

**STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
ENVIRONMENTAL ASSESSMENT CHECKLIST**

Date: August 17, 2021

Project Name: Replacement of Bridge No. 04446 – Hop River Road over Hop River

State Project Number: 32-150

Municipality: Coventry and Columbia

Staff Contact: Kevin Fleming

This assessment is being conducted in conformance to the Connecticut Department of Transportation’s Environmental Classification Document (ECD) to determine Connecticut Environmental Policy Act (CEPA) obligations.

Project Description:

Bridge No. 04446 is a two-span structure that carries Hop River Road over Hop River at the Coventry and Columbia town line. Hop River Road is functionally classified as a Rural Local Road with a posted speed of 25 mph and has an Average Daily Traffic (ADT) volume of approximately 258 vehicles. The existing structure is generally oriented in a north/south direction and carries one travel lane (stop sign controlled, one-way alternating) of vehicular traffic. There are no sidewalks on the existing structure.

The bridge, constructed in 1955 and rehabilitated in 1989 consists of two spans comprised of steel beams and a concrete deck supported by stone masonry abutments and central pier. The existing structure has been determined to be functionally obsolete due to its curb-to-curb width of 12 feet and the ADT of 258 vehicles per day. Due to the feasibility of rehabilitating the existing structure, it has been deemed eligible for replacement.

The proposed construction involves replacement of the existing structure with a new two-span continuous steel multi-girder and concrete deck superstructure on pile supported cast-in-place abutments and modified central pier. The proposed structure consists of two 65-foot clear spans with an overall length of approximately 134 feet. The existing pier will have minor masonry repairs and the concrete cap will be replaced with a new concrete prestressed steel cap to accommodate the wider superstructure. The proposed structure will be built on a new horizontal and vertical alignment.

The northern span of the proposed structure will be comprised of straight girders while the southern span will be comprised of curved girders to accommodate the improved horizontal curve located immediately south of the bridge. The proposed structure will be widened to two-lanes of traffic (one in each direction) and the curb-to-curb width will be increased to 24 feet. The widened roadway, additional travel lane and softened curve (190-foot radius) will eliminate the need for the stop signs on both sides of the bridge. Vertically, the existing flat profile will be changed to a 0.50% slope to promote sheet flow off the bridge during storm events.

Existing overhead utilities will be relocated to provide the appropriate clearance to perform the construction work. A stone veneer will be utilized on the endblocks and substructure elements to replicate the aesthetics of the existing bridge.

Construction duration is anticipated to be approximately 6 to 8 months. Hop River Road will be closed to vehicular traffic during construction, and a detour will be implemented during the duration of construction utilizing state and local roads. Access to adjacent properties will be maintained at all times during construction.

This project was scoped in the Environmental Monitor on January 19, 2021; a public scoping meeting was not held as no requests from the public were received. The public comment period remained open until the close of business on February 19, 2021. CTDOT received comments from one State agency – the Connecticut Department of Energy and Environmental Protection (CTDEEP). No comments were received from the public. Prior to project scoping, a virtual public informational meeting was held on December 15, 2020. A link to the report of meeting is included in the scoping notice for this project.

The proposed action is non-site specific, or encompasses multiple sites;	<input type="checkbox"/>
Current site ownership:	<input type="checkbox"/> N/A, <input type="checkbox"/> State; <input checked="" type="checkbox"/> Municipal, <input type="checkbox"/> Private, <input type="checkbox"/> Other: <u>Town of Coventry</u>
Anticipated ownership upon project completion:	<input type="checkbox"/> N/A, <input type="checkbox"/> State; <input checked="" type="checkbox"/> Municipal, <input type="checkbox"/> Private, <input type="checkbox"/> Other: <u>Town of Coventry</u>

Locational Guide Map Criteria:

<http://ctmaps.maps.arcgis.com/apps/webappviewer/index.html?id=ba47efccdb304e02893b7b8e8cff556a>

Priority Funding Area factors:

- Designated as a Priority Funding Area, including Balanced, or Village PFA;
- Urban Area or Urban Cluster, as designated by the most recent US Census Data;
- Public Transit, defined as being within a ½ mile buffer surrounding existing or planned mass transit;
- Existing or planned sewer service from an adopted Wastewater Facility Plan;
- Existing or planned water service from an adopted Public Drinking Water Supply Plan;
- Existing local bus service provided 7 days a week.

Conservation Area factors:

- Core Forest Area(s), defined as greater than 250 acres based on the 2006 Land Cover Dataset;
- Existing or potential drinking water supply watershed(s);
- Aquifer Protection Area(s);
- Wetland Soils greater than 25 acres;
- Undeveloped Prime, Statewide Important and/or locally important agricultural soils greater than 25 acres;
- Storm Surge Inundation Zone(s);
- 100 year Flood Zone(s);
- Critical Habitat;
- Locally Important Conservation Area(s),
- Protected Land (list type): Enter text.
- Local, State, or National Historic District(s).

Regulations of Connecticut State Agencies (RCSA) Section 22a-1a-3 Determination of Environmental Significance (Direct/Indirect)**1. Impact on water quality, including surface water and groundwater**

Water Quality – No negative impacts are anticipated. All CTDOT projects must conform to the CTDOT Standard Specifications for Roads, Bridges, Facilities, and Incidental Construction Form 818. Section 1.10.03, Environmental Compliance, specifically deals with water pollution control and Best Management Practices (BMP).

Surface Water – No negative impacts are anticipated.

Stormwater – No negative impacts are anticipated as Best Management Practices will be employed regarding stormwater management. Registration under *CTDEEP's General Permit for Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities* will be completed if required.

Groundwater – No negative impacts are anticipated. All CTDOT projects conform to the CTDOT Standards Specifications for Roads, Bridges, Facilities and Incidental Construction Form 818.

Section 1.10.03, Environmental Compliance, specifically deals with water pollution control and Best Management Practices.

- 2. Effect on a public water supply system** - No negative impacts are anticipated. The project is not located within a source of public drinking water.

- 3. Effect on flooding, in-stream flows, erosion or sedimentation:**

Flooding – No negative impacts are anticipated. The project is located within a FEMA-mapped flood zone, therefore, CTDEEP Flood Management Certification will be obtained.

In-stream flows – No negative impacts are anticipated.

Erosion or Sedimentation – No negative impacts are anticipated. All work will be consistent with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control.

- 4. Disruption or alteration of an historic, archaeological, cultural, or recreational building, object, district, site or its surroundings** – No negative impacts are anticipated. On September 22, 2020, the CT State Historic Preservation Office (CTSHPO) concurred with CTDOT's recommendation that the project would result in No Adverse Effect to Historic Properties (Conditional).

- 5. Effect on natural communities and upon critical species of animal or plant and their habitat; interference with the movement of any resident or migratory fish or wildlife species** – No negative impacts are anticipated. There are records of turtles just upstream of the bridge. Best Management Practices will be followed for any listed species in the project area. Additionally, CTDEEP has requested that if dewatering is required and the streambed exposed, they be given an opportunity to check for freshwater mussels. Coordination with CTDEEP will take place to determine if this is feasible. Coordination with CTDEEP Fisheries is currently ongoing.

- 6. Use of pesticides, toxic or hazardous materials or any other substance in such quantities as to create extensive detrimental environmental impact** – No negative impacts are anticipated. Land use in the vicinity of the project limits and the potential for excess soil as a result of construction will be considered during project design. Should there be any sites with known contamination issues in the vicinity of the project, additional study will be performed within the project area and/or adjacent right-of-way. As design progresses, a testing plan will be developed to assess soil and groundwater in any high-risk areas within which intrusive construction activities are proposed. Remediation measures will be put in place to mitigate potential impacts if contaminated soils or groundwater is confirmed by the testing. If needed, registration under CTDEEP's *General Permit for Contaminated Soil and/or Sediment Management (Staging & Transfer)* will be obtained, and soil management will be conducted in accordance with the General Permit.

- 7. Substantial aesthetic or visual effects** – No negative impacts are anticipated.

- 8. Inconsistency with (a) the policies of the State Plan of Conservation and Development developed in accordance with Section 16a-30 of the CT General Statutes, (b) other relevant state agency plans, and (c) applicable regional or municipal land use plans** – This project is consistent with the Statewide Plan of Conservation and Development. CTDOT has adopted a programmatic approach for meeting the requirements of CGS Chapter 297 Section 16a-31(a) and Chapter 297 Section 16a-35(c) and 16a-35(d) for determining consistency of proposed actions with the Statewide Plan of Conservation and Development, as indicated in a memo from CTDOT to OPM. In accordance with that memo, this type of project has been determined to be exempt from the consistency requirements of CGS Section 16a-31(a) since the proposed action is for replacing a component of the transportation system after it has reached the end of its useful life.
- 9. Disruption or division of an established community or inconsistency with adopted municipal and regional plans, including impacts on existing housing where sections 22a-1b(c) and 8-37t of the CGS require additional analysis** – No negative impacts are anticipated. This project is not in conflict with any municipal or regional plans. There will be temporary road closures during construction, however detours will be established on State and Local roads.
- 10. Displacement or addition of substantial numbers of people** – No negative impacts are anticipated. This project does not involve the displacement or addition of people.
- 11. Substantial increase in congestion (traffic, recreational, other)** – No negative impacts are anticipated. A detour will be established as the project will require the temporary closure of Hop River Road. It is anticipated at this time that the detour will utilize Route 6, Pucker Street, South Street, and Bunker Hill Road.
- 12. A substantial increase in the type or rate of energy use as a direct or indirect result of this action** – No negative impacts are anticipated. No new construction of any buildings is proposed. The project is safety related and is not anticipated to result in any change to land use or traffic conditions that would impact energy use.
- 13. The creation of a hazard to human health or safety** – No negative impacts are anticipated. The project will be reviewed for the potential of having hazardous material constituents in existing infrastructure components. Testing will be performed on any suspect materials. Should the presence of hazardous materials be confirmed through the testing, specifications to properly handle and dispose the hazardous materials will be incorporated into the design to mitigate potential health or safety. Therefore, significant impacts associated with hazardous materials or waste sites are not anticipated. Additionally, the project will have beneficial effects on human health and safety once complete, as the project is being proposed to address existing safety concerns.
- 14. Effect on air quality** - No negative impacts are anticipated. The project is located within the boundaries of the portion of the state that has been classified as attainment for carbon monoxide (CO), attainment for PM 2.5, non-attainment for Ozone, and attainment for PM 10. A project level Air Quality Conformity Determination is not required, nor is an analysis or discussion of Mobile Source Air Toxics since this type of project is exempt under the Clean Air Act. Any potential temporary impacts during construction can be avoided or limited by proper operation of construction equipment and adherence to regulations limiting idling of engines.

15. Effect on ambient noise levels - No negative impacts are anticipated. The project was reviewed by CTDOT's Office of Environmental Planning and it was determined that no noise study would be required. Any noise impacts during construction will be temporary and will be minimized to the best extent practicable by compliance with CTDOT Standard Specifications for Roads, Bridges, Facilities and Incidental Construction Form 818 regarding construction noise pollution:

"1.10.05 – Noise Pollution: The contractor shall take measures to control noise intensity caused by his construction operations and equipment, including but not limited to equipment used for drilling, pile driving, blasting, and excavating or hauling. All methods and devices employed to minimize noise shall be subject to continuing approval of the Engineer. The maximum allowable level of noise at the nearest residence or occupied building shall be 90 decibels on the "A" weighted scale (dB(A)). Any operation that exceeds this standard will cease until a different construction methodology is developed to allow work to proceed within the 90-dB(A) limit."

16. Effect on existing land resources and landscapes, including coastal and inland wetlands – The project will require a Coventry Inland Wetlands Permit, Columbia Inland Wetlands and Watercourse Commission Permit, and a United States Army Corps. of Engineers General Permit (Self Verification).

17. Effect on agricultural resources – No negative impacts are anticipated.

18. Adequacy of existing or proposed utilities and infrastructure – No negative impacts are anticipated.

19. Effect on greenhouse gas emissions as a direct or indirect result of the action – No negative impacts are anticipated. Construction phase impacts on greenhouse gas emissions will be limited. Any potential temporary impacts during construction can be avoided or limited by adherence to regulations limiting idling of engines.

20. Effect of a changing climate on the action, including any resiliency measures incorporated into the action – No negative impact is anticipated. The project is located outside of the coastal boundary and will not be exposed to climate change hazards.

21. Any other substantial effect on natural, cultural, recreational, or scenic resources- No other substantial effects are anticipated. The Hop River State Park Trail will remain open during construction, however, the trail entrance will need to be accessed from the upper portion of Hop River Road during construction. Detour and access signs will be posted prior to any construction activities. Coordination with CTDEEP and the CT Greenway Council will take place at that time to discuss posting notices on their websites concerning trail access during construction. CTDEEP also recommends notifying Trout Unlimited regarding construction schedule and possible stocking modifications. Coordination with CTDEEP Fisheries is ongoing.

22. Cumulative effects – This project does not involve any cumulative effects that have the potential for significant effects on the environment.

Conclusion:

After examining any potential environmental impacts and reviewing all comments received, CTDOT has concluded that the preparation of an Environmental Impact Evaluation (EIE) will not be required for the Replacement of Bridge No. 04446 – Hop River Road over Hop River. Publication of this document to the Environmental Monitor shall satisfy the agency's responsibilities under Section 22a-1a-7 of the RCSA. Coordination with CTDEEP will continue, to address comments received, as appropriate.

During the comment period, CTDOT received comments from one State agency (CTDEEP). No comments were received from the public during the scoping period. Below is a synopsis of the comments received; comments are addressed in the appropriate sections above where needed.

State Parks/Hop River: The Hop River State Park Trail is approximately 500 feet from the bridge. During the anticipated 6-8 months of construction, the Hop River Road parking access to the state park trail will only be accessible from the north/upper side of the road, with a several mile detour through Coventry. Trail users coming through this area from above or below locations may not realize the detour situation if they have not parked there. To promote proper trail planning, CTDEEP recommends that DOT post temporary signage prior to and during construction at a couple of other Hop River State Park trail junction locations (e.g. Kings Road, Coventry, Parker Bridge Road, Andover) to alert through-trail users. CTDEEP recommends checking with the Connecticut Greenway Council to post a notice if they actively maintain a website. To coordinate signage and post notices on CTDEEP's website please contact Laurie Giannotti.

CTDEEP recommends that DOT include standard DOT design for 1-2 stream crossing signs on the new bridge, identifying the Hop River. There is a history of recreational watercraft use of the Hop River that informally portage around the adjacent dam. Anecdotal evidence suggests paddler uses include both quick water times (there are some Class I and Class II sections at times) and slower river times. There is no official water trail or management along this Hop River segment. However, DOT design and outreach should consider notifying the informal paddling and fishing community that temporary construction period barriers to portage or river access at the bridge may occur. The Thames River chapter of Trout Unlimited may be an appropriate angler contact. Further, CTDEEP Fisheries has stocked trout at this location and should be notified for possible stocking schedule modifications.

Watershed/Water Quality: Hop River Road in Coventry is a paved road leading up to the existing river bridge crossing, there is no curb and water sheet flows to shed water off the traveling road surface. Hop River Road in Andover is also paved leading up to the existing river bridge crossing and uses a combination of sheet flow and partial paved ditch to control direct runoff into the down gradient Hop River. Connecticut ground water classification of GA along the Andover shore of this bridge project area may not be fully meeting Connecticut water quality standards. Such is reflected in review of historic and some current land uses in the area, and no source or cause has been specifically identified with the current bridge crossing infrastructure. Final DOT design should incorporate an appropriate suite of stormwater runoff control and treatment best practices to minimize runoff from entering the Hop River at the bridge project site. This recommendation supports the quality of the receiving 11.87 mile long Hop River segment, which has a surface water classification of A and in recent water quality assessment cycles has fully supported designated uses of Aquatic Life and Recreation.

Inland Wetlands and Watercourses: A map of the area shows that different project components could impact Hop River. Mitigation may be required for any impacts that cannot be avoided. If the reconnaissance of the site by a certified soil scientist identifies regulated areas, they should be clearly delineated. Any activity within federally regulated wetland areas or watercourses at the site may require a permit from the U.S. Army Corps of Engineers pursuant to Section 404 of the Clean Water Act. If a permit is required from USACOE, a Water Quality Certificate will also be required from CTDEEP pursuant to Section 401 of the Clean Water Act.

Inland Fisheries: CTDEEP Fisheries will work with DOT during the permit review process to ensure fisheries resources and habits are protected. Time of year restrictions will be considered if there is direct

in-stream work. Since this area is one of the common fish stocking sites, DOT should contact Fisheries to discuss stocking locations if this area is impacted by construction.

Threatened and Endangered Species: CTDEEP Wildlife Division maintains Natural Diversity Database (NDDB) maps. Wildlife Division confirmed that an application was submitted by DOT for this project. Although the application is under review and more specific recommendations are forthcoming, the following general comments are offered:

Turtles:

- There are records of turtles upstream from the bridge, CTDEEP recommends fencing in the construction area to keep turtles out.
- In-stream ground disturbance work should be done during the turtle active season, which will be discussed in more detail in the determination letter.
- Maintaining in-stream overwintering areas, such as tree roots, fallen trees, logs, crevices, can assist in protecting turtle habitat.

Freshwater Mussels:

- The Wildlife Division is not aware of any freshwater mussel data in this stream, If dewatering is needed and the streambed is exposed, the Wildlife Division would like the opportunity to check for freshwater mussels and salvage any that could perish. Please contact Laura Saucier with any advanced notice if this is an option.

Air Quality: CTDEEP typically recommends the use of newer off-road construction equipment that meets the latest (EPA) or California Air Resources Board (CARB) standards. If that newer equipment cannot be used, equipment with the best available controls on diesel emissions including retrofitting with diesel oxidation catalysts or particulate filters in addition to the use of ultra-low sulfur fuel would be the second choice that can be effective in reducing exhaust emissions. The use of newer equipment that meets EPA standards would obviate the need for retrofits.

CTDEEP also recommends the use of newer on-road vehicles that meet either the latest EPA or CARB standards for construction projects. These on-road vehicles include dump trucks, fuel delivery trucks and other vehicles typically found at construction sites. On-road vehicles older than the 2007-model year typically should be retrofitted with diesel oxidation catalysts or diesel particulate filters for projects. Again, the use of newer vehicles that meet EPA standards would eliminate the need for retrofits.

Additionally, Section 22a-174-18(b)(3)(C) of the RCSA limits the idling of mobile sources to three (3) minutes. This regulation applies to most vehicles such as trucks and other diesel engine-powered vehicles commonly used on construction sites. Adhering to the regulation will reduce unnecessary idling at truck staging zones, delivery or truck dumping areas and further reduce on-road and construction equipment emissions. Use of posted signs indicating the three-minute idling limit is recommended. It should be noted that only CTDEEP can enforce section 22a-174-18(b)(3)(C) of the RCSA. Therefore, it is recommended that the project sponsor include language similar to the anti-idling regulations in the contract specifications for construction in order to allow them to enforce idling restrictions at the project site without the involvement of CTDEEP.

PCBs: When demolition occurs, debris may include materials that contain PCBs. Where testing confirms the presence of PCBs, it is important to ensure that they are not released to the air during replacement.