STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
ENVIRONMENTAL ASSESSMENT CHECKLIST

Date: December 7, 2021
Project Name: Replacement of Stiles Bridge (Bridge No. 01524) – Route 191 over Scantic River
State Project Number: 46-127
Municipality: East Windsor
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:
The Stiles Bridge (Bridge No. 01524) was built in 1925 and rehabilitated in 1987 and is eligible for listing in the National Register of Historic Places. It is a 76-foot span steel truss on reinforced concrete with a curb-to-curb width of 27 feet 10 inches. It carries one lane of traffic in each direction and has an estimated average daily traffic of 1,500 vehicles. The proposed project scope is to replace the existing bridge. Replacement is required based on the findings of the latest Bridge Inspection Report in which the bridge was found to be in serious condition. The proposed new structure will be a multi girder steel superstructure on reinforced concrete abutments.

An approximate 9-month closure of Bridge No. 01524 and a corresponding detour of pedestrian and vehicular traffic will be required. The estimated project cost is $9 million and is anticipated to be undertaken with 80% Federal funds and 20% State funds. Construction is anticipated to begin in 2023 based on availability of funding and approval of permits.

This project was scoped in the Environmental Monitor on April 20, 2021; and a public scoping meeting was held on May 4, 2021. The public comment period remained open until the close of business on May 21, 2021. CTDOT received comments from one State agency – the Connecticut Department of Energy and Environmental Protection (CTDEEP). No comments were received from the public during the public scoping period outside of the scoping meeting itself. During the Question and Answer portion of the scoping meeting, the public asked a few general questions about the project.

The proposed action is non-site specific, or encompasses multiple sites;	☐
Current site ownership:	☐ N/A, ☒ State; ☐Municipal, ☐ Private, ☐ Other: Please Explain.
Anticipated ownership upon project completion:	☐ N/A, ☒ State; ☐Municipal, ☐ Private, ☐ Other: Please Explain.

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): Municipal Land to the SW of project area
☐ 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. Coordination with CTDEEP and USFWS will occur as needed.

   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. Any CTDOT project that changes impervious area, stormwater drainage patterns pre to post construction shall meet the requirements of the CTDEEP's General Permit for the Discharge of Stormwater from Department of Transportation Separate Storm Sewer Systems (DOT MS4 Permit) and submit a CTDOT MS4 Designer Worksheet.

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. As design progresses, a testing plan will be developed to assess groundwater in any 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.

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. Coordination with CTDEEP will continue.

   Erosion or Sedimentation – No negative impacts are anticipated. Proper erosion and sedimentation controls will be installed and maintained throughout the project. The contractor will comply with Best Management Practices for sedimentation and erosion control as outlined in in CTDOT Standards Specifications for Roads, Bridges, Facilities and Incidental Construction Form 818 (Section 1.10.03). CTDEEP notes that care should be exercised to not increase turbidity levels and recommends that any unconfined work within the Scantic River should be restricted to the period from July 1 to September 30. This, however, does not apply to the installation or removal of water control structures such as cofferdams.

4. **Disruption or alteration of an historic, archaeological, cultural, or recreational building, object, district, site or its surroundings –** The Stiles Bridge is eligible for listing on the National Register of Historic Places. CTDOT has been coordinating with the CT State Historic Preservation Office (CTSHPO), and on April 15, 2021, CTSHPO concurred with CTDOT's recommendation that the project will result in an Adverse Effect to Historic Properties due to the proposed replacement of the bridge. Coordination among CTDOT, CTSHPO and the Federal Highway Administration will continue; and a Memorandum of Agreement will be drafted to outline the various stipulations required to mitigate for the Adverse Effect to the bridge. CTDOT has contacted the East Windsor Historical Society and will continue to coordinate with the East Windsor Historical Society as project design develops.

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 –** The project is located within a Natural Diversity Database Area according to CTDEEP Mapping. A mussel survey and recovery/relocation effort may be required, and CTDOT will continue to work with CTDEEP as the project progresses regarding this.

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. Additionally, the project is not inconsistent with any other land use plans.

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. Since the project will require a complete bridge replacement and the structure type will not allow for removal of the bridge in stages in order to maintain traffic over the bridge during construction, the bridge will be completely closed during construction and a detour will be established. It is anticipated that the detour will be along Route 140, Route 5, and Route 191 during construction (anticipated March 2023 – November 2023). Additionally, the project is not in conflict with any adopted municipal or regional plans.

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 on Route 140, Route 5, and Route 191 during construction.

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 not the type 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.

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 – Construction Noise Pollution: The contractor shall take measures to minimize the noise caused by its construction operations, including but not limited to noise generated by 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 residence or occupied building nearest to the Site shall be 90 decibels on the "A" weighted scale (dB(A)). The contractor shall halt any project operation that violates this standard at any time until the Contractor develops and implements a methodology that enables it to keep the noise from its project operations below the 90-dB(A) limit."*

16. **Effect on existing land resources and landscapes, including coastal and inland wetlands –** Wetlands were field delineated in April 2019. CTDOT will coordinate with CTDEEP and the US Army Corps of Engineers to determine the proper permits required.

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. Coordination with CTDEEP Fisheries will continue as the project's site is one of the Fisheries Division's stocking location for Brown Trout and Rainbow Trout.

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. 01524 – Route 191 over Scantic 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.

Fisheries Division:

The Scantic River supports a diverse fish community of resident inland species including Blacknose Dace, Longnose Dace, Common Shiner, Largemouth and Smallmouth Bass, Chain Pickerel, Wild Brown Trout as well as a number of diadromous species including Alewife, Blueback Herring, Sea Lamprey, and American Eel. The project site is one of the Fisheries Division's stocking locations for thousands of Brown Trout and Rainbow Trout.

The following recommendations were discussed with CTDOT in previous meetings:

1. Two municipally owned open space parcels abut the southern side of the bridge right-of-way and extend downstream, providing nearly three quarters of a mile of riverfront access. If the Town is amenable, there could be an opportunity to establish a formal or informal access point adjacent to the bridge to allow fisherman, hikers, etc. to enjoy this section of the Scantic River.

2. The existing crossing allows for unrestricted fish passage at this location and the proposed full bridge replacement is expected to maintain this condition. The Fisheries Division will provide additional comments when a preliminary design is available for review.

3. It is important that proper erosion and sedimentation controls be installed and maintained throughout the duration of this project. Care should be exercised so as not to increase turbidity levels. As a best management practice, any unconfined instream work within the Scantic River should be restricted to the period from July 1 to September 30, inclusive. This prohibition does not apply to the installation or removal of water control structures such as cofferdams.

4. Any water control structures used at this site should allow for the free upstream and downstream passage of fish and no more than one half of the river channel should be blocked at any given time.

5. Most of the diadromous fish species found at this site migrate primarily at night, therefore loud construction related activities should be prohibited from sunset to sunrise during the diadromous fish migration period from April 1 to June 30. Loud construction activities are defined as those with noise levels exceeding 90 decibels, as measured at the water's surface at the point closest to the source of the noise.

6. Bright lights may also interfere with diadromous fish migrations; therefore, construction lights should not be directed down on to the water's surface during the period from April 1 to June 30.

7. The Fisheries Division would also like the opportunity to review the proposed bridge design and water control plan before final approval to ensure that there will be no major impacts to fisheries resources.

Land and Water Resources Division:

A map of this area shows that different project components could impact the Scantic 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 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. Further information is available on-line at Army Corps of Engineers, New England District or by calling the Corps Regulatory Branch in Concord, Massachusetts at 978-318-8338. If a permit is required from the U.S. Army Corps of Engineers, a Water Quality Certificate will also be required from DEEP pursuant to section 401 of the Clean Water Act.

Wildlife Division:

DEEP's Wildlife Division confirmed that the site is within a Natural Diversity Database Area. The Wildlife Division is concerned that in-stream work could harm freshwater mussels. A mussel survey and recovery/relocation effort may be required. The applicant must submit a Request for Natural Diversity Data Base (NDDB) State Listed Species Review Form (DEEP-APP-007) and all required attachments, including maps, to NDDB for further review.

Air Management:

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.