

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

Date: January 8, 2019

Project Name: Safety and Operational Improvements on I-84

Municipality: West Hartford

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 purpose of this project is to provide safety and operational improvements to address concerns with congestion and traffic operations on I-84 in the Town of West Hartford.

To address existing congestion concerns and projected traffic volumes on I-84 WB, an additional thru travel lane is proposed from the Park Road on-ramp to Exit 39A (Route 9 south) by widening I-84 towards the median. The fourth thru lane will reduce congestion and crash frequencies between the closely spaced interchanges by improving weaving operations. To address congestion concerns, improve acceleration/deceleration lanes and reduce crash frequencies on I-84 EB, an auxiliary lane is proposed between Exit 40 (New Britain Avenue-Ridgewood Road) and Exit 41 (Route 173-South Main Street). To accommodate the auxiliary lane, I-84 will be widened towards the median.

The proposed thru lane in the westbound direction will start at the on-ramp from Park Road and end as an "Exit Only" lane to the Exit 39A off ramp to Route 9 south for a distance of approximately 9,500 feet.

An auxiliary lane in the eastbound direction will be constructed beginning at the Exit 40 on-ramp from New Britain Avenue and ending at the Exit 41 off-ramp to South Main Street for a distance of approximately 2,800 feet. The inside and outside shoulders in both directions will be brought to current design standards.

Two bridges at I-84 eastbound and I-84 westbound over Berkshire Road will be replaced completely. The I-84 westbound bridge over Ridgewood Road will be widened and the superstructure will be replaced. The project also includes mill and overlay of the existing travel lanes, addition of the concrete barrier curb and construction of noise barrier walls, installation of guide railing and overhead/side mounted sign structures, highway drainage improvements, and the minor relocation of some highway illumination.

Regulations of Connecticut State Agencies (RCSA) Section 22a-1a-3 Determination of Environmental Significance (Direct/Indirect)

1. Impact on air and water quality or on ambient noise levels

- a) **Air Quality** – No negative impacts are anticipated. 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.
- b) **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 817. Section 1.10.03, Environmental Compliance, specifically deals with water pollution control and Best Management Practices.
- c) **Ambient Noise Levels** – No negative impacts are anticipated. A noise study report (October 2017) was prepared for the project, and noise barrier walls were analyzed as potential traffic noise abatement measures. The analysis determined that a traffic noise barrier for the Beechwood Road and Shadow Lane neighborhoods is reasonable as it does not exceed the cost effectiveness index per benefitted receiver. Final determinations regarding the traffic noise abatement measures will be made upon completion of the project’s final design and public involvement process. Any noise impacts during construction will be temporary and be minimized to the best extent practicable by compliance with CTDOT Standard Specifications for Roads, Bridges, Facilities and Incidental Construction Form 817 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.”

Construction noise impacts and abatement measures shall be considered using the FHWA Construction Noise Handbook (August 2006). This handbook provides numerous mitigation techniques and insight as how to approach analysis of construction noise impacts.

2. Impact on a public water supply system or serious effects on groundwater, flooding, erosion, or sedimentation

- a) **Water Supply** – This project is not within a public water supply source water area; therefore, no negative impacts are anticipated.

- b) **Groundwater** – No negative impacts are anticipated. All CTDOT projects conform to the CTDOT Standard Specifications for Roads, Bridges, Facilities and Incidental Construction Form 817. Section 1.10.03, Environmental Compliance, specifically deals with water pollution control and Best Management Practices. During initial investigations, no groundwater was encountered. Based on the topography and the elevation of the highway, groundwater likely flows away from the highway. Additionally, this project does not take place within an Aquifer Protection Area.

- c) **Flooding** – A portion of the project is located within the 100-year flood zone on the community's Flood Insurance Rate Map. A Flood Management Certification will be required. The project will be certified by CTDOT as being in compliance with flood and stormwater management standards specified in the Connecticut General Statutes and in the Regulations of Connecticut State Agencies. It will be demonstrated that there will be no activity within the floodway that will result in any increase in water surface elevation for the 10 or 100-year event as determined by hydraulic modeling. Coordination will take place with CTDEEP as appropriate. Additionally, registration under CTDEEP's *General Permit for Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities* will be completed if required; and CTDOT will employ Best Management Practices regarding stormwater management. All CTDOT projects are designed in conformance with the 2004 CTDEEP Stormwater Quality Manual.

- d) **Erosion or Sedimentation** – No negative impacts are anticipated. Erosion and sediment controls will conform to and be maintained in accordance with the *"2002 Connecticut Guidelines for Soil Erosion and Sediment Control"*

3. Effect on natural land resources and formations, including coastal and inland wetlands, and the maintenance of in-stream flows –No negative impacts are anticipated. The project corridor includes several areas where wetland soils mapped by the Natural Resources Conservation Service's Soil Survey border the highway. CTDOT performed a full wetlands delineation of the project area. Registration under CTDEEP's *General Permit for Water Resource Construction Activities* will be required.

4. Disruption or alteration of an historic, archaeological, cultural, or recreational building, object, district, site or its surroundings – No negative impacts are anticipated. On June 20, 2016, the Connecticut State Historic Preservation Officer concurred with CTDOT's recommendation that no historic properties will be affected by the project.

5. Effect on natural communities and upon critical species of animal or plant and their habitats; interference with the movement of any resident or migratory fish or wildlife species – No negative impact is anticipated. The Natural Diversity Data Base, maintained by CTDEEP, contains no records of extant populations of federally listed endangered or threatened species or species listed by the State in the immediate project vicinity.

- 6. Use of pesticides, toxic or hazardous materials or any other substance in such quantities as to create extensive detrimental environmental impact** – No negative impact is anticipated. A Task 210 Subsurface Site Investigation (SSI) was conducted in 2018 to collect and review site soil data in order to evaluate any potential subsurface contamination within the project area and to evaluate whether the proposed construction activities may require management of contaminated soil. One preliminary Area of Environmental Concern (AOEC) and two Low-Level Areas of Environmental Concern (LLAOEC) were identified during the task 210 SSI. No negative impacts will result as measures will be put in place to mitigate any potential impacts. A Task 310 – Plans, Specifications, and Estimates will be assigned to provide guidance for the proper management and disposal of any potential contaminated materials that may be excavated, handled, transported, or disposed during construction activities and for the establishment of appropriate worker health and safety protocols. 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. Consistency with the written and/or mapped policies of the Statewide Plan of Conservation and Development and such other plans and policies developed or coordinated by the Office of Policy and Management or other agency** – This project is consistent with the Statewide Plan of Conservation and Development. In a memo from CTDOT to OPM dated March 2015, CTDOT has adopted a programmatic approach for meeting the requirements of CGS Chapter 297 Section 16a-31(a) and Chapter 297a Section 16a-35(c) and 16a-35(d) for determining consistency of proposed actions with the Statewide Plan of Conservation and Development. As stated in the memo, this type of project is categorized as “Renovations with Capacity Improvements”. It is CTDOT’s interpretation that this type of project is consistent with the Plan of Conservation and Development through GMP #1 (Redevelop and Revitalize Regional Centers and Areas with Existing or Currently Planned Physical Infrastructure); specifically, the State policy “Ensure the safety and integrity of existing infrastructure over its useful life through the timely budgeting for maintenance, repairs, and necessary upgrades.”

Changes to an existing facility that increase the capacity of the corridor or facility are intended, at least in part, to facilitate growth in areas served by that corridor or facility and therefore meet the definition of a Growth Related Project. CTDOT is prohibited from providing funding, without the approval of the Secretary of OPM, for growth related projects unless the project is located entirely in a priority funding area. Based upon a review of OPM’s Locational Guide Map, this project has been determined to be entirely within a priority funding area. However, portions of the project are located in a Balanced Priority Funding Area.

Balanced Priority Funding Areas meet the criteria of both Priority Funding Areas and Conservation Areas. Conservation Areas are delineated based on the presence of factors that reflect environmental or natural resource values. State agencies that propose actions in these areas must provide balanced

consideration of all factors in determining the extent to which it is consistent with the policies of the State C&D Plan. CTDOT considers all environmental resources when determining consistency with the State C&D Plan. This particular project takes place within a portion of the 100-year floodplain. There will be no net increase in the floodplain, however, and coordination with the CTDOT Hydraulic and Drainage Unit will take place to obtain a Flood Management General Permit.

- 9. Disruption or division of an established community or inconsistency with adopted municipal and regional plans** – No negative impacts are anticipated. The project is consistent with the Town of West Hartford’s existing Plan of Conservation and Development (2009-2019) (Plan). This project takes place entirely on an interstate highway and the Plan notes that the interstate is not part of West Hartford’s integrated network and there are no plans to integrate the interstate into West Hartford’s “complete street” network. Furthermore, the Plan states that it is important for the Town to support traffic improvements to Interstate 84 to minimize the congestion that diverts highway traffic to local streets. The Plan does indicate the Town’s willingness to help promote alternatives to the widening of highways (such as increased transit and CT**fastrack**, which opened after the Plan was completed). However, even with increased transit opportunities in the area and the opening of CT**fastrack**, this section of I-84 experiences a Level of Service that operates at a deficient level, and will continue to do so under the “No Build” conditions. Much coordination with the Town of West Hartford and CTDOT has taken place, and will continue as the project progresses. The Town has been supportive of the project, and this project does not preclude the Town from reaching any of the goals identified in the Town’s existing Plan of Conservation and Development.
- 10. Displacement or addition of substantial numbers of people** – This project does not involve the displacement of people.
- 11. Substantial increase in congestion (traffic, recreational, other)** – No negative impacts are anticipated. This project will increase safety and improve operational deficiencies, thus reducing congestion. Any congestion incurred from the project will be temporary during construction. The project will utilize suitable detours during construction as required. Public outreach and signage will be used to make the public aware of construction
- 12. A substantial increase in the type or rate of energy use as a direct or indirect result of this action** – No negative impact is anticipated.
- 13. The creation of a hazard to human health or safety** – No negative impact is anticipated. Once construction is complete this project will improve safety on I-84 in West Hartford. The project will be reviewed for the potential of having hazardous material constituents in existing infrastructure components. Should the presence of hazardous materials be confirmed, specifications to properly handle and dispose the hazardous materials will be incorporated into the design to mitigate potential impacts to human health or safety.

14. Any other substantial impact on natural, cultural, recreational or scenic resources – No other negative impacts are anticipated.

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 Safety and Operational Improvements on I-84 in West Hartford, Connecticut.

No comments were received from the public during the scoping process for this project. The following are comments received from various State agencies during scoping process.

Connecticut Department of Energy & Environmental Protection (CTDEEP)

The project corridor includes several areas where wetland soils mapped by the Natural Resources Conservation Service's Soil Survey border the highway corridor. If there are any undeveloped areas to be impacted, it is recommended that a certified soil scientist perform a reconnaissance of the site in order to determine whether there are any areas which would be regulated by wetlands or watercourses. If so, the project will require an inland wetland and watercourses permit from the Inland Water Resources Division.

The project corridor includes a crossing of the South Branch Trout Brook. The 100-year flood discharge is contained within the culvert. Any extension or alteration of the culvert would require certification with flood and stormwater management standards specified in the CGS and the RCSA. However, it appears that the watershed of South Branch Trout Brook upstream of the project area is approximately 350 acres, so the project would be exempt from certification.

The opportunity to introduce treatment measures to the stormwater collection system should be explored.

The project will require registration under the General Permit for the *Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities*. Stormwater treatment systems must be designed to comply with the post-construction stormwater performance management requirements of the permit.

CTDEEP encourages the use of newer off-road construction equipment and newer on-road vehicles that meet the latest EPA or California Air Resources Board standards.

Idling of mobile sources should be limited to 3 minutes. Use of posted signs indicating the 3-minute idling limit is recommended. It is recommended that CTDOT include language similar to the anti-idling regulations in the contract specifications for construction.

A site-specific hazardous materials management plan should be developed prior to commencement of construction and a health and safety plan for construction workers should also be prepared.

The Waste Engineering and Enforcement Division has issued a *General Permit for Contaminated Soil and/or Sediment Management (Staging & Transfer)*. It establishes a uniform set of environmentally protective management measures for stockpiling soils when they are generated during construction or utility installation projects where contaminated soils are typically managed.

Development plans in urban areas that entail soil excavation should include a protocol for sampling and analysis of potentially contaminated soil. Soil with contaminant levels that exceed the applicable criteria of the Remediation Standard Regulations, that is not hazardous waste, is considered to be special waste. The disposal of special wastes, as defined in section 22a-209-1 of the Regulations of Connecticut State Agencies (RCSA), requires written authorization from the Waste Engineering and Enforcement Division prior to delivery to any solid waste disposal facility in Connecticut. If clean fill is to be segregated from waste material, there must be strict adherence to the definition of clean fill, as provided in Section 22a-209-1 of the RCSA. In addition, the regulations prohibit the disposal of more than 10 cubic yards of stumps, brush or woodchips on the site, either buried or on the surface.

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Office of Policy and Management (OPM)

While the project is described as “Safety and Operational Improvements on I-84”, the project description justifies the new travel lane on I-84 WB by saying it is intended to “address existing congestion concerns and projected traffic volumes”. Similarly, the first justification listed for adding a lane on I-84 EB is that it will “address congestion concerns”. The project description does identify safety concerns, such as weaving and crashes, but to what extent are those largely concerns during congestion periods”

The project is within an area where the state has made substantial investments in transit infrastructure and operations, according to a comparison of the scoping notice’s project area map with system maps for CTfastrak and CT Transit. Adding highway lanes to address congestion concerns can reduce the

incentive for people who can use transit to actually use it. It might even undermine ongoing private, municipal, and state investments in transit oriented development (TOD).

Given the availability of alternative routes for those driving through the Hartford region and the expanded transit opportunities for local commuters, I-84 west of Hartford might be one of the state's better opportunities to improve traffic flow and safety without spending limited state and federal transportation funds for new highway lanes. As federal rules for interstate highway operations continue to evolve, has CTDOT considered whether there might be other options available in the future that could potentially address the subject project's purpose and need in a more cost effective manner than adding a new operational lane?

In 9/2015 scoping comments regarding CTDOT's proposed I-91-Rt 15- I-84 interchange, OPM had expressed concern about scoping notices treating Hartford-area projects in isolation from each other, without describing how individual projects fit into the broader picture. How does CTDOT evaluate the direct and indirect impacts of such projects on other segments of the highway network and on other transportation or environmental resources?

There is an increasing recognition of the state's deferred infrastructure maintenance needs and of new infrastructure's impact on the state's long-term financial obligations. What operation and maintenance costs can be expected for this project's proposed new infrastructure?

CTDOT responses to OPM comments

The 2017 Traffic Evaluation Report states that the I-84 Eastbound direction is experiencing low Levels of Service (LOS) in the existing condition and will continue to in the 2020 and 2040 "no build" scenarios. The AM peak hour had level of Service E and F for most segments, with the only exception being the Interchange 41 mainline segment between the off and on-ramp in the existing and 2020 "no build" scenarios. The weave between Interchange 41 and Interchange 43 experience LOS F for all scenarios except for the PM peak hours of the existing and 2020 "no build" scenarios.

The introduction of the auxiliary lane between Interchange 40 and 41 on I-84 Eastbound will improve the LOS and operation in the area, as LOS experienced by the interchange areas will approve.

The I-84 Westbound direction is experiencing low LOS in the existing and "no build" scenarios.

The additional travel lane on I-84 Westbound will cause the LOS experienced to improve from an F to a D or E between the 2040 "no build" and build scenarios for the mainline segments analyzed. The LOS of the diverges and merges analyzed will also improve from LOS F to E.

The weave between interchange 39A and 40 will improve from LOS F to D in the PM peak hour. The weave between Interchange 41 and 43 should have minimal impacts to LOS, generating

improvements to density between the 2040 build and “no build” scenarios. The weave will operate more efficiently and will operate below volume capacity. Overall, traffic capacity and operation will improve due to the additional travel lane.

The report concluded that the proposed auxiliary lane on I-84 Eastbound will improve operation considerably in the future, especially between Interchange 40 and Interchange 41. The 2040 LOS during the AM peak hour, however, is projected to be an E for the weaving segment. This is still an improvement from the “no build” scenario.

Although CTDOT projects have independent utility, they give consideration to other projects occurring in the area. Though not specifically mentioned in scoping notices, CTDOT does evaluate projects in relation to one another in the broader picture, and considers the direct and indirect impacts of each project through an internal environmental review process. CTDOT has worked and continues to work diligently with the Town of West Hartford to achieve the stated purpose and need of the project, and remedy the transportation deficiencies in the project area.

Maintenance and operational costs for the new infrastructure is expected to be minimal as the proposed improvements are being constructed within an existing facility that is currently being maintained. The proposed bridge replacements and roadway safety upgrades associated with the project will reduce maintenance needs that are required for assets that are beyond their service life.