NEW HAVEN-HARTFORD-SPRINGFIELD LINE
HIGH SPEED INTERCITY PASSENGER RAIL PROJECT

ENVIRONMENTAL ASSESSMENT/ENVIRONMENTAL IMPACT EVALUATION

Appendices

Submitted pursuant to 42 U.S.C. 4331 et. seq.
and Conn. General Statute ANN. §§ 22a-1a to 1h

STATE PROJECT NO. 170-2296

FEDERAL RAILROAD ADMINISTRATION

In Cooperation with

FEDERAL TRANSIT ADMINISTRATION

AND

CONNECTICUT DEPARTMENT OF TRANSPORTATION

May 2012

APPENDICES

Appendix 1

Phase 1 and Phase 3A CATEX's

Federal Railroad Administration (FRA)
CATEGORICAL EXCLUSION WORKSHEET

Note: The purpose of this worksheet is to assist proposal sponsors in gathering and organizing materials for environmental analysis required under the National Environmental Policy Act (NEPA), particularly for proposals, which may qualify as Categorical Exclusions and to assist the FRA in evaluating requests from project sponsors for categorical exclusion determinations. Categorical Exclusions are categories of actions (i.e. types of projects) that the FRA has determined, based on its experience, typically do not individually or cumulatively have a significant effect on the human environment and which generally do not require the preparation of either an environmental impact statement or an environmental assessment.

Submission of the worksheet by itself does not meet NEPA requirements. FRA must concur in writing with the proposal sponsor's Categorical Exclusion recommendation for NEPA requirements to be met. Please complete this worksheet using compatible word processing software and submit and transmit the completed form in electronic format.

For Agency Use	*Date Received:*
Reviewed By: *Date:*	*Recommendation for action:* ☐ *Accept* ☐ *Return for Revisions* ☐ *Not Eligible*
Comments:	
Concurrence by Counsel: ☐ *Accept Recommendation* ☐ *Return with Comments*	*Reviewed By:* *Date:*
Comments:	
Concurrence by Approving Official:	*Date:*

I. PROPOSAL DESCRIPTION

Proposal Sponsor CTDOT	**Date Submitted**	**FRA Identification Number (if any)**
Proposal Title Springfield-New Haven-NYC HSR Corridor PART B		
Location (Include Street Address, City or Township, County, and State)		
Contact Person James Redeker	**Phone** 860-594-2802	**E-mail Address** james.redeker@ct.gov
Note: Fully describe the proposal including specifics that may be of environmental concern such as: widening an embankment to stabilize roadbed; repairing or replacing bridge piers foundations, including adding rip-rap in a waterway; earthwork and altering natural (existing) drainage patterns and creating new water discharge; contaminated water needing treatment; building a new or adding on to a shop building; fueling or collection of fuel or oil and contaminated water; building or extending a siding; and building or adding on to a yard.		

Description of Proposal

This is one of three separate projects, each with independent utility, which combined propose the eventual development of fully electrified HSR service from Springfield, MA to NYC. PART B, this project, consists of a "ready to go" project that will serve as a congestion relief project train for service on this route. The New Haven- Springfield Line currently operates both freight and passenger service on a 62 mile corridor. Amtrak is currently upgrading all of the existing track to Class 6. This proposed action includes the addition of about 10 miles of Class 6 track to provide double track and one interlock in a segment of the line where passenger and freight encounter conflicts with each other. Work will include track, interlock, related signal system improvements, and bridge repairs. Minor re-alignment of the existing main-line track and changes to curve geometry on sidings, spurs, and secondary track will be required as part of the propsed track installation. However, all such changes will remain within the railroad right-of-way and within the existing disturbed area or along previous track alignments. These improvements will increase the operating capacity for both passenger rail and freight.

Purpose and Need of Proposal

Problem Statement

Amtrak's current regional service in the corridor operates six trains each way per day. In addition to Amtrak, there are four freight operators that use the Springfield Line. These operators serve to make deliveries between various yards and local industry. The efficient transportation of product is vital to the economic well being of the local industry as well as the operators.

Because about 60% of the Springfield Line is single track, the freight and passenger service must be coordinated closely to avoid delays. A copy of the track chart is attached as Appendix A. From the track charts it is apparent that if the segment of track from "Quarry" through "New" were double track, there would be a long segment of double track from "Holt" through "Wood"; about 17 miles.

Appendix B contains a summary of freight and passenger movements in the corridor and indicates the potential for conflict between the freight and passenger service in the Study Area between "Quarry" and "New". Insofar as these railroad operators provide delivery to local industry it is difficult to maintain schedule adherence and passing tracks are necessary to maintain operations.

PURPOSE

The PURPOSE of the proposed action is to provide an effective passing track in order to relieve congestion in the Study Area and, therefore, improve the efficiency of the freight operators. This will improve their ability to provide timely service to local industry, allow for growth in both freight and passenger volumes, avoid delay to passenger service, and add to the overall economic vitality of the region.

NEED

The NEED for the proposed action is based on the current conflicts that occur between freight and passenger service and limitations those conflicts cause to growth in both services.

II. NEPA CLASS OF ACTION

Answer the following questions to determine the proposal's potential class of action.

A. Will the proposal substantially impact the natural, social and / or human environment?

☐ YES (Contact FRA) ☒ NO (Continue)

Actions that will significantly impact the environment require preparation of an Environmental Impact

Statement. These proposals typically include construction or extension of rail lines or rail facilities including passenger, high speed, or freight rail activities.

B. Is the significance of the proposal's social, economic or environmental impacts unknown?

☐ YES (Contact FRA) ☒ NO (Continue)

C. Does Section 4(f) of the Department of Transportation Act apply? (i.e. proposal requires the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of an historic site of national, State, or local significance, as determined by the Federal, State, or local officials having jurisdiction over the park, area, refuge, or site.)

☒ YES (Contact FRA) ☐ NO (Continue)

D. Is the proposal likely to require detailed evaluation of more than a few potential impacts?

☐ YES (Contact FRA) ☒ NO (Continue)

E. Is the proposal likely to generate intense public discussion or concern, even though it may be limited to a relatively small subset of the community?

☐ YES (Contact FRA) ☒ NO (Continue)

F. Is the proposal inconsistent with any Federal, State, or local law, regulation, ordinance, or Judicial or administrative determination relating to environmental protection?

☐ YES (Contact FRA) ☒ NO (Continue)

G. Is the proposal an integral part of a program of current Federally supported actions which, when considered separately, would not be classified as major actions, but when considered together may result in substantial impacts?

☐ YES (Contact FRA) ☒ NO (Continue)

If the answer to any of the questions B through G is "YES", contact the FRA to determine whether the proposal requires preparation of an Environmental Assessment.

H. Is the proposal consistent with one of the following potential Categorical Exclusions?
FRA Procedures for Considering Environmental Impacts, 64 FR 28545 (May 26, 1999)

☒ YES (Mark category and continue as indicated) ☐ NO (Contact FRA)

☐ Financial assistance or procurements solely for planning or design activities that do not commit the FRA or its applicants to a particular course of action affecting the environment. *(stop and submit to FRA)*

☐ State rail assistance grants for acquisition. *(Continue to Part III)*

☐ Operating assistance to a railroad to continue existing service or to increase service to meet demand, where the assistance will not result in a change in the effect on the environment. *(stop and submit to FRA)*

☐ Acquisition of existing railroad equipment, track and bridge structures, electrification, communication, signaling or security facilities, stations, maintenance of way and maintenance of equipment bases, and other existing railroad facilities or the right to use such facilities, for the purpose of conducting operations of a nature and at a level of use similar to those presently or previously existing on the subject properties. *(Complete Part III, Sections H, I, U, & V and submit to FRA)*

☐ Research, development and/or demonstration of advances in signal, communication and/or train control systems on existing rail lines provided that such research, development and/or demonstrations do not require the acquisition of substantial amounts of right-of-way, and do not substantially alter the traffic density [or operational] characteristics of the existing rail line. *(Continue to Part III)*

☐ Temporary replacement of an essential rail facility if repairs are commenced immediately after the occurrence of a natural disaster or catastrophic failure. *(Continue to Part III)*

☐ Changes in plans for a proposal for which an environmental document has been prepared, where the changes would not alter the environmental impacts of the action. *(Continue to Part III describing the full consequences of the changes only)*

☐ Maintenance of: existing railroad equipment; track and bridge structures; electrification, communication, signaling, or security facilities; stations; maintenance-of-way and maintenance-of-equipment bases; and other existing railroad-related facilities. ("Maintenance" means work, normally provided on a periodic basis, which does not change the existing character of the facility, and may include work characterized by other terms under specific FRA programs) *(Continue to Part III)*

☐ Financial assistance for the construction of minor loading and unloading facilities, provided that proposals are consistent with local zoning, do not involve the acquisition of a significant amount of land, and do not significantly alter the traffic density characteristics of existing rail or highway facilities. *(Continue to Part III)*

☒ Minor rail line additions including construction of side tracks, passing tracks, crossovers, short connections between existing rail lines, and new tracks within existing rail yards, provided that such additions are consistent with existing zoning, do not involve acquisition of a significant amount of right of way, and do not substantially alter the traffic density characteristics of the existing rail lines or rail facilities. *(Continue to Part III)*

☐ Improvements to existing facilities to service, inspect, or maintain rail passenger equipment, including expansion of existing buildings, the construction of new buildings and outdoor facilities, and the reconfiguration of yard tracks. *(Continue to Part III)*

☐ Environmental remediation through improvements to existing and former railroad track, infrastructure, stations and facilities, for the purpose of preventing or correcting environmental pollution of soil, air or water. *(Continue to Part III)*

☒ Replacement, reconstruction, or rehabilitation of an existing railroad bridge, including replacement with a culvert, that does not require the acquisition of a significant amount of right-of-way. *(Continue to Part III)*

III. PROPOSAL INFORMATION FOR CATEGORICAL EXCLUSIONS

Complete Part III unless indicated otherwise in Part II and submit to FRA.

For work to fixed facilities, maps displaying the following, as applicable, are required to be attached for FRA review:

- Proposal vicinity
- Proposal Site Plan indicating the USGS Quadrangle and Section
- Other Information as necessary to complete Part III

A. Describe how the proposal satisfies the purpose and need identified in Part I:

The proposed action increases the operating capacity of the Springfield Line to relieve congestion between passenger and freight service and leads to economic benefits through more efficient transport of goods and services. All improvements in the proposed action would be permanent and support a future High Speed Rail implementation process.

B. Location & Land Use: *For fixed facilities, attach a map or diagram, at an appropriate scale, identifying the location of the proposal site and if applicable, the surrounding land uses and zoning of the site and surrounding properties. If the proposal would require many pages of maps or diagrams, include only a location map and contact FRA to determine if additional information is required. A map or diagram that identifies locations of critical resource areas, wetlands, potential historic sites, or sensitive noise receptors such as schools, hospitals, and residences should be included if there is the potential for impacts to these resources.*

Briefly describe the existing land use of the proposal site and surrounding properties and resources.

The existing land to be used for the project is already railroad right of way that historically contained two or more tracks. Adjacent property usage along the corridor varies; industrial,agriculture, commercial/civic, recreations, residential, and undeveloped land.

From Berlin north to Newington, land uses consist of very low density

residential and neighborhood commercial uses on the west side of the tracks and industrial uses on the east side of the tracks. Single-family dwellings on large lots appear on both sides of the tracks as the corridor approaches the center of Berlin. Then, landscape becomes more industrial with several large distribution facilities located on the east and west sides of the rail line.

As the rail corridor enters Newington, industrial uses can be found on the east side of the rail line. Single family homes are located on the west side of the tracks. The neighborhood streets are separated from the rail line by a densely forested buffer. Moving northward through Newington, residential uses are located directly adjacent to the rail line on the east side, while the west side of the tracks is vacant, forested lands. As the rail corridor continues north toward West Hartford, industrial land uses become more prevalent and take the form of large warehouses and distribution centers. There are also several football and baseball field located on the east side of the tracks.

C. Historic Resources: *If any cultural, historic, or archaeological resources are located in the immediate vicinity of the proposal, check and describe the resource(s) and then describe any potential effect of the proposal on the resource(s). Consultation with the SHPO is necessary when these resources are potentially affected.*

☐ Cultural:

☒ Historical:

Many of the existing railroad bridges and culverts are historic structures dating to the nineteenth century. These structures accommodated double track until one track was removed around 1990. Preliminary engineering inspections indicate that some of the bridges/culverts in the proposed action segment have deteriorated to the point that they will need to be repaired, rehabilitated, or replaced to support the new double track. No adjacent properties would be affected by the project and thus the railroad bridges/culverts are the only potentially affected historic resources. The Connecticut State Historic Preservation Officer (SHPO) is in concurrence with the determination of eligibility of the entire Line for listing on the National Register and the determination of No Adverse Effect, conditional upon mitigation and further consultation. The inspection and recommended action on each bridge structure, as well as it's potential historic significance is attached as Appendix C.

☐ Archaeological:

The existing land to be used for the project is already railroad right of way that historically contained two or more tracks. Any removal of or disturbance to archaelogical artifacts occurred during the original and subsequent construction. The proposed action would require mimimal excavation and is not anticipated to extend beyond the horizontal and vertical extent of previously disturbed and/or filled areas.

Has consultation with the State Historic Preservation Officer occurred? If so, describe and attach relevant correspondence.

☒ Consultation with SHPO: A number of historic bridges/culverts in the project area have become structurally unsound and may require repairs, rehabilitation, or replacement. CTDOT has been in communication with

SHPO relative to the historical significance and potential Section 106 impacts from the bridges/culverts. SHPO review resulted in their determination of No Adverse Effect upon the State's cultural heritage contingent upon mitigative measures taking place prior to the start of construction (see Section X. Mitigation). Correspondence received from SHPO dated October 19, 2009 and May 20, 2010 relative to concurrence, mitigation and consultation procedures is attached in Appendix C.

D. Public Notification: *Briefly describe any public outreach efforts undertaken on behalf of the proposal, if any. Indicate opportunities the public has had to comment on the proposal (e.g., Board meetings, open houses, special hearings).*

CTDOT has met with local community leaders to discuss the scope and limits of this project.

Indicate prominent concerns expressed by agencies or the public regarding the proposal, if any.

All consulted parties are in favor of this project.

E. Transportation: *Would the proposal have a detrimental effect on other railway operations or impact road traffic, or increase demand for parking?*

☒ No (continue) ☐ Yes, describe potential transportation, traffic, and parking impacts, and address capacity constraints and potential impacts to existing railroad and highway operations. Include maps or diagrams indicating any impacts and any proposed modifications to existing railways or roadways or parking facilities. Also, summarize any consultation that has occurred with other railroads or highway authorities whose operations this project will impact.

The congestion relief achieved by the proposed action will not increase the number of freight and passenger trains in the corridor.

F. Noise and Vibration: *Are permanent noise or vibration impacts likely?*

☒ No (continue) ☐ Yes, describe how the proposal will involve noise impacts. If the proposal will result in a change in noise sources (number or speed of trains, stationary sources, etc.) and sensitive receptors (residences, hospitals, schools, parks, etc.) are present, apply screening distances for noise and vibration assessment found in FRA noise impact assessment guidance manual (and FTA's manual as needed) and compare proposal location with nearest receptor(s). If the screening distance is not achieved, attach a "General Noise and/or Vibration Assessment."

Noise ☐ Vibration ☐

The proposed action does not increase the number of trains operating in the corridor. And, the existing railroad right-of-way historically contained two or more tracks, with more operations than at the present time. This project will re-install the track that used to be there, and relieve congestion, making for more efficient operations along the corridor. A benefit of the project is less congestion, which means less slowing and braking of diesel-powered locomotives and idling, both of which create noise in the corridor.
The Proposed Action accounts for double-tracking for a 10-mile stretch from Berlin to Newington to relieve congestion. The number of trains will not increase as a result of the Proposed Action. Therefore, there are no expected vibration impacts from the Proposed Action.

As a result of the general assessment(s) are there noise or vibration impacts?

☒ No (continue) ☐ Yes (Describe and provide map identifying sensitive receptors):

G. **Air Quality:** *Does the proposal have the potential to increase concentrations of ambient criteria pollutants to levels that exceed the NAAQS, lead to the establishment of a new non-attainment area, or delay achievement of attainment?*
☒ No (continue) ☐ Yes, attach an emissions analysis for General Conformity regarding Carbon Monoxide (CO), Ozone (O_3), Particulate Matter (PM_{10}), Nitrous Oxides (NO_x), and Carbon Dioxide (CO_2), and include a hot spot analysis if indicated. Describe any substantial impacts from the proposal.

Because the Proposed Action does not increase the number of trains operating in the corridor, emissions will not change as a result of the Proposed Action. Thus, the Proposed Action will not result in emission budgets to be violated or cause or contribute to violations of the National Ambient Air Quality Standards (NAAQS) for volatile organic compounds (VOCs), nitrogen oxides (NOx), carbon monoxide (CO), ozone, carbon monoxide (CO).

Is the proposal located in a Non-Attainment or Maintenance area?
☐ No (continue) ☒ Yes, for which of the following pollutants:

☒ Carbon Monoxide (CO) ☒ Ozone (O_3) ☐Particulate Matter (PM_{10})

H. **Hazardous Materials***: Does the proposal involve the use or handling of hazardous materials?*
☒ No (continue) ☐ Yes, describe use and measures that will mitigate any potential for release and contamination.

I. **Hazardous Waste:** *If the proposal site is in a developed area or was previously developed or used for industrial or agricultural production, is it likely that hazardous materials will be encountered by undertaking the proposal?* (Prior to acquiring land or a facility with FRA funds, FRA must be consulted regarding the potential presence of hazardous materials)

☐ No, explain why not and describe the steps taken to determine that hazardous materials are not present on the proposal site and then continue to question I.

☒ Yes, complete a Phase I site assessment and attach.

If a Phase I survey was completed, is a Phase II site assessment recommended?
☐ No (continue) ☒ Yes, describe the mitigation and clean-up measures that will be taken to remediate any hazardous materials present and what steps will be taken to ensure that the local community is protected from contamination during construction and operation of the proposal.

The proposed project does not change existing rail uses and does not introduce the use or handling of hazardous waste. There is, however, some likelihood that contaminants will be encountered during construction. Within the Proposed Action area (defined as the NHHS rail line, plus 250 feet on either side of the line from Milepost 21 to Milepost 31 from Berlin to Newington), there are properties adjacent to the railroad right-of-way with a history of contamination. These sites were identified by existing CERCLIS, hazardous waste, and/or leachate-wastewater sites associated with industrial, landfill, or waste management sites or incidents. A list of these sites/incidents by town is attached (Appendix D) for reference.

In addition, given the long history of rail operations along the NHHS line, there is some likelihood of encountering contaminants commonly associated with railroad corridors, such as railroad ties (wood - treating chemicals), spilled or leaked fluids (oil, cleaning solvents),

herbicides, transformer fluids (PCBs), fossil fuel combustion products (PAHs), asbestos, and metals such as arsenic and mercury.

To address the potential to encounter hazardous materials during construction, a Waste Management Plan will be developed setting forth protocols and procedures relative to testing and disposal of such materials. The Plan will be approved by CTDEP and comply with all state and federal regulations.

J. Property Acquisition: *Is property acquisition needed for the proposal?*
☒ No (continue) ☐ Yes, indicate whether the acquisition will result in relocation of businesses or individuals. **Note:** *To ensure eligibility for Federal participation, grantees may not acquire property with either local matching or Federal funds prior to completing the NEPA process and receiving written FRA concurrence in both the NEPA recommendation and property appraisals.*

K. Community Disruption and Environmental Justice: *Does the proposal present potentially disruptive impacts to adjacent communities?*
☒ No (continue) ☐ Yes, provide a socio-economic profile of the affected community. Indicate whether the proposal will have a disproportionately high and adverse effect on minority or low-income populations. Describe any potential adverse effects and any community resources likely to be impacted. Describe outreach efforts targeted specifically at minority or low-income populations.

The re-installment of double tracking where there once was double tracking for the purposes of congestion relief will have no impacts to neighborhoods or community facilities including:

- No changes to access within or to or from a neighborhood
- No changes to aesthetic setting or architectural fabric of the neighborhood
- No physical barriers to neighborhood interaction or community disruptions from noise impacts
- No loss of important community institutions or gathering places
- No disruption or loss of community resources, such as emergency services (police, fire, and ambulance/EMT stations), schools, religious institutions and cemeteries, cultural institutions including libraries and museums, hospitals, recreation areas/parks, community/senior centers.

L. Impacts On Wetlands: *Does the proposal temporarily or permanently impact wetlands or require alterations to streams or waterways?*
☐ No (continue) ☒ Yes, show wetlands and waters on the site map and classification. Describe the proposal's potential impact to on-site and adjacent wetlands and waters and attach any coordination with the State and US Army Corps of Engineers.

April 2010 field observations indicate that there are several wetlands within Amtrak properties throughout the corridor. These wetlands are at the base of existing ballast and would not be impacted by the project because there is no proposal to alter the existing topography. The double track will be constructed on a previously engineered rail bed which does not contain wetlands. However, bridge and culvert replacements could temporarily or permanently impact waterways where the bridge/culvert spans or conveys water. The work would be conducted to avoid direct impacts to water to the extent possible and to abide by all state and federal permit conditions, with the intent to minimize

and (if warranted) mitigate impacts. Mapping of Wetlands is attached as Appendix E.

M. Floodplain Impacts: *Is the proposal located within the 100-year floodplain or are regulated floodways affected?*

☐ No (continue) ☒ Yes, describe the potential for impacts due to changes in floodplain capacity or water flow, if any. If impacts are likely, attach scale maps describing potential impacts and describe any coordination with regulatory entities.

The project will not add embankment and and will not change the existing topography that would impact the floodplain capacity. Work on the bridges and culverts within the floodplains will be designed as not to adversely impact the floodplain. Mapping of floodplains is attached as Appendix F.

N. Water Quality: *Are protected waters of special quality or concern, essential fish habitats, or protected drinking water resources present at or directly adjacent to the proposal site?*

☒ No (continue) ☐ Yes, describe water resource and the potential for impact from the proposal, and any coordination with regulatory entities.

There is no increase in water quality impacts due to the proposed action except during construction. Surface Water is illustrated in Appendix F. Impacts and associated mitigations are included under Construction Impacts.

O. Navigable Waterways: *Does the proposal cross or have effect on a navigable waterway?*

☒ No (continue) ☐ Yes, describe potential for impact and any coordination with US Coast Guard.

The Proposed Action does not cross or have an effect on any Navigable Waterways.

P. Coastal Zones: *Is the proposal in a designated coastal zone?*

☒ No (continue) ☐ Yes, describe coordination with the State regarding consistency with the coastal zone management plan and attach the State finding if available.

The Proposed Action is not in a designated coastal zone.

Q. Prime and Unique Farmlands: *Does the proposal involve the use of any prime or unique farmlands?*

☒ No (continue) ☐ Yes, describe potential for impact and any coordination with the Soil Conservation Service of the US Department of Agriculture.

The existing land to be used for the project is already railroad right of way that historically contained two or more tracks. Any farmlands that used to be present in the corridor have long since been removed and filled to create the embankment for the railroad line and for the installation of ballast.

R. Ecologically Sensitive Areas And Endangered Species: *Are any ecologically sensitive natural areas, designated wildlife or waterfowl refuges, or designated critical habitat areas (woodlands, prairies, wetlands, rivers, lakes, streams, and geological formations determined to be essential for the survival of a threatened or endangered species) within or directly adjacent to the proposal site?*

☐ No (continue) ☒ Yes, describe them and the potential for impact. Describe any consultation with the State and the US Fish and Wildlife Service about the impacts to these natural areas and on threatened and endangered fauna and flora that may be affected. If required prepare a biological assessment and attach.

Coordination with the DEP and U.S. Fish and Wildlife Service was initiated for the entire 62-mile Line between New Haven and Springfield. There is one potential sensitive/critical habitat area for threatened and endangered species near MP 23, indicated by a

Connecticut DEP Natural Diversity Database record (mapped). However, there are no bridge/culvert replacements proposed in the vicinity of this record, so no work will extend beyond the existing previously engineered rail bed where the double track will be placed. There is thus negligible risk of impact to this habitat area. Correspondence between CTDOT and DEP is attached in Appendix G.

S. **Safety And Security:** *Are there safety or security concerns about the proposal?*
☒ No (continue) ☐ Yes, describe the safety or security concerns and the measures that would need to be taken to provide for the safe and secure operation of the proposal after its construction.

T. **Construction Impacts:** *Are major construction period impacts likely?*
☐ No (continue) ☒ Yes, describe the construction plan and identify impacts due to construction noise, utility disruption, debris and spoil disposal, and address air and water quality impacts, safety and security issues, and disruptions of traffic and access to property and attach scale maps as necessary.

1. Construction of the Proposed Action will require about 24 months to complete. The following types of construction equipment, among others will be used to prepare the site; realign existing track; construct the new track and rail infrastructure; and repair and modify existing bridge structures: Trucks and Dump Trucks, Backhoes, Cranes, Air Compressors, Various Track and Ballast Machines.

2. Demolition and construction will result in a variety of temporary impacts including: Maintenance of Traffic and safety during construction near Amtrak and freight rail operations, temporary noise and air, waste disposal measures, and erosion and sedimentation control.

3. It is anticipated that all work, including construction staging, will be completed within the permanent railroad right-of-way.

4. To mitigate the potential impacts during construction, mitigation measures incorporating best mangaement practices will be developed by the designer. Such mitigation measures will be included in the contract documents where necessary and as appropriate and will include, but not be limited to:

   -Maintenance and protection of traffic
   -Noise
   -Air quality
   -Water quality
   -Disposal of construction waste
   -Contaminated soils
   -Utility impacts

5. At Berlin Station, the Track 1 alignment was relocated to the location originally occupied by Track 2. This is due to the under grade bridge recently replaced to the south of the station. This alignment was never moved back, thus there the Track 1 alignment crosses over to the existing single low level platform on the eastern side of the right-of-way.

   To accommodate construction of the second track, a temporary pedestrian grade crossing will be installed in front of the existing low-level platform. This will facilitate the boarding of

passengers on a train waiting on Track 1, the westernmost track. It is anticipated that most trains will board and alight passengers from Track 2, the closest track to the platform, however, Track 1 will be available if necessary.

Should Track 1 boarding and alighting occur, rassengers will not cross Track 2 without instruction and supervision by a qualified train conductor. The pedestrian grade crossing will be a temporary condition until the follow-on project provides two high-level platforms and a pedestrian up and over structure.

U. Cumulative Impacts: *Are cumulative impacts likely?*

A "cumulative impact" is the impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts may include ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or resulting from smaller actions that individually have no significant impact. Determining the cumulative environmental consequences of an action requires delineating the cause-and-effect relationships between the multiple actions and the resources, ecosystems, and human communities of concern.

☒ No (continue) ☐ Yes, describe the reasonably foreseeable:

(a) Direct impacts, which are caused by the action and occur at the same time and place.

(b) Indirect impacts, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect impacts may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.

V. Related Federal, State, or Local Actions: *Indicate whether the proposal requires any of the following actions (e.g., permits) by other Agencies and attach copies of relevant correspondence.* It is not necessary to attach voluminous permit applications if a single cover Agency transmittal will indicate that a permit has been granted. Permitting issues can be described in the relevant resource discussion in sections B-S above.

☒ **Section 106** *Historic and Culturally Significant Properties*

☒ **Section 401/404** *Wetlands and Water*

☐ **USCG 404** *Navigable Waterways*

☒ **Executive Orders** *Wetlands, Floodplains, Environmental Justice*

☐ **Clean Air Act** *Air Quality*

☐ **Endangered Species Act** *Threatened and Endangered Biological Resources*

☐ **Magnuson-Stevens Fishery Conservation and Management Act** *Essential Fish Habitat*

☐ **Safe Drinking Water Act**

☒ **Other State or Local Requirements** (Describe)

During the design stage of the project, coordination with the applicable federal, state and local agencies will be undertaken to

determine the applicable permit requirements.

X. Mitigation: Describe mitigation measures which address identified impacts and have been incorporated into the proposal, if any.

Pursuant to the letter dated December 2, 2010, from the US Army Corps of Engineers, a permit will be sent to that Agency in compliance with section 404 of the Clean Water Act for the discharge of dredged and/or fill materials into waterways/wetlands in association with rail construction and the rehabilitation, repair/replacement of those bridges/culverts to support the rail projects. In addition, Federal wetlands boundaries will be supported by appropriate field data information where there will be impacts on wetlands areas, in accordance with the Corp of Engineers Wetland Delineation manual and the accompanying regional supplement. Additional information will be provided to the US Army Corp of Engineers as developed, and appropriate regualtory actions taken, regarding historic resources, floodplains impacts, and construction impacts. No work will be conducted within the regulated areas prior to obtaining the required permits.

In compliance with the letter dated October 19, 2009 from the State Historic Preservation Office, the following mitigative measures will be undertaken prior to the start of construction: CTDOT and/or FRA shall document all railroad-related components located within the project boundaries, including passenger stations, freight houses, culverts, bridges, elevated alignments and embankments, interlocking and switching devices, and whistle posts and signalization. Final documentation shall consist of narrative text, photographs and/or digital images, an index to the photographs, and a photographic site plan. Final documentation shall be provided to SHPO for permanent archiving and public accessibility. CTDOT and/or FRA shall submit a brief history and description of the New Haven-Hartford-Springfield Line, including project-related information, photographs, site plans and maps to the Society for Industrial Archaeology New England Chapters Newsletter. CTDOT and/or FRA shall coordinate with Connecticut's trolley and railroad museums regarding the potential salvage and adaptive use of small-scale railroad components scheduled to be upgraded and/or replaced within the proposed project boundaries.

Pursuant to the provisions of Section 106 of the National Historic Preservation Act and the Connecticut Environmental Policy Act, all masonry work required during construction must meet the Secretary of the Interior's Standards for the treatment of historic places.

All remaining construction-related mitigation required during construction is included under Section T. Construction Impacts.

Federal Railroad Administration (FRA)
CATEGORICAL EXCLUSION WORKSHEET

Note: The purpose of this worksheet is to assist proposal sponsors in gathering and organizing materials for environmental analysis required under the National Environmental Policy Act (NEPA), particularly for proposals, which may qualify as Categorical Exclusions and to assist the FRA in evaluating requests from project sponsors for categorical exclusion determinations. Categorical Exclusions are categories of actions (i.e. types of projects) that the FRA has determined, based on its experience, typically do not individually or cumulatively have a significant effect on the human environment and which generally do not require the preparation of either an environmental impact statement or an environmental assessment.

Submission of the worksheet by itself does not meet NEPA requirements. FRA must concur in writing with the proposal sponsor's Categorical Exclusion recommendation for NEPA requirements to be met. Please complete this worksheet using compatible word processing software and submit and transmit the completed form in electronic format.

For Agency Use	*Date Received:*
Reviewed By: *Date:*	*Recommendation for action:* ☐ *Accept* ☐ *Return for Revisions* ☐ *Not Eligible*
Comments:	
Concurrence by Counsel: ☐ *Accept Recommendation* ☐ *Return with Comments*	*Reviewed By:* *Date:*
Comments:	
Concurrence by Approving Official:	*Date:*

I. PROPOSAL DESCRIPTION

Proposal Sponsor	**Date Submitted**	**FRA Identification Number (if any)**
Connecticut Department of Transportation	08/30/2011	
Proposal Title New Haven-Hartford-Springfield (NHHS)Rail Program Hartford-Windsor Double Track Project		
Location (Include Street Address, City or Township, County, and State) New Haven, CT - Springfield, MA		
Contact Person Acting Commissioner James Redeker	**Phone** 860-594-2802	**E-mail Address** james.redeker@ct.gov
Note: Fully describe the proposal including specifics that may be of environmental concern such as: widening an embankment to stabilize roadbed; repairing or replacing bridge piers foundations, including adding rip-rap in a waterway; earthwork and altering natural (existing) drainage patterns and creating new water discharge; contaminated water needing treatment; building a new or adding on to a shop building; fueling or collection of fuel or oil and contaminated water; building or extending a siding; and building or adding on to a yard.		

Description of Proposal

The NHHS Rail Program Hartford-Windsor Double Track Project is intended to restore 5.8 miles of double track along the the New Haven-Hartford-Springfield (NHHS) rail corridor between Hartford and Windsor. The track was removed by Amtrak in the 1980s. This trackage will connect to an existing 3.3 mile segment of double track between Windsor and Windsor Locks to create a combined 9.1 mile two-track section. This added track capacity will reduce current passenger and freight train delays in the congested area leading to Hartford Yard and the single-track Hartford Viaduct, as well as support the capacity required for future passenger rail service expansion on the NHHS rail corridor included as part of the NHHS Rail Program. In addition, five public and four private crossings will be upgraded Between Hartford and Windsor Locks to accommodate the next section of future double track, and new underground signal, communications and power cables will be installed on the railroad right-of-way between Hartford and Springfield to support current and future wayside equipment. A map of the NHHS rail corridor is attached.

The project consists of the following:

- Installation of 4.1 miles of new track between MP 38.9 and 43.0
- Rehabilitation of 1.7 miles of existing siding (MP 37.2-38.9)
- Installation of 8500 feet of new rail siding between MP 37.3 and 38.8
- Installation of 4.1 miles of track between MP 38.9 and 43.0.
- Installation of a new “Midland” interlocking at MP 39.1
- Signalization upgrades, including 26 miles of new underground cabling
- Repairs/rehabilitation to seven under-grade culverts/bridges
- Minor maintenance to two culverts
- Upgrade 5 public at-grade crossings; closure/upgrade 4 private crossings.

Several of the structures which must be repaired are historic; however, none currently are planned for replacement. CTDOT is in discussions with the CTSHPO to coordinate this work (see discussion under Section C Historic Resources, and letter of August 26, 2011, to the CTSHPO). Amtrak is seeking to update the NHHS right-of-way cross section with wider track centers and more consistent shoulders. This would result in minor changes in the existing track alignment and potential expansion of right-of-way boundaries. In a worst case scenario, this could impact up to 1.04 acres of wetlands between Hartford and Windsor. However, Amtrak has indicated that it will work with CTDOT to avoid any such adverse impacts to wetlands and flood plain areas. As a result, changes to the alignment in wetland or floodplain areas currently are planned to remain within the railroad right-of-way and within the existing disturbed area, with no permanent wetland impacts. No property acquisition is planned, but it is possible that small "sliver takes" may ultimately be required to adjust ROW boundaries, for slope stabilization and at at-grade crossings. Any impacts in a wetland area will be coordinated with CTDEEP and FRA, including appropriate mitigation, and CTDOT and Amtrak will comply with all federal requirements.

The double-tracking will provide immediate benefits in terms of increased reliability for existing passenger and freight rail service. In the event the full NHHS Rail Program is ready to advance to construction, this segment of double-track could be constructed as part of the larger program to provide procurement and cost efficiencies, and reduce delays to existing operations.

Purpose and Need of Proposal

Project needs include the following:

The project will provide a reliable, safe and fast transportation alternative along the 5.8 mile NHHS rail corridor and provide a high-speed passenger rail network connecting the region. In the process, the communities along the NHHS rail corridor can leverage the investment in new rail service to stimulate new downtown mixed-use development and economic opportunities.

This project provides important new capacity for both current and future passenger and freight rail service. A major area of rail line congestion is immediately north of the Hartford station. Freight operators use the Hartford Yard to build trains and manage shipments destined for local shippers. These trains operate both on the NHHS rail line and/or cross over it, limiting the line's availability for use by trains operating to or from Hartford. The result is both a limitation on the number of through trains and frequent delays. Adding track capacity by restoring 5.8 miles of double track and adding a new siding in the Hartford Yard, as well as adding the new Midland interlocking, will reduce delays as well as provide future capacity for additional passenger and freight rail service. This is critical to transforming the NHHS rail corridor into a reliable, fast passenger transportation alternative, as well as helping to support timely transportation for local shippers and busineses.

Impacts resulting from implementation of the NHHS Rail Program are detailed in the NHHS Rail Program Environmental Assessment, completion of which is planned for December 2011. The project for which this CE is being completed is a stand alone project with independent utility.

II. NEPA CLASS OF ACTION

Answer the following questions to determine the proposal's potential class of action.

A. Will the proposal substantially impact the natural, social and / or human environment?

☐ YES (Contact FRA) ☒ NO (Continue)

Actions that will significantly impact the environment require preparation of an Environmental Impact Statement. These proposals typically include construction or extension of rail lines or rail facilities including passenger, high speed, or freight rail activities.

B. Is the significance of the proposal's social, economic or environmental impacts unknown?

☐ YES (Contact FRA) ☒ NO (Continue)

C. Does Section 4(f) of the Department of Transportation Act apply? (i.e. proposal requires the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of an historic site of national, State, or local significance, as determined by the Federal, State, or local officials having jurisdiction over the park, area, refuge, or site.)

☐ YES (Contact FRA) ☒ NO (Continue)

D. Is the proposal likely to require detailed evaluation of more than a few potential impacts?

☐ YES (Contact FRA) ☒ NO (Continue)

E. Is the proposal likely to generate intense public discussion or concern, even though it may be limited to a relatively small subset of the community?

☐ YES (Contact FRA) ☒ NO (Continue)

F. Is the proposal inconsistent with any Federal, State, or local law, regulation, ordinance, or Judicial or administrative determination relating to environmental protection?

☐ YES (Contact FRA) ☒ NO (Continue)

G. Is the proposal an integral part of a program of current Federally supported actions which, when considered separately, would not be classified as major actions, but when considered together may result in substantial impacts?

☐ YES (Contact FRA) ☒ NO (Continue)

If the answer to any of the questions B through G is "YES", contact the FRA to determine whether the proposal requires preparation of an Environmental Assessment.

H. Is the proposal consistent with one of the following potential Categorical Exclusions?

FRA Procedures for Considering Environmental Impacts, 64 FR 28545 (May 26, 1999)

☒ YES (Mark category and continue as indicated) ☐ NO (Contact FRA)

☐ Financial assistance or procurements solely for planning or design activities that do not commit the FRA or its applicants to a particular course of action affecting the environment. *(stop and submit to FRA)*

☐ State rail assistance grants for acquisition. *(Continue to Part III)*

☐ Operating assistance to a railroad to continue existing service or to increase service to meet demand, where the assistance will not result in a change in the effect on the environment. *(stop and submit to FRA)*

☐ Acquisition of existing railroad equipment, track and bridge structures, electrification, communication, signaling or security facilities, stations, maintenance of way and maintenance of equipment bases, and other existing railroad facilities or the right to use such facilities, for the purpose of conducting operations of a nature and at a level of use similar to those presently or previously existing on the subject properties. *(Complete Part III, Sections H, I, U, & V and submit to FRA)*

☐ Research, development and/or demonstration of advances in signal, communication and/or train control systems on existing rail lines provided that such research, development and/or demonstrations do not require the acquisition of substantial amounts of right-of-way, and do not substantially alter the traffic density [or operational] characteristics of the existing rail line. *(Continue to Part III)*

☐ Temporary replacement of an essential rail facility if repairs are commenced immediately after the occurrence of a natural disaster or catastrophic failure. *(Continue to Part III)*

☐ Changes in plans for a proposal for which an environmental document has been prepared, where the changes would not alter the environmental impacts of the action. *(Continue to Part III describing the full consequences of the changes only)*

☒ Maintenance of: existing railroad equipment; track and bridge structures; electrification, communication, signaling, or security facilities; stations; maintenance-of-way and maintenance-of-equipment bases; and other existing railroad-related facilities. ("Maintenance" means work, normally provided on a periodic basis, which does not change the existing character of the facility, and may include work characterized by other terms under specific FRA programs) *(Continue to Part III)*

☐ Financial assistance for the construction of minor loading and unloading facilities, provided that proposals are consistent with local zoning, do not involve the acquisition of a significant amount of land, and do not significantly alter the traffic density characteristics of existing rail or highway facilities. *(Continue to Part III)*

☒ Minor rail line additions including construction of side tracks, passing tracks, crossovers, short connections between existing rail lines, and new tracks within existing rail yards, provided that such additions are consistent with existing zoning, do not involve acquisition of a significant amount of right of way, and do not substantially alter the traffic density characteristics of the existing rail lines or rail facilities. *(Continue to Part III)*

☐ Improvements to existing facilities to service, inspect, or maintain rail passenger equipment, including expansion of existing buildings, the construction of new buildings and outdoor facilities, and the reconfiguration of yard tracks. *(Continue to Part III)*

☐ Environmental remediation through improvements to existing and former railroad track, infrastructure, stations and facilities, for the purpose of preventing or correcting environmental pollution of soil, air or water.

(Continue to Part III)

☒ Replacement, reconstruction, or rehabilitation of an existing railroad bridge, including replacement with a culvert, that does not require the acquisition of a significant amount of right-of-way. *(Continue to Part III)*

III. PROPOSAL INFORMATION FOR CATEGORICAL EXCLUSIONS

Complete Part III unless indicated otherwise in Part II and submit to FRA.

For work to fixed facilities, maps displaying the following, as applicable, are required to be attached for FRA review:

- Proposal vicinity
- Proposal Site Plan indicating the USGS Quadrangle and Section
- Other Information as necessary to complete Part III

A. Describe how the proposal satisfies the purpose and need identified in Part I:

This project provides important new capacity for both current and future passenger and freight rail service. A major area of existing rail line congestion is immediately north of the Hartford station. Freight operators use the Hartford Yard to build trains and manage shipments destined for local shippers. These trains operate both on the NHHS rail line or cross over it, limiting its availability for use by passenger trains operating to or from Hartford. The result is both a limitation on the number of through trains and frequent delays. Adding track capacity by restoring 5.8 miles of double track and adding a new siding in the Hartford Yard, as well as adding the new Midland interlocking, will reduce delays as well as provide future capacity for additional passenger and freight rail service. This is critical to transforming the corridor into a reliable, fast regional passenger transportation alternative, as well as helping to support timely transportation for local shippers and busineses.

B. Location & Land Use: *For fixed facilities, attach a map or diagram, at an appropriate scale, identifying the location of the proposal site and if applicable, the surrounding land uses and zoning of the site and surrounding properties. If the proposal would require many pages of maps or diagrams, include only a location map and contact FRA to determine if additional information is required. A map or diagram that identifies locations of critical resource areas, wetlands, potential historic sites, or sensitive noise receptors such as schools, hospitals, and residences should be included if there is the potential for impacts to these resources.*

Briefly describe the existing land use of the proposal site and surrounding properties and resources.

The project covers 5.8 miles of the NHHS rail corridor immediately north of Hartford. Approximately half of this distance lies within heavily industrial and other developed areas, including the Hartford Yard; the other half lies in undeveloped forest and forested wetland areas to the west of the Connecticut River near and in Windsor.

C. Historic Resources: *If any cultural, historic, or archaeological resources are located in the immediate vicinity of the proposal, check and describe the resource(s) and then describe any potential effect of the proposal on the resource(s). Consultation with the SHPO is necessary when these resources are potentially affected.*

☐ Cultural:

☒ Historical:

Many of the existing railroad bridges and culverts along the NHHS rail corridor are historic structures dating to the nineteeth century. These

structures accommodated double track until one track was removed in the 1980s. A total of seven structures require repair or rehabilitation to extend their life and accommodate restoration of the second track; however, no replacements are planned at this time. Two other structures require minor maintenance. Most of these structures exceed fifty years in age. Work will include replacing existing signal, communications and power cables currently attached to or under the bridges with new cable. Photographs of the structures are included in the CTDOT letter of of August 26, 2011 to the Connecticut State Historic Preservation Officer (CTSHPO). No adjacent properties are expected to be affected by the project (other than, as noted, the possibility that small "sliver takes" ultimately may be required to adjust the ROW boundaries, for slope stabilization and at at-grade crossings) and thus the railroad structures are the only potentially affected historic resources. The CTSHPO is in concurrence with the determination of eligibility of the entire NHHS rail line for listing on the National Register. In 2009, it provided a determination of No Adverse Effect, conditional upon mitigation and further consultation, for a similar segment of double track work between Meriden and Newington.

☐ Archaeological:

Has consultation with the State Historic Preservation Officer occurred? If so, describe and attach relevant correspondence.

☒ Consultation with SHPO: Issues affecting historic structures were addressed by the SHPO in its October 19, 2009 and May 20, 2010 letters pertaining to Phase 1(Meriden-Newington) of the NHHS Rail Program. On August 26, 2011, CTDOT sent a letter regarding the Hartford-Windsor double track project to the SHPO seeking a consistent determination and mitigation requirements for the new double track section.

D. Public Notification: *Briefly describe any public outreach efforts undertaken on behalf of the proposal, if any. Indicate opportunities the public has had to comment on the proposal (e.g., Board meetings, open houses, special hearings).*

There have been numerous public meetings, hearings and discussions of the NHHS Rail Program over the past five years. A new program website recently was developed to provide information and news about the program. It has received some 2500 visits in just the past four months.

Indicate prominent concerns expressed by agencies or the public regarding the proposal, if any.

No concerns have been raised by the public about double tracking north of Hartford.

E. Transportation: *Would the proposal have a detrimental effect on other railway operations or impact road traffic, or increase demand for parking?*

☒ No (continue) ☐ Yes, describe potential transportation, traffic, and parking impacts, and address capacity constraints and potential impacts to existing railroad and highway operations. Include maps or diagrams indicating any impacts and any proposed modifications to existing railways or roadways or parking facilities. Also, summarize any consultation that has occurred with other railroads or highway authorities whose operations this project will impact.

The improvements will reduce passenger and freight rail delays and enhance operations by freight rail operators. Construction activities will be staged to minimize impacts to existing train service.

F. Noise and Vibration: *Are permanent noise or vibration impacts likely?*
☒ No (continue) ☐ Yes, describe how the proposal will involve noise impacts. If the proposal will result in a change in noise sources (number or speed of trains, stationary sources, etc.) and sensitive receptors (residences, hospitals, schools, parks, etc.) are present, apply screening distances for noise and vibration assessment found in FRA noise impact assessment guidance manual (and FTA's manual as needed) and compare proposal location with nearest receptor(s). If the screening distance is not achieved, attach a "General Noise and/or Vibration Assessment."

Noise ☐ Vibration ☐

The proposed double tracking will not generate noise or vibration impacts. The project will support improvements to existing Amtrak service. However, the project will also support future implementation of the NHHS Rail Program, which incudes a significant increase in the number of trains serving the NHHS rail corridor.

As a result of the general assessment(s) are there noise or vibration impacts?

☒ No (continue) ☐ Yes (Describe and provide map identifying sensitive receptors):

G. Air Quality: *Does the proposal have the potential to increase concentrations of ambient criteria pollutants to levels that exceed the NAAQS, lead to the establishment of a new non-attainment area, or delay achievement of attainment?*
☒ No (continue) ☐ Yes, attach an emissions analysis for General Conformity regarding Carbon Monoxide (CO), Ozone (O_3), Particulate Matter (PM_{10}), Nitrous Oxides (NO_x), and Carbon Dioxide (CO_2), and include a hot spot analysis if indicated. Describe any substantial impacts from the proposal.

The project will reduce passenger and freight delays for the current level of service. However, given the low number of trains currently operating on the line, the double track project will have neglibile impact on overall regional air quality. It should be noted, however, that the project will also suppport future implementation of the full NHHS Rail Program, which includes a significant increase in the number of trains serving the NHHS rail corridor. Impacts resulting from implementation of the full build NHHS Rail Program are detailed in the NHHS Rail Program Environmental Assessment, completion of which is planned for December 2011.

Is the proposal located in a Non-Attainment or Maintenance area?
☒ No (continue) ☐ Yes, for which of the following pollutants:

☐ Carbon Monoxide (CO) ☐ Ozone (O_3) ☐Particulate Matter (PM_{10})

H. Hazardous Materials*: Does the proposal involve the use or handling of hazardous materials?*
☒ No (continue) ☐ Yes, describe use and measures that will mitigate any potential for release and contamination.

I. Hazardous Waste: *If the proposal site is in a developed area or was previously developed or used for industrial or agricultural production, is it likely that hazardous materials will be encountered by undertaking the proposal?* (Prior to acquiring land or a facility with FRA funds, FRA must be consulted regarding the potential presence of hazardous materials)

☒ No, explain why not and describe the steps taken to determine that hazardous materials are not present on the proposal site and then continue to question I.

The work includes preparation of the rail bed to restore a second track. All work will be performed within the railroad right-of-way. Given the long history of rail operations along the NHHS line, there is some likelihood of encountering contaminants commonly associated with

railroad corridors, such as railroad ties (wood - treating chemicals), spilled or leaked fluids (oil, cleaning solvents), herbicides, fossil fuel combustion products (PAHs), asbestos, and metals such as arsenic and mercury. CTDOT Environmental Compliance will monitor project activities and provide any testing and/or disposal of materials if encountered and required.

Although the work will be limited to the railroad ROW, there are a number of potential hazardous waste sites near the study area in Hartford and Windsor, as well as two CERCLIS sites in Windsor. None of these sites abut the rail line. These are as follows:

Hartford: There are no designated CERCLIS sites located within the study corridor in the City of Hartford. There are four potential hazardous waste sites:

1. A cooling water discharge site located west of the rail corridor between the rail bed and New Park Avenue;

2. A site where ten gallons of oil was discharged, per month, into the storm sewer system at the southeast corner of Walnut and Edwards Streets;

3. An auto junkyard located west of the rail corridor near the intersection of Canton and New Donald Streets;

4. An oil drum storage site spill site, located at the end of Sanford Street on the western edge of the corridor.

Windsor: There are two designated CERCLIS sites within the study corridor in Windsor. One is located west of the railroad corridor on Meadow Road. The other is west of the railroad corridor on State Route 159. There are two potential hazardous waste sites identified within the study corridor in the Town of Windsor. One is located south of I-291 and is associated with industrial cooling water discharge; the second is located north of I-291 and consists of an industrial pit for former metal hydroxide sludge drying lagoons.

To address the potential to encounter hazardous materials during construction, a Waste Management Plan will be developed setting forth protocols and procedures relative to testing and disposal of such materials. The Plan will be approved by CTDEEP and comply with all state and federal regulations.

☐ Yes, complete a Phase I site assessment and attach.

If a Phase I survey was completed, is a Phase II site assessment recommended?
☐ No (continue) ☐ Yes, describe the mitigation and clean-up measures that will be taken to remediate any hazardous materials present and what steps will be taken to ensure that the local community is protected from contamination during construction and operation of the proposal.

J. Property Acquisition: *Is property acquisition needed for the proposal?*
☐ No (continue) ☒ Yes, indicate whether the acquisition will result in relocation of businesses or individuals. **Note:** *To ensure eligibility for Federal participation, grantees may not acquire property with either local matching or Federal funds prior to completing the NEPA process and receiving written FRA concurrence in both the NEPA recommendation and property appraisals.*

The improvements to the rail line will be made within the railroad right-of-way. No property acquisition is planned. However, it is possible that minor "sliver takes" ultimately will be required to adjust the ROW boundaries, for slope stabilization, or at at-grade crossings. If property is required, CTDOT will comply with all Federal

requirements.

K. Community Disruption and Environmental Justice: *Does the proposal present potentially disruptive impacts to adjacent communities?*

☒ No (continue) ☐ Yes, provide a socio-economic profile of the affected community. Indicate whether the proposal will have a disproportionately high and adverse effect on minority or low-income populations. Describe any potential adverse effects and any community resources likely to be impacted. Describe outreach efforts targeted specifically at minority or low-income populations.

L. Impacts On Wetlands: *Does the proposal temporarily or permanently impact wetlands or require alterations to streams or waterways?*

☐ No (continue) ☒ Yes, show wetlands and waters on the site map and classification. Describe the proposal's potential impact to on-site and adjacent wetlands and waters and attach any coordination with the State and US Army Corps of Engineers.

The improvements will be constructed on a previously engineered, Amtrak-owned railroad right-of-way originating to the mid-1800s. The right-of-way traverses several forested wetlands between Hartford and Windsor. These wetlands are at the base of existing ballast. Amtrak is seeking to update the NHHS right-of-way cross section with wider track centers and more consistent shoulders. This would result in minor changes in the existing track alignment and potential expansion of right-of-way boundaries. In a worst case scenario, this could impact up to 1.04 acres of wetlands between Harford and Windsor (based on a worst-case assumption of a five-foot wide impact through any wetlands abutting the track in the study area). However, Amtrak has indicated that it will work with CTDOT to avoid any such adverse impacts to wetlands and flood plain areas. As a result, changes to the alignment in wetland or floodplain areas currently are planned to remain within the railroad right-of-way and within the existing disturbed area, with no permanent wetland impacts. No property acquisition is planned, but it is possible that small "sliver takes" may ultimately be required to adjust ROW boundaries, for slope stabilization and at at-grade crossings. Any impacts in a wetland area will be coordinated with CTDEEP and FRA, including appropriate mitigation, and CTDOT and Amtrak will comply with all federal requirements.

Bridge and culvert replacements could temporarily impact waterways where the bridge/culvert spans or conveys water. As currently planned, no increase in the conveyance of water across the railroad right-of-way is planned within this geographical section of the rail line. As a result, the work is not expected to directly impact waterways or wetlands. All work will be conducted to avoid permanent and temporary impacts to water to the extent possible and to abide by all state and federal permit conditions, with the intent to minimize and (if warranted) mitigate impacts.

Consultation with both the CTDEEP and the USACE by CTDOT and Amtrak has been initiated. A major briefing of both resource agencies is planned for September 13, 2011. Amtrak is planning to seek a section 401/404 permit for the NHHS Rail Program, covering the entire corridor including the Hartford-Windsor segment of track. The corridor-wide permit will be submitted in 2012, with issuance of the permits expected in 2013.

A copy of correspondence with the US Army Corps of Engineerings, relating to the Phase 1 Meriden-Newington double track project but defining the process and requirements applicable to the entire NHHS Rail Program, is attached.

M. Floodplain Impacts: *Is the proposal located within the 100-year floodplain or are regulated floodways affected?*

☐ No (continue) ☒ Yes, describe the potential for impacts due to changes in floodplain capacity or water flow, if any. If impacts are likely, attach scale maps describing potential impacts and describe any coordination with regulatory entities.

Portions of the project lies within the 100-year floodplain.

The improvements will be constructed on a previously engineered, Amtrak-owned railroad right-of-way originating to the mid-1800s. However, portions of the right-of-way lie within the 100-year floodplain. Amtrak is seeking to update the NHHS right-of-way cross section with wider track centers and more consistent shoulders. This would result in minor changes in the existing track alignment and potential expansion of right-of-way boundaries. In a worst case scenario, this could impact up to 1.04 acres of wetlands between Harford and Windsor (based on a worst-case assumption of a five-foot wide impact through any wetlands abutting the track in the study area). However, Amtrak has indicated that it will work with CTDOT to avoid any such adverse impacts to wetlands and flood plain areas. As a result, changes to the alignment in wetland or floodplain areas currently are planned to remain within the railroad right-of-way and within the existing disturbed area, with no permanent wetland impacts. Current plans do not include a need to add embankment and no change is anticipated in the existing topography that would impact floodplains capacity. Work on bridges/culverts within floodplains areas will be designed as not to adversely impact the floodplain. No property acquisition is planned, but it is possible that small "sliver takes" may ultimately be required to adjust ROW boundaries, for slope stabilization and at at-grade crossings. Any impacts on floodplains will be coordinated with CTDEEP and FRA, including appropriate mitigation, and CTDOT and Amtrak will comply with all federal requirements.

Consultation with both the CTDEEP and the USACE by CTDOT and Amtrak has been initiated. A major briefing of both resource agencies is planned for September 13, 2011.

N. Water Quality: *Are protected waters of special quality or concern, essential fish habitats, or protected drinking water resources present at or directly adjacent to the proposal site?*

☒ No (continue) ☐ Yes, describe water resource and the potential for impact from the proposal, and any coordination with regulatory entities.

O. Navigable Waterways: *Does the proposal cross or have effect on a navigable waterway?*

☒ No (continue) ☐ Yes, describe potential for impact and any coordination with US Coast Guard.

P. Coastal Zones: *Is the proposal in a designated coastal zone?*

☒ No (continue) ☐ Yes, describe coordination with the State regarding consistency with the coastal zone management plan and attach the State finding if available.

Q. Prime and Unique Farmlands: *Does the proposal involve the use of any prime or unique farmlands?*

☒ No (continue) ☐ Yes, describe potential for impact and any coordination with the Soil Conservation

Service of the US Department of Agriculture.

R. **Ecologically Sensitive Areas And Endangered Species:** *Are any ecologically sensitive natural areas, designated wildlife or waterfowl refuges, or designated critical habitat areas (woodlands, prairies, wetlands, rivers, lakes, streams, and geological formations determined to be essential for the survival of a threatened or endangered species) within or directly adjacent to the proposal site?*

☐ No (continue) ☒ Yes, describe them and the potential for impact. Describe any consultation with the State and the US Fish and Wildlife Service about the impacts to these natural areas and on threatened and endangered fauna and flora that may be affected. If required prepare a biological assessment and attach.

There is one potential sensitive/critical habitat area for threatened and endangered species in downtown Windsor near the existing train station, around MP 43, indicated by the Connecticut DEP Natural Diversity Database. (There are records in the Windsor area for State Threatened Leptodea ochracea (tidewater mucket; State Special Concern Ligumia nasuta (eastern pond mussel), Lampsilis cariosa (yellow lampmussel) and Rana pipiens (northern leopard frog)). Because all work is anticipated to be undertaken within the railroad right-of-way, and as much as the habitat area is within a developed area, impacts will be minimal. Correspondence between CTDOT and DEP regarding ecologically sensitive areas and endangered species is attached, including recommendations suggested by the CTDEEP.

S. **Safety And Security:** *Are there safety or security concerns about the proposal?*

☒ No (continue) ☐ Yes, describe the safety or security concerns and the measures that would need to be taken to provide for the safe and secure operation of the proposal after its construction.

T. **Construction Impacts:** *Are major construction period impacts likely?*

☐ No (continue) ☒ Yes, describe the construction plan and identify impacts due to construction noise, utility disruption, debris and spoil disposal, and address air and water quality impacts, safety and security issues, and disruptions of traffic and access to property and attach scale maps as necessary.

1. Construction of the Proposed Action will require about 24 months to complete. Equipment to be used during construction include: Trucks and Dump Trucks, Backhoes, Cranes, Air Compressors, Various Track and Ballast Machines.

2. Demolition and construction will result in a variety of temporary impacts including: Maintenance of Traffic and safety during construction near Amtrak and freight rail operations, temporary noise and air quality, waste disposal measures, and erosion and sedimentation control.

3. It is anticipated that all work, including construction staging, will be completed within the permanent railroad right-of-way.

4. To mitigate potential impacts during construction, mitigation measures incorporating best management practices will be developed by CTDOT and included in the contract documents as appropriate. These will include, but not be limited to:

- Maintenance/protection of traffic
- Noise
- Air quality
- Water quality

- Disposal of construction waste
- Contaminated soils
- Utility impacts
- Compliance with terms of all permits and other regulations

U. Cumulative Impacts: *Are cumulative impacts likely?*

A "cumulative impact" is the impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts may include ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or resulting from smaller actions that individually have no significant impact. Determining the cumulative environmental consequences of an action requires delineating the cause-and-effect relationships between the multiple actions and the resources, ecosystems, and human communities of concern.

☒ No (continue) ☐ Yes, describe the reasonably foreseeable:

(a) Direct impacts, which are caused by the action and occur at the same time and place.

(b) Indirect impacts, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect impacts may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.

No adverse effects are anticipated to occur as a result of the project, and implementation of the project would not contribute to any cumulative effects. These improvements have independent utility and would occur ahead of the forthcoming program of corridor improvements that are being evaluated in the NHHS Rail Program Environmental Assessment, scheduled for completion in December 2011.

V. Related Federal, State, or Local Actions: *Indicate whether the proposal requires any of the following actions (e.g., permits) by other Agencies and attach copies of relevant correspondence.* It is not necessary to attach voluminous permit applications if a single cover Agency transmittal will indicate that a permit has been granted. Permitting issues can be described in the relevant resource discussion in sections B-S above.

☒ **Section 106** *Historic and Culturally Significant Properties*

☒ **Section 401/404** *Wetlands and Water*

☐ **USCG 404** *Navigable Waterways*

☒ **Executive Orders** *Wetlands, Floodplains, Environmental Justice*

☐ **Clean Air Act** *Air Quality*

☒ **Endangered Species Act** *Threatened and Endangered Biological Resources*

☐ **Magnuson-Stevens Fishery Conservation and Management Act** *Essential Fish Habitat*

☐ **Safe Drinking Water Act**

☐ **Other State or Local Requirements** (Describe)

X. Mitigation: Describe mitigation measures which address identified impacts and have been incorporated into the proposal, if any.

All work is planned to take place within the railroad right-of-way and areas that already have been disturbed. No property acquisition is planned. However, it is possible that small "sliver takes" may ultimately be required to adjust the ROW boundaries, for slope stabilization and at at-grade crossings. To mitigate potential impacts during construction, best management practices will be developed and followed.

CTDOT is coordinating with the SHPO and other relevant agencies regarding application of the Phase 1 mitigation to the Hartford-Windsor double tracking work.

Prior agency communications committing CTDOT to specific mitigation activities relating to Phase 1 of the NHHS Rail Program include the following:

U.S. Army Corps of Engineers: Pursuant to the letter dated December 2, 2010, from the US Army Corps of Engineers, a permit will be sent to that Agency in compliance with Section 404 of the Clean Water Act for the discharge of dredged and/or fill materials into waterways/wetlands in association with rail construction and the rehabilitation, repair/replacement of those bridges/culverts to support the rail projects. In addition, Federal wetlands boundaries will be supported by appropriate field data information where there will be impacts on wetlands areas, in accordance with the Corp of Engineers Wetland Delineation manual and the accompanying regional supplement. Additional information will be provided to the US Army Corp of Engineers as developed, and appropriate regualtory actions taken, regarding historic resources, floodplains impacts, and construction impacts. No work will be conducted within the regulated areas prior to obtaining the required permits.

Connecticut State Historic Preservation Office: In compliance with the letter dated October 19, 2009 from the State Historic Preservation Office, the following mitigative measures will be undertaken prior to the start of construction of work under the NHHS Rail Program: CTDOT shall document all railroad-related components located within the project boundaries, including passenger stations, freight houses, culverts, bridges, elevated alignments and embankments, interlocking and switching devices, and whistle posts and signalization. Final documentation shall consist of narrative text, photographs and/or digital images, an index to the photographs, and a photographic site plan. Final documentation shall be provided to SHPO for permanent archiving and public accessibility. CTDOT shall submit a brief history and description of the New Haven-Hartford-Springfield Line, including project-related information, photographs, site plans and maps to the Society for Industrial Archaeology New England Chapters Newsletter. CTDOT shall coordinate with Connecticut's trolley and railroad museums regarding the potential salvage and adaptive use of small-scale railroad components scheduled to be upgraded and/or replaced within the proposed project boundaries.

Pursuant to the provisions of Section 106 of the National Historic Preservation Act and the Connecticut Environmental Policy Act, all masonry work required during construction must meet the Secretary of the Interior's Standards for the treatment of historic places.