

Final Notice and Public Explanation of a Proposed Activity in a 100-Year Floodplain and Wetland

To: All interested Agencies, Groups and Individuals

This is to give notice that the Federal Railroad Administration (FRA), the Federal Transit Administration (FTA), and the US Department of Housing and Urban Development (HUD) under Part 50 has conducted an evaluation as required by Executive Order 11988 and 11990, in accordance with HUD regulations at 24 CFR 55.20 Subpart C Procedures for Making Determinations on Floodplain Management, to determine the potential affect that its activity in the floodplain and wetland will have on the human environment for the Enfield Railroad Station Project, Community Project Funding Program, Grant B-22-CP-CT-0198. The proposed project is located on and adjacent to the existing Amtrak right-of-way, north of Main Street, in Enfield, Hartford County, Connecticut. Through HUD grant B-22-CP-CT-0198 and grants from FRA and FTA, the Connecticut Department of Transportation (CTDOT) proposes to construct a new Enfield Railroad Station on and adjacent to Amtrak's existing mainline track, with associated parking proposed on adjacent property. To accommodate the increased load created by the elevated track for the station, the Main Street railroad bridge located just south of the station site would be replaced and the Asnuntuck Street underpass slightly further south would be closed. Since the proposed project is federally funded and requires approvals from various local, State and federal agencies, an Environmental Assessment (EA) has been prepared pursuant to the National Environmental Policy Act (NEPA) to examine the potential environmental and social impacts of the project.

FEMA defines the 100-year floodplain area along Freshwater Brook in the Study Area as a Zone AE Special Flood Hazard Area. To ensure accurate 100-year floodplain limits were being used as a baseline for project impact assessment, CTDOT calculated the 100-year floodplain line using the Base Flood Elevation (BFE) and existing contour information consistent with their Regulatory Floodplain Guidance (2016). The Federal Flood Risk Management Standard (FFRMS) was then determined by adding two feet to the BFE and plotting along existing contours. HUD determined that the project is not considered a critical action.

The majority of the project site is located outside the FFRMS floodplain. The only project activities proposed in the FFRMS floodplain are those associated with the replacement of two existing stormwater drainage outfalls, one each on the north and south sides of Freshwater Brook. A description of the proposed replacements, mitigation measures, and alternatives considered for each of the outfalls is provided below.

North Outfall

The existing northern outfall structure would be replaced with the same size pipe. A new headwall would be constructed and a new pre-formed scour hole and associated armoring would be installed. The CTDOT considered different options for the location of this outfall. First, the potential for construction of the northern outfall outside the FFRMS floodplain was investigated. It is not feasible to relocate the northern outfall completely out of the FFRMS floodplain since the upland to its north is narrow and limited by an existing roadway. The roadway cannot be moved to facilitate the outfall since it must be in line with the tunnel under the rail line and it must not encroach on existing private property to the north. Also, the narrow strip of upland between the existing roadway and existing north culvert is proposed to be used for overflow parking associated with the new rail station.

While the new outfall is located outside Freshwater Brook, less than 1,000 square feet of temporary impacts to the brook may occur during construction for containment of work areas. It is anticipated that as a result of the rehabilitation and armoring of the outfall, there would be approximately 1,500 square feet of impact within the FFRMS floodplain, of which approximately 1,250 square feet is within the calculated 100-year floodplain, and approximately 800 sf within the floodway. As a stormwater facility, floodproofing has not been implemented into this project, however, the elevation of existing stormwater pipes, adjacent infrastructure and the landscape has been considered. The north outfall is located on the tall, steep banks of Freshwater Brook, and it has been designed to fit into this landscape while minimizing the amount of disturbance to the FFRMS floodplain and Freshwater Brook to the extent practicable. Use of a drop manhole at this culvert allows for better integration into the existing stormwater system and adjacent topography, while also providing reduction in water discharge velocities. Armoring and a scour hole, partially within the FFRMS floodplain, would be installed to reduce water discharge velocities and protect Freshwater Brook from potential erosion at the outfall location. The project would require the excavation of a portion of the bank to facilitate the installation of the new outfall, pre-formed scour hole and associated armoring. However, there would be no net fill within the FFRMS floodplain, and therefore no flood storage volume would be lost as a result of the project.

There would be no negative impacts to human safety, property values, or natural or beneficial values of the FFRMS floodplain or floodway. There are no opportunities to improve the floodplain at the site since Freshwater Brook is highly encroached upon by urban development and has tall, steep banks. Stormwater design measures integrated into the proposed Project would be consistent with the *CT DEEP 2024 Connecticut Stormwater Quality Manual* to ensure an improvement in water quality discharging from

the site post-construction. During construction, water quality impacts would be minimized using BMPs and the implementation of an erosion and sediment control plan consistent with the *CT DEEP 2024 Connecticut Guidelines for Soil Erosion and Sediment Control*. In addition, the Project would be constructed in accordance with the *CT DEEP General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities* and its requirements and conditions, as applicable.

For the northern outfall, CTDOT has considered the following alternatives and mitigation measures to be taken to minimize adverse impacts and to restore and preserve natural and beneficial values. The CTDOT would design the proposed outfall in compliance with state and local floodplain protection procedures.

1. Alternative 1 - Use of existing outfall with no rehabilitation:
The existing structure is in poor condition based on recent inspection by the CTDOT. Although the existing pipe has the capacity to handle the stormwater from the new station site, this alternative is not recommended since the existing culvert would have a short life span and the existing armoring is also in need of improvement and may not fully protect surface waters.
2. Alternative 2 - Replacement of outfall structure at existing location without drop manhole structure:
Although a new structure would improve the life span of the outfall and provide improvements to armoring and protection of surface waters, outlet velocities would require a greater amount of armoring due to higher flow velocities, which would in turn require more potential impact within the FFRMS floodplain and watercourse.
3. Alternative 3 - New outfall structure at new location:
A new structure would improve the life span of the outfall and provide improvements to armoring and protection of surface waters. However, the practicable areas available for a new outfall at a new location are very limited due to the steepness of the Freshwater Brook banks, the rising ground elevations to the east and west of the existing culvert at the top of the bank, and the separation distance needed from the existing outfall to avoid impacting its structural integrity. Also, the excavation and armoring of a new outfall location would cause a larger area of land and vegetation disturbance which could affect water quality and wildlife habitat. Avoiding any potential disturbance to the rail structure to the west was also an important consideration.

CTDOT considered a range of minimization measures in the design of the north outfall. Through the outfall's placement and design, CTDOT has sought to minimize the footprint of impermeable surfaces within the FFRMS floodplain, as well as disturbance below ordinary high water (OHW). While the outfall design employs riprap, the purpose of the riprap is not to stabilize the bank, which could be accomplished with green infrastructure, but rather to dissipate the velocity of the flow of water from the outfall, which could not be accomplished by using green infrastructure. Green infrastructure has, however, been included in the station design, specifically permeable pavers and an underground infiltration/detention chamber underneath the parking lot. These elements will attenuate the peak flow off the site, reducing it below existing conditions. Two additional minimization measures, the use of resilient building standards and Severe Repetitive Loss Mitigation, were determined not to be applicable to the action.

Asnuntuck Street Outfall

The existing southern outfall would be replaced with a new outfall that would receive stormwater from Asnuntuck Street as well as a small portion of the rail right-of-way. The CTDOT considered different options for the location of this outfall. First, the potential for construction of the Asnuntuck Street outfall outside the FFRMS floodplain was investigated. It is not feasible to relocate this outfall completely out of the FFRMS floodplain since the upland to its south is narrow and limited by the existing Asnuntuck Road. The roadway cannot be moved to facilitate the outfall since it must be reconstructed as a turnaround due to removal of the Asnuntuck Street tunnel under the rail line. The turnaround is a larger footprint than the current roadway limits, but it is required since the road will now be a dead end and must be in compliance with local regulations. Also, erosion of the stream bank was observed at the existing Asnuntuck Street outfall, and the CTDOT intends to address this issue with the installation of the new outfall and associated stabilization measures. The project would require the excavation of a portion of the bank and streambed to facilitate the installation of the new outfall and associated armoring. The armoring would be installed by over-excavating existing material, and then placing the armoring back to existing grades, so there is no net fill within the FFRMS floodplain.

As a stormwater facility, floodproofing has not been included in this project, however, the elevation of existing stormwater pipes and adjacent infrastructure has been considered. The proposed outfall would connect to the existing system, which is already at a set invert elevation. If the new outfall were to be constructed at a lower elevation, closer to the brook elevation, a significant amount of work on the existing stormwater system would be required. This would be costly and there is currently no funding available to construct a large-scale stormwater upgrade. Since designing to a lower

elevation is not feasible, the project was designed to reduce flood impacts to the extent practicable by designing the system to fit into the stormwater system and landscape.

The proposed apron, armoring for water velocity dissipation and slope stabilization, and related grading for the outfall would be constructed or occur within the FFRMS floodplain, the floodway, and partially below the OHW elevation of Freshwater Brook. The regrading of the bank and placement of armoring in the bank would be in the FFRMS floodplain and the floodway. A portion of the armoring would be below the OHW limit. Approximately 1,700 sf within the FFRMS floodplain would be permanently impacted by excavation of existing fill material for placement of the apron and armoring. Approximately 400 sf of armoring would be in the floodway and below OHW, while an additional 300 sf below OHW would be temporarily impacted due to containment of work areas during construction. Armoring would be installed by over-excavating existing bank and stream bed material and then placing the armoring material back to the existing grade elevations, for no net fill within the FFRMS floodplain or floodway and no loss of flood storage volume.

There would be no negative impacts to human safety, property values, or natural or beneficial values of the FFRMS floodplain or floodway. There are no opportunities to improve the floodplain at this outfall due to its steep banks and encroachment at this location. Stormwater design measures integrated into the proposed Project would be consistent with the *CT DEEP 2023 Connecticut Stormwater Quality Manual* to ensure an improvement in water quality discharging from the site post-construction. During construction, water quality impacts would be minimized using BMPs and the implementation of an erosion and sediment control plan consistent with the *CT DEEP 2023 Connecticut Guidelines for Soil Erosion and Sediment Control*. In addition, the Project would be constructed in accordance with the *CT DEEP General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities* and its requirements and conditions, as applicable.

For the Asnuntuck Street outfall, CTDOT has considered the following alternatives and mitigation measures to be taken to minimize adverse impacts and to restore and preserve natural and beneficial values. The CTDOT would design the proposed outfall in compliance with state and local floodplain protection procedures.

1. Alternative 1 - Use of existing outfall with no rehabilitation:

The existing structure is in poor condition based on recent inspection by the CTDOT. Although the existing pipe has the capacity to handle the stormwater from Asnuntuck Street and the rail right-of-way, this alternative is not recommended since the existing culvert would have a short life span, there is on-

going erosion at the outfall location, and the existing armoring is also in need of improvement and may not fully protect surface waters.

2. Alternative 2 – Rehabilitate culvert to original condition:

This alternative would require a large amount of fill below the OHW to re-establish the original outfall location and grades, which was further to the north into the stream prior to being eroded by the brook.

3. Alternative 3 - New outfall structure at new location:

A new structure would improve the life span of the outfall and provide improvements to armoring and protection of surface waters. However, the practicable areas available for a new outfall at a new location are very limited, as the existing location is the low point along the southern streambank, and the outfall drains an existing municipal stormwater system. Moving it to the east or west would require tree clearing and earth excavation, which could affect water quality and wildlife habitat.

CTDOT considered a range of minimization measures in the design of the Asnuntuck Street outfall. Through the outfall's placement and design, CTDOT has sought to minimize the footprint of impermeable surfaces within the FFRMS floodplain, as well as disturbance below OHW. The use of stormwater infiltration measures was investigated for the Asnuntuck Street outfall, however this type of facility is not feasible due to the space limitations at this location and incompatibility with the existing stormwater system elevations. While the outfall design employs riprap, the purpose of the riprap is not to stabilize the bank, which could be accomplished with green infrastructure, but rather to dissipate the velocity of the flow of water from the outfall, which could not be accomplished by using green infrastructure. Two additional minimization measures, the use of resilient building standards and Severe Repetitive Loss Mitigation, were determined not to be applicable to the action. The improvements to the Asnuntuck Street outfall will also provide for stabilization of the outfall location, which is currently experiencing bank erosion.

Summary

The CTDOT has reevaluated the alternatives to building in the floodplain and has determined that it has no practicable alternative. Throughout the final design and construction of the outfalls, CTDOT will seek opportunities to restore and preserve natural and beneficial values in the vicinity of the outfalls. This activity will have no significant impact on the environment for the following reasons:

1. there is no permanent fill proposed at the north outfall within Freshwater Brook;
2. there is only minor permanent fill proposed at the Asnuntuck Street outfall within Freshwater Brook at existing grades and no net volumetric fill;
3. the design of the Asnuntuck Street outfall would dissipate overland water velocities prior to discharge and slow the progression of erosion in the banks, thereby improving water quality;
4. there would be an overall net excavation of materials within the floodway and FFRMS floodplain;
5. there would be no change in stormwater flow rates, no change in infiltration rates, and no increase in surface water elevation of the FFRMS floodplain or floodway; and,
6. all temporary impact areas would be restored to preserve natural and beneficial values.

There are three primary purposes for this notice. First, people who may be affected by activities in floodplains and those who have an interest in the protection of the natural environment should be given an opportunity to express their concerns and provide information about these areas. Second, an adequate public notice program can be an important public educational tool. The dissemination of information about floodplains can facilitate and enhance Federal efforts to reduce the risks associated with the occupancy and modification of these special areas. Third, as a matter of fairness, when the Federal government determines it will participate in actions taking place in floodplains, it must inform those who may be put at greater or continued risk.

Written comments must be received by HUD via email at martha.a.curran@hud.gov on or before [October 31, 2024]. A minimum 7 calendar day comment period will begin the day after the publication and end on the 8th day after the publication.

Martha A. Curran, Regional Environmental Officer

Date: October 23, 2024