

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.

<i>For Agency Use</i>	<i>Date Received:</i>
<i>Reviewed By:</i> <i>Date:</i>	<i>Recommendation for action:</i> <input type="checkbox"/> <i>Accept</i> <input type="checkbox"/> <i>Return for Revisions</i> <input type="checkbox"/> <i>Not Eligible</i>
<i>Comments:</i>	
<i>Concurrence by Counsel:</i> <input type="checkbox"/> <i>Accept Recommendation</i> <input type="checkbox"/> <i>Return with Comments</i>	<i>Reviewed By:</i> <i>Date:</i>
<i>Comments:</i>	
<i>Concurrence by Approving Official:</i>	<i>Date:</i>

I. PROPOSAL DESCRIPTION

Proposal Sponsor Massachusetts Department of Transportation	Date Submitted	FRA Identification Number (if any)
Proposal Title New England Gateway, proposed by Providence and Worcester Railroad Company ("P&W")		
Location (Include Street Address, City or Township, County, and State) P&W Main Line with one (1) bridge in each of the towns of Millbury, Sutton, Uxbridge, Millville, and Blackstone, Worcester County, MA		
Contact Person Mr. Timothy Doherty	Phone 617-973-7840	E-mail Address Timothy.Doherty@state.ma.us)
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 New England Gateway project includes the replacement of five (5) bridge superstructures along the Providence and Worcester Railroad that carry its Main Line track over the Blackstone River in Massachusetts. These bridges are key infrastructure items on the rail corridor connecting Worcester, Massachusetts and Providence, RI and integral to the New England Gateway, a multi-state, public/private partnership for the movement of freight from Canadian Class I rail carriers (Canadian National Railway and Canadian Pacific Railway) into New England. The freight shipped between Canada, New England's largest international trade partner, and New England is distributed along the entirety of the Gateway as well as P&W destinations such as Worcester, MA and the Ports of Providence and Quonset Point/Davisville, both in Rhode Island. The bridge superstructures to be replaced vary in age from 108 to 122 years, the bridge types include three (3) through-truss structures, one (1) deck truss structure, and one (1) plate-deck girder structure. These bridges are adequate for 263K cars but are not sufficient for 286K cars. In order to improve the bridges, the existing superstructures on four of the bridges (Nos. 35.29, 19.40, 37.74 and 23.19) will be replaced with through plate girders (see Figure 1), and a top deck plate girder will be used to improve Bridge No. 17.92 (see Figure 2). The preliminary and final design for the bridge replacement projects will be in accordance with AREMA Design Standards.

The bridge replacements will require suspending operation along the Main Line for a period of 14 to 21 days for each structure. Access to the bridges will be via rail and/or over existing roadways. Demolition is anticipated to involve cutting the existing structures into large sections which will be removed with a crane and deposited directly into rail cars. Following removal of the existing spans, minor modifications to the existing abutments will be made to enable them to accept the new superstructures at the appropriate elevations. The new bridges will be pre-assembled at the site and once the abutments are ready, will be set in place using one or more cranes. Once the superstructures have been installed, new ballast will be placed and new ties and track installed.

Purpose and Need of Proposal

None of the Bridges have the load capacity to accommodate today's larger rail industry weight standards of 286,000 pounds, and cannot be retrofitted to carry that load capacity. To ensure that: rail traffic safety on the Main Line is maintained, all Class I carriers with which P&W interchanges traffic can move 286,000 cars to P&W customers, and to assure the competitiveness of P&W infrastructure necessary to service the New England International Gateway, the Bridges must be replaced.

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 replacement of the existing five (5) bridge structures will enable the railroad to improve its bridges weight carrying capacity to meet the pending increased industry weight increase for bridge structures.

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 railroad and the existing railroad infrastructure and bridges have been a fixture in the surrounding land use for over a hundred years. The land uses surrounding the bridges generally include the riparian zones along the riverbank which are then bordered by light industrial, residential or agricultural uses.

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: Prior to construction the Massachusetts Historic Commission

will be provided with a request letter of concurrence and FORM F ~
 STRUCTURE (BRIDGE) application for the five (5) bridges to be
 replaced. A comprehensive Section 106 review of the (5) bridge
 structures, history and photographs will be provided prior to
 demolition.

Archaeological: NA

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

Consultation with SHPO: See attached letter of concurrence & Form F
 Structure (Bridge) application.

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).*

As this is principally a maintenance projejct there has been limited public notification, however communication with the Conservation Commission in each town has occurred, and as the project progresses through the required permitting process in each town, the public will be provided the opportunity in comment on project impacts.

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

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.

There are no anticipated detrimental effects on railway operations. The only impact that the service will have on rail operations will be with regard to the carload capacity that can be moved along the line. There are no projected impacts from the project to road traffic or parking.

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 project will not result in changes ot the number or speed or trains or change sources of noise or vibration and therefore no impacts are likely.

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 (O₃), Particulate Matter (PM₁₀), Nitrous Oxides (NO_x), and Carbon Dioxide (CO₂), and include a hot spot analysis if indicated. Describe any substantial impacts from the proposal.

Since the project will not impact volumes of rail or roadway traffic, there are no anticipated impacts to air quality.

Is the proposal located in a Non-Attainment or Maintenance area?

No (continue) Yes, for which of the following pollutants:

Carbon Monoxide (CO) Ozone (O₃) Particulate Matter (PM₁₀)

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.

Lead paint may be on the bridge members planned for removal. Testing for lead will be conducted prior to removal. If lead paint is found to be present, then during construction, the contractor will comply with all applicable environmental rules and regulations regarding the handling and disposal of lead paint.

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.

Waste from the project will be limited to the bridge superstructure and associated infrastructure. The project will not include disturbing the existing soil. Therefore, all materials will be removed from Project site and either scrapped or disposed of at an appropriate solid waste facility in accordance with all applicable law.

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 project will not require the acquisition of additional property. All work will be conducted on the existing railroad right of way.

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.

Since the project is limited to the replacement of existing bridges along an existing railroad there are not potentially disruptive impacts to adjacent communities.

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 project will not temporarily or permanently impact wetlands or require alterations to streams or waterways.

However, the project will cross the Blackstone River and therefore will require review under the Massachusetts Wetlands Protection Act (WPA). In Massachusetts, the WPA is administered by the Conservation Commission in each town. In addition to their responsibilities under the state legislation, individual municipalities may also enact local wetlands protection bylaws or ordinances with more stringent protections. All five Towns within which work is proposed have enacted such bylaws. Consequently, each bridge replacement must be reviewed by the Conservation Commission in the community where it is located. Coordination with the local Conservation Commissions in the five towns has commenced. During October 2011, P&W representatives met with the Conservation Commissions in the Towns of Millbury, Sutton, Uxbridge, and Blackstone to provide advanced information on the upcoming work and to solicit any relevant information that may be applicable to permitting the Project. A similar meeting with the Millville Conservation Commission is anticipated to occur in November 2011. In all cases the Conservation Commissions were receptive to the bridge replacement concept, and no "fatal flaws" were identified. Upon completion of preliminary replacement designs, permit applications will be submitted to each Town with permit issuance anticipated approximately 2 months thereafter

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.

Although the project involves bridge abutments and piers that are located in the 100-year floodplain, no work is being done below the 100-year floodplain elevation, and therefore the project will not result in any floodplain impact.

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.

The project will not result in the impact to water quality. There will be no changes to volumes of runoff, no wastewater will be generated and there will be no alteration to the surface or subsurface drainage patterns. There are no protected waters of special quality or concern, essential fish habitat, or protected drinking water resources at or directly adjacent to the project

- 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 project does not cross or have effect on a navigable waterway.

- 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 project 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 project does not involve the use of any prime or unique farmlands.

- 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.

Bridge 23.19, over the Blackstone River in Uxbridge, is located within an area mapped as "Priority Habitat" for state-listed rare, endangered, or special concern species. The bridge replacement in this location will be reviewed by the Massachusetts Natural Heritage and Endangered Species Program. Due to the limited impact that the project will have on anything but the existing railroad infrastructure, a finding of "no take" or "take with conditions" is anticipated, ending the MESA permitting process.

- 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.

The project will improve the safety of the railroad through the replacement of infrastructure that is in excess of 100 years old. There are no aspects of the project that will adversely impact the safety and security of the railroad.

- 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.

The only significant impact to the reconstruction of the bridges will be the related to railroad traffic along the corridor. The bridge replacements will require suspending operation along the Main Line for a period of 14 to 21 days for each structure. Construction access to the bridges will be via rail and/or over existing roadways. Demolition is anticipated to involve cutting the existing structures into large sections which will be removed with a crane and deposited directly into rail cars. Following removal of the existing spans, minor modifications to the existing abutments will be made to enable them to accept the new superstructures at the appropriate elevations. The new bridges will be pre-assembled at the site and once the abutments are ready, will be set

in place using one or more cranes. Once the superstructures have been installed, new ballast will be placed and new ties and track installed.

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.

The project will result in an indirect impact of improving the capacity of the rail system within New England. The five existing P&W bridges represent one of the few remaining gaps in a coordinated rail system in New England rail system's ability to accommodate 286K capacity. This project will enable P&W to operate industry-standard 286,000 pound freight cars (286K cars) along a route connecting Massachusetts and Rhode Island to New England and the rest of the United States. Thanks to significant investments over many years, nearly the entire freight rail system in the northeastern United States has been updated to accommodate 286K cars. When complete, this initiative will significantly increase regional rail capacity, benefitting the many and varied companies that utilize freight rail and preserving several thousand jobs in Rhode Island and New England by enhancing the competitiveness of P&W's customers.

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.

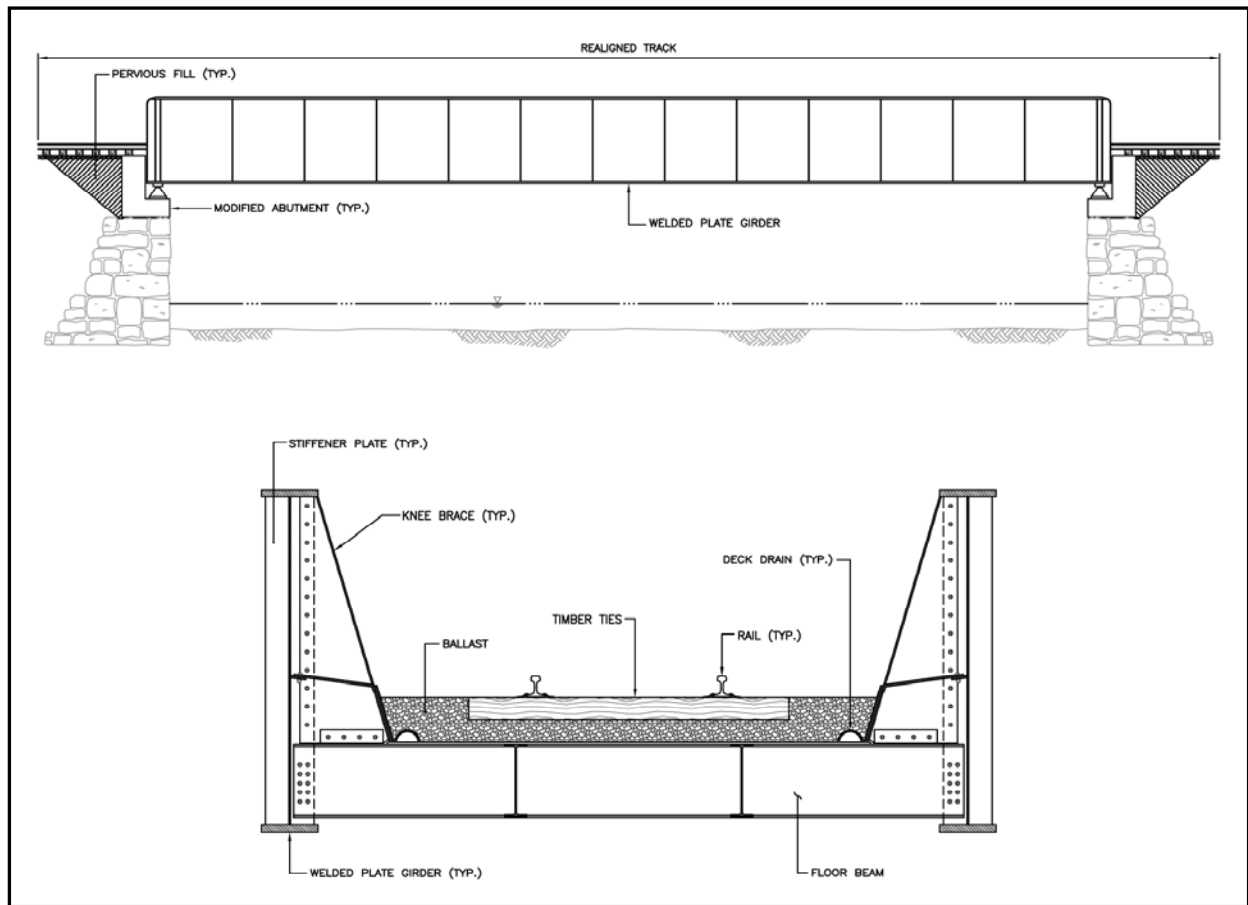


Figure 1. Schematic of through plate girder superstructure.

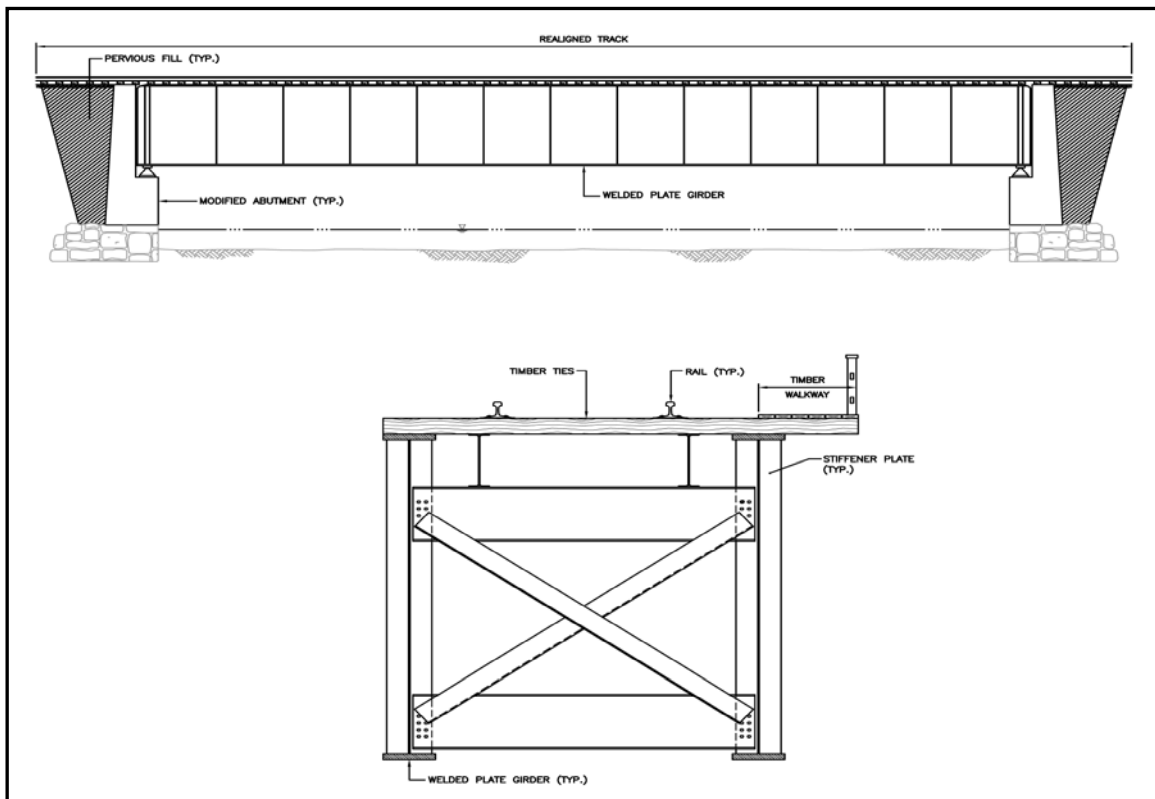


Figure 2. Schematic of top deck plate girder superstructure.