

FEDERAL RAILROAD ADMINISTRATION

FINDING OF NO SIGNIFICANT IMPACT

for the Virginia Railway Express/Virginia Department of Rail and Public Transportation Arkendale to Powell's Creek Third Track (also known as Cherry Hill Third Track)

Statement of Purpose and Need:

The Federal Railroad Administration (FRA), Virginia Department of Rail and Public Transportation (DRPT), and Virginia Railway Express (VRE) are collaborating on the evaluation of opportunities to provide additional capacity to improve intercity passenger rail service within the CSX Transportation (CSX) owned right-of-way. This project is specifically evaluating the corridor from Arkendale in Stafford County, Virginia (at or about milepost CFP 72.0), crossing through the Marine Corps Base Quantico (MCBQ) and ending at Powell's Creek in Prince William County, Virginia (at or about milepost CFP 83.4). The study corridor falls within the Richmond, Fredericksburg, and Potomac (RF&P) Subdivision, which is generally a north-south railroad line from Richmond to Washington, D.C. The project limits are approximately 11.4 miles long and the existing CSX right-of-way corridor varies from 75 to 100 feet wide in this area. The corridor currently has two main tracks between the limits of the project. In general, the project study area was limited to approximately 50 feet on each side of the existing track. Freight and passenger train speeds vary in this corridor from 55 miles per hour to 79 miles per hour.

In addition to CSX moving freight through the project corridor, two passenger rail operations, Virginia Railway Express (VRE) and Amtrak, currently operate on the existing rail line by agreement with CSX. On December 1, 1989, the Northern Virginia Transportation Commission (NVTC) and the Potomac and Rappahannock Transportation Commission (PRTC) signed an operating agreement with CSX's predecessor, RF&P Railroad Company, stating that VRE would construct a third track in exchange for track rights to the RF&P (now CSX) corridor. VRE, partnering with the DRPT and CSX in a Memorandum of Understanding (MOU) dated January 31, 2002, committed to a series of improvements to expand rail capacity in the CSX corridor between Fredericksburg and Washington. One commitment is the construction of a third track within this corridor. A number of the MOU projects, including segments of this third track, have already been completed and are already contributing to improving on-time performance.

The purpose of this project is to improve railroad service and increase passenger capacity in the 11.4-mile corridor between Arkendale and Powell's Creek which would, in turn, improve overall railroad service from Washington, D.C. to Fredericksburg, Virginia. The project would provide operational flexibility to move CSX, Amtrak, and VRE trains more efficiently, which would allow for higher speed passenger trains. In addition, improving the service would reduce travel delays and improve on-time performance, reliability, and predictability of existing freight, Amtrak, and VRE service. Increasing passenger capacity is also a component of long-term future service growth within the project corridor as well as the overall railroad service area.¹

¹ None of the rail operators, however, is currently planning to add frequencies. Under an existing agreement with CSX, VRE is prohibited from adding frequencies. The new third track will improve existing operations and would provide for additional capacity should any operator decide in the future to add frequencies; however, FRA recently

Multiple conditions exist that create the need for rail service improvements within the study corridor, including the need to:

- Reduce travel delays and improve on-time performance, reliability and predictability.
- Provide for increased demand caused by the transition from other modes of transportation to rail.
- Provide for increased passenger capacity and ridership.
- Provide for increased track demand by multiple users (e.g., VRE, Amtrak, CSX).

The key goal and objective for this project is to safely and efficiently accommodate passing moves between faster passenger trains and slower freight trains with simultaneous train moves in the opposite direction. Being able to provide for both north-south continuous moves of two trains while a third VRE or Amtrak train is servicing the stations along the corridor is also critical in improving the efficiency of the passenger rail operations without adversely affecting freight traffic.

In addition, the demand for rail use by both passenger and freight service is expected to increase over the coming years. This increase in demand could lead to an increased number of trains using the track, exacerbating the potential for delays already experienced under the current conditions. The following factors, many of which are interrelated, contribute to the future needs for additional trains and improvements to the study corridor:

- Projected increases in ridership levels.
- Projected increases to usage of the tracks by the freight and passenger rail industry.
- Growing demand for train operations on existing tracks.

Thus, the project would meet essential present needs while also laying a foundation for addressing longer term objectives that will be evaluated in the planned environmental impact statement.

Alternatives:

A full range of alternatives aimed at meeting the project purpose was evaluated. Prior to the development of these alternatives, a comprehensive identification of environmental resources within the corridor was performed in order to best avoid and minimize impacts when exploring these alternatives. Alternatives evaluated conceptually included construction and non-construction options such as adding more trains and cars to existing trains, modification of existing train schedules and the construction of additional railroad tracks. The non-construction alternatives evaluated included a range of Transportation System Management (TSM) Alternatives. At the early stages of the project, DRPT and CSX decided that any build alternatives studied would be within the existing right-of-way. In keeping within this parameter, the build alternatives were designed parallel with and directly adjacent to the existing railroad tracks. This limited the construction alternatives to either east or west of the existing railroad tracks, or some combination of the two. Existing sidings were also evaluated to determine if they could be utilized for improving the movements along the corridor. In some cases the evaluation included shifting the existing tracks to accommodate an additional track within the boundaries of the existing infrastructure.

In order to best compare alternatives, a comprehensive screening process was developed and performed for each alternative. The addition of a third track within the existing right-of-way was developed to use as a template for the build alternatives. Each alternative was analyzed for its ability to provide for the project purpose and ability to address the identified existing and future project needs. Alternatives that

announced a \$44.3 million grant to Virginia that will fund the completion of preliminary engineering and environmental study of the rail corridor between Richmond, VA and Washington, DC. The impacts of any additional frequencies along this corridor will be addressed in that study.

could not satisfy the project purpose and need were not analyzed further. The conceptual alternatives that were determined to meet the project purpose and need were carried forward and further refined and analyzed, resulting in the No-Build Alternative and one Preferred Build Alternative.

With the **No-Build Alternative**, there would be no third track along the CSX corridor between Arkendale and Powell's Creek and thus the tracks would remain in their present configuration. The No-Build Alternative would not satisfy the purpose of this project in improving railroad service and increasing capacity in this existing 11.4 mile two track rail corridor, nor would it meet or provide for any of the specific needs identified for this project. Without the construction of a third track, VRE would not be able to expand its service in the future as specified by the conditions set forth in the NVTC/PRTC/RF&P Operating Agreement dated December 1, 1989. In addition, potential future expansions of Amtrak, intercity rail and high speed rail would be limited without improvements to the railroad corridor in this study area.

The **Preferred Build Alternative** is the addition of a third track along the project corridor. Various locations and options were evaluated for this additional track to determine the most appropriate location from engineering, environmental, and construction perspectives. Both the east and west sides of the existing tracks were studied to determine which side would be the best location for a future track. Multiple studies and investigations were conducted to isolate an alignment that would best meet these parameters. In doing so, a Preferred Build Alternative was identified. This Preferred Build Alternative consists of constructing an additional track parallel with and adjacent to the existing two tracks in a combination of locations rather than all to one side. In addition, FRA, DRPT and VRE determined that in order to best meet design and safety criteria, the existing two tracks in a few areas would need to be shifted in order to accommodate the third track. These shifts to the existing two tracks are primarily needed in areas that cross over or underneath existing infrastructure.

The third track would utilize the new double track Quantico Creek Bridge that parallels the original single track bridge. In addition to the 11 miles of new track that would be constructed, two new interlockings would be built to provide universal parallel movements between the three track segment and the existing double track at each end. Existing bridges would be widened over Chopawamsic Creek, Widewater Creek and a private driveway. In addition, new drainage structures would be constructed adjacent to five existing structures. Grade crossing warning devices would be modified/upgraded at six existing crossings. There are currently siding tracks located near Arkendale, Quantico, Possum Point, and Cherry Hill. One industrial spur track exists within the limits of the project at the Possum Point Power Generating Station. Three of these existing sidings would be adjusted to accommodate the third track. The majority of any improvements evaluated would be within the existing right-of-way; however the project area may extend outside the right-of-way in the narrower sections, primarily at the Cherry Hill Road crossing area where the right-of-way may need to be increased from 5 to 27 feet outside of the existing CSX property line. The estimated cost for engineering and construction for the Preferred Build Alternative is approximately \$75,000,000.

The Preferred Build Alternative was developed to meet the project purpose and need and to best adhere to the engineering criteria, while avoiding and minimizing impacts to the identified environmental resources. Specifically, the addition of a third track would increase capacity for the multiple users including VRE, Amtrak and CSX. The third track would allow for better train maneuverability to meet the increasing demand, as well as reduce travel delays caused by the congestion on the existing tracks; therefore improving on-time performance, reliability and predictability. In addition, the third track would allow VRE to eventually negotiate additional train slots and add more service to its network as warranted by future ridership levels. Overall, the Preferred Build Alternative would meet the project purpose and all of the identified existing and future project needs.

Summary of the Environmental Assessment:

DRPT and the FRA prepared an Environmental Assessment (EA) to assess the project's potential for significant environmental impacts. *Table 1* and *Table 2* provide an at-a-glance summary of that assessment, with additional information for each resource assessment provided below. Further details for each resource can be found in the EA. Mitigation measures are noted in *Table 1* and discussed briefly in the relevant sections.

Table 1 – Environmental Impacts Summary

Resource	No-Build	Build	Mitigation
Land Use, Right-of-Way, and Relocations	○	○	n/a
Environmental Justice Populations	○	+	n/a
Agriculture and Prime Farmland	○	○	n/a
Federal Properties	○	+	n/a
Parks and Recreational Resources	○	○	n/a
Section 4(f) Resources	○	○	n/a
Cultural Resources: Archaeology	○	○	Clifton Cemetery will be marked in order to avoid disturbance
Cultural Resources: Historic Structures	○	-	SHPO concurred that the project will have No Effect on all resources except the RF&P, which will have No Adverse Effect. Overall, the project will have No Adverse Effect.
Waters of the U.S., including Wetlands	○	-	Yes (see below for details)
Floodplains	○	-	Hydrology and Hydraulic analysis will be conducted during final design
Air Quality	○	○	n/a
Noise	○	○	n/a
Vibration	○	○	n/a
Forest Resources	○	○	n/a
Mineral Resources	○	○	n/a
Energy Resources	○	○	n/a
Terrestrial and Aquatic Habitat and Wildlife	○	○	n/a
Threatened and Endangered Species	○	○	Final mitigation will be determined by VDGIF, but can include construction time-of-year restrictions; consideration of clear-span bridges
Wildlife and Waterfowl Refuges	○	○	n/a
Anadromous Fish, Trout Waters, Shellfish	○	○	Construction time-of-year restrictions and BMPs
Scenic Byways/Scenic Rivers	○	○	n/a
Open Space Easements	○	○	n/a
Hazardous Materials	-	-	Further evaluation needed; should hazmat be found, CSX, VRE and DRPT will negotiate mitigation
Traffic & Rail Operations	-	○	n/a
Safety	○	+	n/a

Legend

- No impact
- + Minimal Positive Impact
- Minimal Negative Impact

Table 2 – Preferred Build Alternative Impacts

Environmental Resources	Preferred Build Alternative Impacts
Federal Properties	1
Historic Properties within APE (number of eligible/listed properties)	5
Wetlands Displaced (acres within limits of construction)	2,275
Length of Streams Disturbed (feet within limits of construction)	1,580
Floodplains Crossed (acres within limits of construction)	5.81
Noise Impacts (number of receptors)	46 ²
Vibration Impacts (number of receptors)	31 ³
Potential Bald Eagle Habitat Area (number of areas)	6
Anadromous Fish Areas (number of confirmed areas)	6
Hazardous Material Sites Impacted (number of sites)	5

Land Use, Right-of-Way, and Relocations

The existing CSX right-of-way is a 75 to 100 foot corridor that has been severely disturbed from the construction of various transportation routes (railroads, streets, etc.), military installations, utilities, and industrial complexes. The proposed project would require minor amounts of right-of-way, roughly 1.4-acres of permanent right-of-way to be proffered by the Harbor Station development and less than 0.5 acres of permanent easements; however, there would be no displacements or relocations associated with the Preferred Build Alternative.

Environmental Justice

The need to identify low-income and minority populations and incorporate their input in the project’s decision-making process comes from Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority and Low-income Populations* (February 11, 1994). This Order directs all Federal agencies to determine whether a proposed action would have a disproportionately high and adverse impact on minority and/or low-income populations. Based on Census 2000 data, there were no low-income populations identified within the study area. However, one Census Block Group (CBG) was shown to have a minority population of 50% or greater. CBG 900800 2, located in Prince William County, had a minority population of 62%, however this area is located outside of the proposed limits of disturbance for the proposed alternative. The proposed alternative is not expected to result in a disproportionately high and adverse effect to environmental justice populations. Implementation of the proposed project would not represent a significant change in area character to any population, whether it be an environmental justice population or otherwise. In fact, this project would provide improved services to the surrounding areas, therefore creating a positive impact for these populations.

Agricultural and Prime Farmland

There are no agricultural uses, prime farmland, or Agricultural and Forestal Districts within the project area.

Federal Properties

The CSX railroad right-of-way runs through MCBQ. Established in 1917, MCBQ is home to the Marine Corps Combat Development Command and the Marine Corps University, among other Marine Corps

² 46 impacted receptors includes severe impacts for 36 Category 2 land uses and six Category 3 land uses and moderate impacts for zero Category 2 land uses and 4 Category 3 land uses at 2030 Conditions With Horn Noise.

³ 31 impacted receptors include 26 Category 2 land uses and 5 Category 3 land uses.

programs. Base staff provides infrastructure, operational, and community services support to these organizations and to the military members, families, and civilians who live and work on base. The Base is comprised of more than 6,700 military personnel, 6,900 civilians, and 2,500 family members whose large and diverse population has a tremendous impact on the surrounding towns and counties. In 2007, approximately 400 riders per day utilized the Quantico VRE Station directly adjacent to the Base. Projections have shown the level of ridership at this station doubling by 2030. The railroad is an important resource for the Base and it is reasonable to assume that improvements to the rail corridor and train movement efficiency will likely enhance Base operations.

Parks and Recreational Resources

There are no existing parks or recreational facilities within the project area.

Section 4(f) Resources

Within the project study area, five potential Section 4(f) resources, specifically National Register of Historic Places (NRHP) listed or eligible resources within the project's area of potential effect, were identified: the RF&P Railroad, Quantico Marine Base Historic District, Richland (a private residence), Town of Quantico and Cockpit Point. The proposed project improvements will be within the boundaries of the RF&P Railroad and Cockpit Point, but outside of the boundaries of the Quantico Marine Base Historic District, Richland property, and the Town of Quantico. By letter dated October 7, 2010, the Virginia Department of Historic Resources (DHR) determined that the project will have No Effect on four of the five NRHP-listed or eligible historic resources located within in the APE. For the fifth resource (the RF&P Railroad), the DHR concurred that the project will have No Adverse Effect. Based on this concurrence, FRA finds that while the project will result in a use of the RF&P, the impact will be de minimis. There will not be a direct or constructive "use" of the above mentioned properties and therefore a Section 4(f) Evaluation is not necessary for these resources.

Cultural Resources

A cultural resource study was designed and conducted to identify all archaeological and architectural resources within the area of potential effects (APE) for the project and to assess whether each identified resource might be potentially eligible for listing in the National Register of Historic Places (NRHP). The survey was conducted in compliance with applicable State and Federal guidelines and, as noted above, identified five NRHP listed or eligible aboveground resources within the project's area of potential effects. The archaeological investigation failed to identify any intact archaeological sites within the APE. By letter dated October 6, 2010, the DHR concurred with the findings that no further archaeological field work was warranted. By letter dated October 7, 2010, the DHR concurred that the undertaking will have No Effect on all of the above ground properties except the RF&P Railroad, which will have a No Adverse Effect. The DHR determined that the undertaking as a whole will have No Adverse Effect on historic properties listed in or eligible for the NRHP.

Mitigation: An abandoned cemetery on Clifton Property noted in the October 6 letter will be identified on the plans and marked in the field prior to construction in order to avoid disturbance during construction activities.

Waters of the United States, Including Wetlands

Surface water delineations were conducted to determine the presence and location of any Waters of the United States (WUS), including wetlands and stream channels, within the project corridor. In summary, 3.75 acres of wetlands and 6,467 linear feet of other WUS (stream channels) were determined to be jurisdictional by the USACE within the study area. Avoidance and minimization measures were devised during the development of the Preferred Build Alternative to protect the WUS areas to the greatest extent possible. Efforts included placing the track on the side of the corridor with the least overall potential impacts and the design of retaining walls to minimize requirements for fill areas. Potential impacts to

wetlands and stream channels were estimated within the study corridor based on the Preferred Build Alternative's current areas of potential impact. Based on these limits, the potential total permanent wetland and other WUS impacts to USACE jurisdictional resources are 2.275 acres and 1,580 linear feet, respectively.

Mitigation: At stream crossings, the agencies recommended clear-span bridges, countersunk culverts or bottomless culverts to allow passage of aquatic organisms. The proposed design includes the use of a clear span bridge at Widewater Creek, multi-spans at Chopawamsic Creek, and pipe culverts at Little Creek. All other culverts will be extended with similar pipe types and sizes as existing, where practicable. Other agency recommendations included restoring original streambed and streambank contours, installation of floodplain culverts to carry bankfull discharges, and conducting any in-stream activities during low or no-flow conditions. Every attempt will be made to incorporate these preliminary recommendations into the design as much as possible. However, certain recommendations may not be practicable. Additional agency coordination will be conducted during the final design and permitting stage of the project at which time commitments will be made regarding specific agency recommendations.

Impacts and any necessary mitigation will be regulated under the Federal and State permits to be obtained during the final design and permitting stage of this project by VRE. It is anticipated that the permits to be issued for this project include a Section 404 Individual Permit from the USACE, a Virginia Water Protection Individual Permit from the VDEQ, and a subaqueous bottom permit from the Virginia Marine Resources Commission (VMRC). If impacts occur to navigable waters (including the Potomac River), a United States Coast Guard (USCG) bridge permit may be required for the individual bridge crossings over navigable waters under Section 10 of the Rivers and Harbors Act.

Floodplains

The 100-year floodplains were identified using the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps (FIRM). The proposed footprint for the third track (including easements and embankments) has the potential to encroach upon 5.81 acres of the mapped floodplain areas adjacent to the Potomac River, Quantico Creek, Chopawamsic Creek, Tank Creek, and other unnamed perennial tributaries of the Potomac River. No impacts to the floodplain are foreseen at the Quantico Creek railroad crossing. The majority of potential impacts to the floodplain are the result of proposed cut/fill operations and the expansion of the existing bridge across Chopawamsic Creek. In addition, a clear span bridge will be constructed over the channel at Widewater Creek.

Mitigation: A hydrology and hydraulic analysis will be conducted during final design to determine if there would be a rise in normal water surface elevation at the areas of potential encroachment, in which case FEMA may require a revision to the FIRMs during final design. Stafford County adheres to the FEMA standards for notifications required for any changes greater than 0.5 feet to the mapped floodplain. However, Prince William County has developed their own floodplain program which requires the submission of a Conditional Letter of Map Revision (CLOMR) for any change or modification to the mapped floodplain.

Air Quality

No negative air quality impacts are anticipated with this project, and the project is considered part of a conforming Transportation Improvement Plan (TIP) and meets conformity requirements.

Noise

Although this project, in combination with other projects either completed or planned along this corridor, will allow for increased frequencies, none of the rail operators is currently planning to add trains.⁴ Upon completion, the project will allow for improved rail operations and an increase in on-time performance of VRE travel rather than an increase in the volume of trains in the corridor. As a result, all calculations of noise that were completed as a part of this study are reflective of the existing conditions as well as the currently planned future conditions. Therefore, the Preferred Build Alternative would not result in an increase in noise impacts from existing conditions.

Vibration

Although this project, in combination with other projects either completed or planned along this corridor, will allow for increased frequencies, none of the rail operators is currently planning to add trains.⁵ Upon completion, the project will allow for improved rail operations and an increase in on-time performance of VRE travel rather than an increase in the volume of trains in the corridor. As a result, all calculations of vibration that were completed as a part of this study are reflective of the existing conditions as well as the currently planned future conditions. Therefore, the Preferred Build Alternative would not result in an increase in vibration impacts from existing conditions.

Forest Resources

Forest resources have limited presence in the study area due to the disturbed CSX right-of-way and development in the surrounding areas. There are no anticipated impacts to any known forest resources within the study area.

Mineral Resources

There are no anticipated impacts to any known mineral resources within the study area.

Energy Resources

There are no anticipated impacts to any known energy resources within the study area.

Terrestrial and Aquatic Habitat and Wildlife

There are no unique terrestrial or aquatic habitat or wildlife areas within the study area.

Threatened and Endangered Species

Following agency coordination, analysis and survey, it was determined there would be no impacts to known endangered mussel, plant and/or insect species as a result of the project. The federal species of concern/State threatened bald eagle was documented adjacent to and/or within most of the project area, which is considered a concentration zone representing riparian areas where eagles congregate for roosting and foraging. As of the 2009 nesting season, several active bald eagle nests were documented in the area; however, no nests were located within 800 feet of the project nor within the Virginia Department of Game and Inland Fisheries' (VDGIF) 660-foot nest protection zone. The *Virginia Bald Eagle Nest and Productivity Survey: Year 2010 Report* developed by the Center for Conservation Biology indicates that a number of new nests along the corridor were classified as Active/Occupied in 2010. Based on location coordinates provided by the VDGIF, three of the newly identified nests are located within the 660-foot nest protection zone. One nest (Nest Code ST1003) is located approximately 550 feet east of the CSX right of way and approximately 4,000 feet north of Brent Point Road. The second nest (Nest Code PW0801) is located approximately 500 feet west of the CSX right of way, just south of Chopawamsic

⁴ As noted above, FRA recently announced a \$44.3 million grant to Virginia that will fund completion of preliminary engineering and environmental study of the rail corridor between Richmond and Washington, DC. The impacts of any additional frequencies along this corridor will be addressed in that study.

⁵ See previous footnote.

Creek. The third nest (Nest Code PW0903) is located approximately 185 feet from the CSX right of way and approximately 1.7 miles north of the Quantico Creek bridge.

Bald eagles are currently de-listed under the federal Endangered Species Act; however, they are still recognized as a threatened species at the State level and are protected by the Bald Eagle Protection Act and the Migratory Bird Treaty Act. The US Fish and Wildlife Service (USFWS) has deferred to VDGIF for all comments regarding bald eagles.

Mitigation: The VDGIF is primarily concerned with eagle's attraction to carrion present along the tracks and potential disturbance to eagles nesting in close proximity to the track in Nest Code PW0903. The VDGIF recommends that during the final design stage of this project, detailed maps depicting the location of new structures including areas of pile driving and detailed descriptions of the proposed work be provided to the agency for further review. Based on their review of the final materials, the VDGIF can then make final comments regarding the protection of bald eagles and potential time-of-year restrictions for certain areas of specific construction activities. The VDGIF's comments and proposed time-of-year restrictions may be incorporated in the VDEQ and/or VMRC permit conditions.

Wildlife and Waterfowl Refuges

No acquisition of land from a wildlife or waterfowl refuge would be required.

Anadromous Fish, Trout Waters, Shellfish

Confirmed Anadromous Fish Use Areas were also identified due to the documented occurrence of anadromous and/or semi-anadromous fish species within, and/or adjacent, to various portions of the project area. Through coordination with the agencies, all anadromous fish species were cleared with the exception of blueback herring and yellow perch species at Chopawamsic Creek.

Mitigation: To address potential impacts to anadromous fish resources at Chopawamsic Creek, the agencies recommended that any in-stream work in these waters and/or their tributaries adhere to a time-of-year restriction limiting construction from February 15 through June 30 of any year. They also recommended the following activities: using non-erodible cofferdams to isolate the construction area; blocking no more than 50% of the streamflow at any given time; stockpiling excavated material in a manner that prevents reentry into the stream; revegetating barren areas with native vegetation; and implementing strict erosion and sediment control measures. There are no trout waters or shellfish grounds in the vicinity of the project.

Scenic Byways/Scenic Rivers

No state-designated scenic byways or scenic rivers and no federally designated wild and scenic rivers are located within or near the study area.

Open Space Easements

The project does not affect any open space easements held by the Virginia Outdoors Foundation.

Hazardous Materials

A Phase I Environmental Site Assessment (ESA) was conducted in accordance with ASTM E1527-05, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*. The Phase I ESA included a background review and a field assessment; no analyses of soils, groundwater, asbestos, or paint were conducted. Six potential waste sites were identified within the project study area. **Table 3** below summarizes the sites and describes recommendations for further evaluation. The Phase I ESA recommendations were broken down into four categories, including: No further action required; No

further action required at this time; Initiate Phase II ESA or Phase III ESA activities; and Initiate immediate action⁶. Please refer to the EA for more background on each of these sites.

Mitigation: Because all right-of-way is owned by CSX, any potential mitigation will be discussed and negotiated by CSX, VRE and DRPT.

Table 3 – Phase I ESA Recommendations

Site Name	Recommendation
Old NPL Landfill (Former Cherry Hill Landfill)	Initiate Phase II Activities ⁷ Construction Monitoring may include having an OSHA 40-Hour HAZWOPER trained employee on site during construction activities to monitor for any unknown waste materials through the use of a photoionization detector.
NuStar Energy - Dumfries Terminal	Initiate Phase II Activities ⁴ Construction Monitoring may include having an OSHA 40-Hour HAZWOPER trained employee on site during construction activities to monitor for any unknown waste materials through the use of a photoionization detector.
Dominion - Possum Point Power Station	Initiate Phase II Activities ⁴ Soil sampling in and near this site is recommended. Sampling parameters should include: priority pollutant metals, volatile and semivolatile organic compounds, and total petroleum hydrocarbons (gas to diesel range).
Jim Toller Well Property	No Further Action Required Based on the field reconnaissance, no potential impacts are likely to occur at this site. Data has indicated this property poses no significant impact to the project.
Marine Corps Base Quantico	Initiate Phase II Activities ⁴ Sampling parameters should include: priority pollutant metals, volatile and semivolatile organic compounds, and total petroleum hydrocarbons (gas to diesel range).
CSX Railroad	Initiate Phase II Activities ⁴ Shallow soil sampling should be performed to test for: PCBs, TPHs, PAHs, VOCs, and SVOCs.

Transportation and Railroad Operations

Improvements along this corridor would increase efficiencies in all systems of rail, especially intercity passenger rail which is often held up by lengthy and slower moving freight trains. This project would have a positive impact on passenger rail transportation by improving operations for all forms of rail and would reduce congestion, thereby resulting in reduced emissions and travel costs.

Safety

All of the at-grade rail crossings throughout the project would be rebuilt to meet all current Federal Railroad Administration, CSX, and Amtrak standards, including the necessary gates, flashing lights, signs, and pavement markings. There will be no effect on public health as a result of this project.

⁶ Serious contamination is present on, or migrating toward, property which will likely result in the substantive detriment to life, the environment or property if immediate action is not taken. Any required remedial actions, as a result of imminent threats to human health and the environment, are the responsibility of the current owner/operator.

⁷ If design changes occur, and further invasive work will be done on this property, additional testing may be necessary including subsurface soil sampling.

Construction Impacts

Temporary construction easements and/or access easements may be necessary during construction of the project. In addition, this project may have some construction impacts to the roads that cross over, at-grade, or under the railroad tracks. For the roads that cross the tracks at-grade, the construction impacts may include short-term road closures and/or detours. Quantico Station is expected to remain open throughout construction of the project. The construction of the project is not anticipated to have a substantial effect on train operations. There may be short-term periods when speed restrictions may be imposed on trains or when operations may need to be restricted to one track, such as when new interlockings are built. Other construction impacts are anticipated along the corridor but will be further defined during final design. Although short-term construction-related air quality, noise or vibration impacts may be possible, no significant, long-term impacts are anticipated. Any impacts that do occur, as a result of railway construction measures, are anticipated to be temporary in nature and would cease upon completion of the project construction phase.

Mitigation: Construction activities would follow federal, state, and local statutes, regulations and ordinances and the proper permits will be obtained. A Stormwater Pollution Prevention Plan (SWPPP) will need to be prepared and the Virginia Stormwater Management Program (VSMP) permit will need to be acquired from the Virginia Department of Conservation and Recreation (VDCR). In addition, the construction work must be completed in accordance with the Stafford County and Prince William County land disturbance practices and permits.

Indirect Effects

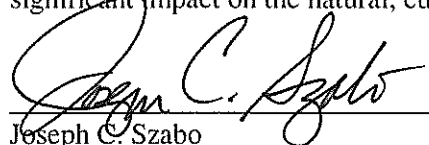
Indirect effects from this project are expected to be either minimal or nonexistent. Development within the area is limited to the area surrounding MCBQ, which includes the only VRE station within the study area. A new station and commuter parking structure was previously planned at Cherry Hill along with a high density, mixed-use development known as Harbor Station, however the developer has filed for bankruptcy and the property has been returned to the bank; therefore, development at this location is uncertain, and, for the foreseeable future, unlikely. Both of these projects may or may not move forward and are not contingent upon the expansion of the CSX/VRE line. Although the majority of the study area is not developed, it is anticipated that no development would be induced by this project, since planned development is anticipated to occur regardless of this project.

Cumulative Effects

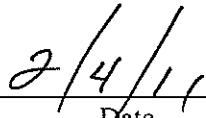
Both the EA and the Indirect and Cumulative Effects Analysis Technical Report identified a number of past, present and reasonably foreseeable future actions that contribute to a cumulative impact on environmental resources within the project corridor. As with any project that involves change, the Arkendale to Powell's Creek Third Track Preferred Build Alternative has the potential to contribute to positive and negative, indirect and cumulative, environmental effects in the area. Substantial growth in this region will likely continue to occur with or without the addition of the third track. However, this project would provide significant cumulative benefits in terms of regional accessibility, which in turn would benefit economic growth. Benefits to the regional economy would result through reduced transportation and freight costs. Other benefits would include improved air quality and quality of life for commuters.

Summary:

Based on the above assessment, the FRA finds that the Preferred Build Alternative, as presented in the *VRE/DRPT Arkendale to Powell's Creek Third Track Environmental Assessment* prepared in accordance with FRA's *Procedures for Considering Environmental Impacts*, including the mitigation measures outlined in *Table 1* and further discussed in the relevant sections of this FONSI, would not have a significant impact on the natural, cultural or human environment.



Joseph C. Szabo
Administrator



Date

