

Third-Party Projects Manual

(ver. 10/2025)

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1. Introduction

1.1 Purpose and Scope of the Manual

As the steward of passenger rail initiatives and partner to both freight and commuter operations, VPRA will work collaboratively with other public agencies, municipalities, and private sponsors to assist with delivering projects safely, efficiently, and in accordance with rail standards.

This Third-Party Project Manual ("TPM" or "manual") has been developed to guide Project Sponsors through the process of planning, designing, and executing projects involving VPRA-owned or managed rail corridors. Except for projects to be undertaken by Railroads or Utilities, this TPM will govern all Third-Party Projects requiring VPRA review and approval. It is intended to promote transparency, accountability, and mutual understanding among all parties involved.



ARE YOU A RAILROAD OR UTILITY LOOKING TO DO WORK?

This manual is not intended to apply to projects to undertaken by Railroads or Utilities within VPRA Property. The work to be performed by a particular Railroad will be governed by the applicable rail agreement(s). See Sec. 2.1 for the Utility Application Process.

This TPM will be updated periodically to reflect policy changes, engineering best practices, and regulatory updates.

1.2 About VPRA

VPRA is responsible for promoting, sustaining, and expanding the availability of passenger and commuter rail service in the Commonwealth. Created in 2020, VPRA administers all capital expansion projects, infrastructure, and land acquisitions related to the Iransforming Rail in Virginia (TRV) Initiative, which will increase Amtrak state-supported service and increase VRE service in Virginia over the next decade.

VPRA manages all administrative and fiduciary responsibilities for the Commonwealth's state-supported Amtrak Virginia passenger rail service, including the current eight daily roundtrips originating or terminating in Roanoke, Norfolk, Newport News, and Richmond. VPRA also provides funding for VRE.

More information on VPRA, current progress of its TRV projects, and future plans can be found on the <u>VPRA website</u>.

1.3 VPRA Contact Information

| Richmond Office | 919 East Main Street, Suite 2400 |
|----------------------------|----------------------------------|
| | Richmond, VA 23219 |
| Alexandria Office | 1800 Diagonal Road, Suite 300 |
| | Alexandria, VA 22314 |
| Phone | 804-712-6879 |
| Real Estate Senior Manager | realestate@vpra.virginia.gov |

1.4 Acronyms and Definitions

Acronyms

| Amtrak | National Railroad Passenger Corporation | | |
|--------|---|--|--|
| BBRR | Buckingham Branch Railroad | | |
| CSXT | CSX Transportation, Inc. | | |
| DCR | Virginia Department of Conservation and Recreation | | |
| DEQ | Virginia Department of Environmental Quality | | |
| DRPT | Virginia Department of Rail and Public Transportation | | |
| FRA | Federal Railroad Administration | | |
| NS | Norfolk Southern Railway Company | | |
| OSHA | Occupational Safety and Health Administration | | |
| USDOT | United States Department of Transportation | | |
| VDOT | Virginia Department of Transportation | | |
| VPRA | Virginia Passenger Rail Authority | | |
| VRE | Virginia Railway Express | | |

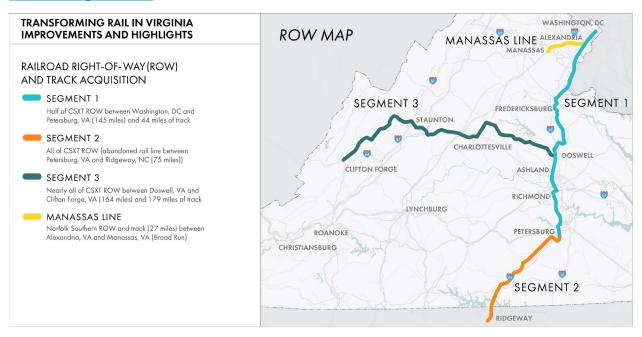
Definitions

| Access Road | A road used and controlled by VPRA for the purpose of accessing, inspecting, and maintaining track, other railroad infrastructure, or railroad property. | | |
|---|--|--|--|
| Active Warning Device | Automatic traffic control devices activated upon the detection of approaching rail traffic, such as flashing light signals, gates, and/or traffic control signals at a grade crossing. | | |
| Adjacent Project | Projects within fifty (50) feet of the VPRA Property line but which do not have the potential to foul the track (no possibility of coming within 15' of the centerline of any track, including if any equipment such as cranes were to fail), or impact freight or passenger rail operations, or affect the stability of the track roadbed or railroad facilities. | | |
| Alternative Safety Measure (ASM) | A safety system or procedure determined by the FRA to be an effective substitute for the locomotive horn at specific highwayrail grade crossings. | | |
| American Railway Engineering and Maintenance-of-Way Association (AREMA) | A North American Railroad industry group that develops recommended practices for railroad-related projects. This term refers specifically to the AREMA Manual for Railway Engineering (latest version). | | |
| Concept Design | The initial submittal of a Project's development defines the proposed scope and layout with preliminary drawings and narratives sufficient for VPRA to assess potential impacts to VPRA Property or railroad operations. | | |
| Construction Documents | The design plans and calculations, project specifications, and other documents used to construct a project. | | |
| Contractor | An individual, partnership, corporation, or joint venture, and all principals and representatives with whom the contract is made by the Project Sponsor for the design and/or construction of the | | |

| | Project. For purposes of this definition, Contractor shall include |
|--|--|
| | individuals or firms providing surveying and site investigation services pertaining to the Project. |
| Controlled Demolition | Removal of an existing structure or subcomponents in a manner that prevents debris or material from impacting railroad employees, equipment, or property. |
| Design Review | The process described in Section 4 of this manual. It includes the review and approval of a Project Sponsor's design package for the Project by VPRA. |
| Flagger | A qualified individual responsible for directing or restricting the movement of trains to protect workers. |
| Grade Separation | Construction of an overpass or underpass structure that crosses the VPRA Property, eliminating at-grade crossings. |
| Highway-Rail Grade Crossing | A location where a roadway and VPRA Property cross at the same level. |
| Horizontal Clearance | Distance measured perpendicularly from the centerline of any track to the nearest obstruction. |
| Manual on Uniform Traffic Control Devices (MUTCD) Overpass | Manual published by the Federal Highway Administration under the U.S. Department of Transportation for traffic control devices. A roadway, pedestrian, or trail structure passing over VPRA |
| | Property. |
| Professional Engineer (PE) | An engineer licensed in the state where the project occurs, responsible for preparing, signing, and sealing plans. |
| Project Sponsor | Any entity proposing a Project on, over, or adjacent to VPRA Property or other operating location. It includes state DOTs, local governments, and developers. |
| Railroad | Any freight or passenger rail organization that conducts railroad operations upon VPRA Property. |
| Railroad Flagging | The practice of using qualified personnel to protect workers and equipment on or near railroad tracks by controlling or stopping rail traffic. |
| Temporary Right of Entry Agreement | An agreement executed between VPRA and the Project Sponsor that governs the Project Sponsor's entry on the Project site to include VPRA's oversight and management of the Project, protective services, and any VPRA furnished work. |
| Third-Party Project or Project | The planning, design, surveying, site investigation, and/or construction work to be undertaken by the Project Sponsor, as more particularly described in the Temporary Right of Entry Agreement. |
| Underpass | A railroad structure over a roadway, pedestrian, or trail structure. |
| Vertical Clearance | Distance measured vertically from the Top of Rail to the lowest obstruction under the structure. |
| VPRA Engineer | The VPRA employee, or their designee, responsible for providing authorizations on a Project. |
| VPRA Property | All real property, easements, and facilities owned by or under the control of VPRA. |
| VPRA Real Estate Manager | The VPRA employee, or their designee, responsible for performing any required real estate reviews on a Project. |
| Yard | A system of non-mainline tracks used for making up trains, storing cars, and other purposes. |

1.5 Rights Within Railroad Segments

Through a series of comprehensive rail agreements, VPRA acquired approximately 400 miles of VPRA Property in rail corridors parallel to interstates 95, 64, 85, and 81. VPRA acquired three segments of rail corridor (Segments 1, 2, and 3) from CSXT and a portion of the Manassas Line rail corridor from NS. However, each of CSXT and NS retain certain rights in these corridors. See VPRA Rail Agreements for more details.



Project Sponsors shall utilize the search feature on the <u>map of VPRA rail</u> on the VPRA website to determine on which segment a given property is located.

Once a third party determines which segment applies to their project and their project type, they should follow the application process for project review with CSXT, NS, BBRR or VPRA as noted in the table below. It should be noted that this manual will only apply to Projects on which VPRA has review and approval authority. In all other instances, the third-party should follow the procedures identified by the applicable railroad. Depending on the nature of the project, separate reviews and approvals by VPRA and the applicable railroad may be required.

| Corridor/Property | Milepost Range(s) | Air Rights (Overpasses & Other) | Road Crossings | Underpass (Railroad Bridges & Other) |
|--|---|---------------------------------------|-------------------|---|
| Segment 1 – RF&P Passenger Corridor Note: VRE Territory (CFP 110.1 to CFP 53.2) | CFP 112.35 / QLZ 137.49 / Amtrak 136.49 | CSXT | CSXT | CSXT |
| Segment 2 – S-Line Corridors (Virginia and North Carolina) | A 29.04 to S 100.1 | CSXT | VPRA | VPRA |
| Segment 3 – Buckingham Branch Railroad Corridor | CA 111.78 to CA 276.0 | CSXT | BBRR | BBRR |
| Manassas Line | 9.25 to 32.75 | VPRA | VPRA | VPRA |

2. Third-Party Projects Overview

2.1 Types of Third-Party Projects

While every Project is unique, adherence to the guidelines in this manual will assist in navigating approvals, minimizing delays, and ensuring compliance with regulatory and operational standards. Representative Third-Party Projects that may be subject to VPRA's review and approval process are set forth in Sections 6-10. Project Sponsors should carefully review the guidelines associated with each project classification prior to submitting a project application to VPRA. For project classifications not listed in this manual, please contact VPRA's Real Estate Manager for a determination as to whether VPRA review and approval is required.

- Highway-Rail Grade Crossings
- Bridges over or under VPRA-owned tracks
- Parallel Infrastructure Development
- Beautification

VPRA administers a separate Utility Application Process for installations such as pipelines, conduits, cables, and other utility facilities proposed to be located on VPRA Property. Utility work is not processed through the general Third-Party Project application described in this manual.



DOES YOUR PROJECT INVOLVE UTILITY REOLOCATION OR INSTALLATION?

Utility projects are reviewed separately from Third-Party Projects. Details can be found on VPRA's website under Real Estate resources.

2.2 Adjacent Projects

VPRA highly recommends that Project Sponsors coordinate Adjacent Projects (see Section 1.2 Definition of Terms). Adjacent Projects typically do not require the execution of any of the standard Third-Party Project agreements with VPRA (see Section 3.1 Application Procedures) but should be coordinated with VPRA to ensure there will be no negative impacts to rail infrastructure, rail operations, or VPRA assets. Any roadways, retaining walls, or facilities constructed adjacent to VPRA's Property must not create any potential safety hazards.

- a. Plans should be provided with a level of detail sufficient to verify VPRA property is not at risk during and after construction.
- b. Parallel roads should provide sufficient Horizontal Clearance between the tracks and the road.
- c. Drainage to the VPRA Property must not be altered in location, quantity, quality, or flow rate.
- d. Erosion control must meet DEQ standards.
- e. Construction information should be provided to demonstrate that any means and methods will not have the potential to foul the track and will not present any operational or safety concerns.
- f. Construction must not impede access to tracks, signals, or other infrastructure, unless such temporary restrictions are coordinated with and approved in advance by VPRA and all relevant stakeholders.

g. Construction must not introduce excessive vibration and displacement, undermine or compromise the long-term performance and maintenance of railroad infrastructure.

2.3 Roles and Responsibilities

Clear communication and accountability at every stage of the Project lifecycle are essential to maintaining the operational integrity of the rail network and delivering successful project outcomes. In support of safe, efficient, and coordinated delivery of Third-Party Projects subject to VPRA review and approval in accordance with this manual, the responsibilities for all participating parties are summarized below. Adherence to these responsibilities will facilitate smoother approvals, reduce project risk, and promote long-term infrastructure integrity.

VIRGINIA PASSENGER RAIL AUTHORITY (VPRA)

- Reviews and approves design plans, specifications, and submittals.
- Prepares required agreements and/or issues permits for construction, maintenance, or access.
- Coordinates construction oversight services when required.
- Reviews for compliance with VPRA (where applicable), FRA, and AREMA standards.
- Serves as liaison between Project Sponsors and the Railroad(s).
- For the M-line, assist in coordination with NS for ROE and flagging

PROJECT SPONSOR

- Coordinates and manages the performance and obligations of the design and construction professionals hired by the Project Sponsor.
 - a. Design Consultants
 - i. Prepares design plans that meet applicable VPRA (where applicable, dispatching Railroad and AREMA design standards.
 - ii. Incorporates VPRA feedback at each review stage and provides timely resubmissions.
 - iii. Coordinates closely with utility companies, municipalities, and other third parties as needed.
 - iv. Supports permitting processes by providing detailed engineering documentation and responses.
 - v. Remains available for consultation and design modifications during construction.
 - b. Construction Contractor
 - i. Complies with all safety regulations, including those specific to working on or adjacent to active railroad tracks.
 - ii. Maintains site security, access control, and communication with Railroad personnel.
 - iii. Provides timely notification of schedule updates, work completion, or any incidents affecting Railroad property.
 - iv. Ensures that the completed work meets the approved design and specifications.
- Coordinates with VPRA and the applicable Railroad's staff or their flagging and construction monitoring service providers. This coordination shall occur prior to mobilization or any on-site work.

Note: On the M-line, VPRA will assist Project Sponsor, by acting as a liaison with NS, as

- they require the Contractor to directly coordinate Railroad Flagging with their approved Railroad Flagging service providers.
- Submits required documentation to VPRA at applicable project milestones (30%, 60%, 90%, final design).
- Where applicable, enters into relocation agreements or other related (ancillary)
 contracts required to carry out the project. For example, agreements to relocate utilities,
 adjust drainage facilities, modify existing access roads, or coordinate with other owners
 of affected infrastructure.
- Maintains regular communication with VPRA throughout the design and construction phases.
- Ensures all environmental, utility, and local approvals are obtained.
- Ensures safe delivery of the Project in accordance with applicable laws, regulations, and VPRA policies.
- Coordinates utility relocation or protection in accordance with project design and/or contract requirements.
- Participates in design and field coordination meetings as required.

3. Project Applications and Agreements

All proposed Third-Party Projects that are to be performed within VPRA Property or which will impact VPRA assets or Railroad operations within VPRA Property must be evaluated and approved in advance by VPRA. Depending on the nature of the Project, separate review and approval by the Railroad may also be required in accordance with the Railroad's policies and procedures.

3.1 Application Procedures

Project applications shall be submitted through the VPRA property portal on the VPRA website: Third Party Projects – VPRA

PDF Application Package

- **Cover Letter:** Provide a brief description of the project purpose, objectives and background, and any other specific circumstances that may assist VPRA when processing the application, including items such as the following:
 - End user of facility: provide (1) exact purpose of the facility, (2) expected number of end users, and (3) nature of end user(s) (i.e., individuals, government agency, industry, etc.); if fewer than 10 individual end users, provide name, address, and contact information of end user(s).
 - Facility is required as a result of public highway or bridge construction: provide name and contact of Project Sponsor.
 - If there is a need/request for access to VPRA property for surveying, field visits, soil examinations, or any other purposes associated with the design of the proposed Project.
 - Previous understandings with VPRA representatives: provide copies of relevant correspondence, name, and title of VPRA contact, and understanding with VPRA.
 - Track ownership (i.e., industry-owned or VPRA-owned).
- Application Form: Complete all sections on the Application for Third Party Project (Form, RE-01). [Third Party Projects – VPRA]
- **Location Map:** Provide a detailed location map, indicating the proposed location of the facility, the railroad, and local streets and highways.
- Location Plan: VPRA must have a permanent record of the facility location, based upon railroad mileposts and valuation map stationing, and GPS latitude and longitude information. It is recognized that many applicants will not have access to this information. If a permanent record is not available, then the location plan should include the distance from a milepost marker or centerline of the nearest street grade crossing or bridge to the proposed facility.

Applicants should also identify the DOT/AAR Number of the nearest public grade crossing. All public rail-highway crossings have a unique number assigned in a format such as "123 456B." A metal tag indicating the number is located on the crossbuck or

flasher post at the crossing. Locate the crossing on the map at this website to find the DOT/AAR Number: FRA Crossing Viewer

• **Concept Plans:** The Project submission should include the following: the Project owner's information; general location plans, aerials, and typical section views; a narrative outlining the construction approach and potential impacts to Railroad operations; and a completed Project Data Sheet (forms provided in Appendix A – Sample Forms).

Application Review Timelines

VPRA will conduct a preliminary review of the project application submittals to verify completeness and to assess the overall feasibility of the project within 15 days of receipt to determine if the project will proceed. Project Sponsors will be contacted during this period if additional information or revised plans are required.

3.2 Design Review Agreement and Site Access

If the Project is deemed eligible to proceed, the Project Sponsor will be provided with a Design Review Agreement (DRA) for signature. VPRA will complete a full review of the Concept Design within 45 days of receipt; however, no comments will be released or approvals issued unless the DRA has been executed. Additional submittal requirements typically associated with the Design Review process are addressed in **Section 4**.

Site access required in connection with a project application shall be coordinated with the VPRA Engineer. Prior to performing any surveying, site investigation, and/or construction work, the Project Sponsor must enter into a Temporary Right of Entry Agreement ("TREA") with VPRA. Depending on the phasing of the work, multiple TREA may be required. Refer to **Section 5** for additional information regarding requirements applicable to entry upon VPRA Property.

3.3 Payment for Costs and Expenses

All costs and expenses incurred by VPRA in connection with the Project must be paid by the Project Sponsor. These expenses may include, but are not limited to, the following:

- Review of project submittals
- Out-of-pocket expenses directly related to the Project
- Travel and lodging expenses incurred by VPRA personnel, or VPRA contractors
- Communication costs, including telephone, mailing, and data transfer fees
- Equipment, tools, materials, and supplies
- Project protective services, including flagging
- Attendance at project meetings, including preconstruction and coordination sessions
- Construction engineering and inspection services
- Applicable labor overhead rates, as determined by VPRA policy and relevant regulations
- System and/or infrastructure modifications or relocations required to accommodate construction activities
- Track relocation or modifications, including temporary construction crossings necessary to maintain train operations
- Maintenance or replacement of grade crossings and associated trackwork, as determined by VPRA or through agreement with highway authorities
- Fees paid to VPRA consultants and contractors for project related activities

VPRA has estimated its reimbursable costs and expenses for typical Projects and will identify those items within both the DRA and TREA, which will form the basis of the initial deposit that will be due from the Project Sponsor under each of the respective agreements. No services will be furnished by VPRA, and no work will commence by the Project Sponsor, until such time as the initial deposit is paid in full to VPRA. Costs in excess of the initial deposit will be invoiced separately, if it becomes apparent that the original estimate will be exceeded.

3.4 Project Approvals

All approvals involving the Project Sponsor's application and Project-specific deliverables will be furnished through VPRA's Engineer. The Project Sponsor agrees that, in performing the Project, it shall comply at all times and in all respects with the terms and conditions and other requirements of the project approvals. Where approval is identified as a condition precedent to subsequent project work activities, the Project Sponsor shall not commence the subsequent project work activities until such time as the applicable approval has been rendered.

3.5 Real Estate and Utility Transactions

Real estate transactions and utility coordination will be governed by separate agreements. The majority of projects on VPRA property are typically authorized by permit rather than by conveyance of a real property interest such as an easement. Easements or other property transfers will be used only when a permanent property right is required. Refer to Section 10 for additional information on VPRA property access rights.

4. Design Review

4.1 Requirements for Design Submittals

As part of the Design Review phase, the Project Sponsor is expected to submit all relevant documents and supporting materials to VPRA for review and approval. Design packages submitted must follow the applicable design criteria and VPRA's design standards noted within the DRA. All submissions must be in electronic format (pdf), unless otherwise specified, and submitted through the VPRA Property Portal. Project Sponsors should refer to their DRA for details as to the deliverables to be provided at each key design milestone.

A completed Project Data Sheet corresponding to the Project (see Appendix A: A.2 Overhead Grade Separation Data Sheet, A.3 Underpass Grade Separation Data Sheet, or A.4 Grade Crossing Data Sheet) shall be included with the Concept Design submission to document Project information.

Representative design submittals may include the following:

Concept Design

- Project owner information
- General location plans, aerials, and typical section views
- Narrative outlining the construction approach and potential impacts to VPRA's operations
- Completed Project Data Sheet (forms provided in Appendix A Sample Forms)

30% Design Package Submission

- Responses to initial VPRA comments made to the Concept Design submittal.
- Updated general plans, elevation views, and utility coordination notes
- Initial construction sequencing and design criteria
- Preliminary engineering reports and supporting technical documentation

60% Design Package Submission

- Progression from the 30% design
- Revised plans and responses to previous review comments
- Identify VPRA Property impacts and property needs
- Continued refinement of construction methodology and sequencing

90% Design Package Submission

- Near-final design
- Detailed plan sets with calculations sealed by a licensed Professional Engineer
- All applicable specifications, special provisions, and design reports
- Final utility coordination, staging details, and constructability elements

Final (100%) Design Package Submission

- Final signed and sealed drawings and calculations
- Final versions of all specifications, technical reports, and provisions
- Complete project documentation necessary to proceed to construction such as VPRA Property plans, staging documents, etc.

4.2 Typical Timeline for Design Review

The table below shows typical timeframes for design review and is offered for informational purposes only. Actual timeframes can vary significantly depending on the complexity of the Project and the quality of submittals.

| Task | Duration (Days from Receipt of Submittal) |
|--|--|
| Receive VPRA acceptance of and/or comments on Concept Design package | 45 Days |
| Receive VPRA acceptance of and/or comments on 30% plans | 45 Days |
| Receive VPRA acceptance of and/or comments on 60% plans | 45 Days |
| Receive VPRA acceptance of and/or comments on 90% plans | 45 Days |
| Receive VPRA acceptance of and/or comments on final design | 30 Days |

4.3 Costs for Review

Project Sponsors are responsible for all out-of-pocket costs and expenses associated with the Design Review. Review costs, as determined by VPRA, are based on the estimated level of support required by the Project and are not intended to generate revenue for VPRA. This support may include VPRA staff time and engineering consultant reviews. VPRA requires an initial deposit from the Project Sponsor prior to initiating the Design Review. The initial deposit amount will be specified in the DRA.

Below are required initial deposit amounts based on project type:

| Project type | DRA Initial Deposit |
|--|------------------------|
| Culvert/Drainage/SWM | \$15,000 |
| At-grade highway crossing | \$15,000 |
| Quiet Zones | \$10,000 |
| Bridge over VPRA Property | \$25,000 |
| Bridges Carrying VPRA Tracks (Underpass Bridges) | \$50,000* |
| Parallel Infrastructure (trails, roadways) | \$15,000 |
| Beautification | \$7,500 |
| Subgrade Crossing (Tunnel) | \$50,000* |

^{*}May require higher deposit depending on complexity

VPRA will draw down against the initial deposit as costs are incurred and will monitor the drawdown of the deposit throughout the project review period. If it becomes apparent that the original deposit will be insufficient to cover VPRA's remaining costs, VPRA will prepare a revised estimate and notify the Project Sponsor. A supplemental deposit request or final invoice will then

be issued to the Project Sponsor. Upon completion of the Design Review, any unused funding will be returned to the Project Sponsor. Note that significant changes in the project design during the design review phase will necessitate more review time.

5. Entry Upon VPRA Property

5.1 Temporary Right of Entry Agreements (TREA)

Entry on VPRA Property for the purpose of conducting surveys, field inspections, soil

examinations, or any other purposes associated with the design and construction of the proposed Project will require execution of a TREA.

Prior to construction, Project Sponsors will initiate the TREA process by coordinating with the VPRA Engineer and VPRA Legal department. The TREA will be specific to the project and is required to engage flagging and construction monitoring support.

Depending on the nature of the work, Project Sponsors may also need to obtain authorization from

the Railroad before entering the corridor. The Project Sponsor will be informed during the application phase whether a separate or joint TREA document will be required.

PLEASE NOTE

The execution of a TREA does not constitute authority to proceed with site investigation and/or construction activities. The Project Sponsor cannot enter or begin work on the site until VPRA issues a notice to proceed as described in the TREA.

5.2 Compliance with Safety Rules and Regulations

Project Sponsors, along with their Contractors, are responsible for knowing and complying with the following:

- All applicable local, county, state and federal laws and regulations, including FRA fall
 protection and Roadway Worker Protection, applicable OSHA requirements, and
 Department of Homeland Security requirements; and
- VPRA and Railroad safety standards.

Any violation of the foregoing may result in VPRA issuing a stop work order to the Project Sponsor and barring the Project Sponsor's personnel and Contractors from VPRA's property.

5.3 Insurance Requirements

The Project Sponsor and its Contractors shall be responsible for maintaining all applicable insurances as specified in the TREA. Proof of coverage shall be submitted to the point of contact specified within the TREA. No work may begin at the Project until the Project Sponsor has submitted proof of the required coverages and VPRA has issued written acknowledgement as to conformance.

5.4 Railroad Operations

All activities conducted within or adjacent to VPRA Property must be planned and executed in a manner that does not interfere with Railroad operations or compromise the safety of Railroad employees, passengers, equipment, or the public. Weekend, nighttime, or off-peak work hours may be required to maintain rail service continuity.

The Project Sponsor and its Contractors are responsible for coordinating their work with VPRA and the Railroad to maintain uninterrupted train movements. Construction methods, scheduling, and access points must be designed to minimize impacts to rail service and maintenance activities.

At no time shall equipment, personnel, or materials foul an active track or create conditions that could endanger train movements. The Project Sponsor must maintain required horizontal and vertical clearances and comply with all restrictions set forth in the applicable TREA.

Access to tracks, signals, communication systems, and other railroad infrastructure must remain unobstructed at all times. VPRA and the Railroad must have immediate access to respond to operational or safety emergencies.

5.5 Railroad Flagging Services

VPRA will work cooperatively with agencies, consultants, contractors and the Railroads to determine whether flagging services will be required for the Project.

Railroad Flagging services are typically required when:

- any entity is working on, near, or adjacent to active railroad tracks.
- an outside party is entering VPRA Property or performing work that may affect VPRA
 Property and/or Railroad operations. This includes occasions when a party has been
 given express permission from VPRA to enter its VPRA Property to perform work under the
 terms of a TREA.
- work adjacent to rail lines has the potential to impact VPRA property or Railroad operations.
- off-highway construction equipment is crossing the rail lines at a private or public crossing.
- oversized equipment or highway vehicles are crossing the VPRA Property at a private or public crossing.
- In other instances, as determined by VPRA.

Qualified Flagging Personnel

Flaggers are trained in the proper procedures related to rail operations and safety requirements, familiar with rail operations and procedures in a project area, and able to communicate directly with Railroad dispatching personnel and train crews. Railroad Flagging may only be performed by qualified personnel designated by the dispatching Railroad.

Arrangements for Railroad Flagging Services

The Project Sponsor must make arrangements for Railroad Flagging related to planned work by contracting with an outside party certified to perform flagging by the dispatching Railroad. The Project Sponsor is responsible for understanding these terms and complying with all Railroad Flagging requirements.

Scheduling for flagging services will not typically begin until a TREA agreement is executed with VPRA. Advance notice must be provided to secure Railroad Flagging. Project Sponsor must coordinate directly with flaggers on construction schedule modifications or cancelations.

Responsibility for Costs and Expenses

All costs and expenses associated with Railroad Flagging are Project costs and thus not the responsibility of VPRA. Project Sponsors are encouraged to discuss estimated flagging costs directly with the Railroad Flagging contractor. Charges billed by the Railroad Flagging contractor to the Project Sponsor may include hourly rates, overhead costs, and expenses incurred by the flaggers.

5.6 Construction Monitoring and CEI

VPRA and its Railroad partners may require construction monitoring or construction engineering and inspection (CEI) for the Project to facilitate the safety of the public and VPRA employees and to protect VPRA assets. These potential requirements are separate from Railroad Flagging services and will be performed by VPRA and/or its consultants. The costs are a pass-through charge to the Project Sponsor. An estimate of these costs will be included in the TREA between VPRA and the Project Sponsor.

General Guidelines for Construction Monitoring

Construction Monitoring is typically required for short-duration or limited-scope projects such as roadway paving, drainage improvements, or other minor activities within or adjacent to VPRA Property.

Construction Monitoring-

- Confirms that construction activities are conducted in a safe manner consistent with approved plans and the TREA requirements.
- Involves intermittent or periodic on-site observation by VPRA or its consultants to ensure that the Project is built as shown on the approved drawings and that means and methods do not endanger railroad operations.
- Maintains detailed logs and photographic documentation based on site observations.
- Reviews and verifies that required submittals, access control measures, and clearances are being followed.
- Reports observed unsafe conditions or deviations from approved plans immediately to Contractor, VPRA and the Project Sponsor.
- Does not include material testing, formal inspection, or quality assurance on behalf of the Project Sponsor.

VPRA and its consultants are not responsible for the contractor's compliance with OSHA or other safety regulations, nor for certifying or accepting construction work. The contractor must perform required inspections, certifications, and provide documentation to VPRA.

General Guidelines for Construction Engineering and Inspection

CEI includes intermittent or continuous on-site presence of VPRA or its consultants during construction activities to ensure the Project is built as shown on the plans, following the means and methods proposed.

CEI-

- Includes VPRA review and approval of all plan changes and required contractor submissions during the construction phase of the Project.
- Reviews and coordinates approval of field design changes, temporary works, and construction sequencing.
- Maintains detailed daily inspection logs and photographic documentation.
- Reviews and verifies all contractor-provided inspection and testing data, including material certifications, field testing results, and quality control documentation, to ensure they meet applicable VPRA, FRA, and AREMA standards.

VPRA and its consultants are not responsible for monitoring the general work activities for compliance with safety regulations. VPRA and its consultants are not responsible for

certifications or inspections of construction. The contractor must certify and inspect its work and provide appropriate documentation to VPRA upon request.

5.7 VPRA Costs Related to Construction

Project Sponsors are responsible for all out-of-pocket costs and expenses associated with the construction of the project. Costs will vary depending on the complexity of the project and the support that will be required by VPRA and its consultants relative to construction oversight and monitoring. VPRA will prepare an initial cost estimate in advance of execution of the TREA, which VPRA will share with the Project Sponsor. No profit or markup is included in the cost estimate, except for those amounts associated with consultant-related costs and expenses.

Contemporaneously with the execution of the TREA, VPRA will require an initial deposit from the Project Sponsor for the construction phase based on the cost estimate. This initial deposit is in addition to any deposits Project Sponsor made at the start of the design phase; i.e., in connection with the DRA.

VPRA will draw-down the initial deposit as costs are incurred and will monitor the drawdown of the deposit throughout the delivery of the project. If it becomes apparent that the initial deposit will be insufficient to cover VPRA's remaining costs, VPRA will prepare a revised estimate and notify the Project Sponsor. A supplemental deposit request or final invoice will then be issued to the Project Sponsor.

Upon close-out of the project, any unused funds that have been deposited with VPRA will be returned to the Project Sponsor. Note that significant delays during construction and changes in the project design during construction will typically equate to additional oversight costs on the part of VPRA.

6. Highway-Rail Grade Crossings

The majority of VPRA property is within the Commonwealth of Virginia, therefore this manual when referring to the transportation agency, will refer to the Virginia Department of Transportation (VDOT). If the Project is outside of Virginia, coordination with the applicable transportation agency will be required. All crossing-related projects, whether for removal, improvement, or maintenance, must be reviewed and approved via VPRA's design review process, as noted in Section 3. Each existing public at-grade crossing is identified by a unique USDOT Inventory Number FRA Crossing Inventory. Project Sponsors must reference this number in all communications and documentation. Crossing-related projects include the following:

- a. Crossing elimination, consolidation, new construction, resurfacing, or rehabilitation; and
- b. Installation or modification of warning systems and devices.

Ownership of the roadway will dictate the entity required to review warning devices and pavement markings. The Project Sponsor is responsible for the design of warning devices, signage and pavement markings, and all costs associated with their design and installation.

| Ownership | Pavement marking Review | Safety device Review | Signal Design | Cost |
|---|-------------------------------|-----------------------------------|-------------------------|-----------------|
| Public highways, owned and maintained by VDOT | VPRA | VPRA & Dispatching Railroad | Dispatching Railroad | Project Sponsor |
| City highways, owned and maintained by City in Virginia | VDOT | VPRA & Dispatching Railroad | Dispatching Railroad | Project Sponsor |
| Private roadways, owned and maintained by a private entity | VDOT | VPRA & Dispatching Railroad | Dispatching Railroad | Project Sponsor |

VPRA will attend diagnostic meetings with the appropriate stakeholders, including the FRA, the applicable state agency (e.g., DRPT, VDOT, etc.), Railroad partners, and Project Sponsors to provide warning device assessments and design input. The Project Sponsor is responsible for the associated costs for such assessments.

All crossing-closure or grade-separation efforts must be coordinated with and approved by the VPRA Engineer, VDOT and local government, depending on ownership. Collaboration with local governments is necessary to address the high-risk nature of at-grade crossings and pursue closure and alternative crossing solutions.

- a. Whenever proposing a new crossing for consideration or widening of an existing roadway, a feasibility review of an overpass or underpass alternative must be performed.
- b. For safety reasons, an existing public crossing must be permanently closed in conjunction with any proposed new public highway-rail at-grade crossings. A waiver of the required closure may be requested, which will require engineering documentation demonstrating the need to keep all crossings open.

VDOT manages the Virginia Highway Safety Improvement Program (VHSIP). Section 8 of the VHSIP reference guide details the Highway-Rail Grade Crossing Safety Program (H-RGCP). The VDOT Right of Way Division includes the Rail Section, which coordinates the Railroad activities for VDOT, including obtaining necessary right of entry agreements, grade crossing agreements and Project Railroad agreements, and provides guidance and direction to VDOT staff/consultants statewide for Railroad associated activities.

For all grade-crossing projects, Project Sponsors must complete and submit the At-Grade Crossing Data Sheet (Appendix A.4) as part of the Concept Design package.

6.1 Surface Replacement and Maintenance

The crossing surface provides a path for highway vehicles to cross Railroad tracks. The objective is to provide a safe, smooth, and cost-effective crossing for highway and Railroad traffic. Highway and Railroad maintenance work in the vicinity of highway-rail grade crossings must consider safety concerns for both highway and Railroad traffic before, during, and after the time the work is implemented.

Identification of the Crossing and Location

Each crossing has a unique DOT inventory identification number posted at the crossing. There is often more than one crossing on the same road. The crossing number (e.g., 123456A) must be used to identify the specific crossing in all communications with VPRA and the Railroad to reduce possible confusion about the specific location.

Crossing Construction

Railroad tracks must be continuous through the crossing and include Railroad ties, rail, and fasteners below the surface of the crossing. The crossing surface for highway traffic can be made of several different materials. Drainage is required for all four quadrants at a crossing.

Crossing Surface Types and Selection

Crossing surface material and construction methods are selected for each crossing based on the type of highway and Railroad traffic, past performance, and funding available from highway agencies for individual Projects.

Pavement Markings

Design and maintenance of any pavement markings outside of the foul zone (4') are the responsibility of the roadway owner.

Crossing Maintenance and Replacement

Maintenance responsibilities are addressed within the TREA. Refer to Section 5 for details.

6.2 Warning Device Alterations

It is the dispatching Railroad's responsibility to maintain all railroad crossing signals at public highway-rail grade crossings in accordance with federal, state, and local law and regulations. VPRA will review and coordinate with the dispatching Railroad for all Projects proposing alterations to public highway-rail grade crossing warning systems, which includes:

- opening new crossings,
- closing existing crossings,
- modifying or widening existing crossings,
- installing new warning systems,

- removing and/or relocating existing warning systems, and
- modifying/upgrading existing warning systems.

VPRA does not unilaterally determine the adequacy of warning devices at highway-rail grade crossings; rather, this is determined through a diagnostic team which includes all Project stakeholders.

Identification of the Crossing and Location

Each crossing has a unique DOT inventory identification number posted at the crossing. There is often more than one crossing on the same road. The crossing number (e.g., 123456A) must be used to identify the specific crossing in all communications with the VPRA to reduce possible confusion about the specific location. Refer to section 3.1 for link to FRA crossing database.

Design Considerations

Highway-rail grade crossing warning systems must adhere to all applicable federal and state standards and regulations, and local policies, laws and ordinances, as well as both VPRA and dispatching Railroad standards. The highway agency or other governmental agency responsible for making warning system and equipment determinations is responsible for selecting appropriate vehicular traffic control signs and/or devices for a specific public highway. Loop Detection Circuitry will not be designed, installed, owned, or maintained by VPRA.

Recommended practices and additional information are available in American Railway Engineering and Maintenance of Way Association (AREMA) manuals and the Manual on Uniform Traffic Control Devices (MUTCD).

Engineering, Cost Estimation, Installation

The dispatching Railroad on VPRA's Property must retain operating control of rail facilities impacted by the proposed Project Sponsor's Project. The Project Sponsor must request a cost estimate from the dispatching Railroad for engineering and design, and a cost estimate for the installation of highway-rail grade crossing warning devices at the expense of the Project Sponsor as part of the design review for a Project. This includes all costs incurred in completing environmental assessments and construction of improvements necessary to carry out the proposed Project without adverse effects, delays, or restrictions on current and future freight and passenger rail transportation mobility and growth, and to reflect fair market value of any interest in rail property affected by or acquired by the Project Sponsor. Each Project Sponsor will propose the design of pavement markings and types of at-grade crossing signals to be installed pursuant to the MUTCD and applicable laws and regulations. Section 130 funding is available from the Federal Highway Administration (FHWA) for crossing safety improvements and is managed by VDOT.

Per the MUTCD and applicable law, VPRA cannot and does not install grade crossing signals of its own accord without VDOT review and approval as VPRA does not have the authority to regulate roadway traffic. Installation of traffic control devices must be done according to the procedures detailed by the Commonwealth of Virginia.

Traffic Light Preemption Interconnection

Preemption of the cycle of traffic signals at highway intersections near highway-rail grade crossings requires careful review by highway traffic engineers to determine the appropriate timing and sequence for both the traffic signal and the highway-rail grade crossing warning system. Preemption for the traffic signal may be simultaneous with, or in advance of, the warning system activation. The appropriate sequence and timing shall be reviewed and approved by

VDOT and distributed to the Project Sponsor to facilitate their signal design. VPRA requires that all requests for preemption Projects and proposed preemption timing and traffic signal operation be reviewed by a qualified traffic engineering consultant before being forwarded to VDOT's Traffic Division for estimation and final approval. As such, the Project Sponsor shall review all preemption plans, layouts, traffic signal timing, and calculations with VDOT.

Advanced Preemption Timing

For grade crossing warning systems interconnected with highway traffic signals, the 2018 AREMA C&S Manual limits advanced preemption timing to 50 seconds (plus equipment response time), and VPRA will abide by this standard. For more information refer to 2018 AREMA C&S Manual Part 3.1.10, section C.1.

6.3 Opening, Closure and Consolidation of Crossings

VPRA understands the importance of highway-rail grade crossings and their relevance to such priorities as economic development, emergency vehicle access and other growth opportunities in the communities through which we operate. Because of the safety concerns associated with highway-rail grade crossings, however, every effort must be made to obtain alternative access or additional capacity using grade separations, or by other roads leading to existing crossings. If a Project Sponsor desires a new public crossing, it must close like-crossings, similar in nature to the new crossing being proposed.

Crossing Closure Incentive Program

Eliminating crossings is a goal of VPRA, VDOT, and the Federal Railroad Administration (FRA). Likewise, the Federal Highway Administration's (FHWA) Railroad-Highway Grade Crossing Handbook acknowledges that the first alternative that should always be considered for a highway-rail at-grade crossing is elimination. Elimination of a crossing provides the highest level of crossing safety because the point of intersection between highway and Railroad is removed. Closing adjacent crossings simplifies the design, installation and operation of highway-rail grade crossing warning systems.

Considerations for Crossing Openings and Closures

The addition of any grade crossing brings the potential for incidents involving trains and motor vehicles. For this reason, both federal and state government policies discourage the creation of new grade crossings. VPRA, the dispatching Railroads, the United States Department of Transportation and VDOT encourage communities to carefully consider all alternatives, including grade separations (crossings that go over or under railroad tracks), as opposed to the creation of new at-grade crossings. The cost of a grade separation should not outweigh the enhanced safety it would provide for motorists.

VPRA, the FRA and dispatching Railroads actively participate in programs such as Operation Lifesaver, an initiative dedicated to educating the public on the importance of practicing safe driving procedures at grade crossings. For more information about crossing safety, visit:

Operation Lifesaver

Before agreeing to the establishment of a new crossing, VPRA expects communities to engage in a study with the purpose of identifying existing redundant public crossings for closure. To comply with, and in support of, the federal initiative to reduce grade crossings, VPRA requires

that the community identify the potential closure of three or more comparable active public atgrade crossings.

Any new crossings requested across VPRA should generally be constructed with concrete surfaces and active warning devices where consistent with the requirements of the MUTCD and determinations of the diagnostic team. As discussed above, the appropriate public authority will be expected to cover the cost of design, installation and future maintenance of the crossing.

To close or modify a public at-grading crossing, approval from VDOT and, where applicable, the Virginia State Corporation Commission (SCC) or other regulatory agencies is required. VPRA will work with the roadway authority to try to reach a consensus on closure and then make a formal application to the authority for closure. If the roadway authority disputes the closure, the dispute will be resolved under procedures established by state law. Once closure is approved and the road is formally closed to vehicular traffic, VPRA will remove the crossing surface and any/all passive and active warning devices. VPRA will enter into an agreement with the road authority and assist in development of a plan to remove the approaches and restore the Railroad ditch line, as well as install any necessary end of road treatment. Any related work outside of the VPRA Property is the responsibility of outside parties unless it specified otherwise in any agreements with VPRA.

In the case of grade separation, the at-grade crossing may or may not need to stay open during construction of the grade separation structure(s), but the same removal process outlined above applies.

Requirements for New Crossing Requests:

The Project Sponsor requesting a new crossing or seeking to convert a private crossing to a public crossing must prepare a written request, presenting the following information:

- 1. A description of the proposed highway Project, including proposed passive or active traffic control devices, and the need for preemption and/or interconnection with traffic signals, together with a scale drawing or sketch of the proposed highway and vicinity.
- 2. Expected Annual Average Daily Traffic (AADT) and proposed vehicular speed limit, photographs, and aerial map.
- 3. A detailed explanation of the necessity of the crossing.
- 4. Identify at-grade crossings to be closed. Include their vehicular speed limit, AADT, and traffic type.
- 5. The determination by VDOT or regulatory authority of the need for passive or active traffic control devices and other safety treatments (signage, roadway medians, etc.), consistent with applicable federal and state MUTCD guidelines and requirements.
- 6. A plan to satisfy any appropriate regulatory authority's requirements, procedures and approval. The Project Sponsor should coordinate with all applicable agencies (state, county, city, etc.) to ensure proper procedures are followed.
- 7. Execute a DRA prior to VPRA incurring costs to review the crossing request and design review.
- 8. Execute a TREA which will address construction expenses, and the cost for the ongoing maintenance of the crossing surface and related grade crossing warning devices.

VPRA will review the request for a new crossing and inform the Project Sponsor whether or not the new crossing is approved. VPRA may deny a new crossing request due to safety or operational concerns.

6.4 Quiet Zone Proposals

Overview

VPRA will fully comply with the 49 CFR 222, FRA Train Horn Rule (Rule), which provides requirements for the sounding of locomotive horns when approaching public highway-rail grade crossings. The Rule also provides guidance for conditions under which a public authority with jurisdiction over the roadway crossing VPRA tracks may apply for and establish Quiet Zones. A Quiet Zone is a section of a rail line that contains one or more consecutive public crossings at which locomotive horns are not routinely sounded. For full details on the rules, VPRA recommends that communities either visit the FRA web site at www.fra.dot.gov or contact the FRA's Office of Safety at 202-493-6299. To that extent, communities should note that just because a Quiet Zone is implemented, the train horn may still be sounded for specific circumstances.

Policy on Quiet Zones

The Rule clearly defines requirements that must be satisfied by the public authority requesting that a Quiet Zone be established or continued. VPRA will expect the public authority to strictly comply with these requirements.

Identification of the Crossing and Location

Each crossing has a unique DOT inventory identification number posted at the crossing. There is often more than one crossing on the same road. The crossing number (such as 123456A) must be used to identify the specific crossing in all communications with VPRA to reduce possible confusion about the specific location. Refer to section 3.1 for link to FRA crossing database.

Preliminary Planning for Quiet Zones

Preliminary work by VPRA personnel and/or its consultants is likely to be required in connection with the proposed new or continued Quiet Zone, including, but not limited to: updating crossing inventory information; attending meetings; participating, to the extent feasible, in diagnostic reviews of the public, private and pedestrian crossings in a proposed Quiet Zone; preparing and processing estimates covering the cost of work to be performed by VPRA, if applicable; and processing necessary agreements. VPRA will coordinate preliminary planning activities with each public authority upon execution of a DRA.

Process for Pursuing a Quiet Zone

- Groups or individuals interested in Quiet Zones should first contact the public authority
 responsible for the highway where the Quiet Zone would be located. Public authorities
 should then contact the FRA for additional information on Quiet Zone requirements and
 procedures.
- 2. The public authority shall initiate contact with VPRA via the property portal on our website. Upon receipt of the application, the Project Sponsor will be put in contact with the Planning Department at VPRA.
- 3. If the public authority decides to proceed with preliminary planning for a Quiet Zone, the public authority shall deposit funds with VPRA for VPRA's Quiet Zone related expenses, per the executed DRA. After this deposit is received, VPRA will assist by attending diagnostic review meetings. VPRA resources to attend these meetings are limited and thus VPRA will seek flexibility in establishing meeting dates and times to permit VPRA representatives to attend.

- 4. The preliminary planning for a Quiet Zone Project should include a review of the following principles:
 - a. VPRA will cooperate and work in good faith with local communities and the appropriate public authority to provide assistance in a manner that protects the safety of local citizens and their communities as well as VPRA's employees.
 - b. In accordance with the Rule, VPRA's support of a Quiet Zone proposal will require the plan to meet very specific FRA measures and requirements, which in some cases, may be subject to FRA review, approval and on-going oversight.

 Accordingly, VPRA retains the right to review and comment on the requests.
 - c. VPRA expects the involvement of VDOT, FRA, and/or state regulatory authority in any diagnostic review of a public, private and pedestrian crossing in the Quiet Zone corridor being proposed.
 - d. VPRA will not bear the cost of design, installation and future maintenance of safety enhancements, including, but not limited to, its installation of Supplemental Safety Measures (SSMs) and Alternative Safety Measures (ASMs). A TREA will be executed to determine the specific responsibilities at highway-rail grade crossings that may be modified or expanded for a Quiet Zone. If curbs, medians, pavement markings and other traffic control signs such as advance warning signs are installed and maintained by public authorities, they will be required to be maintained by those authorities. The cost of this work will be the responsibility of the requesting public authority.
 - e. SSMs or ASMs installed and maintained by the public authority as described above are important parts of traffic control at each crossing. The public authority is responsible for periodic inspection and repair of these items.
- 5. Standard VPRA design and estimating procedures will be used for Projects related to Quiet Zones.
- 6. Vehicle Loop Detection Circuitry will not be designed, installed, owned, or maintained by VPRA.
- 7. Wayside Horn Systems are not authorized for use on VPRA.

7. Bridges Over or Under VPRA-Owned Tracks

7.1 Bridges over VPRA Tracks

Project Sponsors must complete and submit the Grade Separation Data Sheet Appendix A.2 for Overhead Bridges with the Concept Design submission.

Projects that involve the construction or rehabilitation of bridges crossing over VPRA-owned tracks must meet VPRA's design requirements, drainage, and protection criteria. This includes new structures or major modifications to existing overhead bridges.

- a. Design packages at planned major design milestones (i.e., Concept, 30%, 60%, 90%, Final) must be submitted as part of the design review process described in Section 4.
- b. Bridge design must comply with VPRA bridge and clearance requirements in both horizontal and vertical directions. Clearance requirements vary by Segment.
- c. Construction feasibility, including site access, utility conflicts, proposed means and methods and impacts to rail operations, must be included.
- d. If the Project Sponsor plans to paint a bridge or other adjacent structure that is located on or near VPRA property, the Project Sponsor must first execute both a DRA and a TREA with VPRA before any work begins.
- e. Flagging services will be required to safeguard passenger and freight rail operations, workers, and the public.

7.2 Bridges Carrying VPRA Tracks (Underpass Bridges)

Project Sponsors must complete and submit the Grade Separation Data Sheet (Appendix A.3 for Underpass Bridges) with the Concept Design submission.

Projects involving bridges to be owned by VPRA that support VPRA-owned rail lines, such as when VPRA tracks cross over roads, must be evaluated for both structural integrity and operational impact.

- a. Designs must comply with AREMA guidelines, as well as VPRA comments made during the design review period.
- b. Work phasing and coordination for train operations must be addressed in the design.

8. Parallel Infrastructure Development

8.1 Roadways and Facilities Parallel to VPRA Property

Overview

In the interest of public safety, generally, parallel public roads will not be located on VPRA Property. Parallel roads involving intersections with existing or proposed highways where public or private crossings are present should be aligned to provide sufficient distance from the crossing for the largest vehicle (design vehicle) permitted to use the road to stop between the Railroad and the parallel road traffic control signs, markings, and warning devices without interfering with Railroad operations, obstructing or preventing the operation of traffic control devices or obstructing the crossing in any manner. Access to VPRA Property shall not be restricted by the proposed facilities.

In addition to VPRA guidelines, Federal and State design manuals, the MUTCD, and AREMA manuals provide required design information to be incorporated by the highway agency responsible for the Project.

General Guidelines

The design of publicly owned highways, highway intersections, and configuration of highway-rail grade crossings is the responsibility of VDOT. In situations where a roadway, retaining wall, or highway facility is being modified or constructed adjacent to VPRA Property, the Project Sponsor shall communicate with VPRA to ensure the Project will not adversely impact the Railroad. Drainage for highway runoff, the Railroad corridor, and adjacent property must be designed to reduce or maintain existing Railroad drainage and to prevent standing water and potential erosion. Drainage for both the public road and VPRA will be considered. Adverse impacts to VPRA property resulting from insufficient drainage devices and erosion and sediment controls will not be permitted.

Access to the Railroad property, structures, and track cannot be restricted or prevented.

- Plans should include a typical section to show the relationship of the proposed work with respect to VPRA property.
- A Railroad Flagger may be required at Project Sponsor's expense.

8.2 Bicycle and Pedestrian Pathways

Overview

Bicycle and pedestrian pathway projects include:

- At grade crossings at existing highway easements or public roadway crossing with appropriate signs and warning systems and appropriate placement of the sidewalk
- Grade separated pathway and trail crossings with protective fencing
- Underpass crossings with modifications or a canopy and protective fencing in special circumstances
- Parallel trails outside of VPRA Property with fences or barriers to prevent trespassers and independent parallel structures to cross over roadways, creeks, or other features requiring an elevated surface

Pursuant to HB2088, all proposed trail projects on railway property must be processed through DCR. DCR will lead the process defined by HB2088 in coordination with the DPRT, Railroads, VPRA, and other project stakeholders. As further detailed below, approval rights pathway policies vary as between the various railway segments. Project Sponsors are advised that in most circumstances, requests for bicycle, pedestrian or multi-use pathways within an active railway corridor will be denied due to public safety concerns.

Pathway Approvals and Restrictions by Segment

If a trail project that will impact VPRA property is under development/consideration, the Project Sponsor must get approval from the impacted Railroad operator and property owner. Refer to the table below for required reviewers and approvers within VPRA property.

| VPRA Rail Corridor | Initial reviewer for trail projects | Railroad Operator: review/approval required | Rail corridor Owner: review/approval required |
|--------------------|-------------------------------------|---|---|
| Segment 1 | VA DCR | CSX | VPRA |
| Segment 2 | VA DCR | CSX | VPRA |
| Segment 3 | VA DCR | BBRR | VPRA |
| M-line | VA DCR | NS | VPRA |

Segments 1, 2, 3: VPRA acquired certain rights in Segments 1, 2, and 3 to advance passenger rail operations, however, the legal instruments providing VPRA those rights contain stringent restrictions against certain uses, including recreational uses.

Under the "Restrictive Covenants" section in each respective deed, hiking trails are explicitly prohibited. The applicable language is as follows:

"[VPRA] acknowledges that the Passenger Rail Corridor has been historically used for railroad industrial operations and is being conveyed for use only for Passenger Rail Operations. Grantee, by acceptance of this Deed, hereby covenants that it, its successors, heirs, legal representatives or assigns shall not use the Passenger Rail Corridor for any purpose other than Passenger Rail Operations and that the Passenger Rail Corridor will not be used for the following (collectively, the "Use Restrictions"):...(c) any recreational purpose (recreational use shall be defined

broadly to include, without limitation, use as a public park, hiking or biking trail, athletic fields or courts, or public gathering place)."

Accordingly, VPRA does not have the legal right to unilaterally authorize the use of portions of Segments 1, 2, or 3 for recreational trails. Rather, proponents of trails over those segments must obtain the approval of CSX (the "grantee" under the deeds) and also work through other applicable stakeholders such as DCR, VDOT, etc.

Manassas Line: Like the segments above, recreational trails cannot interfere with passenger or freight operations on this line, and precautions must be implemented to ensure the safety of trail users and the safe and efficient operation of trains. Accordingly, proponents of trails over the Manassas Line must work with VPRA, NS, DCR and other railroad stakeholders to advance any desired trails over the line.

For more information regarding bicycle and pedestrian pathways, visit <u>CSX's Public Projects</u> <u>Manual: Bicycle/Pedestrian Pathways and Multi-Use Trails</u> for Segments 1, 2, and 3, and <u>NS's</u> Public Project Manual Section 5.5: Bicycle/Pedestrian Trails and Crossings for the M-line.

9. Beautification

Requests to improve the appearance of VPRA structures, such as through landscaping or beautification, are considered on a case-by-case basis.

- a. Signage or banners are not permitted on underpass bridges.
- b. Safety, visibility, and long-term maintenance must be considered and incorporated into designs.

Such Projects must not interfere with train visibility or infrastructure access, inspection and maintenance.

9.1 Bridge Painting

Requests by communities, agencies, and other outside parties to undertake beautification projects involving VPRA underpass bridges are considered on a project specific basis. These projects include painting overhead and underpass bridges or landscaping on VPRA property.

Please note that at no time will VPRA allow Rappers or Signs to be attached to its bridge.

Please note that at no time will VPRA allow Banners or Signs to be attached to its bridge structures.

Safety remains the priority in all public projects and must be assessed with regards to how the Project will affect the Railroad and the public. Additionally, future maintenance of the beautification Project will be addressed within the TREA. VPRA requires these Projects to be handled like all other Projects, utilizing a DRA with reviews at all project design stages to determine Railroad impacts and check for potential safety issues.

The cost of painting and future aesthetic maintenance will be the responsibility of the Project Sponsor proposing to paint the VPRA bridge, which will be addressed within the TREA. VPRA will make every effort to support beautification projects, consistent with maintaining the safety of the public and the safe operation of the Railroad.

Consideration of Bridge Painting Projects

Bridge painting proposals must be reviewed and approved by VPRA to ensure that the proposal will not impact VPRA's property or Railroad operations.

- VPRA will require an executed DRA and TREA for all bridge painting proposals.
- A public agency must be a party to the agreement.
- VPRA will incur no costs or liabilities as a result of the Project.
- The public agency or its designee will be responsible for maintenance of the painted surfaces, including aesthetic damage caused by highway vehicles and vandalism.
- Railroad Flagging services will be required at the expense of the Project Sponsor.
- Painting materials must not adversely impact the inspection and long-term performance of the bridge components

Submission of Project Requests

An application from the party wishing to undertake such Projects should be submitted via the property portal on the VPRA website. The application should include information about the situation and the project objectives to assist VPRA with completion of the review. The following information should be included:

- The Project Sponsor and public agency that will execute the DRA and TREA for implementation as well as future maintenance of the painted surfaces.
- Paint specifications that meet applicable standards and methods for surface preparation, cleanup, and paint application.
- Qualifications and experience of the painting contractor. VPRA will accept state
 qualified bridge painting contractors working for the responsible agency or company.
- Means and methods to be employed during the Project.
- The materials removed during the surface preparation must not impact the surrounding area including ground, water, or air. Materials must not be stored on VPRA property.
- Procedures for addressing paint overspray and vapors during application. The work must be done complying with appropriate regulations and overspray controlled to prevent damage to adjacent property and vehicles in the area.
- Containment system, clean up and disposal of all paint and other material removed from the bridge. The cleanup and disposal of material from the surface preparation for painting and actual painting must comply with all appropriate regulations.
- Pictures and conceptual drawings should be submitted with the initial request from the community to simplify the initial review and comment by VPRA.
- Work site safety plan including keeping all personnel away from the tracks and fall protection measures where required.

10. VPRA Property Access Rights

10.1 Rights by License, Generally

As a general practice, VPRA will accommodate Third Party Project by granting Project Sponsors (and related entities, as needed) a license to both undertake the engineering and construction of the Project, and also for any long-term (post-construction) access right required over VPRA Property. Long-term (post-construction) access rights may be required to locate the project assets on VPRA Property, or for Project Sponsors to access VPRA Property to inspect, maintain, and repair Project assets located outside of VPRA Property.

VPRA will convey real property interest in VPRA Property to Project Sponsors when (i) legally required to do so, or (ii) when VPRA leadership deems such a conveyance to be in the best interest of VPRA and the Commonwealth. However, certain conveyances are subject to the approval of the VPRA board of directors and/or the Commonwealth Transportation Board. Accordingly, most Project Sponsors should anticipate engineering, constructing, and maintaining the Project and related assets under licenses granted by VPRA.

In certain cases, a Railroad has retained the right to introduce certain third-party occupants onto VPRA Property. In those cases, a Railroad may be the licensor, granting the Project Sponsor the right to enter VPRA Property and locate its assets thereon. Any such license will be subject to the conditions stated in the governing agreement between VPRA and the relevant Railroad.

11. Maintenance and Repair

11.1 Scope and Duration of Maintenance Obligations

All facilities, structures, or improvements installed on VPRA Property as part of a Third-Party Project shall be maintained, repaired, and replaced by the Project Sponsor, at its sole cost and expense, for the entire period during which the improvement remains in place on VPRA Property.

Maintenance obligations include, but are not limited to:

- routine and preventive maintenance of structures, pavements, track appurtenances, signage, lighting, fencing, and drainage features;
- periodic inspections required by VPRA, FRA, VDOT, or other regulatory agencies;
- prompt repair or replacement of damaged or deteriorated components; and
- removal of debris or vegetation that may affect the safety, function, or integrity of VPRA facilities.

Unless otherwise agreed in writing, the Project Sponsor's maintenance obligation is perpetual and continues until the asset is removed, abandoned, or formally accepted by VPRA under a subsequent written agreement.

Each Project will have the applicable maintenance provisions defined in [a Post-Construction Access and Maintenance License Agreement].

11.2 Responsibilities Matrix

A responsibilities matrix showing the party responsible for performance of maintenance and repair work on the various structures and improvements is included in **Appendix B**. VPRA reserves the right to directly perform any maintenance and repair work assigned to the Project Sponsor, or to remove any assets from VPRA property, if the structures and improvements in question are not properly maintained and jeopardize VPRA facilities and/or Railroad operations within VPRA Property.

11.3 Responsibilities and Coordination

For grade-separated structures constructed as part of a Third-Party Project:

Overpass Structures (Highway or Pedestrian Bridges)

The Project Sponsor shall own and maintain the entire overpass bridge, abutments, deck, fencing, drainage systems, and approach roadways upon completion.

VPRA or the Railroad will retain responsibility only for its track, signal, and communication systems located beneath the structure.

Underpass Structures (Railroad Bridges Carrying VPRA Tracks):

The Project Sponsor will generally be responsible for maintenance costs associated with the structure, lighting, fencing, drainage, and all appurtenances necessary to provide VPRA and its Railroad partners with safe access for inspection and maintenance.

The Project Sponsor must demonstrate the ability to conduct required inspections and repairs in accordance with FRA and AREMA standards.

If VPRA or its Railroad partners must perform work to preserve operational safety, the associated costs will be invoiced to the Project Sponsor unless otherwise stated in the executed agreements.

Temporary Construction Works

Temporary facilities such as shoofly tracks, detours, or temporary bridges required for construction will be constructed, owned, and maintained by VPRA at the Project Sponsor's expense.

11.4 Access for Maintenance Activities

A Project Sponsor's duty to maintain an improvement does not convey independent access rights to VPRA Property.

Access for maintenance, inspection, or repair must be coordinated through the VPRA Engineer and will be governed by the Temporary Right of Entry Agreement (TREA) and such additional written authorization describing the scope, timing, safety requirements, and flagging or protective services to be provided. A Project Sponsor's maintenance obligations represent a continuing obligation and will survive any expiration or termination of the TREA.

When scheduling maintenance, the Project Sponsor shall:

- Notify VPRA at least 15 days in advance of proposed entry or work within the rail corridor.
- Coordinate with the dispatching Railroad for any required flagging.
- Comply with all current VPRA safety, insurance, and training requirements before mobilization.
- Restore VPRA Property to its prior condition upon completion of the work.

Emergency maintenance may proceed immediately when necessary to protect public safety or prevent damage to VPRA Property and/or Railroad operations or equipment. The Project Sponsor must notify VPRA as soon as practicable following an emergency repair and shall comply with any directives issued by VPRA and/or Railroad as well as requests for information.

Appendix A

Sample Forms

| A.1 | Application for Third-Party Project (Form RE-01) |
|-----|--|
| A.2 | Overhead Grade Separation Data Sheet |
| A.3 | Underpass Grade Separation Data Sheet |

A.4 Grade Crossing Data Sheet

A.1 RE-01 THIRD-PARTY APPLICATION FORM

APPLICATION FOR THIRD-PARTY PROJECT

INSTRUCTIONS

Please complete all sections below and attach all other information specified within Section 3.1 of the *Third-Party Projects Manual* ("TPM") (e.g., cover letter, location map, location plan, and concept plan). At their election, Project Sponsors may include additional information that may be relevant to VPRA's evaluation of the proposed project, such as permit requirements, time-of-year restrictions, environmental assessments, and the like. Completed applications and attachments must be submitted via the Property Portal on the VPRA website [Third Party Projects – VPRA]. Incomplete applications may lead to delayed processing times.

If you are a **utility owner** looking to do installation, maintenance or relocation work, <u>DO NOT USE THIS FORM</u>. Instead, please complete and submit **Form RE-02** [<u>Utilities – VPRA</u>]

REVIEW FEES

VPRA charges review fees to Project Sponsors to cover the cost of reviewing a Project Sponsor's submittals and issuing all necessary approvals. Costs may include out-of-pocket expenses along with VPRA staff time and engineering consultant review time. A lump-sum deposit is required upon execution of the Design Review Agreement. Representative review fees can be found in Section 3.1 of TPM.

1. Project Sponsor Information:

| Company or Agency Name:** | |
|---------------------------|--|
| Street Address: | |
| State: | |
| Postal Code: | |

2. Project Sponsor Point of Contact:

| First Name: | |
|---|--|
| Last Name: | |
| Email Address: | |
| Phone Number: | |
| Company or Agency Name (if different than Section 1): | |

^{**}Please ensure that the <u>exact legal name</u> is provided. Exclude trade names and abbreviations not found in the full legal name.

3. Location of Proposed Project:

| Segment/Location impacted: | |
|--|--|
| City/Municipality: | |
| County: | |
| State: | |
| Name of closest street crossing of railroad: | |
| Street grade crossing DOT # (Refer to TPM | |
| Section 6 for link to DOT database): | |
| GPS coordinate, Latitude: | |
| GPS coordinate, Longitude: | |

4. Description of Proposed Project:

| | Yes/No | Narrative |
|---|--------|-----------|
| Is the proposed project a non- utility third-party project as described in Section 2 of the TPM? If yes, list the type of Project. | | |
| Does the proposed project seek to locate new assets on the railroad corridor? If yes, please summarize. | | |
| Are the limits of the proposed project exclusively on VPRA property? | | |
| Will any Railroad property and/or assets be impacted by the proposed Project? If yes, please describe the impacts. | | |

5. VPRA Property Impacts:

| | Yes/No | Narrative |
|--|--------|-----------|
| Does the proposed project require an easement from VPRA or fee interest acquisition of VPRA property? | | |
| Does the work include environmental characterization or remediation activities? | | |
| Does the work include crossing tracks at places other than public crossings? | | |

Note: All projects authorized to proceed will, at a minimum, require execution of a Design Review Agreement and Temporary Right of Entry Agreement. Execution of the Temporary Right of Entry Agreement is required prior to applicant's commencement of the work, including coordination with the Railroad regarding any flagging requirements. Depending on the

nature of the work, additional agreements may also be necessary as a condition precedent to applicant's performance of the work and/or preconstruction activities.

6. Proposed Project Schedule:

| Design start date: | |
|-----------------------|--|
| Design completion | date: |
| Construction start d | ate: |
| Construction closed | ut: |
| approval, limi | ping your proposed project schedule, be sure to account for design review tations on work windows, flagging availability, right-of-way acquisitions, third-locations, and other factors that can impact the delivery of the project. |
| 7. Concept Plans: | |
| Are Concept Plai | ns included with your application: |
| [] Yes | [] No |
| | No," please indicate the status of the Concept Plans and the date on which bects to have the Concept Plans available for review: |
| For the Project Spons | or: |
| Ву, | |
| (signature) | |
| (printed name | e) |
| (title) | |
| Dated: | |

A.2 OVERHEAD GRADE SEPARATION DATA SHEET

| 1. | Location: | | | | |
|----|---------------------|----------------|---------------|----------------------------|-------------------------|
| | | City | | County | State |
| 2. | Distance from r | nearest Milepo | ost to Center | rline of Bridge: | |
| 3. | Agency Project | Number: | | | |
| 4. | Description of P | roject: | | | |
| 5. | Utilities on Railro | oad Property | | | |
| | Name | Туре | Adjust | ments Required | Contact Person |
| | | | | | |
| 6. | List all the at-gro | ade crossings | that will be | eliminated by the con | struction of this grade |
| | Road Nam | ne D | OOT# | Milepost | Signalized |
| | | | | | |
| 7. | Minimum Horizo | ontal Clearan | ce from Cen | terline of Nearest Tracl | k to Face of Pier or |
| | A. Proposed: | | | B. Existing (if Applicable | le): |
| 8. | Minimum Vertic | al Clearance | above top | of high rail: | |
| | A. Proposed: | | | B. Existing (if Applicab | le): |
| 9. | List piers where | crashwalls ar | e provided: | | |
| | Pier: | | Distance | e from centerline of tra | ck: |
| | | | | | |
| | - | | | | |

10. Describe how drainage from approach roadway will be handled:

| 11. | Describe how drainage from bridge will be handled: |
|-------|---|
| | |
| | |
| 12. | List piers where shoring is required to protect track: |
| | |
| | |
| 13. | Scheduled Letting Date: |
| 14. | Anticipated Number of Railroad Protective Services Days: |
| NOTE: | Design criteria for overhead bridges apply to Items 7 through 12. |
| | All information on this Data Sheet to be furnished by Submitting Project Sponsor and should be sent with initial transmittal of Project notification. |

A.3 UNDERPASS GRADE SEPARATION DATA SHEET

| 1. | Location: | | | | |
|----------------|--|-------------------------------|---------------------|-----------------------------------|---------------------------------------|
| | | City | | County | State |
| 2. | Distance from | nearest Mile | post to Cente | rline of Bridge: | |
| 3. | Agency Projec | ct Number: | | | |
| 4. | Description of | Project: | | | |
| 5. | Utilities on Rail | road Property | | tments Required | Contact Person |
| | | | | | |
| 6. | List all the at-g separation Road Na | | gs that will be | eliminated by the con Milepost | struction of this grade Signalized |
| | | | | | |
| 7. 8. 9. | How many spo Offset to temp Temporary De On Embankm | oorary detour tour Alignme | alignment: _ nt: | | ft |
| 10. | Drainage: Describe hov | v drainage fro | om roadway | will be handled: | |
| | | | | | |
| | Describe hov | w drainage fro | om bridge wil | l be handled: | |
| | | | | | |
| | | | | | |

| 11. | Scheduled Letting Date: |
|-------|---|
| 12. | Anticipated Number of VPRA Protective Services Days: |
| 13. | Proposed horizontal and vertical clearance: |
| NOTE: | Design criteria for underpass bridges apply to Items 7 through 12. All information on this Data Sheet to be furnished by the Project Sponsor and |
| | should be sent with initial transmittal of Project notification. |

A.4 AT-GRADE CROSSING DATA SHEET

| | City | County | State |
|------------------------------------|-----------------|---|---------------------------------|
| | | | |
| | AAR/DOT# | Zip Code | Agency |
| Distance from | nearest Milepo | st to Centerline of Bridge: | |
| Agency Projec | ct Number: | | |
| Description of | Project: | | |
| Utilities on Rail | road Property | | |
| Name | Туре | Adjustments Required | Contact Person |
| | | | |
| Is VPRA reque on either side | of rail? | e the crossing between the (| |
| Existing Crossir | ng Surface Type | | ⊐ No |
| Existing Advar | nced Warning D | evices: | |
| Will the existing proposed wor | ~ | arning devices need to be up | odated to accommodate th |
| | | Yes | □No |
| Will construction reversal of flow | | ng warning device performo | ance (staging, traffic shift or |
| | | Yes | □ No |
| | | ting advanced warning devi cted, proposed gate lengths | |
| | | | |

| 12. | Has a Diagnostic Review been performed (or will one be performed) with appropriate stakeholders? | | | | | |
|-------|--|-------|-----|--|--|--|
| | ו | Yes | □No | | | |
| 13. | . Is Signal Preemption required or anticipated to accommodate the proposed w | | | | | |
| | 1 | □ Yes | □No | | | |
| 14. | Does the crossing require widening to accommodate the proposed work? | | | | | |
| |] | Yes | □No | | | |
| 15. | Does the crossing require realignment to accommodate the proposed work? | | | | | |
| |] | □ Yes | □No | | | |
| 16. | 6. Does a sidewalk exist at the crossing? | | | | | |
| |] | Yes | □No | | | |
| 17. | 17. Is a sidewalk proposed as part of the Project? | | | | | |
| |] | Yes | □No | | | |
| 18. | . Describe how drainage from approach roadway is handled: | | | | | |
| | | | | | | |
| | | | | | | |
| 19. | In conjunction with this Project, can nearby at-grade crossings be closed? | | | | | |
| | | Yes | □No | | | |
| 20. | List location and DOT # of potential crossing closure(s): | | | | | |
| | | | | | | |
| 21. | Scheduled Letting Date: | | | | | |
| 22. | Anticipated Number of VPRA Protective Services Days: | | | | | |
| NOTE: | Design criteria for at-grade crossings apply to Items 6 through 19. All information on this Data Sheet to be furnished by the Project Sponsor and should be sent with initial transmittal of Project notification. | | | | | |

APPENDIX B

Maintenance and Repair Work Obligation Matrix

| GRADE CROSSINGS | PARTY RESPONSIBLE | |
|---|-------------------|----------|
| Work Item | Project Sponsor | VPRA |
| | | |
| Roadway pavement to outer ends of railroad | ✓ | |
| cross ties | | |
| Sidewalks | ✓ | |
| Guardrails | √ | |
| Curbs | √ | |
| Other permanent aspects shown on plans | √ | |
| Crossing surface between ends of cross ties | | √ |
| Signal facilities | | √ |

| OVERHEAD BRIDGES | PARTY RESPONSIBLE | |
|-----------------------------|-------------------|------|
| Work Item | Project Sponsor | VPRA |
| | | |
| Highway overpass structure | ✓ | |
| Roadway surfacing | √ | |
| Roadway slopes | √ | |
| Retaining walls | √ | |
| Highway drainage facilities | ✓ | |

| UNDERPASS BRIDGES | PARTY RESPONSIBLE | |
|---|-------------------|------|
| Work Item | Project Sponsor | VPRA |
| Project Sponsor-owned bridge structure | <i>J</i> | |
| VPRA-owned bridge structure | · | ✓ |
| Highway underpass structure | ✓ | |
| Roadway surfacing | ✓ | |
| Roadway slopes | ✓ | |
| Retaining walls | ✓ | |
| Roadway drainage facilities | ✓ | |
| Sidewalks | ✓ | |
| Lighting | ✓ | |
| Ballast and approach embankments | | ✓ |
| Railroad signal and communication systems | | ✓ |
| Tracks | | ✓ |
| Utilities, facilities, and cable | | ✓ |