FREIGHT RAIL PROGRAM

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MAKING TRACKS

1ST Edition
February 21st, 2025

A RAILROAD INFORMATION MANUAL

For Freight Railroad Corridor Assets
Under Maryland State Ownership

MARYLAND DEPARTMENT OF TRANSPORTATION

FREIGHT RAIL PROGRAM

RAILROAD INFORMATION MANUAL

For Railroad Assets under Maryland State Ownership

Prepared by:

Maryland Department of Transportation

Office of Planning Programming and Project Delivery

Office of Rail and Intermodal Freight

7201 Corporate Center Drive

Hanover, MD 21076

For the use of the general public, municipalities, counties, state agencies, contractors, railroads, landowners, and other interest groups and stakeholders.

First Edition, 2025

MARYLAND DEPARTMENT OF TRANSPORTATION

Wes Moore
Governor
Aruna Miller
Lieutenant Governor
Paul J. Wiedefeld
Secretary

Maryland Department of Transportation
7201 Corporate Center Drive
Hanover MD 21076

Message from the MDOT Secretary and MTA Administrator

The Maryland Department of Transportation (MDOT) is a multimodal agency that operates and maintains a complex and interconnected system of assets that supports the public and the Statewide economy. Railroad service is an important transportation option for many industries, communities, commuters, and passengers in Maryland. Over time, the State of Maryland has stepped in to preserve and protect many railroad corridors across the State.

Through the Maryland Transit Administration (MTA), the State of Maryland owns and maintains railroad corridors across the State to secure or promote economic development, to secure or promote sustainability goals, and to preserve railroad corridors for future interim or non-railroad use. The MDOT and MTA seek to ensure the continued continuity of these corridors, their continued safe rail operation where practicable, and their effective management through interim use where rail service has ceased.

This Railroad Information Manual for Railroad Assets under Maryland State Ownership has been developed as a combined effort of MDOT and MTA to establish common processes, specifications, and methods for the management of the State's railroad corridor assets. The policies and standards in this manual are adopted for use in administering applicable railroad corridor properties across the State. This manual is intended to be used by the general public, municipalities, counties, state agencies, contractors, railroads, landowners, and other interest groups and stakeholders.

Paul J. Wiedefeld
Transportation Secretary

Digitally signed by Holly Arnold.
Date: 2025.02.21

Holly Arnold
MTA Administrator

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1 PURPOSE & NEED

Railroad service is an important transportation option for many industries, communities, commuters, and passengers in Maryland. Most railroad corridors in the United States were constructed in the 19th and 20th centuries by private enterprises which were authorized and supported by either state governments or the U.S. government. These railroads provided critical service and allowed many of the cities and towns we know today to grow. Eventually, the economics of transportation changed, and the revenue from many railroad corridors was no longer sufficient to support their operation. In order to protect the communities served by light density railroad corridors and continue to realize the full potential of the current and former railroad corridors, the State of Maryland, through the actions of some of its departments, seeks to ensure the continued continuity of these corridors, their continued safe rail operation where practicable, and their effective management through interim use where rail service has ceased.

Figure 1 -
Easton, MD, 1910

PURPOSE & NEED

A Railroad is recognized to be a "*carrier of people or property on cars that are operated on stationary rails*" (MD Transportation Code, Title 21, Subtitle 1 – Definitions[1]). This manual is intended to apply only to Maryland-owned railroad properties which are part of the national General Railroad System of Transportation or have historically been operated as part of that system. The United States Federal Railroad Administration describes the General Railroad System in 49 CFR Pt 209, Appendix A[2] as a "*network of standard gage track over which goods may be transported throughout the Nation and passengers may travel between cities and within metropolitan and suburban areas…*". By this definition of Railroad, this manual is not intended to apply to mass transit or rapid transit systems owned or operated by the State of Maryland or former railroad properties which have been fully abandoned for rail operation.

1.1 Why Does the State of Maryland Own Railroad Corridors?

Over time, the State of Maryland has stepped in to preserve and protect many light density railroad corridors across the state. The Maryland Transportation Code §7-901[3] gives certain departments of the State of Maryland the ability to acquire railroad corridors under specific conditions. The value or potential value of a railroad corridor can be difficult to appreciate because most rail corridors are operated by private businesses and aren't typically the subject of significant public planning efforts. However, the historical loss of many light density railroad corridors and spurs has had a deleterious effect on Maryland as a whole, and avoiding future losses will pay dividends for future generations of Marylanders.

[1] https://mgaleg.maryland.gov/2025RS/Statute_Web/gtr/21-101.pdf
[2] https://www.ecfr.gov/current/title-49/subtitle-B/chapter-II/part-209#Appendix-A-to-Part-209
[3] https://mgaleg.maryland.gov/2025RS/Statute_Web/gtr/7-901.pdf

While Maryland first seeks to support continued private railroad operations as long as possible, there may come a time when no other party is willing to maintain the line and keep it intact. Generally, there are three reasons why Maryland may consider acquiring a railroad corridor, any one of which could justify the acquisition of an eligible line. The reasons include: to secure or promote economic development, to secure or promote sustainability goals, or to preserve the railroad corridor for future interim or non-railroad use.

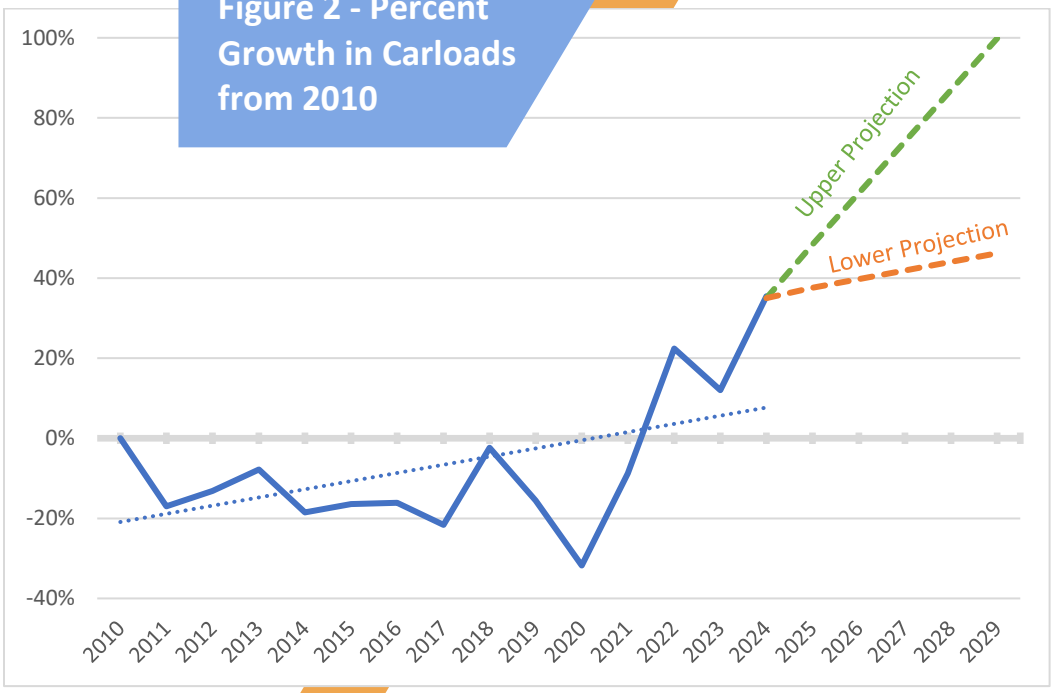
1.1.1 Economic Development

Maryland may acquire a light density railroad corridor to preserve an acceptable level of rail service on that line. Railroads, like many businesses, are subject to the general economic conditions of the nation, but railroad operations have an additional disadvantage of being heavily capital intensive. A safely run rail operation must dedicate a significant part of its revenue to the general maintenance of the tracks, bridges, facilities, locomotives, and cars. With other transportation methods, many of these costs are borne by the public in the form of public highways and roadways. Most railroads operate as private businesses and are subject to state and local taxes, which may put pressure on gross capital expenditures and reduce the amount of reinvestment possible. Typically, Maryland state ownership of a railroad corridor reduces this tax burden and may allow a previously light density railroad corridor to sustainably operate again.

A recent study of the economic impact of continued rail service on state-owned corridors in Kent, Queen Anne's, Caroline and Dorchester Counties produced significant insight. It found a total of 20 companies along Maryland-owned railroad corridors which actively shipped materials via rail service. These shippers are in industries such as agriculture, fertilizer, chemicals, wood and timber

processing, manufacturing, and steel fabrication. Those shippers directly employed over 1,300 individuals in those communities and indirectly support many thousands more. The study also found the continued operation of the Maryland-owned Centreville, Chestertown and Cambridge rail corridors enable over $500 million in annual economic output in the counties they serve. For urban areas, these numbers are not dramatic, but in a largely rural region like Maryland's eastern shore, the loss or reduction of rail service would have real and lasting effects on the economy of an area which accounts for about a third of the total area of the state.

Figure 2 - Percent Growth in Carloads from 2010



(data from selected State-owned railroad corridors)

1.1.2 Sustainability

Maryland may acquire a light density railroad corridor to promote the shipment of people or goods by rail as a method to increase the sustainability of its overall transportation system. The environmental case for the continued operation of railroad corridors, hauling either people or freight, is a powerful one. Railroad locomotives and cars by virtue of their design with steel wheels on steel rails, their massive size, and their preferential and highly engineered routes, can achieve a high level of efficiency in terms of their energy use intensity. The advantages of safe, sustainable freight rail service are clear, fewer trucks on the roadways, more opportunity for business, and fewer emissions and harm to our shared environment.

Figure 3 - Trucks and Cars on Highway

According to multiple studies by the Federal Railroad Administration[4], and the Association of American Railroads, freight moved by train is up to 75% less energy intensive as most kinds of semi-trucks for any given ton of freight. Although many factors may account for individual examples and results, on average, railroad efficiency was shown to be even higher with an increase in volume, increase in "directness" or routing of shipment, and for bulk or heavy commodities. Continued advances in emissions reductions and electric motive power also mean future railroad traffic will be less carbon intensive; even as total energy intensiveness has remained relatively constant in recent years.

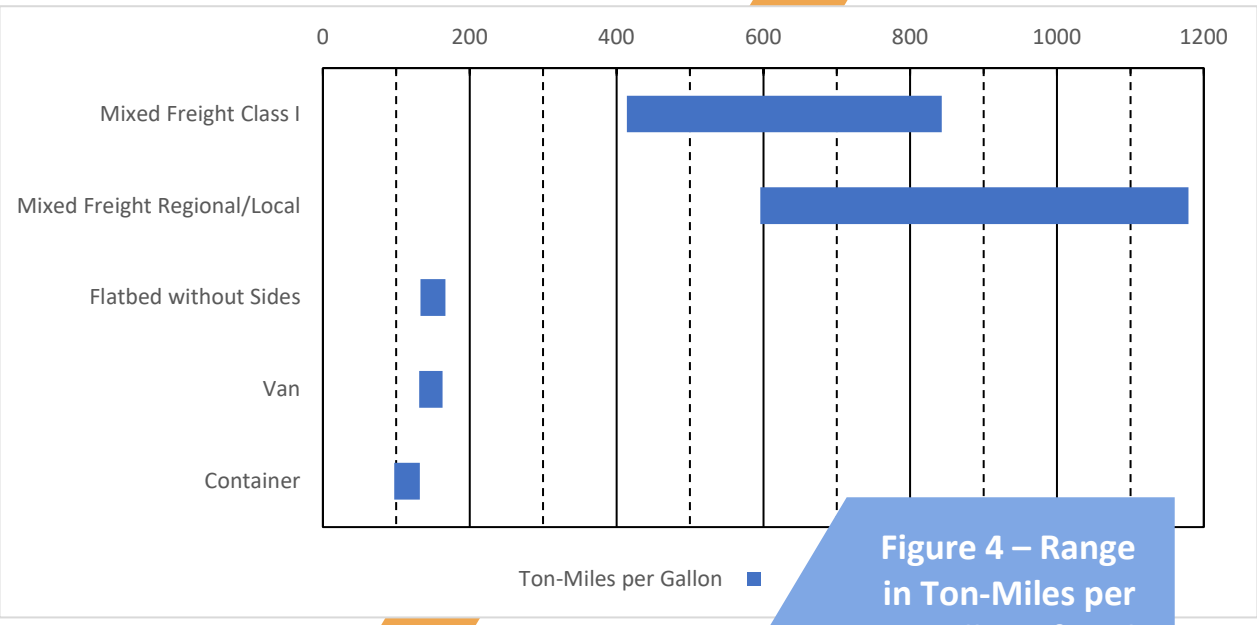


Figure 4 – Range in Ton-Miles per Gallon of Fuel

4 https://railroads.dot.gov/sites/fra.dot.gov/files/fra_net/16332/1991_RAIL%20VS%20TRUCK%20FUEL%20EFFICIENCY%20-%20THE%20RELATIVE%20F%282%29.PDF

1.1.3 Preservation of Corridors

Maryland may acquire a light density railroad corridor to preserve the continuity of the corridors for a future interim or non-railroad related use. In Maryland, railroad corridors with no residual railroad service value have already been repurposed into mass transit or rapid transit lines, public roadways, and multi-use trails.

According to the National Bureau of Economic Research[5], the United States once had a peak of 254,037 railroad route-miles in 1916. Since that time, the number of route-miles has fallen to 91,773 in 2020. This trend represents a 63.8% reduction nationally in the available railroad infrastructure available for the movement of people and freight. It's certain the continued improvement in the efficient operation of trains over rail networks is one of the prominent forces in the route-mile reduction over time. However, it is also concerning as a result of the loss of route-miles, more areas of the nation are farther away from active railroad corridors, and this has led to increased truck traffic in some industries and the loss of competitiveness of rail service itself. The State of Maryland has also seen trends similar to those seen nationally.

Figure 5 - Damaged Railroad in Carroll County, MD

[5] https://www.nber.org/

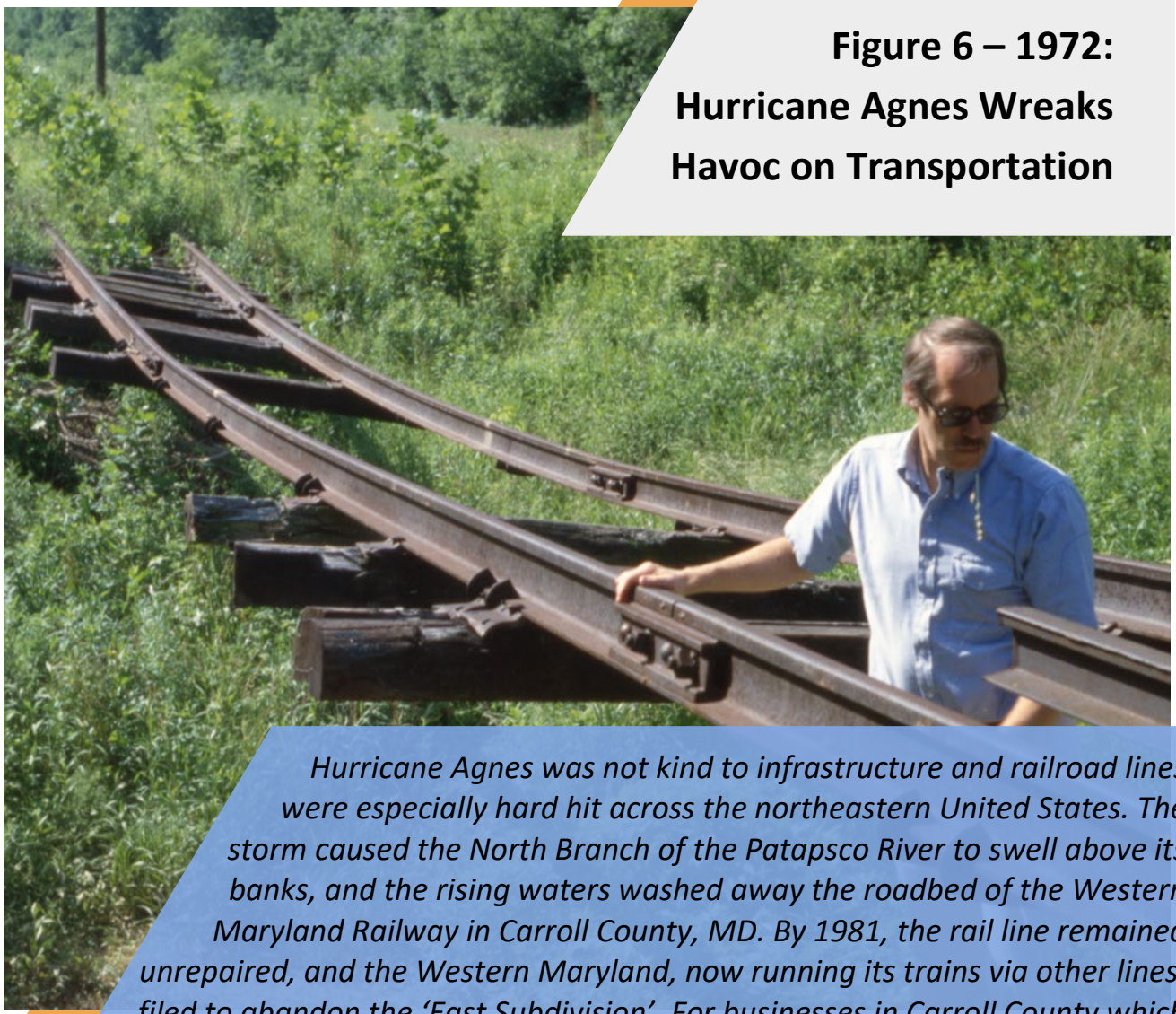


Figure 6 – 1972: Hurricane Agnes Wreaks Havoc on Transportation

Hurricane Agnes was not kind to infrastructure and railroad lines were especially hard hit across the northeastern United States. The storm caused the North Branch of the Patapsco River to swell above its banks, and the rising waters washed away the roadbed of the Western Maryland Railway in Carroll County, MD. By 1981, the rail line remained unrepaired, and the Western Maryland, now running its trains via other lines, filed to abandon the 'East Subdivision'. For businesses in Carroll County which had depended on the railroad, trucks became their only option. In 1983, with help from the Maryland Department of Transportation, the State Railroad Admin. purchased the disused railroad corridor from the Western Maryland. Over the next decade, the SRA repaired the tracks and structures, and enabled the Maryland Midland Railroad to fully restore service. The line was sold in 2007 and remains in service today.

1.2 What Railroad Corridors are Maryland-Owned?

The Maryland Transit Administration (MTA) is the primary owner of active railroad corridors for the State. The MTA owns various railroad properties across Maryland and in parts of Delaware which are used or formerly used for freight rail transportation. These properties may or may not contain actual railroad tracks and may also occasionally include properties adjacent to the railroad right-of-way. Policies and management practices established in this manual are intended to apply to the following rail properties.

1) Chestertown Secondary (USRA Line 149) – This Line extends from Massey, MD to Chestertown, MD, approximately 20 mi. “Chestertown Line”.
2) Centreville Secondary (USRA Line 147/148) – This Line extends from Townsend, DE to Centreville, MD, approximately 35 mi. “Centreville Line”.
3) Oxford Secondary (USRA Line 169) – This Line extends from Clayton, DE to Easton, MD, approximately 45 mi. “Oxford Line”.
4) Denton Track (USRA Line 150) – This Line extends from Queen Anne, MD to Denton, MD, approximately 9 mi.
5) Preston Track (USRA Line 152) – This Line extends from Hurlock, MD to Preston MD, approximately 7 mi.
6) Cambridge Secondary (USRA Line 168) – This Line extends from Seaford, DE to Cambridge, MD, approximately 30 mi. “Cambridge Line”.
7) Frederick Secondary (USRA Line 198/199)– This Line extends from Walkersville, MD to Frederick, MD, approximately 9 mi. “Frederick Line”.

The State of Maryland also owns several miscellaneous railroad corridors, properties, or businesses through other departments. The Torrey Brown Rail Trail, former Northern Central Railroad, and the Western Maryland Rail-Trail, are owned and operated by DNR for the use of a multi-use trail. The Rt 413 rail-trail, former Pennsylvania Railroad, in Somerset County is owned by Maryland State Highway Administration for the same purpose. The Canton Railroad is owned by the Maryland Transportation Authority and is in active operation. Each of these examples adhere to different policy and management approaches than those set out in this manual, although some of the underlying purpose and many of the realized benefits remain in common.

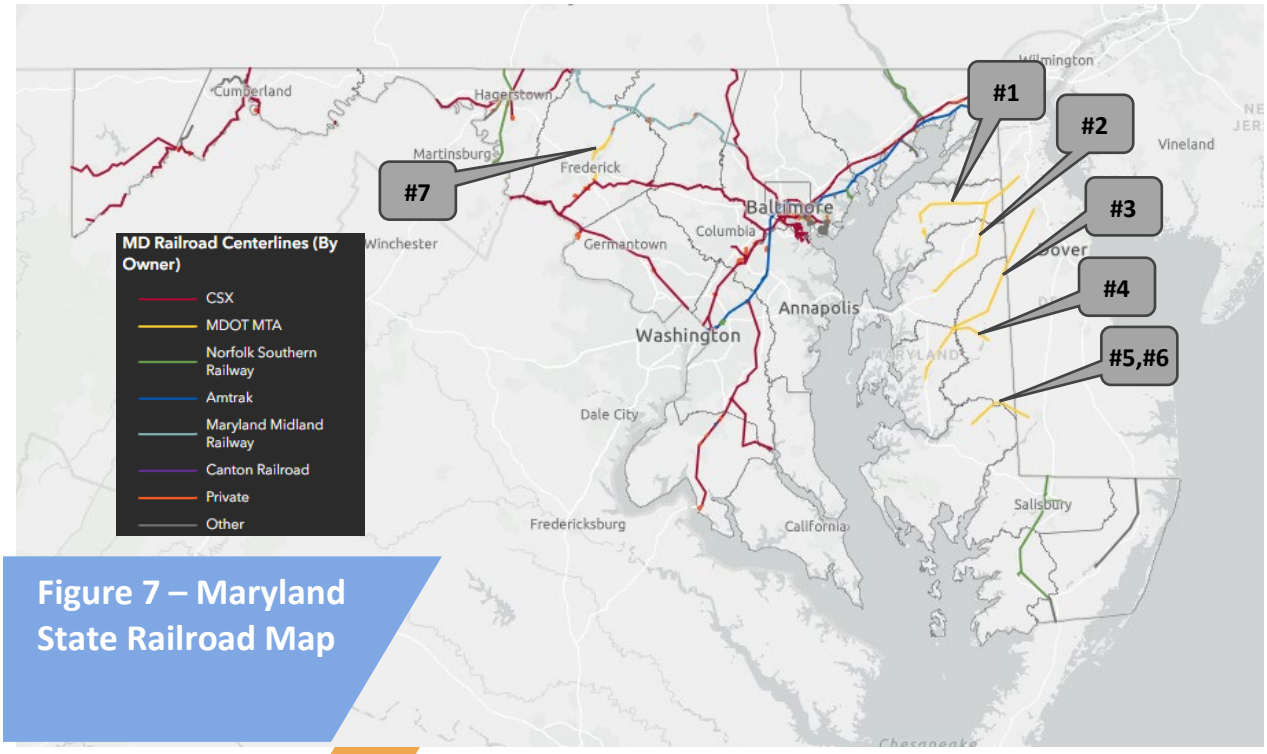
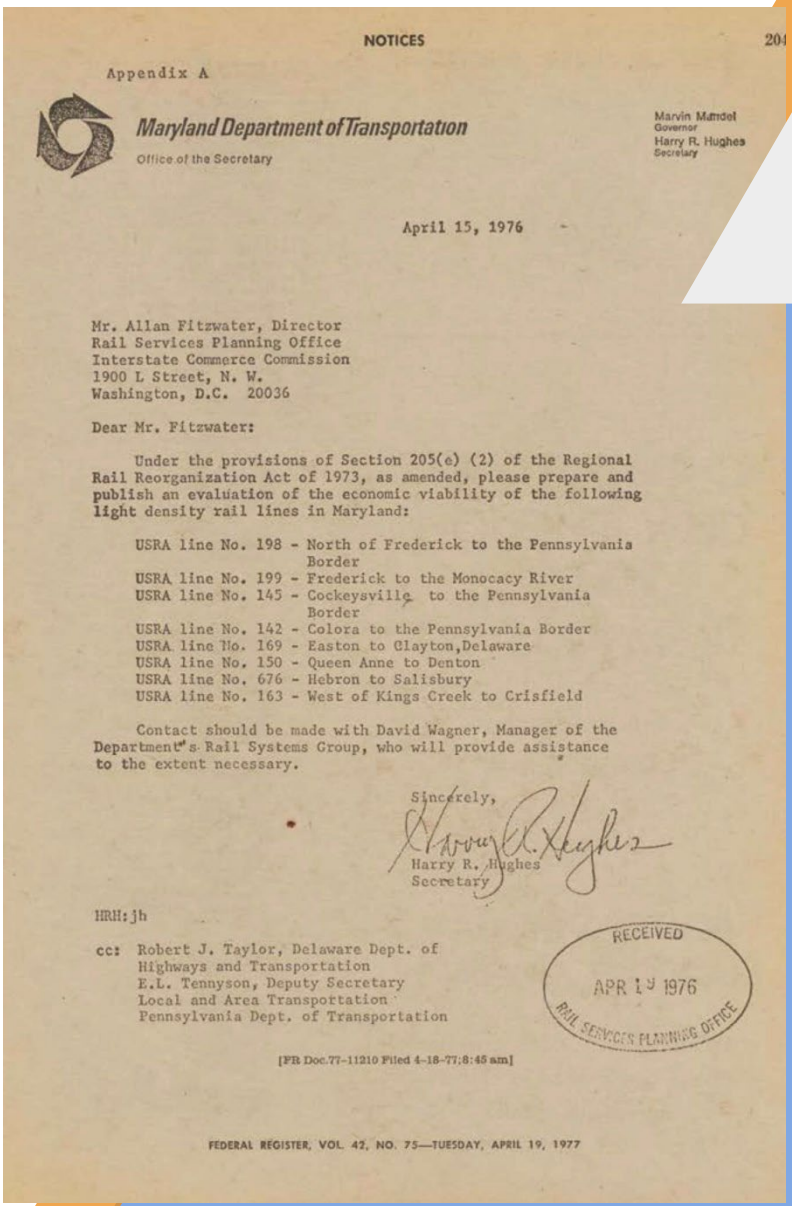


Figure 7 – Maryland State Railroad Map

1.3 How did Maryland Acquire Railroad Corridors?

Figure 8 – 1971: MDOT is Created, Harry R. Hughes, First Secretary

Authorized in 1970, the Maryland Department of Transportation began as a principal executive department on July 1, 1971 (Chapter 526, Acts of 1970). MDOT was formed by the consolidation of independent State agencies, each responsible for a specific transportation sphere. MDOT's first Secretary, Harry R. Hughes, defined MDOT's original goal of taking steps to build a balanced transportation system. A native of Denton, MD, on Maryland's Eastern Shore, he recognized the importance of rail service to the communities and industries across the state. During his tenure, MDOT would be challenged by several railroad bankruptcies which threatened to limit freight rail service and hurt the state's economy. Other early accomplishments of MDOT were establishing the origins of Baltimore-Washington International Airport, starting construction on the Baltimore Metro system, and purchasing rail corridors.



NOTICES 20

Appendix A

Maryland Department of Transportation
Office of the Secretary

Marvin Mandel
Governor
Harry R. Hughes
Secretary

April 15, 1976

Mr. Allan Fitzwater, Director
Rail Services Planning Office
Interstate Commerce Commission
1900 L Street, N. W.
Washington, D.C. 20036

Dear Mr. Fitzwater:

Under the provisions of Section 205(e) (2) of the Regional Rail Reorganization Act of 1973, as amended, please prepare and publish an evaluation of the economic viability of the following light density rail lines in Maryland:

USRA line No. 198 - North of Frederick to the Pennsylvania Border
USRA line No. 199 - Frederick to the Monocacy River
USRA line No. 145 - Cockeysville to the Pennsylvania Border
USRA line No. 142 - Colora to the Pennsylvania Border
USRA line No. 169 - Easton to Clayton, Delaware
USRA line No. 150 - Queen Anne to Denton
USRA line No. 676 - Hebron to Salisbury
USRA line No. 163 - West of Kings Creek to Crisfield

Contact should be made with David Wagner, Manager of the Department's Rail Systems Group, who will provide assistance to the extent necessary.

Sincerely,

Harry R. Hughes
Secretary

HRH:jh

cc: Robert J. Taylor, Delaware Dept. of Highways and Transportation
E.L. Tennyson, Deputy Secretary
Local and Area Transportation
Pennsylvania Dept. of Transportation

RECEIVED
APR 19 1976
RAIL SERVICES PLANNING OFFICE

[FR Doc.77-11210 Filed 4-18-77;8:45 am]

FEDERAL REGISTER, VOL. 42, NO. 75—TUESDAY, APRIL 19, 1977

Figure 9 – 1976: MDOT Evaluates Acquisition of Rail Corridors

*The U.S. Congress passed the **Regional Rail Reorganization Act of 1973 ("3R Act")**, and the **Railroad Revitalization and Regulatory Reform Act of 1976 ("4R Act")**, to stabilize the nations freight rail system after multiple bankruptcies of freight railroads. These laws together provided a framework for many light density rail corridors to cease operation, but also allowed for states to choose to subsidize or acquire them. In 1976, MDOT first began investigating how to support freight rail access by rail corridor management. After multiple years of providing a rail service subsidy to a railroad operator, MDOT determined it was worthwhile to acquire many light-density freight railroad corridors rather than subsidize them. In 1979 Harry Hughes was elected Maryland's 57th Governor. Still seeking balance in Maryland's transportation System, MDOT would purchase over 200 miles of light-density railroad corridors from the former railroad owner whereby ensuring freight rail service would continue with the support of a dedicated capital investment program.*

1.4 What Maryland Agencies are Involved in Railroad Corridors?

There are multiple Maryland state agencies involved with the administration of Maryland-owned railroad corridors. Each agency has a specific role to play and mandate to perform. The agencies work closely together to ensure Maryland-owned railroad properties are safely administered and protected, whether they host active railroad service, or whether they have been redeveloped into an interim use multi-use trail.

1.4.1 MDOT

The Maryland Department of Transportation (MDOT) as a whole, or more specifically The Secretary's Office (TSO) develops policy for the prioritization of Maryland-owned railroad corridors. Through Maryland Transportation Code §7-901[6], railroad operators must notify the Secretary of Transportation when they intend to sell or dispose of railroad properties, the Secretary may then acquire those properties in accordance with the terms of that section. The Secretary also may approve or disapprove alterations or changes a railroad proposes to make to some railroad crossings in the State, as shown in Maryland Transportation Code §8-639[7]. In this way, it is the responsibility of MDOT to ensure the states railroad corridor resources are being leveraged to the maximum benefit for the state of Maryland.

Within MDOT, the Office of Rail and Intermodal Freight (ORIF) updates and implements the Maryland Rail Plan. This plan outlines several goals for rail transportation, one of which is the preservation of rail freight access. This goal supports the Freight Rail Program, which seeks to preserve, manage, and accommodate uses on State-owned railroad corridors.

[6] https://mgaleg.maryland.gov/2025RS/Statute_Web/gtr/7-901.pdf
[7] https://mgaleg.maryland.gov/2025RS/Statute_Web/gtr/8-639.pdf

1.4.2 MTA

The Maryland Transit Administration (MTA) is a modal division of the Maryland Department of Transportation which is empowered to operate some transit and passenger services in Maryland. It shares some of the same powers with MDOT from Maryland Transportation Code §7-901, in addition, Maryland Transportation Code §7-903[8] states any "rule, regulation, form, order and directive adopted by or relating to the former State Railroad Administration" was inherited by the MTA. Maryland Transportation Code §7-204[9] elaborates the agency may "construct, acquire, own, operate, maintain and control any interest in any property, whether by contract, purchase, condemnation, lease as lessor or lessee…" Therefore, MTA is the logical choice to host most of the state's active railroad holdings. In this way, it is the MTA's responsibility to ensure effective administration of the Maryland-owned railroad corridors through operating agreements or lease agreements. Since the year 2000, MTA and various other MDOT agencies have invested more than $50 million in capital improvement projects, bridge and structure maintenance, and grade crossing improvements.

1.4.3 MDTA

The Maryland Transportation Authority (MDTA) is an independent state agency responsible for financing, constructing, operating, and maintaining transportation facilities. In addition to managing the states tolled roadway facilities, the MDTA also manages other revenue producing transportation projects (Maryland Transportation Code §4-204[10]). The MDTA is the owner of the Canton

[8] https://mgaleg.maryland.gov/2025RS/Statute_Web/gtr/7-903.pdf
[9] https://mgaleg.maryland.gov/2025RS/Statute_Web/gtr/7-204.pdf
[10] https://mgaleg.maryland.gov/2025RS/Statute_Web/gtr/4-204.pdf

Railroad in Baltimore City which provides independent services to rail shippers along the harbor and surrounding areas.

1.4.4 DNR

The Maryland Department of Natural Resources (DNR) was created in 1969 by combination of five former departments: The Department of Tidewater Fisheries; the Department of Game and Inland Fish; the Department of State Forests and Parks; the Department of Geology, Mines, and Water Resources; and the Department of Research and Education. Maryland Natural Resources Code §5-1010[11] "*declared to be the public policy of this State to provide the means and procedures for establishing and expanding a network of recreational and scenic trails*", further asserted "*Railroad corridor property is being abandoned at a high rate and is often sold in segments, thereby fragmenting the original corridors and leaving unconnected segments which may be suitable for acquisition for recreational trail use*" and gave DNR the ability to "*acquire railroad corridors pursuant to the National Trails Systems Act, 16 U.S.C. § 1241 et seq., as amended*".

Since its creation, the DNR has successfully preserved the major former railroad corridors of the Torrey Brown Rail-Trail and the Western Maryland Rail-Trail, along with several minor sections. While these railroad corridors are no longer subject to the return of rail service, they remain intact and have proven to be greatly beneficial to the communities they connect.

1.5 Partner Organizations

In addition to the Maryland state governmental departments and private firms already mentioned, there are more organizations which play a role in the

[11] https://mgaleg.maryland.gov/2025RS/Statute_Web/gnr/5-1010.pdf

operation of state-owned railroad corridors. The Maryland Transit Administration contracts with private railroad operators to provide rail service and property maintenance. The Maryland & Delaware Railroad operates the Centreville Line, Chestertown Line and Cambridge Line, while the Walkersville Southern Railroad operates the Frederick Line. The DNR contracts with MTA to operate multi-use trail infrastructure on the Oxford Line, and The Town of Chestertown acts as the trail sponsor for the Wayne Gilchrest Rail-trail.

In Maryland, there are two governmental bodies which concern themselves with ensuring railroads operate safely, the Federal Railroad Administration (FRA) and the Maryland Department of Labor, Licensing, and Regulation (DLLR). Both play key roles ensuring Maryland's rail network delivers safe, dependable rail service.

Figure 10 – Maryland & Delaware Railroad

2 PROPERTY USE & ADMINISTRATION

The various railroad corridor properties owned by the State of Maryland have unique operational conditions and requirements. Railroad corridors differ considerably in activity level from bustling daily activity to tranquil multi-use trail. Railroad corridors may have different types of operators responsible for their maintenance. Adjacent property owners and local communities may have different needs regarding the use of railroad corridors, and those needs may be handled in different ways depending on many factors.

Because of this situational complexity, careful management is necessary to enable the maximum benefit of the corridors' use. Maryland's state agencies are required to ensure all uses, activities and modifications of this land are properly documented. MTA, Contractors and Railroad Operators shall to work with local governments, state agencies, stakeholders, and adjacent landowners to accommodate all reasonable requests for use, so long as the proposed use is consistent with the purpose of the property, and the corridors function is protected.

2.1 Statuses of Railroad Property

According to the Maryland State Rail Plan, rail corridors may be of several types, or "*Statuses*." These statuses are determined by several factors which influence the general management approach of the corridor and inform how access, use, and encroachment issues are managed.

PROPERTY USE

ACTIVE: ***Railroad rights-of-way where railroad operations routinely occur or may occur depending on variabilities in economic activity***. Active state-owned railroad corridors are treated the same as any other active railroad track. Unauthorized use of these properties can present a danger of moving trains and is prohibited. Trains should be expected at any time, and in either direction on active tracks. Access must be authorized either by the owning agency, or the established operator of the railroad corridor, under the terms of their contract. Unauthorized access may be subject to criminal prosecution or other legal actions. These corridors are subject to regulation by U.S. Department of Transportation (USDOT) and the U.S. Surface Transportation Board (STB).

Figure 11 – Active Railroad Tracks in Worton, MD

Trespassing is not permitted on any potentially active railroad property, whether a track looks used or not.

INACTIVE: ***Railroad rights-of-way where no rail activity is currently occurring but for which formal abandonment authority has not been received from federal regulators are considered inactive.*** Usually, regular activity must have ceased without definite plans for the return of railroad operations for a line to be considered inactive (or "idle"). If there is a likelihood of trains or equipment moving on the line, the segment is considered active. Access must be authorized either by the owning agency, or the established operator of the railroad corridor, under the terms of their contract. Unauthorized access may be subject to criminal prosecution or other legal actions. These corridors are subject to regulation by USDOT, and STB.

Figure 12 - An Inactive Railroad Track near Centreville, MD

PROPERTY USE

Figure 13 - Wayne Gilcrist Rail-Trail on the Rail-Banked Chestertown Line

RAIL-BANKED: ***A status of railroad corridor that is described by the National Trails System Act of 1983 (NTSA) and approved by the STB which provides protection for the continuity of the railroad corridor such that a return to routine railroad use is possible.*** Rail-banked corridors require sponsorship for any associated trail development or alternate use which may occur on the rail-banked property. Depending on how these sponsorship or trail-use agreements are constructed, Maryland, as owner, or the assigned Trail Sponsor may have responsibilities for different requests. Rail-Banking a corridor allows the Trail Sponsor to develop the property for non-railroad uses, such are multi-use trails, so long as the property is preserved as a corridor which could potentially be used in the future as an active railroad corridor again.

PROPERTY USE

ABANDONED: ***Formal abandonment of a rail line requires the owner to seek approval by the US Surface Transportation Board (STB). Once formally abandoned, parcels of the right-of-way may be broken up and sold or potentially retained for other public uses, including for public transportation or recreation.*** Abandoned railroad corridors are those which have formally been permitted through established STB processes, including both authorization and consumption of abandonment. Full Abandonment status means the properties are no longer regulated as commercial rail corridors, but it does not mean Maryland has abandoned its interest in the property. As with any other non-railroad property owned by Maryland, the use of these properties must still be permitted explicitly by the agency which owns the property. Fully abandoned railroad corridors which are owned by Maryland are not considered under this rail manual and are not managed under the Freight Rail Program.

Figure 14 – Abandoned Freight Rail Service on MTA Light Rail Line

Abandonment means more than the physical condition of a railroad. Freight Rail Service was abandoned on part of the MTA's Light Rail line in 2001.

2.2 The Role of Operators

Maryland state agencies may choose to directly administer a railroad corridor or enter into a contract with another party to manage, maintain, and/or operate, the corridor on its behalf. Such parties are called "*Corridor Operators*" (CO's) and are usually either a Railroad, or a Trail Sponsor.

Typically, on Active or Inactive corridors, a Railroad will act as the CO subject to its contract or operating agreement with the MTA. A CO of a Maryland-owned railroad corridor is expected to provide for the safe operation of the line, in compliance with all applicable laws, regulations, and agreements with the State. Railroads which operate active corridors which are part of the General Railroad System are regulated by the FRA, STB, DLLR and others.

Figure 15 – Walkersville So. R.R., State-Owned Railroad Corridor Operator

On rail-banked corridors, a local organization must *"Sponsor"* that line. Detailed information may be found in 49 CFR §1152.29[12]. A Trail Sponsor acts as the Operator for a railroad property which has ceased railroad activity and has been fully rail-banked. This arrangement allows the Trail Sponsor to preserve the corridor for future potential railroad use, while using the line for other uses in the interim period where railroad activity has ceased, such uses are called "Interim-Use".

Either a Railroad or a Trail Sponsor, operating by agreement with the State of Maryland to be the Operator of a state-owned railroad corridor, may be given authority to manage the corridors which they are responsible for, or in some cases, the state agency which owns the property may exercise direct operating responsibilities.

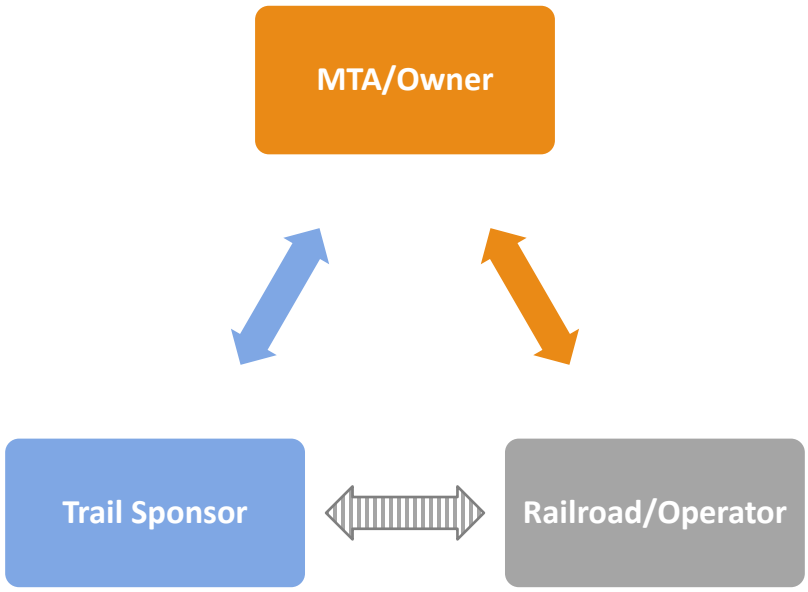


Figure 16 - Owner, Operator, and Trail Sponsor Relationship

[12] https://www.ecfr.gov/current/title-49/subtitle-B/chapter-X/subchapter-B/part-1152/subpart-C/section-1152.29

2.3 Corridor Uses

Railroad corridors generally were first constructed by acquiring property either in "Fee Simple" or through easements. Fee Simple acquisition means full and irrevocable ownership of land, and any buildings on that land, while easements allow a railroad corridor to cross over an existing parcel, usually as long as the railroad operates the line or owns the tracks. In either case, there is an ownership stake in either the property itself or in the use of the property.

The majority of railroad corridor property now owned by the State was originally acquired by quitclaim deed from bankrupted railroads. Regardless of the original method of land acquisition, access to state-owned railroad property must be closely controlled to ensure the continued safe operation of trains. The precise method of property control will be informed by the railroad corridor status, and the terms of any operating agreement or lease which may exist for that line.

Example of Use	Standard Method
Private Grade Crossing	Grade Crossing Agreement (type of License Agreement)
Utility and Fiber Optic Crossing	License Agreement
Civic Uses such as Gardens or Trail Features	Trail Use Agreement (type of License Agreement)
Authorized Occupancies	License Agreement

Figure 17 – Corridor Uses and Property Control Method

2.3.1 Adjacent Properties

Railroad corridors are closely integrated with the communities they connect. Active railroad tracks frequently have sidings or spurs which depart from the corridor and enter into private adjacent properties. For rail-trails, pedestrian crossings connect with residential and commercial areas which sit alongside the corridors. While land-use and development occurring on adjacent properties is generally determined by the landowner and the local authorities, some considerations should be made for properties which sit next to railroad corridors, such as maximizing the use the limited frontage with the railroad corridor, mitigating the potential noise and other nuisance factors of rail activity, and balancing any previously existing property rights.

An active railroad corridor is a unique piece of infrastructure. Unlike public roadways, virtually no new railroad corridors have been constructed in Maryland in the last one hundred years. Freight railroad operations depend on the shippers served to provide traffic, while shippers need real estate to locate and grow their businesses. Because there is only a limited frontage with active railroad corridors, there is also a finite amount of developable land which can be used for this kind of economic activity. Local authorities should consider this finite resource carefully when developing land use planning and zoning, and ideally, seek to preserve areas along railroad corridors for rail-dependent uses. For rail-trail corridors, consideration should be given to the potential for the return of active railroad service when buildings on adjacent parcels are designed and built.

Frequently, adjacent neighbors and landowners share feedback about some of the nuisances associated with railroad corridors, most common of which is the sounding of the locomotive horn at railroad crossings or other sounds or vibrations resulting from train operations. In the United States, sounding the locomotive horn

at railroad crossings is required under Federal regulations, with only the strictest of exceptions, and while it's never the intention of a railroad operator to produce excess noise, some noise is inevitable from typical train operations, including wheel squeal, locomotive noises or banging sounds as freight cars are pulled along. Existing operating conditions should be factored into local authority decision making such as where to build new residential homes, schools or other community centers.

Occasionally, some adjacent properties contain residual, preexisting or historical rights to cross railroad corridors, or provide for the use of some adjacent land for railroad activity. These provisions can take the form of deed references or restrictions, side-track agreements, easements or others. Where documented, best management practices dictate the provision for these residual rights to the extent they do not interfere with the operation of the railroad service. Each example of residual property rights is different, and every effort is made to ensure any existing rights are respected, or renegotiated, while balancing the overall integrity of the corridors and their related activities.

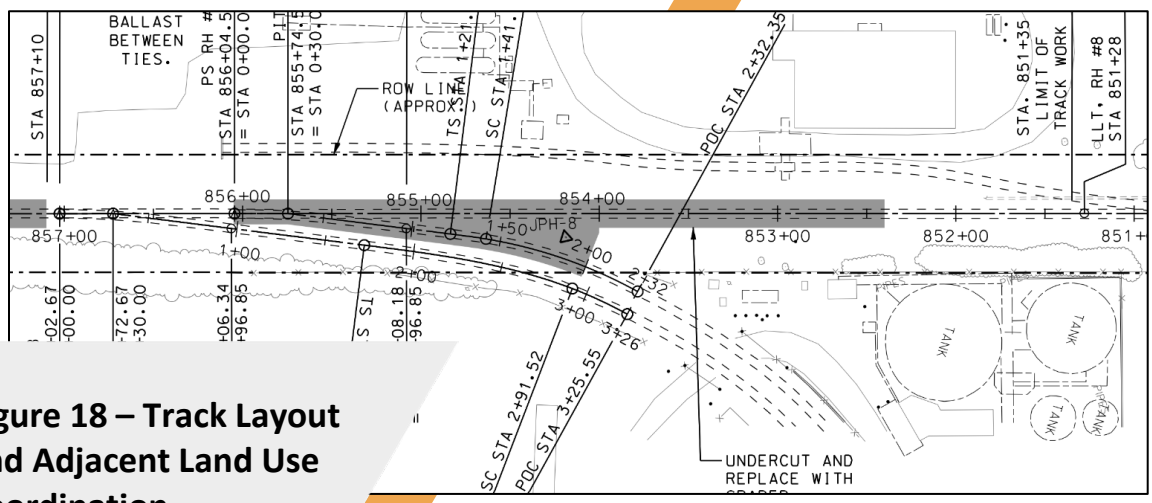


Figure 18 – Track Layout and Adjacent Land Use Coordination

2.4 Safety

Regardless of the location, status or condition of a railroad track or corridor, overall safety must be a primary concern for all stakeholders. MDOT and MTA seek to ensure the safest possible conditions on all state-owned railroad corridors and are committed to continuous improvement of conditions on both active railroad corridors, and inactive or rail-banked railroad corridors.

On active railroad corridors, quality assurance techniques are leveraged to ensure the Railroad Operator is complying with all contract requirements. Partnering with state and federal regulating agencies, inspections of track, equipment and operating practices are conducted routinely. The safety of highway-rail grade crossings is of particular concern due to the potential risk of grade crossing collisions with roadway vehicles, people walking, or bicycling.

Figure 19 – An Automated Track Inspection Device Used on Active Corridors

PROPERTY USE

Figure 20 – Pedestrian Safety Devices Utilized at Former Road Crossing

On inactive and rail-banked railroad corridors, appropriate maintenance methods and design upgrades are pursued to reduce environmental risks such as flooding or other damage. In areas that have or will be developed into multi-use paths, design review and maintenance plans must be in place before any such development may occur to ensure the general public has access to the highest quality infrastructure without the typical hazards associated with railroad property.

Specific attention should be given to the identification and reduction of risks as part of any use of state-owned railroad property. During all phases of project development, construction and general operation, the identification and mitigation of all varieties of hazards, such as safety, financial, engineering, environmental, and others, must be considered and documented by the party conducting the work.

2.4.1 Trespassing

When individuals enter onto railroad corridor property without permission of any kind, it's referred to trespassing. Trespassing on railroad corridor property is a dangerous and serious problem. People trespass on railroad corridors for many reasons: there might be a short-cut across the tracks when walking somewhere, or they might be curious about the corridor, tracks or structures. Some railroad corridors have been converted into public use spaces, such as parks, trails, or gardens, these areas have been reengineered for safe public use. However, any other types of railroad corridors are never open to public use, regardless of the appearance, or perceived likelihood of train traffic. Just as entering a neighbor's home without permission is illegal, entering railroad property is as illegal and far more dangerous as injury to yourself or others could result.

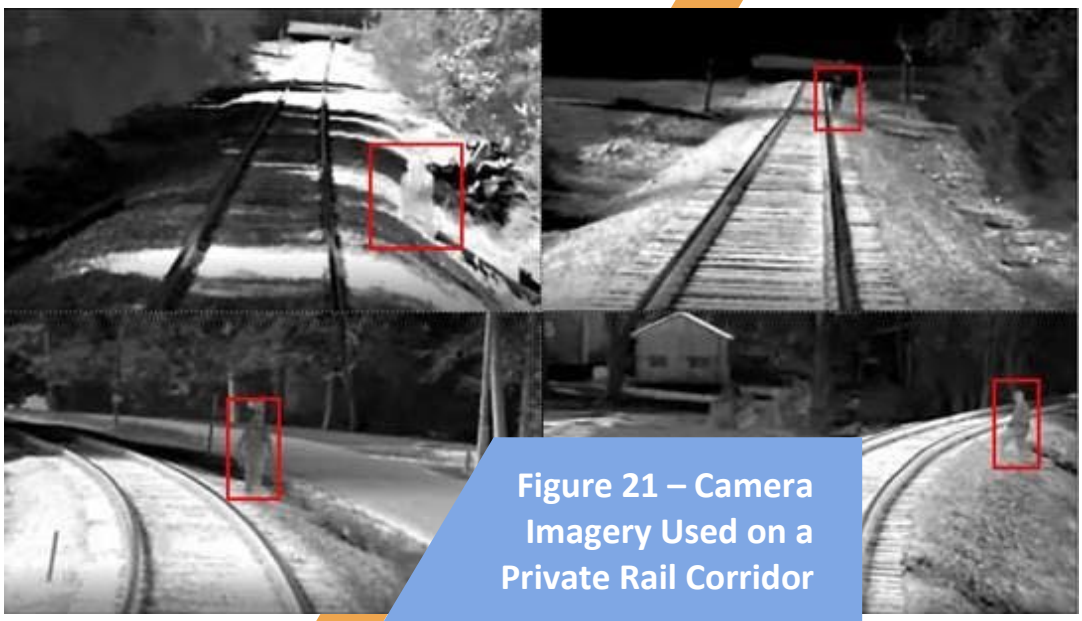


Figure 21 – Camera Imagery Used on a Private Rail Corridor

2.4.2 Training & Qualifications

Figure 22 – Roadway Work requires RWP Training Certification

The operation of railroad service is subject to many federal regulations, several of which describe the training and qualifications necessary to perform work on or near the railroad corridors. Rail Operators are expected to qualify their operating, mechanical, and roadway employees with the various certifications necessary for them to fulfil their roles. In addition, all third parties working on or sometimes near the railroad corridors are also required to qualify employees for working on or about tracks, generally referred to as "Roadway Worker Protection" (49 CFR § 214 Subpart C[13]). Contractors or parties working on rail corridors which are rail-banked are not expected to fulfill RWP requirements, otherwise, these qualifications are required for any project conducted on the corridor. Roadway Worker Protection training is available online from multiple providers. Documentation of successful completion and qualification must be provided as required in any project agreement or documentation. Further details may be provided by the Railroad Operator.

[13] https://www.ecfr.gov/current/title-49/subtitle-B/chapter-II/part-214/subpart-C

2.4.3 Flag Protection

On active railroad corridors, all work done on the corridor property or within 50ft of the tracks must include an adequate method of worker protection against the movement of trains as prescribed by Federal regulations. Some types of protection include out of service track and temporal separation, but the most commonly used form is Flag Protection. The purpose of Flag Protection, or "Flaggers", is to ensure moving trains are protected from ongoing work on a site, and that site workers are protected from moving trains.

Only the Railroad Operator at a location can provide flaggers, or any other type of protection against the movement of trains. Work done on or near tracks which require flag protection may be subject to a fee for this service from the Railroad Operator, and the schedule and availability for this service are subject to change. Contact the railroad which Operates the corridor at the work location prior to finalizing plans for work.

Figure 23 – An Employee-in-Charge Gives a Stop Signal to a Train.

2.5 Access to MTA and State-Owned Properties

Generally, access to state-owned railroad property can be granted for temporary needs, such as special events, or preliminary construction work activities using a "Right-of-Entry" agreement (ROE); or for longer durations of time, such as for the provision of railway-roadway grade crossings, railway-utility crossings, or other infrastructure additions by a "License" agreement (LA) for continued occupancy. A sub-type of the License Agreement which is used by Trail Sponsors for the building of multi-use trails is called a "Trail Use" agreement (TUA). Whether these agreements contain a construction component or are used for access only depend on project requirements. All agreements perform the basic function of providing terms for the nature of the access, the term of the access and the fee associated, and requirements for insurance, design review, and safety.

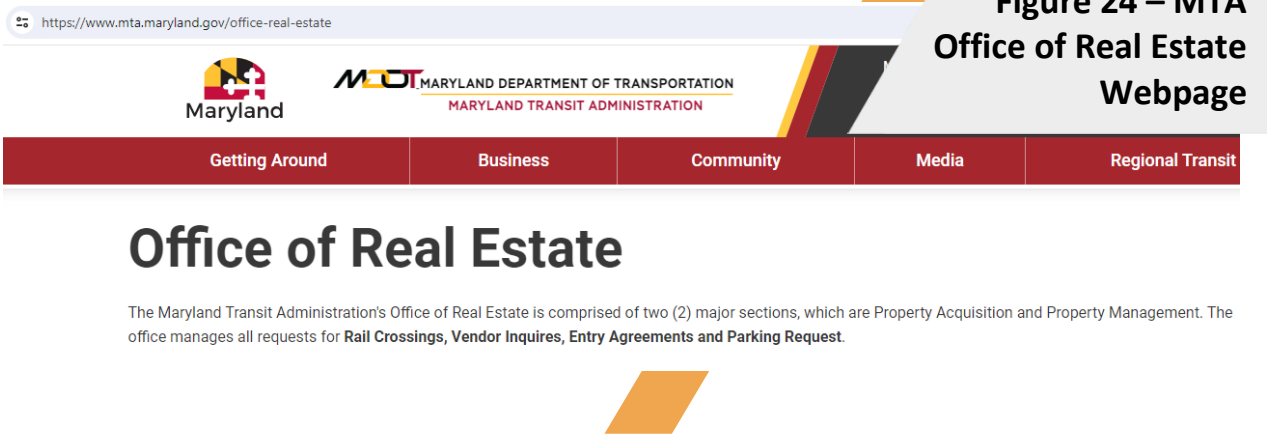


Figure 24 – MTA Office of Real Estate Webpage

While some responsibilities to grant access to state-owned railroad corridors may be exercised by Railroad Operators, MTA Office of Real Estate (MTA-ORE) remains the first and primary point of contact for inquiries related to requests to use, occupy, or access MTA-Owned railroad properties. Any request to access MTA Freight rail property should begin by reading the directions at the following website: **https://www.mta.maryland.gov/office-real-estate.** If you are a contractor working on an MTA project, your contract or project manager may put you in contact with MTA-ORE. Each request for access contains a unique set of circumstances, and MTA may at any time change or modify the process for granting access based on these conditions. In addition, the email address **FreightRail@mdot.maryland.gov** can be used for inquires and general questions.

2.5.1 Temporary Right of Entry

In circumstances where temporary or transient access is required to MTA property, MTA ORE may provide an applicant with a "Right-of-Entry". As the name suggests, these agreements are temporary in nature and do not provide any type of ownership or interest in the property. ROEs may be used for Construction Projects (CP's) on the property such as for the need of miscellaneous repair work, or for Access-Only (AO) needs such as providing access to an adjacent property for an unrelated project. For temporary access which occurs routinely such as maintenance to crossing roadways or utility lines, MTA-ORE may elect to establish a single "Umbrella" ROE Agreement, or if a property right is involved, a License Agreement, with the applicant to streamline the administration of these projects.

2.5.2 Use Agreements and Licenses

A License Agreement is a contract which gives an individual or entity permission to use real property for a specific purpose. Also called a Use Agreement, these agreements are the primary means railway owners grant access to or across railroad corridors. Depending on the nature of the agreed upon use, a License Agreement may be used when a property right is combined with a construction project, such as for the building and maintenance of an overhead bridge, or there may be no construction component such as the use of a private grade crossing. Usually, these agreements are renewed annually if needed for longer than one year. License Agreements may be terminated by either party with due notice to the other party or by MTA with a Reciprocal Right of Termination.

Figure 25 – A License Agreement May Be Used to Maintain Crossings

Standard Procedure for License Agreements:

1. Submit a proposal letter detailing the reason for requesting a License Agreement. Should MTA ORE determine that A License agreement is appropriate a non-refundable application fee of $750.00 will be applicable and will determine if an engineering review fee of $450.00 should be assessed. Both are payable to the Maryland Transit Administration. Fees are subject to change by the Maryland Board of Public Works.
2. The existing Maryland Board of Public Works approved fee schedule for utility, fiber, and other crossings of MTA rights-of-way (ROW) will indicate the annual usage fee and will increase on each subsequent anniversary month of the license agreement, by the same percentage of increase as reflected in the Consumer Price Index (CPI) for all Urban Consumers. The applicability of the fee schedule will be determined when the review package is submitted to MTA.
3. Applicants must demonstrate that during the term of the agreement it will maintain all necessary insurance coverages as outlined in this document and License Agreement.
4. MTA Office of Engineering will review the proposal based on industry standards. Generally, access requests fall into one of the categories shown in the table below.
5. Once MTA approves the plans and specifications, a non-exclusive license agreement is drafted for the proposed occupancy.
6. Once construction of the approved project is completed, MTA will require the applicant to submit as-built drawings electronically to MTA for record keeping.
7. The applicant will be responsible for paying all inspection fees incurred by MTA, if applicable. License Agreements may be terminated by either party with requisite notice.

Figure 26 – Access Request Processes Matrix

Desired Access	Status of Track	MTA Direct and Exclusive Management	Managed under Lease or Trail-Use Agreement	Operated by Contract
Right of Entry	Active	See Note 5	See Note 2; Railroad may have additional requirements.	See Note 3; Railroad may have additional requirements.
	Inactive	See Note 1	See Note 2; Party may have additional requirements.	See Note 3; Railroad may have additional requirements.
	Rail-Banked	See Note 5	See Note 2; Trail-Sponsor may have additional requirements.	See Note 5
License	Active	See Note 5	See Note 4; Railroad may have additional requirements.	See Note 4; Railroad may have additional requirements.
	Inactive	See Note 4	See Note 4; Railroad may have additional requirements.	See Note 4; Railroad may have additional requirements.
	Rail-Banked	See Note 5	See Note 4; Trail-Sponsor may have additional requirements.	See Note 5

TABLE NOTES:

1. Right of Entry Agreements may be permitted by MTA ORE under the standard procedure.

2. In addition to MTA ORE, ROE Agreements may be permitted by the property Lessee or Licensee, under the conditions of their lease or license. MDOT ORIF will facilitate communication and coordination between the applicant and the Lessee or Licensee.

3. In addition to MTA ORE, ROE Agreements may be permitted by the contracted operator of the railroad corridor under the conditions of their contract. MTA ORE will facilitate communication and coordination between the applicant and the contracted Operator. ROEs may be terminated by either party with due notice to the other party or by MTA with a Reciprocal Right of Termination

4. Unless specifically outlined in an agreement with a Railroad Operator or Trail Sponsor, License Agreements may be permitted only by MTA ORE under the standard procedure. If any construction work is to be conducted that alters the property, MTA ORE may require railroad-specific design standards to be met as a condition of the license.

5. There are presently no railroad corridor segments managed in this way.

2.5.3 Encroachments

The unauthorized permanent or semi-permanent use of railroad corridor property is referred to as an Encroachment. Unauthorized entry into railroad corridor property is considered Trespassing unless explicitly permitted through a trail use agreement. In either case, when found and documented, encroachments and trespassing occurrences may be addressed by the MTA, the Trail Sponsor, or the railroad operator. These cases are serious issues whether corridors are actively used for railroad activities or not, as they must be kept free from unauthorized use.

State agencies are required to ensure all uses of state property are adequately documented. MDOT & MTA shall work with adjacent landowners and other stakeholders to accommodate reasonable requests for use, so long as the primary use of the property is unaffected, and the MDOT-MTA's interests are protected. While this section sets out a general process for identifying encroachments, communicating with stakeholders, and seeking corrective action, this document does not limit or confine the actions taken by the MTA and the agency reserves the right to act accordingly on case-by-case basis when necessary.

Encroachment Management Process

1. Encroachments may be reported by third parties or discovered by railroad or state officials through routine inspections. When a suspected encroachment is discovered, details of the location including railroad mile post and/or engineer station, scope of the encroachment, whether it presents an imminent safety risk and the land use or activity in place must be submitted to the MDOT Rail Program & Policy Manager for further review and verification.

2. MDOT staff will log the occurrence and refer the case to the MTA ORE if initial investigation indicates a possible encroachment or trespassing. MTA will confirm the encroachment and initiate communication with nearby parties which may be responsible for the encroachment. In some locations, a Railroad Operator may act on behalf of the MTA.

3. If a responsible party can be identified, that party will receive a formal written request for the removal of the encroachment from MTA property, and/or a request for the provision of documentation which can establish the parties right occupy the corridor within thirty (30) days. It is not presumed any such occupancy documentation exists unless copies can be furnished to the MTA for consideration or are already in MTA's possession.

4. If adequate existing documentation has been provided to and accepted by MTA, or, if the encroaching party then enters into an appropriate new use agreement governing the encroachment, terms may be established to accommodate the encroachment (thereafter to be called "Property Use"). Otherwise, the encroaching party will be required to remove the encroachment within 90 days of the date of the initial letter.

5. If after 90 days additional field inspections indicate the encroachment has not been removed or continues to be used, the case will be referred to the State of Maryland Office of the Attorney General for further administration.

Figure 27 – Dumping Materials on Rail Corridors is Prohibited

2.5.4 Easements and Sales

In special circumstances only, a specific kind of property sale may be used, called an Easement, which allows a party access in for a long duration or in perpetuity. Those circumstances are exclusively handled on a case-by-case basis and contingent on the nature of the project. Due to the continued use of railroad corridor properties for railroad transportation and the accompanying property control risks involved, easements are generally not considered an appropriate instrument for granting access to state-owned railroad corridors. In cases where easements are used, the process should be expected to take at least 1 year, and transactions must be made at market (appraised) value for the property.

2.6 Insurance Requirements on Freight Rail Corridors

All proposed uses of MTA property require insurance; however, insurance requirements vary based on the type of use proposed and the location of the activity. The types of insurance for active and inactive railroad property may differ based on the use. Active railroad areas where trains continually operate, and rail-banked areas which are frequently converted to multi-use pathways have different insurance requirements. The following sections serve as a guide for understanding insurance requirements. All insurance requirements are subject to change without notice and are at the discretion of the MTA.

If the property use agreement includes a rail line which is rail-banked, the existing Trail-Use Agreement will provide additional information about the types and levels of insurance required to perform work on the property. These agreements typically provide for public access to railroad corridor property which has been converted to multi-use trail for the purposes of personal transportation or recreation under the protection of insurance maintained by the trail sponsor. Additional access requirements may be required by the trail sponsor.

Figure 28 – Insurance Requirements Matrix

Corridor Type	Activity	Sec.2.6.1 CGL	Sec 2.6.2 RPL	Sec 2.6.3 Auto	Sec 2.6.4 WC	Sec 2.6.5 UM
Active	Construction	A	B	B	B	Note
Active	Access Only	A, C	A	A	A	Note
Banked	Construction	B	C	C	C	Note
Banked	Access Only	B, C	A	A	A	Note

Green letter indicates coverage generally not required, Red letter indicates further detail in the section.

During any procurement phase for any project planned for a rail corridor, all insurance policies shall be endorsed to include a clause requiring the insurance carrier to provide the MTA and/or other parties as necessary, by certified mail, not less than 30 days' advance notice of any non-renewal, cancellation, or expiration. The project sponsor or contractor shall notify the MTA in writing, if policies are cancelled or not renewed within five (5) days of learning of such cancellation or nonrenewal. The Contractor shall provide evidence of replacement insurance coverage to the Procurement Officer at least 15 days prior to the expiration of the insurance policy then in effect.

2.6.1 Commercial General Liability

During the term of any property use agreement, license, and/or right of entry, the applicant shall maintain Commercial General Liability (CGL) insurance, and if necessary commercial umbrella insurance with:

- A limit of not less than $5,000,000 each occurrence, $10,000,000 Overall
- This coverage will name MDOT, MTA, and depending on the circumstance, the Railroad Operator, or the Trail Sponsor for the corridor.
- Under some circumstances, governmental project partners may use qualifying self-insurance systems to meet this requirement.
- Waiver of Subrogation must be in favor of MTA.
- Coverage should be primary and non-contributory with regard to MTA.
- The exclusion of work within 50 feet of ROW must be deleted (Endorsement CG 2417) when possible.
- The Maryland Transit Administration, the Maryland Department of Transportation and the State of Maryland as additional insured always named additional insured.

Matrix Notes:

A) Railroad Operator must be added as additional insured.
B) Trail Sponsor added as additional insured.
C) Umbrella or some homeowners coverage may be used for private individuals in the case of private grade crossings. Confirm with MTA when needed.

2.6.2 Railway Protective Liability

For projects that require RPL insurance with construction related work, the RPL insurance requirements are as follows:

- RPL Insurance (ISO/RIMA Form G-00-35 or equivalent), in the name of MDOT, MTA and State of Maryland.
- Amended definition of "Physical Damage to Property"
- Sudden and Accidental Pollution included
- Evacuation Expenses included

Matrix Notes:

A) If a property use agreement on either an active or rail-banked corridor governs access only and is not associated with any construction or maintenance component, such as the use of a private railroad crossing, RPL insurance is not necessary if adequate liability coverage can be acquired and maintained.
B) If the property use agreement includes a rail line which is not rail-banked, applicant and/or contractors, subcontractors shall provide, with respect to activities it or any of its agents perform within 50 feet vertically or horizontally of railroad tracks, Railroad Protective Liability (RPL) insurance.
    i. This insurance coverage shall have limits of liability of not less than $5 million per occurrence, combined single limits, of coverage A & B, for

losses arising out of injury to our death of any person, and for physical loss or damage to or destruction of property, including the loss of use thereof. A $10 million annual aggregate may apply.

ii. MTA provides an option for the contractor and/or subcontractor to buy into MTA's blanket RPL coverage for the duration of construction only through MTA Office of Safety and Risk Management administered by MTA ORE. CGL and all other requirements remain the responsibility of the licensee and their contractor and subcontractors.

iii. The Railroad Operator and the MTA should be consulted to confirm whether any special conditions apply to these projects.

C) May not be required if CGL coverage can be confirmed to adequately cover projects on public-use rail-trails. Otherwise, projects that require RPL insurance on rail-banked corridors will need the following:

i. RPL Insurance (ISO/RIMA Form G-00-35 or equivalent), in the name of MDOT, MTA and State of Maryland.

ii. The coverage shall have limits of liability of not less than Two Million Dollars and 00/100 ($2,000,000) per occurrence, combined single limits, for coverage A & B, for losses arising out of injury to or death of any person, and for physical loss or damage to or destruction of property, including the loss of use thereof. A Six Million Dollars and 00/100 ($6,000,000) annual aggregate may apply.

2.6.3 Automotive Insurance

Matrix Notes:

A) If a property use agreement on either an active or rail-banked corridor governs access only and is not associated with any construction or

maintenance component, such as the use of a private railroad crossing, Auto insurance is not necessary if adequate liability coverage can be acquired and maintained.

B) Commercial Automotive, Limit - $2,000,000, MDOT, MTA and State of Maryland must be added as additional insured and the project partner if necessary. Exclusion for work within 50 feet of railroad must be deleted (Endorsement CA 2070), Waiver of Subrogation in favor of the Railroad.

C) If property agreement or access agreement is with a nonprofit or other non-commercial group Auto insurance is not necessary if adequate liability coverage can be acquired and maintained.

2.6.4 Workers Compensation

Matrix Notes:

A) If a property use agreement on either an active or rail-banked corridor governs access only and is not associated with any construction or maintenance component, such as the use of a private railroad crossing, Workers Compensation is not necessary.

B) The Contractor shall maintain such insurance meeting the statutory requirements of the jurisdiction where the work will be performed, including Employer's Liability coverage with minimum limits of $1,000,000 each accident for bodily injury or disease. Where and when applicable, Longshore and Harbor Workers' Compensation Act, (work performed on or over navigable waterways) to cover contractor's employees for wages, transportation, maintenance and cure, in accordance with applicable laws. Maritime Coverage Endorsement (Jones Act) for work upon navigable waterways and barges, tugboats, and all other vessels on the ocean and all

intracoastal rivers and canals, covering drivers, divers, and underwater personnel, seamen, masters and members of a crew, providing remedy for damage or injury, in accordance with applicable laws.

C) If property agreement or access agreement is with a nonprofit or other non-commercial group Workers Compensation insurance is not necessary if adequate liability coverage can be acquired and maintained.

Figure 29 – Tour Activity of Rail-Trail Landmarks and Amenities

2.6.5 Umbrella Occurrence

If any Excess or Umbrella Liability policies are used to meet the limits of liability required by this agreement, then said policies shall be on a true "following form" of the underlying insurance policy coverage, terms, conditions, and provisions and shall meet all of the insurance requirements stated in this document, including, but not limited to, the additional insured, contractual liability & "insured contract" definition for indemnity, occurrence, no limitation of prior work coverage, and primary & non-contributory insurance requirements stated therein. No insurance policies maintained by the Additional Insureds, whether primary or excess, and which also apply to a loss covered hereunder, shall be called upon to contribute to a loss until the Contractor's primary and excess liability policies are exhausted.

- MDOT, MTA, State of Maryland must be added as an additional insured & the jurisdiction if their project (Refer to Contract or Right-of-Entry Agreement)
- Waiver of Subrogation in favor of the Railroad
- Coverage should be primary and non- contributory in regard to the Railroad (MTA)

Contractor's Pollution Liability Insurance with minimum limits of $1,000,000 per occurrence for work involving environmentally regulated substances or hazardous material exposures, including but not limited to handling, transporting or disposing of any hazardous substances and/or environmentally regulated materials and any sudden and/or non-sudden pollution or impairment of the environment, including cleanup costs and defense. This insurance may be supplied

by the subcontractor performing the work if the Contractor is not performing any of the relevant work and providing that MTA and the Contractor are named as additional insureds on the subcontractor's policy. In the event the Contractor or its subcontractor transports hazardous substances or any other environmentally regulated substance that requires a governmentally regulated manifest, the MCS-90 Endorsements shall be attached to the Contractor's (or subcontractor's) auto liability policy. The State shall be listed as an additional insured on the faces of the certificates associated with these coverages.

Additional Insured Status - The Entity, its officers, officials, employees, and volunteers are to be covered as additional insureds on the coverages listed above, including umbrella and excess policies, excluding Workers Compensation and Professional with respect to liability arising out of work or operations performed by or on behalf of the Contractor including materials, parts, or equipment furnished in connection with such work or operations. General liability coverage can be provided in the form of an endorsement to the Contractor's insurance ((at least as broad as ISO Form CG 20 10 11 85 or if not available, through the addition of both CG 20 10, CG 20 26, CG 20 33, or CG 20 38; and CG 20 37 if a later edition is used).

Primary Coverage for any claims related to this contract shall have the **Contractor's insurance coverage shall be primary and non-contributory** and at least as broad as ISO CG 20 01 04 13 as respects the Entity, its officers, officials, employees, and volunteers. Any insurance or self-insurance maintained by the Entity, its officers, officials, employees, or volunteers shall be excess of the Contractor's insurance and shall not contribute with it. This requirement shall also apply to any Excess or Umbrella liability policies, but excludes Professional Liability.

Waiver of Subrogation – The contractor must grant to MTA and other appropriate Entity, a waiver of any right to subrogation which any insurer of said Contractor may acquire against the Entity by virtue of the payment of any loss under such insurance. The contractor agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation, but this provision applies regardless of whether or not the Entity has received a waiver of subrogation endorsement from the insurer.

Figure 30 – Contractors perform major track construction.

2.7 Railbikes

Railbikes have become a popular and interesting activity which utilize railroad tracks to convey specially built human-powered quadracycles. There are several rail-bike operators in the state of Maryland, but presently there are no such operations on state-owned railroad corridors. Regardless of the track owner, railbikes or other on-track vehicles must never be placed or operated on railroad tracks without the consent of the owner and the operator of the tracks. Doing so can be a serious safety concern and can lead to the injury of the operator of the railroad employees or customers.

Requests to operate railbikes or other on-track equipment on state-owned railroad corridors will be considered on a case-by-case basis and will review whether the corridor is in active rail use, the nature and scope of the request, the level of risk involved in the activity, and other factors. The operation of railbikes and other on-track equipment such as motor cars pose many of the same risks of injury and collision that the operation of trains, and therefore, FRA regulations for on track equipment and roadway maintenance machines are used as guidance on requirements which could apply to those operations.

Even on tracks which are no longer regulated by the FRA, operators of railbikes and on-track vehicles on state-owned corridors will be required by MTA and MDOT to implement their own “On-Track Safety Programs” as defined by FRA regulations. These programs must be pre-approved for all operations and include but aren’t limited to establishing standards for employee training and qualifications, communications between vehicles, minimum spacing of vehicles, inspection standards, maximum traveling speeds, braking system inspections and testing, and emergency response procedures.

3 ENGINEERING REVIEW

Any construction or improvement project located on or within 50 feet of state-owned railroad property must be reviewed by MTA under one of the methods described in this section. To initiate a construction or improvement project, a project sponsor must define the scope of the project and submit all required documentation to the MTA for review. Once the plans for the project are approved by MTA, a right of entry, license agreement, and/or construction agreement will be developed for the project, if one does not already exist. Coordination with other stakeholders such as Railroad Operators, or Trail Sponsors is also necessary, unless those parties are the sponsors of the project themselves.

Construction and improvement projects involving state-owned rail property may include but are not limited to:

- Roadway or Pedestrian-Rail Grade Crossings
- Utility crossings, overhead or underground
- Bridges over railroads
- Parallel Roads/Facilities
- Road/Bridge Widening Projects
- Multi-Use trails

All submissions or inquiries related to engineering review can be sent to FreightRail@mdot.maryland.gov, where a MDOT or MTA project manager will be assigned for follow up if appropriate.

3.1 MTA and MDOT Review Process

The purpose of the project review process is to identify issues related to safety, engineering, customer service, operations, legal and regulatory matters, expense, risk and other considerations specific to any proposed project and to determine that the project or improvements are constructed in accordance with its requirements and do not adversely impact or damage MTA property interests. Engineering plans should be submitted early in project development to ensure that MTA requirements can be incorporated.

3.1.1 Notice of Intent for a Project

When considering a project which could affect state-owned railroad property, the Project Sponsor should first notify the MTA and the MDOT ORIF Office by completing and submitting a *Project Initiation Form (PIF)*. This form includes fields for data such as location information, scope of the project, property access status, and any conceptual or formal planning documents. This notice will establish a file for the project and an external project number will be assigned for tracking purposes.

3.1.2 Application for Engineering Review

After the Project Sponsor has notified MTA and MDOT of the project using the PIF and feedback has been given about the extent of the project, the Project Sponsor may submit an *Application for Engineering Review (AER).* This form will include additional basic information about the project, construction methods, timeline, other stakeholders affected, other necessary procedures. Along with the AER, any and all drawings and specifications for the project must be submitted. Any final drawings must be stamped by a licensed Maryland Professional Engineer.

MARYLAND STATE-OWNED RAIL CORRIDOR
PROJECT INITIATION FORM (PIF)

Project Name:

Organization:

Point of Contact:

Contact Information:

Date:

Project Reference No. (if applicable):

PART I – PROJECT LOCATION AND PROJECT D

A. County/Municipality:

B. Route and/or Street(s):

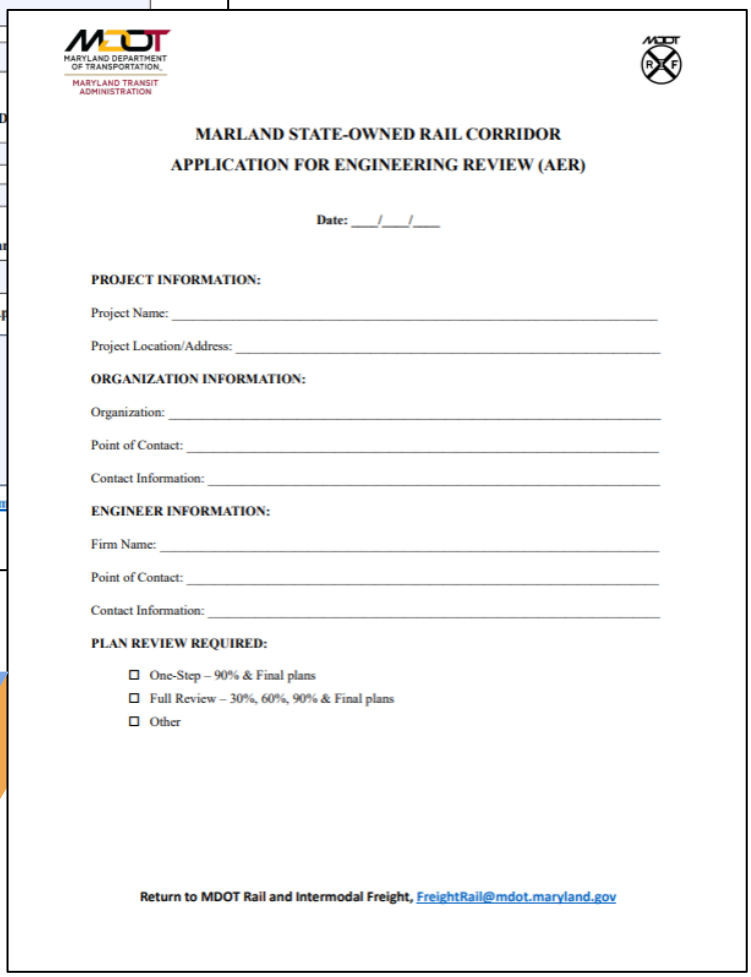
C. Location description or estimated project limits by mile marker ar

Start: End:

D. Provide a brief project description (Attach Project Narrative if Ap

Return to MDOT Rail and Intermodal Freight, FreightRail@m

Figure 31 – Project Initiation Form Example.



MARLAND STATE-OWNED RAIL CORRIDOR
APPLICATION FOR ENGINEERING REVIEW (AER)

Date: ___/___/___

PROJECT INFORMATION:

Project Name: _____

Project Location/Address: _____

ORGANIZATION INFORMATION:

Organization: _____

Point of Contact: _____

Contact Information: _____

ENGINEER INFORMATION:

Firm Name: _____

Point of Contact: _____

Contact Information: _____

PLAN REVIEW REQUIRED:

- ☐ One-Step – 90% & Final plans
- ☐ Full Review – 30%, 60%, 90% & Final plans
- ☐ Other

Return to MDOT Rail and Intermodal Freight, FreightRail@mdot.maryland.gov

Figure 32 – Application for Engineering Review Form Example

3.1.3 Review Process

After all materials have been submitted, MDOT and MTA will review the materials and indicate its intent to either approve the plans or request changes or additional information within 30 calendar days. If additional information is required from the Project Sponsor, final approval cannot be provided until that information has been examined during a follow-up review. When all planning documents have been reviewed by MTA and MDOT and no issues remain, Engineering Approval will be granted. Engineering approval may be a prerequisite in some cases for a final execution of a Right of Entry agreement, or a License Agreement.

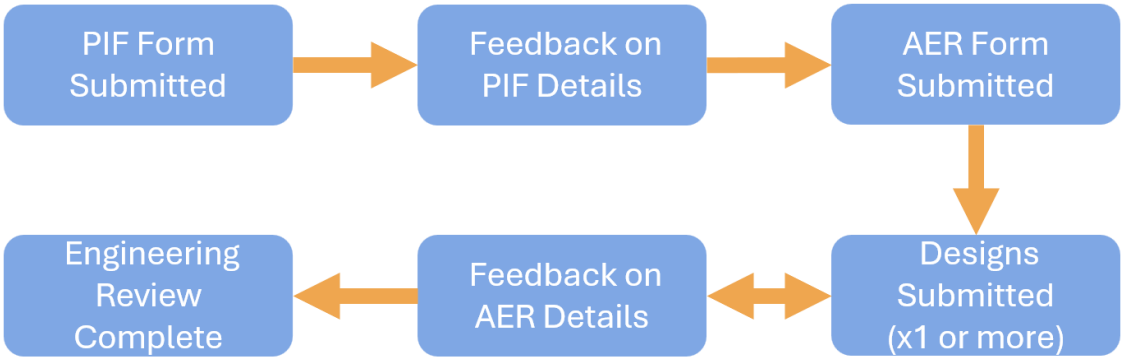


Figure 33 – Review Process Flow Chart

3.2 Pre-Approval Ability for Railroad Operators

When authorized by a Lease or Operating agreement, the Railroad Operator may under some conditions exercise authority to grant Engineering Approval for projects on behalf of the MDOT or MTA (see Section 3.2.1 for conditions). This could be for simple projects such as private grade crossings, or other minor repairs.

When a railroad is authorized to perform this function, the process remains unchanged. Engineering review requests should be submitted as indicated in this process, at which point the application will be referred to the appropriate railroad officials for processing and administration rather than MDOT or MTA Project Managers. All engineering review cases are subject to continued MDOT and MTA oversight.

3.2.1 Conditions for Pre-Approval

Projects which may qualify for pre-approval must meet the following conditions at a minimum:

1. Railroad Operator must confirm the project qualifies for pre-approval in accordance with its Lease or Operating Agreement.
2. Project must be fully documented with all proposed specifications, and valid stamped drawings. Documentation must follow prescribed MTA Engineering Templates (Section 3.5).
3. Project designs must adhere to all Special Standards and Specifications (Section 3.3) in this Manual, and all other standards incorporated by reference.
4. Project must not need any policy exceptions granted (Section 5.2) to comply with requirements.
5. Projects may be reviewed at any time by MTA or MDOT staff.
6. All Grade Crossing projects are subject to separate MDOT Grade Crossing review processes.
7. Projects which require permanent or semi-permanent land use agreements which the Railroad Operator cannot provide are not eligible for Pre-Approval.

3.3 Special Standards and Specifications

Projects undertaken on Maryland-owned railroad properties must meet the standards and specifications set forth in this section, or Policy Exemptions must be granted for individual cases where those standards cannot be met. The freight railroad industry benefits from many existing sets of standards and for the purpose of this manual the following sets of external or non-MTA standards are incorporated by reference as updated. See Section 7 – Referenced Documents for complete list of external and MDOT documentation related to this manual. The standards and specifications described in this manual are in addition to and/or supersede those listed in the incorporated documents list below.

1. *Manual of Standards and Specifications,* Association of American Railroads
2. *Guide for the Development of Bicycle Facilities 5th ed. (2024).* American Association of State Highway and Transportation Officials (AASHTO).
3. *Manual for Railway Engineering (Updated Annually)*. American Railway Engineering and Maintenance of Way Association (AREMA).
4. *Portfolio of Trackwork Plans (Updated Annually).* American Railway Engineering and Maintenance of Way Association (AREMA).
5. *Communications and Signals Manual (Updated Annually).* American Railway Engineering and Maintenance of Way Association (AREMA).
6. *Manual on Uniform Traffic Control Devices for streets and Highways (MUTCD)*. (2012). U.S. DOT
7. *Rails with Trails: Best Practices and Lessons Learned (2021)*. U.S. DOT
8. *Highway-Rail Crossing Handbook (2019).* U.S. DOT, Federal Highway Administration, Federal Railroad Administration.

3.3.1 Roadbed and Track

Roadbed and track are both key elements to safe administration of railroad property, although requirements can vary depending on whether active train service occurs over the line.

The adequate maintenance of roadbed is of the utmost concern on all Maryland-owned railroad property. As railroad corridors typically are highly engineered alignments, the corridors usually include unique grading, drainage features, and are intended to support the heavy loads of train traffic. The structure and condition of the track itself is critical to ensuring the safe operation of trains, and even in locations where tracks are out of service, the track material and structure are valuable assets to Maryland.

1. The grading and alignment of all railroad properties must be always maintained in serviceable condition to facilitate the movement of trains or the reactivation of train service.
2. Adequate ditching or other drainage structures must be kept clear of all debris, including discarded ties and materials, to prevent water from unnaturally standing, eroding, or saturating the grading or the surrounding areas. Ditch maintenance must be done in accordance with all laws and regulations which apply.
3. When projects are determined to influence drainage characteristics of a site, adequate documentation and calculation of all stormwater management data should be included with any preliminary design including sizing of any new or existing culverts.

Figure 34 – Newly installed roadway, drainage and track.

4. No modifications of the track or removal of any track materials may be made without the explicit permission of the MTA and MDOT, which under some circumstances may have been granted to a Railroad Operator or a Trail Sponsor only. Tampering with, removing, or modifying any railroad track without authority to do so should never be done, as it may be a crime.
5. The use of timber railroad ties and preservatives is widespread in the freight railroad industry, however, both materials present environmental challenges when used in the quantities required for rail operations. Rail Operators are encouraged to reduce or eliminate the use of timber ties and harmful wood preservatives wherever possible to reduce the likelihood of deforestation, the spread of chemicals into the soil or watershed, and end of life disposal challenges.

6. Lastly, used railroad ties which have been either removed from active tracks or from rail-banked corridors must never be left discarded on railroad property, other than for temporary staging to facilitate further removal. Spent timber railroad ties produced from railroad maintenance should first be re-used, if possible, in other applications, and when reuse is not possible due to poor condition, ties should be disposed of at a facility which explicitly accepts timber railroad ties. Ties treated with preservatives should always be kept out of waterways, ditches or standing water.

3.3.2 Facilities & Structural Engineering

Maryland owned railroad corridors include a limited number of buildings, structures or facilities. These facilities may include locomotive or car shops, stations, platforms, foundations, light poles or fixtures, and tool sheds. These facilities are in place for the benefit of the railroad operator(s) only, any unauthorized use of facilities is strictly prohibited.

1. Facilities are to be kept in a state of good repair, secure from unauthorized entry, safe from unnecessary hazards or fire risks, and inspected in accordance with the *MTA Freight Bridge Inspection Manual*.
2. In some cases, properties adjacent to the railroad corridor itself may have at one time contained additional facilities like stations, depots, or platforms, and while these structures may have been demolished over the years, the properties they occupied are still considered facilities are managed along with the remaining railroad properties.

3.3.3 Grade Crossing Engineering

All highway-rail grade crossings are site specific, and rarely does a generic or standard design suffice as a final grade crossing design, especially for a public roadway. However, MTA and MDOT have provided a series of standard drawings to illustrate some potential designs for sample highway-rail grade crossings.

1. Grade Crossings are to be kept in a state of good repair, with adequate surface and track conditions, safe from unnecessary hazards, as referenced in the Maryland Transportation Code § 8-640(a)[14]. The grade crossings shall be inspected in accordance with the *MTA Freight Railroad Grade Crossing Inspection Manual* *by* the MTA or Railroad Operator when authorized to do so.
2. Generally, highway-rail grade crossings that have increased truck traffic should consider a concrete or cement surfacing method. Grade crossings of lower traffic volume should consider asphalt or rubberized surfaces, and only farm or agricultural crossings which are privately used should use stone, timber or earthen surfaces.
3. In any case, provision for adequate latitudinal (across tracks) and longitudinal (along tracks) drainage must be made to ensure the safe passage of water flows underneath tracks and roadway surfaces.
4. All signage and pavement markings at highway-rail grade crossings shall be in compliance with the latest version of the Maryland Manual on Uniform Traffic Control Devices.
5. Final design of any grade crossing project is subject to the approval of MDOT under Maryland Transportation Code § 8-639[15], and the review of MTA and/or the Railroad Operator.

[14] https://mgaleg.maryland.gov/2025RS/Statute_Web/gtr/8-640.pdf
[15] https://mgaleg.maryland.gov/2025RS/Statute_Web/gtr/8-639.pdf

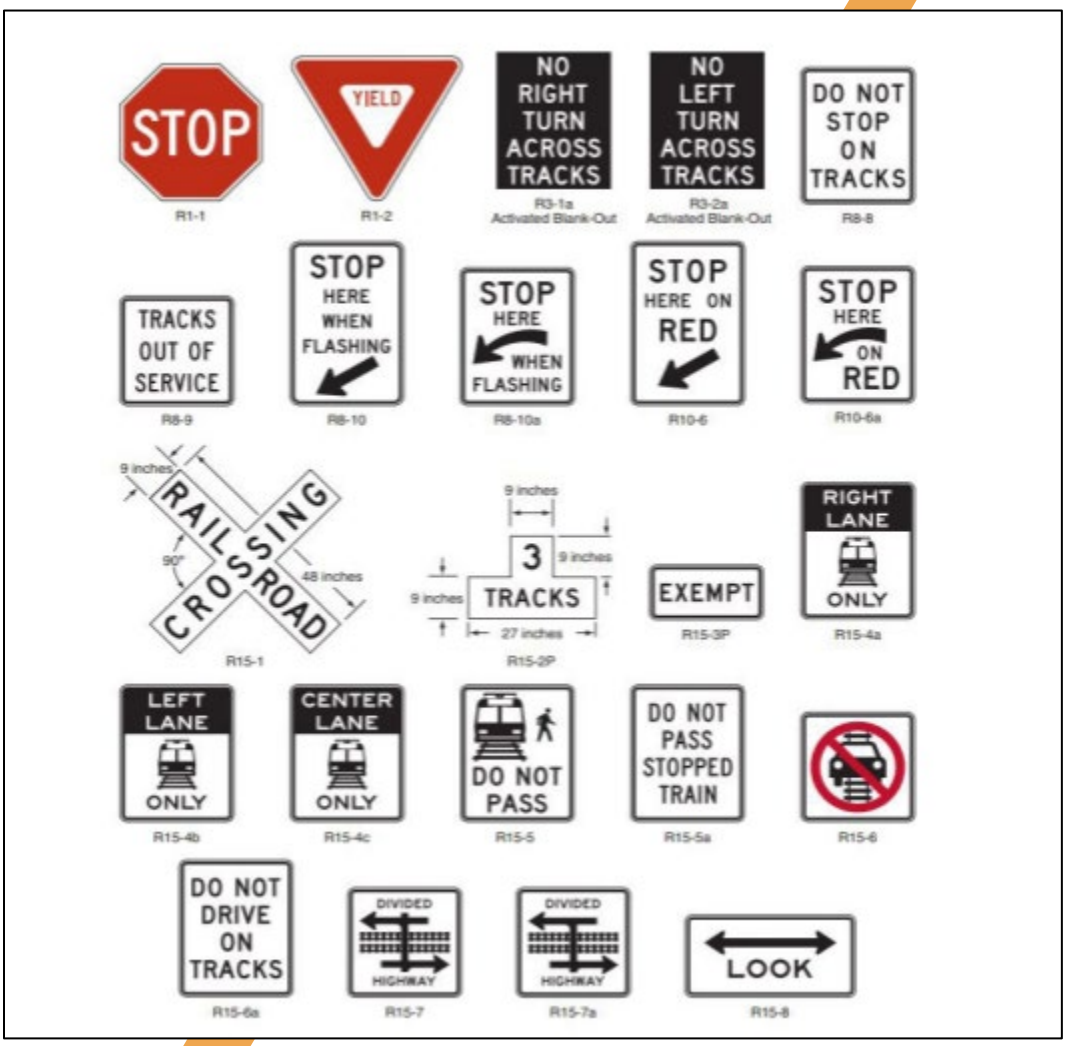


Figure 35 – Example of Highway-Road Signs used in the MUTCD

3.3.4 Bridges and Culverts

Railroad corridors require extensive use of bridges and culverts to facilitate the safe conveyance of the railroad track over various landscapes and topographies. MTA has adopted specific bridge and culvert inspection standards in *MTA Freight Bridge Inspection Manual*, a separate manual, to inform Railroad Operators on additional details necessary to properly oversee the care and maintenance of railroad bridges and culverts. Details on the party responsible for work on bridges and structures will be specified in any Lease, License, or Operating agreement.

Figure 36 – A 3-Pipe Culvert Shown After Cleaning and Repair

Type of Bridge	Inspection Requirement	Notes
Active Rail Bridges	Annual documented inspection per FRA regulation	Inspections only performed by MDOT, MTA or Railroad Operator
Inactive or Railbanked Rail Bridges	Up to 4-year inspection cycle allowable	Inspections may be performed by MDOT, MTA, Railroad Operator, or Trail Sponsor
Highway Bridges	Annual documented inspection per FHWA regulation	Inspections may be performed by MDOT, MTA, or per specific agreement.
Structures	Up to 4-year inspection cycle allowable	Inspections only performed by MDOT, MTA or Railroad Operator
Culverts	Up to 4-year inspection cycle allowable	Inspections may be performed by MDOT, MTA, Railroad Operator, or Trail Sponsor

Figure 37 – Bridge Inspection Frequency Matrix

3.3.5 Shared-Use Paths (Rail-Trails)

Shared-use paths along railroad corridors are a popular and beneficial feature which allows communities to maximize the use of a railroad corridor. There are two ways shared-use paths can be built. Known as rail-trails, some paths replace the railroad track with the path, which is constructed on top of the railroad grade, usually on corridors which have been rail-banked. A rail-with-trail is instead placed parallel to a low density or low-speed railroad track by routing the trail alongside the track. Rail trails and rails-with-trails follow different processes to be developed. Specific details for specific rail trails will usually be found in the Trail Use Agreement or Use Agreement which permits the trail construction.

All Rail Trails

In either case, general considerations apply to the planning, design, construction and operation of rail-trails on MTA railroad corridor property. Primarily, trail construction must seek to preserve the functionality of the railroad corridor.

1. New culverts may be designed as part of the project to address drainage issues created by building a trail. Design, construction and maintenance of new culverts, or similar features, which intersect railroad tracks should be handed through the Railroad Operator at the specific location or the MTA in a separate maintenance agreement. Typically, the trail sponsor or party operating the trail will assume financial responsibility for these new culverts and other improvements.
2. Trail access points or “Spurs” across the railroad corridor may be considered as part of the design to address and preempt trespassing concerns. These may take the form of new grade crossings, or simple trail access features

depending on whether tracks remain in place or not. Design, construction and maintenance of any new grade crossings which intersect railroad tracks should be handled through the Railroad Operator at the specific location or the MTA in a separate maintenance agreement. Trail access spurs may be allowed by the Trail Use Agreements. At all times effort must be made during trail construction to reduce and rationalize the number of grade crossings in place.

Figure 38 – Rail-Trail Example in Easton, MD, built 1993

Trails with Rails

The Federal Railroad Administration (FRA) and the Federal Highway Administration (FHWA) produced *Rails with Trails: Best Practices and Lessons Learned Guide (2021)* which provides planning, design, construction and operational considerations for rail-with-trails. Some design considerations are as follows. *(Continued from above)*

3. In areas where rail-trails are to run concurrently to rail operations or active railroad tracks, trail pedestrian crossings must be fully compliant with all crossing regulations and intersect the tracks at not less than a 75-degree angle and use flangeway gap filler strips.
4. On State-owned corridors, Rail-with-Trails are not permitted to be built adjacent to railroad tracks of FRA Class 3 level or higher, or tracks with a speed limit above 25 MPH without additional project-specific mitigations.
5. A horizontal displacement or offset of at least 20ft from the centerline of the track to the centerline of the trail is suitable in most locations and is allowed when railroad operating speeds do not exceed 10MPH.
6. Additional precautions should be addressed on a case-by-case basis for higher train speeds when trail areas are more constricted.
7. For rail-with-trails, due to the shared-use path being in close proximity to rail operations, fencing between the trail and the track is highly recommended where space allows, and are required 100ft on each side of major bridges or where the elevation of the trail is higher than that of the railroad track. In each case the fencing is to prevent pedestrians from falling downward onto the tracks. Said fencing will be of a style with apertures larger than 9” to allow for railroad cross ties to pass through the fence, or of a style which can be disassembled to allow the placement of cross ties.

8. Planning, design, construction and operation of rail-with-trails must be coordinated with the railroad operator at that location. The railroad operator may elect to establish a "curfew" during work to ensure train activity and construction activity do not occur simultaneously ("temporal separation").
9. All work conducted within 50 feet of active railroad tracks must be done in accordance with FRA's roadway worker protection regulation, 49 CFR 214 Subpart C, unless an approved plan to implement an adequate curfew is put in place for the work.
10. Should elements of the project require cessation of railroad traffic, this work must be done on a schedule prescribed by the Railroad Operator and must not interfere with normal operations.
11. Discouragement of pedestrian trespassing into the railroad tracks should be done through the placement of adequately designed public notification signs at every access point along the concurrent section, e.g. "No Trespassing on Tracks".

Figure 39 – Rail-with-Trail Example in Allegany County, MD

3.4 Asset Management

MDOT is committed to an asset management program that embraces data-driven decision making, enhances transparency, supports continuous improvement, and employs structured management and infrastructure decision making processes. This commitment is developed through the publication of MDOT's *Strategic Asset Management Plan (SAMP)*. This plan, updated every few years, establishes a framework for MDOT's asset management program, and seeks to enhance understanding of our most critical assets, advance data-driven and risk-based decision making, prioritize needs and efficiently allocate funding, and support workforce collaboration, training and development.

Management of asset inventories, condition scores, and performance data is essential to supporting a data-driven process which informs the allocation of resources and ensures MDOT makes the right investments at the right time and in the right way. To support this effort, record keeping and data management techniques are leveraged to gather and maintain multiple databases covering every aspect of the railroad corridors, whether active or not. These databases include but are not limited to:

1. Track, rail, tie and subgrade condition with 1/10th of a mile resolution
2. Small structures and drainages; Large structures and bridges
3. Grade crossings
4. Facilities and buildings
5. Properties, occupancies, and real estate

Annual and cyclical inspections of these assets by the Railroad Operator, the Trail Sponsor, and/or MDOT/MTA are key to monitoring these assets and ensuring the most accurate data is available for review and analysis.

3.4.1 Responsibilities

Railroad Operators and Trail Sponsors may have the responsibility to facilitate the collection of data and the management of railroad property assets and structural assets on state owned railroad corridors. These responsibilities may be further defined in Operating and Trail-Use Agreements, but should include at a minimum:

1. Inspection of active railroad track, rail, subgrade, small structures, drainages, bridges, grade crossings, facilities and buildings as required by regulation and MTA Inspection policies.
2. Inspection of rail-banked sections of railroad corridor as prescribed in a trail use agreement, including sub grade, small structures, drainages and bridges.
3. Inspection of all property boundaries for unauthorized encroachments or uses.
4. Methods for the collection, distribution and use of datasets and databases, including specifics on the ownership, sensitivity and governance of the data.

3.4.2 Processes

MTA updates the *MTA Freight Bridge Inspection Manual* to aid in the systematic inspection of the bridges and small structures on the corridors. This manual is to be used by Trail Sponsors and Railroad Operators if they are required to perform the routine inspections on MTA's behalf. All reports and documentation must be submitted to the MTA for review annually. While regulatory requirements must always be met at a minimum, the following inspections cycles are required.

1. Active railroad bridges and culverts: Annually
2. Inactive railroad bridges and culverts: 2-Year Cycle
3. Rail Banked bridges and culverts: 4-year cycle

3.5 Engineering Specifications Templates

Construction projects undertaken by Railroad Operators with previously authorized pre-approval authority for engineering review (PARO's) must be thoroughly documented using the *specification templates* in this section to record all necessary specifications used in every capital project. The proper completion and submission of these specification templates to the MTA is an essential part of MDOT's asset management process. The specification templates may be slightly altered to fit the specific circumstances of each project if necessary, although any templates which are changed or added must remain compliant with details in this manual, and any referenced standard such as AREMA. Major changes, substitutions, or revisions of a specification template must be approved by MTA Engineering, who may create or request additional specification templates if necessary for any given project. The PARO must always keep the required specifications in an orderly and assessable library for future need or review. These templates are described below and provided directly to the Railroad Operator.

List of Forms and Templates:

1. *SP 01 11 00 – Summary of Work*
    a. This specification describes the general details of how a project will be conducted, organized and managed.
    b. It is required for any project.
2. *SP 01 15 00 – Construction Procedures*
    a. This specification describes the requirements for preparing to perform the work.
    b. It is required for any project.

3. *SP 01 18 13 – Interface Requirements*
    a. This specification describes the Contractor's obligations and other pertinent information relative to the various interfaces between the Contractor and other third parties.
    b. It is required for any project that interfaces with third parties such as utilities, roadway users, other railroads, Trail Sponsors.
4. *SP 01 33 00 – Submittals*
    a. This specification describes the general requirements and procedures for preparing and transmitting design data to the Engineer for informational purposes, recording or for approval.
    b. It is required for any project.
5. *SP 01 43 00 – Quality Assurance and Quality Control*
    a. This specification describes the Quality Assurance/Quality Control (QA/QC) requirements for the work performed under this project.
    b. It is required for any project.
6. *SP 01 55 26 – Maintenance of Traffic*
    a. This specification describes general requirements for maintaining pedestrian and/or vehicular traffic and protecting the public from danger to persons and property within the limits of each work site.
    b. It is required for any project which interfaces with roadways, shared-use paths, vehicular traffic, or pedestrian traffic.
7. *SP 01 57 13 – Temporary Erosion and Sediment Control*
    a. This specification describes the application of measures to control soil erosion throughout the life of the project.
    b. It is required for any project which conducts significant soil disturbances.

8. *SP 01 57 19.01 – Temporary Maintenance of Stream Flow*
    a. This specification describes the application of measures to temporarily redirect or manage the flow of steams or small waterways.
    b. It is required for any project that must temporarily redirect or manage the flow of steams or small waterways.
9. *SP 01 61 00 – Products*
    a. This specification describes the general requirements for products, including the handling, transportation, and storage thereof, and the use of trade names and alternatives.
    b. It is required for any project which requires the use of consumable materials such as but not limited to adhesives, paints, chemicals, and cleaners.
10. *SP 09 97 13.23 – Exterior Steel Coatings*
    a. This specification describes the properties, application and procedures for effective coating of outside steel features.
    b. It is required for any project which includes the use of outside steel materials or components.
11. *SP 26 805 45 – Direct Buried Conduit for Trackwork*
    a. This specification describes the general requirements for the installation and use of direct buried conduit for trackwork.
    b. It is required for any project which utilizes direct buried conduit.

12. *SP 28 13 00 – Access Control*
    a. This specification describes the general requirements for the design, installation and use of the MTA's access control system.
    b. It is required for any project which includes the use of a facilities access control system.
13. *SP 31 05 19.14 – Geotextiles for Track Work*
    a. This specification describes specifications for furnishing and installing geotextile under tracks at the locations shown on plans.
    b. It is required for any track or excavation project utilizing geotextiles.
14. *SP 31 23 00 – Excavation and Fill*
    a. This specification describes methods and considerations for excavating, filling, disposal of concrete, and the removal of pavements.
    b. It is required for any project which conducts excavations or filling.
15. *SP 31 23 33 – Trenching and Backfilling*
    a. This specification describes excavation and backfill for underground conduits and duct work, as required.
    b. It is required for any project which conducts trenching for the installation of utilities or similar structures.
16. *SP 31 37 00 – Riprap*
    a. This specification describes the construction of riprap aprons as specified by plans or as directed by the Engineer.
    b. It is required for projects which require the placement of riprap.

17. *SP 32 11 13 - Subgrade Modifications*
    a. This specification describes the techniques and requirements when the use of subgrade modifications is necessary to create stable platforms for equipment or structures.
    b. It is required for projects which require subgrade modifications, treatments or conditioning.
18. *S 32 11 23 – Aggregate Base Courses*
    a. This specification describes the techniques and requirements when the use of aggregate base courses are necessary under roadways or railways.
    b. It is required for projects which require the use of aggregate base courses.
19. *S 32 31 13 – Chain Link Fences and Gates*
    a. This specification describes design criteria and requirements for the design, placement, installation and maintenance of chain link fencing.
    b. It is required for projects which include installation or repair of chain link fencing.
20. *S 34 05 17 – Common Work Results for Track Work*
    a. This specification describes general information common to track installation at the grade crossing and construction of ballasted track.
    b. It is required for any project involving the manipulation or construction of railroad track.

21. *S 34 11 13 – Track Rail*
    a. This specification describes furnishing all labor, materials, and equipment for the manufacture, testing, fabricating and shipping of high strength 115 RE steel running rail for installation.
    b. It is required for any project installing new rail.
22. *S 31 11 13.05 – Track Restraining Rail*
    a. This specification describes furnishing all labor, materials, and equipment for the manufacture, testing, fabricating and shipping of high strength 115 RE steel restraining rail for installation.
    b. It is required for track projects which require installation of restraining rails.
23. *S 34 11 16 – Welded Track Rails*
    a. This specification describes requirements for field-welding of running rails.
    b. It is required for any track project involving welding rails.
24. *S 34 11 19 – Track Rail Joints*
    a. This specification describes the furnishing, fabricating, delivering, and installing track rail joints.
    b. It is required for track projects requiring track rail joint repair or installation.
25. *S 34 11 23 – Special Track Work*
    a. This specification describes the furnishing and installing ballasted special trackwork materials.
    b. It is required for track projects that involve turnouts, diamonds, road crossings and derails.

26. *S 34 11 26 – Ballasted Track Rail*
    a. This specification describes the construction of ballasted track
    b. It is required for any track project.
27. *S 34 11 26.13 – Track Rail Ballast*
    a. This specification describes furnishing and installation of mineral aggregate for ballast on ballasted track.
    b. It is required for any track project.
28. *S 34 11 26.16 – Track Rail Subballast*
    a. This specification describes furnishing and installation of mineral aggregate for subballast on ballasted track.
    b. It is required for any track project.
29. *S 34 11 33.17 – Timber Ties*
    a. This specification describes furnishing and installation of timber and composite railroad ties.
    b. It is required for any track project.
30. *S 34 11 93 – Track Appurtenances and Accessories*
    a. This specification describes furnishing new track materials required for the completion of trackwork.
    b. It is required for any track project.

4 HIGHWAY-RAIL GRADE CROSSINGS

MDOT and MTA apply an overall risk-reduction strategy to the management of existing highway-rail grade crossings which is consistent with Maryland's statewide grade crossing policies. A safe and properly authorized grade crossing can only exist with an applicable property agreement to govern it, therefore all grade crossings must be under formal written agreement between the grade crossing user and the MTA.

Grade crossings which allow pedestrian, cyclist, or vehicular traffic to cross railroad tracks create a potential for collisions between the road user and trains. Therefore, to limit the risk of collisions, the number of grade crossings and the intensity of their use must in general be limited and/or eliminated. As a general rule, a request for a new grade crossing, where one presently does not exist, will require the closing of another similar crossing. A proposed increase in the intensity of grade crossing use by a crossing user will require additional safety systems to be installed at the crossing. Final discretion over the general condition and suitability of grade crossing improvements is vested with the Secretary of Transportation.

4.1 MDOT Oversight of Crossings

Maryland Transportation Code § 8-639[16], establishes the parameters where a railroad operator or a roadway operator can make changes to, construct, or improve a grade crossing. The code requires that before any changes to public or private grade crossings can be made, notification to and corresponding approval

[16] https://law.justia.com/codes/maryland/transportation/title-8/subtitle-6/part-viii/section-8-639/

from the Secretary of Transportation or their designee is required. The process ensures the highway-rail grade crossings in Maryland all adhere to a basic level of consistent safety. Grade crossings on rail-banked corridors should be treated as active crossings for the purposes of this requirement, even if decommissioned, so long as the corridor is subject to the return of railroad activity.

Figure 40 – Public Roadway Grade Crossing

4.2 Types of Grade Crossings

Highway-rail grade crossings can be categorized in multiple ways. Typically, crossings are first categorized by the use of the roadway. Roadways can be publicly maintained or privately maintained in Maryland. Secondly, the activity level of railroad use is considered. This includes whether the crossing is deemed Active, Inactive or Railbanked and is dependent on the status of the railroad corridor at that location. All crossings must be documented, most commonly as a Use-Agreement, so all parties involved have certainties about their responsibilities and the costs necessary to maintain the crossing.

4.2.1 Public Crossings

Public Crossings are the most common type of crossing in Maryland. Public roadway crossings can be managed by the State Highway Administration or other State agency, a specific County, or Municipality. These roadways are open for general use of the public and therefore must adhere to strict grade crossing design standards and regulations which exist for the entire industry. The State of Maryland also publishes its own *Manual on Uniform Traffic Control Devices* which covers the roadway pavement markings and approach warning signage required on roadways. Multiple public roadway crossings may be managed under one property use agreement to reduce redundancy in administration and maintenance. All agencies working within 50ft of railroad tracks must contact the Railroad Operator and MDOT to ensure work does not interfere with train operations.

4.2.2 Private Crossings

Private Crossings are locations where a private roadway or driveway crosses a railroad corridor. These crossings are typically managed by the railroad operator under specific agreements with the private roadway user. Each private railroad crossing is unique, and property rights may vary and inform the structure of any use agreement or the collection of maintenance fees at a location. For more information on grade crossing and other property use fees, refer to the License Agreement Fee Sheet attached to this document. To ensure continued safe conditions, it is important that only the Railroad Operator or other qualified party perform any work on the grade crossings, as the condition of the crossing can pose a risk to operating railroad equipment and trains.

Figure 41 – Private Roadway Grade Crossing

4.3 Maintenance of Grade Crossing Structures

Any new or modified grade crossing agreement must require all repair work or maintenance work performed to be done by the Railroad Operator, public roadway owner, or MDOT and must be done in coordination with all parties. Costs associated with the maintenance of grade crossings must be allocated under the use agreements which cover the grade crossings and may be subject to prior rights of either the railroad or roadway operator.

Process for Private Grade Crossing Maintenance

1. Request made for maintenance, or inspection detects maintenance required.
2. The agreement which governs the crossing is reviewed.
    a. Agreement may be pre-existing deed reference, easement, or license agreement.
    b. If no agreement exists, the creation of an agreement is required to maintain the crossing.
    c. All new agreements require crossing user to provide payment of annual maintenance fee in consideration of the use of the crossing.
3. Typically, the MTA, or the Railroad Operator performs all crossing maintenance, unless provided for specifically in the crossing agreement.

4.4 Intensity of Grade Crossing Use

Changes to the use of highway-rail grade crossings must be commensurate with the grade crossings design. Increases in vehicular traffic, pedestrian or cyclist traffic, or railroad traffic can all influence changes which may be needed at a grade crossing. Whether or not any grade crossing upgrades are required, they must be considered before any proposed changes to the intensity of use for a grade crossing. This process must be completed by the appropriate MDOT Rail Safety Program staff, who will document the proposed change in crossing use, and conduct on-site diagnostic meeting(s) with all grade crossing stakeholders to determine appropriate mitigations.

4.4.1 Active Corridors

Grade crossing configurations are very sensitive to local conditions and each crossing tends to have unique challenges. Generally, the roadway surface for an active public grade crossing must be concrete or asphalt, as wood surfaces are not permitted for public grade crossings on MTA-Owned railroad tracks. Whether an active public crossing has *Active Warning Devices* like lights, bells and gates, will depend on traffic volumes and visibility conditions at the crossing.

Private crossings of active railroad segments must be Concrete or Asphalt for commercial or business activities, however, wood and gravel surface crossings may be used in some cases for agricultural or residential crossings. Final approval for grade crossings changes and modifications can only be given by MDOT, and construction overseen by MTA either directly, or through a Railroad Operator.

4.4.2 Rail-Banked Corridors

Rail-banked grade crossings are a unique type of railroad crossing. Tracks may or may not remain in place at a rail-banked crossing, but the crossing should always be decommissioned first before being included in a rail-banking corridor. If a trail has been constructed on the corridor, the crossing may instead take the form of a crosswalk, roadway intersection underpass, or overhead bridge. While the rules which govern active railroad crossings no longer apply to rail-banked crossings, it's important to note that rail-banked corridors are subject to the return of railroad service. These crossings must still be documented and treated as though they have the potential to support possible railroad activity in the future.

5 ADMINISTRATIVE REVIEW

The information and policies outlined in this Railroad Information Manual have been assembled for the use of railroad operators, municipalities, counties, other state agencies and neighbors to the railroad corridors. The following sections describe how this manual is reviewed, updated and administered.

5.1 Manual Review and Update Process

This Railroad Information Manual is to be reviewed at least annually for any changes or updates which have been deemed necessary by MDOT and the MTA. Changes to this manual may be made at any time and published on www.mdot.maryland.gov/freight-rail . Wholesale updates of this manual will be done on an as needed basis, and when done, be republished in the fourth quarter of each year and will take effect in the first quarter of the following year.

5.2 Exceptions

Exceptions to any of the policies in this Rail Information Manual may be granted by the Director of Rail and Intermodal Freight. Exceptions will only be granted in cases where an appeal has demonstrated an existing requirement has not been developed in consideration of a novel problem, where an existing requirement creates a safety concern, or where an existing requirement is no longer supported by the necessity under which it was adopted. Exceptions generally will inform the Rail Manual update and review process.

5.3 Appeals Process

In order to document an appeal to a requirement in this manual, please email FreightRail@MDOT.Maryland.gov, and note which section or subsection the appeal is for and explain the situation in detail. The Rail and Intermodal Freight Team will respond to appeals within 30 days.

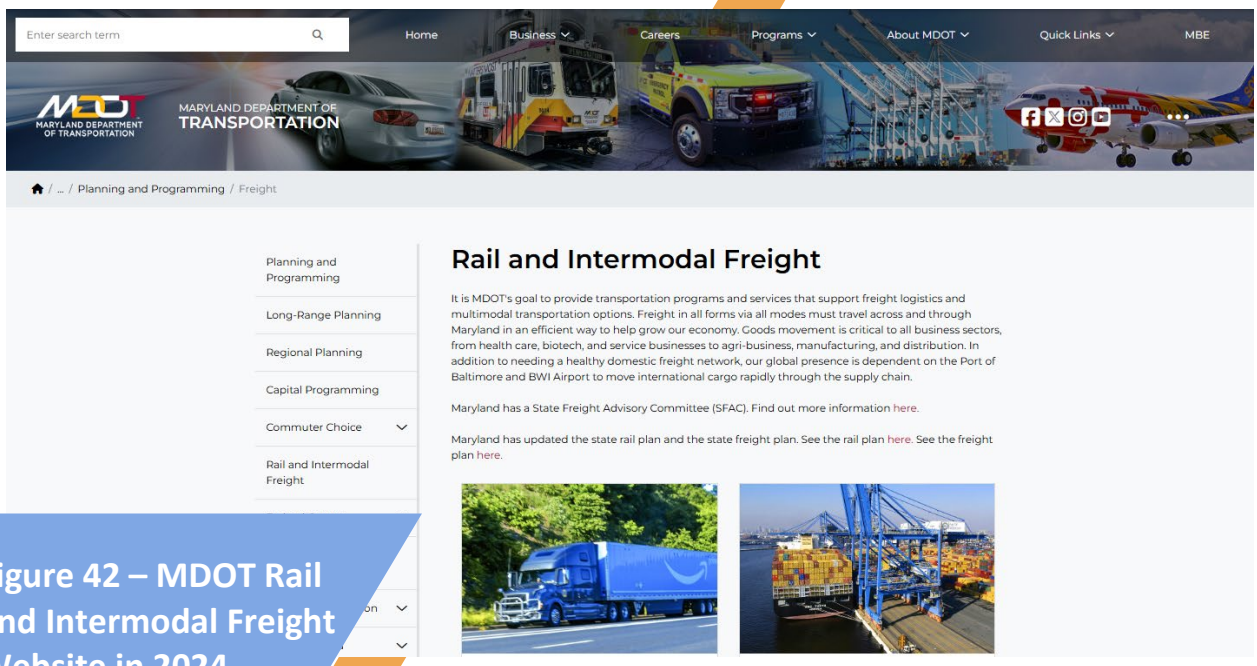


Figure 42 – MDOT Rail and Intermodal Freight Website in 2024.

6 DEFINED TERMS

The following terms or phrases have been used in this document.

1. 3R Act (Regional Rail Reorganization Act of 1973) – As amended, this act of the US Congress provided for the creation of the United States Railway Association (USRA) to study the condition of railroads in the northeast United States and issue a plan for their reorganization.
2. 4R Act (Railroad Revitalization and Regulatory Reform Act of 1976) – As amended, this act of the US Congress adopted the *Final System Plan* developed by the USRA and authorized creation of the new system, called the Consolidated Rail Corp, or Conrail.
3. Abandoned Railroad – According to the Maryland State Rail Plan, Formal abandonment of a railroad corridor requires the owner to seek approval by the US Surface Transportation Board.
4. Active Railroad - Railroad rights-of-way where railroad operations routinely occur or are likely to occur depending on variabilities in economic activity.
5. Active Warning Devices - Traffic control devices that are activated when a train is approaching a highway-rail grade crossing, typically bells, lights or automated gates.
6. AO (Access only activity) – A type of activity occurring on a railroad corridor which does not involve construction or commercial operations. Such activities could be simple crossing from one side to the other.
7. Corridor Operator (CO) – A party conducting business under a contract with a appropriate state agency, which manages, maintains, and/or operates, railroad corridor properties. May be a Railroad or a Trail Sponsor.

8. CP (Construction Project) – A type of activity occurring on a railroad corridor which involves construction activities such as repair work.
9. DLLR (Maryland Department of Labor, Licensing and Regulation) – A departmental agency of the State of Maryland which is tasked among other things, enforcing state and federal railroad regulations.
10. DNR – *Department of Natural Resources.* A departmental agency of the State of Maryland which is tasked with maintaining natural resources including state parks, public lands, state forests, state waterways, wildlife, and recreation areas.
11. Fee Simple – Highest level of ownership of real estate property meaning full and irrevocable ownership of land, and any buildings on that land.
12. FRA – *Federal Railroad Administration*. A United States Department of Transportation (DOT) agency that ensures the safe and efficient transportation of people and goods by rail.
13. General Railroad System of Transportation - a "*network of standard gage track over which goods may be transported throughout the Nation and passengers may travel between cities and within metropolitan and suburban areas…*"
14. Grade Crossing – Usually a level crossing of a railroad track and a vehicular roadway, as opposed to *Grade-Separated Crossing* which allows the either the roadway or track to cross either above or below the other. Grade crossings can be public or private. Changes or construction to most grade crossings are subject to review by MDOT.
15. Inactive Railroad – According to the Maryland State Rail Plan, Railroad rights-of-way not formally abandoned or railbanked on which operations

have ceased [without definite plans of resuming] are considered inactive. Inactive Railroad lines may continue to be subject to the STB's jurisdiction.

16. Interim Use – The use of a rail-banked railroad corridor during the time between its initial usefulness for railroad operation and potential future return of that usefulness at an unknown date.
17. Light Density Railroad Line – A Railroad corridor where private railroad ownership and operation is no longer economically sustainable.
18. Maryland State Rail Plan – An MDOT issued plan which outlines public and private investments and policies that will ensure the efficient, safe, and sustainable movement of freight and passengers by rail.
19. MDOT – *Maryland Department of Transportation.* A departmental agency of the State of Maryland which is tasked with direct and indirect management of Maryland Transportation infrastructure.
20. MDTA – *Maryland Transportation Authority.* A state authority within MDOT, responsible for financing, constructing, operating, and maintaining transportation facilities.
21. MTA – *Maryland Transit Administration.* A modal division of the Maryland Department of Transportation which is empowered to operate some transit and passenger services in Maryland.
22. MUTCD – *Manual on Uniform Traffic Control Devices for streets and Highways.* Federal guidance which sets minimum standards for traffic control devices in the United States
23. NTSA – National Trails System Act of 1983 as amended, established the Rail-Banking process of reserving railroad corridors for the future return of rail service.

24. ORIF – Office of Rail and Intermodal Freight (MDOT), MDOT TSO's office dedicated to state-wide rail policy administration.
25. Railbanked - A status of railroad corridor that is described by the National Trails System Act of 1983 and determined by the STB retaining jurisdiction for the continuity of the railroad corridor such that a return to railroad use is possible.
26. Railroad - a "*carrier of people or property on cars that are operated on stationary rails"*
27. RIM – *Railroad Information Manual.* Published Standards containing technical requirements for track and project management on MTA Freight property.
28. ROE (Right of Entry) – A contract between the owner or operator of a corridor property and a party needing temporary or transient access to the property which provides this access under certain conditions.
29. Status (Rail Corridor) – As defined by the Maryland State Rail Plan, a railroad may be Active, Inactive, Rail-Banked, or Abandoned.
30. STB – *U.S. Surface Transportation Board.* An independent federal agency that regulates the economic aspects of surface transportation, particularly freight rail.
31. Trail Sponsor – In order for a corridor to become rail-banked under the NTSA, a party must sponsor the corridor's redevelopment for interim-use.
32. TSO (The Secretary's Office) – The consolidated administrative headquarters office of the Maryland Department of Transportation which sets policy for and coordinates the actions of multiple transportation modes.

7 REFERENCED DOCUMENTS

The following external documents are incorporated by reference to this manual.

1. *Manual of Standards and Specifications* (as amended, all sections). Association of American Railroads (AAR)
2. *Guide for the Development of Bicycle Facilities 5th ed. (2024).* American Association of State Highway and Transportation Officials (AASHTO).
3. *Manual for Railway Engineering (Updated Annually)*. American Railway Engineering and Maintenance of Way Association (AREMA).
4. *Portfolio of Trackwork Plans (Updated Annually).* American Railway Engineering and Maintenance of Way Association (AREMA).
5. *Communications and Signals Manual (Updated Annually).* American Railway Engineering and Maintenance of Way Association (AREMA).
6. *Manual on Uniform Traffic Control Devices for streets and Highways (MUTCD)*. (2012). U.S. Dept. of Transportation, Federal Highway Administration.
7. *Rails with Trails: Best Practices and Lessons Learned (2021)*. U.S. Dept. of Transportation, Federal Highway Administration, Federal Railroad Administration.
8. *Highway-Rail Crossing Handbook (2019).* U.S. Dept. of Transportation, Federal Highway Administration, Federal Railroad Administration.

MANUAL NOTES

The following MDOT documents are incorporated by reference to this manual.

9. *Maryland State Rail Plan (2022)*. Maryland Department of Transportation, https://www.mdot.maryland.gov/railplan
10. *Maryland Strategic Asset Management Plan (2019),* Maryland Department of Transportation (MDOT) (and affiliated documentation), https://www.mdot.maryland.gov/ctp
11. *Comprehensive Structural Inspection of Aerial Structures and Bridges for the MTA Freight Rail Line System (2013),* Maryland Transit Administration (MTA), www.mdot.maryland.gov/Freight-Rail
12. *Freight Railroad Grade Crossing Inspection Manual (2012),* Maryland Transit Administration (MTA), www.mdot.maryland.gov/Freight-Rail
13. *Bicycle Policy & Design Guidelines (2015).* Maryland State Highway Administration (SHA), https://mdot.maryland.gov/OPCP/bike_policy_and_design_guide.pdf

8 PREVIOUS EDITIONS

The previous editions of the RIM manual are summarized as follows.

First Edition (2025) – This Edition.

9 SAMPLE DOCUMENTS – ATTACHMENTS

The following is a list of sample documents or forms provided.

1. New Project Initiation Form
2. Application for Engineering Review
3. Minimum License Fee Structure
4. Sample Use/License Agreement
5. Sample Grade Crossing Maintenance Agreement
6. Sample Encroachment Letter
7. Sample Encroachment Inspection Form
8. Sample Grade Crossing Plan Drawings

9.1 New Project Initiation Form

The Project Initiation Form (5 pages) begins on the Next Page.

MANUAL NOTES

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MARYLAND STATE-OWNED RAIL CORRIDOR

PROJECT INITIATION FORM (PIF)

Project Name:	
Organization:	
Point of Contact:	
Contact Information:	
Date:	
Project Reference No. (if applicable):	

PART I – PROJECT LOCATION AND PROJECT DESCRIPTION

A. County/Municipality:

B. Route and/or Street(s):

C. Location description or estimated project limits by mile marker and station:

Start: **End:**

D. Provide a brief project description (Attach Project Narrative if Applicable):

Return to MDOT Rail and Intermodal Freight, FreightRail@mdot.maryland.gov

PART II – PROJECT TYPE AND DESCRIPTION

E. Rail Corridor Projects: Check as many as apply.

- ☐ New trail, sidewalk, or multiuse path
- ☐ Trail operations and maintenance
- ☐ Trail access improvements
- ☐ Grade crossing or intersection improvements
- ☐ Trail safety or signage improvements
- ☐ Landscape, streetscape, lighting, or other enhancements
- ☐ Corridor structure improvement (bridge, structure)
- ☐ Drainage or storm water management improvements
- ☐ Utility crossings or access
- ☐ Other: _____

PART III – PROJECT PLANNING SUMMARY

F. Is the proposed project included in any State, County, or Local Master Plans or other Planning documents?

- ☐ Yes
- ☐ No

If yes, please describe:

G. Have any Public Outreach activities occurred for the proposed project?

- ☐ Yes
- ☐ No

If yes, please describe:

H. Environmental Coordination Activities:

Please indicate any agency coordination or anticipated coordination:

Wetlands/ Waterways

- ☐ MDE
- ☐ MDNR
- ☐ US Army Corps of Engineers
- ☐ US Coast Guard
- ☐ Others (please list)

_____

Endangered Species/Habitat

- ☐ MDNR
- ☐ USFWS
- ☐ Others (please list)

_____

Hazardous Materials

- ☐ Local Health Boards
- ☐ Local Fire Department
- ☐ MDE
- ☐ US EPA
- ☐ Others (please list)

_____

Cultural Resources/Section 106

- ☐ Local Historic Commissions
- ☐ Maryland Historical Trust
- ☐ Tribal Historic Preservation Officer
- ☐ Others (please list)

_____

Section 4f Resources

- ☐ Maryland Historical Trust
- ☐ Local Parks Department
- ☐ MDNR
- ☐ NPS
- ☐ Others (please list)

_____

Anticipated NEPA Documentation Required:

- ☐ CE
- ☐ EA/FONSI
- ☐ EIS
- ☐ None

PART IV – PROJECT COSTS AND FUNDING

I. Estimated Project Costs: _____

J. Anticipated Funding Program(s) - Check all that apply:

- ☐ National Highway System (NHS)
- ☐ Surface Transportation Program (STP)
- ☐ Congestion Mitigation and Air Quality Improvement Program (CMAQ)
- ☐ Federal Railroad Administration (FRA)
- ☐ Kim Lamphier Bikeways Network Program
- ☐ Freight Rail Grant Program
- ☐ MDOT SHA Transportation Alternative Program (TAP)
- ☐ Non-Federal Aid
- ☐ State Aid Roadways
- ☐ Other: _____

PART V – PROJECT MANAGEMENT/PARTNERSHIP PLAN

K. Will this project be solely managed and implemented by the applicant listed on the PIF?

- ☐ Yes
- ☐ No

If No, please list all project partners: _____

L. Who will be responsible, if known, if applicable, for the following phases of the project:

- ☐ Design: _____
- ☐ Permitting: _____
- ☐ Right-of-Way: _____
- ☐ Construction: _____
- ☐ Operations-Maintenance: _____

PART VI – RIF PROJECT REVIEW (To be completed by RIF Staff)

Comments/Observations on Project Location, Project Type, Or Project Description:

Comments/Observations on Project Planning Summary:

Comments/Observations on Project Costs and Funding:

Comments/Observations on Project Management/Partnership Plan:

Project Review:

- ☐ Favorable
- ☐ Unfavorable

Does the Project Require Property Agreement:

- ☐ Yes – Indicate Party to refer request (MTA ORE) (RAILROAD)
- ☐ No

Does the Project Require Design Review and Approval:

- ☐ No
- ☐ Final Only – 90% plans
- ☐ Full Review – 30%, 60%, 90% plans

Return to MDOT Rail and Intermodal Freight, FreightRail@mdot.maryland.gov

MANUAL NOTES

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9.2 Application for Engineering Review

The Application for Engineering Review (2 pages) begins on the Next Page.

MANUAL NOTES

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MARLAND STATE-OWNED RAIL CORRIDOR

APPLICATION FOR ENGINEERING REVIEW (AER)

Date: ____/____/____

PROJECT INFORMATION:

Project Name: _____

Project Location/Address: _____

ORGANIZATION INFORMATION:

Organization: _____

Point of Contact: _____

Contact Information: _____

ENGINEER INFORMATION:

Firm Name: _____

Point of Contact: _____

Contact Information: _____

PLAN REVIEW REQUIRED:

- ☐ One-Step – 90% & Final plans
- ☐ Full Review – 30%, 60%, 90% & Final plans
- ☐ Other

Return to MDOT Rail and Intermodal Freight, FreightRail@mdot.maryland.gov

MARYLAND DEPARTMENT OF TRANSPORTATION
MARYLAND TRANSIT ADMINISTRATION

THIS SUBMITTAL CONSTITUTES:

- ☐ 30% submittal, date: _____
- ☐ 60% submittal, date: _____
- ☐ 90% submittal, date: _____
- ☐ Final submittal, date: _____

INITIAL (30%) Submittal Package Must Include:

- ☐ Completed engineering plan review checklist (this page)
- ☐ Plan sets
- ☐ Outline of Specifications
- ☐ Engineer's preliminary cost estimate
- ☐ Proposed construction schedule

60% & 90% Package Includes:

- ☐ Copy of Original Application (this page)
- ☐ Previous review set check print and tabular revisions response summary (Errata sheet)
- ☐ Engineer's revised cost estimate
- ☐ Revised schedule
- ☐ Environmental reports/permits (as required)

FINAL Submittal Package Includes:

- ☐ Copy of Original Application (this page)
- ☐ Complete plan sets
- ☐ Previous review set check print and tabular revisions response summary (Errata sheet)
- ☐ Design Engineer's final cost estimate
- ☐ Final Schedule

9.3 Minimum License Fee Structure

The Minimum License Fee Structure (2 pages) begins on the next page. The Fee Structure is subject to update and change by the Maryland Board of Public Works.

MANUAL NOTES

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MTA LICENSE AGREEMENT FEES AND RATES
MAY 2008

ITEM	AMOUNT
Preparation Fee	
Application	$750
Engineering Review	$450
Protection of RR Operations	$120/day
Crossings	
Farm	$300
Residential – Single	$600
Residential – Multi	$3,000
Commercial	$2,400
Industrial	$2,400
Land	
Unimproved/Improved	Market
Track	
MTA Maint. – w/land	$8.15/ft
w/o land	$7.85/ft
Lessee Maint. w/land	$6.65/ft
w/o land	$6.35/ft
Outdoor Advertising	
All	Negotiated
Attachments	
Guy Wires, Arms, Brackets	$600-1X
Wire/cables overhanging MTA prop	$540/yr
Pipeline-Transverse/Non-Hazardous	
Pipe Diameter – Interior Dimension	$300 + $18/inch
Manhole	$120
Pipeline-Transverse/Hazardous	
Pipe Diameter-Interior Dimension	$540 + $18/inch
Manhole	$120
Pipeline-Longitudinal/Non-Hazardous	
All Diameters-Interior Dimension	$4.80 per inch /100 feet
Manhole	$120
Pipeline-Longitudinal/Hazardous	
All diameters-Interior Dimension	$7.25 per inch/100 feet
Manholes	$120

MTA LICENSE AGREEMENT FEES AND RATES
MAY 2008

ITEM	AMOUNT
Wire-Transverse	
Telephone/Communication-Overhead	$660
-Subgrade	$725
Coaxial-Overhead (Single Feed)	$240
- Subgrade (Single Feed)	$240
Power-to 69 Kv - Overhead	$540
-Subgrade	$600
to 345 Kv -Overhead	$785
-Subgrade	$845
to 500 Kv – Overhead	$1,025
-Subgrade	$1,100
Over 500 Kv - Overhead	$1,200
-Subgrade	$1,325
Cable-Overhead	$900
-Subgrade	$1,200
Fiber Optic-Local Connection	Negotiated
Wire-Longitudinal	
Telephone-to 1,100 prs-Overhead	$1,800/mi
-Subgrade	$2,400/mi
-to 1,800prs-Overhead	$3,015/mi
-Subgrade	$3,625/mi
-to 1,800+prs-Overhead	$4,225/mi
-Subgrade	$4,825/mi
Power-to 69Kv-Overhead	$2,400/mi
-Subgrade	$3,000/mi
-to 345 Kv-Overhead	$3,625/mi
-Subgrade	$4,225/mi
-to 500 Kv-Overhead	$4,225/mi
-Subgrade	$4,825/mi
Coaxial Cable-Overhead	$3,000/mi
-Subgrade	$3,625/mi
Fiber Optic-Local Connection	Negotiated/or $7.25/conduit/ right-of-way ft.

Note: No annual rate amounts shall be applied for agreements involving overhead or undergrade crossings of the rail right of way within the limits of any public highway to those holding franchise rights. Preparation and review fees will be levied on all agreements.

9.4 Sample Use/License Agreement

The Sample Use/License Agreement (10 pages) begins on the Next Page. The Agreement is subject to update and change by the MTA.

MANUAL NOTES

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LICENSE AGREEMENT
BETWEEN
MARYLAND TRANSIT ADMINISTRATION
a modal administration of the
MARYLAND DEPARTMENT OF TRANSPORTATION
acting for and on behalf of
THE STATE OF MARYLAND
and

_____

THIS LICENSE AGREEMENT ("Agreement") is entered into this _____ day of _____, 202__, by and between the **Maryland Transit Administration** (the "MTA" or "Licensor"), a modal administration of the **Maryland Department of Transportation** ("MDOT"), acting for and on behalf of **The State of Maryland** located at 401 E. Pratt Street, Suite 1500, Baltimore, MD 21202 and _____ (or "Licensee") and its designated contractors, sub-contractors, officials, agents, employees, invitees, successors and assigns located at _____, hereinafter collectively referred to as the "Parties."

RECITALS

WHEREAS, LOCATION, LEGAL DESCRIPTION OF PROPERTY; and

WHEREAS, Licensor is willing to grant to Licensee at its sole risk and expense, a non-exclusive License onto a certain portion of the Property ("Area"), more particularly shown on **Exhibit(s) "A"**, which is attached hereto and made a part hereof, subject to the terms and conditions contained herein and subject to the operation and effect of any and all instruments and matters of record or in fact for the express purpose of DESCRIPTION OF WORK ("Purpose"); and

WHEREAS, the Licensee warrants that its entry onto the Area of Licensor for the Purpose will not adversely affect the interests or operations of Licensor with respect to the Area; and

NOW, THEREFORE WITNESSETH: Licensor hereby grants to Licensee a License to enter upon the Area for the Purpose unless terminated or extended by Licensor as provided in Section XIII. Reciprocal Right of Termination of this Agreement, and in consideration of the mutual entry into this Agreement by the parties hereto, and for good and valuable consideration, including the mutual promises and covenants of the parties hereto, the receipt and sufficiency of which are hereby acknowledged the parties do hereby agree to the following terms and conditions.

I. INCORPORATION OF RECITALS

The foregoing recitals are incorporated herein by reference and made a part of this Agreement.

II. GRANT OF LICENSE

2.1 Licensor grants to designated contractors, sub-contractors, officials, agents, employees, invitees, successors and assigns of Licensee the right of unimpeded access across the Area at all times to maintain and operate the same and as otherwise needed in connection with Licensee's operations, such access being subject to any railroad operations which may occur and have priority; and

2.2 Licensor shall not do anything and shall not suffer any condition to occur upon the Area which would have the effect of unreasonably hindering the rights of access or use hereunder; and

2.3 Licensee shall have the right of ingress and egress from the Area via access over and across Licensor's property by utilizing existing roadways and/or driveways; and

2.4 This Agreement does not convey to Licensee any interest in or to any mineral rights; and

2.5 This Agreement is subject to the operation and effect of any and all instruments or matters of record or in fact; and

2.6 This Agreement shall in no way be construed as the conveyance of real property from one party to the other; nor is it to be construed as the conveyance of any rights other than the right of Licensee and/or its designated employees, contractors, sub-contractors, officials, agents, employees, invitees, successors and assigns to enter that Area for the Purpose; and

2.7 The Licensee hereby accepts the Area in "As Is/Where Is" condition, as being sufficient for the current use, and as complying with all obligations of the Licensor with respect to the condition, order, and repair thereof; and

2.8 Licensee shall, at the discretion of MTA Office of Real Estate, provide as applicable Geographic Information System ("GIS") coordinates as an Esri shapefile (.SHP) or geodatabase (.GDB), projected in a WGS 1984 WebMercator (auxiliary sphere), of any of its facilities, utilities, infrastructure, and appurtenance installed within the Area or other work accomplished within Licensor's Right-of-Way (ROW) to MTA Office of Real Estate within forty-five (45) calendar days of the completion of the Licensee's work.
The GIS Coordinates should be provided on "As Constructed" Plans, which must be signed and sealed by a Maryland Licensed Surveyor or Professional Engineer and/or final design plans that conform to any comments required by Licensor's review including photographs of the completed project; and

2.9 Licensee shall notify the Licensor by email within twenty-four (24) hours of the start of work/entrance onto the Area as well as completion of work or when vacating the Area. Failure to notify Licensor of entry and vacating the Area may result in the termination of this Agreement or the approval of future Agreements; and

2.10 Licensee shall notify Licensor within thirty (30) calendar days of the completion of Licensee's work accessed by the use of said Licensor's ROW as described herein and provide any documentation requested by the Licensor that addressed any comments required by Licensor's review.

III. GRANT OF ACCESS TO THE AREA

3.1 The Area may be subject to continued railroad operations which take priority over this License. Other than continued railroad operations, Licensor shall not do anything and shall not suffer any condition to occur upon the Area which would have the effect of unreasonably hindering the rights of access hereunder. Licensor agrees that the Licensee's right of access to and across the Area is appurtenant to and an essential part of the Licensee's contractual rights in the Area, and that such rights may be terminated by Licensor only upon termination of this Agreement; and

3.2 Licensor reserves the right of entry onto the Area to inspect, maintain, and conduct repairs as needed to ensure the integrity thereof.

IV. LICENSEE'S RESPONSIBILITIES

4.1 Except as otherwise provided in writing from Licensor, the Area shall be used for the Purpose, as defined previously, and no other use or purpose provided; and

4.2 Licensee shall not make alterations and improvements to the Area without prior written approval obtained from Licensor; and

4.3 Licensee shall pay or cause to be paid all taxes and charges levied against the Area during the term of this Agreement; and

4.4 Licensee shall keep the Area free and clear of any debris; and

4.5 Licensee shall be responsible for reasonable maintenance of the Area; and

4.6 Licensee shall ensure that all work of whatever kind performed by Licensee, contractors; subcontractors, officials, agents, employees, invitees, successors and assigns while upon the Area be done in a workmanlike manner and in compliance with all applicable laws, rules, regulations, and orders; and

4.7 Licensee shall comply with all requirements with respect to protection of the environment and shall not place, cause to be placed, or knowingly allow any third party to place upon or under the

Area or the access ways to and from the Area any hazardous substance or other substance which may cause environmental degradation; and

4.8 Licensee shall be solely responsible for any act, commission, or omission of any contractor(s), sub-contractor(s), officials, agents, employees, invitees, successors and assigns or any person operating or acting by or through it; and

4.9 Upon termination or expiration, Licensee shall vacate the Area and leave it in as good as, if not better, condition as it existed upon Licensee's original entry; and

4.10 Licensee shall properly dispose of any solid waste, including, but not limited to, construction, demolition, and land clearing debris, generated from the subject project, at a permitted solid waste disposal facility or shall recycle any such solid waste if possible; and

4.11 The risk of loss or damage to any materials, equipment or any other personal property of Licensee, its designated contractors, sub-contractors, officials, agents, employees, invitees, successors and assigns on the Property in relation to the Project or in the performance of its obligations under the Agreement shall be solely that of Licensee.

4.12 If this License applies to a roadway-railroad crossing at grade, Licensee and Licensor will execute and maintain a concurrent Maintenance Agreement to dictate specific maintenance and financial responsibilities related to the crossing.

V. LICENSOR'S RESPONSIBILITIES

Licensor has the exclusive right to grant easements, leases, and licenses within the Area. Easements, leases, and licenses granted by Licensor may be for any purpose, including, but not limited to, utilities, telecommunications, fiber optic communications, and ROW crossings. Licensor shall receive and retain all revenues from any such easements, leases, and licenses.

VI. LICENSE TERM

For a period of _____ ( ) months/years from the date fully executed, MTA grants to Licensee the right to _____ within the Area on the attached **Exhibit "A"** and for no other purpose. This Agreement does not convey any title or interest of any kind with respect to the ROW. This Agreement shall automatically renew for successive terms of ___ ( ) months/years, except when terminated in accordance with Section XIII. Reciprocal Right of Termination.

If the Licensor sells the property within the ____ ( ) month/year term of the License Agreement, or any renewal, the License Agreement will transfer with the written consent of Licensor and Licensee to the buyer with the same Terms and Conditions of this License Agreement.

VII. FEES

In consideration for the License Agreement hereby granted and **prior to MTA execution of this Agreement**, Licensee shall make a one-time non-refundable payment in the amount of One Thousand and Two Hundred and 00/100 Dollars ($1,200.00) which includes a Document Preparation Fee ($750.00) and Engineering Review Fee ($450.00). If MTA determines that no engineering review is required, the Engineering Review Fee will be deducted from the amount payable. All checks shall include Project Name and MTA RE Number in the memo section and made payable to the Maryland Transit Administration, and delivered to: Maryland Transit Administration, Office of Real Estate, 401 E. Pratt Street, Suite 1500, Baltimore, Maryland 21202, Attention: Director.

VIII. LICENSE FEE

8.1 Licensee shall pay a License Fee of _____ and 00/100 Dollars ($_____), due and payable in advance on the 1st day of _____ each year/month, as agreed. Licensee will not automatically pay the License Fee. Licensor shall submit a License Fee Invoice for each payment due (i.e., monthly, annually, etc.) to the Licensee for the amount stated in this Agreement. The License Fee shall be

payable by check with the Project Name and MTA RE Number in the Memo section to the Maryland Transit Administration, Office of Real Estate, 401 E. Pratt Street, Suite 1500, Baltimore, Maryland 21202, Attention: Director.

8.2 All invoices shall state "License Fee Invoice" on the invoice and include the following:

(a) Invoice Date
(b) Licensor Name: "Maryland Transit Administration"
(c) License Property Address: Street, City, Zip Cod
(d) Purpose (i.e., parking; lease; etc.)
(e) Payment Due Date
(f) Payment Amount Due
(g) Licensee's Federal Employer's ID Number or if an individual, the Licensee's social security number
(h) Late Fees may be applied 30 days after the due date; collections after 90 days due
(i) Additional information as may be specifically required in this Agreement

.

IX. INDEMNIFICATION AND LIABILITY

Licensee shall require in its agreements with contractors, sub-contractors, officials, agents, employees, invitees, successors and assigns that they shall protect, indemnify, defend, and hold harmless MDOT, MTA and State of Maryland officials, Railroad Operators as necessary, officers, agents, employees, invitees, successors and assigns with respect to any and all liabilities arising out of or in any way connected with:

9.1 The exercise or performance by Licensee's contractors and sub-contractors of any of its rights or obligations hereunder; and
9.2 The use or operation by Licensee's designated contractors, sub-contractors, officers, agents, employees, invitees, successors and assigns of the Area of the Property; or
9.3 Work performed on behalf of Licensee within the Area of the Property. As used herein, "Liabilities" shall include any losses, claims, damages, suits, or costs whatsoever which arise from the negligence of Licensee's contractors or sub-contractors; and

(a) Out of injury to any person (including without limitation loss of limb or death); and

(b) Out of damage to or destruction of any MTA property including damage to the _____ and any cost incurred by MTA to provide alternate means of transportation for any person whomsoever; and

(c) Out of damage to or destruction of the environment, including without limitation, land, air, water, wildlife, or vegetation (including, but not limited to, costs and expenses incident to monitoring, remedial actions, proceedings or investigations or the defense of any claim); or

(d) Out of, or occasioned by, any breach or default by Licensee (or its designated contractors, sub-contractors, officials, agents, employees, invitees, successors and assigns in performing any of its obligations shall survive termination of this Agreement with respect to liabilities arising during its term; and

(e) Out of interruption of rail or transit services including without limitation, loss of revenue and income.

X. INSURANCE

Licensee prior to the effective date of the work, and at all times during the term shall require its contractors and sub-contractors (of any tier) performing activities while performing activities hereunder, to procure and maintain, insurance which shall protect MDOT, MTA and State of Maryland, Railroad Operators as

necessary, their officers, contractors, sub-contractors, officials, agents, employees, invitees, successors, and assigns from claims which may arise out of or as a result of Licensee's designated contractors, sub-contractors, officials, agents, employees, invites, successors and assigns activities under this Agreement, whether such activities be by Licensee, by any designated contractors, sub-contractors, officials, agents, employees, invitees, successors, and assigns, by anyone directly or indirectly employed by any of them or by anyone for whose acts any of them may be liable. In furtherance of this obligation, Licensee shall procure and maintain at least the minimum levels of insurance coverage as set forth below.

10.1 **Commercial General Liability Insurance:** Commercial General Liability Insurance with minimum limits of Five Million and 00/100 Dollars ($5,000,000) per occurrence, written on and occurrence form. When the minimum contract amounts can only be met when applying the umbrella/excess policy, the umbrella/excess policy must follow form of the underlying policy and be extended to "drop down" to become primary in the event the primary limits are reduced, or aggregate limits are exhausted. The coverage shall include:

[X] Personal and Advertising Injury Coverage
[X] Products and Completed Operations Coverage
[X] Independent Contractors Coverage
[X] Terrorism Coverage (as needed)
[X] XCU Coverage (explosion, collapse, and underground hazards (as needed)
[X] Contractual liability exclusion (applicable to work to be performed within fifty (50) feet of railroad tracks) must be removed
[X] Additional Insured Endorsement naming Maryland Department of Transportation, Maryland Transit Administration and State of Maryland and _____ (**jurisdiction or agency**)
[X] Waiver of Subrogation Rights in favor of MTA

10.2 **Workers' Compensation Insurance:** Meeting the statutory requirements of the jurisdiction where the work will be performed, including Employer's Liability coverage with minimum limits of One Million 00/100 Dollars ($1,000,000) each accident or disease; and

10.3 **Business Automobile Liability Insurance:** With minimum limits of One Million and 00/100 Dollars ($1,000,000) per occurrence covering contractor against claims for bodily injury and property damage arising out of the ownership, maintenance or use of any owned, hired, or non-owned motor vehicle. MTA shall be added as an additional insured on the policy; and

10.4 **Railroad Protection Liability Insurance:** If any work is performed within fifty (50) feet vertically or horizontally of active railroad tracks:

(a) Licensee's contractors, sub-contractors and or agent(s) shall provide, with respect to activities to be performed within fifty (50) feet vertically or horizontally of railroad tracks, Railroad Protective Liability Insurance (RPLI) (ISO/RIMA Form G-00-35 or equivalent), in the name of MDOT, MTA and State of Maryland. The policy shall have limits of liability of not less than Five Million and 00/100 Dollars ($5,000,000) per occurrence, combined single limits, for coverage A & B, for losses arising out of injury to or death of any person, and for physical loss or damage to or destruction of property, including the loss of use thereof. A Ten Million and 00/100 Dollars ($10,000,000) annual aggregate may apply. If equivalent, or better, wording is not contained in the policy form, the endorsements shall be included; and

AS APPLICABLE: **If the work is non-construction related** the Policy shall have limits of liability of not less than Two Million and 00/100 Dollars ($2,000,000) per occurrence, combined single limits, for coverage A & B, for losses arising out of injury to or death of any person, and for physical loss or damage to or destruction of property, including the loss of use thereof. A Six Million and 00/100 Dollars ($6,000,000) annual aggregate may apply. If equivalent, or better, wording is not contained in the policy form, the endorsements shall be included; or

(b) It is agreed that in this policy of insurance "Physical Damage to Property" means direct and accidental loss of or damage to rolling stock and their contents, mechanical construction equipment or motive power equipment, railroad tracks, roadbed, signals, bridges or buildings; and

10.5 If at any time the above required insurance policies should be cancelled, terminated or modified so that the insurance is not in full force and effect as required herein, MTA may terminate this permission for default or, at its sole option, obtain insurance coverage equal to that required herein, the full cost of which shall be charged to and paid by Licensee; and

10.6 Each policy referenced hereinabove, by endorsement, shall include the following required clauses; and

10.7 This insurance coverage shall not be cancelled by this Insurance Company, nor shall any changes be made which alter, restrict or reduce the insurance coverage so provided or change the name of the Insured(s), without first having given thirty (30) days written notice to (1) **LICENSEE** Attention: _____ and (2) Maryland Transit Administration, Office of Real Estate, 401 E. Pratt Street, Suite 1500, Baltimore, Maryland 21202, Attention: Director, all as evidenced by receipt of registered letter. The responsibility for such notice will be with the Licensee; and

10.8 Such insurance as afforded by this policy for the benefit of MDOT, MTA and State of Maryland shall be primary and noncontributing with insurance afforded by this policy; and

10.9 In the event of any occurrence, accident or claim made under this policy, this Insurance Company shall not contend that MDOT, MTA and State of Maryland (are) not liable in tort by virtue of being a governmental instrumentality or public or quasi-public body; and

10.10 Waiver of Subrogation shall apply under the General Liability/Excess Liability, Automobile Liability and Workers Compensation policies in favor of MDOT, MTA and the State of Maryland; and

10.11 As evidence of the above insurance, License shall, prior to the effective date of this permission, require any designated contractors, sub-contractors, agents, invitees, employees, successors, and assigns performing activities under this permission to file duly executed Certificates of Insurance issued by the insurance broker of all insurance required herein, including special endorsements. Each such Certificate shall be in a form satisfactory to MTA; shall list the various coverage types and limits; shall name MDOT, MTA and State of Maryland as additional insureds; and shall indicate that the Commercial General Liability policy has been endorsed as described above. All insurance shall be placed and maintained with insurers licensed and authorized to do business in the State of Maryland and who have an A.M. Best rating of "A" or better, unless otherwise approved by MTA. MTA's approval or failure to disapprove insurance furnished by Licensee shall not diminish or release Licensee from full responsibility for liability as set forth herein. **Prior to MTA execution of this Agreement**, Licensee shall furnish MTA with a copy of Certificate of Insurance and Endorsements of each insurance policy, as applicable and must be approved by the MTA Office of Safety Management and Risk Control; and

10.12 Whenever either party becomes aware of any claim, injury, death, damage, or loss of any kind to persons or property arising out of or connected with this Agreement, that party shall have the right to fully investigate the claim. Each party shall cooperate with the other in any such investigation. All costs and expenses in connection with the investigation, adjustment, and defense of any claim or suit under this permission, including prorated salaries or wages of full-time agents or employees of either party, including full-time attorneys, engaged directly or indirectly in such work, shall be included as costs and expenses in applying the liability provisions set forth in this permission.

XI. USE OF PROPERTY

The Licensee will not interfere with MTA or any other person on the Property who is authorized to be there by MTA. The Licensee will strictly confine itself, its employees, agents, and all others connected in any way with the Purpose to the implementation of the Purpose and will conduct no other activity at the Property.

The Licensee and those authorized by this Agreement for on behalf of the Licensee, shall conduct all activities to and in the Area in a safe and secure manner using all precautions to protect and secure persons and property at and near the Property during the Licensee's occupancy and use of the Area, including the provision of having individual(s) receive training and certification in the Railroad Worker Protection (RWP) Program as described in Section XII: RWP TRAINING AND RED TAG/WORK BLOCK.

XII. RAILROAD WORKER PROTECTION TRAINING (RWP) AND RED TAG / WORK BLOCK PROCEDURES

If work is to be done by any party other than the railroad operator or the Licensor, the following apply,

1. MTA Standard Operating Procedures (SOP) are established for any work within fifty (50) feet vertically or horizontally of active rail lines to ensure a safe and proper environment for the purposes of maintenance, modification, repair, inspection, or other associated tasks in the rail right-of-way.
2. All individuals, including contractors of the Licensee, performing work in the Area must be qualified as Roadway Workers under 49 CFR 214 Subpart C ("RWP") and have received valid training to acquire that qualification. The Licensee must provide MTA a copy of all RWP certification cards issued indicating successful completion of the RWP Training prior to MTA execution of this Agreement, if applicable. Online training is available through third parties.
3. Prior to and during any work in the Area within fifty (50) feet vertically or horizontally of active railroad tracks, the Licensee shall coordinate all entry into the area with the operating railroad and abide by the railroads procedures for entry and work around railroad operations. Licensee shall maintain coordination with the applicable railroad contact point:

_____

or designee, to ensure the safety and security of the Licensee's personnel working in the Area.

XIII. RECIPROCAL RIGHT OF TERMINATION

13.1 This Agreement may be terminated by Licensee by providing ten (10) days prior written notice to Licensor; and

13.2 Notwithstanding the foregoing, this Agreement may be terminated by Licensor in whole, or from time to time in part, whenever the Licensor determines that termination is in the best interest of the State of Maryland upon ten (10) days prior written notice to Licensee; and

13.3 In the event of termination under either Subsection 13.1 or 13.2 of this Section, unless otherwise instructed by Licensor, Licensee shall:

(a) Remove any improvements Licensee has made in, on or to the Property; and

(b) Restore the Property to a condition satisfactory to Licensor, all at Licensee's sole responsibility and expense.

XIV. SEVERABILITY

If any term, covenant, condition or provision of this Agreement or the application thereof to any person or circumstance shall at any time or to any extent be determined to be invalid or unenforceable by a court of competent jurisdiction, the remainder of this Agreement or the application thereof, to any person or circumstance other than those as to which it is held invalid or unenforceable, shall not be affected thereby. It is the intent of the parties that each term, covenant, condition, or provision of this Agreement, including, but not limited to, those that may be determined to be invalid or unenforceable as written, shall be valid and enforced to the fullest extent permitted by and consonant with then existing law.

XV. RELATIONSHIP BETWEEN THE PARTIES

The relationship between the parties shall be that of Licensor and Licensee. Nothing contained in this Agreement shall be construed as constituting either party hereto as a partner or joint venture of the other. The contractors, sub-contractors, officials, agents, employees, invitees, successors and assigns of either party shall not be considered employees of the other party. No party or its contractors, sub-contractors, officials, agents, employees, invitees, successors and assigns shall have, nor represent themselves as having, any authority to approve or acceptance any proposal on behalf of the other party or make any promises, representations, contracts, or other commitments binding upon the other party. All personnel shall be under the exclusive supervision, direction, and control of their respective employer or principal.

XVI. NOTICES

Where notice or approval is required in this Agreement, it shall be given in writing, by certified mail, return receipt requested, as follows:

As to MTA, notice or approval shall be addressed to:
Maryland Transit Administration
Office of Real Estate
401 E. Pratt Street, Suite 1500
Baltimore, Maryland 21202
Attention: Director

With Copy to
MDOT Office of Rail and Intermodal Freight
7201 Corporate Center Drive, Hanover, MD 21076
or via email to FreightRail@Mdot.Maryland.gov

As to Licensee, notice or approval shall be addressed to:
COMPANY
ADDRESS
ATTENTION, TITLE

XVII. COMPLIANCE WITH THE LAW

Licensee agrees that it shall abide by all Federal, State and local statutes, ordinances, rules and regulations pertaining to or regulating the work to be performed hereunder, including those now in effect and hereafter enacted, promulgated or adopted. Any violation of said statutes, ordinances, rules, and regulations shall constitute a breach of this Agreement and shall entitle MTA to terminate this Agreement immediately upon delivery of written notice of termination to Licensee. All permits, licenses, and approvals for the use of the property shall be the responsibility of Licensee.

XIX. MODIFICATION

This Agreement contains all the terms and conditions made between the parties and may not be modified, orally or in any other manner, other than by a written amendment to this Agreement signed by the legally authorized representatives of both parties hereto.

XX. NO REPRESENTATIONS OR WARRANTIES

Licensor makes no representations or warranties as to the condition of the Property, and Licensee acknowledges by and upon execution of this Agreement that Licensee and/or Licensee's designated contractors, sub-contractors, officials, agents, employees, invitees, successors and assigns or other persons as permitted by Licensee shall enter the Property and conduct the activities authorized hereunder at their sole risk.

XXI. HEADINGS

The within headings are for convenience and shall not affect any construction or interpretation of this Agreement. The singular shall be read to include the plural, and vice versa, unless the context clearly requires otherwise.

XXII. REMEDIES CUMULATIVE

Any and all remedies provided for enforcement of the provisions of this Agreement are cumulative and not exclusive, and the parties shall be entitled to pursue either the rights enumerated in this Agreement or remedies authorized by law or both.

XXIII. MISCELLANEOUS

This Agreement:

23.1 Shall insure to the benefit of and bind the parties and their respective successors or assigns; and
23.2 Constitutes the entire agreement between the parties with respect to its subject matter; and
23.3 May be executed in several counterparts, each of which shall constitute an original; and
23.4 Shall survive its termination or expiration with respect to any claim, damage, injury, or death arising or occurring prior to such termination or expiration; and
23.5 May be amended by and only by an instrument executed and delivered by each party hereto; and
23.6 Shall not be assigned or in any matter transferred, with respect to its rights and obligations, without obtaining the prior written consent of MTA, which may be granted or withheld in MTA's sole discretion; and
23.7 Is not for the benefit of or enforceable by any third party and shall not be deemed to create any rights or benefits in any third part; and
23.8 Shall be governed by the laws of the State of Maryland and any disputes arising from this License shall be resolved in the courts of Maryland, without regard to principles of conflicts of laws.

XXIV. SIGNATORIES

The individuals who sign this Agreement on behalf of Licensee and Licensor warrant and declare that they are authorized and empowered to enter into this Agreement on behalf of Licensee and Licensor and to bind Licensee and Licensor to its terms and conditions.

XXV. ELECTRONIC EXECUTION AGREEMENT

The words "execution", "signed", "signature", and such similar terms used in this Agreement will not be deemed to include electronic signatures and electronic records. An electronic signature or electronic record will have the same legal effect, validity, or enforceability as:

25.1 A manually executed signature; and
25.2 The use of a written record keeping system, as the case may be, to the extent permitted by applicable law, including the Federal Electronic Signatures in Global and National Commerce Act, Title 21 "The Maryland Uniform Electronic Transactions Act" of the Commercial Law Article of the Annotated Code of Maryland, or any similar State law based on the Uniform Electronic Transactions Act.

SIGNATURES ON FOLLOWING PAGE

IN WITNESS WHEREOF the parties hereto have caused this Agreement to be properly executed by their duly authorized representatives as of the day and year written above.

WITNESS:

MARYLAND TRANSIT ADMINISTRATION

_____ Date

BY: _____(SEAL)
Matthew A. Lattin, Director
Office of Real Estate

APPROVED AS TO FORM AND LEGAL SUFFICIENCY FOR MTA

_____
Assistant Attorney General, MTA Date

FOR CERTAIN FREIGHT LINES ONLY:

WITNESS:

MARYLAND DEPARTMENT OF TRANSPORTATION, solely as a consenting party

_____ Date

BY: _____(SEAL)
John Thomas, Director
Office of Planning and Capital Programming,
Rail and Intermodal Freight Section

WITNESS:

LICENSEE

_____ Date

BY: _____(SEAL)
Name
Title

LICENSEE OPTION: APPROVED AS TO FORM AND LEGAL SUFFICIENCY

_____
Date

9.5 Sample Grade Crossing Maintenance Agreement

The Sample Grade Crossing Maintenance Agreement (6 pages) begins on the Next Page. The Agreement is subject to update and change by the MTA.

MANUAL NOTES

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SAMPLE GRADE CROSSING MAINTENANCE AGREEMENT

THIS GRADE CROSSING MAINTENANCE AGREEMENT ("Agreement") effective as of the _____day of _____, 20_____, (the "Effective Date") is between **RAILROAD NAME**, a _____ corporation having its address at _____, hereinafter called ("Railroad") acting as Railroad Operator of the property ("Property") belonging to the Maryland Transit Administration ("Administration") and **PARTY NAME,** an _____ entity having its address at _____, hereinafter called ("User").

WITNESSETH:

WHEREAS, the User has entered into a License Agreement, Lease, Contract, Easement or other formal occupancy arrangement ("Occupancy") with the Administration providing for the legal use and occupancy of certain parts of the Property for the purposes outlined in that agreement which generally require as a condition of occupancy, construction and/or maintenance of an at-grade roadway crossing across and over the tracks, right-of-way and property operated by the Railroad, hereinafter referred to as the ("Crossing") and;

WHEREAS, the Railroad, having management authority by contract with the Administration generally for the maintenance and operation of the railroad, is agreeable to provide construction and/or maintenance services ("Maintenance") for the Crossing as described in Section 1 of this Agreement, subject to the terms and conditions contained in this Agreement, and;

WHEREAS, this Agreement is not intended to modify the roles, responsibilities and/or obligations of any party in the Occupancy agreement, and the Railroad accepts no additional responsibility with regard to the Users roles, responsibilities and/or obligations to the Administration, unless outlined in this Agreement, and;

NOW, THEREFORE, in consideration of the mutual promises contained herein and other good and valuable consideration, it is agreed between the **RAILROAD** and **PARTY NAME** as follows:

1. DESCRIPTION OF CROSSING

A level _____ at-grade crossing (the "Crossing") of the _____track, identified as _____ - _____ feet in length, more or less, crossing that track at its center point at the engineering station, [_____+_____] and mile post ____.____. The DOT number of said crossing is or will be _____. The surface of the Crossing is or will be _____. Unless defined differently in the Occupancy, the Crossing is understood to include all roadway surfaces, flangeways, active or passive warning devices, track or road sensors (if equipped), electrical services (if equipped), circuitry (if equipped), track structure, and provisions for lateral drainage. Advance Warning signage when positioned off the Property will not be covered by this Agreement.

2. SCOPE OF MAINTENANCE SERVICES

Railroad shall provide design and construction services if a new Crossing is necessary, or an existing Crossing must be rebuilt. For existing Crossings, Railroad shall provide maintenance of that Crossing such that the Crossing remains in a state of good repair throughout its designed life span. When Railroad makes the determination, subject to Administration concurrence, the complete or partial replacement of the Crossing is more economical than its continued maintenance, Railroad will have the option to remove and replace any or all of the Crossing in accordance with the previous design of the Crossing, or a new design of the Crossing as required. User shall not directly undertake any alteration, modification, or expansion of the Crossing without prior written approval of the Railroad and the execution of any such additional agreements as Railroad may determine are necessary.

3. DESIGN

The Railroad shall be responsible for producing an acceptable design for the Crossing in accordance with all applicable laws and regulations. The design shall comply with all design standards established by the railroad such as materials and clearances.

a. The final design of any permanent Crossing is subject to review and approval by the Administration.
b. If the Crossing is a grade crossing, final design is subject to additional MDOT review pursuant to Maryland State Transportation Code, Title 8, Subtitle 6, Part VIII §8-639. The costs of any additional design features which are required by MDOT, including but not limited to flashing lights, bells, gates, or track circuits, will be the responsibility of the User, unless otherwise specified in the Occupancy.

4. USE FOR THIRD PARTIES

Crossings shall be for the exclusive use of the User and for purposes documented in the Occupancy. Any uses of the Crossing other than those in the Occupancy, having a deleterious effect on the Crossing's condition beyond what is normally expected, will be considered a breach of this Agreement. User will notify Railroad's corporate office at least forty-eight (48) hours in advance to request entry upon the Property for any reason other than the prescribed use of the Crossing, Railroad will determine to what degree a railroad watchmen or representative will be required to facilitate this request.

5. TERM

This Agreement is for an initial term of one (1) year and shall continue in effect thereafter from year to year, subject to termination by RAILROAD or PARTY NAME upon sixty (60) days prior written notice.

6. OWNERSHIP

Ownership of the rails, materials and fixtures which make up the Crossing, being an integral part of the railroad Property, shall belong to the Administration unless specified otherwise in the Occupancy.

7. COSTS AND PAYMENTS

User shall be responsible for the costs to provide the Maintenance services in this Agreement. User will make payment to Railroad in the following manner:

a. Annual License Fee: An annual license fee will be required for all crossings.

b. Annualized Replacement Cost: Annualized replacement costs, based upon $1/10^{th}$ of the estimated cost of the Crossing installation will be charged to the User. This charge is subject to yearly adjustment based on annual increase to Consumers Price Index. Fees are payable in advance; the first payment being made at the time this agreement is executed.

8. RAILROAD'S RIGHTS AND OBLIGATIONS

Railroad shall maintain the Crossing to ensure its continued function for the purpose it was designed. The Railroad shall provide 30-day's notice to User for any maintenance actions which could disrupt the use of the Crossing and coordinate with the User for all construction activities to minimize the effects on the User and the Railroad. In the event the Crossing must have emergency repairs the Railroad shall immediately notify the User and seek to complete the emergency repairs with minimal effect to the User. Railroad shall retain all documents, agreements, plans, and correspondence related to this Agreement. Such documents shall be made available to the Administration.

9. LIABILITY

To the fullest extent permitted by state law, the PARTY NAME shall, and shall require its contractor to, indemnify, defend and hold harmless RAILROAD, its affiliates, officers, directors and employees from any and all suits, claims, liability, losses, damages, expenses and costs (including reasonable attorney's fees) incurred by or asserted against RAILROAD whether for personal injury or death or damage to property of any person or persons whomsoever, relating to, resulting from or arising out of any future maintenance or replacement of the crossing and/or warning devices by RAILROAD, the performance of work by RAILROAD required to be performed by PARTY NAME hereunder, or the use of the crossing or PARTY NAME facilities, including but not limited to pedestrian walkways, at or near the crossing and regardless of whether such injury or damage is caused or alleged to be caused, in whole or in part, by the negligence of RAILROAD. Notwithstanding the foregoing, the PARTY NAME shall have no indemnification obligation for the intentional, wrongful acts of RAILROAD.

10. ENVIRONMENTAL REQUIREMENTS

a. User and Railroad will comply with all federal, state, and local laws, rules, regulations, and ordinances which relate to the control of air, water, noise, solid waste, and other pollution or to the storage, transport, release or disposal of hazardous materials, substances, or waste. User will assume the responsibility for the costs of all modifications, repairs, or additions to the Crossing as necessary to affect such compliance, and User will install and bear the expense of any and all Crossings, devices or equipment required by any such laws, rules, regulations or ordinances, or by the orders of any governmental agency.
b. User and Railroad shall not dispose of any wastes of any kind, whether or not hazardous, on the right of way or property of Railroad, and User shall not conduct any activity on said right of way or property which may or does require a hazardous waste treatment, storage or disposal facility permit from either the federal or state agencies.
c. Regardless of any Railroad acquiescence, User agrees to indemnify, protect and hold Railroad harmless from and against all liabilities, fines and penalties arising or growing out of a violation of subsections (a) and (b) of this Section, and User agrees to reimburse Railroad for all costs and expenses incurred by Railroad in eliminating or remedying such violations unless such liability, fines, or penalties arise solely from the negligence of Railroad.
d. User hereby waives any and all statutes of limitation applicable to claims, demands or suits by Railroad under the preceding subsections of this Section, and User further agrees that it will not raise or plead a statute of limitation defense against Railroad in any claim, action or proceeding arising or growing out of User's failure to comply with this Section.

11. SUCCESSORS, ASSIGNS AND THIRD-PARTY RIGHTS

a. The provisions of this Agreement shall inure to the benefit of the successors and assigns of Railroad. User agrees that, in the event it permits a third party to use the Crossing, it will furnish Railroad written notice in advance of any such third-party use. User further agrees that, until the use of the Crossing by any such third party shall be covered by an appropriate agreement between said third party and Railroad, such third party shall be deemed a Party affiliated with the User under this Agreement.
b. This Agreement is not assignable or transferable by User, in whole or in part, except with the advance written consent of Railroad.

12. EFFECTIVE DATE AND TERMINATION

a. This Agreement shall be effective as of the date first above written. Either Railroad or User may terminate this Agreement for convenience at any time upon sixty (60) days' prior written notice of the election to terminate.

b. In the event of a breach by User of any of its obligations under this Agreement, Railroad shall have the right to terminate this Agreement on account of breach by giving User not less than ten (10) days' prior written notice of the election to terminate.

13. INSURANCE

User will maintain insurance as indicated in the Occupancy. If User fails to maintain specified levels and types of insurance, it will be considered a breach of this Agreement.

14. HEADINGS

The headings used in this Agreement are for convenience only and shall not affect the construction or interpretation of any section of this Agreement. If any provision of this Agreement or any part of any provision should become or be found to be invalid or unenforceable, the remaining provisions and parts shall continue to be fully effective and enforceable. Where necessary or appropriate in this Agreement, the singular and plural shall be interchangeable, and words of any gender shall include all genders.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement. The parties agree that if an authorized officer of a party fully signs this Agreement in the appropriate location(s) below and then returns that signature to the other party via electronic means with a pdf or similar scanned copy of that signature, then that scanned signature shall serve as that party's signature for the Agreement, and, upon full execution of the Agreement by all parties, shall create a legally binding Agreement. In the alternative, either party may fully sign an actual copy of this Agreement and return the same to the other party.

PARTY SIGNATURE:

WITNESS: **NAME:**_____

_____ BY: _____(SEAL)
Date Name
Title

RAILROAD SIGNATURE:

WITNESS: **NAME:**_____

_____ BY: _____(SEAL)
Date Name
Title

WITNESS: **MARYLAND TRANSIT ADMINISTRATION**

_____ BY: _____(SEAL)
Date Matthew A. Lattin, Director
Office of Real Estate

APPROVED AS TO FORM AND LEGAL SUFFICIENCY FOR MTA

_____
Assistant Attorney General, MTA Date

9.6 Sample Encroachment Letter

MARYLAND DEPARTMENT OF TRANSPORTATION

Wes Moore
Governor
Aruna Miller
Lieutenant Governor
Paul J. Wiedefeld
Secretary

December 22, 2024Year

Sent [Via Email] [First Class] [Certified] [Other]

Encroachment Responsible Party Name
Address
City, State, Zip

Subject: Encroachment on Maryland Transit Administration Railroad Corridor Property
(First Letter) (Second Letter) (Last Letter)

Dear (Name),

As you may be aware, the Maryland Transit Administration (MTA) owns the railroad corridor next to your property. A recent site inspection of the railroad corridor revealed _____ _____.
Based on available information, we believe these features are occupying MTA property without authorization.

On behalf of the Director of the MTA Office of Real Estate, we would like to discuss this matter with you and review our findings. If documentation exists which authorizes these features to occupy MTA property, we request copies please be sent to us to review. Please contact (Name), Freight Rail Real Estate Manager, at (000)000-0000, to discuss this matter further and potential remedies.

Thank you for your consideration in this matter, we look forward to hearing from you.

Sincerely,

Name
Rail Program & Policy Manager
Office of Rail & Intermodal Freight
Maryland Department of Transportation
Cell: (000) 000-0000

CC: Name, Director, Office of Rail and Intermodal Freight, MDOT
Name, Director, Office of Real Estate, MTA
Name, Freight Rail Real Estate Manager, MTA
Name, Principal Counsel, MTA

Attachment:
xxxxxxxxxx -Encroachment Inspection form.Pdf

7201 Corporate Center Drive, Hanover, Maryland 21076 | 410.865.1000 | Maryland Relay TTY 410.859.7227 | mdot.maryland.gov

MANUAL NOTES

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9.7 Sample Encroachment Inspection Form

MARYLAND DEPARTMENT OF TRANSPORTATION
MARYLAND TRANSIT ADMINISTRATION

MARLAND STATE-OWNED RAIL CORRIDOR
ENCROACHMENT INSPECTION FORM (EIF)

Date: _____/_____/_____

LOCATION INFORMATION:

Railroad corridor name and approximate mile post or engineer station:

_____

Parcel Name: _____

Parcel Location/Address: _____

Parcel Number/Code: _____

INSPECTOR INFORMATION:

Inspected By: _____

Contact Information: _____

ENCROACHMENT INFORMATION:

Indicate type(s) of encroachment: (Structure) (Areal) (Grade Crossing) (Garbage) (Removed) (Other)

Were all boundaries walked/inspected? Describe:

_____

_____

Estimate approximate size and dimensions:

_____

Survey Status: (Needed) (Not Needed) (Conducted) (Unknown)

Are survey monuments or other markers apparent?

_____

Return to MDOT Rail and Intermodal Freight, FreightRail@mdot.maryland.gov

MARYLAND DEPARTMENT OF TRANSPORTATION
MARYLAND TRANSIT ADMINISTRATION

ENCROACHING PARTY:

Has contact been made with a responsible party? (Yes) (No)

Date of Contact:_____

Contact information for responsible party (if known):

_____

_____

Were any commitments made to remove the encroachment? Describe:

_____

_____

Follow Up With: (Inspection) (Use Agreement) (Warning Letter) (OAG Referral) (Thank You)

Date for Follow Up? _____

INSPECTION DETAILS:

This Inspection Is: (FIRST) (SECOND) (THIRD) (FOURTH)

_____

Signature and Date of Inspector

Return to MDOT Rail and Intermodal Freight, FreightRail@mdot.maryland.gov

9.8 Sample Grade Crossing Plan Drawings

The Sample Grade Crossing Plan Drawings (3 pages) begin on the Next Page.

MANUAL NOTES

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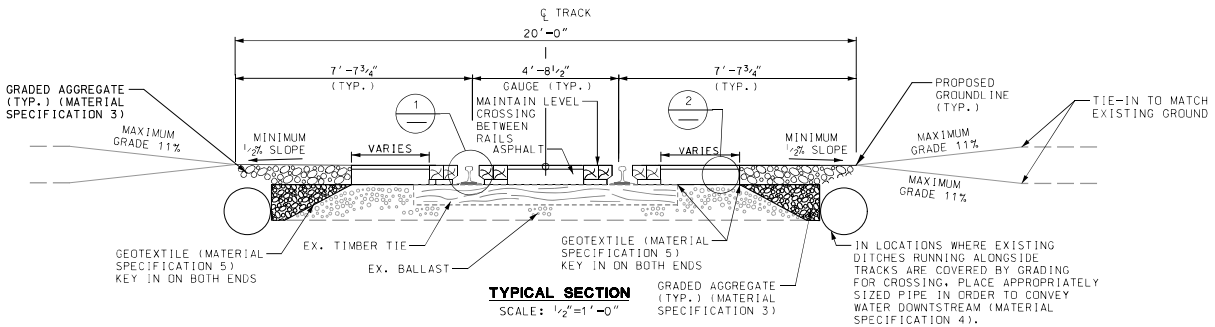
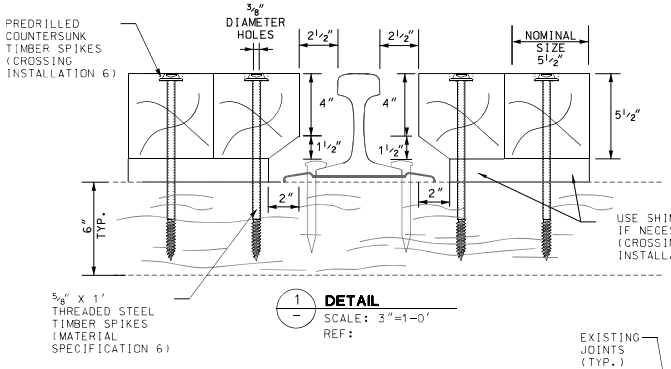
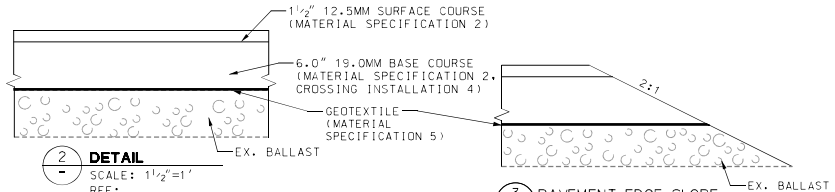


TYPICAL SECTION
SCALE: 1/2"=1'-0"

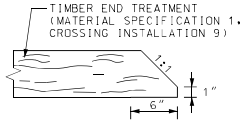


1 DETAIL
SCALE: 3"=1'-0'
REF:

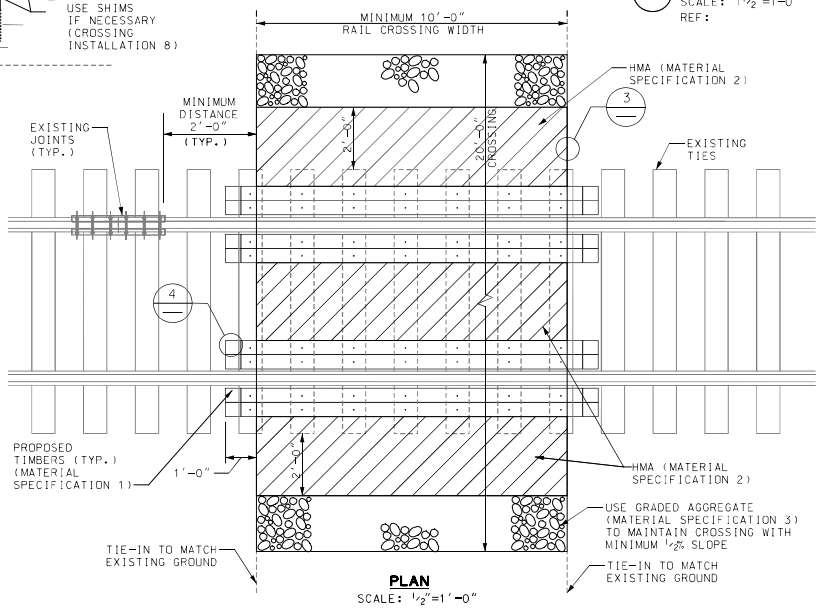


2 DETAIL
SCALE: 1 1/2"=1'
REF:

3 PAVEMENT EDGE SLOPE
SCALE: 1 1/2"=1'-0'
REF:



4 TIMBER END TREATMENT
SCALE: 1 1/2" = 1'
REF:



PLAN
SCALE: 1/2"=1'-0"

CROSSING INSTALLATION REQUIREMENT

1. COORDINATE INSTALLATION OF THE CROSSING WITH OPERATING RAILROAD.REVIEW CONDITIONS OF EXISTING TIES TO ENSURE THAT TIES ARE IN GOOD CONDITION TO SUPPORT THE INSTALLATION OF THE CROSSING.
2. CROSSING INSTALLER IS RESPONSIBLE FOR ALL NECESSARY PERMITS AND APPROVALS FROM PRIVATE OWNERS AND PUBLIC AGENCIES.
3. INSTALL TRAFFIC SAFETY DEVICES AS NECESSARY.
4. FOR 6 1/2" RAIL HEIGHT USE 5" THICK BASE COURSE.
5. NEW CROSSING SHALL NOT COVER EXISTING RAIL JOINTS.
6. BORE 3/8" DIAMETER HOLES IN WOOD TIMBERS TO THE PATTERN SHOWN IN PLAN VIEW FOR THE 5/8" STEEL TIMBER SPIKES.
7. BEYOND THE ASPHALT LIMIT, USE GRADED AGGREGATE TO MAINTAIN A MINIMUM 1/2% SLOPE FOR A TOTAL DISTANCE OF 20 FEET.
8. HEIGHT OF RAIL VARIES. USE SHIM BOARDS TO RAISE THE TIMBER HEIGHT LEVEL WITH TOP OF THE RAIL.
9. CUT BOTH ENDS OF TIMBERS AT 1:1.

MATERIAL SPECIFICATIONS

1. SOFTWOOD TIMBERS (6"X6"X12') AND SHIM BOARDS (2"X12") TREATED FOR GROUND CONTACT (#2 MIN.).
2. HOT MIX ASPHALT (HMA) WITH 1 1/2" 12.5MM SURFACE COURSE AND 6.0" 19.0MM BASE COURSE.
3. GRADED AGGREGATE PER SHA STANDARD SPECIFICATIONS SECTION 901.
4. USE A MINIMUM PIPE SIZE OF 18" CMP OR HDPE WHERE NECESSARY.
5. PLACE GEOTEXTILE CLASS "PE" TYPE III BETWEEN THE GRAVEL AND EXISTING BALLAST.PLACE GEOTEXTILE CLASS "PE" TYPE III BETWEEN THE ASPHALT AND EXISTING BALLAST.
6. 5/8" RECESSED HEAD TIMBER SCREWS (GALVANIZED), LEWIS NUT & BOLT CO. (1-800-328-3480) OR APPROVED EQUAL.

BILL OF MATERIAL

ITEM	DESCRIPTION	QUANTITY
1	ASPHALT BASE COURSE	TONS
2	GRADED AGGREGATE	*
3	PIPE (18" MINIMUM)	**
4	GEOTEXTILE	10 SY
5	6"X6"X12' SOFTWOOD TIMBER PLANKS	16 EA
6	5/8"X1' STEEL TIMBER SPIKES	56 EA

* QUANTITY VARIES FOR EACH CROSSING
** PIPE SIZE AND NUMBER OF PIPES VARIES FOR EACH CROSSING

LEGEND

GRADED AGGREGATE

SOFTWOOD TIMBERS

MARYLAND DEPARTMENT OF TRANSPORTATION
MARYLAND TRANSIT ADMINISTRATION

MTA Maryland

NO.	DESCRIPTION	BY	DATE
	REVISIONS		

DESIGN
DRAWN
CHECK
APPR

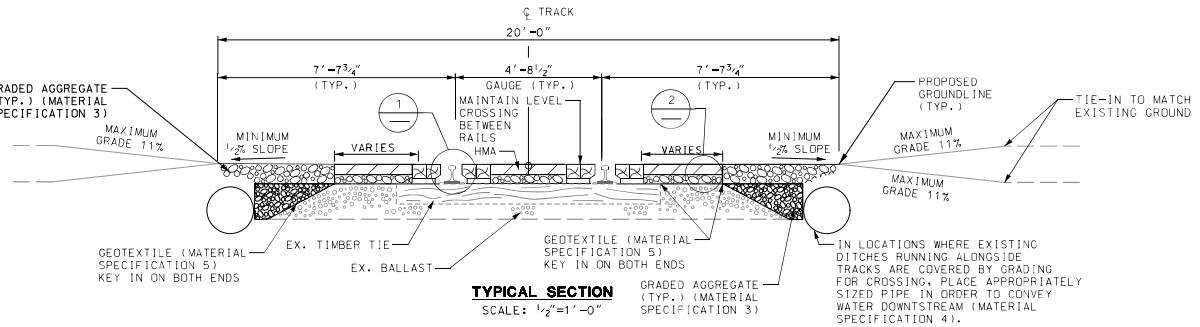
STANDARD DETAIL FOR
PRIVATE GRADE CROSSINGS

COMMERCIAL USE – FULL DEPTH ASPHALT
FOR MEDIUM TRAFFIC VOULME

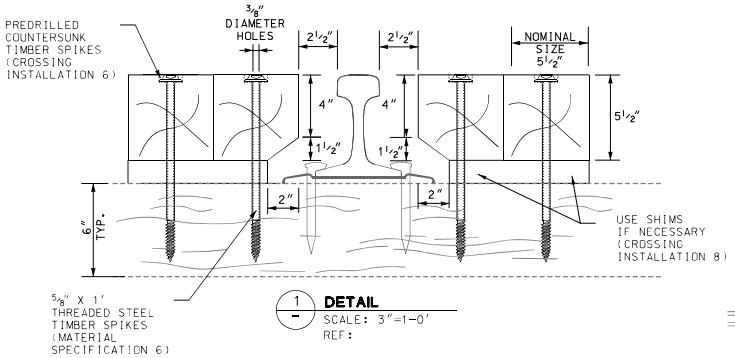
DATE:
SCALE: AS SHOWN

CONTRACT NO. 0-0000-0000
DRAWING NO.
SHEET NO. ___ OF 00

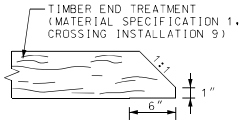
pw:\\mtagbpwapp1:MTA_PW_Data\Documents\00 - Current Projects\0212 - Freight Grade Crossings\04 Project Engineering\Track & Structural Preservation\0212-0520- Private Grade Xing Designs\Cadd Files\Plan Sheets\1367
2/4/2022



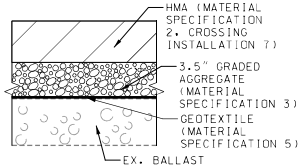
TYPICAL SECTION
SCALE: ½"=1'-0"



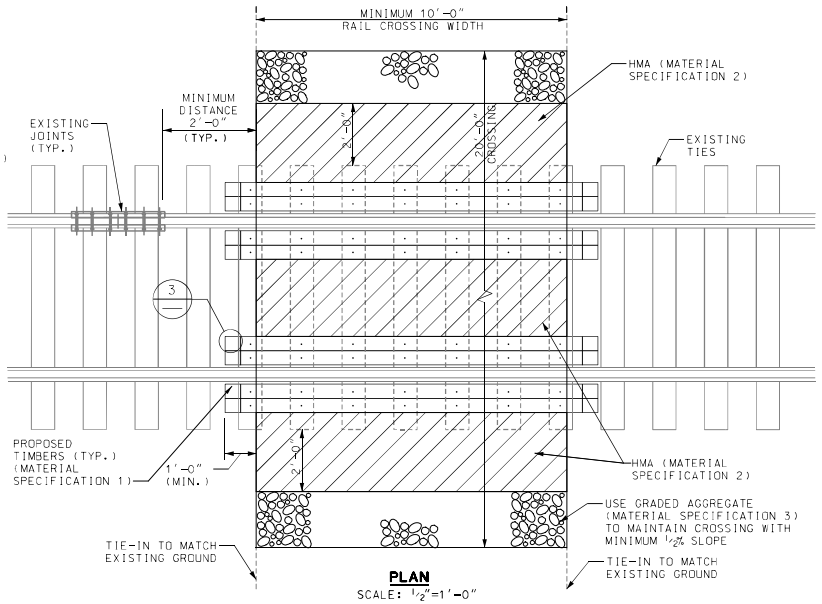
1 — **DETAIL**
SCALE: 3"=1-0'
REF:



3 — **TIMBER END TREATMENT**
SCALE: 1½" = 1'
REF:



2 — **PAVEMENT DETAIL**
SCALE: 1½"=1-0'
REF:



PLAN
SCALE: ½"=1'-0"

CROSSING INSTALLATION REQUIREMENT

1. COORDINATE INSTALLATION OF THE CROSSING WITH OPERATING RAILROAD. REVIEW CONDITIONS OF EXISTING TIES TO ENSURE THAT TIES ARE IN GOOD CONDITION TO SUPPORT THE INSTALLATION OF THE CROSSING.
2. CROSSING INSTALLER IS RESPONSIBLE FOR ALL NECESSARY PERMITS AND APPROVALS FROM PRIVATE OWNERS AND PUBLIC AGENCIES.
3. INSTALL TRAFFIC SAFETY DEVICES AS NECESSARY.
4. FOR 6½" RAIL HEIGHT USE 2.5" THICK GRADED AGGREGATE.
5. NEW CROSSING SHALL NOT COVER EXISTING RAIL JOINTS.
6. BORE ⅜" DIAMETER HOLES IN WOOD PLANKS TO THE PATTERN SHOWN IN PLAN VIEW FOR THE ⅝" STEEL TIMBER SPIKES.
7. BEYOND THE ASPHALT LIMIT, USE GRADED AGGREGATE TO MAINTAIN A MINIMUM ½% SLOPE FOR A TOTAL DISTANCE OF 20 FEET.
8. HEIGHT OF RAIL VARIES. USE TIMBER SHIM BOARDS TO RAISE THE TIMBER HEIGHT LEVEL WITH TOP OF THE RAIL.
9. CUT BOTH ENDS OF THE TIMBER AT 1:1.

MATERIAL SPECIFICATIONS

1. SOFTWOOD TIMBER (6"X6"X12') AND SHIM BOARDS (2"X 12") TREATED FOR GROUND CONTACT (#2 MIN.).
2. HOT MIX ASPHALT (HMA) SUPERPAVE, 4.0" 19.0MM FOR BASE, PG64-22 LEVEL 1.
3. GRADED AGGREGATE PER SHA STANDARD SPECIFICATIONS SECTION 901.
4. USE A MINIMUM PIPE SIZE OF 18" CMP OR HDPE WHERE NECESSARY.
5. PLACE GEOTEXTILE CLASS "PE" TYPE III BETWEEN THE GRAVEL AND EXISTING BALLAST.
6. ⅝" X 1'-0" RECESSED HEAD THREADED STEEL TIMBER SPIKES (GALVANIZED), LEWIS NUT & BOLT CO. (1-800-328-3480) OR APPROVED EQUAL.

BILL OF MATERIAL

ITEM	DESCRIPTION	QUANTITY
1	HMA SUPERPAVE BASE	TONS
2	GRADED AGGREGATE	*
3	PIPE (18" MINIMUM)	**
4	GEOTEXTILE	10 SY
5	TREATED SOFTWOOD TIMBERS	8 EA
6	⅝"X1' STEEL TIMBER SPIKES	56 EA

* QUANTITY VARIES FOR EACH CROSSING
** PIPE SIZE AND NUMBER OF PIPES VARIES FOR EACH CROSSING

LEGEND

GRADED AGGREGATE — ASPHALT — SOFTWOOD TIMBERS

MARYLAND DEPARTMENT OF TRANSPORTATION
MARYLAND TRANSIT ADMINISTRATION
MTA Maryland

NO.	DESCRIPTION	BY	DATE
	REVISIONS		

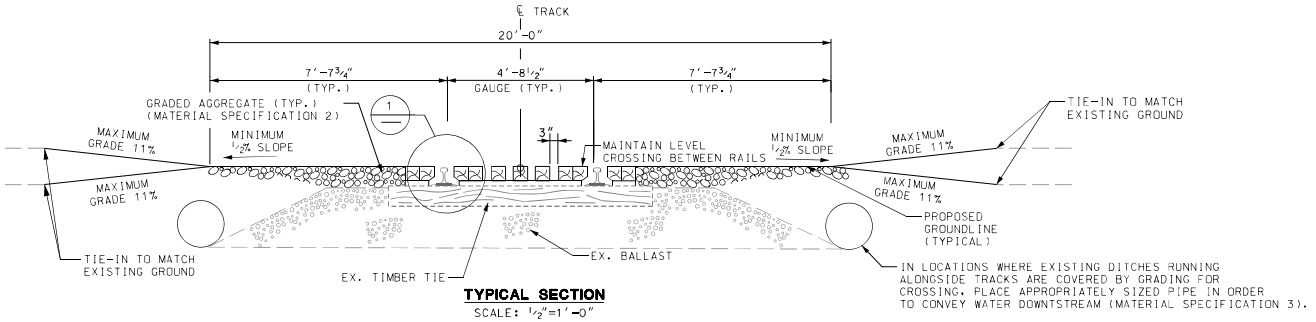
DESIGN | DRAWN | CHECK | APPR

STANDARD DETAIL FOR
PRIVATE GRADE CROSSINGS

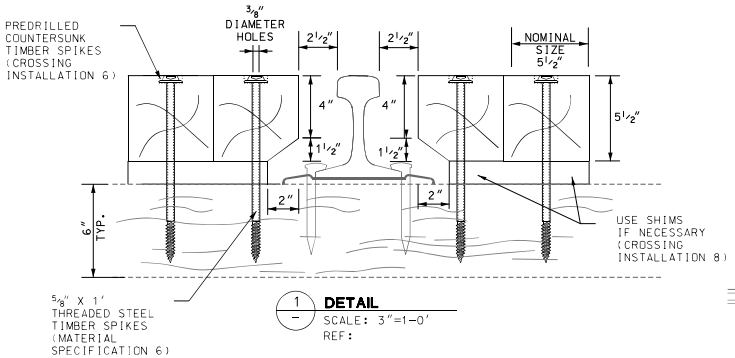
COMMERCIAL USE – 4 IN ASPHALT
FOR LIGHT TRAFFIC VOLUME

DATE: SCALE: AS SHOWN

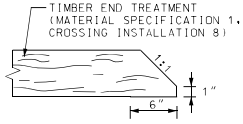
CONTRACT NO. 0-0000-0000
DRAWING NO.
SHEET NO. ___ OF 00



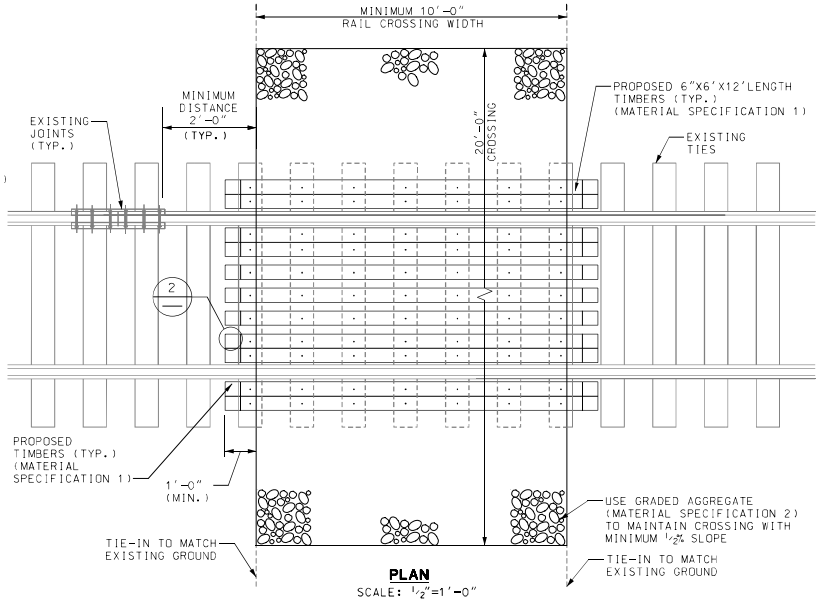
TYPICAL SECTION
SCALE: ½"=1'-0"



1 — **DETAIL**
SCALE: 3"=1-0'
REF:



2 — **TIMBER END TREATMENT**
SCALE: 1½" = 1'
REF:



PLAN
SCALE: ½"=1'-0"

CROSSING INSTALLATION REQUIREMENT

1. COORDINATE INSTALLATION OF THE CROSSING WITH OPERATING RAILROAD. REVIEW CONDITIONS OF EXISTING TIES TO ENSURE THAT TIES ARE IN GOOD CONDITION TO SUPPORT THE INSTALLATION OF THE CROSSING.
2. CROSSING INSTALLER IS RESPONSIBLE FOR ALL NECESSARY PERMITS AND APPROVALS FROM PRIVATE OWNERS AND PUBLIC AGENCIES.
3. INSTALL TRAFFIC SAFETY DEVICES AS NECESSARY.
4. NEW CROSSING SHALL NOT COVER EXISTING RAIL JOINTS.
5. BORE ⅜" DIAMETER HOLES IN WOOD TIMBERS TO THE PATTERN SHOWN IN PLAN VIEW FOR THE ⅝" STEEL TIMBER SPIKES.
6. USE TIMBERS TO MAINTAIN A LEVEL CROSSING BETWEEN THE RAILS AND USE GRADED AGGREGATE TO MAINTAIN A MINIMUM ½% SLOPE FOR THE REMAINDER OF THE CROSSING, TOTAL LENGTH OF 20 FEET.
7. HEIGHT OF RAIL VARIES, USE TIMBER SHIM BOARDS TO RAISE THE TIMBER HEIGHT LEVEL WITH TOP OF THE RAIL.
8. CUT BOTH ENDS OF TIMBER AT 1:1.

MATERIAL SPECIFICATIONS

1. SOFT WOOD TIMBERS (6"X6"X12') AND SHIM BOARDS (2"X12") TREATED FOR GROUND CONTACT (#2 MIN.).
2. GRADED AGGREGATE PER SHA STANDARD SPECIFICATIONS SECTION 901.
3. USE A MINIMUM PIPE SIZE OF 18" HDPE OR CMP WHERE NECESSARY.
4. 5#8" X 1'-0" RECESSED HEAD THREADED STEEL TIMBER SPIKES (GALVANIZED), LEWIS NUT & BOLT CO. (1-800-328-3480) OR APPROVED EQUAL.

BILL OF MATERIAL

ITEM	DESCRIPTION	QUANTITY
1	6"X6"X12'SOFTWOOD TIMBERS	11 EA
2	2"X12'SHIM BOARDS	*
3	⅝"X1' STEEL TIMBER SPIKES	77 EA
4	GRADED AGGREGATE	*
5	PIPE (18" MINIMUM)	**

* QUANTITY VARIES FOR EACH CROSSING
** PIPE SIZE AND NUMBER OF PIPES VARIES FOR EACH CROSSING

LEGEND

GRADED AGGREGATE

SOFTWOOD TIMBERS

MARYLAND DEPARTMENT OF TRANSPORTATION
MARYLAND TRANSIT ADMINISTRATION

MTA Maryland

NO.	DESCRIPTION	BY	DATE
	REVISIONS		

DESIGN | DRAWN | CHECK | APPR

STANDARD DETAIL FOR
PRIVATE GRADE CROSSINGS

TIMBER PANEL FOR
AGRICULTURAL & RESIDENTIAL USE

DATE: SCALE: AS SHOWN

CONTRACT NO. 0-0000-0000
DRAWING NO.
SHEET NO. ___ OF 00

MANUAL NOTES

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Figure 43 – Ridgely, MD Railroad Park Station Platform and Caboose


MDOT
MARYLAND DEPARTMENT
OF TRANSPORTATION