

DEPARTMENT OF TRANSPORTATION P.O. Box 600 Trenton, New Jersey 08625-0600

PHILIP D. MURPHY
Governor

SHEILA Y. OLIVER
Lt. Governor

DIANE GUTIERREZ-SCACCETTI

Commissioner

IN THE MATTER OF THE REVIEW OF)	MEMORANDUM OF RECORD
REESTABLIISHING AN HIGHWAY-RAIL AT-) GRADE CROSSING OF BLACK RIVER &)	WEST MAIN STREET (CR-524)
WESTERN/DELAWARE AND RARITAN RIVER RAILROAD FREEHOLD I.T. LINE, WITH WEST MAIN STREET (CR-524), IN THE	DOCKET NO. DOT 09-2023CM
MUNICIPALITY OF HOWELL TOWNSHIP, MONMOUTH COUNTY, NEW JERSEY USDOT INVENTORY NO. 501186A.	

ATTENTION:

The Commissioner of the New Jersey Department of Transportation initiated proceedings for the above-captioned matter to determine the highway-rail at-grade crossing surface and railroad warning devices necessary for the re-establishment of the at-grade crossing.

Black River & Western/Delaware and Raritan River Railroad requested the reestablishment of the highway-rail at-grade crossing due to the restoration of 5 miles of the Freehold I.T. track between Freehold and Farmingdale to divert freight operations from the NJT North Jersey Coast Line. The line will redirect the freight service away from busy at-grade crossings in Redbank and neighboring communities and continue to provide service to four existing customers and the Naval Weapons Station at Earl.

After notice, a Diagnostic Team Meeting took place on Thursday, March 30, 2023, at the location of the proposed highway-rail at-grade crossing of West Main Street (CR-524), in Township of Howell, Monmouth County.

The following stakeholders were present at the Diagnostic Team Meeting.

NEW JERSEY DEPARTMENT OF TRANSPORTATION (NJDOT)

Salma Abdelrahim Barbara Foran Diagnostic Team Leader Principal Engineer Railroad Engineering Safety Railroad Engineering Safety

BLACK RIVER & WESTERN/DELAWARE AND RARITAN RIVER RAILROAD

Kean Burenga	President	BRW/DRRR
Colton Burenga	Track Supervisor	BRW/DRRR
Cathrin Banks	Vice President/General Counsel	BRW/DRRR
John Sobotka	Safety Consultant	BRW/DRRR
Ryan Gerhardt	Transportation Services	BRW/DRRR

MONMOUTH COUNTY

Gary Fread	Asst. Superintendent/Administration	Division of Highways
Michael Nei	Traffic Engineer	Monmouth County
Vincent J. Cardone	Principal Traffic Engineer	Monmouth County

HOWELL TOWNSHIP

Justin Yost	Deputy Director of Community Development	Howell Township
Michael Silvani	Patrolman Traffic Safety Unit	Howell Township

The Diagnostic Team, comprised of those in attendance, reviewed current conditions of West Main Street (CR-524) pertaining to re-establishing the highway-rail at-grade crossing.

The Diagnostic Team Leader advised the attendees that the functions and powers of the Board of Public Utility Commissioners, under Title 48:2-28 & 48:2-29 of the New Jersey Revised Statutes transferred to the Commissioner of the Department of Transportation under Title 27-1A-62. The Commissioner of the Department of Transportation delegated the review process to the Railroad Engineering Safety Unit.

For purposes of review and discussion, West Main Street (CR-524) orients in the east/west direction, and Freehold I.T. Line orients in the north/south direction. The quadrants are related to the at-grade crossing re-establishment.





DIAGNOSTIC TEAM FINDINGS

- 1. New Jersey Transit owns the railroad right-of-way.
- 2. Black River & Western/Delaware and Raritan River Railroad will maintain and operate on the tracks.
- 3. Black River & Western/Delaware and Raritan River Railroad refers to the currently disused railroad line as the Freehold Branch.
- 4. The Railroad right-of-way at West Main Street (CR-524) is approximately sixty (60) feet wide.
- 5. The West Main Street (CR-524) at-grade crossing is USDOT# 501186A in the Federal Railroad Administration Inventory Database.
- 6. One (1) track of the restored Freehold I.T. Line will cross West Main Street (CR-524), at an acute angle.
- 7. The proposed highway-rail at-grade crossing surface will be rail seal and asphalt.
- 8. There are no proposed rail switches near the proposed highway-rail at-grade crossing.
- 9. The projected volume of freight trains on the Freehold I.T. Line across the proposed West Main Street (CR-524) at-grade crossing is anticipated to be 2-3 train movements per week, Monday through Friday, during daylight hours.
- 10. The anticipated train units consist of an average of fifteen (15) railcars per movement, at a maximum speed of 25 mph.
- 11. The Railroad Company anticipates transporting hazardous material once monthly.
- 12. Currently there is no planned passenger service on the line.
- 13. The Railroad Company expects rail operations to begin in late 2023 or early 2024.
- 14. West Main Street (CR-524) is a county roadway, one (1) lane in each direction, under the jurisdiction of Monmouth County.
- 15. The Average Annual Daily Traffic Volume (AADT) as indicated by the ARCGIS is 6579 in 2021.
- 16. The posted speed limit is 45 mph on the eastbound approach and 35 mph on the westbound approach to the future at-grade crossing.

- 17. In proximity to the railroad line, the existing roadway width is approximately twenty-three (23) feet wide.
- 18. There are no sidewalks or shoulders near the railroad line.
- 19. There is a curb approximately sixty (60) feet from the rail line in the southwest quadrant.
- 20. West Main Street (CR-524) has solid double yellow center lines and solid white edge line pavement markings.
- 21. There is a driveway of a residential property approximately one hundred and fifty (150) feet from the future at-grade crossing.
- 22. The county representative indicated there is school bus activity on West Main Street (CR-524).
- 23. The surrounding area in proximity to the rail line is residential.
- 24. Open fields occupy each of the four quadrants of the future at-grade crossing.
- 25. There are dense trees in the southwest and southeast quadrants of the future at-grade crossing.
- 26. Aerial utility power lines cross the rail track from the southwest quadrant to the southeast quadrant. The aerial utility power lines are telecommunication and electrical distribution.
- 27. There are utility power lines along the south side of West Main Street (CR-524).
- 28. There is an overhead light fixture approximately sixty feet (60') from the rail line in the southeast quadrant.
- 29. There are no stormwater inlets in proximity to the railroad right-of-way.
- 30. The stopping sight distance for a vehicle to the railroad warning devices on the eastbound approach may be obstructed by a utility pole; the westbound approach is clear.
- 31. The corner sight distance between a vehicle approaching the future at-grade crossing and a train is obstructed by dense trees on both approaches.
- 32. The clearing sight distance between a vehicle at the future stop bar and a train is clear in the southwest quadrant and obstructed by trees in the northwest, northeast, and southeast quadrants.
- 33. Revisions to the highway-rail at-grade railroad crossing warning devices and highway traffic control devices at the above captioned at-grade crossings may better serve the judicious motorist.

DISCUSSION

- 1. The Diagnostic Team Members examined and discussed the site conditions at the proposed highway-rail at-grade crossing.
- 2. The re-establishing of the crossing will occur in two phases.
 - a. Phase 1 will include the installation of:
 - i. Rail seal and asphalt at-grade crossing surface.
 - ii. Crossbuck (R15-1) sign.
 - iii. Emergency Notification System sign ENS (I-13)
 - iv. "YEILD" (R1-2) sign.
 - v. "No Trespassing" sign
 - b. Phase 2 will include the installation of:
 - i. A cantilever structure in the northeast quadrant.
 - ii. Twelve inches (12") light-emitting diode flashing lights.
- 3. A flagger will be present at the at-grade crossing during rail operations throughout Phase 1.
- 4. The county mentioned that there is a project on West Main Street (CR-524) by the water company.
- 5. The county requested concrete at-grade crossing surface. A representative from the Railroad Company stated the asphalt flange surface is suitable for current train movements and roadway drivability. The County may contact the Railroad Company and NJDOT if after installation, the County feels the need to revisit the at-grade surface type,
- 6. A representative from Railroad Engineering Safety Unit suggested installing Dynamic Envelop pavement markings.
- 7. The county requested gates. The Railroad representative suggested a cantilever structure.
- 8. A representative from Railroad Engineering Safety Unit stated that the County may review the highway-rail at-grade crossing conditions and traffic impacts for a six-month period after the installation of the warning devices. After the review period, or if a need arises prior, the County may request a Diagnostic Team Meeting to review the highway-rail at-grade crossing warning devices.
- 9. 10. The Railroad Company will clear vegetation three hundred feet (300') on both sides of the track.
- 10. The county will trim trees' branches along West Main Street (CR-524) to maintain a clear view of the railroad warning devices.

- 11. The Railroad Company anticipates a three-to-five-day roadway closure for re-establishing the grade crossing.
- 12. NJDOT Railroad Engineering will implement a detour for the surface construction.
- 13. A public notice will be published in the local newspaper (Asbury Park Press) to inform the public of the project.

DIAGNOSTIC TEAM RECOMMENDATIONS:

A. Black River & Western/Delaware and Raritan River Railroad Shall:

SURFACE

- 1. Install a new crossing surface. The crossing surface shall extend a minimum of three (3) feet beyond the outer edge of the pavement and/or walkway. The new crossing surface shall include a continuous welded running rail. The design of the crossing shall conform to railroad standards and provide as uniform as practical vertical profile through the crossing area to minimize any discontinuity between the crossing surface and the roadway approach pavements leading up to the crossing confines and track structure.
- 2. According to the Americans with Disabilities Act of 1990 "ADA" and the 2010 ADA Standards for Accessible Design, ADA requires that the railroad flangeway widths be a maximum of 2½" wide from inside ball of rail to the grade crossing surface and depth of the flangeway area/gap should be approximately 1½" deep from top of rail to the bottom of flangeway gap. NOTE: The Highway-Rail At-Grade Crossing Surface shall be level with top of the rail.
- 3. Pave approaches.
- 4. Clear/clean out any vegetation and debris within the railroad R.O.W., three hundred (300) feet on each side of the at-grade crossing.
- 5. The West Main Street (CR-524) at-grade crossing surface project requires a <u>minimum</u> of three (3) days for surface installation.

B. Black River & Western/Delaware and Raritan River Railroad Shall:

• Phase 1 (at Railroad's own expense):

- 1. Install passive at-grade crossing assembly. (Reference current MUTCD Section 8B.04)
 - a. Install post-mounted, back-to-back retro-reflective railroad crossing crossbuck (R15-1) signs on each approach to the at-grade crossing.
 - b. Install a post-mounted, single-faced retro-reflective "YEILD" (R1-2) sign on each approach to the at-grade crossing.
 - c. Install a 2-inch white retroreflective strip on the front and back of each post, on each approach to the at-grade crossing.

• Phase 2 (Reimbursed by NJDOT):

- 1. Remove passive at-grade crossing assembly from each approach to the at-grade crossing.
- 2. In the northeast quadrant:
 - a. Remove passive at-grade crossing assembly.
 - b. Install a cantilever structure.
 - c. Install back-to-back twelve inches (12") light-emitting diode flashing lights post-mounted on the cantilever.
 - d. Install back-to-back twelve inches (12") light-emitting diode flashing lights on the cantilever arm.
 - e. Reinstall post-mounted, back-to-back retro-reflective railroad crossing crossbuck (R15-1) signs.
 - f. Reinstall an Emergency Notification System Sign ENS (I-13) on the post of each approach to the at-grade crossing.
 - g. Install a "No Trespassing" sign.
- 3. In the southwest quadrant:
 - a. Remove passive at-grade crossing assembly.
 - b. Install new foundation for mast.
 - e. Install post-mounted, back-to-back retro-reflective railroad crossing crossbuck (R15-1) signs.
 - d. Install back-to-back twelve inches (12") light-emitting diode flashing lights.
 - e. Install an Emergency Notification System Sign ENS (I-13).
 - f. Install a "No Trespassing" sign.
- 4. In the northwest and southeast quadrants:
 - a. Install a "No Trespassing" sign.

RAILROAD INCLUSIVE

- 2. Black River & Western/Delaware and Raritan River Railroad shall establish appropriate maintenance of traffic and traffic controls for trains, vehicles, and pedestrians affected by work at the crossing <u>before</u> work begins.
- 3. Black River & Western/Delaware and Raritan River Railroad shall notify the Department's Railroad Engineering Safety Unit in <u>writing</u> when work is to commence and when work is complete, for scheduling of inspections and issuance of acceptance/approval.
- 4. Upon approval of the appropriate documents and associated funding, the State of New Jersey shall reimburse Black River & Western/Delaware and Raritan River Railroad for costs incurred to implement the recommendation listed in Section A line item 1-4 and Section B Item 1-4.

- 5. Black River & Western/Delaware and Raritan River Railroad shall provide a signed and dated Certificate of Compliance Items Containing Steel & Iron"; NJDOT Form DC-17RR, upon delivery of rails/steel/iron to the at-grade crossing or upon submission of the first invoice for surface construction of the subject project. The first surface construction invoice must include the "Contractor's Certificate of Compliance"; NJDOT Form DC-17RR for acceptance and approval.
- 6. Upon completion of all construction of the subject project, Black River & Western/Delaware and Raritan River Railroad shall provide a "Statement of Certification" specifying, "the Railroad certifies that all materials received meet or exceed the applicable A.R.E.M.A. and N.J.D.O.T. Standards and all work has been completed to the satisfaction of N.J.D.O.T." The "Statement of Certification" is required for Project Closeout.
- 7. NJDOT Railroad Engineering Safety Unit will send out a Notification of Project Closeout, at which time, the Railroad has forty-five (45) days to submit FINAL invoices if any. Invoices may not be accepted after the federal project end date.

C. The New Jersey Department of Transportation Railroad Engineering Safety Unit (through the detour contractor) shall:

- 1. Install dynamic envelope pavement marking.
- 2. Install a railroad stop bar at each approach to the at-grade crossing.
- 3. Install a railroad advance warning (W10-1) sign on each approach to the at-grade crossing. (Reference: MUTCD 8B.06, Section 2C.05 and Table 2C-4.)
- 4. Install railroad advance warning pavement markings on each approach to the at-grade crossing.
- 5. Reestablish the double yellow center line pavement marking on each side of the at-grade crossing.
- 6. Reestablish the white edge line pavement markings on each side of the at-grade crossing.

D. The County of Monmouth shall:

1. Maintain all pavement markings, railroad advance warning pavement markings, signs, and stop bars within the County's jurisdiction.

E. Inclusive:

1. ALL devices installed controlling roadway vehicles and pedestrians shall be per the current Manual on Uniform Traffic Control Devices (MUTCD).

Date: 5/11/2023

- 2. <u>All</u> work associated with this matter shall be subject to final inspection and approval by NJDOT'S Railroad Engineering Services Unit.
- The Diagnostic Team always reserves the right to reconvene if these railroad traffic control
 devices advanced warning devices, roadway approaches, and crossing surfaces are not
 adequate for safety.

The distribution of this Memorandum of Record is to those listed on the Initiation of Proceedings and those in attendance at the Diagnostic Team Meeting. The placement of a Public Notice will be in local newspapers or publications. Unless any concerned party or a member of the general public advances a meritorious objection, the matter is submitted to the Commissioner of the New Jersey Department of Transportation for final determination. Any person NOT in accord with these provisions MUST reply in writing within **thirty (30) days** of the receipt of this Memorandum of Record. All submissions must include the name or agency and contact information, the at-grade crossing name, and the DOT Docket Number. **Failure to respond qualifies as acceptance.**

Meritorious objections received will warrant submission to the Department's Exception Review Committee to determine further action.

Completion of the work described herein should be within two (2) years of the issuance of the ORDER.

Direct any questions and/or objections concerning this matter to the Diagnostic Team Leader, Salma Abdelrahim – salma.abdelrahim@dot.nj.gov.

DEPARTMENT OF TRANSPORTATION Approved by:

Salma Abdelrahim

Diagnostic Team Leader

Railroad Engineering Safety Unit



DEPARTMENT OF TRANSPORTATION P.O. Box 600 Trenton, New Jersey 08625-0600

PHILIP D. MURPHY
Governor

DIANE GUTIERREZ-SCACCETTI

Commissioner

SHEILA Y. OLIVER Lt. Governor

IN THE MATTER OF THE REVIEW OF REESTABLIISHING AN HIGHWAY-RAIL ATGRADE CROSSING OF BLACK RIVER & WESTERN/DELAWARE AND RARITAN RIVER RAILROAD FREEHOLD I.T. LINE, WITH FAIRFIELD ROAD, IN THE MUNICIPALITY OF HOWELL TOWNSHIP, MONMOUTH COUNTY, NEW JERSEY USDOT INVENTORY NO. 501182X.

EXIDEIEI D DOAD

MEMORANDUM OF RECORD

FAIRFIELD ROAD DOCKET NO. DOT 07-2023CM

YELLOWBROOK ROAD DOCKET NO. DOT 08-2023CM

WEST MAIN STREET (CR-524) DOCKET NO. DOT 09-2023CM

ATTENTION:

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Christopher Casaburro
NJAM Inspector
New Jersey American Water
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To the above Addressees:

Transmitted herewith is the Diagnostic Team's MEMORANDUM OF RECORD, for the above referenced project.

Direct any questions, comments, or objections in writing to the NJDOT's Railroad Engineering Safety Unit, Diagnostic Team Leader at salma.abdelrahim@dot.nj.gov.

Dated:

DEPARTMENT OF TRANSPORTATION

Approved by:

Gregory Spiritosanto

Project Engineer

Railroad Engineering Safety Unit

Capital Program Support



DEPARTMENT OF TRANSPORTATION P.O. Box 600 Trenton, New Jersey 08625-0600

PHILIP D. MURPHY Governor DIANE GUTIERREZ-SCACCETTI

Commissioner

SHEILA Y. OLIVER Lt. Governor

IN THE MATTER OF THE REVIEW OF)	MEMORANDUM OF RECORD
REESTABLIISHING AN HIGHWAY-RAIL AT- GRADE CROSSING OF BLACK RIVER &)	FAIRFIELD ROAD
WESTERN/DELAWARE AND RARITAN RIVER RAILROAD FREEHOLD I.T. LINE, WITH FAIRFIELD ROAD, IN THE)	DOCKET NO. DOT 07-2023CM
MUNICIPALITY OF HOWELL TOWNSHIP, MONMOUTH COUNTY, NEW JERSEY USDOT INVENTORY NO. 501182X.)	

ATTENTION:

The Commissioner of the New Jersey Department of Transportation initiated proceedings for the above-captioned matter to determine the highway-rail at-grade crossing surface and railroad warning devices necessary for the re-establishment of the at-grade crossing.

Black River & Western/Delaware and Raritan River Railroad requested the reestablishment of the highway-rail at-grade crossing due to the restoration of 5 miles of the Freehold I.T. track between Freehold and Farmingdale to divert freight operations from the NJT North Jersey Coast Line. The line will redirect freight service away from busy at-grade crossings in Redbank and neighboring communities and continue to provide service to four existing customers and the Naval Weapons Station at Earl.

After notice, a Diagnostic Team Meeting took place on Thursday, March 30, 2023, at the location of the proposed highway-rail at-grade crossing of Fairfield Road, in Township of Howell, Monmouth County.

The following stakeholders were present at the Diagnostic Team Meeting.

NEW JERSEY DEPARTMENT OF TRANSPORTATION (NJDOT)

Salma Abdelrahim Diagnostic Team Leader Railroad Engineering Safety
Barbara Foran Principal Engineer Railroad Engineering Safety
Eric Souders Senior Engineer Railroad Engineering Safety

BLACK RIVER & WESTERN/DELAWARE AND RARITAN RIVER RAILROAD

Kean Burenga	President	BRW/DRRR
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Ryan Gerhardt	Transportation Services	BRW/DRRR

NJ AMERICAN WATER

Christopher Casaburro Inspector NJAW

VERIZON

Thomas Grabowski Engineer Verizon

BRIGHT VIEW ENGINEERING

John Jahr Principal Bright View Engineering

MONMOUTH COUNTY

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HOWELL TOWNSHIP

Justin YostDeputy Director of Community DevelopmentHowell TownshipMichael SilvaniPatrolman Traffic Safety UnitHowell TownshipRonald SanasacAsst. SuperintendentHowell Schools

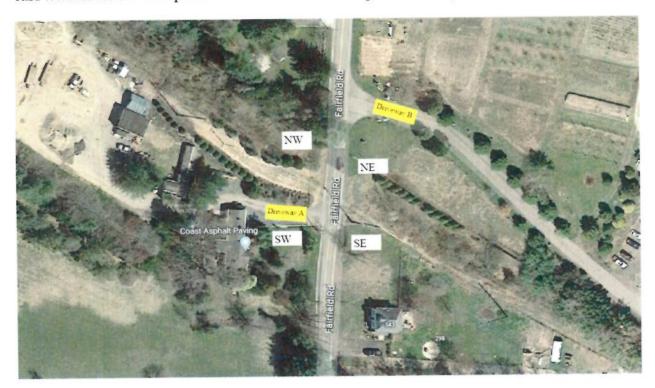
ACTIVE ACQUISITIONS

Paul Latham Howell 1 Project Fairfield Road

The Diagnostic Team, comprised of those in attendance, reviewed the current conditions of Fairfield Road pertaining to re-establishing the highway-rail at-grade crossing.

The Diagnostic Team Leader advised the attendees that the functions and powers of the Board of Public Utility Commissioners, under Title 48:2-28 & 48:2-29 of the New Jersey Revised Statutes transferred to the Commissioner of the Department of Transportation under Title 27-1A-62. The Commissioner of the Department of Transportation delegated the review process to the Railroad Engineering Safety Unit.

For purposes of review and discussions, Fairfield Road orients in the north/south direction, and Black River & Western/Delaware and Raritan River Railroad Freehold I.T. Line orients in the east/west direction. The quadrants are related to the at-grade crossing re-establishment.





DIAGNOSTIC TEAM FINDINGS

- 1. New Jersey Transit owns the railroad right-of-way.
- 2. Black River & Western/Delaware and Raritan River Railroad will maintain and operate on the tracks.
- 3. Black River & Western/Delaware and Raritan River Railroad refers to the currently disused railroad line as the Freehold Branch.
- 4. The Railroad right-of-way at Fairfield Road is approximately sixty (60) feet wide.
- 5. The Fairfield Road at-grade crossing is USDOT# 501184L in the Federal Railroad Administration Inventory Database.
- 6. One (1) track of the restored Freehold I.T. Line will cross Fairfield Road, at an acute angle.
- 7. The proposed highway-rail at-grade crossing surface will be rail seal and asphalt.
- 8. There are no proposed rail switches near the proposed highway-rail at-grade crossing.

- 9. The projected volume of freight trains on the Freehold I.T. Line across the proposed Fairfield Road at-grade crossing is anticipated to be 2-3 train movements per week, Monday through Friday, during daylight hours.
- 10. The anticipated train units consist of an average of fifteen (15) railcars per movement, at a maximum speed of 25 mph.
- 11. The Railroad Company projects transporting hazardous material once monthly.
- 12. Currently there is no planned passenger service on the line.
- 13. The Railroad Company expects rail operations to begin in late 2023 or early 2024.
- 14. Fairfield Road is a municipal roadway, one (1) lane in each direction, under the jurisdiction of Howell Township.
- 15. The Average Annual Daily Traffic Volume (AADT) as indicated by the Federal Railroad Administration is 16457 in 2004. There is no current data for AADT.
- 16. The posted speed limit is 45 mph.
- 17. In proximity to the railroad line, the existing roadway width is approximately twenty-three (23) feet wide.
- 18. Fairfield Road presents a northwest curvature approximately four hundred-forty (440) feet north railroad right-of-way and southeast curvature approximately four hundred (400) feet south railroad right-of-way.
- 19. There are no sidewalks, curbs, or shoulders near the railroad line.
- 20. Fairfield Road has solid double yellow center lines and solid white edge line pavement markings.
- 21. The Township representative indicated school buses and Transit buses utilize Fairfield Road.
- 22. The surrounding area in proximity to the rail line is residential, commercial, and farm properties.
- 23. There are open fields in the northeast and southeast quadrants. There is a corporation in the southwest quadrant.
- 24. There are dense trees in the northwest quadrant.
- 25. In the southwest quadrant, a driveway (Driveway A) to a corporation is parallel to the railroad track and is approximately twenty-five (25) feet from the future at-grade crossing.

- 26. In the northeast quadrant, a driveway (Driveway B) to a shop is approximately one hundred (100) feet from the future at-grade crossing.
- 27. Aerial utility power lines cross the rail track from the northwest quadrant to the southwest quadrant and from the northwest quadrant to the southeast quadrant. The aerial utility power lines are telecommunication and electrical distribution.
- 28. There are utility power lines along both sides of Fairfield Road.
- 29. There is no overhead light fixture in proximity to the railroad right-of-way.
- 30. There are no stormwater inlets in proximity to the railroad right-of-way.
- 31. The stopping sight distance for a vehicle to the railroad warning devices is clear on the northbound approach; the southbound approach is obstructed by trees and vegetation.
- 32. The corner sight distance between a vehicle approaching the future at-grade crossing and a train is obscured by trees on both approaches to the future at-grade crossing.
- 33. The clearing sight distance between a vehicle at the future stop bar and a train is obscured by trees in each quadrant of the at-grade crossing.
- 34. Revisions to the highway-rail at-grade railroad crossing warning devices and highway traffic control devices at the above captioned at-grade crossings may better serve the judicious motorist.

DISCUSSION

- 1. The Diagnostic Team Members examined and discussed the site conditions at the proposed highway-rail at-grade crossing.
- 2. The re-establishing of the crossing will occur in two phases.
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 - i. Rail seal and asphalt at-grade crossing surface.
 - ii. Crossbuck (R15-1) sign.
 - iii. Emergency Notification System sign ENS (I-13)
 - iv. "YEILD" (R1-2) sign.
 - v. "No Trespassing" sign
 - b. Phase 2 will include the installation of:
 - i. Twelve inches (12") light-emitting diode flashing lights.
- 3. A flagger will be present at the at-grade crossing during rail operations throughout Phase 1.
- 4. A representative from NJ American Water Line informed the Team members about their project to install a water pipe six (6) feet below the bottom of railroad tie. The water pipe

- diameter is sixteen (16) inches. The water pipe will be perpendicular to the track. The water main will be located on the east side of the street. The work will take place by April 2023.
- 5. The Township mentioned that there is construction for three (3) warehouses on the northern end of Fairfield Road. There are no plans for street widening or sidewalks in proximity to the railroad right-of-way.
- 6. The representative for the Township schools mentioned that there is a school at the southern end of Fairfield Road. There are about sixty (60) school buses per day passing through Fairfield Road.
- 7. The Team discussed the potential issue with utility lines and trains, as the lowest utility line is approximately twenty-three feet and six inches (23'-6") from the ground. The railroad mentioned at present that the maximum height of the trains is approximately seventeen (17) feet. There will be no issues at present.
- 8. During the DTM, a tractor-trailer exiting Driveway A in the southwest quadrant took a wide turn heading north on Fairfield Road. The tractor-trailer could not immediately turn into the northbound lane due to the width of the driveway access onto Fairfield Road and the tractor-trailer turning radius. The property owner indicated that this was a one-time delivery.
- The Railroad Company will clear vegetation three hundred feet (300°) on both sides of the track.
- 10. The Township will trim tree branches to maintain clear sight distance.
- 11. The Railroad Company anticipates a three-to-five-day roadway closure for re-establishing the grade crossing.
- 12. NJDOT Railroad Engineering will implement a detour for the surface construction.
- 13. A public notice will be published in the local newspaper (Asbury Park Press) to inform the public of the project.

DIAGNOSTIC TEAM RECOMMENDATIONS:

A. Black River & Western/Delaware and Raritan River Railroad Shall:

SURFACE

1. Install a new crossing surface. The crossing surface shall extend a minimum of three (3) feet beyond the outer edge of the pavement and/or walkway. The new crossing surface shall include a continuous welded running rail. The design of the crossing shall conform to railroad standards and provide as uniform as practical vertical profile through the crossing area to minimize any discontinuity between the crossing surface and the roadway approach pavements leading up to the crossing confines and track structure.

- 2. According to the Americans with Disabilities Act of 1990 "ADA" and the 2010 ADA Standards for Accessible Design, ADA requires that the railroad flangeway widths be a maximum of 2½" wide from inside ball of rail to the grade crossing surface and depth of the flangeway area/gap should be approximately 1½" deep from top of rail to the bottom of flangeway gap. NOTE: The Highway-Rail At-Grade Crossing Surface shall be level with the top of the rail.
- 3. Pave approaches.
- 4. Clear/clean out any vegetation and debris within the railroad R.O.W., three hundred (300') feet on each side of the at-grade crossing.
- 5. The Fairfield Road at-grade crossing surface project requires a <u>minimum</u> of three (3) days for surface installation.

B. Black River & Western/Delaware and Raritan River Railroad Shall:

Phase 1 (at Railroad's own expense):

- 1. Install passive at-grade crossing assembly. (Reference current MUTCD Section 8B.04)
 - a. Install post-mounted, back-to-back retro-reflective railroad crossing crossbuck (R15-1) signs on each approach to the at-grade crossing.
 - b. Install a post-mounted, single-faced retro-reflective "YEILD" (R1-2) sign on each approach to the at-grade crossing.
 - c. Install a 2-inch white retroreflective strip on the front and back of each post, on each approach to the at-grade crossing.
 - d. Install an Emergency Notification System Sign ENS (I-13) on the post of each approach to the at-grade crossing.

• Phase 2 (Reimbursed by NJDOT):

- 1. Remove passive at-grade crossing assembly from each approach to the at-grade crossing.
- 2. Install the following in the northwest quadrant:
 - a. New foundation for mast.
 - b. Back-to-back retro-reflective railroad crossing crossbuck (R15-1) signs.
 - c. Back-to-back twelve inches (12") light-emitting diode flashing lights.
 - d. Single faced twelve inches (12") light-emitting diode flashing lights facing Driveway B.
 - e. Emergency Notification System sign ENS (I-13).
 - f. "No Trespassing" sign.
- 3. Install the following in the southeast quadrant:
 - a. New foundation for mast.

- b. Back-to-back retro-reflective railroad crossing crossbuck (R15-1) signs.
- c. Back-to-back twelve inches (12") light-emitting diode flashing lights.
- d. Single faced twelve inches (12") light-emitting diode flashing lights facing Driveway A.
- e. Emergency Notification System sign ENS (I-13).
- f. "No Trespassing" sign.
- 4. Install a "No Trespassing" sign in the northeast and southwest quadrants.

RAILROAD INCLUSIVE

- 1. Black River & Western/Delaware and Raritan River Railroad shall establish appropriate maintenance of traffic and traffic controls for trains, vehicles, and pedestrians affected by work at the crossing <u>before</u> work begins.
- 2. Black River & Western/Delaware and Raritan River Railroad shall notify the Department's Railroad Engineering Safety Unit in <u>writing</u> when work is to commence and when work is complete, for scheduling of inspections and issuance of acceptance/approval.
- 3. Upon approval of the appropriate documents and associated funding, the State of New Jersey shall reimburse Black River & Western/Delaware and Raritan River Railroad for costs incurred to implement the recommendation listed in Section A line item 1-4 and Section B Item 1-4.
- 4. Black River & Western/Delaware and Raritan River Railroad shall provide a signed and dated Certificate of Compliance Items Containing Steel & Iron;" NJDOT Form DC-17RR, upon delivery of rails/steel/iron to the at-grade crossing or upon submission of the first invoice for surface construction of the subject project. The first surface construction invoice must include the "Contractor's Certificate of Compliance;" NJDOT Form DC-17RR for acceptance and approval.
- 5. Upon completion of all construction of the subject project, Black River & Western/Delaware and Raritan River Railroad shall provide a "Statement of Certification" specifying, "the Railroad certifies that all materials received meet or exceed the applicable A.R.E.M.A. and N.J.D.O.T. Standards and all work has been completed to the satisfaction of N.J.D.O.T." The "Statement of Certification" is required for Project Closeout.
- 6. NJDOT Railroad Engineering Safety Unit will send out a Notification of Project Closeout, at which time, the Railroad has forty-five (45) days to submit FINAL invoices if any. Invoices may not be accepted after the federal project end date.

C. The New Jersey Department of Transportation Railroad Engineering Safety Unit (through the detour contractor) shall:

1. Install dynamic envelope pavement marking.

- 2. Install a railroad stop bar at each approach to the at-grade crossing.
- 3. Install a railroad advance warning (W10-1) sign on each approach to the at-grade crossing. (Reference: MUTCD 8B.06, Section 2C.05 and Table 2C-4.)
- 4. Install railroad advance warning pavement markings on each approach to the at-grade crossing.
- 5. Reestablish the double yellow center line pavement marking on each side of the at-grade crossing.
- 6. Reestablish the white edge line pavement markings on each side of the at-grade crossing.

D. The Township of Howell shall:

1. Maintain all pavement markings, railroad advance warning pavement markings, signs, and stop bars within the Township's jurisdiction.

E. Inclusive:

- 1. ALL devices installed controlling roadway vehicles and pedestrians shall be per the current Manual on Uniform Traffic Control Devices (MUTCD).
- 2. All work associated with this matter shall be subject to final inspection and approval by NJDOT'S Railroad Engineering Services Unit.
- 3. The Diagnostic Team always reserves the right to reconvene if these railroad traffic control devices advanced warning devices, roadway approaches, and crossing surfaces are not adequate.

The distribution of this Memorandum of Record is to those listed on the Initiation of Proceedings and those in attendance at the Diagnostic Team Meeting. The placement of a Public Notice will be in local newspapers or publications. Unless any concerned party or a member of the general public advances a meritorious objection, the matter is submitted to the Commissioner of the New Jersey Department of Transportation for final determination. Any person NOT in accord with these provisions MUST reply in writing within **thirty (30) days** of the receipt of this Memorandum of Record. All submissions must include the name or agency and contact information, the at-grade crossing name, and the DOT Docket Number. **Failure to respond qualifies as acceptance.**

Meritorious objections received will warrant submission to the Department's Exception Review Committee to determine further action.

Completion of the work described herein should be within two (2) years of the issuance of the ORDER,

DEPARTMENT OF TRANSPORTATION

Approved by:

Salma Abdelrahim

Diagnostic Team Leader

Railroad Engineering Safety Unit



DEPARTMENT OF TRANSPORTATION P.O. Box 600 Trenton, New Jersey 08625-0600

PHILIP D. MURPHY
Governor

DIANE GUTIERREZ-SCACCETTI

Commissioner

SHEILA Y. OLIVER Lt. Governor

IN THE MATTER OF THE REVIEW OF)	M
REESTABLIISHING AN HIGHWAY-RAIL AT-)	
GRADE CROSSING OF BLACK RIVER &	í	
WESTERN/DELAWARE AND RARITAN	í	
RIVER RAILROAD FREEHOLD I.T. LINE,	ί	DO
WITH YELLOWBROOK ROAD, IN THE	,	
MUNICIPALITY OF HOWELL TOWNSHIP,	,	15
MONMOUTH COUNTY, NEW JERSEY	,	
USDOT INVENTORY NO. 501184L.)	

MEMORANDUM OF RECORD

YELLOWBROOK ROAD

DOCKET NO. DOT 08-2023CM

ATTENTION:

The Commissioner of the New Jersey Department of Transportation initiated proceedings for the above-captioned matter to determine the highway-rail at-grade crossing surface and railroad warning devices necessary for the re-establishment of the at-grade crossing.

Black River & Western/Delaware and Raritan River Railroad requested the reestablishment of the highway-rail at-grade crossing due to the restoration of 5 miles of the Freehold I.T. track between Freehold and Farmingdale to divert freight operations from the NJT North Jersey Coast Line. The line will redirect freight service away from busy at-grade crossings in Redbank and neighboring communities and continue to provide service to four existing customers and the Naval Weapons Station at Earl.

After notice, a Diagnostic Team Meeting took place on Thursday, March 30, 2023, at the location of the proposed highway-rail at-grade crossing of Yellowbrook Road, in Township of Howell, Monmouth County.

The following stakeholders were present at the Diagnostic Team Meeting.

NEW JERSEY DEPARTMENT OF TRANSPORTATION (NJDOT)

Salma Abdelrahim

Diagnostic Team Leader

Railroad Engineering Safety

Barbara Foran

Principal Engineer

Railroad Engineering Safety

BLACK RIVER & WESTERN/DELAWARE AND RARITAN RIVER RAILROAD

Kean Burenga	President	BRW/DRRR
Colton Burenga	Track Supervisor	BRW/DRRR
Cathrin Banks	Vice President/General Counsel	BRW/DRRR
John Sobotka	Safety Consultant	BRW/DRRR

HOWELL TOWNSHIP

Justin Yost	Deputy Director of Community Development	Howell Township
Michael Silvani	Patrolman Traffic Safety Unit	Howell Township

The Diagnostic Team, comprised of those in attendance, reviewed current conditions of Yellowbrook Road pertaining to re-establishing the highway-rail at-grade crossing.

The Diagnostic Team Leader advised the attendees that the functions and powers of the Board of Public Utility Commissioners, under Title 48:2-28 & 48:2-29 of the New Jersey Revised Statutes transferred to the Commissioner of the Department of Transportation under Title 27-1A-62. The Commissioner of the Department of Transportation delegated the review process to the Railroad Engineering Safety Unit.

For purposes of review and discussions, Yellowbrook Road orients in the north/south direction, and Black River & Western/Delaware and Raritan River Railroad Freehold I.T. Line orients in the east/west direction. The quadrants are related to the at-grade crossing re-establishment.





DIAGNOSTIC TEAM FINDINGS

- 1. New Jersey Transit owns the railroad right-of-way.
- 2. Black River & Western/Delaware and Raritan River Railroad will maintain and operate on the tracks.
- 3. Black River & Western/Delaware and Raritan River Railroad refers to the currently disused railroad line as the Freehold Branch.
- 4. The Railroad right-of-way at Yellowbrook Road is approximately sixty (60) feet wide.
- 5. The Yellowbrook Road at-grade crossing is USDOT# 501184L in the Federal Railroad Administration Inventory Database.
- 6. One (1) track of the restored Freehold I.T. Line will cross Yellowbrook Road, at an acute angle.
- 7. The proposed highway-rail at-grade crossing surface will be rail seal and asphalt.
- 8. There are no proposed rail switches near the proposed highway-rail at-grade crossing.
- 9. The projected volume of freight trains on the Freehold I.T. Line across the proposed Yellowbrook Road at-grade crossing is anticipated to be 2-3 train movements per week, Monday through Friday, during daylight hours.
- 10. The anticipated train units consist of an average of fifteen (15) railcars per movement, at a maximum speed of 25 mph.
- 11. The Railroad Company projects transporting hazardous material once monthly.
- 12. Currently there is no planned passenger service on the line.
- 13. The Railroad Company expects rail operations to begin in late 2023 or early 2024.
- 14. Yellowbrook Road is a municipal roadway, one (1) lane in each direction, under the jurisdiction of Howell Township.
- 15. The posted speed limit is 45 mph.
- 16. In proximity to the railroad line, the existing roadway width is approximately twenty-five (25) feet wide.
- 17. The Average Annual Daily Traffic Volume (AADT) as indicated by the Federal Railroad Administration is 7384 in 2003. There is no current data for AADT.
- 18. There are no sidewalks or shoulders near the railroad line.

- 19. Approximately seventy-five (75) feet from the proposed railroad right-of-way, there is a vertical curb in the southwest quadrant.
- 20. Approximately forty-five (45) feet from the proposed railroad right-of-way, there is a vertical curb in the northwest quadrant.
- 21. Yellowbrook Road has solid double yellow center lines and solid white edge line pavement markings.
- 22. The Township representative indicated there is school bus activity on Yellowbrook Road.
- 23. The surrounding area in proximity to the rail line is commercial.
- 24. Open fields and corporations occupy each of the four quadrants. There are local businesses in the northeast, southwest, and northwest quadrants.
- 25. In the northeast quadrant, a driveway (Driveway A) to a corporation is parallel to the railroad track and is approximately five (5) feet from the nearest rail.
- 26. In the southwest quadrant, a driveway (Driveway B) to a corporation is approximately one hundred (100) feet from the proposed railroad right-of-way.
- 27. There are dense trees in the northeast, southeast, and southwest quadrants of the at-grade crossing.
- 28. Aerial utility power lines cross the railroad right-of-way track from the northwest quadrant to the southwest quadrant. The aerial utility power lines are telecommunication and electrical distribution.
- 29. There are utility power lines along the west side of Yellowbrook Road.
- 30. There is no overhead light fixture in proximity to the railroad right-of-way.
- 31. There are no stormwater inlets in proximity to the railroad right-of-way.
- 32. The stopping sight distance for a vehicle to the railroad warning devices on the southbound approach is clear; the northbound approach is obstructed by trees along Yellowbrook Road.
- 33. The corner sight distance between a vehicle approaching the future at-grade crossing and a train is obstructed by trees on both approaches to the future at-grade crossing.
- 34. The clearing sight distance between a vehicle at the future stop bar and a train is obstructed by trees in the northwest and southwest quadrants of the future at-grade crossing.

- 35. The clearing sight distance between a vehicle at the future stop bar and a train is clear in the northeast and southeast quadrants of the future at-grade crossing.
- 36. Revisions to the highway-rail at-grade railroad crossing warning devices and highway traffic control devices at the above captioned at-grade crossings may better serve the judicious motorist.

DISCUSSION

- 1. The Diagnostic Team Members examined and discussed the site conditions at the proposed highway-rail at-grade crossing.
- 2. The re-establishing of the crossing will occur in two phases.
 - a. Phase I will include the installation of:
 - i. Rail seal and asphalt at-grade crossing surface.
 - ii. Crossbuck (R15-1) sign.
 - iii. Emergency Notification System sign ENS (I-13)
 - iv. "YEILD" (R1-2) sign.
 - v. "No Trespassing" sign
 - b. Phase 2 will include the installation of:
 - i. Twelve inches (12") light-emitting diode flashing lights.
- 3. There is a possibility trucks which are going back and forth into Driveway A in the northeast quadrant hit the warning devices mast in the southeast quadrant; therefore, the Team suggested installation of a ring guide rail.
- 4. A flagger will be present at the at-grade crossing during rail operations throughout Phase 1.
- 5. The Railroad Company will clear vegetation three hundred (300) feet on both sides of the track.
- 6. The Township will trim trees' branches to maintain clear sight distance.
- 7. As Yellowbrook Road has heavy trucks traffic, the Team discussed installing dynamic envelope pavement markings.
- 8. The Team discussed the potential issue with utility lines and trains, as the lowest utility line is approximately twenty-five feet and four inches (25'-4") from the ground. The railroad mentioned at present that the maximum height of the trains is approximately seventeen (17) feet. There will be no issues at present.
- 9. The Railroad Company anticipates a three-to-five-day roadway closure for re-establishing the grade crossing.

- 10. NJDOT Railroad Engineering will implement a detour for the surface construction.
- 11. A public notice will be published in the local newspaper to inform the public of the project.

DIAGNOSTIC TEAM RECOMMENDATIONS:

A. Black River & Western/Delaware and Raritan River Railroad Shall:

SURFACE

- 1. Install a new crossing surface. The crossing surface shall extend a minimum of three (3) feet beyond the outer edge of the pavement and/or walkway. The new crossing surface shall include a continuous welded running rail. The design of the crossing shall conform to railroad standards and provide as uniform as practical vertical profile through the crossing area to minimize any discontinuity between the crossing surface and the roadway approach pavements leading up to the crossing confines and track structure.
- 2. According to the Americans with Disabilities Act of 1990 "ADA" and the 2010 ADA Standards for Accessible Design, ADA requires that the railroad flangeway widths be a maximum of 2½" wide from inside ball of rail to the grade crossing surface and depth of the flangeway area/gap should be approximately 1½" deep from top of rail to the bottom of flangeway gap. NOTE: The Highway-Rail At-Grade Crossing Surface shall be level with top of the rail.
- 3. Pave approaches.
- 4. Clear/clean out any vegetation and debris within the railroad R.O.W., three hundred (300) feet on each side of the at-grade crossing.
- 5. The Yellowbrook Road at-grade crossing surface project requires a minimum of three (3) days for surface installation.

B. Black River & Western/Delaware and Raritan River Railroad Shall:

- Phase 1 (at Railroad's own expense):
 - 1. Install passive at-grade crossing assembly. (Reference current MUTCD Section 8B.04)
 - a. Install post-mounted, back-to-back retro-reflective railroad crossing crossbuck (R15-1) signs on each approach to the at-grade crossing.
 - b. Install a post-mounted, single-faced retro-reflective "YEILD" (R1-2) sign on each approach to the at-grade crossing.
 - c. Install a 2-inch white retroreflective strip on the front and back of each post, on each approach to the at-grade crossing.
 - d. Install an Emergency Notification System Sign ENS (I-13) on the post of each approach to the at-grade crossing.

• Phase 2 (Reimbursed by NJDOT):

- 1. Remove passive at-grade crossing assembly from each approach to the at-grade crossing.
- 2. Install the following in the northwest quadrant:
 - a. New foundation for mast.
 - b. Back-to-back retro-reflective railroad crossing crossbuck (R15-1) signs.
 - c. Back-to-back twelve inches (12") light-emitting diode flashing lights.
 - d. Single faced twelve inches (12") light-emitting diode flashing lights facing Driveway A.
 - e. Emergency Notification System sign ENS (I-13).
 - f. "No Trespassing" sign.
- 3. Install the following in the southeast quadrant:
 - a. New foundation for mast.
 - b. A ring guiderail.
 - c. Back-to-back retro-reflective railroad crossing crossbuck (R15-1) signs.
 - d. Back-to-back twelve inches (12") light-emitting diode flashing lights.
 - e. Single faced twelve inches (12") light-emitting diode flashing lights facing Driveway B.
 - f. Emergency Notification System sign ENS (I-13).
 - g. "No Trespassing" sign.
- 4. Install a "No Trespassing" sign in the northeast and southwest quadrants.

RAILROAD INCLUSIVE

- 1. Black River & Western/Delaware and Raritan River Railroad shall establish appropriate maintenance of traffic and traffic controls for trains, vehicles, and pedestrians affected by work at the crossing <u>before</u> work begins.
- Black River & Western/Delaware and Raritan River Railroad shall notify the Department's Railroad Engineering Safety Unit in <u>writing</u> when work is to commence and when work is complete, for scheduling of inspections and issuance of acceptance/approval.
- 3. Upon approval of the appropriate documents and associated funding, the State of New Jersey shall reimburse Black River & Western/Delaware and Raritan River Railroad for costs incurred to implement the recommendation listed in Section A line item 1-4 and Section B Item 1-4.
- 4. Black River & Western/Delaware and Raritan River Railroad shall provide a signed and dated Certificate of Compliance Items Containing Steel & Iron; "NJDOT Form DC-17RR, upon delivery of rails/steel/iron to the at-grade crossing or upon submission of the first invoice for surface construction of the subject project. The first surface construction invoice must include the "Contractor's Certificate of Compliance;" NJDOT Form DC-17RR for acceptance and approval.

- 5. Upon completion of all construction of the subject project, Black River & Western/Delaware and Raritan River Railroad shall provide a "Statement of Certification" specifying, "the Railroad certifies that all materials received meet or exceed the applicable A.R.E.M.A. and N.J.D.O.T. Standards and all work has been completed to the satisfaction of N.J.D.O.T." The "Statement of Certification" is required for Project Closeout.
- 6. NJDOT Railroad Engineering Safety Unit will send out a Notification of Project Closeout, at which time, the Railroad has forty-five (45) days to submit FINAL invoices if any. Invoices may not be accepted after the federal project end date.

C. The New Jersey Department of Transportation Railroad Engineering Safety Unit (through the detour contractor) shall:

- 1. Install dynamic envelope pavement marking.
- 2. Install a railroad stop bar at each approach to the at-grade crossing.
- 3. Install a railroad advance warning (W10-1) sign on each approach to the at-grade crossing. (Reference: MUTCD 8B.06, Section 2C.05 and Table 2C-4.)
- 4. Install railroad advance warning pavement markings on each approach to the at-grade crossing.
- 5. Reestablish the double yellow center line pavement marking on each side of the at-grade crossing.
- 6. Reestablish the white edge line pavement markings on each side of the at-grade crossing.

D. The Township of Howell shall:

1. Maintain all pavement markings, railroad advance warning pavement markings, signs, and stop bars within the Township's jurisdiction.

E. Inclusive:

- 1. ALL devices installed controlling roadway vehicles and pedestrians shall be per the current Manual on Uniform Traffic Control Devices (MUTCD).
- 2. All work associated with this matter shall be subject to final inspection and approval by NJDOT'S Railroad Engineering Services Unit.
- 3. The Diagnostic Team always reserves the right to reconvene if these railroad traffic control devices advanced warning devices, roadway approaches, and crossing surfaces are not adequate.

5/11/2023

The distribution of this Memorandum of Record is to those listed on the Initiation of Proceedings and those in attendance at the Diagnostic Team Meeting. The placement of a Public Notice will be in local newspapers or publications. Unless any concerned party or a member of the general public advances a meritorious objection, the matter is submitted to the Commissioner of the New Jersey Department of Transportation for final determination. Any person NOT in accord with these provisions MUST reply in writing within **thirty (30) days** of the receipt of this Memorandum of Record. All submissions must include the name or agency and contact information, the at-grade crossing name, and the DOT Docket Number. **Failure to respond qualifies as acceptance.**

Meritorious objections received will warrant submission to the Department's Exception Review Committee to determine further action.

Completion of the work described herein should be within two (2) years of the issuance of the ORDER.

Direct any questions and/or objections concerning this matter, in writing, to the Diagnostic Team Leader, Salma Abdelrahim – salma.abdelrahim@dot.nj.gov

DEPARTMENT OF TRANSPORTATION Approved by:

Salma Abdelrahim

Diagnostic Team Leader

Railroad Engineering Safety Unit



DEPARTMENT OF TRANSPORTATION P.O. Box 600 Trenton, New Jersey 08625-0600

PHILIP D. MURPHY
Governor

SHEILA Y. OLIVER Lt. Governor DIANE GUTIERREZ-SCACCETTI

Commissioner

IN THE MATTER OF THE REVIEW OF	MEMORANDUM OF RECORD
REESTABLIISHING AN HIGHWAY-RAIL AT- GRADE CROSSING OF BLACK RIVER &) WEST MAIN STREET (CR-524)
WESTERN/DELAWARE AND RARITAN RIVER RAILROAD FREEHOLD I.T. LINE, WITH WEST MAIN STREET (CR-524), IN THE	DOCKET NO. DOT 09-2023CM
MUNICIPALITY OF HOWELL TOWNSHIP, MONMOUTH COUNTY, NEW JERSEY	
USDOT INVENTORY NO. 501186A.	1

ATTENTION:

The Commissioner of the New Jersey Department of Transportation initiated proceedings for the above-captioned matter to determine the highway-rail at-grade crossing surface and railroad warning devices necessary for the re-establishment of the at-grade crossing.

Black River & Western/Delaware and Raritan River Railroad requested the reestablishment of the highway-rail at-grade crossing due to the restoration of 5 miles of the Freehold I.T. track between Freehold and Farmingdale to divert freight operations from the NJT North Jersey Coast Line. The line will redirect the freight service away from busy at-grade crossings in Redbank and neighboring communities and continue to provide service to four existing customers and the Naval Weapons Station at Earl.

After notice, a Diagnostic Team Meeting took place on Thursday, March 30, 2023, at the location of the proposed highway-rail at-grade crossing of West Main Street (CR-524), in Township of Howell, Monmouth County.

The following stakeholders were present at the Diagnostic Team Meeting.

NEW JERSEY DEPARTMENT OF TRANSPORTATION (NJDOT)

Salma Abdelrahim Barbara Foran Diagnostic Team Leader Principal Engineer

Railroad Engineering Safety Railroad Engineering Safety

BLACK RIVER & WESTERN/DELAWARE AND RARITAN RIVER RAILROAD

Kean Burenga	President	BRW/DRRR
Colton Burenga	Track Supervisor	BRW/DRRR
Cathrin Banks	Vice President/General Counsel	BRW/DRRR
John Sobotka	Safety Consultant	BRW/DRRR
Ryan Gerhardt	Transportation Services	BRW/DRRR

MONMOUTH COUNTY

Gary Fread	Asst. Superintendent/Administration	Division of Highways
Michael Nei	Traffic Engineer	Monmouth County
Vincent J. Cardone	Principal Traffic Engineer	Monmouth County

HOWELL TOWNSHIP

Justin Yost	Deputy Director of Community Development	Howell Township
Michael Silvani	Patrolman Traffic Safety Unit	Howell Township

The Diagnostic Team, comprised of those in attendance, reviewed current conditions of West Main Street (CR-524) pertaining to re-establishing the highway-rail at-grade crossing.

The Diagnostic Team Leader advised the attendees that the functions and powers of the Board of Public Utility Commissioners, under Title 48:2-28 & 48:2-29 of the New Jersey Revised Statutes transferred to the Commissioner of the Department of Transportation under Title 27-1A-62. The Commissioner of the Department of Transportation delegated the review process to the Railroad Engineering Safety Unit.

For purposes of review and discussion, West Main Street (CR-524) orients in the east/west direction, and Freehold I.T. Line orients in the north/south direction. The quadrants are related to the at-grade crossing re-establishment.





DIAGNOSTIC TEAM FINDINGS

- 1. New Jersey Transit owns the railroad right-of-way.
- 2. Black River & Western/Delaware and Raritan River Railroad will maintain and operate on the tracks.
- 3. Black River & Western/Delaware and Raritan River Railroad refers to the currently disused railroad line as the Freehold Branch.
- 4. The Railroad right-of-way at West Main Street (CR-524) is approximately sixty (60) feet wide.
- 5. The West Main Street (CR-524) at-grade crossing is USDOT# 501186A in the Federal Railroad Administration Inventory Database.
- 6. One (1) track of the restored Freehold I.T. Line will cross West Main Street (CR-524), at an acute angle.
- 7. The proposed highway-rail at-grade crossing surface will be rail seal and asphalt.
- 8. There are no proposed rail switches near the proposed highway-rail at-grade crossing.
- 9. The projected volume of freight trains on the Freehold I.T. Line across the proposed West Main Street (CR-524) at-grade crossing is anticipated to be 2-3 train movements per week, Monday through Friday, during daylight hours.
- 10. The anticipated train units consist of an average of fifteen (15) railcars per movement, at a maximum speed of 25 mph.
- 11. The Railroad Company anticipates transporting hazardous material once monthly.
- 12. Currently there is no planned passenger service on the line.
- 13. The Railroad Company expects rail operations to begin in late 2023 or early 2024.
- 14. West Main Street (CR-524) is a county roadway, one (1) lane in each direction, under the jurisdiction of Monmouth County.
- 15. The Average Annual Daily Traffic Volume (AADT) as indicated by the ARCGIS is 6579 in 2021.
- 16. The posted speed limit is 45 mph on the eastbound approach and 35 mph on the westbound approach to the future at-grade crossing.

- 17. In proximity to the railroad line, the existing roadway width is approximately twenty-three (23) feet wide.
- 18. There are no sidewalks or shoulders near the railroad line.
- 19. There is a curb approximately sixty (60) feet from the rail line in the southwest quadrant.
- 20. West Main Street (CR-524) has solid double yellow center lines and solid white edge line pavement markings.
- 21. There is a driveway of a residential property approximately one hundred and fifty (150) feet from the future at-grade crossing.
- 22. The county representative indicated there is school bus activity on West Main Street (CR-524).
- 23. The surrounding area in proximity to the rail line is residential.
- 24. Open fields occupy each of the four quadrants of the future at-grade crossing.
- 25. There are dense trees in the southwest and southeast quadrants of the future at-grade crossing.
- 26. Aerial utility power lines cross the rail track from the southwest quadrant to the southeast quadrant. The aerial utility power lines are telecommunication and electrical distribution.
- 27. There are utility power lines along the south side of West Main Street (CR-524).
- 28. There is an overhead light fixture approximately sixty feet (60') from the rail line in the southeast quadrant.
- 29. There are no stormwater inlets in proximity to the railroad right-of-way.
- 30. The stopping sight distance for a vehicle to the railroad warning devices on the eastbound approach may be obstructed by a utility pole; the westbound approach is clear.
- 31. The corner sight distance between a vehicle approaching the future at-grade crossing and a train is obstructed by dense trees on both approaches.
- 32. The clearing sight distance between a vehicle at the future stop bar and a train is clear in the southwest quadrant and obstructed by trees in the northwest, northeast, and southeast quadrants.
- 33. Revisions to the highway-rail at-grade railroad crossing warning devices and highway traffic control devices at the above captioned at-grade crossings may better serve the judicious motorist.

DISCUSSION

- 1. The Diagnostic Team Members examined and discussed the site conditions at the proposed highway-rail at-grade crossing.
- 2. The re-establishing of the crossing will occur in two phases.
 - a. Phase 1 will include the installation of:
 - i. Rail seal and asphalt at-grade crossing surface.
 - ii. Crossbuck (R15-1) sign.
 - iii. Emergency Notification System sign ENS (I-13)
 - iv. "YEILD" (R1-2) sign.
 - v. "No Trespassing" sign
 - b. Phase 2 will include the installation of:
 - i. A cantilever structure in the northeast quadrant.
 - ii. Twelve inches (12") light-emitting diode flashing lights.
- 3. A flagger will be present at the at-grade crossing during rail operations throughout Phase 1.
- 4. The county mentioned that there is a project on West Main Street (CR-524) by the water company.
- 5. The county requested concrete at-grade crossing surface. A representative from the Railroad Company stated the asphalt flange surface is suitable for current train movements and roadway drivability. The County may contact the Railroad Company and NJDOT if after installation, the County feels the need to revisit the at-grade surface type,
- 6. A representative from Railroad Engineering Safety Unit suggested installing Dynamic Envelop pavement markings.
- 7. The county requested gates. The Railroad representative suggested a cantilever structure.
- 8. A representative from Railroad Engineering Safety Unit stated that the County may review the highway-rail at-grade crossing conditions and traffic impacts for a six-month period after the installation of the warning devices. After the review period, or if a need arises prior, the County may request a Diagnostic Team Meeting to review the highway-rail at-grade crossing warning devices.
- 9. 10. The Railroad Company will clear vegetation three hundred feet (300') on both sides of the track.
- 10. The county will trim trees' branches along West Main Street (CR-524) to maintain a clear view of the railroad warning devices.

- 11. The Railroad Company anticipates a three-to-five-day roadway closure for re-establishing the grade crossing.
- 12. NJDOT Railroad Engineering will implement a detour for the surface construction.
- 13. A public notice will be published in the local newspaper (Asbury Park Press) to inform the public of the project.

DIAGNOSTIC TEAM RECOMMENDATIONS:

A. Black River & Western/Delaware and Raritan River Railroad Shall:

SURFACE

- 1. Install a new crossing surface. The crossing surface shall extend a minimum of three (3) feet beyond the outer edge of the pavement and/or walkway. The new crossing surface shall include a continuous welded running rail. The design of the crossing shall conform to railroad standards and provide as uniform as practical vertical profile through the crossing area to minimize any discontinuity between the crossing surface and the roadway approach pavements leading up to the crossing confines and track structure.
- 2. According to the Americans with Disabilities Act of 1990 "ADA" and the 2010 ADA Standards for Accessible Design, ADA requires that the railroad flangeway widths be a maximum of 2½" wide from inside ball of rail to the grade crossing surface and depth of the flangeway area/gap should be approximately 1½" deep from top of rail to the bottom of flangeway gap. NOTE: The Highway-Rail At-Grade Crossing Surface shall be level with top of the rail.
- 3. Pave approaches.
- 4. Clear/clean out any vegetation and debris within the railroad R.O.W., three hundred (300) feet on each side of the at-grade crossing.
- 5. The West Main Street (CR-524) at-grade crossing surface project requires a <u>minimum</u> of three (3) days for surface installation.

B. Black River & Western/Delaware and Raritan River Railroad Shall:

• Phase 1 (at Railroad's own expense):

- 1. Install passive at-grade crossing assembly. (Reference current MUTCD Section 8B.04)
 - a. Install post-mounted, back-to-back retro-reflective railroad crossing crossbuck (R15-1) signs on each approach to the at-grade crossing.
 - b. Install a post-mounted, single-faced retro-reflective "YEILD" (R1-2) sign on each approach to the at-grade crossing.
 - c. Install a 2-inch white retroreflective strip on the front and back of each post, on each approach to the at-grade crossing.

• Phase 2 (Reimbursed by NJDOT):

- 1. Remove passive at-grade crossing assembly from each approach to the at-grade crossing.
- 2. In the northeast quadrant:
 - a. Remove passive at-grade crossing assembly.
 - b. Install a cantilever structure.
 - c. Install back-to-back twelve inches (12") light-emitting diode flashing lights post-mounted on the cantilever.
 - d. Install back-to-back twelve inches (12") light-emitting diode flashing lights on the cantilever arm.
 - e. Reinstall post-mounted, back-to-back retro-reflective railroad crossing crossbuck (R15-1) signs.
 - f. Reinstall an Emergency Notification System Sign ENS (I-13) on the post of each approach to the at-grade crossing.
 - g. Install a "No Trespassing" sign.
- 3. In the southwest quadrant:
 - a. Remove passive at-grade crossing assembly.
 - b. Install new foundation for mast.
 - e. Install post-mounted, back-to-back retro-reflective railroad crossing crossbuck (R15-1) signs.
 - d. Install back-to-back twelve inches (12") light-emitting diode flashing lights.
 - e. Install an Emergency Notification System Sign ENS (I-13).
 - f. Install a "No Trespassing" sign.
- 4. In the northwest and southeast quadrants:
 - a. Install a "No Trespassing" sign.

RAILROAD INCLUSIVE

- 2. Black River & Western/Delaware and Raritan River Railroad shall establish appropriate maintenance of traffic and traffic controls for trains, vehicles, and pedestrians affected by work at the crossing <u>before</u> work begins.
- 3. Black River & Western/Delaware and Raritan River Railroad shall notify the Department's Railroad Engineering Safety Unit in <u>writing</u> when work is to commence and when work is complete, for scheduling of inspections and issuance of acceptance/approval.
- 4. Upon approval of the appropriate documents and associated funding, the State of New Jersey shall reimburse Black River & Western/Delaware and Raritan River Railroad for costs incurred to implement the recommendation listed in Section A line item 1-4 and Section B Item 1-4.

- 5. Black River & Western/Delaware and Raritan River Railroad shall provide a signed and dated Certificate of Compliance Items Containing Steel & Iron"; NJDOT Form DC-17RR, upon delivery of rails/steel/iron to the at-grade crossing or upon submission of the first invoice for surface construction of the subject project. The first surface construction invoice must include the "Contractor's Certificate of Compliance"; NJDOT Form DC-17RR for acceptance and approval.
- 6. Upon completion of all construction of the subject project, Black River & Western/Delaware and Raritan River Railroad shall provide a "Statement of Certification" specifying, "the Railroad certifies that all materials received meet or exceed the applicable A.R.E.M.A. and N.J.D.O.T. Standards and all work has been completed to the satisfaction of N.J.D.O.T." The "Statement of Certification" is required for Project Closeout.
- 7. NJDOT Railroad Engineering Safety Unit will send out a Notification of Project Closeout, at which time, the Railroad has forty-five (45) days to submit FINAL invoices if any. Invoices may not be accepted after the federal project end date.

C. The New Jersey Department of Transportation Railroad Engineering Safety Unit (through the detour contractor) shall:

- 1. Install dynamic envelope pavement marking.
- 2. Install a railroad stop bar at each approach to the at-grade crossing.
- 3. Install a railroad advance warning (W10-1) sign on each approach to the at-grade crossing. (Reference: MUTCD 8B.06, Section 2C.05 and Table 2C-4.)
- 4. Install railroad advance warning pavement markings on each approach to the at-grade crossing.
- 5. Reestablish the double yellow center line pavement marking on each side of the at-grade crossing.
- 6. Reestablish the white edge line pavement markings on each side of the at-grade crossing.

D. The County of Monmouth shall:

1. Maintain all pavement markings, railroad advance warning pavement markings, signs, and stop bars within the County's jurisdiction.

E. Inclusive:

1. ALL devices installed controlling roadway vehicles and pedestrians shall be per the current Manual on Uniform Traffic Control Devices (MUTCD).

Date: 5/11/2023

- 2. <u>All</u> work associated with this matter shall be subject to final inspection and approval by NJDOT'S Railroad Engineering Services Unit.
- The Diagnostic Team always reserves the right to reconvene if these railroad traffic control
 devices advanced warning devices, roadway approaches, and crossing surfaces are not
 adequate for safety.

The distribution of this Memorandum of Record is to those listed on the Initiation of Proceedings and those in attendance at the Diagnostic Team Meeting. The placement of a Public Notice will be in local newspapers or publications. Unless any concerned party or a member of the general public advances a meritorious objection, the matter is submitted to the Commissioner of the New Jersey Department of Transportation for final determination. Any person NOT in accord with these provisions MUST reply in writing within **thirty (30) days** of the receipt of this Memorandum of Record. All submissions must include the name or agency and contact information, the at-grade crossing name, and the DOT Docket Number. **Failure to respond qualifies as acceptance.**

Meritorious objections received will warrant submission to the Department's Exception Review Committee to determine further action.

Completion of the work described herein should be within two (2) years of the issuance of the ORDER.

Direct any questions and/or objections concerning this matter to the Diagnostic Team Leader, Salma Abdelrahim – salma.abdelrahim@dot.nj.gov.

DEPARTMENT OF TRANSPORTATION Approved by:

Salma Abdelrahim

Diagnostic Team Leader

Railroad Engineering Safety Unit



State of New Jersey

DEPARTMENT OF TRANSPORTATION P.O. Box 600 Trenton, New Jersey 08625-0600

PHILIP D. MURPHY Governor

DIANE GUTIERREZ-SCACCETTI

Commissioner

TAHESHA L. WAY Lt. Governor

IN THE MATTER OF THE REVIEW OF ESTABLISHING A HIGHWAY-RAIL AT-GRADE CROSSINGS OF BLACK RIVER WESTERN/DELAWARE AND RARITAN RIVER) FREEHOLD I.T. LINE, RAILROAD WITH) SOUTHARD AVENUE AND PREVENTORIUM ROAD (RAILROAD AVENUE) IN MUNICIPALITY OF HOWELL TOWNSHIP AND BOROUGH, FARMINGDALE MONMOUTH COUNTY.

MEMORANDUM OF RECORD

SOUTHARD AVENUE DOCKET NO. DOT 08-2024CM

PREVENTORIUM ROAD DOCKET NO. DOT 09-2024CM

ATTENTION:

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Memorandum of Record - MOR Southard Avenue - Docket No. DOT 08-2024 CM Preventorium Road - Docket No. DOT 09-2024 CM Page 2 of 3

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Memorandum of Record - MOR Southard Avenue - Docket No. DOT 08-2024 CM Preventorium Road - Docket No. DOT 09-2024 CM Page 3 of 3

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To the above Addressees:

Transmitted herewith is the Diagnostic Team's MEMORANDUM OF RECORD, for the above referenced project.

Direct any questions, comments, or objections in writing to the NJDOT's Railroad Engineering Safety Unit, Diagnostic Team Leader at salma.abdelrahim@dot.nj.gov.

DEPARTMENT OF TRANSPORTATION

Approved by:

Dated:

9/22/23

Gregory Spiritosanto Supervisor Engineer

Railroad Engineering Safety Unit

Capital Program Support



DEPARTMENT OF TRANSPORTATION P.O. Box 600 Trenton, New Jersey 08625-0600

PHILIP D. MURPHY
Governor

DIANE GUTIERREZ-SCACCETTI

Commissioner

TAHESHA L. WAY Lt. Governor

IN THE MATTER OF REVIEW OF THE	MEMORANDUM OF RECORDS
RAILROAD WARNING DEVICES, TRAFFIC)
CONTROL DEVICES AND SURFACE OF THE)
HIGHWAY-RAIL AT-GRADE CROSSING OF	Southard Avenue
BLACK RIVER & WESTERN/DELAWARE AND)
RARITAN RIVER RAILROAD FREEHOLD I.T.	\(\)
LINE, WITH SOUTHARD AVENUE, IN THE	DOCKET NO. DOT 08-2024CM
TOWNSHIP OF HOWELL AND BOROUGH OF	j
FARMINGDALE, MONMOUTH COUNTY, NEW	j
JERSEY. USDOT INVENTORY NO. 501187G.)

ATTENTION:

The Commissioner of the New Jersey Department of Transportation initiated proceedings for the above-captioned matter to determine the highway-rail at-grade crossing surface and railroad warning devices necessary for the re-establishment of the at-grade crossing.

Black River & Western/Delaware and Raritan River Railroad is restoring 5 miles of the Freehold I.T. track between Freehold and Farmingdale to divert freight operations from the NJT North Jersey Coast Line. The line will redirect freight service away from busy at-grade crossings in Redbank and neighboring communities and continue to provide service to four existing customers and the Naval Weapons Station at Earl.

After notice, a Diagnostic Team Meeting took place on Wednesday, August 30, 2023, at the location of the highway-rail at-grade crossing of Southard Avenue, in Township of Howell and Borough of Farmingdale, Monmouth County.

The following stakeholders were present at the Diagnostic Team Meeting:

Salma Abdelrahim Diagnostic Team Leader Railroad Engineering Safety Unit/NJDOT
Barbara Foran Principal Engineer Railroad Engineering Safety Unit/NJDOT
Kean Burenga President BRW/DRRR
John Clements Wastewater Engineer Mott MacDonald

James A. Daly

Mayor

Farmingdale Borough

Justin Yost

Deputy Director

Community Development/Howell Township

Michael Silvani

Patrolman Traffic Safety Unit

Howell Township

Ronald Sanasac

Asst. Superintendent

Howell Schools

The Diagnostic Team, comprised of those in attendance, reviewed the current conditions of Southard Avenue highway-rail at-grade crossing.

The Diagnostic Team Leader advised the attendees that the functions and powers of the Board of Public Utility Commissioners, under Title 48:2-28 & 48:2-29 of the New Jersey Revised Statutes transferred to the Commissioner of the Department of Transportation under Title 27-1A-62. The Commissioner of the Department of Transportation delegated the review process to the Railroad Engineering Safety Unit.

For purposes of review and discussions, Southard Avenue orients in the north/south direction, and Black River & Western/Delaware and Raritan River Railroad Freehold I.T. Line orients in the east/west direction. The quadrants are related to the at-grade crossing. The red line represents the approximate location of the at-grade crossing.





DIAGNOSTIC TEAM FINDINGS

- 1. New Jersey Transit owns the railroad right-of-way.
- 2. Black River & Western/Delaware and Raritan River Railroad will maintain and operate on the tracks.
- 3. Black River & Western/Delaware and Raritan River Railroad refers to the currently disused railroad line as the Freehold Branch.
- 4. The Railroad right-of-way at Southard Avenue is approximately sixty-six (66) feet wide.
- 5. The Southard Avenue at-grade crossing is USDOT# 501187G in the Federal Railroad Administration Inventory Database.
- 6. One (1) track of the restored Freehold I.T. Line will cross Southard Avenue, at a right angle.
- 7. The highway-rail at-grade crossing surface is rail seal and asphalt. The at-grade crossing surface was constructed on June 28, 2023, under a municipal utility project.
- 8. There is a rail switch near the highway-rail at-grade crossing for a turn out near the highway-rail at-grade crossing approximately nine (9) feet of the edge of the roadway.
- The projected volume of freight trains on the Freehold I.T. Line across the Southard Avenue at-grade crossing is anticipated to be 2-3 train movements per week, Monday through Friday, during daylight hours.
- 10. The anticipated train units consist of an average of fifteen (15) railcars per movement, at a maximum speed of 10 mph.
- 11. The Railroad Company projects transporting about four (4) cars of hazardous materials per year.
- 12. Currently there is no planned passenger service on the line.
- 13. The Railroad Company expects rail operations to begin in late 2023 or early 2024.
- 14. According to NJDOT Straight Line Diagram, Southard Avenue (CR-21) County Road ends at its intersection with Squankum Yellowbrook Road, approximately two thousand four hundred (2,400) feet south the at-grade crossing.
- 15. Southard Avenue is a municipal roadway, one (1) lane in each direction, under the jurisdiction of Howell Township at the southern side of the roadway and Farmingdale Borough at the northern side of the roadway.

- 16. The Average Annual Daily Traffic Volume (AADT) as indicated by the Federal Railroad Administration is 4224 in 2016.
- 17. The posted speed limit is 25 mph near the at-grade crossing.
- 18. In proximity to the railroad line, the existing roadway width is approximately thirty-three (33) feet wide.
- 19. In the northwest quadrant, there is a driveway parallel with the railroad track. The driveway is approximately fifty feet (50') from the at-grade crossing.
- 20. In the northeast quadrant of Southard Avenue at-grade, there is a driveway approximately three hundred feet (300') from the at-grade crossing.
- 21. There are no sidewalks or shoulders near the at-grade crossing. There are curbs in the southbound approach to the at-grade crossing.
- 22. There are faded solid double yellow center lines and solid white edge line pavement markings near the at-grade crossing.
- 23. There are no stop bar payement markings on both approaches to the at-grade crossing.
- 24. There are railroad pavement markings on the southbound approach to the at-grade crossing, but there is no one on the northbound approach to the at-grade crossing.
- 25. There are railroad advance warning signs (W10-1) on both approaches to the at-grade crossing.
- 26. The municipality representative indicated that school buses utilize Southard Avenue.
- 27. The surrounding area in proximity to the rail line is commercial.
- 28. There are commercial buildings in the northeast and northwest quadrants of the at-grade crossing.
- 29. There are dense trees in the northeast and southeast quadrants of the at-grade crossing.
- 30. There is an open field in the southwest quadrant of the at-grade crossing.
- 31. There is a commercial building in the northwest quadrant of the at-grade crossing.
- 32. There are utility power lines along both sides of Southard Avenue in proximity to the at-grade crossing.

- 33. There are storm water inlets in the northwest and northeast quadrants of the at-grade crossing.
- 34. There is no overhead light fixture in proximity to the railroad right-of-way.

DISCUSSION

- 1. The Diagnostic Team Members examined and discussed the site conditions at the highway-rail at-grade crossing.
- 2. The Diagnostic Team Members discussed the locations of the railroad warning devices.
- 3. The Team agreed to install:
 - a. Crossbuck (R15-1) sign
 - b. Twelve inches (12") light-emitting diode flashing lights
 - c. Cantilever
 - d. Guide rail
 - e. Delineator
 - f. Emergency Notification System sign ENS (I-13)
 - g. "No Trespassing" sign
- 4. The crossbuck (R15-1) signs need to be installed promptly.
- 5. A flagger will be present at the at-grade crossing during rail operations until flashing lights are installed.
- 6. The Railroad Company will clear vegetation three hundred feet (300') on both sides of the track.
- 7. The Townships will trim tree branches to maintain clear sight distance within their jurisdictions.
- 8. The Townships will maintain, within their jurisdictions, railroad advance warning signs, railroad pavement markings, stop bars, double yellow lines, and edge lines around the at-grade crossing.
- The Diagnostic Team discussed a truck's right turning radius exiting the business in the northwest quadrant of the at-grade crossing. Currently, trucks encroach upon the area intended for railroad warning devices.
- 10. The Team suggested ring guide rail due to heavy truck movement in the northwest quadrant.
- 11. The Team suggested flexible delineators in the northwest quadrant, for a visual mark for the edge of driveway and roadway.

DIAGNOSTIC TEAM RECOMMENDATIONS:

A. Black River & Western/Delaware and Raritan River Railroad Shall (Reimbursed by NJDOT):

- 1. Remove passive at-grade crossing assembly from each approach to the at-grade crossing.
- 2. Install the following in the northwest quadrant:
 - a. New foundation for cantilever.
 - b. Single lane cantilever.
 - e. Mast mounted back-to-back retro-reflective railroad crossing crossbuck (R15-1) signs.
 - d. Mast mounted back-to-back twelve inches (12") light-emitting diode flashing lights.
 - e. Back-to-back retro-reflective railroad crossing crossbuck (R15-1) signs on the cantilever arm.
 - f. Back-to-back twelve inches (12") light-emitting diode flashing lights on the cantilever arm.
 - g. Emergency Notification System sign ENS (I-13).
 - h. "No Trespassing" sign.
 - i. Ring guide rail.
 - i. Delineators.
- 3. Install the following in the southeast quadrant:
 - a. New foundation for mast.
 - b. Back-to-back retro-reflective railroad crossing crossbuck (R15-1) signs.
 - c. Back-to-back twelve inches (12") light-emitting diode flashing lights.
 - d. Emergency Notification System sign ENS (I-13).
 - e. "No Trespassing" sign.
- 4. Install a "No Trespassing" sign in the northeast and southwest quadrants.

RAILROAD INCLUSIVE

- Black River & Western/Delaware and Raritan River Railroad shall establish appropriate maintenance of traffic and traffic controls for trains, vehicles, and pedestrians affected by work at the crossing <u>before</u> work begins.
- 2. Black River & Western/Delaware and Raritan River Railroad shall notify the Department's Railroad Engineering Safety Unit in <u>writing</u> when work is to commence and when work is complete, for scheduling of inspections and issuance of acceptance/approval.
- 3. Upon approval of the appropriate documents and associated funding, the State of New Jersey shall reimburse Black River & Western/Delaware and Raritan River Railroad for costs incurred to implement the recommendation listed in Section B Phase 2.

- 4. Black River & Western/Delaware and Raritan River Railroad shall provide a signed and dated Certificate of Compliance Items Containing Steel & Iron;" NJDOT Form DC-17RR, upon delivery of rails/steel/iron to the at-grade crossing or upon submission of the first invoice for surface construction of the subject project. The first surface construction invoice must include the "Contractor's Certificate of Compliance;" NJDOT Form DC-17RR for acceptance and approval.
- 5. Upon completion of all construction of the subject project, Black River & Western/Delaware and Raritan River Railroad shall provide a "Statement of Certification" specifying, "the Railroad certifies that all materials received meet or exceed the applicable A.R.E.M.A. and N.J.D.O.T. Standards and all work has been completed to the satisfaction of N.J.D.O.T." The "Statement of Certification" is required for Project Closeout.
- 6. NJDOT Railroad Engineering Safety Unit will send out a Notification of Project Closeout, at which time, the Railroad has forty-five (45) days to submit FINAL invoices if any. Invoices may not be accepted after the federal project end date.

C. The New Jersey Department of Transportation Railroad Engineering Safety Unit (through the detour contractor) shall:

- 1. Install dynamic envelope pavement marking.
- 2. Install a railroad stop bar at each approach to the at-grade crossing.
- 3. Install a railroad advance warning (W10-1) sign on each approach to the at-grade crossing. (Reference: MUTCD 8B.06, Section 2C.05 and Table 2C-4.)
- 4. Install railroad advance warning pavement markings on each approach to the at-grade crossing.
- 5. Reestablish the double yellow center line pavement marking on each side of the at-grade crossing.
- 6. Reestablish the white edge line pavement markings on each side of the at-grade crossing.

D. The Township of Howell shall:

1. Maintain all pavement markings, railroad advance warning pavement markings, signs, and stop bars within the Township's jurisdiction.

E. The Borough of Farmingdale shall:

1. Maintain all pavement markings, railroad advance warning pavement markings, signs, and stop bars within the Township's jurisdiction.

F. Inclusive:

- 1. ALL devices installed controlling roadway vehicles and pedestrians shall be per the current Manual on Uniform Traffic Control Devices (MUTCD).
- 2. <u>All</u> work associated with this matter shall be subject to final inspection and approval by NJDOT'S Railroad Engineering Services Unit.
- The Diagnostic Team always reserves the right to reconvene if these railroad traffic control
 devices advanced warning devices, roadway approaches, and crossing surfaces are not
 adequate.

The distribution of this Memorandum of Record is to those listed on the Initiation of Proceedings and those in attendance at the Diagnostic Team Meeting. The placement of a Public Notice will be in local newspapers or publications. Unless any concerned party or a member of the general public advances a meritorious objection, the matter is submitted to the Commissioner of the New Jersey Department of Transportation for final determination. Any person NOT in accord with these provisions MUST reply in writing within **thirty (30) days** of the receipt of this Memorandum of Record. All submissions must include the name or agency and contact information, the at-grade crossing name, and the DOT Docket Number. Failure to respond qualifies as acceptance.

Meritorious objections received will warrant submission to the Department's Exception Review Committee to determine further action.

Completion of the work described herein should be within two (2) years of the issuance of the ORDER.

Direct any questions and/or objections concerning this matter, in writing, to the Diagnostic Team Leader, Salma Abdelrahim—salma.abdelrahim@dot.nj.gov

Date: 9 /21/2023

DEPARTMENT OF TRANSPORTATION Approved by:

Salma Abdelrahim

Diagnostic Team Leader

Railroad Engineering Safety Unit



DEPARTMENT OF TRANSPORTATION P.O. Box 600 Trenton, New Jersey 08625-0600

PHILIP D. MURPHY
Governor

DIANE GUTIERREZ-SCACCETTI

Commissioner

TAHESHA L. WAY Lt. Governor

IN THE MATTER OF THE REVIEW OF)	MEMORANDUM OF RECORD
ESTABLISHING A HIGHWAY-RAIL AT-GRADE)	
CROSSING OF BLACK RIVER &)	
WESTERN/DELAWARE AND RARITAN RIVER)	Preventorium Road
RAILROAD FREEHOLD I.T. LINE, WITH)	
PREVENTORIUM ROAD, IN THE TOWNSHIP OF)	
HOWELL AND BOROUGH OF FARMINGDALE,)	DOCKET NO. DOT 09-2024CM
MONMOUTH COUNTY, NEW JERSEY)	DUCKET 140. DUT 07-2024CM

ATTENTION:

The Commissioner of the New Jersey Department of Transportation initiated proceedings for the above-captioned matter to determine the highway-rail at-grade crossing surface and railroad warning devices necessary for the establishment of the at-grade crossing.

Black River & Western/Delaware and Raritan River Railroad requested the establishment of the highway-rail at-grade crossing due to the restoration of 5 miles of the Freehold I.T. track between Freehold and Farmingdale to divert freight operations from the NJT North Jersey Coast Line. The line will redirect freight service away from busy at-grade crossings in Redbank and neighboring communities and continue to provide service to four existing customers and the Naval Weapons Station at Earl.

After notice, a Diagnostic Team Meeting took place on Wednesday, August 30, 2023, at the location of the proposed highway-rail at-grade crossing of Preventorium Road, in Township of Howell and Borough of Farmingdale, Monmouth County.

The following stakeholders were present at the Diagnostic Team Meeting:

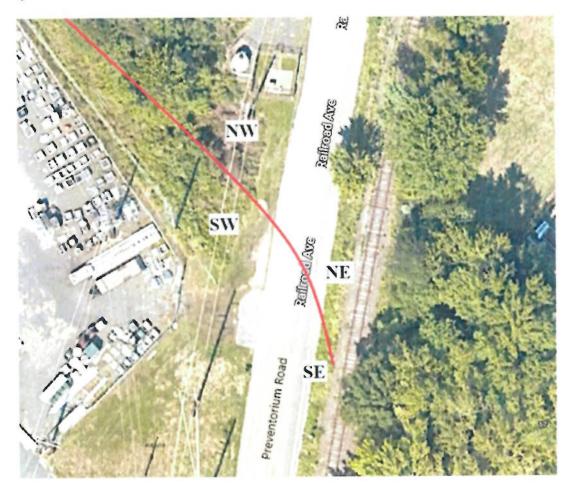
Salma Abdelrahim	Diagnostic Team Leader	Railroad Engineering Safety Unit/NJDOT
Barbara Foran	Principal Engineer	Railroad Engineering Safety Unit/NJDOT
Kean Burenga	President	BRW/DRRR
John Clements	Wastewater Engineer	Mott MacDonald
James A. Daly	Mayor	Farmingdale Borough
Justin Yost	Deputy Director	Community Development/Howell Township

Michael Silvani Patrolman Traffic Safety Unit Howell Township Ronald Sanasac Asst. Superintendent Howell Schools

The Diagnostic Team, comprised of those in attendance, reviewed the current conditions of Preventorium Road pertaining to establishing the highway-rail at-grade crossing.

The Diagnostic Team Leader advised the attendees that the functions and powers of the Board of Public Utility Commissioners, under Title 48:2-28 & 48:2-29 of the New Jersey Revised Statutes transferred to the Commissioner of the Department of Transportation under Title 27-1A-62. The Commissioner of the Department of Transportation delegated the review process to the Railroad Engineering Safety Unit.

For purposes of review and discussions, Preventorium Road orients in the north/south direction, and Black River & Western/Delaware and Raritan River Railroad Freehold I.T. Line orients in the east/west direction. The quadrants are related to the at-grade crossing establishment. The red line represents the approximate location of the at-grade crossing. The roadway is known as Railroad Avenue north of the proposed at-grade and Preventorium Road south of the proposed at-grade crossing.





DIAGNOSTIC TEAM FINDINGS

- 1. New Jersey Transit owns the railroad right-of-way.
- 2. Black River & Western/Delaware and Raritan River Railroad will maintain and operate on the tracks.
- 3. Black River & Western/Delaware and Raritan River Railroad refers to the currently disused railroad line as the Freehold Branch.
- 4. The Railroad right-of-way at Preventorium Road is approximately one thousand feet (1,000') wide.
- 5. One (1) track of Freehold I.T. Line will cross Preventorium Road, at an acute angle.
- 6. An at-grade crossing existed in a similar location in the 1950s, and it was removed in the 1960s. The at-grade crossing's line was called Sea Girt.
- 7. The proposed highway-rail at-grade crossing surface will be rail seal and asphalt.
- 8. There are no proposed rail switches near the proposed highway-rail at-grade crossing. There is a turnout near the proposed highway-rail at-grade crossing to merge with Southern Secondary Branch.
- 9. The projected volume of freight trains on the Freehold I.T. Line across the proposed Preventorium Road at-grade crossing is anticipated to be 2-3 train movements per week, Monday through Friday, during daylight hours.
- 10. The anticipated train units consist of an average of fifteen (15) railcars per movement, at a maximum speed of 10 mph.
- 11. The Railroad Company projects transporting about four (4) cars of hazardous materials per year.
- 12. Currently there is no planned passenger service on the line.
- 13. The Railroad Company expects rail operations to begin in late 2023 or early 2024.
- 14. Preventorium Road is a municipal roadway, one (1) lane in each direction, under the jurisdiction of Howell Township at the southern side of the roadway and Farmingdale Borough at the northern side of the roadway.
- 15. There is an existing at-grade crossing on Railroad Road. Railroad Road at-grade crossing is one thousand feet (1,000') from the proposed Preventorium at-grade crossing.

- 16. The Average Annual Daily Traffic Volume (AADT) as indicated by the Federal Railroad Administration for Railroad Avenue at-grade crossing is 1,824 in 2017 with eighteen percent (18%) trucks. AADT of Preventorium Road could be approximately the same as Railroad Avenue's AADT, as Railroad Avenue at-grade crossing and Preventorium Road proposed at-grade crossing are on the same roadway.
- 17. The posted speed limit is 25 mph.
- 18. In proximity to the railroad line, the existing roadway width is approximately thirty feet (30') wide.
- 19. There is an intersection approximately five hundred feet (500') from the proposed at-grade crossing in the northern side of the proposed at-grade crossing.
- 20. There is an intersection approximately six hundred feet (600') from the proposed at-grade crossing in the southern side of the proposed at-grade crossing.
- 21. There are no sidewalks, curbs, or shoulders near the railroad line.
- 22. There is no solid double yellow center lines and solid white edge line pavement markings near the proposed at-grade crossing at Farmingdale Borough side of the roadway.
- 23. There are solid double yellow center lines and solid white edge line pavement markings near the proposed at-grade crossing at Howell Township side of the roadway.
- 24. The municipalities representative indicated 2-3 school buses utilize Preventorium Road per day.
- 25. The municipalities representative indicated that there are no Transit buses utilize Preventorium Road.
- 26. The surrounding area in proximity to the rail line is commercial.
- 27. In the northwest quadrant, there is Manasquan River Regional Sewerage Authority (MRRSA) pumping station.
- 28. In the northwest quadrant, there is Jersey Central Power and Light Company (JCP&L) building.
- 29. In the southeast and northeast quadrants, there is Southern Secondary Branch railroad track.
- 30. There are dense trees in all quadrants of the proposed at-grade crossing.
- 31. There are utility power lines along the west side of Preventorium Road.

- 32. There is no overhead light fixture in proximity to the railroad right-of-way.
- 33. There are no stormwater inlets in proximity to the railroad right-of-way. There is no flooding issue around the proposed at-grade crossing area.

DISCUSSION

- 1. The Diagnostic Team Members examined and discussed the site conditions at the proposed highway-rail at-grade crossing.
- 2. The Railroad Company is establishing Preventorium Road at-grade crossing to move the freight service on its line to the south.
- 3. The establishing of the crossing will occur in two phases.
 - a. Phase I will include the installation of:
 - i. Rail seal and asphalt at-grade crossing surface.
 - ii. Crossbuck (R15-1) sign.
 - iii. Emergency Notification System sign ENS (I-13)
 - iv. "YEILD" (R1-2) sign.
 - v. "No Trespassing" sign
 - b. Phase 2 will include the installation of:
 - i. Twelve inches (12") light-emitting diode flashing lights.
- 4. A flagger will be present at the at-grade crossing during rail operations throughout Phase 1.
- 5. The Railroad Company will clear vegetation three hundred feet (300°) on both sides of the track.
- 6. The Railroad Company will provide us with new USDOT# for Preventorium Road new atgrade crossing.
- 7. The Railroad Company anticipates a three-to-five-day roadway closure for establishing the grade crossing.
- 8. Howell Township and Farmingdale Borough will trim tree branches within their jurisdiction to maintain clear sight distance.
- 9. Howell Township and Farmingdale Borough will maintain pavement markings and advance warning sign within their jurisdiction.
- 10. NJDOT Railroad Engineering will implement a detour for the surface construction.

DIAGNOSTIC TEAM RECOMMENDATIONS:

A. Black River & Western/Delaware and Raritan River Railroad Shall:

SURFACE

- 1. Install a new crossing surface. The crossing surface shall extend a minimum of three (3) feet beyond the outer edge of the pavement and/or walkway. The new crossing surface shall include a continuous welded running rail. The design of the crossing shall conform to railroad standards and provide as uniform as practical vertical profile through the crossing area to minimize any discontinuity between the crossing surface and the roadway approach pavements leading up to the crossing confines and track structure.
- 2. According to the Americans with Disabilities Act of 1990 "ADA" and the 2010 ADA Standards for Accessible Design, ADA requires that the railroad flangeway widths be a maximum of 2½" wide from inside ball of rail to the grade crossing surface and depth of the flangeway area/gap should be approximately 1½" deep from top of rail to the bottom of flangeway gap, NOTE: The Highway-Rail At-Grade Crossing Surface shall be level with the top of the rail.
- 3. Pave approaches.
- 4. Clear/clean out any vegetation and debris within the railroad R.O.W., three hundred (300') feet on each side of the at-grade crossing. Remove tree in the northeast quadrant of the proposed at-grade crossing.
- 5. The Preventorium Road at grade crossing surface project requires a <u>minimum</u> of four to five (4-5) days for surface installation.

B. Black River & Western/Delaware and Raritan River Railroad Shall:

• Phase 1 (at Railroad's own expense):

- 1. Install passive at-grade crossing assembly. (Reference current MUTCD Section 8B.04)
 - a. Install post-mounted, back-to-back retro-reflective railroad crossing crossbuck (R15-1) signs on each approach to the at-grade crossing.
 - b. Install a post-mounted, single-faced retro-reflective "YEILD" (R1-2) sign on each approach to the at-grade crossing.
 - c. Install a 2-inch white retroreflective strip on the front and back of each post, on each approach to the at-grade crossing.
 - d. Install an Emergency Notification System Sign ENS (I-13) on the post of each approach to the at-grade crossing.

Phase 2 (Reimbursed by NJDOT):

- 1. Remove passive at-grade crossing assembly from each approach to the at-grade crossing.
- 2. Install the following in the northwest quadrant:
 - a. New foundation for mast.
 - b. Back-to-back retro-reflective railroad crossing crossbuck (R15-1) signs.
 - c. Back-to-back twelve inches (12") light-emitting diode flashing lights.
 - d. Emergency Notification System sign ENS (I-13).
 - e. "No Trespassing" sign.
- 3. Install the following in the southeast quadrant:
 - a. New foundation for mast.
 - b. Single-faced retro-reflective railroad crossing crossbuck (R15-1) signs, facing northbound approach.
 - c. Single-faced twelve inches (12") light-emitting diode flashing lights, facing northbound approach.
 - d. Emergency Notification System sign ENS (I-13).
 - e. "No Trespassing" sign.
- 4. Install the following in the northeast quadrant:
 - a. New foundation for mast.
 - b. Single-faced retro-reflective railroad crossing crossbuck (R15-1) signs, facing southbound approach.
 - c. Single-faced twelve inches (12") light-emitting diode flashing lights, facing southbound approach.
 - d. "No Trespassing" sign.
- 5. Install a "No Trespassing" sign in the southwest quadrant.

RAILROAD INCLUSIVE

- 1. Black River & Western/Delaware and Raritan River Railroad shall establish appropriate maintenance of traffic and traffic controls for trains, vehicles, and pedestrians affected by work at the crossing <u>before</u> work begins.
- 2. Black River & Western/Delaware and Raritan River Railroad shall notify the Department's Railroad Engineering Safety Unit in <u>writing</u> when work is to commence and when work is complete, for scheduling of inspections and issuance of acceptance/approval.
- 3. Upon approval of the appropriate documents and associated funding, the State of New Jersey shall reimburse Black River & Western/Delaware and Raritan River Railroad for costs incurred to implement the recommendation listed in Section A line item 1-4 and Section B Phase 2.

- 4. Black River & Western/Delaware and Raritan River Railroad shall provide a signed and dated Certificate of Compliance Items Containing Steel & Iron;" NJDOT Form DC-17RR, upon delivery of rails/steel/iron to the at-grade crossing or upon submission of the first invoice for surface construction of the subject project. The first surface construction invoice must include the "Contractor's Certificate of Compliance;" NJDOT Form DC-17RR for acceptance and approval.
- 5. Upon completion of all construction of the subject project, Black River & Western/Delaware and Raritan River Railroad shall provide a "Statement of Certification" specifying, "the Railroad certifies that all materials received meet or exceed the applicable A.R.E.M.A. and N.J.D.O.T. Standards and all work has been completed to the satisfaction of N.J.D.O.T." The "Statement of Certification" is required for Project Closeout.
- 6. NJDOT Railroad Engineering Safety Unit will send out a Notification of Project Closeout, at which time, the Railroad has forty-five (45) days to submit FINAL invoices if any. Invoices may not be accepted after the federal project end date.

C. The New Jersey Department of Transportation Railroad Engineering Safety Unit (through the detour contractor) shall:

- 1. Install dynamic envelope pavement marking.
- 2. Install a railroad stop bar at each approach to the at-grade crossing.
- 3. Install a railroad advance warning (W10-1) sign on each approach to the at-grade crossing. (Reference: MUTCD 8B.06, Section 2C.05 and Table 2C-4.)
- 4. Install railroad advance warning pavement markings on each approach to the at-grade crossing. A portion of the railroad advance warning pavement markings should be opposite to railroad advance warning (W10-1) sign.
- 5. Reestablish/install the double yellow center line pavement marking on each side of the atgrade crossing.
- 6. Reestablish/install the white edge line pavement markings on each side of the at-grade crossing.

D. The Township of Howell shall:

1. Maintain all pavement markings, railroad advance warning pavement markings, signs, and stop bars within the Township's jurisdiction.

E. The Borough of Farmingdale shall:

1. Maintain all pavement markings, railroad advance warning pavement markings, signs, and stop bars within the Township's jurisdiction.

F. Inclusive:

- 1. ALL devices installed controlling roadway vehicles and pedestrians shall be per the current Manual on Uniform Traffic Control Devices (MUTCD).
- 2. <u>All</u> work associated with this matter shall be subject to final inspection and approval by NJDOT'S Railroad Engineering Services Unit.
- The Diagnostic Team always reserves the right to reconvene if these railroad traffic control devices advanced warning devices, roadway approaches, and crossing surfaces are not adequate.

The distribution of this Memorandum of Record is to those listed on the Initiation of Proceedings and those in attendance at the Diagnostic Team Meeting. The placement of a Public Notice will be in local newspapers or publications. Unless any concerned party or a member of the general public advances a meritorious objection, the matter is submitted to the Commissioner of the New Jersey Department of Transportation for final determination. Any person NOT in accord with these provisions MUST reply in writing within **thirty (30) days** of the receipt of this Memorandum of Record. All submissions must include the name or agency and contact information, the at-grade crossing name, and the DOT Docket Number. **Failure to respond qualifies as acceptance.**

Meritorious objections received will warrant submission to the Department's Exception Review Committee to determine further action.

Completion of the work described herein should be within two (2) years of the issuance of the ORDER.

Direct any questions and/or objections concerning this matter, in writing, to the Diagnostic Team Leader, Salma Abdelrahim – salma.abdelrahim@dot.nj.gov

Date: 9/2//2023

DEPARTMENT OF TRANSPORTATION

Approved by:

Salma Abdelrahim

Diagnostic Team Leader

Railroad Engineering Safety Unit