

**Appendix V**  
**Alternative Alignment Analysis**  
V-2: Alternative Alignments Analysis 2024 Addendum (August 2024)



# Hudson Highlands Fjord Trail

## Alternative Alignments Analysis 2024 Addendum

### Hudson Highlands Fjord Trail Inc.

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Prepared by:

#### SLR International Corporation

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SLR Project No.: 142.17345.00002

November 27, 2024

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## 1.0 Introduction

This document appends the 2022 Alternative Alignments Analysis prepared by SLR International Corporation (SLR) to include additional information and alignment considerations focused within the defined Reach No. 1 Dockside Park to Little Stony Point. The 2024 Addendum specifically focuses within the Village of Cold Spring as it relates to connectivity in and around the Metro-North Railroad (MNR) Cold Spring Station. The alignment evaluated was suggested through the ongoing public outreach efforts conducted by Hudson Highlands Fjord Trail Inc.

This alternative analysis evaluates one additional route option titled Alignment No. 9, which stems from public feedback to avoid or reduce congestion at the Village of Cold Spring's commercial center along Main Street and to reduce directing trail traffic directly into Dockside Park.

The evaluation of Alignment No. 9 was conducted through desktop reviews of pertinent mapping and design plans as well as through field investigations and ongoing discussions with the project design team and key stakeholders.





## 2.0 2024 Alternative Alignment Analysis

The 2024 Alternative Alignments Analysis focuses on Reach No. 1 at the Village of Cold Spring and includes one additional route option. This addendum report introduces Alignment No. 9, which connects the southbound platform of the MNR Cold Spring Station to the MNR causeway just north of Dockside Park. The alignment would then continue to Little Stony Point following the currently defined Main Trail route. The new alignment is titled Alignment No. 9 because there were eight total alignments spanning the four defined trail reaches previously identified in the 2022 Alternative Alignment Analysis report. Five of the previously identified alternative alignments were evaluated within the Cold Spring community, as shown below in Figure 1.



Figure 1: Map of 2022 Reach No. 1 Alternative Alignments

The addition of Alignment No. 9 to the 2022 Alternative Alignments Analysis is related to ongoing public engagement and preparation of the Draft Generic Environmental Impact Statement submission. Based on available mapping, the new alignment traverses MNR right-of-way throughout its length and would require MNR's authorization to be implemented. Property boundary and record research will be needed to ensure other properties are not affected should alignment No.9 be pursued for implementation. Alignment No. 9 would modify and connect to the existing MNR southbound platform infrastructure to access the MNR Cold Spring Station. This addendum documents the initial observations, opportunities, and constraints that would need to be discussed further with MNR representatives should this alignment be pursued for further analysis.







**Figure 2: Map of Alignment No.9 limits**

HHFT, Inc. will coordinate with MNR as the analysis, and potentially design, advances to assure MNR's requirements and stated objectives to ultimately obtain MNR approval to construct and operate the trail on its right-of-way. Some of MNR's requirements and stated objectives are (i) a minimum 25-foot horizontal offset from the centerline of MNR tracks to the edge of the proposed trail, (ii) MNR's station guidelines (federal Americans with Disabilities Act requirements), (iii) review and approval of design and construction work plans, and (iv) future ability to perform maintenance including but not limited to track work. Any future design and construction costs, including for safety non-scalable fencing, would be the responsibility of HHFT, Inc.

For more detailed information on Alignment No. 9, including topography, property limits, cross sections, and text callouts, refer to plan sheets 1 through 4 included in Appendix A of this report.





## 2.1 Alignment Descriptions

### Existing MNR Station Pedestrian Infrastructure

The MNR Cold Spring Station provides multiple means of pedestrian access within its vicinity. The primary access point, not including the train itself, is via the parking lot adjacent to the southbound tracks, which provides both stair and accessible ramp access to the southbound Track No. 2 platform. The southbound platform can also be accessed via a pedestrian-only walkway that parallels the southbound track and connects to the west side terminus of Main Street. The walk varies in width from 4 to 8 feet. The walkway is accessible for its intended purpose as a railroad station platform for rail service but does not fully meet Americans with Disabilities (ADA) Accessibility guidelines due to stairs along the walkway. The southbound platform can also be accessed via the elevator and overpass connecting both the south and north platforms.



**Figure 3: View of southbound platform and stair access to pedestrian walk heading northwest**



**Figure 4: View of pedestrian walk stair connection adjacent to Main Street tunnel access**





Figure 5: Main Street tunnel stair access

Travelers arriving on the southbound platform can access the northbound Track No. 1 platform via an overhead pedestrian crossing that provides both stair and elevator access to an overhead enclosed connector spanning the tracks below. Upon reaching the northbound platform, travellers can access the Cold Spring village center along Main Street via an accessible ramp and walk heading northeast from the platform. Travellers can also access an existing walking trail to Foundry Preserve to the southeast of the northbound platform via an accessible ramp.

Other means of access within the study area include the Main Street tunnel that provides stair-only (non-ADA) access under the MNR tracks to connect to Main Street, which is bisected by the at-grade railroad tracks.

#### Alignment No. 9

Alignment No. 9 would utilize and improve upon existing MNR pedestrian infrastructure at the Cold Spring Station to connect the MNR parking facility and southbound platform (Figure 5) to the MNR causeway approximately 2,000 linear feet to the northwest. Utilizing the existing platform, the route would replace existing stair-only access with an accessible transition via a sloped walkway or ramp heading northwest from the southbound platform towards Main Street. At Main Street the public would be able to the trail heading north while MNR customers and personnel would utilize the walkway and platform improvements to the south. The alignment would be a 10'-wide trail paralleling the southbound railroad tracks throughout its length. The proposed alignment would remove the existing walkways and, where possible, push further west to provide a consistent 10-foot width and a greater buffer from the MNR southbound track (Figure 6). Continuing past Main Street, the alignment would travel through the current lawn area and vegetative buffer northwest of the Main Street tunnel (Figure 7) along the rear of three private properties to the west. The route would then travel along the toe of the wooded slope (Figure 8) paralleling the MNR southbound track heading northwest towards the MNR causeway at the northern end of Dockside Park and eventually onto Little Stony Point. The portion of the alignment along the MNR causeway and connection to Little Stony Point would follow the defined Main Trail route as currently designed.







Figure 6: Existing MNR pedestrian infrastructure

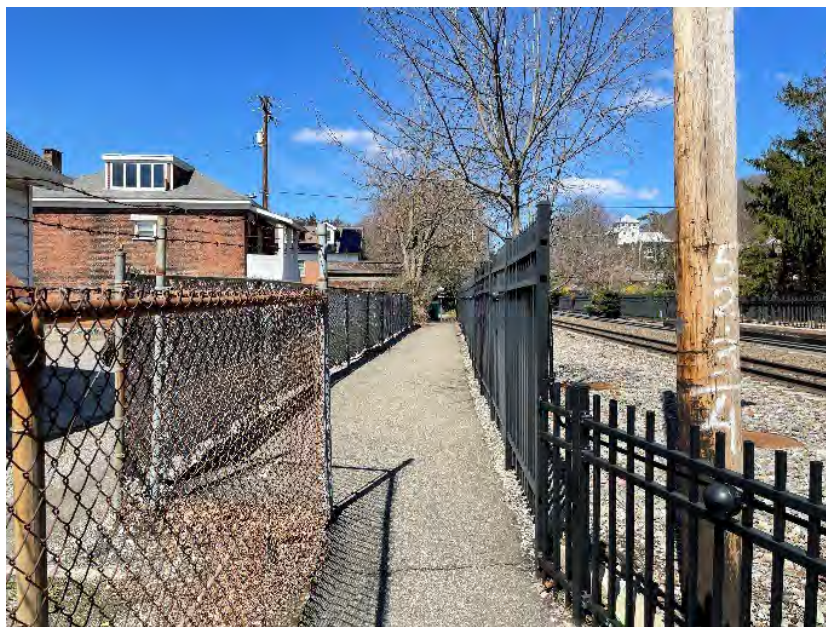


Figure 7: MNR southbound track







Figure 8: Lawn area and vegetative buffer northwest of Main Street tunnel



Figure 9: Wooded slope paralleling MNR southbound track





## 2.2 Alternative Alignment Impact and Constraint Summary

The following section provides an “at-a-glance” summary of the major obstacles, impacts, and constraint conditions within the project area as they relate to Alignment No.9. Refer to the 2022 Alternative Alignments Analysis report for discussions related to Impact & Constraint Categories and the Alternative Analysis Matrix.

The mapping below utilizes keyed graphic bubbles to indicate the appropriate Alignment number (#) and the associated Impact category letter designation (X) to identify the general location of the constraint. Refer to Appendix B for a full graphic representation including the 2022 evaluated alignments.



Impact and Constraint Summary - 2024 Addendum										
Category	A	B	C	D	E	F	G	H	I	J
	Accessibility (Excessive Distances at or near maximum allowed running slope of 5% preferred, 8% max.)	Private Property Impacts	Requires MNR or NYSDOT Approval	Earthwork (Excessive Cut, Fill, or Rock Removal)	Vegetation Clearing	Impact to Existing Infrastructure	Potential for Vehicular Conflicts	Limited Construction or Emergency Access	Quality of Life Impacts (Views, Noise, Traffic, etc.)	Impact of Adjacent Land Use
9 (2024 Addendum)	Accessibility improvements necessary at MNR Cold Spring Station southbound platform	MNR right-of-way and Cold Spring Station infrastructure. Trail will pass along the rear of several private properties requiring removal of buffer vegetation	Yes-MNR	Approx. removal of 1,400 cubic yards of rock over 500 linear feet of trail route within MNR property	Alignment will require removal of vegetation for approx. 1000 l.f. Existing vegetation varies in quality	Requires coordination with MNR and NYS Parks. MNR critical Communication and Signal Infrastructure is present west of the track though the rock cut and might be impacted by construction.	None	Yes	Trail will pass along the rear of several private properties requiring removal of buffer vegetation. Removal of wooded edge at east property line of Dockside Park.	Noise from parallel MNR Corridor. Proximity to MNR tracks near Cold Spring Station within 25' clear zone

Figure 10: Impact and Constraints



## 2.3 Analysis and Rating Summary

This section provides an "at-a-glance" summary of the alignment rating. Refer to Figure 9 on the following page and the full Decision Matrix graphic provided in Appendix C which includes the 2022 evaluated alignments.

### **Alignment No. 9 score = 40**

Alignment No. 9 scores well because of its connectivity to key destinations, including the MNR Cold Spring Station, reduced community impacts to the Cold Spring Main Street commercial area, consistent facility type, lack of road crossings, and accessibility enhancements to key existing infrastructure.

Points are deducted for the alignment's lack of direct access to Dockside Park, limited trail uses near the train platform, proximity to the train tracks, impacts to MNR property, impacts to adjacent private properties due to vegetation clearing and rock removal, and complexity of construction and associated costs.

Alignment No. 9 outscores the majority of the 2022 alignments and provides an alternative to the Main Trail to consider within Reach No. 1. The feasibility of Alignment No. 9 must be vetted through MNR personnel and will require extensive coordination for design, construction, maintenance of platform access, and safety of train patrons, MNR staff, and Hudson Highlands Fjord Trail's construction crews, if pursued.





Figure 11: Decision Matrix – Alignment No.9

Criteria	Maximum Category Score	Reach No. 1 Dockside Park to Little Stony Point	Alignment No.9
<b>Alignment Design</b> – Alignments will be evaluated against desired width and clearances, inclusion of multi-modal users in a single facility, consistency of form and material, and resiliency goals.	5		5
<b>Traffic &amp; Safety</b> – Prioritize alignments that are universally accessible, limit at-grade crossings of roads, intersections and driveways, improve safety along Route 9D, promote traffic calming, provide separation or buffers to vehicular travel ways, and enhance emergency response	5		5
<b>Context</b> - Prioritize alignments that offer the most scenic, ecological, and cultural experience of the Hudson Highlands while blending seamlessly into the surrounding environment	5		4
<b>Connectivity</b> - Prioritize alignments that foster connection to the visual and physical beauty of the Hudson Highlands landscape, ecology, and history	5		4
<b>Diversity of Users</b> - Prioritize alignments that amplify universal accessibility, safety, and create a unique multimodal and recreational experience for all ages and abilities	5		4
<b>Congestion Mangement</b> - Prioritize alignments that manage access to popular destinations and sensitive sites, minimize negative impacts to community and environment, and promote new experiences, destinations, and narratives to explore	5		5
<b>Regional Support</b> - Prioritize alignments that expand the region's recreational amenities, enhance access to existing or planned facilities, and have a high level of community support	5		4
<b>Stewardship</b> - Prioritize alignments that minimize impacts to the environment while promoting ecological processes, and preserving and enhancing the region's scenic beauty.	5		4
<b>Community</b> – Prioritize alignments that minimize impacts to private property, utilities, limits the need for easements and acquisitions and disruption to community fabric	5		3
<b>Implementation</b> - Prioritize alignments that are feasible, sustainable, and cost effective with fewer design challenges and impacts to the community	5		2
<b>Total Score</b>			40
<b>Ranking Per Reach</b>			2



## 2.4 Detailed Alignment Findings and Recommendations

For more information at a scale of 1"=100', including topography, spot grades, property lines, cross sections, and detailed callouts, refer to plan sheets 1 through 4 included in Appendix A of this report.

### Alignment No. 9

The 2024 evaluated Alignment No. 9, including the area of existing MNR platform infrastructure, is approximately 2,000 feet in length and extends from the MNR parking at Cold Spring Station to the MNR causeway just northwest of Dockside Park. The entirety of this length will be within MNR's property and either directly next to or within the clear zone of the nearest track, necessitating safety fence meeting MNR's barrier requirements. A portion of the alignment will need to be designated as pedestrian-only due to safety considerations of users exiting or approaching the southbound train platform.

Alignment No. 9 would utilize existing MNR pedestrian infrastructure, including the stairs and accessible ramp adjacent to the parking lot at the Cold Spring Station, to access the southbound platform at Track No. 2. Heading from the parking lot northwest along the southbound platform, a new accessible ramp or sloped walkway would be installed to create a code-compliant accessible route similar to the northbound platform access.

At the current northwest terminus of the southbound platform, MNR property limits allow for expansion of a 10'-wide connecting trail further to the west of the existing 4' pathway. This alteration would allow for an increased buffer for travellers away from the MNR tracks but would not relocate the new trail facility outside of the 25' desired clear zone. Additional grading, vegetation clearing, fencing, and platform infrastructure improvements would be required and would affect views to adjacent private properties for approximately 200 linear feet northwest from the southbound platform. MNR's property limits within this section would allow for replacement and additional buffer plantings, if desired. It is recommended that this section of trail be designated pedestrian-only as travellers approach the southbound platform. Regulatory signs directing cyclists and other approved modes of nonmotorized transportation would be directed to dismount and walk. Signs are suggested to be placed 250 to 300 feet prior to the platform. Additional safety pavement markings can also be utilized to alert all users of the transition area.



**Figure 12: View northwest from southbound platform. Proposed trail would be to the left side of the existing walk.**

The alignment travels near the rear of several Market Street properties at varying distances from their property lines until reaching a more constrained area of MNR property. At this juncture, private development, including walls, fencing, and pavement, immediately abuts the property line. During review of Geographic Information System (GIS) mapping and aerial photogrammetry, it appears that there may be several areas of encroachment onto MNR property that would conflict with the proposed Alignment No. 9 route. Additional review of property mapping of both MNR and Market Street properties should be conducted should Alignment No. 9 be pursued in greater detail.





Continuing northwest, the alignment would travel in a similar fashion to the existing walkway passing behind the Main Street tunnel stairway but at an increased width of 10', 2' greater than the existing width. An accessible sloped walk or ramp connection at Main Street should also be implemented to expand access to the adjacent sidewalk facilities. Currently, a set of stairs are the only means of access heading towards the Hudson River from the trackside walkway.

Beyond Main Street, the alignment would continue northwest through a small lawn area and then along the rear of three North Street private properties to the west. MNR property limits again allow for the trail to push further west, this time out of the clear zone as the trail parallels the tracks heading towards the MNR causeway. Beyond the North Street properties, steep topography along the western edge of MNR's property that abuts the east side of Dockside Park will require rock removal for approximately 500 linear feet to construct the trail. Rock is assumed to be at or near the surface throughout this section. Due to the varying slopes of the existing topography, it is difficult to estimate the amount of rock removal at this conceptual level, but a rough estimate would be approximately 1,400 cubic yards. Vegetation removal will also be required throughout the section of trail from Main Street to the MNR causeway, impacting an area approximately 900 feet long by 14' wide.

Reaching the MNR causeway, Alignment No. 9 would follow the defined Main Trail alignment to Little Stony Point. Refer to current design plans prepared by SCAPE for more detailed information pertaining to this section of the proposed trail.



Figure 13: View along southbound tracks looking southeast towards Main Street. Note the steep grade and rock to the right of photo where the trail alignment is proposed to be outside of the MNR clear zone



### 3.0 Summary

Alignment No. 9 provides direct access from Little Stony Point continuing south along the Main Trail to the MNR Cold Spring Station, directing trail users to a known and established transportation facility while also providing an accessible off-road multiuse trail meeting most of the design criteria for the Hudson Highlands Fjord Trail. The alignment provides an alternative to the Main Trail between Dockside and the MNR Cold Spring Station for connecting the Main Trail alignment at the north end of Dockside Park to the Village of Cold Spring without using Cold Spring sidewalks. Detailed coordination with MNR will be necessary particularly as the trail approaches and connects with the southbound rail platform. Additional property survey investigations would also be prudent given the proximity of existing private property along the proposed trail alignment, including adjacent Market Street and North Street properties.

Alignment No. 9 could relieve community impacts to the Main Street commercial area and within Dockside Park by mitigating direct access. Impacts to both will likely not be completely resolved as some trail users will seek out both popular destinations. Construction of the trail may directly impact the east side of the Dockside Park property, albeit along a limited visibility area.

Alignment No. 9 shares many of the constructability and safety concerns with the defined Main Trail and will require detailed construction plans to implement. Construction access and safety will be paramount as construction will occur in close proximity to MNR's tracks throughout the entire alignment. Emergency access will also have to be well thought out as this area can be difficult to access due to the active rail lines, topography, limited visibility, and surrounding private property.



## Limitations

The services described in this work product were performed in accordance with generally accepted professional consulting principles and practices. No other representations or warranties, expressed or implied, are made. These services were performed consistent with our agreement with our client. This work product is intended solely for the use and information of our client unless otherwise noted. Any reliance on this work product by a third party is at such party's sole risk.

Opinions and recommendations contained in this work product are based on conditions that existed at the time the services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. The data reported and the findings, observations, and conclusions expressed are limited by the scope of work. We are not responsible for the impacts of any changes in standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others or the use of segregated portions of this work product.

The purpose of this assessment is to reasonably evaluate the potential for, or actual impact of, constructing the trail alignments identified. It is understood that a balance must be struck between a reasonable inquiry effort and an appropriate level of analysis for each conceivable issue of potential concern.

No investigation was undertaken to exclude the presence of hazardous materials within the project limits. If hazardous conditions have not been identified during the assessment, such a finding should not therefore be construed as a guarantee of the absence of such materials on the site, but rather as the result of the services performed within the scope, practical limitations, and cost of the work performed.

The passage of time, manifestation of latent conditions, or occurrence of future events may require further study at the site, analysis of the data, and/or reevaluation of the findings, observations, and conclusions in the work product.

This work product presents professional opinions and findings of a technical nature. The work product shall not be construed to offer legal opinion or representations as to the requirements of, or the compliance with, environmental laws, rules, regulations, or policies of federal, state, or local governmental agencies.





# **Appendix A    2024 Alternative Alignment Analysis Plans**

## **Hudson Highlands Fjord Trail**

Alternative Alignments Analysis 2024 Addendum

**Hudson Highlands Fjord Trail Inc.**

SLR Project No.: 142.17345.00002

November 27, 2024







ROUTE LEGEND:

ALIGNMENT NO.9

PHOTO LOCATION AND DIRECTION OF VIEW

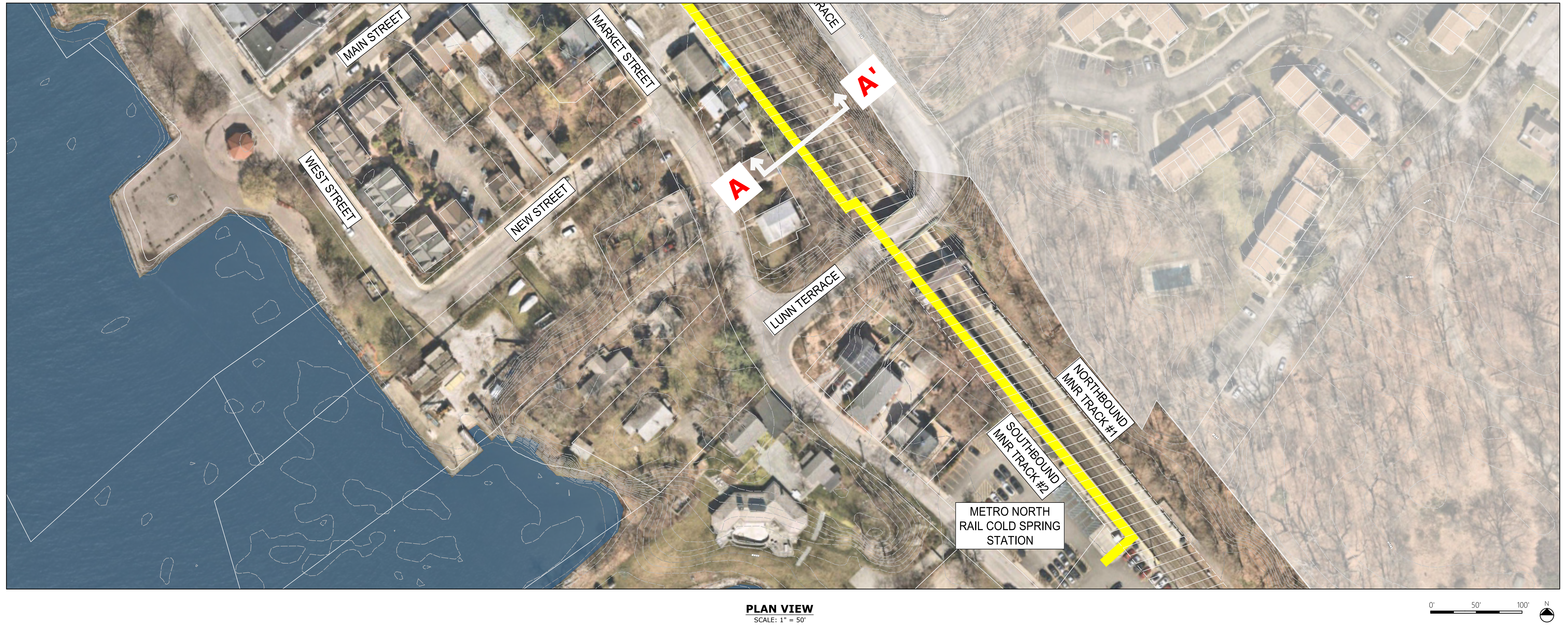
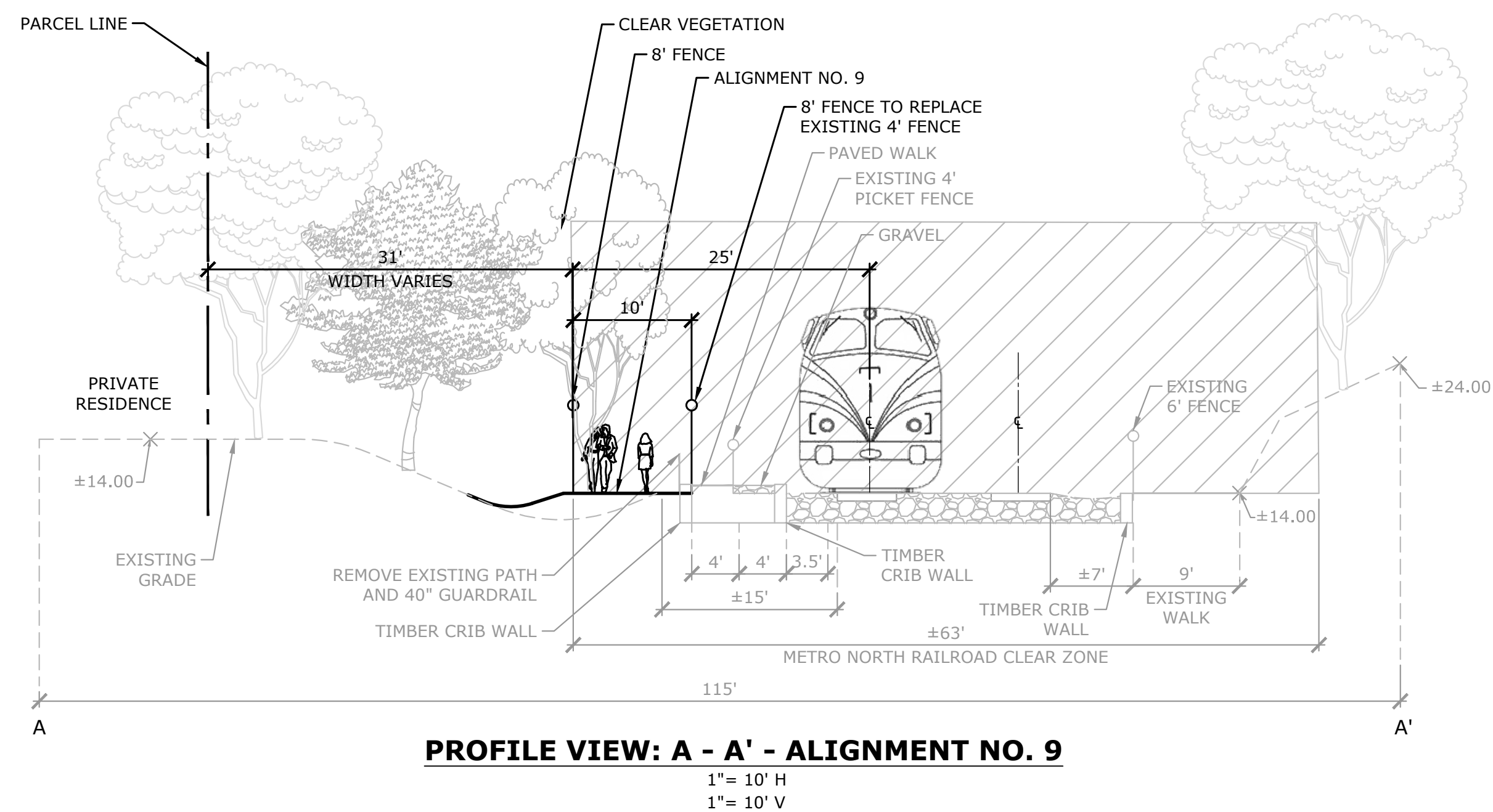
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# HUDSON HIGHLANDS FJORD TRAIL

## ALTERNATIVE ROUTING ANALYSIS 2024 ADDENDUM

### DOCKSIDE PARK TO LITTLE STONY POINT



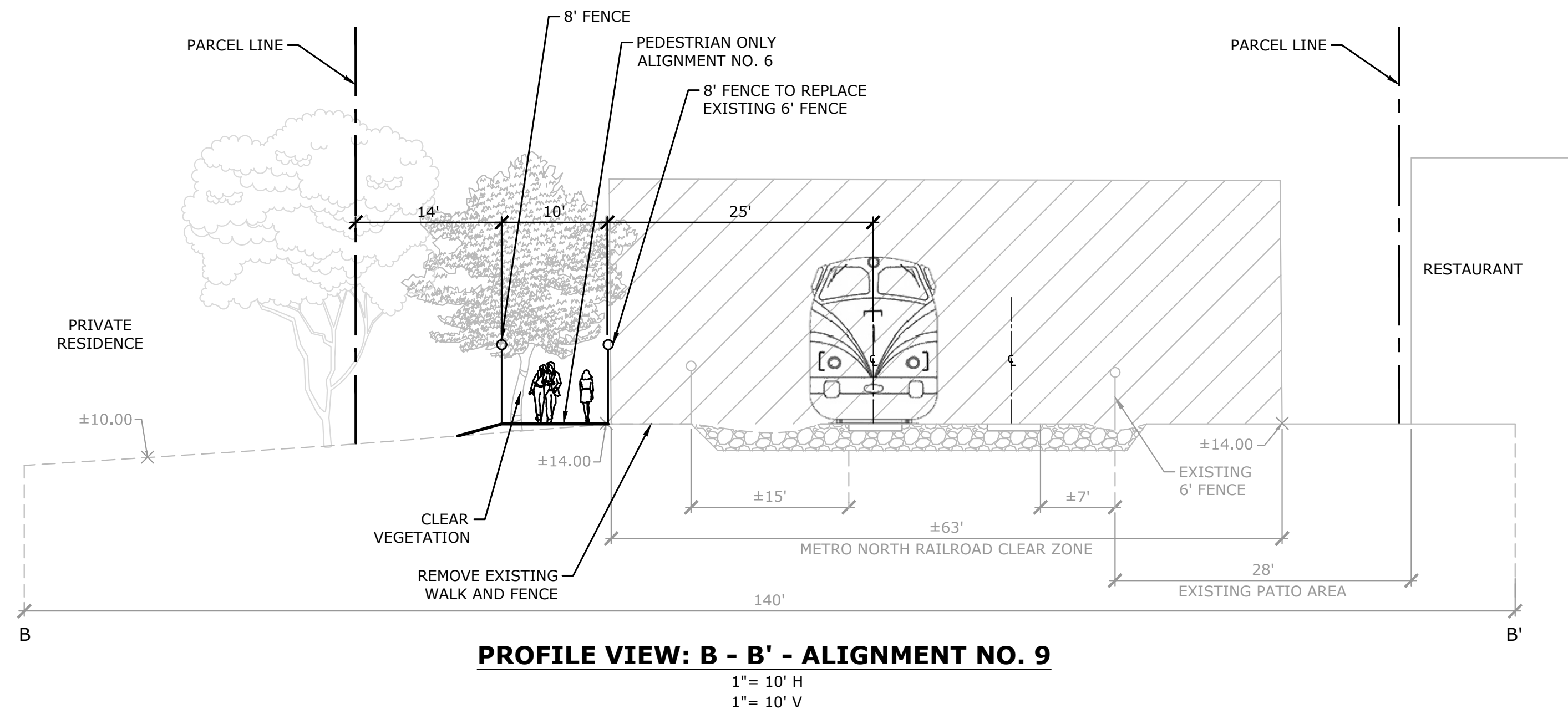


# HUDSON HIGHLANDS FJORD TRAIL ALTERNATIVE ROUTING ANALYSIS 2024 ADDENDUM DOCKSIDE PARK TO LITTLE STONY POINT

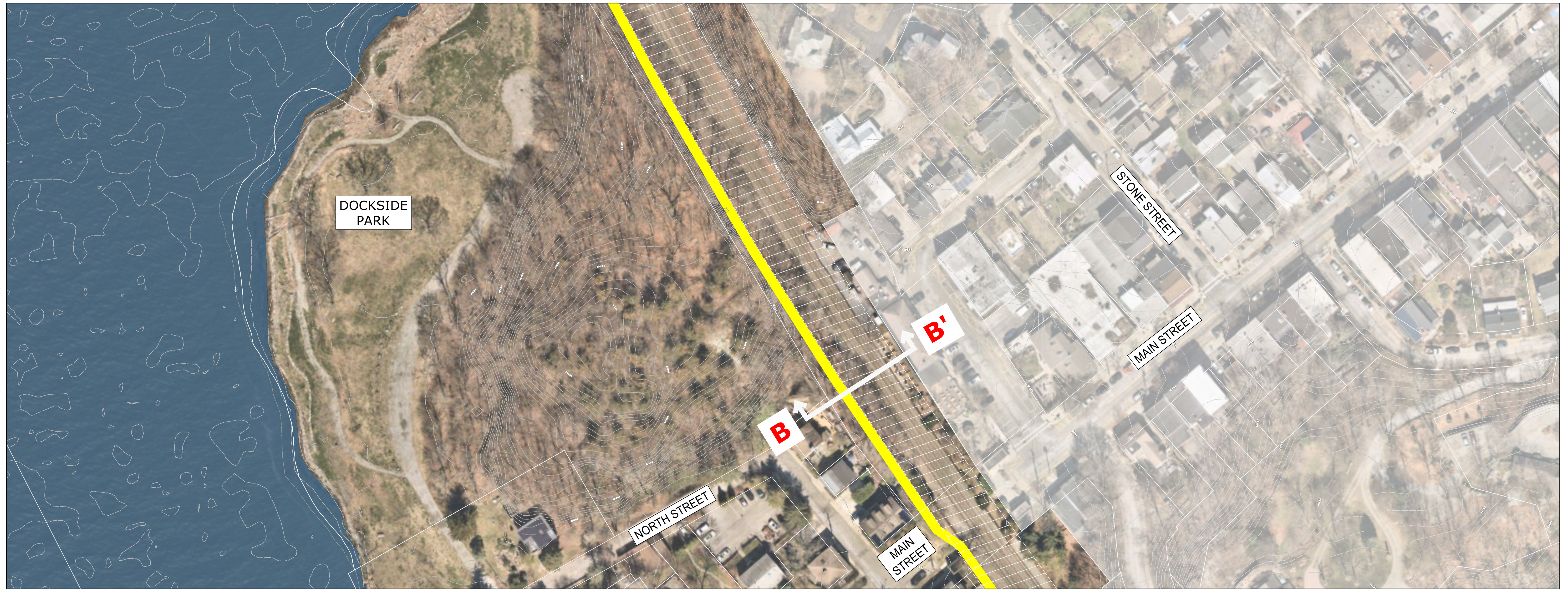
SHEET 2 OF 4



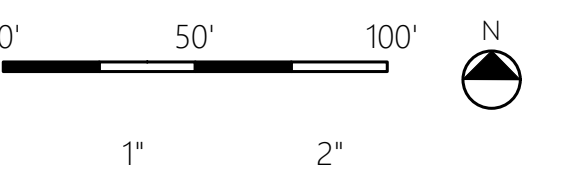
Drawing: HUDSON HIGHLANDS FJORD TRAIL - ALTERNATIVE ROUTING ANALYSIS 2024 ADDENDUM - SHEET 3 OF 4



VIEW AT MAIN STREET LOOKING NORTHWEST AT REAR OF NORTH STREET PROPERTIES



**PLAN VIEW**  
SCALE: 1" = 50'



# HUDSON HIGHLANDS FJORD TRAIL ALTERNATIVE ROUTING ANALYSIS 2024 ADDENDUM DOCKSIDE PARK TO LITTLE STONY POINT

AUGUST, 2024

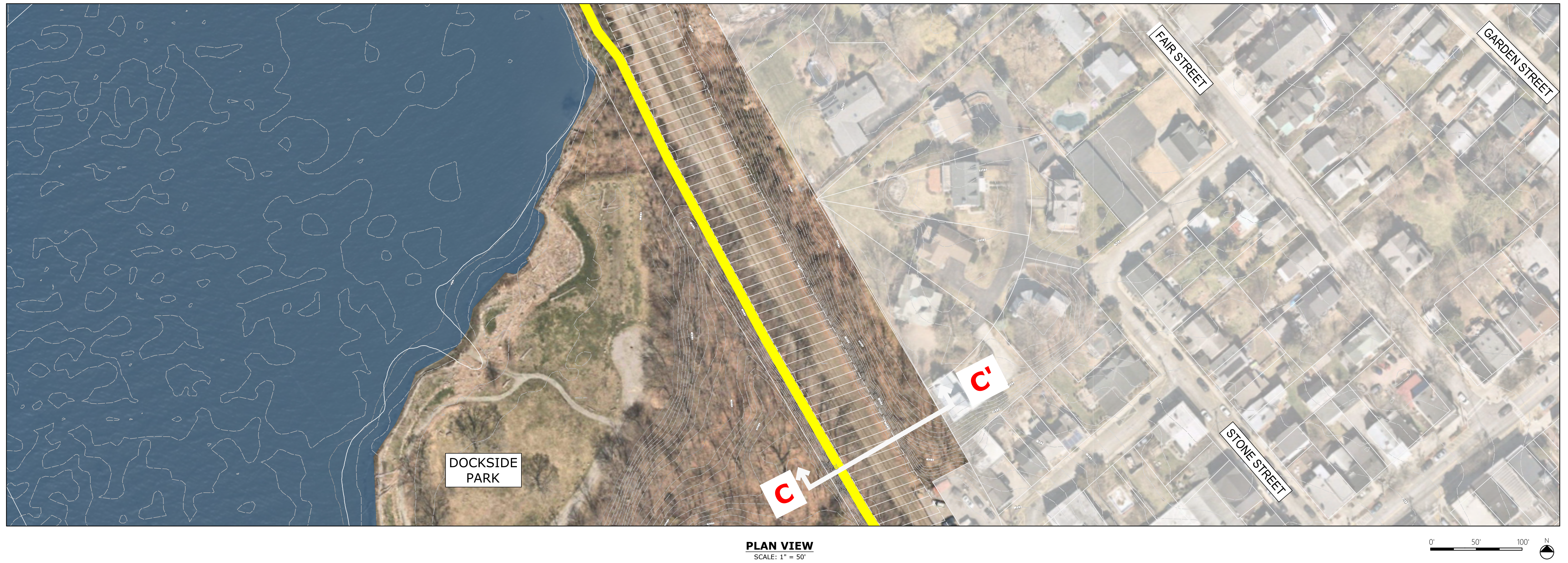
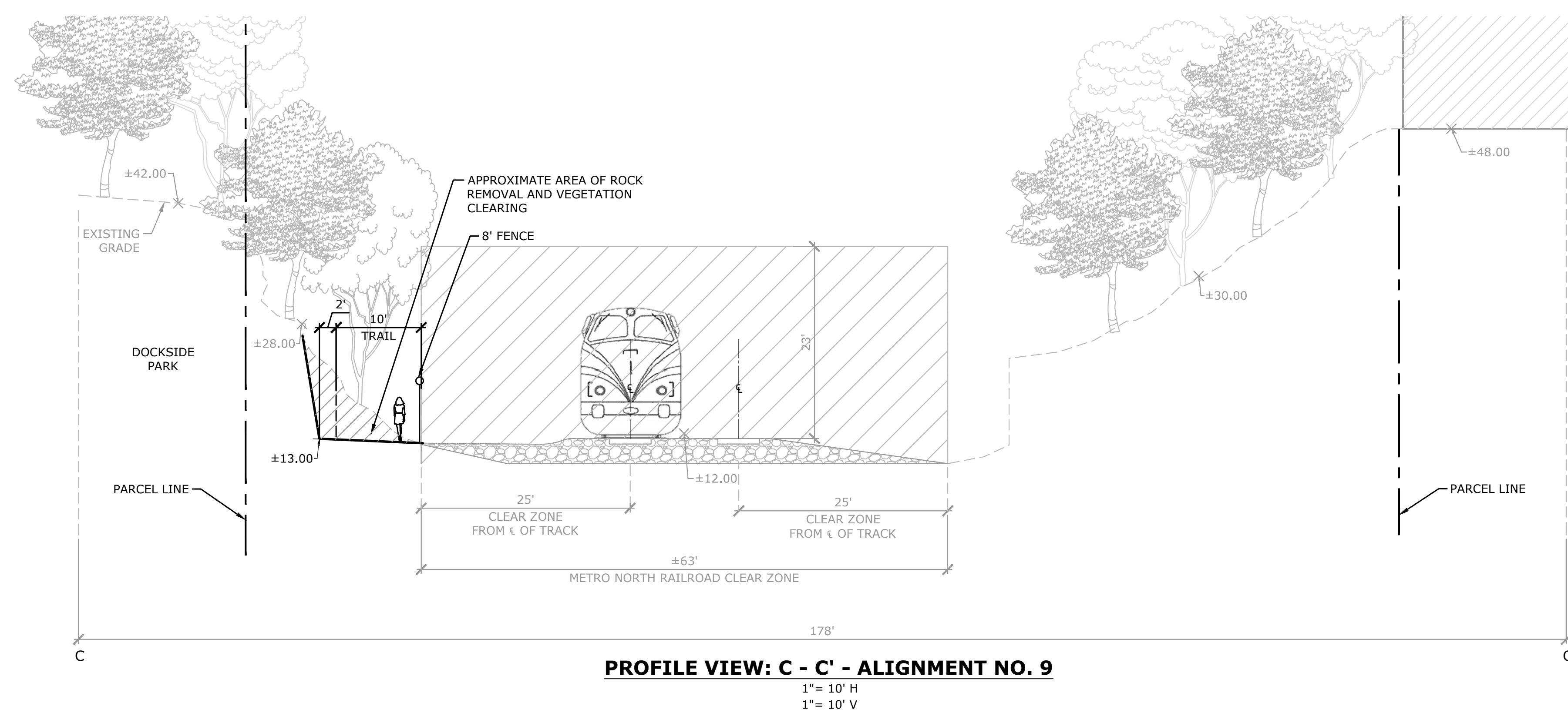
SHEET 3 OF 4

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# HUDSON HIGHLANDS FJORD TRAIL ALTERNATIVE ROUTING ANALYSIS 2024 ADDENDUM DOCKSIDE PARK TO LITTLE STONY POINT

SHEET 4 OF 4





# Appendix B    2024 Impact & Constraints

## **Hudson Highlands Fjord Trail**

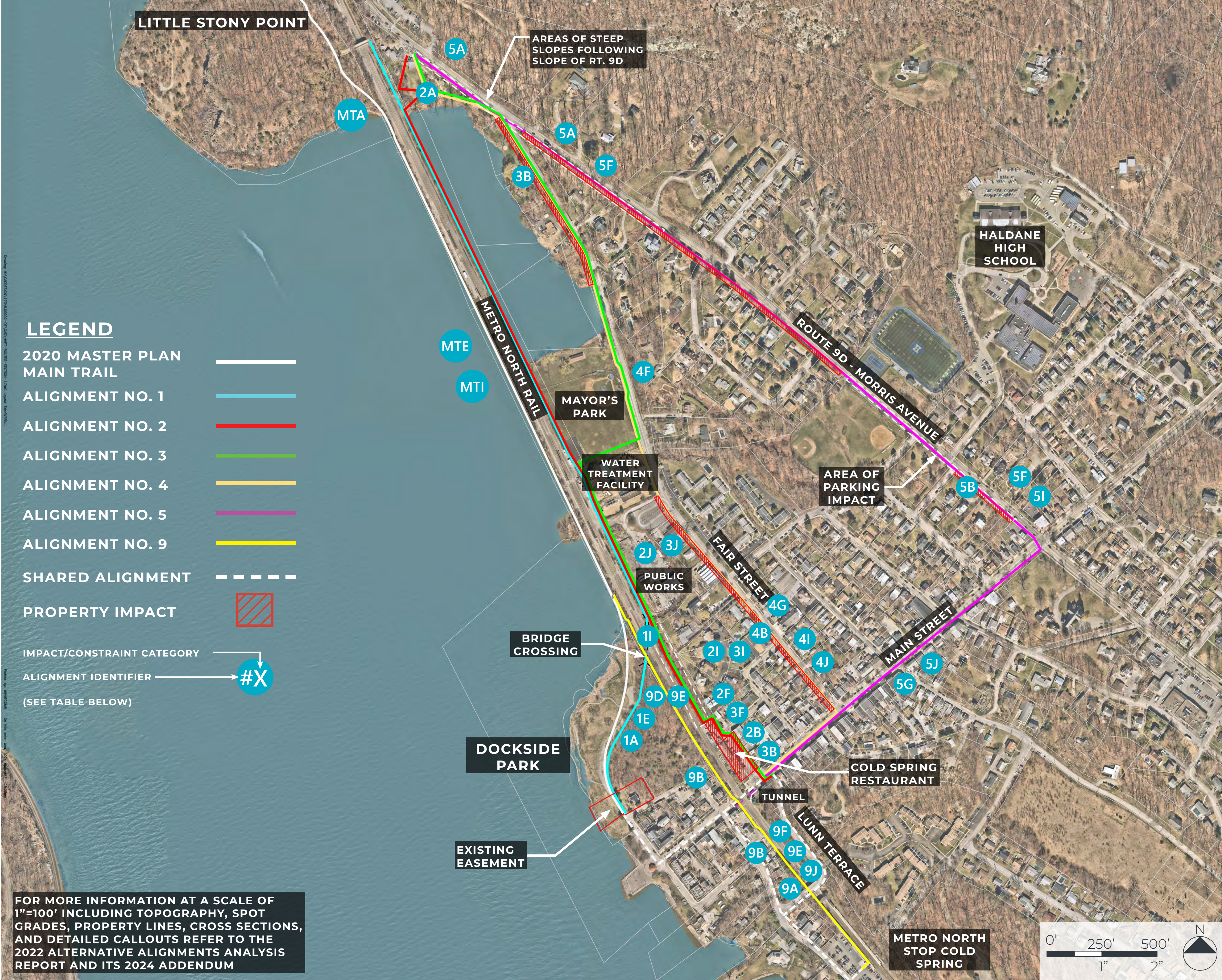
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Category	A	B	C	D	E	F	G	H	I	J
	Accessibility (Excessive distances at or near maximum allowed running slope of 5% preferred, 8% max.)	Private Property Impacts	Requires MNR or NYSDOT Approval	Earthwork (Excessive Cut, Fill, or Rock Removal)	Vegetation Clearing	Impact to Existing Infrastructure	Potential for Vehicular Conflicts	Limited Construction or Emergency Access	Quality of Life Impacts (Views, Noise, Traffic, etc.)	Impact of Adjacent Land Use
Main Trail (MT)	600 l.f. of elevated structure sloped at 5% to access Little Stony Point	MNR property	Yes-MNR	N/A	Alignment will be designed to avoid mature or select vegetation to remain along the 2500 l.f. of MNR corridor Clearing of approximately 3000 s.f. of scrub shrub within Dockside Park	Requires coordination with MNR and NYS Parks	None	Yes	Views from river to shoreline impacted by clearing and trail construction	Noise from parallel MNR Corridor
1	400 l.f. of elevated trail sloped at 7.5% 600 l.f. of elevated trail sloped at 5%	MNR property including vertical clearances for a new pedestrian bridge crossing	Yes-MNR including air rights for pedestrian bridge crossing	N/A	Clearing approx. 5000 s.f. in Dockside Park for bridge crossing	Requires coordination with MNR and NYS Parks	None	Yes	Bridge and elevated trail will create an obstruction to waterfront views from 5 adjacent residential properties for approx. 400 l.f.	Noise from parallel MNR Corridor
2	200 l.f. switchback required to reach NYS Parks Property at Little Stony Point	1 Property Impacted at Cold Spring Depot Alignment traverses 360 linear feet of private property and will impact service yard of Cold Spring Depot Restaurant MNR property	Yes-MNR	Approx. removal of 2,500 cubic yards of rock over 450 linear feet of trail route	450 linear feet of clearing impacting buffer to railroad at 5 residential properties at Northern Gate road	Requires coordination with MNR and NYS Parks Directly impacts service yard of Cold Spring Restaurant	None	Yes	Clearing of vegetation and rock blasting will effect 5 residential and 1 commercial property	Noise from parallel MNR Corridor Alignment traverses 800 l.f. at rear of Public Works yard and Water Treatment Facility
3	None	1 Property Impacted at Cold Spring Depot Alignment traverses 360 linear feet of private property and impacts service yard of Cold Spring Depot Restaurant, Potential for impacts to frontage of 3 properties on Fair Street MNR Property	Yes-MNR	Approx. removal of 2,500 cubic yards of rock over 450 linear feet of trail route	450 linear feet of clearing impacting buffer to railroad at 5 residential properties at Northern Gate road	Requires coordination with MNR and NYS Parks Directly impacts service yard of Cold Spring Restaurant Impacts to Mayor's Park 460 l.f. frontage including fencing, parking and athletic facilities	Low - Alignment adjacent to Fair Street and Route 9D for a short distance	Partial	Clearing of vegetation and rock blasting will effect 5 residential and 1 commercial property	Noise from parallel MNR Corridor Alignment traverses 800 l.f. at rear of Public Works yard and Water Treatment Facility
4	None	17 properties along Fair Street, 3125 l.f. of trail along properties' frontage	No	N/A	Limited street tree clearing	Impacts to Mayor's Park 460 l.f. frontage including fencing, parking and athletic facilities 500 l.f. of Fair Street to be reconstructed above elev.8	Medium - Alignment requires on-road facilities Sidepath alignment on Fair Street 8 intersection crossings and numerous driveway crossings	No	Increased traffic, noise, litter, and trespassing Cold Spring residents have expressed concerns and opposition to this route at past public meetings and written comments received from July to November 2016.	3125 l.f. of trail traverses front yards of residential properties
5	1000 l.f. at or above 8% as alignment follows Route 9D headed towards Little Stony Point	12 properties adjacent to Route 9D	Yes-NYSDOT	N/A	Limited street tree clearing	550 l.f. of on-street parking removed on Route 9D 325 l.f. or parking affected at Halstad Park 1000 l.f. of retaining wall construction, guiderail replacement, and drainage improvements	High - Requires bicyclists to share the road for 0.7 miles Includes 14 non-signalized intersection crossings & 1 signalized crossing Includes over 20 residential driveway crossings	No	Removal of on-street parking and impacts to front yards along Route 9D	Alignment traverses 0.6 miles through village business district 1400 l.f. of alignment traverses front yards of residential properties
9 (2024 Addendum)	Accessibility improvements necessary at MNR Cold Spring Station southbound platform	MNR right-of-way and Cold Spring Station infrastructure Trail will pass along the rear of several private properties requiring removal of buffer vegetation	Yes-MNR	Approx. removal of 1,400 cubic yards of rock over 500 linear feet of trail route within MNR property	Alignment will require removal of vegetation for approx. 1000 l.f. Existing vegetation varies in quality	Requires coordination with MNR and NYS Parks MNR critical Communication and Signal infrastructure is present west of the track though the rock cut	None	Yes	Trail will pass along the rear of several private properties requiring removal of buffer vegetation Removal of wooded edge at east property line of Dockside Park	Noise from parallel MNR Corridor Proximity to MNR tracks near Cold Spring Station within 25' clear zone





# Appendix C    2024 Decision Matrix

## **Hudson Highlands Fjord Trail**

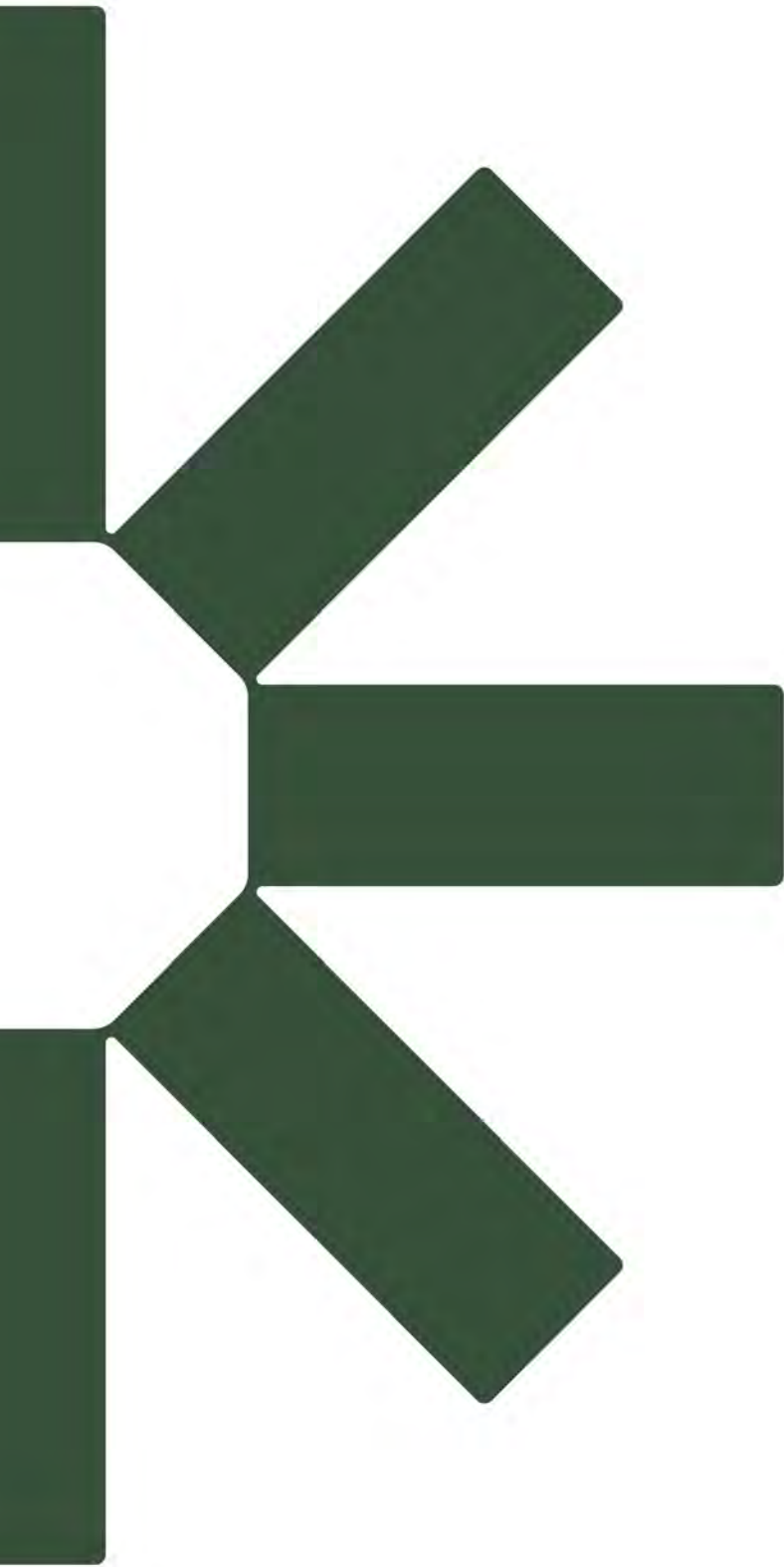
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Category	A	B	C	D	E	F	G	H	I	J
	Accessibility (Excessive distances at or near maximum allowed running slope of 5% preferred, 8% max.)	Private Property Impacts	Requires MNR or NYSDOT Approval	Earthwork (Excessive Cut, Fill, or Rock Removal)	Vegetation Clearing	Impact to Existing Infrastructure	Potential for Vehicular Conflicts	Limited Construction or Emergency Access	Quality of Life Impacts (Views, Noise, Traffic, etc.)	Impact of Adjacent Land Use
Main Trail (MT)	600 l.f. of elevated structure sloped at 5% to access Little Stony Point	MNR property	Yes-MNR	N/A	Alignment will be designed to avoid mature or select vegetation to remain along the 2500 l.f. of MNR corridor Clearing of approximately 3000 s.f. of scrub shrub within Dockside Park	Requires coordination with MNR and NYS Parks	None	Yes	Views from river to shoreline impacted by clearing and trail construction	Noise from parallel MNR Corridor
1	400 l.f. of elevated trail sloped at 7.5% 600 l.f. of elevated trail sloped at 5%	MNR property including vertical clearances for a new pedestrian bridge crossing	Yes-MNR including air rights for pedestrian bridge crossing	N/A	Clearing approx. 5000 s.f. in Dockside Park for bridge crossing	Requires coordination with MNR and NYS Parks	None	Yes	Bridge and elevated trail will create an obstruction to waterfront views from 5 adjacent residential properties for approx. 400 l.f.	Noise from parallel MNR Corridor
2	200 l.f. switchback required to reach NYS Parks Property at Little Stony Point	1 Property Impacted at Cold Spring Depot Alignment traverses 360 linear feet of private property and will impact service yard of Cold Spring Depot Restaurant MNR property	Yes-MNR	Approx. removal of 2,500 cubic yards of rock over 450 linear feet of trail route	450 linear feet of clearing impacting buffer to railroad at 5 residential properties at Northern Gate road	Requires coordination with MNR and NYS Parks Directly impacts service yard of Cold Spring Restaurant	None	Yes	Clearing of vegetation and rock blasting will effect 5 residential and 1 commercial property	Noise from parallel MNR Corridor Alignment traverses 800 l.f. at rear of Public Works yard and Water Treatment Facility
3	None	1 Property Impacted at Cold Spring Depot Alignment traverses 360 linear feet of private property and impacts service yard of Cold Spring Depot Restaurant, Potential for impacts to frontage of 3 properties on Fair Street MNR Property	Yes-MNR	Approx. removal of 2,500 cubic yards of rock over 450 linear feet of trail route	450 linear feet of clearing impacting buffer to railroad at 5 residential properties at Northern Gate road	Requires coordination with MNR and NYS Parks Directly impacts service yard of Cold Spring Restaurant Impacts to Mayor's Park 460 l.f. frontage including fencing, parking and athletic facilities	Low - Alignment adjacent to Fair Street and Route 9D for a short distance	Partial	Clearing of vegetation and rock blasting will effect 5 residential and 1 commercial property	Noise from parallel MNR Corridor Alignment traverses 800 l.f. at rear of Public Works yard and Water Treatment Facility
4	None	17 properties along Fair Street, 3125 l.f. of trail along properties' frontage	No	N/A	Limited street tree clearing	Impacts to Mayor's Park 460 l.f. frontage including fencing, parking and athletic facilities 500 l.f. of Fair Street to be reconstructed above elev.8	Medium - Alignment requires on-road facilities Sidewalk alignment on Fair street 8 intersection crossings and numerous driveway crossings	No	Increased traffic, noise, litter, and trespassing Cold Spring residents have expressed concerns and opposition to this route at past public meetings and written comments received from July to November 2016.	3125 l.f. of trail traverses front yards of residential properties
5	1000 l.f. at or above 8% as alignment follows Route 9D headed towards Little Stony Point	12 properties adjacent to Route 9D	Yes-NYS DOT	N/A	Limited street tree clearing	550 l.f. of on-street parking removed on Route 9D 325 l.f. or parking affected at Halstad Park 1000 l.f. of retaining wall construction, guiderail replacement, and drainage improvements	High - Requires bicyclists to share the road for 0.7 miles Includes 14 non-signalized intersection crossings & 1 signalized crossing Includes over 20 residential driveway crossings	No	Removal of on-street parking and impacts to front yards along Route 9D	Alignment traverses 0.6 miles through village business district 1400 l.f. of alignment traverses front yards of residential properties
9 (2024 Addendum)	Accessibility improvements necessary at MNR Cold Spring Station southbound platform	MNR right-of-way and Cold Spring Station infrastructure Trail will pass along the rear of several private properties requiring removal of buffer vegetation	Yes-MNR	Approx. removal of 1,400 cubic yards of rock over 500 linear feet of trail route within MNR property	Alignment will require removal of vegetation for approx. 1000 l.f. Existing vegetation varies in quality	Requires coordination with MNR and NYS Parks MNR critical Communication and Signal infrastructure is present west of the track though the rock cut and might be impacted by construction.	None	Yes	Trail will pass along the rear of several private properties requiring removal of buffer vegetation Removal of wooded edge at east property line of Dockside Park	Noise from parallel MNR Corridor Proximity to MNR tracks near Cold Spring Station within 25' clear zone



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