Chapter 21: Draft Section 4(f) Evaluation

21.1 INTRODUCTION

FRA, as the Lead Federal Agency, prepared the analysis in this chapter to document and evaluate the Preferred Alternative's potential impacts to resources protected under Section 4(f) of the USDOT Act, (23 USC 138 and 49 USC 303), and the implementing regulations at 23 CFR 774.[1] Section 4(f) is a Federal law that protects publicly owned parks, recreation areas, or wildlife and waterfowl refuges of national, state, or local significance, and historic sites of national, state, or local significance that may be affected by transportation projects approved or funded by the USDOT and its operating administrations, including FRA.

21.2 REGULATORY CONTEXT

This analysis was prepared in accordance with Section 4(f) of the USDOT Act. The regulatory context for this analysis is described in detail in Chapter 19 of **Appendix B**, "Methodology Report."

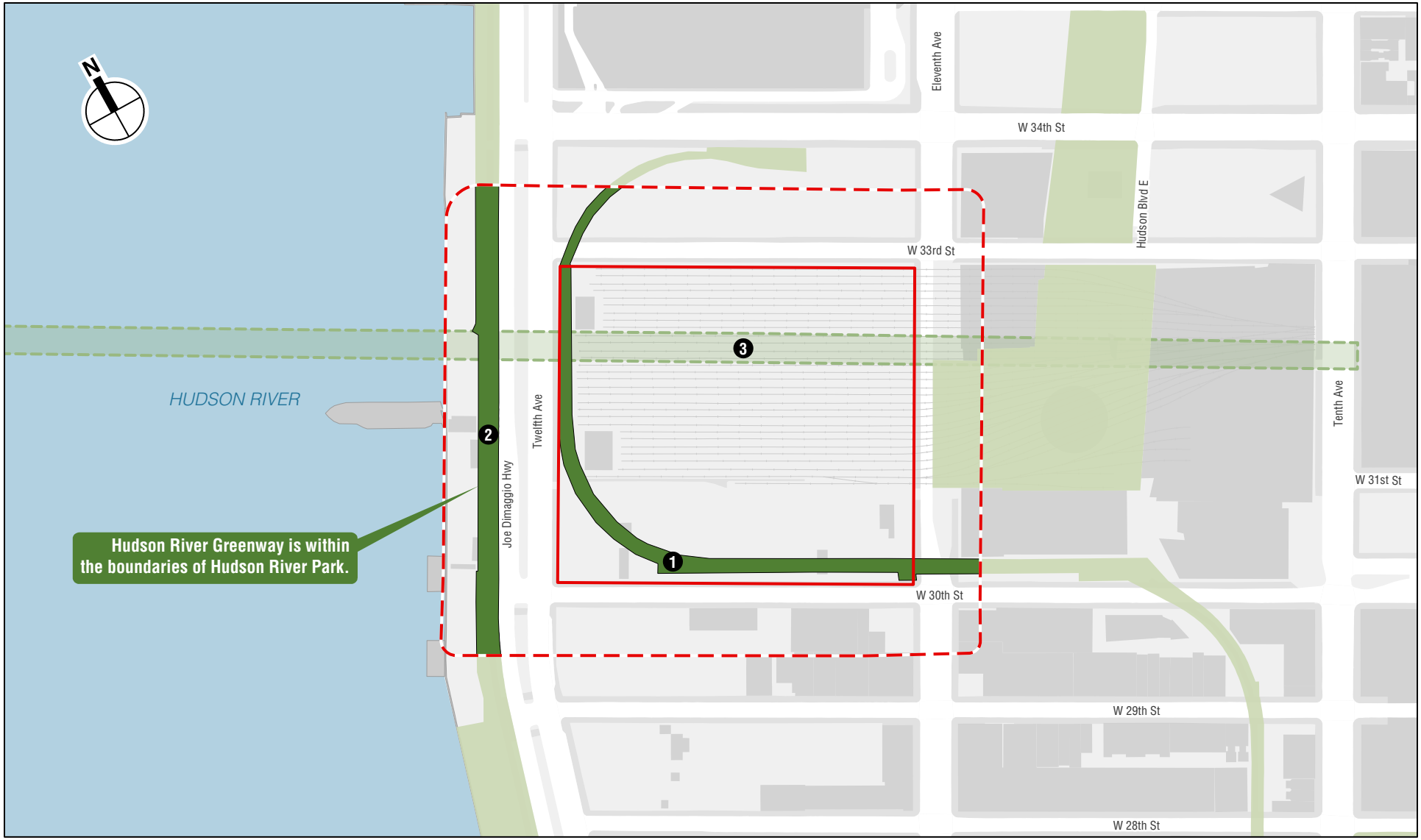
Pursuant to 23 CFR 774.17, a project uses a Section 4(f) property when: 1) land from the Section 4(f) property is permanently incorporated into a transportation facility; 2) there is a temporary occupancy of land that is adverse in terms of the statute's preservation purpose, as determined by the criteria in 23 CFR 774.13(d) (e.g., when all or part of the Section 4(f) property is required for project construction-related activities); or 3) there is a "constructive" use of a Section 4(f) property, as determined by the criteria in 23 CFR § 774.15(a). A constructive use occurs when the transportation project does not incorporate land from a Section 4(f) property, but the project's proximity impacts are so severe that the protected activities, features, or attributes that qualify the property for protection under Section 4(f) are substantially impaired.

23 CFR Part 774 establishes procedures for determining if a potential use of a Section 4(f) property would result in a *de minimis* impact. The regulations define *de minimis* impacts related to historic sites as those where the responsible USDOT modal administration made a determination of either "no effect" or "no adverse effect" pursuant to Section 106, and the SHPO concurred with that determination. *De minimis* impacts on publicly owned parks, recreation areas, and wildlife and waterfowl refuges are defined as those that do not "adversely affect the activities, features, and attributes" of the Section 4(f) property (23 CFR § 774.17).

21.3 IDENTIFICATION OF SECTION 4(F) PROPERTIES

As detailed in **Appendix B**, the Study Area for the Section 4(f) evaluation comprises the Project Site and directly adjacent blockfronts, and is focused specifically on the area where a potential Section 4(f) use could occur. Within this Study Area, FRA identified three Section 4(f) properties based on analyses conducted for this EIS and described in Chapter 9, "Cultural Resources," and Chapter 10, "Parks and Recreation Areas." These are described below, listed in **Table 21-1**, and identified on **Figure 21-1**.

[1] In 1983, Section 4(f) of the U.S. Department of Transportation Act of 1966 (USDOT Act) was codified as 49 USC § 303(c), but this law is still commonly referred to as Section 4(f).



Project Site (Western Rail Yard)

Section 4(f) Study Area

Park/Open Space within the Study Area

1 *Section 4(f) Property*

Note: Although a portion of the Hudson Yards Public Square and Garden is located within the study area, it is privately-owned public space and thus is not identified as as a Section 4(f) property.

0 400 FEET

Section 4(f) Properties

WESTERN RAIL YARD INFRASTRUCTURE PROJECT

Figure 21-1

Table 21-1
Section 4(f) Properties in the Study Area

Map No.	Property Name	Location*	Official(s) with Jurisdiction	Section 4(f) Property Type	Description (Features/ Attributes/ Activities)	Approximate Size
1	High Line	Between Gansevoort and 34th Streets west of Tenth Avenue	NYSHPO NYC Parks	Park and Recreational Resource Historic site	Walkway and landscaped area on elevated former rail line	1.45 miles long, 6.73 acres total Approx. 1.20 acres in Study Area
2	NRT	Bergen Portal Township of North Bergen, Hudson County, New Jersey to the Tenth Avenue Portal in New York City, New York County	NYSHPO	Historic site	Within Study Area: subterranean tubes containing railroad tracks	N/A
3	Hudson River Park	Hudson River waterfront, between roughly Chambers Street and West 59th Street	HRPT	Park and Recreational Resource	Within Study Area: walkway/esplanade, and commercial-use heliport	4 miles long, 550 acres total Approx. 1.18 acres in Study Area

Note: HRPT = Hudson River Park Trust
See **Figure 21-1** for locations.

21.3.1 WILDLIFE OR WATERFOWL REFUGES

There are no wildlife and waterfowl refuges or conservation areas within the Study Area. Therefore, the Preferred Alternative would not result in the use of any such resources under Section 4(f).

21.3.2 PARK AND RECREATIONAL RESOURCES

There are two park and recreational resources within the Study Area. These are the High Line and Hudson River Park.

The High Line is a 1.45-mile-long, 6.73-acre linear park on the viaduct structure of a former rail freight line, originally constructed by the New York Central Railroad in 1934, that runs between and through existing buildings and around the MTA LIRR's John D. Caemmerer West Side Yard. The High Line additionally qualifies for protection under Section 4(f) as a historic site eligible for the NRHP; see "Historic Sites" section below. Approximately 1.2 acres of the High Line fall within the boundaries of the Study Area. The High Line opened as a publicly owned park in phases, starting in 2009. It is owned by the City of New York and maintained, operated, and programmed by a non-profit conservancy, Friends of the High Line, in partnership with NYC Parks. The officials with jurisdiction for the High Line are NYC Parks and the NYSHPO.

The High Line consists predominantly of a paved walking area lined with landscaped areas of native plantings evocative of the plants that grew on the abandoned freight right-of-way before it was converted into a park. The entire route is on a steel railroad viaduct approximately 25 to 30 feet above street level that cuts between and through buildings. Access is via staircases and elevators located every few blocks. The High Line is a long, linear resource, with a range of different zones that offer varied experiences for visitors, including segments located in narrow corridors between buildings, segments running through buildings, and segments in wide open areas. The northern segment of the High Line at the Project Site comprises a predominantly paved walkway, with limited plantings, some seating areas, and egress points. An adjacent area of former railroad tracks and volunteer vegetation between the tracks is intentionally preserved beside the walkway to evoke the past functional use of the High Line. This section of the High Line is anticipated to be incorporated into the Overbuild, consistent with the adopted zoning regulations that govern the High Line and planned open spaces within the Project Site.

Hudson River Park is an approximately 4-mile long, 550-acre linear park along New York City's Hudson River waterfront.[2] It extends from just north of Chambers Street in Lower Manhattan to West 59th Street, where it connects to Riverside Park South. The park occupies the area from the pierhead line to the western boundary of Manhattan's waterfront arterial, Route 9A (also known as Twelfth Avenue near the Project Site).[3] Approximately 1.18 acres of the park fall within the boundaries of the Study Area. Hudson River Park is the result of long-term efforts by New York City and New York State to transform the underutilized industrial Hudson River waterfront into a network of open space on upland areas and piers. The HRPT, a public benefit corporation created by the New York State legislature with the mandate to design, construct, and maintain the park, is undertaking construction of Hudson River Park incrementally, as funding becomes available. The park includes a waterfront esplanade that runs the length of the park, adjacent to a bikeway (the Hudson River Greenway) that is owned by the New York State Department of Transportation (NYSDOT) as part of the adjacent Route 9A roadway but is maintained by HRPT. Closer to the water, the park's waterside esplanade provides a safe, segregated alternative for pedestrians and runners, who are not intended users of the Route 9A bikeway. In places where the permanent walkway has not yet been constructed, an interim walkway provides public access to the waterfront. The official with jurisdiction over Hudson River Park is HRPT.

[2] Acreage includes approximately 400 acres of lands under water.

[3] The Hudson River Park Act (HRPA) was passed by the New York State legislature in June 1998 and signed into law in September 1998 (New York State Legislature, "Hudson River Park Act," 1998 Sess. NY Legis Ch. 592 (S. 7845), Amended 2005, 2008, 2013, 2018, and 2020). The HRPA establishes the eastern boundary of the park as the western boundary of West Street/Eleventh Avenue/Twelfth Avenue, and when Route 9A is complete, as certified by the commission of NYSDOT, the eastern boundary of the park will be the western boundary of Route 9A. Hudson River Park is being developed in conjunction with the reconstruction of Route 9A into a landscaped urban boulevard, also a long-term project that began construction in 1994. At this time, the commissioner of NYSDOT has not yet certified the long-term reconstruction of Route 9A as complete and therefore the exact location of the boundary between the park and the roadway has not yet been established.

The area of the park between West 30th and 33rd Street, opposite the Project Site, is not yet completed; plans are dependent on the availability of future funding. Today, this section of the park consists of an interim walkway adjacent to the Route 9A bikeway, and a privately operated commercial heliport, the West 30th Street Heliport, that occupies the area west of the walkway to the water's edge within the boundaries of the park. The heliport is located within the boundaries of Hudson River Park on land that is publicly owned and designated for parkland use, which HRPT leases to the heliport operator to generate revenue for HRPT. Although within the park boundaries, the heliport is a private commercial operation that is not open to the public for recreation. The heliport has 10 helipads and provides commercial, general aviation, and air taxi services. A 2013 amendment to the Hudson River Park Act calls for the relocation of the heliport to a floating structure between West 29th and West 32nd Streets, but the timing of such a potential relocation is unknown.[4] Although the West 30th Street Heliport is not currently open to the public or used as a park, in consideration of the property's location within the park boundaries and potential future park use, consistent with guidance from the Section 4(f) Policy Paper, this analysis conservatively treats this space as a Section 4(f) property.

21.3.3 HISTORIC SITES

Two historic sites were identified within the Study Area, which the NYSHPO previously determined were eligible for listing on the NRHP. These are the High Line and the New York Improvements and Tunnel Extension of the Pennsylvania Railroad (NRT). These resources and the characteristics that qualify them for protection under Section 4(f) are described below. Detailed information regarding the resources is provided in the *Historic Architectural Resources Study and Effects Assessment* (HARBS/EA report) for the Preferred Alternative (**Appendix F2**).

The High Line was determined NRHP-eligible in 2004 as part of the No. 7. Subway Extension – Hudson Yards Rezoning and Development Program Project. The full length of the High Line between West 34th Street and Gansevoort Street to meet NRHP Criterion A as a significant transportation structure from the 20th-century industrial development of the city. As described above, the High Line is a former freight railroad viaduct that has been converted to a publicly owned park. The loop track has a concrete parapet simply ornamented with recessed panels and a tubular steel railing broken up with square concrete posts. As it parallels Twelfth Avenue between West 30th and West 33rd Streets, the loop track viaduct has a decorative steel parapet and railing facing Twelfth Avenue and a tubular steel railing facing the interior of the Project Site. The features and attributes that qualify the High Line for protection under Section 4(f) as an historic site are its continued presence and its historic integrity, which allow the High Line to serve as a physical reminder of one of Manhattan's important industrial transportation corridors.

The NRT, which extends from the Bergen Portal in the Township of North Bergen, Hudson County, New Jersey to the Tenth Avenue Portal in New York City, New York County, New York was determined NRHP-eligible in 2011, as part of the Amtrak Security Enhancement Project (PRJ29112351) Replacement and Upgrading of Fire and Life Safety Supervisory Control and Data Acquisition System. The subterranean and subaqueous railroad tracks and tunnels meet NRHP Criterion A for transportation history and Criterion C for engineering design. The official with jurisdiction over the NRT is the NYSHPO.

[4] 2013 Amendment to Hudson River Park Act (Chapter 517 of the Laws of 2013), Section 3(m)(v).

Built between 1903 and 1910, this linear transportation corridor was the largest and most advanced metropolitan railroad project undertaken in the United States at that point in history. The system's engineering represents various construction techniques and designs that met the various needs of the project and the geological conditions.[5] The resource comprises two subaqueous/ subterranean tubes extending under the Hudson River and below the Project Site, each of which contains a single set of railroad tracks. It is not publicly accessible.

The analysis of effects to historic properties conducted in accordance with Section 106 and summarized in Chapter 9 identifies the potential effects of the Preferred Alternative on NRHP-eligible or -listed sites. As required by Section 106, FRA established an APE for the Preferred Alternative, which is defined as "the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if such properties exist" (36 CFR § 800.16[d]). The Section 106 APE encompasses the area 800 feet in all directions from the Project Site boundary. FRA then identified five properties that are listed on or eligible for the NRHP in the APE and assessed the effects of the Preferred Alternative on those resources. As detailed in Chapter 9, FRA has determined, and NYSHPO concurred in a letter dated February 11, 2021, that Preferred Alternative would not result in adverse effects to any historic properties provided the Project Sponsor follows certain conditions. (Potential indirect and cumulative impacts to historic properties are considered in Chapter 20, "Indirect, Cumulative, and Other Impacts.") Specifically, the Project Sponsor would be required to develop a CPP for the construction of the Platform and Tunnel Encasement to avoid the potential for construction-related effects (including vibration effects) on the High Line and the NRT. The CPP would set forth the specific protection and monitoring measures that would be implemented during construction to avoid inadvertent damage to these historic properties and would be implemented in coordination with the New York State Historic Preservation Office and the New York City Landmarks Preservation Commission. The CPP for the protection of the High Line and NRT would be incorporated into the overarching CEPP that would be developed for the Preferred Alternative (see Chapter 22, "Mitigation Measures and Project Commitments").

21.4 POTENTIAL USE OF SECTION 4(F) PROPERTIES

21.4.1 HIGH LINE

The High Line is a NRHP-eligible historic site under the jurisdiction of the NYSHPO, as well as a park and recreational resource under the jurisdiction of NYC Parks. It has been determined NRHP-eligible by NYSHPO as a significant transportation structure important to New York City's 20th century industrial development. The section of the High Line within the Study Area is a predominantly paved walkway with limited plantings, some seating areas, and egress points. Recreational activities occurring within the High Line include walking and running.

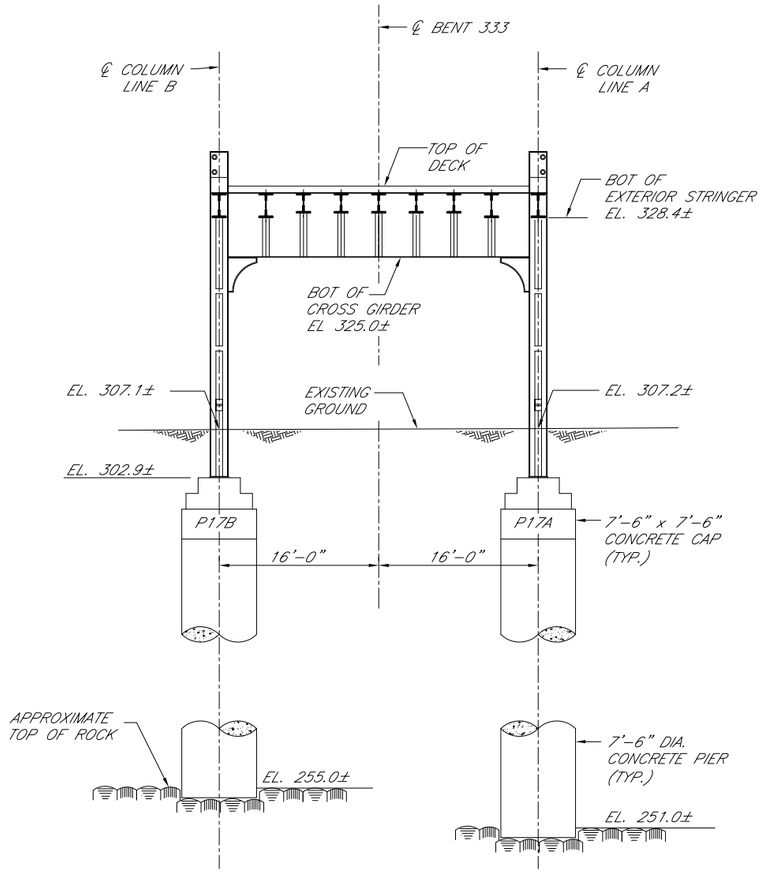
[5] New York State Office of Parks, Recreation, and Historic Preservation, Kathy Howe, Resource Evaluation, New York Improvement & Tunnel Extension of the Pennsylvania Railroad from NJ to Manhattan to LIC Queens, USN: 06101.018103, March 11, 2011.

Construction activities for the Preferred Alternative would include temporary underpinning of a segment of the High Line, where the Tunnel Encasement alignment would cross beneath the portion of the High Line that runs along West 30th Street between Eleventh and Twelfth Avenues (see **Figure 21-2**). Underpinning is a process in which structural support (often using piles) is added to support an existing foundation to allow for safe construction adjacent to or below the supported structure. The Preferred Alternative would include temporarily underpinning the High Line at this location to protect the structural integrity of the resource during construction of the Tunnel Encasement. The duration of the underpinning construction would be approximately four months, comprising two months for underpinning installation and two months for underpinning removal. The underpinning would be in place for an additional 16 months, during excavation and construction of the Tunnel Encasement. During the time of constructing the Tunnel Encasement, the High Line is envisioned to be supported on steel beams spanning the open cut for the Tunnel Encasement. The anticipated temporary underpinning would affect only one approximately 100-foot-long portion of the High Line within the Project Site boundaries, and for the limited period defined above; the remainder of the 1.45-mile-long, 6.73-acre resource would not be affected by project construction.

The temporary support would be removed once the load-transfer to the new permanent support for the Tunnel Encasement is complete. All underpinning work below the High Line would be underground. The foundations for the viaduct structure are part of the resource, for which NYC Parks has jurisdiction; however, the land within which the foundations are located is owned by MTA. The underpinning work would likely be carried out through a construction permit from NYC Parks. There would be no change in ownership of the land or the High Line structure. The High Line would remain open and publicly accessible during this temporary construction activity.

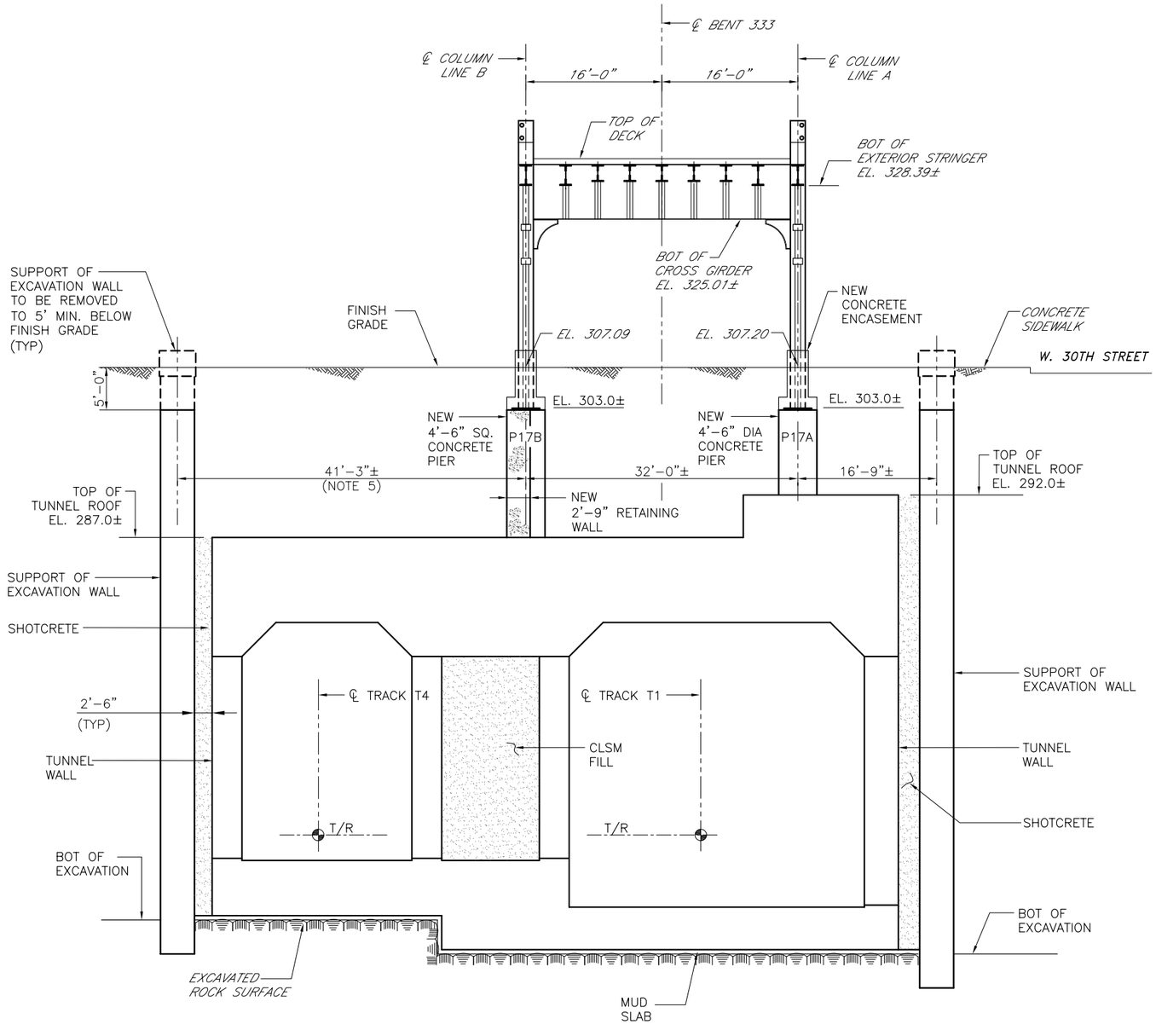
The portion of the High Line subject to underpinning would be inaccessible during construction activities related to the underpinning; however, the underpinning work is anticipated to occur during hours when the High Line is closed to the public. Construction activities would be less than one week in duration, throughout the two month periods for installation and removal of the underpinning. The Project Sponsor has committed to include a specification in construction documents indicating the following: the only allowable construction work hours on the High Line structure and columns for underpinning work (column load transfer) are between 11 PM and 7 AM—when the High Line is not open—unless otherwise approved by NYC Parks and Friends of the High Line. As a result, it is likely the Project Sponsor will need to apply to NYCDOB for approval of the hours for the underpinning work. Therefore, the High Line and its park features within the Study Area (egress points, walkways, and benches) would not be closed to the public during typical park hours (currently 7 AM to 7 PM Monday through Friday with no reservations required, and 10 AM to 6 PM Saturday/Sunday with reservations required). The underpinning for the Preferred Alternative would not preclude the public from using the High Line.

Other construction activities for the Preferred Alternative would occur in close proximity to the High Line; these include staging areas within the Project Site, for approximately five years; cut-and-cover excavation of soil and rock for the Tunnel Encasement, and construction of the concrete Tunnel Encasement, for approximately 28 months; and installation of deep footings (caisson drilling), reinforced building foundations, and a concrete slab for the Platform, for approximately five years. During these construction activities, the High Line and its protected park features within the Study Area (egress points, walkways, and benches) would not be closed to the public during typical park hours, and construction of the Preferred Alternative would not preclude the public from using the High Line.



EXISTING TYPICAL SECTION

(LOOKING EAST)



PROPOSED TYPICAL SECTION

(LOOKING EAST)

Source: Amtrak

High Line Structure Underpinning — Existing and Proposed Typical Sections

Figure 21-2

These other temporary construction activities for the Preferred Alternative would occur in close proximity to the High Line and could be visible from the park, but would not be staged from or result in physical alterations to or occupation of the park. The Eleventh Avenue access point to the High Line would not be affected. The construction activities would be noticeable to people on nearby portions of the High Line and could be temporarily disruptive; however, in the same period while the Preferred Alternative is under construction, extensive construction would also be occurring in the surrounding area for other projects. Overall, construction activities for the Preferred Alternative would not result in an adverse visual quality impact (see Chapter 11, "Aesthetics and Visual Quality").

As detailed in Chapter 8, "Noise and Vibration," worst-case noise levels at the High Line resulting from construction of the Preferred Alternative, projected using the FTA general assessment methodology, would be up to 94 dB(A) during construction for the Tunnel Encasement and up to 82 dB(A) during Platform construction. The maximum predicted noise level increment at this receptor is 23 dB(A) and would occur during hoe ram use periods for the first 20 months of excavation for Tunnel Encasement. During non-hoe ram use periods and the remaining 14 months of Tunnel Encasement construction, maximum predicted noise level increments would be approximately 18 dB(A) resulting from the use of drill rigs. These maximum predicted incremental changes in noise levels would occur at the High Line west of Eleventh Avenue, as shown in Figure 8-2, and would not affect the entire length of the High Line. As noted in Chapter 8, the predicted construction noise levels would exceed nuisance levels, as defined by the *CEQR Technical Manual,* and may interfere with speech while construction equipment is in use. While the High Line would not experience construction noise levels exceeding FTA construction noise impact thresholds for commercial/industrial areas, the construction noise levels at the High Line would constitute an adverse noise impact under *CEQR Technical Manual* guidelines.

The worst-case noise levels during Tunnel Encasement construction would not extend throughout the full 1.45-mile length / approximately 6.73-acre area of the High Line, most of which would be substantially distanced from the construction work areas associated with the Preferred Alternative. An approximately 0.5-mile-long/1.2-acre portion of the High Line would experience elevated noise levels. In addition to the historic significance of the viaduct structure itself, the features and activities that qualify the portion of High Line within the Study Area for protection under Section 4(f) are the walking and running that occur on the paved walkway; these active recreational uses are not noise-sensitive. The High Line has not been identified as a publicly accessible outdoor area requiring serenity and quiet.[6] At portions of the High Line south of 30th Street (i.e., 630 feet from the center of the nearest work area), noise levels would not exceed 74 dB(A) and would no longer exceed nuisance levels or have the potential to interfere with speech communication.

Tunnel Encasement construction is not anticipated to occur on weekends, leaving the High Line available for use without the effects of Tunnel Encasement construction noise during weekend times.

[6] The *CEQR Technical Manual* identifies "outdoor areas requiring serenity and quiet" as a receptor type for noise exposure guidelines. "Outdoor areas requiring serenity and quiet" are further defined as "Tracts of land where serenity and quiet are extraordinarily important and serve as important public need, and where the preservation of these qualities is essential for the area to serve its intended purpose. Such areas could include amphitheaters, particular parks or portions of parks, or open spaces dedicated to or recognized by appropriate local officials for activities requiring special qualities of serenity and quiet. Examples are grounds for ambulatory hospital patients and patients and residents of sanitariums and nursing homes." (2014 *CEQR Technical Manual*, Chapter 19, Table 19-2)

Upon completion of construction, the Preferred Alternative would include one permanent below-grade structure (the Tunnel Encasement) and one new above-grade structure (the Platform) in proximity to the portion of the High Line that extends through the Project Site. A portion of the Tunnel Encasement would be located directly beneath one segment of the High Line along West 30th Street on the Project Site, and the Platform would be located directly adjacent to the segment of the High Line along Twelfth Avenue on the Project Site. As described in Chapter 3, "Alternatives," the Tunnel Encasement would be a buried structure, and its presence would not be visible from the High Line or affect the protected features and activities in the park (paved walkway, egress points, and benches). The Platform would be minimally visible above-grade separate from the Overbuild, which would be constructed above it. The Platform would be set back from the edge of the High Line park by approximately five feet (per a requirement of the New York City Zoning Resolution), and thus may also be minimally visible in elevated views from adjacent portions of the High Line. Furthermore, as described in detail in Chapter 5, "Land Use, Land Planning, and Property," the area around the Project Site and the High Line is currently undergoing substantial redevelopment, and by the completion of the Preferred Alternative, many high-rise buildings would be present within this area, changing the visual context of this resource. The operational Tunnel Encasement and Platform would not result in air quality or noise impacts on the High Line.

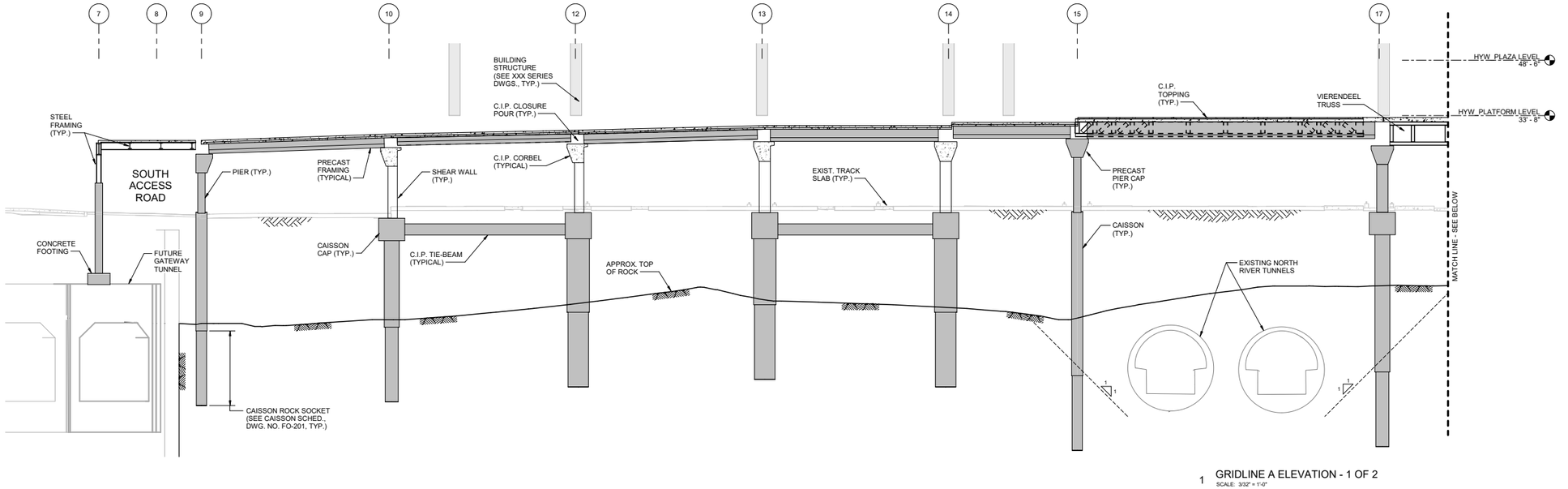
Construction of the Preferred Alternative would not alter any of the public park features of the High Line, and the underpinning of the High Line underground foundations would not preclude the public from using the High Line during construction. In consideration of the avoidance, minimization, and mitigation measures identified for the temporary underpinning and the projected noise at the High Line during construction of the Preferred Alternative, FRA intends to apply Section 4(f) *de minimis* for impacts to the High Line, as discussed in Section 21.7. FRA is coordinating with NYC Parks to determine appropriate minimization measures to address impacts to the High Line (Section 21.5).

21.4.2 NORTH RIVER TUNNEL (NRT)

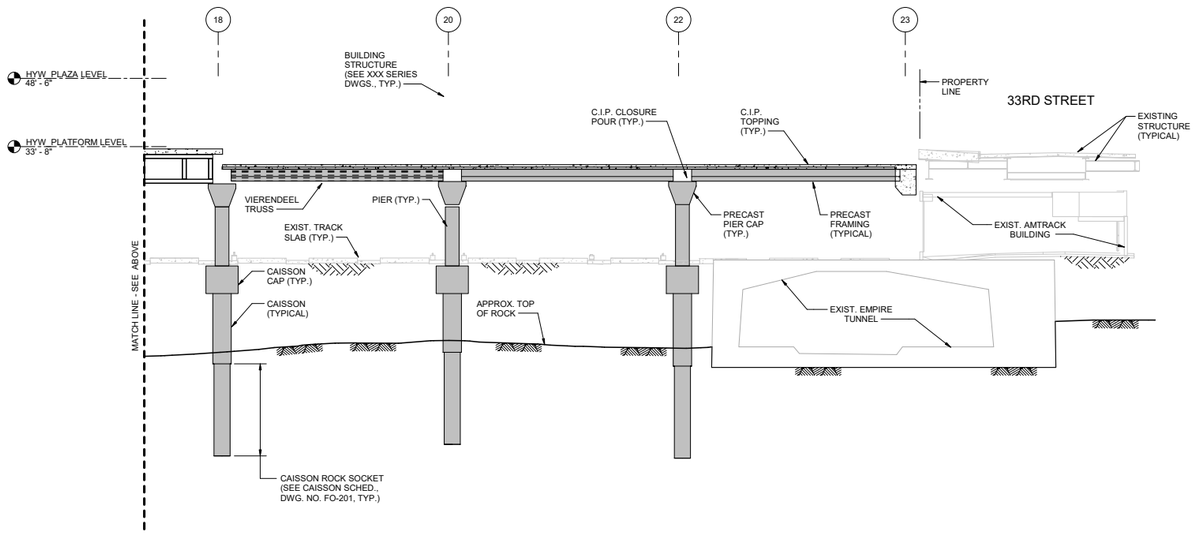
The NRT is a NRHP-eligible historic site under the jurisdiction of the NYSHPO. It has been determined NRHP-eligible for its significance in transportation history and engineering design. The subterranean tunnel carries railroad tracks below and through the Project Site and is not publicly accessible.

The Preferred Alternative would not result in the permanent incorporation of any land from the NRT. Construction of the Platform would require deep footings, reinforced building foundations, and a concrete slab to transfer building loads to the bedrock below. To support the Platform and private Overbuild, approximately 400 caissons (watertight columns) for the Platform would be drilled on either side of the NRT, through the water table and soil and into the bedrock that is up to 120 feet below the surface in certain locations (see **Figure 21-3**). The Platform's support columns would be threaded between the existing railroad tracks and associated infrastructure in the Western Rail Yard. To avoid the potential for damage to the NRT from vibration produced by caisson drilling, the caissons will be located outside of Amtrak's influence line exclusion zone. Furthermore, FRA would include a condition in the ROD, to ensure that potential construction-related effects to the NRT are not adverse. This condition would require the Project Sponsor to develop a CPP for the construction of the Platform and Tunnel Encasement in order to protect the NRT. The CPP would be required to meet the guidelines set forth in NYCDOB's *TPPN #10/88,* the *Protection for Landmarked Buildings* guidance document of the LPC, and the National Park Service's *Preservation Tech Notes, Temporary Protection #3: Protecting a Historic Structure during Adjacent Construction* (see Chapter 9 and Chapter 22).

3.4.21



1 GRIDLINE A ELEVATION - 1 OF 2
SCALE: 3/32" = 1'-0"



Source: WRY Tenant LLC

Caissons Adjacent To North River Tunnel
Figure 21-3

The NRT would remain operational during construction of the Preferred Alternative. Upon completion of construction, the Preferred Alternative would include one permanent above-grade structure (the Platform) in proximity to the portion of the NRT that extends below-grade through the Project Site. As a subsurface resource, the NRT would have no visual relationship with the above-grade Platform.

The Preferred Alternative would not permanently incorporate land from the NRT into a transportation facility; nor would the construction or operation of the Preferred Alternative result in a temporary occupancy. The Preferred Alternative also would not constitute a constructive use under Section 4(f) of the NRT. The characteristics that qualify the NRT for protection as a historic site would not be affected by the Preferred Alternative. To avoid inadvertent construction-related damage to the NRT structure, FRA would require the Project Sponsor to develop a CPP for the construction of the Platform and Tunnel Encasement, and the Project Sponsor would implement the CPP during construction activities for the Preferred Alternative. Therefore, the protected features of the NRT would not be substantially impaired by construction or operation of the Preferred Alternative.

FRA has identified the NRT as a Section 4(f) property within the Study Area that would not experience a use or impact from the Preferred Alternative.

21.4.3 HUDSON RIVER PARK

As detailed above, the Hudson River Park is a park/recreational resource under the jurisdiction of the HRPT, a New York State public benefit corporation. The section of the park within the Study Area is not yet completed; plans are dependent on the availability of future funding. Today, this section of the park consists of an interim walkway adjacent to the Route 9A bikeway, and a privately operated commercial heliport, and is used for biking, running, in-line skating, and walking.

Construction activities for the Preferred Alternative that would occur in proximity to Hudson River Park would include: staging areas within the Project Site, for approximately five years; cut-and-cover excavation of soil and rock for the Tunnel Encasement, and construction of the concrete casing, for approximately 28 months; and installation of deep footings (caisson drilling), reinforced building foundations, and a concrete slab for the Platform, for approximately five years. Construction would normally not occur on weekends, which is the time when Hudson River Park has the greatest demand; the exception would be during excavation and foundation activities for the Platform, which the Project Sponsor expects to occur over two shifts per day, six days per week. Construction activities for the Platform would be conducted in seven overlapping phases, with excavation and foundation activities comprising three to nine months of each phase. To support the Platform and previously approved as-of-right private Overbuild, the Project Sponsor would drill approximately 400 caissons at the Project Site. Construction staging and activities would occur within the Project Site, on the adjacent sidewalk, in the parking lane on West 33rd Street and Eleventh Avenue, and in the parking lane on West 30th Street, and construction fencing would be erected around the construction activities and staging areas.

These temporary construction activities for the Preferred Alternative would occur in proximity to Hudson River Park, but would not be staged from or result in physical alterations to or occupation of the park. No temporary closures of Hudson River Park would be required during construction activities for the Preferred Alternative. The existing concrete wall surrounding the Project Site along Twelfth Avenue would remain in the future with the Preferred Alternative; this wall, as well as the construction fencing around the construction activities and staging areas on the Project Site, traffic on Twelfth Avenue, and trees in the landscaped median along the avenue, would limit views from Hudson River Park to construction activities within the Project Site. In the same period while the Preferred Alternative is under construction, extensive construction would also be occurring in the surrounding area for other projects. Overall, construction activities for the Preferred Alternative would not result in an adverse visual quality impact (see Chapter 11).

Upon completion of construction, the Preferred Alternative would include one permanent below-grade structure (the Tunnel Encasement) and one new above-grade structure (the Platform) on the Project Site. The Tunnel Encasement would be a buried structure, and would not be visible from Hudson River Park. The Platform would be minimally visible above-grade separate from the Overbuild, which would be constructed above it. The existing concrete wall surrounding the Project Site along Twelfth Avenue would remain in the future with the Preferred Alternative; this wall, as well as the traffic and trees in the landscaped median along the avenue, would limit views from Hudson River Park to the Platform. Furthermore, as described above and in detail in Chapter 5 and Chapter 20, the area around the Project Site and this portion of Hudson River Park is currently undergoing substantial redevelopment, and by the completion of the Preferred Alternative, many high-rise buildings would be present within this area, changing the visual context of the park. The completed Tunnel Encasement and Platform would not result in air quality or noise effects on Hudson River Park or affect the protected activities in the park.

The Preferred Alternative would not permanently incorporate land from Hudson River Park into a transportation facility; nor would it temporarily occupy Hudson River Park land. The Preferred Alternative also would not constitute a constructive use under Section 4(f) of the Hudson River Park. As discussed in Chapter 10, the portion of Hudson River Park adjacent to the Project Site could have elevated noise levels during construction of the Preferred Alternative. However, noise levels from construction would be expected to be lessened by distance, and the park is located on a busy and noisy traffic arterial and next to the West 30th Street Heliport.

Hudson River Park has not been identified as a publicly accessible outdoor area requiring serenity and quiet.[7] The features and activities that qualify the portion of Hudson River Park within the Study Area for protection under Section 4(f) are the biking, running, in-line skating, and walking that occur on the esplanade and interim walkway; these active recreational uses are not noise-sensitive, and therefore the increase in noise would not substantially impair the protected activity (the use of the park for active recreation) during the period when the increased noise from construction would occur. In addition, construction would normally not occur on weekends, which is the time when Hudson River Park has the greatest demand. Construction noise also would affect only a 1.18-acre portion of the 4-mile long, 500-acre Hudson River Park, leaving the majority of this linear park available for recreation without increased noise. Overall, construction activities for the Preferred Alternative would not impair the protected activity at Hudson River Park (the use of the park for recreation).

FRA has identified the Hudson River Park as a Section 4(f) property within the Study Area that would not experience a use or impact from the Preferred Alternative.

[7] Please refer to footnote 6.

21.5 AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES

To ensure that potential construction-related effects on the High Line and the NRT are not adverse, FRA would include a condition as part of its environmental decision regarding the Preferred Alternative, a requirement for the Project Sponsor to develop a CPP for the construction of the Platform and Tunnel Encasement in order to avoid the potential for construction-related effects (including vibration effects) on the High Line and the NRT. The CPP would set forth the specific protection and monitoring measures that would be implemented during construction to avoid inadvertent damage to the High Line and the NRT and would be implemented in coordination with the NYSHPO and LPC. The CPP would be required to meet the guidelines set forth in NYCDOB's *TPPN #10/88,* the *Protection for Landmarked Buildings* guidance document of the New York Landmarks Preservation Commission, and the National Park Service's *Preservation Tech Notes, Temporary Protection #3: Protecting a Historic Structure during Adjacent Construction.*

FRA is consulting with NYC Parks to determine the appropriate steps to protect park users and ability to maintain the High Line. FRA proposes the Project Sponsor would consult with NYC Parks regarding those aspects of the Platform design that relate to the High Line. Design plans for the Platform would be submitted at the preliminary and pre-final design stages. If NYC Parks identifies substantive concerns with maintenance and operation access, the Project Sponsor would continue coordination with NYC Parks to mitigate those concerns.

The following practices would be used to the extent feasible and practicable to reduce noise and vibration levels associated with construction of the Preferred Alternative (see also Chapter 8).

- Noise from construction equipment would comply with noise emission standards of New York City. These requirements mandate that certain classifications of construction equipment and motor vehicles meet specified noise emission standards, and construction material be handled and transported in such a manner to not create unnecessary noise.
- Construction of the Preferred Alternative would include sufficient mitigation to meet the NYCNCC construction noise limit of an L_{max} of 85 dB(A) at the exteriors of any adjacent residential properties.
- The Project Sponsor would be required to obtain NYCDOB approval for construction outside of weekdays 7AM to 6PM, which is prohibited by the NYCNCC. The Project Sponsor expects discretionary approval would be granted to reduce interference with LIRR operations.
- To the extent practicable given space constraints at the work sites, construction would use acoustical noise tent and/or enclosures surrounding hoe rams, jackhammers, or pavement breakers that can provide up to 15 dB(A) of noise reduction during any demolition activities. For additional noise reduction, jackhammer noise mufflers that can provide up to an additional 10 dB(A) of noise reduction can also be used.
- To minimize the noise from the backup warning alarms on trucks, vehicles would be routed through the construction sites to minimize the use of alarms. In addition, vehicles would also be equipped with OSHA-approved quieter backup alarms.
- Consistent with the protection and monitoring procedures that FRA would develop for the High Line, construction vibration monitoring would be required whenever construction would occur within 90 feet of the High Line structure to ensure that construction activities do not result in vibration levels that would be capable of causing damage.

- Any blasting activities associated with excavation of rock during Tunnel Encasement would be coordinated and conducted with permission from the Fire Department of the City of New York (FDNY). The Project Sponsor would provide a blasting schedule to neighboring building owners and occupants. Construction vibration monitoring would be required during blasting activities to ensure that vibration does not exceed a level that could result in damage to any nearby buildings or structures.

Additionally, the Project Sponsor has committed to include a specification in construction documents indicating the following: the only allowable construction work hours on the High Line structure and columns for underpinning work (column load transfer) are between 11 PM and 7 AM—when the High Line is not open—unless otherwise approved by NYC Parks and Friends of the High Line.

21.6 COORDINATION AND PUBLIC INVOLVEMENT

As set forth in the Section 4(f) regulations (23 CFR § 774.5), Section 4(f) evaluations must be provided for coordination and comment to the officials with jurisdiction over the Section 4(f) resources that will be used by a proposed project, and to the DOI. As noted above, for the Preferred Alternative, the officials with jurisdiction are NYC Parks and NYSHPO for the NRHP-eligible High Line. NYC Parks and NYSHPO are both NEPA Participating Agencies for this Project and have participated in the Section 106 process as consulting parties. Agency Coordination materials are provided in **Appendix P**. NYSHPO and consulting parties' correspondence for Section 106 is provided in **Appendix F**.

Section 4(f) requires that public notice and an opportunity for public review and comment must be provided on the Draft Section 4(f) Evaluation. This requirement can be satisfied in conjunction with other public involvement procedures, such as the comment period provided on an EIS prepared in accordance with NEPA. For this Project, FRA is providing an opportunity for public review and comment on this Draft Section 4(f) Evaluation in conjunction with the public review period for the EIS. FRA will also make the Draft Section 4(f) Evaluation available to DOI, NYSHPO, and NYC Parks for comment during the public review period. Any agency or public comments received during this review period will be addressed in the Final Section 4(f) Evaluation, to be provided with the FEIS. FRA will issue a Section 4(f) Determination prior to or in conjunction with the ROD for the Project.

21.7 CONCLUSION

This Draft Section 4(f) Evaluation has been prepared in accordance with 49 U.S.C. § 303; 23 CFR Part 74; and FHWA's Section 4(f) Policy Paper (2012). Following a 45-day review period, the preceding alternatives evaluation along with any comments received would be considered as a basis for FRA's final determination. Taking into account the information provided above and the avoidance, minimization, and mitigation measures identified for the underpinning and projected noise increases at the High Line during construction of the Preferred Alternative, FRA intends to make a *de minimis* finding for the High Line.

Because the High Line is both a historic site and a park resource, FRA must find that the criteria for both parks and historic sites are met in order to reach a conclusion that the impacts are *de minimis*, NYSHPO is the official with jurisdiction for the High Line as a historic site; NYC Parks is the official with jurisdiction for the High Line as a park resource. As noted above, FRA has determined there is no adverse effect to the historic property under Section 106. In a letter dated February 11, 2021, NYSHPO concurred with the Section 106 finding, and FRA is using this concurrence for the *de minimis* finding. In addition, after taking into account measures to avoid, minimize, and mitigate harm to the High Line park, FRA proposes that the project would not adversely affect the activities, features, and attributes of the park. FRA has consulted with NYC Parks and informed them of FRA's intent to find the impacts are *de minimis*. Coordination with NYC Parks is ongoing at this time.

Therefore, after public notice and the opportunity to comment on the proposed finding through the public review period for this Draft EIS, FRA intends to make a *de minimis* impact determination for the High Line. ✴