

HUDSON TUNNEL PROJECT

NEPA RE-EVALUATION #9

**PROPOSED MODIFICATIONS TO PROJECT CONSTRUCTION IN THE CITY OF
HOBOKEN AND TOWNSHIP OF WEEHAWKEN, NEW JERSEY**

September 2, 2025

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1 INTRODUCTION

This National Environmental Policy Act (“NEPA”) re-evaluation assesses proposed modifications to the Hudson Tunnel Project (“HTP” or “the Project”) in the City of Hoboken and Township of Weehawken, New Jersey, and below the New Jersey portion of the Hudson River following the issuance of the Project’s Combined Final Environmental Impact Statement (“FEIS”) and Record of Decision (“ROD”) on May 28, 2021. As described in the FEIS/ROD, the HTP is intended to preserve the current functionality of the Northeast Corridor’s (“NEC”) Hudson River passenger rail crossing between New Jersey and New York and to strengthen the NEC’s resilience. The Federal Railroad Administration (“FRA”) was the lead Federal agency for the HTP’s environmental review, in accordance with NEPA. The Federal Transit Administration (“FTA”) was a Cooperating Agency for the FEIS/ROD and, as such, FTA issued the ROD jointly with FRA. On May 5, 2025, FTA notified the Gateway Development Commission (“GDC”) that FTA has assumed responsibility as the Lead Federal Agency for environmental reviews for the HTP. The Port Authority of New York and New Jersey (“PANYNJ”) was the Project Sponsor at the time that the FEIS/ROD was issued. On October 21, 2022, PANYNJ and GDC formally notified FRA and FTA that GDC was assuming the role of NEPA Project Sponsor.

This re-evaluation includes the following refinements to the Project design and construction means and methods (“Proposed Project Modifications”):

- **Hudson River Tunnel Re-Alignment:** GDC proposes a permanent minor northward shift in tunnel alignment of the proposed Hudson River Tunnel¹ segment below the Hudson River from Weehawken Cove to the New Jersey-New York state boundary to avoid obstructions associated with former Pier 16. The modified tunnel alignment would be approximately 20 linear feet shorter than anticipated in the FEIS/ROD. The topmost tunnel components would remain between approximately 25 feet and 90 feet below the Hudson River mudline. The proposed Hudson River Tunnel re-alignment would require geotechnical borings prior to Tunnel Boring Machine (“TBM”) operations.

The proposed tunnel re-alignment would require new permanent subsurface easements, as follows:

- *City of Hoboken Block 267 Lot 1, Block 265 Lot 1, and Block 264 Lot 2* from the City of Hoboken; and
- *Parcel T201A* (total area approximately 4.74 acres) in the Hudson River between *City of Hoboken Block 264 Lot 2*, and New York State line) from the State of New Jersey.

Permanent subsurface easements of the above properties (*City of Hoboken Block 267 Lot 1, Block 265 Lot 1, Block 264 Lot 2, and Parcel T201A*) were anticipated in the FEIS/ROD. However, due to the re-alignment of the tunnel, new easements must be obtained that encompass the

¹ The Hudson River Tunnel refers to the new rail tunnel that would be constructed below the Hudson River between Hudson County, New Jersey and the Manhattan shoreline as part of the Project. The new Hudson River Tunnel would consist of two separate single-track tunnels, referred to as “tubes” throughout the FEIS/ROD. This is similar to the existing North River Tunnel, which also consists of two separate single-track tubes.

revised subsurface area through which the modified tunnel alignment will pass. The permanent subsurface easement on *City of Hoboken Block 268.01 Lot 4* anticipated in the FEIS/ROD would no longer be required with the proposed Hudson River Tunnel re-alignment.

These properties comprise areas within the Hudson River. Block 267 Lot 1 and Block 265 Lot 1 comprise a part of the waterside portion of the Hudson River Waterfront Walkway. The re-alignment of the tunnel below these properties would not affect nearby land uses nor would it affect natural resources, habitat, or maritime traffic within the Hudson River.

- **Willow Avenue Viaduct Underpinning Design:** GDC has modified the design of the Willow Avenue viaduct underpinning supports, resulting in permanent above-ground infrastructure below the Willow Avenue viaduct not previously contemplated in the FEIS/ROD.
- **Changes to Construction Means, Methods, and Duration:** GDC proposes construction changes associated with jet grouting below and in the vicinity of the Hudson-Bergen Light Rail (“HBLR”) and Willow Avenue viaduct underpinning, including:
 - A new construction staging area to support jet grouting below the HBLR and Willow Avenue viaduct underpinning construction activities (“17th Street Construction Staging Area”).
 - Changes to construction truck routes to serve the 17th Street Construction Staging Area; specifically allowing trucks to travel along Park Avenue between 15th and 19th streets, 15th and 16th streets between Park Avenue and Clinton Street, as well as a short section of Clinton Street between 15th and 17th streets. The 17th Street Construction Staging Area would not change the number, frequency, or schedule of truck trips from what was assumed in the FEIS/ROD.
 - Identification of the duration of jet grouting below the HBLR. Although the FEIS/ROD contemplated that jet grouting below the HBLR would be necessary, the duration was not identified in the FEIS/ROD. As currently contemplated, jet grouting below the HBLR would require approximately 19 months of construction.
 - Minor changes to construction hours for jet grouting below the HBLR, including short-term intermittent overnight work required for the installation of fencing and/or jet grouting directly adjacent to the HBLR alignment. Additionally, as contemplated in the FEIS/ROD for other work elements in the area, some weekend work may be required to make up for potential unanticipated schedule delays.
 - Increase in the duration of Willow Avenue viaduct underpinning construction activities from approximately two months, as contemplated in the FEIS/ROD, to approximately 14 months.
- **Park Avenue Pedestrian Safety Improvements:** GDC proposes new pedestrian safety improvements along Park Avenue between West 18th Street and West 19th Street in the Township of Weehawken. The proposed pedestrian safety improvements, which would be operational throughout Project construction, would provide an alternate pedestrian route between the Shades residential neighborhood and the Lincoln Harbor waterfront to the east

while avoiding the intersection of Park Avenue and West 19th Street, which will experience additional truck traffic while the 17th Street Construction Staging Area remains active.

In addition to the new subsurface easements described above for the refined Hudson River Tunnel alignment, the Proposed Project Modifications would require changes to property acquisitions compared to those identified in the FEIS/ROD, as summarized below in **Table 1, “Proposed Property Easements Summary.”**

Table 1: Proposed Property Easements Summary

Property	Owner	Easement Type	Purpose of Easement	Change Since FEIS/ROD
Hoboken Block 146, Lot 4	PSE&G Corporate Properties	Temporary Construction	Proposed above ground construction activities associated with jet grouting below the HBLR.	New as part of Proposed Project Modifications
Hoboken Block 146, Lot 4	PSE&G Corporate Properties	Permanent Subsurface	Tunnel alignment	No change from FEIS/ROD
Hoboken Block 146, Lot 4.01	Hartz Mountain Industries, Inc.	Temporary Construction	Proposed above ground construction activities associated with jet grouting below the HBLR.	New as part of Proposed Project Modifications
Hoboken Block 146, Lot 4.01	Hartz Mountain Industries, Inc.	Permanent Subsurface	Tunnel alignment	No change from FEIS/ROD
Weehawken Block 11, Lot 6	Hartz Mountain Industries, Inc.	Temporary Construction	Proposed above ground construction activities associated with Willow Avenue Viaduct Underpinning and associated utility relocations	New as part of Proposed Project Modifications
Hoboken Block 264, Lot 2	City of Hoboken	Permanent Subsurface	Below ground tunnel alignment	Change to easement area as a result of tunnel re-alignment
Hoboken Block 265, Lot 1	City of Hoboken	Permanent Subsurface	Below ground tunnel alignment	Change to easement area as a result of tunnel re-alignment
Hoboken Block 267, Lot 1	City of Hoboken	Permanent Subsurface	Below ground tunnel alignment	Change to easement area as a result of tunnel re-alignment
Hoboken Block 268.01, Lot 4	Hudson Cove, LLC	None	N/A	Easement no longer required due to tunnel re-alignment
New Jersey – Hudson River (Parcel T201A)	New Jersey	Permanent Subsurface	Below ground tunnel alignment	Change to easement area as a result of tunnel re-alignment

Source: GTHP, 2025; New Jersey Division of Taxation Property Tax System/MOD-IV, 2025.

Additionally, the 17th Street Construction Staging Area would require a new Temporary Right-of-Way User Agreement with the City of Hoboken to allow for Project use of West 17th Street for construction activities and staging associated with jet grouting below the HBLR and the Willow Avenue viaduct underpinning.

The permanent Hudson River Tunnel re-alignment has been designed to meet Amtrak Specification 63, as per the FEIS/ROD, and would not introduce any new design exception requests (“DER”) to Amtrak specifications. The Hudson River Tunnel re-alignment and Willow Avenue underpinning design would not alter rail service operating speeds, tunnel throughput, or other Hudson Tunnel performance objectives analyzed in the FEIS/ROD. The Proposed Project Modifications would not result in new in-water construction activities which were not previously contemplated in the FEIS/ROD. The modified Hudson River Tunnel alignment would be located at minimum between approximately 25 and 90 feet below the Hudson River bottom, as contemplated in the FEIS/ROD, and as such would not result in any physical alteration of, or effects to, the Hudson River water column, river bottom, or in-water natural and biological resources, nor would it affect maritime navigation. As such, this re-evaluation focuses primarily on the effects resulting from proposed above-ground permanent infrastructure under the Willow Avenue viaduct and on changes to construction-period effects and mitigation measures, as described further in **Section 2, “Description of Proposed Project Modifications.”**

2 DESCRIPTION OF PROPOSED PROJECT MODIFICATIONS

2.1 Hudson River Tunnel Re-Alignment

2.1.1 *Conditions Included as Part of the Published FEIS/ROD*

As described in Chapter 2 of the FEIS/ROD, “Project Alternatives and Description of the Preferred Alternative,” four tunnel alignment alternatives were considered for the Hudson River Tunnel between its portal at the western slope of the Palisades and the Manhattan shoreline (Section 2.3.2.2). The fourth Hudson River Tunnel alignment alternative, which included a construction staging area (“Hudson County Construction Staging Area”)² and construction access shaft in Hoboken, New Jersey, was selected because it was determined to best serve the Project purpose, need, goals, and objectives.³

The FEIS/ROD (Section 3.3.4.5) identified the potential for obstructions to be encountered under the riverbed beneath the Hudson River during underground boring for the Hudson River Tunnel. Where waterfront features were once located, TBMs may encounter remaining below-ground timber piles. If this occurs, the FEIS/ROD found that the obstructions could be manually removed from the face of the TBM, either with compressed air pumped to maintain tunnel face stability or by applying ground treatment in advance so that work can be conducted under normal atmospheric pressure.

² In the FEIS/ROD, the Hudson County Construction Staging Area was referred to as the Hoboken Construction Staging Area.

³ The selected tunnel alignment option matches the same horizontal alignment in New Jersey identified in the Access to Region’s Core (“ARC”) Project’s Draft Environmental Impact Statement (“DEIS”) and Supplemental DEIS (“SDEIS”)/FEIS Build Alternatives.

2.1.2 *Changes Since Publication of the FEIS/ROD*

Subsequent to the issuance of the FEIS/ROD, GDC further reviewed available historical documentation regarding abandoned waterfront structures, including timber piles associated with former Pier 16 in Hoboken, which is in the path of the TBM. Historical records indicate that former pier piles and metal elements such as iron or steel “driving shoes,”⁴ and concrete may be present within the vertical and horizontal tunnel alignment. These obstructions would require slower TBM operations, and may cause damage to the TBM, if encountered. Available historical records and geophysical surveys do not provide information on the length of the piles associated with former Pier 16, although it can be inferred from its size and purpose, and its appearance in photographs, that the piles and associated obstructions may extend up to 130 feet below water level. The FEIS/ROD contemplated that the top of the Hudson River Tunnel would be approximately 115 feet below water level. Over 1,000 of these piles may still exist at this elevation, and there is a material risk that both tunnel tubes could conflict with them without a modification in the tunnel alignment.

The removal of these obstructions prior to tunneling activities through this area was considered; however, based on the construction methodology and historical documentation available for former Pier 16, GDC would not be able to confirm whether each entire pile was removed from the path of the Hudson River Tunnel alignment. Where piles have been spliced together, the project team could potentially remove one pile segment but leave the remaining pile segment in the path of the tunnel alignment.

To reduce the risk of the TBM encountering these piles, the horizontal alignment of the Hudson River Tunnel has been shifted north of the limit of that pier, obviating the need for boring below and/or through former Pier 16 and eliminating the risk of encountering piles in this location (see **Figure 1, “Proposed Modification to the Hudson River Tunnel Alignment”**).

The vertical alignment (i.e., profile) of the modified tunnel has correspondingly been modified to accommodate lower top of rock elevations within this section of the alignment. As currently proposed, the tunnel between Weehawken Cove and the New Jersey-New York state boundary would be shallower than was originally contemplated in the FEIS/ROD. However, the top of any tunnel component within the modified portion of the Hudson River Tunnel would remain between 25 feet and 90 feet below the Hudson River mudline, providing sufficient depth for TBM operations and cross-passage construction.

The proposed Hudson River Tunnel re-alignment would result in an overall reduction in the length of bored and lined tunnel, resulting in cost and time savings. It would not alter rail service operating speeds, tunnel throughput, or other Hudson Tunnel performance objectives analyzed in the FEIS/ROD, nor would it result in new in-water construction activities or physical alteration of, or effects to, the Hudson River.

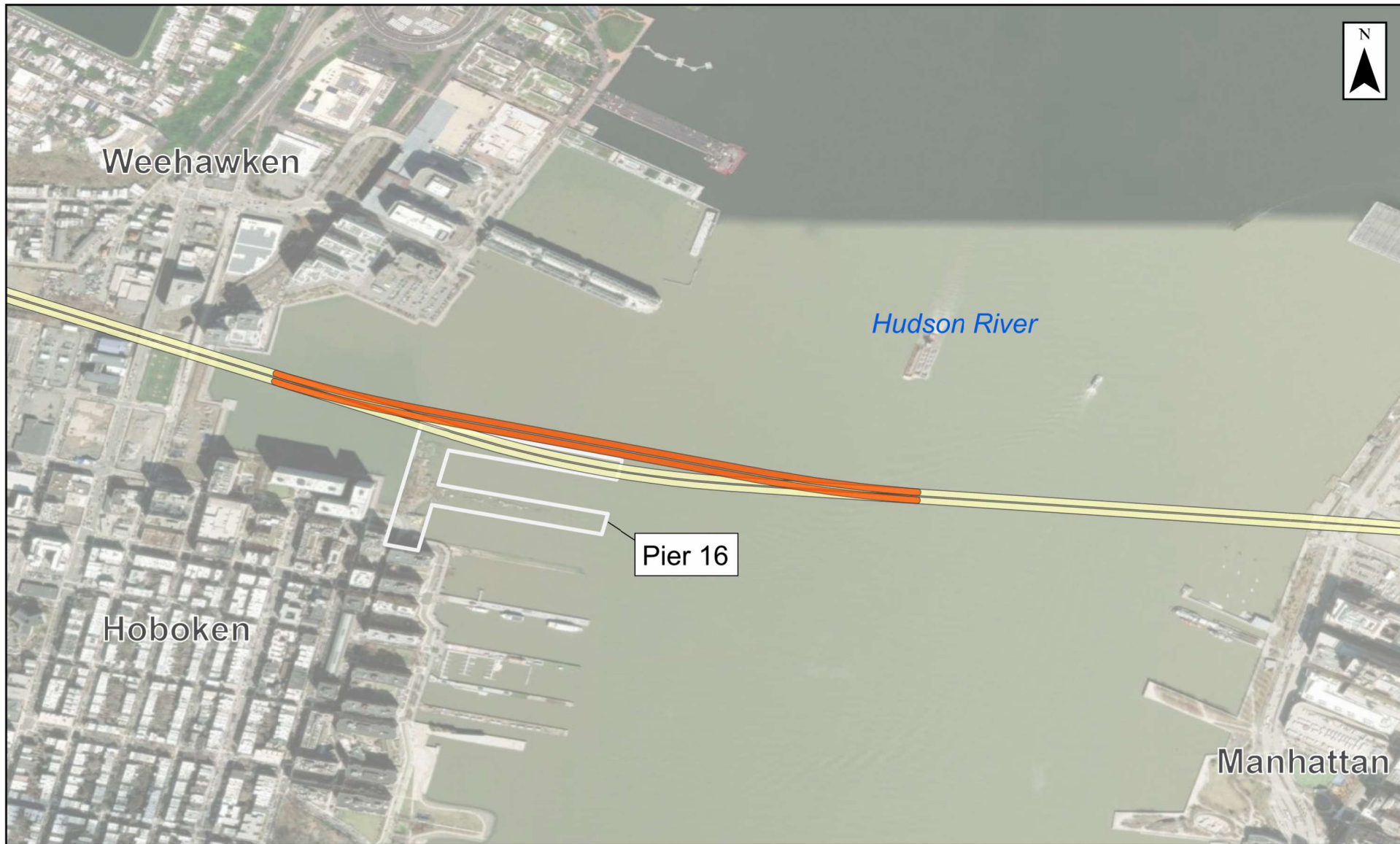
The proposed tunnel re-alignment would require new permanent subsurface easements, as follows:

⁴ Pier pile ‘driving shoes’ are attachments sometimes used on the bottom of pier piles to protect the ends of piles and ease installation.

- *City of Hoboken Block 267 Lot 1, Block 265 Lot 1, and Block 264 Lot 2* from the City of Hoboken; and
- *Parcel T201A* (total area approximately 4.74 acres) in the Hudson River between *City of Hoboken Block 264 Lot 2*, and New York State line) from the State of New Jersey.

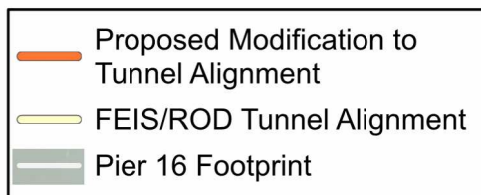
Permanent subsurface easements of the above properties were anticipated in the FEIS/ROD. However, due to the re-alignment of the tunnel, new easements must be obtained that encompass the revised subsurface area through which the modified tunnel alignment will pass. These properties comprise area within the Hudson River. Hoboken *Block 267 Lot 1* and *Block 265 Lot 1* comprise a part of the waterside portion of the Hudson River Waterfront Walkway (see **Figures 2a and 2b, “Revised Subsurface Easements”**). The re-alignment of the tunnel below these properties would not affect nearby land uses, natural and biological resources, or maritime traffic within the Hudson River.

The permanent subsurface easement on *City of Hoboken Block 268.01 Lot 4* anticipated in the FEIS/ROD would no longer be required with the proposed Hudson River Tunnel re-alignment.



Source: Gateway Trans-Hudson Partnership (GTHP), 2025; Gateway Development Commission, 2025.

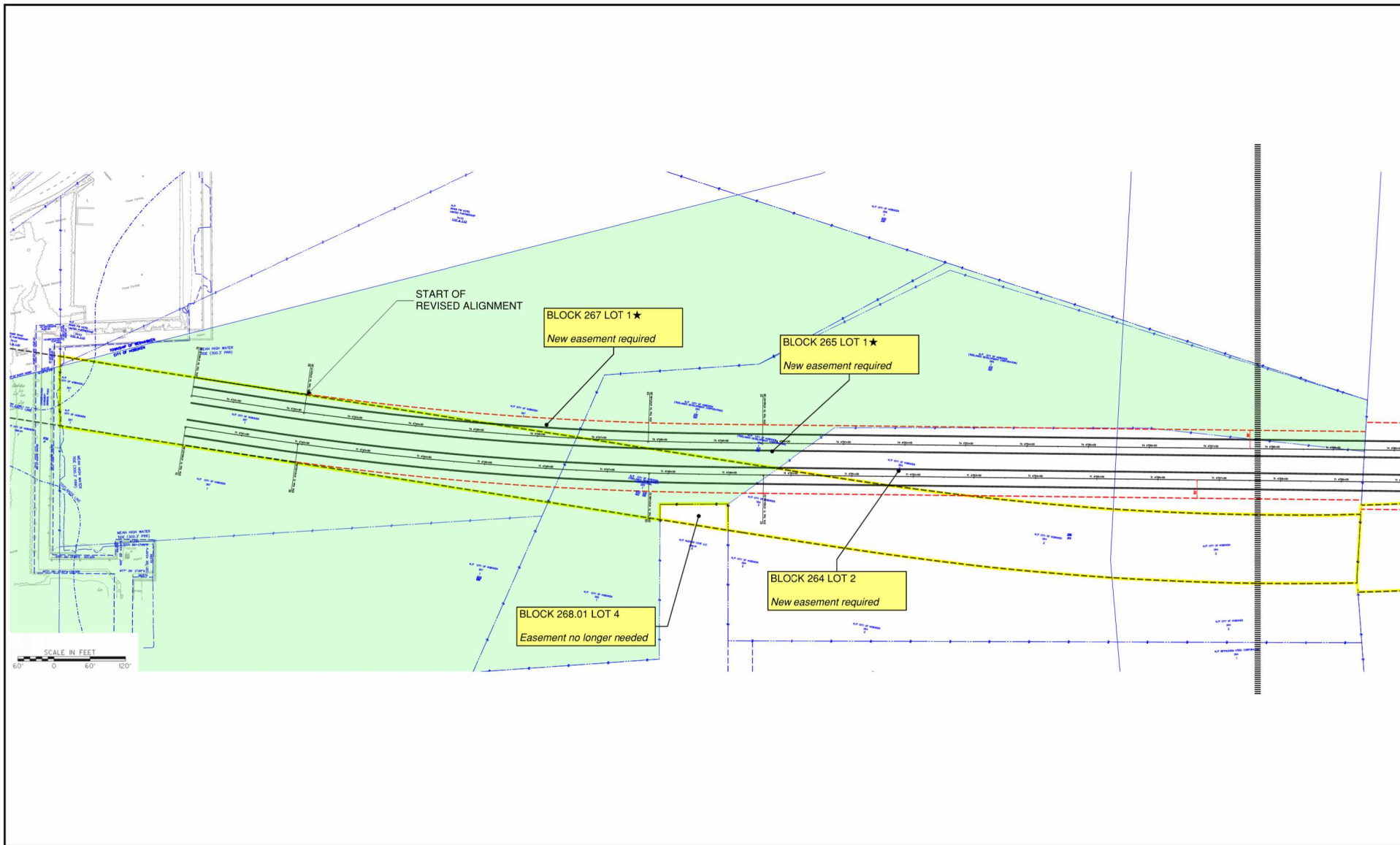
**GATEWAY DEVELOPMENT
COMMISSION**



0 500 1,000 2,000 Feet

Proposed Modification to the
Hudson River Tunnel Alignment

Figure 1



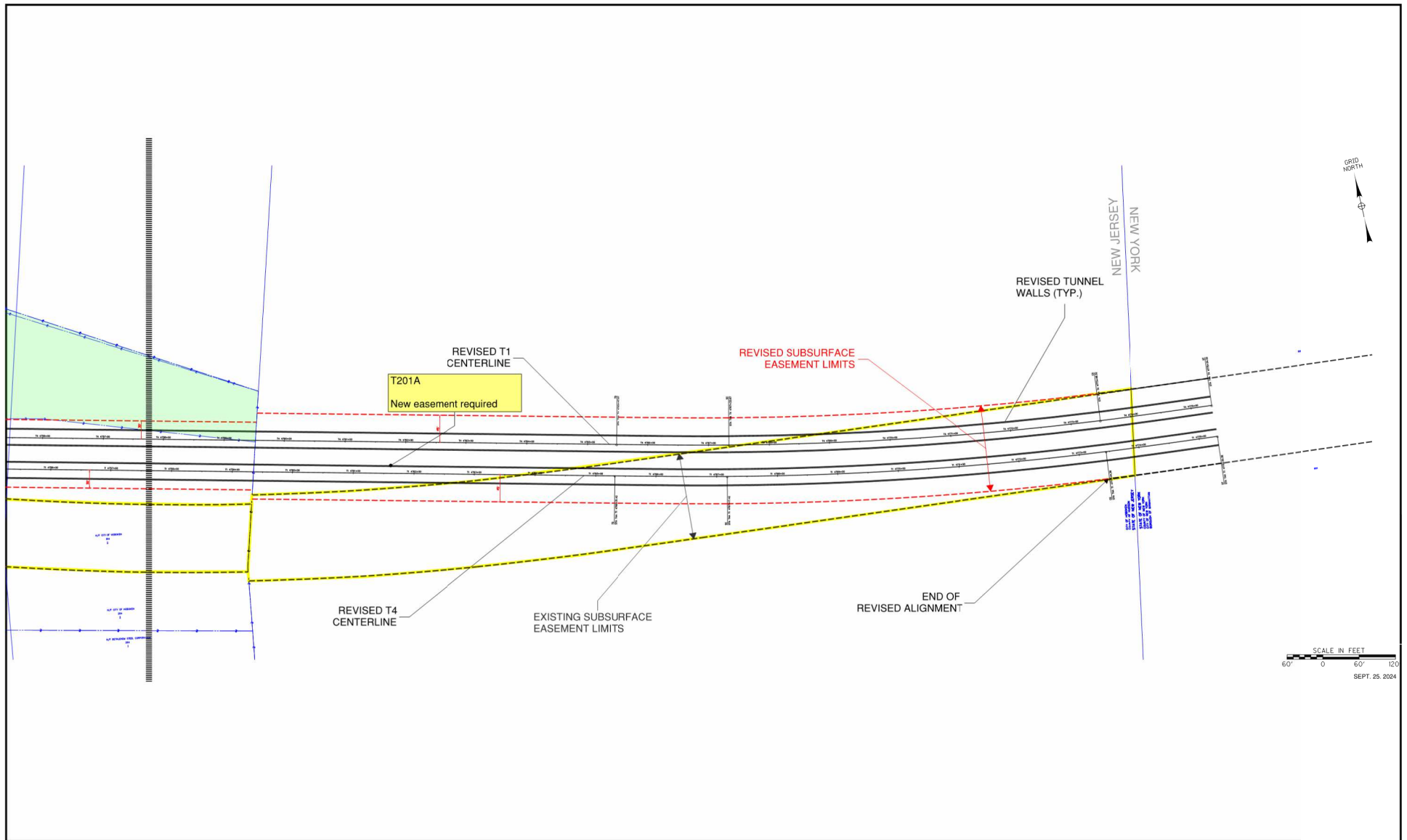
Source: Gateway Trans-Hudson Partnership (GTHP), 2025; Gateway Development Commission, 2025.

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- FEIS Tunnel Alignment
- Proposed Modification to Tunnel Alignment
- Green Acres Land
- ★ Green Acres Parcel
- Parcel/Municipal Boundary

Revised Subsurface Easements

Figure 2a



Source: Gateway Trans-Hudson Partnership (GTHP), 2025; Gateway Development Commission, 2025.

**GATEWAY DEVELOPMENT
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- — — FEIS Tunnel Alignment
- - - Proposed Modification to Tunnel Alignment
- Green Acres Land
- ★ Green Acres Parcel
- - - Parcel/Municipal Boundary

Revised Subsurface Easements

Figure 2b

2.2 Jet Grouting Below the Hudson Bergen Light-Rail (“HBLR”) from the 17th Street Staging Area

2.2.1 *Conditions Included as Part of the Published FEIS/ROD*

Ground improvement would harden the ground to prevent settlement (i.e., shifting) of soils while TBM operation proceeds. The FEIS/ROD (Section 3.3.4.1) contemplated ground improvement prior to TBM tunneling such as injection of grout into the soil to harden the soil (referred to as “jet grouting”). The FEIS/ROD assumed jet grouting would be conducted adjacent to the Hudson County shaft to strengthen the soil at the interface between the shaft and the new Hudson River Tunnel. The FEIS/ROD assumed that similar ground improvement would also be conducted in the area where the new tunnel alignment would pass beneath the HBLR right-of-way (“ROW”). The FEIS/ROD stated that this work would most likely be conducted from the ground surface; however, exact jet grouting locations were not identified pending Project engineering. Jet grouting activities were assumed to be conducted from 7 AM to 11 PM on weekdays.

2.2.2 *Changes Since Publication of the FEIS/ROD*

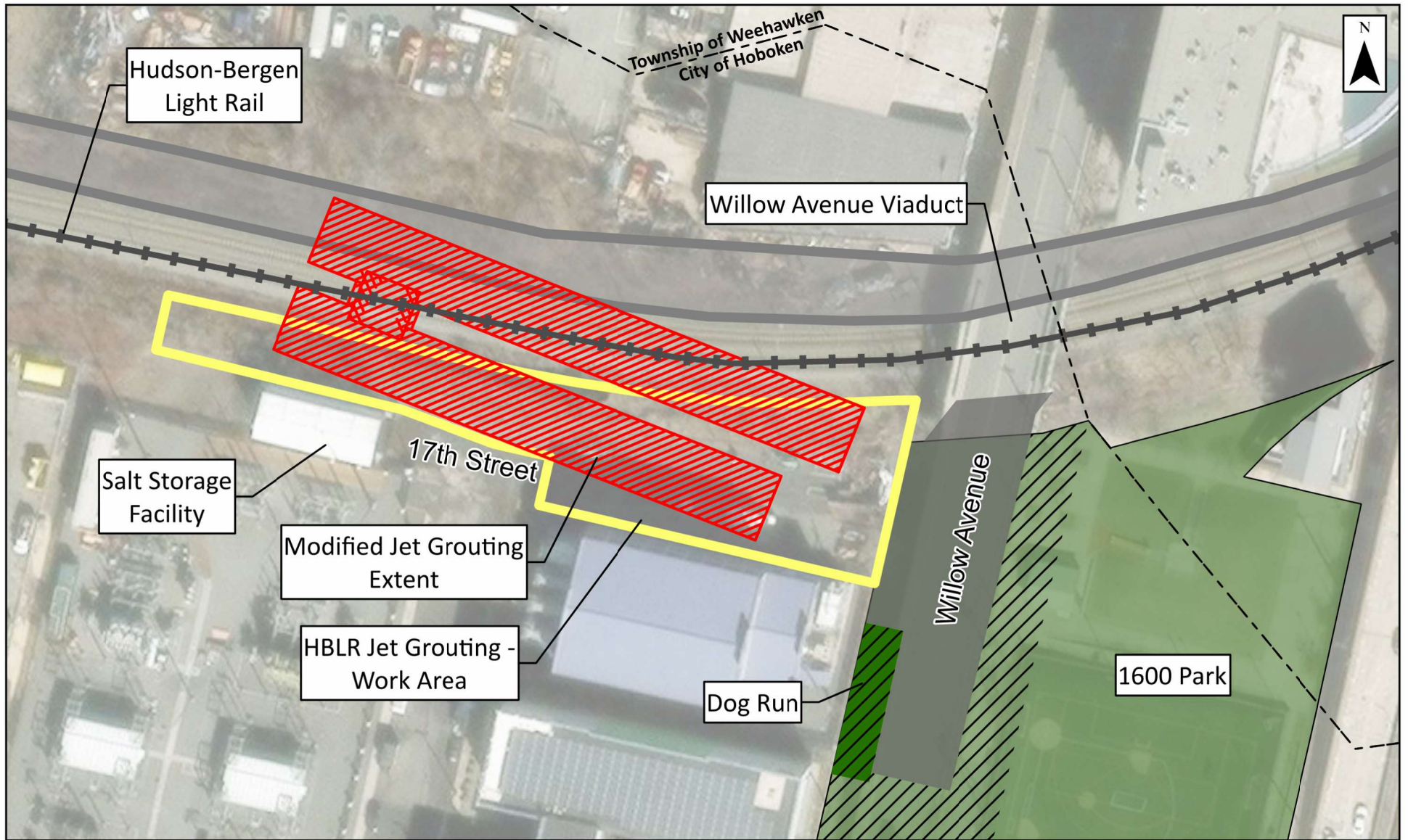
Since the publication of the FEIS/ROD, the area to be used for staging jet grouting activities along the portion of the tunnel alignment passing beneath the HBLR has been identified. Based on further analysis during Project engineering, jet grouting would be performed beneath the HBLR ROW and above the new Hudson River Tunnel alignment at the locations identified on **Figure 3, “Modified Jet Grouting Extent,”** prior to tunnel excavation. Jet grouting would be undertaken within the identified areas at depths approximately 60 to 100 feet below ground. As with the FEIS/ROD, jet grouting activities as currently contemplated would generally be conducted on weekdays from 7 AM to 11 PM. In addition, short-term intermittent overnight work is likely to be required during the time the HBLR is not active for the installation of fencing directly adjacent to the HBLR alignment and potentially for the installation of jet grouting equipment (e.g., pipes) below ground nearly adjacent to the HBLR alignment.⁵ Additionally, some weekend work may be required to make up for potential unanticipated schedule delays. Jet grouting construction activities at this location would last approximately 19 months.

Jet grouting activities would require the temporary filling with soil of an existing open concrete channel south of the HBLR tracks that currently drains into a culvert to provide a temporary construction platform for jet grouting operations. The water flow in the open channel would be temporarily diverted into bypass pipes installed directly south of the existing open channel, leading back into the existing culvert. These facilities would protect the quality of the water within the pipes during jet grouting construction activities. The open channel would be restored after jet grouting is complete. As shown in

⁵ The City of Hoboken noise ordinance requires special permission for construction activity occurring between the hours of 6 PM and 8 AM on weekdays or on weekends, subject to a noise mitigation plan approved by a Land Use Board. While GDC is not required to comply with the City of Hoboken noise ordinance when doing so would be impracticable (See N.J. Stat. § 32:36-9(b)), GDC will continue to proactively work with the NJ County Commissioners and the local elected officials to bring awareness and transparency to the various construction activities proposed in North Bergen, Weehawken and Hoboken. GDC will also continue to implement the mitigation measures set forth in the FEIS/ROD.

FEIS Appendix 11-2, "Wetlands Delineation Report," the Jurisdictional Determination Plans classified the concrete open channel in the study area as a "concrete drainage swale." This feature was not delineated in the field and, because it was constructed for stormwater conveyance, it is considered a non-jurisdictional feature. Further, no adjacent wetlands were delineated in the immediate vicinity of this swale. As such, no additional permits or modifications of existing permits would be required to temporarily divert the water flow of the concrete open channel into bypass pipes.

A new construction staging area would be required to support the proposed jet grouting and Willow Avenue underpinning construction activities; the new staging area is described below in **Section 2.4, "17th Street Construction Staging Area."**



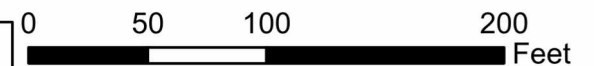
Source: Gateway Trans-Hudson Partnership (GTHP), 2025; Gateway Development Commission, 2025.

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*This portion of 1600 Park is beyond the limits of Block 256, Lot 1.01 and within the limits of the Hudson County-owned Willow Avenue ROW. Per a 2013 Encroachment Agreement between the City of Hoboken and Hudson County, Hudson County grants the City of Hoboken a license to encroach onto this portion of the Willow Avenue ROW.

- Modified Jet Grouting Extent
- HBLR Jet Grouting - Work Area
- Off-Street Haul Route
- Open Space Resource
- Dog Run

- Park Encroachment Area*
- Area Currently Inaccessible to Public
- Hudson-Bergen Light Rail (HBLR)
- Municipal Boundary



Modified Jet Grouting Extent
Figure 3

2.3 Willow Avenue Viaduct Underpinning

2.3.1 *Conditions Included as Part of the Published FEIS/ROD*

The FEIS/ROD (Section 3.3.4.1) described underpinning work at the Willow Avenue viaduct in Hoboken to secure the viaduct during TBM operations. Underpinning is a process in which additional structural elements (e.g., piles) are added to support an existing foundation during construction below. The FEIS/ROD contemplated that new subsurface piles would be drilled into the ground at the Willow Avenue viaduct foundation and the existing pile-supported foundation would be underpinned to these new subsurface piles. This approach would not involve any permanent elements that would be visible above ground at the foundation of the viaduct, and Willow Avenue would remain open throughout the construction period. Only short-term, intermittent closures of Willow Avenue during off-peak hours or weekends would be required. Underpinning construction activities were assumed in the FEIS/ROD to last approximately two months, with no use of the adjacent open space (1600 Park).

2.3.2 *Changes Since Publication of the FEIS/ROD*

As project design advanced, and more detailed engineering and site analysis information became available, it was determined that below-ground underpinning to the Willow Avenue viaduct foundations would require jet grouting, sheet piling, and dewatering below the Willow Avenue viaduct, and consequently a larger area of excavation and substantially longer construction duration than anticipated at the time of the FEIS/ROD. Therefore, GDC developed a modified underpinning construction method to secure the Willow Avenue viaduct and facilitate safe TBM operations and the operation of the new tunnel below it in order to minimize disruption to adjacent uses by limiting the need for excavation and eliminating the need for jet grouting, sheet piling, and dewatering below the Willow Avenue viaduct.

The modified Willow Avenue underpinning construction approach comprises the drilling of new “micropiles” in the vicinity of the existing Willow Avenue viaduct piles and installation of new pile caps. Concrete-encased steel girders would be installed above ground atop these new pile caps. These girders would attach to the existing above-ground columns supporting the Willow Avenue viaduct, permanently transferring the load of the viaduct from the columns onto the new girders and micropiles (see **Figure 4, “Willow Avenue Viaduct Underpinning Extent”**). This approach would result in permanent above-ground pile caps and concrete-encased steel girders above grade and below the Willow Avenue viaduct; the pile caps would be approximately two feet tall above ground, and the concrete-encased steel girders atop new pile caps would be approximately four feet tall. In total, above-ground elements would be approximately six feet tall and extend horizontally approximately 150 feet, connecting the new pile caps to existing column foundations.

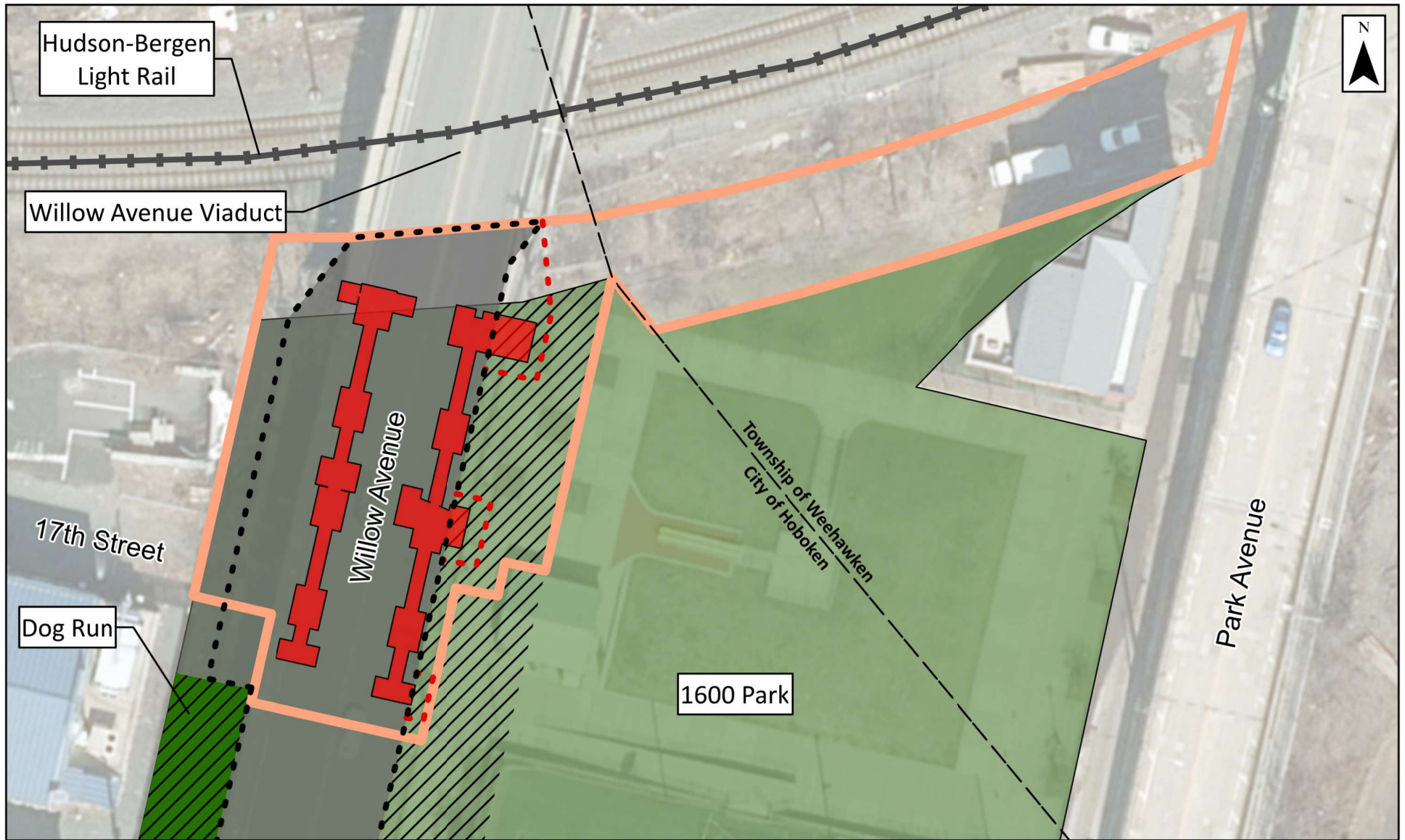
The below-ground underpinning to the Willow Avenue viaduct foundations, as described in the FEIS/ROD, were anticipated to require a construction duration of approximately two months; however, subsequent engineering analysis determined that this underpinning design would require up to approximately 18 months. With the refined design included as part of the Proposed Project Modifications, Willow Avenue viaduct underpinning construction would last approximately 12 months longer than contemplated in the FEIS/ROD, for a total of 14 months. As contemplated in the FEIS/ROD,

the Willow Avenue viaduct would remain open during the underpinning construction activity, with only short-term, intermittent closures required during off-peak hours or weekends.

Construction would result in a temporary reduction in the width of the sidewalk along the eastern Willow Avenue marginal road (beneath the Willow Avenue viaduct) and adjacent to the public bathroom facility. A minimum clear width of 10 feet adjacent to the athletic field and three feet adjacent to the bathroom facility would be maintained throughout construction. This approach would also require the removal of one park tree and two trees below the Willow Avenue viaduct; these trees would be replaced and/or relocated in coordination with the City of Hoboken. All other trees in the vicinity of underpinning construction would be protected in place. A portion of the existing fence between the area under the Willow Avenue viaduct and 1600 Park would be permanently relocated around new infrastructure, as shown on **Figure 4, "Willow Avenue Viaduct Underpinning Extent."**

Several utilities within the Willow Avenue ROW would be maintained in place, abandoned in place, or relocated. Utility work has been coordinated with utility owners/operators and property owners as applicable.

As currently contemplated, the Willow Avenue viaduct underpinning and utility relocations, in addition to the proposed jet grouting work described above, would require the use of a new construction staging area, as described below in **Section 2.4, "17th Street Construction Staging Area."**



Source: Gateway Trans-Hudson Partnership (GTHP), 2025; Gateway Development Commission, 2025.

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- | | |
|--|--|
| Underpinning Extent | Area Currently Inaccessible to Public |
| Underpinning Construction Site | Existing Fence |
| Open Space Resource | Proposed Relocated Fence |
| Dog Run | Hudson-Bergen Light Rail (HBLR) |
| Park Encroachment Area* | Municipal Boundary |

0 25 50 100 Feet

Willow Avenue Viaduct
Underpinning Extent
Figure 4

2.4 17th Street Construction Staging Area

2.4.1 *Conditions Included as Part of the Published FEIS/ROD*

The FEIS/ROD (Section 3.3.3) described the Hudson County Construction Staging Area in Hoboken that would serve as the launching point for the required TBMs and a staging and equipment storage area for tunneling operations.

A separate construction staging area to support jet grouting construction activities and the Willow Avenue viaduct underpinning was not described in the FEIS/ROD.

The FEIS/ROD analyzed three potential dedicated haul route options for trucks accessing the Hudson County Construction Staging Area, all utilizing Park Avenue north of West 19th Street in Weehawken, New Jersey. A NEPA Re-evaluation (Re-evaluation #1) of the FEIS/ROD was prepared and approved by the FRA/FTA in October 2023 to select dedicated Haul Route Option 3 and evaluate refinements to the off-street portions of this haul route. As such, the use of Park Avenue north of West 19th Street for construction trucks has been previously approved per NEPA.

2.4.2 *Changes Since Publication of the FEIS/ROD*

GDC has determined based on further project engineering that a new construction staging area would be required to support jet grouting under the HBLR tracks and Willow Avenue viaduct underpinning construction activities. GDC, in coordination with the City of Hoboken, has identified a suitable area located primarily within the ROW of 17th Street in Hoboken, and partly within Hoboken Block 145 Lot 1.01, Block 146 Lots 1, 4, and 4.01 and Weehawken Block 11 Lot 6. This new construction staging area would occupy the area approximately bounded by the HBLR tracks to the north, Willow Avenue to the east, Hoboken Block 141, Lot 12.01 to the south, and Grand Street/the Hoboken Department of Public Works salt storage shed to the west, as well as a portion of the dedicated off-street haul route located immediately north of the HBLR tracks between approximately Grand Street and Willow Avenue (“17th Street Construction Staging Area”) (see **Figure 5, “17th Street Construction Staging Area”**). Construction vehicles would access the construction staging area via Park Avenue, 15th Street, Clinton Street, and 16th Street (see **Figure 6, “17th Street Construction Staging Area Truck Route”**). The City of Hoboken currently uses 17th Street for equipment storage and provides access to a City-owned salt storage facility located within the 17th Street ROW, as well as Block 146, Lots 4 and 4.01, owned by Public Service Electric and Gas (“PSE&G”) and Hartz Mountain Industries, Inc., respectively.⁶ Access to, and use of, the salt storage facility would be maintained throughout construction. During winter weather events, traffic management would be coordinated with the City of Hoboken.

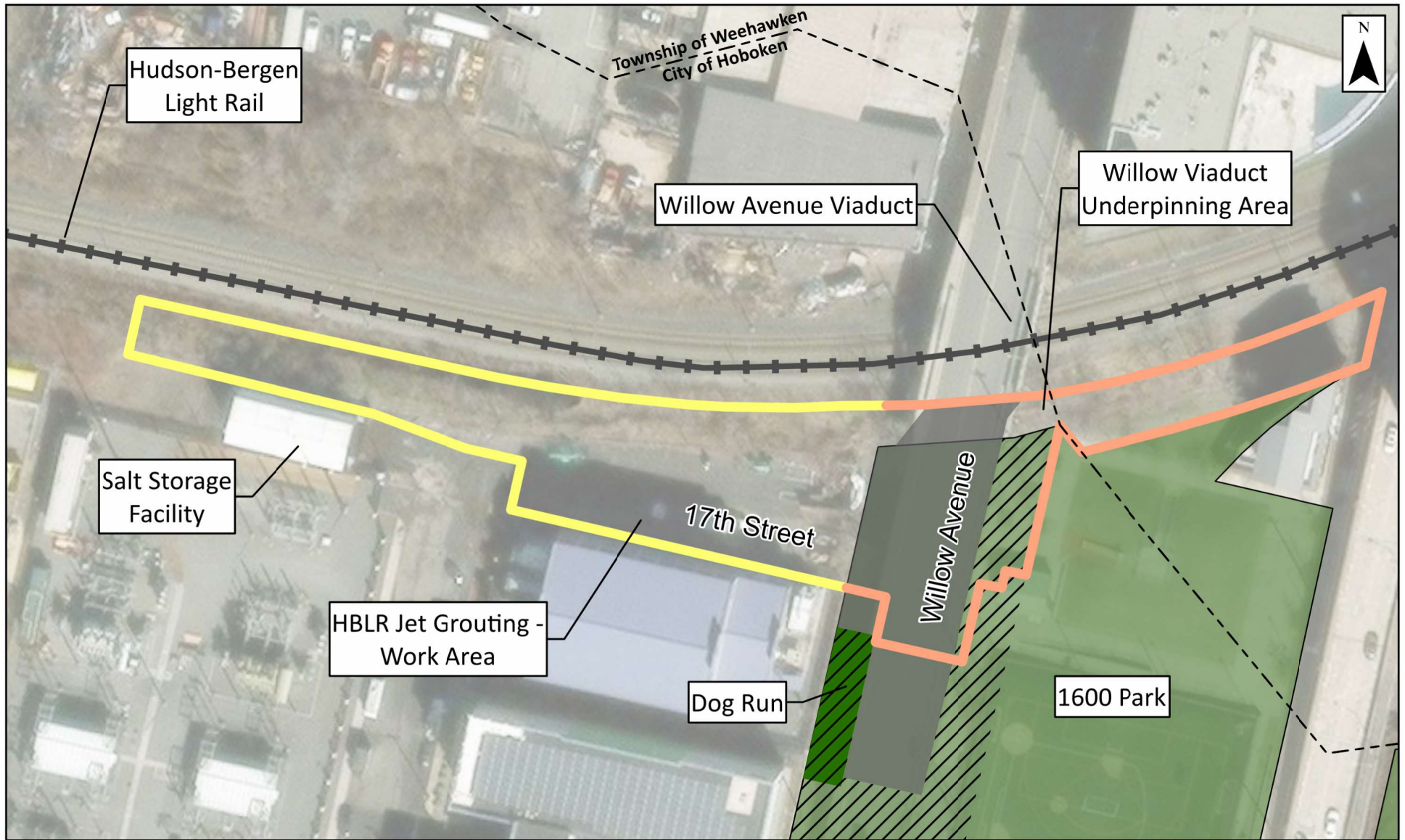
The proposed 17th Street Construction Staging Area would not restrict access to, or affect the use of, the 1600 Park dog run at the Willow Avenue western marginal road or the salt storage facility. It would result in a temporary reduction in the width of the sidewalk along the Willow Avenue eastern marginal

⁶ Block 146, Lots 4 and 4.01 are listed as vacant in the City of Hoboken Master Plan, Land Use Element (<https://masterplan-cityofhoboken.opendata.arcgis.com/>). GDC is in coordination with Hartz Mountain Industries, Inc. and PSE&G regarding the temporary use of this property for construction staging activities.

road (beneath the Willow Avenue viaduct) and adjacent to the public bathroom facility. A minimum clear width of 10 feet adjacent to the athletic field and three feet adjacent to the bathroom facility would be maintained at all times. One park tree and two trees below the Willow Avenue viaduct would be removed to accommodate the 17th Street Construction Staging Area; these trees would be replaced and/or relocated in coordination with the City of Hoboken. All other trees in the vicinity of underpinning construction would be protected in place. It would also require the removal of overgrown vegetation along the southern portion of the HBLR ROW (between 17th Street and the HBLR tracks).

This proposed construction staging area would be in use for approximately 19 months, as described below in **Section 2.6, “Construction Duration.”**

The creation of the 17th Street Construction Staging Area would require currently proposed modification to construction truck routes would allow for the use of Park Avenue between West 15th Street. Specifically, trucks would travel along Park Avenue between 15th and 19th streets, 15th and 16th streets between Park Avenue and Clinton Street, as well as a short section of Clinton Street between 15th and 17th streets. The 17th Street Construction Staging Area would not change the number, frequency, or schedule of truck trips from what was assumed in the FEIS/ROD.



Source: Gateway Trans-Hudson Partnership (GTHP), 2025; Gateway Development Commission, 2025.

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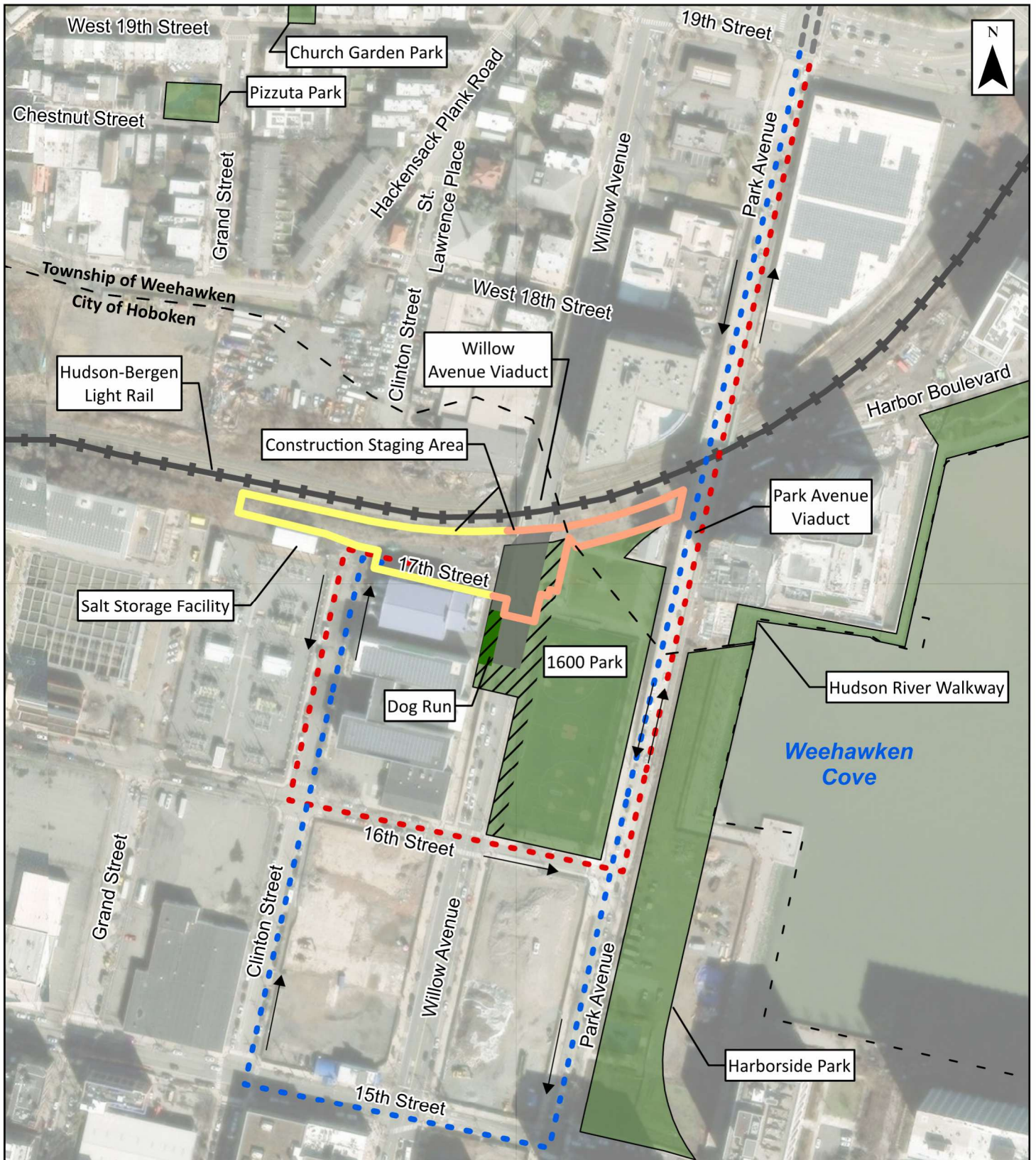
*This portion of 1600 Park is beyond the limits of Block 256, Lot 1.01 and within the limits of the Hudson County-owned Willow Avenue ROW. Per a 2013 Encroachment Agreement between the City of Hoboken and Hudson County, Hudson County grants the City of Hoboken a license to encroach onto this portion of the Willow Avenue ROW.

- 17th Street Construction Staging Area
- Open Space Resource
- Dog Run
- Park Encroachment Area*

- Area Currently Inaccessible to Public
- Hudson-Bergen Light Rail (HBLR)
- Municipal Boundary

0 50 100 200 Feet

17th Street Construction Staging Area
Figure 5

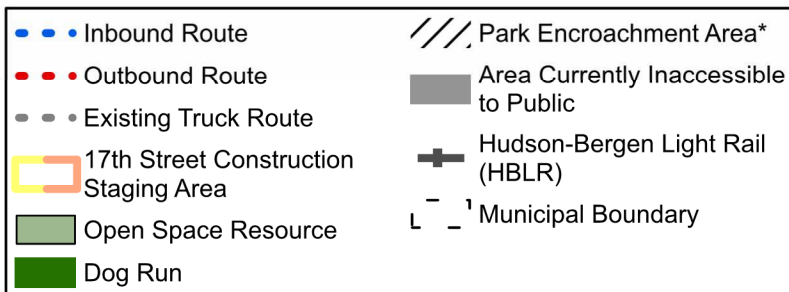


Source: Gateway Trans-Hudson Partnership (GTHP), 2025; Gateway Development Commission, 2025.

0 100 200 400 Feet

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*This portion of 1600 Park is beyond the limits of Block 256, Lot 1.01 and within the limits of the Hudson County-owned Willow Avenue ROW. Per a 2013 Encroachment Agreement between the City of Hoboken and Hudson County, Hudson County grants the City of Hoboken a license to encroach onto this portion of the Willow Avenue ROW.



17th Street Construction Staging Area Truck Route
Figure 6

2.5 Park Avenue Pedestrian Safety Improvements

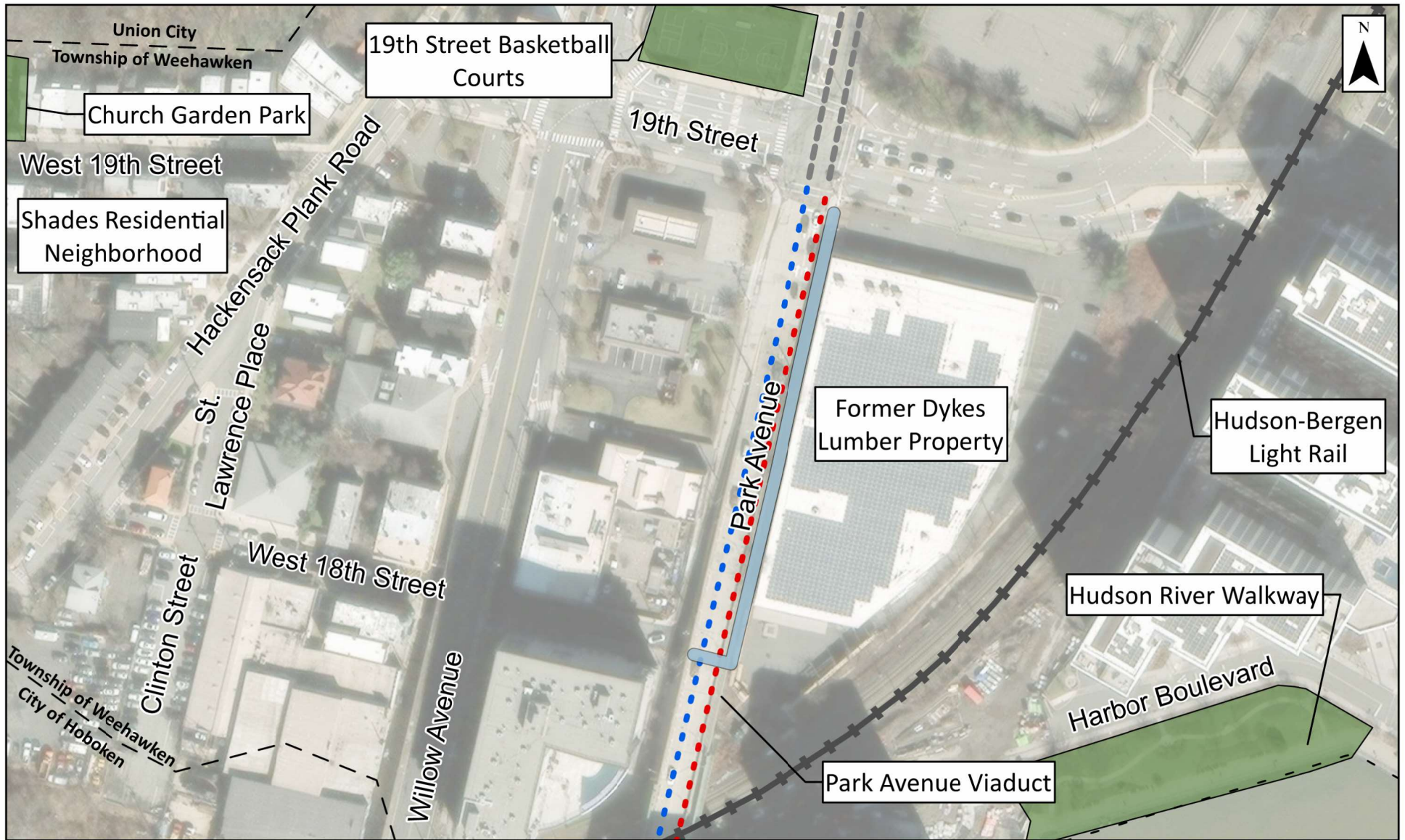
2.5.1 Conditions Included as Part of the Published FEIS/ROD

The FEIS/ROD (Section 5A.4.1.2.4) identified the intersection of Park Avenue and 19th Street in Weehawken as the intersection experiencing the most reportable crashes (47) during the reporting period (January 1, 2014 to December 31, 2016), which is below the 48-crash threshold for a high crash location as defined in the New York City *Environmental Quality Review ("CEQR") Technical Manual*.⁷ As noted therein, the hourly weekday increase in truck or construction worker trips in this area would not be large enough to adversely affect safety conditions; as such, no pedestrian safety improvements were proposed.

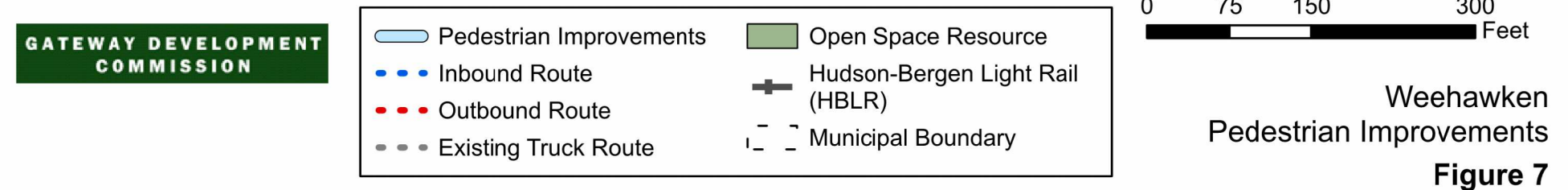
2.5.2 Changes Since Publication of the FEIS/ROD

As described above in **Section 2.4, "17th Street Construction Staging Area,"** and shown on **Figure 6, "17th Street Construction Staging Area Truck Route,"** in order to access the 17th Street Construction Staging Area, construction trucks would utilize Park Avenue between 19th Street in Weehawken, New Jersey, and 15th Street in Hoboken. In coordination with the Township of Weehawken, as part of GDC's active and responsive local community outreach program required in the FEIS/ROD, GDC proposes to implement pedestrian safety improvements along Park Avenue comprising a new Americans with Disabilities Act ("ADA")-compliant crosswalk across the Park Avenue marginal road (below the Park Avenue viaduct) at 18th Street, and a pedestrian path on Amtrak property along the former Dykes Lumber building (Township of Weehawken Block 34.03, Lot 7) between West 18th Street and West 19th Street in the Township of Weehawken (see **Figure 7, "Weehawken Pedestrian Improvements"**). As the owner of this parcel, Amtrak would require the Township of Weehawken to obtain a temporary easement prior to GDC's installation of the new ADA-compliant sidewalk. These proposed pedestrian safety improvements would provide a safe and comfortable pedestrian route from the Shades residential neighborhood west of Park Avenue to access the Lincoln Harbor Waterfront area while avoiding the intersection of Park Avenue and West 19th Street while the 17th Street Construction Staging Area remains active.

⁷ No technical guidance regarding pedestrian safety analysis specific to Hudson County or New Jersey is available; as such, New York *CEQR Technical Manual* guidance is utilized.



Source: Gateway Trans-Hudson Partnership (GTHP), 2025; Gateway Development Commission, 2025.



2.6 Construction Duration

2.6.1 *Conditions Included as Part of the Published FEIS/ROD*

The FEIS/ROD (Section 3.3.4.9) anticipated TBM operations for the Hudson River Tunnel east of the Hudson County Shaft and tunnel cross passage excavation to last approximately two years. Tunneling activities were anticipated to occur 24 hours a day on weekdays.

Willow Avenue underpinning construction activity was anticipated to last approximately two months. The duration of jet grouting activity below the HBLR was not identified in the FEIS/ROD.

Above-ground tunnel preparation work was anticipated to be conducted from 7 AM to 11 PM on weekdays, with no trucking activity conducted at the Hoboken staging area after 10 PM.

The overall duration of construction activities associated with the Hudson River Tunnel was anticipated to be approximately seven years.

2.6.2 *Changes Since Publication of the FEIS/ROD*

The proposed changes to the Hudson River Tunnel alignment would not change the construction duration or work hours for tunneling operations and cross passage excavation, nor would it affect future train operations in the future with the Proposed Project Modifications.

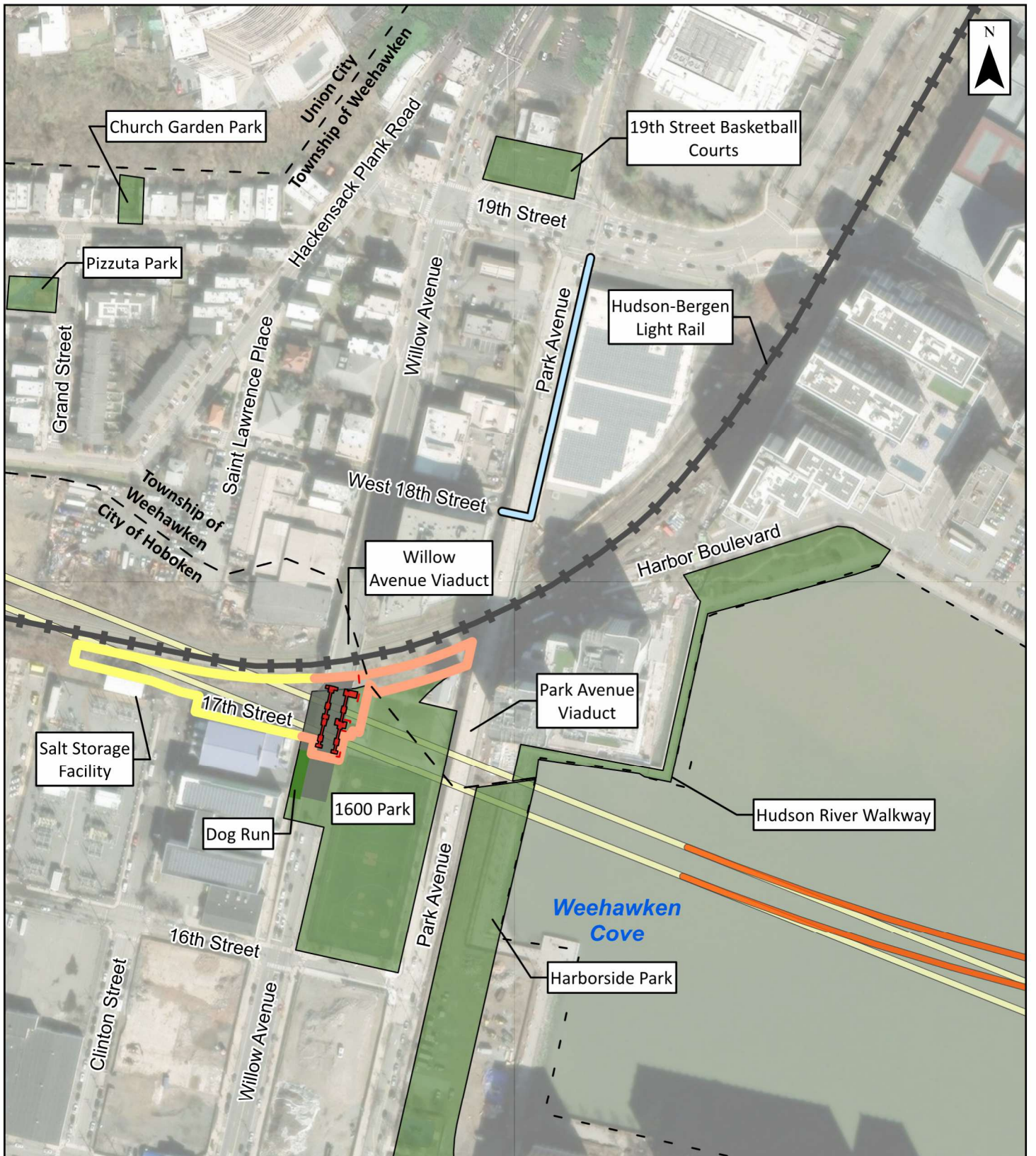
As currently contemplated, jet grouting activities below the HBLR are anticipated to last approximately 19 months, and the Willow Avenue viaduct underpinning work would occur concurrently for approximately 14 months.

As with the FEIS/ROD, jet grouting below the HBLR and Willow Avenue underpinning work would be conducted on weekdays from 7 AM to 11 PM, with no trucking activity after 10 PM, though short term intermittent overnight work may be required for the installation of fencing and/or jet grouting directly adjacent to the HBLR alignment.⁸ Additionally, some weekend work may be required to make up for potential unanticipated schedule delays.

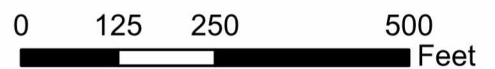
The overall duration of construction activities associated with the Hudson River Tunnel would remain unchanged from the FEIS/ROD, lasting approximately seven years.

The Proposed Project Modifications are collectively shown on **Figure 8, “Proposed Project Modifications.”**

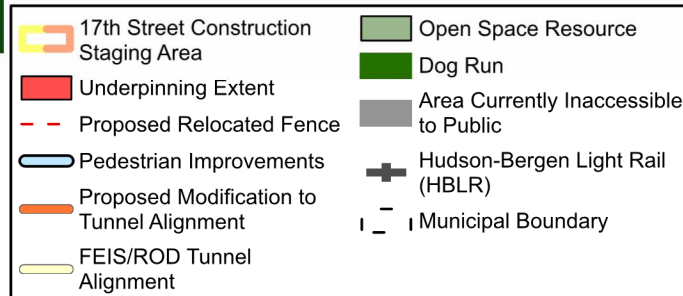
⁸ The City of Hoboken noise ordinance requires special permission for construction activity occurring between the hours of 6 PM and 8 AM on weekdays or on weekends, subject to a noise mitigation plan approved by a Land Use Board. While GDC is not required to comply with the City of Hoboken noise ordinance when doing so would be impracticable (See N.J. Stat. § 32:36-9(b)), GDC will continue to proactively work with the NJ County Commissioners and the local elected officials to bring awareness and transparency to the various construction activities proposed in North Bergen, Weehawken and Hoboken. GDC will also continue to implement the mitigation measures set forth in the FEIS/ROD.



Source: Gateway Trans-Hudson Partnership (GTHP), 2025; Gateway Development Commission, 2025.



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**Proposed Project
Modifications
Figure 8**

3 AFFECTED ENVIRONMENT: “NO ACTION” CONDITIONS

As described in the FEIS/ROD, transportation and waterfront redevelopment projects are underway in the vicinity of the Proposed Project Modifications.

Table 2, “No Action Projects in the Vicinity of the Proposed Project Modifications,” provides a summary of projects that would occur whether the HTP is implemented or not (see **Figure 9, “No Action Projects in the Vicinity of the Proposed Project Modifications”**). The list includes information on ongoing projects that were described in the FEIS/ROD and new projects identified during the re-evaluation process. As noted in the FEIS/ROD, GDC will coordinate project activities to minimize disruptions wherever possible.

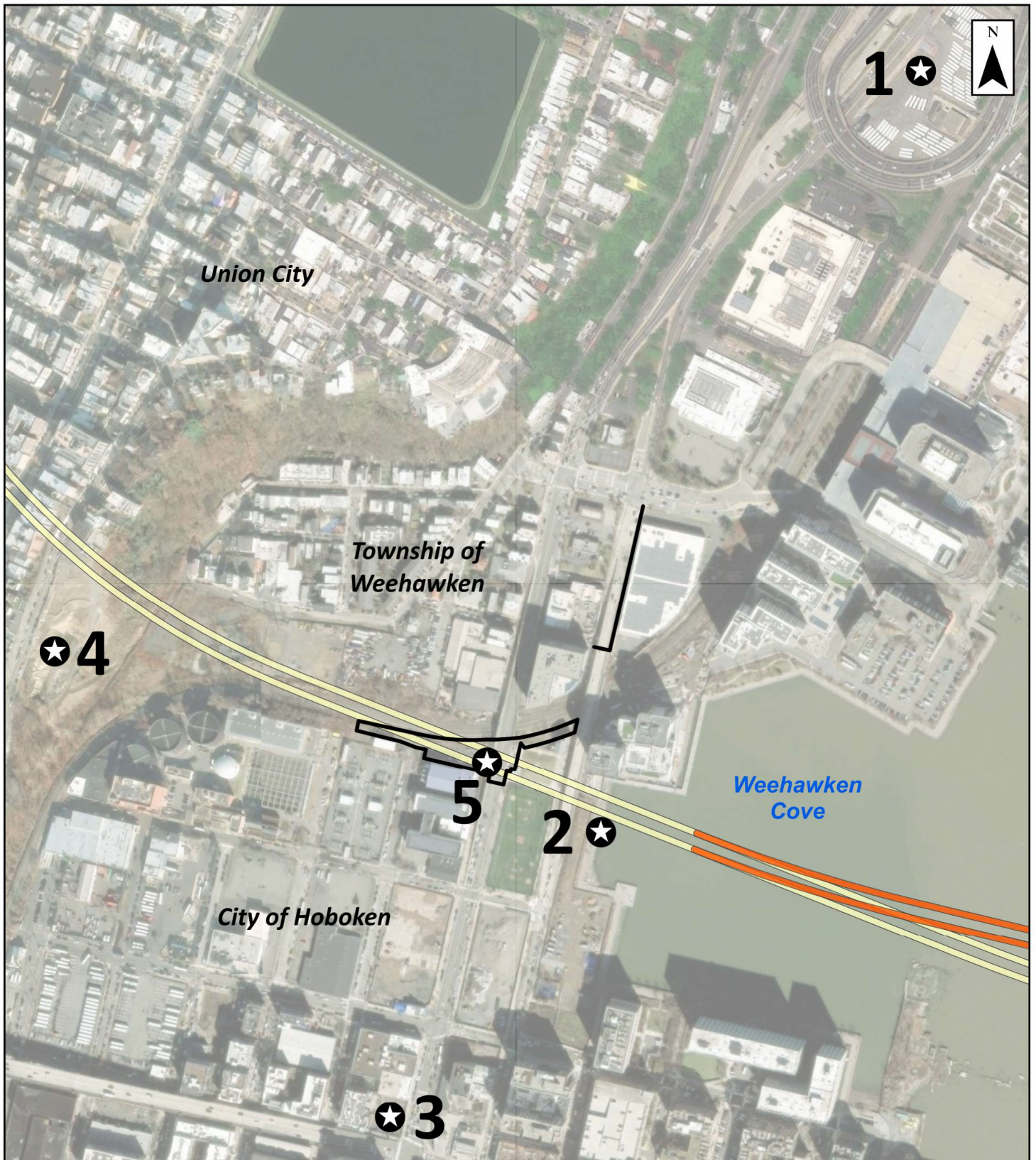
Since the publication of the FEIS/ROD, the Willow Avenue Bridge Rehabilitation in Weehawken has been completed by Hudson County. The Lincoln Harbor Redevelopment, a large scale residential and commercial waterfront redevelopment in Weehawken, has also been completed and is occupied.

A new 52-unit mixed-use complex has been proposed for 1404 Willow Avenue in Hoboken. GDC will ensure that construction of the Proposed Project Modifications does not interfere with this or other developments in the area and will work to minimize the potential for cumulative adverse construction effects.

Table 2: No Action Projects in the Vicinity of the Proposed Project Modifications

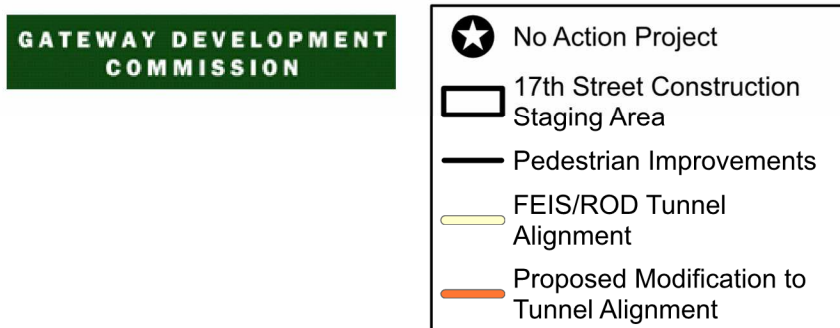
ID*	Project Name/Address	Project Description/Program	Completion Year
1	Lincoln Tunnel Helix Replacement Program	Replace the curved approach ramp between Route 495 and the Lincoln Tunnel in New Jersey.	Unknown at this time (no change from FEIS/ROD)
2	Rebuild By Design Hudson River (NJDEP)	Infrastructure initiative to reduce frequent storm and tidal flooding in Hoboken and adjacent communities; mixed approach includes floodwalls, stormwater controls, and green infrastructure.	Under construction; completion anticipated in approximately 2026 (was in design at time FEIS/ROD was issued)
3	1404 Willow Avenue	A mixed-use development comprising 52 residential units (5 reserved for affordable housing) and ground retail space at 1404 Willow Avenue in Hoboken.	Under construction; ground broke in November 2024 and an expected completion date has not been announced
4	Hoboken Heights	A residential development comprising four multifamily buildings with a total of 55 residential units at 1300 Manhattan Avenue in Union City.	Under construction; no expected completion date announced
5	Adams Street Outfall (North Hudson Sewer Authority [“NHSA”])	A 60-inch steel pipe sleeve, for a 48-inch carrier pipe, to be installed from a jacking pit adjacent to Willow Avenue at 17 th Street. Pipes will be jacked west to the NHSA treatment plant and east towards Weehawken Cove.	2026. Currently in design. Construction is expected to start in late 2025.
Notes: ¹ ID corresponds to the No Action projects shown on Figure 9, “No Action Projects in the Vicinity of the Proposed Project Modification.”			

Source: GTHP, 2025.



Source: Gateway Trans-Hudson Partnership (GTHP), 2025; Gateway Development Commission, 2025.

0 200 400 800 Feet



No Action Projects in the Vicinity of the Proposed Project Modifications
Figure 9

4 EFFECTS OF THE PROPOSED PROJECT MODIFICATIONS

The FEIS/ROD considered 23 technical areas for both final operational conditions and temporary construction-period conditions. As described above, the Proposed Project Modifications would involve some permanent changes comprising a modified Hudson River Tunnel Alignment (see **Section 2.1, “Tunnel Alignment”**) and permanent above ground pile caps and steel girders below the Willow Avenue Viaduct and extending marginally into 1600 Park, (see **Section 2.3, “Willow Avenue Viaduct Underpinning”**). These permanent elements of the Proposed Project Modifications would not alter rail service operating speeds, tunnel throughput, or other Hudson Tunnel performance objectives analyzed in the FEIS/ROD. The Proposed Project Modifications would not result in new in-water construction activities which were not previously contemplated in the FEIS/ROD, and further, the modified Hudson River Tunnel alignment would be located at minimum between approximately 25 and 90 feet below the Hudson River bottom, consistent with the FEIS/ROD. As such, the permanent elements of the Proposed Project Modifications would not have the potential to affect:

- Traffic and Pedestrians;
- Transportation Services;
- Zoning and Public Policy
- Socioeconomic Conditions;
- Historic and Archaeological Resources;
- Visual and Aesthetic Resources;
- Natural Resources;
- Noise;
- Vibration;
- Air Quality;
- GHG and Resilience;
- Contaminated Materials;
- Safety and Security;
- Public Health and Electro-magnetic Fields (“EMFs”); and
- Coastal Zone Consistency.

Analysis of the potential for permanent effects resulting from the re-alignment of the Hudson River Tunnel and modified Willow Avenue viaduct underpinning to the following environmental areas is provided below:

- Land Use;
- Property Acquisitions;
- Open Space and Recreational Resources;
- Visual and Aesthetic Resources; and
- Utilities and Energy.

The identification and assessment of new or additional construction-period impacts and associated mitigation measures not previously documented in the FEIS/ROD are provided below. GDC anticipates

that the Proposed Project Modifications would not change the following FEIS/ROD technical areas vis-à-vis construction-period impacts, and that therefore new analyses would not be required:

- Zoning and Public Policy;
- Socioeconomic Conditions;
- Greenhouse Gas and Resilience;
- Geology and Soils;
- Contaminated Materials;
- Electromagnetic Fields;
- Indirect and Cumulative Effects;
- Commitment of Resources; and
- Environmental Justice.

Given that the Proposed Project Modifications would be located within portions of 1600 Park, additional coordination pursuant to Section 4(f) of the U.S. Department of Transportation (“DOT”) Act of 1966 (23 CFR Part 774) (“Section 4(f)”) has been undertaken.

As described in **Section 4.16, “Section 4(f) Resources (FEIS Chapter 24),”** public outreach and consultation with the City of Hoboken has been conducted pursuant to Section 4(f), and is provided in **Attachment C, “Section 4(f) Evaluation.”**

4.1 Traffic and Pedestrians (FEIS Chapter 5A)

Hudson River Tunnel Re-Alignment

The re-alignment of the Hudson River Tunnel would not affect construction vehicle and worker traffic on streets within Hoboken and Weehawken, nor would it affect pedestrians or bicyclists.

Jet Grouting Below the HBLR from the 17th Street Staging Area

Jet grouting would be conducted, in part, from the dedicated off-street haul route north of the HBLR tracks, though a new construction staging area would also be required to support these proposed activities, as described further below. Construction traffic associated with jet grouting activities below the HBLR would travel via designated truck routes and would not result in adverse effects to traffic, pedestrians, or bicyclists.

Willow Avenue Viaduct Underpinning

As with the construction contemplated in the FEIS/ROD, the Willow Avenue viaduct would remain open during the proposed underpinning construction activity, with only short-term, intermittent closures required during off-peak hours or weekends. With the additional underpinning work contemplated as part of this proposed modification, construction would last approximately 12 months longer than contemplated in the FEIS/ROD, for a total of 14 months. In addition, construction would result in a temporary reduction in the width of the sidewalk along the eastern Willow Avenue marginal road (beneath the Willow Avenue viaduct); a minimum clear width of 10 feet adjacent to the athletic field and three feet adjacent to the bathroom facility would be maintained at all times.

17th Street Construction Staging Area

The FEIS/ROD contemplated three options for access routes with off-street segments within the HBLR right-of-way that all utilized, in part, JFK Boulevard/Park Avenue in the Township of Weehawken for access to and from Route 495 near the Lincoln Tunnel entrance. With the implementation of the 17th Street Construction Staging Area, construction vehicles would access the construction staging area via JFK Boulevard/Park Avenue, 15th Street, Clinton Street, and 16th Street.

Although the use of an additional construction staging area and truck route were not previously contemplated in the FEIS/ROD, the traffic-related impacts of the construction activities that would occur at the 17th Street Construction Staging Area (i.e., jet grouting and Willow Avenue viaduct underpinning), and their associated truck traffic, were considered in the FEIS/ROD. The proposed truck route that would provide access to this new staging area would extend all three Haul Route options contemplated in the FEIS/ROD south into the City of Hoboken along Park Avenue, and would allow trucks to travel along 15th and 16th streets between Park Avenue and Clinton Street, as well as a short section of Clinton Street between 15th and 17th streets. The 17th Street Construction Staging Area would not change the number, frequency, or schedule of truck trips from what was assumed in the FEIS/ROD.

Further, access to the City of Hoboken salt storage facility on 17th Street would be maintained throughout construction; traffic management would be coordinated with the City during winter weather events.

Park Avenue Pedestrian Safety Improvements

The FEIS/ROD identified the intersection of Park Avenue and 19th Street in Weehawken as experiencing 47 crashes during a three-year reporting period. This intersection did not exceed the threshold for being considered a high crash location, though it did experience the most crashes of any intersection in the crash study area.⁹ Although specific mitigation was not determined warranted in the FEIS/ROD, in consultation with the Township of Weehawken, GDC has since identified pedestrian safety improvements along Park Avenue. These improvements would comprise a new ADA-compliant crosswalk across the Park Avenue marginal road (below the Park Avenue viaduct) at 18th Street and a pedestrian path along the former Dykes Lumber Parcel (Township of Weehawken Block 34.03, Lot 7) between West 18th Street and West 19th Street. These proposed improvements would provide safe and comfortable pedestrian travel from the Shades residential neighborhood located west of Park Avenue to access the Lincoln Harbor Waterfront area while avoiding the intersection of Park Avenue and West 19th Street while the 17th Street Construction Staging Area remains active.

Construction Duration

The Proposed Project Modifications would specify the duration of jet grouting and extend the duration of Willow Avenue viaduct underpinning activities. However, as described above, these construction activities would not result in adverse impacts to traffic, pedestrians, or bicyclists and, therefore, the

⁹ Per *CEQR Technical Manual* criteria, a high crash location is a location where 48 or more total crashes, or five or more combined pedestrian and/or bicycle-related crashes, have occurred in any consecutive 12-month period. The intersection of Park Avenue and 19th Street experienced 47 crashes over a period of three years.

durations contemplated as part of the Proposed Project Modifications similarly would not result in adverse effects to traffic, pedestrians, or bicyclists.

4.2 Transportation Services (FEIS Chapter 5B)

The FEIS/ROD identified transportation services in the Hudson County Study Area, including the HBLR and local New Jersey Transit Corporation (“NJ TRANSIT”) bus routes (four of which – routes 89, 119, 126, and 159 – operate within approximately a quarter mile of the Proposed Project Modifications). In addition, ferry services operate from the Lincoln Harbor terminal, east of the Hudson County Study Area.

Hudson River Tunnel Re-Alignment

The Hudson River Tunnel re-alignment would not affect train service in the future operational condition, nor would it affect any other transportation services.

Jet Grouting Below the HBLR from the 17th Street Staging Area

Jet grouting activities below the HBLR would be staged from either side of the HBLR alignment, with pipes drilled into the ground at an angle to stabilize the ground below the HBLR tracks. This construction activity would be undertaken in coordination with NJ TRANSIT to minimize disruption to HBLR service and would not have the potential to affect other transportation services in the area.

Willow Avenue Viaduct Underpinning

Willow Avenue viaduct underpinning construction activities would be staged below the viaduct within the 17th Street Construction Staging Area, as described in **Section 2.3, “Willow Avenue Viaduct Underpinning,”** and **Section 2.4, “17th Street Construction Staging Area.”** As described in FEIS/ROD (Section 5B.6.5), Willow Avenue viaduct underpinning work would require temporary disruptions to traffic on the Willow Avenue viaduct during off-peak hours or weekends; however, the roadway would otherwise remain open and there would be no change from the impacts contemplated in the FEIS/ROD. As such, bus service would not be adversely affected. Willow Avenue viaduct underpinning work would not affect any other transportation services.

17th Street Construction Staging Area

The potential effects of construction activities associated with jet grouting and underpinning work occurring within the 17th Street Construction Staging Area are described above. No transportation services utilize this portion of 17th Street. As such the 17th Street Construction Staging Area would not result in adverse impacts to transportation services.

Park Avenue Pedestrian Safety Improvements

The proposed Park Avenue pedestrian safety improvements would be constructed within Weehawken, Block 34.03 Lot 7 (the former Dykes Lumber parcel), owned by Amtrak; they would also include crosswalk striping across the Park Avenue marginal road below the Park Avenue viaduct at West 18th Street. These construction activities would not affect any transportation services.

Construction Duration

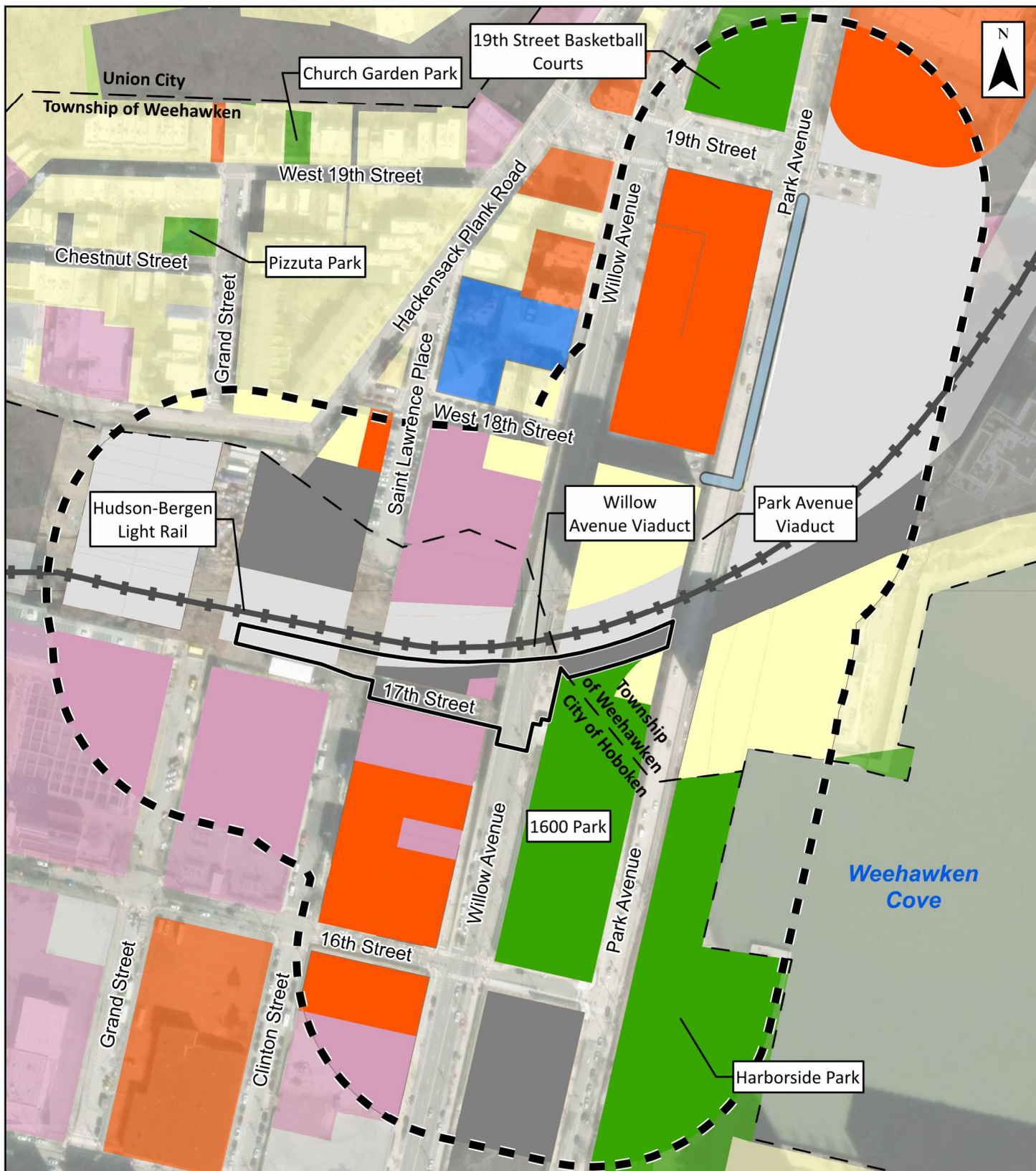
The Proposed Project Modifications would specify the duration of jet grouting and extend the duration of Willow Avenue viaduct underpinning activities. However, as described above, these construction activities would not adversely affect transportation services. As such, the construction durations contemplated as part of the Proposed Project Modifications would not result in adverse impacts to transportation services.

4.3 Land Use, Zoning, and Public Policy (FEIS Chapter 6A)

The Proposed Project Modifications would include the provision of a new temporary construction staging area, the 17th Street Construction Staging Area, approximately bounded by the HBLR tracks to the north, Willow Avenue to the east, Hoboken Block 141, Lot 12.01 to the south, and Grand Street/the Hoboken Department of Public Works salt storage shed to the west (see **Figure 5, “17th Street Construction Staging Area”**). Construction vehicles would access the construction staging area via Park Avenue, 15th Street, Clinton Street, and 16th Street (see **Figure 6, “17th Street Construction Staging Area Truck Route,”** and **Figure 10, “Land Use”**). While the Proposed Project Modifications define the 17th Street Construction Staging Area and truck access route, they would not result in new or substantially different construction activities not proposed as part of the FEIS/ROD, with regards to jet grouting below the HBLR and Willow Avenue viaduct underpinning. The presence of construction traffic accessing the 17th Street Construction Staging Area would be noticeable to the residents of the nearby Gateway building at 1700 Park Avenue and the adjacent residential building at 1632 Park Avenue; however the Proposed Project Modifications would not change the number, frequency, or schedule of truck trips from what was assumed in the FEIS/ROD. Therefore, as described in **Section 4.1, “Traffic and Pedestrians (FEIS Chapter 5A),”** the definition of the 17th Street Construction Staging Area and truck access route would not result in new construction traffic effects that could result in adverse impacts to nearby land uses.

Access to the salt storage facility would be maintained, and traffic management would be coordinated with the City of Hoboken during winter weather events. As described in **Section 4.5, “Open Space and Recreational Resources (FEIS Chapter 8),”** the proposed 17th Street Construction Staging Area would not restrict access to, or the use of, the dog run at 1600 Park. Although the proposed staging area would partially extend into the Encroachment Area of 1600 Park, it would not affect any park features or amenities (see **Section 4.5, “Open Space and Recreational Resources (FEIS Chapter 8),”** for further information). Overall, the Proposed Project Modifications generally represent temporary changes to construction activities and do not comprise actions that could affect local land use, zoning, or public policy.

The modification in tunnel alignment, relocation of a portion of fence between the area under the Willow Avenue viaduct and 1600 Park, and installation of above-ground pile caps and concrete-encased steel girders would represent changes to the permanent, operational condition of the HTP. These proposed modifications would not conflict with or change nearby land uses or local zoning, nor would they be inconsistent with public policy. Rather, the Park Avenue pedestrian improvements would provide for safe and comfortable pedestrian travel in the area while the 17th Street Construction Staging Area remains active.



Source: Gateway Trans-Hudson Partnership (GTHP), 2025; Gateway Development Commission, 2025; City of Hoboken Master Plan Land Use Element (2018); NJ Office of GIS, 2025.

0 100 200 400 Feet

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Land Use

- Residential
- Commercial
- Public Facility
- Parks
- Industrial
- Transportation
- Vacant

- 17th Street Construction Staging Area
- Pedestrian Improvements
- 400-foot Study Area
- Hudson-Bergen Light Rail (HBLR)
- Municipal Boundary

**Land Use
Figure 10**

4.4 Property Acquisition (FEIS Chapter 6B)

Changes to property easements, as well as associated Tidelands Conveyance¹⁰ and Green Acres¹¹ approvals, required to implement the Proposed Project Modifications are summarized below in **Table 3, “Property Easements Associated with the Proposed Project Modifications.”** NJ TRANSIT is in the process of obtaining these easements, Tidelands Conveyances, and Green Acres approvals, as applicable.

Additionally, the 17th Street Construction Staging Area would require a new Temporary Right-of-Way User Agreement with the City of Hoboken to allow for Project use of West 17th Street ROW for construction activities and staging associated with jet grouting below the HBLR and the Willow Avenue viaduct underpinning.

¹⁰ Per the New Jersey Department of Environmental Protection (“NJDEP”), Tidelands refer to “all lands that are now or were formerly flowed by the mean high tide of a natural waterbody” including ocean, bays, and tidal sections of rivers, creeks, and marshlands. Tidelands are owned by the State of New Jersey and overseen by the Tidelands Resource Council and NJDEP Bureau of Tidelands Management. A “Tidelands Conveyance” refers to a property agreement to transfer property rights to use tidelands. NJ TRANSIT is in the process of obtaining Tidelands Conveyances to construct and operate the subsurface Hudson River Tunnel within (below) these Tidelands properties.

¹¹ The NJDEP Green Acres Program was created to ensure that there is adequate supply of and access to public open space and conservation areas in the State by providing funds for the development and conservation of public open space. The Green Acres legislation establishes restrictions and compensation requirements for the use of all parkland resources. Open space resources within municipalities that have used Green Acres funds become subject to (or “encumbered by”) Green Acres restrictions and compensation requirements. A “diversion” of parkland for the use or control of the parkland for purposes other than recreation and conservation generally requires a Green Acres parkland diversion application to be submitted for approval by NJDEP and the State House Commission.

Table 3: Property Easements Associated with the Proposed Project Modifications

Municipality	Block	Lot	Owner	Class	Lot Area (Acre)	FEIS/ROD Easement Area (Acre)	Proposed Project Modifications Easement Area (Acre)	Easement Type	NJ Tidelands Conveyance Required	NJ Green Acres Required	Purpose of Easement	Change Since FEIS/ROD
Hoboken	146	4	PSE&G Corporate Properties	Vacant Land	0.09	0.09	0.09	Permanent Subsurface			Tunnel Alignment	No Change
Hoboken	146	4	PSE&G Corporate Properties	Vacant Land	0.09	0.09	0.09	Temporary Construction			Proposed above ground construction activities associated with jet grouting below the HBLR.	New as part of Proposed Project Modifications
Hoboken	146	4.01	Hartz Mountain Industries, Inc.	Vacant Land	0.03	0.03	0.03	Permanent Subsurface			Tunnel Alignment	No Change
Hoboken	146	4.01	Hartz Mountain Industries, Inc.	Vacant Land	0.03	0.03	0.03	Temporary Construction			Proposed above ground construction activities associated with jet grouting below the HBLR.	New as part of Proposed Project Modifications
Weehawken	11	6	Hartz Mountain Industries, Inc.	Industrial (vacant)	0.13	0.00	0.13	Temporary Construction			Proposed above ground construction activities associated with Willow Avenue Viaduct Underpinning and associated utility relocations	New as part of Proposed Project Modifications
Hoboken	264	2	City of Hoboken	Publicly owned	7.89	2.60	2.27	Permanent Subsurface	X		Below ground tunnel alignment	Change to easement area as a result of the Hudson River Tunnel re-alignment
Hoboken	265	1	City of Hoboken	Publicly owned	6.93	0.69	1.10	Permanent Subsurface	X	X	Below ground tunnel alignment	Change to easement area as a result of the Hudson River Tunnel re-alignment
Hoboken	267	1	City of Hoboken	Publicly owned	16.20	2.13	2.15	Permanent Subsurface	X	X	Below ground tunnel alignment	Change to easement area as a result of the Hudson River Tunnel re-alignment
Hoboken	268.01	4	Hudson Cove LLC	Vacant Land	3.19	0.09	0.00	None	X		N/A	Easement no longer required as a result of the Hudson River Tunnel re-alignment
New Jersey – Hudson River	N/A	N/A	State of New Jersey	Hudson River	N/A	4.79	4.74	Permanent Subsurface	X		Below ground tunnel alignment	Change to easement area as a result of the Hudson River Tunnel re-alignment

Source: GTHP, 2025; New Jersey Division of Taxation Property Tax System/MOD-IV, 2025.

4.5 Open Space and Recreational Resources (FEIS Chapter 8)

The Proposed Project Modifications are located in the vicinity of two open space resources: the Hudson River Waterfront Walkway and 1600 Park in the City of Hoboken.¹² The Hudson River Waterfront Walkway is an 18.5-mile-long, 30-foot-wide waterfront walkway along the Hudson River between Bayonne and Fort Lee, New Jersey. In addition to the landside portion of the park, properties within the Hudson River (i.e., City of Hoboken Block 267 Lot 1, Block 265 Lot 1, and Block 264 Lot 2) are dedicated for recreational use (see **Figures 2a and 2b, “Revised Subsurface Easements”**).

1600 Park is a 2.5-acre multi-use playing field with baseball, soccer, and lacrosse facilities, as well as a dog run, slide hill, and restrooms. A portion of 1600 Park extends into the Willow Avenue ROW (owned by Hudson County), below and adjacent to the Willow Avenue viaduct. As described in **Section 4.4, “Property Acquisition (FEIS Chapter 6B),”** the City of Hoboken entered into an agreement with Hudson County to encroach upon the Willow Avenue ROW for park and recreation uses (the “Encroachment Area”) (see **Figure 4, “Willow Avenue Underpinning Extent”**).

The potential for the Proposed Project Modifications to affect these open space and recreational resources is described in the following sections.

Hudson River Tunnel Re-Alignment

As described in the FEIS/ROD (Section 8.6.2), the tunnel alignment would pass directly beneath three open space resources within Hoboken and Weehawken: 1600 Park, Harborside/Hoboken Cove Park, and the Hudson River Waterfront Walkway. Tunneling activities would be approximately 100 feet below the surface in this area. While the FEIS/ROD determined that minor vibration from the TBM may be discernible for a few days as the TBM passes these parks, this would not be disruptive. Approval of permanent subsurface easements for the tunnel alignment is required in accordance with New Jersey’s Green Acres Program. The acquisition of these subsurface easements would not have an impact on the public’s access to or use of these parks.

As described in **Section 2.1, “Tunnel Alignment,”** and shown on **Figures 2a and 2b, “Revised Subsurface Easements,”** the currently proposed modification to the tunnel alignment is limited to the portion of the alignment below the Hudson River and would not alter the alignment below 1600 Park, Harborside/Hoboken Cove Park, or the landside portion of the Hudson River Waterfront Walkway. Further, TBM operations in the portion of the re-aligned Hudson River Tunnel below the Hudson River would not affect landside structures or uses. The revised tunnel alignment would pass beneath different portions of Block 265, Lot 1, and Block 267, Lot 1 below the Hudson River, which include portions of the Hudson River Waterfront Walkway. As such, the modified tunnel alignment requires NJ TRANSIT to modify subsurface easements for City of Hoboken Block 267, Lot 1 and Block 265, Lot 1. Approval for these revised subsurface easements must be obtained in accordance with the Green Acres

¹² A third open space resource – the Harborside/Hoboken Cove Park – is considered below in the assessment of the proposed modification to the tunnel alignment given that a portion of the tunnel alignment would pass directly beneath it. However, this resource is not considered in the assessment of other proposed modifications (i.e., jet grouting, Willow Avenue viaduct underpinning, 17th Street Construction Staging Area, etc.) given that it is not in the immediate vicinity of these activities, nor would it be directly affected by the Proposed Project Modifications.

Program. NJ TRANSIT will obtain these revised subsurface easements from the City of Hoboken and subsequently will seek approval of revised Green Acres parkland diversion from NJDEP and the New Jersey State House Commissioner.

As with the FEIS/ROD, the acquisition of revised subsurface easements for City of Hoboken Block 265, Lot 1 and Block 267, Lot 1 would not affect the public's access to, or use of, the Hudson River Waterfront Walkway. The modified tunnel alignment would be, at a minimum, approximately 25 to 90 feet below the river bottom and would not be anticipated to result in a discernable increase in noise or vibration at the Hudson River Waterfront Walkway. The modified tunnel alignment would not be visible, nor would it require new or additional construction activities that could be discernable to park users.

As such, the modified tunnel alignment would not result in any adverse effects to open space and recreational resources.

Jet Grouting Below the HBLR from the 17th Street Staging Area

As described in the FEIS/ROD, jet grouting activities were anticipated in the vicinity of the HBLR from the Hudson County Staging Area. As Project engineering has advanced, the location for jet grouting activities from the ground surface has been refined, requiring jet grouting activities from the southside of the HBLR, as shown on **Figure 3, "Modified Jet Grouting Extent."** These activities would be located approximately 100 feet from 1600 Park in the City of Hoboken and would be visually obscured from 1600 Park by metal fencing and the Willow Avenue viaduct.

Construction noise may be discernable and equipment visible from 1600 Park, however neither the noise nor visible equipment would adversely affect the use and enjoyment of this park, particularly given that it is primarily used for active recreation activities that are not typically adversely affected by intermittent construction noise. Jet grouting activities will be enclosed with temporary acoustical curtains or barriers during operations to further reduce noise levels.

Willow Avenue Viaduct Underpinning

The FEIS/ROD contemplated drilling piles within the Willow Avenue ROW adjacent to 1600 Park to underpin the pile-supported foundations of the Willow Avenue viaduct (see FEIS/ROD Section 3.3.4.1). Per the FEIS/ROD, construction would be staged from the area below the Willow Avenue viaduct and require approximately two months of active construction.

The Willow Avenue viaduct underpinning, as currently contemplated, would require drilling "micropiles" below the Willow Avenue ROW, as well as the installation of new above ground pile caps and concrete-encased steel girders. Further, utility work would be required, as described above in **Section 2.3.2, "Changes Since Publication of the FEIS/ROD."** The duration of currently contemplated construction activities would be extended by approximately 12 months from the construction duration disclosed in the FEIS/ROD (14 months total).

These changes to Willow Avenue viaduct underpinning construction would require the temporary use of a portion of 1600 Park within the Encroachment Area (approximately 2,500 sf, or 2.5 percent of the publicly accessible park). Above ground pile caps and concrete-encased steel girders would be permanently placed below the viaduct and extend partially into the Encroachment Area of 1600 Park

(approximately 500 sf, or 0.5 percent of the publicly accessible park). The existing fence separating 1600 Park from the publicly inaccessible area below the Willow Avenue viaduct would be relocated around these permanent pile caps. These changes would require the removal of one park tree and two trees below the Willow Avenue viaduct; these trees would be replaced and/or relocated in coordination with the City of Hoboken. All other trees in the vicinity of underpinning construction would be protected in place. No other park features/amenities (i.e., active use ball fields, slide hill, restrooms, dog run, or seating) would be affected. Public access to the park, and circulation within it, would not be affected by these proposed changes, either during temporary construction activities or in the future operational condition.

There are three murals within and/or visible from 1600 Park, located on the walls of the bathroom facility (within 1600 Park), on the southeastern wall of the Willow Avenue viaduct facing the athletic fields (adjacent to 1600 Park), and below the Willow Avenue viaduct facing 1600 Park. Views of the mural located below the Willow Avenue viaduct from within 1600 Park would be partially obscured by construction fencing and equipment, however the murals on the bathroom facility and southwestern wall of the Willow Avenue viaduct would remain visible throughout construction. Permanent pile caps and concrete encased steel girders would be located adjacent to the mural below the Willow Avenue viaduct, and partially visible from 1600 Park, but these proposed permanent features would be located in an area that currently contains metal and concrete foundations/columns and paved area beneath the Willow Avenue viaduct. As such, these proposed changes would not significantly change the quality of views of the murals, or from the park.

As described in **Section 4.9, “Noise (FEIS Chapter 12A),”** noise from the cumulative construction activities associated with the Proposed Project Modifications would not exceed FEIS/ROD impact criteria at sensitive noise receptors, including at 1600 Park (Site 1c).

As the proposed modifications to Willow Avenue viaduct underpinning would not affect any amenities or features of 1600 Park, would not significantly adversely alter the quality of views of or from the park, and would result in temporary intermittent noise, they are not anticipated to result in significant adverse impacts to 1600 Park.

17th Street Construction Staging Area

Potential effects to open space and recreational resources related to the 17th Street Construction Staging Area are discussed above in the Willow Avenue viaduct underpinning assessment.

Park Avenue Pedestrian Safety Improvements

The Park Avenue pedestrian safety improvements are not in the vicinity of any open space resources and would not have the potential to result in any direct or indirect effects to open space or recreational resources.

Construction Duration

Potential effects to open space and recreational resources related to the jet grouting and Willow Avenue viaduct construction durations currently proposed are discussed above in the assessments of jet grouting below the HBLR and Willow Avenue viaduct underpinning.

4.6 Historic and Archaeological Resources (FEIS Chapter 9)

The proposed pedestrian improvements along Park Avenue would be outside of the area of potential effects (“APE”) that was originally assessed in the FEIS/ROD; therefore, the APE has been revised to include this area. Given that there are no known National Register of Historic Places (“NRHP”)-eligible architectural resources within the revised APE, historic architectural resources are not included in the analysis of potential effects of the Proposed Project Modifications. However, as with the original APE identified in the FEIS/ROD, the revised APE includes two historic-period archaeological resources that were previously identified: the Hackensack Plank Road and the Swartwout Sea Wall. As such, analysis of the potential effects of the Proposed Project Modifications on archaeological resources is provided below.

As with the FEIS/ROD, the area currently contemplated for jet grouting below the HBLR would include a portion of the historic-period Swartwout Sea Wall area of archaeological sensitivity. Although jet grouting is planned to take place beginning at 60 feet below the ground surface, which is well below the depths associated with the Swartwout Sea Wall, the exact placement of the two-inch steel casings that would be driven into the ground surface to inject the jet grout into the soil is unknown and could have the potential to disturb a portion or portions of the historic Swartwout Sea Wall area of archaeological sensitivity, thereby resulting in a direct impact to this resource. However, these impacts would be similar to those described in the FEIS/ROD and addressed in the Section 106 Programmatic Agreement (“PA”). Consequently, there would be no change in the nature of the impact from what was disclosed in the FEIS/ROD, and therefore there would be no change to the Adverse Effect finding from the FEIS/ROD. Pursuant to the Archaeological Monitoring Plan (“AMP”) for New Jersey, archaeological monitoring will be undertaken during any subsurface construction activity in the archaeologically sensitive Swartwout Sea Wall area (see **Appendix A, “Section 106 Effects Assessment”**).

Neither of the two archaeologically sensitive areas are located within the area of Willow Avenue viaduct underpinning activities or the proposed Park Avenue pedestrian safety improvements. As currently contemplated, construction means and methods for the Willow Avenue viaduct underpinning would be generally consistent with those proposed in the FEIS/ROD, with proposed changes largely involving steel girder installation on top of the new pile caps, which would be installed above ground. Ground disturbing activities associated with the proposed pedestrian safety improvements would be minimal and would be conducted no deeper than three feet below grade to install the new widened sidewalk. Therefore, these activities would not result in any impacts to archaeologically sensitive areas.

The New Jersey State Historic Preservation Office reviewed the Section 106 Effects Assessment and, on June 19, 2025, provided written concurrence with the finding that the Proposed Project Modifications would result in No Additional Adverse Effects to Historic Properties (see **Appendix A, “Section 106 Effects Assessment”**).

4.7 Visual and Aesthetic Resources (FEIS Chapter 10)

Visual resources in the vicinity of the Proposed Project Modifications include 1600 Park and the Hudson River Waterfront Walkway. As described in **Section 4.5, “Open Space and Recreational Resources (FEIS Chapter 8),”** the Proposed Project Modifications would not significantly alter the quality of views to or

from these open space resources. As such, the Proposed Project Modifications would not result in any significant adverse impacts to visual and aesthetic resources.

4.8 Natural Resources (FEIS Chapter 11)

Hudson River Tunnel Re-Alignment

The proposed modification to the subsurface Hudson River Tunnel alignment below the Hudson River is located west of the low-cover area of the Hudson River and would not affect proposed construction activities associated with ground stabilization in this area.¹³

The FEIS/ROD (Section 11.6.3) did not identify any impacts to natural resources because of TBM operations in the Hudson River. The modified Hudson River Tunnel alignment would be located at minimum between approximately 25 and 90 feet below the Hudson River bottom, consistent with the FEIS/ROD (Section 2.5.2.1.3), and therefore would similarly not be expected to result in impacts to natural resources as a result of TBM operations. Further, the refined tunnel alignment currently contemplated would not require new construction activities to support TBM operations. As such, this project modification does not have the potential to result in new adverse effects on natural resources.

A United States Army Corps of Engineers (“USACE”) permit and NJDEP permit issued for the tunnel alignment would be modified to support the new tunnel alignment. A modification request to USACE would be submitted in support of USACE permit issuance. A Coastal Consistency determination from NJDEP would be sought to support the NJDEP and USACE permit. The new tunnel alignment would be located within the confines of the existing approved NJDEP Tidelands conveyance so no permit modifications or amendments to the NJDEP Tidelands conveyance would be required.

Jet Grouting Below the HBLR from the 17th Street Staging Area

The FEIS/ROD did not identify any potential adverse impacts to natural resources because of jet grouting activity above the portion of the Hudson River Tunnel alignment in Hoboken and Weehawken.

As currently contemplated, jet grouting activity below the HBLR tracks would require clearing of approximately 0.5 acres of vegetation and debris on the south side of the HBLR alignment. As described in the FEIS/ROD, vegetation in this area includes “railroad” community,¹⁴ covered by ballast and railroad infrastructure, with some ruderal species growing (i.e., plants growing in waste places and along roadsides). All clearing of vegetation and debris would occur between October 1 and March 14 to

¹³ See FEIS/ROD Chapter 3, Section 3.3.5 for detailed description of the low-cover area of the Hudson River and proposed construction activities associated with ground stabilization.

¹⁴ Per the New York State Ecological Communities of New York State, “railroad community” is defined as “a permanent road having a line of steel rails fixed to wood ties and laid on gravel roadbed that provides a track for cars or equipment drawn by locomotives or propelled by self-contained motors. There may be sparse vegetation rooted in the gravel substrate along regularly maintained railroads. The railroad right of way may be maintained by mowing or herbicide spraying.” Edinger, G.J., D.J. Evans, S. Gebauer, T.G. Howard, D.M. Hunt, and A.M. Olivero. 2014. Ecological Communities of New York State, Second Edition. New York Natural Heritage Program, New York State Department of Environmental Conservation, Albany, NY. (<https://www.nynhp.org/documents/39/ecocomm2014.pdf>)

minimize potential impacts to breeding birds protected under the Migratory Bird Treaty Act. This area would be restored and re-planted after the completion of construction.

Jet grouting activities would require the temporary filling with soil of an existing open concrete channel south of the HBLR tracks that currently drains into a culvert to provide a temporary construction platform for jet grouting operations. The water flow in the open channel would be temporarily diverted into two 42-inch bypass pipes, leading back into the existing culvert. These facilities would protect the quality of the water within the pipes during jet grouting construction activities. The concrete channel does not receive drainage flow from an area more than 50 acres and is not regulated under the NJDEP Flood Hazard Area ("FHA") rules and no FHA permit is required.

Willow Avenue Viaduct Underpinning

The currently proposed approach to underpinning the Willow Avenue viaduct represents a refinement to the construction methods previously contemplated in the FEIS/ROD. As described further below, this approach would require the removal of one park tree and two trees below the Willow Avenue viaduct; these trees would be replaced and/or relocated in coordination with the City of Hoboken. All other trees in the vicinity of underpinning construction would be protected in place. The viaduct underpinning work in Willow Avenue would require approval and coordination with NJ TRANSIT HBLR, Jersey Department of Transportation ("NJDOT") permit for work in the street, and Tree Permit from City of Hoboken Shade Tree Commission for tree removal.

17th Street Construction Staging Area

The 17th Street Construction Staging Area would not directly affect wetlands, surface and navigable waters, or potential habitat for threatened, endangered, or special concern species. As described in the FEIS/ROD, there are no Federal threatened or endangered species or critical habitats (including wildlife refuges or fish hatcheries) within the New Jersey portion of the Project study area, including the 17th Street Construction Staging Area. The 17th Street Construction Staging Area would be located within the 100-year floodplain; however, as described in the FEIS/ROD, construction crews would handle equipment and materials as required by state and local regulations to ensure the safety of workers and protect adjacent uses. Further, because the source of the floodwaters is tidal, the Base Flood Elevation ("BFE") would not be affected by displacement of floodplain storage or conveyance as a result of construction. The 17th Street Construction Staging Area comprises a primarily paved area within the 17th Street ROW and Block 146 Lots 4 and 4.01, though as described above, an approximately 0.5-acre portion of the area is covered with "railroad" community vegetation, along with ballast and railroad infrastructure, with some ruderal species (i.e., plants growing in waste places and along roadsides). This area would be cleared of vegetation and debris and restored and re-planted after the completion of construction. All clearing of vegetation and debris would occur between October 1 and March 14 to minimize potential impacts to breeding birds protected under the Migratory Bird Treaty Act. As such, the implementation of the proposed 17th Street Construction Staging Area would not result in adverse impacts related to floodplains, wetlands, terrestrial resources (e.g., ecological communities, wildlife), or threatened, endangered, or special concern species.

As described in the FEIS/ROD, a moderate amount of dewatering and seepage control would likely be required for construction of the HTP between the Palisades and the Hudson River. However, with the

measures described in the FEIS/ROD, construction at the 17th Street Construction Staging Area would not result in adverse effects to groundwater. The nearest water body to the 17th Street Construction Staging Area would be Weehawken Cove, approximately 350 feet east. Stormwater runoff at the 17th Street Construction Staging Area flows into catch basins connected to a closed stormwater pipe system and does not flow overland to surface or navigable waters. As such, there would be no adverse impacts to surface or navigable waters (e.g., water quality, aquatic biota) associated with the 17th Street Construction Staging Area.

Construction at the 17th Street Construction Staging Area would not disturb vegetated communities with high ecological value, or threatened, endangered, or special concern species. Further, the area of impact would represent a negligible reduction in the amount of habitat available and would not result in impacts to the size or viability of threatened, endangered, and special concern species' local populations.

Park Avenue Pedestrian Safety Improvements

Given that the proposed pedestrian safety improvements on Park Avenue would be limited to minor infrastructure improvements along a developed corridor in an urbanized area, they would not result in adverse impacts to natural resources.

Construction Duration

The effects of the jet grouting and Willow Avenue viaduct construction durations on natural resources are described above in the assessments of jet grouting below the HBLR, Willow Avenue viaduct underpinning, and 17th Street Construction Staging Area.

4.9 Noise (FEIS Chapter 12A)

A detailed noise assessment was conducted to assess potential impacts of the Proposed Project Modifications at the nearest noise-sensitive receptors during the two-year duration from 2026 to 2027. This assessment was conducted using the same procedures and methodology as those utilized in the FEIS/ROD. Updates to the equipment assumptions and modeling adjustments were applied in accordance with guidance from FTA's *Transit Noise and Vibration Impact Assessment Manual* (September 2018). As shown on **Figure 11, "Noise-Sensitive Receptors,"** two noise-sensitive receptors were identified in the immediate vicinity of the Proposed Project Modifications.

Several construction activities within the vicinity of the Proposed Project Modifications would occur concurrently, resulting in higher overall noise levels than would result were the activities to be conducted sequentially. As a result, the highest noise levels are predicted to occur in the second quarter of 2026 due to the confluence of proposed Project construction activities occurring simultaneously.

As shown in **Table 4, "Summary of Noise Impacts at the Closest Receptors (dBA),"** noise from the cumulative construction activities associated with the Proposed Project Modifications are not predicted to exceed the FEIS/ROD impact criteria at Site 1b (high-rise residences located at 1700 Park Avenue) or Site 1c (a park and recreational facility adjacent to the proposed construction). Daytime 8-hour Leq

noise levels from cumulative construction activities are predicted to range from 68 dBA at Site 1b to 80 dBA at Site 1c.

Table 4: Summary of Noise Impacts at the Closest Receptors (dBA)

Site	Location	Land Use	Existing Noise Level	8-Hour Leq-Day (7AM to 10PM)		8-Hour Leq-Night (10PM to 7AM)		30-Day Average Ldn	
				Impact Criterion ¹	Project Level ¹	Impact Criterion ¹	Project Level ¹	Impact Criterion ¹	Project Level ¹
1b	1700 Park Ave, Weehawken	Residential	60	80	68	70	--	75	65
1c	1600 Park, Hoboken	Recreation	57	85	80	--	--	--	--

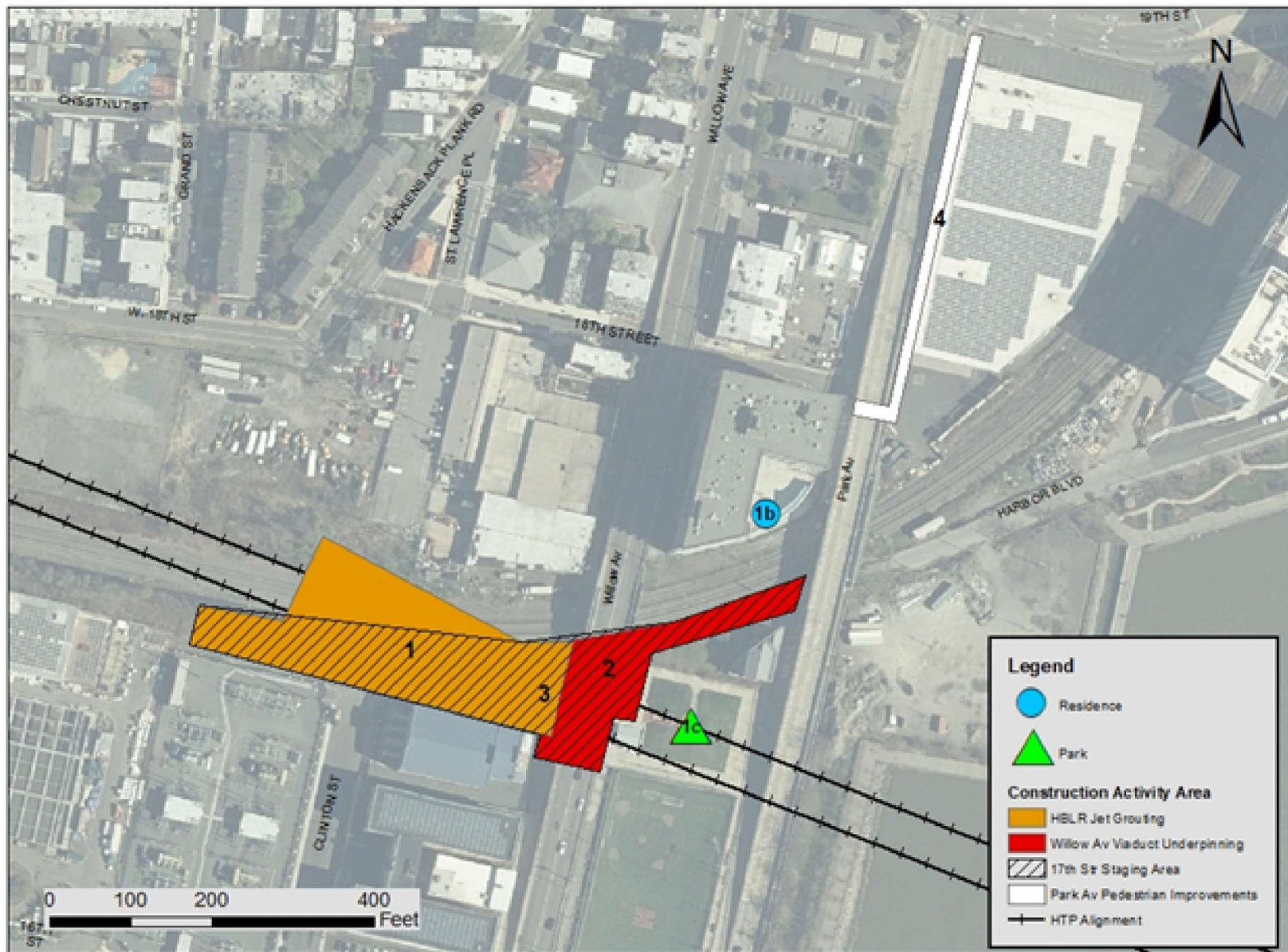
¹ Noise levels for residences (site 1b) are in Ldn; noise levels for recreation receptors (site 1c) are in 24-hour Leq.
² For the recreational use, the impact criteria for commercial uses were used.
 * Exceedances of the FTA construction noise impact thresholds are shown in bold with an asterisk (*).

Source: GTHP, June 2025.

The day-night noise levels ("30-day average Ldn") at the closest residential receptor is predicted at 65 dBA, which is well below the FTA noise criterion of 75 dBA. All of the noise levels that would result with the Proposed Project Modifications are predicted to be below their respective FTA noise criteria. Overall, GDC requires its contractors to apply noise control measures whenever possible and to be mindful of adverse noise effects at nearby residences.

The City of Hoboken noise ordinance¹⁵ requires special permission for construction activity occurring between the hours of 6 PM and 8 AM on weekdays or on weekends, subject to a noise mitigation plan approved by a Land Use Board. While GDC is not required to comply with the City of Hoboken noise ordinance when doing so would be impracticable (See N.J. Stat. § 32:36-9(b)), GDC will continue to proactively work with the NJ County Commissioners and the local elected officials to bring awareness and transparency to the various construction activities proposed in North Bergen, Weehawken and Hoboken. All GDC contractors will be required to implement the noise mitigation measures set forth in the FEIS/ROD.

¹⁵ The 2011 City of Hoboken Ordinance #Z-84, "An Ordinance Amending the Previously Adopted Chapter 133 'Noise Control' Addressing Revisions Required by the State of New Jersey Department of Environmental Protection," restricts construction activity to the hours of 8 AM to 6 PM on weekdays.



Source: GTHP, June 2025.

4.10 Vibration (FEIS Chapter 12B)

A detailed vibration assessment was conducted to assess potential impacts of the Proposed Project Modifications at the nearest sensitive receptors during a two-year duration from 2026 to 2027. This assessment was conducted using the same procedures and methodology as those utilized in the FEIS/ROD. Updates to the equipment assumptions and modeling adjustments were applied in accordance with guidance from FTA's *Transit Noise and Vibration Impact Assessment Manual* (September 2018). As shown on **Figure 12, "Vibration-Sensitive Receptors,"** three vibration-sensitive receptors were identified in the immediate vicinity of the Proposed Project Modifications.

Ground-borne vibration levels at the closest receptors are predicted to range from 65 VdB at FEIS/ROD Site 2 (residences located at 1700 Park Avenue) to 74 VdB at FEIS/ROD Site 4 (a recording studio located at 1806 Park Avenue). No exceedances of the applicable FTA impact criterion of 72 VdB is predicted at Site 2. However, the maximum vibration level from peak construction activities is predicted to exceed the applicable FTA annoyance threshold of 65 VdB at the recording studio (Site 4) (see **Table 5, "Summary of Vibration Impacts at the Closest Receptors (dBA)"**).

Regarding potential damage to structures from impact equipment, ground-borne vibration levels at the closest receptors are predicted to range from 0.007 inches per second ("in/sec") at Site 2 (residences located at 1700 Park Avenue), to 0.021 in/sec at Site 4 (recording studio), to 0.022 in/sec at FEIS/ROD Site 3 (flood protection wall). Due to the large distances between the equipment and receptors, no exceedances of the FTA damage criteria of 0.5 in/sec for the closest receptors are predicted.

Table 5: Summary of Vibration Impacts at the Closest Receptors

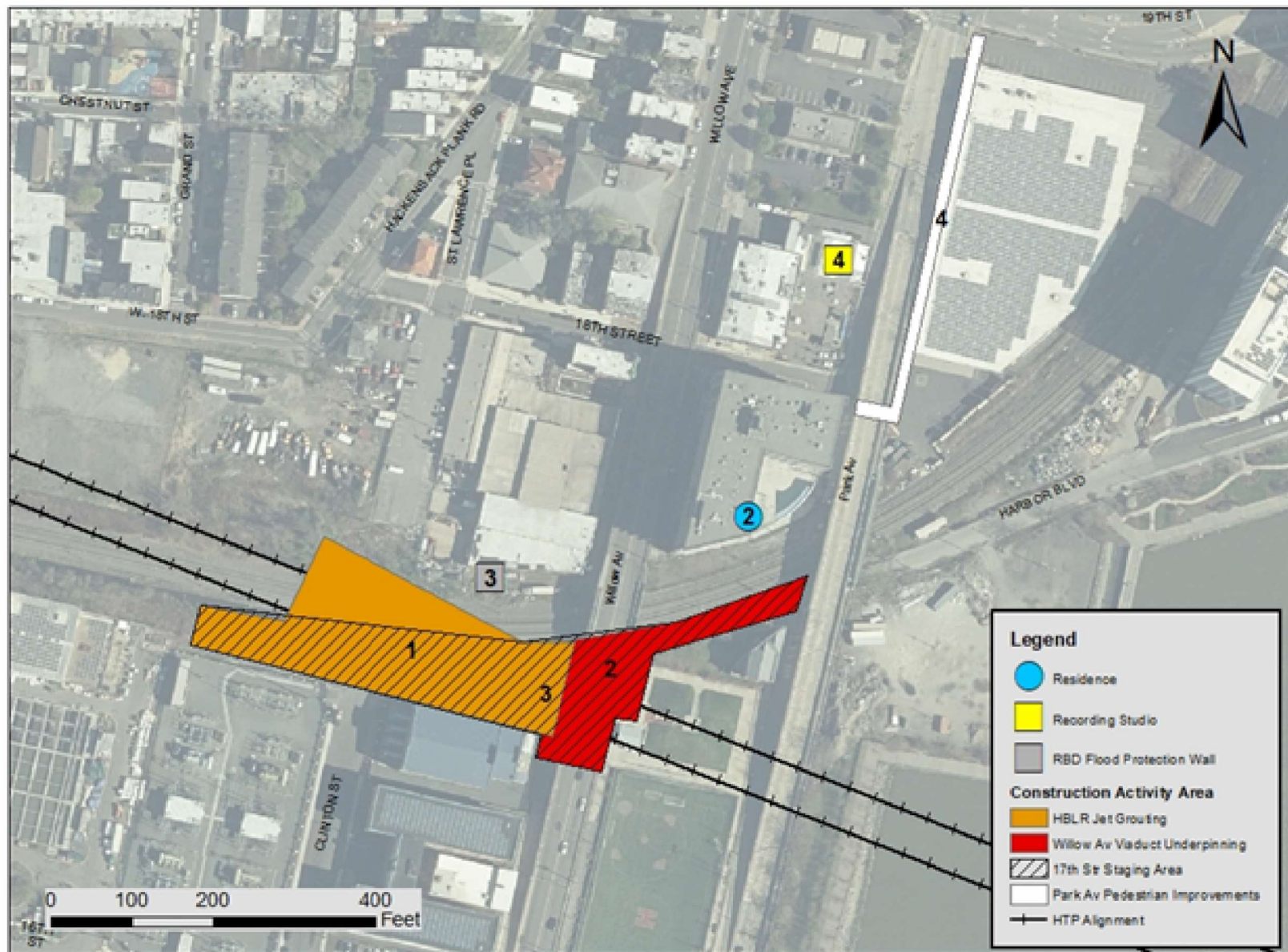
FEIS/ROD Site	Location	Land Use	FTA Category	Damage, PPV (in/sec) ¹		Annoyance, RMS (VdB) ²	
				Criteria	Project	Criteria	Project
2	1700 Park Ave, Weehawken	Residential	2	0.500	0.007	72	65
3	RBD Flood Protection Wall	Industrial	--	0.500	0.022	--	--
4	1806 Park Ave, Weehawken	Recording Studio	1	0.500	0.021	65	74

¹ Damage is assessed in peak particle velocity (PPV in inches per second (in/sec)).

² Annoyance is assessed in root-mean square ("RMS") velocity levels relative to 1 micro-inch per second (VdB).

Source: GTHP, June 2025.

At the recording studio (Site 4), the predicted vibration is estimated to be equal to or less than existing truck traffic along Park Avenue. Therefore, it can be reasonably assumed that the recording studio building was designed to mitigate external noise and vibration from nearby sources such as frequent truck traffic. Therefore, although the predicted vibration at the building façade exceeds the limit for a vibration-sensitive structure, the potential for a significant exceedance at Site 4 is not expected. However, vibration measurements will be conducted once work begins by the selected contractor to ensure that no exceedances (or damage) would occur at Site 4 and the other surrounding receptors. Additionally, further outreach would be conducted to determine the true sensitivity to vibration for the current land-use at this receptor.



Source: GTHP, June 2025.

4.11 Air Quality (FEIS Chapter 13)

A detailed air pollutant emissions analysis was conducted using estimates of equipment inventories that could be reasonably assumed over a two-year duration from 2026 to 2027. Because a contractor has not been retained for the contract package associated with the Proposed Project Modifications and detailed inventories of equipment and activity levels are not yet available, this analysis is based on reasonably assumed equipment inventories considering the nature of the construction activities.

The results of the emissions analysis for the Proposed Project Modifications are summarized in **Table 6, “Summary of Emissions for the Proposed Project Modifications.”** Emissions for all the nonattainment or maintenance criteria pollutants (including volatile organic compounds [“VOC”], nitrogen oxides [“NO_x”], carbon dioxide [“CO”] and particulate matter with an aerodynamic diameter of less than or equal to 2.5 micrometers [“PM_{2.5}”] and 10 micrometers [“PM₁₀”]) associated with the Proposed Project Modifications would be well below their respective *de minimis* thresholds. Therefore, a formal general conformity determination is not required for the Proposed Project Modifications.

Table 6: Summary of Emissions for the Proposed Project Modifications

Pollutant	Pollutant Emissions (tons/year)				
	2025	2026	2027	2028	<i>de minimis</i>
VOC	0.0	0.1	0.1	0.0	50
NO _x	0.0	2.3	2.0	0.0	50
CO	0.0	1.4	1.2	0.0	100
PM ₁₀	0.0	0.1	0.1	0.0	100
PM _{2.5}	0.0	0.1	0.1	0.0	100

Source: GTHP, July 2025.

In addition to the emissions resulting from the Proposed Project Modifications, the cumulative emissions for other activities (including those subject to previously approved NEPA re-evaluations for the Project) were also evaluated for compliance. In particular, GDC has been advancing construction activities, design, and contracting, which has yielded additional information that has been incorporated into this analysis of cumulative air quality effects. As summarized in **Table 7, “Summary of Cumulative NO_x Emission for the Proposed Project Modifications and Other Activities (by Contract Package and Re-evaluations, as Noted),”** cumulative NO_x emissions are also not predicted to exceed the threshold of 50 tons per year for any of the calendar years. Since NO_x is the only pollutant for which emissions even remotely approach the *de minimis* limits, the cumulative NO_x emissions were reviewed. As noted above, Emissions for the work associated with Re-evaluation #9, the New Jersey Surface Alignment (Package 3) and the Hudson River Tunnel Contract (Package 1C) were determined based on preliminary estimates of the potential equipment and activities that could be reasonably expected for these modifications. Estimates for the Palisades Tunnel (Package 1A) were estimated using contractor-provided equipment inventories.

Table 7: Summary of Cumulative NO_x Emission for the Proposed Project Modifications and Other Activities (by Contract Package and Re-evaluations, as Noted)

Re-Evaluation	Activity	Pollutant Emissions (tons/year)				
		2025	2026	2027	2028	<i>de minimis</i>
3	Hudson River Obstructions West of Pierhead Line ¹	5.3	0.0	0.0	0.0	50
8	HRGS Weeks Crane Barge Emissions ²	13.4	13.4	0.0	0.0	50
7	Manhattan Tunnel Waterside/Landside Modifications (Package 1B) and Obstruction Removal East of the Pierhead Line as modified and analyzed per Re-evaluation #7 ³	14.4	29.4	12.6	3.7	50
9	Hudson Tunnel Waterside/Landside Modifications (Package 1C) as modified and analyzed herein (Re-evaluation #9)	0.0	2.3	2.0	0.0	50
--	Palisades Tunnel Construction (Package 1A)	2.2	1.9	0.5	0.0	50
--	Hudson River Tunnel Construction (Package 1C)	0.0	0.0	3.4	1.7	50
--	NJ Surface Alignment Construction (Package 3)	<u>0.0</u>	<u>0.0</u>	<u>9.1</u>	<u>8.9</u>	50
Sum		35.3	47.0	27.6	14.3	50

¹ HTP NEPA Re-evaluation #3, "Proposed Hudson River Obstruction Removal Activities to Support HRGS Work," approved April 2025.

² HTP NEPA Re-Evaluation #8, "Hudson River Ground Stabilization Contract: Request for Crane Barge Use of Tier 0 Engines," approved January 2025.

³ HTP NEPA Re-evaluation #7, "Proposed Modifications to Construction Activities, Layout, and Duration Within Hudson River, Hudson River Park, and Twelfth Avenue/Route 9a," is currently in development.

Source: GTHP, July 2025.

4.12 Utilities and Energy (FEIS Chapter 17)

As described in **Section 2.3, "Willow Avenue Viaduct Underpinning,"** some utilities within the Willow Avenue ROW would be maintained in place, abandoned in place, or relocated. Utility work has been coordinated with utility owners/operators and property owners as applicable. There would be no disruption to utility service beyond standard pauses to enable the transition to newly constructed infrastructure.

Proposed utility relocations would be conducted within and using the 17th Street Construction Staging Area. All utility work would take place within the Willow Avenue ROW or the Hartz Mountain Property (Block 11, Lot 6) in Weehawken. No utilities would be relocated to or abandoned within Block 256, Lot 1.01 of 1600 Park.

The proposed modifications to the tunnel alignment, the use of jet grouting under the HBLR from the 17th Street Construction Staging Area, the introduction of the 17th Street Construction Staging Area, and the addition of pedestrian improvements along Park Avenue would not result in substantial changes to utilities or energy usage. Although the 17th Street Construction Staging Area would require the use of a new truck route (see **Figure 6, "17th Street Construction Staging Area Truck Route"**), the total number of construction vehicle trips to the area would remain unchanged.

Therefore, the Proposed Project Modifications would not result in adverse impacts to utilities and energy.

4.13 Safety and Security (FEIS Chapter 18)

As with the FEIS/ROD, safety and security measures would be employed during construction associated with the Proposed Project Modifications to ensure safety of workers and the public. Proposed Project Modifications associated with the tunnel alignment, jet grouting below the HBLR from the 17th Street Construction Staging Area, Willow Avenue viaduct underpinning, 17th Street Construction Staging Area, and construction duration would not result in any adverse impacts to safety and security.

Park Avenue Pedestrian Safety Improvements

The proposed new ADA-compliant crosswalk across the Park Avenue marginal road (below the Park Avenue viaduct) at 18th Street and pedestrian path along the former Dykes Lumber Parcel between 18th Street and 19th Street would enable safe and comfortable pedestrian travel between the Shades residential neighborhood and the Lincoln Harbor Waterfront area while avoiding the intersection of Park Avenue and West 19th Street while the 17th Street Construction Staging Area remains active. As such, the Proposed Project Modifications would result in an improvement to pedestrian safety when compared to the No Action condition.

4.14 Public Health (FEIS Chapter 19)

As described herein, the Proposed Project Modifications would not result in any new significant adverse impacts regarding air quality, water quality, contaminated materials, or noise. As such, the Proposed Project Modifications would not result in any new impacts to public health. Further, these changes would not generate electromagnetic fields (“EMFs”) or have the potential to affect the generation of EMFs from other sources.

4.15 Coastal Zone Consistency (FEIS Chapter 21)

As described in the FEIS/ROD, NJDEP issued a determination dated June 30, 2017, that the Project is consistent with New Jersey’s Coastal Zone Management (“CZM”) rules.

The Proposed Project Modifications are located within the New Jersey Coastal Zone. As such, a new request for coastal consistency was prepared for submittal to NJDEP to assess the Proposed Project Modifications’ consistency with New Jersey’s CZM rules. Following submission of the coastal consistency assessment to NJDEP on July 27, 2025, NJDEP issued a determination that the Proposed Project Modifications are consistent with New Jersey’s CZM rules. The coastal consistency assessment and NJDEP correspondence are provided in **Appendix B, “Coastal Consistency Assessment.”**

4.16 Section 4(f) Resources (FEIS Chapter 24)

As described in **Section 4.5, “Open Space and Recreational Resources (FEIS Chapter 8),”** but for the definition of the 17th Street Construction Staging Area and construction duration, the Proposed Project Modifications would not affect Section 4(f) resources.¹⁶ The potential for Section 4(f) effects related to the 17th Street Construction Staging Area and construction duration, as part of the Willow Avenue viaduct underpinning, are discussed below.

Tunnel Alignment

As described in Table 24-1, “Section 4(f) Properties – Parklands and Recreational Resources,” in the FEIS/ROD, the permanent tunnel alignment passing beneath the Hudson River Waterfront Walkway, including the waterside portion of this park within the Hudson River, would not result in a Section 4(f) use of this resource. The proposed modification to the tunnel alignment at this location passing beneath the waterfront portion of the Hudson River Waterfront Walkway would not result in any potential for new Section 4(f) use of this property, and so the original Section 4(f) finding remains unchanged with this proposed modification.

Willow Avenue Viaduct Underpinning

As described in **Section 4.5, “Open Space and Recreational Resources (FEIS Chapter 8),”** and shown on **Figure 13, “Section 4(f) Resources,”** the proposed Willow Avenue viaduct underpinning would have the potential to affect 1600 Park, which is a resource protected under Section 4(f). 1600 Park is a 2.5-acre multi-use open space located at 1600 Park Avenue in the City of Hoboken, with a portion extending into the Township of Weehawken. 1600 Park contains a multi-use playing field with baseball, soccer, and lacrosse facilities, as well as a slide hill, a dog run, and restrooms. Pedestrian circulation throughout the park is provided by paved walkways lined intermittently with trees. The park occupies Block 256 Lot 1.01 in the City of Hoboken, and Block 11 Lots 1 and 2 in the Township of Weehawken; a portion of the park is located within the publicly accessible portion of the Willow Avenue ROW, owned by Hudson County (the “Encroachment Area”).^{17,18} The Encroachment Area is publicly owned by Hudson County, is publicly accessible, and is administered as part of 1600 Park, which has a “major purpose” of existing for

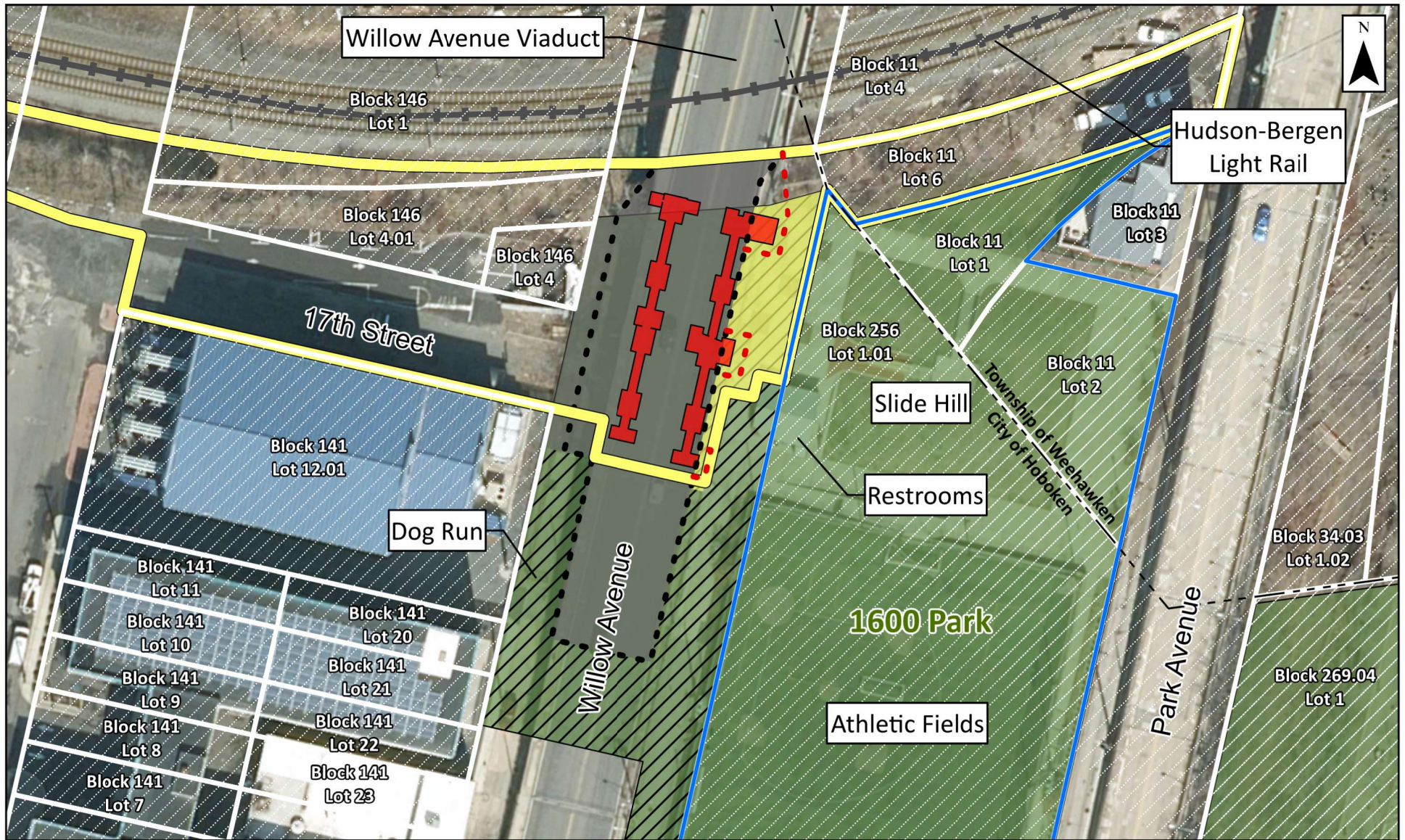
¹⁶ As described in the FEIS/ROD, ground improvement activities east of the Hudson County Construction Staging Area would have the potential to affect the Swartwout sea wall in Hoboken, New Jersey, a historic period archaeological resource. The FEIS/ROD determined that ground improvement activities in the vicinity of the Hudson County Shaft have the potential to result in an adverse effect to the historic sea wall below, if present. The Proposed Project Modifications would not alter the potentially Adverse Effect finding from the FEIS/ROD. Per the final Section 4(f) Evaluation included as part of the FEIS/ROD, this resource was determined to have importance for what could be learned through data recovery and does not warrant preservation in place. As such, Section 4(f) regulations would not be applicable to the Swartwout sea wall.

¹⁷ The City of Hoboken (owner of the remainder of 1600 Park) entered into an Encroachment Agreement with Hudson County (owner of the Willow Avenue ROW) on January 22, 2013, allowing for construction and maintenance of certain recreational facilities within the publicly accessible portions of Willow Avenue ROW between approximately 16th Street and the HBLR. The Encroachment Area is shown on **Figure 13, “Section 4(f) Resources.”**

¹⁸ The portion of 1600 Park located within City of Hoboken Block 256 Lot 1.01 and Township of Weehawken Block 11 Lots 1 and 2 is encumbered by the requirements of the New Jersey Green Acres Program. The Green Acres regulations would not apply to the Proposed Project Modifications, however, as they would occur entirely within the Encroachment Area, which did not receive Green Acres Funding and was not held by the City for conservation or recreation purposes at the time the City received Green Acres funding for other lands.

park/recreation activities, and is a significant park resource. As such, the Encroachment Area meets the criteria for protection under Section 4(f).

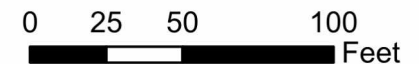
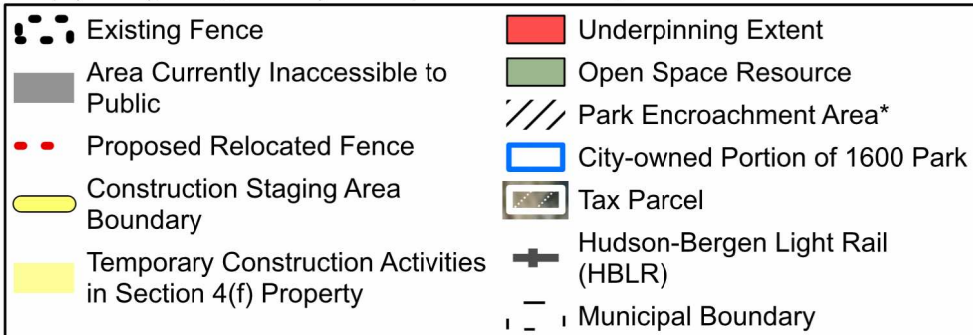
Since publication of the FEIS/ROD, it was determined that the underpinning scheme for the Willow Avenue underpass proposed therein could be improved to minimize disruptions to 1600 Park and utilities by minimizing excavation while eliminating the need for jet grouting, sheet piling, and dewatering. The Proposed Project Modifications include a refined underpinning scheme, with the installation of permanent above-ground pile caps and concrete-encased steel girders attached to the existing Willow Avenue viaduct columns. The refined Willow Avenue viaduct underpinning plan would require the expansion of temporary construction activities into an approximately 2,500-sf portion of the Encroachment Area (approximately 2.5 percent of the publicly accessible park); following the completion of construction, three of the proposed above-ground pile caps would permanently extend a total of 500 sf (approximately 0.5 percent of the total park area) into the publicly accessible portion of the park. The refined underpinning scheme would require approximately 14 months of construction activities within the Encroachment Area and adjacent to 1600 Park as opposed to approximately two months, as contemplated in the FEIS/ROD. Access to and within the park would be maintained throughout construction, and construction activities would not affect any park features or its defining attributes. The temporary construction area would require the removal of one park tree and two trees below the Willow Avenue viaduct; these trees would be replaced and/or relocated in coordination with the City of Hoboken. All other trees in the vicinity of underpinning construction would be protected in place. Coordination with the City of Hoboken would inform the approach to tree replacement or mitigation to address the tree removal.



Source: Gateway Trans-Hudson Partnership (GTHP), 2025; Gateway Development Commission, 2025.

GATEWAY DEVELOPMENT COMMISSION

*This portion of 1600 Park is beyond the limits of Block 256, Lot 1.01 and within the limits of the Hudson County-owned Willow Avenue ROW. Per a 2013 Encroachment Agreement between the City of Hoboken and Hudson County, Hudson County grants the City of Hoboken a license to encroach onto this portion of the Willow Avenue ROW for certain recreational uses.



Section 4(f) Resources

Figure 13

These changes would not reduce or eliminate any other park features/amenities (i.e., active use ball fields, slide hill, restrooms, dog run, or seating), nor would they affect public access to – or circulation within – the park. Aesthetically, the permanent pile caps and concrete encased steel girders would be partially visible from 1600 Park, but these proposed permanent features would be located inside the restricted area enclosed by iron picket fence that currently contains metal and concrete foundations/columns and paved area beneath Willow Avenue viaduct. Consequently, the Proposed Project Modifications would not represent a significant change in the quality of views from or of the park. Viaduct modifications would not result in permanent increases of traffic, noise, or emissions in the park.

FTA and GDC initiated a new consultation with the City of Hoboken and provided an opportunity for public review and comment. GDC presented an overview of the Proposed Project Modifications and the anticipated Section 4(f) impact determination at the Hoboken City Council meeting on June 4, 2025. Following the meeting, GDC made the presentation available online via the Hudson Tunnel Project website (hudsontunnelproject.com) and provided a 30-day comment period (which closed on July 7, 2025) as a further opportunity for public review and comment concerning potential effects on the protected activities, features, and attributes of the affected portion of 1600 Park. FTA and GDC did not receive any comments during the Section 4(f) public comment period.

After considering the potential for the Proposed Project Modifications to affect 1600 Park, FTA determined that the Proposed Project Modifications would constitute a *de minimis* condition pursuant to 23 CFR 774.13 because these changes would:

- Not affect or substantially impair any protected activities, features, or attributes of the park;
- Allow for continuous access to all park features and facilities throughout construction; and
- Affect an area small enough in area so as to not adversely affect the public use of 1600 Park.

GDC subsequently received concurrence from the City of Hoboken on this *de minimis* impact determination under Section 4(f). For further information, see **Appendix C, “Section 4(f) Evaluation.”**

5 PUBLIC AND STAKEHOLDER OUTREACH

GDC, Amtrak, PANYNJ, and GTHP have been in coordination with Federal and State permitting agencies, the City of Hoboken, Township of Weehawken and Hudson County as well as other community organizations, and members of the public in order to solicit feedback on modifications to construction activities proposed in Hoboken, Weehawken, and the New Jersey portion of the Hudson River and inform the project changes described herein. Previous coordination efforts are outlined as follows:

- City of Hoboken – June 4, 2025
- Township of Weehawken – April 29, 2025
- City of Hoboken Site Visit at 17th Street – November 25, 2024
- City of Hoboken Technical Briefing – October 25, 2024
- City of Hoboken – September 9, 2024
- Hudson County – June 12, 2024
- Hudson County – October 2, 2024

- Hudson County – October 31, 2024
- Township of Weehawken – ongoing email correspondence

As described in **Section 4.16, “Section 4(f) Resources (FEIS Chapter 24),”** GDC provided a 30-day comment period (which closed on July 7, 2025) to provide an opportunity for public review and comment concerning potential effects on the protected activities, features, and attributes of the affected portion of 1600 Park. FTA and GDC did not receive any comments during the Section 4(f) public comment period. The Section 4(f) analysis, as well as public outreach materials and City of Hoboken correspondence, is provided in **Attachment C, “Section 4(f) Evaluation.”**

6 CHANGE IN PERMIT REQUIREMENTS

The Proposed Project Modification would require the following permits or approvals:

- USACE Section 404/10 Individual Permit (Permit No. NAN-2020-00835) Permit Modification
- NJDEP Coastal Zone Consistency Determination
- NJDEP Green Acres Program
- Hudson Essex Passaic Soil Conservation District Soil Erosion and Sediment Control Plan
- NJDOT Road Opening
- City of Hoboken Shade Tree Commission

7 MITIGATION AND COMMITMENTS

Table 8, “Mitigation Measures and Commitments,” describes those commitments made to avoid potential environmental impacts, as well as any proposed mitigation measures to reduce adverse environmental impacts associated with the Proposed Project Modifications. Unless stated otherwise, mitigation and avoidance measures identified within the HTP FEIS/ROD, as well as previous NEPA re-evaluations, remain valid; this table identifies only those mitigation measures specific to the Proposed Project Modifications and/or not previously disclosed in prior environmental documentation for the HTP.

Table 8: Mitigation Measures and Commitments

#	Subject Area	Mitigation or Commitment Description	Responsible Entity
1	Historic and Archaeological Resources	Follow archaeological monitoring procedures in the archaeological monitoring plan (“AMP”) during ground disturbing activities in the Swartwout Sea Wall area of archaeological sensitivity.	GDC and Construction Contractor(s)
2	Natural Resources	The clearing of overgrown vegetation and debris to accommodate jet grouting below the HBLR would occur between October 1 and March 14 to minimize potential impacts to breeding birds protected under the Migratory Bird Treaty Act. This area would be restored and re-planted after completion of construction.	GDC and Construction Contractor(s)
3	Section 4(f) Resources	Maintenance and protection in place of up to ten planted trees within 1600 Park. GDC would be required to obtain a Shade Tree Commission permit for the removal and protection of trees within the 17 th Street Construction Staging Area and coordinate with the City of Hoboken Shade Tree Commission to replace and/or relocate one park tree.	GDC

Source: GTHP, 2025.

8 CONCLUSION

As described herein, the Proposed Project Modifications are not anticipated to result in any new significant adverse impacts beyond those identified in the FEIS/ROD.

As described in **Section 4.6, “Historic and Archaeological Resources (FEIS Chapter 9),”** and **Appendix A, “Section 106 Effects Assessment,”** the Proposed Project Modifications would result in no new adverse effect to the Swartwout Sea Wall area of archaeological sensitivity. No new effects related to historic or archaeological resources were identified.

The Proposed Project Modifications are expected to result in a new Section 4(f) *de minimis* impact determination due to the marginal permanent occupancy of the Encroachment Area of 1600 Park. Temporary and permanent uses of this Section 4(f) resource would not adversely affect the public use or enjoyment of 1600 Park, nor would they affect or restrict access to any of the parks defining features or amenities.

In conclusion, after comprehensive consideration of the Proposed Project Modifications’ impact on the affected environment, the original FEIS/ROD remains valid. Supplemental NEPA analysis is not required.