24. **Archaeology**

24.1. **Chapter Overview**

24.1.1. **Introduction**

This section identifies archeological resources in the Northern Branch Corridor study area that are listed on the State and National Registers of Historic Places, have been determined eligible by the Keeper of the National Register of Historic Places, or have State Historic Preservation Office (SHPO) opinions of eligibility. This analysis was prepared in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended, and Chapter 268 of the New Jersey State Register Law of 1970.

Archeological resources are protected under federal law through Section 106 of the National Historic Preservation Act of 1966, as amended; Section 101(b)(4) of the National Environmental Policy Act of 1969; the Historic and Archaeological Data Protection Act of 1974; Section 4(f) of the Department of Transportation Act, as amended in 1987; Executive Orders 11593 and 12372; 23 CFR 771, as amended, October 30, 1980; 36 DVR 66; the guidelines developed by the Advisory Council on Historic Preservation published November 26, 1980; and the amended procedures for the Protection of Historic and Cultural Properties as set forth in 36 CFR 800. Applicable State of New Jersey legislation governing the protection of these resources includes Chapter 268 of the New Jersey State Register Law of 1970 and Executive Order 215.

The regulations developed under Section 106 of the National Historic Preservation Act require that prior to approval of federal funding, agencies should consider a project's impacts on any district, site, building, structure, or object that is included in, or eligible for inclusion in, the National Register of Historic Places (National Register), and give the Advisory Council on Historic Preservation (ACHP) an opportunity to comment on an undertaking. The Historic and Archaeological Data Preservation Act directs Federal agencies to preserve historic and archaeological data that would otherwise be lost as a result of a Federal action. A project is considered to have an adverse effect on such sensitive resources if it changes the quality or cultural characteristics that render them eligible for listing on the National Register. Section 4(f) of the Department of Transportation Act allows for the use or constructive use of an archaeological property only if there is no feasible or prudent alternative and all possible planning has been undertaken to minimize harm to the property. Further details are included in Chapter 25: Section 4(f).

24.1.2. **Summary of Findings**

The Northern Branch Corridor has been used as a rail transportation corridor for more than 100 years. Records indicate that previous railroad structures were once located in the vicinity of project elements proposed for the Northern Branch project. In addition, the study area is crossed by several water courses that may have provided power sources and fresh water for prehistoric groups.

A Phase I Analysis was conducted for the Northern Branch study area. While the analysis identified the location of the earlier railroad structures based on records, site analysis indicated that little remained of the resources. Additionally, the New Jersey State Historic Preservation Officer (SHPO) determined that the resources identified were not eligible for listing on the State or National Registers of Historic Places. These findings were identical for both Light Rail to Tenafly (Preferred Alternative) and Light Rail to Englewood Route 4. The development of neither Build Alternative is expected to result in impacts to known archaeological resources.

However, although no remains of structures or evidence of prehistoric occupation were found during the Phase I Analysis, the potential exists for buried portions of known resources and previously
undocumented resources to be discovered during the development of either Build Alternative. If resources are identified, a Phase II Analysis, which requires soil borings, will be performed. Mitigation for any resources discovered during the Phase II Analysis will be determined in consultation with the SHPO.

24.2. Methodology

24.2.1. Definition of the Area of Potential Effect

An APE is defined in 36 CFR 800.16(d) as "the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if any such properties exist. The APE is influenced by the scale and nature of the undertaking and may be different for different kinds of effects cause[d] by the undertaking."

Included within the APE are all locations where an undertaking may result in disturbance of the ground. The archaeological APE for the project runs from North Bergen, approximately near Paterson Plank Road, to about 200 feet south of the crossing of Madison Avenue in the Borough of Cresskill. Between these points the archaeological APE is coterminous with the right-of-way, except where proposed new construction lies beyond the right-of-way. An APE has been mapped for each station area and vehicle base facility (VBF); these maps are included as graphics in the discussion of potential impacts by municipality.

24.2.2. Phase I Analysis

The Phase I Analysis was conducted to identify potentially significant archaeological resources within the archaeological APE and to assess disturbance of the sites resulting from past land uses. Several research tasks were undertaken. The site files of the New Jersey State Museum were consulted to identify previously recorded prehistoric archaeological sites. Surveys and reports at the New Jersey Historic Preservation Office of the New Jersey Department of Environmental Protection were reviewed for the project vicinity. Secondary sources on the history of the counties and municipalities potentially affected by the proposed project were consulted. Historic maps of the area were also reviewed. Finally, the project alignment was inspected to establish current conditions and to assess potential impacts of the proposed construction. No subsurface testing or other archaeological interventions have been undertaken as part of the DEIS process.

24.2.3. Phase II Analysis and Mitigation

If resources are identified after the presence/absence analysis (Phase I Analysis) it may be necessary to undertake more detailed work designed to establish the integrity and National Register eligibility and significance of the resources. This typically involves exposure of larger areas of features or soils to determine extent, date and preservation (Phase II Analysis). These analyses are typically performed during Final Design and Engineering. This would involve the following steps:

- Soil borings taken during Final Design and Engineering will be reviewed by accredited archaeologists to determine if there are potential archaeological resources present. Analysis of the soil borings may eliminate the need for additional analysis such as a Phase II testing program.
- If as a result of the soil boring review, there is deemed a potential presence of archeological resources, then additional archaeological investigation will be conducted by accredited archaeologists during the Final Design and Engineering at the applicable station site.
If additional archaeological investigations (Phase II) reveal the presence of resources, further archaeological evaluation will be performed by accredited archaeologists and will be mitigated in consultation with SHPO.

In the event the previously non-recorded archaeological resources are encountered during construction, all such activities will halt in the subject area pending investigation and review by the accredited project archaeologist. Upon the archaeologist’s consultation with SHPO construction activities may resume as modified by the results of such consultation.

If a resource is found to be adversely affected by the project, treatment measures will be developed. These may involve one or more of the following: adjustment to project design; archaeological documentation; and public outreach in the form of publications, presentations, signage, etc. If appropriate, a construction plan would also be prepared in coordination with SHPO to minimize potential construction impacts to these resources. These measures have been documented in a Draft Programmatic Agreement (refer to Appendix K). Prior to the issuance of a Record of Decision, the SHPO, FTA and NJ TRANSIT would agree upon the stipulations and mitigation measures required to maintain no adverse effect on any archaeological resources.

24.2.4. Historical Development of the Project Area

Appendix I includes a narrative of prehistoric and early historic conditions of the study corridor area. A history of the Northern Branch is also referenced in Appendix I.

24.3. Environmental Review

Environmental review for archaeological resources is a predictive endeavor, as these resources are usually hidden below ground. Map identification of previous railroad components constructed by the Northern Branch Railroad and its successor the Erie Railroad was used to evaluate the previous use of the rail right-of-way. For each proposed station site and VBF, the land use history and a review of historic cartographic sources were performed to identify any potential for unmapped archaeological resources. However, for sites that have no integrity, or the soil integrity has been destroyed by previous developments, no further analysis would be required.

Prehistoric developments, however, are not always documented. The background survey of the project vicinity demonstrates that any surviving well-drained terraces adjacent to confluences or large areas of wetlands can be expected to produce evidence of aboriginal settlement. Areas with the potential for prehistoric sensitivity are described for each municipality.

24.3.1. North Bergen

24.3.1.1. Existing Conditions

Two former station sites and a railroad bridge over Bellmans Creek, constructed by Northern Railroad, and its successor the Erie Railroad, are located in North Bergen within the rail right-of-way. The New Durham Station located west of the rail tracks at 52nd and 53rd Streets and the Fairview Station, located south of Railroad Avenue, were constructed in 1859 as part of the original Northern Railroad of New Jersey. The station sites are considered a potential archeological resource and the railroad bridge has the potential for prehistoric sensitivity due to its location near a creek (Refer to Figures 24-1 through 24-3). However, past construction and demolition episodes have resulted in a loss of archeological integrity of the station sites.
ARCHAEOLOGICAL RESOURCES
NORTH BERGEN VBF

Northern Branch Corridor
Figure 24-1

1859 New Durham Station Site
(Site 1)

NORTH BERGEN TOWNSHIP

Stations - All Alternatives
Stations Light Rail To Tenafly
(Preferred Alternative Only)
Viaduct
Proposed Alignment
Half-Mile Study Area
Freight Only
Hudson-Bergen Light Rail
Archaeological Area of Potential Effect
Archaeological Resource
North Bergen VBF
Municipal Boundary

0 500 1,000 Feet

Bergen County
Hudson County
Hudson-Bergen Light Rail
Northern Branch Corridor
Figure 24-1

NJ TRANSIT
The Way To Go.

JACOBS
ARCHAEOLOGICAL RESOURCES
91st Street Station

Northern Branch Corridor
Figure 24-2

Stations - All Alternatives
Stations Light Rail To Tenafly (Preferred Alternative Only)
Viaduct
Proposed Alignment
Half-Mile Study Area
Freight Only
Hudson-Bergen Light Rail
Archaeological Area of Potential Effect
Proposed Parking Area
Proposed Platforms
Municipal Boundary
ARCHAEOLOGICAL RESOURCES

Northern North Bergen, Fairview, and Ridgefield

Northern Branch Corridor

Figure 24-3

Prehistoric Sensitivity at Stream Crossing (Site 3)

Fairview Station Site (Site 2)

Bergen County

Hudson County

Stations - All Alternatives

Stations Light Rail To Tenafly (Preferred Alternative Only)

Viaduct

Proposed Alignment

Half-Mile Study Area

Freight Only

Hudson-Bergen Light Rail

Archaeological Resource

Municipal Boundary

NJ TRANSIT
The Way To Go.

JACOBS
None of these archaeological resources is on, or determined to be eligible for, the National Register of Historic Places, nor has the New Jersey State Historic Preservation Officer (SHPO) issued an opinion of eligibility for the National Register on these resources.

No recorded prehistoric sites have at this point been identified in the immediate vicinity of the current project alignment or the VBF or the proposed station sites.

The APEs for the North Bergen VBF and 91st Street Station are also shown on Figures 24-1, and 24-2. Potential archaeological resources were not identified on the VBF or proposed 91st Street Station site. The archaeological sensitivity within North Bergen is summarized in Table 24-1.

### Table 24-1: Archaeological Sensitivity in North Bergen

<table>
<thead>
<tr>
<th>Location</th>
<th>Prehistoric Sensitivity</th>
<th>Land Use History</th>
<th>Present Condition</th>
<th>Evaluation</th>
<th>Further Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rail Right-of-Way – Site 1</td>
<td>No</td>
<td>1859 New Durham Station west of tracks at 53rd and 52nd Street.</td>
<td>Extensive rail yard with multiple tracks.</td>
<td>No integrity of earlier station</td>
<td>None.</td>
</tr>
<tr>
<td>Rail Right-of-Way – Site 2</td>
<td>No</td>
<td>1859 Fairview Station, south of Railroad Avenue, east of tracks.</td>
<td>Very heavily modified landscape.</td>
<td>No integrity of earlier station</td>
<td>None.</td>
</tr>
<tr>
<td>Rail Right-of-Way – Site 3</td>
<td>Bellmans Creek Crossing</td>
<td>Railroad Bridge over Bellmans Creek</td>
<td>Railroad Bridge over Bellmans Creek</td>
<td>No recorded archaeological resources. Chance of intact soils and prehistoric resources extremely low.</td>
<td>None.</td>
</tr>
<tr>
<td>North Bergen VBF</td>
<td>No</td>
<td>Proximate to 1859 New Durham Station west of tracks at 53rd and 52nd Street.</td>
<td>Extensive rail yard with multiple tracks.</td>
<td>No integrity of earlier station</td>
<td>None.</td>
</tr>
<tr>
<td>91st Street Station</td>
<td>Close to Bellmans Creek Headwaters</td>
<td>No structures noted on maps. All present buildings post-1950.</td>
<td>Heavily modified landscape. Piles of demolition debris in proposed parking area. Bellman's Creek in modified and realigned course north of 91st Street, but chance of intact soils and prehistoric resources extremely low.</td>
<td>No recorded archaeological resources. Soil integrity destroyed.</td>
<td>None.</td>
</tr>
</tbody>
</table>

Source: Hunter Research, 2008

### 24.3.1.2. Potential Impacts and Mitigation

#### No Build Alternative

Under the No Build Alternative, the Northern Branch project would not be constructed; consequently, there would be no effect to the archaeological resources in the APE. It is assumed that archaeological resources within and adjacent to the right-of-way would remain the same as for the existing conditions.

#### Light Rail to Tenafly (Preferred Alternative) and Light Rail to Englewood Route 4

Both Light Rail to Tenafly (Preferred Alternative) and Light Rail to Englewood Route 4 are identical in their potential impacts and mitigation through North Bergen. Consequently, the discussion below applies to both alternatives.
Impacts – The identified stations and bridge crossing no longer have integrity due to previous construction along the right-of-way and no other archaeological resources have been identified that would be disturbed by any elements associated with the Build Alternatives.

Mitigation – In the event that non-recorded resources are found along the alignment during construction, measures described in the Methodology section will be implemented. Refer to Chapter 27 for construction mitigation.

24.3.2. Fairview

24.3.2.1. Existing Conditions

The Northern Railroad, and its successor the Erie Railroad, constructed a pair of railroad bridges across creeks in Fairview, at the borders of North Bergen and Fairview, and Fairview and Ridgefield (Refer to Figure 24-3, shown previously).

The railroad crossing is not on, nor determined to be eligible for, the National Register of Historic Places, nor has the New Jersey State Historic Preservation Officer (SHPO) issued an opinion of eligibility for the National Register on these resources. No prehistoric sites have at this point been identified in the immediate vicinity of the current project alignment.

The archaeological sensitivity within Fairview is summarized in Table 24-2.

Table 24-2: Archaeological Sensitivity in Fairview

<table>
<thead>
<tr>
<th>Location</th>
<th>Prehistoric Sensitivity</th>
<th>Land Use History</th>
<th>Present Condition</th>
<th>Evaluation</th>
<th>Further Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rail Right-of-Way – Site 3</td>
<td>Bellmans and Wolf Creek Crossing</td>
<td>Railroad Bridge over Bellmans and Wolfs Creeks</td>
<td>Railroad Bridge over Bellmans and Wolfs Creeks</td>
<td>No recorded archaeological resources. Chance of intact soils and prehistoric resources extremely low.</td>
<td>None.</td>
</tr>
</tbody>
</table>

Source: Hunter Research, 2008

24.3.2.2. Potential Impacts and Mitigation

No Build Alternative
Under the No Build Alternative, the Northern Branch project would not be constructed; consequently, there would be no effect to the archaeological resources in the APE. It is assumed that archaeological resources within and adjacent to the right-of-way would remain the same as for the existing conditions.

Light Rail to Tenafly (Preferred Alternative) and Light Rail to Englewood Route 4
Both Light Rail to Tenafly (Preferred Alternative) and Light Rail to Englewood Route 4 are identical in their potential impacts and mitigation through Fairview. Consequently, the discussion below applies to both alternatives.

Impacts – The chance of encountering intact soils and prehistoric resources in the vicinity of the two bridges is extremely low due to previous construction along the right-of-way, and no other archaeological resources have been identified that would be disturbed by any elements associated with the Build Alternatives.
Mitigation – In the event that non-recorded resources are found along the alignment during construction, measures described in the Methodology section will be implemented. Refer to Chapter 27 for construction mitigation.

24.3.3. Ridgefield

24.3.3.1. Existing Conditions

As discussed for Fairview, the Northern Railroad, and its successor the Erie Railroad, constructed a railroad bridge across Wolf Creek at the border of Fairview and Ridgefield. The former site of the Hackensack Junction Station, constructed in 1859 as part of the original Northern Railroad of New Jersey, is located south of Edgewater Avenue, just north of the proposed Ridgefield Station site (Refer to Figures 24-3, shown previously, and 24-4).

None of these archaeological resources is on, nor determined to be eligible for, the National Register of Historic Places, nor has the New Jersey State Historic Preservation Officer (SHPO) issued an opinion of eligibility for the National Register on these resources. No prehistoric sites have at this point been identified in the immediate vicinity of the current project alignment or the Ridgefield Station site.

The APE for the Ridgefield Station is shown on Figures 24-4, showing no archaeological resources on the station site. The archaeological sensitivity within Ridgefield is summarized in Table 24-3.

Table 24-3: Archaeological Sensitivity in Ridgefield

<table>
<thead>
<tr>
<th>Location</th>
<th>Prehistoric Sensitivity</th>
<th>Land Use History</th>
<th>Present Condition</th>
<th>Evaluation</th>
<th>Further Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rail Right-of-Way – Site 3</td>
<td>Wolf Creek Crossing</td>
<td>Railroad Bridge over Wolf Creek</td>
<td>Railroad Bridge over Wolf Creek</td>
<td>No recorded archaeological resources. Chance of intact soils and prehistoric resources extremely low.</td>
<td>None.</td>
</tr>
<tr>
<td>Rail Right-of-Way – Site 4</td>
<td>No</td>
<td>1859 Hackensack Junction Station, south of Edgewater Avenue, east of tracks.</td>
<td>Narrow tree/grass verge in area of probable station site. Area urbanized</td>
<td>Possible survival of below-ground remains of station</td>
<td>None.</td>
</tr>
<tr>
<td>Ridgefield Station</td>
<td>No</td>
<td>No structures on maps until 1950, By 1950 industrial building on east side of tracks.</td>
<td>Large commercial building with parking lot to north in proposed parking area.</td>
<td>No recorded archaeological resources. Soil integrity destroyed.</td>
<td>None.</td>
</tr>
</tbody>
</table>

Source: Hunter Research, 2008

24.3.3.2. Potential Impacts and Mitigation

No Build Alternative

Under the No Build Alternative, the Northern Branch project would not be constructed; consequently, there would be no effect to the archaeological resources in the APE. It is assumed that archaeological resources within and adjacent to the right-of-way would remain the same as for the existing conditions.

Light Rail to Tenafly (Preferred Alternative) and Light Rail to Englewood Route 4
Both Light Rail to Tenafly (Preferred Alternative) and Light Rail to Englewood Route 4 are identical in their potential impacts and mitigation through Ridgefield. Consequently, the discussion below applies to both alternatives.
ARCHEOLOGICAL RESOURCES
In the Vicinity of Edgewater Ave. and Ridgefield Station
Northern Branch Corridor
Figure 24-4
Impacts – The chance of encountering intact soils and prehistoric resources in the vicinity of the bridge is extremely low due to previous disturbance along the right-of-way. Although there is the potential for survival of below-ground remains at the former station site, no construction is proposed outside of the right-of-way in the vicinity of this site. No other archaeological resources have been identified that would be disturbed by any elements associated with the construction of the station site.

Mitigation – In the event that non-recorded resources are found along the alignment during construction, measures described in the Methodology section will be implemented. Refer to Chapter 27 for construction mitigation.

24.3.4. Palisades Park

24.3.4.1. Existing Conditions

No facilities are recorded to have been constructed in Palisades Park by the Northern Railroad, or its successor the Erie Railroad and no prehistoric sites have at this point been identified in the immediate vicinity of the current project alignment. The APE for the Palisades Park Station is shown on Figure 24-5 and Table 24-4 describes the land use history of the station site.

Table 24-4: Archaeological Sensitivity in Palisades Park

<table>
<thead>
<tr>
<th>Location</th>
<th>Prehistoric Sensitivity</th>
<th>Land Use History</th>
<th>Present Condition</th>
<th>Evaluation</th>
<th>Further Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palisades Park</td>
<td>No</td>
<td>No structures as of 1876. By 1911, 3 to 4 structures on south side of Fairview east of tracks. By 1930, lots on the north side of Ruby laid in. By 1950, warehouses on Ruby. A dwelling remains on Fairview.</td>
<td>Heavily industrialized and modified area. Fairview and Ruby frontages built up with mid-late 20th century commercial/industrial buildings.</td>
<td>No recorded archaeological resources. Soil integrity destroyed.</td>
<td>None.</td>
</tr>
</tbody>
</table>

Source: Hunter Research, 2008

24.3.4.2. Potential Impacts and Mitigation

No Build Alternative

Under the No Build Alternative, the Northern Branch project would not be constructed; consequently, there would be no effect to the archaeological resources in the APE. It is assumed that archaeological resources within and adjacent to the right-of-way would remain the same as for the existing conditions.

Light Rail to Tenafly (Preferred Alternative) and Light Rail to Englewood Route 4

Both Light Rail to Tenafly (Preferred Alternative) and Light Rail to Englewood Route 4 are identical in their potential impacts and mitigation through Palisades Park. Consequently, the discussion below applies to both alternatives.

Impacts – As there are no known archaeological resources associated with the Northern Railroad or other development in the vicinity of the proposed Palisades Park Station, no impact is anticipated.

Mitigation – In the event that non-recorded resources are found along the alignment during construction, measures described in the Methodology section will be implemented. Refer to Chapter 27 for construction mitigation.
ARCHAEOLOGICAL RESOURCES

Palisades Park Station

Northern Branch Corridor

Figure 24-5

- Stations - All Alternatives
- Stations Light Rail To Tenafly (Preferred Alternative Only)
- Viaduct
- Proposed Alignment
- Half-Mile Study Area
- Freight Only
- Hudson-Bergen Light Rail
- Archaeological Area of Potential Effect
- Proposed Parking Area
- Proposed Platforms
- Municipal Boundary

Palisades Park Station

Bergen County

New York

Hudson County

0 250 500 Feet
24.3.5. Leonia

24.3.5.1. Existing Conditions

Two former facilities constructed by the Northern Railroad and its successor the Erie Railroad are located in Leonia. The former site of the Fort Lee Station, constructed in 1859 as part of the original Northern Railroad of New Jersey, is located east of the rail track and south of Fort Lee Road. The former site of a complex of late 19th century buildings is found west of the rail track within the current Overpeck Park (Refer to Figure 24-6).

None of these archaeological resources is on, nor determined to be eligible for, the National Register of Historic Places, nor has the New Jersey State Historic Preservation Officer (SHPO) issued an opinion of eligibility for the National Register on these resources. The APE for the Leonia Station is shown on Figures 24-6, showing the potential for archaeological resources adjacent to the proposed platform. The archaeological sensitivity within Leonia is summarized in Table 24-5.

<table>
<thead>
<tr>
<th>Location</th>
<th>Prehistoric Sensitivity</th>
<th>Land Use History</th>
<th>Present Condition</th>
<th>Evaluation</th>
<th>Further Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rail Right-of-Way – Site 5</td>
<td>No</td>
<td>1859 Fort Lee Station, south of Fort Lee Road, east of tracks.</td>
<td>Station Park - grass verge with trees</td>
<td>Possible survival of below-ground remains of station</td>
<td>None.</td>
</tr>
<tr>
<td>Rail Right-of-Way – Site 6</td>
<td>Proximity to Overpeck Creek</td>
<td>Later 19th century buildings and possible prehistoric resources, previously used as a landfill.</td>
<td>Overpeck Park</td>
<td>Possible survival of below-ground remains. Proximity to Overpeck Creek gives area moderate sensitivity for prehistoric resources.</td>
<td>None.</td>
</tr>
<tr>
<td>Leonia Station</td>
<td>No</td>
<td>No structures on any maps. Area shown in 1912 to be owned by sewer company.</td>
<td>Surface parking deck at proposed station parking area, and rail ballast and oil-static line in the vicinity of the station platforms.</td>
<td>Soil integrity destroyed along right-of-way. No recorded archaeological resources at parking area.</td>
<td>None.</td>
</tr>
</tbody>
</table>


24.3.5.2. Potential Impacts and Mitigation

No Build Alternative

Under the No Build Alternative, the Northern Branch project would not be constructed; consequently, there would be no effect to the archaeological resources in the APE. It is assumed that archaeological resources within and adjacent to the right-of-way would remain the same as for the existing conditions.

Light Rail to Tenafly (Preferred Alternative) and Light Rail to Englewood Route 4

Both Light Rail to Tenafly (Preferred Alternative) and Light Rail to Englewood Route 4 are identical in their potential impacts and mitigation through Leonia. Consequently, the discussion below applies to both alternatives.

Impacts – Although there are potential archaeological and prehistoric resources adjacent to the southbound platform, the construction of the platform should not impact the resources since it would be constructed within the rail right-of-way, which has been previously disturbed. The parking deck would be located on an existing surface parking lot which has also been previously disturbed. As such, no impacts are anticipated in Leonia.
Prehistoric Sensitivity and Late 19th Century Dwelling Sites (Site 6)

1859 Fort Lee Station Site (Site 5)

ARCHAEOLOGICAL RESOURCES
In The Vicinity of Leonia Station
Northern Branch Corridor
Figure 24-6
Mitigation – In the event that non-recorded resources are found along the alignment during construction, measures described in the Methodology section will be implemented. Refer to Chapter 27 for construction mitigation.

24.3.6. Englewood

24.3.6.1. Existing Conditions

Four former railroad station sites, constructed by the Northern Railroad, and its successor the Erie Railroad are found in Englewood. Additionally two potential prehistoric sites were identified (Refer to Figures 24-7 through 24-9). None of these archaeological resources is on, nor determined to be eligible for, the National Register of Historic Places, nor has the New Jersey State Historic Preservation Officer (SHPO) issued an opinion of eligibility for the National Register on these resources. The APEs for the stations and optional VBF in Englewood are shown on Figures 24-7 through 24-9, showing no archaeological resources on the station sites. The archaeological sensitivity within Englewood is summarized in Table 24-6.

Table 24-6: Archaeological Sensitivity in Englewood

<table>
<thead>
<tr>
<th>Location</th>
<th>Prehistoric Sensitivity</th>
<th>Land Use History</th>
<th>Present Condition</th>
<th>Evaluation</th>
<th>Further Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rail Right-of-Way – Site 7</td>
<td>Mill Stream crossing</td>
<td>Mill Stream - used as water power from before 1859, between Cedar Lane and I-95</td>
<td>Culverted and modified</td>
<td>No integrity</td>
<td>None.</td>
</tr>
<tr>
<td>Rail Right-of-Way – Site 8</td>
<td>No</td>
<td>Nordhoff Station, late 19th century, south of Sheffield Ave., east of tracks</td>
<td>Grass verge with trees</td>
<td>Possible survival of below-ground remains of station</td>
<td>None.</td>
</tr>
<tr>
<td>Rail Right-of-Way – Site 9</td>
<td>No</td>
<td>1859 Van Brunt Station, Forest Ave. (precise location uncertain)</td>
<td>Paved areas, road, grass verges</td>
<td>Possible survival of below-ground remains of station</td>
<td>None.</td>
</tr>
<tr>
<td>Rail Right-of-Way – Site 10</td>
<td>No</td>
<td>1859 Station Site and Depot, north of Palisade Ave, both sides of track</td>
<td>Parking lots and paved road</td>
<td>Possible survival of below-ground remains of station and depot</td>
<td>None.</td>
</tr>
<tr>
<td>Rail Right-of-Way – Site 11</td>
<td>No</td>
<td>Station Stop, late 19th century, opposite Tallman Place on east side of track</td>
<td>Parking lot and grass verge</td>
<td>Possible survival of below-ground remains of station and depot</td>
<td>None.</td>
</tr>
<tr>
<td>Rail Right-of-Way – Site 12</td>
<td>Overpeck Creek crossing</td>
<td>Overhistoric Sensitivity at Overpeck Creek, north of Englewood Hospital</td>
<td>Railroad Bridge over Creek</td>
<td>No recorded archaeological resources. Chance of intact soils and prehistoric resources extremely low.</td>
<td>None.</td>
</tr>
<tr>
<td>Englewood Route 4 Station</td>
<td>No</td>
<td>No structures until after 1922. By 1950 United Hoisting Co. building on site.</td>
<td>Parking area occupied by modern building.</td>
<td>No recorded archaeological resources. Soil integrity destroyed.</td>
<td>None.</td>
</tr>
<tr>
<td>Optional Englewood Route 4 VBF</td>
<td>No</td>
<td>No structures until after 1922. By 1950 United Hoisting Co. building on site.</td>
<td>Occupied by commercial buildings erected post 1950.</td>
<td>No recorded archaeological resources. Soil integrity destroyed.</td>
<td>None.</td>
</tr>
<tr>
<td>Englewood Town Center Station</td>
<td>No</td>
<td>Coal sheds on east side of tracks by 1884. Remain in place until 1950+.</td>
<td>Proposed Station site is developed, with parking deck at south end.</td>
<td>No recorded archaeological resources. Soil integrity destroyed.</td>
<td>None.</td>
</tr>
<tr>
<td>Englewood Hospital Station</td>
<td>No</td>
<td>Lots laid out on the west side of the tracks between 1920 and 1922. Houses built on west side between 1922 and 1929.</td>
<td>Proposed Station site is mostly a gently sloping grassy median between Dean St and tracks.</td>
<td>No recorded archaeological resources. No development. Soils probably modified by road and railroad.</td>
<td>None.</td>
</tr>
</tbody>
</table>

ARCHAEOLOGICAL RESOURCES

Englewood Town Center Station Location

Northern Branch Corridor Figure 24-8

- Stations - All Alternatives
- Stations Light Rail To Tenafly (Preferred Alternative Only)
- Viaduct
- Proposed Alignment
- Half-Mile Study Area
- Freight Only
- Hudson-Bergen Light Rail
- Archaeological Area of Potential Effect
- Archaeological Resource
- Proposed Parking Area
- Proposed Platforms
- Municipal Boundary
Only one historical archaeological resource predating the railroad has been identified within the Northern Branch archaeological APE (Rail right-of-way - Site 7). This is Mill Stream, modified for use as a part of a waterpower system, running east to west from Crystal Lake towards Overpeck Creek, between I-95 and Cedar Avenue/Brookside Lane/Knapp Place in Englewood. The mill is depicted as Christian Mill on the 1859 Seymour and Tower map. The drainage is now confined to an underground pipe that runs from the lake to a point immediately west of Grand Avenue. Beginning at this location, the stream was redirected into an open concrete conduit, called a race, that now runs along the north side of the I-95 bridge, parallel to Cedar Lane. This section of the race crosses the alignment. Brick buildings possibly related to the late 19th century dye works on the site of the mill are located immediately west of the archaeological APE along Cedar Lane. Extensive modifications to the drainage and the absence of any indication of waterpower structures within the APE indicate that this resource lacks integrity and is not significant.

24.3.6.2. Potential Impacts and Mitigation

**No Build Alternative**
Under the No Build Alternative, the Northern Branch project would not be constructed; consequently, there would be no effect to the archaeological resources in the APE. It is assumed that archaeological resources within and adjacent to the right-of-way would remain the same as for the existing conditions.

**Light Rail to Tenafly (Preferred Alternative)**

*Impacts* – The chance of encountering intact soils and prehistoric resources in the vicinity of the Overpeck Creek crossing is extremely low due to previous construction along the right-of-way. Although there is the potential for survival of below-ground remains at the former station sites, no construction is proposed outside of the right-of-way in the vicinity of the former sites. No other archaeological resources have been identified that would be disturbed by any elements associated with the construction of the station sites or the optional Englewood VBF.

*Mitigation* – In the event that non-recorded resources are found along the alignment during construction, measures described in the Methodology section will be implemented. Refer to Chapter 27 for construction mitigation.

**Light Rail to Englewood Route 4**

*Impacts* – Although there is the potential for survival of below-ground remains at the former Nordhoff station site, no construction is proposed outside of the right-of-way in the vicinity of the former station. No other archaeological resources have been identified that would be disturbed by any elements associated with the construction of the station site or the optional Englewood VBF, and no potential impacts would occur north of the Englewood Route 4 Station.

*Mitigation* – In the event that non-recorded resources are found along the alignment during construction, measures described in the Methodology section will be implemented. Refer to Chapter 27 for construction mitigation.
24.3.7. Tenafly

24.3.7.1. Existing Conditions

The Northern Railroad, and its successor the Erie Railroad, constructed one station in Tenafly (Refer to Figure 24-10). This archaeological resource is not on, or determined to be eligible for, the National Register of Historic Places, nor has the New Jersey State Historic Preservation Officer (SHPO) issued an opinion of eligibility for the National Register on these resources. No prehistoric sites have at this point been identified in the immediate vicinity of the current project alignment or the Ridgefield Station site. Note that the station of archaeological concern was constructed in 1859 and preceded the 1873 station which exists on the site today. The 1873 Tenafly Station is recognized as an historic resource (See Chapter 23: Historic). The archaeological analysis is not concerned with the historic station site but the previous site.

The APEs for the proposed Tenafly stations are shown on Figures 24-10 and 24-11, showing no archaeological resources on the station site. The archaeological sensitivity within Tenafly is summarized in Table 24-7.

<table>
<thead>
<tr>
<th>Location</th>
<th>Prehistoric Sensitivity</th>
<th>Land Use History</th>
<th>Present Condition</th>
<th>Evaluation</th>
<th>Further Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rail Right-of-Way – Site 13</td>
<td>No</td>
<td>1859 Station Site, Piermont Road at Hillside Avenue</td>
<td>1873 Station occupies site of earlier station</td>
<td>No integrity of earlier station</td>
<td>None.</td>
</tr>
<tr>
<td>Tenafly Town Center</td>
<td>No</td>
<td>No development by 1880. Two dwellings at north end by 1912. Replaced by large Richter Manufacturing furniture factory between 1913 and 1920.</td>
<td>Parking lots and club house.</td>
<td>No recorded archaeological resources. No development until after 1880. No integrity of pre-1913 soils.</td>
<td>None.</td>
</tr>
<tr>
<td>Tenafly North</td>
<td>No</td>
<td>Two houses on west side of Madison by 1876. Development remains limited until 1949+.</td>
<td>19th century house still remains on west side of Madison Street. Pre-1949 building on east side of Atwood at Hudson. Other buildings 20th century one-story commercial/industrial structures. Open lots used for parking.</td>
<td>No recorded archaeological resources. No development until after 1872. Some soil integrity on undeveloped lots.</td>
<td>None.</td>
</tr>
</tbody>
</table>

Source: Hunter Research, 2008

24.3.7.2. Potential Impacts and Mitigation

No Build Alternative

Under the No Build Alternative, the Northern Branch project would not be constructed; consequently, there would be no effect to the archaeological resources in the APE. It is assumed that archaeological resources within and adjacent to the right-of-way would remain the same as for the existing conditions.

Light Rail to Tenafly (Preferred Alternative)

Impacts – The identified former station site (1859 station) no longer has integrity due to previous construction. No other archaeological resources have been identified that would be disturbed by any elements associated with the construction of the station sites.
ARCHAEOLOGICAL RESOURCES

Tenafly Town Center Station Location

Northern Branch Corridor

Figure 24-10

1859 Tenafly Station Site
(Site 13)

Stations - All Alternatives
Stations Light Rail To Tenafly (Preferred Alternative Only)
Viaduct
Proposed Alignment
Half-Mile Study Area
Freight Only
Hudson-Bergen Light Rail
Archaeological Area of Potential Effect
Archaeological Resource
Proposed Parking Area
Proposed Platforms
Municipal Boundary

0 250 500 Feet
ARCHAEOLOGICAL RESOURCES

Tenafly North Station Location

Northern Branch Corridor
Figure 24-11

Stations - All Alternatives

Stations Light Rail To Tenafly (Preferred Alternative Only)

Viaduct

Proposed Alignment

Half-Mile Study Area

Freight Only

Hudson-Bergen Light Rail

Archaeological Area of Potential Effect

Proposed Parking Area

Proposed Platforms

Municipal Boundary

Bergen County

New York

Hudson County

0 250 500 Feet

NJ TRANSIT
The Way To Go.

JACOBS
Mitigation – In the event that non-recorded resources are found along the alignment during construction, measures described in the Methodology section will be implemented. Refer to Chapter 27 for construction mitigation.

**Light Rail to Englewood Route 4**

*Impacts* – Light Rail to Englewood Route 4 terminates at Englewood Route 4 Station. No improvements are proposed north of Englewood Route 4. No impacts to archaeological resources would result.

*Mitigation* – None required.

**24.4. Summary of Potential Environmental Effects**

Table 24-8 compares the two Build Alternatives – Light Rail to Tenafly (Preferred Alternative) and Light Rail to Englewood Route 4 – in terms of their potential for resulting in adverse impacts to archaeological resources within the Northern Branch study area. While no impacts are anticipated to occur for documented archaeological resources, the potential remains for unrecorded resources to be discovered in the course of project development. A Draft Programmatic Agreement has been developed documenting the analyses, stipulations and mitigation measures required to maintain no adverse effect on any archaeological resources. A copy of the Draft Programmatic Agreement that would be reviewed/revised and then signed by the SHPO, FTA and NJ TRANSIT can be found in Appendix K. In the event that non-recorded resources are found along the alignment during construction, measures described in the Methodology section and documented in the Draft Programmatic Agreement will be implemented.
Table 24-8: Archaeological Assessment of Station Sites/VBF – Englewood under Light Rail to Tenafly (Preferred Alternative)

<table>
<thead>
<tr>
<th>Municipality and Project Element</th>
<th>Light Rail to Tenafly (Preferred Alternative)</th>
<th>Light Rail to Englewood Route 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NORTH BERGEN:</strong> Three archaeological resources identified</td>
<td></td>
<td></td>
</tr>
<tr>
<td>North Bergen VBF</td>
<td>Impacts: None Mitigation: None required</td>
<td>Same as Light Rail to Tenafly (Preferred Alternative)</td>
</tr>
<tr>
<td>91st Street Station</td>
<td>Impacts: None Mitigation: None required</td>
<td>Same as Light Rail to Tenafly (Preferred Alternative)</td>
</tr>
<tr>
<td><strong>FAIRVIEW:</strong> One archaeological resource identified</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No project elements proposed for Fairview beyond the rail right-of-way. Impacts: None Mitigation: None required</td>
<td></td>
<td>Same as Light Rail to Tenafly (Preferred Alternative)</td>
</tr>
<tr>
<td><strong>RIDGEFIELD:</strong> Two archaeological resources identified</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rail ROW</td>
<td>Impacts: None Mitigation: None required</td>
<td>Same as Light Rail to Tenafly (Preferred Alternative)</td>
</tr>
<tr>
<td>Ridgefield Station</td>
<td>Impacts: None Mitigation: None required</td>
<td>Same as Light Rail to Tenafly (Preferred Alternative)</td>
</tr>
<tr>
<td><strong>PALISADES PARK:</strong> One archaeological resource identified</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rail ROW</td>
<td>Impacts: None Mitigation: None required</td>
<td>Same as Light Rail to Tenafly (Preferred Alternative)</td>
</tr>
<tr>
<td>Palisades Park Station</td>
<td>Impacts: None Mitigation: None required</td>
<td>Same as Light Rail to Tenafly (Preferred Alternative)</td>
</tr>
<tr>
<td><strong>LEONIA:</strong> Two archaeological resources identified</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rail ROW</td>
<td>Impacts: None Mitigation: None required</td>
<td>Same as Light Rail to Tenafly (Preferred Alternative)</td>
</tr>
<tr>
<td>Leonia Station</td>
<td>Impacts: None Mitigation: None required</td>
<td>Same as Light Rail to Tenafly (Preferred Alternative)</td>
</tr>
<tr>
<td><strong>ENGLEWOOD:</strong> Six archaeological resources identified</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rail ROW south of Englewood Route 4 Station</td>
<td>Impacts: None Mitigation: None required</td>
<td>Same as Light Rail to Tenafly (Preferred Alternative)</td>
</tr>
<tr>
<td>Englewood Rt. 4 Station</td>
<td>Impacts: None Mitigation: None required</td>
<td>Same as Light Rail to Tenafly (Preferred Alternative)</td>
</tr>
<tr>
<td>Englewood VBF</td>
<td>Impacts: None Mitigation: None required</td>
<td>Same as Light Rail to Tenafly (Preferred Alternative)</td>
</tr>
<tr>
<td>Rail ROW north of Englewood Route 4 Station</td>
<td>Impacts: None Mitigation: None required</td>
<td>No impact.</td>
</tr>
<tr>
<td>Englewood Town Center Station</td>
<td>Impacts: None Mitigation: None required</td>
<td>Light Rail to Englewood Route 4 terminates at Englewood Route 4 Station. No project improvements proposed north of Englewood Route 4 Station with the exception of the installation of four-quadrant gates at grade crossings, which would not result in hazardous materials concerns.</td>
</tr>
<tr>
<td>Englewood Hospital Station</td>
<td>Impacts: None Mitigation: None required</td>
<td></td>
</tr>
<tr>
<td><strong>TENAFLY:</strong> One archaeological resources identified</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rail ROW</td>
<td>Impacts: None Mitigation: None required</td>
<td></td>
</tr>
<tr>
<td>Tenafly Town Center Station</td>
<td>Impacts: None Mitigation: None required</td>
<td></td>
</tr>
<tr>
<td>Tenafly North Station</td>
<td>Impacts: None Mitigation: None required</td>
<td></td>
</tr>
</tbody>
</table>