24. Archaeology

24.1. Chapter Overview

24.1.1. Introduction

This chapter contains the supplemental archaeological resource analysis that has been prepared in compliance with Section 106 of the National Historic Preservation Act (NHPA). The chapter identifies the revised and new Areas of Potential Effect (APE) that have been defined to address changes to the project since the 2011 DEIS. This chapter describes the additional archaeological resources that are included in the revised APEs for the Preferred Alternative, the potential effects of the Preferred Alternative on those resources, as well as any change to potential effects that were previously identified in the 2011 DEIS, due to changes in the project. Archaeological resources include those 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. The federal and state laws that protect archaeological resources are the same as those outlined in the DEIS. Further details are included in Chapter 25: Section 4(f) Evaluation.

The modifications to the Preferred Alternative that resulted in changes in the APE and the archaeology analysis include:

- **Change in project terminus:** the Preferred Alternative would now terminate at the proposed Englewood Hospital and Medical Center Station instead of the proposed Tenafly North Station. Therefore, archaeological resources located in the section of the Northern Branch Corridor between the Englewood/Tenafly border and Tenafly North have been removed from the study.
- **Viaduct over CSX North Bergen Yard and West Side Avenue alignment:** the Preferred Alternative alignment in North Bergen would include a viaduct from the Tonnelle Avenue Station over the freight yard and then travel at grade on West Side Avenue until 85th Street; therefore an APE has been mapped to include this new area for study.
- **85th Street Viaduct and 85th Street Extension:** a new underpass would be constructed under the CSX River Line tracks at 85th Street to connect the light rail tracks from West Side Avenue to the Northern Branch. This area was previously studied in the 2011 DEIS; therefore no additional work was required.
- **91st Street Station:** the 91st Street Station has been relocated to the northern side of 91st Street; therefore an APE has been mapped to include this new area for study.
- **Ridgefield Station:** the proposed Ridgefield Station has been revised to include pedestrian walkways and bus pullouts on the northbound and southbound sides of Broad Avenue (Route 1/9); therefore a supplemental APE has been mapped and assessed to include these new areas of study.
- **Leonia Station:** the Leonia Station has been relocated to Overpeck County Park where a four-story parking deck and bus pullouts have been proposed. The Leonia Station APE has been expanded to include this new area for study.
- **Leonia Pedestrian Overpass:** a new pedestrian overpass would be constructed to extend over the railroad from Leonia High School to Overpeck County Park. A new APE has been mapped to include this new area in the study.
- **Englewood Town Center Station:** the Englewood Town Center Station platforms have been relocated to the east side of North Van Brunt Street between Palisade Avenue and Demarest Avenue. A second rail track would also be added in this area requiring the partial linear taking of the parking area and sidewalk associated with Depot Square Park (Veterans Memorial Park).
Impacts to the park and parking would be mitigated with reconfiguration of the surface parking area adjacent to the eastern side of the rail right-of-way and bordered by East Palisade Avenue, Demarest Avenue, and North Dean Street, as well as with the development of a new park at South Van Brunt Street and East Palisade Avenue. A new APE has been mapped to include these new areas in the study.

- **Englewood Hospital and Medical Center Station**: the Englewood Hospital and Medical Center Station has been shifted north closer to Cambridge Avenue. A pedestrian overpass would be constructed over North Dean Street to connect the station and the shared use parking facility. A pedestrian crossing would also be added across the stream at Cambridge Avenue and pedestrian improvements are being included between Durie and Cambridge Avenues. The Englewood Hospital and Medical Center Station APE has been expanded to include these new areas for study.

There were no public comments submitted on the DEIS that expressed concerns pertaining to archaeology. This reanalysis therefore addresses only impacts related to the changes to the Preferred Alternative and the incorporation of updated archaeological data.

### 24.1.2. Summary of Findings of the DEIS and SDEIS

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, and a Phase 1B study was performed at the Leonia parking deck. The Phase I Analyses conducted for the DEIS and the SDEIS determined that the development of the Preferred Alternative is not expected to result in impacts to known archaeological resources. The Phase IB studies at the Leonia parking deck, consisting of observation of soil cores, indicated that the predicted prehistoric archaeological sensitivity at this location can be discounted and no further action is required.

A total of 21 potential archaeological resources have been identified for the Preferred Alternative and evaluated to determine potential impacts to the resources as a result of the development of the Preferred Alternative. None of these resources were found to be currently listed, eligible, or evaluated as potentially eligible for listing on the State and National Registers of Historic Places.

The SDEIS Phase 1 Analysis identified the potential for impacts associated with the Englewood Town Center Station parking area and the Englewood Hospital and Medical Center parking area, as follows:

- At the Englewood Town Center Station reconfigured parking area, construction should be accompanied by a program of archaeological monitoring to confirm the presence or absence of these potential historic resources. Evaluation and treatment of identified resources should then take place in accordance with Stipulation II.7 of the Draft Programmatic Agreement (refer to Appendix K).
- At the Englewood Hospital Station parking area, there exists the possibility of unmarked human burials extending into the area adjacent to Brookside Cemetery on the northern side of the parking deck. Should construction occur in the vicinity of the Brookside Cemetery, the possibility for impact should be addressed through the provisions of the Draft Programmatic Agreement (refer to Appendix K), arranging for monitoring of ground disturbance during construction, and implementation of Stipulation II.6 regarding discovery of human remains.
Although no remains of structures or evidence of prehistoric occupation were found during the DEIS Phase I Analysis or the SDEIS Phase I and Phase IB studies, the potential exists for buried portions of known resources and previously undocumented resources to be discovered during the development of the revised Preferred Alternative. If resources are identified, a Phase II Evaluation of Significance Analysis (Phase II Analysis) would be performed. Treatment for any significant resources discovered during the Phase II Analysis would be determined in consultation with the SHPO. These studies can be undertaken under the stipulations of the Draft Programmatic Agreement (refer to Appendix K), specifically those relating to unanticipated discovery. Archaeological monitoring, followed by agreed evaluation of significance of identified resources and their treatment through documentation, would meet the requirements of the National Historic Preservation Act of 1966 and the National Environmental Policy Act of 1969.

24.2. Methodology

The term APE continues to be defined as it was in the DEIS. Included within the revised APEs are all locations where a newly proposed undertaking may result in disturbance of the ground. The overall archaeological APE for the project runs from North Bergen near 51st Street to East Ivy Lane in the City of Englewood. Between these points the archaeological APE is predominantly coterminous with the right-of-way. Exceptions include the Viaduct over the CSX North Bergen Yard, the West Side Avenue alignment, the 85th Street Viaduct, and the 85th Street Extension in North Bergen where the right-of-way diverges from the existing right-of-way and where new APEs were developed. Revisions to other project elements for the Preferred Alternative that also resulted in revised APEs include Leonia Station parking deck, bus pullouts, and the Leonia High School pedestrian overpass; Ridgefield Station bus pullouts and pedestrian access; Englewood Town Center Station platforms, parking area, double track, and new park; and Englewood Hospital and Medical Center Station pedestrian improvements and existing parking facility.

The SDEIS Phase I Analysis was conducted to identify potentially significant archaeological resources within the revised archaeological APEs and to assess disturbance of the sites resulting from past land uses. The Phase I Analysis process is the same as described in the DEIS. A more detailed Phase II Analysis, the process of which is the same as described in the DEIS, would be undertaken if necessary to establish the integrity and National Register eligibility and significance of resources identified in the Phase I Analysis. In the event that previously non-recorded archaeological resources are encountered during construction, procedures to determine appropriate treatment and mitigation measures are the same as discussed in the DEIS and in the Draft Programmatic Agreement (refer to Appendix K). The DEIS Appendix I includes a narrative of prehistoric and early historic conditions of the study area. A history of the Northern Branch is also referenced in Appendix I of the DEIS.

24.3. Environmental Review

For each newly proposed project element, reviews of the land use history and historic cartographic sources were performed to identify any potential for unmapped archaeological resources. Prehistoric developments are not always documented and any surviving well-drained terraces adjacent to confluences or large areas of wetlands can be expected to produce evidence of aboriginal settlement. For sites that have no integrity or where the soil integrity has been destroyed by previous developments, no further analysis would be required. Areas with the potential for prehistoric sensitivity are described for each municipality.

24.3.1. Existing Conditions

Table 24-1 identifies the locations of the known and potential archaeological resources in the study area. Revised APEs showing previously and newly identified archaeological resources are mapped on Figures
24-1 through 24-10. The figures are followed by a discussion of the changes to the APEs since the DEIS and any newly identified resources are discussed in more detail by municipality. There were no changes to the APE for Fairview, Palisades Park Station, or Englewood Route 4 Station and vehicle base facility (VBF) since the DEIS; therefore, there is no discussion for those locations.

### Table 24-1: Archaeological Sensitivity for the Preferred Alternative

<table>
<thead>
<tr>
<th>Location</th>
<th>Prehistoric Sensitivity</th>
<th>Land Use History</th>
<th>Present Condition</th>
<th>Evaluation</th>
<th>Evaluation of Resource</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NORTH BERGEN</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<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>2011 DEIS; 2014 SDEIS</td>
</tr>
<tr>
<td>91st Street Station</td>
<td>Close to Wolf Creek headwaters</td>
<td>No structures noted on maps. All present buildings post-1950.</td>
<td>Heavy modified landscape. Piles of demolition debris in proposed parking area. Wolf 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>2011 DEIS; 2014 SDEIS</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. 1859 Station on site of later stations.</td>
<td>No integrity of earlier station.</td>
<td>2011 DEIS</td>
</tr>
<tr>
<td>Rail Right-of-Way – Site 3</td>
<td>Wolf Creek unnamed tributary Crossing</td>
<td>Railroad Bridge over Wolf Creek unnamed tributary.</td>
<td>Railroad Bridge over Wolf Creek unnamed tributary.</td>
<td>No recorded archaeological resources. Chance of intact soils and prehistoric resources extremely low.</td>
<td>2011 DEIS</td>
</tr>
<tr>
<td><strong>RIDGEFIELD</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rail Right-of-Way – Site 3</td>
<td>Wolf Creek unnamed tributary Crossing</td>
<td>Railroad Bridge over Wolf Creek unnamed tributary.</td>
<td>Railroad Bridge over Wolf Creek unnamed tributary.</td>
<td>No recorded archaeological resources. Chance of intact soils and prehistoric resources extremely low.</td>
<td>2011 DEIS</td>
</tr>
<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>2011 DEIS</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>2011 DEIS</td>
</tr>
</tbody>
</table>
Table 24-1: Archaeological Sensitivity for the Preferred Alternative (continued)

<table>
<thead>
<tr>
<th>Location</th>
<th>Prehistoric Sensitivity</th>
<th>Land Use History</th>
<th>Present Condition</th>
<th>Evaluation</th>
<th>Evaluation of Resource</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RIDGEFIELD</strong> (continued)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></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. Vacant parcel and sidewalk/parking in areas of probably bus pullouts.</td>
<td>No recorded archaeological resources. Soil integrity destroyed.</td>
<td>2011 DEIS; 2015 SDEIS</td>
</tr>
<tr>
<td>Palisades Park Station</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>2011 DEIS</td>
</tr>
<tr>
<td><strong>LEONIA</strong></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<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>2011 DEIS</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>Proposed bus pullouts; Overpeck County Park.</td>
<td>Possible survival of below-ground remains. Proximity to Overpeck Creek gives area moderate sensitivity for prehistoric resources.</td>
<td>2011 DEIS; 2015 SDEIS</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. Observation of soil cores at parking deck site in October 2014 establish no sensitivity for historic or prehistoric resources.</td>
<td>2011 DEIS; 2015 SDEIS</td>
</tr>
<tr>
<td><strong>ENGLEWOOD</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<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>2011 DEIS</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>2011 DEIS</td>
</tr>
</tbody>
</table>
### Table 24-1: Archaeological Sensitivity for the Preferred Alternative (continued)

<table>
<thead>
<tr>
<th>Location</th>
<th>Prehistoric Sensitivity</th>
<th>Land Use History</th>
<th>Present Condition</th>
<th>Evaluation</th>
<th>Evaluation of Resource</th>
</tr>
</thead>
<tbody>
<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 verge.</td>
<td>Possible survival of below-ground remains of station.</td>
<td>2011 DEIS</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>2011 DEIS</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>2011 DEIS</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>2011 DEIS</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 area to east of the rail right-of-way.</td>
<td>Historic Archaeological Resources may be present in parking area to be reconfigured. Proposed treatment through program of archaeological monitoring. Evaluation and treatment of identified resources in accordance with Stipulation II.7 of Draft Programmatic Agreement.</td>
<td>2011 DEIS; 2015 SDEIS</td>
</tr>
<tr>
<td>Rail Right-of-Way – Site 12</td>
<td>No</td>
<td>Overpeck Creek Crossing</td>
<td>Railroad Bridge over Creek.</td>
<td>No recorded archaeological resources. Chance of intact soils and prehistoric resources extremely low.</td>
<td>2011 DEIS</td>
</tr>
<tr>
<td>Englewood Hospital and Medical Center 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. If construction is planned to the north of the existing parking deck, use provisions of the Draft Programmatic Agreement for the discovery of human skeletal remains (II.6) and unanticipated discovery (II.7), including clear annotations and directions on construction plans.</td>
<td>2011 DEIS; 2015 SDEIS</td>
</tr>
</tbody>
</table>

Source: Hunter Research, 2015
Northern Branch Freight Yard Flyover

Figure 24-1

Archaeology APE
HBLR Stations
Proposed Alignment
At Grade
Viaduct
Hudson Bergen Light Rail
Municipality

Source: USDA NRCS HiRes County Mosaic
Northern Branch
69th St Substation

Figure 24-2

Archaeology APE
Proposed Alignment
At Grade
Municipality

Source: USDA NRCS HiRes County Mosaic

NJTRANSIT
The Way To Go.
Northern Branch
91st Street Station

Figure 24-3

Station Area Features
- Parking Area
- Pedestrian Walkway
- Platform
- 85th Street Extension
- 85th Street Railroad Underpass
- Archaeology APE
- Proposed Stations

Proposed Alignment
- At Grade
- Viaduct
- Municipality

Source: USDA NRCS HiRes County Mosaic

NJTRANSIT
The Way To Go.

JACOBS
Hendricks Cswy
Broad Ave
Hackensack
Junction Station Site
(Site 4)

Bergen County
Hudson County
Manhattan

Northern Branch
Ridgefield Station

Figure 24-5

Archaeological Resource
Station Area Features
- Bus Pullout
- Parking Area
- Pedestrian Walkway
- Platform
- Archaeology APE
- Proposed Stations
- Proposed Alignment
- At Grade
- Underpass
- Municipality

Source: USDA NRCS HiRes County Mosaic
Northern Branch
Palisades Park Station

Figure 24-6

Station Area Features
- Bus Pullout
- Drop Off Area
- Parking Area
- Pedestrian Walkway
- Platform
- Archaeology APE

Proposed Stations

Proposed Alignment
- At Grade
- Underpass
- Municipality

Source: USDA NRCS HiRes County Mosaic
Soil borings conducted for the nearby parking deck indicate no sensitivity for archaeological resource.

Soil boring observations October 2014 confirm no sensitivity for archaeological resource.
Northern Branch
Englewood
Route 4 Station

Figure 24-8

Archaeological Resource
Station Area Features
- Drop Off Area
- Parking Area
- Pedestrian Walkway
- Pedestrian Overpass
- Platform
- VBF
- Archaeology APE

Proposed Stations
Proposed Alignment
- At Grade
- Underpass

Municipality

Sources: USDA NRCS High County Mosaic

NJTRANSIT
The Way To Go.

JACOBS®
Archaeological sensitivity in parking area

Northern Branch
Englewood
Town Center Station

Figure 24-9

Archaeological Resource
Station Area Features
- Park
- Pedestrian Walkway
- Platform
- Reconfigured Parking Area
- Archaeology APE

- Proposed Stations
- Proposed Alignment
  - At Grade
- Municipality

Source: USDA NRCS HiRes County Mosaic
Archaeological sensitivity in parking area

Prehistoric Sensitivity at Creek Crossing (Site 12)

Archaeological sensitivity in parking area

Figure 24-10

Northern Branch
Englewood Hospital & Medical Center Station

Archaeological Resource

Station Area Features
- Bus Pullout
- Drop Off Area
- Parking Area
- Pedestrian Walkway
- Pedestrian Overpass
- Platform
- Archaeology APE

Proposed Stations
- Proposed Alignment
  - At Grade

Municipality

Source: USDA NRCS HiRes County Mosaic

NJ TRANSIT
The Way To Go.

JACOBS
North Bergen
Supplemental APEs were assessed in North Bergen for revised project elements. Although the Viaduct over the CSX North Bergen Yard crosses the northern portion of the site of the New Durham Station, the previous assessment of this potential archaeological resource, which found that it does not retain any integrity, was confirmed.

Leonia
Archaeological monitoring of soil borings conducted in October 2014 at the proposed parking area in Overpeck County Park, Leonia, and an examination of the project boring logs identified no evidence that would suggest the presence of significant, deeply buried prehistoric or historic archaeological resources. It is concluded that the proposed construction of a parking deck at Overpeck County Park in Leonia, as currently planned, would not impact archaeological resources. No further archaeological investigation is required.

The proposed bus pullouts on the eastbound and westbound sides of Fort Lee Road to the west of the rail right-of-way were assessed and are not anticipated to affect any known or potential archaeological resources. The impact of constructing the bus pullouts would be confined to the upper part of the soil profile alongside a previously widened road. Previously conducted testing to the south for the proposed parking deck showed that this area is probably composed of recent fill materials. No further archaeological investigation is required.

Englewood
The parking area to be reconfigured at Englewood Town Center is coincident with the location of the sites of 19th century structures. These are considered potentially significant and construction activity at the proposed parking area should be accompanied by a program of archaeological monitoring to confirm the presence or absence of these potential historic resources. Evaluation and treatment of identified resources should then take place in accordance with Stipulation II.7 of the Draft Programmatic Agreement (refer to Appendix K).

Neither the proposed restored lawn at Depot Square (Veterans Memorial Park) nor the proposed public park west of the rail right-of-way and south of West Palisade Avenue have the potential to affect known or potentially significant archaeological resources. The lawn area appears never to have been developed or occupied by buildings. The proposed new park area had commercial buildings erected on the West Palisade Avenue frontage in the late 19th century. If these structures remain as archaeological resources it is not anticipated that they would meet National Register Criterion D. Similarly, the assessment does not indicate any likelihood of their significance under Criteria A, B, or C.

The location of the proposed shared parking area at Englewood Hospital and Medical Center Station, which is an existing parking deck for the hospital users, may possibly impact unmarked human burials, should any improvements to the facility take place in the area of archaeological sensitivity. Should construction take place in the vicinity of the Brookside Cemetery, it is recommended that this issue be addressed through the provisions of the Draft Programmatic Agreement (refer to Appendix K) for the discovery of human skeletal remains (II.6) and unanticipated discovery (II.7), including clear annotations and directions on construction plans.

24.3.2. Potential Impacts and Mitigation

24.3.2.1. 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 revised APEs. It is assumed that
archaeological resources within and adjacent to the right-of-way would remain the same as the existing conditions.

24.3.2.2. Preferred Alternative

In North Bergen, Fairview, Ridgefield, and Palisades Park, no additional archaeological resources have been identified that would be disturbed by any elements associated with the Preferred Alternative. The known resource of the 1859 New Durham Station Site, impacted by the Viaduct over the CSX North Bergen Yard, is not considered potentially significant because of its lack of integrity.

In Leonia, the parking deck would be located predominantly on an existing surface parking lot. The bus pullouts would be constructed on areas that are anticipated to be composed of recent fill materials. Phase IB examination of soil borings in 2014 confirm that no impacts are anticipated in Leonia.

In Englewood, there is the potential for survival of below-ground remains of coal sheds in the vicinity of the reconfigured parking area at Englewood Town Center and possibly of human burials at the Englewood Hospital parking area. Construction in this area should be accompanied by a program of archaeological monitoring to confirm the presence or absence of these potential historic resources. Because any alterations to the existing Englewood Hospital parking deck would take place away from the sites of potential archaeological sensitivity, these would not be impacted. No other archaeological resources have been identified that would be disturbed by any elements associated with the construction of the station sites.

Mitigation – In the event that unanticipated resources are found along the alignment during construction, mitigation measures described in the Draft Programmatic Agreement (refer to Appendix K) would be implemented. 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. Refer to Chapter 27 for construction mitigation.

24.4. Summary of Potential Environmental Effects

Table 24-2 summarizes the potential for adverse impacts to archaeological resources within the Northern Branch study area. While no impacts are anticipated to occur for identified and evaluated archaeological resources, the potential remains for unanticipated 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, which would be reviewed, revised, and signed by the SHPO, FTA, and NJ TRANSIT, can be found in Appendix K. In the event that unanticipated resources are found along the alignment during construction, measures described in the DEIS Methodology section and documented in the Draft Programmatic Agreement would be implemented. These would include archaeological monitoring during ground disturbance at Englewood Town Center reconfigured parking areas.
Table 24-2: Archaeological Assessment of Project Elements for the Preferred Alternative

<table>
<thead>
<tr>
<th>Municipality and Project Element</th>
<th>Preferred Alternative</th>
</tr>
</thead>
</table>

**NORTH BERGEN:** Four archaeological resources assessed

<table>
<thead>
<tr>
<th>Rail ROW (3)</th>
<th>Impacts: None</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mitigation: None required</td>
</tr>
<tr>
<td>91st Street Station</td>
<td>Impacts: None</td>
</tr>
<tr>
<td></td>
<td>Mitigation: None required</td>
</tr>
</tbody>
</table>

**FAIRVIEW:** No archaeological resources identified for assessment

**RIDGEFIELD:** Four archaeological resources assessed

<table>
<thead>
<tr>
<th>Rail ROW (3)</th>
<th>Impacts: None</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mitigation: None required</td>
</tr>
<tr>
<td>Ridgefield Station</td>
<td>Impacts: None</td>
</tr>
<tr>
<td></td>
<td>Mitigation: None required</td>
</tr>
</tbody>
</table>

**PALISADES PARK:** One archaeological resource assessed

<table>
<thead>
<tr>
<th>Palisades Park Station</th>
<th>Impacts: None</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mitigation: None required</td>
</tr>
</tbody>
</table>

**LEONIA:** Three archaeological resources assessed

<table>
<thead>
<tr>
<th>Rail ROW (2)</th>
<th>Impacts: None</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mitigation: None required</td>
</tr>
<tr>
<td>Leonia Station</td>
<td>Impacts: None</td>
</tr>
<tr>
<td></td>
<td>Mitigation: None required</td>
</tr>
</tbody>
</table>

**ENGLEWOOD:** Nine archaeological resources assessed

<table>
<thead>
<tr>
<th>Rail ROW (6)</th>
<th>Impacts: None</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mitigation: None required</td>
</tr>
<tr>
<td>Englewood Rt. 4 Station and VBF</td>
<td>Impacts: None</td>
</tr>
<tr>
<td></td>
<td>Mitigation: None required</td>
</tr>
<tr>
<td>Englewood Town Center Station</td>
<td>Impacts: Historic archaeological resources in parking area</td>
</tr>
<tr>
<td></td>
<td>Mitigation: Identification, evaluation, and treatment by documentation under stipulations of Programmatic Agreement (refer to Appendix K)</td>
</tr>
<tr>
<td>Englewood Hospital Station</td>
<td>Impacts: Historic archaeological resources adjacent to the existing parking facilities.</td>
</tr>
<tr>
<td></td>
<td>Mitigation: Identification, evaluation, and treatment by documentation under stipulations of Programmatic Agreement (refer to Appendix K)</td>
</tr>
</tbody>
</table>

**NORTH OF ENGLEWOOD:** No archaeological resources identified for assessment

*Source: Hunter Research, 2015*
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