3.1 INTRODUCTION

This chapter examines the potential for the No Action and Build Alternative to impact land use, zoning, and public policy. Land use is the activity occurring on a particular piece of land and in the structures that occupy the land. Land uses may be categorized broadly (e.g., residential, commercial, industrial) or in more detail by specifying the particular use. Zoning is the classification and regulation of land according to use categories, developed by the local jurisdiction. Zoning controls the type, density, and bulk of development in a given jurisdiction by establishing districts where specific land uses are allowed. Public policy may include development plans and other types of policies adopted by localities to identify community goals and guide development and green space preservation. Although not required by NEPA, public policy is being analyzed to evaluate compliance with local requirements. The methodology for this analysis is presented below, followed by a description of existing baseline conditions, projected future conditions without the proposed Project, and the potential for impacts to result from advancing the Build Alternative. Property acquisition requirements associated with the Build Alternative are also identified.

3.2 METHODOLOGY

Two study areas were developed for this analysis:

- 1) The proposed Project area plus a 500-foot buffer on either side of the electrical line routes (including alternative routes), new substations and HBLR Headquarters.
- 2) The two-mile study area, which includes the area within a two-mile radius of the Main Facility's stacks on the Koppers Koke Site, is used to address air quality modeling regulations and identify sensitive land uses within those boundaries (NJDEP 2009). In this chapter, the two-mile radius study area is for analysis of land use only.

The proposed Project area is defined as the potential construction footprint of the Build Alternative, and includes:

- The Main Facility and natural gas pipeline connection to the Main Facility (Preferred Alternative Project Components A and B);
- the railroad right-of-way, including the HBLR, that would be used for the proposed electrical lines (Preferred Alternative Project Components C, D, E and G, optional routing for Project Component D); and
- the NJ TRANSIT owned HBLR Headquarters property on Caven Point Avenue (Preferred Alternative Project Component F).

The 500-foot study area is used for analysis of land use, zoning and public policy. The land use, zoning and public policy analysis was performed according to the following methodology:

- Preparing land use and zoning maps based on published data, maps and other available documentation;
- Describing existing land uses and zoning in the study area and planned projects that are scheduled to be completed by 2021 (future No Action conditions);
- Qualitatively assessing the compatibility of the Build Alternative with existing and proposed land uses, and compliance with or variance from land use patterns, zoning and public policy initiatives;
- Evaluating the proposed Project's compliance with the *Koppers Coke Peninsula Redevelopment Plan* (the Redevelopment Plan) (NJMC 2013) including: setbacks, site development regulations, and local code requirements applicable to the zone and scale and type of development; and
- Identifying properties that need to be acquired in order to construct and operate the proposed Project, including partial and full permanent and temporary fee acquisitions and easements.

3.3 AFFECTED ENVIRONMENT

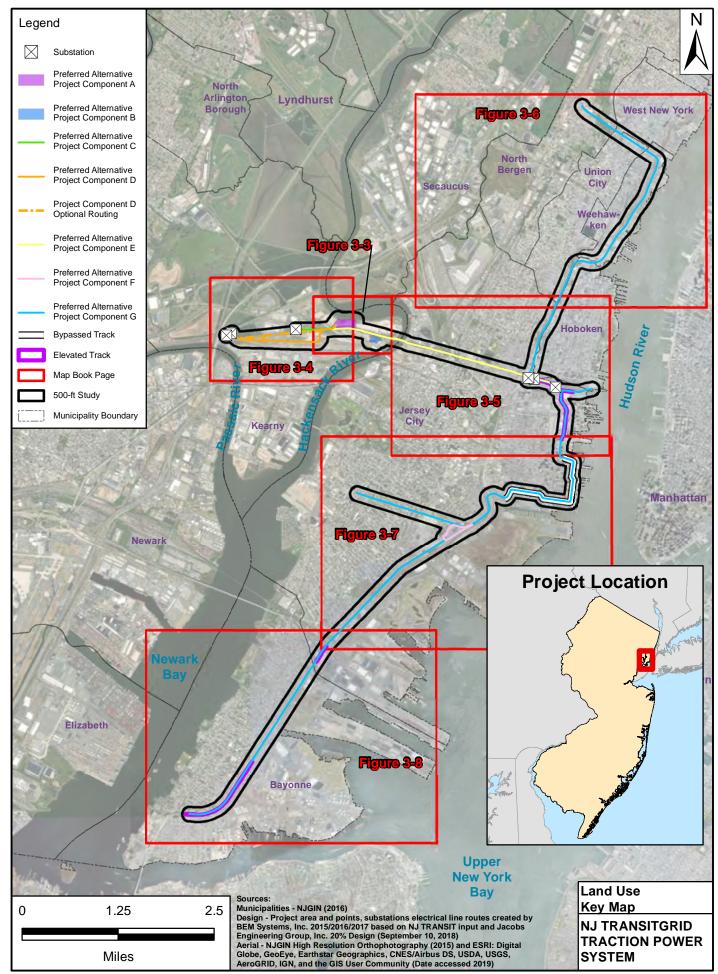
3.3.1 Land Use

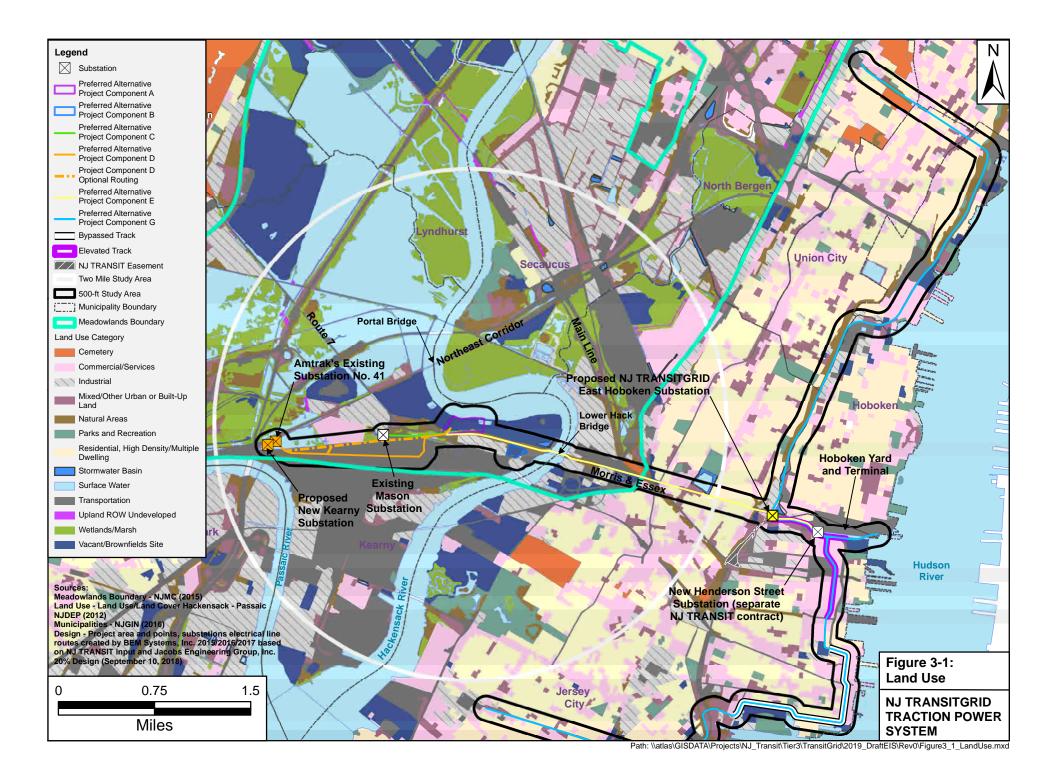
Land uses in both study areas for the Build Alternative are shown on Figures 3-1 through 3-8 and discussed separately below.

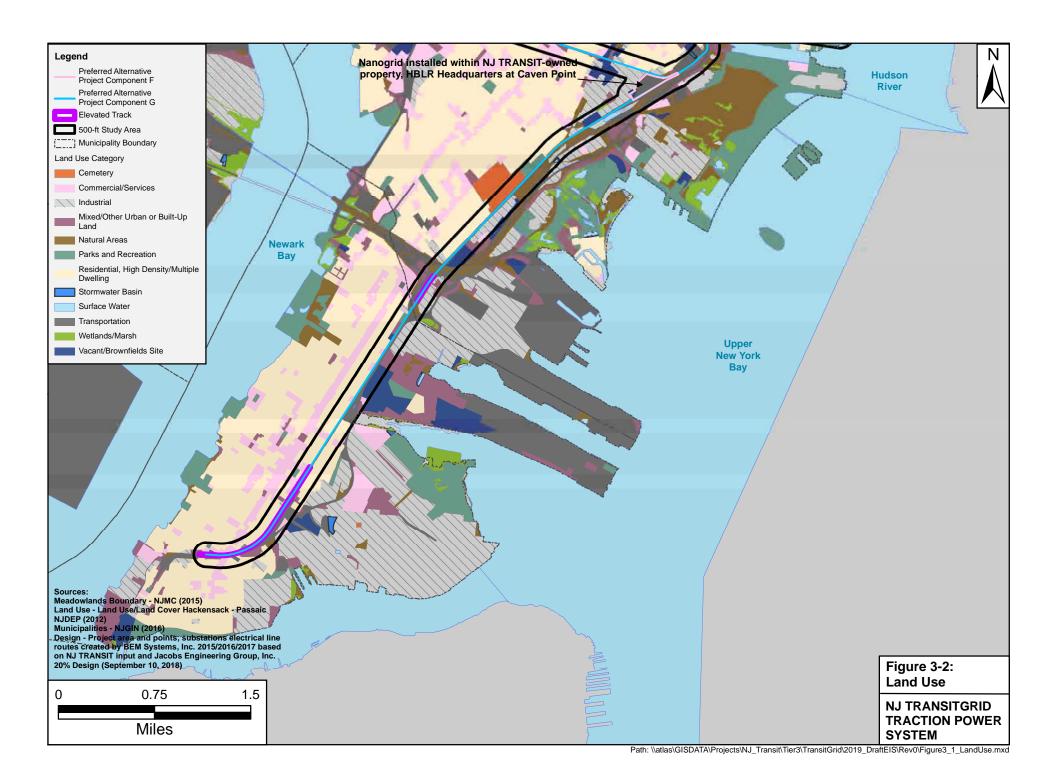
Project Area Plus 500-Foot Buffer

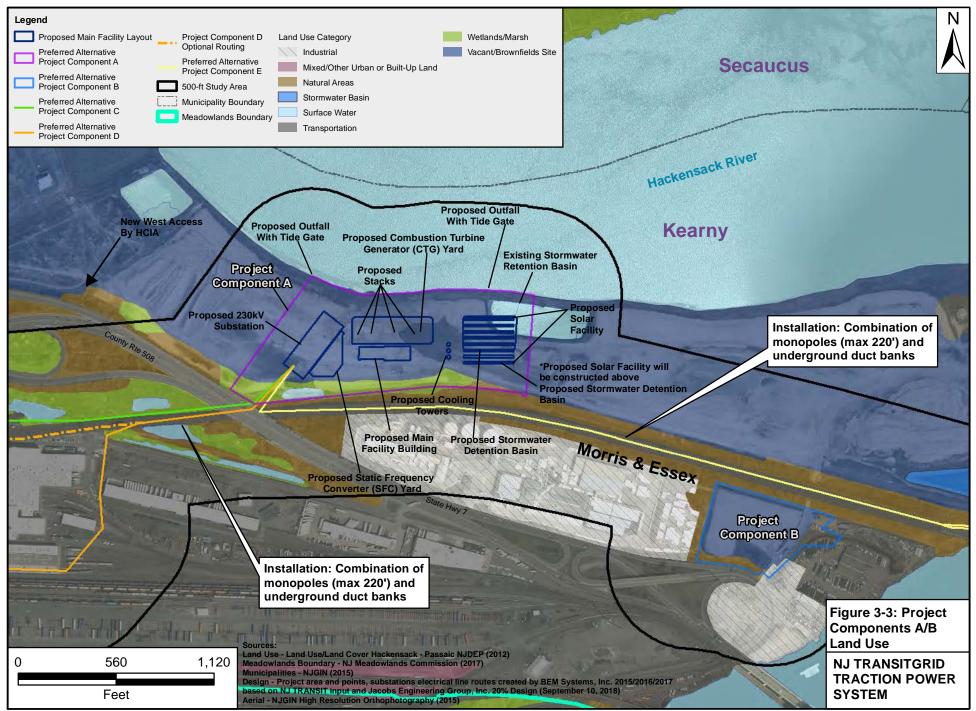
The proposed Project area extends from the new Kearny Substation location at the western end, adjacent to the existing Amtrak Substation No. 41 in the Town of Kearny, Hudson County, NJ, across the Hackensack River to the new NJ TRANSITGRID East Hoboken Substation (see Figure 3-1) and the Henderson Street Substation at the eastern end in Jersey City, Hudson County. The proposed Project area also includes the NJ TRANSIT owned HBLR Headquarters property on Caven Point Avenue in Jersey City for Preferred Alternative Project Component F and the approximately 14.4 miles of the HBLR where new electrical lines for Preferred Alternative Project Component G would be installed (see G in Figure 3-1 and Figure 3-2). The land uses near Project Components A through G are described below.

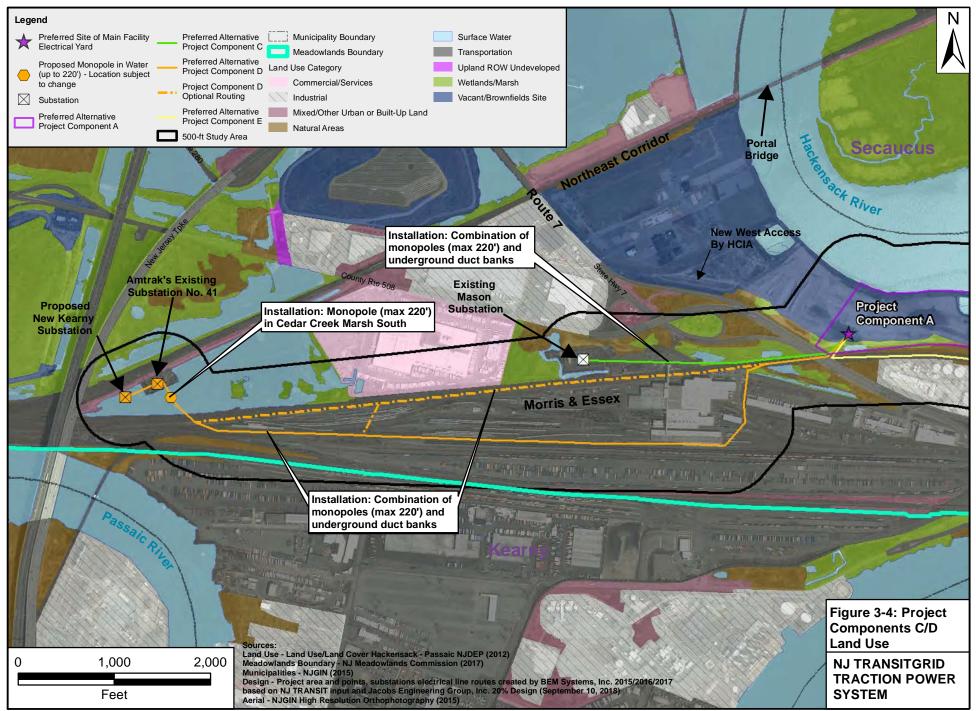
Preferred Alternative Project Components A (Main Facility) and B (six-acre parcel) are located in a heavily industrialized area (see Figure 3-1) on the northern end of the Kearny Peninsula and along the western shore of the Hackensack River. As shown in Figure 3-9, they are located within to the Redevelopment Area as defined in the Redevelopment Plan and are a part of the former "Koppers Seaboard Koke and By-Products Plant," also known as the "Koppers Koke Site." The Koppers Koke Site is approximately 170 acres in size and comprises two parcels—the large parcel to the north of NJ TRANSIT's Morris & Essex Line and the six-acre parcel south of the Morris & Essex Line. Entrances to the large parcel are located at One Fish House Road, through a culvert under the Morris & Essex Line, and an existing west access point that

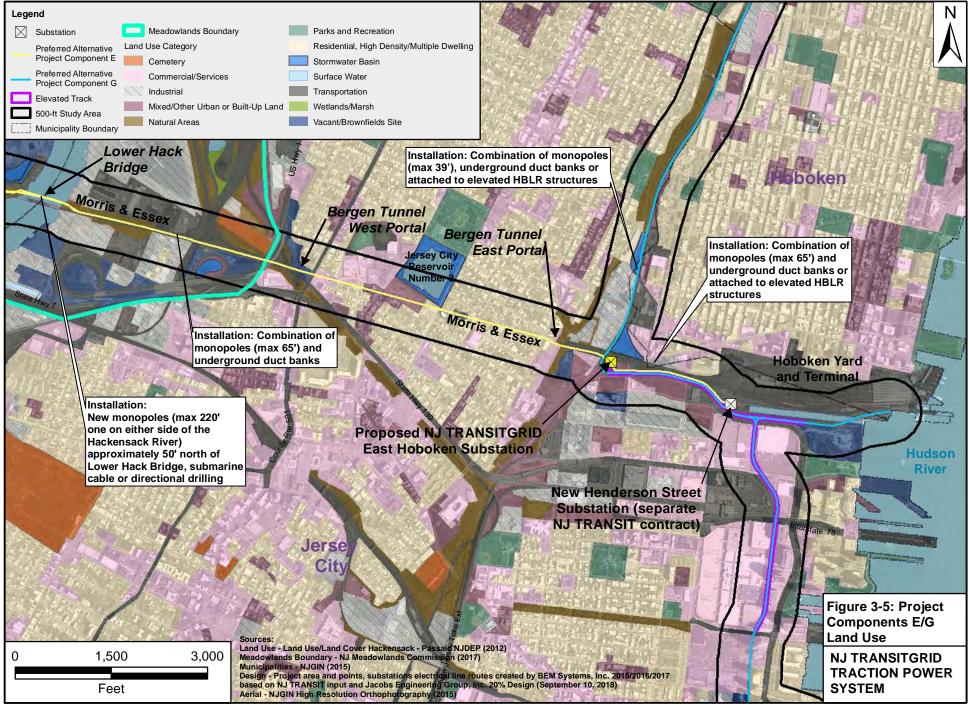


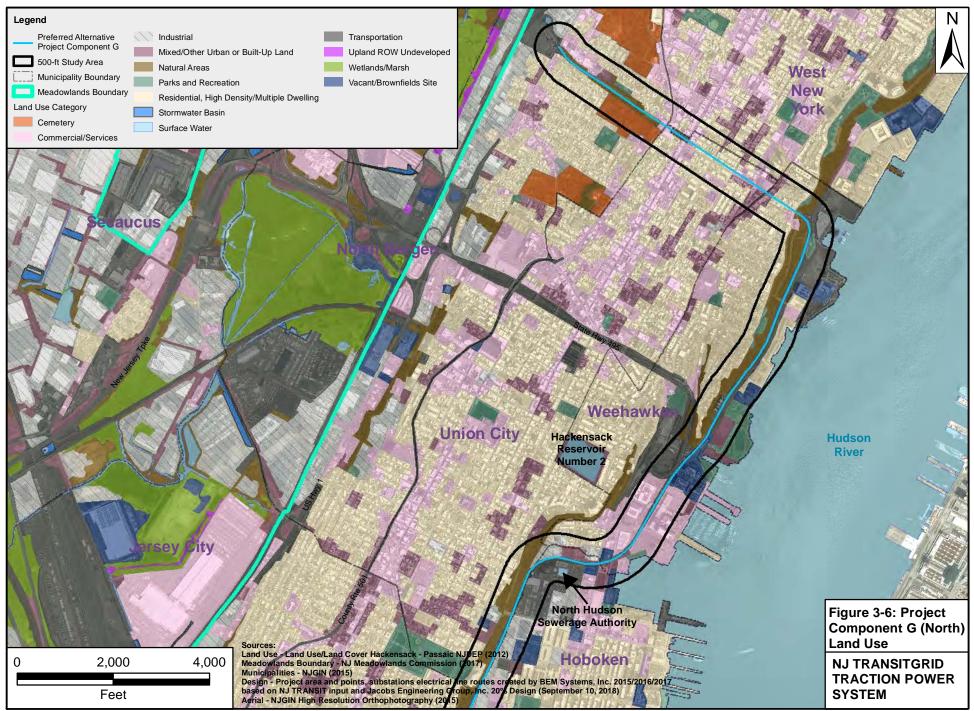






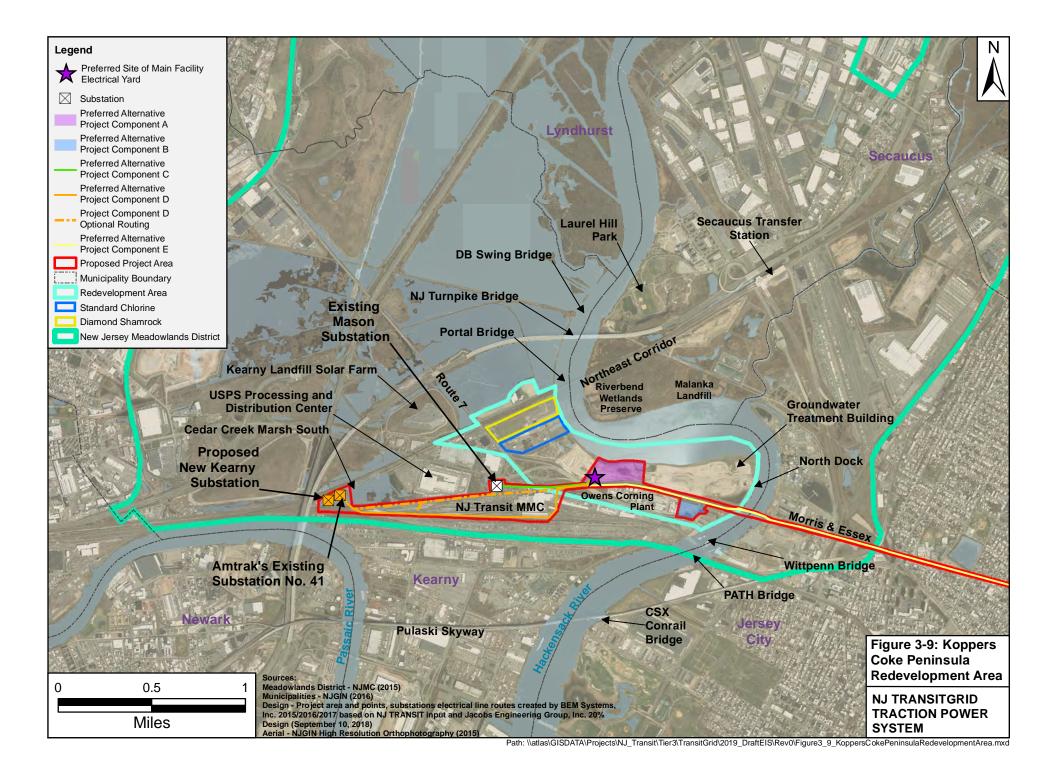












connects to Route 7. Both parcels are currently owned by HCIA. The large parcel was historically used for coke production and coal-tar processing. The Koppers Koke facility was constructed in 1917 and razed in 1979. The Koppers Koke Site includes Block 287, Lots 32.01, 54, 55, 56, 60, 61.02, 61.03, 62, 62.01, 63, 70, 70.01, 71, and 71.01. These block/lots are on the Known Contaminated Sites List (KCSL), maintained by the NJDEP to provide a record of sites with confirmed soil or water contamination at levels greater than the applicable cleanup criteria or standards. Bounded by the Hackensack River to the north and east, the Koppers Koke Site is generally flat, a result of recent site remediation efforts performed in accordance with an extensive Remedial Action Work Plan (discussed in detail in Chapter 14, "Contaminated Materials"). HCIA has prepared the site for redevelopment by placing processed dredged material (PDM) as a cap and to elevate the site. The Great Lakes Dredge & Dock Company (GLDD) operates a dredged material processing facility from the North Dock on the Hackensack River at the eastern end of the Koppers Koke Site. Two PSE&G high-voltage electrical towers are located on the site along the river, and a groundwater treatment building is located in the northeast portion of the site. NJ TRANSIT's Morris & Essex Line and Route 7 provide the southern boundary for the preferred site for the Main Facility (Project Component A) (see Figure 3-9).

The Koppers Koke Site is part of the Redevelopment Area, which encompasses approximately 367 acres and 74 former industrial properties that are either abandoned or vacant. These properties include the Owens Corning property and a liquid material receiving station and pipeline to the south of the Koppers Koke Site, and the Standard Chlorine Chemical Company (SCCC) and Diamond Shamrock properties to the northwest. The SCCC and Diamond Shamrock sites have extensive contamination and, together with the contiguous Koppers Koke Site, are considered brownfields sites—defined as "any former or current commercial or industrial site that is currently vacant or underutilized and on which there has been, or there is suspected to have been, a discharge of a contaminant" (NJMC 2013). The SCCC site is also a Superfund site listed on the USEPA Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) database.

Several redevelopment projects within the Redevelopment Area are in the planning stages. Two notable planned projects include:

- Koppers Koke Site / Warehousing Development—HCIA is working with a developer to redevelop approximately 126 acres of the Koppers Koke Site into a warehousing facility. The planned project is anticipated to result in two million square feet of warehouse space, occupying three lots that flank Project Component A. This redevelopment will include utility improvements and a frontage road spanning the Koppers Koke Site with access to Route 7. On August 21, 2017, an agreement was signed between the Morris Kearny Associates, LLC and NJSEA, providing the rights to redevelop the site to Morris Kearny Associates, LLC. No construction is currently authorized. (NJSEA 2017)
- SCCC / Diamond Shamrock Sites—The Town of Kearny is working with a developer to redevelop
 the SCCC and Diamond Shamrock properties, located to the northwest of the Koppers Koke Site.
 The planned project includes redevelopment of approximately 50 acres for warehousing

purposes, potentially including one 849,000 square-foot building that would span the two parcels. As of the date of this report, the construction schedule is not known.

The route of the proposed electrical line for Preferred Alternative Project Component C travels along the Morris & Essex Line to the Mason Substation (Figure 3-4). To avoid existing utilities, under the preferred alternative, the electrical line for Project Component D would extend west from the Main Facility along the Morris & Essex Line and depart from the Morris & Essex Line east of the Mason Substation and travel south around the MMC buildings and west along the MMC access rail and through Cedar Creek Marsh South to the existing Amtrak Substation No. 41 (total of 1.47 miles) (see Figure 3-4). As an optional routing, the electrical line could travel past Mason Substation through open water to the existing Amtrak Substation No. 41 in Cedar Creek Marsh South, (with possible brief south routing just before reaching the marsh) ending at the location of the new Kearny Substation. The study area for connectivity to the new Kearny Substation includes the rail yard that the electrical line will travel through. Existing land uses surrounding Preferred Alternative Project Components C and D, and the optional routing for Project Component D include the Cedar Creek Marsh South (surface water), a U.S. Postal Service processing and distribution center (commercial/services), Family Food Distributors (industrial), the MMC (transportation), and the CSX South Kearny Yard (transportation) (see Figure 3-4). Other land uses in this portion of the Project area include surface water, vegetated areas, and partially vegetated areas (designated by NJDEP as "up to 25% brush covered lands"). See Chapter 12, "Natural Resources," for detailed discussion of the natural environment (i.e., vegetation, wetlands, and waters) within the project area.

The electrical line route for Preferred Alternative Project Component E follows the existing railroad rightof-way and extends east from the Main Facility site across the Hackensack River, continuing through an industrial section of Jersey City and past historic Saint Peter's Cemetery to an intersection with John F. Kennedy Boulevard. Past John F. Kennedy Boulevard, the Preferred Alternative Project Component E electrical line route enters NJ TRANSIT's Bergen Tunnel beneath neighborhoods dominated by residential and commercial uses (see Figure 3-3 and 3-5). Upon exiting the Bergen Tunnel, the electrical line would continue along the Morris & Essex Line through a transportation corridor and connect the new NJ TRANSITGRID East Hoboken Substation to the Henderson Street Substation, the line would be divided with a feeder headed north on the HBLR easement (Preferred Alternative Project Component G), and a feeder headed east to feed Hoboken Yard and a small section of the HBLR in Jersey City. The NJ TRANSITowned HBLR Headquarters property on Caven Point Avenue is also included in the study area for the proposed nanogrid (Preferred Alternative Project Component F). Several mixed-use developments are planned near Preferred Alternative Project Component E, near the Bergen Tunnel East Portal. According to the City of Jersey City's Hoboken Avenue Redevelopment Plan (Jersey City 2015), the Hoboken Brownstone Company has plans to redevelop several properties near Hoboken Avenue and Monmouth Street:

• The former Van Leer Chocolate Factory site is being redeveloped into a residential condominium complex with a 1.5-acre public park. The two-phase project will entail two, six story apartment buildings with 568 residential units, 7,500 square feet of retail space, and parking. Construction is currently planned for completion in 2019 (Hoboken Brownstone Company 2017). This project is

included under the Cumulative Effects analysis as part of Chapter 18, "Indirect and Cumulative Effects.

Along Coles Street, about 5.5 acres of land is expected to be redeveloped into a large mixed-use development with a two-acre public park. The project is reported to include 1,181 residential units, about 90,000 square feet of retail space, and parking. The project received local Jersey City planning approvals in 2016, but the project has not commenced construction. No construction dates are currently available. (Hoboken Brownstone Company 2017)

Land uses along Preferred Alternative Project Component E are primarily transportation-related. Uses within the 500-foot buffer of Preferred Alternative Project Component E include vacant/brownfields sites, stormwater basins, industrial, commercial/services, mixed/other urban or built-up land, vegetation, surface water, residential (high density/multiple dwelling), cemetery, and up to 25% brush-covered land. Land uses over the Bergen Tunnel, which would not be impacted by the electrical line installation, include residential (high density/multiple dwelling), commercial/services, stormwater basin, and surface water Within the 500-foot buffer for Preferred Alternative Project Component F, land uses include commercial/services, mixed/other urban or built-up land, transportation, stormwater basin, industrial, and residential (high density/multiple dwelling).

Land uses within the 500-foot buffer for Preferred Alternative Project Component G in North Bergen are predominately industrial, commercial/services, residential, natural areas (vegetated buffers), and cemetery. Continuing east, the mapped land use of the study area in Union City and West New York includes commercial/services, residential, and transportation. As the HBLR alignment navigates south through Weehawken, adjacent land uses include primarily transportation, parks, and natural areas (vegetative buffers), with commercial, residential, industrial, and other uses nearby. To the south, where the HBLR alignment follows the border of Union City and Hoboken, the surrounding land uses are industrial (including a large bus depot and wastewater treatment plant), natural areas (vegetative buffers), commercial/services, and some residential areas. As the HBLR alignment continues south through Jersey City, the land uses vary but are predominately commercial/services, residential, park/open space, and industrial. Continuing south, land uses in the Bayonne portion of the study area include residential, industrial, commercial/services, and transportation.

Two-Mile Study Area

The two-mile study area is centered on the Main Facility site (Preferred Alternative Project Component A) and includes portions of Lyndhurst (Bergen County), Newark (Essex County), Kearny, Secaucus, and Jersey City (Hudson County). Much of the two-mile study area, including the Redevelopment Area, lies within the New Jersey Meadowlands District. The Hackensack River and the NJ TRANSIT Morris & Essex Line roughly divide the area into quadrants (see Figure 3-1).

The northwest quadrant (Lyndhurst and Kearny) is dominated by open water and wetland areas. It also contains numerous transportation rights-of-way and major roadways, Amtrak's Northeast Corridor, several landfills, warehouses, and brownfield redevelopment properties (including the Diamond

Shamrock and SCCC sites referenced above). The Kearny Landfill Solar Farm is a 3MW installation operated by PSE&G on a 13-acre section of a closed landfill known as "Landfill 1A."

The southwest quadrant (Kearny and Newark) is dominated by rail yards, industrial uses, and utilities. These include NJ TRANSIT's MMC and the CSX South Kearny Yard. There are no residential areas in this quadrant. The Hudson County Correctional Facility is located on South Hackensack Avenue in the southern portion of the Kearny Peninsula. Two of the three power generation facilities that are located within the two-mile study area are located in this quadrant: the PSE&G Fossil Kearny Generating Station (a 452MW gas-fired combustion turbine power generating station and retired 1925 power plant building), and the 81MW PSE&G Fossil Essex Generating Station, which is located across the Passaic River, in a heavy industrial area known as "Point No Point" in Newark (see Figure 3-10).

The northeast quadrant (Secaucus and Jersey City) is a mix of vegetation, recreational, transportation, industrial, vacant and residential and commercial areas. The 620MW PSE&G Fossil Hudson Generating Station is located along the Hackensack River in Jersey City (see Figure 3-10). Norfolk Southern's Croxton Intermodal Terminal is located in Jersey City, adjacent to the NJ International and Bulk Mail Center. A residential Jersey City neighborhood referred to as "The Heights" is located east of Tonnelle Avenue. Land uses in the Secaucus portion include the Northeast Corridor, Riverbend Wetland Preserve, the former Malanka Landfill, the Frank R. Lautenberg Secaucus Transfer Station and an associated residential complex, and Laurel Hill Park (see Figure 3-9).

The southeast quadrant (Jersey City) is a mix of industrial, vacant, and other uses along the waterfront and parks, residential, and commercial areas towards inland areas. The Holy Name Cemetery and the 150-acre Lincoln Park are located in this quadrant. Residential and commercial areas are present east of U.S. Route 1/9 and Route 440.

3.3.2 Zoning and Public Policy

Zoning designations for the study areas for Project Components A through G are shown on Figures 3-11 through 3-16 and reflect the zoning codes of the individual municipalities except within the Meadowlands District, where the District's zoning supersedes the local designation. Furthermore, within the designated Redevelopment Area, the Redevelopment Plan supersedes NJSEA prior zoning.

Project Study Area Plus 500-Foot Buffer

With the exception of the eastern portion of Preferred Alternative Project Component E and all of Preferred Alternative Project Components F and G, this study area lies within the Meadowlands District (formerly known as the Hackensack Meadowlands). The Meadowlands District encompasses about 32 square miles in Bergen and Hudson Counties, of which approximately 13 square miles are wetlands, waterways, and open space. The NJSEA, which recently incorporated the MRC, formerly the NJMC, is charged with environmental protection and stewardship and promoting orderly development in the Meadowlands District.



Most of the area surrounding Project Components A, B, C, and D (including all options for Project Component D) is zoned as intermodal (see Figures 3-11 and 3-12). The area around Amtrak's Substation No. 41, including the location of the new Kearny Substation (Preferred Alternative Project Component D), is a designated Environmental Conservation Zone, which consists of areas designated for open space and habitat protection and enhancement, including wetland restoration and/or mitigation and potential wildlife management areas, and a Redevelopment Area is present at the western end of the 500-foot study area. Areas of Preferred Alternative Project Component E within the Kearny Peninsula are designated intermodal, until the electrical line route reaches the Hackensack River. The Preferred Alternative Project Component E electrical line route passes through the Meadowlands District Heavy Industrial zone in Jersey City and a Jersey City Highway Commercial zone prior to entering the Bergen Tunnel. Within the 500-foot buffer, areas are also zoned for Park/Open Space, Transportation, and Residential Redevelopment (see Figure 3-13). Upon exiting the tunnel portal on the Morris & Essex Line's right-of-way, the 500-foot buffer zone includes portions of Jersey City's Redevelopment Area, and Hoboken Industrial zones (see Figure 3-13). Areas are also zoned as Medical, Residential and Transportation in Jersey City.

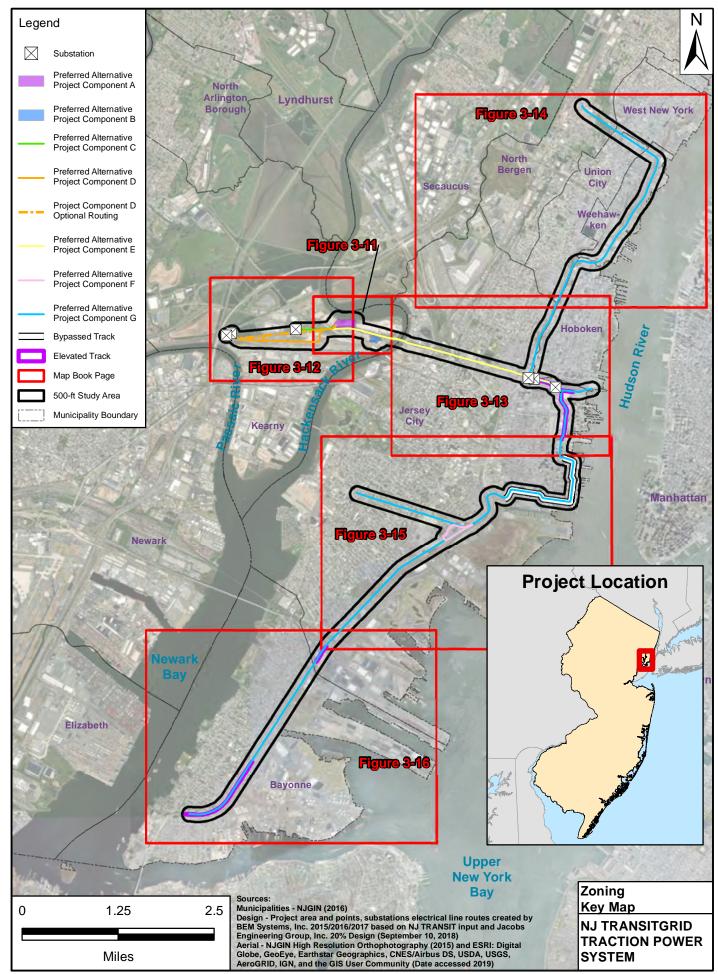
Preferred Alternative Project Component F consists of a smaller "nanogrid" that would be installed on NJ TRANSIT-owned property at the HBLR Headquarters on Caven Point Avenue in Jersey City. The nanogrid would consist of two approximately 2MW generators driven by natural gas reciprocating engines and will supply power to the southern half of the HBLR during emergencies. Some measure of stored energy is also anticipated in the form of batteries or flywheels to help smooth out the instantaneous load profile of the HBLR traction loads. The 500-foot buffer of Preferred Alternative Project Component F includes Redevelopment Areas (see Figure 3-14).

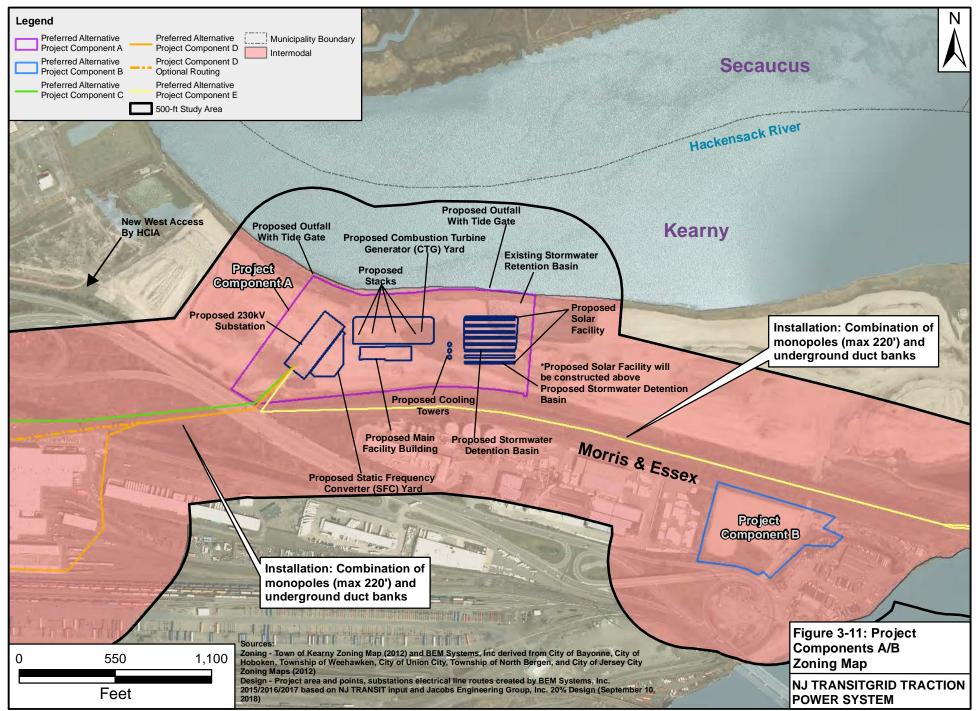
For Preferred Alternative Project Component G, from Tonnelle Avenue in North Bergen, the HBLR travels east toward Bergenline Avenue. The study area within North Bergen is zoned Commercial, Residential, Developed Area and Park/ Open Space. From Bergenline Avenue in Union City, the HBLR alignment continues east to the Weehawken Tunnel, where the HBLR is below ground through Union City, and surfaces west of Port Imperial in Weehawken. The study area extends into the southern portion of West New York. Zoning within the study area (above the Weehawken Tunnel) through Union City includes: Redevelopment Area, Industrial, Park/ Open Space, Commercial and Developed Space.

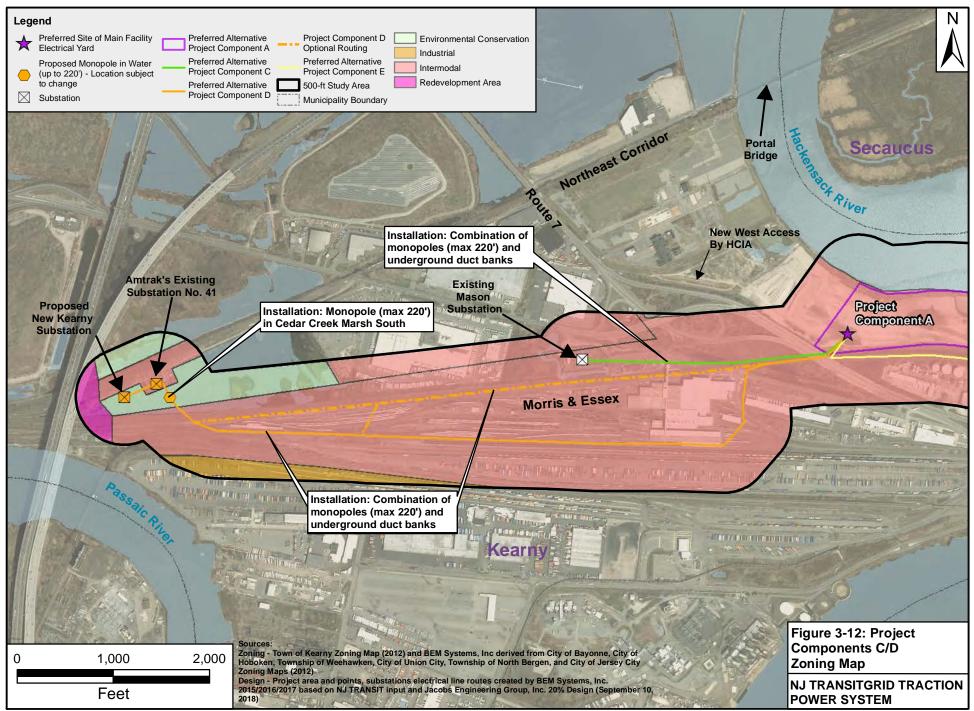
From Port Imperial, the HBLR alignment continues south through Weehawken, Hoboken, and Union City, toward Hoboken Terminal. The study area extends into the western border of Hoboken. The zoning in this area includes Redevelopment Area, Industrial, Park/ Open Space, Commercial and Historic District.

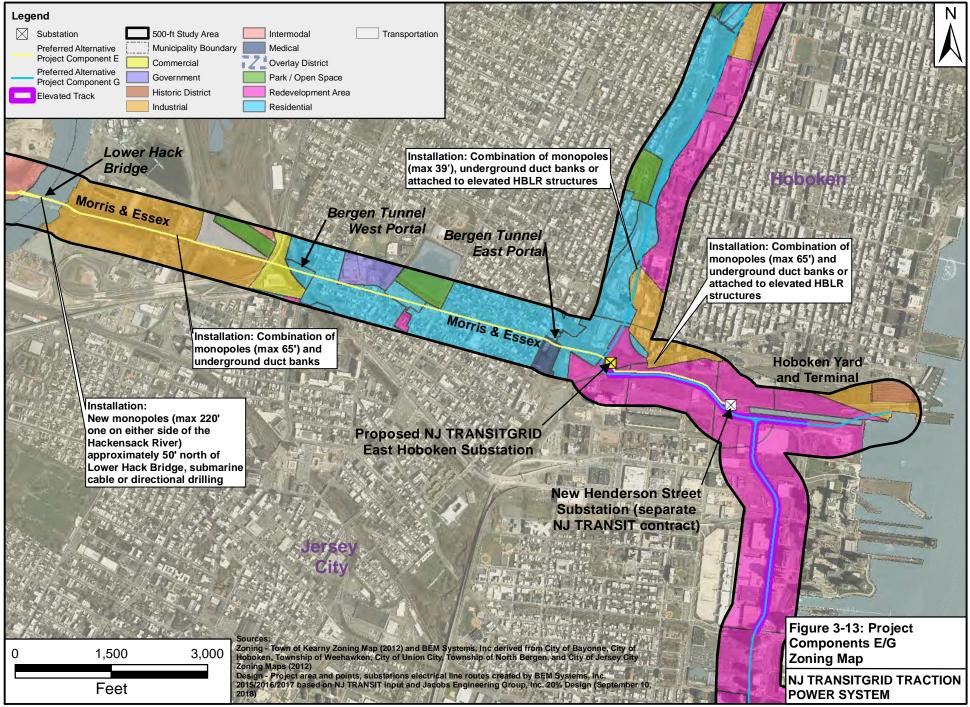
West and south of Hoboken Terminal, the HBLR alignment travels through Jersey City toward 45th Street, with a western spur terminating at West Side Avenue. The zoning in this area includes Redevelopment Area, Industrial, Park/ Open Space, Commercial and Historic District.

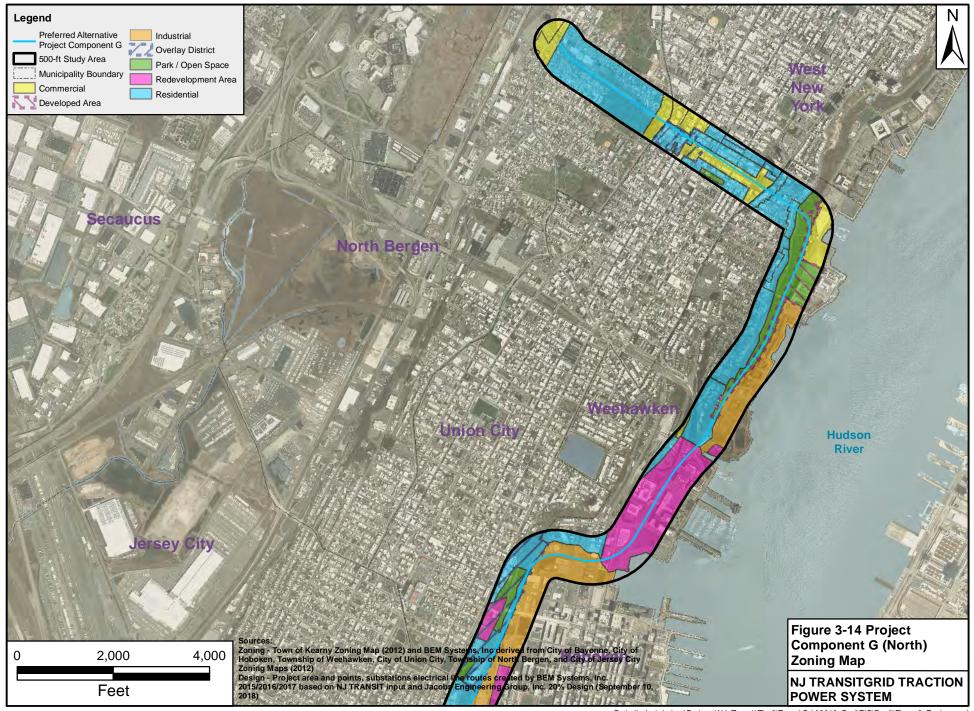
From 45th Street, the HBLR alignment continues south through the City of Bayonne toward the southern terminus at 8th Street. A large portion of the study area is zoned as Residential, Commercial, Industrial and Redevelopment Area.

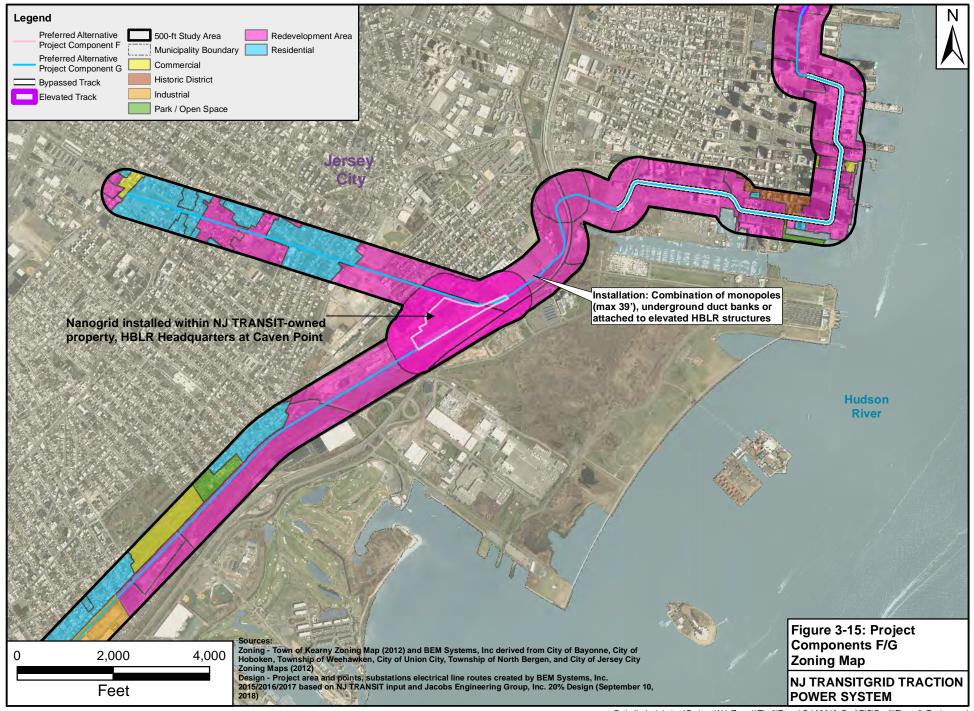


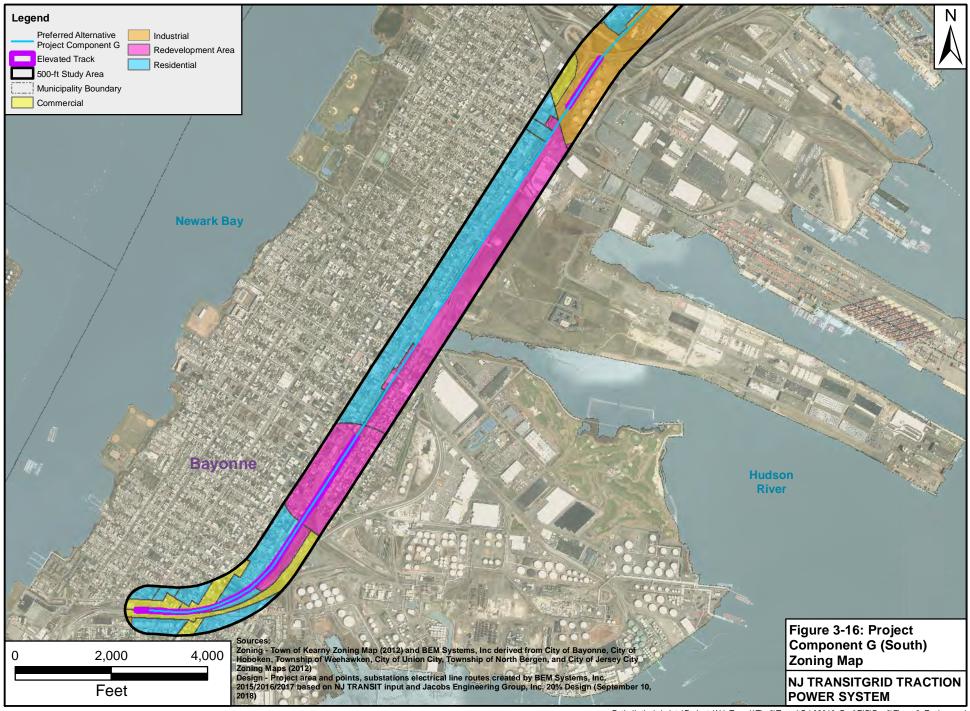












Zoning changes are not required or expected to result from the activities associated with Preferred Alternative Project Component G, as the existing light rail has operated along the alignment since 2000, and the land use and layout of the alignment would not change as a result of Preferred Alternative Project Component G. The proposed electrical lines associated with Preferred Alternative Project Component G would be installed within the existing transportation right-of-way where electrical lines are currently prevalent. No significant adverse impacts to zoning are expected under Preferred Alternative Project Component G.

Land development on the Koppers Koke Site is regulated by the Redevelopment Plan, which provides an outline for redevelopment to encourage the remediation of contaminated sites and return defunct and underutilized properties to active use, allowing them to contribute to the local economy. Prior to issuance of the Redevelopment Plan, the Koppers Koke Site was designated as a Meadowlands District Intermodal B zone, which is designed to accommodate high-intensity transportation facilities that are located proximate to rail lines in the Meadowlands District and whose operations are related to port and rail activities, including rail and trucking facilities and supporting uses. The Redevelopment Plan applies a zoning overlay onto certain properties within Blocks 286 and 287 in Kearny, including the Koppers Koke Site. The Redevelopment Plan proposes to provide for a variety of uses to support industrial usage of the properties while also providing opportunities for services to support industry within the Redevelopment Area. The recommended land uses for the planned development of the area can be classified into five planning categories; industrial/storage/truck uses, transport support services, neighborhood services, public/quasi-public uses (e.g., light public utilities), and water-dependent uses. The plan acknowledges that the historic contamination issues render the area unsuitable for residential development. The plan provides a comprehensive list of specific allowable uses, ranging from essential public services to heavy industry to "area-specific power generation facilities," defined as a facility producing power for the sole purpose of serving single or multiple properties within the redevelopment area boundary. In addition to permissible uses, the plan specifies bulk requirements, design criteria, and other redevelopment standards that supersede existing regulations. The Redevelopment Plan indicates that "unless superseded herein, all uses shall comply with the Category C environmental performance standards in N.J.A.C.§ 19:4-7.1 (2013)." (NJMC 2013).

Other public policy and adopted plans that guide development in the study area include:

• 2004 NJMC Master Plan. The latest Master Plan for the Meadowlands District includes land use plans for the entire district to guide future redevelopment and foster a healthy Meadowlands economy through the implementation of strategies that promote redevelopment and infill development, while minimizing the development of greenfields. Redevelopment of underutilized brownfield sites is one of the goals and the Redevelopment Area is identified as one of 20 planning areas, designated as Logistics Intermodal/Industrial. Traditionally associated with heavy industry, the Logistic Intermodal/ Industrial planning area provide the opportunity for meeting the demands of the logistics and intermodal industries. The intermodal designation is derived from the use of multiple transportation modes to move goods from manufacturing facilities to the consumer market. District zoning regulations and the Hackensack District Meadowlands Zoning

Map serve as the implementation tool for the land use planning objectives of the Master Plan. (NJMC 2004; (N.J.A.C. § 19:4 [2013]))

- The State Strategic Plan: New Jersey's State Development and Redevelopment Plan (and pending revisions), designates the Meadowlands District as a "Priority Growth Investment Area"

 an area where more significant development and redevelopment is preferred and will be prioritized. The Redevelopment Plan cross-references the State plan and explains how it helps advance several of the State plan's goals, including targeted economic growth and effective regional planning. (New Jersey State Planning Commission [NJSPC] 2012)
- In 2008, the Town of Kearny adopted a Master Plan Reexamination Report / Master Plan Revision. Several planning goals and objectives in this plan are promoted by and cross-referenced in the Redevelopment Plan, including the utilization of the redevelopment process as a tool for Kearny's revitalization, investments in the regional transportation network, and reclamation of contaminated sites. (Town of Kearny 2008)
- The Town of Kearny has been a New Jersey Urban Enterprise Zone (UEZ) Program municipality since November 1992. The UEZ program is intended "to foster an economic climate that revitalizes designated urban communities and stimulates their growth by encouraging businesses to develop and create private section jobs through public and private investment" (New Jersey Department of Community Affairs). Two properties in the redevelopment area, the Jana Company and Owens Corning sites, are currently included within the Town of Kearny's UEZ program. The Redevelopment Plan recommends the exploration of expanding the UEZ program to include all properties in the redevelopment area. (NJMC 2013)
- In 2006, the City of Jersey City adopted its *Hoboken Avenue Redevelopment Plan* (amended through 2015). The plan is intended to take a pro-active approach to addressing vacant land in generally poor condition and redevelop such lands to be more consistent with recently revitalized areas in the surrounding communities. (Jersey City 2015)

3.4 PROBABLE IMPACTS OF THE PROJECT ALTERNATIVES

3.4.1 No Action Alternative

Under the No Action Alternative, the proposed Project would not be constructed. With or without the proposed Project, NJ TRANSIT intends to acquire the 20-acre parcel (Preferred Alternative Project Component A) on the Koppers Koke property as well as the adjacent six-acre parcel (Preferred Alternative Project Component B). As explained in Chapter 2, this acquisition is moving forward as part of a property settlement agreement between NJ TRANSIT and HCIA. Therefore, in the absence of the proposed Project, it is likely these portions of the Koppers Koke Site would be used for ancillary railroad purposes (storage, parking, etc.). Separately, Amtrak has plans to construct the new Kearny Substation, replacing the functions of the existing Substation No. 41 with or without the proposed Project; therefore, some changes to the land use within Cedar Creek Marsh South will occur, specifically to mapped surface water. This

change however is consistent with current uses, and is located in an area that is not accessible for public recreation.

3.4.2 Build Alternative

Preferred Alternative Project Components A and B would occupy 20 acres and six acres, respectively, within the Redevelopment Area and result in a change in land use from vacant/brownfield to transportation, a positive impact. The utility improvements required to support the Main Facility would occur within NJ TRANSIT utility easements or within the 20-acre parcel and would not require any additional land use changes. The electrical lines for Project Components C, D, E and G would be located within railroad rights-of-way and would not require connection to public utilities. The preferred alternative for installation of electrical lines on a combination of monopoles, underground duct banks, and attachment to existing NJ TRANSIT infrastructure (i.e., HBLR elevated tracks and bridges) is consistent with current land use and zoning. Both the Preferred Alternative Project Component D through the rail yard and the optional routing along the Morris & Essex right-of-way would have the same impacts to land use and zoning. Preferred Alternative Project Component F is construction of an elevated platform for two emergency standby generators (i.e., the nanogrid) on NJ TRANSIT-owned property at the HBLR Headquarters facility. The proposed Project would be located primarily within NJ TRANSIT's existing rightof-way and entirely within transportation rights-of-way, and would not adversely affect land use, land use trends, future development, zoning, or public policy. Construction of the Build Alternative would further the goals of the Redevelopment Plan by returning a defunct and underutilized brownfield property to active use.

Use of the site for the Main Facility does not strictly adhere to the Redevelopment Plan's list of permitted uses, which includes: area-specific power generation facility, essential public services, heavy industry, rail terminals and yard, electric transmission tower, among other uses. An "area-specific power generation facility" is defined to be "a facility producing power for the sole purpose of serving single or multiple properties within the redevelopment area boundary" (NJMC 2013). The energy generated by the Main Facility would power railroad substations that are located beyond the boundaries of the Redevelopment Area. Nonetheless, the microgrid is consistent with the intent of the Redevelopment Plan, which includes supporting transportation services and restoring the property to active use. The Main Facility would be consistent with the intent of the underlying Intermodal B zoning designation, as it would support rail services. It is also consistent with the original Town of Kearny industrial zone designation. Additionally, implementing the proposed Project at the preferred location would not prevent the remainder of the Redevelopment Area from being developed in accordance with the Redevelopment Plan's intent and requirements. Where feasible and practical, the final design of Preferred Alternative Project Components A and B would conform to the applicable bulk requirements, design criteria, setbacks, and other redevelopment standards outlined in the Redevelopment Plan. NJ TRANSIT would continue to coordinate with NJSEA throughout the permitting and design phases as required.

The entirety of Cedar Creek Marsh is 60.5 acres of wetlands and open water; Cedar Creek Marsh North comprises 31.5 acres north of the Northeast Corridor and Cedar Creek Marsh South encompasses approximately 29 acres to the south of the Northeast Corridor. The new Kearny Substation and monopoles would occupy approximately two acres of waters in Cedar Creek Marsh South. The adjacent Amtrak

Substation No. 41 would be decommissioned once the new Kearny Substation is operational. While this two-acre portion would change to a transportation land use, the remainder of Cedar Creek Marsh South would maintain its existing natural land use. Cedar Creek Marsh South is a designated Environmental Conservation Zone, which consists of transportation corridors, areas designated for open space and habitat protection and enhancement, including wetland restoration and/or mitigation and potential wildlife management areas. The project area is located within the New Jersey Meadowlands District – an area of approximately 19,730 acres (32 square miles) in Bergen and Hudson Counties, of which approximately 8,400 acres (13 square miles) are wetlands, waterways, and open space (NJMC 2007). While the two acres of Cedar Creek Marsh South required for the new Kearny Substation and monopoles would not be used for open space or habitat protection or enhancement, it would not comprise a substantial percentage of the Meadowlands and would not adversely impact the effective regulatory land use policies. Furthermore, N.J.A.C. § 19:4-5.10 (2013) modified the Environmental Conservation Zone policy to include several special exception uses-including communication transmission towers and electrical transmission towers. The modification acknowledged that electrical transmission towers often require significant open spaces without obstructions from nearby buildings, and that the addition of electrical towers is consistent with the provision of the comprehensive regional plan not to exclude uses of a regional benefit. Overall, the proposed Project would not result in significant adverse impacts to the land use policies of the Meadowlands District, the NJDEP, or land use modifications governed by the USACE.

Where monopoles are installed for the electrical lines, they would be in areas where electrical lines, utility lines, and catenary systems are prevalent, and they would be in context with the existing infrastructure. The new monopoles will be designed to be consistent in color and texture to the existing monopoles, to further blend into the existing conditions of the corridor. The electrical line routes (Preferred Alternative Project Components E and G) would optimize the use of existing railroad right-of-way and easements and optimize the use of a NJ TRANSIT-owned tunnel and other transportation rights-of-way. Where electrical lines are installed in underground duct banks, there would be no effect on land use or zoning. Where the nanogrid (Preferred Alternative Project Component F) is proposed for connectivity to the southern portions of HBLR, it would be built entirely within NJ TRANSIT-owned property, already developed for transportation purposes.

As further discussed in Chapter 16, "Safety and Security," the installation of monopoles within or near developed residential, commercial or mixed-use areas will not adversely affect public health from electromagnetic fields (EMFs). Electric fields from power lines, measured by voltage or the force behind the flow of electricity, rapidly become weaker with distance from its source and can be greatly reduced by trees, vehicles, walls and roofs of buildings. Underground power line electric fields are significantly reduced compared to its above ground counterparts. A more detailed analysis of EMFs for the Build Alternative is included in Chapter 16, "Safety and Security." As the project corridor is currently a utility transmission corridor, the distance from power lines to occupied buildings and publicly accessible open areas will be within the guidelines and consistent with existing conditions.

Project Components A, B, C, D and E (portion within Kearny) will not affect the existing land use of adjacent properties, as the area is primarily heavy industry and transportation. The installation of electrical lines (both monopoles and underground duct banks) for Project Component C, D, and E (in Kearny), are

proposed entirely within existing transportation rights-of-way, which already consist of existing electrical infrastructure and are surrounded by industrial and transportation areas. This existing infrastructure includes poles and towers at heights exceeding the maximum proposed monopole height (220 feet) for the proposed Project in industrial Kearny.

Preferred Alternative Project Component E in Jersey City travels next to the existing Hudson Generating Station and other industrial land uses before entering the Bergen Tunnels. Upon exiting the Bergen Tunnel, Project Component E travels through a heavily developed area of industrial, commercial, mixed use and high-density residential land uses. Electrical lines installed on monopoles for this section of Project Component E would not have an adverse impact on the adjacent land uses since the monopoles would be designed to be consistent with existing infrastructure. Where the electrical line is installed within underground duct banks, there would be no impact to adjacent land use since they would be installed within transportation rights-of-way and would not be visible, once the Build Alternative is operational.

Preferred Alternative Project Component F is proposed within the existing HBLR Headquarters property. Views of the nanogrid would be obstructed from nearby residential properties due to the existing HBLR Headquarters building. Therefore, there would be no impact to adjacent land use or zoning with construction of Preferred Alternative Project Component F.

Preferred Alternative Project Component G would be located entirely within NJ TRANSIT's existing right-of-way and travels through highly developed areas, as described above in Section 3.3.1. Where electrical lines are installed on monopoles (up to 39 feet tall) the monopoles would be designed to reflect the existing character of the particular areas (i.e., the new monopoles would be consistent in color and texture to existing monopoles in particular areas) to avoid aesthetic impacts. Where electrical lines are installed in underground duct banks or attached to the elevated HBLR tracks, the lines would not be visible. Therefore, the adjacent land uses will not change with the installation of the electrical lines on a combination of monopoles and underground duct banks for Preferred Alternative Project Component G.

Table 3-1 presents a summary of the changes in land use and zoning for each project component associated with the Build Alternative. As demonstrated in the table and in the analysis presented above, no significant impacts to land use, zoning, and public policy would result from implementation of the Build Alternative.

Table 3-1 Summary of Build Alternative's Effects on Land Use and Zoning

| Project Element | Current Land Use | Current Zoning | Proposed Land Use | Proposed Zoning | Effects |
|---|-----------------------|---|----------------------|---|--|
| Preferred Alternative Project Component A: Main Facility Site | Vacant Brownfields | Meadowlands District - Intermodal B Zone and Redevelopment Area | Transportation | Meadowlands District - Roads, Railroad Right- of-Way | Land Use: Positive Zoning: Neutral |

| Project Element | Current Land Use | Current Zoning | Proposed Land Use | Proposed Zoning | Effects |
|---|---|---|--------------------------|---|--|
| Preferred Alternative Project Component B: Natural Gas Pipeline Connection | Vacant Brownfields | Meadowlands District - Intermodal B Zone and Redevelopment Area | Transportation | Meadowlands District - Roads, Railroad Right- of-Way | Land Use: Positive Zoning: Neutral |
| Project Components C, D (all potential route options) and E: Proposed Electrical Line Routes (New Monopoles and Duct Banks) | Transportation | Meadowlands District - Intermodal B Zone, Environmental Conservation Area and Redevelopment Area, Heavy Industrial Jersey City — Highway Commercial, Transportation Right-of-Way, Residential, Redevelopment Area | Railroad Right-of-Way | Railroad Right-of-Way, Transportation | Land Use: Neutral Zoning: Neutral |
| Preferred Alternative Project Component D: New Kearny Substation and Towers in Cedar Creek Marsh South | Surface Water | Meadowlands District - Environmental Conservation Area | Transportation | Meadowlands District - Roads, Railroad Right-of-Way | Land Use: Adverse Zoning: Adverse |
| Preferred Alternative Project Component E: New NJ TRANSITGRID East Hoboken Substation | Mixed/Other Urban or Built- up Land | Jersey City - Redevelopment Area | Transportation | Transportation | Land Use: Neutral Zoning: Neutral |

| Project Element | Current Land Use | Current Zoning | Proposed Land Use | Proposed Zoning | Effects |
|--|---|--|---|---|---|
| Preferred Alternative Project Component F: Nanogrid at | Commercial Services, Transportation | Jersey City - Redevelopment Area, Residential, Open/Space, Commercial | No change. Improvements on NJ TRANSIT owned property. | No change. Improvements on NJ TRANSIT owned property. | Land Use: Neutral Zoning: Neutral |
| HBLR Headquarters | | | | | |
| Preferred Alternative Project Component G: Utility Work within existing HBLR Right-of- Way | Transportation | Residential, Industrial, Overlay District, Developed Area, Redevelopment Area, Commercial | No change. Electrical line within existing HBLR right-of- way | No change. Electrical line within existing HBLR right-of- way | Land Use: Neutral Zoning: Neutral |

As shown in this table, the proposed Project will have an adverse effect on the land use and zoning for the approximately two acres of Cedar Creek Marsh South for construction of the new Kearny Substation. However, the area is within a restricted water body and is adjacent to two railroads and an interstate. This area is not publicly accessible and is a low value for natural resources, making any potential effects minor and insignificant. Other effects are positive or neutral for land use and zoning designations of the proposed Project area. Please refer to Chapter 8, "Visual Resources" for visual impacts, mitigation requirements for impacts within Cedar Creek Marsh South are discussed in Chapter 12, "Natural Resources."

3.5 PROPERTY ACQUISITION REQUIREMENTS

As discussed in Chapter 2, "Project Alternatives," and above, NJ TRANSIT's acquisition of the two parcels within the Redevelopment Area would proceed as part of the No Action Alternative and is not an element of the proposed Project. Two new permanent easements would be utilized for the proposed Project. No active businesses or residences would be displaced. Preferred Alternative Project Components A and B would utilize the fee acquisition of 26 acres within the Koppers Koke Site—approximately 20 acres for Preferred Alternative Project Component A and six acres for the connection to the natural gas pipeline and the associated metering station (Preferred Alternative Project Component B).

Project Components C and D (all route options) would be entirely within NJ TRANSIT's right-of-way, except for the monopole in Cedar Creek Marsh South and the acreage needed for the new Kearny Substation, which would be located on Amtrak property. The monopole would be installed on an existing railroad easement through a privately-owned portion of Cedar Creek Marsh South (owned by 42 Monmouth Street, LLC). Preferred Alternative Project Component E would be located entirely within NJ TRANSIT right-of-way. Preferred Alternative Project Component F would be within NJ TRANSIT-owned property (HBLR Headquarters). A description of the fee acquisitions and the permanent easements required for

construction of the Build Alternative are presented in Table 3-2. The permanent easements include the land needed to construct the proposed Project and for ongoing maintenance requirements. A temporary floating access easement would be secured for construction access.

In the event that it becomes necessary for NJ TRANSIT to acquire additional properties, all acquisitions will be performed in accordance with the requirements of the Uniform Relocation Act. All FTA real property requirements, including FTA's early acquisition guidance, will be maintained if early acquisition of real property is required prior to the completion of NEPA. Identification of additional property acquisitions, although not currently anticipated, will be identified prior to final design of the project.

Table 3-2 Property Acquisition and Easements from the Build Alternative

| Description/Need for Property | Block/Lot | Current Owner | Acquisition Type | Estimated Acreage |
|---------------------------------------|-----------------------------|------------------|---------------------|---------------------------|
| Preferred Alternative Project | Portions of | HCIA | Fee acquisition | 19.38. HCIA and |
| Component A: | Block 287, | | | NJ TRANSIT would |
| Main Facility Site [Note: this | Lots 60, | | | maintain various non- |
| property is being acquired as | 61.02, 61.03, 62, 63, 70 | | | exclusive agreements |
| part of No Action Alternative] | 02, 03, 70 | | | for site access, |
| | | | | drainage/stormwater |
| | | | | system, construction, |
| | | | | maintenance and |
| | | | | mooring easements |
| | | | | within this parcel. |
| Preferred Alternative Project | Block 287 | HCIA | Fee Acquisition | 6.05. HCIA would retain |
| Component B: | Lot 73 | | | a non-exclusive Fish |
| Natural Gas Pipeline | | | | House Road access |
| Connection and Metering | | | | easement totaling 0.52 |
| Station [Note: this property is | | | | acres. |
| being acquired as part of No | | | | |
| Action Alternative] | | | | |
| Preferred Alternative Project | Block 284 | Amtrak (Lot | Permanent | Minimum of 30-foot |
| Component D: | Lot, 28.01, | 28.03) | Easement | radius for construction |
| New Kearny Substation and | 28.03, | 42 Monmouth | | and maintenance of |
| Monopoles in Cedar Creek Marsh South | | Street, LLC (Lot | | electrical towers (Lot |
| iviarsh South | | 28.01) | | 28.01) and |
| | | | | approximately 1.7 |
| | | | | acres for new Kearny |
| | | | | Substation (Lot 28.03). |
| Access/construction access | Portion of | HCIA | Temporary | Minimum of 30-foot |
| | Block 287, | | Floating Access | width, total of 1.2 acres |
| | Lot 70 | | Easement | |

3.6 SUMMARY OF SIGNIFICANT ADVERSE IMPACTS AND MITIGATION MEASURES

The Build Alternative would not result in significant adverse impacts to land use in the study area and would be consistent with zoning and public policy. While no mitigation is required for land use or zoning, the proposed Project will have an adverse effect on the land use and zoning for the approximately two acres of Cedar Creek Marsh South for construction of the new Kearny Substation. As discussed in Chapter 2, "Project Alternatives," under the No Action Alternative, the new Kearny Substation would still be constructed. Other effects from the proposed Project are positive (returning vacant Brownfield to active use) or neutral for land use and zoning designations.