A. INTRODUCTION

In the preceding chapters, potential impacts across a full range of environmental areas (land use, natural resources, groundwater, traffic, etc.) relating to the Direct Route Alternative, including the proposed expansion of the Bridgehampton Substation, were analyzed. This chapter analyzes three additional routes (i.e., Existing Line Alternative, Long Island Rail Road [LIRR] Route Alternative, and Montauk Highway Alternative) and examines two additional alternatives—No Action and Demand Side Management Alternatives. Potential impacts of each of these alternatives are compared to those that would occur with the Direct Route Alternative.

For the Existing Line, LIRR Route, and Montauk Highway Alternatives, the expansion of the Bridgehampton Substation is not addressed in this chapter since the impacts of the expansion are the same as those for the Direct Route Alternative, which has been presented in the preceding chapters. Impacts of the Bridgehampton Substation for the No Action and Demand Side Alternatives are compared with impacts of the Direct Route Alternative.

B. DESCRIPTION OF ALTERNATIVES

NO ACTION

The No Action (or No Build) Alternative represents the future conditions if the Direct Route Alternative was not constructed. The technical chapters of this EIS have described the No Action Alternative (referred to therein as "Existing Conditions") and have used it as the basis to assess the potential impacts and associated mitigation for the Direct Route Alternative. The No Action Alternative would not require any discretionary actions. The No Action condition is compared with the Direct Route Alternative.

Consideration of the No Action Alternative is mandated by the State Environmental Quality Review Act (SEQRA), and is intended to provide the lead and involved agencies with an assessment of the consequences of not selecting the Direct Route Alternative. Although the No Action Alternative is required to be examined under SEQRA, maintaining the existing transmission system in its current condition is not desirable due to the negative effect this alternative would have on the reliability of the LIPA system for the East End. Consequently, it would not be considered a feasible, reasonable, or practicable option for meeting the immediate and future energy demands of the East End.

Under the No Action Alternative, no changes would occur along the Direct Route Alternative roadways, the Bridgehampton Substation would not be expanded, and the existing transmission system would remain in its current state and not have sufficient capacity to accommodate the current demand and future anticipated growth on the East End. With the No Action Alternative, the existing 80-year-old 69 kV double circuit transmission line would become overstressed under certain circumstances, carrying an electric load beyond its design capacity, and would not

provide the South Fork with a back-up transmission supply should something disable the existing 69 kV double circuit line. As such, the reliability of the 80-year-old 69 kV transmission system would continue to be a major concern. By the summer of 2008 without the new transmission lines, LIPA would be forced to operate the South Fork transmission system at very high risk loads, which could cause thermal overloads and voltage collapse throughout the East End towns of Southampton, East Hampton, Shelter Island, and Southold. Indeed, a catastrophic collapse could cascade back into other parts of LIPA's transmission system, potentially impacting the towns of Riverhead and Brookhaven, immediately west of the East End area to be served by the new transmission line. Therefore, the No Action Alternative would not meet the energy needs of the South Fork and the East End and would result in increasingly frequent blackouts and brownouts. The No Action Alternative would not ensure transmission system reliability in this part of the LIPA system.

In addition, increased power outages have the potential to cause other significant adverse environmental impacts on the East End, including the potential operation of peak power-generating equipment located in East Hampton, Southampton, Greenport, Southold, and Montauk at higher capacity in order to accommodate the increased load. The operation of such generating equipment has the potential to cause significant adverse impacts, including noise and air quality impacts.

ENERGY EFFICIENCY AND DEMAND SIDE MANAGEMENT ALTERNATIVE

EXISTING PROGRAMS

The Energy Efficiency and Demand Side Management Alternative assumes that all of LIPA's existing energy conservation measures remain in force and are augmented to the highest degree practicable. The purpose of these programs is to reduce the demand for electricity to the lowest level possible, especially during peak demand periods.

As part of LIPA's energy efficiency and demand side management program, LIPA has implemented the Clean Energy Initiative (CEI), LIPA*edge* and the Peak Reduction Program (PRP). The CEI, originally approved for a five-year period in 1999, has produced approximately 1,341 gigawatt hours (GWh) of energy savings and approximately 269 megawatts (MW) of peak demand savings through 2005. In 2004, LIPA extended the CEI for another five-year period and has committed $185 million in funding for that initiative. LIPA*edge* and PRP combined allow LIPA to control approximately 125 MW of electric demand during peak periods. Some of the elements of the programs include:

- Residential Lighting & Appliances Program: The program is designed to transform specific components of the residential lighting and appliance market through comprehensive and coordinated market intervention strategies. The program has about 2.5 million participants.
- Residential Cool Homes (HVAC) Program: The program encourages customers to purchase and install energy-efficient central air conditioning (CACs) and geothermal heat pumps by providing financial incentives to offset a portion of the equipment's higher initial cost. The program's long-range goal is to encourage contractors to use energy efficiency as a marketing tool, thereby stocking and selling more efficient units and moving the entire CAC and heatpump market toward greater efficiency. The program has over 36,000 participants.

- Geothermal Projects: Geothermal systems use the energy stored in the earth to provide heating, cooling and hot water in both commercial and residential applications. The program has over 170 participants.
- Stay Cool Summer Campaign: LIPA in partnership with New York State Energy Research and Development Authority (NYSERDA) and New York Power Authority (NYPA) launched its Stay Cool Room Air Conditioner promotion in May 2007. The Stay Cool promotion is the successor to the previous year's Keep Cool Program. This modified program does not feature a rebate as in years past but rather focuses on educating consumers with tips to save energy during the summer.
- Residential Energy Affordability Partnership (REAP) Program: The program is dedicated to improving energy affordability for lower income households through the direct installation of a comprehensive set of cost-effective efficiency measures, extensive energy education and counseling. The program has over 26,000 participants.
- Customer-Driven Efficiency Program: The Customer Driven Efficiency Program provides assistance to both residential and commercial customers wishing to make energy efficiency improvements not covered in any of LIPA's other CEI programs. The program also provides technical, on-site energy analysis and audits to help commercial/industrial customers evaluate potential energy-saving opportunities. LIPA provides financial incentives for those opportunities shown to be cost effective.

  In addition, the program makes available a commercial/industrial audit report, which is used to identify savings, to verify/refute claims of savings from manufacturers, and to understand the energy bills. It has also been used as a bid document for construction projects seeking energy services contracts and setting budgets for capital projects. It is the first step in an energy master plan. This program has over 2,600 participants.
- Commercial Construction: The program promotes the application of a broad range of energy-efficient electric technologies and energy efficient designs. It is comprised of three components: Prescriptive, Custom and Comprehensive Whole Building Design. The program has over 2,800 participants.
- Solar Pioneer: LIPA's Solar Pioneer Program provides residential and commercial customers the opportunity to supplement their energy needs with clean, renewable solar power. The program has approximately 600 participants.
- NY Energy Star Homes: LIPA launched its Residential New Construction Program, New York ENERGY STAR® Labeled Homes in 2004. The program seeks to improve the energy efficiency of the residential new construction market. This program is a collaborative effort between LIPA and NYSERDA. The program has about 75 participants.
- Residential Information/Education Program: LIPA's Information & Education Program provides energy-saving information to customers through printed materials, advertising and marketing, a student component, an Energy Infoline, the LIPA Web site and energy audit services. LIPA's free Home Energy Audit, which is a big part of the program, helps customers analyze and lower their energy costs by answering a series of questions about their home and how it uses energy. "ENERGYsmart" is a CD-ROM-based program that lets customers perform their home energy audit quickly, simply and on-line.

FUTURE PROGRAMS

LIPA staff proposes to implement a new energy efficiency program in January 2009. The new program will succeed and expand upon LIPA's current energy efficiency program and contains new initiatives to promote even greater levels of energy efficiency for electric utilities within the State of New York. Since shortly after it acquired the LILCO system in 1998, LIPA has provided a portfolio of energy efficiency programs to its customers through its' CEI program, as summarized above. Since the authorization for CEI is expiring at the end of 2008, LIPA has been working on designing a successor program. The proposed program is highly cost effective and shows the largest benefit of any capacity resource option LIPA has studied to date. The program is projected to reduce LIPA's peak demand by a factor which will result in the deferral or elimination of at least two medium-size power plants from LIPA's capacity expansion plan and the avoidance of high cost on-peak energy production.

As designed, the program is comprised of five initiatives that separately target residential and commercial customers and address energy efficient products and buildings in both the existing and new construction markets. The five initiatives are:

- Efficient Products — purchases of lighting, appliances, consumer electronics and pool pumps by residential customers from retail outlets.
- ENERGY STAR Labeled Homes — includes building shell upgrades, Heating Ventilation Air Conditioning (HVAC), hot water, duct seals, lighting and high efficiency appliances.
- Existing Homes — duct sealing and tune-ups for central air conditioners, whole house retrofit assistance and installation services, REAP, and properly installed higher-than-code efficiency central air and heat pump equipment.
- C&I New Construction — targets all new buildings and major renovations
- C&I Existing Buildings — addresses equipment purchases stemming from natural replacement at the end of useful life and retro-fits (discretionary replacement of functioning inefficient equipment).

The proposed program differs from CEI in its design and implementation. Whereas CEI focused mainly on new construction markets, the proposed program targets both new construction markets and the significant energy efficiency potential in existing homes and businesses.

ALTERNATIVE ENERGY INITIATIVES BEING PURSUED BY LIPA

The following programs, while not leading to energy efficiency or to lowering demand, are part of LIPA's effort to bring the latest clean energy technologies to it customers. Certain of these technologies could lead to more energy efficient use of power and will lower LIPA's dependency of fossil fuels.

Fuel Cell Projects:

- Plug Power Fuel Cell Demonstration
- In 2002-03, LIPA installed 17 combined heat and power (CHP) fuel cells at various commercial locations on Long Island.
- In 2004/05 LIPA embarked on the nation's first residential fuel cell demonstration project.
- UPS Fuel Cell Demonstrations

- Optimization and Fabrication of PEM Fuel Cell Bipolar Plates
- H-Power Fuel Cell

Wind Energy Projects:

- 10kW Wind Turbine Demonstrations — LIU/Southampton College and Brookhaven Town Hall
- Small Commercial Wind Demonstration Project — Zeh farm in Calverton.
- Off-Shore Wind Feasibility Study
- Development of Atmospheric Profiling and Modeling Project

Solar/Photovoltaic (PV) Projects:

- Jones Beach Nature Center Photovoltaic and Geothermal Project
- Long Island Photovoltaic Performance Verification Project
- FALA Photovoltaic Project
- Long Island Ducks Stadium

Miscellaneous Distributed Generation Projects:

- Request for Proposals for Microturbines Fueled by Landfill Gas or Biogas
- Wave Power Generation and Mitigation of Beach Erosion
- GORLEV Helical Turbine
- GeoColumn
- EcoDryer

Supporting Technologies:

- Distributed Generation Monitoring

EXISTING LINE

The Existing Line Alternative would consider a new transmission line of approximately 8.3 miles in length along the same route as the existing transmission line easements between the Southampton and Bridgehampton Substations. The existing lattice towers that run parallel to the LIRR right-of-way would remain and new steel 61-foot poles, approximately 30 inches in diameter at the base, would be constructed in this vicinity to accommodate the new transmission line and connect to the Southampton Substation. The remaining poles would be wood and about 48 feet above grade.

The configuration for this alternative would be underground transmission lines because above ground lines along this route are not feasible, due to constraints in the width of the easements and reliability rules. For safety purposes, good engineering practices require a certain physical separation (clearance) among the transmission lines. These separations cannot be achieved within the existing easements, and therefore limit the potential to construct above ground lines along this route. In addition, if the lines were above ground in this location, all three transmission lines would be in the same corridor, and one incident could disable all three lines.

The existing easements for this route are limited to above-ground transmission lines. Therefore, each of the individual easements would have to be renegotiated to allow for underground

installation. LIPA may not be able to complete the renegotiation process within the time frame needed to provide an operational additional transmission line by summer 2008.

LIRR ROUTE

This alternative would consider the installation of the proposed transmission line along the LIRR Montauk line right-of-way from the Southampton Substation to Bridgehampton Sag Harbor Turnpike and then north along this roadway to the Bridgehampton Substation (approximately 8.2 miles). Similar to the Direct Route Alternative, this alternative would replace the existing 57 foot wood poles with 61 foot steel poles and 30 inches in diameter at the base. The remainder of the proposed line would likely utilize poles ranging from 61 to 75 feet (above grade) steel poles 30 to 34 inches in diameter with the exception of the poles to be installed along the Bridgehampton Sag Harbor Turnpike. These poles would be about 48 feet above grade. The increased pole height along the LIRR right-of-way (greater than 61 feet) feet would be required to span existing overpasses where there are clearance issues (i.e., Head of Pond Road and Butter Lane). Outside of the Village of Southampton, there are no existing distribution poles along the LIRR right-of-way, and therefore, all of the poles along this right-of-way would be new. There is limited space along the LIRR right-of-way for installation of the new transmission line.

The configuration under consideration for this alternative is the entire proposed line overhead along the LIRR right-of-way and hybrid overhead and underground along Bridgehampton Sag Harbor Turnpike. For the underground configuration along Bridgehampton Sag Harbor Turnpike, the existing wood distribution poles would be retained to accommodate existing distribution lines. For the overhead/underground configurations, the existing wood distribution poles would be replaced with the new wooden poles in the areas where the transmission lines are proposed overhead and the existing wood distribution poles would be retained in the areas where the transmission line would run underground.

MONTAUK HIGHWAY

The Montauk Highway Alternative is the longest route considered (approximately 9.5 miles in length) and would exit the Southampton Substation, follow the LIRR right-of-way to CR 39 to Montauk Highway to Bridgehampton Sag Harbor Turnpike and then turn north along the roadway to the Bridgehampton Substation. The typical pole along this route would be approximately 48 feet above grade with the exception of the poles along the LIRR right-of-way, which would be 61 feet above grade. Similar to the Direct Route Alternative, taller poles (approximately 61 feet above grade) would be required at turns along the route and road crossings as well as for riser poles. There is one area along Montauk Highway Alternative within Water Mill, approximately 2,000 feet long, that does not currently have existing distribution poles and therefore poles within this section would be new. The configuration of this line along the LIRR right-of-way and Montauk Highway would be all overhead. Along Bridgehampton Sag Harbor Turnpike, the transmission line would be a combination of overhead and underground. An all-underground line along this route was not considered because the length of the route and subsequent cost make such an option impractical. If an all underground option were chosen, one of the shorter routes would be selected to minimize costs. As with the other alternatives, in areas where the transmission lines were underground, the existing wood distribution poles would be retained to accommodate existing distribution lines.

C. NO ACTION ALTERNATIVE

The No Action Alternative would not result in the expansion of the Bridgehampton Substation. Both the No Action and Direct Route Alternatives would not result in any significant adverse impacts.

LAND USE AND COMMUNITY CHARACTER

Unlike the Direct Route Alternative, which would add a new transmission line and expanded substation to the project area, the No Action Alternative would not result in any changes to the existing transmission system on the South Fork. Similar to the Direct Route Alternative, the No Action Alternative would not result in any significant changes to the study area's land use patterns. Low-density development is expected to occur on the South Fork both with the No Action Alternative and with the Direct Route Alternative.

The No Action Alternative, similar to the Direct Route Alternative, would not result in significant adverse impacts on land use. However, the No Action Alternative could result in adverse impacts to community character since the South Fork transmission system would be expected to experience thermal overloads and voltage collapse, resulting in blackouts, if upgrades are not made. Transmission supply interruptions, especially those of a sustained nature, would impact public health and safety. The problems associated with blackouts were evidenced by the power failure on August 14/15 2003. Public transportation systems failed, road traffic was stalled due to lack of traffic signals, essential public services were unavailable, emergency services were not able to meet demands, and communication systems often did not function. The blackout led to large public costs and loss of output in the private sector. Under the No Action Alternative, the risk of blackouts and brownouts would not be eliminated and system reliability would not be ensured, ultimately adversely affecting the health, safety, and/or welfare of the study area residents and the overall character of the community.

COMMUNITY FACILITIES AND OPEN SPACE

Similar to the Direct Route Alternative, the No Action Alternative would not directly displace police, fire, schools, libraries, health care facilities, or other community facilities.

With the No Action Alternative, in the future, background growth and new development near the Direct Route Alternative corridor would generate additional demand for community facilities and emergency services. Similar to conditions in the Direct Route Alternative, it is expected that there would be adequate capacity at schools, libraries, and health care facilities to support this growth with the No Action Alternative.

However, the No Action Alternative, unlike the Direct Route Alternative, could result in adverse impacts to emergency services as a result of the blackouts that are projected to result from thermal overloads and voltage collapse in the South Fork transmission system in the absence of the proposed upgrades. As stated above, during the power failure on August 14/15 2003, public transportation systems failed, road traffic stalled due to lack of traffic signals, essential public services were unavailable, emergency services were not able to meet demands, and communication systems often did not function.

With the No Action Alternative, as with the Direct Route Alternative, the amount of new open space would be expected to increase in the future. New open space for the area will be provided as part of the Two Trees Farms subdivision, which would preserve 61.51 acres of existing vacant

land as an agricultural reserve. The No Action Alternative, similar to the Direct Route Alternative, would not result in any significant adverse impacts to open space.

ZONING AND PUBLIC POLICY

The No Action Alternative, similar to the Direct Route Alternative, would not result in significant adverse impacts on zoning or public policy. However, the No Action Alternative would not meet the forecasted energy demands for the South Fork and therefore, unlike the Direct Route Alternative, would not be consistent with regional energy plans that promote the reliable transfer of energy. In addition, the No Action Alternative, in contrast to the Direct Route Alternative, would not meet the expected energy needs for the area as projected in Town and regional plans. Similar to the Direct Route Alternative, the No Action Alternative would be in conformance with State, local, and regional plans and policies focused on the preservation and enhancement of visual and open space resources and would be compatible with transportation policies for the area.

COASTAL ZONE MANAGEMENT

Unlike the Direct Route Alternative, the No Action Alternative could result in blackouts, which may be in conflict with some of the objectives of the State Coastal Management Program (CZM) policies. For example, rather than strengthening the area's economic base (Policy 4), the blackouts resulting from the No Action Alternative could lead to large public costs and loss of output in the private sector. Blackouts and the resulting road traffic stalls could also restrict access to the waterfront on the South Fork, rather than serving to protect, maintain, and increase the level and types of access to water-related recreation resources (Policy 19). The No Action Alternative doesn't promote certain of the CZM policy objectives, but overall, the No Action Alternative, similar to the Direct Route Alternative, would be consistent with the State's policies.

VISUAL RESOURCES

With the No Action Alternative, visual resources would not be affected and view corridors would remain in their current condition. With the No Action Alternative, views of the proposed distribution lines and new poles would not be visible from viewpoints as they would with the aboveground portions of the Direct Route Alternative. However, the 250 existing wood distribution utility poles along the Direct Route Alternative that are between 30 and 35 feet above grade and approximately 16 inches in diameter at the base would continue to be visible as they are in the existing condition. The existing distribution lines would also continue to be visible as they are currently. In addition, the 22 existing wood poles (about 57 feet above grade and 19 inches in diameter at the base) that exit the Southampton Substation and traverse the LIRR right-of-way would continue to be visible. As with the Direct Route Alternative, the No Action Alternative would not result in any significant adverse impacts to visual resources.

ARCHAEOLOGICAL RESOURCES

With the No Action Alternative, the Direct Route Alternative corridor and the Bridgehampton Substation site is anticipated to remain in its current condition and, as with the Direct Route Alternative, no significant adverse impacts to archaeological resources would be expected.

HISTORIC RESOURCES

Similar to the Direct Route Alternative, the No Action Alternative would not be expected to result in direct or indirect adverse impacts to historic resources. It can be expected that the future no build projects in the study area would undergo appropriate consultations with the Office of Parks, Recreation, and Historic Preservation (OPRHP) such that no adverse impacts to historic resources in the study area would result. However, to the extent that these projects do not undergo historic review, there could be potential impacts to historic resources from these no build projects. However, the potential effects of these projects on historic resources would occur both with the No Action Alternative and with the Direct Route Alternative.

NATURAL RESOURCES

Neither the Direct Route Alternative nor the No Action Alternative would be expected to result in significant adverse impacts to wetlands, terrestrial resources, or endangered, threatened, special concern, or rare species. With the No Action Alternative, the Direct Route Alternative corridor would be expected to remain in its current condition. Further, the effects of the future no build projects on natural resources in the study area would occur both with the No Action Alternative and with the Direct Route Alternative.

HAZARDOUS MATERIALS

Similar to the Direct Route Alternative, the No Action Alternative would not be expected to result in any significant adverse hazardous-materials related impacts.

INFRASTRUCTURE

The No Action Alternative, similar to the Direct Route Alternative, would not be expected to result in adverse impacts to water supply and treatment or solid waste or stormwater management services. It is expected that the future background growth anticipated in the study area would be accommodated by such services. However, the No Action Alternative, unlike the Direct Route Alternative, could result in adverse impacts to energy infrastructure. As stated above, by the summer of 2008 without the new transmission line, the South Fork transmission system could experience thermal overloads and voltage collapse. The loss of the existing double circuit infrastructure between the Southampton and Bridgehampton Substations would create severe transmission circuit overloads and voltage problems on the East End system. Specifically, the loss of this line west of Deerfield could cause the Jamesport to Peconic 69 kV circuit to reach 118 percent of its long term emergency (LTE) rating (108 percent of its short term emergency rating) and the Southold to Buell 69 kV cable to reach 116 percent of its LTE rating. Operation of these lines above their capacity would substantially increase the risk of voltage collapse (blackouts) to the East End system. Furthermore, a catastrophic collapse could cascade back into other segments of LIPA's transmission system, potentially impacting the towns of Riverhead and Brookhaven, immediately west of the East End area to be served by the new transmission line. Similarly, with the No Action Alternative, the Direct Route Alternative's anticipated benefits in terms of increased future load capacity and system reliability would not be realized.

GROUNDWATER AND SURFACE WATER RESOURCES

The No Action Alternative, similar to the Direct Route Alternative, would not be expected to result in significant adverse impacts to groundwater and surface water resources.

TRAFFIC/AIR QUALITY/NOISE

Similar to the Direct Route Alternative, the No Action Alternative would not be expected to result in significant adverse impacts with regard to traffic, air quality, or noise.

With the No Action Alternative, it is anticipated that traffic volumes would continue to increase on New York State (NYS) Route 27, as well as other roads in the vicinity of the Southampton to Bridgehampton Transmission Line Project. With the No Action Alternative, the proportion of traffic accidents involving utility poles would likely remain the same as current conditions, and would be similar to those that would be expected to occur with the aboveground portions of the Direct Route Alternative.

As discussed earlier, the Direct Route Alternative is anticipated to reduce the occurrence of blackouts in the study area. As evidenced by the power failure on August 14/15 2003, the problems associated with blackouts can include the failure of public transportation systems and road traffic stalls due to lack of traffic signals. Further, in the No Action Alternative, the use of combustion turbines on the East End would likely increase to meet future demands. This would have the potential to adversely affect air quality and noise.

ELECTRIC AND MAGNETIC FIELDS

With the No Action Alternative, it is likely that future Electric and Magnetic Fields (EMFs) at and adjacent to the proposed transmission line route, and at and adjacent to the proposed site of the substation expansion would be comparable to existing EMFs and those that would occur with the Direct Route Alternative.

CONSTRUCTION

There would be no construction activities associated with the No Action Alternative. Therefore, in the No Action Alternative, the temporary construction effects associated with the Direct Route Alternative, such as those related to traffic, air quality, and noise, would not occur.

D. ENERGY EFFICIENCY AND DEMAND SIDE MANAGEMENT ALTERNATIVE

While the Energy Efficiency and Demand Side Management Alternative is extensive and provides for future savings in energy use, it will not reduce the expected demand for power on the East End of Long Island in 2008 to a sufficient degree to obviate the need for an additional transmission line. Even with the current and future measures, the demand for electricity on the East End from new development and other factors is rising faster than the ability of the region's current infrastructure to deliver it. None of the energy efficiency and demand side management programs provides for the transmission of electric power to locations where demand exceeds the local electric generation capacity, nor will they result in reductions in overall demand that would obviate the need for the addition of new transmission capacity on the South Fork. Thus, the Energy Efficiency and Demand Side Management Alternative alone would neither allow LIPA to meet the growing energy needs on the East End nor permit LIPA to ensure reliable and efficient delivery of electricity to its customers.

E. EXISTING LINE ALTERNATIVE

The Existing Line Alternative would include the same expansion at the Bridgehampton Substation as the Direct Route Alternative. Both the Existing Line and Direct Route Alternatives would not result in any significant adverse impacts from the expansion of the Bridgehampton Substation. Consequently, the following sections focus on examining potential impacts of the new transmission line.

LAND USE AND COMMUNITY CHARACTER

EXISTING CONDITIONS

The Existing Line Alternative would be located along easements on individual lots between two substations. Starting at the Southampton Substation, this route would follow Prospect Street for a short distance and then turn north and northeast, following the existing double circuit transmission line right-of-way, and cross over Willow Street north to County Road (CR) 39. The entire Existing Line Alternative would be located within an existing utility right-of-way. Generally, the predominant land uses featured along the route are single-family residential and vacant land. Other land uses found along this alternative include agricultural and open space uses. See Figure 17-1 for land uses along this alternative.

The Existing Line Alternative study area includes all uses within ½ mile of the route. The study area is located in the hamlets of Tuckahoe, North Sea, Water Mill, Bridgehampton, Noyack, and the Village of Southampton, see Figure 17-2. As shown on Figure 17-1, the predominant land use within the ½-mile study area is residential (approximately 41 percent of the study area), with vacant land representing about 20 percent of the study area.

Residential uses are the predominant use located throughout the study area and are the principal use found adjacent to the existing double circuit line and Existing Line Alternative. Large tracts of vacant land, the second most abundant land use in the study area, are located north of Edge of Woods Road and south of Water Mill Towd Road. Other locations where vacant land is found include areas around Little Noyack and Millstone Roads, and around Old Sag Harbor Road just south of Middle Line Highway.

Agricultural uses make up almost 15 percent of the study area and are located primarily south of this alternative route. The Existing Line Alternative itself is generally not located adjacent to agricultural lands, with the exception of a few parcels south of North Sea and Mecox Roads and east of Noyack Road.

Open space encompasses about 13 percent of the study area and is largely located within the northeastern and south central portions of the study area. It is important to note that the study area is located within the Old Filed Map Overlay District. Undersized lots within Old Filed Map Overlay District are often the target of local preservation efforts, which may explain the preservation of small, open space parcels in the area of Edge of Woods Road. Additionally, the Atlantic Golf Course is also located in the study area southeast of Noyack Road.

Community facilities, which encompass about 1 percent of the study area, and commercial uses, which encompass about 2 percent of the study area, are clustered around the southern portion of the study area around and south of CR 39. Other, less prevalent uses in the study area include parking and transportation, utilities, and surface water.

The community is characterized primarily by its residential, vacant, and agricultural land uses. There is less commercial development and development overall in this study area relative to the other alternative routes. However, residential uses are the principal use found within this study area compared to other alternative routes.

POTENTIAL IMPACTS OF THE EXISTING LINE ALTERNATIVE

The configuration for this alternative would be underground because, due to constraints in the width of the easements and reliability rules, an above-ground configuration is not feasible. There is not enough physical space along the existing easements to achieve the required wire clearances without creating aerial encroachments on the surrounding property. It is not expected that this alternative would have an adverse impact on land use and community character, especially since land use conditions would not substantially change as a result of the Existing Line Alternative. The existing lattice towers have historically coexisted with the residential, agricultural, open space, and other uses located along the route. Therefore, the land uses along and surrounding this alternative would not be adversely affected. Furthermore, because there is an existing transmission line along this route, community character would not significantly change. Therefore, the Existing Line Alternative, similar to the Direct Route Alternative, would not have a significant adverse impact on land use or community character.

COMMUNITY FACILITIES AND OPEN SPACE

EXISTING CONDITIONS

Figure 17-3 depicts the locations of all community facilities and public open space within the Existing Line Alternative ½-mile study area. There are 38 community facilities and open space parcels within the Existing Line Alternative study area that are generally located in the vicinity of the Southampton Substation, in the southern portion of the ½-mile study area. The northern portion of the study area mainly comprises County and Town open space parcels. Figure 17-3 lists the name and location of each facility. These facilities and services are described below.

Police

The Southampton Village Police Department is located at 151 Windmill Lane, within the southern portion of the study area. The Town of Southampton Police Department does not maintain any facilities within the Existing Line Alternative ½-mile study area. Refer to Chapter 3, "Community Facilities and Open Space," for detailed information on Town and Village Police Departments.

Fire Protection

Fire Protection has been discussed in greater detail in Chapter 3, "Community Facilities and Open Space." As with the Direct Route Alternative, the Existing Line Alternative ½-mile study area is partially within 5 of the 10 Southampton fire districts: Bridgehampton Fire District, North Sea Fire District, Noyack Fire Prevention District, Southampton Fire District, and Southampton Fire Prevention District. Figure 17-4 illustrates the fire district boundaries within the Town. None of the fire districts maintain stations within the Existing Line Alternative ½-mile study area.

Schools

Public Schools

The Existing Line Alternative study area is within the boundaries of two school districts—Southampton Union Free School District (UFSD) and Bridgehampton UFSD (see Figure 17-5). The southwest portion of the study area borders Tuckahoe Common School District. There are no public schools within the Existing Line Alternative ½-mile study area.

Higher Education

See Chapter 3, "Community Facilities and Open Space," for information on Higher Education.

Private Education

There is one private educational facility located within the Existing Line Alternative ½-mile study area, Our Lady of the Hamptons Regional Catholic School. This private, Catholic elementary school is located at 160 North Main Street, in the southern portion of the Existing Line Alternative ½-mile study area, south of the LIRR Montauk line tracks. Refer to Chapter 3, "Community Facilities and Open Space," for additional information on Our Lady of the Hamptons Regional Catholic School.

Libraries

The Rogers Memorial Library in Southampton Village is located at 91 Coopers Farm Road in the southernmost portion of the study area and is the only library in the Existing Line Alternative ½-mile study area.

Health Services

See Chapter 3, "Community Facilities and Open Space," for information on Health Services.

Other Community Facilities

Churches and Cemeteries

- North End Graveyard, North Sea Road
- United Methodist Church of Southampton, 160 Main Street
- Our Lady of Poland Roman Catholic Church, 35 Maple Street
- Southampton Full Gospel Church, 130 County Road 39
- Sacred Hearts of Jesus and Mary Cemetery, 231 Country Road 39
- Southampton Cemetery, 545 North Sea Road
- Unitarian Universalist Congregation, 977 Bridgehampton Sag Harbor Turnpike

Post Office

The United States Post Office of Southampton is located on 39 Nugent Street, directly west of North Sea Road in the southern portion of the Existing Line Alternative ½-mile study area, within the Village of Southampton.

Child Care

The only child care facility in the Existing Line Alternative ½-mile study area is Once Upon a Day Care, located on North Sea Road. This facility is located in the southern portion of the ½-mile study area, north of the LIRR tracks.

Senior Citizen Residential Facilities

The Payton Lane Nursing Home, located on County Road 39, is the only senior citizen residential facility in the Existing Line Alternative ½-mile study area.

Open Space

The largest expanse of open space within the ½-mile study area is associated with portions of the Long Pond Greenbelt. These lands are located in the northeastern portion of the study area and are associated with State- and County-owned parks located in the Town of Southampton. Detailed information on parks in Southampton can be found in Chapter 3, "Community Facilities and Open Space."

Open space lands occupy approximately 776 acres or 14 percent of the study area (see Figure 17-6). This acreage includes land set aside by the County, Town, or Village for open space conservation, land preserved by the Nature Conservancy and Peconic Land Trust, and cemeteries, as well as privately held lands that have been preserved. Of the total open space within the study area, approximately 477 acres (or 39 percent) are publicly owned. Generally, most of the open space is located within the northeastern portion of the Existing Line Alternative ½-mile study area and is associated with the Long Pond Greenbelt. The remainder of the open space is primarily located south and west of the Bridgehampton Substation between Middle Line Road to the north and Scuttle Hole Road to the south, and principally County- and Town-owned open space is also featured west of Deerfield Road.

The southern portion of the ½-mile study area includes 3 cemeteries on approximately 31 acres (about 4 percent of the total open space in the study area). North End Graveyard is located on North Sea Road in the southernmost portion of the study area, within the Village of Southampton. Southampton Cemetery, in the southwest portion of the study area south of the LIRR tracks is also located on North Sea Road. Also in the southwest portion of the study area, Sacred Hearts of Jesus and Mary Cemetery is located on County Road 39.

Open Space Preservation Plans, Programs, and Policies

See Chapter 3, "Community Facilities and Open Space," for detailed information on open space preservation plans, programs, and policies, and their respective descriptions and overviews. The following plans, programs, and policies have been discussed in greater detail for the Direct Route Alternative and no additional recommendations are relevant to the Existing Line Alternative.

- *Town of Southampton Master Plan* (1970)
- *Town of Southampton Master Plan Update* (1984)
- *Southampton Tomorrow - Comprehensive Plan Update Implementation Strategies, 1999*
- Town of Southampton Community Preservation Fund
- Southampton Town Code
- *Bridgehampton Hamlet Center Plan* (February 2004)
- *New York State Open Space Conservation Plan* (2006)
- *Statewide Comprehensive Outdoor Recreation Plan* (2003)

The following policies are also discussed in Chapter 3, "Community Facilities and Open Space," but have different implications for the Existing Line Alternative:

Master List and Maps of Proposed County Open Space Acquisitions, 2004

According to the *Master List and Maps of Proposed County Open Space Acquisitions*, there is one property identified for acquisition (Suffolk County Tax ID: Section 35, Block 2, Lot 52.1) within the Existing Line Alternative ½-mile study area. This property is located on the border of the study area, east of Little Noyack Road.

Town of Southampton Recreation Plan (2003)

In addition to identifying the Town's needs, as discussed in greater detail in Chapter 3, "Community Facilities and Open Space," the *Town of Southampton Recreation Plan* (2003 Recreation Plan) identifies the needs of specific areas within the Town. The Existing Line Alternative ½-mile study area is within the Tuckahoe-Southampton District, which encompasses Shinnecock Hills, Tuckahoe, Water Mill, North Sea, and the Village of Southampton, and the Bridgehampton-Sagaponack District, which includes the hamlets of Bridgehampton and Sagaponack.

Similar to the Direct Route Alternative, the Long Pond Greenbelt, located in the northeastern portion of the study area, is the only target area for additional preservation identified in the plan that is within the ½-mile study area.

Town of Southampton Community Preservation Project Plan (2005)

There is a noticeable amount of open space areas throughout the Existing Line Alternative study area proposed for preservation as part of the *Town of Southampton Community Preservation Project Plan* (2005 Project Plan). As discussed previously in Chapter 3, "Community Facilities and Open Space," the 2005 Project Plan further builds upon the previous two plans and has identified nearly 735 parcels (approximately 1,700 acres) of land within the Existing Line Alternative ½-mile study area that boast natural features worth preserving. Figure 17-7 shows the priority parcels listed in the 2005 update that are within the Existing Line Alternative study area.

In the northeastern portion of the study area is open space land associated with the Long Pond Greenbelt that were identified for preservation due to aquifer recharge. Such areas are proposed for preservation to protect and preserve the increased risk of habitat loss and degradation and groundwater recharge.

Portions of the Eastern GEIS/Great Swamp area are located within the Existing Line Alternative ½-mile study area. Located north of Bridgehampton, this target area lies between Bridgehampton Sag Harbor Turnpike and Scuttle Hole and Brick Kiln Roads.[1] As previously discussed in Chapter 3, "Community Facilities and Open Space," this area is known for the "finest collections of inland freshwater wetlands remaining east of the Shinnecock Canal." The Town has also identified additional remaining unprotected parcels whose acquisition is important in securing and completing existing trails. Within this study area, the Brick Kiln Woods Trail, part of Great Swamp, is a trail path that includes an interior loop from the Paumanok Path on one side and trails from each of the four roads that border the area (i.e., Brick

[1]*Town of Southampton Community Preservation Fund -Community Preservation Project Plan, 2005*

Kiln Road to the north, Brick Kiln Road to the west, Bridgehampton Sag Harbor Turnpike to the east, and Scuttle Hole Road to the south).[1]

In the south central portion of the study area, there is a portion of open space associated with Great Hills, which is located in the North Sea section of Southampton. This section is also known for being part of the largest contiguous blocks of Pine Barrens forest remaining east of the Shinnecock Canal. Great Hills offers both scenic and recreational values, and features open woodlands, moraine hills, and is a critical linkage for the Paumanok Path. The area also contains abundant wildlife. Protection of the Great Hill area is vital in the preservation of the underlying aquifer.

Additionally, east of the Great Hill area, are pockets of land identified for preservation as agricultural lands and to the southwest are lands identified for wetland preservation within the Existing Line Alternative ½-mile study area. Refer to Chapter 3, "Community Facilities and Open Space," for additional information on the 2005 Project Plan.

Village of Southampton Comprehensive Plan (May 2000)

As discussed previously in Chapter 3, "Community Facilities and Open Space," the *Village of Southampton Comprehensive Plan* (Village Comprehensive Plan) puts forth several recommendations regarding open space and community facilities.

Similar to the Direct Route Alternative, within the Village portion of the study area, there are limited vacant and agricultural lands, and the area is mostly built. Further, there are few open space parcels located within the Existing Line Alternative study area in the Village. These open space parcels are located north and south of the LIRR tracks in the southern portion of the study area and total approximately 5 acres, or less than 0.1 percent of the study area.

POTENTIAL IMPACTS OF THE EXISTING LINE ALTERNATIVE

Community Facilities and Emergency Services

The Existing Line Alternative, similar to the Direct Route Alternative, would not result in any significant adverse impacts on community facilities and emergency services. Because this alternative would construct a new line underground along an existing utility right-of-way, this additional transmission line would not add any additional demand on community facilities and for emergency services.

Open Space

The Existing Line Alternative would be below grade and similar to the Direct Route Alternative, would not affect the preservation of open space parcels. Open space preservation in the Town of Southampton has occurred in the past and would be expected to occur in the future with or without the Existing Line Alternative.

The Existing Line Alternative, similar to the Direct Route Alternative, would not conflict with State, County, and local open space policy goals and objectives and would not have a negative impact on any identified parcels for preservation that are identified in these policy documents.

[1] Ibid.

The Existing Line Alternative, similar to the Direct Route Alternative, would not have any significant adverse impacts with regard to preservation of open space or complying with open space acquisition plans.

ZONING AND PUBLIC POLICY

EXISTING CONDITIONS

Zoning

The Existing Line Alternative, relative to the other alternative routes, would be located within the least number of zoning districts. The route itself would be located within nine zoning districts, six of which are Town districts, namely Country Residence (CR60, CR80, CR120, and CR200) and Residence (R15 and R20) and three Village districts, including Residence (R-12.5), Highway Business (HB), and Office District (OD), see Figures 17-8 and 17-9, respectively.

The Existing Line Alternative study area is approximately 5,697 acres. This study area traverses two separate municipal jurisdictions, namely the Town of Southampton and the Village of Southampton. Overall there are 10 zoning districts found in the Town portion of the study area, and 10 zoning districts in the Village portion of the study area. Approximately 5,290 acres (93 percent) of the study area are located within the Town of Southampton. In addition, the study area falls within three overlay districts in the Town and two in the Village. The remaining 407 acres (7 percent) of the study area are located within the Village of Southampton.

Table 17-1 provides the Town of Southampton zoning districts by acreage and percent of total area.

Table 17-1
Existing Line Alternative Study Area: Town Zoning

District	Land Area (acres)	Percent of Total
CR60: Country Residence	394.3	6.9
CR80: Country Residence	1,729.5	30.4
CR120: Country Residence	113.2	2.0
CR200: Country Residence	2,805.0	49.2
R15: Residence	8.7	0.2
R20: Residence	151.0	2.7
R40: Residence	25.7	0.5
HB: Highway Business	38.0	0.7
LI40: Light Industrial	18.4	0.3
OD: Office District	6.0	0.1
Total	5,290	92.9
Study Area Total	**5,697**	**N/A**

Sources: *Code of the Town of Southampton*, Chapter 330, 2007 and Geographic Information System, 2005.

Land use and development regulations for all zoning districts located within the study area have been summarized in Chapter 4, "Zoning and Public Policy." Approximately 89 percent of the study area is located within Country Residence zoning districts. The study area is also located within three Town overlay districts. The overlay districts are the Aquifer Protection Overlay District, the Agricultural Overlay District, and Old Filed Map Overlay District. Figures 17-10

and 17-11 depict the boundaries of the overlay districts within the study area. The route is located within the Aquifer Protection Overlay District between Edge of Woods Road and the Bridgehampton Substation and within the Agricultural Overlay District north of CR 39 to Edge of Woods Road and from Deerfield Road to just east of Noyack Road. The Old Filed Map Overlay District is located along the entire route outside of the Village.

Only 7 percent of the study area is located within the Village (see Table 17-2). Approximately 273 acres (67 percent) of the Village portion of the study area is located in Residence zoning districts.

Table 17-2
Existing Line Alternative Study Area: Village Zoning

District	Land Area (acres)	Percent of Total
R-7.5: Residence	102.7	1.8
R-12.5: Residence	90.1	1.6
R-20: Residence	80.2	1.4
R-120: Residence	0.04	0.0
MF-20: Multifamily	5.0	0.1
MF-25: Multifamily	8.7	0.2
HB: Highway Business	14.9	0.3
LI: Light Industrial	32.8	0.6
OD: Office District	56.5	1.0
VB: Village Business	16.1	0.3
Total	407	7.1
Study Area Total	**5,697**	**N/A**

Source: *Code of the Village of Southampton*, Chapter 116, and Geographic Information System, 2007.

A description of the Village zoning district regulations is also provided in Chapter 4, "Zoning and Public Policy," of this EIS. The Village portion of the Existing Line Alternative study area is located along the two overlay districts discussed in Chapter 4, "Zoning and Public Policy." These districts include Accessory Apartment Overlay District and the Multifamily Planned Residential Development District.

Public Policy

Public policies relevant to the Direct Route Alternative study area are discussed in Chapter 4, "Zoning and Public Policy," and are also applicable to this study area. No additional recommendations of those policies are applicable to this alternative.

POTENTIAL IMPACTS OF THE EXISTING LINE ALTERNATIVE

LIPA is a New York State public authority with the power to determine the need for and location, type, size, use, and construction of transmission facilities within its service area. Under well-established case law doctrine and based on language in its enabling statute, LIPA is not obligated to seek local zoning approvals for such projects. However, this section assesses the Existing Line Alternative's compliance with Town and Village zoning ordinances. Issues relevant to zoning and the Existing Line Alternative include permitted uses, height, and site plan approval.

If LIPA were subject to local zoning regulations within the Town, the Existing Line Alternative poles would be considered structures as defined by the Town's zoning ordinance, i.e., "anything constructed or erected on or under the ground or upon another structure or building, excluding walkways and driveways."

If LIPA were subject to local zoning, the Existing Line Alternative would require the following from the Town of Southampton:

- A special exception permit. In accordance with Chapter 330 of the Town Code, all districts permit public utility structures or rights-of-way by issuance of a special exception permit. Therefore, the construction of the Existing Line Alternative along the right-of-way would require a special exception permit.
- A site plan approval. The Town Code authorizes the Town Board to approve a site plan if such site plan meets a number of conditions, including the physical compatibility of the structure with the surrounding area, the protection of residential areas, parking, access, lighting, and water supply.

If LIPA were subject to local zoning regulations, the Existing Line Alternative poles would be considered a structure as defined by the Village's zoning ordinance as, "anything constructed or erected on or under the ground or upon another structure or building, excluding driveways constructed at a natural grade."

If LIPA were subject to local zoning, the Existing Line Alternative would require the following from the Village of Southampton:

- Pursuant to Chapter 116, Article IV (Special Exceptions), the Village empowers the Board of Appeals the authority to grant special exception permits. All districts along the line permit public utility structures or rights-of-way as a special exception use. The Board of Appeals must generally follow the same guidelines described above to grant such permit.
- A site plan approval for the installation of the line underground. The Village Code authorizes the Village Board to approve a site plan if such site plan meets a number of conditions, including the physical compatibility of the structure with the surrounding area, the protection of residential areas, parking, access, lighting, and water supply. This alternative would conform to the requirements of the conditions for site plan approval if such approval were required.

Even in the absence of LIPA's status as a state public authority, the Existing Line Alternative is consistent with the existing uses along the existing distribution line right-of-way and within the ½-mile study area as presently zoned, and therefore, similar to the Direct Route Alternative, would not have a significant adverse impact on zoning in the study area.

This alternative would not have a significant adverse impact on public policy for the following reasons:

- The alternative would ensure that energy transmission is clean, equitable, and addresses the energy needs of the area in a manner that is environmentally sound.
- By placing the new transmission line underground within an existing transmission route, LIPA would avoid impacting scenic resources.

Open space parcels for preservation would not be affected by the new transmission line. The preservation of these properties has occurred in the past and would be expected to occur in the future with or without the transmission line.

COASTAL ZONE MANAGEMENT

The Existing Line Alternative, as shown in Figure 17-12, is not within the Coastal Management Zone. Therefore, no analysis is required.

VISUAL RESOURCES

Since the Existing Line Alternative would be all underground, there would be no significant adverse impacts to visual resources.

ARCHAEOLOGICAL RESOURCES

ARCHAEOLOGICAL SENSTIVITY

As described in Chapter 7, "Archaeological Resources," the Institute for Long Island Archaeology (ILIA) has conducted a Stage 1A archaeological survey for the Existing Line Alternative. The Existing Line Alternative, similar to the Direct Route Alternative, was found by the Stage 1A survey to possess moderate sensitivity for prehistoric and historic-period archaeological resources.

POTENTIAL IMPACTS OF THE EXISTING LINE ALTERNATIVE

Based on the results of the Stage 1A survey, if the Existing Line Alternative were to be selected, a Phase 1B Archaeological Survey (i.e., subsurface testing) would be necessary in advance of construction to determine if archaeological resources are present in the study area. If any such resources are identified, additional testing may be necessary to determine if they meet the eligibility requirements for listing on the State and National Register of Historic Places (S/NR). Adverse effects, which generally occur where eligible resources are located in areas that will be affected by project actions, such as excavation, construction, or the storage of heavy machinery or supplies, would be mitigated either through avoidance, project redesign, or completion of a data recovery designed in consultation with the OPRHP.

Consequently, the Existing Line Alternative, similar to the Direct Route Alternative, would not result in significant adverse impacts in terms of archaeological resources.

HISTORIC RESOURCES

PREVIOUSLY IDENTIFIED HISTORIC RESOURCES

Two known historic resources are located in the study area for the Existing Line Alternative. They are:

- ***North Main Street Historic District*** (S/NR-Listed; Village of Southampton-designated) (described in Chapter 8 "Historic Resources" and shown in Appendix D, as Resource NMHD on Figure D-1a).

- ***Southampton Village Historic District & Expansion*** (S/NR-Listed; Village of Southampton-designated excluding Expansion) (described in Chapter 8 "Historic Resources" and shown in Appendix D, as Resource NMHD on Figure D-1a).

POTENTIAL HISTORIC RESOURCES

Twenty-two (22) individual potential historic resources and one (1) potential thematic grouping have been identified in the study area for this alternative. Further information on these potential historic resources, including the ***Potato Barn Thematic Grouping*** (described in Chapter 8 "Historic Resources") is provided in Appendix D, including a table listing the resources (Table D-2), a map showing the locations of the resources (Figure D-1), and photographs and brief descriptions of the resources (Figures D-4 through D-31).

POTENTIAL IMPACTS OF THE EXISTING LINE ALTERNATIVE

Direct Impacts

The Existing Line Alternative, similar to the Direct Route Alternative, would not be expected to directly impact historic resources. Multiple individual historic resources, two historic districts, and a thematic nomination, are located in the study area. However, installation of the new transmission line would not result in the demolition, physical destruction, or alteration of historic resources.

In order to ensure that construction activities associated with the installation of the transmission line would not cause inadvertent physical impacts to adjacent historic resources, LIPA would prepare and implement a construction protection plan (CPP) in consultation with OPRHP for any architectural resources in close proximity to the Existing Line Alternative construction.

Indirect Impacts

Indirect effects, such as changes in the appearance of a historic resource or in its setting have also been considered. The Existing Line Alternative would be underground and therefore would not cause a significant change in the setting of resources (see Section C of Chapter 6, "Visual Resources") Therefore, the Existing Line Alternative, similar to the Direct Route Alternative, would not adversely impact visual, audible, or atmospheric elements of a resource's setting, nor would it eliminate publicly accessible views to the resource.

NATURAL RESOURCES

INTRODUCTION

This section describes natural resources that could be affected by the three proposed route alternatives, including wetlands, terrestrial flora and fauna, and federal and state endangered, threatened, or special concern species. The potential impacts of each alternative are compared to those of the Direct Route Alternative.

Field investigations were conducted to characterize terrestrial habitats, and to identify common, rare, and environmentally sensitive species and communities within the area that would be impacted by construction, installation, and maintenance of each of the three route corridors (i.e., within the right-of-way and 50 feet on either side).

The purpose of this section is to:

- Describe the regulatory programs that protect floodplains, wetlands, wildlife, threatened or endangered species, and other natural resources;
- Describe the current condition of natural resources, such as wetlands and terrestrial plants, wildlife, and threatened or endangered species; and
- Assess the probable impacts on floodplains, water quality, and terrestrial natural resources.

Background and Survey Methods

The natural resources survey study area includes the right-of-way and on either side of the proposed transmission line route (referred to hereafter as 'corridors'), and adjacent wetland areas noted from previous state or federal mapping or identified during field surveys.

Regulatory Context

Federal, State, and local regulations pertaining to this project are presented in Chapter 9, "Natural Resources."

Methodology

The methodology is described in Chapter 9, "Natural Resources." Field surveys were conducted on 15-17, 23-25, and 30 August 2007.

EXISTING CONDITIONS – APPLICABLE TO ALL THREE ALTERNATIVES

To minimize repetition, this section of the Alternatives chapter is organized slightly differently than the other areas of technical analysis. The habitats that are common to all three alternatives (Existing Route Alternative, LIRR Route Alternative, and Montauk Highway Alternative) are described first. Under each of the alternatives, the reader is referred back to either the Direct Route Alternative chapter or this section of the Alternative chapter. For each of the route alternatives, the habitats and conditions unique to that route are described separately.

Descriptions of plants and animals identified along portions of the three alternative transmission line routes shared with the Direct Route Alternative discussed in Chapter 9, "Natural Resources" include:

- Southampton Substation along LIRR to David White's Lane
- Bridgehampton Sag Harbor Turnpike from the intersection of Scuttle Hole Road to Bridgehampton Substation
- Proposed expansion of Bridgehampton Substation

Floodplains and Wetlands

Inundation zones and predicted hurricane surge zones within the vicinity of the proposed Existing Line Alternative, LIRR Route Alternatives, and Montauk Highway Alternative are discussed below. In addition, the 100-year floodplain (area with a 1 percent chance of flooding each year) and the 500-year floodplain (area with a 0.2 percent chance of flooding each year) boundaries within the project area are also discussed below. Figure 17-12 indicates the portions of these three alternatives that fall within the coastal zone.

Both the United State Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) has mapped freshwater wetlands along or adjacent to the three Alternatives, as shown in Figure 17-13. These include forested, scrub shrub, and lacustrine wetlands with a diversity of water regimes, from permanently flooded to seasonally flooded or saturated.

New York State Department of Environmental Conservation (NYSDEC) has also mapped over 30 freshwater wetlands within the vicinity of the Existing Line Alternative, LIRR Route Alternative, and Montauk Highway Alternative. These include small freshwater ponds (i.e., Slate Pond and numerous other small ponds), emergent wetlands, forested/shrub wetlands, and lakes. Of these New York State-regulated wetlands, several are within 200' of the Existing Line Alternative, LIRR Route Alternative, and Montauk Highway Alternative corridors, including (from west to east) Seven Ponds and Mill Pond (SA-9), Long Pond and Little Long Pond (SA-5), Kellis Pond (SA-7) and several ephemeral wetlands in the vicinity of the proposed Bridgehampton Substation expansion (SA-28).

While no NWI or NYSDEC designated estuarine (tidal) wetlands were noted along or directly adjacent to the proposed Existing Line Alternative, Montauk Highway Alternative, or LIRR Route Alternative, tidal wetlands do occur immediately to the south of the LIRR Route Alternative and Montauk Highway Alternative within Mecox Bay. Mecox Bay is a large brackish pond that is designated by NMFS as Essential Fish Habitat due to a managed inlet that conveys flows to and from the Atlantic Ocean.

Ecological Communities and Vegetation

In order to map the spatial occurrence of the general vegetative cover types that occur, six cover type designations were created. These are shown in Figure 17-14, and are defined in Chapter 9, "Natural Resources." These cover type designations are:

- open – landscaped
- open – hedgerow/thicket
- open – field
- old field – early successional shrubland
- roadside thicket
- forest

Cover types within each of these three alternatives are discussed in the location-specific section of this chapter below.

Similar to the Direct Route Alternative, as discussed in Chapter 9, "Natural Resources," the majority of the habitat types occurring in proximity to the Alternative corridors are human-maintained habitats (i.e., residential development, agriculture, etc.). These landscapes have been altered or modified by human activity, including grading and draining of the landscape, and changing the landscape through agriculture or planting of ornamentals and the construction of impervious surfaces in commercial areas, and succession occurring in formerly cleared urban vacant lots. By comparison, the Existing Line Alternative passes through less developed lands containing a higher predominance of native plant and animal species and greater native oak forest cover. Nevertheless, maintenance directly beneath the existing transmission line has modified the composition of vegetation to favor shrubs and grasses, some of which are non-native.

The Location Specific Findings section of this section that follows provides additional site- specific information on plants and animals that utilize each of the three alternative transmission line routes.

Regional Ecological Communities

The New York Natural Heritage Program's (NHP) manual Ecological Communities of New York State (Reschke (1990), Edinger et al. (2002)) was used to determine the ecological communities found in the region through which each of the three alternative routes pass. These ecological community types have been mapped by the Town of Southampton and are shown in Figure 17-15. Table 17-3 lists the NHP-designated community types, indicates their location in the landscape in relation to the three alternative routes, and describes characteristic species found in each community.

Table 17-3
Ecological Communities in the Vicinity of the Existing Line Alternative, Montauk Highway Alternative, and LIRR Route Alternative Corridors

Natural Community Type	Location	Some NHP-Reported Characteristic Species Associated with Community
Floodplain Forest (NHP Rank: G3G4/S2S3)	Greenbelt Region	Flora: Red and silver maple, cottonwood, black willow, swamp white oak, spicebush, sensitive fern Fauna: Yellow-throated vireo, tufted titmouse, red-bellied woodpecker
Red Maple-Hardwood Swamp (NHP Rank: G3G4/S2)	Montauk Highway Alternative LIRR Route Alternative Existing Line Alternative	Flora: Red maple, black gum/tupelo, sweet pepperbush, highbush blueberry, swamp azalea, cinnamon fern, skunk cabbage Fauna: NHP faunal details lacking
Coastal Plain Poor Fen (NHP Rank: G3?/S1)	Greenbelt Region	Flora: Sphagnum moss, leatherleaf, water willow, cranberry, dwarf huckleberry, cottongrass, sundews, bladderworts, rose pogonia orchid Fauna: Great blue heron, green frog, bullfrog, spotted turtle
Coastal Plain Pond Shore (NHP Rank: G3G4/S2	Greenbelt Region	Flora: Fragrant waterlily, pondweeds, sphagnum moss, rushes, pipewort, slender blue-flag, panic grasses, large cranberry Fauna: Painted turtle, muskrat, dragonflies, damselflies, chain pickerel
Rich Mesophytic Forest (G4/S2/S3)	Montauk Highway Alternative LIRR Route Alternative Existing Line Alternative	Flora: Red oak, red maple, white ash, American beech, black cherry, sugar maple, red-berried elderberry, witch hazel Fauna:
Coastal Oak-Heath Forest (NHP Rank: G4/S3)	Greenbelt Region	Flora: Various oaks, pitch pine, blueberries, huckleberries, bracken fern, wintergreen, Pennsylvania sedge Fauna: Eastern Towhee, white-tailed deer
Succcessional Shrubland (NHP Rank: G4/S4)	LIRR Montauk Highway Alternative	Flora: Sumac, serviceberries, eastern red cedar, gray dogwood, raspberries, wild plum, arrowood, nanny-berry Fauna: brown thrasher, blue-winged warbler, indigo bunting, song sparrow
Successional Old Field (NHP Rank: G4/S4)	Montauk Highway Alternative LIRR Route Alternative Existing Line Alternative	Flora: Various goldenrods, timothy grass, quackgrass, brome grass, various asters, queen-anne's lace, sumacs Fauna: Field sparrow
Successional Red Cedar Woodland	LIRR Route Alternative	Flora: Eastern Red Cedar, gray birch, hawthorn, non-native bluegrasses, early successional hardwoods Fauna: Prairie Warbler
Successional Southern Hardwoods	Montauk Highway Alternative LIRR Existing Line Alternative	Flora: American elm, red maple, sassafras, box elder, eastern red cedar, choke-cherry, black locust, tree of heaven Fauna: Chestnut-sided warbler
Pitch Pine-Oak Forest (NHP Rank: G4G5/S4)	Montauk Highway Alternative LIRR Route Alternative Existing Line Alternative	Flora: Various oaks, pitch pine, scrub oak, low blueberries, black huckleberry, wintergreen, bracken fern, Pennsylvania sedge Fauna: rufous-sided towhee, pine warbler, blue jay, yellowthroat
Lakes, Ponds, and Creeks	Montauk Highway Alternative LIRR Route Alternative	
Vernal Pool (NHP Rank: G4 S3/S4)	Greenbelt Region	Flora: Sphagum spp., Glyceria sp. Fauna: spotted salamander, spring peeper, gray frog, spotted turtle, red-spotted newt, marbled salamander

Source: *Ecological Communities of New York* and AKRF field surveys (August 2007)

Although the three alternatives pass through these ecological communities, site inspection reveals that the vegetation beneath and immediately adjacent to all three alternative corridors consists of a unique assemblage of species typical of roadsides and disturbed habitats. Therefore, a separate, project-specific list of vegetation cover types was developed for this EIS, as shown in Figure 17-14, and described more fully in the Location Specific Findings section that follows.

In total, 277 plant species were observed within the three alternative routes during August 2007 field surveys. These are listed in Table 17-4 below. This includes 108 species of herbaceous plants, 31 graminoid (grass/sedge) species, 45 shrub species, 22 vine species, and 71 tree species.

Table 17-4
Flora Identified within the Alternative Transmission Line Routes

Growth Habit	Scientific Name	Common	Existing Line Alt	LIRR Alt	Montauk Hwy Alt
Fern	Dennstaedtia puntilobula	Hay Scented Fern	x		
Fern	Osmunda cinnamomea	Cinnamon Fern	x	x	
Fern	Pteridium gleditsch	Bracken Fern	x	x	x
Fern	Thelypteris noveboracensis	New York Fern	x		
Forb/Herb	Achillea millefolium	Yarrow	x	x	x
Forb/Herb	Alliaria officinalis	Garlic Mustard	x	x	x
Forb/Herb	Allium vineale	Field Garlic	x		
Forb/Herb	Amaranthus retroflexus	Green Amaranth	x		x
Forb/Herb	Ambrosia artemisiifolia	Common Ragweed	x	x	x
Forb/Herb	Ambrosia vulgaris	Mugwort	x	x	x
Forb/herb	Anthemis cotula	Mayweed	x		
Forb/Herb	Apocynum cannabinum	Hemp dogbane	x	x	
Forb/Herb	Apocynum sp.	Dogbane	x		
Forb/Herb	Aralia nudicaulus	Wild Sarsaparilla	x		
Forb/Herb	Arctium sp.	Burdock sp.	x	x	x
Forb/Herb	Arisaema triphyllum	Jack-In-The-Pulpit	x		
Forb/Herb	Asclepias syriaca	Common Milkweed	x	x	
Forb/Herb	Asclepias tuberosa	Butterfly Weed	x		
Forb/Herb	Aster sp.	Aster sp.	x	x	x
Forb/Herb	Baptisia tinctoria	Wild Indigo	x	x	
Forb/Herb	Bidens connata	Swamp Beggar's Tick	x		
Forb/Herb	Bidens frondosa	Beggars Ticks	x	x	
Forb/Herb	Brassica nigra	Black Mustard	x		
Forb/Herb	Brassica rapa	Field Mustard	x	x	x
Forb/Herb	Carum carvi	Caraway	x		
Forb/Herb	Cassia fasciculata	Partridge Pea	x	x	x
Forb/Herb	Centaurea maculosa	Spotted Knapweed	x		
Forb/Herb	Centaurea nigra	Black Knapweed	x		
Forb/Herb	Centaurea sp.	Knapweed sp.	x	x	
Forb/Herb	Chenopodium album	Lambs Quarters	x	x	x
Forb/Herb	Chrysopsis falcata	Sickle-leaved Golden Aster	x		
Forb/Herb	Cichorium intybus	Chickory	x	x	x
Forb/Herb	Cicuta maculata	Water Hemlock		x	

Table 17-4 (cont'd)
Flora Identified within the Alternative Transmission Line Routes

Growth Habit	Scientific Name	Common	Existing Line Alt	LIRR Alt	Montauk Hwy Alt
Forb/Herb	Cirsium arvense	Canada Thistle	x	x	x
Forb/Herb	Cirsium vulgare	Bull Thistle	x	x	x
Forb/Herb	Commelina communis	Asiatic dayflower	x	x	x
Forb/Herb	Conyza canadensis	Horseweed	x		
Forb/Herb	Cuscuta gronovii	Common Dodder	x	x	
Forb/Herb	Datura stramonium	Jimsonweed	x		
Forb/Herb	Daucus carota	Queen Anne's Lace	x	x	x
Forb/Herb	Decodon verticillatus	Swamp Loosestrife		x	
Forb/Herb	Erigeron annuus	Daisy Fleabane	x		
Forb/Herb	Erigeron canadensis	Horseweed	x	x	
Forb/Herb	Eupatorium dubium	Eastern Joe-Pye Weed	x		
Forb/Herb	Eupatorium hyssopifolium	Hyssop-leaved Boneset	x	x	
Forb/Herb	Eupatorium perfoliatum	Common Boneset	x	x	x
Forb/Herb	Eurybia divaricata	White Wood Aster	x		
Forb/herb	Galinsoga ciliata	Quickweed	x		x
Forb/Herb	Galium asprellum	Rough Bedstraw	x		
Forb/Herb	Gerardia pedicularia	Fern-leaved False Foxglove	x	x	x
Forb/Herb	Helianthus annuus	Common Sunflower	x		
Forb/Herb	Hieracium pilosella	Mouse Ear	x	x	
Forb/Herb	Hudsonia ericoides	Golden Heather	x		
Forb/Herb	Hypericum perforatum	St. John's wort	x	x	
Forb/Herb	Impatiens capensis	Jewelweed	x	x	
Forb/Herb	Ipomoea coccinea	Small Red Morning Glory	x	x	x
Forb/Herb	Lactuca canadensis	Wild Lettuce	x	x	
Forb/Herb	Lechea intermedia	pinweed	x		
Forb/Herb	Leontodon autumnalis	Fall Dandelion	x	x	x
Forb/Herb	Leonurus cardiaca	Motherwort	x	x	x
Forb/Herb	Lepidium campestre	Field Peppergrass	x	x	
Forb/Herb	Lespedeza capitata	Round-headed Bush-clover	x		
Forb/Herb	Lespedeza sp.	Bush-clover	x	x	x
Forb/Herb	Linaria vulgaris	Butter and Eggs	x	x	x
Forb/Herb	Lotus corniculatus	Birdfoot Trefoil	x		
Forb/Herb	Maianthemum canadense	Canada Mayflower	x	x	
Forb/Herb	Melilotus alba	White Sweet Clover	x	x	
Forb/Herb	Metha piperita	Peppermint	x		
Forb/Herb	Mimulus ringens	Monkey Flower	x		
Forb/Herb	Nipponanthemum nipponicum	Montauk Daisy	x		x
Forb/Herb	Oenothera biennis	Common Evening Primrose	x	x	
Forb/Herb	Origanum vulagare	Wild Marjoram	x		
Forb/Herb	Oxalis europea	Yellow Wood Sorrel	x		

Table 17-4 (cont'd)
Flora Identified within the Alternative Transmission Line Routes

Growth Habit	Scientific Name	Common	Existing Line Alt	LIRR Alt	Montauk Hwy Alt
Forb/Herb	Oxalis grandis	Wood Sorrel	x	x	x
Forb/Herb	Phyolacca americana	Pokeweed	x	x	x
Forb/Herb	Plantago lanceolata	English Plantain	x	x	x
Forb/Herb	Plantago major	Common Plantain	x	x	x
Forb/Herb	Polygonum cuspidatum	Japanese Knotweed	x	x	x
Forb/Herb	Polygonum hydropiper	Water Pepper	x	x	
Forb/Herb	Polygonum hydropiperoides	Mild Water Pepper	x		
Forb/Herb	Polygonum lapathfolium	Nodding smartweed	x	x	x
Forb/Herb	Polygonum persicaria	Lady's Thumb	x	x	x
Forb/Herb	Portulaca oleracea	Common Purslane	x		x
Forb/Herb	Potentilla simplex	Common Cinquefoil	x	x	x
Forb/Herb	Pseudognaphalium obtusifolium	Sweet Everlasting	x		
Forb/Herb	Rumex obtusifolius	Bitter Dock	x	x	x
Forb/Herb	Saponaria officinalis	Bouncing Bet	x		
Forb/Herb	Silene latifolia	White Campion	x		
Forb/Herb	Smilax rotundifolia	Common Greenbriar	x	x	x
Forb/Herb	Solanum carolinense	Horsenettle	x	x	x
Forb/Herb	Solanum dulcamara	Bitter nightshade	x		
Forb/Herb	Solanum nigrum	Black nightshade	x	x	x
Forb/Herb	Solidago altissima	Tall Goldenrod	x		
Forb/Herb	Solidago canadensis	Canada Goldenrod	x		
Forb/Herb	Solidago gigantea	Late Goldenrod	x		
Forb/Herb	Solidago rugosa	Rough-stemmed Goldenrod	x	x	
Forb/Herb	Solidago sp.	Goldenrod sp.	x	x	x
Forb/Herb	Solidago tenuifolia	Slender-leaved Goldenrod	x	x	
Forb/Herb	Solidago ulingosa	Bog Goldenrod	x	x	
Forb/Herb	Sonchus oleraceus	Common Sow-thistle	x		
Forb/Herb	Symplocarpus foetidus	Skunk Cabbage	x	x	
Forb/Herb	Tanacetum vulgare	Tansy	x	x	
Forb/Herb	Taraxacum officinale	Common Dandelion	x	x	x
Forb/herb	Tovara virginiana	Jumpseed	x		x
Forb/Herb	Trifolium pratense	Red Clover	x	x	
Forb/Herb	Trifolium repens	White Clover	x	x	x
Forb/Herb	Verbascum thapsus	Common Mullein	x	x	x
Forb/Herb	Verbena urticifolia	White Vervain	x		
Forb/Herb	Vicia crecca	Cow Vetch	x		
Forb/Herb/Vine	Polygonum arifolium	Halberd-leaved Tearthumb	x	x	
Forb/Herb/Vine	Solanum dulcamara	Bittersweet Nightshade	x	x	x
Graminoid	Agropyron repens	Quack Grass	x	x	x
Graminoid	Agrostis alba	Purple top grass	x	x	x
Graminoid	Agrostis stolonifera	Redtop	x		
Graminoid	Andropogon scoparius	Little Bluestem		x	

Table 17-4 (cont'd)
Flora Identified within the Alternative Transmission Line Routes

Growth Habit	Scientific Name	Common	Existing Line Alt	LIRR Alt	Montauk Hwy Alt
Graminoid	Andropogon virginicus	Broomsedge		x	
Graminoid	Bromus inermis	Smooth Brome	x		
Graminoid	Carex crinita	Fringed Sedge	x		
Graminoid	Carex lurida	Shallow Sedge	x		
Graminoid	Cyperus strigosus	Umbrella Sedge	x		x
Graminoid	Dactylis glomerata	Orchard Grass	x	x	x
Graminoid	Dichanthelium clandestinum	Deer Tongue	x	x	
Graminoid	Digitaria sanguinalis	Crab Grass	x	x	x
Graminoid	Echinochloa crusgalli	Barnyard Grass	x	x	x
Graminoid	Eragrostis spectabilis	Purple Lovegrass	x		
Graminoid	Festuca elatior	Measo Fescue	x		
Graminoid	Festuca rubra	Red Fescue	x		
Graminoid	Hordeum vulgare	Barley	x		
Graminoid	Juncus tenuis	Path Rush	x	x	
Graminoid	Lolium sp.	Ryegrass	x		
Graminoid	Miscanthus sinensis	Eulalia	x		
Graminoid	Panicum virgatum	Switchgrass	x		
Graminoid	Phalaris arundinacea	Reed Canary Grass	x		
Graminoid	Phleum pratense	Timothy Grass	x	x	
Graminoid	Phragmites australis	Common Reed	x		
Graminoid	Phyllostachys aureosulcata	Phyllostachys Bamboo	x	x	
Graminoid	Schizachyrium scoparium	Little Bluestem Grass	x	x	
Graminoid	Scirpus cyperinus	Wool Grass	x	x	x
Graminoid	Seteria magna	Giant Foxtail	x	x	
Graminoid	Triodia flava	Purple top grass	x		
Graminoid	Zea mays	Corn	x		
Shrub	Amalanchier arborea	Juneberry	x		
Shrub	Amalanchier laevis	Smooth Juneberry	x		
Shrub	Aralia spinosa	Devil's walking stick	x		
Shrub	Berberis thunbergii	Japanese Barberry	x		
Shrub	Buddleja	Butterfly Bush	x	x	
Shrub	Cephalanthus occidentalis	Buttonbush	x	x	
Shrub	Clethra alnifolia	Sweet Pepperbush	x	x	
Shrub	Comptonia peregrina	Sweet Fern	x	x	x
Shrub	Cornus alternifolia	Alternate-Leaf Dogwood	x		
Shrub	Cornus sp.	Dogwood	x		
Shrub	Diervilla lonicera	Northern Bush Honeysuckle	x		
Shrub	Elaeagnus umbellata	Autumn Olive	x	x	
Shrub	Euonymus atropurpureus	Burning Bush	x	x	x
Shrub	Forsythis intermedia	Forsythia	x		

Table 17-4 (cont'd)
Flora Identified within the Alternative Transmission Line Routes

Growth Habit	Scientific Name	Common	Existing Line Alt	LIRR Alt	Montauk Hwy Alt
Shrub	Gaylussacia baccata	Black Huckleberry	x		
Shrub	Hibiscus sp.	Hibiscus	x	x	x
Shrub	Hybiscus syriacus	Rose of Sharon	x		
Shrub	Hydrangea sp.	Hydrangea	x		
Shrub	Ilex crenata	Japanese Holly	x		
Shrub	Ilex verticillata	Winterberry	x	x	x
Shrub	Juniperus communis	Dwarf Juniper	x	x	
Shrub	Kalmia latifolia	Mountain Laurel	x		
Shrub	Ligustrum ovalifolium	California Privet	x	x	x
Shrub	Ligustrum sp.	Privet	x	x	x
Shrub	Lindera benzoin	Spicebush	x		
Shrub	Lonicera morrowi	Morrow Honeysuckle	x	x	x
Shrub	Morella pennsylvanica	Bayberry	x	x	
Shrub	Prunus maritima	Beach Plum	x	x	
Shrub	Pyrus sp.	Chokeberry	x	x	x
Shrub	Rhamnus frangula	European Buckthorn	x	x	
Shrub	Rhododendron viscosum	Swamp Azalea	x		
Shrub	Rosa multiflora	Multiflora Rose	x	x	x
Shrub	Rosa rugosa	Rugose Rose	x	x	x
Shrub	Rosa virginiana	Virginia Rose	x	x	
Shrub	Rubus allegheniensis	Allegheny Blackberry	x		
Shrub	Rubus idaeus	Wild Red Raspberry	x	x	x
Shrub	Rubus occidentalis	Black Raspberry	x		
Shrub	Rubus phoenicolasius	Wineberry	x		
Shrub	Sambucus canadensis	Common Elderberry	x	x	
Shrub	Syringa vulgaris	Common Lilac	x		
Shrub	Vaccinium corybosum	Common Highbush Blueberry	x	x	
Shrub	Vaccinium palladium	Early Lowbush Blueberry	x		
Shrub	Viburnum acerifolium	Maple Leaf Viburnum	x		x
Shrub	Viburnum dentadum	Arrowwood	x	x	x
Shrub/Tree	Taxus canadensis	Yew	x		x
Tree	Acer saccharinum	Silver Maple	x	x	x
Tree	Acer negundo	Box Elder	x	x	x
Tree	Acer platanoides	Norway Maple	x	x	x
Tree	Acer platanoides 'Royal Red'	Royal Red Norway Maple	x		x
Tree	Acer pseudo-platanus	Sycamore Maple	x	x	x
Tree	Acer rubrum	Red Maple	x	x	x
Tree	Acer saccarum	Sugar Maple	x		x
Tree	Aesculus hippocastanum	Horse Chestnut	x		x
Tree	Ailanthus altissima	Tree-of-Heaven	x	x	x
Tree	Albizia julibrissin	Mimosa Tree	x	x	
Tree	Betula populifolia	Gray Birch	x		
Tree	Betula sp.	Birch sp.	x	x	

Table 17-4 (cont'd)
Flora Identified within the Alternative Transmission Line Routes

Growth Habit	Scientific Name	Common	Existing Line Alt	LIRR Alt	Montauk Hwy Alt
Tree	Carya cordiformis	Pignut Hickory	x		x
Tree	Carya ovata	Shagbark Hickory	x		
Tree	Carya tomentosa	Mockernut Hickory	x		
Tree	Castanea dentata	American Chestnut	x		
Tree	Catalpa bignonioides	Common Catalpa	x	x	x
Tree	Chamaecyparis sp.	Ornamental False Cypress	x		
Tree	Cornus florida	Flowering dogwood	x		
Tree	Fagus grandifolia	American Beech	x		
Tree	Fagus sp.	Beech sp.	x	x	x
Tree	Fagus sylvatica	European Beech	x		
Tree	Ginkgo biloba	Ginkgo	x		x
Tree	Ilex opaca	American Holly	x		
Tree	Juglans nigra	Black Walnut	x	x	x
Tree	Juniperus virginiana	Red Cedar	x	x	x
Tree	Lagerstroemia indica	Crape Myrtle	x		x
Tree	Liquidambar styraciflua	Sweet Gum	x		x
Tree	Morus alba	White Mulberry	x	x	x
Tree	Morus rubra	Red Mulberry	x		x
Tree	Nyssa sylvatica	Black Gum	x	x	x
Tree	Picea abies	Norway Spruce	x		x
Tree	Picea glauca	White spruce	x	x	x
Tree	Pinus rigida	Pitch Pine	x	x	
Tree	Pinus Strobus	Eastern White Pine	x		x
Tree	Pinus strobus 'nana'	Dwarf white pine	x		x
Tree	Pinus thunbergii	Japanese Black Pine	x		
Tree	Platanus occidentalis	Sycamore	x		
Tree	Platanus x acerifolia	London Plane	x		x
Tree	Platycladus orientalis aurea	Golden Biota	x		x
Tree	Populus alba	White Poplar	x	x	x
Tree	Populus deltoides	Common Cottonwood	x		x
Tree	Populus tremuloides	Quaking Aspen	x	x	
Tree	Prunus avium L.	Sweet Cherry	x		x
Tree	Prunus serotina	Black Cherry	x	x	x
Tree	Prunus serrulata 'Kwanzan'	Kwanzan Cherry	x		
Tree	Prunus sp.	Cherry (ornamental)	x		
Tree	Pyrus calleryana	Callery Pear	x	x	x
Tree	Pyrus communis	Domestic Pear	x		
Tree	Pyrus coronaria	Crab Apple	x	x	
Tree	Pyrus sp.	Apple	x		x
Tree	Quercus alba	White Oak	x	x	x
Tree	Quercus coccinea	Scarlet Oak	x	x	x
Tree	Quercus ilicifolia	Scrub Oak	x	x	
Tree	Quercus prinus	Chestnut Oak	x		

Table 17-4 (cont'd)
Flora Identified within the Alternative Transmission Line Routes

Growth Habit	Scientific Name	Common	Existing Line Alt	LIRR Alt	Montauk Hwy Alt
Tree	Quercus velutina	Black Oak	x		
Tree	Quercus palustris	Pin Oak	x	x	x
Tree	Quercus sp.	Oak sp.	x		x
Tree	Quercus stellata	Post Oak	x		
Tree	Rhus copallina	Winged Sumac	x	x	x
Tree	Rhus glabra	Smooth Sumac	x	x	
Tree	Rhus typhina	Staghorn Sumac	x	x	x
Tree	Robinia pseudo-acacia	Black Locust	x	x	x
Tree	Salix babylonica	Weeping Willow	x	x	x
Tree	Salix nigra	Black Willow		x	
Tree	Sassafras albidum	Sassafras	x	x	x
Tree	Sophora japonica	Japanese Pagoda Tree	x		x
Tree	Thuja occidentalis	Arborvitae	x		
Tree	Tilia americana	American Basswood	x		x
Tree	Tsuga canadensis	Eastern Hemlock	x		
Tree	Ulmus americana	American Elm	x		x
Tree	Zelkova serrata	Japanese Zelkova	x		
Vine	Ampelopsis brevipedunculata	Porcelain Berry	x	x	x
Vine	Apios americana	Ground Nut	x		x
Vine	Aralia nudicaulis	Wild Sarsaparilla	x		
Vine	Calystegia sepium	Hedge Bindweed	x		x
Vine	Campsis radicans	Trumpet Creeper	x	x	
Vine	Celastrus orbiculatus	Asiatic Bittersweet	x	x	x
Vine	Convolvulus arvensis L.	Field Bindweed	x	x	
Vine	Hedera helix	English Ivy	x		x
Vine	Lonicera japonica	Japanese Honeysuckle	x	x	x
Vine	Parthenocissus quinquefolia	Virginia Creeper	x	x	x
Vine	Polygonum perfoliatum	Mile-a-Minute	x	x	
Vine	Rhus radicans	Poison Ivy	x	x	x
Vine	Rubus flagellaris	Dew Berry	x	x	x
Vine	Vinca minor	Common Periwinkle	x	x	x
Vine	Vitis aestivalis	Summer grape	x	x	x
Vine	Vitis labrusca	Fox Grape	x	x	x
Vine	Vitis palmata	Cat Grape	x		
Vine	Vitis vulpina	Frost Grape	x	x	x
Vine	Wisteria sinensis	Chinese Wisteria	x		
Vine	Wisteria sp.	Wisteria sp.	x	x	x

Notes: This list represents flora observed within the Existing Line Alternative, Montauk Highway Alternative, and LIRR Route Alternative corridors during field surveys in August 2007.
Source: AKRF field surveys, August 2007

The Existing Line Alternative exhibited more species diversity, and a greater number of native species, than the Montauk Highway Alternative, LIRR Route Alternative, or Direct Route Alternative due to the route passing through existing hardwood forests and several ecologically significant wetlands associated with Great Swamp. Conversely, the Montauk Highway Alternative and LIRR Route Alternative are both sited through highly developed areas with substantial residential, commercial, and/or transportation-related development. As a result, vegetation along these two alternative routes consists predominantly of ornamental plantings or escapes, non-native vegetation or early successional trees commonly found in human-dominated landscapes, and some open fields occupied by agricultural uses. Native vegetation, however, does exist along the LIRR Route and Montauk Highway Alternatives within remnant forested lots and adjacent to the Bridgehampton Sag Harbor Turnpike.

Significant Habitats and Ecological Resources

New York State Critical Environmental Areas (CEA)

Critical Environmental Areas are designated under the State Environmental Quality Review Act (SEQRA) as areas of exceptional or unique natural value that have an inherent ecological, geological, or hydrological sensitivity. As shown in Figure 17-16, two CEAs have been designated in the project vicinity: Long Pond Greenbelt and the South Fork Special Groundwater Protection Area (SGPA). The characteristics and significance of these CEAs, which represent nearly the entire area of the four alternative routes and the eastern end of three of the four routes along Bridgehampton Sag Harbor Turnpike (Long Pond), are discussed in Chapter 9, "Natural Resources."

Great Swamp

The Great Swamp covers approximately 300 acres west of the Bridgehampton/Sag Harbor Turnpike, and the area generally bounded by Scuttle Hole Road to the south, and Brick Kiln Road to the west and north. It is traversed by the Existing Line Alternative between Brick Kiln Lane and Bridgehampton Turnpike, where high quality wetlands (e.g., Mulvihill Pond) fall within 50 feet of the existing double 69 kilovolt (kV) transmission line. Several unmapped pockets of seasonally flooded wetlands also exist directly underneath the existing line. This property is part of the 200 acre Mulvihill Preserve, created and managed through efforts by Southampton Town, The Peconic Land Trust, and Suffolk County.

Although not specifically designated as a CEA, it is one of the few remaining undisturbed bogs on the South Fork and is composed of an assemblage of ponds, marshlands, vernal ponds, and springs that provide a unique niche for many types of fauna and flora.

Chapter 9, "Natural Resources," provides additional information on the Great Swamp and its ecological resources.

New York State Department of State (NYSDOS) - Significant Coastal Fish and Wildlife Habitats

New York State Department of State has identified Mecox Bay, Hayground Cove, and Mill Creek as Significant Coastal Fish and Wildlife Habitat (NYSDOS 1987). Mecox Bay is a large brackish pond, bordered on the south by a barrier beach inlet. Mecox Bay receives freshwater inputs from Hayground Cove, Mill Creek, and Calf Creek from the north, Burnett Creek and Channel Pond from the west, and Sam's Creek and Swan Creek from the east.

The northern portion of this NYSDOS-designated Significant Coastal Fish and Wildlife Habitat is traversed by the Montauk Highway Alternative and the LIRR Route Alternative. Palustrine scrub-shrub broad-leaved deciduous freshwater wetlands described as "seasonally tidal" (PFO1R) are present north of Hayground Cove in the vicinity of the Montauk Highway Alternative and LIRR Route Alternative. This connection suggests a potential for use by anadramous fish.

Wildlife

Due to the available habitat and degree of human impacts along the Montauk Highway Alternative and LIRR Route Alternative corridors, wildlife expected to be present would primarily include common native and non-native species adapted to suburban, commercial, and agricultural landscapes. These two alternatives include several vegetative communities and structural features that could provide cover, food resources, nesting substrate, and protection for a variety of wildlife. However, these habitats offer a patchwork of nesting habitat in close proximity to heavily traveled highways (i.e., CR39, Montauk Highway) and the LIRR. Vegetated cover varies from non-agricultural grasslands, wetland areas, and forested areas valuable to nesting/foraging birds and mammals, to forest and thicket areas that provide protection, nesting sites, and food sources for the wildlife. Lastly, non-vegetative cover of human origin, such as refuse, is prevalent throughout the site and may provide cover for mammals, reptiles, amphibians, and insects, and could be used as nesting material by birds and mammals.

Ecological communities adjacent to the Montauk Highway Alternative and LIRR Route Alternative corridors include some fragments of grasslands, forests, and freshwater wetlands (the "Southampton Wildlands") that could provide resources for wildlife. Croplands and orchards offer food and cover at various times of the year to migratory shorebirds (i.e., buff-breasted sandpiper, upland sandpiper), blackbirds (i.e., mixed species flocks of common grackles, rusty and red-winged blackbirds), and grassland birds (i.e., horned lark, American pipit, eastern meadowlark). Hedgerows and other landscaped thickets, while often offering little in food value, provide cover and nesting substrate for a variety of birds and mammals.

Larger adjacent areas, such as the Long Pond Greenbelt described in Chapter 9, "Natural Resources," provide the most valuable habitat to resident and migratory wildlife species, and core populations would more likely occur in these larger, more contiguous communities.

The proposed Existing Line Alternative would pass through both agricultural and residential areas, offering habitat for species complements as listed for the Montauk Highway Alternative and LIRR Route Alternative above, as well as more contiguous pine-oak forests and wetland areas. The diversity of woodland, grassland, and wetland habitats adjacent to the Existing Line Alternative offer significant natural resources for a broad range of wildlife.

Birds

The Existing Line Alternative, Montauk Highway Alternative, and LIRR Route Alternative corridors would pass through diverse landscapes, including moderate to high-density residential and commercial areas, agricultural areas, contiguous forests, grasslands, and wetlands from small emergent marshes to sizeable open water areas. Habitats in the vicinity of the three alternative routes offer important habitat for birds throughout the year, including ponds and lakes for breeding and substantial wintering waterfowl populations, and scrublands, grasslands, woodlands for breeding and migratory songbirds. Over 200 bird species are present throughout the year in the vicinity of the Direct Route Alternative (Table 17-5), including 98 potentially or

actively breeding species (NYSDEC 2007, NAS 2007). Further discussion of the general importance of these habitats to birds is presented in Chapter 9, "Natural Resources."

During surveys in August 2007, a total of 84 bird species were observed within the three alternative corridors, as indicated in Table 17-5 below. The majority of birds observed were common breeding species in suburban scrub-shrub and fragmented woodland edges (gray catbird, northern cardinal, house sparrow), with other species that typical of forests (eastern wood-pewee, great crested flycatcher), open meadows and agricultural fields (savannah sparrow, song sparrow, killdeer), and freshwater ponds (belted kingfisher, mallard). Two New York State threatened species (pied-billed grebe and least bittern) that potentially breed in wetlands within the four proposed transmission line routes were not noted during field surveys. Green heron likely breed in Little Long Pond - an open water habitat located between the Montauk Highway and LIRR Route Alternatives in the vicinity of Snake Hollow Road - as a recently used nest was located and two juvenile birds and one adult were observed foraging in the pond. Most of the additional bird species were observed in the Existing Line Alternative corridor, including resident and migratory songbirds (i.e., prairie warbler, pine warbler, palm warbler, indigo bunting), resident sparrows (i.e., chipping sparrow), migratory shorebirds (i.e., greater yellowlegs) and game species (i.e., wild turkey, ring-necked pheasant).

Table 17-5
Bird Species Known to occur within the Existing Line Alternative, Montauk Highway Alternative, and LIRR Route Alternative Corridors

Common Name	Scientific Name	Observed in August 2007
Greater White-fronted Goose	*Anser albifrons*	
Snow Goose	*Chen caerulescens*	
Brant	*Branta bernicla*	
Barnacle Goose	*Branta leucopsis*	
Canada Goose	*Branta canadensis*	X
Mute Swan	*Cygnus olor*	X
Tundra Swan	*Cygnus columbianus*	
Wood Duck	*Aix sponsa*	
Gadwall	*Anas strepera*	X
Eurasian Wigeon	*Anas penelope*	
American Wigeon	*Anas americana*	
American Black Duck	*Anas rubripes*	X
Mallard	*Anas platyrhynchos*	X
Blue-winged Teal	*Anas discors*	
Northern Shoveler	*Anas clypeata*	X
Northern Pintail	*Anas acuta*	X
Green-winged Teal	*Anas crecca*	X
Canvasback	*Aythya valisineria*	
Redhead	*Aythya americana*	
Ring-necked Duck	*Aythya collaris*	
Greater Scaup	*Aythya marila*	
Lesser Scaup	*Aythya affinis*	
King Eider	*Somateria spectabilis*	
Common Eider	*Somateria mollissima*	
Harlequin Duck	*Histrionicus histrionicus*	
Surf Scoter	*Melanitta perspicillata*	

Table 17-5 (cont'd)
Bird Species Known to occur within the Existing Line Alternative, Montauk Highway Alternative, and LIRR Route Alternative Corridors

Common Name	Scientific Name	Observed in August 2007
White-winged Scoter	*Melanitta fusca*	
Black Scoter	*Melanitta nigra*	
Long-tailed Duck	*Clangula hyemalis*	
Bufflehead	*Bucephala albeola*	
Common Goldeneye	*Bucephala clangula*	
Barrow's Goldeneye	*Bucephala islandica*	
Hooded Merganser	*Lophodytes cucullatus*	
Common Merganser	*Mergus merganser*	
Red-breasted Merganser	*Mergus serrator*	
Ruddy Duck	*Oxyura jamaicensis*	
Ring-necked Pheasant	*Phasianus colchicus*	X
Wild Turkey	*Meleagris gallopavo*	X
Northern Bobwhite	*Colinus virginianus*	
Red-throated Loon	*Gavia stellata*	
Common Loon	*Gavia immer*	
Pied-billed Grebe	*Podilymbus podiceps*	
Horned Grebe	*Podiceps auritus*	
Red-necked Grebe	*Podiceps grisegena*	
Cory's Shearwater	*Calonectris diomedea*	
Northern Gannet	*Morus bassanus*	
Eastern Brown Pelican	*Pelecanus occidentalis*	
Double-crested Cormorant	*Phalacrocorax auritus*	X
Great Cormorant	*Phalacrocorax carbo*	
American Bittern	*Botaurus lentiginosus*	
Least Bittern	*Ixobrychus exilis*	
Great Blue Heron (Blue form)	*Ardea herodias*	X
Great Egret	*Ardea alba*	X
Cattle Egret	*Bubulcus ibis*	
Green Heron	*Butorides virescens*	X
Black-crowned Night-Heron	*Nycticorax nycticorax*	X
Yellow-crowned Night-Heron	*Nyctanassa violacea*	
Osprey	*Pandion haliaetus*	X
Bald Eagle	*Haliaeetus leucocephalus*	
Northern Harrier	*Circus cyaneus*	X
Sharp-shinned Hawk	*Accipiter striatus*	
Cooper's Hawk	*Accipiter cooperii*	X
Northern Goshawk	*Accipiter gentilis*	
Broad-winged Hawk	*Buteo platypterus*	
Red-tailed Hawk	*Buteo jamaicensis*	X
Rough-legged Hawk	*Buteo lagopus*	
American Kestrel	*Falco sparverius*	X
Merlin	*Falco columbarius*	
Peregrine Falcon	*Falco peregrinus*	
Clapper Rail	*Rallus longirostris*	
Virginia Rail	*Rallus limicola*	
American Coot	*Fulica americana*	
Black-bellied Plover	*Pluvialis squatarola*	X
Killdeer	*Charadrius vociferus*	X
Greater Yellowlegs	*Tringa melanoleuca*	X

Table 17-5 (cont'd)
Bird Species Known to occur within the Existing Line Alternative, Montauk Highway Alternative, and LIRR Route Alternative Corridors

Common Name	Scientific Name	Observed in August 2007
Ruddy Turnstone	*Arenaria interpres*	
Red Knot	*Calidris canutus*	
Sanderling	*Calidris alba*	
Purple Sandpiper	*Calidris maritima*	
Dunlin	*Calidris alpina*	
Wilson's Snipe	*Gallinago delicata*	
American Woodcock	*Scolopax minor*	X
Laughing Gull	*Larus atricilla*	X
Black-headed Gull	*Larus ridibundus*	
Bonaparte's Gull	*Larus philadelphia*	
Ring-billed Gull	*Larus delawarensis*	X
Herring Gull	*Larus argentatus*	X
Iceland Gull	*Larus glaucoides*	
Lesser Black-backed Gull	*Larus fuscus*	
Glaucous Gull	*Larus hyperboreus*	
Great Black-backed Gull	*Larus marinus*	X
Black-legged Kittiwake	*Rissa tridactyla*	
Thick-billed Murre	*Uria lomvia*	
Razorbill	*Alca torda*	
Rock Pigeon	*Columba livia*	X
Mourning Dove	*Zenaida macroura*	X
Yellow-billed Cuckoo	*Coccyzus americanus*	X
Black-billed Cuckoo	*Coccyzus erythropthalmus*	
Eastern Screech-Owl	*Megascops asio*	
Great Horned Owl	*Bubo virginianus*	
Long-eared Owl	*Asio otus*	
Short-eared Owl	*Asio flammeus*	
Northern Saw-whet Owl	*Aegolius acadicus*	
Common Nighthawk	*Chordeiles minor*	
Chuck-will's-widow	*Caprimulgus carolinensis*	
Whip-poor-will	*Caprimulgus vociferus*	
Chimney Swift	*Chaetura pelagica*	X
Ruby-throated Hummingbird	*Archilochus colubris*	X
Belted Kingfisher	*Ceryle alcyon*	X
Red-headed Woodpecker	*Melanerpes erythrocephalus*	
Red-bellied Woodpecker	*Melanerpes carolinus*	X
Yellow-bellied Sapsucker	*Melanerpes varius*	
Downy Woodpecker	*Picoides pubescens*	X
Hairy Woodpecker	*Picoides villosus*	X
Northern Flicker	*Colaptes auratus*	X
Eastern Wood-Pewee	*Contopus virens*	X
Willow Flycatcher	*Empidonax traillii*	
Eastern Phoebe	*Sayornis phoebe*	
Great Crested Flycatcher	*Myiarchus crinitus*	X
Eastern Kingbird	*Tyrannus tyrannus*	X
Northern Shrike	*Lanius excubitor*	
White-eyed Vireo	*Vireo griseus*	X
Yellow-throated Vireo	*Vireo flavifrons*	

Table 17-5 (cont'd)
Bird Species Known to occur within the Existing Line Alternative, Montauk Highway Alternative, and LIRR Route Alternative Corridors

Common Name	Scientific Name	Observed in August 2007
Warbling Vireo	*Vireo gilvus*	
Red-eyed Vireo	*Vireo olivaceus*	X
Blue Jay	*Cyanocitta cristata*	X
American Crow	*Corvus brachyrhynchos*	X
Fish Crow	*Corvus ossifragus*	X
Horned Lark	*Eremophila alpestris*	
Purple Martin	*Progne subis*	
Tree Swallow	*Tachycineta bicolor*	X
Northern Rough-winged Swallow	*Stelgidopteryx serripennis*	X
Bank Swallow	*Riparia riparia*	
Barn Swallow	*Hirundo rustica*	X
Black-capped Chickadee	*Poecile atricapillus*	X
Tufted Titmouse	*Baeolophus bicolor*	X
Red-breasted Nuthatch	*Sitta canadensis*	
White-breasted Nuthatch	*Sitta carolinensis*	X
Brown Creeper	*Certhia americana*	
Carolina Wren	*Thryothorus ludovicianus*	X
House Wren	*Troglodytes aedon*	X
Winter Wren	*Troglodytes troglodytes*	
Sedge Wren	*Cistothorus platensis*	
Marsh Wren	*Cistothorus palustris*	
Golden-crowned Kinglet	*Regulus satrapa*	
Ruby-crowned Kinglet	*Regulus calendula*	
Blue-gray Gnatcatcher	*Polioptila caerulea*	
Eastern Bluebird	*Sialia sialis*	
Townsend's Solitaire	*Myadestes townsendi*	
Hermit Thrush	*Catharus guttatus*	
Wood Thrush	*Hylocichla mustelina*	X
American Robin	*Turdus migratorius*	X
Gray Catbird	*Dumetella carolinensis*	X
Northern Mockingbird	*Mimus polyglottos*	X
Brown Thrasher	*Toxostoma rufum*	X
European Starling	*Sturnus vulgaris*	X
American Pipit	*Anthus rubescens*	
Cedar Waxwing	*Bombycilla cedrorum*	X
Blue-winged Warbler	*Vermivora pinus*	
Orange-crowned Warbler	*Vermivora celata*	
Nashville Warbler	*Vermivora ruficapilla*	
Northern Parula	*Parula americana*	X
Yellow Warbler	*Dendroica petechia*	
Yellow-rumped (Myrtle) Warbler	*Dendroica coronata*	
Pine Warbler	*Dendroica pinus*	X
Prairie Warbler	*Dendroica discolor*	X
Palm Warbler	*Dendroica palmarum*	X
Black-and-white Warbler	*Mniotilta varia*	X
American Redstart	*Setophaga ruticilla*	
Ovenbird	*Seiurus aurocapilla*	X
Common Yellowthroat	*Geothlypis trichas*	X

Table 17-5 (cont'd)
Bird Species Known to occur within the Existing Line Alternative, Montauk Highway Alternative, and LIRR Route Alternative Corridors

Common Name	Scientific Name	Observed in August 2007
Wilson's Warbler	*Wilsonia pusilla*	
Yellow-breasted Chat	*Icteria virens*	
Scarlet Tanager	*Piranga olivacea*	
Eastern Towhee	*Pipilo erythrophthalmus*	X
American Tree Sparrow	*Spizella arborea*	
Chipping Sparrow	*Spizella passerina*	X
Clay-colored Sparrow	*Spizella pallida*	
Field Sparrow	*Spizella pusilla*	X
Vesper Sparrow	*Pooecetes gramineus*	
Savannah Sparrow	*Passerculus sandwichensis*	X
Grasshopper Sparrow	*Ammodramus savannarum*	
Nelson's Sharp-tailed Sparrow	*Ammodramus nelsoni*	
Saltmarsh Sharp-tailed Sparrow	*Ammodramus caudacutus*	
Seaside Sparrow	*Ammodramus maritimus*	
Fox Sparrow	*Passerella iliaca*	
Song Sparrow	*Melospiza melodia*	X
Swamp Sparrow	*Melospiza georgiana*	X
White-throated Sparrow	*Zonotrichia albicollis*	
White-crowned Sparrow	*Zonotrichia leucophrys*	
Dark-eyed (Slate-colored) Junco	*Junco hyemalis*	
Lapland Longspur	*Calcarius lapponicus*	
Snow Bunting	*Plectrophenax nivalis*	
Northern Cardinal	*Cardinalis cardinalis*	X
Rose-breasted Grosbeak	*Pheucticus ludovicianus*	
Indigo Bunting	*Passerina cyanea*	X
Red-winged Blackbird	*Agelaius phoeniceus*	X
Eastern Meadowlark	*Sturnella magna*	X
Rusty Blackbird	*Euphagus carolinus*	
Common Grackle	*Quiscalus quiscula*	X
Brown-headed Cowbird	*Molothrus ater*	X
Orchard Oriole	*Icterus spurius*	
Baltimore Oriole	*Icterus galbula*	X
Purple Finch	*Carpodacus purpureus*	
House Finch	*Carpodacus mexicanus*	X
Common Redpoll	*Carduelis flammea*	
Pine Siskin	*Carduelis pinus*	
American Goldfinch	*Carduelis tristis*	X
Evening Grosbeak	*Coccothraustes vespertinus*	
House Sparrow	*Passer domesticus*	X

Notes: Birds in bold-face were noted in the 2000-2005 NY State Breeding Bird Atlas as potential or confirmed breeders within the area of the four proposed transmission lines (Atlas 2000 blocks 7152a, 7152b, 7153c, 7153d, 7253c, 7153a, 7153b, 7253a). Wintering birds from 2000-2006 Christmas Bird Counts are also listed.
Sources: NYSDEC 2000-2005, NAS 2000-2006, Field surveys in August 2007

Mammals

AKRF field surveys in 2007 identified 12 mammal species within the Existing Line Alternative, Montauk Highway Alternative, and LIRR Route Alternative corridors (See Table 9-4 for mammals expected to occur within the study area). Observations of mammals within in the Montauk Highway Alternative and LIRR Route Alternative corridors were consistent with observations described within the Direct Route Alternative area in Chapter 9, "Natural Resources."

Two additional mammals were observed in the Existing Line Alternative. A red fox adult and two dens were observed east of Brick Kiln Lane along a sandy berm within the existing double 69kV transmission line right-of-way; feral dogs were observed in several locations along the proposed Existing Line Alternative corridor.

Reptiles & Amphibians

The NYSDEC Herp Atlas Project conducted a survey of reptiles and amphibians from 1990-1999, documenting the geographic distribution of New York's turtles, snakes, lizards, frogs, toads, and salamanders (NYSDEC 1999). Based on these surveys, and available habitat in the vicinity of the Direct Route Alternative corridor, approximately 27 reptiles and amphibian species can be expected to use the Existing Line Alternative, Montauk Highway Alternative, and LIRR Route Alternative corridors and vicinity (see Table 9-5). This list is likely representative of breeding species that would either disperse through these corridors prior to and following the breeding season, and those that breed in adjacent freshwater ponds and wetlands.

Three reptile species were noted within the Existing Line Alternative, Montauk Highway Alternative, and LIRR Route Alternative corridors during surveys in August 2007 The reptile species are (1) painted and (2) snapping turtles in freshwater ponds along the corridor (i.e., Little Long Pond, Mill Pond, Mulvihill Pond), and (3) eastern box turtle in the proposed expansion area of the Bridgehampton Substation (see Chapter 9, "Natural Resources"). Other reptiles and amphibians exist within these three corridors.

The distribution and ecological requirements of the state endangered Eastern Tiger Salamander, which is known to occur is discussed in the section on listed species below, and in Chapter 9, "Natural Resources."

Insects

Table 9-6, found in Chapter 9, "Natural Resources," shows a list of insect taxa expected to be present based on available habitat within the Existing Line Alternative, Montauk Highway Alternative, and LIRR Route Alternative corridors, and observations made during field surveys. Location-specific information for insect species, specifically for rare odonates known to occur within the vicinity, is listed in the following section.

Endangered, Threatened, Special Concern, and Rare Species

Information on endangered, threatened, special concern, and rare species within ½ mile of the project site was requested from the USFWS Long Island Office, the National Marine Fisheries Service (NMFS), and NYSDEC's New York Natural Heritage Program (NYNHP). Written requests and agency responses are presented with all project-related correspondence in Appendix B.

U.S. Fish and Wildlife Service

The USFWS list of federally endangered, threatened, or proposed listed species for Suffolk County (USFWS 2007) is discussed in Chapter 9, "Natural Resources." Conditions along the three alternative routes are similar to Direct Route Alternative in respect to the potential presence of federally threatened and endangered species.

National Marine Fisheries Service

Threatened and endangered species that require marine and estuarine environments, such as marine turtles, are not likely occur within in waterbodies adjacent to any of the three project alternative routes. However, various bays and inlets along the south shore of Long Island, including Mecox Bay, are designated as essential fish habitat (EFH) for a variety of marine and estuarine species during various life stages (D. Rusanowsky, NMFS Fisheries Biologist, personal communication on 5 November 2007). Because the Atlantic Ocean is connected to Mecox Bay, and Mecox Bay receives freshwater inputs from at least two waterbodies within the project area (i.e., Hayground Cove and Mill Creek) as well as saltwater inputs from the Atlantic Ocean, anadramous fish may use these aquatic habitats during their life cycle.

New York Natural Heritage Program

Correspondence from the NYNHP indicates that 23 plants, 2 amphibians, 2 damselflies, and two rare ecological communities are known to occur within the vicinity of the four proposed transmission line routes (Seoane 2007 - NYNHP). Chapter 9, "Natural Resources," describes the individual listed plant and animal species of concern in greater detail.

The potential for listed plant and animal species to occur along the Direct Route Alternative and further descriptions of their habitat requirements are discussed in Chapter 9, "Natural Resources." The potential for specific listed plant or animal species to occur in proximity to each of the three alternative transmission line routes is discussed in the Location Specific Findings section below. As a general note, the majority of New York State-listed plants and animals are known to occur east of the project site, in wetland habitats unaffected by the proposed project.

Of the New York State-listed species known to occur in this area, the eastern tiger salamander is of special note due to its rarity and endemism for this region of New York State and due to recent records of occurrence within the central portion of the overall project study area. The New York State "endangered" Eastern tiger salamander (*Ambystoma tigrinum* tigrinum), is known to occur at two documented locations on or in close proximity to the transmission line corridors, and nine documented locations within 0.25 miles of the project site based on past records of occurrence from the NYNHP. These locations are concentrated in areas east of Bridgehampton Sag Harbor Turnpike. The salamander is also known for the area in the central portion of the overall project site, in the vicinity of the Atlantic Golf Club.

A lengthy discussion of Eastern tiger salamander habitat requirements and presence within the Direct Route Alternative is located in Chapter 9, "Natural Resources." In short, surveys for this species have been conducted over the past 20 years to determine the local habitat requirements of Long Island populations (i.e., Cryan 1984, Madison and Farrand 1998), and numerous studies have been published on the life cycle and ecological requirements for this species throughout its range. In addition to the NYNHP information, recent studies suggest that the species is on the South Fork of Long Island, where the species may have been less numerous than according to surveys conducted since the 1980s.

EXISTING CONDITIONS – EXISTING LINE ALTERNATIVE

Natural Resources Survey and Site Assessment

With the exception of an approximately 2-mile area of the southern portion of the proposed Existing Line Alternative that is mixed residential and agricultural, this proposed route line runs through a forested area with light to moderate residential development, some agricultural uses, and through forested lands, some of which are preserved for hiking and hunting. Due to the predominance of undeveloped, largely forested lands adjacent to the Existing Line Alternative, it contains a higher predominance of native plant species and has greater wildlife value for habitat specialist animal species (birds, mammals, reptiles/amphibians) as compared to the more developed landscapes through which the other alternatives pass.

The Existing Line Alternative is dominated by shrubs, forbs and grasses underneath existing transmission lines. The areas between Mecox Road and Edge of Woods Road, and the area immediately north of Deer Run Road of this alternative route have been subject to less frequent maintenance than the bulk of the Existing Line Alternative and therefore contain taller shrubs and trees. However, the vast majority of the Existing Line Alternative corridor contains few woody plants greater than three (3) feet in height and is open for a width of approximately 50 feet.

As shown in Figure 17-14, a majority of the Existing Line Alternative is bordered by forest, specifically mature, oak-dominated woodlands (black, scarlet and white oaks) with frequent occurrence of pitch pine, pignut and mockernut hickory, and black gum, with an understory of ericaceous shrubs (blueberry, huckleberry, mountain laurel, heathers). The forest closely resembles the "Coastal oak-heath forest" described by Edinger et al. (2002) and to a somewhat lesser extent, the "coastal oak-hickory forest".

Most of the tree species listed below occurs on the edge of the cleared portion of the Existing Line Alternative, and are unlikely to be affected by new poles or excavation within the cleared portions of the existing right-of-way. The species listed below are "new" species seen along the corridor. The dominant matrix of species within the easement (shrubs/grasses/forbs) and along the periphery (oaks) remains the same throughout - the list of plants is not repeated for each section.

Existing Line from Willow Street to County Route (CR) 39A

This portion of the line is directed north across an old field that appears to be periodically mowed, but allowing for the growth of forbs and grasses. The field is west of Willis Street and north of Town Of Southampton Public Works facility on Willow Street. The line runs adjacent to the backyards of a line of houses along Willis Street which were mainly landscaped with ornamental hardwoods and evergreens.

The field contains vegetation below 2 feet tall, including species such as dogbane, winged sumac seedlings, Queen Anne's Lace, red clover, butter & eggs, lamb's quarters, butterfly weed, cow vetch, dandelion, sweet everlasting, red fescue, and switchgrass.

Flowering plants in the field clearly supported various insects, including various skipper species, monarchs, cabbage white butterfly, various bee species, and several grasshopper species. Birds present in the area included Baltimore oriole, song sparrow, cedar waxwing, house sparrow, and European starling.

The existing line continues through the field heading north, and changes to a central mowed lawn area (recently mowed, consisting of turf-type grass and various forbs) surrounded by taller forbs and grasses reaching 5-6 feet, with some succession occurring. An area of shrubs is present at the northern end of Willis Street. The taller field is composed of several goldenrod species, mugwort, and young autumn olives.

Bird species observed in this area include the species mentioned in the southern field (see above) and fish crow, American crow, northern mockingbird, and gray catbird. A juvenile garter snake was present on the edge of the mowed section of this area.

The line crosses CR 39A at an area of tall herbaceous vegetation, including goldenrods, wild lettuce, tall reed, and primrose spp., lower vegetation including poke, campion, mugwort, and bull thistle. A vine-covered roadside thicket consisting of black cherry, Asiatic bittersweet, porcelainberry, morning glory, and hedge bindweed exists underneath the lattice tower (CKT 69972) in this area. To the east of the line, a small cluster of residential homes and associated ornamental plants exists. Bird species noted above, American robin, and rock pigeon were observed in this area.

Existing Line from CR 39A to Long Springs Road/North Main Street

North of CR 39A, the existing double line takes a more northeasterly route, crossing above a small commercial building, over a roadside thicket immediately north of CR 39A, over Wiltshire Street and several residential homes, and then over an agricultural field and tree nursery towards Long Springs Road/North Main Street.

A few ornamental trees and manicured lawn are present where the road crosses CR 39A. The roadside thicket north of CR 39A and south of Wiltshire contains dense growth of eastern red cedar and black cherry saplings covered with heavy Asiatic bittersweet growth. The residence north of Wiltshire Street had a manicured lawn and dense privet hedgerows, several large ornamental maples, and a large (more than 20 inches dbh) hackberry.

At the northeastern jog, the existing double line passes over the Warren Nursery's open agricultural fields and tree nursery. These fields are bounded by grasslands and thicket edges with mixed forbs and trees. The line eventually passes over the backyards and houses along a road (415 and 421 Long Springs Road) surrounded by tall (more than 60 feet) native and ornamental spruces and other evergreens, which are adjacent to more substantial thickets (containing gray birch, privet, and European white birch), grassy pastures, and a vegetable garden.

Bird species observed in this area include a foraging red-tailed hawk being pursued by a flock of American crows, and numerous songbirds found in thicket edge and field habitats such as American goldfinch, eastern towhee, mourning dove, song sparrow, field sparrow, northern flicker, American robin, house wren, and flyover common grackles.

Existing Line from Long Springs Road/North Main Street to North Sea Mecox Road

On the east side of Long Pond Road, the line passes above a narrow right-of-way path in the vicinity of a gated town facility. Vegetation includes low forested thickets on either side, containing blackberry, poison ivy, little bluestem in an adjacent to the path, and the forested thicket containing mainly black cherry with tree of heaven saplings, eastern red cedar, gray birch, paper birch, white oak, American beech, devil's walkingstick, white pine seedlings, an ornamental cherry, arrowwood, Virginia creeper, mutliflora rose, various asters and goldenrods,

smartweed, curly dock, poke, and moderate to dense coverage of smooth greenbrier in the understory. To the south of this right-of-way, a gated water pump facility surrounded by tall evergreens is present; heading north, the double line passes over this gated facility, which is primarily an open building compound with manicured lawns with occasional trees. Northeast of this area, the double line crosses through an active agricultural field situated east and north of a new residential cul-de-sac.

At the end of the agricultural field, the double line follows a dense thicket adjoining a residential area to the east, and a commercial plant nursery to the west before crossing North Sea-Mecox Road.

Bird species sighted in this area include all of those listed for the previous portion of this line, and also species typically found in open fields, such as barn swallow, tree swallow, and song sparrow. A red-tailed hawk was present in the lattice tower in the center of the agricultural field, using it as a perch from which to hunt.

General Note on Forest/open area within Existing Line from North Sea Mecox Road to Bridgehampton Substation

North of North Sea - Mecox Road, the predominant cover types are oak-dominated woodlands (black, scarlet and white oaks) with pitch pine, pignut and mockernut hickory, and black gum with a cleared, sandy right-of-way composed of blueberries, huckleberry, mountain laurel, and diverse herbaceous plants.

Existing Line from North Sea - Mecox Road to Edge of Woods Road

North of North Sea - Mecox Road, the existing double line runs adjacent to a plant nursery and old successional fields to the east, with properties and forested land to the east. Some nursery materials were in the right-of-way, and as a result some ornamental and landscaping vegetation were present in the area.

Vegetation observed includes Japanese black pine, multiflora rose, black locust, peppergrass, common sow thistle, pokeweed, black cherry, eulalia, horseweed, black locust, smooth brome, umbrella sedge, yellow nutsedge, black-eyed susan, milkweed spp., lamb's quarters, bull thistle, box elder, autumn olive, eastern red cedar, common St. John's wort, lance leaved goldenrod, bayberry, jimson weed, grass leaved goldenrod, rough stemmed goldenrod, bristly foxtail, reed canary grass, timothy grass, black locust, mugwort, white vervain, devil's walkingstick, wild marjoram, and birdfoot trefoil. Small wet depressions bordered the path, and included wetland indicators such as orchard grass, barnyard grass, umbrella sedge, and groundsel bush.

Bird species sighted include northern mockingbird, American goldfinch, mourning dove, red-tailed hawk, song sparrow, northern flicker, black-capped chickadee, blue jay, eastern kingbird, and American robin.

Existing Line from Edge of Woods Road towards Seven Ponds Towd Road

North of Edge of Woods Road, the existing line extends northeast as it passes through the Barrel Hill area. As the note above describes, the habitat within the area of the line is characterized by mature forest composed of scarlet, pin, black, and white oaks and mockernut hickory. Areas of red maple and American beech are also present. In the secondary layer, black gum, and sassafras are present. Within the right-of-way, the landscape is a sandy area with variable topography, containing a mix of grassland and low ericaceous shrub vegetation. Species in this area included a dense cover of black huckleberry, with barberry, deer tongue grass, sweet fern, bayberry,

common St. John's wort, smooth greenbrier, arrowwood, path rush, broom sedge, pinweed, dewberry, lowbush blueberry, pitch pine seedlings, bracken fern, and golden heather.

Bird species observed include foraging red-tailed hawks, which use the line cut for perching and hunting. White-tailed deer were also observed.

Northeast towards Seven Ponds Towd Road, the forest profile changes to a pitch pine-scarlet oak-black oak composition. American holly seedlings, peppermint, and fairly small (~1-1.5 feet) specimens of hyssop-leaved boneset were frequently observed. Bird species observed includes eastern towhee, black-capped chickadee, tufted titmouse, wild turkey, red-tailed hawk, and American robin.

Understory is dominated by black huckleberry, broom sedge, golden heather, mountain laurel early low blueberry, prickly dewberry. Also present within the study area is sassafras, deer tongue grass, hay scented fern, path rush, bracken fern, wild indigo, red top, switch grass, Japanese barberry, pitch pine, American holly, hyssop leaved boneset, peppermint.

South of Wilderness Trail and Seven Ponds Towd Road, the line passes over a managed grassland area with various grass species, including fescue, broom sedge, and orchard grass. Also present is bayberry, dogbane, black huckleberry, pitch pine, winged sumac, and azalea species. Bird species observed in this area include American robin, red bellied woodpecker, blue jay, northern mockingbird, downy woodpecker, pine warbler, great crested flycatcher, black-capped chickadee, house wren, and common yellowthroat. Mammals observed include white-footed mouse, gray squirrel, and deer.

Existing Line Right-of-Way from Seven Ponds Towd Road to Deerfield Road

Understory consists of black huckleberry and early low blueberry, with occurrences of purple top, bayberry, sassafras, mile-a-minute, and narrow-leaved pinweed.

Existing Line Right-of-Way at Deerfield Road (Deer Run Road)

From Deerfield Road northwards for approximately ¼ mile, the route is dominated by autumn olive up to 10 feet in height. This is one of the few stretches of the Existing Line Alternative that has not been cleared or maintained in recent years allowing the shrub and tree stratum to extend upwards. This segment is bordered by old field habitat. Species observed include autumn olive, scarlet oak, halberd-leaved tear thumb, hemp dogbane, wild sarsaparilla, black raspberry, field garlic, umbrella sedge, and a single American chestnut with a 10 inch diameter.

Existing Line Right-of-Way to Little Noyac Path

Residential properties are located closer to the right-of-way than in other areas of the line and exhibit slopes that are sandy and moderately to highly eroded. The understory was a mix of grass, forb, shrub and tree species typical to sandy habitats within the right-of-way, including sweet fern, bayberry, switchgrass, broom sedge, black cherry, sassafras, deer tongue grass, mullein, Black locust, Poke, multiflora rose, evening primrose, daisy fleabane, fescue species, and sickle leaved golden aster. Adjacent woodlands are dominated by scarlet and black oaks and pitch pine. Other species observed in and adjacent to the right-of-way include quaking aspen, black knapweed, and sickle-leaved golden-aster.

Insects observed within the area include cicadas and green darners. Birds observed in the area are typical edge and woodland species, including northern flicker, black-capped chickadee, house wren, European starling, white-breasted nuthatch, mourning dove, American robin,

eastern wood-pewee, American crow, tufted titmouse, blue jay, downy woodpecker, and red-bellied woodpecker.

Existing Line Right-of-Way from Little Noyac Path to Brick Kiln Lane

From Little Noyac Path, the area to the north contains similar forested/open habitat as described for the rest of the line, with a slightly wider sandy path and a pine-oak-hickory forest complement. The terrain is more variable than other parts of the line, with frequent hills. Vegetation observed included wild garlic, spotted knapweed, dogbane, sedges, and sickle-leaved goldenrod. Chipping sparrows feeding young, hairy woodpecker, song sparrow, and American crow were observed.

At Noyac Path, the double line crosses an area of successional field to the east and a fenced horse farm and estate beneath the line before re-entering forested lands.

On east side of Millstone Road, the double line crosses open grassland habitats with fallow fields and mowed lawns, and occasional wolf trees. Plant species within the area include little bluestem, broom sedge, and horse nettle. A small wet slope and other wet depressions are present beyond the eastern edge of field containing orchard grass and various facultative smartweed species, although no clear source of water (i.e., stream, pond) is present within the right-of-way.

Following this area to the east, meadow and lowland habitats with wooded and thicket edges and successional fields are present, interspersed with mowed grassy walking paths associated with nearby residences. Plants include red cedar, autumn olive and multiflora and pasture rose.

Also within the vicinity of these residences, an open water pond with small dock was present directly under and south of the line. Vegetation includes black and weeping willow, and various sedges. Mallards and a belted kingfisher were observed foraging in the pond. Other birds observed throughout the area include house wren, barn swallow, American robin, gray catbird, northern cardinal, blue jay, and northern mockingbird.

East of Loper's Path towards Brick Kiln Lane, the right-of-way returns to the more open, non-residential right-of-way with sandy and eroded slopes, with an understory in open areas dominated by sheep laurel, interspersed with black huckleberry and grass species. Adjacent woodlands contain white, scarlet, and black oak with red maple, mockernut and pignut hickory, and sassafras.

Mammals observed included red fox and skunk.

Existing Line Right-of-Way from Brick Kiln Lane to Mulvihill Pond

At Brick Kiln Lane, the existing double line proceeds southeast, and the areas close to the road are colonized with roadside/invasive plants, with these invasive species becoming less prevalent move furthering into the forested edge/grassy right-of-way. Within 500 feet from Brick Kiln Lane, habitat returns to the forested/open habitat observed along most of the Existing Route. Vegetation closest to the road includes Chicory, Mile-a-minute, Summer grape, tree of heaven, Broom sedge, Purple love grass, and a single catalpa. Further along the line, the understory contains several large areas of deer tongue grass.

Birds species sighted in this segment include northern flicker, Carolina wren, American crow, red-bellied woodpecker, red-tailed hawk, and flyover osprey. Mammals included red fox (and associated fox den) and feral cat.

North of the existing line, a large pond and emergent wetland (Mulvihill Pond) is present within a Town of Southampton conservation area. The emergent wetlands associated with the pond began after a steep slope immediately north of line, placing a portion of the wetland area into the survey area (i.e., 25 feet of the line). The pond consists of approximately 60% emergent vegetation and 40 percent open water.

Plants within or adjacent to Mulvihill Pond include swamp loosestrife, button bush, American beech, dogwoods, gray birch, red maple, white oak, soft rush, marsh St. John's wort, swamp azalea, woolgrass, winterberry, sensitive fern, red maple, witch hazel, swamp white oak, red oak, chestnut oak, and American chestnut.

Bird species sighted include those found in palustrine forested and emergent wetlands, including red-winged blackbird, belted kingfisher, mallard, eastern wood pewee, and great-crested flycatcher. Reptiles and herps included green frog, bullfrog, water snake, garter snake, eastern ribbon snake, and painted turtle.

Eastern end of Existing Line Route Right-of-Way between Mulvihill Pond and Bridgehampton Substation

Vegetation seen in wet depressions under the existing double 69kV power line or in wetlands directly adjacent to the line included monkey flower, button bush, and swamp azalea. Adjacent to the upland border, several chestnut oaks were present, although not dominant.

Limited time was spent surveying the area between Mulvihill Pond and the Bridgehampton Substation, as it was an actively managed hunting preserve. On the north side of the existing right-of-way, a large fenced in pond to the east of Mulvihill Pond is present, and was observed to hold approximately 5,000 mallards and feeding apparatus. Water quality in the pond was quite poor from distant visual inspection. These two waterbodies connect by a dry dammed channel; as Mulvihill pond was at a slightly higher elevation, it would not likely receive input from the duck pond.

Several emergent wetland pockets were also observed within the double line right-of-way, with several wetland indicator plants (i.e., *Carex crenita, Carex lurida*). Within the vicinity of the hunting preserve, forested edge with similar oak, hickory, and pine species were observed, although the understory within the right-of-way was more

Several specimens of the mushroom *Boletus edulentus* were also observed within the area.

Each of the three alternative routes includes construction of the proposed Bridgehampton Substation at the eastern terminus of the proposed transmission line. This project component is discussed in the Direct Route Alternative Chapter 9, "Natural Resources".

Wetland Resources

The Existing Route Alternative passes across or adjacent to several wetlands mapped by the NYSDEC and NWI. As shown in Figure 17-13, these include New York State freshwater wetlands SA-27 and SA-28. These wetlands consist of a localized grouping of forested, scrub shrub, emergent and open water wetlands associated with the Great Swamp region of Southampton. Site inspection identified these wetlands in the field - small portions of which occur beneath the existing transmission line in areas of low topography.

These wetland areas occurring within the existing transmission line easement include an open water pond adjacent to Loper's Path mapped as PUBHx and several small wet depressions

linked to NYSDEC wetland SA-27 mapped as PFO1E and PSS1F. Each of these wetlands is a "palustrine" wetland indicating that they are dominated by trees, shrubs and persistent emergent vegetation. With the exception of an open water pond immediately west of Loper's Path which extends for a length of roughly 100 feet beneath the existing transmission lines, the other wetlands within the existing transmission line right-of-way consist of small pockets dominated by wetland rushes, sedges and shrubs that are maintained by periodic clearing to prevent the growth of trees upwards towards the power lines.

Threatened and Endangered Species

Two listed wetland plants - creeping St. John's wort (Hypericum adpressum) and opelousa smartweed (Polygonum hydropiperoides var. opelousanum) have been identified in the region in proximity to the substation expansion area. Portions of the wetlands that comprise the Great Swamp region known to contain these two New York State-listed plant species cross the Existing Line Alternative at its eastern end near New York State wetlands SA-27 and SA-28. As such, there is an increased likelihood of these threatened and endangered plant species occurring in proximity to the Existing Route Alternative as compared to the other alternative routes. Neither plant was identified within the footprint of disturbance of the proposed substation expansion or beneath the existing transmission lines during August 2007 site inspections.

The Existing Route Alternative passes adjacent to forested habitat north of Noyac Path where the New York State "endangered" eastern tiger salamander (Ambystoma tigrinum) is suspected from past studies related to the construction of the Atlantic Golf Club in the late 1980's. Eastern tiger salamander has not been identified in proximity to the Existing Route Alternative - instead, the forest bordering the existing transmission line may serve as summer foraging/dispersal habitat for salamanders breeding within the wetlands well offsite and to the south. Residential housing development constructed within the forest bordering the Existing Transmission Line in the decade since salamanders were identified as part of the Atlantic Golf Club EIS has substantially fragmented this portion of the Town of Southampton as evidenced by examination of aerial photography.

There are several NWI-mapped palustrine wetlands adjacent to the Existing Line Alternative corridor (i.e., along the existing LIPA right-of-way between Brick Kiln Road and the Bridgehampton Substation) that, due to the presence of suitable hydrology and proximity to forested uplands, may also support Eastern tiger salamander breeding activity. Additionally, it is likely that there are other unmapped wetlands within woodland settings adjacent to the Existing Line Alternative, with suitable ephemeral hydrology, that could support salamander breeding habitat.

POTENTIAL IMPACTS OF THE EXISTING LINE ALTERNATIVE

Habitat and Natural Resources

Construction of the proposed transmission line within the Existing Line Alternative would be underground. Construction would be limited to the area within the existing easements that are currently cleared and maintained in a shrub/herbaceous condition. No impacts to adjacent forest would occur.

Installation of new transmission line poles or trenching of a new transmission line within the existing easement would cause temporary impacts to the habitats within the easement. However, on a long-term basis, the corridor can be expected to regenerate to the same habitat structure and

similar vegetation composition of low shrubs, grasses, and forbs that occur today. Increased incidence of invasive (non-native) plant species colonization may result from the proposed project, whether trenching of the line or overhead via new poles. However, this may be avoided by strict adherence to an appropriate seed mix of native grasses/forbs appropriate to sandy soils and coastal oak-pine communities of eastern Long Island. However, on a long-term basis, the corridor will regenerate to the same habitat structure and vegetation composition of low shrubs, grasses, and forbs that occur today. No disturbance to adjacent forest is expected and no new corridor fencing is proposed. Therefore, no significant adverse impacts to local and regional wildlife populations are expected over the long term.

Much of the forested portions abutting the right-of-way of the Existing Line Alternative contain single-family houses, some under construction at the time of survey, close to or within the cleared (maintained) area beneath the existing transmission lines. This residential development is largely of recent origin based on historic aerial photos and observations made in the field. Although the existing transmission line easements itself represent a linear feature causing a discontinuity in the largely unbroken forest, the existing transmission lines easement are not fenced and little traveled. As a result, from a wildlife habitat value perspective, it does not constitute a significant barrier for the movement of animals (or plant dispersal). By contrast, the recent pattern of suburbanization in this region of Southampton, exhibiting newly constructed, large-lot homes, has resulted and continues to result in forest fragmentation, decreasing the region's value for habitat specialist species, for neotropical migrant birds, and for animals requiring larger home ranges. It is also causing the spread of non-native plant species. In sum, habitat fragmentation of the surrounding forest represents the most significant change in habitat structure and function that is occurring in the region through which the transmission lines pass.

Threatened and Endangered Species

Several sites outside of the Existing Line Alternative corridor provide suitable habitat for NYNHP-listed plant and wildlife species, particularly the Long Pond Greenbelt wetland and pond shore communities east of the Bridgehampton Sag Harbor Turnpike. Since there will be no construction or maintenance within these adjacent areas, it is unlikely that the proposed project would have a direct impact on these ecologically sensitive areas. In addition, most of the threatened and endangered species reported by the NYNHP are located in wetland habitats exhibiting fluctuating water levels, ephemeral wetlands), often having dormant seed banks. The NYNHP has identified creeping St. John's wort (Hypericum adpressum) and opelousa smartweed (Polygonum hydropiperoides var. opelousanum) in the wetlands that comprise the Great Swamp - New York State wetlands SA-27 and SA-28. Although these wetlands approach the Existing Line Alternative at its eastern terminus, direct impacts to wetland habitats would be avoided by the proposed project, thereby minimizing the potential for affecting wetland-dependant listed plant or animal species. None of the NHP-reported listed plant species were identified within the Existing Line Alternative Route during August 2007 site inspection.

The New York State endangered Eastern tiger salamander has been identified over the past 20 years in at least two areas adjacent to the proposed Existing Line Alternative (i.e., wetlands in the Short's Pond area and Long Pond Greenbelt). This species has specific ecological requirements supported by the presence of dispersal corridors between breeding areas (i.e., small wetlands unable to support substantial predatory fish populations) and underground burrows in forested uplands where adults of this species spend the majority of the year. Although there are no known records of occurrence of this species within the limit of disturbance of the Existing

Line Alternative, ephemeral wetland areas do occur in proximity to the Existing Line Alternative and the route passes through forested areas that may be suitable for this species.

The Existing Line Alternative is considered by NYSDEC to be one of the most intrusive routes of the four project alternatives. In order to minimize disturbance to potential habitats of the Eastern tiger salamander, the NYSDEC suggests that more information collected during a biologically relevant time of year is required to determine the presence of this species along the Direct Route Alternative corridor. Due to the life cycle of the Eastern tiger salamander, the presence of the species within a pond cannot be determined between the months of August and January. To identify appropriate habitat, surveys for the presence of vernal pools would be conducted within three days of a rain event greater than 0.1 inch between March 1 and August 1. Pools found suitable as habitat should be revisited between the months of February and March to conduct surveys for Eastern tiger salamander adults and egg masses, or in June while the species would be found in larval stages within ponds. LIPA has committed to conducting this survey, if the Existing Line Alternative is selected.

In order to reduce the chance of the dispersal or migration of threatened and endangered animals, principally the Eastern tiger salamander, through areas subject to construction activity, temporary fencing (i.e., type B silt fence) would be placed in the vicinity of expected or documented occurrence of this species. This wildlife exclusion fencing would extend beyond the area of construction to allow for the movement of wildlife around the construction area. An experienced terrestrial ecologist would direct the placement of any temporary fencing to prevent wildlife movement through areas affected by construction. Fencing would be removed upon final grading and removal of all construction related materials and equipment.

The Existing Line Alternative would not have significant adverse impacts on any threatened or endangered species.

Wetland Resources

The Army Corps of Engineers and NYSDEC regulate disturbances to freshwater wetlands. Wetlands that could require wetland permits include the Great Swamp area in the vicinity of Mulvihill Pond. Should the Existing Line Alternative be chosen for implementation of the proposed project, wetlands within the existing right-of-way would be delineated and surveyed in accordance with NYSDEC and Corps methodology. Work near wetlands would be done in accordance with conditions of a NYSDEC General Permit issued to Keyspan. The General Permit authorizes KeySpan to perform minor utility install, repair, and maintenance activities in the adjacent areas of tidal wetlands, freshwater wetlands, and Wild and Scenic Rivers. These activities include the installation of poles with overhead cables, and trenching in the adjacent area. The General Permit also authorizes drilling under wetlands as long as the entry and exit points are in the adjacent area and the wetlands are not disturbed. KeySpan is allowed to use this General Permit for LIPA projects. LIPA would coordinate with NYSDEC on wetland and rare species–related issues. Special precautions near wetland areas would avoid any impacts to sensitive ecological habitats and associated species. Underground installation of the transmission line would avoid wetland impacts by directional drilling to avoid any activities within the wetlands. Therefore, no significant adverse impacts would occur to wetlands.

HAZARDOUS MATERIALS

INTRODUCTION

This section assesses the possibility that hazardous materials may be found in soil or groundwater on-site and evaluates the potential impacts associated with the installation of power lines along the Existing Line Alternative. To identify potential sources of hazardous materials, a limited Phase I Environmental Site Assessment (ESA), similar to that for the Direct Route Alternative (see Chapter 10, "Hazardous Materials"), was performed in August 2007. While documentary research was available for the entire corridor, some areas of the corridor were physically inaccessible from the public rights-of-way at the time of the site inspection.

EXISTING CONDITIONS

Results of the limited Phase I ESA are summarized in Table F-3, provided in Appendix F. The "Village underground option" being considered for the western end of the route is summarized in Table F-2 provided in Appendix F. The project corridor comprises a combination of agricultural land, residential dwellings, the Sag Harbor Landfill at the eastern end of the Existing Line Alternative, and commercial facilities including dry cleaners, automotive repair facilities, and gasoline filling stations. The woodland area north-adjacent to the Bridgehampton Substation is designated as part of an active shooting range/area where shells and casings were observed on the ground.

Historic aerial photographs from 1955, 1966, 1978, 1984, and 1996 were reviewed to determine historic on-site and surrounding area usage. The photographs indicated that in 1955, the Existing Line Alternative corridor was primarily agricultural and residential in nature. Commercial properties were present at the western end of the Existing Line Alternative as early as 1955. The Sag Harbor Landfill was present as early as 1955. Increasingly more commercial facilities were present in the later photographs, including automotive repair facilities and gasoline filling stations.

Historic Sanborn Fire Insurance Maps were reviewed to determine historic on-site and surrounding area usage. Maps were available for a portion of Southampton from 1895, 1902, 1909, 1926, 1932, 1945, and 1964. Maps were available for a portion of Bridgehampton for 1920, 1931, and 1947. Therefore, only a portion of the route was identified on the available maps. The maps indicated that the Existing Line Alternative was primarily agricultural and residential in nature. A coal yard at the western end of the Existing Line Alternative corridor was present as early as 1931. A company producing fertilizer also appeared in 1931 at the western end of the Existing Line Alternative. By 1926, more commercial properties were present at the western end of the Existing Line Alternative, including automotive repair facilities and gasoline filling stations.

A review of regulatory records indicated that the Existing Line Alternative corridor contains numerous Hazardous Waste Generators / Transporters, Hazardous Material Spills, underground storage tanks (USTs), and Petroleum Bulk Storage Sites. Potential environmental issues are summarized in Table F-3, provided in Appendix F. The ESA identified the following potential classes/sources of contaminated materials at various sites in the Existing Line Alternative corridor:

- *Volatile organic compounds (VOCs).*
- *Semivolatile organic compounds (SVOCs).*

- *Polychlorinated biphenyls (PCBs).*
- *Metals.*
- *Pesticides, herbicides, and rodenticides.*
- *Fuel oil and gasoline storage tanks.*
- *Historic coal yards.*
- *Fill materials of unknown origin.*
- *Asbestos.*
- *Lead-based paint.*
- *Rail Road Tracks.*

A description of these sources or contaminated materials is provided in Chapter 10, "Hazardous Materials."

POTENTIAL IMPACTS OF THE EXISTING LINE ALTERNATIVE

Given the history of this area, extensive contamination of the soil or the groundwater would be unlikely within the Existing Line Alternative corridor. Nevertheless, localized pockets of contamination could exist within the Existing Line Alternative corridor. Excavation and construction activities could disturb these hazardous materials and increase pathways for human exposure. Since the entire transmission line is proposed to be placed underground, the need for soil disturbance would be greater. Therefore, the potential for exposure to subsurface contaminants in these areas would also be greater. The potential for adverse impacts due to the presence of subsurface contamination would be avoided by ensuring that construction activities are performed in accordance with the protocols outlined for the Direct Route Alternative in Chapter 10, "Hazardous Materials." :

Similar to the Direct Route Alternative, with the implementation of these protocols, no significant adverse impacts related to hazardous materials would result from demolition and/or construction activities related to the Existing Line Alternative. Following construction, there would be no further potential for significant adverse impacts.

INFRASTRUCTURE

EXISTING CONDITIONS

There is an existing transmission line located along the entire route considered as the Existing Line Alternative. With the exception of stormwater runoff from the existing substations, this alternative does not currently utilize water supply, solid waste, or energy. Water supply treatment, solid waste, energy, and emergency management in the area have been described in detail in Chapter 11, "Infrastructure," and are applicable to the Existing Line Alternative. As shown in Figure 17-17, no portion of the route is located in a storm surge inundation zone. In addition, the two critical corridors described in Chapter 11, "Infrastructure," are also located near this alternative, see Figure 17-18. The southern corridor is located along Montauk Highway (NYS Route 27A) and then merges into CR 39 and then NYS Route 27 or Sunrise Highway in the west. The northern corridor traverses NYS Route 114 in Northaven Village to Noyack Road (CR 38) west to North Sea Road to Sand Hollow Road and then merges into CR 39, ending at NYS Route 27. Both routes merge at CR 39.

POTENTIAL IMPACTS OF THE EXISTING LINE ALTERNATIVE

Similar to the Direct Route Alternative, the Existing Line Alternative would not create an additional demand on the existing water supply system and individual septic systems, but would generate minimal solid waste, which would be handled by commercial carters and therefore would not have significant adverse effect on solid waste management within the Town of Southampton.

This alternative would allow for the transmission of an additional 69 kV of electric power for the Town of Southampton and other East End communities. By providing additional reliable electricity, this alternative would meet the energy demand forecasted for 2008 and beyond.

With regard to emergency situations, LIPA has a designated emergency response system in place to handle emergency issues when they arise.

GROUNDWATER AND SURFACE WATER RESOURCES

EXISTING CONDITIONS

Chapter 12, "Groundwater and Surface Water Resources," provides an in depth description of groundwater conditions within this area of the Town of Southampton and thus, should be referred to in relation to area wide groundwater conditions. This section only provides information on groundwater and surface water conditions where they differ from those that were presented in Chapter 12, "Groundwater and Surface Water Resources."

Geologic Conditions

The regional geologic conditions are described in detail in Chapter 12, "Groundwater and Surface Water Resources." As shown on Figure 17-19, the geological cross-section for the area in the vicinity of the Existing Line Alternative is similar to the Direct Route Alternative.

Soils

The dominant soil class found along the Existing Line Alternative is Carver and Plymouth sands (CpC and CpE) with slopes ranging from 3 to 15 percent and 15 to 35 percent, respectively. The CpC soil class comprises about 19 percent of the route while CpE soils comprise about 20 percent of the route. These soils are generally found north of Edge of Woods Road to just west of Millstone Road—along the central portion of the route. Table 17-6 presents the soils found along the Existing Line Alternative

Other dominant soil classes include Riverhead sandy loam (RdB) with slopes ranging from 3 to 8 percent; Bridgehampton silt loam (BgA) with slopes ranging from 0 to 2 percent; Plymouth loamy sand (PlB) with slopes ranging from 3 to 8 percent; and Haven loam (HaA) with slopes ranging from 0 to 3 percent. These soils are generally found throughout the route. As stated in Chapter 12, "Groundwater and Surface Water Resources," there are several soil types within the region that are identified as prime agricultural soils. In addition to the prime agricultural soils listed in that chapter, there are two additional soils along the Existing Line Alternative that are considered prime agricultural soils—Montauk fine sandy loam (MfB) and Montauk silt loam (MkB). As discussed throughout this chapter, the Existing Line Alternative follows an existing transmission right-of-way and generally, agricultural uses are absent along this route.

Table 17-6
Soils Along the Existing Line Alternative

Soil Class	Soil Description
BgA	Bridgehampton silt loam, 0-2 percent slopes
BgB	Bridgehampton silt loam, 2-6 percent slopes
CpA	Carver and Plymouth sands, 0-3 percent slopes
CpC	Carver and Plymouth sands, 3-15 percent slopes
CpE	Carver and Plymouth sands, 15-35 percent slopes
HaA	Haven loam, 0-2 percent slopes
HaB	Haven loam, 2-6 percent slopes
HaC	Haven loam, 6-12 percent slopes
MfB	Montauk fine sandy loam, 3 to 8 percent slopes
MkB	Montauk silt loam, 3 to 8 percent slopes
PlA	Plymouth loamy sand, 0-3 percent slopes
PlB	Plymouth loamy sand, 3-8 percent slopes
PlC	Plymouth loamy sand, 8-15 percent slopes
RdA	Riverhead sandy loam, 0-3 percent slopes
RdB	Riverhead sandy loam, 3-8 percent slopes
RdC	Riverhead sandy loam, 8-15 percent slopes

Sources: *Soil Survey of Suffolk County*, New York, USDA Soil Conservation Service, April 1975.

With the exception of the Montauk Series, the general soil properties associated with each dominant soil mapping unit described above, as presented in the Soil Survey of Suffolk County have been summarized in Chapter 12, "Groundwater and Surface Water Resources." The Montauk Series are described in the Soil Survey of Suffolk County as deep, well drained to moderately well drained, moderately coarse- to medium-textured soils that formed in fine sandy loam or in a mantle of silt loam and loam. Slopes range from 0 to 15 percent, but are generally 3 to 15 percent.

Groundwater Conditions

Similar to the Direct Route Alternative, the Existing Line Alternative is located south of the groundwater divide. As shown on Figure 17-20, topography along the Existing Line Alternative ranges from 40 to 240 feet above mean sea level (MSL) with the steeper areas of the route in the central and eastern segments. Similar to the Direct Route Alternative, according to the Suffolk County Water Authority (SCWA), the water table in the vicinity of the Existing Line Alternative ranges from 8 to 20 feet above MSL. Therefore, the approximate depth to groundwater ranges between 32 and 220 feet above MSL.

As shown in Figure 17-21, the Existing Line Alternative, similar to the Direct Route Alternative, is located within the South Fork Special Groundwater Protection Area (SGPA), (see Chapter 12, "Groundwater and Surface Water Resources").

Surface Waters

The only surface water within the vicinity of the Existing Line Alternative is associated with ponds located within the Long Pond Greenbelt (Long Pond and Crooked Pond). However, as discussed earlier in the Natural Resources portion of this analysis, there are wetlands present within the vicinity of this alternative, generally in the eastern segment.

POTENTIAL IMPACTS OF THE EXISTING LINE ALTERNATIVE

Several dominant soils found along the Existing Line Alternative have moderate to severe limitations with regard to the construction of pipelines, paths and trails, streets and parking lots and home sites. However, moderate and severe soil limitations do not in themselves create significant adverse environmental impacts but may require additional site preparation and engineering and cause a need for increased maintenance.

Similar to the Direct Route Alternative, it is not expected that the Existing Line Alternative would have a significant adverse impact on geology, soils, and groundwater or surface water resources. Depending on the exact locations selected along the route, directional drilling may be required under some wetlands to avoid significant adverse impacts.

See Chapter 12, "Groundwater and Surface Water Resources," and Chapter 15, "Construction," for specific project elements regarding stormwater runoff and erosion control measures that would be utilized as part of the project. Similar measures would be required for both the Direct Route and Existing Line Alternatives.

TRAFFIC/AIR QUALITY/NOISE

EXISTING CONDITIONS

Traffic Accident Data

The Town of Southampton adopted an updated *Transportation Element* for the *Comprehensive Plan* in 2004 (2004 Transportation Element). The 2004 Transportation Element includes a ranking of the 15 highest accident locations in the Town of Southampton, based on data collected between January 2002 and October 2003. One of these locations, the intersection of NYS Route 27 and David Whites Lane, is within the vicinity of the Existing Line Alternative. Twenty-seven accidents occurred at this intersection during the data collection period, involving 53 vehicles and resulting in 7 injuries.

As described in Chapter 13, "Traffic, Air Quality, and Noise," KeySpan maintains records of traffic accidents involving utility poles. From 2002 to October 2007, 37 occurred in Bridgehampton hamlet, 110 occurred in the Village of Southampton, and 23 occurred in Water Mill hamlet.

Appendix G presents accident data by type for major intersections and links (i.e., road segments between intersections) in the vicinity of the Existing Line Alternative for the most recent 3-year period for which data is available from New York State Department of Transportation (NYSDOT) (July 1, 2004 – June 30, 2007). Tables G-3 and G-4 in Appendix G indicate a total of 25 accidents during the analysis period, of which 15 occurred at intersections and 10 occurred on road segments between intersections. The majority of accidents (about 88 percent) involved a collision with another motor vehicle. Approximately 8 percent of the accidents were recorded as "other," a category as defined by NYSDOT that includes collisions with animals, trees, buildings/walls, barriers, fences, curbing, ditches, and bicyclists; and fire/explosions, submersions, and rollovers. Approximately 4 percent were identified as non-reportable. An accident is considered to be non-reportable by NYSDOT if there was no personal injury and either (a) no motorist report was filed; (b) no dollar value of damage was entered on the accident report; or (c) the amount of vehicular damage did not exceed a specified amount ($1,000). There were no collisions involving light supports/utility poles or pedestrians during the analysis period.

Of all the major intersections in the vicinity of the Existing Line Alternative, NYS Route 27 and David Whites Lane was reported to have the greatest number of accidents during the analysis period (11 accidents over the 3-year period).

POTENTIAL IMPACTS OF THE EXISTING LINE ALTERNATIVE

Traffic

Since the Existing Line Alternative would be underground, it would not affect traffic circulation and would not result in any increase in traffic accidents. In addition, the only new vehicle trips that would be generated as a result of this alternative would be for periodic maintenance along the route. This small number of vehicle trips would not result in any significant adverse impacts. Also, because this alternative would follow the route of the existing line, trips for maintenance of the new line would potentially be combined with trips for maintenance of the existing line, generating an inconsequential number of new trips.

Air Quality

The Existing Line Alternative would not involve the addition of any new stationary sources of emissions. Further, the new transmission line would maintain air quality, as it would help reduce use of combustion turbines on the East End. With regard to mobile source emissions, this alternative would not generate a significant number of new vehicle trips, as noted above, and therefore would not result in any significant adverse impacts on air quality.

Noise

The Existing Line Alternative would not involve the addition of new transformers at substations, nor would it involve the addition of any other new stationary sources of noise. This alternative would generate an inconsequential number of vehicle trips. Therefore, similar to the Direct Route Alternative, this alternative would not result in a significant increase in noise levels due to mobile or stationary sources.

ELECTRIC AND MAGNETIC FIELDS

See Chapter 14, "Electric and Magnetic Fields," for a complete discussion of this issue. In general, similar to the Direct Route Alternative, long-term magnetic field exposures in nearby residences with the proposed 69 kV transmission line, with the Existing Line Alternative, would be expected to be much the same as they are now, well below New York State regulatory levels, and below levels that would most experts believe would pose any increase in health risk.

CONSTRUCTION

INTRODUCTION

Chapter 15, "Construction" provides a detailed description of the construction methods that would be used to install the new transmission line. Unlike the Direct Route Alternative, where both overhead and underground cables could be installed, all of the new transmission line for the Existing Line Alternative would be installed underground. Therefore, the discussion of overhead transmission line installation is not relevant to this alternative.

POTENTIAL IMPACTS OF THE EXISTING LINE ALTERNATIVE

The potential impacts of the Existing Line Alternative would be similar to those for the Direct Route Alternative, except for traffic, air quality, and infrastructure.

Almost all of the Existing Line Alternative would be installed not next to existing roadways, but within existing easements that traverse private lands. The road closures that would be expected with the Direct Route Alternative would be far less with the Existing Line Alternative. The only road closures that are expected would be when the Existing Line Alternative crosses roads, and these closures could be lessened, if directional drilling were used at the road crossings.

Because the Existing Line Alternative would not be installed along paved roadways as would the Direct Route Alternative, but on unpaved land, the potential for fugitive emissions from construction activities is greater. This potential for increased fugitive emissions would be avoided by greater use of watering and other dust suppressions methods.

For the Direct Route Alternative, minor (a few minutes to less than an hour) electrical shutoffs to business and residences are expected when the existing distribution lines are reconnected on the new poles. These minor electrical shutoffs would not occur with the Existing Line Alternative because no existing distribution lines would be disconnected.

Similar to the Direct Route Alternative, no significant adverse impacts are expected from the construction of the Existing Line Alternative.

ENVIRONMENTAL JUSTICE

Environmental justice (EJ) analyses are performed to identify and address any disproportionate and adverse impacts on minority and low-income communities. The EJ analysis performed for the Existing Line Alternative follows the methodology and guidance contained in NYSDEC's *CP-29 Environmental Justice and Permitting* (the Policy) (see Chapter 16, "Environmental Justice," for more information).

DELINIATION OF STUDY AREA

The study area for this environmental justice (EJ) analysis was defined to include all census block groups substantially within one mile of the Existing Line Alternative corridor, or the area where any potential impacts resulting from the Existing Line Alternative could occur. Where census block groups were not substantially captured by the 1-mile study area, but included portions of the Existing Line Alternative corridor, those census block groups were also included in the analysis. As a result, the study area for this EJ analysis incorporates a substantially larger area than could actually be affected by the potential impacts of the Existing Line Alternative, but nevertheless serves as the basis for a conservative analysis. Figure 17-22 depicts the eight census block groups in the environmental justice study area for the Existing Line Alternative. These include Census Tract (CT) 1907.04 Block Group (BG) 1, CT 1907.06 BG 1, CT 1907.06 BG 3, CT 1907.06 BG 4, CT 1907.07 BG 2, CT 1907.07 BG 3, CT 1908 BG 1, and CT 1908 BG 2.

IDENTIFICATION OF POTENTIAL ENVIRONMENTAL JUSTICE AREAS

Based on the NYSDEC methodology described in Chapter 16, "Environmental Justice," the study area and each of its census block groups are not communities of concern for environmental justice.

According to *Census 2000*, and shown in Table 17-7, the study area has a total population of 10,552 residents, of which approximately 13.9 percent is minority—well below the 33.8 percent threshold and also lower than in Southampton Town (17.4 percent) and Suffolk County as a whole (21.2 percent). The block groups in the study area are not considered minority communities and have minority populations ranging from 3.0 percent to 33.3 percent.

Table 17-7
Study Area Population and Economic Characteristics

Census Block Groups	Population (2000)												Economic Profile (1999)
		Race and Ethnicity*										Total Minority (%)	Individuals Below Poverty Level (%)**
	2000 Total	White	%	Black	%	Asian	%	Other	%	Hispanic	%		
CT 1907.04 BG 1	963	851	88.4	46	4.8	6	0.6	12	1.2	48	5.0	11.6	0.52
CT 1907.06 BG 1	1,910	1,734	90.8	30	1.6	10	0.5	31	1.6	105	5.5	9.2	8.52
CT 1907.06 BG 3	406	394	97.0	4	1.0	4	1.0	1	0.2	3	0.7	3.0	20.51
CT 1907.06 BG 4	750	673	89.7	14	1.9	4	0.5	3	0.4	56	7.5	10.3	1.89
CT 1907.07 BG 2	2,774	2,571	92.7	25	0.9	22	0.8	25	0.9	131	4.7	7.3	3.83
CT 1907.07 BG 3	1,091	1,043	95.6	6	0.5	7	0.6	4	0.4	31	2.8	4.4	6.14
CT 1908 BG 1	1,513	1,056	69.8	210	13.9	11	0.7	28	1.9	208	13.7	30.2	9.60
CT 1908 BG 2	1,145	764	66.7	277	24.2	15	1.3	23	2.0	66	5.8	33.3	3.56
Study Area	10,552	9,086	86.1	612	5.8	79	0.7	127	1.2	648	6.1	13.9	5.89
Southampton Town	54,712	45,212	82.6	3,491	6.4	454	0.8	855	1.6	4,700	8.6	17.4	8.31
Suffolk County	1,419,369	1,118,405	78.8	93,262	6.6	34,355	2.4	23,936	1.7	149,411	10.5	21.2	5.97

Notes: * The racial and ethnic categories provided are further defined as: White (White alone, not Hispanic or Latino); Black (Black or African American alone, not Hispanic or Latino); Asian (Asian alone, not Hispanic or Latino); Other (American Indian and Alaska Native alone, not Hispanic or Latino; Native Hawaiian and Other Pacific Islander alone, not Hispanic or Latino; Some other race alone, not Hispanic or Latino; Two or more races, not Hispanic or Latino); Hispanic (Hispanic or Latino; Persons of Hispanic origin may be of any race).
** Percent of individuals with incomes below established poverty level. The U.S. Census Bureau's established income threshold for poverty level defines poverty level.
Source: U.S. Census Bureau, Census 2000.

As shown in Table 17-7, about 5.89 percent of the residents in the study area live below the poverty level (compared to approximately 8.31 percent in Southampton Town and 5.97 percent in Suffolk County as a whole). The percentage of the total population living below the poverty threshold in each block group ranges from 0.52 percent to 20.51 percent. Therefore, the low-income population of the study area and of each of the study area's block groups does not exceed NYSDEC's 23.59 percent threshold for identifying low-income communities.

Since the study area and each of its census block groups are not considered potential environmental justice areas, there would be no potential for environmental justice impacts from the Existing Line Alternative.

F. LIRR ROUTE ALTERNATIVE

The LIRR Route Alternative would include the same expansion at the Bridgehampton Substation as the Direct Route Alternative. Both the LIRR Route and Direct Route Alternatives would not result in

any significant adverse impacts from the expansion of the Bridgehampton Substation. Consequently, the following sections focus on examining potential impacts of the new transmission line.

LAND USE AND COMMUNITY CHARACTER

EXISTING CONDITIONS

The LIRR tracks are the sole land use along the LIRR right-of-way, which is about 66 feet wide in the vicinity of this alternative. The LIRR transportation system is comprised of over 700 miles of track on 11 different branches, stretching from Montauk, on the eastern tip of Long Island, to Pennsylvania Station in Manhattan. Between these two points, the LIRR serves 124 stations in Suffolk, Nassau, Queens, Brooklyn, and Manhattan, providing service for some 82 million customers each year. The railroad tracks located along this alternative are used solely for the railroad's Montauk line. The name of each line corresponds to its respective terminus station. Along the route, the LIRR connects the Southampton Train Station located at Railroad Plaza and Maple Street to the Bridgehampton Train Station located at Halsey Avenue and Butter Lane.

Land uses along the remainder of the route (i.e., along Bridgehampton Sag Harbor Turnpike) principally include open space on the eastern side of the Bridgehampton Sag Harbor Turnpike and residential on the western side of this roadway. Land uses adjacent to the entire route include agricultural, residential, open space, and commercial. Most of the agricultural uses along this alternative are centrally located on both the north and south side the tracks. With the exception of the portion of the LIRR Route Alternative that is located along Bridgehampton Sag Harbor Turnpike, this alternative is not located along or alongside roadways. In fact the LIRR Route Alternative along the LIRR right-of-way is only accessible by roadways that intersect the tracks, such as David Whites Lane, Hayground Road, Mitchells Lane, or by accessing privately owned parcels.

The LIRR Route Alternative study area encompasses a ½-mile perimeter around the LIRR Route Alternative (see Figure 17-23). The entire study area is approximately 5,384 acres. The LIRR Route Alternative is located in the Town of Southampton (hamlets of Tuckahoe, North Sea, Water Mill, Bridgehampton, and Noyack) and the Village of Southampton, see Figure 17-2.

The LIRR Route Alternative study area also encompasses a relatively small portion of the Village of Sagaponack. The Village was incorporated in 2005 and has an associated comprehensive plan and zoning code. Prior to becoming incorporated, the Village was a Town hamlet. The Village of Sagaponack portion of the LIRR Route Alternative study area is located in and around Little Poxabogue Pond, and comprises less than 5 acres of the study area. The only land uses within the Village of Sagaponack portion of the study area include Poxabogue County Park and surface waters.

As shown on Figure 17-23, the predominant land uses in the study area are residential, which encompasses approximately 33 percent of the study area, and agricultural, which encompasses approximately 23 percent of the study area.

Residential uses are located north and south of the LIRR tracks throughout the study area with the concentration of this use in the southern and northern portions of the study area, as well as surrounding Mill Pond and south of Route 27. Agricultural uses are allocated in large tracts in the central and southern portions of this alternative study area.

Open space parcels encompass about 12 percent (625 acres) within the study area. Large tracts of open space associated with the Long Pond Greenbelt are located along and east of Bridgehampton Sag Harbor Turnpike. Smaller areas of open space are featured throughout the remainder of the study area.

Commercial uses encompass approximately 7 percent (394 acres) of the study area and are located along and around CR 39, the Water Mill hamlet center, and the Bridgehampton hamlet center. Community facilities, which are discussed in detail below, encompass approximately 3 percent of the study area, (147 acres). Other uses scattered throughout the study area include industrial, parking and transportation (largely associated with the LIRR station parking lots), utility, and vacant land. Vacant land comprises about 12 percent (619 acres) and is found throughout the ½-mile study area.

The study area is located in the Town and Village's southern coastal region, which also contributes to the area's community character. According to the *Southampton Tomorrow - Comprehensive Plan Update Implementation Strategies, 1999* (1999 Comprehensive Plan Update), the current pattern of residential development has become fairly uniform throughout the southern coastal region. In this area, the distinct separation between hamlet centers has been largely replaced by residential development.

The area is characterized by single-family residential uses, commercial uses, Long Pond Greenbelt, and hamlet centers along Montauk Highway (Water Mill and Bridgehampton). The Town has recognized "hamlet centers" as clusters of commercial uses along Montauk Highway, within the hamlets of Bridgehampton and Water Mill. It is important to note that preserving the visual quality of the traditional hamlet setting is an important goal for the Town and one that has been stated in multiple planning documents. According to the Town Code (Chapter 330, "Zoning"), a hamlet center is defined as follows:

The center of a hamlet area is often characterized by a mixture of nonresidential and residential uses. Hamlet centers typically are pedestrian-oriented areas of mixed commercial, residential, and civic uses that generally include higher-density forms of housing and access to public transportation. Hamlet centers are identified on the Map of Hamlet Centers and Village Centers filed in the office of the Town Clerk. The zoning classifications that generally define a hamlet center typically allow for shopping, personal services, and community facilities.

The Water Mill hamlet center is the local shopping area for the Water Mill hamlet and surrounding residential areas. It is located along Montauk Highway at the historic core of the hamlet, and contains a variety of shops, community facilities and services, public open space, and historic buildings such as the hamlet green, windmill, community center, and other cultural amenities. According to the 1999 Comprehensive Plan Update, hamlet centers anchor their neighborhoods and communities and dominate roadside views.

The Bridgehampton hamlet center is located just west of Hildreth Lane (Bridgehampton Commons) and extends just east of Bridgehampton Sag Harbor Turnpike. This hamlet center has been the historic center of the community's development and settlement. Historic structures and architecture are key components that define the community character of this hamlet center. The historic structures in this area are discussed in greater detail below.

POTENTIAL IMPACTS OF THE LIRR ROUTE ALTERNATIVE

The majority of the LIRR Route Alternative does not have existing poles. The two portions of this alternative route with existing distribution poles are (1) between the Southampton

Substation and the LIRR Southampton Station located on Railroad Avenue, and (2) along the Bridgehampton Sag Harbor Turnpike. The remaining portion of this alternative does not have existing distribution poles, and therefore, any poles between the LIRR Southampton Station and the Bridgehampton Sag Harbor Turnpike installed as part of an above ground configuration along this portion of the right-of-way would be new. Similar to the Direct Route Alternative, this alternative would replace existing 57 foot wood poles with 61 foot (above grade) steel poles, while the remainder of the new poles along the LIRR right-of-way would be between 61 and 75 feet above grade (steel poles).There is limited space along the LIRR right-of-way for installation of the new transmission line. New poles along Bridgehampton Sag Harbor Turnpike would be 48 foot (above grade) wood poles either be overhead, underground, or hybrid.

The portion of this alternative route that is located along the LIRR tracks is not publicly accessible. The right-of-way is a transportation/utility use, and therefore installation of the new transmission line along the LIRR right-of-way would not have an adverse impact on surrounding land uses or the character of the area. However, with the exception of the portion of the LIRR Route Alternative that has existing distribution poles, there are currently no structures within the LIRR right-of-way that extend beyond the height of the train cars. The LIRR Route Alternative would introduce a new height element within the right-of-way. However, as discussed below, this new height element would not have a significant adverse impact on the visual quality within the study area. Similar to the Direct Route Alternative, because Bridgehampton Sag Harbor Turnpike has existing poles, this alternative would not introduce a new use or new height element along this portion of the route. Thus, the LIRR Route Alternative would not change or conflict with the surrounding land uses. Similar to the Direct Route Alternative, the LIRR Route Alternative would not have significant adverse impact on land use or community character.

COMMUNITY FACILITIES AND OPEN SPACE

EXISTING CONDITIONS

Figure 17-24 depicts the locations of all community facilities and public open space within the LIRR Route Alternative ½-mile study area. There are 78 community facilities and open space parcels throughout the study area. The LIRR Route Alternative has concentrations of facilities and open space in the southern portion of the study area mainly in the Village and southwest of the LIRR tracks. The area surrounding Mill Pond, in the hamlet of Water Mill, is host to a cluster of facilities, which include the Water Mill Village Improvement Association and the Water Mill Post Office. Continuing north is a dense area of community facilities and open space located in the downtown area of Bridgehampton along Montauk Highway. The northern portion of the study area primarily includes Town- and County-owned open space. Figure 17-24 lists the name and location of each facility. These facilities and services are described below.

Police

The Town of Southampton Police Department maintains a substation in the hamlet of Bridgehampton at Bridgehampton Commons located on Montauk Highway, south of the LIRR Montauk line track and is centrally located within the LIRR Route Alternative study area. In addition, the Southampton Village Police Department is located at 151 Windmill Lane, within the southwest portion of the study area.

Refer to Chapter 3, “Community Facilities and Open Space,” for additional information on Town and Village Police Departments.

Fire Protection

Fire Protection has been discussed in greater detail in Chapter 3, "Community Facilities and Open Space." However, with regards to the LIRR Route Alternative, 5 of the 10 Southampton fire districts are partially located within the study area: Bridgehampton Fire District, North Sea Fire District, Noyack Fire Prevention District, Southampton Fire District, and Southampton Fire Prevention District. Figure 17-4 illustrates the fire district boundaries within the Town.

- The Bridgehampton Fire Department (Bridgehampton Fire District) has one station on School Street in the eastern portion of the ½-mile study area, located south of the LIRR tracks.
- The North Sea Fire Department (North Sea Fire District and Noyack Fire Prevention District) has two houses: the main station at 149 Noyack Road, and a substation at 1255 Noyack Road, built in 1931. Both houses are outside of the study area.
- The Southampton Fire Prevention Department (Southampton Fire District and Southampton Fire Prevention District) has three firehouses with their headquarters located at Windmill Lane, within the study area, and two substations located at Hampton Road and St. Andrews Lane. The firehouse located on 470 Hampton Road is located in the southern portion of the LIRR Route Alternative study area, while the St. Andrews Lane firehouse is located outside the study area. The fire department also maintains equipment storage at an antique barn located at 35 Flying Point Road, also outside of the study area.

Schools

Public Schools

The LIRR Route Alternative study area is within the boundaries of three school districts—Southampton UFSD, Bridgehampton UFSD, and Sag Harbor UFSD (see Figure 17-5). The study area borders Tuckahoe Common School District to the southeast and is northwest and west of Sagaponack Common School District. The Bridgehampton Elementary and High School are located within the southeastern portion of the study area on Montauk Highway.

Higher Education

See Chapter 3, "Community Facilities and Open Space," for information on Higher Education.

Private Education

There are two private educational facilities located within the LIRR Route Alternative study area.

Our Lady of the Hamptons Regional Catholic School is a private, Catholic elementary school located at 160 North Main Street, in the southwest portion of the study area, south of the LIRR tracks. Refer to Chapter 3, "Community Facilities and Open Space," for additional information on Our Lady of the Hamptons Regional Catholic School.

The Hayground School in Bridgehampton is a private educational facility located on Mitchells Lane, north of the LIRR tracks within the northwestern portion of the study area. This private school serves grades pre-kindergarten to 8.

Libraries

There are two public libraries located within the ½-mile study area. The Rogers Memorial Library in Southampton Village is located at 91 Coopers Farm Road in the southwesternmost

portion of the study area and the Bridgehampton Library is located at 2478 Montauk Highway in the northeastern portion of the LIRR Route Alternative study area.

Health Services

See Chapter 3, "Community Facilities and Open Space," for information on Health Services.

Other Community Facilities

Churches and Cemeteries

- North End Graveyard, North Sea Road
- United Methodist Church of Southampton, 160 Main Street
- Our Lady of Poland Roman Catholic Church, 35 Maple Street
- Church of God in Christ, 57 Hillcrest Terrace
- Southampton Full Gospel Church, 130 County Road 39
- Southampton Cemetery, 545 North Sea Road
- Sacred Hearts of Jesus and Mary Cemetery, 231 Country Road 39
- Community Baptist Church, 16 Plant Street
- First Baptist Church of Southampton, 163 Pulaski Street
- First Baptist Church of Southampton, 57 Halsey Avenue
- Community Baptist Church of Southampton, 30 Halsey Avenue
- Water Mill Cemetery, 731 Montauk Highway
- Incarnation Evangelical Lutheran Church, 59 Hayground Road
- Hayground Cemetery, Montauk Highway
- Bridgehampton United Methodist Church, 2247 Montauk Highway
- Queen of the Most Holy Rosary Roman Catholic Church, 2350 Montauk Highway
- Bridgehampton Presbyterian Church, 2429 Montauk Highway
- St. Ann's Episcopal Church, 2463 Main Street
- First Baptist Church, 151 Bridgehampton Sag Harbor Turnpike
- Edgewood Cemetery, 86 Edgewood Avenue
- First Church of God in Christ, 461 Bridgehampton Sag Harbor Turnpike
- Unitarian Universalist Congregation, 977 Bridgehampton Sag Harbor Turnpike

Post Office

The United States Post Office of Southampton is located on 39 Nugent Street, directly west of North Sea Road in the southwest portion of the study area, within the Village of Southampton.

The United States Post Office of Bridgehampton is located on 2322 Montauk Highway, south of the LIRR tracks and north of Hildreth Lane in the northeast portion of the study area, within the hamlet of Bridgehampton.

Child Care

The Southampton Day Care Center Fountain of Youth is located at 100 David Whites Lane and is within the southeast portion of the ½-mile study area.

Senior Citizen Residential Facilities

The Payton Lane Nursing Home, located on County Road 39, is the only senior citizen residential facility in the study area.

Open Space

The largest concentration of open space within the LIRR Route Alternative study area is associated with the Long Pond Greenbelt, located in the northeastern portion of the study area. These lands are primarily County- and Town-owned parks.

Open space occupies approximately 652 acres or 12 percent of the study area, with about 418 acres (or 64 percent of the total open space) in public ownership (see Figure 17-25). This acreage includes land set aside by the County, Town, or Village for open space conservation, land preserved by the Nature Conservancy and Peconic Land Trust, and cemeteries, as well as private lands that have been preserved. As stated, most of the open space within the LIRR Route Alternative study area is located in the northeast portion and is mainly associated with the Long Pond Greenbelt.

The ½-mile study area includes six cemeteries on approximately 27 acres, representing about 4 percent of the total open space in the study area. Three of the cemeteries are located in the southwest portion of the ½-mile study area, two of which are located on North Sea Road (North End Graveyard and Southampton Cemetery), and one on County Road 39 (Sacred Hearts of Jesus and Mary Cemetery). In the central and eastern portions of the LIRR Route Alternative study area is Water Mill Cemetery located on Montauk Highway, south of Mill Pond. Further east on Montauk Highway is Hayground Cemetery and Edgewood Cemetery located on Edgewood Avenue, east of Bridgehampton Sag Harbor Turnpike.

Open Space Preservation Plans, Programs, and Policies

See Chapter 3, "Community Facilities and Open Space," for additional information on open space preservation plans, programs, and policies, and their respective descriptions and overviews. The following plans, programs, and policies have been discussed in greater detail for the Direct Route Alternative and no additional recommendations are relevant to the LIRR Route Alternative.

- *Town of Southampton Master Plan (1970)*
- *Town of Southampton Master Plan Update (1984)*
- Town of Southampton Community Preservation Fund
- Southampton Town Code
- *Bridgehampton Hamlet Center Plan (February 2004)*
- *New York State Open Space Conservation Plan*
- *Statewide Comprehensive Outdoor Recreation Plan (2003)*

The following policies are also discussed in Chapter 3, "Community Facilities and Open Space," but have different implications for the LIRR Route Alternative:

Master List and Maps of Proposed County Open Space Acquisitions, 2004

According to the *Master List and Maps of Proposed County Open Space Acquisitions,* there is one property identified for acquisition (Suffolk County Tax ID: Section 39, Block 1, Lot 46.1) within the LIRR Route Alternative ½-mile study area. This property is located on the border of the study area, north of Scuttle Hole Road. This lot is also located within the Montauk Highway Alternative ½-mile study area.

Southampton Tomorrow - Comprehensive Plan Update Implementation Strategies, 1999

Relevant to the LIRR Route Alternative, the 1999 Comprehensive Plan Update also recommended the construction of a South Fork Bikeway. The South Fork Bikeway was recommended for implementation in Year 1 of the Strategic and Capital Improvements Plan. The South Fork Bikeway would be funded by the Town and would be located along and surrounding the LIRR tracks east of Church Street and west of the Town of East Hampton line. The Town posted a public notice announcing that bids for the South Fork Bikeway would be accepted until July 25, 2007.

Town of Southampton Recreation Plan (2003)

The LIRR Route Alternative study area is also part of the same districts discussed previously for the Existing Line Alternative. In the Tuckahoe-Southampton District, the 9-mile greenway known as the Long Pond Greenbelt is also partially located in the northeastern portion of the ½-mile study area and recommended for preservation.

Another recreational asset to this study area is the privately run, but publicly used Water Mill Community Club Association Park, located just south of Mill Pond and the LIRR tracks on Montauk Highway in the Bridgehampton-Sagaponack District. Also located in this district within the LIRR Route Alternative study area is Sayre Park. Located south of the LIRR tracks and north of Montauk highway along Snake Hollow Road, the 2003 Recreation Plan seeks improvements such as a gazebo for the 7-acre neighborhood park to enhance its recreational features. South and east of Sayre Park is the Bridgehampton Militia Green, which is located on Ocean Road. The 2003 Recreation Plan recommends enhancements to this park to increase recreational activity.

In addition, within the Bridgehampton-Sagaponack District and ½-mile study area is a portion of the Poxabogue County Park. This 26-acre park and preserve is referenced in the plan as notable preserved land to be utilized as part of the Town's overall level of service to provide parks and recreational facilities. A small portion of this park and preserve is located in the easternmost portion of the ½-mile study area, northwest of Poxabogue Pond.

Town of Southampton Community Preservation Project Plan (2005)

As discussed previously in Chapter 3, "Community Facilities and Open Space," the 2005 Project Plan further builds upon the previous two plans and has identified nearly 400 parcels (approximately 1,200 acres) of land within the study area that boast natural features worth preserving. Figure 17-26 shows the priority parcels listed in the 2005 Project Plan that are within the LIRR Route Alternative study area. In addition, similar to the Direct Route Alternative, the northeast portion of the study area contains a concentration of open space identified in the 2005 Project Plan that is part of the Long Pond Greenbelt.

Moreover, there are pockets of agricultural lands, trails, wetlands, and aquifer recharge areas throughout the study area proposed for preservation as part of the 2005 Project Plan. These include trails surrounding Long Pond and Kellis Pond, known as Morton-to-Kellis Pond Trail. As discussed in Chapter 3, "Community Facilities and Open Space," this linear north-south trail project intends on incorporating the Atlantic Golf Club's trail easement and Long Pond (Bridgehampton), located in the northwest portion of the ½-mile study area, as well as other ponds and parks in the vicinity. Another trail is the Bay-to-Ocean Trail. Located in the southwest portion of the study area, west of Long Pond, this north-south linear trail corridor includes the Long Pond Greenbelt, which is also within the study area; this trail is intended to intersect with the Paumanok Path in the Long Pond Greenbelt. Wetland areas are located in the southern portion of the study area near Mill Pond and along Lower Seven Ponds Road, as well in the vicinity of Noyack Road and Montauk Highway to the north, and east of Long Pond (Bridgehampton) further north.

Refer to Chapter 3, "Community Facilities and Open Space," for a detailed description of the 2005 Community Preservation Project Plan and specific descriptions of areas proposed for preservation.

Village of Southampton Comprehensive Plan (May 2000)

As discussed previously in Chapter 3, "Community Facilities and Open Space," the Village Comprehensive Plan puts forth several recommendations regarding open space and community facilities.

Similar to the previously discussed alternatives, within the Village portion of the study area, there are limited vacant and agricultural lands, and the area is mostly built. The few open space parcels present in the Village are located north and south of the LIRR within the ½-mile study area. These open space parcels, located in the southern portion of the study area, total approximately 24 acres or 0.4 percent of the ½-mile study area.

Village of Sagaponack Comprehensive Plan (2007)

The *Village of Sagaponack Comprehensive Plan* (2007 Village Comprehensive Plan) states, "The Village of Sagaponack is and shall remain a unique community cherished for its extraordinary natural beauty, rich historic and architectural resources, and rural sense of place." The 2007 Village Comprehensive Plan refers to the 30 acres of Suffolk County-owned parkland called Poxabogue Park and Preserve located at the northern edge of Poxabogue Pond, within the LIRR Route Alternative ½-mile study area. This "passive park" has a loop trail for the public and a loop walking trail in the Sagg Swamp Nature Preserve owned by the Nature Conservancy, in the area between Sagaponack Pond and Montauk Highway, with access from Sagaponack Road.[1]

As part of the 2007 Village Comprehensive Plan, strong emphasis is made on devising strategies to protect open spaces, vistas, farmlands, and scenic areas that define the character of the Village. Less than 5 acres of the Village are located within the LIRR Route Alternative study area. These lands include Poxabogue Park and surface waters.

[1] Village of Sagaponack Comprehensive Plan, 2007

POTENTIAL IMPACTS OF THE LIRR ROUTE ALTERNATIVE

Community Facilities

Similar to the Direct Route Alternative, the LIRR Route Alternative would not result in any significant adverse impacts on community facilities and emergency services regardless of the configuration selected. Although adding a new transmission line along this right-of-way would add a new use to this corridor, the existing right-of-way already functions as a utility use, and therefore would not increase demand on community facilities and emergency services.

Open Space

The preservation of open space parcels would not be affected by the LIRR Route Alternative regardless of the configuration chosen. The preservation of these properties has occurred in the past and would be expected to continue in the future with the LIRR Route Alternative.

The LIRR Route Alternative, similar to the Direct Route Alternative, would not conflict with State, County, and local open space policy goals and objectives and would not have a negative impact on any identified parcels for preservation that are identified in these policy documents. Further, LIPA would work with the Town of Southampton on the development of a South Fork Bikeway if the LIRR Route Alternative is selected and the two construction periods coincide.

The LIRR Route Alternative, similar to the Direct Route Alternative, would not have any significant adverse impacts with regard to preservation of open space or complying with open space acquisition plans.

ZONING AND PUBLIC POLICY

EXISTING CONDITIONS

Zoning

There are 12 Town zoning districts located along the LIRR Route Alternative, see Figure 17-27. These districts include Light Industrial (LI40), Highway Business (HB), Village Business (VB), Office District (OD), Country Residence (CR40, CR60, CR80, CR120 and CR200), and Residence (R15, R20, and R40).

There are five Village zoning districts located along the LIRR Route Alternative, see Figure 17-28. These districts include Light Industrial (LI), Highway Business (HB), Office District (OD), and Residence (R-12.5 and R-20).

The LIRR Route Alternative study area includes all zoning districts within ½ mile of the route encompassing approximately 5,384 acres of land. Approximately 89 percent (4,777 acres) of the study area is located within the Town of Southampton and 11 percent (607 acres) of the study area is located within the Village of Southampton. Table 17-8 provides the Town zoning districts found within the study area by acreage and percent of total area.

The LIRR Route Alternative study area boundary also encompasses a relatively small portion of the Village of Sagaponack. The Village of Sagaponack was incorporated in 2005 and has an associated comprehensive plan and zoning code. Prior to becoming incorporated, the Village was a Town hamlet. The Village of Sagaponack portion of the LIRR Route Alternative study area is located in and around Little Poxabogue Pond, and comprises less than 5 acres of the

study area. The only land uses within the Village of Sagaponack portion of the study area include Poxabogue County Park and surface waters.

A discussion of zoning districts and public policy pertaining to the Village of Sagaponack has not been included in this section due to that fact that the zoning in this portion mimics Town zoning districts. The Village of Sagaponack districts are OSC (identical to the Town's OSC district) and R40 (identical to the Town's CR40 district). This EIS does, however, include an analysis of Village policy in the "Visual Resources" section below.

Table 17-8
LIRR Route Alternative: Town Zoning

District	Land Area (acres)	Percent of Total Area
CR40: Country Residence	494.2	9.2
CR60: Country Residence	642.0	11.9
CR80: Country Residence.	1,470.5	27.3
CR120: Country Residence	318.6	5.9
CR200: Country Residence	227.8	4.2
R15: Residence	8.8	0.2
R20: Residence	653.6	12.1
R40: Residence	122.2	2.3
R60:Residence	247.0	4.6
R80: Residence	58.3	1.1
MF-44: Multi-Family Residence	11.8	0.2
HB: Highway Business	132.0	2.5
LI40: Light Industrial	133.7	2.5
OD: Office District	76.6	1.4
OSCPD: Open Space Conservation Park District	38.9	0.7
RTPDD: Resort / Tourism Planned Development District	65.7	1.2
SCB: Shopping Center Business	33.3	0.6
VB: Village Business	42.2	0.8
Total	4,777	88.7
Study Area Total	**5,384**	**N/A**

Source: *Code of the Town of Southampton*, Chapter 330, 2007 and Geographic Information System, 2005.

For a summary and description of permitted uses and bulk restrictions for the Country Residence, Residence, Office District, Highway Business, Open Space Conservation Park District, and Light Industrial zoning districts, see Chapter 4, "Zoning and Public Policy." All districts found within this study area but not described in Chapter 4, "Zoning and Public Policy," are described below.

Residential Districts

Dimensional regulations pertaining to the Multifamily Residential (MF-44) district are found in Section 330-11, "Residential Districts Table of Dimensional Regulation," of the Town Code. The minimum lot area required in this district is 44,000 square feet and the maximum lot coverage is 20 percent. Structures may not exceed a height of 32 feet and front, side, and rear yard setbacks may not be less than 50 feet.

Section 330-10 of the Town Zoning Code states that within the MF-44 district, the following uses are permitted: residential uses with the exception of camping grounds, mobile homes, and senior citizen housing; residential community facilities such as parks, fire stations, and schools; plant nursery; and customarily accessory structures, including swimming pool, green house, and accessory apartment. Some of the special exception uses include, but are not limited to, uses that are converted into a residential condominium or cooperative; colleges or universities; and public utility structures.

Business Districts

Use and dimensional regulations pertaining to the Shopping Center Business (SCB) and VB are found in the Section 330-33, "Business Districts Table of Use Regulations" and Section 330-34, "Business Districts Table of Dimensional Regulation." Within the VB and SCB Districts there is no limit on the maximum number of uses permitted upon a lot. See Chapter 4, "Zoning and Public Policy," for detailed information on the VB District.

The minimum lot area allowed in the SCB District is 220,000 square feet. Lot coverage in this district may not exceed 20 percent and building height may not exceed 35 feet. A minimum front yard setback of 100 feet is required as is a side and rear yard setback of 50 feet. Uses permitted within the SCB District include a pre-existing dwelling; church or similar place of worship; park, playground or recreation area when authorized by a municipality; public library or museum; fire station, municipal office; school; bus passenger shelter; nonprofit meeting room; agriculture excluding animal husbandry; greenhouse; plant nursery; most retail, and some personal service business uses. As in all Town zoning district, public utilities are permitted as a special exception use.

Planned Development Districts

Within the Town portion of the study area, there is one planned development district, namely the Resort Tourism Planned Development District (RTPDD) associated with the Hampton Classic site, just east of Long Pond. Generally, the RTPDD is intended to encourage the development of a centralized area of recreation, cultural, entertainment, and tourism facilities to serve the Town's tourism industry. Within the RTPDD, the following uses are permitted subject to compliance with all applicable laws, rules, and regulations:

- Community or regional sports or recreation facilities, including a stadium, arena, field house, playing field, skating rink, tennis center, swimming pool, golf course, equestrian racetrack or other recreation facility.
- Health clubs, spa facilities or similar type of indoor recreation facilities.
- Parks, playgrounds, and trails.
- Theaters, cinemas, concert halls, museums, amphitheaters, performing arts centers, or similar type of entertainment or cultural facilities.
- Hotels, motels, bed-and-breakfasts, inns, and restaurants.
- Conference and/or trade exposition centers.
- Any use not specifically identified above but otherwise permitted as-of-right or by special exception in the existing underlying zoning district.
- Any other commercial use where it can be demonstrated that such use will be beneficial, compatible and harmonious with the uses of the RTPDD and the surrounding area and where

it is further demonstrated that the goals and objectives set forth in this article and the 1999 Comprehensive Plan Update are maintained and furthered.

There are three Town of Southampton overlay districts located within the study area. These districts are the Aquifer Protection Overlay District, the Agricultural Overlay District, and the Old Filed Map Overlay District (see Figures 17-29 and 17-30). The LIRR tracks are the southernmost boundary of the Aquifer Protection Overlay District from Narrow Lane to the east of Bridgehampton Sag Harbor Turnpike. The study area east of Narrow Lane and north of the LIRR tracks is within this overlay district. The LIRR Route Alternative is located within the Agricultural Overlay District from CR 39 to Water Mill Towd Road, from Deerfield Road to Butter Lane, and from Scuttle Hole Road to the Bridgehampton Substation. The LIRR Route Alternative, with the exception of the route located south of CR 39, is located within the Old Filed Map Overlay District. See Chapter 4, "Zoning and Public Policy," for information on these overlay districts.

The Village portion of the study area includes 12 zoning districts (see Table 17-9). The predominant district in the Village portion of the study area is the Residence zoning district, representing about 383 acres (approximately 7 percent) of the total study area. Permitted uses and bulk regulations for all districts found within the study area are described in Chapter 4, "Zoning and Public Policy."

Table 17-9
LIRR Route Alternative: Village Zoning

District	Land Area (acres)	Percent of Total Area
R-7.5: Residence	156.9	2.9
R-12.5: Residence	90.1	1.7
R-20: Residence	125.4	2.3
R-40: Residence	10.5	0.2
R-80: Residence	0.5	0.0
R-120: Residence	0.04	0.0
MF-20: Multifamily	48.4	0.9
MF-25: Multifamily	8.7	0.2
LI: Light Industrial	46.1	0.9
OD: Office District	68.1	1.3
HB: Highway Business	34.4	0.6
VB: Village Business	17.8	0.3
Total	607	11.3
Study Area Total	**5,384**	**N/A**

Source: *Code of the Village of Southampton*, Chapter 116, and Geographic Information System, 2007.

Public Policy

The following 12 policies, which are discussed in Chapter 4, "Zoning and Public Policy," would be relevant to the LIRR Route Alternative.

- *New York State Open Space Conservation Plan*
- *Statewide Comprehensive Outdoor Recreation Plan 2003*
- *LIPA Energy Plan 2004-2013, Strategic Plan*
- *Energy Plan for Long Island, New York*

- *Citizens Energy Plan for Long Island, Draft*
- *The Long Island Comprehensive Special Groundwater Protection Area Plan*
- *Smart Growth Policy Plan for Suffolk County*
- *Suffolk County Sidewalk Study*
- *Sustainable East End Development Strategies Summary Report*
- *Town of Southampton Master Plan (1970)*
- *Town of Southampton Master Plan Update (1984)*
- *Village of Southampton Comprehensive Plan (2003)*

Four policies, some of which are also discussed in Chapter 4, "Zoning and Public Policy," but have different implications for the LIRR Route Alternative, are discussed below:

Southampton Tomorrow - Comprehensive Plan Update Implementation Strategies, 1999

The 1999 Comprehensive Plan Update has been summarized in Chapter 4, "Zoning and Public Policy." However, several goals or recommendations were made specific to the study area, including the development of hamlet centers, the designation of several roadways as scenic corridors, and the construction of a South Fork Bikeway.

Scenic corridors were identified as roadways or segments of roadways that exhibit valued scenic qualities such as agriculture, open space, and high quality scenic vistas. Within the study area, several roadway segments were identified as potential scenic corridors. These roadways include Bridgehampton Sag Harbor Turnpike, Ocean Road, Horsemill Lane, Atlantic Road, Old Mill, Halsey Lane, Cobb Road, Flying Point Road, and others. A description of these roadways has been provided in Chapter 6, "Visual Resources."

The South Fork Bikeway was recommended for implementation in Year 1 of the Strategic and Capital Improvements Plan. The South Fork Bikeway would be funded by the Town and would be located along and surrounding the LIRR tracks east of Church Street and west of the Town of East Hampton line. The Town posted a public notice announcing that bids for the South Fork Bikeway would be accepted until July 25, 2007.

The plan provides vision or recommendations aimed at the hamlet centers in the Town, two of which are located within the study area. Those recommendations are further described in the individual hamlet studies. The recommendations, entitled "Vision Goals" are listed below:

- Focus growth to accommodate increases in population and spending power, by channeling growth to existing centers; providing more flexibility as to use in and near the centers, but with more assurance of good design; promoting unique, one-of-a-kind shopping; and promoting locally-grown small businesses.
- Reinforce the special character of each hamlet (and village) center, by promoting a unique identity for each center; improving access, circulation and parking; upgrading public spaces, pedestrian amenities, the streetscape and historic qualities; and promoting civic uses.
- Upgrade the Town's "highway" business corridors, by improving and coordinating access and circulation; promoting more attractive signage and landscaping; providing incentives for redevelopment and consolidation; and providing greater flexibility as to use, but with greater attention to design.

Update to the Town of Southampton Comprehensive Plan Transportation Element (2004)

This plan has been summarized in Chapter 4, "Zoning and Public Policy," of the EIS. Several improvements or recommendations specific to the study area are contained in the report. It is important to note that several roadway improvements often include construction activities as well. For the hamlet of Water Mill, the report recommends the following, of which some are also mentioned in the individual hamlet studies:

- Creation of an alternative landscaped service road parallel and north of Montauk Highway (behind the commercial district) to provide increased safety and easier access to the parking areas of the commercial district, extending from Deerfield Road to Water Mill Square.
- Creation of landscaped pedestrian and bicycle access ways in concert with this northerly parallel vehicular service road.
- Removal of the parking spaces located along the southerly side of Montauk Highway from the Post Office to Proprietor's Lane.
- Traffic calming and abundant landscaping should be used along Montauk Highway in Water Mill to improve traffic flow while reducing traffic speed and increasing pedestrian safety.
- Creation of a center left hand turn lane to be striped within the existing pavement at intersections with secondary streets and near commercial businesses to improve traffic flow by moving turning movements to the side of east-west travel.

The plan also recommends site specific changes in and around Bridgehampton hamlet. Most of the recommendations relate to traffic, circulation, and parking.

The plan recommended that all changes or actions preserve the historic, rural character of the community through the use of abundant landscaping and traffic calming.

In addition, the recommendation to develop a joint-use corridor or new roadway along the existing LIRR right-of-way in Bridgehampton and Water Mill is relevant to this alternative. A summary of this proposal is provided in Chapter 4, "Zoning and Public Policy."

A Plan for Bridgehampton Hamlet Center

This report, which has been discussed in Chapter 4, "Zoning and Public Policy," is relevant to the study area because the hamlet center is located within the study area.

One of the several recommendations made in the plan that is relevant to the LIRR Route Alternative is the recommendation to improve the visual quality of the hamlet gateway (located along Montauk Highway, west of Snake Hollow Road) and preserving open space, views, and streetscapes throughout the hamlet center. The plan puts forth specific land use, street design, community character preservation, and overall development recommendations for different sites or lots within the hamlet center. Relevant to this alternative, the plan called out the need to preserve the visual resources within the study area specifically referring to the importance of farmland views between Corwith Road and Butter Lane, which are also recognized in the 1999 Comprehensive Plan Update. According to the plan, this view brings farming directly into the heart of the hamlet, and thus keeps the hamlet's history alive to residents and visitors. The plan recommends that site planning on these parcels should preserve, to the extent practical, the open vista as seen from Montauk Highway.

Water Mill Hamlet Center Strategy

This report, which has been discussed in Chapter 4, "Zoning and Public Policy," is relevant to the study area because the hamlet center is located within the study area.

The report's recommendations state that the development of the hamlet center should be planned in terms of a larger strategy. The strategy recommended should encompass a coordinated approach to circulation, parking, open space and overall land use which can integrate the hamlet center as a whole into an attractive pedestrian environment. Preservation of the historic character is also a key element of the plan. Historic resources within the study area are discussed in greater detail below.

Site Plan Applications

In addition to these reports, there is one pending development application within the study area. On February 22, 2007 the Town received a draft scope for a Draft EIS for a site plan application for the Orchard at Bull's Head Inn. The site is located at 2546 Montauk Highway and 41 Bridgehampton Sag Harbor Turnpike in the hamlet of Bridgehampton and is located on about 3 acres. The site is currently zoned R20. The application proposes to restore an existing main building, barn, and two residences into a full service inn. Additionally, the application proposed the development of four cottages with associated parking and infrastructure.

POTENTIAL IMPACTS OF THE LIRR ROUTE ALTERNATIVE

With the exception of the northern and westernmost portions of the route, the LIRR Route Alternative does not have existing utility poles (i.e., along most of the LIRR right-of-way). Therefore, the segment of the LIRR Route Alternative that runs between the LIRR Southampton Station and the Bridgehampton Sag Harbor Turnpike would have poles where none existed before. However, the LIRR right-of-way is an existing utility/transportation use and the new transmission line would not be in conflict with this existing use and therefore, would be consistent with zoning. Where there are existing utility lines, the LIRR Route Alternative would replace existing poles with new, slightly taller poles that would not conflict with Town or Village zoning.

LIPA is a New York State public authority with the power to determine the need for and location, type, size, use, and construction of transmission facilities within its service area. Under well-established case law doctrine and based on language in its enabling statute, LIPA is not obligated to seek local zoning approvals for such projects. However, this section assesses the LIRR Route Alternative's compliance with Town and Village zoning ordinances. Issues relevant to zoning and the LIRR Route Alternative include permitted uses, height, and site plan approval.

Both the Town and Village zoning ordinances permit public utilities as a special exception use, and limit the height of all structures within districts along the route to no more than 40 and 35 feet, respectively. If LIPA were subject to local zoning ordinances, the poles would require a special exception permit, site plan approval, and height variance[1] ranging from 8 to 40 feet depending on the Town and Village zoning district.

[1] Relative to the other alternatives being considered, this height variance, if one would be required, would be more significant than that required for the other alternatives because taller poles would be necessary for the LIRR Route Alternative.

Two Town policies specific to the LIRR Route Alternative are the proposed South Fork Bikeway and the joint-use corridor. The South Fork Bikeway is proposed in close proximity to and at certain locations along the LIRR Route Alternative. The two projects run parallel and almost adjacent to each other between Lumber Lane and Main Street in Bridgehampton hamlet along the LIRR right-of-way. The LIRR Route Alternative in this segment and in its entirety would not have any significant adverse impacts on the proposed bikeway because the bike path would not be located within the LIRR right-of-way. LIPA would work with the Town on the South Fork Bikeway if the LIRR Route Alternative is selected and the two construction periods coincide.

Although there are no current proposals for the development of the recommended joint-use corridor or new highway along the LIRR right-of-way, there is a possibility that the Town may proceed with the construction of either of these recommendations in the future. The LIRR Route Alternative proposes to construct between 61- and 75-foot steel transmission poles along the entire length of the recommended location of the roadway. If the LIRR Route Alternative is selected and the Town proceeds with the construction of this roadway, it would be expected that the Town coordinate all activities with the LIRR, NYSDOT, as well as LIPA. This alternative would not hinder or prevent this roadway from being constructed or operated. Roadway improvement projects that contain or involve preexisting utility poles have been successfully completed in the past through a coordinated effort by all agencies involved.

Therefore, similar to the Direct Route Alternative, the LIRR Route Alternative would not have an adverse impact on the State, regional, Town, or Village public policies. This alternative route would be located along a right-of-way that is currently recognized as a transportation/utility use, specifically the LIRR tracks. Several planning documents recommend the preservation of the scenic and visual quality of the route, which would be maintained with this alternative. A detailed analysis of the visual impacts that would occur as a result of this alternative is discussed in greater detail below. Further, open space parcels for preservation would not be affected by the new transmission line. The preservation of these properties has occurred in the past and would be expected to occur in the future with or without the transmission line.

COASTAL ZONE MANAGEMENT

Figure 17-12 depicts the State's coastal zone as it relates to the LIRR Route Alternative. As shown on Figure 17-12, only a small portion of this alternative, less than 1 mile in the vicinity of Mill Pond and Mecox Bay, is located within the coastal zone. In general, the Coastal Zone Management consistency analysis completed for the Direct Route Alternative, as described in Chapter 5, "Coastal Zone Management," is the similar to the LIRR Route Alternative analysis. However, of the State's 44 coastal policies, the consistency analysis for 11 policies would be different for the LIRR Route Alternative than for the Direct Route Alternative. These policies and their applicability to the LIRR Route Alternative are summarized below:

Policy 1: Restore, revitalize, and redevelop deteriorated and underutilized waterfront areas for commercial, industrial, cultural, recreational, and other compatible uses.

> With the exception of the area south of Mill Pond and north of Mecox Bay, the existing LIRR right-of-way is generally located inland, where the LIRR Route Alternative is proposed. However, the LIRR right-of-way is an existing utility/transportation use and functions in harmony with both Mill Pond and Mecox Bay and has not historically hindered the waterfront in this area. Therefore, this policy does not apply to this project.

Policy 2: Facilitate the siting of water-dependent uses and facilities on or adjacent to coastal waters.

The LIRR Route Alternative would generally be located inland away from the waterfront and not located along the shorefront. The small area of the existing LIRR right-of-way, where the new transmission line would be sited in the vicinity of Mill Pond and Mecox Bay, does not currently provide for water-dependent uses. Therefore, this policy does not apply.

Policy 5: Encourage the location of development in areas where public services and facilities essential to such development are adequate.

The project is an expansion and improvement of existing electric infrastructure to meet expected future demand. While the electric service is currently adequate, absent this project, in the future the South Fork system could experience thermal overloads and potential collapse. The new transmission line and expansion of the Bridgehampton Substation would allow LIPA to meet future energy demands. The LIRR Route Alternative would achieve this objective of adequate public services and would be consistent with this policy.

Policy 11: Buildings and other structures will be sited in the coastal area so as to minimize damage to property and the endangering of human lives caused by flooding and erosion.

The LIRR Route Alternative would be consistent with this policy. This alternative would site the new transmission line along an existing LIRR right-of-way. In addition, only a small portion of the route, in the vicinity of Mill Pond, Hayground Cove, Long Pond, and Little Long Pond is located within a flood zone (see Figure 17-31). The poles would not be adversely affected by a flood, and the poles would not exacerbate the flooding. This alternative would not be located in an erosion hazard area, nor would it involve or affect any flood or erosion control structures.

Policy 20: Access to the publicly owned foreshore and to lands immediately adjacent to the foreshore or the water's edge that are publicly owned shall be provided and it shall be provided in a manner compatible with adjoining uses.

The LIRR Route Alternative would be located on an existing rail right-of-way. In addition, this route would not be located on the water's edge or on publicly owned lands with access to the waterfront. Therefore, this policy is not applicable.

Policy 21: Water-dependent and water-enhanced recreation will be encouraged and facilitated, and will be given priority over non-water-related uses along the coast.

This policy is not applicable to this alternative. The proposed transmission line would be located along an existing LIRR right-of-way where an existing rail track is located. The proposed transmission line, with this alternative, would not interfere with any existing water-dependent uses or preclude the development of future water dependent, water-related, or recreational uses along the waterfront.

Policy 22: Development when located adjacent to the shore will provide for water-related recreation activities whenever such recreational use is appropriate, in light of reasonably anticipated demand for such activities and the primary purpose of the development.

The LIRR Route Alternative would install the new transmission line on an existing right-of-way and therefore, is not appropriate for water-related recreation. This policy does not apply.

Policy 23: Protect, enhance, and restore structures, districts, areas, or sites that are of significance in the history, architecture, archaeology, or culture of the State, its communities, or the nation.

The LIRR Route Alternative would not adversely affect any structures, site, or districts of historical, architectural, archaeological, or cultural significance. The LIRR Route Alternative has been analyzed for impacts to historic and archaeological resources (see below, "Historic Resources" and "Archaeological Resources") and visual impacts to these resources (see below, "Visual Resources"). This alternative would be, therefore, consistent with this policy.

Policy 25: Protect, restore, and enhance natural and manmade resources that are not identified as being of Statewide significance, but which contribute to the overall scenic quality of the coastal area.

As described in the visual character analysis (see below, "Visual Resources"), the LIRR Route Alternative would be visible or potentially visible at a limited number of visual resources and would not result in adverse impacts on visual character. The new poles would be visible to members of the public riding the LIRR due to the alternative's proposed location along an existing right-of-way but this visibility would not be considered a significant adverse impact. Therefore, this alternative would be consistent with this policy.

Policy 26: Conserve and protect agricultural lands in the State's coastal area.

Because the LIRR Route Alternative would consider the installation of the new transmission line on an existing right-of-way and not on agricultural land, this policy does not apply.

Policy 44: Preserve and protect tidal and freshwater wetlands and preserve the benefits derived from these areas.

The LIRR Route Alternative would not be located in any tidal or freshwater wetlands but, at certain points, would be located within 100 feet of a wetland. KeySpan has a General Wetlands Permit that regulates utility activities within areas adjacent to and within wetlands. Restrictions in the General Wetlands Permit are designed to prevent degradation of wetlands. This General Wetlands Permit would apply to the work that may occur within regulated areas.

VISUAL RESOURCES

This section considers the appearance of the LIRR Route Alternative and evaluates the potential for visual impacts. A list and description of scenic or visual resources and locally significant open space is provided in Chapter 6, "Visual Resources." To determine visual effects, this section identifies resources that would have visibility of the LIRR Route Alternative and describes any changes in visual characteristics that would occur. Visual effects are further demonstrated through photosimulations that demonstrate the future appearance of the transmission line from various locations. Locations of viewpoints for photosimulations were selected to demonstrate potential visibility of the transmission line from a variety of representative viewpoints. The analysis of visual impacts is based upon photosimulations and application of the NYSDEC Visual Impact Assessment Methodology, "Assessing and Mitigating Visual Impacts," (DEP-00-2). This methodology, which is described in detail in Chapter 6, "Visual Resources," was also used to determine the visual effects of the Direct Route Alternative.

EXISTING CONDITIONS

The study area for visual resources is one mile on either side of the LIRR Route Alternative. Based on observations, the one mile study area was determined appropriate as this distance represents the maximum distance from which the poles would be discernible.

INVENTORY OF RESOURCES

An inventory of sensitive aesthetic and visual resources was prepared, including locations or resources identified by local jurisdictions as having scenic or aesthetic quality. All resources within one mile of the LIRR Route Alternative were identified. Some other notable resources outside of the 1-mile study area are also noted. The locations of each resource are shown in Figure 17-32 and labeled accordingly on the "Summary of Inventory of Resources" in Table 17-10. In addition, several roadways identified as scenic in the 1999 Comprehensive Plan Update were analyzed to determine potential impacts of this alternative. Scenic Roadways are shown in Figure 17-33 and are also identified in Table 17-10. A detailed description of each resource is provided in Chapter 6, "Visual Resources."

Table 17-10
Summary of Inventory of Resources

No.	Resource	LIRR Route Alternative	Direct Route Alternative
1.	Southampton North Main Street Historic District	V	V
2.	Southampton Village Historic District & Expansion	PV	PV
3.	Water Mill at Water Mill	V	N
4.	Windmill at Water Mill (Corwith Windmill)	PV	N
5.	The Bridgehampton Historical Society (the Corwith House)	N	N
6.	Bridgehampton Presbyterian Church	N	N
7.	Beebe Windmill	N	N
8.	The Captain Nathaniel Rogers House (a.k.a. the Hampton House; a.k.a. the Hopping House)	N	N
National Wildlife Refuges			
9.	Conscience Point National Wildlife Refuge	N	N
10.	Elizabeth A. Morton National Wildlife Refuges	N	N
State Game Refuges and State Wildlife Management Areas			
11.	Linda Gronlund Memorial Nature Preserve	N	N
Bond Act Properties purchased under Exceptional Scenic Beauty or Open Space Category			
12.	Eastern GEIS/Great Swamp	PV	V
13.	Great Hill Pine Barrens	N	N
14.	Long Pond Greenbelt	V	V
15.	Sagaponack Woods	N	N
16.	Tuckahoe Woods	N	N
17.	Paumanok Path	PV	PV
18.	Tuckahoe Woods trails	N	N
19.	Oak Ponds-to-Peconic Bay Trail	N	N
20.	Morton-to-Kellis Pond Trail	V	V
21.	Trout Pond-to-Brick Hill Trail	PV	PV
22.	Brick Kiln Woods	V	V
23.	Bay-to-Ocean Trail	V	V

Table 17-10 (cont'd)
Summary of Inventory of Resources

No.	Resource	LIRR Route Alternative	Direct Route Alternative
Locally Significant Resources—Public Parks			
24.	Agawam Park, Village of Southampton	N	N
25.	Berwind Memorial Green	N	N
26.	Big Woods Preserve	N	N
27.	Bridgehampton Militia Green	N	N
28.	Coopers Beach	N	N
29.	Cryder Beach	N	N
30.	David Whites Park, Village of Southampton	PV	PV
31.	Emma Rose Elliston Park	N	N
32.	Flying Point Beach	N	N
33.	Flying Point Park, Village of Southampton	N	N
34.	Foster Memorial Beach (Long Beach)	N	N
35.	Fowlers Lane Beach	N	N
36.	Georgica Pond Area	N	N
37.	Gibson Beach	N	N
38.	Gin Lane Beach	N	N
39.	Halsey Neck Lane Beach	N	N
40.	Havens Beach	N	N
41.	Laurel Valley County Park	N	N
42.	Little Plains Beach	N	N
43.	Lola Prentice Park, Village of Southampton	N	N
44.	Long Pond Greenbelt	V	V
45.	Mashashimuet Park, Village of Sag Harbor	N	N
46.	Mecox Bay Preserve	N	N
47.	Mecox Beach	N	N
48.	Munn Point	N	N
49.	North Sea Athletic Facility and Park	N	N
50.	Northwest Harbor County Park	N	N
51.	Old Town Beach	N	N
52.	Peter's Pond Beach	N	N
53.	Poxabogue County Park	N	N
54.	Railroad Plaza Park, Village of Southampton	V	V
55.	Richard L. Fowler Nature Walk, Village of Southampton	N	N
56.	Rosko Drive Park, Village of Southampton	N	N
57.	Ruth Wales DuPont Sanctuary	N	N
58.	Sagg Main Beach	N	N
59.	Sagg Swamp Nature Preserve	N	N
60.	Sayre Park, Bridgehampton hamlet	V	N
61.	Scallop Pond Preserve	N	N
62.	Town Line Beach	N	N
63.	Trout Pond Park	N	N
64.	Water Mill Hamlet Center Green	PV	N
65.	William Dunwell Park, Village of Southampton	N	N
66.	Windward Way Park, Village of Southampton	PV	V
67.	W. Scott Cameron Beach	N	N
68.	Wolf Swamp Sanctuary	N	N
69.	Wyandanch Beach	N	N

Table 17-10 (cont'd)
Summary of Inventory of Resources

No.	Resource	LIRR Route Alternative	Direct Route Alternative
Other Locally Significant Resources			
70.	Railroad Corridor	V	V
71.	Mill Pond	V	N
Locally Significant Resources—Scenic Roads Identified in the Comprehensive Plan			
a.	Atlantic Avenue/Ocean Road	N	N
b.	Blank Lane	N	V
c.	Brick Kiln Road	N	V
d.	Bridgehampton Sag Harbor Turnpike	V	V
e.	Butter Lane	PV	V
f.	Church Lane	N	N
g.	Cobb Isle Road	N	N
h.	Cobb Road	PV	N
i.	Cooks Lane	N	V
j.	Davids Lane	N	N
k.	Deerfield Road	N	V
l.	Edge of Woods Road	N	PV
m.	Flying Point Road from Cobb Lane to the southern edge of the study area	N	N
n.	Halsey Lane	N	N
o.	Hayground Road	V	PV
p.	Head of Pond Road	N	V
q.	Highland Terrace	N	N
r.	Hildreth Lane	N	N
s.	Lopers Path	N	PV
t.	Lumber Lane	PV	V
u.	Mecox Road	N	N
v.	Millstone Road	N	PV
w.	Mitchells Lane from north of Snake Hollow Road to Scuttle Hole Road	N	V
x.	Montauk Highway/NYS Route 27 from Hildreth Lane to west of Poxabogue Lane	N	N
y.	Narrow Lane	N	V
z.	Narrow Lane South	N	PV
aa.	North Sea Mecox Road west of David Whites Lane	N	N
bb.	Noyack Path	N	PV
cc.	Old Mill Road from south of Mill Pond to Montauk Highway/NYS Route 27	V	PV
dd.	Old Sag Harbor Road	N	N
ee.	Pauls Lane east of Halsey Lane	N	N
ff.	Sagaponack Road/Sagg Road east of Highland Terrace	N	N
gg.	Scuttle Hole Road	V	V
hh.	Water Mill-Towd Road	N	V
ii.	Wickapogue Road	N	N

POTENTIAL IMPACTS OF THE LIRR ROUTE ALTERNATIVE

The methodology used to determine impacts of the LIRR Route Alternative is the same methodology used to determine impacts of the Direct Route Alternative. Table 17-10 lists the resources that were analyzed and identifies whether each alternative would be visible (V), potentially visible (PV), or not visible (N) from each resource. Any resources where the transmission line would be visible or potentially visible are described in further detail below with a discussion of the likely views.

The LIRR Route Alternative is characterized by a mix of vegetation and typical Village/hamlet uses. Much of the railroad right-of-way is lined by vegetation while several areas are also characterized by the rear potions of commercial facilities. These features screen most views of the LIRR right-of-way and therefore would also screen most views of the LIRR Route Alternative. In general, views would only be possible at railroad crossings and across open fields.

The visual impact analysis discussion below relies on a series of photosimulations along the LIRR Route Alternative. Photosimulation locations are shown on Figure 17-33 and labeled by a letter that corresponds to subsequent figures. It should also be noted that Figures 6-3a to 6-3e (Photographs 1-10), demonstrate the existing views from locations where the alternatives would not be visible. Figures 17-34 to 17-42 provide existing views and photosimulations from sensitive receptors and view corridors along the route of the transmission line where visibility would be possible. These photosimulations provide representative typical views from various locations in the surrounding study area. It should also be noted that locations of poles along the railroad corridor have not been specifically defined. Therefore, photosimulations show new poles in a worst-case scenario location (i.e. at the center of a view corridor). Where applicable, the following discussion identifies the sensitive receptors from which the view in a photosimulation, or a view largely similar to the photosimulation, would be possible. Additional representative views are provided in Figures 6-4a to 6-4h (Photosimulations A-H) and Figures 17-52 to 17-58, which provide photsimulations of the proposed conditions for alternative routes.

This analysis is based upon the new transmission line being located all above ground, including along Bridgehampton Sag Harbor Turnpike. If portions of the transmission line along Bridgehampton Sag Harbor Turnpike are buried, riser poles would be used to transition from above to below ground. Figure 6-5 provides a photosimulation that demonstrates how a riser pole would look. While the riser poles have an appearance that is more obtrusive than standard utility poles, they would be placed in locations that minimize their prominence in the surrounding landscape.

State/National Register of Historic Places

Southampton North Main Street Historic District. The Southampton North Main Street Historic District is located in the northern central portion of Southampton Village, along North Main Street between Willow Street/Railroad Plaza and Route 27. The northern edge of the historic district is approximately 0.1 miles south of the Southampton Substation and the first 1,200 feet of the transmission line. In general, views of the Southampton Substation from the Historic District are screened by vegetation, buildings, and the wall that surrounds the substation but some views of the substation are possible. In addition, the transmission line would likely be visible in the distance to pedestrians and motorists traveling north on Main and Elm Streets as it would cross both of these roads. Photosimulations A and B on Figures 17-34 and 17-35 show views of the proposed transmission line and poles from two locations in downtown

Southampton. As shown, the proposed poles and transmission line would be visible but would not be significantly different from existing utility poles and lines that already exist in the area.

Few new views of the substation and transmission lines would be created by the LIRR Route Alternative and the character of the neighborhood is not expected to change. In this area, the LIRR Route Alternative would only replace existing utility poles and add new conductors to those poles. The change from wooden to steel poles is not expected to significantly alter the character of the surrounding area. No significant viewsheds, or the enjoyment of historic resources within the district, are expected to change as a result of the LIRR Route Alternative. Therefore, the LIRR Route Alternative would not result in any significant adverse impacts to the Southampton North Main Street Historic District.

Southampton Village Historic District & Expansion. The Southampton Village Historic District includes 374 contributing buildings in the central and southern portions of Southampton Village, including portions of North Sea Road, Hill Street, South Main Street, and others. The Historic District Expansion contains an additional 56 contributing buildings, and extends east, including portions of Lewis Street and others. These historic districts are located south of the Southampton North Main Street Historic District discussed above. The northernmost portion of this district is approximately 0.3 miles south of the Southampton Substation and transmission line. Views of the LIRR Route Alternative would be limited, and primarily confined to the northern section of the historic district. Where visibility would be possible, it would be limited and the new transmission line would have an appearance similar to existing distribution lines in the surrounding area. Farther south within the district, it is unlikely that any portion of the substation or transmission line would be visible due to distance, existing buildings, topography, and vegetation. No significant viewsheds, or the enjoyment of historic resources within the district, are expected to change as a result of the LIRR Route Alternative. Therefore, the LIRR Route Alternative would not result in any significant adverse impacts to the Southampton Village Historic District & Expansion.

Water Mill at Water Mill. The Water Mill at Water Mill is located at 41 Old Mill Road, approximately 200 feet south of the LIRR Route Alternative. An existing residence with dense vegetation currently separates the mill from the LIRR right-of-way and would shield most views of the proposed transmission lines from this location. The transmission lines would be most visible north of the mill where they would cross Old Mill Road at the railroad junction. However, the new poles would not be substantially different from the existing poles that currently line Old Mill Road and cross directly in front of it. Therefore, the LIRR Route Alternative would not result in any significant adverse impacts to the Water Mill at Water Mill.

Windmill at Water Mill (Corwith Windmill). The Windmill at Water Mill (Corwith Windmill) is located on the village green in Water Mill, and is approximately 400 feet south of the LIRR Route Alternative transmission line. Despite being in close proximity to the windmill, existing village commercial development between the windmill and the LIRR right-of-way would likely shield all views of the transmission lines from this location. Any potential visibility would be very limited and would blend with the commercial development directly across the street from the mill. Therefore, the LIRR Route Alternative would not result in any significant adverse impacts to the Windmill at Water Mill (Corwith Windmill).

Bond Act Properties purchased under Exceptional Scenic Beauty or Open Space Category

Eastern GEIS/Great Swamp. The Eastern GEIS/Great Swamp area lies between Bridgehampton Sag Harbor Turnpike and Scuttle Hole and Brick Kiln Roads. This resource is located 0.2 miles west of the LIRR Route Alternative. The transmission line may be visible from portions of this resource. However the resource is heavily vegetated and several existing residences separate it from the LIRR Route Alternative; therefore most views of LIRR Route Alternative would be obstructed. The LIRR Route Alternative would not significantly alter the character of this area, and would not result in a significant adverse impact on this location.

Long Pond Greenbelt. The Long Pond Greenbelt consists of a north-south corridor of interconnected ponds, streams, wetlands, and woodlands stretching from Sag Harbor to Sagaponack to the Atlantic Ocean. A portion of the greenbelt is adjacent to the Bridgehampton Substation and Bridgehampton Sag Harbor Turnpike section of the LIRR Route Alternative. Photosimulation I on Figure 17-42 shows the view from Bridgehampton Sag Harbor Turnpike immediately along the Direct Route Alternative, which follows the same course as the LIRR Route Alternative in this section. As shown in the photosimulation, the LIRR Route Alternative would increase the height of existing poles in this location by approximately 13 feet and would add three new conductors. However, existing vegetation and topography would obstruct most views of the LIRR Route Alternative from the Long Pond Greenbelt. In addition, any views of the LIRR Route Alternative would be of short duration and would be similar to existing views from the area. Since the proposed transmission line would only replace existing utility poles with incrementally higher poles, it would not significantly alter the character of this area, and would not result in a significant adverse impact on the Long Pond Greenbelt.

Paumanok Path. Paumanok Path is a regional trail that will extend 125 miles from Rocky Point to Montauk Point. A 30-mile trail section between Red Creek Park and Sagaponack remains to be completed; however, portions of the trail are already in place in eastern Southampton, including Big Woods Preserve to North Sea Road, Laurel Valley County Park, and Brick Kiln Road to Widow Gavits Road. Portions of the trail are located 0.25 miles from the northeast portion of the LIRR Route Alternative. However, existing development, topography, and vegetation would obstruct most views of the LIRR Route Alternative from this trail. Any views of the LIRR Route Alternative that may be possible in areas of less dense vegetation would be limited and brief, and would not result in any significant adverse visual impacts.

Morton-to-Kellis Pond Trail. Morton-to-Kellis Pond Trail is a linear north-south trail project that will connect Morton NWR, Laurel Valley County Park, Camps Pond, Atlantic Golf Club's trail easement, Long Pond (Bridgehampton), and Kellis Pond. The trail will intersect and follow Paumanok Path in Laurel Valley County Park. The Morton to Kellis Pond Trail would intersect the LIRR Route Alternative as it crossed the LIRR tracks from Long Pond to Kellis Pond. The LIRR Route Alternative transmission lines would be visible to trail users as they crossed the railroad tracks. The new transmission lines would not be out of character with the infrastructural nature of the railroad tracks that already intersect the trail, or with existing utility lines on streets that also intersect the trail. Therefore, the LIRR Route Alternative would not significantly alter the visual character in this area and would not have a visual impact on the Morton-to-Kellis Pond Trail.

Trout Pond-to-Brick Hill Trail. Trout Pond-to-Brick Hill Trail is a linear north-south trail that will link Trout Pond, "Golf At The Bridge's" natural open space areas, and the overlook at the south end of Brick Hill. The trail will intersect and follow Paumanok Path in "Golf At The Bridge's" natural open space. The Trout Pond-to-Brick Hill Trail is located more than 2.5 miles

northwest of the Bridgehampton Substation and LIRR Route Alternative. Due to the distance, vegetation, and topography, it is unlikely that the LIRR Route Alternative would be visible from any portion of the trail. Any potential visibility from the overlook would be very limited and would blend with existing development and character of the land. Therefore, the LIRR Route Alternative would not result in any significant adverse impacts on the visual resources of the Trout Pond-to-Brick Hill Trail.

Brick Kiln Woods. Brick Kiln Woods, which is also known as Great Swamp, will include an interior loop (with Paumanok Path comprising one side of the loop) and spur trails from Brick Kiln Road, Bridgehampton Sag Harbor Turnpike, and Scuttle Hole Road. A large loop is planned between Brick Kiln Woods and Brick Hill, with another spur trail to Brick Kiln Road. The Bridgehampton Substation and the northeast portion of the LIRR Route Alternative are located on the Bridgehampton Sag Harbor Turnpike which is adjacent to the Brick Kiln Woods trail system. Although the LIRR Route Alternative would be visible from the trail heads along the Bridgehampton Sag Harbor Turnpike, it would not alter the existing character of these roads or trail heads as existing utility lines are already present in this area. In addition, from the trails, views of the LIRR Route Alternative would be limited and as they would be obstructed by the heavy vegetation. Therefore, the LIRR Route Alternative would not result in any significant adverse visual impacts on the Brick Kiln Woods.

Bay-to-Ocean Trail. The Bay-to-Ocean Trail is a north-south linear corridor that will extend from Sag Harbor to Sagaponack. The trail will link Mashashimuit Park, the Long Pond Greenbelt, Poxabogue County Park, Sagaponack farmland, and Atlantic Ocean beaches. The trail will intersect and follow Paumanok Path in the Long Pond Greenbelt. Portions of the trail would come within 0.1 miles of the LIRR Route Alternative. From the Long Pond Greenbelt section, the upper portions of the Bridgehampton Substation and transmission lines along the Bridgehampton Sag Harbor Turnpike may be visible. Despite certain areas of potential visibility, existing vegetation and topography would obstruct most views of the LIRR Route Alternative from the Bay to Ocean Trail. The views of the proposed transmission line along Bridgehampton Sag Harbor Turnpike are shown in Photosimulation H on Figure 6-4h in Chapter 6, "Visual Resources." These views represent a "worst-case scenario" from the Bay-to-Ocean Trail since the trail is actually deeper into dense vegetation in the area. In addition, any views of the LIRR Route Alternative would be of short duration and would be similar to existing views along that route. Therefore, the LIRR Route Alternative would not result in any significant adverse visual impacts on the Bay to Ocean Trail.

Scenic Roads Identified in the Town of Southampton Comprehensive Plan

As described in Chapter 6, "Visual Resources," the 1999 Comprehensive Plan Update includes a map showing scenic roads in the Town of Southampton. The following scenic roads would have views of the LIRR Route Alternative:

Butter Lane from north of Foster Avenue north beyond the edge of the study area. The LIRR Route Alternative may be visible in the distance from this section of Butter Lane. Pedestrians and motorists traveling south along Butter Lane would have limited views of the proposed transmission lines crossing Butter Lane at the existing LIRR tracks. The proposed transmission lines would follow the existing railroad corridor and would not obstruct any views of historic or scenic natural resources from this location. In addition, the proposed transmission lines would be similar to existing transmission lines along Butter Lane, and would not alter the character of the street. Photosimulation C on Figure 17-36 shows the proposed visual conditions from a location

south of the railroad tracks. As shown, the new transmission line would not significantly affect views of the area. Therefore, the LIRR Route Alternative would not result in a significant adverse visual impact on Butter Lane.

Bridgehampton Sag Harbor Turnpike from north of Scuttle Hole Road north beyond the edge of the study area. The LIRR Route Alternative would run from Scuttle Hole Road to the Bridgehampton Substation along this section of the Bridgehampton Sag Harbor Turnpike. This alternative would replace existing 35-foot wooden poles with 48-foot wooden poles similar in appearance. Photosimulation I on Figure 17-42 shows the view from Bridgehampton Sag Harbor Turnpike along the Direct Route Alternative (which is the same as the LIRR Route Alternative in this section). As shown in the photosimulation, the LIRR Route Alternative would increase the height of existing poles in this location by 13 feet and would add three new conductors. This change would not significantly affect the existing character of the roadway. Therefore, the visual quality of the Bridgehampton Sag Harbor Turnpike would not be noticeably altered and the LIRR Route Alternative would not result in any significant adverse visual impacts.

Cobb Road from Old Country Road to Flying Point Road. The northern terminus of Cobb Road at Old Country Road is approximately 200 feet from the LIRR Route Alternative. Pedestrians and motorists traveling north on Cobb Road would have limited views of the proposed transmission lines. Most views of the transmission lines would be obstructed by the existing trees and residences at the north end of Cobb Road. Any potential views would be brief and limited, and not result in any significant adverse visual impacts to Cobb Road.

Hayground Road between Mecox Road and Montauk Highway/NYS Route 27. The LIRR Route Alternative may be visible in the distance from this section of Hayground Road. Pedestrians and motorists traveling north along Hayground Road would have limited views of the proposed transmission lines crossing Hayground Road at the existing LIRR tracks. The proposed transmission lines would follow the existing railroad corridor and would not obstruct any views of historic or scenic natural resources from this location. In addition, the proposed transmission lines would be similar to existing distribution lines along Hayground Road, and would not alter the character of the street. Therefore, the LIRR Route Alternative would not result in a significant adverse visual impact on Hayground Road.

Hayground Road between Windmill Lane and Scuttle Hole Road. The LIRR Route Alternative would cross this section of Hayground Road. Pedestrians and motorists traveling along Hayground Road would have views of the proposed transmission lines as they crossed the existing LIRR tracks. The proposed transmission lines would follow the existing railroad corridor and would not obstruct any views of historic or scenic natural resources from this location. In addition, the proposed transmission lines would be similar to existing distribution lines along Hayground Road, and would not alter the character of the street. Therefore, the LIRR Route Alternative would not result in a significant adverse visual impact on Hayground Road.

Lumber Lane. Views of the LIRR Route Alternative would be unlikely from the scenically designated portions of Lumber Lane. However, views may be possible further south. Photosimulation H in Figure 17-41 shows the view of the LIRR Route Alternative from Lumber Lane. Although small portions of the transmission line may be visible, it would not significantly change the character of the area do to some screening that would be provided by vegetation that lines the LIRR right-of-way. Therefore, the LIRR Route Alternative would not result in any significant adverse visual impacts.

Old Mill Road from south of Mill Pond to Montauk Highway/NYS Route 27. The LIRR Route Alternative would cross Old Mill Road. Pedestrians and motorists traveling along Old Mill Road would have views of the proposed transmission lines to the north and south as they crossed the existing LIRR tracks. They would also have some views of the transmission lines to the north as the road crossed the Mill Pond inlet. However, these views would be partially obstructed by existing vegetation. The proposed transmission lines would follow the existing railroad corridor and would not obstruct any views of the historic Water Mill. Furthermore, the proposed transmission lines would be similar to existing distribution lines along Old Mill Road, and would not alter the character of the street. Photosimulation D on Figure 17-37 shows the view of the LIRR Route Alternative from a location slightly west of Old Mill Road. Although this photosimulation shows the LIRR Route Alternative from a greater distance, the new transmission lines would not significantly alter views of the area. Therefore, the LIRR Route Alternative would not result in a significant adverse visual impact on Old Mill Road.

Scuttle Hole Road from Montauk Highway/NYS Route 27 to Narrow Lane South. The LIRR Route Alternative would cross this section of Scuttle Hole Road. Pedestrians and motorists traveling along Scuttle Hole would have views of the proposed transmission lines as they crossed the existing LIRR tracks, as demonstrated in Photosimulation E on Figure 17-38. The proposed transmission lines would follow the existing railroad corridor and would not obstruct any views of historic or scenic natural resources from this location. In addition, the proposed transmission lines would be similar to existing distribution lines along Scuttle Hole Road, and would not alter the character of the street. Therefore, the LIRR Route Alternative would not result in a significant adverse visual impact on Scuttle Hole Road.

Public Parks

David Whites Park. This Village of Southampton park is located on David Whites Lane at the end of Pulaski Street. The LIRR Route Alternative would be approximately 0.25 miles north of David Whites Park. While visibility of the proposed transmission lines may be possible from this park, that visibility would not be significant due to the distance and screening by existing vegetation and buildings. In most portions of the park existing homes along David Whites Lane would entirely block views of the proposed transmission line.

Long Pond Greenbelt. Stretching between Sag Harbor and the Atlantic Ocean is an area designated as the Long Pond Greenbelt which was established by the Nature Conservancy. The greenbelt incorporates a network of ponds including Long Pond, Little Long Pond, and Crooked Pond. The greenbelt is bounded to the west by Bridgehampton Sag Harbor Turnpike, along which the LIRR Route Alternative transmission line would run. Portions of the transmission lines along the Bridgehampton Sag Harbor Turnpike may be visible from portions of the Long Pond Greenbelt. The LIRR Route Alternative would increase the height of existing poles in this location by approximately 13 feet and would add three new conductors. This change does not significantly affect the existing character of the roadway. Therefore, the visual quality of this roadway would not be noticeably altered and the LIRR Route Alternative would result in no significant adverse visual impacts. Further east of the roadway, the greenbelt is heavily forested. This would screen views of the LIRR Route Alternative. Therefore, the LIRR Route Alternative would not result in any significant adverse visual impacts on the Long Pond Greenbelt.

Railroad Plaza Park, Village of Southampton. Railroad Plaza Park is located south of the LIRR Southampton station, along Railroad Plaza. The park is within the LIRR Route Alternative study area. The existing distribution lines are visible from this location and the proposed transmission

lines would also be visible. Although the new utility poles would be taller, they would not significantly alter the views from this location. Photosimulation A on Figure 17-34 shows the view looking northwest towards the railroad tracks from Elm Street (just east of Railroad Plaza). As demonstrated in the photosimulation, the LIRR Route Alternative) would result in new utility poles that would be taller than the existing poles in addition to three new conductors that would be attached to the poles. However, these poles would replace existing infrastructure and would not be significantly different from existing distribution poles that already exist in the area. The additional conductors would also be similar to the existing distribution lines in the surrounding area.

Sayre Park. Sayre Park, a Town of Southampton park, is located on Snake Hollow Road along the LIRR tracks in Bridgehampton. The park is adjacent to the LIRR Route Alternative Route. The proposed transmission lines would be visible from this park. However, the existing vegetation that buffers both sides of the tracks would screen some views of the new poles. In addition, the transmission lines would not significantly alter the character of the park as it already has views of commercial businesses and infrastructure. Therefore, the LIRR Route Alternatives would not have a significant visual impact on Sayre Park.

Water Mill Hamlet Center Green. The Water Mill Village Green is a triangular open space maintained by the Water Mill Village Improvement Association. The property is bounded by Montauk Highway/NYS Route 27, Halsey Lane, and Proprietors Lane. The green is approximately 400 feet south of the LIRR Route Alternative transmission line. Despite being in close proximity to the green, existing village commercial development between the green and the LIRR route would likely shield all views of the transmission lines from this location. Any potential visibility would be very limited and would blend with the commercial development directly across the street from the green. Therefore, the LIRR Route Alternative would not result in any significant adverse impacts to the Water Mill Village Green.

Windward Way Park. Windward Way Park is located south of Windward Way in the Village of Southampton. The park is located 0.3 miles west of the Southampton Substation along the LIRR tracks. It currently has full views of the tracks and partial views of the substation. Although the substation portion of the LIRR Route Alternative would be partially visible from this location, the proposed transmission lines would not extend as far west as the park. The LIRR Route Alternative would not significantly alter the character of the existing views of train tracks and transmission lines. Therefore, the LIRR Route Alternative would not result in any significant adverse visual impacts to Windward Way Park.

Other Locally Significant Resources

Railroad Corridor. The Long Island Rail Road Corridor runs east-west through the study area. There are also two train stations in downtown Southampton and Bridgehampton. The LIRR Route Alternative would utilize the right-of-way of the Long Island Rail Road from downtown Southampton to the Bridgehampton Sag Harbor Turnpike in Bridgehampton. While views of the proposed poles would be possible throughout this portion of the corridor, views would be brief as the train would typically be in motion and would not obstruct the greater viewshed. Therefore, the LIRR Route Alternative is not expected to adversely affect views from the Long Island Rail Road.

Mill Pond. Mill Pond is located near Water Mill. The LIRR Route Alternative would traverse a small inlet in the southern portion of the pond. From the center of the pond, the transmission lines would be visible at the end of the long and narrow inlet. In addition, portions of the

transmission lines would likely be visible at or below the tree line during the winter months. However, during the summer months, views of the transmission lines would be limited due to existing vegetation and residential development surrounding the east side of the pond. Therefore, the LIRR Route Alternative would not result in any significant adverse visual impacts.

Conclusion

Of the 106 visual resources listed in Table 17-10, the proposed poles associated with the LIRR Route Alternative would be visible or potentially visible from 26 resources. At those locations where the LIRR Route Alternative would be visible or potentially visible, this alternative would not result in any significant adverse visual impacts. Similar to the Direct Route Alternative, with the LIRR Route Alternative, residents and visitors to the area would not experience a significant change in the visual character of the area.

ARCHAEOLOGICAL RESOURCES

ARCHAEOLOGICAL SENSTIVITY

As described in Chapter 7, "Archaeological Resources," the Institute for ILIA has conducted a Stage 1A archaeological survey for the LIRR Route Alternative. The LIRR Route Alternative, similar to the Direct Route Alternative, was found by the Stage 1A survey to possess moderate sensitivity for prehistoric and historic-period archaeological resources.

POTENTIAL IMPACTS OF THE LIRR ROUTE ALTERNATIVE

Based on the results of the Stage 1A survey, if the LIRR Route Alternative were to be selected, a Phase 1B Archaeological Survey (i.e., subsurface testing) would be necessary in advance of construction to determine if archaeological resources are present in the study area. If any such resources are identified, additional testing may be necessary to determine if they meet the eligibility requirements for listing on the S/NR. Adverse effects, which generally occur where eligible resources are located in areas that will be affected by project actions, such as excavation, construction, or the storage of heavy machinery or supplies, would be mitigated either through avoidance, project redesign, or completion of a data recovery designed in consultation with the OPRHP.

Consequently, the LIRR Route Alternative, similar to the Direct Route Alternative, would not result in significant adverse impacts in terms of archaeological resources.

HISTORIC RESOURCES

PREVIOUSLY IDENTIFIED HISTORIC RESOURCES

Four known historic resources are located in the study area for this alternative, including two historic districts and two individual historic resources. They are:

- ***North Main Street Historic District*** (S/NR-Listed; Village of Southampton-designated) (described in Chapter 8 "Historic Resources" and shown in Appendix D, as Resource NMHD on Figure D-1a)

- ***Southampton Village Historic District & Expansion*** (S/NR-Listed; Village of Southampton-designated excluding Expansion) (described in Chapter 8 "Historic Resources" and shown in Appendix D, as Resource NMHD on Figure D-1a).
- The ***Water Mill*** at 41 Old Mill Road (S/NR-Listed; Town of Southampton-designated) is located immediately north of the center of Water Mill village on the southeast side of the Mill Pond (see Appendix D: Table D-1; Figure D-1b, Resource 1; and Figure D-32, Photo 3). Edward Howell, a miller from Lynn, Massachusetts, arrived in Water Mill in 1640, and built a mill there in 1644. In 1789, the mill was either moved or a new mill was built on its current site. The Water Mill was operated as a grist and fulling mill, and passed through several ownerships, until it was restored and opened as a museum in the 20th century.
- ***The Windmill at Water Mill (Corwith Windmill)*** (S/NR-Listed) is located in the heart of the village of Water Mill on the triangular parcel of land formed by Montauk Highway, Halsey Lane, and Proprietors Lane (see Appendix D: Table D-1; Figure D-1b, Resource 2; and Figure D-39, Photo 28). It is a two-and-a-half-story smock mill, built in 1800 in North Haven and moved to Water Mill in 1813. It is the only Long Island windmill whose cap is rotated by an external tail pole. It is now open to the public as a museum.

POTENTIAL HISTORIC RESOURCES

Fifty-nine (59) individual potential historic resources, three (3) potential historic districts, and one (1) potential thematic grouping have been identified in the study area. Further information on these potential historic resources is provided in Appendix D, including tables listing the resources (Tables D-2 through D-5), a map showing the locations of the resources (Figures D-1 through D-3), and photographs and brief descriptions of the resources (Figures D-4 through D-80).

Potential historic districts located in the study area for this alternative include:

- ***Water Mill Historic District***: The proposed Water Mill Historic District includes portions of the main street of Water Mill (Montauk Highway) and areas immediately north and south of this roadway (see Appendix D: Table D-3; Figure D-1b, Resource WMHD; and Figures D-32 through D-41). The proposed district is bounded roughly by the Long Island Rail Road tracks to the north; Deerfield Road and David's Lane to the east; Halsey Lane and Little Cobb Road to the south; and Cobb Road on the west.

The initial European settlement of Water Mill occurred in 1640 when the land was divided between several investors from Lynn, Massachusetts seeking a more rural settlement. Edward Howell, one of the early settlers, opened a water mill in 1644. The 17th and 18th century community depended largely on agriculture, with the chief crops and exports being wheat, corn, and cattle. Grist and fulling mills, powered by wind and water, also played a part in the local economy from the seventeenth century onward. As the eighteenth century progressed, Water Mill's fishing industry gained importance and prospered. Whaling from nearby ports reached a peak in the late 1830s, but ships continued leaving for expeditions through the 1870s. The railroad's connection to Water Mill in the 1870s aided the village's economy, as local industry was aided by the improved connection to Manhattan and other nearby cities. The late 19th century also saw the expansion of Water Mill as a summer destination for New Yorkers. The new summer tenants provided jobs for local residents who were enlisted to care for the newly constructed estates year-round and provide services to the seasonal visitors. Much of the town's industry, however, remained agrarian, with the early twentieth-century increase in local dairy farming, and expansion into egg and poultry production. The eras during the first, and then

second, World War witnessed an increased reliance on potato farming, a crop that remained popular throughout much of the twentieth century. Today, area farming is largely for local vegetable stands, while landscaping and horticultural businesses continue to grow. Throughout the twentieth century Water Mill has experienced increasing suburbanization, while still retaining remnants of its agrarian and industrial past.

The potential Water Mill Historic District contains buildings representing a variety of periods and architectural styles, ranging from 18th century vernacular farmhouses to turn of the century commercial buildings to vacation homes of the 1920s. Commercial structures are generally concentrated along Montauk Highway, the main street of Water Mill. On the south side of Montauk Highway, there is also a village green, on which stands the S/NR-listed Corwith Windmill; immediately east of the village green is the Water Mill Burial Ground, established in the early 18th century, and the Union Chapel (now the Water Mill Community House). Mill Creek and the associated Mill Pond, which leads into Mecox Bay, are located at the west edge of the village center. Many of the earliest homes and structures in the village are located on the east of Mill Creek, on road such as Montauk Highway, Halsey Lane, and David's Lane. What is believed to be the oldest house in the village of Water Mill, the mid-19th century David Halsey House (WMHD-15), is located at 173 David's Lane. Another early structure, the Half-Way House (WMHD-24), a former stagecoach stop, is located at 755 Montauk Highway. On Old Mill Road, which runs along the west side of the Mill Pond, the eponymous Water Mill (S/NR-Listed; WMHD-3), now a museum, is located; the neighboring Asher Benedict House (WMHD-2), a Federal-style dwelling originally owned by a miller, is next door. Another chapter in Water Mill's development is represented by the large estates and vacation homes, many of which are located along Cobb Road and Little Cobb Road west of Mill Creek. Lastly, the Villa Maria Convent (WMHD-32), more recently known as the Siena Spirituality Center, a large estate which operated as a convent for many decades, beginning in 1931, is located behind stone gates immediately west of the village green.

- ***Bridgehampton Industrial Historic District:*** The proposed Bridgehampton Industrial Historic District is located immediately north and south of the Long Island Rail Road, including portions of Foster Avenue, Maple Avenue, and Butter Lane in Bridgehampton (see Appendix D: Table D-4; Figure D-1c, Resource BHIHD; and Figures D-42 and D-43). The potential district includes six contributing resources, each of which was identified in previous historic resources surveys (GAI 2000 and Bridgehampton Hamlet Plan 2004).

  The potential district is located almost immediately north of the proposed Bridgehampton Historic District, however, it has been conceived as a separate potential historic district because rather than having a residential and commercial character, the Bridgehampton Industrial Historic District has a light industrial character. It straddles the Long Island Rail Road (built through the area in the 1890s) and is composed primarily of buildings that were formerly associated with the East Hampton Lumber and Coal Company, a syndicate incorporated in 1889 to consolidate the lumber production of Eastern Long Island. Most of the buildings in the district relate to the lumber company complex and were connected with the late 19th- and early 20th-century lumber industry of Eastern Long Island. The buildings are generally vernacular utilitarian structures constructed of wood or brick and most frequently clad in wood shingles. The area is one of the few historically industrial portions of Bridgehampton, and reflects the role of the railroad and the lumber and coal industries in the history of the area. Among the contributing elements within the district are the Battle Iron and Bronze Shop (BHIHD-7), a brick industrial structure built in the late 1880s as part

of the East Hampton Lumber and Coal Company; and the Foster Avenue Lumber Complex (BHIHD-4) including a long wood shingle-clad lumber warehouse and a small brick building with a shingle-clad gable.

- ***Bridgehampton Historic District:*** As delineated, the potential Bridgehampton Historic District is bounded roughly by Hildreth Lane on the south, the Long Island Rail Road on the north, Halsey Lane on the west, and by Lumber Lane and Norris Lane on the east (see Appendix D: Table D-5; Figure D-1c, Resource BHHD; and Figures D-44 through D-80). The potential historic district includes 143 contributing properties.

  The first settlement of what is now Bridgehampton has been dated to 1654, when Josiah Stanborough constructed a home there (Fleming 2003). Some thirty years later, Ezekial Sandford, a local wheelwright, constructed a bridge over Sagg Creek, connecting the nearby settlements of Sagaponack and Mecox (*Our Hampton Heritage* 1(II) 1984). Earlier known as Bull's Head, the economy of the growing settlement was largely agricultural, but also relied on maritime industries. Nearby Sag Harbor became a center of the whaling industry by the early 19th century, while other outlying communities such as Sagaponack revolved primarily around farming. As a geographical middle ground located on Montauk Highway, one of Long Island's oldest and more important east-west routes, Bridgehampton benefited from both economies. Corn, rye, wheat, flax, and potatoes were some of the most important regional crops. Potatoes and dairy rose to the fore toward the end of the 19th century (Southampton Press, 2006). Weaving, milling, importing, carting, and other trades were also incorporated into the local economy (Fleming 2003).

  Bridgehampton's early population included family names such as Howell, Foster, Hedges, Topping, Jagger, Gardiner, and Halsey and the town quickly grew to include the neighborhoods of Hayground, Poxabogue, and Scuttle Hole, as well as Bull's Head (Fleming 2003, Southampton Press, 2006). The Long Island Rail Road extended into the eastern end of the island in the 1890s, however the population of Bridgehampton remained fairly low relative to neighboring areas. Despite its small population, the ethnic make-up of the community was very diverse, including individuals of European, Native American, and African descent (Ibid). A sizeable community of African-Americans, mostly from the southeastern states, migrated to Bridgehampton from the late 19th through the mid-20th century, working mainly as seasonal laborers. The African-American community, which constitutes a large percentage of Bridgehampton's year-round residents, has consistently been concentrated primarily along the Bridgehampton-Sag Harbor Turnpike (the north-south route between the two villages) and intersecting streets. While Bridgehampton and neighboring villages had been popular summer resort areas since the 19th century, towards the end of the 20th century, summer tourism became the most important influence in Bridgehampton's economic and social development. This trend resulted in the division of large farms into smaller domestic lots and increased development.

  The potential Bridgehampton Historic District includes a wide variety of architectural resources, ranging in date from the Colonial period through the first half of the 20th century. Architectural styles represented in the district include early vernacular styles as well as the Greek Revival, Queen Anne, and Prarie styles, among others. The potential district includes the main street of the village, Montauk Highway, along which commercial buildings are most densely concentrated, as well as a number of primarily residential streets. The Beebe Windmill (S/NR-Listed and locally designated), constructed ca. 1820, is located within the district. Three properties that were previously determined S/NR-eligible are also located

within the district: the Captain Nathaniel Rogers House, a Greek Revival-style mansion (BHHD-92); the ca. 1840-Corwith House (the Bridgehampton Historical Society) (BHD-14); and the Greek Revival-style Bridgehampton Presbyterian Church (BHHD-104). Among the 140 potential contributing resources, there are multiple 18th century residences, including the two-story five-bay vernacular dwellings such as Nathaniel Post House (BHHD-90) and the Hildreth House (BHHD-95); and single-story Cape Cod-style structures, such as 148 Ocean Road (BHHD-109). A substantial number of Greek Revival-style dwellings are also located in the district, including the ostentatious Judge Abraham Topping Rose House (BHHD-78), which stands opposite the Captain Nathaniel Rogers House on the main intersection of the village. Other Greek Revival-style dwellings are located on Butter Lane, Newman Lane, Halsey Street, Lumber Lane, and other streets in the village. Only a few Victorian Gothic and Italianate-style dwellings are found in the village, however, notable exceptions include the Picturesque Rose Hall at 2604 Montauk Highway (BHHD-81). A large number of Queen Anne-style residences, built in the late 19th and 20th century are concentrated along the residential streets of the village. Prairie-style dwellings with four-square forms are also numerous, some of which are situated on streets where subdivisions occurred in the early 20th century, such as School Street.

The study area for this alternative also contains resources contributing to the ***Potato Barn Thematic Grouping*** (described in Chapter 8 "Historic Resources") (see Appendix D, Table D-2 [contributing resources are indicated with an asterisk]; photos and brief descriptions of the resources are also provided in Appendix D).

POTENTIAL IMPACTS OF THE LIRR ROUTE ALTERNATIVE

Direct Impacts

The LIRR Route Alternative would not be expected to directly impact historic resources. The proposed transmission line would run directly through the North Main Street Historic District (S/NR-Listed; Village of Southampton-designated) and through the Bridgehampton Industrial Historic District (potential historic district) along the railroad right-of-way. In addition, multiple individual historic resources, two additional historic districts, and a thematic nomination, are located in the study area. Installation of the new transmission line would not result in the demolition, physical destruction, or alteration of historic resources.

In order to ensure that construction activities associated with the installation of the transmission line would not cause inadvertent physical impacts to adjacent historic resources, LIPA would prepare and implement a CPP in consultation with OPRHP for any architectural resources in close proximity to the LIRR Route Alternative construction.

Indirect Impacts

The new overhead transmission line would introduce new poles along the LIRR right-of-way and result in changes to the height, size, and appearance of the poles along Bridgehampton Sag Harbor Turnpike. Along the railroad right-of-way, the new poles would be steel and would extend 61 to 75 feet above grade, replacing 57-foot-tall wood poles. However, because the poles would be located along a railroad line, where existing rail infrastructure features define the immediate visual landscape, the new poles would not be expected to represent a substantial new visual intrusion. Along the Bridgehampton Sag Harbor Turnpike, the poles would be 48-foot-tall wood poles, and would replace wood poles that extend between 30 and 35 feet above grade.

These poles would replace existing poles and would be spaced at the same intervals as the existing poles. Furthermore, the new poles would be only 13-18 feet taller than the existing poles and 6 inches thicker in diameter at the base than the existing poles, and would be constructed of the same material (wood) as the existing poles. Therefore, there would be no significant change in visual character and the settings of the historic resources, which presently exist in context with the existing overhead transmission line, would not be substantially altered.

At the end of each underground cable segment, an underground to overhead transition riser pole would be installed where transitions are necessary. These wood riser poles are similar in appearance to the existing and the proposed poles, but would require guy wires from the top of each riser pole, which would run to the ground, about 25 to 40 feet from the pole (see Chapter 6, "Visual Resources," Figure 6-5). The proposed locations of these riser poles have not yet been identified. LIPA would consult with OPRHP and the Town and Village of Southampton, as appropriate, to identify sites, which would minimize and eliminate the potential for significant adverse impacts to historic resources from the riser poles.

Consequently, similar to the Direct Route Alternative, the LIRR Route Alternative would not adversely impact visual, audible, or atmospheric elements to a resource's setting, nor would it eliminate publicly accessible views to the resource.

NATURAL RESOURCES

EXISTING CONDITIONS

Natural Resources Survey and Site Assessment

Much of the landscape through which the LIRR Route Alternative passes consists of terrestrial-cultural" vegetation community type where the majority of the natural communities have been created and maintained by humans. The study area consists of a mixture of residential, commercial and agricultural land uses adjoining the LIRR right-of-way. Vegetation tends to form a narrow band north and south of the existing railway, predominantly composed of a mix of native and non-native trees and shrubs, often covered by vines (i.e., Asiatic bittersweet.) In areas where the LIRR is adjacent to ponds, wetlands, or older housing developments, a larger, mature tree canopy is present, composed primarily of native species found throughout the study area (i.e., hickories, oaks, etc.).

The LIRR Route Alternative shares sections of the route with other alternative routes, which are described in previous location-specific sections. These include:

- LIRR from Southampton Substation to David Whites Lane (discussed in Chapter 9, "Natural Resources").
- LIRR from David Whites Lane to CR39 (discussed in the Montauk Highway Alternative).
- Bridgehampton Sag Harbor Turnpike from the LIRR to Scuttle Hole Road (discussed in the Montauk Highway Alternative).

Direct access along the LIRR right-of-way was not permitted during these field surveys, so the majority of observations were made by accessing points along the railway at roadcuts, private paths or roads adjoining or intersecting the LIRR right-of-way. While this gives an acceptable sense of general habitat cover types, a more comprehensive survey would require coordination with LIRR.

Route 39A to Old Mill Road

This section can be characterized as roadside thicket with pockets of open field. At the western end of this stretch, the corridor is bordered by a corn field and vineyard on the north side. A narrow strip of roadside thicket acts as a barrier between the fields and the railroad tracks. The dominant tree here is black cherry. Red cedar, sassafras, autumn olive, and morrow honeysuckle are present. On the edge of this narrow strip of roadside thicket, a thin, un-maintained field borders a road in the vineyard. Herbs include goldenrods, pokeberry, field bindweed, lambs quarters, evening primrose, and Virginia creeper.

Further to the east, the vegetation is all roadside thicket characterized by sycamore maple, buckthorn, bayberry, black locust, pin oak, and black cherry. Wild indigo, sickle-leaved aster, and hyssop boneset are also present in this section.

Just before Cobb Road, there is a wetland on the north side of the tracks. Here sweet pepperbush, red maple, blue-stem goldenrod, weeping willow, bamboo, and Japanese knotweed are present.

This segment also includes the Mill Pond wetlands, which cross underneath the rail line via culvert just east of Old Mill Road. Water hemlock, swamp loosestrife, ground nut and other facultative and obligate wetland plants boarder the rail line at this location. Painted turtle was identified within the portion of Mill Pond directly adjacent to the rail line.

Deerfield Road to Hayground Road

The vegetation on both sides of the railroad tracks can be characterized as roadside thicket that borders residences and businesses. In some locations, the roadside thicket-buffer between the developed areas becomes very narrow. Common tree species include black cherry, Norway maple, tree-of-heaven, and a variety of sumac species. In many areas, Asiatic bittersweet and Japanese honeysuckle vines are forming dense mats over the existing canopy. Virginia creeper, porcelain berry, and summer grape vines are also present.

Behind a peach farm before Hayground Road, there is a wetland on the south side of the tracks. This is a palustrine forested wetland mapped by NYSDEC as part of Wetland SA-9, draining southwards to Hayground Cove. Here the vegetation varies from the rest of the stretch to include a black gum, black walnut, and red maple hardwood canopy with boneset, sweet pepperbush, Canada mayflower, halberd-leaved tearthumb, and high bush blueberry in the understory with wool grass and lurid sedge occurring in areas of surface water ponding. Visible signs of disturbance (i.e. fill) have occurred in portions of the wetland nearest the peach orchard.

Just to the east of the wetland area on the south side of the road is a wall of bayberry that lines the transmission line. Beyond this shrub layer, the canopy opens to a field that is used to farm nursery plants, including white spruce stands that border the power lines. On the north side of the stretch, the expanse of forest thicket ends at an open field. Arrowwood, little bluestem, hyssop leaved boneset, dewberry, and beach plum were also identified in this region.

Hayground Road to Long Pond/Little Long Pond

In the vicinity of Long Pond (a large open water pond north of the tracks) and Little Long Pond (a smaller pond south of the tracks with emergent vegetation), the LIRR right-of-way drops steeply. These two water bodies extend directly up to the railroad berm. The north side of the tracks can be characterized as low roadside thicket bordered by agricultural fields, and a large horse riding establishment. The large open water area of Long Pond is surrounded by taller trees

(i.e., oaks, willow, etc). Tree and shrub species closer to the tracks are primarily comprised of red cedar, winged sumac, bayberry and black locust. Little bluestem grass and barnyard grass mixed with partridge pea, yarrow, butter and eggs, various goldenrods, and yarrow dominate the landscape. This section borders a private road on the north end. The south side of the tracks is slightly taller, denser roadside thicket composed of the same species.

The margins of Little Long Pond include species such as boneset, pink knotweed, jewelweed, deer tongue, path rush, and button bush. A green heron was observed with young in proximity to a recently used heron nest, suggesting that they may have bred at this site.

Long Pond/Little Long Pond to Snake Hollow Road

East of Long Pond, the majority of this area directly below the power lines can be characterized as dense roadside thicket. Here Japanese honeysuckle, mile-a-minute weed, and Asiatic bittersweet form a thick mat over the tree species which include black cherry. Multiflora rose and red raspberry are also present in this thicket.

South of the LIRR and just east of Little Long Pond and adjacent to a tree nursery, several specimens of giant hogweed were located in a field north of Bridgehampton Commons. There presence of this potentially hazardous introduced species was subsequently reported to The Nature Conservancy's Long Island Invasives Management Program.

Just west of the roadside thicket, the vegetation opens into a field. Mugwort and goldenrod species dominate the entire herb layer. Sassafras, autumn olive, and sumac trees are dominant in the shrub layer.

LIRR: Snake Hollow Road to Bridgehampton Station to Lumber Lane

The north and south sides of the tracks from Snake Hollow Road to Bridgehampton Substation can be categorized as a roadside thicket dominated by black locust. Similar to the east side of the station, patches of disturbance-tolerant species including autumn olive, sycamore maple, mugwort, and common mullein are present.

The north and south sides of the tracks east of the Bridgehampton LIRR station can be categorized as developed/impervious land cover where impervious lots border the railroad beds. Between the railroad beds and the lots there are small patches of disturbance-tolerant species including autumn olive, sycamore maple, mugwort, and common mullein.

LIRR: Lumber Lane to Bridgehampton Sag Harbor Turnpike

The north side of the tracks can be categorized as a roadside thicket. This thin strip of roadside thicket is dominated by Norway maple, tree-of-heaven, sassafras, and a dense mat of common greenbrier. The south side of this section can be characterized as open/landscaped with fencing serving as a barrier between the tracks and residential lawns.

LIRR: Bridgehampton Sag Harbor Turnpike to Scuttle Hole Road

This segment of the Bridgehampton Sag Harbor Turnpike has large pockets of forested areas intermixed with forested and landscaped residential properties. Field observations demonstrate that remnants of forest are providing a buffer between the road and existing homes or where new home construction is taking place. The canopy layer is dense along the transmission lines. It is for this reason that much of this section was given the forest classification (see Figure 17-14).

In the undeveloped forest areas, the tree canopy composition is dominated by mature scarlet oaks, but intermixed at times with patches of black cherry, sassafras, Norway maple, sycamore

maple, and black locust species. Portions of this forest, particularly at the southern end of the Bridgehampton Sag Harbor Turnpike, contain large trees (24 to 30 inches dbh), including white oak, weeping willow, and beech, that border the transmission line. In general, the understory shrub layer largely includes saplings of the same trees mentioned above along with patches of low bush blueberry and morrow honeysuckle. Common greenbrier and oriental bittersweet proliferate throughout the tree, shrub, and herb layers in certain areas along the road. Patches of Japanese knotweed, lambs quarters, mugwort, and ragweed also commonly found in the herb layer directly adjacent to the roadway.

Where residential homes are present, commonly used ornamental species including California privet, sycamore maple, Callery pear, day lily, and hydrangea are planted adjacent to the roadway. Pockets of roadside thicket are present in small sections of the highway where development has taken place or where manicured areas have gone un-maintained. Species here include Norway maple, dewberry, Japanese knotweed, oriental bittersweet, sumacs, goldenrods, and a variety of grasses.

As discussed in the Threatened and Endangered Species and Significant Habitats and Ecological Resources sections of this chapter and Chapter 9, "Natural Resources," this section of the Bridgehampton Sag Harbor Turnpike borders the Long Pond Greenbelt. Special concern ecological communities have been noted by NYNHP as well as threatened, endangered, and rare species.

The section of Bridgehampton Sag Harbor Turnpike from Scuttle Hole Road north to Bridgehampton Substation is shared by the Direct Route, Montauk Highway, and LIRR Route Alternatives and is described in Chapter 9, "Natural Resources."

Wetland Resources

The LIRR Route Alternative passes adjacent to several wetlands mapped by the NYSDEC and NWI. As shown in Figure 17-13, these include freshwater forested, scrub shrub, emergent and open water wetlands associated with Mill Pond (in the vicinity of Old Mill Road) mapped as New York State Wetland SA-9; streams entering Hayground Cove (in the vicinity of Scuttle Hole Road) also mapped by New York State as Wetland SA-9; Long Pond/Little Long Pond (in the vicinity of Snake Hollow Road) mapped as New York State Wetland SA-5; wetlands at the southern end of Bridgehampton Sag Harbor Turnpike mapped as New York State Wetland SA-43; and wetlands just south of the proposed Bridgehampton Substation Expansion Area mapped as New York State Wetland SA-28. Those wetlands adjacent to the LIRR within the Mill Pond and Hayground Cove regions are tidally influenced freshwater wetlands. Both are tributary to Mecox Bay and the Atlantic Ocean.

Site inspection reveals that in all cases wetlands adjacent to the existing LIRR tracks are separated from the railroad tracks and infrastructure by a berm of soil or rip-rap. Culverts are typically provided to allow flow-through of wetland hydrology beneath the existing railroad berm. Wetlands adjacent to Bridgehampton Sag Harbor Turnpike, at the eastern end of the LIRR Route Alternative (SA-43 and SA-28) vary in their distance to the roadway. Existing poles for the current overhead transmission lines along the Turnpike are immediately adjacent to the roadway and typically outside of wetland areas based on August 2007 site inspection.

Threatened and Endangered Species

The LIRR Route Alternative passes in close proximity to areas mapped as "coastal plain pond shore" community by the NYNHP in the vicinity of the intersection of the LIRR and the Bridgehampton Sag Harbor Turnpike. As described in detail in Chapter 9, "Natural Resources," this is a rare community known to contain several New York State-listed plant and animal species. The plants identified within this habitat in proximity to the LIRR Route Alternative include rose coreopsis (Coreopsis rosea), creeping St. John's wort (Hypericum adpressum), clustered bluets (Oldenlandia uniflora), opelousa smartweed (Polygonum hydropiperoides var. opelousanum), long-beaked beakrush (Rhynchospora scirpoides), and toothcup (Rotala romasior). These are predominantly wetland plants not found in disturbed, roadside habitats. None were seen within the proposed footprint of disturbance during August 2007 field inspections.

Records of occurrences of additional plants and animals listed by the NYNHP are known to occur in the Long Pond Greenbelt habitats, located east of the Bridgehampton Sag Harbor Turnpike, as explained in further detail in Chapter 9, "Natural Resources." These are expected to occur well away from any potential areas of disturbance adjacent to the LIRR Route Alternative.

Lastly, all of the four Alternative Routes include the construction of a Bridgehampton Substation Expansion. Two listed wetland plants - creeping St. John's wort (Hypericum adpressum) and opelousa smartweed (Polygonum hydropiperoides var. opelousanum) have been identified in the region proximal to the substation expansion area. Neither plant was identified within the footprint of disturbance of the proposed substation expansion.

POTENTIAL IMPACTS OF THE LIRR ROUTE ALTERNATIVE

Habitat and Natural Resources

The LIRR Route Alternative is characterized by flora and fauna typical of edge habitats and urban/suburban environments. Vegetation tends to form a narrow band north and south of the existing railway, predominantly composed of a mix of native and non-native trees and shrubs, often covered by vines. The relatively small disturbance zone (~10 feet or less adjacent to the existing rail line) would result in little or no change to existing terrestrial habitats, and is not likely to result in an overall degradation of critical habitat for commonly occurring species.

Human-adapted wildlife dominates the existing LIRR corridor. Wetlands pass through culverts under the existing rail line, constricting wetland dependant wildlife movement. By placing the proposed transmission line, in either overhead or underground configuration, no significant adverse impacts to wildlife habitat or movements are expected.

Threatened and Endangered Species

The LIRR Route Alternative passes in close proximity to areas mapped as "coastal plain pond shore" community by the NYNHP in the vicinity of the intersection of the LIRR rail line and the Bridgehampton Sag Harbor Turnpike. Several New York State-listed plant species are known to occur here. These are predominantly wetland plants not found in disturbed, roadside habitats. None were observed within the proposed footprint of disturbance during August 2007 field inspections. Nevertheless, these wetland areas occur in close proximity to the roadway adjacent to this eastern segment of the LIRR Route Alternative.

The New York State endangered Eastern tiger salamander breeds in ephemeral wetlands and disperses through upland forested habitat. It is known to occur east of the Bridgehampton Sag

Harbor Turnpike. The existing roadway acts as a barrier to Eastern tiger salamander movement. Installation of the proposed project along the LIRR Route Alternative is not expected to have a significant adverse impact to Eastern tiger salamander habitat directly, either by wetland or upland forest lost, or indirectly by acting as a new barrier to animal movement and migration.

Animal exclusion fencing in proximity to known or suspected Eastern tiger salamander breeding areas would be used, which would avoid any significant adverse impacts on the Eastern tiger salamander. Supplemental surveys for Eastern tiger salamander habitats would be conducted if this alternative is selected. If habitat is found the route would be adjust so that the habitat would not be disturbed. Therefore, no significant adverse impacts to threatened or endangered species are expected.

Wetlands

Areas of mapped wetlands in proximity to the LIRR Route Alternative that may require New York State or federal wetland permits for pole or sub-surface placement include:

- Mill Pond/Mill Creek and northern reaches of Hayground Cove, including forested wetlands identified during site inspection (SA-9).
- Long Pond and Little Long Pond (SA-5).

The Army Corps of Engineers and NYSDEC regulate disturbances to freshwater wetlands. Work near wetlands would be done in accordance with conditions of a NYSDEC General Permit issued to Keyspan. The General Permit authorizes KeySpan to perform minor utility install, repair, and maintenance activities in the adjacent areas of tidal wetlands, freshwater wetlands, and Wild and Scenic Rivers. These activities include the installation of poles with overhead cables, and trenching in the adjacent area. The General Permit also authorizes drilling under wetlands as long as the entry and exit points are in the adjacent area and the wetlands are not disturbed. KeySpan is allowed to use this General Permit for LIPA projects. LIPA would coordinate with NYSDEC on wetland and rare species–related issues. Special precautions during the removal of the existing poles and replacement of poles near wetland areas would avoid any impacts to sensitive ecological habitats and associated species. No new poles would be installed within wetlands, and the new poles would be no closer to wetland areas than the existing poles. Wetland impacts would be avoided by siting transmission line poles outside of regulated areas. Underground installation of the transmission line would avoid wetland impacts by directional drilling to avoid any activities within the wetlands. Therefore, no significant adverse impacts would occur to wetlands.

HAZARDOUS MATERIALS

INTRODUCTION

This section assesses the possibility that hazardous materials may be found in soil or groundwater on-site and evaluates the potential impacts associated with the installation of power lines along the LIRR Route Alternative. To identify potential sources of hazardous materials, a limited Phase I ESA, similar to that for the Direct Route Alternative (see Chapter 10, "Hazardous Materials"), was performed in August 2007. While documentary research was available for the entire corridor, some areas of the corridor were physically inaccessible from the public rights-of-way at the time of the site inspection

EXISTING CONDITIONS

Results of the limited Phase I ESA are summarized in Table F-4, provided in Appendix F. The "Village underground option" being considered for the western end of the route is summarized in Table F-2 provided in Appendix F. The project corridor comprises a combination of agricultural land, residential dwellings, the Sag Harbor Landfill at the eastern end of the LIRR Route Alternative, and commercial facilities including automotive-related facilities and gasoline filling stations. The woodland area north-adjacent to the Bridgehampton Substation is designated as part of an active shooting range/area where shells and casings were observed on the ground.

Historic aerial photographs from 1955, 1966, 1978, 1984, and 1996 were reviewed to determine historic on-site and surrounding area usage. The photographs indicated that in 1955, the LIRR Route Alternative corridor was primarily agricultural and residential in nature. Commercial properties were present at the western end of the LIRR Route Alternative as early as 1955. The Sag Harbor Landfill was present as early as 1955. Increasingly more commercial facilities were present in the later photographs, including automotive repair facilities and gasoline filling stations.

Historic Sanborn Fire Insurance Maps were reviewed to determine historic on-site and surrounding area usage. Maps were available for a portion of Southampton from 1895, 1902, 1909, 1926, 1932, 1945, and 1964. Maps were available for a portion of Bridgehampton for 1920, 1931, and 1947. Therefore, only a portion of the route was identified on the available maps. The maps indicated that the LIRR Route Alternative was primarily agricultural and residential in nature. A coal yard at the eastern end of the LIRR Route Alternative corridor was present as early as 1895. The coal yard at the western end of the LIRR Route Alternative was present as early as 1931. A company producing fertilizer also appeared in 1931 at the western end of the LIRR Route Alternative. By 1926, more commercial properties were present at the western end of the LIRR Route Alternative, including automotive repair facilities and gasoline filling stations.

A review of regulatory records indicated that the Direct Route Alternative corridor contains numerous Hazardous Waste Generators / Transporters, Hazardous Material Spills, USTs, and Petroleum Bulk Storage Sites, which are summarized in Table F-4, provided in Appendix F. The complete Toxics Targeting Environmental Report is included in Appendix F. The ESA identified the following potential classes/sources of contaminated materials at various sites in the LIRR Route Alternative corridor:

- *Volatile organic compounds (VOCs).*
- *Semivolatile organic compounds (SVOCs).*
- *Polychlorinated biphenyls (PCBs).*
- *Metals.*
- *Pesticides, herbicides, and rodenticides.*
- *Fuel oil and gasoline storage tanks.*
- *Historic coal yards.*
- *Fill materials of unknown origin.*
- *Asbestos.*
- *Lead-based paint.*
- *Rail Road Tracks.*

A description of these sources or contaminated materials is provided in Chapter 10, "Hazardous Materials."

POTENTIAL IMPACTS OF THE LIRR ROUTE ALTERNATIVE

Given the history of this area, extensive spread contamination of the soil or the groundwater is unlikely. Nevertheless, localized pockets of contamination could exist within the LIRR Route Alternative corridor. Excavation and construction activities could disturb these hazardous materials and increase pathways for human exposure. In the areas where power lines would be installed underground, the need for soil disturbance would be greater. Therefore, the potential for exposure to subsurface contaminants in these areas would also be greater. The potential for adverse impacts due to the presence of subsurface contamination would be avoided by ensuring that construction activities are performed in accordance with the protocols outlined for the Direct Route Alternative in Chapter 10, "Hazardous Materials."

With the implementation of these protocols, similar to the Direct Route Alternative, no significant adverse impacts related to hazardous materials would result from demolition and/or construction activities related to the LIRR Route Alternative. Following construction, there would be no further potential for significant adverse impacts.

INFRASTRUCTURE

EXISTING CONDITIONS

With the exception of stormwater runoff from the existing substations, the LIRR Route Alternative does not currently utilize water supply, solid waste, or energy. Water supply treatment, solid waste, energy, and emergency management in the area have been described in detail in Chapter 11, "Infrastructure." That description is applicable to the LIRR Route Alternative.

Various portions of the LIRR Route Alternative in the vicinity of Mill Pond, Little Long Pond, and Narrow Lane are located within hurricane storm surge inundation zones 1 through 4 (see Figure 17-17). The zones correspond to hurricane categories, which are defined in Chapter 11, "Infrastructure," and indicate the areas that are expected to experience flooding during a hurricane event. As shown in Figure 17-17, the LIRR Route Alternative would be flooded to various degrees in discrete areas, depending on the hurricane event (i.e., Category 1 to Category 4). Flooding can cause damage to energy facilities and can also limit access to the transmission line.

The entire length of Montauk Highway, which is located just south of this alternative route and within the study area, has been designated as a critical corridor for regional evacuation during a natural disaster event. Portions of the Montauk Highway are within the flood zone. In addition, the Bridgehampton Community Center, a designated emergency shelter, is located along the LIRR Route Alternative at 585 Bridgehampton Sag Harbor Turnpike, just south of Hampton Court (see Figure 17-18). This facility is outside of the flood zone. See Chapter 11, "Infrastructure," for more detail on critical corridors and emergency shelters.

POTENTIAL IMPACTS OF THE LIRR ROUTE ALTERNATIVE

The LIRR Route Alternative would be located entirely above ground along the LIRR right-of-way and either entirely aboveground, below ground, or hybrid along Bridgehampton Sag harbor Turnpike. Similar to the Direct Route Alternative, this configuration would not have a significant adverse impact on infrastructure for the following reasons:

- The LIRR Route Alternative would not create an additional demand on the existing water supply system and individual septic systems. This alternative would generate minimal solid waste, which would be handled by commercial carters, and therefore would not have significant effect on solid waste management within the Town.
- This alternative would provide additional energy to the area, which would have a positive effect on energy supply. The installation of overhead lines would minimize sustained outages during flood events because overhead lines are less prone to short- and long-term damage from flooding.

The LIRR Route Alternative would not be constructed along an identified critical corridor. Nevertheless, as discussed in Chapter 11, "Infrastructure," all structures would be constructed with materials that would be able to withstand a Category 3 hurricane. Furthermore, LIPA has a designated emergency response system in place for situations in which emergency management issues may arise.

GROUNDWATER AND SURFACE WATER RESOURCES

EXISTING CONDITIONS

Chapter 12, "Groundwater and Surface Water Resources," provides an in depth description of groundwater conditions within this area of the Town of Southampton and thus, should be referred to in relation to area wide conditions. This section only provides information on groundwater and surface water conditions where they differ from those that were presented in Chapter 12, "Groundwater and Surface Water Resources."

Geologic Conditions

As shown on Figure 17-19, the geological cross-section for the area in the vicinity of the LIRR Route Alternative varies slightly from the Direct Route Alternative, i.e., the Upper Glacial Aquifer is not as thick in the vicinity of the LIRR Route Alternative while the Magothy Aquifer is thicker in this area. Table 17-11 presents the soils found along the LIRR Route Alternative.

Soils

The dominant soil class found along the LIRR Route Alternative is BgA, which comprises about 35 percent of the route. BgA soils are primarily found along the southern and central portions of the route as well as along the eastern segment before the route turns north on Bridgehampton Sag Harbor Turnpike. Other dominant soils include HaA, Plymouth loamy sand (PlA) with slopes ranging from 0 to 3 percent, HaB, and PlB.

Table 17-11
Soils Along the LIRR Route Alternative

Soil Class	Soil Description
At	Atsion sand
Bd	Berryland mucky sand
BgA	Bridgehampton silt loam, 0-2 percent slopes
BgB	Bridgehampton silt loam, 2-6 percent slopes
Bm	Bridgehampton silt loam, graded
CpA	Carver and Plymouth sands, 0-3 percent slopes
CpC	Carver and Plymouth sands, 3-15 percent slopes
CuB	Cut and fill land, gently sloping
De	Deerfield sand
HaA	Haven loam, 0-2 percent slopes
HaB	Haven loam, 2-6 percent slopes
HaC	Haven loam, 6-12 percent slopes
He	Haven loam, thick surface layer
PlA	Plymouth loamy sand, 0-3 percent slopes
PlB	Plymouth loamy sand, 3-8 percent slopes
PmC3	Plymouth gravelly loamy sand, 8 to 15 percent slopes
PsA	Plymouth loamy sand, silty substratum, 0 to 3 percent
Ra	Raynham loam
RdA	Riverhead sandy loam, 0-3 percent slopes
RdB	Riverhead sandy loam, 3-8 percent slopes
RdC	Riverhead sandy loam, 8-15 percent slopes

Sources: *Soil Survey of Suffolk County*, New York, USDA Soil Conservation Service, April 1975.

With the exception of the Atsion Series, the general soil properties associated with each dominant soil mapping unit described above, as presented in the Soil Survey of Suffolk County have been summarized in Chapter 12, "Groundwater and Surface Water Resources." The Atsion Series are described in the Soil Survey of Suffolk County as deep, nearly level, somewhat poorly drained to poorly drained, coarse-textured soils that formed in deep sandy outwash deposits. These soils are on plains adjacent to ponds, creeks, and tidal inlets and are generally located along the south shore.

Groundwater Conditions

Similar to the Direct Route Alternative, the LIRR Route Alternative is located south of the groundwater divide. Topography along the LIRR Route Alternative ranges from 10 to 100 feet above MSL, see Figure 17-20. According to the SCWA, the water table in the vicinity of the LIRR Route Alternative ranges from 5 to 20 feet above MSL. Therefore, the approximate depth to groundwater ranges from 5 to 80 feet above MSL.

As shown in Figure 17-21, the LIRR Route Alternative, similar to the Direct Route Alternative, is located within the South Fork SGPA, see Chapter 12, "Groundwater and Surface Water Resources," for more information on this SGPA. This alternative is at the southernmost boundary of the South Fork SGPA.

Surface Waters

There are numerous surface water bodies and wetlands in the vicinity of the LIRR Route Alternative including Mill Pond, Long Pond, Little Long Pond, Crooked Pond and Long Pond. A detailed discussion on wetlands and surface waters is provided above under Natural Resources.

POTENTIAL IMPACTS OF THE LIRR ROUTE ALTERNATIVE

Generally, most of the soils found along the LIRR Route Alternative have slight limitations with regards to the construction of pipelines, paths and trails, streets and parking lots and home sites. However, there are soils present that have moderate to severe development limitations. As stated for the Direct Route Alternative, moderate and severe soil limitations do not in themselves create significant adverse environmental impacts but may require additional site preparation and engineering and cause a need for increased maintenance requirements.

Similar to the Direct Route Alternative, it is not expected that the LIRR Route Alternative would have a significant adverse impact on geology, soils, and groundwater or surface water resources. Depending on the exact locations selected along Bridgehampton Sag Harbor Turnpike, directional drilling may be required under some wetlands to avoid significant adverse impacts.

See Chapter 12, "Groundwater and Surface Water Resources," and Chapter 15, "Construction," for specific project elements regarding stormwater runoff and erosion control measures proposed as part of the project. Similar measures would be required for both the Direct Route and LIRR Route Alternatives.

TRAFFIC/AIR QUALITY/NOISE

EXISTING CONDITIONS

Traffic Accident Data

As noted above, the 2004 Transportation Element includes a ranking of the 15 highest accident locations in the Town of Southampton, based on data collected between January 2002 and October 2003. Three of the 15 locations are within the vicinity of both the LIRR Route and Montauk Highway Alternatives, as shown in Table 17-12 below.

Table 17-12
Highest Accident Locations, January 1, 2002 to October 15, 2003
Vicinity of LIRR Route and Montauk Highway Alternatives
Town of Southampton

Intersection	Total Number			
	Accidents	Deaths	Injuries	Vehicles Involved
NYS Route 27 (North Road [CR 39] and Flying Point Road [CR 39A]) and David Whites Lane	27	--	7	53
Montauk Highway/NYS Route 27 and Snake Hollow Road	21	1	13	46
Montauk Highway/NYS Route 27 and Bridgehampton Sag Harbor Turnpike (CR 79)	16	--	3	28

Source: 2004 Transportation Element.

KeySpan's records of traffic accidents involving utility poles are described above under "Existing Line Alternative."

Tables G-5 and G-6 in Appendix G present accident data by type for major intersections and links in the vicinity of the LIRR Route Alternative, as well as the Montauk Highway Alternative, for the most recent 3-year period for which data is available from NYSDOT (July 1, 2004 – June 30, 2007). The tables indicate a total of 258 accidents during the analysis period, of which 136 occurred at intersections and 122 occurred on road segments between intersections. The majority of accidents (close to 84 percent) involved a collision with another motor vehicle. Approximately 11 percent of the accidents were recorded as "other" (a description of this category is provided above under "Existing Line Alternative"). Approximately 2 percent involved a collision with a pedestrian, about 2 percent involved a collision with a light support/utility pole, and about 1 percent was identified as non-reportable (see "Existing Line Alternative" above for a description of this category). Of all the major intersections in the vicinity of the LIRR Route Alternative, Montauk Highway/NYS Route 27 and Flying Point Road (CR 39A) was reported to have the greatest number of accidents during the analysis period (15 accidents over the 3-year period). Regarding links in the vicinity of this alternative, road segments adjacent to the intersection of Montauk Highway/NYS Route 27 and Hildreth Lane/Snake Hollow Road were reported to have the greatest number of accidents during the analysis period (22 total accidents over the 3-year period).

POTENTIAL IMPACTS OF THE LIRR ROUTE ALTERNATIVE

Traffic

The LIRR Route Alternative, similar to the Direct Route Alternative, would not affect traffic circulation, and the only new vehicle trips would be for periodic maintenance along the route. This small number of vehicle trips would not result in any significant adverse impacts. For the segment along the LIRR right-of-way, the LIRR Route Alternative would have no impact on traffic accidents involving poles. Along Bridgehampton Sag Harbor Turnpike (CR 79), the LIRR Route Alternative would replace preexisting distribution lines and therefore is not expected to result in a substantial change in the proportion of traffic accidents involving utility poles. Further, while 5 of the 252 accidents that occurred between 2004 and 2007 at major intersections and links in the vicinity of the LIRR Route Alternative involved light supports/utility poles, only one occurred along Bridgehampton Sag Harbor Turnpike (CR 79). As noted above under "Zoning and Public Policy," the LIRR Route Alternative would not interfere with future development of transportation projects, including the proposed joint-use corridor, and would not have a significant adverse impact on public policies related to transportation. The foregoing conclusions would apply to the entire transmission line including portions that are aboveground or below ground.

Air Quality

The LIRR Route Alternative would not involve the addition of any new stationary sources of emissions. Further, the new transmission line would maintain air quality, as it would help reduce use of combustion turbines on the East End. With regard to mobile source emissions, this alternative would not generate a significant number of new vehicle trips, as noted above, and therefore would not result in any significant adverse impacts on air quality.

Noise

The LIRR Route Alternative would not involve the addition of new transformers at substations, nor would it involve the addition of any other new stationary sources of noise. This alternative would generate an inconsequential number of vehicle trips. Therefore, similar to the Direct Route Alternative, this alternative would not result in a significant increase in noise levels due to mobile or stationary sources.

ELECTRIC AND MAGNETIC FIELDS

See Chapter 14, "Electric and Magnetic Fields," for a complete discussion this issue. In general, similar to the Direct Route Alternative, long-term magnetic field exposures in nearby residences with the proposed 69 kV transmission line, with the LIRR Route Alternative, would be expected to be much the same as they are now, well below New York State regulatory levels, and below levels that would most experts believe would pose any increase in health risk.

CONSTRUCTION

INTRODUCTION

Chapter 15, "Construction" provides a detailed description of the construction methods that would be used to install the new transmission line. Unlike the Direct Route Alternative, where both overhead and underground cables could be equally installed, all of the new transmission line along the LIRR right-of way would be overhead, and only the segment of the transmission line along Bridgehampton Sag Harbor Turnpike could be hybrid. Therefore, it is likely that more overhead construction techniques would be used for the LIRR Route Alternative.

Because of the time restriction that LIRR places on construction work within its right-of-way, the construction schedule could be lengthened. The LIRR has a strict schedule for its trains, especially during the peak morning and evening hours. Any disruption to one train can affect trains that follow, causing a cascade of delays. Therefore, LIRR typically restricts construction work in the right-of-way to non-peak hours, such as 10:00 AM to 3:00 PM. To avoid lengthening the construction, LIPA may elect to use more construction crews, which would intensify the number of workers and delivery trucks on the roadways during the day. Another possibility would be to schedule night work, when fewer trains are running.

POTENTIAL IMPACTS OF THE LIRR ROUTE ALTERNATIVE

The potential impacts of the LIRR Route Alternative would be similar to those for the Direct Route Alternative, except for traffic and infrastructure.

The majority of the LIRR Route Alternative would be installed not next to existing roadways, but along the LIRR right-of-way. The road closures that would be expected with the Direct Route Alternative would be less with the LIRR Route Alternative. If LIPA chooses to intensify the construction effort to keep the schedule, the additional number of workers and delivery trucks is still not expected to cause any significant adverse impacts on traffic, because the number of vehicle trips would still be same compared to the number of existing vehicle trips. The lane closures would occur primarily along Bridgehampton Sag Harbor Turnpike. Any effect on LIRR passengers is expected to be minor because most of the work would be accomplished during non-peak hours when fewer trains carry fewer passengers than during peak hours.

For the Direct Route Alternative, minor (a few minutes to less than an hour) electrical shutoffs to business and residences are expected when the existing distribution lines are reconnected on the new poles. These minor electrical shutoffs would be less with the LIRR Route Alternative because fewer existing distribution lines would be disconnected.

Similar to the Direct Route Alternative, no significant adverse impacts are expected from the construction of the LIRR Route Alternative.

ENVIRONMENTAL JUSTICE

DELINIATION OF STUDY AREA

The study area for this EJ analysis was defined to include all census block groups substantially within one mile of the LIRR Route Alternative, or the area where any potential impacts resulting from the LIRR Route Alternative could occur. Where census block groups were not substantially captured by the 1-mile study area, but included portions of the LIRR Route Alternative corridor, those census block groups were also included in the analysis. As a result, the study area for this EJ analysis incorporates a substantially larger area than could actually be affected by the potential impacts of the LIRR Route Alternative, but nevertheless serves as the basis for a conservative analysis. Figure 17-43 depicts the ten census block groups in the environmental justice study area for the LIRR Route Alternative. These include Census Tract (CT) 1907.04 Block Group (BG) 1, CT 1907.04 BG 2, CT 1907.04 BG 3, CT 1907.04 BG 4, CT 1907.06 BG 3, CT 1907.06 BG 4, CT 1907.07 BG 2, CT 1908 BG 1, CT 1908 BG 2, and CT 1908 BG 4.

IDENTIFICATION OF POTENTIAL ENVIRONMENTAL JUSTICE AREAS

Using the methodology described in Chapter 16, "Environmental Justice," one census block group within the study area is considered a potential community of concern for environmental justice, as shown in Figure 17-43. CT 1907.04 BG 3 includes a minority population totaling 41.7 percent (see Table 17-13). This census block group is classified as both urban and rural as defined by the U.S. Census Bureau (see Figure 17-43). As discussed above, this EJ analysis conservatively identifies minority communities where the total minority population exceeds NYSDEC's 33.8 percent threshold for identifying minority communities in rural areas.

According to *Census 2000*, and shown in Table 17-13, the study area has a total population of 10,699 residents, of which approximately 15.9 percent is minority—well below the 33.8 percent threshold and also lower than in Southampton Town (17.4 percent) and Suffolk County as a whole (21.2 percent). Except for CT 1907.04 BG 3, the block groups in the study area are not considered minority communities and have minority populations ranging from 3.0 percent to 33.3 percent.

As shown in Table 17-13, about 5.42 percent of the residents in the study area live below the poverty level (compared to approximately 8.31 percent in Southampton Town and 5.97 percent in Suffolk County as a whole). The percentage of the total population living below the poverty threshold in each block group ranges from 0.52 percent to 20.51 percent. Therefore, the low-income population of the study area and of each of the study area's block groups does not exceed NYSDEC's 23.59 percent threshold for identifying low-income communities.

ANALYSIS OF EXISTING ENVIRONMENTAL BURDENS

In accordance with the Policy, existing sources of pollution or similar facility types in the study area should be considered in order to establish the baseline conditions against which project impacts are assessed.

An existing transmission line is located approximately two miles northwest of the LIRR Route Alternative. This line travels through non-minority and non-low-income communities.

Table 17-13
Study Area Population and Economic Characteristics

Census Block Groups	Population (2000)												Economic Profile (1999)
		Race and Ethnicity*										Total Minority (%)	Individuals Below Poverty Level (%)**
	2000 Total	White	%	Black	%	Asian	%	Other	%	Hispanic	%		
CT 1907.04 BG 1	963	851	88.4	46	4.8	6	0.6	12	1.2	48	5.0	11.6	0.52
CT 1907.04 BG 2	936	841	89.9	39	4.2	21	2.2	13	1.4	22	2.4	10.1	3.88
CT 1907.04 BG 3	521	304	58.3	183	35.1	2	0.4	12	2.3	20	3.8	41.7	14.44
CT 1907.04 BG 4	917	836	91.2	27	2.9	7	0.8	4	0.4	43	4.7	8.8	2.88
CT 1907.06 BG 3	406	394	97.0	4	1.0	4	1.0	1	0.2	3	0.7	3.0	20.51
CT 1907.06 BG 4	750	673	89.7	14	1.9	4	0.5	3	0.4	56	7.5	10.3	1.89
CT 1907.07 BG 2	2,774	2,571	92.7	25	0.9	22	0.8	25	0.9	131	4.7	7.3	3.83
CT 1908 BG 1	1,513	1,056	69.8	210	13.9	11	0.7	28	1.9	208	13.7	30.2	9.60
CT 1908 BG 2	1,145	764	66.7	277	24.2	15	1.3	23	2.0	66	5.8	33.3	3.56
CT 1908 BG 4	774	713	92.1	6	0.8	5	0.6	9	1.2	41	5.3	7.9	6.35
Study Area	10,699	9,003	84.1	831	7.8	97	0.9	130	1.2	638	6.0	15.9	5.42
Southampton Town	54,712	45,212	82.6	3,491	6.4	454	0.8	855	1.6	4,700	8.6	17.4	8.31
Suffolk County	1,419,369	1,118,405	78.8	93,262	6.6	34,355	2.4	23,936	1.7	149,411	10.5	21.2	5.97

Notes: * The racial and ethnic categories provided are further defined as: White (White alone, not Hispanic or Latino); Black (Black or African American alone, not Hispanic or Latino); Asian (Asian alone, not Hispanic or Latino); Other (American Indian and Alaska Native alone, not Hispanic or Latino; Native Hawaiian and Other Pacific Islander alone, not Hispanic or Latino; Some other race alone, not Hispanic or Latino; Two or more races, not Hispanic or Latino); Hispanic (Hispanic or Latino; Persons of Hispanic origin may be of any race).
** Percent of individuals with incomes below established poverty level. The U.S. Census Bureau's established income threshold for poverty level defines poverty level.
Source: U.S. Census Bureau, Census 2000.

As discussed in detail in "Hazardous Materials," above, a review of regulatory records indicated that the LIRR Route Alternative, as with the Direct Route Alternative corridor, contains numerous Hazardous Waste Generators / Transporters, Hazardous Material Spills, underground storage tanks (USTs), and Petroleum Bulk Storage Sites. The complete Toxics Targeting Environmental Report is attached in Appendix F. The Phase I Environmental Site Assessment (ESA) identified various potential classes/sources of contaminated materials at various sites in the LIRR Route Alternative, including volatile organic compounds from former or gasoline or current gasoline tanks; semi-volatile organic compounds from urban fill material or petroleum tanks; polychlorinated biphenyls in the subsurface from manufacturing and industrial operations; subsurface metal contamination from remnant ammunition and casings in the shooting areas at

the Bridgehampton Substation property; pesticides, herbicides, and rodenticides from agricultural uses; aboveground or underground fuel oil or gasoline storage tanks; historic coal yards; fill material of unknown origin; asbestos and lead-based paint in older buildings; and the presence of rail road tracks, which have been known to contaminate surrounding soils. Overall, given the history of this area, extensive contamination of the soil or the groundwater is unlikely.

There are no other similar types of facilities or existing sources of pollution in the study area that, when combined with the proposed transmission line, have the potential to result in cumulative adverse impacts on the potential environmental justice area. In summary, the study area is not considered to be overburdened by sources of pollution or types of uses similar to the one proposed.

ANALYSIS OF THE POTENTIAL FOR ADVERSE IMPACTS

The technical analyses included in this chapter analyze the potential impacts of the project alternatives, including the LIRR Route Alternative, in combination with conditions expected in the surrounding area in the future without the project, including the existing environmental burdens presented above. These analyses therefore consider the cumulative, or combined, effects of the LIRR Route Alternative together with the baseline condition, which includes other sources of pollution and similar facility types in the study area. This is consistent with the requirements of NYSDEC's environmental justice policy, which notes that under existing regulations, NYSDEC must consider other sources of pollution or similar facility types in order to establish the baseline conditions against which project impacts will be assessed.

The analyses performed for all impact analysis areas demonstrated that there would not be any potential significant adverse impacts from operation or construction of the LIRR Route Alternative. As discussed in detail in "Hazardous Materials," above, the potential for adverse impacts due to the presence of subsurface contamination would be avoided by ensuring that construction activities are performed in accordance with a series of protocols, including an HASP, a RAP, applicable Occupational Safety and Health Administration regulations, and all other applicable federal, state, and local requirements. With the implementation of these protocols, no significant adverse impacts related to hazardous materials would result from demolition and/or construction activities related to the LIRR Route Alternative. Following construction, there would be no further potential for significant adverse impacts.

Further, potential impacts associated with construction would be temporary and therefore are not considered significant (see "Construction," above). Moreover, mitigation measures would be in place to minimize any potential impacts (see "Mitigation," above). Therefore, the LIRR Route Alternative would not pose any additional significant burden on the minority and low-income populations within the study area.

CONCLUSIONS ON DISPROPORTIONATE ADVERSE IMPACTS

In summary, the study area as a whole is not considered a potential environmental justice area. Approximately 84 and 95 percent of the study area is made up of non-minority and non-low-income populations, respectively. While the study area includes one minority community—CT 1907.04 BG 3 in the northeastern portion of the study area—this community would not be adversely affected by construction or operation of the LIRR Route Alternative, based on a review of the technical analyses included in this chapter. As noted above, the LIRR Route Alternative would not result in significant adverse impacts on the surrounding communities

during construction or operation. This conclusion considers the potential for cumulative impacts from the LIRR Route Alternative in conjunction with other similar facilities located in the area. Therefore, the LIRR Route Alternative is not expected to result in any disproportionate significant adverse impacts on minority or low-income populations. Moreover, as discussed in Chapter 16, "Environmental Justice," the project includes an extensive public outreach program to the affected communities, including minority and low-income populations in the study area, providing these groups with ample opportunity to have any of their concerns addressed.

G. MONTAUK HIGHWAY ALTERNATIVE

The Montauk Highway Alternative would include the same expansion at the Bridgehampton Substation as the Direct Route Alternative. Both the Montauk Highway and Direct Route Alternatives would not result in any significant adverse impacts from the expansion of the Bridgehampton Substation. Consequently, the following sections focus on the examining potential impacts of the new transmission line.

LAND USE AND COMMUNITY CHARACTER

EXISTING CONDITIONS

The Montauk Highway Alternative, the longest route considered (approximately 9.5 miles), would exit the Southampton Substation, follow the LIRR right-of-way to CR 39 to Montauk Highway to Bridgehampton Sag Harbor Turnpike and then turn north along the roadway to the Bridgehampton Substation. There are preexisting utility poles along most of the Montauk Highway Alternative. The route is located on public easements along the roadways.

The Montauk Highway Alternative at the Southampton Substation on Prospect Street is located alongside commercial establishments. Commercial uses are the predominant use along this portion of the route continuing north to the intersection of Montauk Highway and CR 39. Commercial uses are also present along the northern side of the route (Montauk Highway) just east of Halsey Road to Noyack Road in the vicinity of downtown Water Mill. Commercial uses are also in abundance within the hamlet of Bridgehampton along Montauk Highway just before the Montauk Highway Alternative turns north along Bridgehampton Sag Harbor Turnpike. East of CR 39 to about Hayground Road, agricultural and residential uses become dominant. Community facility uses are located intermittently along Montauk Highway between Southampton Village and Bridgehampton hamlet. Open space parcels are prevalent along the eastern side of Bridgehampton Sag Harbor Turnpike, and residential uses are present along the western side of this roadway.

The Montauk Highway Alternative study area encompasses a ½-mile perimeter around the Montauk Highway Alternative route (see Figure 17-44), and includes the hamlets of Tuckahoe, North Sea, Water Mill, Bridgehampton, Noyack and the Village of Southampton (see Figure 17-2). The Montauk Route Alternative study area also encompasses less than 5 acres of the Village of Sagaponack (identical to the LIRR Route Alternative). The entire study area is approximately 5,600 acres. As shown on Figure 17-44, the predominant land use in the study area is residential, representing approximately 36 percent of the study area.

Residential uses, which encompass the largest proportion of land uses (approximately 36 percent), are located throughout the study area. Agricultural uses, the next dominant land use, make up about 20 percent, or 1,138 acres, of the study area. Large tracts of agricultural land uses

are primarily located in the central portion of the study area, east of CR 39, west of Hayground Road, and on the north and south sides of Montauk Highway.

Commercial uses represent almost 7 percent, or 378 acres, of the study area. These uses are primarily featured along CR 39 and Montauk Highway in the hamlet centers of Water Mill and Bridgehampton. In the Town and Village of Southampton, Montauk Highway serves as a vital commercial corridor. The commercial areas define a large part of the community character in the study area. This is discussed in greater detail below.

Open space and vacant land each comprise almost 12 percent of the study area. Most of the open space is located within the northeastern portion of the study area, east of Bridgehampton Sag Harbor Turnpike, and is associated with the Long Pond Greenbelt. Most of the vacant land is zoned for single-family residential and is expected to be developed in this manner, and is largely located along the waterfront of the surface water bodies located within the study area.

Other uses in the study area include industrial uses, such as light manufacturing and storage oriented uses; parking and transportation, such as roadways and public parking lots; and utilities.

Surface water bodies in the study area include Mill Pond, Mecox Bay, Hayground Cove, Little Long Pond, Kellis Pond, Crooked Pond, and Long Pond.

The study area is largely characterized by Montauk Highway, which serves as a major arterial roadway on the South Fork. This roadway becomes heavily used and congested during the peak season, when the area experiences an overall increase in pedestrian and vehicular activity. The neighborhood is further characterized by single-family residential uses, commercial uses, Long Pond Greenbelt, and hamlet centers along Montauk Highway (Water Mill and Bridgehampton). The study area is located within the Town and Village's southern coastal region, and encompasses the historic Bridgehampton and Water Mill hamlet centers. The study area's community character is almost identical to the LIRR Route Alternative, which is described above.

POTENTIAL IMPACTS OF THE MONTAUK HIGHWAY ALTERNATIVE

Most of the Montauk Highway Alternative corridor has existing distribution poles and therefore this alternative would not introduce a new use to the area. However, there is one area along the Montauk Highway Alternative in the vicinity of Water Mill that does not currently have existing distribution poles. Specifically, there are no poles on Montauk Highway between Halsey Lane and Head of Pond Road in Water Mill within this area. In this vicinity, similar to the Direct Route Alternative, the installation of poles would introduce a new use to the area. However, in the areas where poles do not exist, the Montauk Highway Alternative would not have an adverse impact on land use and community character due to the fact that the land uses are located along a major roadway where utility uses are commonly found. The Montauk Highway Alternative would not have a significant adverse impact on the surrounding uses, the waterfront, hamlet centers, roadways, or overall community character of the area because replacement of existing poles and/or installation of new poles would not be expected to block or effect views; impede hamlet center activity; or conflict with current uses or activities along the route. Further, this alternative would not result in any significant adverse visual impacts or scenic vistas as stated in the "Visual Resources" section below.

Consequently, the Montauk Highway Alternative would not have a significant adverse impact on land use or community.

COMMUNITY FACILITIES AND OPEN SPACE

EXISTING CONDITIONS

Figure 17-45 depicts the locations of all community facilities and public open space within the Montauk Highway Alternative ½-mile study area. There are a total of 81 community facilities and open space parcels located within this study area. As with the LIRR Route Alternative, most of the community facilities are concentrated in the southern portion of the study area along Montauk Highway and County Road 39, south of Mill Pond, in the hamlet of Water Mill, also along Montauk Highway, and in the downtown area of Bridgehampton, along Montauk Highway. The northern portion of the study area primarily includes Town or County open space. Figure 17-45 lists the name and location of each facility. These facilities and services are described below.

Police

The Montauk Highway Alternative and the LIRR Route Alternative maintain the same police districts and locations. Please refer to Chapter 3, "Community Facilities and Open Space," and the LIRR Route Alternative section on Police for additional information.

Fire Protection

Fire Protection has been discussed in greater detail in Chapter 3, "Community Facilities and Open Space." With regards to the Montauk Highway Alternative, the same fire districts and locations apply for the LIRR Route Alternative, see Figure 17-4. (Refer above to the LIRR Route Alternative, "Fire Protection," for additional information).

Schools

Public Schools

The Montauk Highway Alternative study area is within the boundaries of three school districts—Southampton UFSD, Bridgehampton UFSD, and Sag Harbor UFSD (see Figure 17-5). The study area borders Tuckahoe Common School District to the southeast and is northwest and west of Sagaponack Common School District. Within the ½-mile study area is Southampton High School, located at 141 Narrow Lane, south of County Road 39. In addition, the Bridgehampton Elementary and High School are located within the southeastern portion of the study area on Montauk Highway.

Higher Education

See Chapter 3, "Community Facilities and Open Space," for information on Higher Education.

Private Education

The Montauk Highway Alternative ½-mile study area consists of the same private education facilities as the LIRR Route Alternative, see above.

Libraries

The Montauk Highway Alternative ½-mile study area consists of the same library facilities as the LIRR Route Alternative; please refer above to the LIRR Route Alternative description of libraries.

Health Services

See Chapter 3, "Community Facilities and Open Space," for information on Health Services.

Other Community Facilities

Churches and Cemeteries

- North End Graveyard, North Sea Road
- United Methodist Church of Southampton, 160 Main Street
- Church of God in Christ, 57 Hillcrest Terrace
- Southampton Full Gospel Church, 130 County Road 39
- Sacred Heart of Jesus and Mary Cemetery, 231 County Road 39
- Southampton Cemetery, 545 North Sea Road
- Our Lady of Poland Roman Catholic Church, 35 Maple Street
- Community Baptist Church of Southampton, 30 Halsey Avenue
- First Baptist Church of Southampton, 57 Halsey Avenue
- First Baptist Church of Southampton, 163 Pulaski Street
- Community Baptist Church, 16 Plant Street
- Water Mill Cemetery, 731 Montauk Highway
- Incarnation Evangelical Lutheran Church, 59 Hayground Road
- Hayground Cemetery, Montauk Highway
- Bridgehampton United Methodist Church, 2247 Montauk Highway
- Queen of the Most Holy Rosary Roman Catholic Church, 2350 Montauk Highway
- Bridgehampton Presbyterian Church, 2429 Montauk Highway
- St. Ann's Episcopal Church, 2463 Main Street
- First Baptist Church, 151 Bridgehampton Sag Harbor Turnpike
- Edgewood Cemetery, 86 Edgewood Avenue
- First Church of God in Christ, 461 Bridgehampton Sag Harbor Turnpike
- Unitarian Universalist Congregation, 977 Bridgehampton Sag Harbor Turnpike

Post Office

The Montauk Highway Alternative study area comprises the same post offices as the LIRR Route Alternative ½-mile study area. Please see above.

Child Care

The Montauk Highway Alternative study area comprises the same child care facilities as the LIRR Route Alternative ½-mile study area. Please see above.

Senior Citizen Residential Facilities

The Montauk Highway Alternative study area comprises the same senior citizen residential facilities as the LIRR Route Alternative study area. Please see above.

Open Space

Similar to the LIRR Route Alternative, portions of the Long Pond Greenbelt are located in the northeastern portion of the Montauk Highway Alternative ½-mile study area and are associated with County- and Town-owned parks located in Town of Southampton.

Public open space occupies approximately 673 acres or 12 percent of the study area with about 433 acres (or 64 percent of the total open space) under public ownership (see Figure 17-46). All the alternatives have similar open space acreage and as with all the alternatives, this acreage includes land set aside by the County, Town, or Village for open space conservation, land preserved by the Nature Conservancy and Peconic Land Trust, and cemeteries, as well as private land set aside for preservation. Similar to the Direct Route, Existing Line, and LIRR Route Alternatives, most of the open space within the Montauk Highway Alternative study area is located in the northeast portion and is associated with the Long Pond Greenbelt.

The ½-mile study area includes six cemeteries on approximately 27 acres (or about 4 percent of the total open space within the study area). Three of the cemeteries are located in the southwest portion of the ½-mile study area. Two are located on North Sea Road: North End Graveyard and Southampton Cemetery while Sacred Hearts of Jesus and Mary Cemetery is located on County Road 39. In the central and eastern portions of the Montauk Highway Route Alternative study area is Water Mill Cemetery located on Montauk Highway, south of Mill Pond; Hayground Cemetery located further east on Montauk Highway; and Edgewood Cemetery located on Edgewood Avenue, east of Bridgehampton Sag Harbor Turnpike.

Open Space Preservation Plans, Programs, and Policies

See Chapter 3, "Community Facilities and Open Space," for additional information on open space preservation plans, programs, and policies, and their respective descriptions and overviews. The following plans, programs, and policies have been discussed in greater detail for the Direct Route Alternative and no additional recommendations are relevant to the Montauk Highway Alternative.

- *Town of Southampton Master Plan (1970)*
- *Town of Southampton Master Plan Update (1984)*
- Town of Southampton Community Preservation Fund
- *Master List and Maps of Proposed County Open Space Acquisitions, 2004*
- Southampton Town Code
- *Bridgehampton Hamlet Plan (February 2004)*
- *New York State Open Space Conservation Plan*
- Statewide Comprehensive Outdoor Recreation Plan (2003)

The following policies are also discussed in Chapter 3, "Community Facilities and Open Space," but have different implications for the Montauk Highway Alternative:

Southampton Tomorrow - Comprehensive Plan Update Implementation Strategies, 1999

Relevant to the Montauk Highway Alternative, the 1999 Comprehensive Plan Update also recommended the construction of a South Fork Bikeway. The South Fork Bikeway was recommended for implementation in Year 1 of the Strategic and Capital Improvements Plan. The South Fork Bikeway would be funded by the Town and would be located along and surrounding the LIRR tracks east of Church Street and west of the Town of East Hampton line.

The Town posted a public notice announcing that bids for the South Fork Bikeway would be accepted until July 25, 2007.

Town of Southampton Recreation Plan (2003)

Similar to the previous alternatives, in particular the LIRR Route Alternative, the Montauk Highway Alternative is also within the same districts and includes the same parks and recreational facilities discussed in the 2003 Recreation Plan. The Montauk Highway Alternative ½-mile study area includes portions of the Long Pond Greenbelt in the northeastern portion of the study area, the Bridgehampton Militia Green in the eastern portion of the study area on Ocean Road, Sayre Park located north of the LIRR tracks along Snake Hollow Road, and a small portion of the Poxabogue Park and Preserve in the easternmost portion of the ½-mile study area, northwest of Poxabogue pond. Berwind Memorial Green, which is a Town-owned park located in the southeastern portion of the study area on Ocean Road, south of the Bridgehampton Militia Green, is also located within the ½-mile study area. The plan identified the need for signage at this 1-acre hamlet green.

Town of Southampton Community Preservation Project Plan (2005)

As discussed previously in Chapter 3, "Community Facilities and Open Space," the 2005 Project Plan further builds upon the previous two plans and has identified nearly 430 parcels (approximately 1,100 acres) of land within the study area that boast natural features worth preserving. Figure 17-47 shows the priority parcels listed in the 2005 update that are within the Montauk Highway Alternative study area.

Similar to the Direct Route Alternative, the northeast portion of the study area contains a concentration of open space identified in the 2005 Project Plan, which is part of the Long Pond Greenbelt.

Moreover, there are pockets of agricultural lands, trails, wetlands, and aquifer recharge areas throughout the study area proposed for preservation as part of the 2005 Project Plan. These include parcels surrounding Mill Pond, Long Pond, Kellis Pond, and the Long Pond Greenbelt.

Refer to Chapter 3, "Community Facilities and Open Space," for a detailed description of the 2005 Community Preservation Project Plan. As discussed in Chapter 3, "Community Facilities and Open Space," there are four parcels pending community preservation acquisition of agricultural lands. One parcel (Suffolk County Tax Parcel 87-1-9) is located within this study area.

Village of Southampton Comprehensive Plan (May 2000)

As discussed previously in Chapter 3, "Community Facilities and Open Space," the Village Comprehensive Plan puts forth several recommendations regarding open space and community facilities.

Similar to the Direct Route Alternative, within the Village portion of the study area, there are limited vacant and agricultural lands, and the area is mostly built. The few open space parcels present are mainly located within the Village in the southwestern portion of the ½-mile study area and occupy a total of approximately 36 acres or 0.6 percent of the study area.

Village of Sagaponack Comprehensive Plan (2007)

Similar to the LIRR Route Alternative, there are less than 5 acres of the Village of Sagaponack (comprising Poxabogue County Park and surface waters) located in the Montauk Highway Alternative. See LIRR Route Alternative above for details on the 2007 Village Comprehensive Plan.

POTENTIAL IMPACTS OF THE MONTAUK HIGHWAY ALTERNATIVE

Community Facilities

The Montauk Highway Alternative would not result in any significant adverse impacts on community facilities and emergency services regardless of the configuration selected. There is a small area within Water Mill along Montauk Highway that does not currently have existing distribution poles and therefore poles within this portion of the route would be new. The new poles along the route would introduce a new use to the area. However, similar to the Direct Route Alternative, the proposed transmission line would not add any additional demand to community facilities and emergency services. Accordingly, the Montauk Highway Alternative would not cause a significant adverse impact on community facilities and emergency services.

Open Space

The preservation of open space parcels would not be affected by the Montauk Highway Alternative regardless of the configuration chosen. The preservation of these properties has occurred in the past and would be expected to occur in the future with the Montauk Highway Alternative.

The Montauk Highway Alternative, similar to the Direct Route Alternative, would not conflict with State, County, and local open space policy goals and objectives and would not have a negative impact on any identified parcels for preservation that are identified in these policy documents. Further, LIPA would work with the Town of Southampton on the development of a South Fork Bikeway if the Montauk Highway Alternative is selected and the two construction periods coincide.

The Montauk Highway Alternative, similar to the Direct Route Alternative, would not have any significant adverse impacts with regard to preservation of open space or complying with open space acquisition plans.

ZONING AND PUBLIC POLICY

EXISTING CONDITIONS

Zoning

There are 12 Town zoning districts located along the Montauk Highway Alternative. These districts include Light Industrial (LI40), Highway Business (HB), Village Business (VB), Office District (OD), Country Residence (CR40, CR60, CR80, and CR120), and Residence (R20, R40, R60, and R80).

There are six Village zoning districts located along the Montauk Highway Alternative. These districts include Light Industrial (LI), Highway Business (HB), Office District (OD), and Residence (R-7.5, R-12.5, and R-20).

The Montauk Highway Alternative study area includes a ½-mile perimeter around the route, encompassing approximately 5,600 acres of land. Approximately 88 percent (4,899 acres) of the study area is located within the Town of Southampton and almost 13 percent (701 acres) of the study area is located within the Village of Southampton. Table 17-14 provides the Town zoning districts located within the study area by acreage and percent of total area.

Table 17-14
Montauk Highway Alternative: Town Zoning

District	Land Area (acres)	Percent of total area
CR40: Country Residence	504.5	9.0
CR60: Country Residence	697.8	12.5
CR80: Country Residence	1,014.8	18.1
CR120: Country Residence	354.9	6.3
CR200: Country Residence	227.7	4.1
R15: Residence	8.7	0.2
R20: Residence	814.1	14.5
R40: Residence	152.3	2.7
R60: Residence	444.4	7.9
R80: Residence	140.7	2.5
R120: Residence	24.1	0.4
MF-44: Multifamily Residence	11.8	0.2
HB: Highway Business	132.0	2.4
LI40: Light Industrial	128.8	2.3
OSCPD: Open Space Conservation Park District	38.7	0.7
OD: Office District	76.6	1.4
RTPDD: Resort Tourism Planned Development District	51.5	0.9
SCB: Shopping Center Business	33.3	0.6
VB: Village Business	42.2	0.8
Total	4,899	88.7
Study Area Total	**5,600**	**N/A**

Source: *Code of the Town of Southampton*, Chapter 330, 2007 and Geographic Information System, 2005.

The Montauk Route Alternative study area boundary also encompasses less than 5 acres of the Village of Sagaponack (identical to the LIRR Route Alternative). Analysis of the Village of Sagaponack zoning and public policy has not been provided due to the relatively small area and the fact that the zoning districts are identical to the Town's districts.

In total there are 19 Town of Southampton zoning districts within the Town portion of the study area. The Country Residence and Residence zoning districts are the predominant zoning categories (see Figure 17-48), representing approximately 50 percent (about 2,800 acres) and 28 percent (1,584 acres) of the total study area, respectively.

For a summary and description of permitted uses and bulk restrictions for the Country Residence, Residence, Office District, Highway Business, Open Space Conservation Park District, and Light Industrial zoning districts, see Chapter 4, "Zoning and Public Policy." Districts found within this study area and not described in Chapter 4, "Zoning and Public Policy," namely the Resort Tourism Planned Development District (RTPDD), Multifamily

Residential (MF-44), Shopping Center Business (SCB) and Village Business (VB), are described in the LIRR Route Alternative "Zoning and Public Policy" section above.

There are three Town of Southampton overlay districts located within the study area. These districts include the Aquifer Protection Overlay District, the Agricultural Overlay District, and the Old Filed Map Overlay District (see Figures 17-49 and 17-50). The Montauk Highway Alternative is not located in the Aquifer Protection Overlay District. However, the study area is located within this district from Scuttle Hole Road to the east of Bridgehampton Sag Harbor Turnpike. The Montauk Highway Alternative is located within the Agricultural Overlay District between CR 39 and Cobb Road, between Mecox Road and Little Long Pond, and north of Scuttle Hole Road to the Bridgehampton Substation. With the exception of the portion of the route located west of CR 39, the Montauk Highway Alternative is the southernmost boundary of the Old Filed Map Overlay District. See Chapter 4, "Zoning and Public Policy," for information on these overlay districts.

The Village portion of the study area includes 12 zoning districts (see Table 17-15 and Figure 17-51). See Chapter 4, "Zoning and Public Policy," for a summary of dimensional and use regulations for these districts.

Table 17-15
Montauk Highway Alternative: Village Zoning

District	Land Area (acres)	Percent of Total
R-7.5: Residence	157.1	2.8
R-12.5: Residence	90.1	1.6
R-20: Residence	125.6	2.2
R-40: Residence	33.6	0.6
R-80: Residence	68.5	1.2
R-120: Residence	0.04	0.0
MF-20: Multifamily	50.6	0.9
MF-25: Multifamily	8.8	0.2
HB: Highway Business	34.4	0.6
LI: Light Industrial	46.1	0.8
OD: Office District	68.2	1.2
VB: Village Business	17.6	0.3
Total	701	12.5
Study Area Total	**5,600**	**N/A**

Source: *Code of the Village of Southampton*, Chapter 116, and Geographic Information System, 2007.

The predominant district in the Village portion of the study area is the Residence zoning district, representing about 475 acres (approximately 8 percent) of the total study area.

Public Policy

A detailed description of pertinent policies relevant to the Direct Route Alternative has been provided in Chapter 4, "Zoning and Public Policy." Of those policies, the following are relevant and applicable to the Montauk Highway Alternative and do not include additional recommendations relevant to this alternative:

- *New York State Open Space Conservation Plan*
- *Statewide Comprehensive Outdoor Recreation Plan 2003*

- *LIPA Energy Plan 2004-2013, Strategic Plan*
- *Energy Plan for Long Island, New York*
- *Citizens Energy Plan for Long Island, Draft*
- *The Long Island Comprehensive Special Groundwater Protection Area Plan*
- *Smart Growth Policy Plan for Suffolk County*
- *Suffolk County Sidewalk Study*
- *Sustainable East End Development Strategies Summary Report*
- *Town of Southampton Master Plan (1970)*
- *Town of Southampton Master Plan Update (1984)*
- *Village of Southampton Comprehensive Plan (2003)*
- *Southampton Tomorrow - Comprehensive Plan Update Implementation Strategies, 1999*
- *Update to the Town of Southampton Comprehensive Plan Transportation Element (2004)*

Additional policy issues specific to this alternative are also relevant to the LIRR Route Alternative due to the proximity of the two routes and overlap of the respective study areas. Policy issues discussed in the LIRR Route Alternative above are also applicable to this alternative.

POTENTIAL IMPACTS OF THE MONTAUK HIGHWAY ALTERNATIVE

There are some areas along the Montauk Highway Alternative that currently do not have existing distribution poles, and therefore installation of the Montauk Highway Alternative within these sections would introduce a new use. However, Montauk Highway and roadways similar to Montauk Highway have historically coexisted with transmission and distribution lines with little incident. Similar to the Direct Route Alternative, this alternative would not have an adverse impact on the Town or Village zoning because the majority of this route has existing distribution lines and would not conflict with uses present along the route and therefore would be consistent with zoning.

LIPA is a New York State public authority with the power to determine the need for and location, type, size, use, and construction of transmission facilities within its service area. Under well-established case law doctrine and based on language in its enabling statute, LIPA is not obligated to seek local zoning approvals for such projects. However, this section assesses the Montauk Highway Alternative's compliance with Town and Village zoning ordinances. Issues relevant to zoning and the Montauk Highway Alternative include permitted uses, height, and site plan approval. Both the Town and Village zoning ordinances permit public utilities as a special exception use, and limit height of all structures to no more than 40 and 35 feet, respectively. As discussed in Chapter 4, "Zoning and Public Policy," LIPA, as a New York State Public Authority, is not required to obtain permits, variances and/or site plan approvals for the construction of this route. However, if LIPA were subject to local zoning ordinances, they would require a special exception permit, site plan approval, and height variance ranging from 8 to 26 feet from the Town and Village.

Currently, there are no proposals for the construction of the recommended joint-use corridor or new highway along the LIRR right-of-way. Nevertheless, the Town may proceed with the construction of either of these recommendations sometime in the future. The Montauk Highway

Alternative, however, would not be located alongside or on the proposed highway or corridor and thus would not have a significant impact on the recommended joint-use corridor or new highway.

The Montauk Highway Alternative would not have an adverse impact on the State, regional, Town, or Village public policies. This alternative, with the exception of the area between Head of Pond Road and Halsey Lane, would not introduce a new use along Montauk Highway or Bridgehampton Sag Harbor Turnpike. Several planning documents recommend the preservation of the scenic and visual quality of the route. A detailed analysis of the visual impacts that would occur as a result of this alternative is discussed in greater detail below.

COASTAL ZONE MANAGEMENT

As shown on Figure 17-12, the Montauk Highway Alternative is generally located within the same portion of the State's coastal zone as the LIRR Route Alternative but instead of following the LIRR right-of-way, this alternative would run along Montauk Highway. Therefore, the Coastal Zone Management analysis provided for the LIRR Route Alternative is also applicable for this alternative and no further assessment is warranted.

VISUAL RESOURCES

This section considers the appearance of the Montauk Highway Alternative and evaluates the potential for visual impacts. A list and description of scenic or visual resources and locally significant open space is provided in Chapter 6, "Visual Resources." To determine visual effects, this section identifies resources that would have visibility of the Alternative and describes any changes in visual characteristics that would occur. Visual effects are further demonstrated through photosimulations that demonstrate the future appearance of the transmission line from various locations. Locations of viewpoints for photosimulations were selected to demonstrate potential visibility of the transmission line from a variety of representative viewpoints. The analysis of visual impacts is based upon photosimulations and application of the NYSDEC Visual Impact Assessment Methodology, "Assessing and Mitigating Visual Impacts," (DEP-00-2). This methodology, which is described in detail in Chapter 6, "Visual Resources," was also used to determine the visual effects of the Direct Route Alternative.

EXISTING CONDITIONS

The study area for visual resources is one mile on either side of the Montauk Highway Alternative. Based on observations, the one mile study area was determined appropriate as this distance represents the maximum distance from which the poles would be discernible. The Montauk Highway Alternative Route is generally characterized by a mix developed residential and commercial land.

INVENTORY OF RESOURCES

An inventory of sensitive aesthetic and visual resources was prepared following the guidance in NYSDEC Program Policy "Assessing and Mitigating Visual Impacts" (DEP-00-2, July 31, 2000), including locations or resources identified by local jurisdictions as having scenic or aesthetic quality. All resources within one mile of each alternative were identified. Some other notable resources outside of the 1-mile study area are also noted. The locations of each resource are shown in Figure 17-32 and labeled accordingly in the "Summary of Inventory of Resources" in Table 17-16. In addition, several roadways identified as scenic in The Town of Southampton

Comprehensive Plan were analyzed to determine potential impacts of each alternative. Scenic Roadways are shown in Figure 17-33 and are also identified in Table 17-16. A detailed description of each resource is provided in Chapter 6, "Visual Resources."

Table 17-16
Summary of Inventory of Resources

No.	Resource	Direct Route Alternative	Montauk Highway Alternative
1.	Southampton North Main Street Historic District	V	V
2.	Southampton Village Historic District & Expansion	PV	PV
3.	Water Mill at Water Mill	N	PV
4.	Windmill at Water Mill (Corwith Windmill)	N	V
5.	The Bridgehampton Historical Society (the Corwith House)	N	V
6.	Bridgehampton Presbyterian Church	N	V
7.	Beebe Windmill	N	PV
8.	The Captain Nathaniel Rogers House (a.k.a. the Hampton House; a.k.a. the Hopping House)	N	V
National Wildlife Refuges			
9.	Conscience Point National Wildlife Refuge	N	N
10.	Elizabeth A. Morton National Wildlife Refuges	N	N
State Game Refuges and State Wildlife Management Areas			
11.	Linda Gronlund Memorial Nature Preserve	N	N
Bond Act Properties purchased under Exceptional Scenic Beauty or Open Space Category			
12.	Eastern GEIS/Great Swamp	V	PV
13.	Great Hill Pine Barrens	N	N
14.	Long Pond Greenbelt	V	V
15.	Sagaponack Woods	N	N
16.	Tuckahoe Woods	N	N
17.	Paumanok Path	PV	PV
18.	Tuckahoe Woods trails	N	N
19.	Oak Ponds-to-Peconic Bay Trail	N	N
20.	Morton-to-Kellis Pond Trail	V	V
21.	Trout Pond-to-Brick Hill Trail	PV	PV
22.	Brick Kiln Woods	V	V
23.	Bay-to-Ocean Trail	V	V
Locally Significant Resources—Public Parks			
24.	Agawam Park, Village of Southampton	N	PV
25.	Berwind Memorial Green	N	PV
26.	Big Woods Preserve	N	N
27.	Bridgehampton Militia Green	N	V
28.	Coopers Beach	N	N
29.	Cryder Beach	N	N
30.	David Whites Park, Village of Southampton	PV	PV
31.	Emma Rose Elliston Park	N	N
32.	Flying Point Beach	N	N
33.	Flying Point Park, Village of Southampton	N	PV
34.	Foster Memorial Beach (Long Beach)	N	N
35.	Fowlers Lane Beach	N	N
36.	Georgica Pond Area	N	N
37.	Gibson Beach	N	N

Table 17-16 (cont'd)
Summary of Inventory of Resources

No.	Resource	Direct Route Alternative	Montauk Highway Alternative
38.	Gin Lane Beach	N	N
39.	Halsey Neck Lane Beach	N	N
40.	Havens Beach	N	N
41.	Laurel Valley County Park	N	N
42.	Little Plains Beach	N	N
43.	Lola Prentice Park, Village of Southampton	N	PV
44.	Long Pond Greenbelt	V	V
45.	Mashashimuet Park, Village of Sag Harbor	N	N
46.	Mecox Bay Preserve	N	PV
47.	Mecox Beach	N	N
48.	Munn Point	N	N
49.	North Sea Athletic Facility and Park	N	N
50.	Northwest Harbor County Park	N	N
51.	Old Town Beach	N	N
52.	Peter's Pond Beach	N	N
53.	Poxabogue County Park	N	N
54.	Railroad Plaza Park, Village of Southampton	V	N
55.	Richard L. Fowler Nature Walk, Village of Southampton	N	N
56.	Rosko Drive Park, Village of Southampton	N	N
57.	Ruth Wales DuPont Sanctuary	N	N
58.	Sagg Main Beach	N	N
59.	Sagg Swamp Nature Preserve	N	N
60.	Sayre Park, Bridgehampton hamlet	N	N
61.	Scallop Pond Preserve	N	N
62.	Town Line Beach	N	N
63.	Trout Pond Park	N	N
64.	Water Mill Hamlet Center Green	N	V
65.	William Dunwell Park, Village of Southampton	N	N
66.	Windward Way Park, Village of Southampton	V	PV
67.	W. Scott Cameron Beach	N	N
68.	Wolf Swamp Sanctuary	N	N
69.	Wyandanch Beach	N	N
Other Locally Significant Resources			
70.	Railroad Corridor	V	V
71.	Mill Pond	N	PV
Locally Significant Resources—Scenic Roads Identified in the Comprehensive Plan			
a.	Atlantic Avenue/Ocean Road	N	V
b.	Blank Lane	V	N
c.	Brick Kiln Road	V	N
d.	Bridgehampton Sag Harbor Turnpike	V	V
e.	Butter Lane	V	N
f.	Church Lane	N	V
g.	Cobb Isle Road	N	N
h.	Cobb Road	N	V
i.	Cooks Lane	V	N
j.	Davids Lane	N	V
k.	Deerfield Road	V	N

**Table 17-16 (cont'd)
Summary of Inventory of Resources**

No.	Resource	Direct Route Alternative	Montauk Highway Alternative
Locally Significant Resources—Scenic Roads Identified in the Comprehensive Plan (continued)			
l.	Edge of Woods Road	PV	N
m.	Flying Point Road from Cobb Lane to the southern edge of the study area	N	N
n.	Halsey Lane	N	V
o.	Hayground Road	PV	V
p.	Head of Pond Road	V	N
q.	Highland Terrace	N	N
r.	Hildreth Lane	N	V
s.	Lopers Path	PV	N
t.	Lumber Lane	V	N
u.	Mecox Road	N	V
v.	Millstone Road	PV	N
w.	Mitchells Lane from north of Snake Hollow Road to Scuttle Hole Road	V	N
x.	Montauk Highway/NYS Route 27 from Hildreth Lane to west of Poxabogue Lane	N	V
y.	Narrow Lane	V	N
z.	Narrow Lane South	PV	N
aa.	North Sea Mecox Road west of David Whites Lane	N	N
bb.	Noyack Path	PV	N
cc.	Old Mill Road from south of Mill Pond to Montauk Highway/NYS Route 27	PV	V
dd.	Old Sag Harbor Road	N	N
ee.	Pauls Lane east of Halsey Lane	N	N
ff.	Sagaponack Road/Sagg Road east of Highland Terrace	N	N
gg.	Scuttle Hole Road	V	V
hh.	Water Mill-Towd Road	V	N
ii.	Wickapogue Road	N	N

POTENTIAL IMPACTS OF THE MONTAUK HIGHWAY ALTERNATIVE

Table 17-16 lists the resources that were analyzed and identifies whether each alternative would be visible (V), potentially visible (PV), or not visible (N) from each resource. Any resources where the transmission line would be visible or potentially visible are described in further detail below with a discussion of the likely views.

In general, the Montauk Highway Alternative would utilize the right-of-way of Montauk Highway and other roads with residential or commercial development. As such, the transmission line and poles would not represent a significant variation from the overhead distribution lines and utility poles that already exist. Furthermore, the majority of the new transmission line would be attached to new approximately 48 foot wooden poles that simply replace the existing 35 foot wooden distribution utility poles.

The visual impact analysis discussion below relies on a series of photosimulations that follow the route of the Montauk Highway Alternative. Photosimulation locations are shown on Figure

17-33 and labeled by a letter that corresponds to subsequent figures. It should also be noted that Figures 6-3a to 6-3e (Photographs 1- 10), demonstrate the existing views from locations where the alternatives would not be visible. Figures 17-52 to 17-58 provide existing views and photosimulations from sensitive receptors and view corridors along the route of the transmission line where visibility would be possible. These photosimulations provide representative typical views from various locations in the surrounding study area. Where applicable, the following discussion identifies the sensitive receptors from which the view in a photosimulation, or a view largely similar to the photosimulation, would be possible. Additional representative views are provided in Figures 6-4a to 6-4h (Photosimulations A- H) and Figures 17-34 to 17-42, which provide photsimulations of the proposed conditions for alternative routes.

As noted above, the analysis below assumes a "worst-case scenario" where the entire transmission line would be located above ground. If portions of the transmission line are buried, riser poles would be used to transition from above to below ground. Figure 6-5 provides a photosimulation that demonstrates how a riser pole would look. While the riser poles have an appearance that is more obtrusive than standard utility poles, they would be placed in locations that minimize their prominence in the surrounding landscape.

State/National Register of Historic Places

Southampton North Main Street Historic District. The Montauk Highway Alternative would traverse south on North Main Street from the Southampton Substation and enter the Southampton North Main Street Historic District. Therefore, the Montauk Highway Alternative transmission lines would be visible to pedestrians and motorists traveling within this historic district. In general, views of the Southampton Substation from the Historic District would continue to be screened by vegetation and existing buildings. However, upper portions of the substation may be visible from the northernmost section of the Historic District, particularly from the upper floors of businesses and homes within that portion of the district. In general, the Montauk Highway Alternative would only replace existing utility poles and add new conductors to those poles. The change from wooden to steel poles is not expected to significantly alter the character of the surrounding area. No significant viewsheds, or the enjoyment of historic resources within the district, are expected to change as a result of the Montauk Highway Alternative. Therefore, the Montauk Highway Alternative would not result in any significant adverse impacts to the Southampton North Main Street Historic District.

Southampton Village Historic District & Expansion. As discussed above, the Southampton Village Historic District includes 374 contributing buildings in the central and southern portions of Southampton Village, including portions of North Sea Road, Hill Street, South Main Street, and others. The Montauk Highway Alternative would traverse Hampton Rd near the northern section of the historic district; therefore the transmission lines would be visible from portions of this district. The new transmission line would have an appearance similar to existing distribution lines in the surrounding area. Farther south within the district, it is unlikely that any portion of the substation or transmission line would be visible due to distance, existing buildings, topography, and vegetation. No significant viewsheds, or the enjoyment of historic resources within the district, are expected to change as a result of the Montauk Highway Alternative. Therefore, the Montauk Highway Alternative would not result in any significant adverse impacts to the Southampton Village Historic District & Expansion.

Water Mill at Water Mill. The Water Mill at Water Mill is located at 41 Old Mill Road, approximately 300 feet north of the Montauk Highway Alternative. Existing vegetation in the rear of the mill would shield most views of the transmission lines from this location. Any

potential views of the transmission lines would be limited and would blend with existing views of development and infrastructure along Montauk Highway. Therefore, the Montauk Highway Alternative would not result in any significant adverse impacts to the Water Mill at Water Mill.

Windmill at Water Mill (Corwith Windmill). The Windmill at Water Mill (Corwith Windmill) is located on the village green in Water Mill, and is adjacent to the Montauk Highway Alternative transmission line. The transmission lines would be fully visible from this location. However, the appearance of these poles would not be substantially different from the existing poles that currently line Montauk Highway directly in front of the windmill. Therefore, the proposed transmission line would not significantly alter the existing character of the area surrounding the windmill and would not result in any significant adverse visual impact to the Windmill at Water Mill.

The Bridgehampton Historical Society (the Corwith House). The Corwith House is located at 2368 Montauk Highway, adjacent to the Montauk Highway Alternative. The transmission lines would be visible from this location. However, the appearance of these poles would not be substantially different from the existing poles that currently line Montauk Highway directly in front of the Corwith House. Figure 17-58 shows how a similar view from the Captain Nathanial Rodgers House is not significantly affected by the new transmission lines. Therefore, the proposed transmission line would not significantly alter the existing character of the area surrounding the historic home and would not result in any significant adverse visual impact to the Corwith House.

Bridgehampton Presbyterian Church. The Bridgehampton Presbyterian Church is located at 2429 Montauk Highway, adjacent to the Montauk Highway Alternative. Similar to the Corwith House, the transmission lines would be visible from this location. However, the appearance of these poles would not be substantially different from the existing poles that currently line Montauk Highway directly in front of the church. Figure 17-57 demonstrates that views from the Presbyterian Church are limited due to existing vegetation along Montauk Highway. Figure 17-58 shows how a similar view from the Captain Nathanial Rodgers House is not significantly affected by the new transmission lines due to the fact that the new transmission line would only add to existing distribution lines that already exist. Therefore, the proposed transmission line would not significantly alter the existing character of the area surrounding the church and would not result in any significant adverse visual impact to the Bridgehampton Presbyterian Church.

Beebe Windmill. Beebe Windmill is located on Ocean Road and Hildreth Ave in the Bridgehampton hamlet center. The mill is approximately 0.2 miles south of the Montauk Highway Alternative. Although this route would run relatively close to the windmill, any views from this location would be very limited. Existing buildings and vegetation within the hamlet center would obstruct most views of the proposed transmission lines. Any potential views would be indiscernible to the casual viewer. Therefore the Montauk Highway Alternative would not result in any significant adverse impacts on visual resources from Beebe Windmill.

The Captain Nathaniel Rogers House (a.k.a. the Hampton House; a.k.a. the Hopping House). Captain Nathaniel Rogers House is located at 2539 Montauk Highway, adjacent to the Montauk Highway Alternative. Similar to other historic properties along Montauk Highway, the transmission lines would be visible from this location as shown in Photosimulation P on Figure 17-58. However, the appearance of these poles would not be substantially different from the existing poles that currently line Montauk Highway directly in front of Captain Nathaniel Rogers House. Therefore, the proposed transmission line would not significantly alter the existing

character of the area surrounding the house and would not result in any significant adverse visual impact to Captain Nathaniel Rogers House.

Bond Act Properties purchased under Exceptional Scenic Beauty or Open Space Category

Eastern GEIS/Great Swamp. The Eastern GEIS/Great Swamp area lies between Bridgehampton Sag Harbor Turnpike and Scuttle Hole and Brick Kiln Roads. This resource is located 0.2 miles west of the Montauk Highway Alternative. The transmission line may be visible from portions of this resource. However the resource is heavily vegetated and several existing residences separate it from the Montauk Highway Alternative; therefore most views of Montauk Highway Alternative would be obstructed. The Montauk Highway Alternative would not significantly alter the character of this area, and would not result in a significant adverse impact on this location.

Long Pond Greenbelt. The Long Pond Greenbelt consists of a north-south corridor of interconnected ponds, streams, wetlands, and woodlands stretching from Sag Harbor to Sagaponack to the Atlantic Ocean. A portion of the greenbelt is adjacent to the Bridgehampton Substation and Bridgehampton Sag Harbor Turnpike section of the Montauk Highway Alternative. Photosimulation I on Figure 17-42 shows the view from Bridgehampton Sag Harbor Turnpike immediately along the Direct Route Alternative, which follows the same course as the Montauk Highway Alternative in this section. As shown in the photosimulation, the Montauk Highway Alternative would increase the height of existing poles in this location by approximately 13 feet and would add three new conductors. Upper portions of the Bridgehampton Substation and transmission lines along the Bridgehampton Sag Harbor Turnpike may be visible from portions of the Long Pond Greenbelt. However, existing vegetation and topography would obstruct most views of the Montauk Highway Alternative from the Long Pond Greenbelt. In addition, any views of the Montauk Highway Alternative would be of short duration and would be similar to existing views from the area. Since the proposed transmission line would only replace existing utility poles with incrementally higher poles, it would not significantly alter the character of this area, and would not result in a significant adverse impact on the Long Pond Greenbelt.

Paumanok Path. Paumanok Path is a regional trail that will extend 125 miles from Rocky Point to Montauk Point. A 30-mile trail section between Red Creek Park and Sagaponack remains to be completed; however, portions of the trail are already in place in eastern Southampton, including Big Woods Preserve to North Sea Road, Laurel Valley County Park, and Brick Kiln Road to Widow Gavits Road. Portions of the trail are located 0.25 miles from the northeast portion of the Montauk Highway Alternative. However, existing development, topography, and vegetation would obstruct most views of the Montauk Highway Alternative from this trail. Any views of the Montauk Highway Alternative that may be possible in areas of less dense vegetation would be limited and brief, and would not result in any significant adverse visual impacts.

Morton-to-Kellis Pond Trail. Morton-to-Kellis Pond Trail is a linear north-south trail project that will connect Morton NWR, Laurel Valley County Park, Camps Pond, Atlantic Golf Club's trail easement, Long Pond (Bridgehampton), and Kellis Pond. The trail will intersect and follow Paumanok Path in Laurel Valley County Park. The Morton to Kellis Pond Trail would intersect the Montauk Highway Alternative as it crossed Montauk Highway from the Little Long Pond to Kellis Pond. The Montauk Highway Alternative transmission lines would be visible to trail users as they crossed the street. The transmission lines would be similar to the existing utility lines that run along Montauk Highway and would not detract from the enjoyment of the trail. The new

transmission lines would run along the route of the existing utility lines and would be attached to utility poles that are approximately 13 feet higher than existing poles. Therefore, the Montauk Highway Alternative would not significantly alter the visual character of this area and would not have a visual impact on the Morton-to-Kellis Pond Trail.

Trout Pond-to-Brick Hill Trail. Trout Pond-to-Brick Hill Trail is a linear north-south trail that will link Trout Pond, "Golf At The Bridge's" natural open space areas, and the overlook at the south end of Brick Hill. The trail will intersect and follow Paumanok Path in "Golf At The Bridge's" natural open space. The Trout Pond-to-Brick Hill Trail is located more than 2.5 miles northwest of the Bridgehampton Substation and Montauk Highway Alternative. Due to the distance, vegetation, and topography, it is unlikely that the Montauk Highway Alternative would be visible from any portion of the trail. Any potential visibility from the overlook would be very limited and would blend with existing development and character of the land. Therefore, the Montauk Highway Alternative would not result in any significant adverse impacts on the visual resources of the Trout Pond-to-Brick Hill Trail.

Brick Kiln Woods. Brick Kiln Woods, which is also known as Great Swamp, will include an interior loop (with Paumanok Path comprising one side of the loop) and spur trails from Brick Kiln Road, Bridgehampton Sag Harbor Turnpike, and Scuttle Hole Road. A large loop is planned between Brick Kiln Woods and Brick Hill, with another spur trail to Brick Kiln Road. The Bridgehampton Substation and the northeast portion of the Montauk Highway Alternative are located on the Bridgehampton Sag Harbor Turnpike which is adjacent to the Brick Kiln Woods trail system. Although the Montauk Highway Alternative would be visible from the trail heads along the Bridgehampton Sag Harbor Turnpike, it would not alter the existing character of these roads or trail heads as existing utility lines are already present in this area. In addition, from the trails, views of the Montauk Highway Alternative would be limited and as they would be obstructed by the heavy vegetation. Therefore, the Montauk Highway Alternative would not result in any significant adverse visual impacts on the Brick Kiln Woods.

Bay-to-Ocean Trail. The Bay-to-Ocean Trail is a north-south linear corridor that will extend from Sag Harbor to Sagaponack. The trail will link Mashashimuit Park, the Long Pond Greenbelt, Poxabogue County Park, Sagaponack farmland, and Atlantic Ocean beaches. The trail will intersect and follow Paumanok Path in the Long Pond Greenbelt. Portions of the trail would come within 0.1 miles of the Montauk Highway Alternative. From the Long Pond Greenbelt section, the upper portions of the Bridgehampton Substation and transmission lines along the Bridgehampton Sag Harbor Turnpike may be visible. Despite certain areas of potential visibility, existing vegetation and topography would obstruct most views of the Montauk Highway Alternative from the Bay to Ocean Trail. The views of the proposed transmission line along Bridgehampton Sag Harbor Turnpike are shown in Photosimulation I on Figure 17-42. These views represent a "worst-case scenario" from the Bay-to-Ocean Trail since the trail is actually deeper into dense vegetation in the area. In addition, any views of the Montauk Highway Alternative would be of short duration and would be similar to existing views along that route. Therefore, the Montauk Highway Alternative would not result in any significant adverse visual impacts on the Bay to Ocean Trail.

Scenic Roads Identified in the Town of Southampton Comprehensive Plan

As described in Chapter 6, "Visual Resources," the 1999 Comprehensive Plan Update includes a map showing scenic roads in the Town of Southampton. The following scenic roads would be visible from the Montauk Highway Alternative:

Atlantic Avenue/Ocean Road. The Montauk Highway Alternative would intersect the northern terminus of Atlantic Avenue/Ocean Road in the Bridgehampton Hamlet. Pedestrians and motorists traveling north along Atlantic Avenue/Ocean Road would have views of the proposed transmission lines as they reached Montauk Highway. The proposed transmission lines would follow Montauk Highway through the hamlet and then north onto the Bridgehampton Sag Harbor Turnpike (a continuation of Atlantic Avenue/Ocean Road). They would be similar in character to existing distribution lines along Montauk Highway, and would not alter the character of the street or view. Therefore, the Montauk Highway Alternative would not result in a significant adverse visual impact on Atlantic Avenue/Ocean Road.

Bridgehampton Sag Harbor Turnpike from north of Scuttle Hole Road north beyond the edge of the study area. The Montauk Highway Alternative would run from Scuttle Hole Road to the Bridgehampton Substation along this section of the Bridgehampton Sag Harbor Turnpike. This alternative would replace existing 35-foot wooden poles with 48-foot wooden poles similar in appearance. Photosimulation I on Figure 17-42 shows the view from Bridgehampton Sag Harbor Turnpike along the Direct Route Alternative (which is the same as the Montauk Highway Alternative in this section). As shown in the photosimulation, the Montauk Highway Alternative would increase the height of existing poles in this location by 13 feet and would add three new conductors. This change would not significantly affect the existing character of the roadway. Therefore, the visual quality of the Bridgehampton Sag Harbor Turnpike would not be noticeably altered and the Montauk Highway Alternative would not result in any significant adverse visual impacts.

Church Lane. The Montauk Highway Alternative would intersect the northern terminus of Church Lane in the Bridgehampton Hamlet. Pedestrians and motorists traveling north along Church Lane would have views of the proposed transmission lines as they reached Montauk Highway. The proposed transmission lines would follow Montauk Highway through the hamlet. They would be similar in character to existing distribution lines along Montauk Highway, and would not alter the character of the street or view. Therefore, the Montauk Highway Alternative would not result in a significant adverse visual impact on Church Lane.

Cobb Road from Old Country Road to Flying Point Road. The Montauk Highway Alternative would cross Cobb Road at its intersection with Montauk Highway. Pedestrians and motorists traveling along Cobb Road would have views of the proposed transmission lines as they crossed the existing Montauk Highway. The proposed transmission lines would follow Montauk Highway and would not obstruct any views of historic or scenic natural resources from this location. In addition, the proposed transmission lines would be similar to existing distribution lines in the vicinity of Cobb Road, and would not alter the character of the street or views. Therefore, the Montauk Highway Alternative would not result in a significant adverse visual impact on Cobb Road.

Davids Lane. The Montauk Highway Alternative would intersect the northern terminus of Davids Lane. Pedestrians and motorists traveling northwest along Davids Lane would have views of the proposed transmission lines as they reached Montauk Highway. The proposed transmission lines would be similar in character to existing distribution lines along Montauk Highway and Davids Lane, and would not alter the character of either street, nor would it obstruct views of any historic or scenic natural resources from this location. Therefore, the Montauk Highway Alternative would not result in a significant adverse visual impact on Davids Lane.

Halsey Lane (in Water Mill hamlet). The Montauk Highway Alternative would intersect Halsey Lane in the Water Mill Hamlet. Pedestrians and motorists traveling west along Halsey Lane would have views of the proposed transmission lines as they entered the hamlet. The proposed transmission lines would follow Montauk Highway through the hamlet. They would be similar in character to existing distribution lines in the vicinity of Halsey Lane, and would not alter the nature of the street. In addition, the transmission lines would not obstruct any views of Corwith Windmill from Halsey Lane. Therefore, the Montauk Highway Alternative would not result in a significant adverse visual impact on Halsey Lane.

Halsey Lane (in Bridgehampton hamlet). The Montauk Highway Alternative would intersect the northern terminus of Halsey Lane in the Bridgehampton Hamlet. Pedestrians and motorists traveling north along Halsey Lane would have views of the proposed transmission lines as they reached Montauk Highway. The proposed transmission lines would follow Montauk Highway through the hamlet. They would be similar in character to existing distribution lines along Montauk Highway, and would not alter the character of the street or view. Therefore, the Montauk Highway Alternative would not result in a significant adverse visual impact on Halsey Lane.

Hayground Road between Mecox Road and Montauk Highway/NYS Route 27. The Montauk Highway Alternative would intersect this section of Hayground Road. Pedestrians and motorists traveling along Hayground Road would have views of the proposed transmission lines as they crossed they reached Montauk Highway. The proposed transmission lines would follow the existing Montauk Highway and would not obstruct any views of historic or scenic natural resources from this location. In addition, the proposed transmission lines would be similar to existing distribution lines along Hayground Road and Montauk Highway, and would not alter the character of either street. Therefore, the Montauk Highway Alternative would not result in a significant adverse visual impact on Hayground Road.

Hayground Road between Windmill Lane and Scuttle Hole Road. The Montauk Highway Alternative may be visible in the distance from this section of Hayground Road. Pedestrians and motorists traveling south along Hayground Road would have limited views of the proposed transmission lines crossing Hayground Road at Montauk Highway. The proposed transmission lines would follow Montauk Highway and would not obstruct any views of historic or scenic natural resources from this location. In addition, the proposed transmission lines would be similar to existing distribution lines along Hayground Road and Montauk Highway, and would not alter the character of either street. Therefore, the Montauk Highway Alternative would not result in a significant adverse visual impact on Hayground Road.

Hildreth Lane. The Montauk Highway Alternative would intersect the northern terminus of Hildreth Lane in Bridgehampton. Pedestrians and motorists traveling northwest along Hildreth Lane would have views of the proposed transmission lines as they reached Montauk Highway. The proposed transmission lines would follow Montauk Highway through the hamlet. They would be similar in character to existing distribution lines along Montauk Highway, and would not alter the character of the street or view. Therefore, the Montauk Highway Alternative would not result in a significant adverse visual impact on Hildreth Lane.

Mecox Road. The northern terminus of Mecox Road would intersect the Montauk Highway Alternative. Pedestrians and motorists traveling north along Mecox Road would have views of the proposed transmission lines as they reached Montauk Highway. The proposed transmission lines would be similar in character to existing distribution lines along Montauk Highway, and

would not alter the character of Mecox Road, nor would it obstruct views of any historic or scenic natural resources from this location. Therefore, the Montauk Highway Alternative would not result in a significant adverse visual impact on Mecox Road.

Montauk Highway/NYS Route 27 from Hildreth Lane to west of Poxabogue Lane. The Montauk Highway Alternative would run along this section of Montauk Highway. This alternative would replace existing 35-foot wooden poles with 48-foot wooden poles similar in appearance. The Montauk Highway Alternative would increase the height of existing poles in this location by 13 feet and would add three new conductors. This change would not significantly affect the existing character of the roadway. Therefore, the visual quality of the Montauk Highway would not be noticeably altered and the Montauk Highway Alternative would not result in any significant adverse visual impacts.

Old Mill Road from south of Mill Pond to Montauk Highway/NYS Route 27. The Montauk Highway Alternative would intersect Old Mill Road in the Water Mill Hamlet. Pedestrians and motorists traveling east along Old Mill Road would have views of the proposed transmission lines as they entered the hamlet. The proposed transmission lines would follow Montauk Highway through the hamlet. As shown in Photosimulation J on Figure 17-52 (view from a location west of Old Mill Road), they would be similar in character to existing distribution lines along Old Mill Road, and would not alter the nature of the street. Photosimulation K on Figure 17-53 shows how views from Old Mill Road itself would be limited due to vegetation in the area. In addition, the transmission lines would not obstruct any views of Mill Pond or the Water Mill from Old Mill Road. Therefore, the Montauk Highway Alternative would not result in a significant adverse visual impact on Old Mill Road.

Scuttle Hole Road from Montauk Highway/NYS Route 27 to Narrow Lane South. The Montauk Highway Alternative would intersect the southern terminus of Scuttle Hole Road. Pedestrians and motorists traveling south along Scuttle Hole Road would have views of the proposed transmission lines as they reached Montauk Highway. The proposed transmission lines would be similar in character to existing distribution lines along Montauk Highway, and would not alter the character of Scuttle Hole Road, nor would it obstruct views of any historic or scenic natural resources from this location. Therefore, the Montauk Highway Alternative would not result in a significant adverse visual impact on Scuttle Hole Road.

Public Parks

Agawam Park, Village of Southampton. Agawam Park is located on the northern shore of Agawam Lake, approximately 0.2 miles south of the Montauk Highway Alternative. The existing buildings and curvature of the road would obstruct most views of the proposed transmission line from this park. Any potential views of the transmission lines would be limited and brief, and would not detract from the public's enjoyment of the park or interfere with the character of the neighborhood. Therefore, the Montauk Highway Alternative would not result in any adverse visual impacts to this park.

Berwind Memorial Green. Berwind Memorial Green is the site of historic Beebe Windmill, located on Ocean Road and Hildreth Ave in the Bridgehampton hamlet center. The green is located approximately 0.2 miles south of the Montauk Highway Alternative. Although this route would run relatively close to the green, any views from this location would be very limited. Existing buildings and vegetation within the hamlet center would obstruct most views of the proposed transmission lines. Any potential views would be indiscernible to the casual viewer.

Therefore the Montauk Highway Alternative would not result in any significant adverse impacts on visual resources from Berwind Memorial Green.

Bridgehampton Militia Green. This Town-owned triangular commons is located at the intersection of Montauk Highway/NYS Route 27 and Ocean Road in Bridgehampton hamlet center. The park is adjacent to the Montauk Highway Alternative. The transmission lines would be fully visible from this location. However, the appearance of these poles would not be substantially different from the existing poles that currently line Montauk Highway directly in front of the green. Therefore, the proposed transmission line would not significantly alter the existing character of the area surrounding the green and would not result in any significant adverse visual impact to the Bridgehampton Militia Green.

David Whites Park. This Village of Southampton park is located on David Whites Lane at the end of Pulaski Street. The Montauk Highway Alternative would be located approximately 0.25 miles from David Whites Park. While visibility of the proposed transmission lines may be possible from this park, that visibility would not be significant due to the distance and screening by existing vegetation and buildings. In most portions of the park existing homes along David Whites Lane would entirely block views of the proposed transmission line.

Flying Point Park (Downs Family). Flying Point Park, a Village of Southampton park, is located on Flying Point Road, 0.2 miles south of Montauk Highway/NYS Route 27. The park is separated from the Montauk Highway Alternative by existing residential and commercial development; therefore views of the proposed transmission lines are unlikely. Any potential views of the transmission lines would be very limited and indistinguishable from the surrounding development. Therefore, the Montauk Highway Alternative would not have a significant adverse impact on this location.

Lola Prentice Park. Lola Prentice Park, a Village of Southampton park, is located on Windmill Lane north of Jobs Lane. The park is approximately 0.2 miles south of the Montauk Highway Alternative. The existing buildings and curvature of the road would obstruct most views of the proposed transmission line from this park. Any potential views of the transmission lines would be limited and brief, and would not detract from the public's enjoyment of the park or interfere with the character of the neighborhood. Therefore, the Montauk Highway Alternative would not result in any adverse visual impacts to this park.

Long Pond Greenbelt. Stretching between Sag Harbor and the Atlantic Ocean is an area designated as the Long Pond Greenbelt which was established by the Nature Conservancy. The greenbelt incorporates a network of ponds including Long Pond, Little Long Pond, and Crooked Pond. The greenbelt is bounded to the west by Bridgehampton Sag Harbor Turnpike, along which the Montauk Highway Alternative transmission line would run. Upper portions of the Bridgehampton Substation and transmission lines along the Bridgehampton Sag Harbor Turnpike may be visible from portions of the Long Pond Greenbelt. The Montauk Highway Alternative would increase the height of existing poles in this location by approximately 13 feet and would add three new conductors. This change does not significantly affect the existing character of the roadway. Therefore, the visual quality of this roadway would not be noticeably altered and the Montauk Highway Alternative would result in no significant adverse visual impacts. Further east of the roadway, the greenbelt is heavily forested. This would screen views of the Montauk Highway Alternative. Therefore, the Montauk Highway Alternative would not result in any significant adverse visual impacts on the Long Pond Greenbelt.

Mecox Bay Preserve. Mecox Bay Preserve is owned by the Nature Conservancy and located along Dune Road between Mecox Bay and the Atlantic Ocean, in Bridgehampton. The preserve is approximately 2 miles southeast of the Montauk Highway Alternative across Mecox Bay. The open water and long views from Mecox Bay may afford some limited views of the Montauk Highway Alternative where Montauk Highway crosses between Mill Pond and the bay. However, due to the distance, the proposed transmission line indiscernible from adjacent development and vegetation. Therefore, the Montauk Highway Alternative would not result in a significant adverse visual impact from this location.

Water Mill Hamlet Center Green. The Water Mill Village Green is a triangular open space maintained by the Water Mill Village Improvement Association. The property is bounded by Montauk Highway/NYS Route 27, Halsey Lane, and Proprietors Lane. The green is adjacent to the Montauk Highway Alternative transmission line. The transmission lines would be fully visible from this location. However, the appearance of these poles would not be substantially different from the existing poles that currently line Montauk Highway directly in front of the windmill. Therefore, the proposed transmission line would not significantly alter the existing character of the area surrounding the windmill and would not result in any significant adverse visual impact to the Water Mill Village Green.

Windward Way Park. Windward Way Park is located south of Windward Way in the Village of Southampton. The park is located 0.3 miles west of the Southampton Substation along the LIRR tracks. It currently has full views of the tracks and partial views of the substation. Although the substation portion of the Montauk Highway Alternative would be partially visible from this location, the proposed transmission lines would not extend as far west as the park. The Montauk Highway Alternative would not significantly alter the character of the existing views of train tracks and transmission lines. Therefore, the Montauk Highway Alternative would not result in any significant adverse visual impacts to Windward Way Park.

Other Locally Significant Resources

Railroad Corridor. The Long Island Rail Road Corridor runs east-west through the study area. There are also two train stations in downtown Southampton and Bridgehampton. The Montauk Highway Alternative would be briefly visible to train passengers as it crossed the railroad tracks once in downtown Southampton and then again in Bridgehampton. Views of transmission lines from these locations would be so brief, that they would not interrupt views of any scenic vistas or historic resources. Therefore, the Montauk Highway Alternative is not expected to adversely affect views from the Long Island Rail Road.

Mill Pond. Mill Pond is located near Water Mill. The Montauk Highway Alternative would traverse a small inlet in the southern portion of the pond that separates the pond from Mecox Bay. Due to the curvature of the inlet, and existing vegetation and residential development surrounding the pond, views of the transmission lines would be obstructed. Any potential views of the transmission lines would be limited as they would blend with the surrounding tree cover. Therefore, the Montauk Highway Alternative would not result in any significant adverse visual impacts.

Conclusion

Of the 106 visual resources listed in Table 17-16, the proposed poles associated with the Montauk Highway Alternative would be visible or potentially visible from 39 resources. At those locations where the Montauk Highway Alternative would be visible or potentially visible,

this alternative would not result in any significant adverse visual impacts. Similar to the Direct Route Alternative, with the Montauk Highway Alternative, residents and visitors to the area would not experience a significant change in the visual character of the area.

ARCHAEOLOGICAL RESOURCES

ARCHAEOLOGICAL SENSTIVITY

As described in Chapter 7, "Archaeological Resources," the Institute for ILIA has conducted a Stage 1A archaeological survey for the Montauk Highway Alternative. The Montauk Highway Alternative, similar to the Direct Route Alternative, was found by the Stage 1A survey to possess moderate sensitivity for prehistoric and historic-period archaeological resources.

POTENTIAL IMPACTS OF THE MONTAUK HIGHWAY ALTERNATIVE

Based on the results of the Stage 1A survey, if the Montauk Highway Alternative were to be selected, a Phase 1B Archaeological Survey (i.e., subsurface testing) would be necessary in advance of construction to determine if archaeological resources are present in the study area. If any such resources are identified, additional testing may be necessary to determine if they meet the eligibility requirements for listing on the S/NR. Adverse effects, which generally occur where eligible resources are located in areas that will be affected by project actions, such as excavation, construction, or the storage of heavy machinery or supplies, would be mitigated either through avoidance, project redesign, or completion of a data recovery designed in consultation with the OPRHP.

Consequently, the Montauk Highway Alternative, similar to the Direct Route Alternative, would not result in significant adverse impacts in terms of archaeological resources.

HISTORIC RESOURCES

PREVIOUSLY IDENTIFIED HISTORIC RESOURCES

Eight known historic resources are located in the study area for this alternative, including two historic districts and six individual historic resources. They are:

- ***North Main Street Historic District*** (S/NR-Listed; Village of Southampton-designated) (described in Chapter 8 "Historic Resources" and shown in Appendix D, as Resource NMHD on Figure D-1a).
- ***Southampton Village Historic District & Expansion*** (S/NR-Listed; Village of Southampton-designated excluding Expansion) (described in Chapter 8 "Historic Resources" and shown in Appendix D, as Resource NMHD on Figure D-1a).
- The ***Water Mill*** at 41 Old Mill Road (S/NR-Listed; Town of Southampton-designated) (described above under LIRR Route Alternative) (see Appendix D: Table D-1; Figure D-1b, Resource 1; and Figure D-32, Photo 3).
- ***The Windmill at Water Mill (Corwith Windmill)*** (S/NR-Listed) (described above under LIRR Route Alternative) (see Appendix D: Table D-1; Figure D-1b, Resource 2; and Figure D-39, Photo 28).

- ***The Bridgehampton Historical Society (the Corwith House)*** (S/NR-Eligible), is located at 2368 Montauk Highway in the village of Bridgehampton (see Appendix D: Table D-1; Figure D-1c, Resource 3; and Figure D-47, Photo 14). Built ca. 1840 for William Corwith (1791-1882) is a five-bay side-gable Greek Revival-style house, with brick end chimneys; clad in wood shingles.
- ***The Bridgehampton Presbyterian Church*** (S/NR-Eligible), at 2429 Montauk Highway in the village of Bridgehampton, is a Greek Revival-style church, constructed in 1842 and thought to be designed by Nathaniel Rogers (see Appendix D: Table D-1; Figure D-1c, Resource 4; and Figure D-70, Photo 104). The wood clapboard-clad structure has Ionic pilasters, pointed-arch windows, and retains its original spire.
- ***The Beebe Windmill*** (S/NR-Listed; Town of Southampton-designated) is located in the village of Bridgehampton on the southeast corner of Ocean Avenue and Oak Street (a.k.a. Hildreth Lane) (see Appendix D: Table D-1; Figure D-1c, Resource 5; and Figure D-67, Photo 96). The windmill was constructed for Lester Beebe in Sag Harbor in 1820, and was moved to Bridgehampton in 1837. The mill was moved twice more within Bridgehampton before being situated in its current location in 1935 on property that was then part of the Berwind Estate.
- ***The Captain Nathaniel Rogers House (a.k.a. the Hampton House; a.k.a. the Hopping House)*** (S/NR-Listed; Town of Southampton-designated) is located at 2539 Montauk Highway on the southeast corner of Bridgehampton village's main intersection (see Appendix D: Table D-1; Figure D-1c, Resource 6; and Figure D-66, Photo 92). It is a two-story wood-frame Greek Revival-style mansion. Full-height Ionic columns distinguish the front façade. It was constructed in 1842 for Nathaniel Rogers, and was later run as the Hampton House, a first-class hotel and boarding house.

POTENTIAL HISTORIC RESOURCES

Sixty (60) individual potential historic resources, two (2) potential historic districts, and one (1) potential thematic grouping have been identified in the study area for this alternative. Further information on these potential historic resources is provided in Appendix D, including tables listing the resources (Tables D-2, D-3, and D-5), a map showing the locations of the resources (Figures D-1 through D-3), and photographs and brief descriptions of the resources (Figures D-4 through D-80).

Potential historic districts located in the study area for this alternative include:

- ***Water Mill Historic District*** (described in the Long Island Rail Road Alternative section above; also see Appendix D: Table D-3; Figure D-1b, Resource WMHD; and Figures D-32 through D-41).
- ***Bridgehampton Historic District*** (described in the Long Island Rail Road Alternative section above; also see Appendix D: Table D-5; Figure D-1c, Resource BHHD; and Figures D-44 through D-80).

The study area for this alternative also contains resources contributing to the ***Potato Barn Thematic Grouping*** (described in Chapter 8 "Historic Resources") (see Appendix D, Table D-2 [contributing resources are indicated with an asterisk]; photos and brief descriptions of the resources are also provided in Appendix D).

POTENTIAL IMPACTS OF THE MONTAUK HIGHWAY ALTERNATIVE

Direct Impacts

The Montauk Highway Alternative would not be expected to directly impact historic resources. The proposed transmission line would run directly through the North Main Street Historic District (S/NR-Listed; Village of Southampton-designated) along the railroad right-of-way and the Bridgehampton Historic District (potential historic district) along Montauk Highway and the Bridgehampton-Sag Harbor Turnpike. In addition, multiple individual historic resources, one additional historic district, and a thematic nomination, are located in the study area. Installation of the new transmission line would not result in the demolition, physical destruction, or alteration of historic resources.

In order to ensure that construction activities associated with the installation of the transmission line would not cause inadvertent physical impacts to adjacent historic resources, LIPA would prepare and implement a CPP in consultation with OPRHP for any architectural resources in close proximity to the Montauk Highway Alternative construction.

Indirect Impacts

Where the transmission line is proposed overhead, including the small distance were there are no poles, the project would result in changes to the height, size, and appearance of the poles along the transmission line route. However, this change is expected to be minimal. With some exceptions, the proposed poles would replace existing poles and would be spaced at the same intervals as the existing poles. Furthermore, the new poles would be only 13-18 feet taller than the existing poles and 6 inches thicker in diameter at the base than the existing poles, and would be constructed of the same material (wood) as the existing poles. Therefore, there would be no significant change in visual character and the settings of the resources, which presently exist in context with the existing overhead transmission lines, would not be substantially altered. Therefore, the Montauk Highway Alternative would not adversely impact visual, audible, or atmospheric elements to a resource's setting, nor would it eliminate publicly accessible views to the resource.

At the end of each underground cable segment, an underground to overhead transition riser pole would be installed where transitions are necessary. These wood riser poles are similar in appearance to the existing and the proposed poles, but would require guy wires from the top of each riser pole, which would run to the ground, about 25 to 40 feet from the pole (see Chapter 6, "Visual Resources," Figure 6-5). The proposed locations of these riser poles have not yet been identified. LIPA would consult with OPRHP and the Town and Village of Southampton, as appropriate, to identify sites, which would minimize and eliminate the potential for significant adverse impacts to historic resources from the riser poles.

NATURAL RESOURCES

EXISTING CONDITIONS

Natural Resources Survey and Site Assessment

Much of the Montauk Highway Alternative consists primarily of "terrestrial cultural" vegetation cover where the majority of the natural communities have been created and maintained by humans. The study area consists primarily of a mixture of residential, commercial and

agricultural land uses and some areas that have reverted to successional shrub/scrub or woodlands. Very few unmodified natural communities exist within the study area directly adjacent to the Montauk Highway Alternative, although communities with higher ecological value do occur nearby, i.e. wetland areas and the Long Pond Greenbelt.

That portion of the study area within the hamlets of Bridgehampton and Water Mill are comprised largely of developed impervious areas and open ornamental areas consisting of planted and maintained street trees located between sidewalks and the street. The size of these trees ranges from 3 inches to approximately 60 inches dbh. In many cases, trees are located directly beneath existing power distribution lines. Residential portions of the corridor have large trees bordering lawns at the street or sidewalk edge. Many of these residential areas are heavily landscaped, often with tall hedgerows of California privet within or near the study area. In some cases, homes are located close to the street edge.

Between more densely populated hamlet centers, open-ornamental residential and commercial areas are intermixed with expanses of farmland. Particularly, from Flying Point Road to Snake Hollow Road, there is a mixture of developed/open ornamental areas that are maintained by businesses. Intermixed in this stretch, are large expanses of active agriculture fields with farm stands and nurseries that border the study area.

Small pockets of un-maintained hedgerow and roadside thicket often separate the different land use types mentioned above within the study area. These areas are nearly absent in town centers and in the residential area bordering them. The majority of these un-maintained hedgerow and roadside thicket areas can be found on Montauk Highway between Rose Hill Road and Snake Hollow Road. Here some landscaped areas, homes, and businesses are present, but pockets of natural areas are larger and occur more frequently than in other areas of the Montauk Highway project area. This portion of the Montauk Highway Alternative is the least developed and has a mixture of forest, un-maintained open areas, and roadside thicket communities predominately comprised of non-native or early successional trees, shrubs, grasses, and forbs.

The second wetland is located just before Hayground Road on the eastern branch of Hayground Cove. From Montauk Highway, only a culvert densely covered with roadside thicket is visible. To the south, beyond the study area, dense impassible roadside thicket appears to dominate.

David Whites Lane to CR 39A (LIRR tracks)

This section directly can be characterized as roadside thicket with pockets of successional field. The roadside thicket consists of sumac, black cherry, and sassafras trees with a heavy bay berry shrub layer. Within the roadside thicket, there are patches where the canopy is dominated by one species. For instance, a large patch of sassafras dominates the canopy on the north side just east of David Whites Lane. Red cedar, goldenrods, yarrow, knapweeds, milkweed, and a variety of grass species are common to the pockets of successional field.

CR 39A from LIRR to intersection of Montauk Highway (RT27)

This section was not field surveyed by foot due to changes in the project route that occurred after the field visits had commenced. However, the AKRF field survey team did drive this section to reach other project areas and can generally classify this section based on memory and aerial photos.

Both sides of the road in this section can be described as containing open-landscaped vegetation cover types with large sections of developed/impervious land cover where businesses have constructed road-fronting parking lots. Medians separating the road from the parking lots are

vegetated with ornamental plants commonly used for landscaping projects in the area. In some areas, small patches of roadside thicket exist between business properties.

Montauk Highway: Flying Point Road to Head of Pond Road

The north and south sides of this segment can be characterized as open ornamental and mowed roadside areas in front of businesses. Impervious surface cover is prevalent. In these areas ornamental plantings include trees 30 inches or greater in diameter. Sycamore maple, red maple, Norway maple, and Norway spruce are common. Some areas located along this stretch consist of small patches of forested thicket. In addition, there are both active agriculture fields and overgrown open fields along this stretch. Poles are located on the south side for the majority of this stretch.

Montauk Highway/Cobb Road east to Deerfield Pond Road

This segment traverses the hamlet of Water Mill where Montauk Highway crosses over the Mill Pond inlet. On the north side of Montauk Highway a privet separates the sidewalk from a slope leading to Mill Pond occupied by Norway maple and locust. Small patches of roadside thicket border the existing distribution line poles.

This segment can be characterized as open-landscaped and includes trees 20 inches or greater in diameter as street/ornamental shade trees, including Norway maple, sycamore maple, and black locust. The land cover type in Water Mill includes a high percentage of impervious surfaces with small landscaped areas.

At the intersection of Little Cobb Road and Montauk Highway, the existing distribution line poles switch from the south to the north side of the road.

Montauk Highway: Rose Road east to Snake Hollow Road

The south side of Montauk Highway at Rose Road to Snake Hollow Road has the least amount of development of the Montauk Highway Alternative survey area. This section of the highway can be characterized by a mixture of forested areas, successional fields, road side thicket, wetlands, and active agricultural fields. Here some landscaped areas, homes, and businesses are present, but pockets of natural areas are larger and occur more frequently than in other areas of Montauk Highway project area. Overall, species composition for the area resembles that of other stretches of the project area.

Montauk Highway crosses two wetland areas within this segment. Both wetlands are tributary to Hayground Cove. Culverts convey surface water from forested wetland areas north of Montauk Highway to Hayground Cove and Mecox Bay to the south.

Montauk Highway: Snake Hollow Road to Bridgehampton Sag Harbor Turnpike (Bridgehampton)

This stretch of the Montauk Highway Alternative contains street trees ranging from 2 inches to 24 inches in diameter. Ornamental landscaping occurs where lawns are present. California privet often provides a barrier between the sidewalk and the lawns. The same selection of street trees has been planted in this section as in other areas of Montauk Highway.

Bridgehampton Sag Harbor Turnpike to LIRR

This section of the Montauk Highway Alternative can be classified as landscaped residential areas with patches of forest and un-maintained roadside thicket. Woody species within the

forested sections differ from those on Montauk Highway and are comprised of scarlet, white, and pin oaks and sassafras in the overstory. The herbaceous layer resembles that of other areas of the Montauk Highway Alternative. Some large trees (30 inches or greater in diameter) in both landscaped and forested areas fall within the disturbance area of this segment

Wetland Resources

The Montauk Highway Alternative passes adjacent to several wetlands mapped by the NYSDEC and NWI. As shown in Figure 17-13, these include freshwater forested, scrub shrub, emergent and open water wetlands associated with Mill Pond (in the vicinity of Old Mill Road and Little Cobb Road) mapped as New York State wetland SA-9; streams entering Hayground Cove (in the vicinity of Scuttle Hole Road) mapped as New York State wetlands SA-9 and SA-89; Little Long Pond/Kellis Pond (in the vicinity of Snake Hollow Road and Newlight Lane) mapped as New York State wetland SA-7 and SA-5; wetlands at the southern end of Bridgehampton Sag Harbor Turnpike mapped as New York State Wetland SA-43; and wetlands just south of the proposed Bridgehampton Substation Expansion Area mapped as New York State Wetland SA-28. Those wetlands adjacent to the Montauk Highway Alternative within the Mill Pond and Hayground Cove regions are tidally influenced, freshwater wetlands conveyed beneath the roadway by culverts. Both are tributary to Mecox Bay and the Atlantic Ocean.

Wetlands adjacent to Montauk Highway and adjacent to Bridgehampton Sag Harbor Turnpike, at the eastern end of the Montauk Highway Alternative, vary in their distance to the roadway. Areas showing a predominance of hydrophytic (wetland) vegetation do approach the roadway at a limited number of locations. However, existing poles for the current overhead transmission lines along the Highway and Turnpike are located immediately adjacent to the roadway pavement and typically within maintained (mowed) upland roadway berm. As such, the vast majority of existing distribution line poles along the Montauk Highway Alternative are located outside of wetland areas based on August 2007 site inspection.

Threatened and Endangered Species

A freshwater pond - Kellis Pond - occurs approximately 400 feet to the south of the Montauk Highway Alternative. The New York State “endangered” creeping St. John’s wort (Hypericum adpressum) is documented here from historic (1929) records of occurrence. This plant was not seen in the footprint of disturbance adjacent to the Montauk Highway Alternative during August 2007 site inspection.

The Montauk Highway Alternative passes in close proximity to areas mapped as “coastal plain pond shore” community by the NYNHP in the vicinity of the intersection of the Route 27 and the Bridgehampton Sag Harbor Turnpike. As described in detail in Chapter 9, “Natural Resources,” this is a rare community known to contain several New York State-listed plant and animal species. The plants identified within this habitat in proximity to the Montauk Highway Alternative include rose coreopsis (Coreopsis rosea), creeping St. John’s wort (Hypericum adpressum), clustered bluets (Oldenlandia uniflora), opelousa smartweed (Polygonum hydropiperoides var. opelousanum), long-beaked beakrush (Rhynchospora scirpoides), and toothcup (Rotala romasior). These are predominantly wetland plants not found in disturbed, roadside habitats. None were seen within the proposed footprint of disturbance during August 2007 field inspections.

Records of occurrences of additional plants and animals listed by the NYNHP are known for the Long Pond Greenbelt habitats, located east of the Bridgehampton Sag Harbor Turnpike, as

explained in further detail in Chapter 9, "Natural Resources." These are expected to occur well away from any potential areas of disturbance adjacent to the Montauk Highway Alternative.

Lastly, all of the four Alternative Routes include the construction of a Bridgehampton Substation Expansion. Two listed wetland plants - creeping St. John's wort (Hypericum adpressum) and opelousa smartweed (Polygonum hydropiperoides var. opelousanum) have been identified in the region in proximity to the substation expansion area. Neither plant was identified within the footprint of disturbance of the proposed substation expansion during August 2007 site inspection.

POTENTIAL IMPACTS OF THE MONTAUK HIGHWAY ALTERNATIVE

Habitat and Natural Resources

The Montauk Highway Alternative is characterized by landscaped and maintained vegetation, consisting of ornamental trees and herbaceous vegetation, hedgerows, and lawns offering minimal resources for wildlife (i.e., birds, mammals, reptiles and amphibians). The relatively small disturbance zone (~10 feet or less on either side of existing overhead line and within existing paved roadway for underground line placement) would result in little or no change to the existing terrestrial habitats, and is not likely to result in an overall degradation of critical habitat for commonly occurring species.

Mature trees bordering the corridor may be subject to removal of the tree and/or branches overhanging existing lines. The street trees would be inspected by a licensed arborist or trained horticulturalist before final project design to assess which trees would require trimming or other special protection provisions. These provisions for special construction techniques would be integrated into the Contract Bid documents. Any special conditions would be closely observed and best management practices would be integrated into the project design. Conservation strategies to reduce impact to wildlife in upland areas, such as design to maximize connectivity between forested uplands and wetlands, would be implemented during project installation. Maintenance for the overhead lines would consist of tree trimming every 3 to 7 years. None of the activities are expected to have a significant adverse impact.

Construction of the Montauk Highway Alternative would occur primarily in previously disturbed areas (i.e., along open-ornamental habitats, roadways). This project would not represent a substantial additive impact on the connectivity of adjacent ecological communities. Therefore, the proposed project, whether constructed as overhead lines or underground, would not constitute a new or detrimental barrier to wildlife habitats or wildlife movements and would not have any significant adverse impacts.

Threatened and Endangered Species

The Montauk Highway Alternative passes in close proximity to areas mapped as "coastal plain pond shore" community by the NYNHP adjacent to the Bridgehampton Sag Harbor Turnpike. Several New York State-listed plant species are known to occur here. These are predominantly wetland plants not found in disturbed, roadside habitats. None were observed within the proposed footprint of disturbance during August 2007 field inspections. Nevertheless, these wetland areas occur in close proximity to the roadway adjacent to the Montauk Highway Alternative.

The New York State endangered Eastern tiger salamander breeds in ephemeral wetlands and disperses through upland forested habitat. It is known to occur east of the Bridgehampton Sag Harbor Turnpike. The existing roadway acts as a barrier to Eastern tiger salamander movement. Installation of the proposed project along the Montauk Highway Alternative is not expected to produce a negative impact to Eastern tiger salamander habitat directly, either by wetland or upland forest lost, or indirectly by acting as a new barrier to animal movement and migration.

Animal exclusion fencing in proximity to known or suspected eastern tiger salamander breeding areas would be used, which would avoid any significant adverse impacts on the eastern tiger salamander. Supplemental surveys for Eastern tiger salamander habitat would be conducted if this alternative is selected. If suitable habitat is found, the route would be adjusted to avoid that habitat. Therefore, no significant adverse impacts to threatened or endangered species are expected.

Wetland Resources

Areas of mapped wetlands in proximity to the Montauk Highway Alternative that may require New York State and federal wetland permits include:

- Mill Pond/Mill Creek and northern reaches of Hayground Cove (SA-9)
- Little Long Pond (SA-5)
- Kellis Pond (SA-7)

The Army Corps of Engineers and NYSDEC regulate disturbances to freshwater wetlands. Work near wetlands would be done in accordance with conditions of a NYSDEC General Permit issued to Keyspan. The General Permit authorizes KeySpan to perform minor utility install, repair, and maintenance activities in the adjacent areas of tidal wetlands, freshwater wetlands, and Wild and Scenic Rivers. These activities include the installation of poles with overhead cables, and trenching in the adjacent area. The General Permit also authorizes drilling under wetlands as long as the entry and exit points are in the adjacent area and the wetlands are not disturbed. KeySpan is allowed to use this General Permit for LIPA projects. LIPA would coordinate with NYSDEC on wetland and rare species–related issues. Special precautions during the removal of the existing poles and replacement of poles near wetland areas would avoid any impacts to sensitive ecological habitats and associated species. No new poles would be installed within wetlands, and the new poles would be no closer to wetland areas than the existing poles. Wetland impacts would be avoided by siting transmission line poles outside of regulated areas. Underground installation of the transmission line would avoid wetland impacts by directional drilling to avoid any activities within the wetlands. Therefore, no significant adverse impacts would occur to wetlands.

HAZARDOUS MATERIALS

INTRODUCTION

This section assesses the possibility that hazardous materials may be found in soil or groundwater on-site and evaluates the potential impacts associated with the installation of power lines along the Montauk Highway. To identify potential sources of hazardous materials, a limited Phase I ESA was performed in August 2007. The scope of the limited Phase I ESA included an environmental database search of categories that are consistent with current industry standards, including ASTM E1527-05 (though search radii for off-site properties were modified

given the extent of the study area and its location). The hazardous materials study included the following: a review of available records and historical maps and aerial photographs to determine previous on-site and adjacent land uses, a site reconnaissance and general characterization from public rights-of-way, evaluation of regulatory compliance, and a determination of the need for further investigations to identify and quantify potential contamination and related liabilities. Some areas of the corridor were inaccessible from the public rights-of-way at the time of the Phase I site inspection.

EXISTING CONDITIONS

Results of the limited Phase I ESA are summarized in Table F-5, provided in Appendix F. The "Village underground option" being considered for the western end of the route is summarized in Table F-2 provided in Appendix F. At the time of the site visit, the project site consisted of an approximately 9.1 miles long corridor of mixed-use land along the LIRR tracks. The project site comprises a combination of agricultural land, residential dwellings, the Sag Harbor Landfill at the eastern end of the Montauk Route Alternative, and commercial facilities including dry cleaners, automotive repair facilities, and gasoline filling stations. In addition, LIPA substations are present at both ends of the subject site (the Southampton and Bridgehampton Substations). The woodland area north-adjacent to the Bridgehampton Substation is designated as part of an active shooting range/area where shells and casings were observed on the ground.

Historic aerial photographs from 1955, 1966, 1978, 1984, and 1996 were reviewed to determine historic on-site and surrounding area usage. The photographs indicated that in 1955, the Montauk Route Alternative corridor was primarily agricultural and residential in nature. Commercial properties were present at the western end of the Montauk Route Alternative as early as 1955. The Sag Harbor Landfill was present as early as 1955. Increasingly more commercial facilities were present in the later photographs, including automotive repair facilities and gasoline filling stations.

Historic Sanborn Fire Insurance Maps were reviewed to determine historic on-site and surrounding area usage. Maps were available for a portion of Southampton from 1895, 1902, 1909, 1926, 1932, 1945, and 1964. Maps were available for a portion of Bridgehampton for 1920, 1931, and 1947. Therefore, only a portion of the route was identified on the available maps. The maps indicated that the Montauk Route Alternative corridor was primarily agricultural and residential in nature. A coal yard at the eastern end of the Montauk Route Alternative was present as early as 1895. A coal yard at the western end of the Montauk Route Alternative was present as early as 1931. A company producing fertilizer also appeared in 1931 at the western end of the Montauk Route Alternative. By 1926, more commercial properties were present at the western end of the Montauk Route Alternative, including automotive repair facilities and gasoline filling stations.

A review of regulatory records indicated that the Montauk Route Alternative corridor contains numerous Hazardous Waste Generators / Transporters, Hazardous Material Spills, underground storage tanks (USTs), and Petroleum Bulk Storage Sites, which are summarized in Table F-5, provided in Appendix F. The complete Toxics Targeting Environmental Report is included in Appendix F. The ESA identified the following potential classes/sources of contaminated materials at various sites in the Montauk Route Alternative corridor:

- *Volatile organic compounds (VOCs).*
- *Semivolatile organic compounds (SVOCs).*

- *Polychlorinated biphenyls (PCBs).*
- *Metals.*
- *Pesticides, herbicides, and rodenticides.*
- *Fuel oil and gasoline storage tanks.*
- *Historic coal yards.*
- *Fill materials of unknown origin.*
- *Asbestos.*
- *Lead-based paint.*
- *Rail Road Tracks.*

A description of these sources or contaminated materials is provided in Chapter 10, "Hazardous Materials."

POTENTIAL IMPACTS OF THE MONTAUK HIGHWAY ALTERNATIVE

Given the history of this area, extensive contamination of the soil or the groundwater is unlikely. Nevertheless, localized pockets of contamination could exist within the Direct Route Alternative corridor. Excavation and construction activities could disturb these hazardous materials and increase pathways for human exposure. In the areas where power lines would be installed underground, the need for soil disturbance would be greater. Therefore, the potential for exposure to subsurface contaminants in these areas would also be greater. The potential for adverse impacts due to the presence of subsurface contamination would be avoided by ensuring that construction activities are performed in accordance with outlined for the Direct Route Alternative in Chapter 10, "Hazardous Materials."

With the implementation of these protocols, no significant adverse impacts related to hazardous materials would result from demolition and/or construction activities related to the Montauk Highway Alternative. Following construction, there would be no further potential for significant adverse impacts.

INFRASTRUCTURE

EXISTING CONDITIONS

There is an existing distribution line located along most of the Montauk Highway Alternative. With the exception of stormwater runoff from the existing substations, the Montauk Highway Alternative location does not currently utilize water supply, solid waste, or energy. Water supply treatment, solid waste, energy, and emergency management in the area have been described in detail in Chapter 11, "Infrastructure," and are applicable to the Montauk Highway Alternative study area.

Various portions of the Montauk Highway Alternative in the vicinity of Mill Pond, Mecox Bay, Hayground Cove, Little Long Pond, and Kellis Pond are located within hurricane storm surge inundation zones 1 through 4 (see Figure 17-17). The zones correspond to hurricane categories, which are defined in Chapter 11, "Infrastructure," of this EIS and indicate the areas that are expected to experience flooding during a hurricane event. As shown in Figure 17-17, the Montauk Highway Alternative Route would be flooded to various degrees, within discrete areas between Cobb and Station Roads and between Rose Hill and Hayground Roads, depending on

the hurricane event (i.e., Category 1 to Category 4). Montauk Highway has been designated as a critical corridor for regional evacuation during a natural disaster event requiring evacuation, see Figure 17-18. Additionally, along Montauk Highway there is a designated emergency shelter located at 585 Bridgehampton Sag Harbor Turnpike (Bridgehampton Community Center). See Chapter 11, "Infrastructure," for more detail on critical corridors and emergency shelters.

POTENTIAL IMPACTS OF THE MONTAUK HIGHWAY ALTERNATIVE

The Montauk Highway Alternative would not create an additional demand on the existing water supply system, and individual septic systems. This alternative, similar to all alternative routes, would generate minimal solid waste, which would be handled by commercial carters and therefore, would not have significant effect on solid waste management within the Town.

This alternative would, however, provide additional energy to the area, which would have a positive effect on energy supply.

The Montauk Highway Alternative would be constructed along an identified critical corridor that may be used during any emergency situation where evacuation is ordered. There is potential for a severe storm to cause damage to the new poles that could limit access along the roadway. This type of event may potentially create an adverse impact to emergency management in the region by restricting evacuation. However, as discussed in Chapter 11, "Infrastructure," all structures would be constructed with materials that would be able to withstand a Category 3 hurricane, an improvement over existing conditions. Furthermore, LIPA has a designated emergency response system in place for situations in which emergency management issues may arise. Although the route would be located along an identified critical corridor (Montauk Highway), neighboring roadways would also likely be utilized for evacuation purposes. In fact, neighboring roadways are located within the storm surge zones in less frequency than Montauk Highway. Therefore, the Montauk Highway Alternative, similar to the Direct Route Alternative, is not expected to result in significant adverse infrastructure impacts.

GROUNDWATER AND SURFACE WATER RESOURCES

EXISTING CONDITIONS

Chapter 12, "Groundwater and Surface Water Resources," provides an in depth description of groundwater conditions within this area of the Town of Southampton and thus, should be referred to in relation to area wide conditions. This section only provides information on groundwater and surface water conditions where they differ from those that were presented in Chapter 12, "Groundwater and Surface Water Resources."

Geologic Conditions

The regional geologic conditions are described in detail in Chapter 12, "Groundwater and Surface Water Resources." As shown on Figure 17-19, the geological cross-section for the area in the vicinity of the Montauk Highway Alternative is similar to the LIRR Route Alternative.

Soils

The dominant soil class found along the Montauk Highway Alternative is BgA, which comprises about 36 percent of the route. BgA soils are primarily found along the southern and central portions of the route as well as along the eastern segment, south of the LIRR tracks. Other

dominant soils include PlA, HaA, HaB, PlB, and He. Table 17-17 presents the soils found along the Montauk Highway Alternative.

Table 17-17
Soils Along the Montauk Highway Alternative

Soil Class	Soil Description
At	Atsion sand
BgA	Bridgehampton silt loam, 0-2 percent slopes
BgB	Bridgehampton silt loam, 2-6 percent slopes
Bm	Bridgehampton silt loam, graded
CpA	Carver and Plymouth sands, 0-3 percent slopes
CpC	Carver and Plymouth sands, 3-15 percent slopes
CpE	Carver and Plymouth sands, 15-35 percent slopes
CuB	Cut and fill land, gently sloping
HaA	Haven loam, 0-2 percent slopes
HaB	Haven loam, 2-6 percent slopes
HaC	Haven loam, 6-12 percent slopes
He	Haven loam, thick surface layer
PlA	Plymouth loamy sand, 0-3 percent slopes
PlB	Plymouth loamy sand, 3-8 percent slopes
RdA	Riverhead sandy loam, 0-3 percent slopes
RdB	Riverhead sandy loam, 3-8 percent slopes
RhB	Riverhead and Haven soils, graded, 0 to 8 percent slopes
Sources:	*Soil Survey of Suffolk County*, New York, USDA Soil Conservation Service, April 1975.

Groundwater Conditions

Similar to the Direct Route Alternative, Existing Line, and the LIRR Route Alternatives, the Montauk Highway Alternative is located south of the groundwater divide. Topography along the Montauk Highway Alternative ranges from 10 to 100 feet above MSL, see Figure 17-20. According to the SCWA, the water table in the vicinity of the Montauk Highway Alternative ranges from 5 to 20 feet above MSL. Therefore, the approximate depth to groundwater ranges from 5 to 80 feet above MSL.

The Montauk Highway Alternative is not located within the South Fork SGPA.

Surface Waters

There are numerous surface water bodies and wetlands in the vicinity of the LIRR Route Alternative including Mill Pond, Long Pond, Little Long Pond, Kellis Pond, Crooked Pond and Long Pond. A detailed discussion on wetlands and surface waters is provided above under Natural Resources.

POTENTIAL IMPACTS OF THE MONTAUK HIGHWAY ALTERNATIVE

Generally, most of the soils found along the Montauk Highway Alternative have slight limitations with regards to the construction of pipelines, paths and trails, streets and parking lots and home sites. However, there are soils present that have moderate to severe development limitations. As stated for the Direct Route and Existing Line Alternatives, moderate and severe

soil limitations do not in themselves create significant adverse environmental impacts but may require additional site preparation and engineering and cause a need for increased maintenance requirements.

Similar to the Direct Route Alternative, it is not expected that the Montauk Highway Alternative would have a significant adverse impact on geology, soils, and groundwater or surface water resources. Depending on the exact locations selected along the route, directional drilling may be required under some wetlands to avoid significant adverse impacts.

See Chapter 12, "Groundwater and Surface Water Resources," and Chapter 15, "Construction," for specific project elements regarding stormwater runoff and erosion control measures proposed as part of the project. Similar measures would be required for both the Direct Route and Montauk Highway Alternatives.

TRAFFIC/AIR QUALITY/NOISE

EXISTING CONDITIONS

Traffic Accident Data

As noted above, the 2004 Transportation Element includes a ranking of the 15 highest accident locations in the Town of Southampton, based on data collected between January 2002 and October 2003. Three of the 15 locations are within the vicinity of both the Montauk Highway and LIRR Route Alternatives. Table 17-12 above provides information regarding traffic crashes at these locations.

KeySpan's records of traffic accidents involving utility poles are described above under "Existing Line Alternative."

Tables G-5 and G-6 in Appendix G present accident data by type for major intersections and links in the vicinity of the Montauk Highway Alternative, as well as the LIRR Route Alternative, for the most recent 3-year period for which data is available from NYSDOT (July 1, 2004 – June 30, 2007). As noted in Table G-6, the accident recorded on Seven Ponds Towd Road from Lower Seven Ponds and Upper Seven Ponds Roads to Edge of Woods Road is not within the vicinity of the Montauk Highway Alternative. With the exception of this accident, all others occurred within the vicinity of both alternatives. The tables indicate a total of 257 accidents within the vicinity of the Montauk Highway Alternative during the analysis period, of which 136 occurred at intersections and 121 occurred on road segments between intersections. See "LIRR Route Alternative" above for analysis of NYSDOT accident data applicable to the Montauk Highway Alternative.

POTENTIAL IMPACTS OF THE MONTAUK HIGHWAY ALTERNATIVE

Traffic

The Montauk Highway Alternative would not affect traffic circulation, and the only new vehicle trips would be for periodic maintenance along the route. This small number of vehicle trips would not result in any significant adverse impacts. With the exception of one approximately 2,000-foot long area within Water Mill, existing distribution poles are located along the entire Montauk Highway Alternative. This alternative would generally replace preexisting distribution lines and therefore would not result in a substantial change in the proportion of traffic accidents

involving utility poles. Further, between 2004 and 2007, only a minor proportion (fewer than 2 percent) of accidents at major intersections and links in the vicinity of the Montauk Highway Alternative involved light supports/utility poles. Since the Montauk Highway Alternative would largely replace existing poles, it is anticipated that this alternative would not materially alter the proportion of accidents where lighting and/or utility poles are involved. The Montauk Highway Alternative would not have a significant adverse impact on public policies related to transportation and would not interfere with future development of new transportation projects. In the event of widening of Montauk Highway/NYS Route 27 between Flying Point Road (CR 39A) and Town Line Road, similar to all transportation improvement projects, it is expected that the appropriate agency would coordinate with LIPA before construction and installation of the project. Further, it is not expected that this road widening project would be under construction at the same time as the Montauk Highway Alternative. The foregoing conclusions would apply to the entire transmission line including portions that are aboveground or below ground.

Air Quality

The Montauk Highway Alternative would not involve the addition of any new stationary sources of emissions. Further, the new transmission line would maintain air quality, as it would help reduce use of combustion turbines on the East End. With regard to mobile source emissions, this alternative would not generate a significant number of new vehicle trips, as noted above, and therefore would not result in any significant adverse impacts on air quality.

Noise

The Montauk Highway Alternative would not involve the addition of new transformers at substations, nor would it involve the addition of any other new stationary sources of noise. This alternative would generate an inconsequential number of vehicle trips. Therefore, similar to the Direct Route Alternative, this alternative would not result in a significant increase in noise levels due to mobile or stationary sources.

ELECTRIC AND MAGNETIC FIELDS

See Chapter 14, "Electric and Magnetic Fields," for a complete discussion this issue. In general, similar to the Direct Route Alternative, long-term magnetic field exposures in nearby residences with the proposed 69 kV transmission line, with the Montauk Highway Alternative, would be expected to be much the same as they are now, well below New York State regulatory levels, and below levels that would most experts believe would pose any increase in health risk.

CONSTRUCTION

INTRODUCTION

Chapter 15, "Construction" provides a detailed description of the construction methods that would be used to install the new transmission lines. The same construction methods would be used for the Montauk Highway Alternative as for the Direct Route Alternative.

POTENTIAL IMPACTS OF THE MONTAUK HIGHWAY ALTERNATIVE

The potential impacts of the Montauk Highway Alternative would be similar to those for the Direct Route Alternative, except for traffic.

The traffic on the Montauk Highway is far greater than the traffic on the roadways that the Direct Route Alternative would traverse. It is likely that the traffic disruptions that are expected

to occur during construction of the Montauk Highway Alternative would affect more people than would the construction of the Direct Route Alternative. In addition, the traffic delays are expected to last longer.

More traffic control personnel would be needed during the construction period to minimize delays and more construction may occur during non-peak hours. In addition, the construction activity may be intensified with more crews working to shorten the construction period and cause fewer overall delays, although the delays may be longer. These delays are not considered to be significant adverse impacts because they are limited in duration and would occur only over a period of a few months.

Similar to the Direct Route Alternative, no significant adverse impacts are expected from the construction of the Montauk Highway Alternative.

ENVIRONMENTAL JUSTICE

DELINIATION OF STUDY AREA, IDENTIFICATION OF POTENTIAL ENVIRONMENTAL JUSTICE AREAS, AND ANALYSIS OF EXISTING ENVIRONMENTAL BURDENS

The study area for this EJ analysis was defined to include all census block groups substantially within one mile of the Montauk Highway Alternative corridor, or the area where any potential impacts resulting from the Montauk Highway Alternative could occur. Where census block groups were not substantially captured by the 1-mile study area, but included portions of the Montauk Highway Alternative corridor, those census block groups were also included in the analysis. As a result, the study area for this EJ analysis incorporates a substantially larger area than could actually be affected by the potential impacts of the Montauk Highway Alternative, but nevertheless serves as the basis for a conservative analysis. Figure 17-59 depicts the ten census block groups in the environmental justice study area for the Montauk Highway Alternative. These are the same as for the LIRR Route Alternative EJ study area, described above. As such, the same population and economic characteristics that applied to the LIRR Route Alternative EJ study area also apply to the Montauk Highway Alternative EJ study area.

CT 1907.04 BG 3 is the only census block group within the Montauk Highway Alternative EJ study area that is considered a potential community of concern for environmental justice, as shown in Figure 17-59. This block group includes a minority population totaling 41.7 percent (see Table 17-13).

Similarly, the same existing environmental burdens that applied to the LIRR Route Alternative EJ study area also apply to the Montauk Highway Alternative EJ study area. In summary, the study area is not considered to be overburdened by sources of pollution or types of uses similar to the one proposed.

ANALYSIS OF THE POTENTIAL FOR ADVERSE IMPACTS

The technical analyses included in this chapter analyze the potential impacts of the project alternatives, including the Montauk Highway Alternative, in combination with conditions expected in the surrounding area in the future without the project, including the existing environmental burdens presented above. These analyses therefore consider the cumulative, or combined, effects of the Montauk Highway Alternative together with the baseline condition, which includes other sources of pollution and similar facility types in the study area. This is

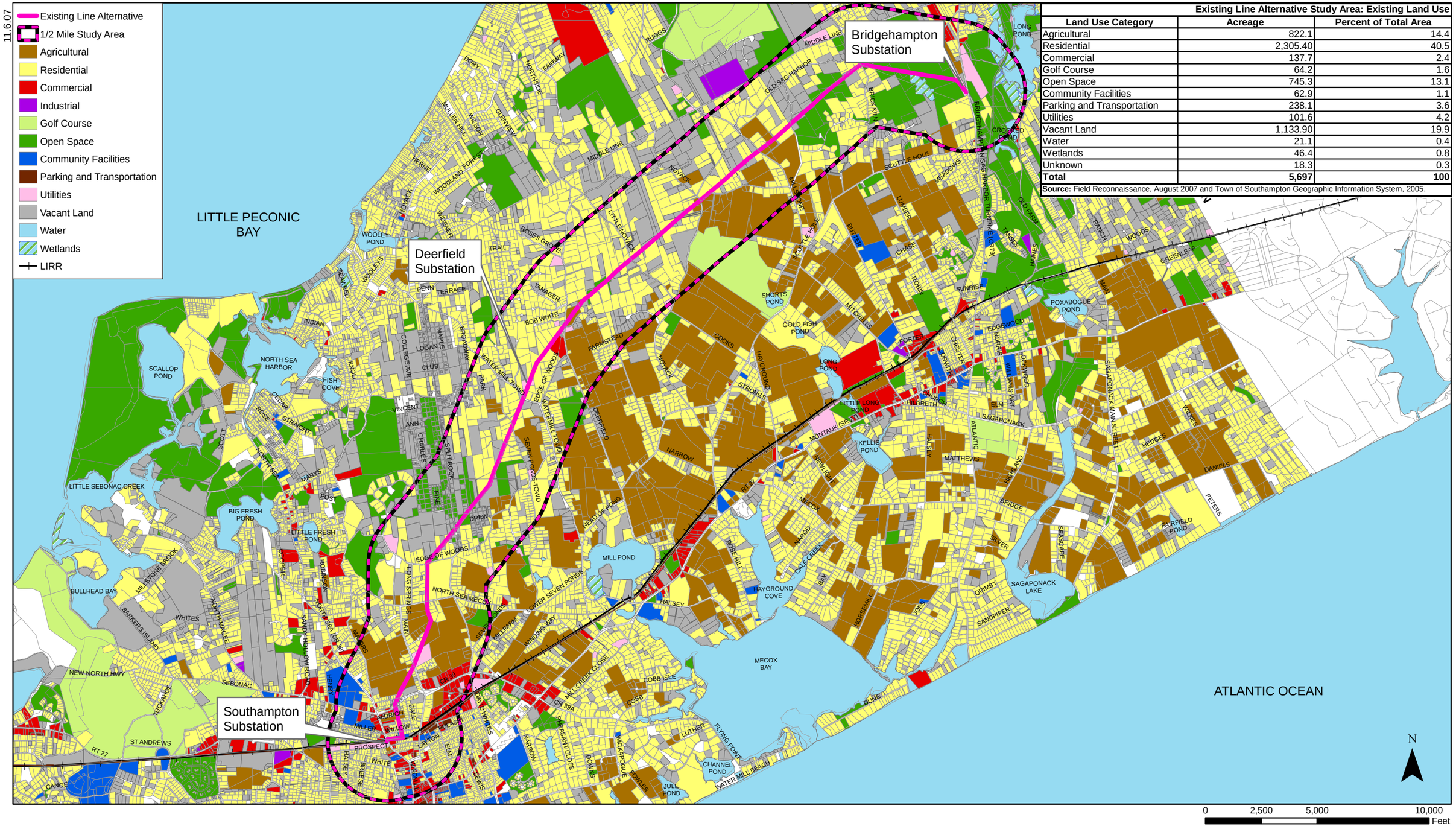
consistent with the requirements of NYSDEC's environmental justice policy, which notes that under existing regulations, NYSDEC must consider other sources of pollution or similar facility types in order to establish the baseline conditions against which project impacts will be assessed.

The analyses performed for all impact analysis areas demonstrated that there would not be any potential significant adverse impacts from operation or construction of the Montauk Highway Alternative. As discussed above, potential construction impacts related to hazardous materials would be avoided by following a series of safety protocols. Potential impacts associated with construction would be temporary and therefore are not considered significant. Moreover, mitigation measures would be in place to minimize these impacts. Therefore, the Montauk Highway Alternative would not pose any additional significant burden on the minority and low-income populations within the study area.

CONCLUSIONS ON DISPROPORTIONATE ADVERSE IMPACTS

In summary, the study area as a whole is not considered a potential environmental justice area. Approximately 84 and 95 percent of the study area is made up of non-minority and non-low-income populations, respectively. While the study area includes one minority community—CT 1907.04 BG 3 in the northeastern portion of the study area—this community would not be adversely affected by construction or operation of the Montauk Highway Alternative, based on a review of the technical analyses included in this chapter. As noted above, the Montauk Highway Alternative would not result in significant adverse impacts on the surrounding communities during construction or operation. This conclusion considers the potential for cumulative impacts from the Montauk Highway Alternative in conjunction with other similar facilities located in the area. Therefore, the Montauk Highway Alternative is not expected to result in any disproportionate significant adverse impacts on minority or low-income populations. Moreover, as discussed in Chapter 16, "Environmental Justice," the project includes an extensive public outreach program to the affected communities, including minority and low-income populations in the study area, providing these groups with ample opportunity to have any of their concerns addressed. ✷

11.6.07



Existing Line Alternative Study Area: Existing Land Use		
Land Use Category	**Acreage**	**Percent of Total Area**
Agricultural	822.1	14.4
Residential	2,305.40	40.5
Commercial	137.7	2.4
Golf Course	64.2	1.6
Open Space	745.3	13.1
Community Facilities	62.9	1.1
Parking and Transportation	238.1	3.6
Utilities	101.6	4.2
Vacant Land	1,133.90	19.9
Water	21.1	0.4
Wetlands	46.4	0.8
Unknown	18.3	0.3
Total	**5,697**	**100**

Source: Field Reconnaissance, August 2007 and Town of Southampton Geographic Information System, 2005.

Long Island Power Authority
Southampton to BridgehamptonTransmission Line

Existing Line Alternative
Exisiting Land Use
Figure 17-1

11.27.07

Existing Line Alternative
LIRR Route Alternative
Montauk Highway Alternative
Hamlet Boundaries
LIRR

Bridgehampton Substation
Deerfield Substation
Southampton Substation

LITTLE PECONIC BAY
NOYACK
WATERMILL
BRIDGEHAMPTON
SAGAPONACK
WAINSCOTT
TOWN OF EAST HAMPTON
NORTH SEA
TUCKAHOE
SOUTHAMPTON
ATLANTIC OCEAN

BRIDGEHAMPTON SAG HARBOR TURNPIKE (CR 79)
MONTAUK (SR 27)
RT 27
CR 39
CR 39A
OLD SAG HARBOR
MIDDLE LINE
SCUTTLE HOLE
MILLSTONE
LITTLE NOYACK
BRICK KILN
MEADOWS
LUMBER
BUTTER
CHASE
ROBIN
SUNRISE
TANSEY
HAWES
OLD FARM
TOPPINGS
SPRIG TREE
NORTHWEST
MERCHANTS
RANCH
WOODS
WAINSCOTT HARBOR
GREENLEAF
MAIN
KOLA
DENISE
LONG POND
CROOKED POND
POXABOGUE POND
SHORTS POND
GOLD FISH POND
MITCHELLS
FOSTER
CHESTER
CORWITH
EDGEWOOD
NORRIS
WILLIAMS WAY
LOCKWOOD
CHURCH
HILDRETH
ELM
SAGAPONACK
ATLANTIC
HALSEY
MATTHEWS
HIGHLAND
KELLIS POND
LITTLE LONG POND
NEWTOWN
SAGAPONACK MAIN STREET
WILKES
HEDGES
DANIELS
PETERS
FAIRFIELD POND
SEASCAPE
SILVER
BRIDGE
QUIMBY
SAGAPONACK LAKE
SANDPIPER
JOBS
HORSEMILL
BAY
CALF CREEK
NARROW
ROSE HILL
HAYGROUND COVE
MECOX
MECOX BAY
DUNE
MILL POND
HEAD OF POND
DEERFIELD
FARMSTEAD
COOKS
HAYGROUND
STRONGS
NARROW
SEVEN PONDS
LOWER SEVEN PONDS
MILLFARM
WINDING WAY
MILL CREEK CLOSE
COBB ISLE
COBB
LUTHER
FLYING POINT
WATER MILL
CHANNEL POND
JULE POND
PLEASANT CLOSE
DOWNS
WICKAPOGUE
FOWLER
LEWIS
WINDMILL
BREESE
WHITE
PROSPECT
ALDRICH
DALE
MILLER
WILLOW
PULASKI
LAYTON
ELM
DAVID WHITES
HALSEY
ST ANDREWS
NEW NORTH HWY
SEBONAC
TUCKAHOE
CANOE
WHITES
NORTH MAGEE
BARKERS ISLAND
BULLHEAD BAY
MILLSTONE BROOK
SANDY HOLLOW ROAD
NORTHSEA (CR 39)
MAJORS
MAIN
LONG SPRINGS
NORTH SEA MECOX
EDGE OF WOODS
COOPER
ROBINSON
HENRY
LITTLE SEBONAC CREEK
BIG FRESH POND
LITTLE FRESH POND
POST
MARYS
NORTH SEA
SCOTT
ROSE
CEDAR
STRAIGHT
SCALLOP POND
NORTH SEA HARBOR
FISH COVE
KNOLL
INDIAN
COLLEGE AVE
LOGAN
MAPLE
CLUB
BROADWAY
PARK
WATER MILL-TOWD
VINCENT
ANN
CHARLES
SPLIT ROCK
PINE
DREW
SEVEN PONDS-TOWD
EDGE OF WOODS
WATERMILL TOWD
WOOLEY POND
WOOLEY'S
SEAWEED
PENN
TERRACE
TRAIL
ROSES GROVE
TANAGER
BOB WHITE
WOODLAND FOREST
HERNE
NOYACK
WIDENER
MULLEN HILL
WILSON
GLENVIEW
DORY
NORTHSIDE
FAIRWAY
RUGGS
MIDDLE LINE
NOYACK

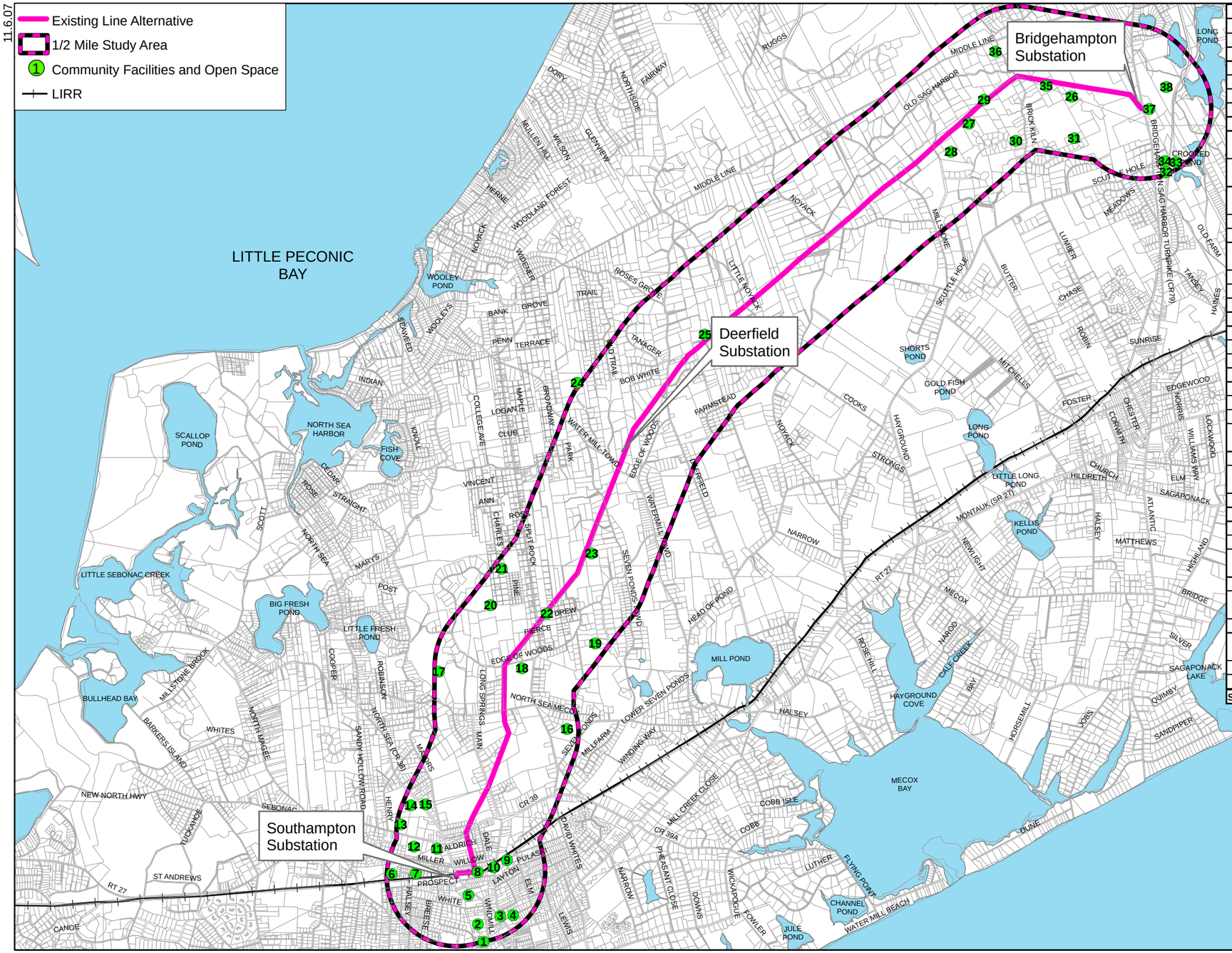
0 2,500 5,000 10,000 Feet

N

Long Island Power Authority
Southampton to BridgehamptonTransmission Line

Hamlet Boundaries
Figure 17-2

11.6.07



Existing Line Alternative - Community Facilities and Public Open Space		
No.	**Facility Name**	**Address**
1	Rogers Memorial Library	91 Coopers Farm Road
2	Southampton Village Police Department	151 Windmill Lane
3	North End Graveyard	North Sea Road
4	United Methodist Church of Southampton	160 Main Street
5	US Post Office	39 Nugent Street
6	Town of Southampton Open Space	50 North Bishops Lane
7	Village of Southampton Open Space	40 Windward Way
8	Village of Southampton Government Highway Garages	102-104 Willow Street
9	Our Lady of Poland Roman Catholic Church	35 Maple Street
10	Our Lady of the Hamptons Regional Catholic School	160 North Main Street
11	Payton Lane Nursing Home	64 County Road 39
12	Southampton Full Gospel Church	130 County Road 39
13	Sacred Hearts of Jesus and Mary Cemetery	231 County Road 39
14	Southampton Cemetery	545 North Sea Road
15	Once Upon a Day Care	502 North Sea Road
16	Peconic Land Trust Open Space	65 Seven Ponds Road
17	Suffolk County Open Space	50 Edge of Woods Road
18	Town of Southampton Open Space	Edge of Woods Road
19	Town of Southampton Open Space	Schwenks Road
20	Suffolk County Open Space	83 Edge of Woods Road
21	Suffolk County Open Space	North of Edge of Woods Road
22	Town of Southampton Open Space	North of Edge of Woods Road
23	Town of Southampton Open Space	West of Seven Ponds-Towd Road
24	Town of Southampton Open Space	East of Water Mill-Towd Road
25	Town of Southampton Open Space	Between Deerfield Road and Little Noyack Path
26	Town of Southampton Open Space	Middle Line Highway
27	Town of Southampton Open Space	East of Millstone Road and south of Old Sag Harbor Road
28	Suffolk County Open Space	682 Lopers Path
29	Suffolk County Open Space	South of Old Sag Harbor Road
30	Town of Southampton Open Space	Bridge Hill Lane and Brick Kiln Road
31	Town of Southampton Open Space	North of Scuttle Hole Road
32	Unitarian Universalist Congregation	977 Bridgehampton Sag Harbor Turnpike
33	Nature Conservancy	Crooked Pond
34	Town of Southampton Open Space	East of Bridgehampton Sag Harbor Turnpike
35	Suffolk County Open Space	East of Brick Kiln Road
36	Suffolk County Open Space	Middle Line Highway, west of Brick Kiln Road
37	Town of Southampton Open Space	Toll Gate Road
38	Suffolk County Open Space	734 Toll Gate Road

Source: Field reconnaissance, August 2007.

Long Island Power Authority
Southampton to BridgehamptonTransmission Line

Existing Line Alternative
Community Facilities and Open Space
Figure 17-3

11.27.07

Existing Line Alternative
LIRR Route Alternative
Montauk Highway Alternative
Bridgehampton Fire District
North Sea Fire District
Noyack Fire Prevention District
Southampton Fire District
Southampton Fire Prevention District
LIRR

Bridgehampton Substation
Deerfield Substation
Southampton Substation

LITTLE PECONIC BAY
ATLANTIC OCEAN
TOWN OF EAST HAMPTON

0 2,500 5,000 10,000 Feet

N

Long Island Power Authority
Southampton to BridgehamptonTransmission Line

Fire Districts
Figure 17-4

11.27.07

Existing Line Alternative
LIRR Route Alternative
Montauk Highway Alternative
Tuckahoe Common School District
Southampton UFSD
Bridgehampton UFSD
Sag Harbor UFSD
Sagaponack Common School District
LIRR

Bridgehampton Substation

Deerfield Substation

Southampton Substation

LITTLE PECONIC BAY

ATLANTIC OCEAN

TOWN OF EAST HAMPTON

0 2,500 5,000 10,000 Feet

N

Long Island Power Authority
Southampton to BridgehamptonTransmission Line

School Districts
Figure 17-5

11.6.07

Existing Line Alternative
1/2 Mile Study Area
Open Space
LIRR

Bridgehampton Substation

Deerfield Substation

Southampton Substation

LITTLE PECONIC BAY

ATLANTIC OCEAN

TOWN OF EAST HAMPTON

0 2,500 5,000 10,000 Feet

N

Long Island Power Authority
Southampton to BridgehamptonTransmission Line

Existing Line Alternative
Open Space
Figure 17-6

11.6.07

Existing Line Alternative
1/2 Mile Study Area
Agricultural
Wetlands
Village/Hamlet Green/Parks & Recreation
Trails
Open Space/Greenbelt Areas
Aquifer Recharge Areas
LIRR

Bridgehampton Substation

Deerfield Substation

Southampton Substation

LITTLE PECONIC BAY

ATLANTIC OCEAN

TOWN OF EAST HAMPTON

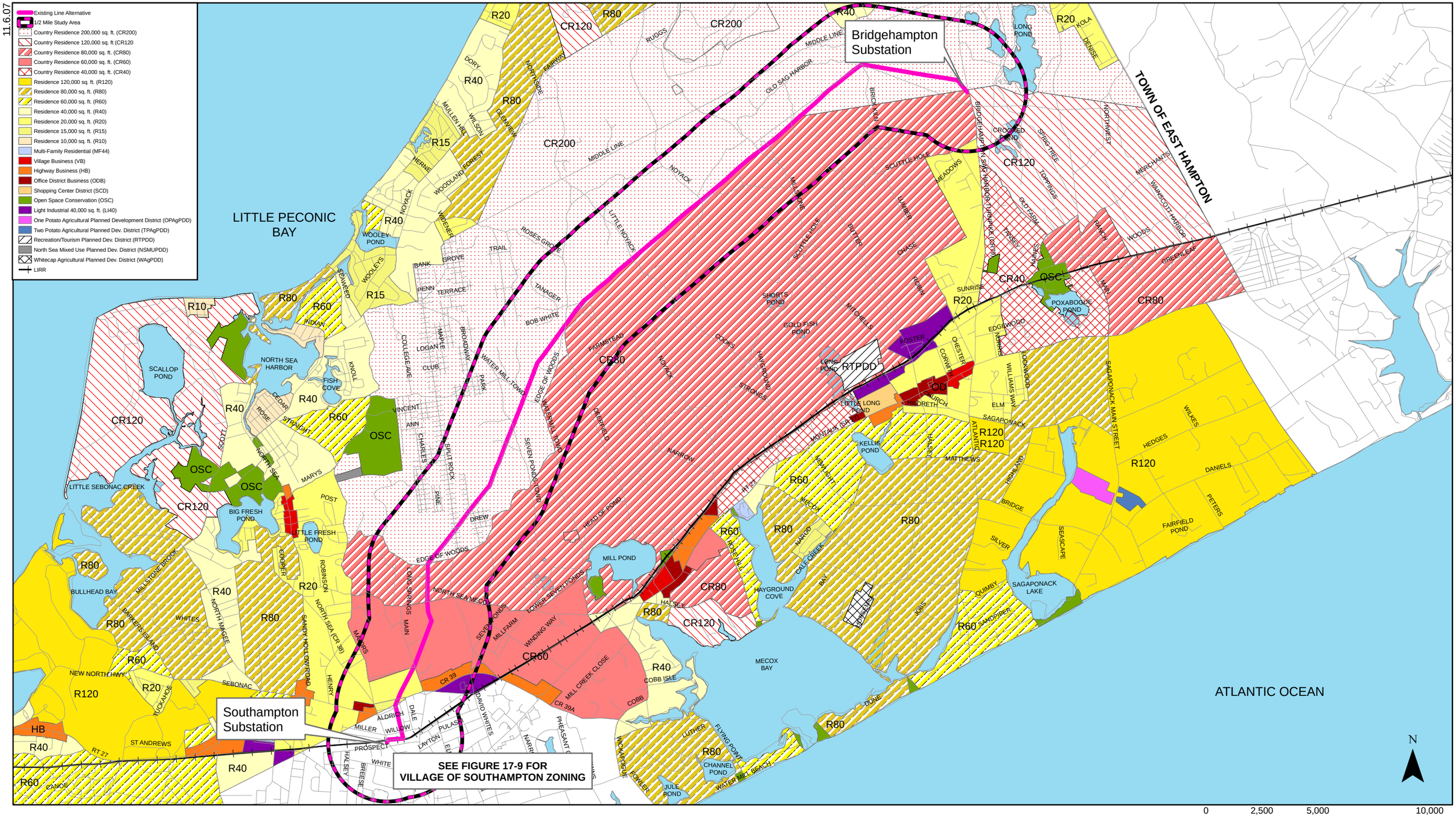
N

0 2,500 5,000 10,000 Feet

Long Island Power Authority
Southampton to BridgehamptonTransmission Line

Existing Line Alternative
Community Preservation Fund Parcels (2005)
Figure 17-7

11.6.07



Long Island Power Authority
Southampton to BridgehamptonTransmission Line

Existing Line Alternative
Town of Southampton Existing Zoning
Figure 17-8

11.6.07

Existing Line Alternative
1/2 Mile Study Area
Residence 120,000 sq. ft.
Residence 80,000 sq. ft.
Residence 40,000 sq. ft.
Residence 20,000 sq. ft.
Residence 12,500 sq.ft
Residence 7,500 sq. ft.
Multi-Family Residence 20,000 sq. ft.
Multi-Family residence 25,000 sq. ft.
Village Business
Highway Business
Office District Business
Hospital Accessory
Light Industry
Medical District
LIRR

SEE FIGURE 17-8 FOR TOWN OF SOUTHAMPTON ZONING

Bridgehampton Substation

Southampton Substation

LITTLE PECONIC BAY

ATLANTIC OCEAN

TOWN OF EAST HAMPTON

0 2,500 5,000 10,000 Feet

N

Long Island Power Authority
Southampton to BridgehamptonTransmission Line

Existing Line Alternative
Village of Southampton Existing Zoning
Figure 17-9

11.6.07

Agricultural Overlay District
Existing Alternative
1/2 Mile Study Area
Aquifer Protection Overlay District
LIRR

Bridgehampton Substation

Deerfield Substation

Southampton Substation

LITTLE PECONIC BAY

ATLANTIC OCEAN

TOWN OF EAST HAMPTON

N

0 2,500 5,000 10,000 Feet

Long Island Power Authority
Southampton to BridgehamptonTransmission Line

Existing Line Alternative
Overlay Districts
Figure 17-10

11.6.07

Existing Line Alternative
1/2 Mile Study Area
Old Filed Map Overlay District
LIRR

Bridgehampton Substation

Deerfield Substation

Southampton Substation

LITTLE PECONIC BAY

NOYACK

WAINSCOTT

TOWN OF EAST HAMPTON

BRIDGEHAMPTON

SAGAPONACK

NORTH SEA

TUCKAHOE

SOUTHAMPTON

ATLANTIC OCEAN

0 2,500 5,000 10,000 Feet

N

Long Island Power Authority
Southampton to BridgehamptonTransmission Line

Existing Line Alternative
Old Filed Map Overlay District
Figure 17-11

11.7.07

Existing Line Alternative
LIRR Route Alternative
Montauk Highway Alternative
Coastal Zone Boundary
LIRR

Bridgehampton Substation

Deerfield Substation

Southampton Substation

LITTLE PECONIC BAY

ATLANTIC OCEAN

TOWN OF EAST HAMPTON

0 2,500 5,000 10,000 Feet

N

Long Island Power Authority
Southampton to BridgehamptonTransmission Line

Coastal Zone Boundary
Figure 17-12

11.7.07

- Existing Line Alternative
- LIRR Route Alternative
- Montauk Highway Alternative
- DEC Regulated Wetlands

NWI Identified Wetlands

- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Riverine
- Other
- LIRR

Bridgehampton Substation

Deerfield Substation

Southampton Substation

LITTLE PECONIC BAY

ATLANTIC OCEAN

TOWN OF EAST HAMPTON

PUBHh PUBHx PUBH PFO1E PFO1R PSS1F PSS1Ed PSS1C PSS1A PSS3Ba L1UBH L1UBHh L1UBHb

SA-27 SA-28 SA-43 SA-5 SA-7 SA-89 SA-9

RT 27 CR 39 CR 39A MONTAUK (SR 27) BRIDGEHAMPTON SAG HARBOR TURNPIKE (CR 79) NORTH SEA (CR 38)

N

0 2,500 5,000 10,000 Feet

Long Island Power Authority
Southampton to BridgehamptonTransmission Line

Wetlands
Figure 17-13

11.16.07

Existing Line Alternative
LIRR Route Alternative
Montauk Highway Alternative
Open - landscaped
Open - hedgerow/thicket
Open - field
Old Field - Early Successional Shrubland
Roadside Thicket
Forest
LIRR

Bridgehampton Substation

Deerfield Substation

Southampton Substation

TOWN OF EAST HAMPTON

LITTLE PECONIC BAY

ATLANTIC OCEAN

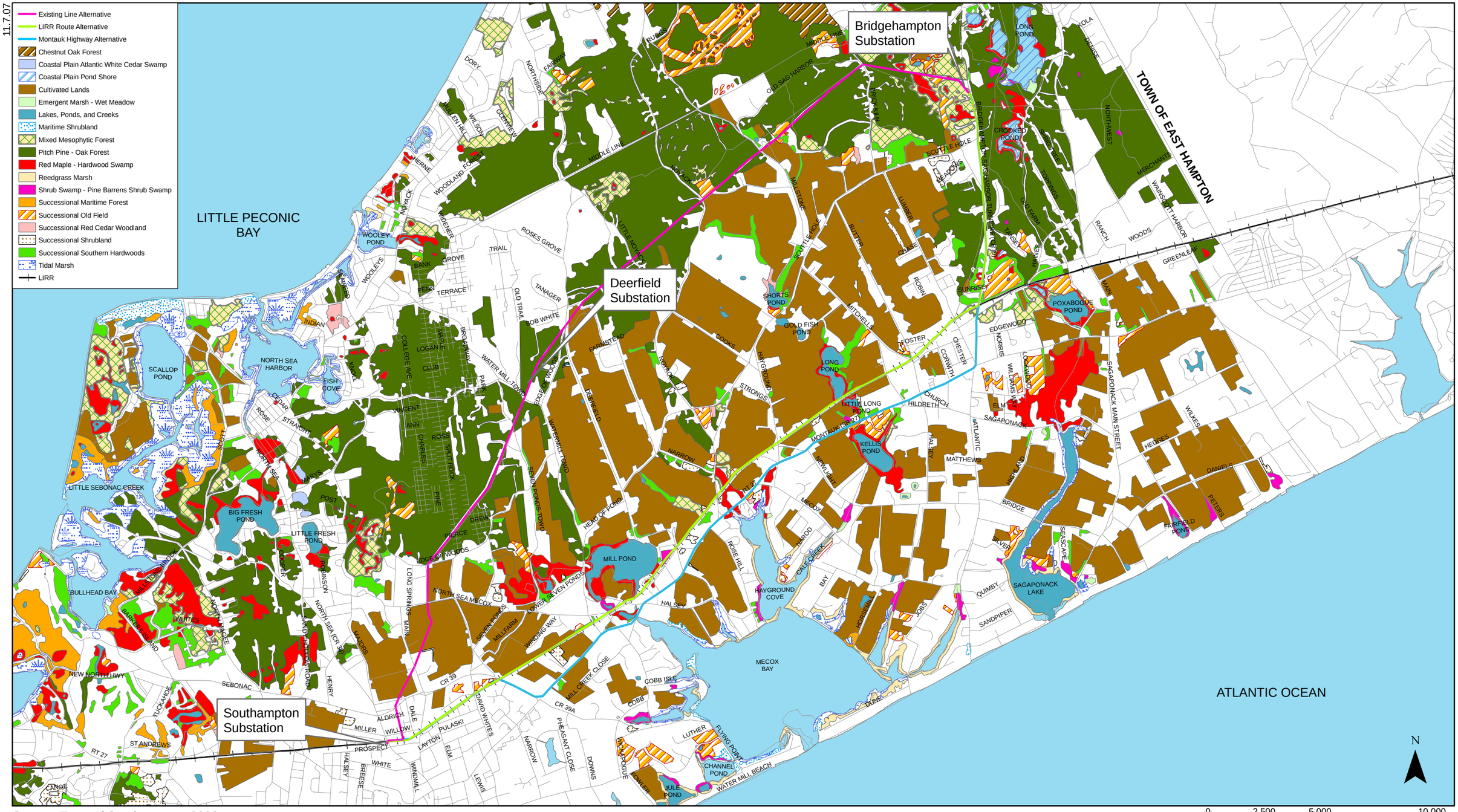
0 2,500 5,000 10,000 Feet

N

Long Island Power Authority
Southampton to BridgehamptonTransmission Line

Habitat Characterization
Figure 17-14

11.7.07



Source: Town of Southampton, 2003

Long Island Power Authority
Southampton to BridgehamptonTransmission Line

Natural Communities
Figure 17-15

11.7.07

Existing Route Alternative
LIRR Route Alternative
Montauk Highway Alternative
CriticalEnvironmentalAreas
South Fork SGPA
Long Pond
LIRR

Bridgehampton Substation
Deerfield Substation
Southampton Substation

LITTLE PECONIC BAY
ATLANTIC OCEAN
TOWN OF EAST HAMPTON
MECOX BAY
HAYGROUND COVE
LONG POND
CROOKED POND
POXABOGUE POND
SAGAPONACK LAKE
KELLIS POND
LITTLE LONG POND
LONG POND
SHORTS POND
GOLD FISH POND
MILL POND
WOOLEY POND
SCALLOP POND
NORTH SEA HARBOR
FISH COVE
LITTLE SEBONAC CREEK
BIG FRESH POND
LITTLE FRESH POND
BULLHEAD BAY
CHANNEL POND
JULE POND
FAIRFIELD POND

BRIDGEHAMPTON SAG HARBOR TURNPIKE (CR 79)
OLD SAG HARBOR
MIDDLE LINE
RUGGS
DORY
NORTHSIDE
FAIRWAY
MULLEN HILL
WILSON
GLENVIEW
HERNE
WOODLAND FOREST
NOYACK
WIDENER
ROSES GROVE
TRAIL
LITTLE NOYACK
BANK
GROVE
PENN
TERRACE
WOOLEYS
SEAWEED
INDIAN
OLD TRAIL
TANAGER
BOB WHITE
COLLEGE AVE
LOGAN
MAPLE
BROADWAY
CLUB
WATER MILL-TOWD
PARK
KNOLL
CEDAR
ROSE
STRAIGHT
SCOTT
NORTH SEA
MARYS
POST
VINCENT
ANN
CHARLES
ROSS
SPLIT ROCK
PINE
DREW
PIERCE
EDGE OF WOODS
FARMSTEAD
DEERFIELD
WATERMILL TOWD
SEVEN PONDS-TOWD
HEAD OF POND
NARROW
MILLSTONE
SCUTTLE HOLE
BUTTER
LUMBER
CHASE
ROBIN
SUNRISE
MEADOWS
BRICK KILN
COOKS
HAYGROUND
STRONGS
LONG SPRINGS MAIN
NORTH SEA MECOX
SEVEN PONDS
MILLFARM
LOWER SEVEN PONDS
WINDING WAY
MAIDES
CR 39
MILLSTONE BROOK
BARKERS ISLAND
WHITES
NORTH MAGEE
SANDY HOLLOW ROAD
NORTH SEA (CR 39)
COOPER
ROBINSON
HENRY
NEW NORTH HWY
SEBONAC
TUCKAHOE
ST ANDREWS
RT 27
CANOE
ALDRICH
DALE
MILLER
WILLOW
PULASKI
LAWTON
ELM
PROSPECT
HALSEY
BREESE
WHITE
WINDMILL
LEWIS
DAVID WHITES
NARROW
PLEASANT CLOSE
DOWNS
WICKAPOGUE
FOWLER
LUTHER
FLYING POINT
WATER MILL BEACH
COBB
COBB ISLE
MILL CREEK CLOSE
CR 39A
MONTAUK (SR 27)
NEWLIGHT
MECOX
ROSE HILL
NARROD
CALF CREEK
BAY
HORSEMILL
JOBS
HALSEY
MATTHEWS
ATLANTIC
HALSEY
CHURCH
HILDRETH
ELM
SAGAPONACK
CHESTER
CORWITH
FOSTER
MITCHELLS
EDGEWOOD
NORRIS
WILLIAMS WAY
LOCKWOOD
SAGAPONACK MAIN STREET
WILKES
HEDGES
DANIELS
PETERS
BRIDGE
SILVER
SEASCAPE
QUIMBY
SANDPIPER
HIGHLAND
KOLA
DENISE
NORTHWEST
SPRIG TREE
TOPPINGS
OLD FARM
TANSEY
HANKS
RANCH
WOODS
MERCHANTS
WAINSCOTT HARBOR
GREENLEAF
MAIN

N

0 2,500 5,000 10,000 Feet

Long Island Power Authority
Southampton to BridgehamptonTransmission Line

Critical Environmental Areas
Figure 17-16

11.19.07

Existing Line Alternative
LIRR Route Alternative
Montauk Highway Alternative

Zone
1
2
3
4
LIRR

Bridgehampton Substation
Deerfield Substation
Southampton Substation

LITTLE PECONIC BAY
ATLANTIC OCEAN
TOWN OF EAST HAMPTON
MECOX BAY
SAGAPONACK LAKE
HAYGROUND COVE
NORTH SEA HARBOR
BULLHEAD BAY
LITTLE SEBONAC CREEK
SCALLOP POND
WOOLEY POND
BIG FRESH POND
LITTLE FRESH POND
MILL POND
SEVEN PONDS
LOWER SEVEN PONDS
LONG POND
CROOKED POND
POXABOGUE POND
SHORTS POND
GOLD FISH POND
KELLIS POND
JULE POND
CHANNEL POND
FRESHFIELD POND
CALF CREEK
COBB ISLE
BARKERS ISLAND
MILLSTONE BROOK
SEBONAC
NEW NORTH HWY
RT 27
MONTAUK (SR 27)
BRIDGEHAMPTON SAG HARBOR TURNPIKE (CR 79)
NORTH SEA (CR 39)
CR 39
CR 39A
OLD SAG HARBOR
MIDDLE LINE
NOYACK
LITTLE NOYACK
SCUTTLE HOLE
MEADOWS
MILLSTONE
BRICK KILN
LUMBER
BUTTER
CHASE
ROBIN
SUNRISE
TANSEY
OLD FARM
HAWES
TOPPINGS
SPRIG TREE
NORTHWEST
MERCHANTS
WAINSCOTT HARBOR
GREENLEAF
RANCH
WOODS
MAIN
KOLA
DENISE
LONG POND
RUGGS
DORY
NORTHSIDE
FAIRWAY
MULLEN HILL
WILSON
GLENVIEW
HERRIE
WOODLAND FOREST
WIDENER
ROSES GROVE
TRAIL
OLD TRAIL
TANAGER
BOB WHITE
WOOLEYS
SEAWEED
BANK
GROVE
PENN
TERRACE
INDIAN
KNOLL
FISH COVE
CLEAR
STRAIGHT
SCOTT
COLLEGE AVE
LOGAN
MAPLE
CLUB
BROADWAY
PARK
WATER MILL-TOWD
VINCENT
ANN
CHARLES
ROSS
SPLIT ROCK
PINE
MARYS
POST
DREW
PIERCE
EDGE OF WOODS
COOPER
ROBINSON
SANDY HOLLOW ROAD
HENRY
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LONG SPRINGS
MAIN
NORTH MAGEE
WHITES
NORTH SEA MECOX
SEVEN PONDS
MILLFARM
WINDING WAY
MILL CREEK CLOSE
TUCKAHOE
ST ANDREWS
CANOE
ALDRICH
DALE
WILLOW
MILLER
PULASKI
LAYTON
PROSPECT
ELM
DAVID WHITES
LEWIS
WHITE
HALSEY
BREESE
WINDMILL
NARROW
PLEASANT CLOSE
DOWNS
WICKAPOGUE
LOWER
LUTHER
FLYING POINT
DUNE
WATER MILL BEACH
FARMSTEAD
DEERFIELD
COOKS
STRONGS
HAYGROUND
WATERMILL TOWD
SEVEN PONDS-TOWD
HEAD OF POND
NARROW
NEWLIGHT
MECOX
ROSE HILL
NEPTUNE
CALF CREEK
BAY
HORSEMILL
JOBS
QUIMBY
SANDPIPER
SILVER
BRIDGE
HIGHLAND
MATTHEWS
ATLANTIC
HALSEY
HILDRETH
CHURCH
ELM
SAGAPONACK
EDGEWOOD
NORRIS
CHESTER
CORWITH
FOSTER
MITCHELLS
WILLIAMS WAY
LOCKWOOD
SAGAPONACK MAIN STREET
HEDGES
WILKES
DANIELS
PETERS
SEASCAPE

N

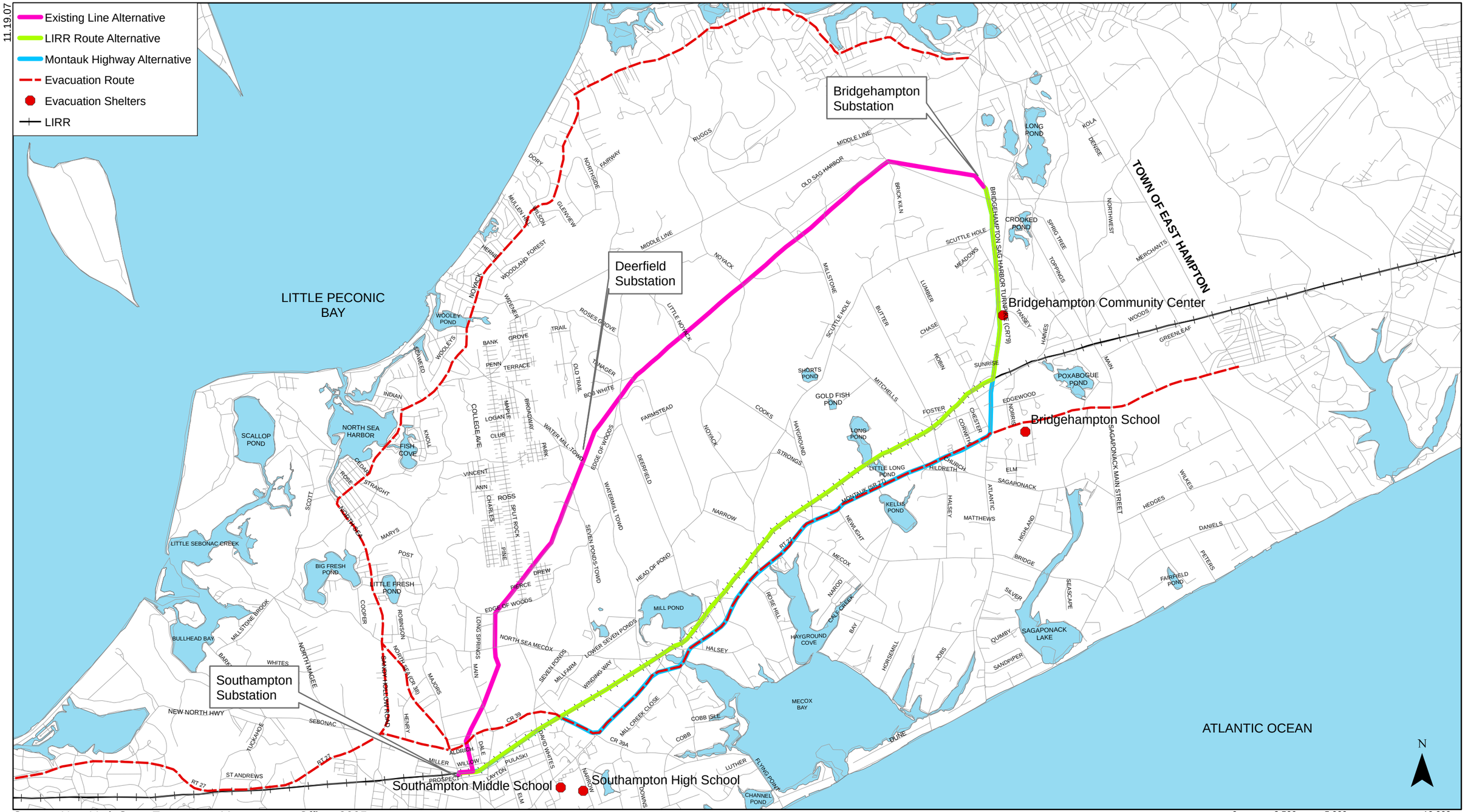
0 2,500 5,000 10,000 Feet

Source: New York State Emergency Management Office, 2005

Long Island Power Authority
Southampton to BridgehamptonTransmission Line

Hurricane Storm Surge Zones
Figure 17-17

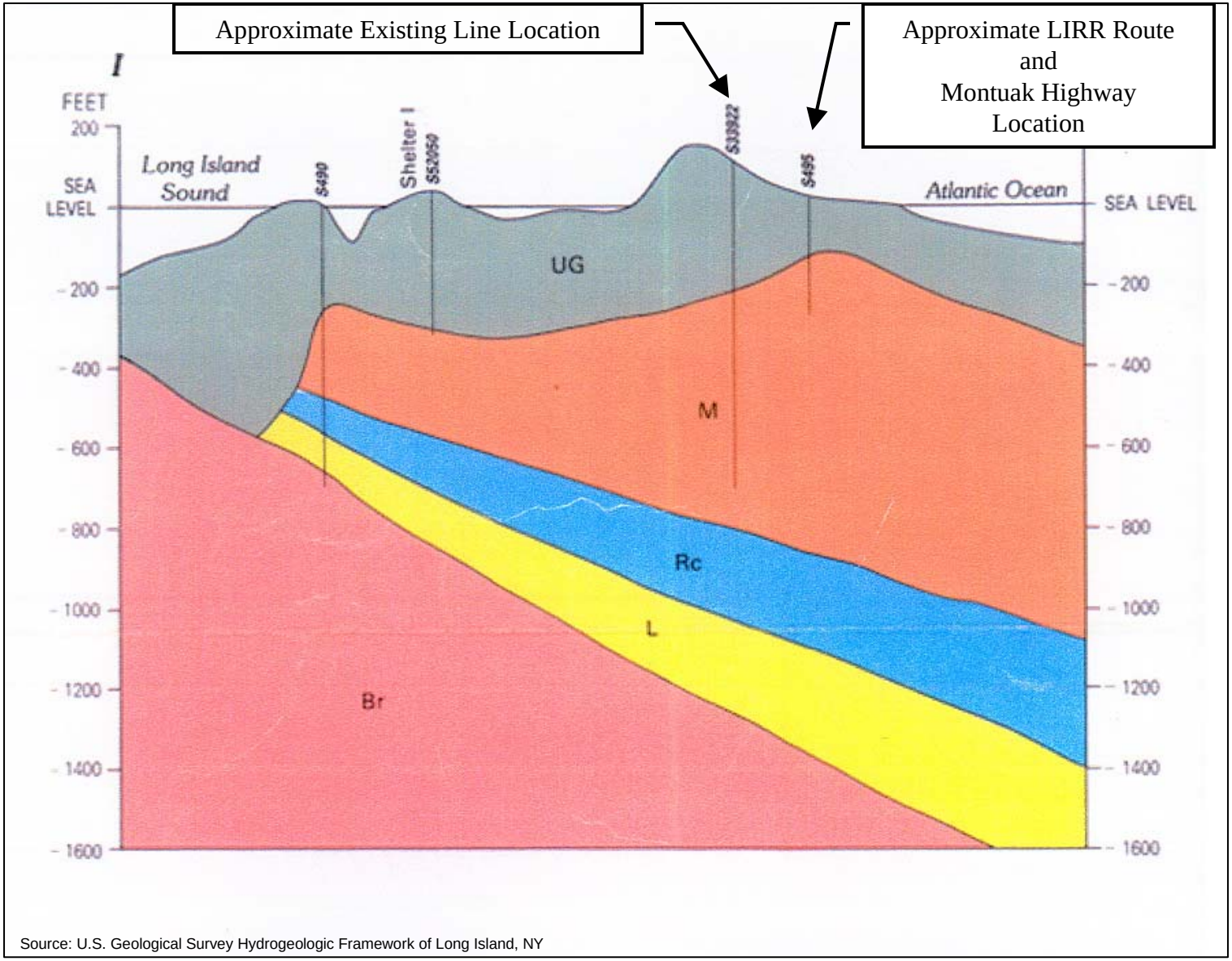
11.19.07



Source: New York State Emergency Management Office, 2005

Long Island Power Authority
Southampton to BridgehamptonTransmission Line

Evacuation Routes and Shelters
Figure 17-18



Source: U.S. Geological Survey Hydrogeologic Framework of Long Island, NY

Long Island Power Authority
Southampton to Bridgehampton Transmission Line

Geologic Cross-Section
Figure 17-19

11.19.07

Existing Line Alternative
LIRR Route Alternative
Montauk Highway Alternative
10 foot Contours
LIRR

Bridgehampton Substation

Deerfield Substation

Southampton Substation

LITTLE PECONIC BAY

ATLANTIC OCEAN

LONG POND

POXABOGUE POND

SCALLOP POND

NORTH SEA HARBOR

LITTLE FRESH POND

SAGAPONACK LAKE

N

0 2,500 5,000 10,000 Feet

Long Island Power Authority
Southampton to BridgehamptonTransmission Line

Topography
Figure 17-20

11.19.07

Existing Line Alternative
LIRR Route Alternative
Montauk Highway Alternative
South Fork SGPA
LIRR

Bridgehampton Substation

Deerfield Substation

Southampton Substation

LITTLE PECONIC BAY

ATLANTIC OCEAN

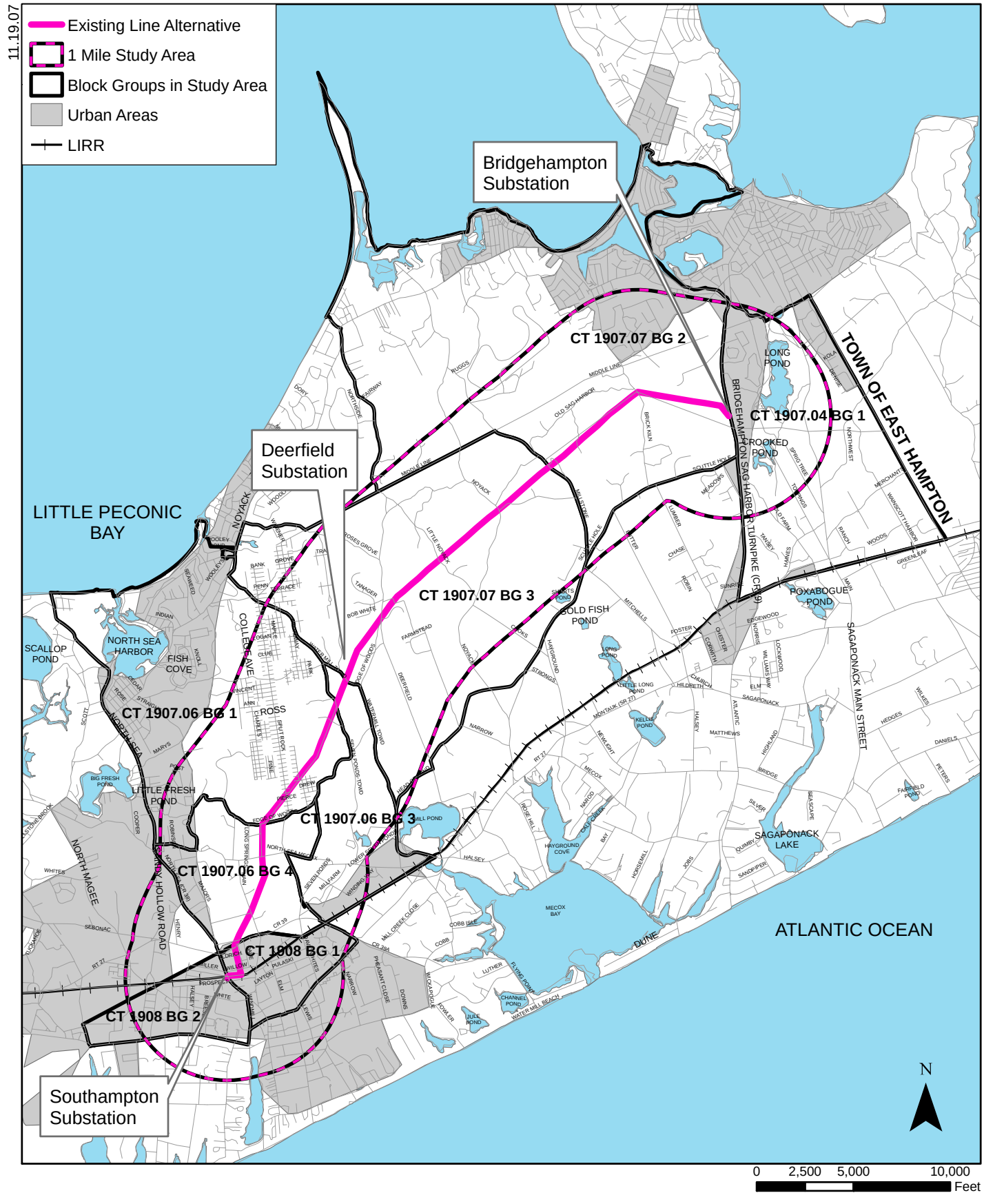
TOWN OF EAST HAMPTON

0 2,500 5,000 10,000 Feet

N

Long Island Power Authority
Southampton to BridgehamptonTransmission Line

Special Groundwater Protection Areas
Figure 17-21



Long Island Power Authority
Southampton to BridgehamptonTransmission Line

Existing Line Alternative
Environmental Justice Study Area
Figure 17-22

11.19.07

LIRR Route Alternative
1/2 Mile Study Area
Agricultural
Residential
Commercial
Industrial
Golf Course
Open Space
Community Facilities
Parking and Transportation
Utilities
Vacant Land
Water
Wetlands
LIRR

Bridgehampton Substation

Deerfield Substation

Southampton Substation

LITTLE PECONIC BAY

ATLANTIC OCEAN

MECOX BAY

N

0 2,500 5,000 10,000 Feet

LIRR Route Alternative: Land Use

Land Use Category	Acreage	Percent of Total Area
Total Area		
Agricultural	1,224.60	22.7
Residential	1,775.30	33
Commercial	393.6	7.3
Open Space	625.1	11.6
Community Facilities	146.6	2.7
Industrial	9.5	0.2
Parking and Transportation	181.9	3.4
Utilities	97.6	1.8
Vacant Land	619	11.5
Water	190	3.5
Wetlands	65.8	1.2
Unknown	54.8	1
Total	**5,384**	**100**

Source: Field Reconnaissance, August 2007 and Town of Southampton Geographic Information System, 2005.

Long Island Power Authority
Southampton to BridgehamptonTransmission Line

LIRR Route Alternative
Exisitng Land Use
Figure 17-23

11.19.07

LIRR Route Alternative
1/2 Mile Study Area
Community Facilities and Open Space
LIRR

Bridgehampton Substation

Deerfield Substation

Southampton Substation

LITTLE PECONIC BAY

LIRR Route Alternative - Community Facilities and Public Open Space		
No.	**Facility Name**	**Address**
1	Rogers Memorial Library	91 Coopers Farm Road
2	Southampton Village Police Department	151 Windmill Lane
3	North End Graveyard	North Sea Road
4	United Methodist Church of Southampton	160 Main Street
5	US Post Office	39 Nugent Street
6	Our Lady of Poland Roman Catholic Church	35 Maple Street
7	Our Lady of the Hamptons Regional Catholic School	160 North Main Street
8	Village of Southampton Government Highway Garages	102-104 Willow Street
9	Village of Southampton Open Space	40 Windward Way
10	Town of Southampton Open Space	50 Bishops Lane
11	Church of God in Christ	57 Hillcrest Terrace
12	Payton Lane Nursing Home	64 County Road 39
13	Southampton Full Gospel Church	130 County Road 39
14	Southampton Cemetery	545 North Sea Road
15	Sacred Hearts of Jesus and Mary Cemetery	231 County Road 39
16	Community Baptist Church	16 Plant Street
17	First Baptist Church of Southampton	163 Pulaski Street
18	Southampton Day Care Center Fountain of Youth	100 David Whites Lane
19	First Baptist Church of Southampton	57 Halsey Avenue
20	Community Baptist Church of Southampton	30 Halsey Ave
21	Village of Southampton Fire House	470 Hampton Road
22	Village of Southampton Park Area/Open Space	81 Flying Point Road
23	Suffolk County Open Space	South of LIRR tracks, west of County Road 39
24	Peconic Land Trust Open Space	65 Seven Ponds Road
25	Nuns of St. Dominic (Villa Maria)	615 Montauk Highway
26	Water Mill Village Improvement Association Park	695 Montauk Highway
27	Water Mill Cemetery	731 Montauk Highway
28	Water Mill Community House	743 Montauk Highway
29	Water Mill Post Office	670 Montauk Highway
30	Ladies Auxiliary No. 1 Water Mill Fraternal	41 Old Mill Road
31	Southampton UFSD Transportation Department	136 Old Mill Road
32	Burnett Field House and ball fields	36 Nowedonah Avenue
33	Town of Southampton Open Space	139 Mill Pond Lane
34	Horticulture Alliance	1225 Montauk Highway
35	NY State of Mental Health Office of Community Residences	1272 Montauk Highway
36	Incarnation Evangelical Lutheran Church	59 Hayground Road
37	Hayground Cemetery	Montauk Highway
38	Town of Southampton Open Space	Montauk Highway, east of Lake Road
39	Sayre Town Park	156 Snake Hollow Road
40	Hayground School	151 Mitchells Lane
41	Bridgehampton United Methodist Church	2247 Montauk Highway
42	Bridgehampton Post Office	2322 Montauk Highway
43	Queen of the Most Holy Rosary Roman Catholic Church	2352 Montauk Highway
44	Queen of the Most Holy Rosary Roman Catholic Church Open Space	2350 Montauk Highway
45	Bridgehampton Historical Society	2368 Montauk Highway
46	DIA Art Foundation	23 Corwith Avenue
47	Town of Southampton Highway Department	131 Corwith Avenue
48	Bridgehampton Fire Department and Ball fields	64 School Street
49	Town of Southampton Public Facilities	41 Montauk Highway
50	Bridgehampton Library	2478 Montauk Highway
51	Bridgehampton Presbyterian Church	2429 Montauk Highway
52	St. Ann's Episcopal Church	2463 Main Street
53	First Baptist Church	151 Bridgehampton Sag Harbor Turnpike
54	Bridgehampton Elementary School and High School	2685 Montauk Highway
55	Edgewood Cemetery	86 Edgewood Avenue
56	South Fork Natural History Society	377 Bridgehampton Sag Harbor Turnpike
57	Town of Southampton Open Space	East of Bridgehampton Sag Harbor Turnpike
58	First Church of God in Christ	461 Bridgehampton Sag Harbor Turnpike
59	Town of Southampton Open Space	Lumber Lane
60	Bridgehampton Child Care and Recreational Center	551 Sag Harbor Turnpike
61	Town of Southampton Community Center	585 Bridgehampton Sag Harbor Turnpike
62	Town of Southampton Open Space	West of Tansey Lane
63	Town of Southampton Open Space	North and south of Narrow Lane
64	Town of Southampton Open Space	Toppings Path
65	Suffolk County Open Space	Haines Path
66	Town of Southampton Open Space	Old Farm Road
67	Nature Conservancy	Crooked Pond
68	Unitarian Universalist Congregation	977 Bridgehampton Sag Harbor Turnpike
69	Suffolk County Open Space	1120 Bridgehampton Sag Harbor Turnpike
70	Nature Conservancy	585 Sprig Tree Path
71	Suffolk County Open Space	734 Toll Gate Road
72	Town of Southampton Open Space	South of Middle Line Highway
73	Town of Southampton Open Space	North of Scuttle Hole Road
74	Town of Southampton Police Substation	2044 Montauk Highway
75	Bridgehampton Militia Green	66 Mitchells Lane
76	Poxabogue County Park and Preserve	Northwest of Poxabogue Pond
77	Town of Southampton Open Space	Toll Gate Road
78	Suffolk County Open Space	Aelfies Way

Source: Field reconnaissance, August 2007.

N

0 2,500 5,000 10,000 Feet

Long Island Power Authority
Southampton to BridgehamptonTransmission Line

LIRR Route Alternative
Community Facilities and Open Space
Figure 17-24

11.19.07

LIRR Route Alternative
1/2 Mile Study Area
Open Space
LIRR

Bridgehampton Substation

Deerfield Substation

Southampton Substation

LITTLE PECONIC BAY

ATLANTIC OCEAN

TOWN OF EAST HAMPTON

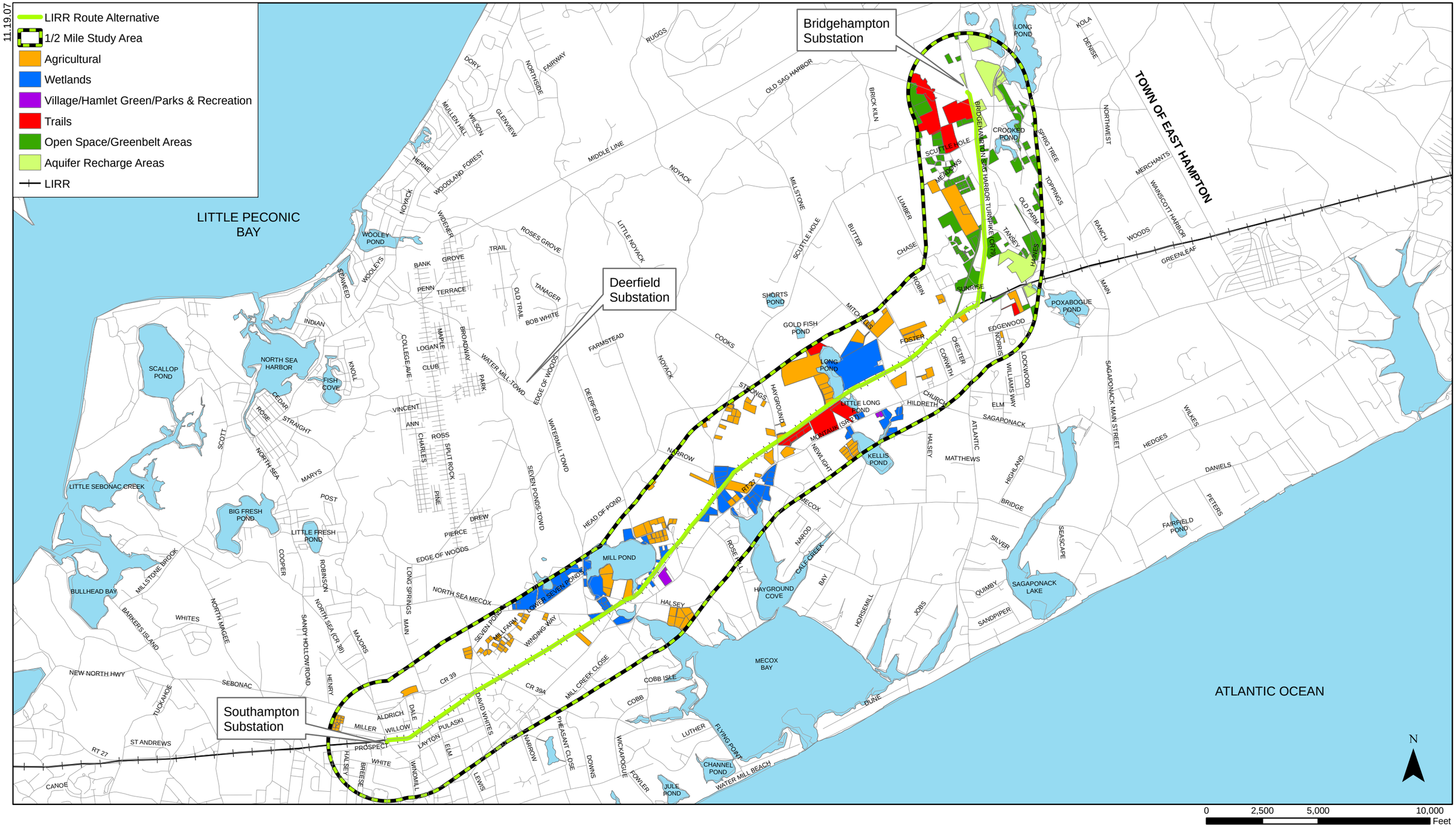
0 2,500 5,000 10,000 Feet

N

Long Island Power Authority
Southampton to BridgehamptonTransmission Line

LIRR Route Alternative
Open Space
Figure 17-25

11.19.07



Long Island Power Authority
Southampton to BridgehamptonTransmission Line

LIRR Route Alternative
Community Preservation Fund Priority Parcels (2005)
Figure 17-26

11.21.07

- LIRR Route Alternative
- 1/2 Mile Study Area
- Country Residence 200,000 sq. ft. (CR200)
- Country Residence 120,000 sq. ft (CR120
- Country Residence 80,000 sq. ft. (CR80)
- Country Residence 60,000 sq. ft. (CR60)
- Country Residence 40,000 sq. ft. (CR40)
- Residence 120,000 sq. ft. (R120)
- Residence 80,000 sq. ft. (R80)
- Residence 60,000 sq. ft. (R60)
- Residence 40,000 sq. ft. (R40)
- Residence 20,000 sq. ft. (R20)
- Residence 15,000 sq. ft. (R15)
- Residence 10,000 sq. ft. (R10)
- Multi-Family Residential (MF44)
- Village Business (VB)
- Highway Business (HB)
- Office District Business (ODB)
- Shopping Center District (SCD)
- Open Space Conservation (OSC)
- Light Industrial 40,000 sq. ft. (LI40)
- One Potato Agricultural Planned Development District (OPAgPDD)
- Two Potato Agricultural Planned Dev. District (TPAgPDD)
- Recreation/Tourism Planned Dev. District (RTPDD)
- North Sea Mixed Use Planned Dev. District (NSMUPDD)
- Whitecap Agricultural Planned Dev. District (WAgPDD)
- LIRR

Bridgehampton Substation

Deerfield Substation

Southampton Substation

SEE FIGURE 17-28 FOR VILLAGE OF SOUTHAMPTON ZONING

TOWN OF EAST HAMPTON

LITTLE PECONIC BAY

ATLANTIC OCEAN

0 2,500 5,000 10,000 Feet

N

Long Island Power Authority
Southampton to BridgehamptonTransmission Line

LIRR Route Alternative
Town of Southampton Existing Zoning
Figure 17-27

11.21.07

LIRR Route Alternative
1/2 Mile Study Area
Residence 120,000 sq. ft.
Residence 80,000 sq. ft.
Residence 40,000 sq. ft.
Residence 20,000 sq. ft.
Residence 12,500 sq.ft
Residence 7,500 sq. ft.
Multi-Family Residence 20,000 sq. ft.
Multi-Family residence 25,000 sq. ft.
Village Business
Highway Business
Office District Business
Hospital Accessory
Light Industry
Medical District
LIRR

Bridgehampton Substation

SEE FIGURE 17-27 FOR TOWN OF SOUTHAMPTON ZONING

Deerfield Substation

Southampton Substation

LITTLE PECONIC BAY

ATLANTIC OCEAN

TOWN OF EAST HAMPTON

0 2,500 5,000 10,000 Feet

N

Long Island Power Authority
Southampton to BridgehamptonTransmission Line

LIRR Route Alternative
Village of Southampton Existing Zoning
Figure 17-28

11.19.07

LIRR Route Alternative
1/2 Mile Study Area
Agricultural Overlay District
Aquifer Protection Overlay District
LIRR

Bridgehampton Substation

Deerfield Substation

Southampton Substation

LITTLE PECONIC BAY

ATLANTIC OCEAN

TOWN OF EAST HAMPTON

N

0 2,500 5,000 10,000 Feet

Long Island Power Authority
Southampton to BridgehamptonTransmission Line

LIRR Route Alternative
Overlay Districts
Figure 17-29

11.19.07

LIRR Route Alternative
1/2 Mile Study Area
Old Filed Map Overlay District
LIRR

Bridgehampton Substation

Deerfield Substation

Southampton Substation

TOWN OF EAST HAMPTON

LITTLE PECONIC BAY

ATLANTIC OCEAN

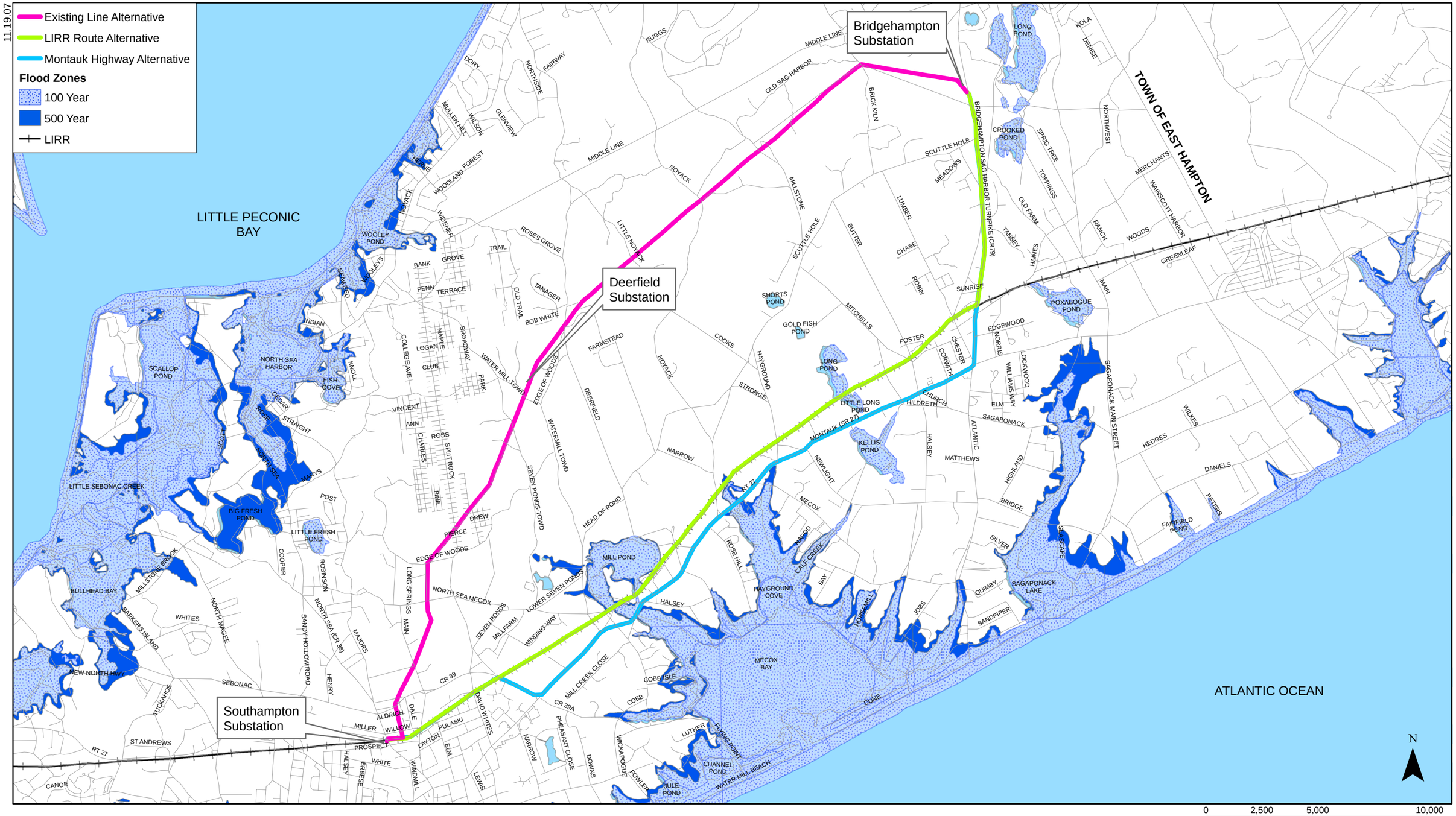
0 2,500 5,000 10,000 Feet

N

Long Island Power Authority
Southampton to BridgehamptonTransmission Line

LIRR Route Alternative
Old Filed Map Overlay District
Figure 17-30

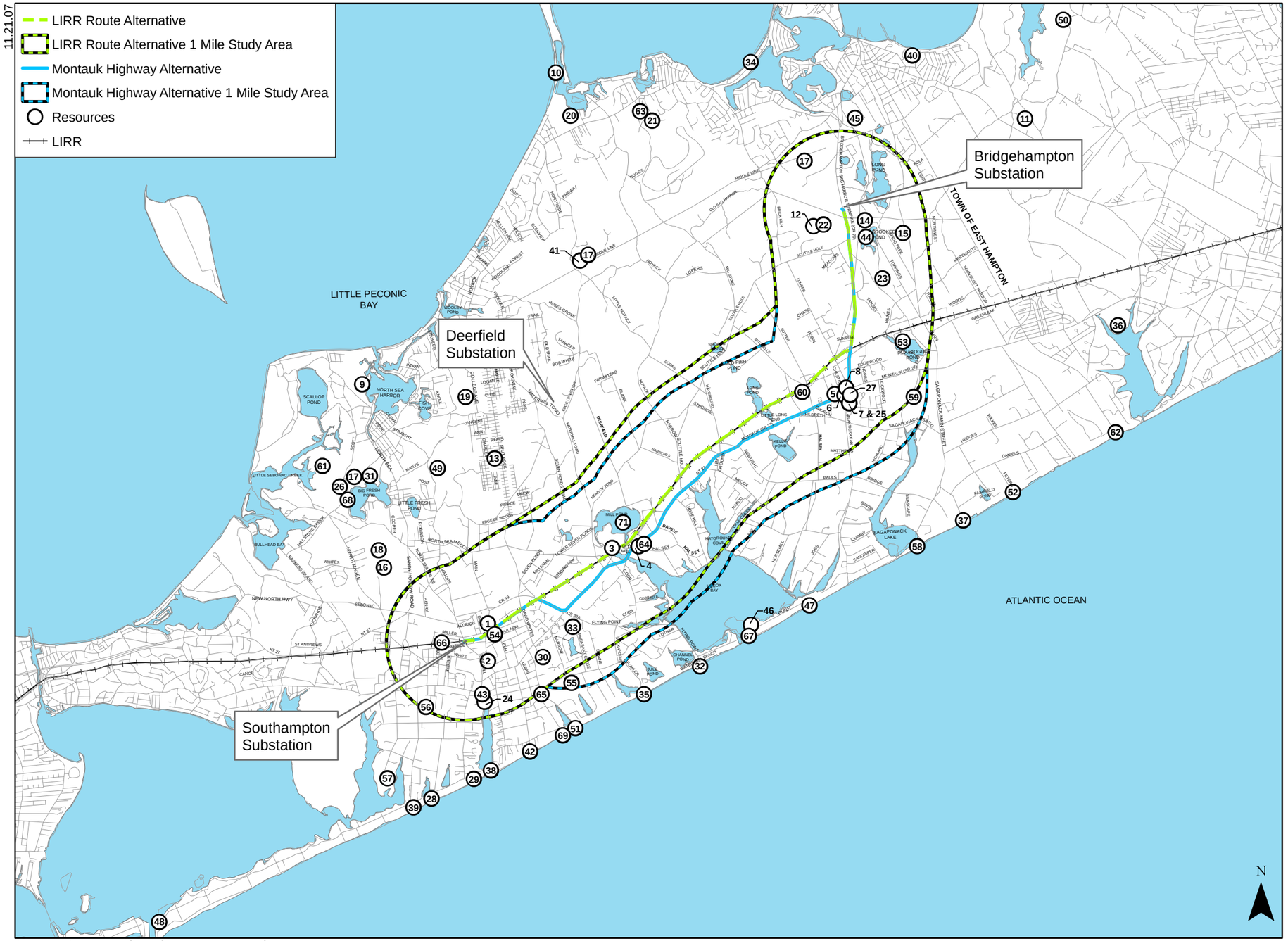
11.19.07



Long Island Power Authority
Southampton to BridgehamptonTransmission Line

100- and 500- Year Floodplains
Figure 17-31

11.21.07



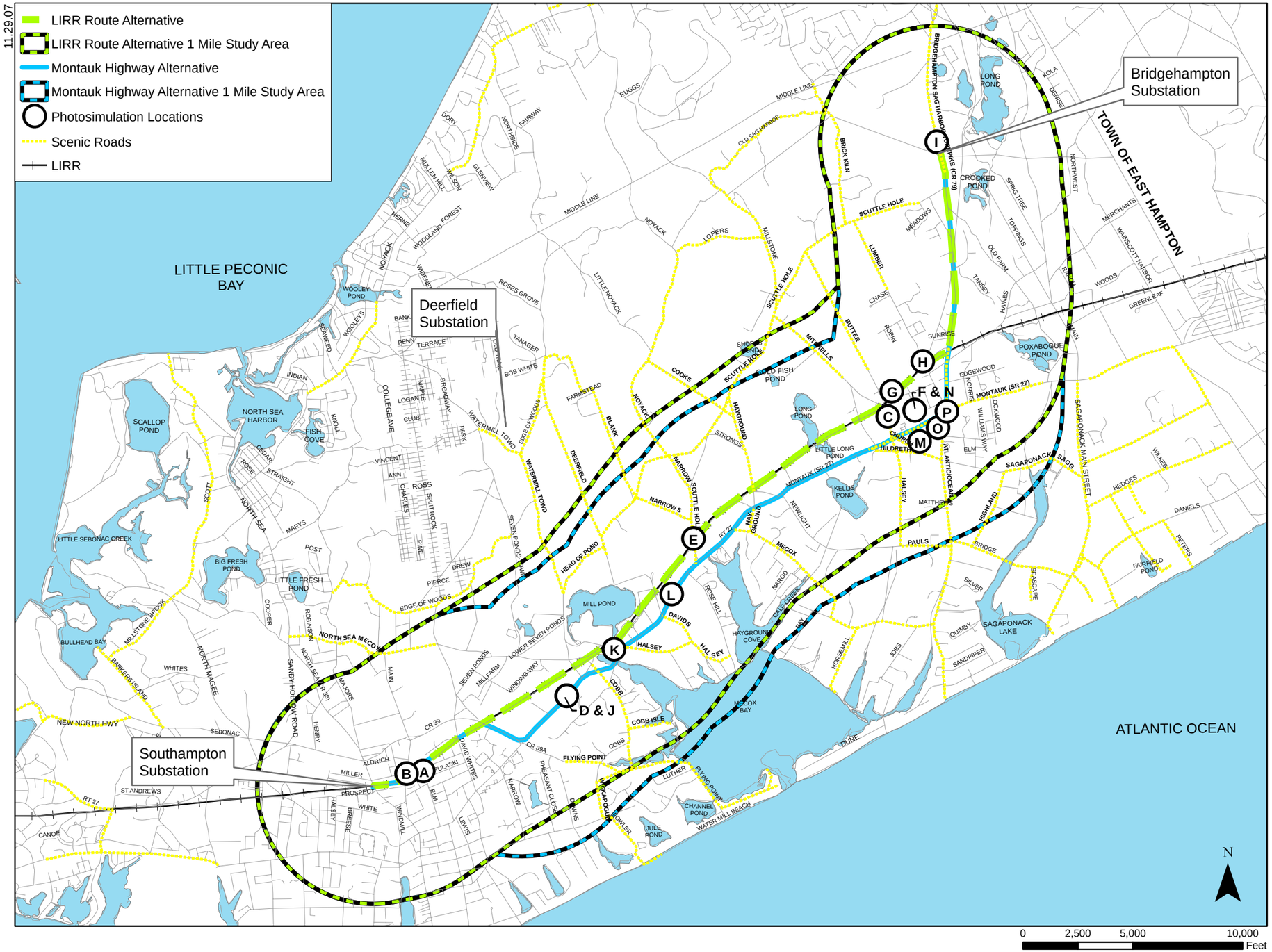
1	Southampton North Main Street Historic District
2	Southampton Village Historic District & Expansion
3	Water Mill at Water Mill
4	Windmill at Water Mill (Corwith Windmill)
5	The Bridgehampton Historical Society (the Corwith House)
6	Bridgehampton Presbyterian Church
7	Beebe Windmill
8	The Captain Nathaniel Rogers House (a.k.a. the Hampton House / the Hopping House)
9	Conscience Point National Wildlife Refuge
10	Elizabeth A. Morton National Wildlife Refuge
11	Linda Gronlund Memorial Nature Preserve
12	Eastern GEIS/Great Swamp
13	Great Hill Pine Barrens
14	Long Pond Greenbelt
15	Sagaponack Woods
16	Tuckahoe Woods
17	Paumanok Path
18	Tuckahoe Woods trails
19	Oak Ponds-to-Peconic Bay Trail
20	Morton-to-Kellis Pond Trail
21	Trout Pond-to-Brick Hill Trail
22	Brick Kiln Woods
23	Bay-to-Ocean Trail
24	Agawam Park, Village of Southampton
25	Berwind Memorial Green
26	Big Woods Preserve
27	Bridgehampton Militia Green
28	Coopers Beach
29	Cryder Beach
30	David Whites Park, Village of Southampton
31	Emma Rose Elliston Park
32	Flying Point Beach
33	Flying Point Park, Village of Southampton
34	Foster Memorial Beach (Long Beach)
35	Fowlers Lane Beach
36	Georgica Pond Area
37	Gibson Beach
38	Gin Lane Beach
39	Halsey Neck Lane Beach
40	Havens Beach
41	Laurel Valley County Park
42	Little Plains Beach
43	Lola Prentice Park, Village of Southampton
44	Long Pond Greenbelt
45	Mashashimuet Park, Village of Sag Harbor
46	Mecox Bay Preserve
47	Mecox Beach
48	Munn Point
49	North Sea Athletic Facility and Park
50	Northwest Harbor County Park
51	Old Town Beach
52	Peter's Pond Beach
53	Poxabogue County Park
54	Railroad Plaza Park, Village of Southampton
55	Richard L. Fowler Nature Walk, Village of Southampton
56	Rosko Drive Park, Village of Southampton
57	Ruth Wales DuPont Sanctuary
58	Sagg Main Beach
59	Sagg Swamp Nature Preserve
60	Sayre Park
61	Scallop Pond Preserve
62	Town Line Beach
63	Trout Pond Park
64	Water Mill Hamlet Center Green
65	William Dunwell Park, Village of Southampton
66	Windward Way Park, Village of Southampton
67	W. Scott Cameron Beach
68	Wolf Swamp Sanctuary
69	Wyandanch Beach
70	Railroad Corridor
71	Mill Pond

Notes: Resource locations are approximate.
Linear resources and large resources are shown as a single point even though they cover large areas.
Long Pond Greenbelt (#'s 14 & 44) is a trail and an open space/greenbelt target area identified in the "Town of Southampton Community Preservation Project Plan 2005."

Long Island Power Authority
Southampton to BridgehamptonTransmission Line

Inventory of Resources
Figure 17-32

11.29.07



A	View looking northwest from Elm Street at Railroad Plaza
B	View looking south from North Main Street and Willow Street
C	View looking north toward LIRR from Butter Lane
D	View looking northwest from Montauk Highway (east of Fairbanks Court)
E	View looking southwest from Scuttle Hole Road (south of Narrow Lane)
F	View looking north from Corwith Avenue (north of Montauk Highway)
G	View looking south from Foster Avenue in Bridgehampton Industrial District
H	View looking toward LIRR southwest from Lumber Lane
I	View looking south on Bridgehampton Sag Harbor Turnpike near Bridgehampton Substation
J	View looking southwest from Montauk Highway (east of Fairbanks Court)
K	View looking south toward Montauk Highway from Water Mill at Water Mill
L	View from Willow Road looking northeast
M	View looking north from School Street (south of Montauk Highway)
N	View looking south from Corwith Avenue (north of Montauk Highway)
O	View looking northwest from Presbyterian Church in Bridgehampton
P	View looking west from the Nathaniel Rogers Historic Site at Montauk Highway and Ocean Road in Bridgehampton

Long Island Power Authority
Southampton to BridgehamptonTransmission Line

Photosimulation Locations and Scenic Roads
Figure 17-33

11.29.07

Photograph Taken September 13, 2007

Existing

Proposed

LIRR Route Alternative: Photo Simulation A
View looking north from Elm Street at Railroad Plaza
Figure 17-34

Long Island Power Authority
Bridgehampton to Southampton Transmission Line

12.03.07

Photograph Taken Novemebr 27, 2007

Existing

Proposed

LIRR Route Alternative: Photo Simulation B
View looking south from North Main Street and Willow Street
Figure 17-35

Long Island Power Authority
Bridgehampton to Southampton Transmission Line

12.03.07

Photograph Taken November27, 2007

Existing

Proposed

LIRR Route Alternative: Photo Simulation C
View looking north toward LIRR from Butter Lane
Figure 17-36

Long Island Power Authority
Bridgehampton to Southampton Transmission Line

12.03.07

Photograph Taken November 27, 2007

Existing

Proposed

LIRR Route Alternative: Photo Simulation D
View looking northwest from Montauk Highway
(East of Fairbanks Court)
Figure 17-37

12.03.07

Photograph Taken November 27, 2007

Existing

Proposed

LIRR Route Alternative: Photo Simulation E
View looking southwest from Scuttle Hole Road
(South of Narrow Lane)
Figure 17-38

Long Island Power Authority
Bridgehampton to Southampton Transmission Line

12.03.07

Photograph Taken November 27, 2007

Existing

Proposed

LIRR Route Alternative: Photo Simulation F
View looking northwest from Corwith Avenue
(North of Montauk Highway)
Figure 17-39

Long Island Power Authority
Bridgehampton to Southampton Transmission Line

12.03.07

Photograph Taken November 27, 2007

Existing

Proposed

LIRR Route Alternative: Photo Simulation G
View looking south from Foster Avenue in
the Bridgehampton Industrial District
Figure 17-40

11.29.07

Photograph Taken November 27, 2007

Existing

Proposed

LIRR Route Alternative: Photo Simulation H
View looking toward LIRR southwest from Lumber Lane
Figure 17-41

Long Island Power Authority
Bridgehampton to Southampton Transmission Line

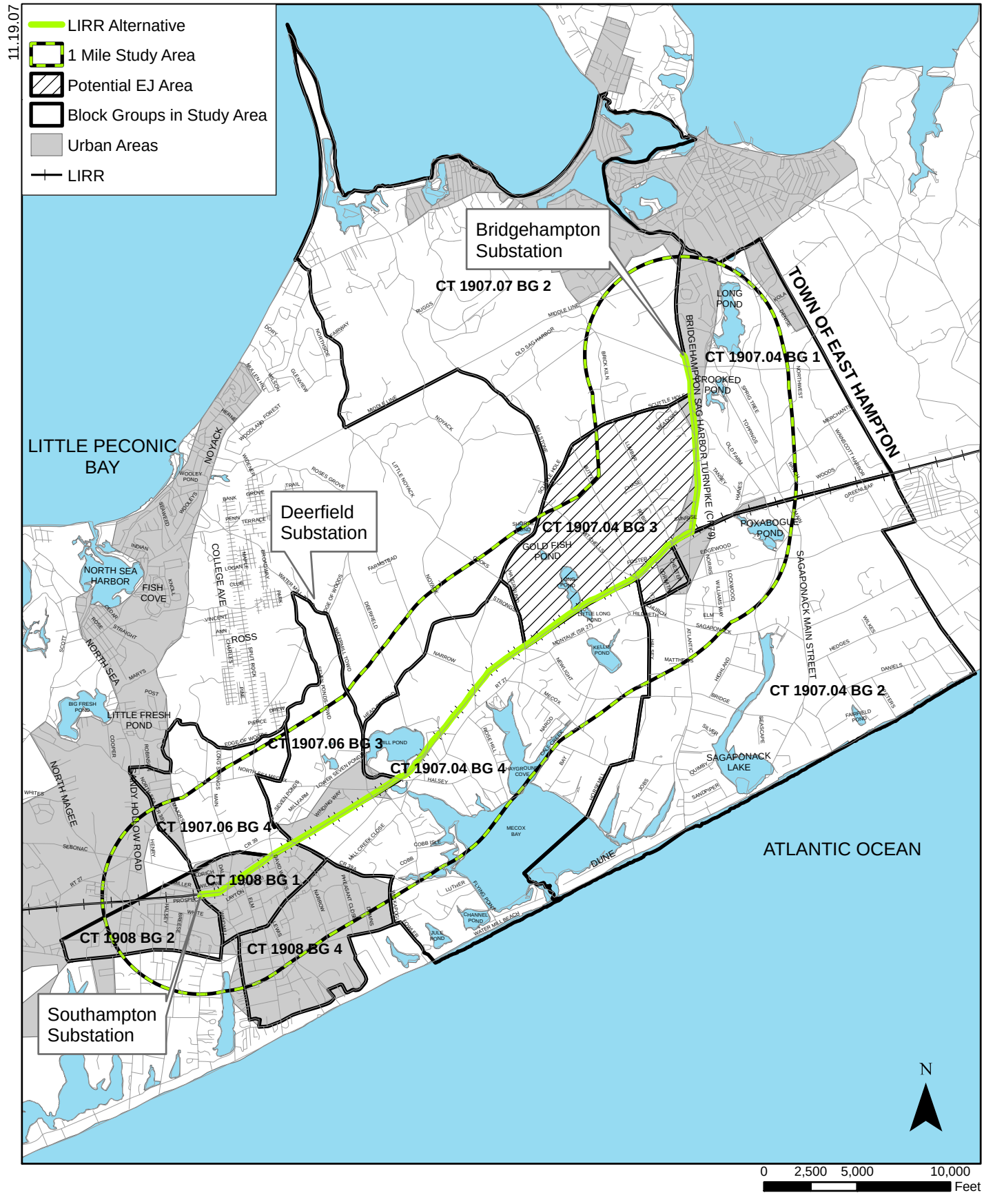
12.03.07

Photograph Taken November 27, 2007

Existing

Proposed

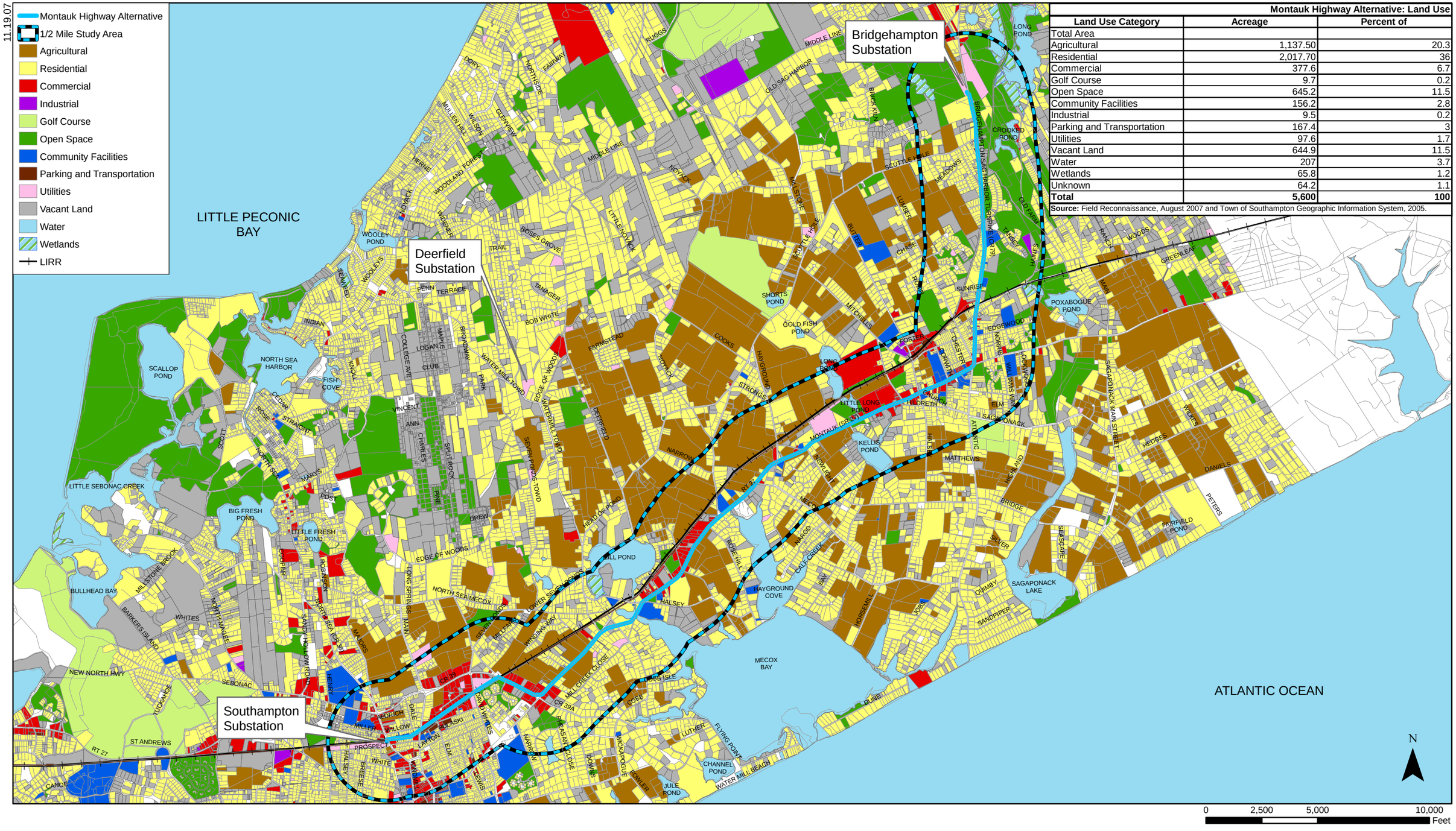
LIRR Route Alternative: Photo Simulation I
View looking south on Bridgehampton Sag Harbor Turnpike near Bridgehampton Substation
Figure 17-42



Long Island Power Authority
Southampton to BridgehamptonTransmission Line

LIRR Alternative
Environmental Justice Study Area
Figure 17-43

11.19.07



Montauk Highway Alternative: Land Use

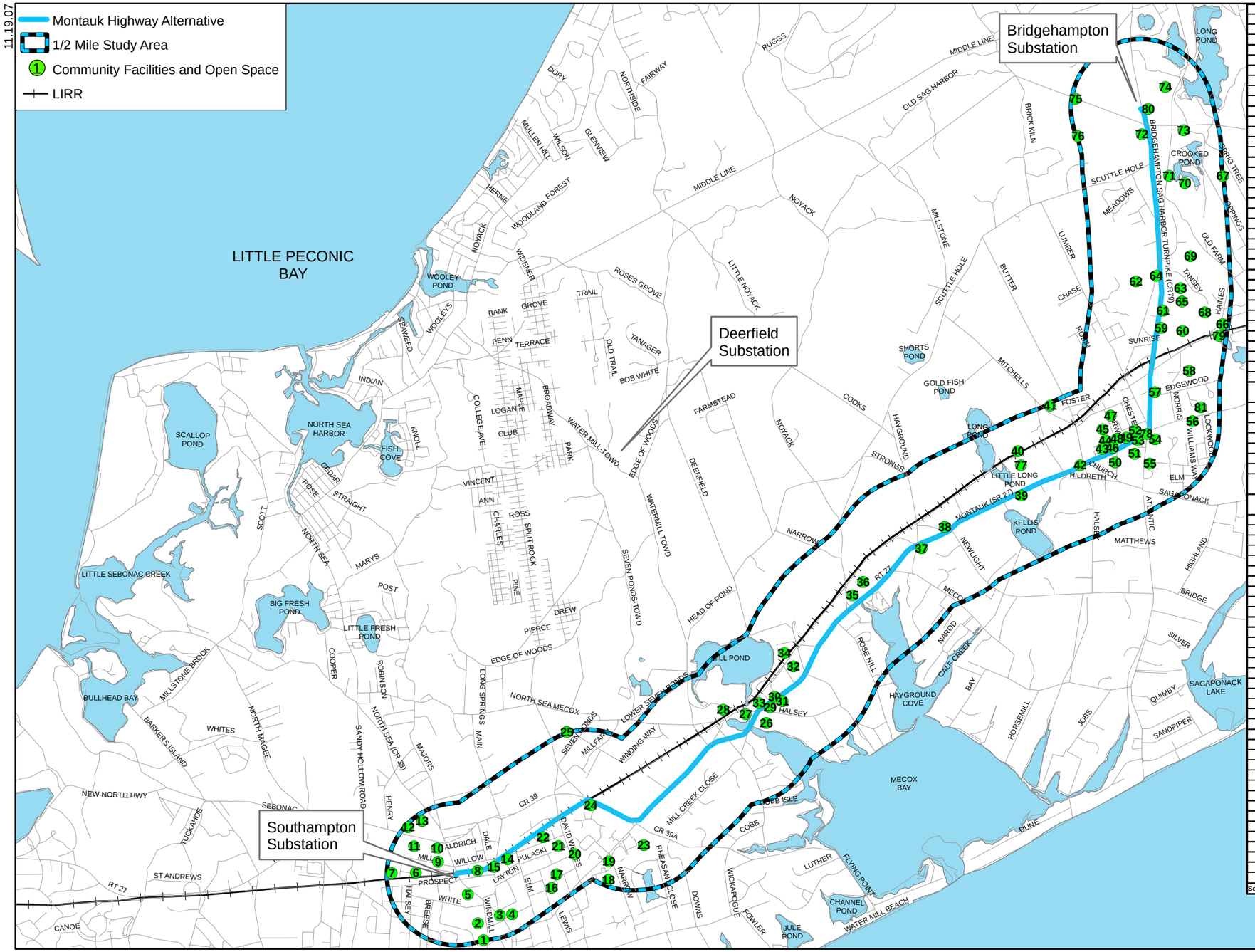
Land Use Category	Acreage	Percent of
Total Area		
Agricultural	1,137.50	20.3
Residential	2,017.70	36
Commercial	377.6	6.7
Golf Course	9.7	0.2
Open Space	645.2	11.5
Community Facilities	156.2	2.8
Industrial	9.5	0.2
Parking and Transportation	167.4	3
Utilities	97.6	1.7
Vacant Land	644.9	11.5
Water	207	3.7
Wetlands	65.8	1.2
Unknown	64.2	1.1
Total	**5,600**	**100**

Source: Field Reconnaissance, August 2007 and Town of Southampton Geographic Information System, 2005.

Long Island Power Authority
Southampton to BridgehamptonTransmission Line

Montauk Highway Alternative
Existing Land Use
Figure 17-44

11.19.07



	Montauk Highway Alternative - Community Facilities and Public Open Space	
No.	**Facility Name**	**Address**
1	Rogers Memorial Library	91 Coopers Farm Road
2	Southampton Village Police Department	151 Windmill Lane
3	North End Graveyard	North Sea Road
4	United Methodist Church of Southampton	160 Main Street
5	US Post Office	39 Nugent Street
6	Village of Southampton Open Space	40 Windward Way
7	Town of Southampton Open Space	50 Bishops Lane
8	Village of Southampton Government Highway Garages	102-104 Willow Street
9	Church of God in Christ	57 Hillcrest Terrace
10	Payton Lane Nursing Home	64 County Road 39
11	Southampton Full Gospel Church	130 County Road 39
12	Sacred Hearts of Jesus and Mary Cemetery	231 County Road 39
13	Southampton Cemetery	545 North Sea Road
14	Our Lady of Poland Roman Catholic Church	35 Maple Street
15	Our Lady of the Hamptons Regional Catholic School	160 North Main Street
16	Community Baptist Church of Southampton	30 Halsey Ave
17	First Baptist Church of Southampton	57 Halsey Avenue
18	Southampton High School	141 Narrow lane
19	Village of Southampton Fire House	470 Hampton Road
20	Southampton Day Care Center Fountain of Youth	100 David Whites Lane
21	First Baptist Church of Southampton	163 Pulaski Street
22	Community Baptist Church	16 Plant Street
23	Village of Southampton Park Area/Open Space	81 Flying Point Road
24	Suffolk County Open Space	South of LIRR tracks, west of County Road 39
25	Peconic Land Trust Open Space	65 Seven Ponds Road
26	Nuns of St. Dominic (Villa Maria)	615 Montauk Highway
27	Ladies Auxiliary No. 1 Water Mill Fraternal	41 Old Mill Road
28	Southampton UFSD Transportation Department	136 Old Mill Road
29	Water Mill Village Improvement Association Park	695 Montauk Highway
30	Water Mill Cemetery	731 Montauk Highway
31	Water Mill Community House	743 Montauk Highway
32	Burnett Field House and ball fields	36 Nowedonah Avenue
33	Water Mill Post Office	670 Montauk Highway
34	Town of Southampton Open Space	139 Mill Pond Lane
35	Horticulture Alliance	1225 Montauk Highway
36	NY State of Mental Health Office of Community Residences	1272 Montauk Highway
37	Incarnation Evangelical Lutheran Church	59 Hayground Road
38	Hayground Cemetery	Montauk Highway
39	Town of Southampton Open Space	Montauk Highway, east of Lake Road
40	Sayre Town Park	156 Snake Hollow Road
41	Hayground School	151 Mitchells Lane
42	Bridgehampton United Methodist Church	2247 Montauk Highway
43	Bridgehampton Post Office	2322 Montauk Highway
44	Queen of the Most Holy Rosary Roman Catholic Church	2352 Montauk Highway
45	Queen of the Most Holy Rosary Roman Catholic Church Open Space	2350 Montauk Highway
46	Bridgehampton Historical Society	2368 Montauk Highway
47	Town of Southampton Highway Department	131 Corwith Avenue
48	DIA Art Foundation	23 Corwith Avenue
49	Town of Southampton Public Facilities	41 Montauk Highway
50	Bridgehampton Fire Department and Ball fields	64 School Street
51	Bridgehampton Presbyterian Church	2429 Montauk Highway
52	Bridgehampton Library	2478 Montauk Highway
53	St. Ann's Episcopal Church	2463 Main Street
54	Town of Southampton Open Space	2539 Montauk Highway
55	Berwind Memorial Green	25 Hildreth Avenue
56	Bridgehampton Elementary School and High School	2685 Montauk Highway
57	First Baptist Church	151 Bridgehampton Sag Harbor Turnpike
58	Edgewood Cemetery	86 Edgewood Avenue
59	South Fork Natural History Society	377 Bridgehampton Sag Harbor Turnpike
60	Town of Southampton Open Space	East of Bridgehampton Sag Harbor Turnpike
61	Church of God in Christ	461 Bridgehampton Sag Harbor Turnpike
62	Town of Southampton Open Space	North and south of Narrow Lane
63	Bridgehampton Child Care and Recreational Center	551 Sag Harbor Turnpike
64	Town of Southampton Community Center	585 Bridgehampton Sag Harbor Turnpike
65	Town of Southampton Open Space	West of Tansey Lane
66	Town of Southampton Open Space	Lumber Lane
67	Town of Southampton Open Space	Toppings Path
68	Suffolk County Open Space	Haines Path
69	Town of Southampton Open Space	Old Farm Road
70	Nature Conservancy Open Space	Crooked Pond
71	Unitarian Universalist Congregation	977 Bridgehampton Sag Harbor Turnpike
72	Suffolk County Open Space	1120 Bridgehampton Sag Harbor Turnpike
73	Nature Conservancy Open Space	585 Sprig Tree Path
74	Suffolk County Open Space	734 Toll Gate Road
75	Town of Southampton Open Space	South of Middle Line Highway
76	Town of Southampton Open Space	North of Scuttle Hole Road
77	Town of Southampton Police Substation	2044 Montauk Highway
78	Bridgehampton Militia Green	66 Mitchells Lane
79	Poxabogue County Park and Preserve	Northwest of Poxabogue Pond
80	Town of Southampton Open Space	Toll Gate Road
81	Suffolk County Open Space	Aelfies Way

Source: Field reconnaissance, August 2007

0 2,500 5,000 10,000 Feet

Long Island Power Authority
Southampton to BridgehamptonTransmission Line

Montauk Highway Alternative
Community Facilities and Open Space
Figure 17-45

11.19.07

Montauk Highway Alternative
1/2 Mile Study Area
Open Space
LIRR

Bridgehampton Substation

Deerfield Substation

Southampton Substation

LITTLE PECONIC BAY

ATLANTIC OCEAN

TOWN OF EAST HAMPTON

N

0 2,500 5,000 10,000 Feet

Long Island Power Authority
Southampton to BridgehamptonTransmission Line

Montauk Highway Alternative
Open Space
Figure 17-46

11.19.07

Montauk Highway Alternative
1/2 Mile Study Area
Agricultural
Wetlands
Village/Hamlet Gren/Parks & Recreation
Trails
Open Space/Greenbelt Areas
Aquifers Recharge Areas
LIRR

Bridgehampton Substation

Deerfield Substation

Southampton Substation

LITTLE PECONIC BAY

ATLANTIC OCEAN

TOWN OF EAST HAMPTON

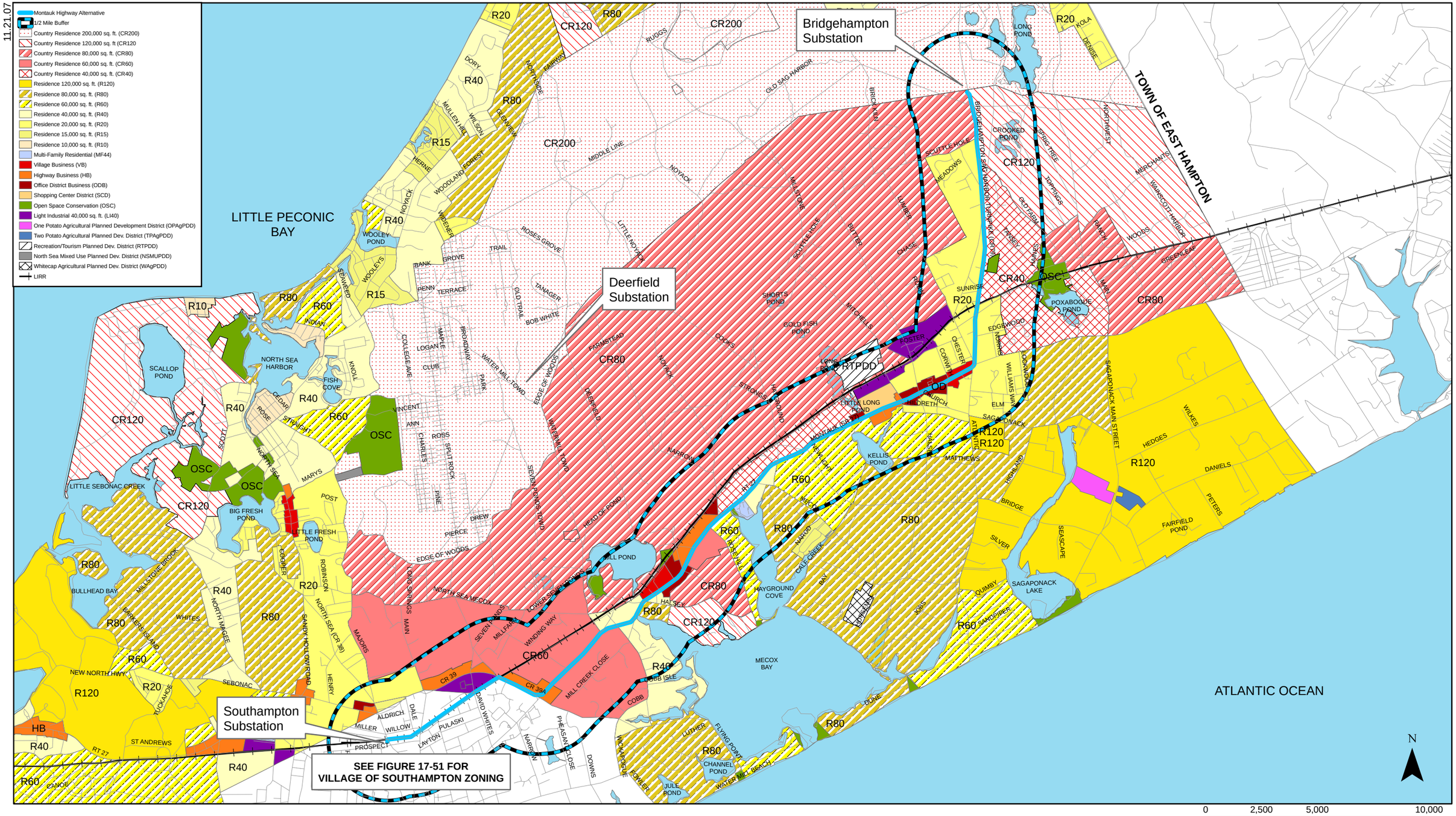
0 2,500 5,000 10,000 Feet

N

Long Island Power Authority
Southampton to BridgehamptonTransmission Line

Montauk Highway Alternative
Community Preservation Fund Priority Parcels (2005)
Figure 17-47

11.21.07



Long Island Power Authority
Southampton to BridgehamptonTransmission Line

Montauk Highway Alternative
Town of Southampton Existing Zoning
Figure 17-48

11.19.07

Montauk Highway Alternative
1/2 Mile Study Area
Agricultural Overlay District
Aquifer Protection Overlay District
LIRR

Bridgehampton Substation

Deerfield Substation

Southampton Substation

TOWN OF EAST HAMPTON

LITTLE PECONIC BAY

ATLANTIC OCEAN

MECOX BAY

SAGAPONACK LAKE

LONG POND

CROOKED POND

POXABOGUE POND

SHORTS POND

GOLD FISH POND

LITTLE LONG POND

KELLIS POND

HAYGROUND COVE

CHANNEL POND

JULE POND

FAIRFIELD POND

MILL POND

LITTLE SEBONAC CREEK

BIG FRESH POND

LITTLE FRESH POND

SCALLOP POND

BULLHEAD BAY

WOOLEY POND

NORTH SEA HARBOR

FISH COVE

CALF CREEK

MILL CREEK

WATER MILL BEACH

BRIDGEHAMPTON SAG HARBOR TURNPIKE (CR 79)

NORTH SEA (CR 39)

NEW NORTH HWY

RT 27

CR 39A

CR 39

0 2,500 5,000 10,000 Feet

N

Long Island Power Authority
Southampton to BridgehamptonTransmission Line

Montauk Highway Alternative
Overlay Districts
Figure 17-49

11.19.07

Montauk Highway Alternative
1/2 Mile Study Area
Old Filed Map Overlay District
LIRR

Bridgehampton Substation

Deerfield Substation

Southampton Substation

TOWN OF EAST HAMPTON

LITTLE PECONIC BAY

ATLANTIC OCEAN

N

0 2,500 5,000 10,000 Feet

Long Island Power Authority
Southampton to BridgehamptonTransmission Line

Montauk Highway Alternative
Old Filed Map Overlay District
Figure 17-50

11.21.07

Montauk Highway Alternative
1/2 Mile Study Area
Residence 120,000 sq. ft.
Residence 80,000 sq. ft.
Residence 40,000 sq. ft.
Residence 20,000 sq. ft.
Residence 12,500 sq.ft
Residence 7,500 sq. ft.
Multi-Family Residence 20,000 sq. ft.
Multi-Family residence 25,000 sq. ft.
Village Business
Highway Business
Office District Business
Hospital Accessory
Light Industry
Medical District
LIRR

Bridgehampton Substation

SEE FIGURE 17-48 FOR TOWN OF SOUTHAMPTON ZONING

Deerfield Substation

Southampton Substation

LITTLE PECONIC BAY

ATLANTIC OCEAN

TOWN OF EAST HAMPTON

0 2,500 5,000 10,000 Feet

N

Long Island Power Authority
Southampton to BridgehamptonTransmission Line

Montauk Highway Alternative
Village of Southampton Existing Zoning
Figure 17-51

11.20.07

Photograph Taken September 12, 2007

Existing

Proposed

Montauk Highway Alternative: Photo Simulation J
View looking southwest from Montauk Highway
(East of Fairbanks Court)
Figure 17-52

Long Island Power Authority
Bridgehampton to Southampton Transmission Line

12.03.07

Photograph Taken November 27, 2007

Existing

Proposed

Montauk Highway Alternative: Photo Simulation K
View looking south from Water Mill at Water Mill
Figure 17-53

Long Island Power Authority
Bridgehampton to Southampton Transmission Line

11.29.07

Photograph Taken September 13, 2007

Existing

Proposed

Montauk Highway Alternative: Photo Simulation L
View from Willow Road looking northeast
Figure 17-54

Long Island Power Authority
Bridgehampton to Southampton Transmission Line

12.04.07

Photograph Taken November 27, 2007

Existing

Proposed

Montauk Highway Alternative: Photo Simulation M
View looking north from School Street
south of Montauk Highway
Figure 17-55

Long Island Power Authority
Bridgehampton to Southampton Transmission Line

11.29.07

Photograph Taken November 27, 2007

Existing

Proposed

Montauk Highway Alternative: Photo Simulation N
View looking south from Corwith Avenue north of Montauk Highway
Figure 17-56

Long Island Power Authority
Bridgehampton to Southampton Transmission Line

11.29.07

Photograph Taken November 27, 2007

Existing

Proposed

Montauk Highway Alternative: Photo Simulation O
View looking northwest from Presbyterian Church
(South of Hill Lane in Bridgehampton)
Figure 17-57

Long Island Power Authority
Bridgehampton to Southampton Transmission Line

11.29.07

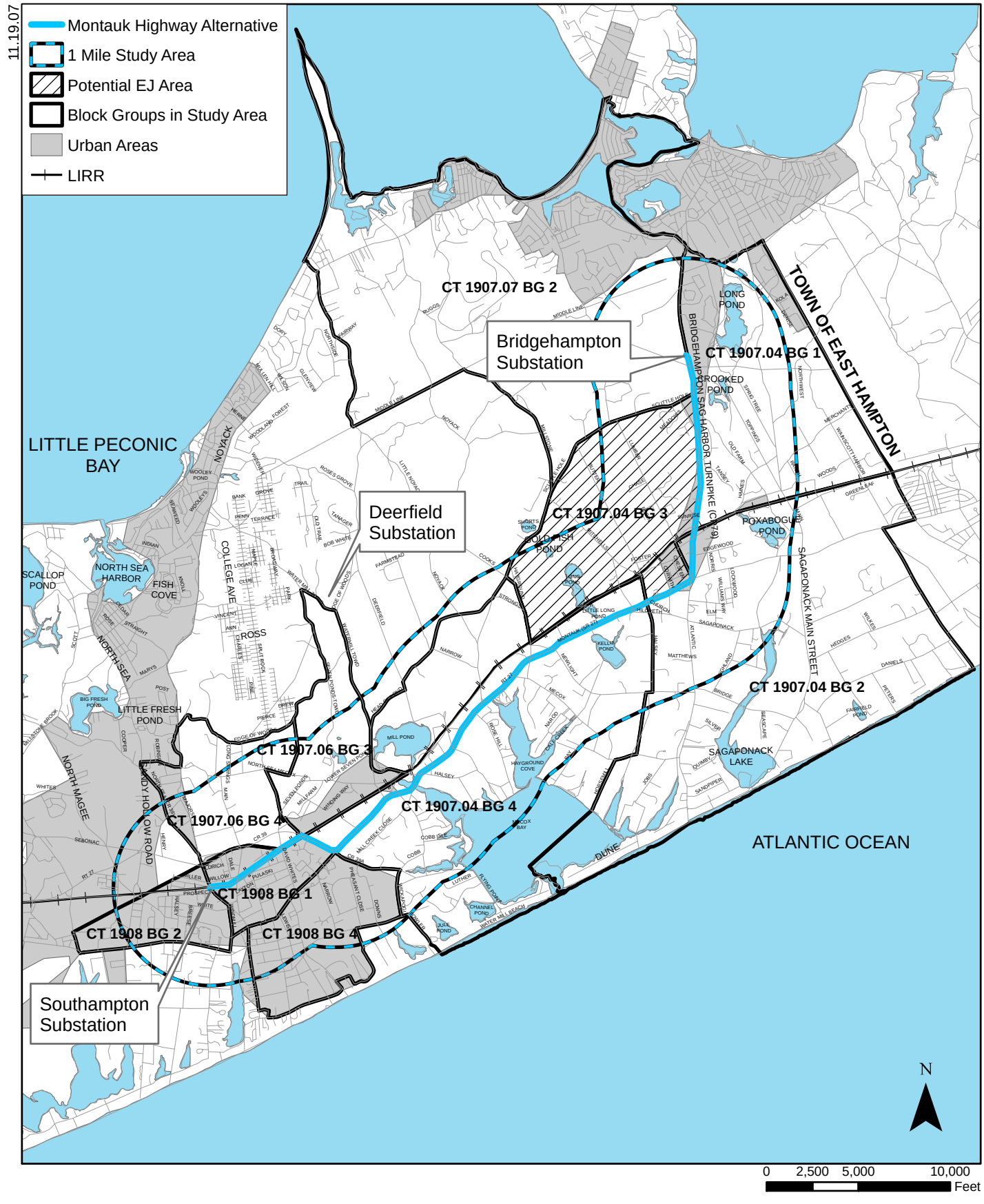
Photograph Taken November 27, 2007

Existing

Proposed

Montauk Highway Alternative: Photo Simulation P
View looking west from the Nathaniel Rodgers Historic Site at Montauk HIghway and Ocean Road in Bridgehampton
Figure 17-58

Long Island Power Authority
Bridgehampton to Southampton Transmission Line



Long Island Power Authority
Southampton to BridgehamptonTransmission Line

Montauk Highway Alternative
Environmental Justice Study Area
Figure 17-59