

20. Construction Impacts

20.1. Potential Impacts of Proposed Project

The construction of this project, like any large construction project, would have short-term impacts on the environment related strictly to the construction activities itself. These include soil erosion, noise, traffic disruption, and dust.

20.1.1. Construction Schedule

Construction is estimated to extend over a fifteen year period and consist of multiple phases. At this time a specific construction schedule is not known.

20.1.2. Construction Hours

Construction activities would comply with local regulations in effect at the time of construction. It is anticipated that construction would be confined to the weekday hours of 7 am to 6 pm. Typical construction schedules begin the weekday at 7:00 am, and end around 3:00-3:30 pm, so construction trips typically occur outside weekday AM and PM peak hours.

20.1.3. Soil Erosion and Dust

Due to the lack of turf and the movement of construction vehicles and equipment during construction, soil erosion and dust generation are a potential impact if not properly managed.

20.1.4. Noise

Impacts on community noise levels during construction can result from noise from construction equipment operation, and from construction vehicles and delivery vehicles traveling to and from the site. Noise and vibration levels at a given location are dependent on the type and quantity of construction equipment being operated, the acoustical utilization factor of the equipment (i.e., the percentage of time a piece of equipment is operating), the distance from the construction site, and any shielding effects from structures or barriers). Noise levels caused by construction activities would vary widely, depending on the phase of construction and the location of the construction activities relative to noise sensitive receptor locations.

20.1.5. Traffic Disruption

The bulk of construction-related traffic typically occurs outside normal “rush hour” peak periods. Construction workers arrive by 6:00 or 7:00 am and therefore do not generate traffic during the AM peak hour period that begins at 7:00 am. Along the same lines, most construction workers typically end their day by 3:00 pm, and therefore do not generate traffic during the PM peak hour period that begins at 4:00 pm.

Specific construction vehicle routes are also not known at this early stage. It is likely that trucks would be routed to access the Long Island Expressway directly, and will not utilize local roads.

20.2. Proposed Mitigation

There are several impacts which are associated with construction. These impacts are short-term in nature and end upon the completion of construction. While the exact construction techniques are unknown at this time, information is provided below concerning typical measures utilized to minimize the short-term impacts from construction.

20.2.1. Soil Erosion and Dust

The proposed erosion control measures would be installed prior to the start of construction. Additional erosion control measures may become necessary, based upon field conditions that may develop as construction progresses

Specific methods and materials to be employed in the installation and maintenance of the erosion control measures would conform to the *New York Standards and Specifications for Erosion and Sediment Control*.

Existing vegetation to be maintained would be protected by the use of snow fencing, triangular wood fencing or other equivalent means and would remain undisturbed.

Prior to any construction disturbance erosion control measures and tree protection measures would be implemented. Erosion control measures would include silt fence installation, a stabilized construction entrance, hay bale protection, inlet protection, etc. and the protection of both individual trees and groupings of trees as needed. Both erosion control measures and tree protection measures would be

inspected and maintained on a regular/daily basis and remain in place until an acceptable level of permanent stabilization is achieved.

Clearing and grading would be scheduled to minimize the size of exposed areas and the length of time such areas will be exposed.

Sediment barriers (silt fence, hay bales or the equivalent) would be installed prior to any grading work along the limits of disturbance and would be maintained for the duration of the work. No sediment from the site would be permitted to wash onto adjacent properties.

Drainage inlets would be protected from sediment buildup through the use of sediment barriers, sediment traps or the equivalent, as required.

Proper maintenance of erosion control measures would be performed as indicated by periodic inspection and after heavy or prolonged storm events. Maintenance measures include, but are not limited to, cleaning of sediment basins or traps, cleaning or repair of sediment barriers, cleaning and repair of berms and diversions and cleaning and repair of inlet protection.

Appropriate means such as spraying of exposed soils, the use of tarpaulins or the equivalent to cover small areas of exposed materials would be used to control fugitive dust. Larger areas would be hydroseeded with a fast germinating seed mix.

A stabilized construction entrance would be maintained to prevent soil and loose debris from being tracked onto adjacent roads. The construction entrance would be maintained until the site is permanently stabilized.

Sediment barriers and other erosion control measures would remain in place until disturbed areas are permanently stabilized. After permanent stabilization, paved areas would be cleaned and drainage systems cleaned and flushed, as necessary.

20.2.2. Noise

A wide variety of measures can be used to minimize construction noise and reduce potential noise impacts. In addition to complying with local ordinances

regarding construction schedule, during each phase of construction at the project site, measures should be implemented to control construction noise and vibration levels.

The Code of the Town of Brookhaven, specifically § 50-6 B (7), prohibits construction activities between the hours of 6:00 pm and 7:00 am on weekdays and at any time on weekends and holidays. In accordance with the Code of Brookhaven, construction will be confined to the weekday hours of 07:00 am and 6:00 pm.

In terms of source controls (i.e., reducing noise emission levels at the source or during the most noise sensitive time periods), all contractors and subcontractors should be required to properly maintain their equipment and have the appropriate manufacturer's noise reduction devices, including but not limited to a quality muffler that is free of rust, holes, and exhaust leaks.

In terms of path controls (e.g., placement of equipment, implementation of barriers between equipment and noise sensitive receptors), the following measures for construction could be implemented to the extent feasible and practicable:

Noisy equipment, such as generators, cranes, trailers, concrete pumps, concrete trucks, and dump trucks, would be located away from and shielded from noise sensitive receptor locations.

During construction, either vibratory pile drivers or a shroud/noise bellows system could be used in conjunction with impact pile drivers to reduce noise levels from pile driving activity at adjacent noise sensitive locations (i.e., residences and parks/open space).

20.2.3. Traffic Disruption

While the construction phasing and plans are unknown at this time, it is highly unlikely that there would be significant numbers of construction worker vehicles during typical peak hour periods. If construction plans developed in the future indicate extensive heavy construction (or multiple simultaneous phases or projects), a construction trip analysis should be undertaken to prevent traffic disruption during construction periods.