SECTION 11

EFFECTS ON THE USE AND CONSERVATION OF ENERGY RESOURCES

11.0 <u>INTRODUCTION</u>:

This section of the DGEIS consists of the proposed impacts of the mixed use neighborhood on use and conservation of energy. The SEQRA Regulations require that a DGEIS include an analysis of a proposed project on the use and conservation of energy. ¹

11.1 EVALUATION OF USE OF ENERGY AND CONSERVATION OF ENERGY:

The Project will result in the consumption of energy resources, during both the construction and occupation of the Project facilities. Overall, however, a key objective of the Project is to promote sustainable growth in a pedestrian-friendly setting, which is designed to minimize long-term energy use. Further, the Project Sponsor plans to design the Project facilities in consideration of Leadership in Energy and Environmental Design ("LEED") criteria, incorporating green building concepts and energy efficiencies.

During the multi-year construction of the mixed use neighborhood, energy use impacts will be short-term and will stem from minor and localized increases in the demand for fossil fuels and petroleum products necessary for the operation and maintenance of construction equipment, machinery, and vehicles. Minor amounts of energy will also be expended as construction personnel travel to and from the Project Site.

¹ <u>See</u> 6 NYCRR Part 617.9(b)(5)(iii)(e).

On a long-term basis, energy use will increase as the Westwood residential areas are inhabited and commercial buildings are occupied. Increased energy consumption is expected to occur in order to heat and cool the facilities on the Project Site and as a result of vehicular movements to and from the Project Site. However, these long-term impacts will be relatively minor and localized to the Project Site and vicinity.

The heating and cooling energy demands anticipated from the Project Site redevelopment will not be significant and local electric and natural gas suppliers (National Grid and National Fuel Gas, respectively) have confirmed that sufficient capacity is available to serve the proposed mixed use components. No improvements to these existing energy supply systems are anticipated to be necessary (apart from the extension of utility lines to the residential and commercial facilities on the Project Site). In addition, the new buildings are expected to incorporate energy-efficient designs and to use energy-efficient building materials and HVAC systems. Further, commercial buildings in New York State must be designed in accordance with Chapter 5 of the Energy Conservation Construction Code of New York State ("ECCCNYS 2010"). ECCCNYS 2010 addresses the design and construction of energy-efficient building envelopes and the installation of energy-efficient mechanical, lighting and power systems through requirements emphasizing performance. This comprehensive code establishes minimum requirements for energy-efficient buildings using prescriptive and performance-related provisions. It makes possible the use of new materials and innovative techniques that conserve energy.²

² See ECCCNYS 2010, www.iccsafe.org

Further, the Project is designed to promote pedestrian/bicycle uses, providing options for using a network of trails and sidewalks to access a range of nearby retail, commercial, recreational, and educational facilities.

The Project Sponsor has designed the Conceptual Master Plan in association with the principles and objectives of the LEED Neighborhood Development Rating System. LEED certification programs are managed through the United States Green Building Council ("USGBC"). USGBC is a green building initiative and energy efficiency advocacy group that provides policymakers and community leaders with the tools, strategies, and resources to support sustainable built environments. LEED certification is the most widely recognized and widely used green building program internationally. The Neighborhood Development ("ND") certification program places an emphasis on site selection, design, and construction elements that bring buildings and infrastructure together into a neighborhood.