



7. Effects on the Use and Conservation of Energy Resources

The Project would use energy resources including electricity and fossil fuels. Anticipated levels of consumption, as well as some strategies to reduce energy consumption, are summarized below. Many energy efficient factors and components of the Project meet "green technology" building standards and objectives, and would help to reduce energy use during the short term construction period and long term operational period.

The Project has been designed to meet the energy conservation goals of the Poughkeepsie Town Plan and the MacDonnell Heights Center Zone, including *'Promote pedestrian activity through a safe and walkable environment, encourage a "park once and walk around" core and establish connections to adjacent residential neighborhoods'* and *'Promote a retail shopping and business environment that is not strip-retail oriented, where shoppers park once and walk between adjoining commercial uses where the buildings are primarily connected to each other or use zero lot lines.'*

The Project would meet the basic requirements and comply with the New York State Energy Conservation Construction Code and standards. The Project would incorporate efficient mechanical equipment, insulated roofs, insulated exterior wall, insulated foundations, and windows that are insulated and designed for energy efficiency.

The following energy saving and sustainability measures would be implemented in the Project:

Energy Saving Measures

- The Project would participate in the Town and County recycling programs.
- Water saving fixtures, such as low flow toilets and high efficiency plumbing fixtures and fittings in kitchens and baths, would be used in the proposed structures to reduce water consumption and sewage treatment and discharge.
- Water conserving clothes washers and dishwashers would be selected for the residential units to reduce water consumption and sewage treatment and discharge.
- The commercial and non-residential structures and the exterior lighting would include LED lighting fixtures to reduce energy demand.



- The Project is sited adjacent to existing development, offering opportunities to connect to existing neighborhood resources, transportation and utility infrastructure therefore reducing overall impacts.
- Active streetscapes and appropriately scaled structures were created to reduce independent vehicle use, and increase pedestrian and bicycle activity.

Stormwater Management Practices

- Green infrastructure practices, including tree plantings and stormwater planters, would be included in the Stormwater Pollution Prevention Plan (SWPPP) to reduce runoff volume.

Landscaping Elements

- Landscaping and street trees would be provided throughout the development where feasible, including along Route 44.
- Potential water consumption would be reduced through the implementation of low maintenance landscaping, native plants, and irrigation time restrictions.
- Trees and shrubs would be planted to replace the trees to be removed during construction and planting would be provided along the perimeter areas of the development as well as bordering the buildings on site (see Exhibit 3I-1, Landscaping Plan). Native species would be used as frequently as possible.
- Bicycling would be encouraged as bicycle racks would be provided throughout the Project Site.
- Two community gardens would be incorporated into the Project. One would be proposed on the east side of the Project Site, adjacent to the proposed Maintenance Office/Service Building. Another small community garden would be proposed on the west side immediately east of Building 1.
- Over 21.7 acres of the Project Site's open space is proposed to be retained and available for passive pedestrian oriented recreational opportunities.