that will be considered during the design of the excavation and dewatering activities include the following:

- The amount of water that will need to be removed based on the embedment depth.
- Slope stability and subsidence issues that can occur when water is removed from the unconsolidated materials.
- The lateral extent of groundwater depressions caused by dewatering.
- The management and handling of the water removed from the excavation.
- Changes in water quality.

In accordance with the DCD, the proposed maximum embedment depth of approximately 12.2 m (40 ft.) (elevation of 3 m [10 ft.] NAVD88) is below the static water table. Temporary groundwater wells will be installed and monitored to prevent excessive dewatering effects. Detailed information pertaining to groundwater monitoring activities is discussed in ER Sections 6.1, 6.3, and 6.6.

Dewatering for the nuclear island foundation excavations will be required during construction activities. The planned depth of the excavations is approximately 75 ft. Water from the excavations will be intermittently pumped and discharged to temporary retention/settling ponds. The construction of the ponds will allow the discharged water to percolate back into the subsurface. Measures will be implemented, such as sedimentation traps or filtration, to ensure that erosion or siltation caused by the dewatering will be negligible. However, the effects of these activities will be confined to the construction period. They will be monitored and controlled using Florida BMP Selection and Implementation for sediment control (Reference 4.2-005). Proper safeguards will be implemented to prevent long-term effects on local habitats from construction activities. Potential long-term impacts on groundwater levels from dewatering are anticipated to be SMALL.

Raw water for construction activities will be withdrawn from on-site supply wells (see Figure 4.2-1). Permit approval is anticipated for four 16-in. diameter supply wells constructed to a maximum depth of 500 ft. with a minimum cased interval of 150 ft. Planned pump capacity per well is 1000 gallons per minute (gpm). The following maximum groundwater needs are estimated as follows:

- Soil compaction — 300,000 gallons per day (gpd).
- Dust and erosion control — 100,000 gpd.
- Concrete mixing — 100,000 gpd.
- Miscellaneous — 50,000 gpd.