

3.1.2 Potential Impacts

3.1.2.1 Potential Short-Term Impacts

Approximately 547 acres of surface soils will be disturbed during the construction of the Project. Once construction activities are complete, approximately 92 percent of the disturbed area, or approximately 503 acres of surface soil, will be restored. Table 3-2 provides the approximate areas of both temporary and permanent soil disturbance.

Table 3-2
Approximate Area of Soil Disturbance

Component	Permanent Impact (acres)	Temporary Impact (acres)
Turbines	0.4	50.8
Access Roads	31.3	38.4
Buried Electrical Interconnect	0.0	282.9
Overhead Electrical Transmission Line	0.0	106.5
Collector Substation/O&M Building	11.4	0.1
Transmission Owner Substation	0.5	0.0
Meteorological Towers	0.4	3.6
Laydown Yard	0.0	12.25
Concrete Batch Plant	0.0	9.9

Based on the information reviewed and described above, the subsoils within the Project Site consist predominantly of silt loams and loams of glacial origin. The soil survey indicates that the soils in and around the Project Area vary from shallow to very deep and have been formed from glacial till derived from the underlying limestone. The water table associated with mapped soils on the Project Site is shallow. In addition, bedrock depths across the area would vary in areas underlain by karst limestone. As stated above, due to its particular characteristics, including an irregular bedrock surface, the presence of large voids and rapid underground drainage, karst limestone presents special challenges for civil engineering projects such as wind energy projects. The finer grained soils may have a tendency to soften on exposure to weather and would likely require protection from weather and vehicle traffic to prevent rutting. Slopes are generally slight to moderate in the area of the proposed wind turbines and slope stability is not expected to be an issue for design. The overall seismic risk is low.

Based upon the topographic features (see Figure 2-1) and drainage characteristics of the proposed Project Site, grading and other construction activities could cause the disruption of soils and the increased potential for erosion during construction without appropriate erosion and