TABLES

TABLE 1
Dominant Soil Proximate to Proposed Cassadaga Wind Project Study Area
Chautauqua, New York

Soil Type	Busti silt loam (Bs)	Chautauqua silt loam (Ck)	Chadokin silt loam (Ch)
Occurrence	**BsA:** Broad flats and in long, narrow areas along drainageways; some areas receive runoff from the higher adjacent soils (0-3% slopes)	**CkB:** Convex hilltops and small knolls that receive little or no runoff from the higher adjacent soils (3-8% slopes)	**ChB:** Convex areas on hilltops that receive little or no runoff from the higher adjacent soils
			ChC: Convex areas on hilltops and side slopes that receive runoff from the higher adjacent soils (8-15% slopes)
	BsB: Convex areas on uplands, on side slopes, and in concave areas on foot slopes that receive runoff from the higher adjacents soils (3-8% slopes)	**CkC:** Hillsides and side slopes that receive runoff from the higher adjacent soils (8-15% slopes)	**ChD:** Uniformly sloping valley sides that receive runoff from the higher adjacent soils (15-25% slopes)
	BsC: Side slopes and foot slopes that receive runoff from the higher adjacent soils (8-15% slopes)	**CkD:** Smooth hillsides and valley sides that receive runoff from the higher adjacent soils (15-25% slopes)	**ChE:** Side slopes of hills and on valley walls; areas receive runoff from the higher adjacent soils (25-35% slopes)
			ChF: Hillsides and valley sides that receive runoff from the higher adjacent soils; many areas on the valley sides are deeply dissected by V-shaped gullies (35-50% slopes)
Depth	Very deep	Very deep	Very deep
Drainage	Somewhat poorly drained	Moderately well drained	Well drained
High Water Table	Perched at 0.5 to 1.5 feet from November through April	Perched at 1.5 to 2.0 feet from November through April	3 to 6 feet
Depth to Bedrock	More than 6 feet	More than 6 feet	More than 6 feet
Notable Features	30% gravel in subsoil and substratum from 19 to 72 inches (gravelly silt loam)	45% gravel in subsoil from 22 to 34 inches (gravelly silt loam); 30% gravel in substratum from 34 to 60 inches (very gravelly loam); 45% gravel in substratum from 60 to 72 inches (very gravelly loam)	10% gravel in subsoil from 13 to 24 inches; 20% gravel in subsoil from 24 to 43 inches (gravelly loam); 30% gravel in substratum from 43 to 72 inches (gravelly loam)

Soil Type	Fremont silt loam (Fm)	Schuyler silt loam (Sh)
Occurrence	**FmA:** Flat hilltops that receive little or no runoff, and on upland benches that receive runoff from the higher adjacent soils (0-3% slopes)	**ShB:** Convex areas on hilltops and the upper side slopes that receive little runoff from the higher adjacent soils (3-8% slopes)
	FmB: Broad hilltops and valley sides that receive a considerable amount of runoff from the higher adjacent soils (3-8% slopes)	**ShC:** Hillsides and side slopes that receive runoff from the higher adjacent soils (8-15% slopes)
	FmC: Hillsides and valley sides that receive runoff from the higher adjacent soils (8-15% slopes)	**ShD:** Smooth hillsides and valley sides that receive runoff from the higher adjacent soils (15-25% slopes)
	FmD: Valley sides that receive runoff from the higher adjacent soils	**ShE:** Hillsides and valley sides that receive runoff from the higher adjacent soils (25-35% slopes)
		ShF: Hillsides and valley sides that receive runoff from the higher adjacent soils
Depth	Very deep	Very deep
Drainage	Somewhat poorly drained	Moderately well drained
High Water Table	Perched at 0.5 to 1.5 feet from December through May	Perched at 1.5 to 2.0 feet from March through May
Depth to Bedrock	More than 6 feet	More than 6 feet
Notable Features	30% channery fragrments in subsoil from 8 to 19 inches; 20% channery fragments in subsoil from 19 to 35 inches; 25% channery fragments in substratum from 35 to 72 inches	20% channery fragments in subsoil and substratum from 18 to 38 inches; 25% channery fragments in substratum from 38 to 72 inches

Soil Type	Raynham silt loam (Ra)	Getzville silt loam (Ge)
Occurrence	**RaA:** Broad flats on lake plains and in low areas in the larger valleys	Lowland plains in the wide major valleys
	RaB: Broad flats on lake plains and in low areas in the larger valleys	
Depth	Very deep	Very deep
Drainage	Somewhat poorly drained	Poorly or very poorly drained
High Water Table	Perched at a depth of 0.5 to 2.0 feet from November through May	Perched at the surface or within a depth of 0.5 feet from November through June
Depth to Bedrock	More than 6 feet	More than 6 feet
Notable Features	-	Dominantly sand in substratum from 22 to 72 inches

TABLE 2
Minor Soils Proximate to Proposed Cassadaga Wind Project Study Area
Chautauqua, New York

Soil Type	Mardin channery silt loam (Md)	Ashville silt loam (As)	Alden mucky silt loam (Ad)
Occurrence	**MdB:** Convex hilltops and on side slopes that receive runoff from the higher adjacent soils (3-8% slopes) **MdC:** Hillsides and side slopes that receive runoff from the higher adjacent soils (8-15% slopes) **MdD:** Smooth hillsides and valley sides that receive runoff from the higher adjacent soils (15-25% slopes)	Along drainageways, on broad flats, and in small depressions on glaciated uplands (slopes range from 0-3%)	Low areas, depressions, and in headwater areas of streams (slopes range from 0-3%)
Depth	Very deep	Very deep	Very deep
Drainage	Moderately well drained	Poorly drained	Very poorly drained
High Water Table	Perched at 1.5 to 2.0 feet from March through May	Within a depth of 1 foot from November through May	As much as 1.0 foot above the surface or within a depth of 0.5 foot from November through June
Depth to Bedrock	More than 6 feet	More than 6 feet	More than 6 feet
Notable Features	15% channery fragments in subsoil from 1 to 18 inches; 25% channery fragments in subsoil from 18 to 32 inches; 20% channery fragments in subsoil from 32 to 45 inches; 25% channery fragments in substratum from 45 to 72 inches	10% rock fragments in subsoil from 12 to 36 inches; 30% rock fragments in substratum from 36 to 72 inches (gravelly silt loam)	5% rock fragments in subsurface layer from 9 to 13 inches; 10% rock fragments in subsoil from 13 to 35 inches; 30% rock fragments in substratum from 35 to 72 inches

Soil Type	Dalton silt loam (Da)	Volusia channery silt loam (Vo)	Fluvaquents-Udifluvents complex, frequently flooded (Fe)
Occurrence	**DaA:** Top of hills in the uplands and on broad flats on till plains (0-3% slopes) **DaB:** Top of hills in uplands and on broad flats on till plains (3-8%	**VoA:** Flat hilltops that receive little or no runoff and upland benches that receive runoff from the higher adjacent soils (0-3% slopes) **VoB:** Hilltops, side slopes, and concave toe slopes on uplands that receive runoff from the higher adjacent soils (3-8% slopes) **VoC:** Hillsides, valley sides, and side slopes of dissecting	Unconsolidated alluvium deposited in long, narrow strips along secondary streams
Depth	Very deep	Very deep	Very deep
Drainage	Somewhat poorly drained	Somewhat poorly drained	Very poorly drained to moderately well drained
High Water Table	Perched at 0.5 to 1.5 feet from December through May	Perched at 0.5 to 1.5 feet from December through May	Not provided
Depth to Bedrock	More than 6 feet	More than 6 feet	Not provided
Notable Features	20% gravel in subsoil from 23 to 46 inches (gravelly silt loam); 25% gravel in substratum from 46 to 72 inches (gravelly silt loam)	20% gravel in subsoil from 15 to 42 inches (gravelly silt loam); 25% gravel in substratum from 42 to 72 inches (gravelly silt loam)	Frequently flooded by nearby streams; varying amounts of gravel and cobblestones

Soil Type	Valois gravelly silt loam (Va and Vc)	Towerville silt loam (To)	Orpark silt loam (Or)
Occurrence	**VaB:** Reglaciated moraines on the lower sides of the major valleys (3-8% slopes) **VaC:** Reglaciated moraines on the lower sides of valleys (8-15% slopes) **VaD:** Hilly reglaciated moraines on the lower sides of valleys (15-25% slopes) **VaE:** Reglaciated moraines on the sides of valleys (25-35% slopes) **VaF:** Reglaciated moraines on the sides of valleys (35-50% slopes) **VcC:** Ridges and knolls that slope in many directions, on dissected terranes, on long eskers, and in areas of kettle-kame deposits (rolling)	**ToB:** Convex hilltops and side slopes in areas where the topography is influenced by the underlying bedrock (3-8% slopes) **ToC:** Hilltops and side slopes in areas where topography is influenced by bedrock (8-15% slopes) **ToD:** Valley sides that commmonly are dissected by V-shaped gullies (15-25% slopes) **ToE:** Valley sides that commonly are dissected by V-shaped gullies (25-35% slopes) **ToF:** Valley sides that commonly are dissected by V-shaped gullies (35-50% slopes)	**OrA:** Flat ledges and ridge crests where topography is influenced by the underlying bedrock (0-3% slopes) **OrB:** Side slopes and ridge benches where topography is influenced by bedrock (3-8% slopes) **OrC:** Valley sides and hillsides in areas where topography is influenced by bedrock; soil receives runoff from the higher adjacent soils (8-15% slopes) **OrD:** Valley sides that commonly are dissected by V-shaped gullies, in areas where the topography is influenced by bedrock; soil receives runoff from the higher adjacent soils (15-25% slopes)
Depth	Very deep	Moderately deep	Moderately deep
Drainage	Well drained	Moderately well drained	Somewhat poorly drained
High Water Table	More than 6 feet	Perched at 1.5 to 2.0 feet from December through May	Perched at 0.5 to 1.5 feet from November through May
Depth to Bedrock	More than 6 feet	20 to 40 inches (bedded siltstone)	20 to 40 inches (siltstone)
Notable Features	15% gravel in subsoil from 6 to 11 inches; 20% gravel in subsoil from 11 to 28 inches; 30% gravel in subsoil from 28 to 45 inches (gravelly sandy loam); 35% gravel in substratum from 45 to 48 inches (very gravelly loamy sand); 45% gravel in substratum from 48 to 72 inches (very gravelly sandy loam)	15% channery fragments in subsoil from 12 to 22 inches; 20% channery fragments in subsoil from 22 to 30 inches	20% channery fragments in subsoil from 13 to 26 inches

Soil Type	Chenango gravelly loam (Cn)	Chenango channery loam (Co)	Canaseraga silt loam (Cd)
Occurrence	**CnA:** Outwash plains, beach ridges, and stream terraces (0-3% slopes) **CnB:** Outwash plains, beach ridges, and stream terraces (3-8% slopes) **CnC:** Rolling outwash plains, beach ridges, and stream terraces (8-15% slopes) **CnD:** Hilly outwash plains, terrace fronts, and dissected deltas (15-25% slopes) **CnE:** Terrace fronts, sides of ridges, and side slopes of dissected outwash plains (25-35% slopes)	**CoA:** Alluvial fans and remnant deltas (0-3% slopes) **CoB:** Alluvial fans and remnant deltas (3-8% slopes)	**CdB:** Convex areas on hilltops and side slopes that receive little or no runoff from the higher adjacent soils (3-8% slopes) **CdC:** Areas on hilltops and side slopes that receive runoff from the higher adjacent soils (8-15% slopes)
Depth	Very deep	Very deep	Very deep
Drainage	Well drained to excessively drained	Well drained to excessively drained	Well or moderately drained
High Water Table	More than 6 feet	3 to 6 feet from April through May	Perched at 1 to 4 feet from March through May
Depth to Bedrock	More than 6 feet	More than 6 feet	More than 6 feet
Notable Features	-	30% gravel in susbsoil from 9 to 27 inches; 45% gravel in subsoil from 27 to 45 inches; 55% gravel in substratum from 45 to 72 inches	25% gravel in subsoil from 23 to 55 inches and in substratum from 55 to 72 inches

TABLE 2
Minor Soils Proximate to Proposed Cassadaga Wind Project Study Area
Chautauqua, New York

Soil Type	Erie silt loam (Er)	Langford silt loam	Canandaigua silt loam, loamy substratum (Cb)
Occurrence	**ErA:** Broad flats on hilltops and till plains (0-3% slopes) **ErB:** Areas on broad hilltops, concave toe slopes, and low till plains that receive runoff from the higher adjacent soils (3-8% slopes) **ErC:** Hillsides, valley sides, and side slopes of dissecting drainageways (8-15% slopes)	**LnB:** Convex hilltops and side slopes that receive runoff from the higher adjacent soils (3-8% slopes) **LnC:** Hillsides and side slopes that receive runoff from the higher adjacent soils (8-15% slopes)	Flat areas on lake plains and to a lesser extent in the major valleys (slopes range from 0-3%)
Depth	Very deep	Very deep	Very deep
Drainage	Somewhat poorly drained	Moderately well drained	Poorly drained
High Water Table	Perched at 0.5 to 1.5 feet from December through May	Perched at 1.5 to 2.0 feet from March through May	Within 1 foot from November through May
Depth to Bedrock	More than 6 feet	More than 6 feet	More than 6 feet
Notable Features	15% gravel in subsoil from 15 to 28 inches; 25% gravel in subsoil from 28 to 35 inches; 20% gravel in substratum from 35 to 50 inches; 35% gravel in substratum from 50 to 72 inches	15% gravel in subsoil from 21 to 45 inches; 20% gravel in substratum from 45 to 72 inches	20% gravel in substratum from 60 to 72 inches

Soil Type	Canandaigua mucky silt loam (Cc)	Elnora fine sandy loam (El)	Lamson silt loam (La)
Occurrence	Low areas in the major valleys and to a lesser extent in depressions on lake plains (slopes range from 0-3%)	**ElA:** Broad flats on lowland lake plains and lowlands in the major valleys (0-3% slopes) **ElB:** Undulating areas on lowland lake plains and in dissected areas on the side slopes of the major valleys (3-8% slopes)	Flat lowlands on lake plains and on broad flats in the major valleys
Depth	Very deep	Very deep	Very deep
Drainage	Very poorly drained	Moderately well drained	Poorly drained
High Water Table	At the surface to 1 foot above from November through May	At a depth of 1.5 to 2.0 feet from February through May	As much as 1.0 foot above the surface or within a depth of 0.5 foot from December through May
Depth to Bedrock	More than 6 feet	More than 6 feet	More than 6 feet
Notable Features	20% gravel in substratum from 60 to 72 inches	Loamy fine sand in subsoil from 9 to 30 inches; loamy fine sand and fine sand in substraturm from 30 to 72 inches	Fine sand in substratum from 37 to 72 inches

Soil Type	Minoa fine sandy loam (Mn)	Wayland soils complex (Wy)
Occurrence	Broad flats on lake plains and in areas of lowland in the larger valleys (slopes range from 0-3%)	Lowest positions of the flood plains along the major steams in Chautauqua County (slopes range from 0-3%)
Depth	Very deep	Very deep
Drainage	Somewhat poorly drained	Poorly or very poorly drained
High Water Table	At a depth of 0.5 to 1.5 feet from February through April	0.5 feet above the surface to 1.0 feet below from November through June
Depth to Bedrock	More than 6 feet	More than 6 feet
Notable Features	-	-

TABLE 3

Oil, Natural Gas and Groundwater Well Data in Cassadaga Wind Project Study Area

Chautauqua County, New York

Well Name	Elevation (feet abobe sea level)	Surficial Deposits	Depth to Bedrock (feet)	Depth to Groundwater (feet)	Water Well Depth (feet)	Yield (gallons per minute)
CU1051	1381	*	13	*	65	4
CU1028	1486	*	14	45	75	5
CU1111	1501	*	*	60	119	24
CU2270	1541	*	20	25	45	20
CU1135	1545	*	12	26	76	10
CU1196	1549	*	32	2	55	35
Ames 2	1556	*	35	*	*	*
CU1119	1567	*	>97	73	97	6
CU2387	1572	*	80	23	80	8
CU2560	1582	*	45	*	80	*
CU1098	1584	*	40	45	70	*
Green Highlands 1	1592	*	85	*	*	*
Depew 545	1616	sand and gravel	60	*	*	*
Newton Bros 1	1617	gravel	160	*	*	*
CU1014	1643	*	40	70	122	*
Husarek Drilling Unit 3	1648	*	65	*	*	*
CU2388	1653	*	240	120	268	3
Horton 6	1666	*	67	*	*	*
CU1013	1678	*	37	30	78	*
Bautista 773	1678	*	47	*	*	*
CU1010	1691	*	68	79	100	6
CU2261	1707	*	68	60	100	10
Lengerick 1	1712	*	60	*	*	*
Bolibrzuch 1	1714	sand and gravel	*	*	*	*
Newton Brothers 5	1735	sand	42	*	*	*
CU 1951	1739	*	*	77	124	*
Gierlinger 2	1745	sand	*	*	*	*
Widley M 1	1746	*	40	138	*	*
CU1212	1751	*	63	20	100	10
Penhollow 2	1788	*	10	*	*	*
Horton 3	1791	*	40	*	*	*
CU1030	1794	*	26	116	123	10
Rowicki 1	1794	*	65	103	*	*
CU1704	1733	*	234	180	263	3
CU1079	1823	*	22	8	60	20
Rowicki 2	1846	*	49	175	*	*
Davis 3 767	1860	*	30	*	*	*
Edson 2	1904	till	30	*	*	*
NYSRA 7-4	1933	gravel	40	*	*	*
CU1185	1959	*	30	30	90	25
NYSRA 7-3	1974	gravel	48	*	*	*
CU 743	1977	till	*	5	14	*
Green Highlands 3	1982	*	25	*	*	*
NYSRA 1-13 7678	1988	*	15	*	*	*
Lind 2	1989	*	15	10	*	*
NYSRA 1-18	1992	*	12	*	*	*
Green Highlands 6	2003	*	43	*	*	*
CU 6	2113	till	*	6	13	*

* Not available in records reviewed

"CU" identifier indicative of groundwater well. Other wells are oil or natural gas

See Figure 5 for well locations within Study Area

TABLE 4

Engineering and Chemical Propereties and Classification of Select Soil withing the Cassadaga Wind project Study Area

Chatuaqua County, New York

Busti Silt Loam

	Surface Layer (0 to 8 inches)	Subsoil (8 to 27 inches)	Substratum (27 to 72 inches)
USDA Texture	Silt loam	Silt loam, loam (8-12 in.); Silt loam, loam, gravelly silt loam (12-27 in.)	Gravelly silt loam, gravelly loam
Percentage Fragments > 3 inches	0-5	0-5	0-5
Percentage Passing Sieve No. 200	45-75	45-75 (8-12 in.); 35-75 (12-27 in.)	35-65
% Organic Matter	2-6	2-6	2-6
Liquid Limit (%)	20-40	20-40 (8-12 in.); 15-25 (12-27 in.)	15-25
Plasticity Index	1-12	1-12 (8-12 in.); NP-5 (12-27 in.)	NP-5
Permeability (in/hr)	0.2-2.0	0.2-2.0	0.06-0.6
Available Water Capacity (in./in)	0.13-0.20	0.13-0.20 (8-12 in.); 0.08-0.15 (12-27 in.)	0.08-0.14
Soil Reaction (pH)	5.6-6.5	5.6-6.5	5.6-6.5
Flooding Frequency	None	None	None
Potential Frost Action	High	High	High
Shrink/Swell Potential	Low	Low	Low
Risk of Corrosion - Uncoated Steel	High	High	High
Risk of Corrosion - Concrete	Low	Low	Low

Chautauqua Silt Loam

	Surface Layer (0 to 7 inches)	Subsoil (7 to 34 inches)	Substratum (34 to 72 inches)
Texture	Silt loam	Channery silt loam, gravelly loam, silt loam	Gravelly silt loam, very gravelly loam
Fragments > 3 inches	0-5	0-5	0-5
Percentage Passing Sieve No. 200	45-75	35-70	30-60
% Organic Matter	2-6	2-6	2-6
Liquid Limit	20-40	15-25	15-25
Plasticity Index	1-12	NP-5	NP-5
Permeability (in/hr)	0.6-2.0	0.6-2.0	0.2-0.6
Available Water Capacity (in./in)	0.13-0.20	0.08-0.15	0.08-0.14
Soil Reaction (pH)	5.1-6.5	5.1-6.5	5.1-6.5
Flooding Frequency	None	None	None
Potential Frost Action	Moderate	Moderate	Moderate
Shrink/Swell Potential	Low	Low	Low
Risk of Corrosion - Uncoated Steel	Moderate	Moderate	Moderate
Risk of Corrosion - Concrete	Moderate	Moderate	Moderate

Chadokin Silt Loam

	Surface Layer (0 to 4 inches)	Subsoil (4 to 43 inches)	Substratum (43 to 72 inches)
Texture	Silt loam	Silt loam, gravelly loam, gravelly fine sandy loam (4-24 in.); Channery silt loam, gravelly loam, gravelly sandy loam (24-43 in.)	Channery silt loam, gravelly loam, sandy loam
Fragments > 3 inches	0-5	0-5 (4-24 in.); 0-10 (24-43 in.)	0-15
Percentage Passing Sieve No. 200	40-75	30-70 (4-24 in.); 25-65 (24-43 in.)	26-60
% Organic Matter	2-6	2-6	2-6
Liquid Limit	20-40	15-25	15-25
Plasticity Index	1-12	NP-5	NP-5
Permeability (in/hr)	0.6-2.0	0.6-2.0 (4-24 in.); 0.2-2.0 (24-43 in.)	0.2-2.0
Available Water Capacity (in./in)	0.12-0.21	0.08-0.16 (4-24 in.); 0.07-0.14 (24-43 in.)	0.07-0.14
Soil Reaction (pH)	4.5-6.0	4.5-6.0	5.1-6.5
Flooding Frequency	None	None	None
Potential Frost Action	Moderate	Moderate	Moderate
Shrink/Swell Potential	Low	Low	Low
Risk of Corrosion - Uncoated Steel	Low	Low	Low
Risk of Corrosion - Concrete	High	High	High

Fremont Silt Loam

	Surface Layer (0 to 8 inches)	Subsoil (8 to 35 inches)	Substratum (35 to 72 inches)
Texture	Silt loam	Silt loam, silty clay loam, channery silty clay loam	Silty clay loam, channery silt loam
Fragments > 3 inches	0-10	0-10	0-10
Percentage Passing Sieve No. 200	55-80	35-80	15-65
% Organic Matter	3-8	3-8	3-8
Liquid Limit	35-45	25-40	25-40
Plasticity Index	10-20	10-20	5-15
Permeability (in/hr)	0.6-2.0	0.2-2.0	<0.2
Available Water Capacity (in./in)	0.17-0.21	0.12-0.19	0.08-0.14
Soil Reaction (pH)	4.5-6.0	4.5-6.0	5.1-7.3
Flooding Frequency	None	None	None
Potential Frost Action	High	High	High
Shrink/Swell Potential	Low	Low	Low
Risk of Corrosion - Uncoated Steel	High	High	High
Risk of Corrosion - Concrete	High	High	High

Schuyler Silt Loam

	Surface Layer (0 to 9 inches)	Subsoil (9 to 29 inches)	Substratum (29 to 72 inches)
Texture	Silt loam	Silt loam, very channery loam, channery silty clay loam	Very channery silt loam, loam, channery silty clay loam
Fragments > 3 inches	0-5	5-15	5-15
Percentage Passing Sieve No. 200	30-80	40-80	35-80
% Organic Matter	3-8	3-8	3-8
Liquid Limit	25-40	25-40	25-40
Plasticity Index	5-20	5-20	5-20
Permeability (in/hr)	0.6-2.0	0.2-2.0	0.06-0.2
Available Water Capacity (in./in)	0.12-0.19	0.11-0.18	0.09-0.18
Soil Reaction (pH)	3.6-6.0	3.6-6.0	3.6-6.0
Flooding Frequency	None	None	None
Potential Frost Action	High	High	High
Shrink/Swell Potential	Low	Low	Low
Risk of Corrosion - Uncoated Steel	Moderate	Moderate	Moderate
Risk of Corrosion - Concrete	High	High	High

Raynham Silt Loam

	Surface Layer (0 to 7 inches)	Subsoil (7 to 24 inches)	Substratum (24 to 72 inches)
Texture	Silt loam	Silt loam, silt, very fine sandy loam	Silt loam, silt, very fine sandy loam
Fragments > 3 inches	0	0	0
Percentage Passing Sieve No. 200	55-95	55-95	70-95
% Organic Matter	3-10	3-10	3-10
Liquid Limit	<25	<25	<25
Plasticity Index	NP-5	NP-5	NP-5
Permeability (in/hr)	0.2-2.0	0.2-2.0	0.06-0.2
Available Water Capacity (in./in)	0.18-0.24	0.18-0.22	0.17-0.21
Soil Reaction (pH)	5.1-7.3	5.1-7.3	5.6-7.8
Flooding Frequency	None	None	None
Potential Frost Action	High	High	High
Shrink/Swell Potential	Low	Low	Low
Risk of Corrosion - Uncoated Steel	High	High	High
Risk of Corrosion - Concrete	Moderate	Moderate	Moderate

TABLE 4

Engineering and Chemical Propereties and Classification of Select Soil withing the Cassadaga Wind project Study Area

Chatuaqua County, New York

Getzville Silt Loam

	Surface Layer (0 to 10 inches)	Subsoil (10 to 22 inches)	Substratum (22 to 72 inches)
Texture	Silt loam	Silt loam, silty clay loam	Stratified loamy fine sand to very gravelly sand
Fragments > 3 inches	0	0	0-5
Percentage Passing Sieve No. 200	65-95	65-95	2-35
% Organic Matter	4-10	4-10	4-10
Liquid Limit	35-45	20-40	-
Plasticity Index	10-20	5-20	NP
Permeability (in/hr)	0.2-2.0	0.2-2.0	2.0-6.0
Available Water Capacity (in./in)	0.15-0.22	0.15-0.20	0.02-0.08
Soil Reaction (pH)	5.1-7.3	5.6-7.3	6.6-8.4
Flooding Frequency	Rare	Rare	Rare
Potential Frost Action	High	High	High
Shrink/Swell Potential	Low	Low	Low
Risk of Corrosion - Uncoated Steel	High	High	High
Risk of Corrosion - Concrete	Low	Low	Low

Asheville Silt Loam

	Surface Layer (0 to 9 inches)	Subsoil (9 to 36 inches)	Substratum (36 to 72 inches)
Texture	Silt loam	Silt loam, loam, silty clay loam	Very gravelly silt loam, gravelly loam, fine sandy loam
Fragments > 3 inches	0	0	0-5
Percentage Passing Sieve No. 200	55-85	55-85	25-85
% Organic Matter	4-8	4-8	4-8
Liquid Limit	40-50	20-35	20-35
Plasticity Index	5-15	5-15	5-15
Permeability (in/hr)	0.6-2.0	0.2-0.6	0.06-0.6
Available Water Capacity (in./in)	0.16-0.22	0.14-0.20	0.11-0.18
Soil Reaction (pH)	5.1-7.3	5.6-7.3	5.6-8.4
Flooding Frequency	None	None	None
Potential Frost Action	High	High	High
Shrink/Swell Potential	Low	Low	Low
Risk of Corrosion - Uncoated Steel	High	High	High
Risk of Corrosion - Concrete	Low	Low	Low

Alden Mucky Silt Loam

	Surface Layer (0 to 9 inches)	Subsoil (9 to 35 inches)	Substratum (35 to 72 inches)
Texture	Mucky silt loam	Silt loam, silty clay loam, very fine sandy loam	Gravelly loam, fine sandy loam, silty clay loam
Fragments > 3 inches	0	0	0-5
Percentage Passing Sieve No. 200	55-85	55-85	30-85
% Organic Matter	10-25	10-25	10-25
Liquid Limit	40-50	20-35	20-35
Plasticity Index	5-15	5-15	5-15
Permeability (in/hr)	0.6-2.0	0.2-0.6	0.06-0.6
Available Water Capacity (in./in)	0.16-0.22	0.14-0.20	0.08-0.15
Soil Reaction (pH)	5.1-7.3	5.6-7.3	6.1-8.4
Flooding Frequency	None	None	None
Potential Frost Action	High	High	High
Shrink/Swell Potential	Low	Low	Low
Risk of Corrosion - Uncoated Steel	High	High	High
Risk of Corrosion - Concrete	Low	Low	Low

Dalton Silt Loam

	Surface Layer (0 to 9 inches)	Subsoil (9 to 46 inches)	Substratum (46 to 72 inches)
Texture	Silt loam	Silt loam, very fine sandy loam (9-23 in.); channery loam, channery silt loam, loam (23-46 in.)	Channery loam, channery silt loam, loam
Fragments > 3 inches	0-2	0-2 (9-23 in.); 5-10 (23-46 in.)	5-10
Percentage Passing Sieve No. 200	80-90	80-90 (9-23 in.); 30-75 (23-46 in.)	30-75
% Organic Matter	2-4	2-4	2-4
Liquid Limit	<20	<20 (9-23 in.); <25 (23-46 in.)	<25
Plasticity Index	NP-4	NP-6 (9-23 in.); 2-6 (23-46 in.)	2-6
Permeability (in/hr)	0.6-2.0	0.6-2.0 (9-23 in.); <0.2 (23-46 in.)	<0.2
Available Water Capacity (in./in)	0.17-0.21	0.16-0.20 (9-23 in.); 0.02-0.04 (23-46 in.)	0.02-0.04
Soil Reaction (pH)	4.5-6.0	4.5-6.0 (9-23 in.); 5.1-7.8 (23-46 in.)	5.1-7.8
Flooding Frequency	None	None	None
Potential Frost Action	High	High	High
Shrink/Swell Potential	Low	Low	Low
Risk of Corrosion - Uncoated Steel	High	High	High
Risk of Corrosion - Concrete	Moderate	Moderate	Moderate

Volusia Channery Silt Loam

	Surface Layer (0 to 9 inches)	Subsoil (9 to 42 inches)	Substratum (42 to 72 inches)
Texture	Channery silt	Channery silt loam, channery loam, silt loam (9-15 in.); channery silt loam, channery loam, silty clay loam (15-42 in.)	Very channery loam, channery loam, silt loam
Fragments > 3 inches	5-10	5-10 (9-15 in.); 10-25 (15-42 in.)	10-25
Percentage Passing Sieve No. 200	40-70	35-75 (9-15 in.); 40-80 (15-42 in.)	20-75
% Organic Matter	2-7	2-7	2-7
Liquid Limit	15-25	15-25 (9-15 in.); 20-30 (15-42 in.)	20-30
Plasticity Index	5-10	5-10	5-10
Permeability (in/hr)	0.6-2.0	0.6-2.0 (9-15 in.); <0.2 (15-42 in.)	<0.2
Available Water Capacity (in./in)	0.11-0.17	0.09-0.16 (9-15 in.); 0.01-0.02 (15-42 in.)	0.01-0.02
Soil Reaction (pH)	4.5-6.5	4.5-6.5 (9-15 in.); 5.1-7.3 (15-42 in.)	5.6-8.4
Flooding Frequency	None	None	None
Potential Frost Action	High	High	High
Shrink/Swell Potential	Low	Low	Low
Risk of Corrosion - Uncoated Steel	High	High	High
Risk of Corrosion - Concrete	Moderate	Moderate	Moderate

Valois Gravelly Silt Loam

	Surface Layer (0 to 6 inches)	Subsoil (6 to 45 inches)	Substratum (45 to 72 inches)
Texture	Gravelly silt loam	Gravelly loam, gravelly silt loam, gravelly sandy loam	Very gravelly fine sandy loam, very gravelly sandy loam, very gravelly loamy sand, very gravelly loam
Fragments > 3 inches	0-5	0-10	0-15
Percentage Passing Sieve No. 200	20-70	20-80	4-40
% Organic Matter	2-6	2-6	2-6
Liquid Limit	20-40	15-25	15-25
Plasticity Index	1-12	NP-5	NP-7
Permeability (in/hr)	0.6-2.0	0.6-2.0	0.6-6.0
Available Water Capacity (in./in)	0.08-0.16	0.07-0.14	0.03-0.09
Soil Reaction (pH)	3.6-6.0	3.6-6.0	4.5-7.3
Flooding Frequency	None	None	None
Potential Frost Action	Moderate	Moderate	Moderate
Shrink/Swell Potential	Low	Low	Low
Risk of Corrosion - Uncoated Steel	Low	Low	Low
Risk of Corrosion - Concrete	High	High	High

TABLE 4

Engineering and Chemical Propereties and Classification of Select Soil withing the Cassadaga Wind project Study Area

Chatuaqua County, New York

Towerville Silt Loam

	Surface Layer (0 to 12 inches)	Subsoil (12 to 30 inches)	Substratum (none)
Texture	Silt loam	Silt loam, channery loam, channery silty clay loam (12-22 in.); very channery silt loam, loam, channery silty clay loam (22-30 in.)	unweathered bedrock
Fragments > 3 inches	0-5	5-15	-
Percentage Passing Sieve No. 200	30-80	40-80 (12-22 in.); 35-80 (22-30 in.)	-
% Organic Matter	3-8	3-8	-
Liquid Limit	25-40	25-40	-
Plasticity Index	5-20	5-20	-
Permeability (in/hr)	0.6-2.0	0.6-2.0 (12-22 in.); 0.06-0.6 (22-30 in.)	-
Available Water Capacity (in./in)	0.12-0.19	0.11-0.18 (12-22 in.); 0.09-0.18 (22-30 in.)	-
Soil Reaction (pH)	4.5-6.0	4.5-6.0 (12-22 in.); 5.1-6.5 (22-30 in.)	-
Flooding Frequency	None	None	-
Potential Frost Action	High	High	-
Shrink/Swell Potential	Low	Low	-
Risk of Corrosion - Uncoated Steel	Moderate	Moderate	-
Risk of Corrosion - Concrete	High	High	-

Orpark Silt Loam

	Surface Layer (0 to 3 inches)	Subsoil (3 to 26 inches)	Substratum (none)
Texture	Silt loam	Silt loam (3-7 in.); silt loam, silty clay loam, channery silt loam (7-26 in.)	weathered bedrock
Fragments > 3 inches	0%	0%	-
Percentage Passing Sieve No. 200	70-100	70-100 (3-7 in.); 55-100 (7-26 in.)	-
% Organic Matter	3-7	3-7	-
Liquid Limit	35-49	35-49 (3-7 in.); 30-40 (7-26 in.)	-
Plasticity Index	6-15	6-15	-
Permeability (in/hr)	0.6-2.0	0.6-20 (3-7 in.); 0.06-0.6 (7-26 in.)	-
Available Water Capacity (in./in)	0.14-0.21	0.14-0.21 (3-7 in.); 0.14-0.20 (7-26 in.)	-
Soil Reaction (pH)	4.5-5.5	4.5-5.5	-
Flooding Frequency	None	None	-
Potential Frost Action	High	High	-
Shrink/Swell Potential	Low	Low	-
Risk of Corrosion - Uncoated Steel	High	High	-
Risk of Corrosion - Concrete	High	High	-

Chenango Gravelly Loam

	Surface Layer (0 to 6 inches)	Subsoil (6 to 45 inches)	Substratum (45 to 72 inches)
Texture	Gravelly loam	Gravelly silt loam, gravelly fine sandy loam, very gravelly fine sandy loam, very gravelly silt loam	Very gravelly loamy coarse sand, very gravelly loamy sand, very gravelly sand, gravelly loamy fine sand
Fragments > 3 inches	5-15	5-10	5-10
Percentage Passing Sieve No. 200	15-70	15-65	1-20
% Organic Matter	2-6	2-6	2-6
Liquid Limit	<35	<40	-
Plasticity Index	NP-10	NP-10	NP
Permeability (in/hr)	0.6-6.0	0.6-6.0	6.0-20.0
Available Water Capacity (in./in)	0.08-0.16	0.07-0.15	0.01-0.05
Soil Reaction (pH)	4.5-6.0	4.5-6.0	5.1-7.8
Flooding Frequency	None	None	None
Potential Frost Action	Moderate	Moderate	Moderate
Shrink/Swell Potential	Low	Low	Low
Risk of Corrosion - Uncoated Steel	Low	Low	Low
Risk of Corrosion - Concrete	Moderate	Moderate	Moderate

Chenango Channery Loam

	Surface Layer (0 to 9 inches)	Subsoil (9 to 45 inches)	Substratum (45 to 72 inches)
Texture	Channery loam (0-6 in.); Channery silt loam, channery loam, very channery fine sandy loam (6-9 in.)	Channery silt loam, channery loam, very channery fine sandy loam	Very channery silt loam, very channery loam, very channery sandy loam
Fragments > 3 inches	5-15 (0-6 in.); 5-20 (6-9 in.)	5-20	10-20
Percentage Passing Sieve No. 200	15-70 (0-6 in.); 10-65 (6-9 in.)	10-65	5-50
% Organic Matter	2-6	2-6	2-6
Liquid Limit	<35	<40	<35
Plasticity Index	NP-10	NP-10	NP-10
Permeability (in/hr)	0.6-6.0	0.6-6.0	6.0-20.0
Available Water Capacity (in./in)	0.11-0.19 (0-6 in.); 0.07-0.15 (6-9 in.)	0.07-0.15	0.01-0.05
Soil Reaction (pH)	4.5-6.0	4.5-6.0	5.1-7.8
Flooding Frequency	Rare	Rare	Rare
Potential Frost Action	Moderate	Moderate	Moderate
Shrink/Swell Potential	Low	Low	Low
Risk of Corrosion - Uncoated Steel	Low	Low	Low
Risk of Corrosion - Concrete	Moderate	Moderate	Moderate

Canaseraga Silt Loam

	Surface Layer (0 to 2 inches)	Subsoil (2 to 55 inches)	Substratum (55 to 72 inches)
Texture	Silt loam	Silt loam, very fine sandy loam (2-23 in.); Channery silt loam, channery loam, loam (23-55 in.)	Channery silt loam, channery loam, loam
Fragments > 3 inches	0-2	0-2 (2-23 in.); 5-10 (23-55 in.)	5-10
Percentage Passing Sieve No. 200	80-90	80-90 (2-23 in.); 30-75 (23-55 in.)	30-75
% Organic Matter	2-4	2-4	2-4
Liquid Limit	<20	<20 (2-23 in.); 20-25 (23-55 in.)	20-25
Plasticity Index	NP-4	NP-6 (2-23 in.); 3-8 (23-55 in.)	3-8
Permeability (in/hr)	0.6-2.0	0.6-2.0 (2-23 in.); <0.2 (23-55 in.)	<0.2
Available Water Capacity (in./in)	0.17-0.21	0.16-0.20 (2-23 in.); 0.02-0.04 (23-55 in.)	0.02-0.04
Soil Reaction (pH)	4.5-6.0	4.5-6.0 (2-23 in.); 5.1-7.3 (23-45 in.)	5.6-8.4
Flooding Frequency	None	None	None
Potential Frost Action	High	High	High
Shrink/Swell Potential	Low	Low	Low
Risk of Corrosion - Uncoated Steel	Moderate	Moderate	Moderate
Risk of Corrosion - Concrete	Moderate	Moderate	Moderate

Erie Silt Loam

	Surface Layer (0 to 15 inches)	Subsoil (15 to 35 inches)	Substratum (35 to 72 inches)
Texture	Silt loam (0-12 in.); Channery fine sandy loam, channery silt loam, channery loam (12-15 in.)	Channery silt loam, channery silty clay loam, very channery loam	Channery silt loam, channery silty clay loam, very channery loam
Fragments > 3 inches	0-5 (0-12 in.); 5-10 (12-15 in.)	10-25	10-25
Percentage Passing Sieve No. 200	30-75 (0-12 in.); 20-65 (12-15 in.)	30-65	30-65
% Organic Matter	3-7	3-7	3-7
Liquid Limit	30-40 (0-12 in.); 15-25 in. (12-15 in.)	25-35	25-35
Plasticity Index	5-10	10-15	10-15
Permeability (in/hr)	0.6-2.0	<0.2	<0.2
Available Water Capacity (in./in)	0.12-0.19 (0-12 in.); 0.09-0.16 (12-15 in.)	0.01-0.03	0.01-0.03
Soil Reaction (pH)	4.5-6.0 (0-12 in.); 5.1-6.5 (12-15 in.)	5.1-7.8	5.6-8.4
Flooding Frequency	None	None	None
Potential Frost Action	High	High	High
Shrink/Swell Potential	Low	Low	Low
Risk of Corrosion - Uncoated Steel	High	High	High
Risk of Corrosion - Concrete	Low	Low	Low

TABLE 4

Engineering and Chemical Propereties and Classification of Select Soil withing the Cassadaga Wind project Study Area

Chatuaqua County, New York

Langford Silt Loam

	Surface Layer (0 to 9 inches)	Subsoil (9 to 45 inches)	Substratum (45 to 72 inches)
Texture	Silt loam	Channery silt loam, channery loam, fine sandy loam (9-21 in.); Channery silt loam, channery silty clay loam, very channery loam (21-45 in.)	Channery silt loam, channery silty clay loam, very channery loam
Fragments > 3 inches	0-5	5-10 (9-21 in.); 10-25 (21-45 in.)	10-25
Percentage Passing Sieve No. 200	30-75	20-65 (9-21 in.); 15-65 (21-45 in.)	15-65
% Organic Matter	3-9	3-9	3-9
Liquid Limit	25-35	15-25 (9-21 in.); 25-35 (21-45 in.)	25-35
Plasticity Index	5-10	5-10 (9-21 in.); 10-15 (21-45 in.)	10-15
Permeability (in/hr)	0.6-2.0	0.6-2.0 (9-21 in.); <0.2 (21-45 in.)	<0.2
Available Water Capacity (in./in)	0.12-0.19	0.08-0.14 (9-21 in.); 0.01-0.03 (21-45 in.)	0.01-0.03
Soil Reaction (pH)	5.1-7.3	5.1-7.3 (9-21 in.); 5.6-7.3 (21-45 in.)	5.6-8.4
Flooding Frequency	None	None	None
Potential Frost Action	High	High	High
Shrink/Swell Potential	Low	Low	Low
Risk of Corrosion - Uncoated Steel	Moderate	Moderate	Moderate
Risk of Corrosion - Concrete	Low	Low	Low

Canandaigua Silt Loam (loamy substratum)

	Surface Layer (0 to 10 inches)	Subsoil (10 to 36 inches)	Substratum (36 to 72 inches)
Texture	Silt loam	Silt loam, silty clay loam, very fine sandy loam	Silt loam, silty clay loam, very fine sandy loam (36-45 in.); Gravelly loam, gravelly silt loam (45-72 in.)
Fragments > 3 inches	0	0	0 (36-45 in.); 0-5 (45-72 in.)
Percentage Passing Sieve No. 200	85-100	70-95	70-95 (36-45 in.); 35-70 (45-72 in.)
% Organic Matter	4-15	4-15	4-15
Liquid Limit	35-55	20-40	20-40 (36-45 in.); 20-30 (45-72 in.)
Plasticity Index	5-15	5-15	5-15 (36-45 in.); 5-10 (45-72 in.)
Permeability (in/hr)	0.6-2.0	0.2-0.6	0.2-0.6
Available Water Capacity (in./in)	0.20-0.35	0.19-0.20	0.19-0.20 (36-45 in.); 0.10-0.15 (45-72 in.)
Soil Reaction (pH)	5.6-7.8	6.1-7.8	6.1-7.8 (36-45 in.); 6.6-8.4 (45-72 in.)
Flooding Frequency	None	None	None
Potential Frost Action	High	High	High
Shrink/Swell Potential	Low	Low	Low
Risk of Corrosion - Uncoated Steel	High	High	High
Risk of Corrosion - Concrete	Low	Low	Low

Canandaigua Mucky Silt Loam

	Surface Layer (0 to 10 inches)	Subsoil (10 to 36 inches)	Substratum (36 to 72 inches)
Texture	Mucky silt loam	Silt loam, very fine sandy loam, silty clay loam	Silt loam, very fine sandy loam, silty clay loam (36-45 in.); Silt loam, very fine sandy loam (45-72 in.)
Fragments > 3 inches	0	0	0
Percentage Passing Sieve No. 200	85-100	70-95	70-95
% Organic Matter	10-20	10-20	10-20
Liquid Limit	35-55	20-40	20-40 (36-45 in.); 20-30 (45-72 in.)
Plasticity Index	5-15	5-15	5-15 (36-45 in.); 3-10
Permeability (in/hr)	0.6-2.0	0.2-0.6	0.2-0.6
Available Water Capacity (in./in)	0.25-0.40	0.19-0.20	0.19-0.20 (36-45 in.); 0.19-0.21 (45-72 in.)
Soil Reaction (pH)	5.6-7.8	6.1-7.8	6.1-7.8 (36-45 in.); 6.6-8.4 (45-72 in.)
Flooding Frequency	None	None	None
Potential Frost Action	High	High	High
Shrink/Swell Potential	Low	Low	Low
Risk of Corrosion - Uncoated Steel	High	High	High
Risk of Corrosion - Concrete	Low	Low	Low

Elnora Fine Sandy Loam

	Surface Layer (0 to 9 inches)	Subsoil (9 to 30 inches)	Substratum (30 to 72 inches)
Texture	Fine sandy loam	Loamy fine sand, fine sand	Fine sand, loamy fine sand
Fragments > 3 inches	0	0	0
Percentage Passing Sieve No. 200	25-60	25-45	20-45
% Organic Matter	2-6	2-6	2-6
Liquid Limit	-	-	-
Plasticity Index	NP	NP	NP
Permeability (in/hr)	2.0-6.0	6.0-20	6.0-20
Available Water Capacity (in./in)	0.08-0.16	0.06-0.08	0.03-0.06
Soil Reaction (pH)	3.6-6.5	3.6-6.5	5.1-7.3
Flooding Frequency	None	None	None
Potential Frost Action	Moderate	Moderate	Moderate
Shrink/Swell Potential	Low	Low	Low
Risk of Corrosion - Uncoated Steel	Low	Low	Low
Risk of Corrosion - Concrete	Moderate	Moderate	Moderate

Lamson Silt Loam

	Surface Layer (0 to 8 inches)	Subsoil (8 to 37 inches)	Substratum (37 to 72 inches)
Texture	Silt loam	Fine sandy loam, very fine sandy loam	Fine sand, very fine sand, silt loam
Fragments > 3 inches	0	0	0
Percentage Passing Sieve No. 200	40-85	45-65	20-90
% Organic Matter	3-10	3-10	3-10
Liquid Limit	<20	<20	-
Plasticity Index	NP-4	NP-4	NP
Permeability (in/hr)	0.6-6.0	0.6-6.0	0.6-6.0
Available Water Capacity (in./in)	0.15-0.22	0.12-0.17	0.02-0.04
Soil Reaction (pH)	5.6-7.8	6.1-8.4	6.1-8.4
Flooding Frequency	None	None	None
Potential Frost Action	High	High	High
Shrink/Swell Potential	Low	Low	Low
Risk of Corrosion - Uncoated Steel	High	High	High
Risk of Corrosion - Concrete	Low	Low	Low

Minoa Fine Sandy Loam

	Surface Layer (0 to 5 inches)	Subsoil (5 to 35 inches)	Substratum (35 to 72 inches)
Texture	Fine sandy loam	Loamy very fine sand, silt loam, fine sandy loam	Loamy very fine sand, fine sandy loam, silt loam (35-48 in.); Loamy fine sand, fine sandy loam, silt loam (48-72 in.)
Fragments > 3 inches	0	0	0
Percentage Passing Sieve No. 200	35-75	35-90	35-90 (35-48 in.); 20-90 (48-72 in.)
% Organic Matter	3-6	3-6	3-6
Liquid Limit	<20	<20	<20
Plasticity Index	NP-4	NP-4	NP-4
Permeability (in/hr)	0.6-2.0	0.6-2.0	0.6-2.0 (35-48 in.); 0.6-6.0 (48-72 in.)
Available Water Capacity (in./in)	0.16-0.20	0.13-0.20	0.13-0.20 (35-48 in.); 0.07-0.20 (48-72 in.)
Soil Reaction (pH)	5.1-7.3	5.1-7.3	5.6-7.3 (35-48 in.); 5.6-8.4 (48-72 in.)
Flooding Frequency	None	None	None
Potential Frost Action	High	High	High
Shrink/Swell Potential	Low	Low	Low
Risk of Corrosion - Uncoated Steel	Moderate	Moderate	Moderate
Risk of Corrosion - Concrete	Moderate	Moderate	Moderate

TABLE 4

Engineering and Chemical Propereties and Classification of Select Soil withing the Cassadaga Wind project Study Area

Chatuaqua County, New York

Wayland Soils Complex

	Surface Layer (0 to 6 inches)	Subsoil (6 to 18 inches)	Substratum (18 to 72 inches)
Texture	Silt loam	Silt loam, silty clay loam	Silt loam, silty clay loam
Fragments > 3 inches	0	0	0
Percentage Passing Sieve No. 200	70-95	70-95	70-95
% Organic Matter	3-6	3-6	3-6
Liquid Limit	40-50	25-45	25-45
Plasticity Index	5-15	5-15	5-15
Permeability (in/hr)	0.2-2.0	0.06-0.2	0.06-0.2
Available Water Capacity (in./in)	0.17-0.22	0.16-0.20	0.16-0.20
Soil Reaction (pH)	5.1-7.8	5.1-8.4	5.1-8.4
Flooding Frequency	Frequent	Frequent	Frequent
Potential Frost Action	High	High	High
Shrink/Swell Potential	Low	Low	Low
Risk of Corrosion - Uncoated Steel	High	High	High
Risk of Corrosion - Concrete	Low	Low	Low

ATTACHMENT 1

REFERENCES

ATTACHMENT A

REFERENCES

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