APPENDIX D
Visual Impact Assessment Report

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1.0 INTRODUCTION

1.1 Visual Impact Assessments

The Tri-Lakes 46 kV Reliability Project consists of the construction and operation of a 46 kV line. The Visual Impact Assessment ("VIA") for the project analyzes existing conditions and inventories visual resources within a 3-mile radius of the project site.[1]

Visual impact is assessed in terms of the anticipated change in visual resources, including whether there will be a change to the visual character or quality of significant scenic and aesthetic resources. The methodology used for the evaluation of potential visual impacts generally follows NYSDEC's policy for *Assessing and Mitigating Visual Impacts (DEP-00-2)*, as well as APA's *Visual Analysis Methodology*, and *Policy on Agency Review of Proposals for New Telecommunications Towers and Other Tall Structures in the Adirondack Park* ("Towers & Tall Structures" policy). The purpose of the VIA is to assess the visual impact of the project on the surrounding area, and to provide information to aid in decision making during both the APA project review and the State Environmental Quality Review Act ("SEQRA") review.

APA's Towers & Tall Structures policy emphasizes achieving "substantial invisibility" when citing and building tall structures within the park. The policy defines substantial invisibility as when a structure:

> *...and its appurtenant support facilities and access road(s) will not be readily apparent as to size, composition, or color and the structures(s) will, to the maximum extent practicable, blend with the existing background vegetation, other structures or other landscape features as seen from all significant potential public viewing points and as documented by simulation and other visual analysis methods. Potential public viewing points include public roads, navigable waters, and other public places. Substantial invisibility is intended to be applied on a site-specific basis and may be achieved by consolidation of existing visual intrusions… and/or by providing substantial screening or concealment of the structure itself.*

The policy states that one way for substantial invisibility to be achieved is by the "consolidation of visual intrusion." Consolidation of visual intrusion is achieved by collocating equipment on a single, existing tower. Achieving "substantial invisibility" in developed areas, such as Hamlets where utility poles and lines tend to blend in with the built environment, is more easily obtained than in undeveloped areas, such as "Rural Use" and "Resource Management" areas where man-made structures stand out more readily. Statutory purposes and policies for these specialized areas are set forth in the *Adirondack Park Land Use and Development Management Plan*.

Substantial invisibility can also be achieved for new structures introduced into an area that previously had no structures. Cross-country routes and "offsetting" the line by placing it 200 feet off roadway corridors, thereby allowing intervening vegetation and forest to screen the line, are two additional methods used to achieve substantial invisibility.

The Towers & Tall Structures policy is intended to maintain the visual quality and character of project areas, and to avoid undue adverse impacts to scenic vistas, locally important viewsheds, and historic resources. Preferred methods to reduce visibility include: avoid siting of facilities on mountaintops and

[1] While VIAs typically use the distance of a 5-mile radius from a project site, this project focuses on under 3 miles, due to the height and size of the structures.

ridgelines; concealing structures by careful siting, using a topographic or vegetative foreground or backdrop; minimizing structure height and bulk; and using color to blend with surroundings.

1.2 Project Description and Application of Standards

1.2.1 General

The Tri-Lakes Reliability Project consists of the construction and operation of a 46 kV line. There are two practicable alternative routes to reach Sevey Corners. The Preferred Route, for much of its length, follows an existing distribution line and State Route 56 from Stark Falls to Sevey Corners. The Alternate Route would entail construction of a new line on mostly new ROW from Newton Falls to Sevey Corners. From Sevey Corners to Piercefield, both alternatives follow a common route along or in proximity to State Route 3. The structures needed to support the proposed 46 kV line will be wood poles that vary from 45 to 70 feet in height above grade, depending on the local distribution needs, local topography, and engineering factors. The height of the poles will be similar to the height of trees in the surrounding forests, and the vertical preferred pole type is similar in silhouette to the existing trees. This similarity will reduce pole visibility.

1.2.2 Configuration

There are two alternate pole type configurations: vertical (no cross arm) and horizontal (with cross arm). The vertical configuration is the preferred design. On average, these structures will be 57 feet tall and slender in profile in an overbuild condition. The horizontal cross arm structure is lower in height, but with one or two "T" shaped cross arms. Vertical configuration is preferred because these structures are more reliable than poles with cross arms. The cross arm design has proven to be more susceptible to power interruption due to extreme icing conditions.

It is expected that guy wires will be necessary in some locations, such as at angles and long spans. Guy wires provide extra stability and support to the poles structures. The addition of guy wires to pole structures generally will not require additional widening of ROWs or corridors.

In instances where long spans must be accommodated, such as the crossing of the Oswegatchie River, Dead Creek, and wetlands, three single-pole structures will be used at each end of the span. In these locations, three poles, each up to as much as 70 feet tall, will be placed close together, and additionally supported by guy wires. This arrangement is necessary to accommodate water or wetland spans over 500 feet in length.

Consolidation of visual intrusion by “overbuilding” will be used where possible along State Routes 56 and 3, such as in locations where existing poles currently carry both local distribution lines and telephone and/or cable lines. (Where telephone lines currently exist on an independent system of poles, that independent system will be maintained.) In overbuild locations, the local distribution and telephone lines will be collocated on new, larger poles carrying the 46 kV line. Local distribution lines will be carried below the 46 kV line, on “candlestick” insulators in the vertically configured structures, or on cross arms in the horizontal configuration. The new poles will be placed in close proximity to the existing poles in order to facilitate the wire transfer. After the new poles and lines are in place, the old poles will be removed. It is possible that some existing pole positions may be eliminated if no longer necessary. Overbuilding reduces visual clutter by combining electrical and other utilities on a single pole.

1.2.3 Right-of-Way

The proposed 46 kV line requires clearing of new ROWs of 75 feet in width and construction of a limited amount of work trails to access the pole sites. The width of clearing and access trail requirements can be reduced substantially in existing highway and utility corridors. Landscape character changes caused by ROW clearing were assessed using Digital Elevation Model ("DEM") topography and simulated orthographic (bird's eye) views of regional super-elevated vistas (*see* "Bird's Eye View" figures). These methods were used to evaluate regional scale changes in the natural character of the corridor. Both the orthographic view and DEM provide means of obtaining a birds-eye view of the regional position of ROW corridors within a natural lowland setting, a difficult setting to capture realistically with photographs. It is necessary to complete this level of analysis to ascertain that the ROW clearings will not create new vistas from local travel corridors, such as roads, rivers, or trails that are incompatible with overall visual settings, or specially designated areas. These mapping methods were used to evaluate the potential for visual impacts and to identify areas that require detailed evaluation in the field.

As a general practice, where new 75-foot wide ROWs are required, the proposed 46 kV line will be located either cross-country or offset from existing roads. Offsetting and underground construction will be used near recreational and scenic rivers and other navigable waterbodies in conformance with the APA Policy that considers navigable waters to be travel corridors.

The visual impact assessment demonstrates that offsetting the line ±200 feet from roads and waterbodies will provide substantial screening of both the new ROWs and the wood pole structures. Photographic simulation and topographic computer generated "3-D" models were used to determine the changes in landscape and forest feature cover of both roadside vista and of the offset ROW. Standard zone of visibility mapping and cross-section analysis were also used to show potential visibility from viewpoints on roads, rivers, or waterbodies.

2.0 METHODOLOGY

2.1 VIA Methods

Standard VIA methods have been applied to quantify visual effects. The methodology includes the following:

- Aerial Photographs and Maps – Route alternatives were initially reviewed using detailed 1 inch=200 feet scale aerial photos in combination with USGS topographic maps. These plans depict tree cover, clearing, roads, buildings, waterways, and other features. Niagara Mohawk provided electronic files of existing pole and line locations. This information, along with land use zoning maps, was incorporated into the analysis.

- Potential Visibility Maps – The entire study area out to 5 miles was modeled electronically to identify potential receptor points. Two maps were prepared to aid in visual assessment. Potential Visibility Map 1 depicts potential visibility based on topographic screening only. Potential Visibility Map 2 drapes the study area with an average height of vegetative cover to identify potential viewpoints while considering the screening capacity of the existing trees.

- Field Verification – There were two phases in the field verification process. The first phase was to travel to remote high peaks or trail locations that were identified as potential viewpoints in the map analysis process. The viewpoints were analyzed by taking high-resolution photographs

(using 55 mm and 80 mm lenses) to approximate the average viewer's field of vision and visual acuity. These photos record the existing landscape and context, and assist in anticipating the presence or absence of views of the project. The second phase of the field verification process was to travel the both routes and photographically record the existing study area with a specific goal of representing general conditions, key visual locations, and sensitive environmental areas, as defined by the APA Guidelines. Field photograph locations are identified on Figure 3.3-3, Map 1-9.

- Helicopter Video – Early in the project planning stage and prior to leaf-out conditions, the study area and identified route alternatives were filmed on the ground and by aerial reconnaissance. The video provides a valuable overview of the study area and environs.

- Birds-Eye View – In some locations, the routes diverge from the road to improve efficiency or eliminate potential impacts to sensitive environmental resources. A computer simulated 3-D birds-eye view aids in assessment of the view potential from any location within this specific visual study area.

- Photo Simulations – "Before" and "after" photographic renderings were prepared using field verification photographs and photos of existing structures similar to those proposed for this project. The change in view was analyzed for sensitive environmental areas.

- Visual Impact Assessment Report – Visual analysis information and data that was compiled is presented in this Visual Impact Assessment Report.

2.2 Inventory of Potential Visual Impact Conditions

- OB Overbuild – Analyze the potential visual effect of replacing an existing distribution line with overbuilding at existing pole locations, using drawings, plans, and photo simulations. Assess structure height, adjacent tree heights, backdrop, view angle, and receptors.

- OV Overbuild through Village – Inventory significant buildings and those over 50 years old to assess the potential visual effect of the project, in anticipation of completion of the Architectural Survey.

- OS Offset – Develop birds-eye view or isometric plans and graphics to depict area character and potential impact on environs and forest character, as applicable. Quantify forest density by basal analysis to estimate offset distance for visual screening and balance setback distance with work trail impacts.

- RDC Road Crossing – Study visual character for new road crossings and photograph all crossing conditions.

- D Divergence – Analyze the effects of long views down the length of the new corridors where transmission lines strike off from a road corridor or offset. Consider mitigation techniques to limit long views down the utility corridor.

- RVC River Crossing – Assess views of river crossings both upstream and downstream. Compare pole heights, tree heights, and human receptors, such as recreationists, travelers, and residents.

- CC Cross Country – Assess change in visual character in areas where the proposed line leaves the path of an existing road or trail. This condition shall require ROW clearing and work trail construction.

- NL New Line – Assess change in regional visual character due to project development. Analyze structure height, clearing width, height of existing trees, and topography, and investigate potential middle and far view receptor locations.
- UG Underground – At locations where underground lines emerge, assess the visibility of overhead transition structures to determine the best locations, both upstream and downstream, for utilizing existing vegetation to provide visual screening.

3.0 DISCUSSION

3.1 Project Environs

Low population density, moderate to heavy forest cover, and rolling topography characterize the project environs. The project area is located within the Adirondack lowlands. The St. Lawrence River Valley is located to the north and northwest of the project area, and the Adirondack highlands are located to the east. The region's rolling and variable topography limits long vista opportunities. Dense deciduous forest, meandering streams, and shallow wetlands limit view opportunities from woods and water.

Although views may exist from clearing at road crossings, on waterways, waterbodies, or from mountain top lookouts, opportunities for long vistas are commonly restricted by topography and forest vegetation. In general, viewers must be in close proximity to the line to be afforded views.

3.2 Visibility Assessment

Visibility Map 1 illustrates the view potential of the proposed project based upon topographic screening only. No accommodation is made for tree clearing or distance.

The significant view potential depicted on Potential Visibility Map 1 (Figure 3.3-1) is moderated considerably by allowing for the screening benefits that will be derived from intervening vegetation. Potential Visibility Map 2 (Figure 3.3-2) depicts the reduced visibility of the project once vegetative screening is added. Vegetation provides visual screening when:

- The structure height is comparable to the vegetation height; and
- Vegetation in the area of the potential viewer blocks long-range views.

At the northernmost beginning of Stark Falls Route, visibility is indicated where the line transects an open field. This has been verified by field investigation. Continuing south on State Route 56, there is limited visibility from Fox Marsh. Field investigation revealed no view opportunities from Carry Falls Reservoir and the Raquette River.

Map 2 shows potential visibility of the Sevey Corners to Piercefield Route from Sevey Pond, Catamount Pond, and the Raquette River. However, field analysis indicates that the project will not be visible from these locations. The route will be visible at the Dead Creek Crossing.

The Alternate Route begins in Newton Falls to the west. The visibility indicated from the Oswegatchie River is limited to the line crossing only. Proceeding east, field investigation revealed no viewing opportunity of the line from the Grasse River flow at N16-N17.

A detailed description of the route alternatives with supporting photographs follows. Aerial photos with topographic contours overlayed onto them provide a base for the photo "key" locations. *See* Figure 3.3-3, Maps 1-9, and "Photo Location Maps." Each photograph location is keyed to the closest marker (N1), photo letter (A, B, etc.), and view direction (N, S, E, W). The photos are like labeled except where telephoto zoom blow-ups are presented and denoted (T) for telephoto. Although using telephoto narrows the view, the advantage of using it is that it zooms in on distant objects, improving color, and sharpening definition.

3.3 Potential Visibility from Specified Viewpoints

Firetowers, mountaintops and other high vantage points or potential vista locations were carefully investigated for potential views of the project. No significant adverse visual effect was identified.

A 45-70 foot utility pole and/or 75-foot ROW clearing within an offset or as an overbuild will be substantially invisible at a distance of 3-5 miles. At this distance, the forest texture is characterized by the masses of trees in stands of uniform cover. Structures near or within trees will only be discernable in open or sparse stands *(US Forest Service National Forest Landscape Management, Volume 26 Agricultural Handbook Number 462)*.

A 5-mile radius was selected to assess potential visibility from regional peaks and other specified viewpoints. In the visual assessment from locations other than peaks, the inventory and analysis was based on a 3-mile radius, since a distance of 5 miles is beyond the limit of visibility for the types of wooden poles and lines that will be utilized in this project.

Of particular interest to the NYSDEC are mountains with fire/lookout towers or mountains that afford the opportunity to see out over the forest cover. Locations identified for further investigation included:

- Wanakena Ranger School fire tower;
- Tooley Pond Mountain;
- Bear Mountain;
- Catamount Mountain;
- Moosehead Mountain;
- Arab Mountain lookout tower; and
- White's Hill APA Scenic Vista.

The secondary list of sites includes those sites without towers or defined trails and include:

- Buck Mountain;
- Mt. Matumbla; and the
- Town of Fine-APA Scenic Vista.

The first seven locations were investigated for potential views of the project and are discussed below. Generally speaking, all of the potential view locations from mountaintop vistas share the following conditions: the views of the surrounding area are often blocked by vegetation at the summit; the views that do exist are often directed away from the project, and the extreme distances between the viewpoint and the project eliminate potential visual effect. These general conclusions are borne out by the photos, in which existing, known physical features, such as roads, rivers, and villages within one mile of the selected viewpoint are difficult to locate and identify. Unless the route is close to the viewpoints (within one half-mile), is aligned along the axis of the view direction, and is located in an area of level or rising terrain, the power line ROW clearing will only appear as a break in, or overlap of, the forest canopy a

common natural occurrence. The proposed power line project will present only a minor visual effect on specified viewpoints.

3.3.1 Wanakena Ranger School Fire Tower

Views from the Ranger School Fire Tower towards the proposed line are generally to the north. The Alternate Route is approximately 6 miles from the fire tower (the Preferred Route is about 14 miles away). A portion of State Route 3 is visible to the northwest approximately 5 miles away. There are no views of the Preferred or Alternate Route from the fire tower. The peaks between the fire tower and the proposed lines block potential views of the project (*see* Photo R1). There will be no discernible views of the project from this location.

3.3.2 Tooley Pond Mountain

There is no longer a lookout tower on this mountain; only pieces of the foundation remain. To the east, there are views of the distant peaks. In this direction, the Preferred Route is approximately 9 miles away. One picture taken with a 300 mm zoom lens does not show enough detail for transmission poles to be visible. Views to the south, where the Alternate Route is approximately 3 miles away, are blocked by fairly dense forest (*see* Photo T5S). There will be no discernible views of the project from this location.

3.3.3 Bear Mountain

Bear Mountain is approximately 4 miles from the Newton Falls Alternate where it crosses the Grasse River. Views to the north and east are both blocked by moderate to dense deciduous forest on the mountain (*see* Photos TS, B1N, and B2N). Traveling down the mountain on the designated trail, there was one break in the trees with a view north/northeast (*see* Photo B4). The visible hills are to the south of the Alternate Route, blocking any potential views of the route location. There will be no discernible views of the project from this location.

3.3.4 Catamount Mountain

From the summit, Stark Falls Dam is visible to the north. Just to the west of the dam is a shiny object visible at 85 mm and 300 mm zoom, which is an existing substation (*see* C1NW and C2WT). To the west, the Preferred Route would be located approximately 1.5 miles away. The distant hills visible in Photo C3W are those just to the west of the Preferred Route. The proposed line in this section would be an overbuild consolidating the proposed and existing lines on one set of structures along State Route 56. The road cut is not visible from Catamount Mountain. Views to the west/southwest are blocked by dense deciduous vegetation. The existing view photos demonstrate that even the Route 3 highway clearing, at a closer distance than the project would be located, is difficult to discern. There will be no discernible views of the project from this location.

3.3.5 Moosehead Mountain

Access to Moosehead Mountain is through private land; there is no clear trail or access to the summit. The land has been logged. A surveyor who has bush-wacked up the mountain stated that dense vegetative cover on the summit blocks views.

3.3.6 Arab Mountain Fire Tower

There are three distinct objects visible in Photo A1NE (taken with an 85 mm zoom lens). The clearing to the left is the State Route 3 Dead Creek crossing (reference marker P9.5). The clearing to the right is a

portion of the Raquette River and Sols Island. Another portion of Route 3, at reference marker P8.5, can be seen in the upper center of the photo. This is the only identified location where the portions of the project may be visible. The P7 cutoff may be discernible as the alignment coincides with the view's angle from this viewpoint, but from this distance of 4.5 miles, and understanding that the ground surface shall be natural vegetation (as opposed to the pavement in this photo), the visual change to the landscape character resulting from the project will be minor.

The State Route 3 crossing of the Piercefield Flow is visible on the right side of Photo A1NE, taken with a 85 mm zoom lens, from the fire tower on Arab Mountain. State Route 3 is also visible to the north/northwest as it makes cuts over hills. It is visible using 50 mm, 85 mm with zoom, and 300 mm zoom. Photo A1NE, taken with 300 mm zoom, clearly shows the existing power line poles along State Route 3. On a clear day, these may be visible with a 85 mm zoom (*see* Photo A2NE). Also visible with the 50 mm, 85 mm zoom, and 300 mm zoom is Piercefield Center.

3.3.7 White's Hill (APA Scenic Vista)

There is no tower remaining at this location, which is approximately 10 miles from the proposed line. There are views of the ridges to the south of White's Hill. These hills are at much higher elevations than both White's Hill and the proposed line. No views of the Preferred Route (about 20 miles east) will be possible from this selected viewpoint.

3.4 Stark Falls to Sevey Corners – Detailed Visual Route Description

Much of the Preferred Route from Stark Falls to Sevey Corners follows the route of existing distribution lines adjacent to State Route 56. Approximately half of the 16.3-mile route consists of a roadside overbuild (approximately 7.8 miles). The remainder of approximately 8.5 miles are cross-country with little viewing opportunity for the general public.

This route originates at a new substation near an existing 115 kV line east of Raquette River Road (Figure 3.3-3, Map 1). The photo below depicts the existing 115 kV line at the town border and the location of the proposed Stark Falls substation. The proposed substation will be sited to maintain as much existing vegetation screening as possible.

Location of proposed Stark Falls substation

Photo S1AN depicts where the Preferred Route would cross Raquette River Road from the new substation (out of view to right). Photo S1BN depicts the character of the existing line. Photo S1CS depicts the line where it diverges from, then runs parallel to the road. Photos S1DN and S1EN (both taken looking north) show the character of the existing line as the distribution line converges with the road.

Photo S1FS depicts the take-off point, along Joe Indian Road, for a cross-country route to connect with State Route 56 southeast of the intersection of this highway and Joe Indian Road (*see* Photo S2AE for location). The proposed cutoff will allow for an efficient route without creating a negative visual impact. Figure 3.4-1 depicts the cutoff from the north. The proposed Stark Falls connection is near the upper left of the figure, just below a stream and reservoir. The existing distribution line is visible as a 300-foot offset to Joe Indian Road. State Route 56 runs from the lower center of the figure to the upper right. The proposed S2 cutoff completes the triangle.

Rotating the viewer position counter clockwise and lowering the height of eye in Figure 3.4-2 shows the lower two-thirds of the cutoff is through dense conifers, the upper one-third is across pastureland. Figure 3.4-3 also presents this condition as viewed from the southeast. The topography is relatively low and rolling and the vegetation provides considerable screening.

Where the Preferred Route converges with State Route 56, it will follow the road south in an overbuild configuration (Figure 3.3-3, Map 1). Photos S2BS and S2BT (telephoto zoom) show the character of the existing roadside distribution line. The proposed overbuild structure will carry both the existing distribution line and the new 46 kV line on new poles.

Photos S3AS, S3BN, and S3BT depict the existing pole type, line, and character of the ROW clearing along State Route 56. In many instances, the existing structures are not backdropped by vegetation but are skylined as in Photo S3AS. In the view(s) north from this location, both the existing poles and the proposed overbuild will be backdropped. Photos S3CS, S3DS, and S3DT (telephoto) also demonstrate a vegetative backdrop.

Photos S4AS, S4AT (telephoto), S4BN, and S4DS depict the line character where State Route 56 is at its closest point to the Carry Falls Reservoir (Figure 3.3-3, Map 2). Photo S4CE was taken during leaf-off condition and indicates that there is a substantial vegetated buffer between the highway and the reservoir. Overbuild construction and the minor additional ROW clearing will not reduce that buffer appreciably.

Figure 3.4-4 shows an overview of the approximately 6-mile alternative bypass around the Raquette Boreal State Forest Preserve, as viewed from the north (Figure 3.3-3, Maps 3 and 4). The northern portion of the route is presented in Figure 3.4-5 where the line diverges from State Route 56 and strikes out cross-country to the west through a largely unpopulated area (*see* Figure 3.4-6). Turning south, the bypass route connects with an existing logging road at reference marker A3-75 (*see* Figure 3.4-7). The route then turns east and follows the logging road as it passes north of Sevey Bog to reconnect with State Route 56 (*see* Figure 3.4-8). There is minimal potential for visual impact of this segment, since there are no opportunities for the general public to view the line once it diverges from State Route 56. However, parts of the bypass segment may be visible to outdoor recreational users, depending on their routes or direction.

A detailed photo description of the segment along the logging road accessible alternative begins with Photo A4AN, mid-way through the bypass at reference marker A4. This view depicts the dense evergreen forest of 30-60 foot tall trees. Continuing south, Photo A4BS depicts the existing logging road as it passes through a wetland.

Photos A5AN and A5BS show the north and south facing views of the access road and surrounding environment. Occasional log loading clearings are evident in views A5CW, A5DW, A5GN, A5IN, and A5YS.

Views into the Sevey Bog wetland complex from the closest point of the route are presented in Photo A6AS and telephoto A6AT, during leaf-off condition. The route will be substantially invisible from the wetland, because the route quickly enters dense evergreen vegetation (*see* Photos A6BS and A6 CW).

The Preferred Route converges with State Route 56 at reference marker S13, where the bypass around the State Forest Preserve ends. The 46 kV line will cross the road at this point and continue south, parallel to the road, with a 200-foot offset. Photo S13AE shows the 40-foot trees east of State Route 56. Photo S13BW depicts the point where the bypass around the State Forest converges with State Route 56.

At the wetland depicted in Photo S13CE, the 200-foot offset distance is maintained to allow the proposed power line to cross the wetland at its narrowest point. Alternative crossing locations were explored. Locations to the east were rejected, as the wetland widens, and the distance to the Raquette River is reduced.

The density of the existing vegetation along the east side of State Route 56 in this area is depicted in photos S13EE, S13FE, and S13HE. Typical views from the proposed ROW out to the road are shown in Photos S13DW, S13GW, and S13IW (Figure 3.3-3, Map 4).

Photo S13JE characterizes the location from which the 200-foot offset route will run cross-country, south/southeast, to connect with the existing offset running east from Sevey Corners. There will be no visual effect resulting from this cross-country segment.

3.4.1 Stark Falls Route Impact Assessment

At the beginning of the Stark Falls Route (Stark Falls-Sevey Corners), the proposed line, in an overbuild configuration with single circuit structures, will be visible from Raquette River Road where it crosses an open field adjacent to Joe Indian Road. This has been verified by field investigation. Continuing south on State Route 56, there is limited visibility from Fox Marsh. Field investigation revealed no viewing opportunities from Carry Falls Reservoir and the Raquette River.

Of the 16.3-mile Stark Falls-Sevey Corners (Preferred) Route, approximately 8.5 miles are cross-country with little viewing opportunity for the general public. These cross-country and logging road locations may be visible to outdoor recreationists, depending on their routes or direction. The Preferred Route includes a 0.8-mile offset with 200-foot buffer that will minimize visual impact from the road. There are four locations where cross-country segments will diverge from the road and only three of these have the potential to create new view corridors down the ROW. Perpendicular view angle and under-story plant preservation can reduce this effect. There are two locations where a new overhead road crossing will occur. The remainder of the line consists of a roadside overbuild of approximately 7.8 miles. The visual effect of the change of pole structures and the additional ROW clearing is a moderate impact. In those overbuild locations along State Route 56, the proposed 46 kV line would be an incremental visual effect of consolidating utility structures and maintenance operations within the existing travel corridor.

Table 3.4-1 summarizes the locations viewed in the field, line types, and potential visual impact conditions.

Table 3.4-1
Stark Falls – Sevey Corners
Proposed Line Type and
Potential Visual Impact Conditions

LOCATION	OVERBUILD	OVERBUILD THROUGH VILLAGE	OFFSET	ROAD CROSSING	DIVERGENCE	MIDDLE VIEW	RIVER CROSSING	NEW LINE	UNDERGROUND	CROSS-COUNTRY
S1	OB									
S1.5-S2.5				RDC	D	MV		NL		CC
S2.5				RDC	D					
S2.5-S11.5	OB									
A1					D					
A1-A7						MV		NL		CC
S13				RDC	2D			NL		
S13-S13.5			OS					NL		
S13.5-S14.5								NL		CC

3.5 Sevey Corners to Piercefield Route Segment - Detailed Visual Route Description

The Sevey Corners to Piercefield route segment is common to both the Stark Falls Preferred Route and the Newton Falls Alternate Route. The 9.8-mile route has over 7 miles of overbuild and approximately 2 miles of new overhead. The new overhead locations have been selected to minimize the potential for visual effect upon important aquatic recreational resources.

The segment begins at reference marker P1 at the intersection of State Routes 56 and 3. Proceeding east, the route will initially be offset 200 feet to the north of and parallel to State Route 3. Photos P1AN, P1BN, P1CN, P1EN, and P1FN as shown on Figure 3.3-3, Map 5, characterize the existing vegetation as seen along State Route 3 between Sevey Corners and Piercefield. Photo P1DS depicts an uncharacteristic openness of this portion of the woodland as viewed from the proposed edge of the cleared ROW looking west.

At reference marker P1.7, the Preferred Route intersects and follows the Sevey Corners to Piercefield route segment. Near Sevey Pond, the offset route segment connects with an existing offset distribution line located north of and parallel to State Route 3. Larger pole structures capable of carrying both the existing local distribution line and the proposed 46 kV line will replace existing poles currently carrying the local lines. After the new poles and all lines are in places, the old poles will be removed. In this overbuild configuration, ROW clearing will be limited to the north side of the existing ROW to preserve the existing vegetative buffer to the greatest extent practicable.

Photos P2AN and P2AT depict the screening capability of 175 feet of vegetation between the highway and the Preferred Route during leaf-off conditions. Although the conductors are visible in the telephoto photo, they are not readily apparent, nor would they be visible during leaf-out conditions.

Photos P2BN and P2CS depict a width of only 45 feet of undisturbed vegetation during leaf-off conditions (Figure 3.3-3, Map 5). Dappled sunlight patches within a forest setting are common conditions caused by logging or natural conditions. The visibility of the sunlight falling in the cleared ROW is more of a factor than visibility of the pole or line will be.

As shown on Photo P2DS, a 100-foot buffer provides substantial density, even during leaf-off condition. The character of the divergence as the existing distribution ROW route approaches the highway corridor is presented in Photo P3AW in leaf-off conditions.

The State Route 3 overbuild through the Childwold area will match the existing distribution poles structure for structure (*see* Photos P3DE, P4AE, P4BE, P4BT, P4CE, and P5AW). Although some poles are currently backdropped by vegetation, the generally open character of Childwold will result in poles and conductors being viewed in silhouette.

Photo P4DW, below, shows the existing view looking west along Route 3 in Childwold. This photo depicts existing roadside vegetation.

Photo P4DW- Existing roadside vegetation in Childwold

As State Route 3 continues south, east of Childwold, the landscape traversed by the project is rural and wooded (*see* Photo P6BN). The sensitivity of the view from Catamount Pond (*see* Photo P7BS) prompted the location of the Preferred Route along the Gale By-Pass. The proposed takeoff point from State Route 3 (Figure 3.3-3, Map 6) was relocated from the location shown in Photo P7AS and P7AT (telephoto) to protect wetland resources and provide a 90º take-off point. This cross-county bypass intersects the existing distribution corridor further east of Catamount Pond. Convergence with State Route 3 east of Catamount Pond occurs at a right angle. The location is presented in Photo P7CH. This alignment provides a more direct cross-country route, avoiding visual impact to Catamount Pond and Massawepie Lake. This route passes through logged forest and two sand and gravel operations.

Figure 3.5-1 shows an overview from high above Catamount Pond. Figure 3.5-2 is a similar view direction, but with lowered height of eye to demonstrate how intervening landform and vegetation screens potential views of this alternate. The existing local distribution line is depicted along the roadway. Figure 3.5-3 depicts the Gale By-Pass as viewed from the north with a lowered height of eye. This figure demonstrates visual separation resulting from intervening landform and vegetation.

Photos P8AW, P8AT, P8BW, P8BT, P8CW, P9AN, P9AT, and P9BS depict the character of the State Route 3 section south of where the Gale By-Pass rejoins State Route 3. Much of the existing line is backdropped by existing vegetation.

The view from the rest area north of State Route 3 near Dead Creek crossing is depicted in Photos P10AS and P10AT (with telephoto) looking south (Figure 3.3-3, Map 6), and Photos P10BN and P10BT (with telephoto) facing north. Photo P10CN shows the Dead Creek crossing from the south. Dead Creek has a wetland complex associated with the creek, but has no recreational value or boat access. Proposed improvements would be a pole for pole replacement, and only minor clearing though the road corridor wetland crossing.

The Raquette River north of Piercefield is under a pending land reclassification for inclusion in the New York State Forest Preserve as “primitive.” The existing distribution line runs along the roadside in close proximity to the river’s edge. In this location, the route diverges from the existing distribution line and State Route 3 and follows an existing jeep trail located southwest and upslope of State Route 3.

The point of divergence is depicted in Photo P10DE and P10DT (telephoto). Vegetation density is depicted in Photo P11AE. The point at which the new line would converge with State Route 3 is shown in Photo P11BW.

Figure 3.5-4 provides a bird's eye view of this portion of route, away from the river, looking south. Figure 3.5-5 also looking south has a vantage point lower in elevation, and begins to suggest the screening benefits of landform and vegetation to reduce or eliminate views of this line segment from the river. Figure 3.5-6 represents a view from similar height of eye, but depicts the line segment as would be viewed from the north. Figure 3.5-7 from the southwest, illustrates the separation achieved between the proposed line segment and the river and road to the east.

The proposed route converges with State Route 3 and continues in an overbuild configuration into the community of Piercefield (*see* Photos P11CW, P11DE, and P11EW).

As shown in Photo P11FE, a new overhead line will be constructed 1,000 feet east of reference marker P11 (Figure 3.3-3, Map 6). The new line will cross and diverge from Main Street as an overhead offset. The 20-foot grade change and 100-200 feet of vegetative buffer should provide adequate screening benefits from the road. The existing vegetation is depicted in Photos P11GE, P11HE, and P11IE. The substation tie-in will be along the river below the residences on Main Street.

The photo below depicts the location of the proposed Piercefield regulator station. The proposed tie-in point is situated mid-way down the slope between Main Street and the river. This existing, level clearing is not readily visible from the village streets.

Location of proposed Piercefield regulator station

3.5.1 Sevey Corners to Piercefield Route Impact Assessment

The 9.8-mile route between Sevey Corners and Piercefield, common to both the Preferred and Alternate Routes, has over 7 miles of overbuild and approximately 2 miles of new overhead. The overbuild sections will have incremental visual impacts. That portion of overbuild that will be offset on existing ROW will be barely visible, even during leaf-off conditions. Other overbuild sections will have higher visibility in areas where there is generally open landscape such as in the Childwold area. Here, some structures will not be backdropped by trees, but be seen in silhouette against the sky. In other locations,

where following the existing distribution corridor could result in a potential for greater visual impact, such as in the Catamount Pond and Raquette River areas, the route was relocated cross-country to eliminate potential visibility from these resources. As the route enters Piercefield, incremental visual impact of the overbuild configuration will be further reduced by using a new overhead alignment which will minimize visibility to residents of Main Street.

Table 3.5-1 summarizes the locations viewed in the field, line types, and potential visual impact conditions.

Table 3.5-1
Sevey Corners – Piercefield
Proposed Line Type and
Potential Visual Impact Conditions

LOCATION	OVERBUILD	OVERBUILD THROUGH VILLAGE	OFF-SET	ROAD CROSSING	DIVERGENCE	MIDDLE VIEW	RIVER CROSSING	NEW LINE	UNDERGROUND	CROSS-COUNTRY
P1			OS	2RDC	4D			NL		
P1-P1.5			OS					NL		
P1.5-P3	OB		OS							
P3-P6.5	OB									
P6.5					D					
P6.5-P7.5								NL		CC
P7.5					D					
P7.5-P10	OB									
P10					D					
P10-P11								NL		CC
P11				RDC	D					
P11-P11.25		OV								
P11.25				RDC	D					
P11.25-P11.5			OS					NL		

3.6 Newton Falls to Sevey Corners – Detailed Visual Route Description

The Newton Falls to Sevey Corners Alternate Route would involve clearing a new ROW and installing a new set of wood pole structures where no lines currently exist for 16.2 miles out of a total length of approximately 18 miles. The remainder of the line is an overbuild condition through the two communities of Newton Falls and Cook Corners. This alternate also requires a new substation that will be constructed west of Newton Falls, near the Oswegatchie River.

The photo below depicts the location of the proposed Newton Falls substation. It is located on the north side of River Road, west of Newton Falls.

Location of the proposed Newton Falls substation

Photos N1AE and N1BE (looking east) depict the existing distribution line along River Road (Figure 3.3-3, Map 7) which would be replaced with an overbuild configuration. Photo N1BT is a 80 mm telephoto image showing more detail than N1BE. The proposed overbuild (OB) would transition from roadside corridor to ROW offset along River Road. Photos N1CW and N1DE show the existing overhead utility lines.

The character of Newton Falls is shown in Photos N2AW and N2BE facing west and east from downtown Newton Falls. The existing distribution would be replaced with a set of overbuild structures. The overbuild condition would continue east past the town highway garage to the location of the final existing distribution pole. This also marks the location of the last roadside residence east of Newton Falls. At this point, the design becomes a new overhead offset, which will run parallel to the road while preserving 200+ feet of existing vegetation for screening. The line setback would increase to 400 feet at an unnamed tributary of the Oswegatchie River (*see* Photo N3AS) and then return to a 200-foot offset.

Photos N3BW, N3CS, and N3DN depict the existing conditions where the overhead line would cross the River Road (Figure 3.3-3, Map 7). The line continues north to cross the Oswegatchie River. This crossing point was carefully chosen to minimize visibility from the road. Photos N3EW and N3FW record the view opportunity of this crossing from the road. After crossing the Oswegatchie River, the Alternate Route proceeds north and then east to take advantage of the screening benefits of the existing topography and vegetation.

The Alternate Route proceeds cross-country and spans Tooley Pond Outlet. Photos N5AN and N5BS show the view from the road, and from the crossing point back out to the River Road.

Proceeding east from the Tooley Pond Outlet crossing, the Alternate Route conforms to a 200+ foot road offset with greater setbacks in various locations to avoid wetlands along River Road. It is anticipated that the vegetative buffer between the ROW clearing and the road may be reduced to as little as 75 feet in some locations to facilitate power line construction, without significantly sacrificing screening benefits. Photos N6AN, N6BN, N6DS, N6CN, N7AN, and N7BS record the existing character of this area.

Figure 3.6-1 faces east and depicts the road crossing and Oswagatchie River crossing. The line then continues behind a hill and through the forest toward the Tooley Pond Outlet crossing. Figure 3.6-2 depicts the same area, but as viewed from the southwest, lowering the vantage point. Figure 3.6-3 lowers the vantage point still further, demonstrating that the proposed line and associated clearing will not be visible from the Oswagatchie River and Chaumont Pond areas. Figure 3.6-4 depicts reference marker N5 from the southeast.

The Alternate Route approaches the hamlet of Cook Corners from the west (Figure 3.3-1, Map 8). Photos N8AN and N8BS depict the vegetation character of the 200-foot offset as viewed from the road and as viewed from the proposed line location back to the road. The overbuild route passes through Cook Corners and across Tooley Pond Road. It then continues cross-country to connect with the snowmobile trail 7.5 miles to the east. Photo N11AW depicts the general character of the area between Cook Corner and the South Branch Grasse River.

The South Branch Grasse River Crossing is proposed as an underground segment. The western takeoff point will be totally screened from river views. Photos N12FW and N12JW depict the heavy evergreen vegetative screen. A balloon flown at 60 feet above ground at the western takeoff point was not visible from any of the receptor points along the river.

Photographs of the South Branch Grasse River Crossing were taken during leaf-off conditions (Figure 3.3-1, Map 8). Typical views of the area are depicted in photos N12BN, N12CN, N12EE, N12GE, and N12HE. There is dense brush along the meandering riverbed, limiting opportunities for long distance views from the river surface out to the surrounding landscape.

The eastern takeoff point (the first pole structure proposed east of the South Branch Grasse River underground) was located in the field. Two viewing targets were placed at the location of the first above ground structure. A weather balloon was flown at 40 feet high (height was limited due to increasing wind conditions) and an orange tarp was raised to 35 feet above the ground. The river was then traveled up and downstream to identify potential views. The targets were not visible downstream of the bridge (Photos N12GE and N12HE). While much of the visibility of the targets was restricted by topography and vegetation (Photos N12BN, N12GN, N12EE, and N12IE), the targets were identified from two locations. Photo locations N12AN and N12DN align with a clear stretch of river and are located far enough away to provide views over the riverbank vegetation. Photos N12AN and N12AT depict the tarp, which is located at 35 feet above ground. The tarp appears low in the photo due to an intervening rise. A structure at this location would be substantially invisible during leaf-off conditions and invisible during leaf-on conditions as viewed from View Location A. Photo N12DN and N12DT (telephoto) depict the only location from where the balloon flown at 40 feet high (height was limited due to increasing wind conditions) could be seen. A structure at that location could be seen from Viewpoint Location A during leaf-off, but would be substantially invisible during leaf-out conditions.

The snowmobile trail and transmission line route cross Dead Creek and wetland as depicted in Photos N13AS, N13BN, and N13CW. The Alternate Route would span this wetland adjacent to the snowmobile trail alignment.

The Alternate Route would then continue east generally along the alignment of the trail, passing north around a portion of designated Wild Forest Lands at N14. At the log landing (*see* Photo N14AN) (Figure 3.3-1, Map 9), the alignment assumes a 200-foot offset north of State Route 3. The view character of the vegetation viewed along State Route 3 is depicted in Photos N15AN, N15BN, N16BN, and N18AW. The offset distance increases to improve the screening potential around open fields (*see* Photo N16AN) and wetlands (*see* Photos N18BW and N18FW).

3.6.1 Newton Falls Route Impact Assessment

Approximately 16.2 miles of the 17.7-mile portion of the Newton Falls Alternate Route to Sevey Corners will not be visible to the general public. The cross-country portions will not be visible and the offset portions will be substantially invisible from potential viewing locations. The line may be visible to recreational users, such as hikers, hunters, and snowmobilers, depending on their location and direction of travel.

Roadside overbuilds within the communities of Newton Falls and Cook Corners are anticipated to have a moderate visual impact due to the additional clearing required and the increase in pole height.

The 1+ mile of existing offset to be overbuilt west of Newton Falls will require additional clearing and replacement of existing structures with taller structures. There will be little visual effect due to the alignment of the existing offset. In some locations (near N17), the width of the vegetative buffer of existing trees to remain is shown at less than 200 feet. This is an area of side slopes, which become steeper as the distance to the road increases. The minimum width of undisturbed vegetation shall be 75-feet, which has been demonstrated to be an effective visual buffer, even during leaf-off (*see* photos P2BN and P2CS which demonstrate the screening ability of 45 feet of vegetation).

There is one new overhead road crossing of River Road east of Newton Falls. The visual effect of the road crossing can be mitigated by techniques such as:

- Setting the structures well back from the travel way to screen all but views of the conductors;
- Preserving or planting under-story vegetation at the road edge; and
- Crossing the road at a near 90º angle to minimize viewing opportunities.

There are three river crossings along the Newton Falls Alternate. Visual effects of the South Branch Grasse River Underground crossing have been reduced to substantial invisibility. Field investigation revealed no potential views of the line from the Grasse River flow at locations N16 and N17.

The Tooley Pond outlet crossing has been located 1,200 feet from the River Road to minimize the potential visual impact. The structure will be screened by vegetation, resulting in only the conductors being visible. From the road, the conductors will be barely perceptible.

Visual impact of the Oswegatchie River overhead crossing has been minimized to the greatest extent practicable and employs the following mitigation techniques:

- Structures set at locations which limit views of the crossing;
- Distance of 1,200 feet from the closest view point;

- Structure setbacks to allow view of the conductors only; and
- Preservation, or planting of under-story shrubs at the river edge to screen views of the cleared utility corridor.

As a result, project visibility from the Oswegatchie River is limited to the conductor line crossing only. No support structures will be visible.

Table 3.6-1 summarizes the locations viewed in the field, line types, and potential visual impact conditions.

Table 3.6-1
Newton Falls to Sevey Corners
Proposed Line Type and
Potential Visual Impact Conditions

LOCATION	OVERBUILD	OVERBUILD THROUGH VILLAGE	OFFSET	ROAD CROSSING	DIVERGENCE	MIDDLE VIEW	RIVER CROSSING	NEW LINE	UNDERGROUND	CROSS-COUNTRY
N1	OB									
N2		OV								
N2.5			OS							
N3				RDC	2D		RVC			
N4-N5						MV				
N5.5							RVC			
N6-N7			OS							
N8	OB	OV								
N9-N11								NL		CC
N11.5									UG	
N12-N14.5								NL		CC
N14.5-N19			OS							

3.7 Photo Simulations

3.7.1 General

For the three route segments including the Preferred Stark Falls-Sevey Corners segment, followed by the Sevey Corners-Piercefield segment, and the Alternate (Newton Falls-Sevey Corners) segment, a total of 36 photo simulations were created to depict visual changes or impacts that may result from the Tri-Lakes Reliability Project. Every effort has been made to accurately and realistically portray "after construction" conditions, including appropriate pole types and anticipated clearing conditions. The scale of project structures within the photo simulations was determined by measuring the height of existing trees and electric distribution structures. The images inserted are derived from photographs of similar pole types with graphic modifications using "Photoshop" electronic rendering software. Pole types vary from simulation to simulation, depending upon span length and proposed configuration, i.e., overbuild single phase, overbuild three phase or 46 kV line only.

As discussed in Section 1.2.2 of this appendix, where telephone lines are currently collocated on existing distribution poles, both will be accommodated on the new overbuild configurations. However, in locations where telephone lines currently exist on a separate system of poles, that independent system will be maintained.

It is expected that guy wires will be necessary in some locations, such as at angles and long spans. Guy wires have been depicted in some of the photo simulations, for example, in simulations where they already exist, or where it is clear that they will be necessary. Generally, additional corridor or ROW clearing will not be required to accommodate guy wires.

The photo simulations and related discussion represent the three route segments: Stark Falls-Sevey Corners, Sevey Corners to Piercefield, and Newton Falls-Sevey Corners. However, the final project will only include two of the three segments.

Photo simulations are included at the end of this appendix following the photos of the existing conditions along the three route segments. The simulation numbers match the numbers of the photos that they are based on and which are referenced throughout this appendix. Photo locations are shown on the Photo Location Maps 1-9.

Each photo simulation is depicted with the corresponding photo of the existing condition for ease of comparison. The following section provides a description of the key visual elements.

3.7.2 Stark Falls – Sevey Corners Segment Photo Simulations

Stark Falls Substation Simulation – This view depicts the proposed substation. Existing trees along the River Road will be maintained to provide visual screening.

S1CS Simulation – Proceeding south from the new Stark Falls Substation, the existing distribution line will be in an offset ROW. The new poles will be placed in close proximity to the existing poles to facilitate the wire transfer. The simulation depicts new overbuild structures with 46 kV and distribution lines and the anticipated tree clearing required to facilitate construction and maintenance of the proposed facility.

S1FS Simulation – This view, also facing south, illustrates an open field/skylined configuration at the intersection of River Road and Joe Indian Road. Only minor clearing is anticipated. The new overbuild

continues approximately 200 feet (or one span length) from Joe Indian Road to the next pole, where the existing distribution line diverges and continues west, and the new 46 kV line proceeds southwest to join with State Route 56 south.

S3AS Simulation – The overbuild conditions will continue south along the west side of State Route 56. One advantage of roadside construction is that a limited amount of additional clearing will be necessary due to the adjacent pavement. Tree clearing will be limited to 37½ feet from either side of the ROW centerline. The new poles will be placed in close proximity to the existing poles to facilitate the wire transfer.

S3CT Simulation – This view, taken with a telephoto lens, depicts a typical roadside overbuild condition along State Route 56 where the structures are backdropped by vegetation. When compared to the base photo S3CT, the simulation shows that the pole type has changed and that there is additional clearing. Using a telephoto image for comparison and discussion has the benefit of added clarity, but also holds the potential to unrealistically “flatten” the image due to its longer focal length. The poles in this image appear closer together due to the magnification.

S5AN Simulation – Photo S5AN depicts a situation where, under current conditions, the structures are backdropped by trees. However, after additional clearing, the structures will be partially skylined. While this view change is apparent when the "before" and "after" views are compared, general landscape character will be unchanged.

S6AT Simulation – This view, taken with a telephoto lens, depicts a typical roadside overbuild condition along State Route 56 where the structures are backdropped by vegetation. When compared to the base Photo S6AT, the simulation shows that the pole type has changed, and there is additional clearing. However, the general landscape character of the view will be unchanged, with only minor visual impact. Using a telephoto image for comparison and discussion has the benefit of added clarity, but also holds the potential to unrealistically “flatten” the image due to its longer focal length. The poles in this image appear closer together due to the magnification.

S7AT Simulation – This view, taken with a telephoto lens, depicts a typical roadside overbuild condition where the proposed structures are mostly backdropped by vegetation with limited skylining. The general landscape character of the proposed view will be unchanged, with only minor visual effect. Using a telephoto image for comparison and discussion has the benefit of added clarity, but also holds the potential to unrealistically “flatten” the image due to its longer focal length. The poles in this image appear closer together due to the magnification.

S9CT Simulation – Photo S9CT depicts a situation where, under current conditions, the structures are backdropped by trees. However, after necessary corridor clearing has occurred, the structures will be partially or completely skylined. While this view change is somewhat dramatic when the "before" and "after" views are compared side by side, the overall change in landscape character will be minor. Using a telephoto image for comparison and discussion has the benefit of added clarity, but also holds the potential to unrealistically “flatten” the image due to its longer focal length. The poles in this image appear closer together due to the magnification.

A5AN Simulation – The line segment proposed along the Hollywood Club woods road will generally follow the meandering roadway on the east side. At times the line will be adjacent to woods road with no intervening vegetation, but for the most part, the project structures will be visually separated from woods road by 20 or more feet of intervening vegetation. This simulation depicts the power line on the west side of the woods road in this photo, but the view is characteristic of the anticipated visual effect.

S13AE and S13BW Simulation – The overhead crossing of State Route 56 will be at a 90º angle to the road and to the direction of travel. The east side is depicted in simulation S13AE. In this view the wires will cross over the road to an angle structure on the east side of State Route 56. The line will then turn to continue south and offset from State Route 56. Several large trees will be removed, although a buffer of low plantings along the road edge will be maintained. The view back to the Hollywood Road entrance is depicted in simulation S13BW. When "before" and "after" views are compared, road crossings in general can appear as a striking visual change. New view corridors are created as roadside vegetation is removed to facilitate power line construction. However, the opportunity to experience this change in visual character however, must be understood within the context of the road corridor. The majority of potential receptors will experience the change in landscape character from a moving vehicle. The opportunity for the viewer to be aligned with the axis of the power line is limited to a brief second in time, and at a 90º angle to travel direction. Mitigation measures, such as view angle, support pole setback, time of receptor exposure and retention of lower growing vegetation along the road edge, all serve to minimize the potential for visual impact. While the "before" and "after" view change may be dramatic, the limited opportunity to access that view will result in a minimal visual effect.

S13CE Simulation – This view is located at the outlet to Sevey Bog. The transmission line alignment will be located 200 feet from the edge of the road ROW to coincide with an island of upland within the marsh. A pole structure placed on this island will allow the line to span the wetland. Comparison of the S13CE photo (taken during leaf-off) and the simulation indicate minor visual change, as the clearing is imperceptible and the pole structures are similar in height and color to the existing trees.

S13FE Simulation – A 200-foot-wide band of dense deciduous and evergreen vegetation along State Route 56 will provide an adequate visual screen for the south leg of the Stark Falls Route. This view along an existing woods road is typical of the limited opportunities to view the offset condition.

3.7.3 Sevey Corners – Piercefield Segment Photo Simulations

P1CN Simulation – This simulation depicts a new line segment located 200 feet off of the existing State Route 3 travel corridor. Although the forest in this location has been logged and is fairly open, the addition of the proposed transmission line will not create a significant visual effect.

P3AW Simulation – The existing local distribution is located in a ROW offset from the State Route 3. The proposed overbuild condition will require taller structures and will require some additional clearing on the north side of the ROW. However, the overall visual effect will be minor.

P3DE Simulation – The power poles along the western approach to Childwold will be replaced with taller structures to carry both local distribution and the new transmission line. Additional roadside clearing is anticipated, but the landscape character will be only minimally affected.

P4CE Simulation – The overbuild condition adjacent to State Route 3 will continue through Childwold, with only minor effect on the existing visual character. Necessary clearing will be coordinated with individual homeowners to minimize front yard impacts.

P4DW Simulation – This view depicts the visual change due to the removal of large vegetation within the 75-foot ROW. Some significant mature maples will be affected by project implementation. While care will be taken to preserve specimen plants in front yards, large danger trees will need to be removed.

P7AS Simulation – At this location, the proposed 46 kV line overbuild condition adjacent to State Route 3 will continue, with only minor effect on the existing visual character. This location is one pole distance from a southeast divergence from the roadside in order to cut off a corner and eliminate possible

impacts to the visual character of views from Catamount Pond and Massawepie Lake. While this divergence may expose new view opportunities down the cleared ROW, it avoids visual impact from lakeside views, resulting in a minimization of potential visual impacts.

P7CN Simulation – At this location, the proposed line will diverge from the roadside in order to cut off a corner and eliminate possible impacts to the visual character of Catamount Pond and Massawepie Lake. While this divergence may expose new view opportunities down the cleared ROW, it avoids visual impact from lakeside views, resulting in a minimization of potential visual impacts upon important aquatic recreational resources.

P8BT Simulation – This view is based on a telephoto photography. The existing poles will be replaced with larger structures to carry both the local distribution line and the new 46 kV line. Additional clearing will be required, but the replacement poles will still be visually backdropped by existing vegetation. There will be only a minor change to the landscape character. Using a telephoto image for comparison and discussion has the benefit of added clarity, but also holds the potential to unrealistically "flatten" the image due to its longer focal length. The poles in this image appear closer together that 300 feet due to the magnification.

P9AT Simulation – This view is based on a telephoto photography. The existing poles will be replaced with larger structures to carry both the local distribution line and the new 46 kV line. Additional clearing will be required, but many of the replacement poles remain visually backdropped by existing vegetation. The general character of the landscape will be unchanged. Using a telephoto image for comparison and discussion has the benefit of added clarity, but also holds the potential to unrealistically "flatten" the image due to its longer focal length. The poles in this image appear closer together due to the magnification.

P10CN Simulation – At this location, the existing poles will be replaced with larger structures to carry both the local distribution line and the new 46 kV line. Additional clearing will be required, but the replacement poles will still be visually backdropped by existing vegetation. There will be only a minor change to the landscape character.

P11BW Simulation – At this location looking back toward Sevey Corners, the proposed line will diverge from the roadside in order to cut off a corner and eliminate possible impacts to the visual character of views from the Raquette River corridor. While this divergence may expose new view opportunities down the cleared ROW, it avoids visual impact from river corridor views, resulting in a minimization of potential visual impacts.

P11FE Simulation – Upon entering the Hamlet of Piercefield, the transmission line route will diverge from the existing power poles to run along a wooded slope located midway between the river and Main Street. There will be a minor visual impact as a result of the corridor divergence. However, a significant visual benefit will be obtained because the route will screen residences and parkland from views of the project. The result will be only a minor visual change to the existing landscape character.

Piercefield Regulator Station Simulation – This view depicts the regulator station to be located in Piercefield. The station will be screened on all sides by maintaining the existing vegetation. Recreation on the adjacent segment of the Raquette River is limited due to dam effects.

3.7.4 Newton Falls – Sevey Corners Segment Photo Simulations

Newton Falls Substation Simulation – The proposed Newton Falls substation is depicted in this view. The "leaf-off" condition shows the screening benefits of existing trees to the north and west. Although

the substation will be fairly visible from the west, security regulations prohibit the use of berms and screen plantings.

N2AW Simulation – The new 46 kV line will be carried in an overbuild condition through the hamlet of Newton Falls. Additional vegetation clearing will be required in the existing corridor when the new, taller “overbuild” poles are installed. It is anticipated that only a minor change in the visual character of the Hamlet will occur.

N3BW Simulation – The proposed route will cross River Road east of Newton Falls. The support structures will be located away from the road to reduce potential visibility. Only the conductor wires and ROW clearing will be visible to general roadway traffic. Several large trees must be removed, although a buffer of low plantings along the road edge will be maintained. Road crossings, in general, when "before" and "after" views are compared at a 90º angle, appear as a striking visual change. New view corridors are created when roadside vegetation is removed to facilitate power line construction. The opportunity to experience this change in visual character, however, must be understood within the context of the road corridor. The majority of potential receptors will experience the change in landscape character from a moving vehicle as is depicted in this simulation. The opportunity for the viewer to be aligned with the axis of the power line is limited to a split second in time, and at a 90º angle to travel direction. Mitigation measures such as view angle, support pole setback, time of receptor exposure and retention of lower growing vegetation along the road edge all serve to minimize the potential for visual impact. While the "before" and "after" view change may be dramatic, the limited opportunity to access that view will result in a minimal visual effect. This view, with the poles set back behind the trees, minimizes the potential visual impact.

N3EW Simulation – The Oswagatchie River crossing is depicted in this view simulation. The base photo was taken during leaf-off conditions. Key elements to minimizing potential impacts of this crossing include: crossing location (where limited view opportunities exist); pole setback from the river (to minimize the visibility from the water and the travel way); selective clearing (to preserve and maintain low growing species along the water’s edge); and the selective use of taller long span structures to avoid sensitive wetlands and stream edges. Views of the crossing from the road will be limited to only the east side of the road, at a distance of over 1,000 feet. The conductor will be visible under normal conditions, and the top of the support structures may be seen at the tree top level. Views from the road west of the crossing will be screened by existing vegetation that will be maintained.

N5AN Simulation – This view depicts the Tooley Pond Outlet crossing. The route was selected to take advantage of a narrowing of the wetland complex, and was moved 1,500 feet away from potential receptors on the River Road. The base photo was taken during leaf-off conditions. The line will be screened by existing topography and by vegetation that will be maintained. The ROW clearing is imperceptible from this view. The crossing support structures are well removed from the riverbank to minimize both visual and wetland/stream bank impacts.

N6CN Simulation – The 2.5-mile portion of the Alternate Route between reference markers N5.5 and N8 consists of a simple vertical structure located parallel to the roadway. A 200-foot wide band of existing trees will be maintained between the line and River Road to provide visual screening. There are several existing logging roads and woods roads that may provide glimpses of the project conductors and possibly structures. Simulation N6CN represents the anticipated view of the line as it passes though one of these typical existing woods road corridors. Because the view is at a 90º angle to the travel direction, the additional clearing and conductors are barely perceptible.

N8AN Simulation – This view represents another woods road crossing of the proposed line. This view is at a 90º angle to the travel direction, and the additional clearing and conductor wires are barely perceptible.

N8DE Simulation – Within the small community of Cook Corners, the proposed line will be constructed in an overbuild configuration that will include the existing electric distribution lines and the proposed 46 kV line. In this view, the new line turns to the right (south) for a short distance prior to diverging from the roadside replacement overbuild to travel cross-country and connect with the snowmobile trail to the east. The visual effect of the pole replacement and additional conductors on the landscape character of the community will be minor.

N11AW Simulation – The line along the snowmobile trail/logging road will follow a more direct route than that of the meandering existing trail. At times, the ROW will be adjacent to the trail with no intervening vegetation, but for the most part, power line structures will be visually separated from the trail by 20 or more feet of intervening vegetation. Potential viewers include hunters and snowmobilers. There will only be a minor overall visual impact to the existing landscape character.

N12DN Simulation – The South Branch Grasse River crossing will be underground. The transition to overhead has been sited to minimize visibility from the river. The western pole structure is invisible due to topography and dense evergreen vegetation. The eastern pole structure is depicted in this view (the base photo was taken during leaf-off conditions). The pole appears lower than its true height, due to intervening landform. The pole structure blends with existing trees in size and color, and the conductors are indistinguishable from horizontal branches at this 700-foot distance. During leaf-off conditions, the proposed line will be substantially invisible, and during leaf-on conditions, will be substantially invisible.

N13CW Simulation – This west facing view depicts an existing logging road/causeway crossing of Dead Creek near where it joins with the South Branch of the Grasse River. The proposed line structures will parallel the logging road as shown just north of the road. The wetland will be spanned with three pole dead-end structures. No impacts to the stream or wetland complex are anticipated. Vegetative clearing along the crossing is not necessary.

N16BN Simulation – This is a representative view of the proposed power line as it may be seen crossing existing road cuts and clearings at a 90º angle to Route 3. All along this portion of the Alternate Route, the power line ROW is offset to allow maintenance of 200 feet or more of existing vegetation to remain and reduce potential visibility. The offset distance increased at select locations to avoid wetlands or to accommodate and skirt existing clearings.

4.0 CONCLUSION

4.1 Balanced Approach

The Preferred and Alternate Routes have separate and unique characteristics and challenges. The routes also present balanced alternatives that minimize the potential impacts to unique environmental areas and demonstrate the extent to which the project sponsors have gone to consider alternatives.

4.2 Avoidance and Minimization of Visual Impacts

The project is committed to minimizing visual impact. In areas where distribution lines currently exist, utility poles would be replaced by new poles that will be roughly one-third to one-half taller than the

existing structures in order to accommodate both the existing local distribution lines and the proposed 46 kV line. This consolidation of existing and proposed utilities would result in incremental visual change along State Routes 3 and 56.

Where new lines are offset from existing roadways, a 200+ foot buffer would be preserved to minimize the visual impact to roadway travelers. New road crossings have been kept to a minimum. Where road crossings are unavoidable, an attempt will be made to position project components in a manner that reduces potential visual impacts.

Wild Forest lands have been avoided. Rivers and lands pending reclassification have been treated in accordance with the pending land use category. Where crossings or line placement across rivers, streams, and wetlands is unavoidable, cutoffs, offsets, undergrounding, and bypasses have been employed to minimize potential visual impact on the important natural resources of the Park.

4.3 Visual Range

The heavily wooded, rolling foothills of the project area offer limited opportunity for long-range views. However, near, middle, and far views were assessed to determine the potential for visual impact.

In the near view of under 0.5 miles, the color and height of the poles will be readily apparent. However, the wood pole structures will be somewhat masked due to the fact that the cross-sectional width of the pole, as well as pole height, will be similar in scale to the trees in the surrounding forests.

In the middle view range of 0.5-3 miles, the poles will blend in with the wooded landscape, since both the poles and trees are comprised of vertical elements and natural materials.

The far view component of the visual analysis was considered as part of vista inventory from regional locations such as hilltop trails, fire towers, and road corridors that include a long vista view down the length of clearing. No potential views of the Preferred or Alternate Routes (ROW clearings) were identified from peaks, trails, or lookouts.

4.4 Contextual Change

In the overbuild configuration, distribution structures will be replaced with taller structures. To accommodate the taller structures, existing corridors and ROWs will be widened by an additional 25 to 37 feet. These taller structures and wider clearings will create an incremental change in visual impact, but avoid creating a new utility corridor. In some areas where existing wood pole distribution structures are currently backdropped by vegetation, the proposed overbuild structures may be partially silhouetted. Also, in some locations, the existing structures currently backdropped by trees will remain backdropped by trees even after the overbuild and corridor expansion occur. The visual change of both skylined and forest backdropped “before” and “after” condition is represented in simulations.

For a time, local viewers (residents and visitors) will likely be aware of the taller replacement poles and wider corridor clearings. The overall visual impact, however, will be a smaller incremental change. While the structure may increase in height a third or more and the corridors may double in width, this is a change of existing man-made elements within the context of a “built environment.” Utility structures along roadsides are common occurrences, one that we each have grown up with from childhood. We see them, but they are an accepted and common component of the roadside visual fabric. New visitors to the area will experience an environment visually indistinguishable from the previous pole condition and clearing. The effect of overbuild conditions on roadside visual character will consist only of an increase or incremental change to an existing condition.

4.5 Introduction of New Elements

When new or unusual elements are introduced into the existing visual fabric, "visual impact" occurs. Great care will be taken to reduce the visibility of poles and lines in areas where none existed before. The route alternatives identify and minimize road and river crossings, and mitigate the impact of those crossings through increased view angle, careful selection of crossing locations, modification of clearing techniques at road and river edges, and maintaining a minimum of 200 feet of existing vegetation between the ROWs and the existing travel corridors. Even though the proposed 46 kV lines will be visible to motorists on local roads, this incremental impact must be reviewed in balance with other potential impacts associated with cross-country power line construction.

4.6 Summary

Visual impact is assessed in terms of the anticipated change in visual resources, including whether there would be a change in character or quality of the view with respect to significant scenic and aesthetic resources. The project has been routed and designed to minimize visual effects and impacts.

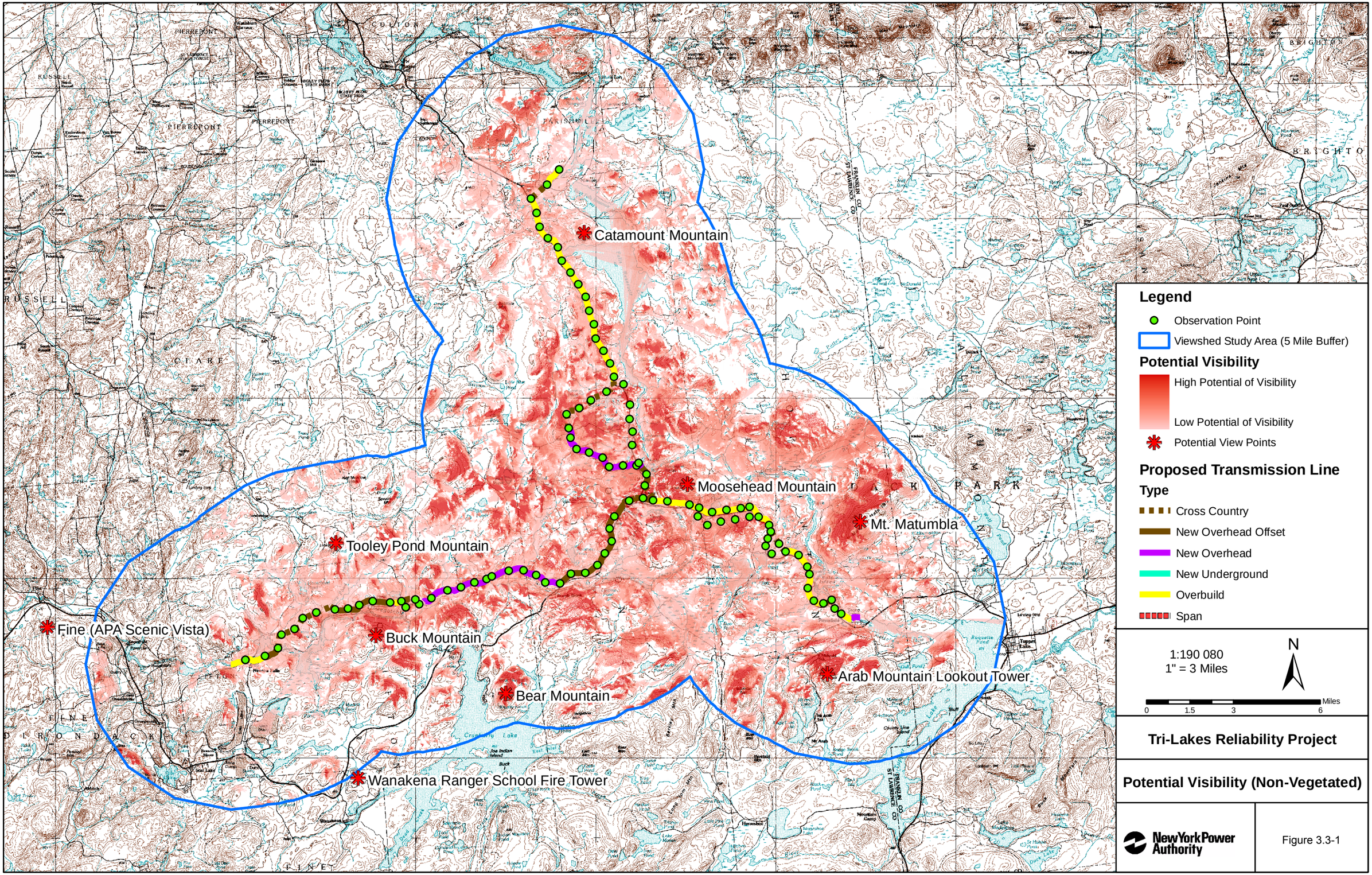
The Stark Falls Preferred Route will have less visual impact potential than the Newton Fall Alternate Route. Of the 26-mile length of the Preferred Route (including the 9.8 mile segment from Sevey Corners to Piercefield), 5.8 miles are cross-country with little opportunity for the general public to view the proposed facilities. Segments of the cross-country route may be visible to recreational users, such as hikers, hunters, and snowmobilers, depending on their location and direction of travel. A 0.8-mile segment of this line will be offset from the road by 200+ feet, resulting in minimal visual impact. There are five locations where the new line route will diverge from the State Routes 56 and 3 and create open views down the ROW. Retaining or preserving existing vegetation where possible can reduce this effect. There are two locations where a new overhead road crossing will be necessary. The remainder of the line is a roadside overbuild of 15.5 miles. The visual impact of replacing existing structures with overbuild structures and increasing corridors widths will be minimal.

Of the approximately 28-mile overall length of the Newton Falls Alternate Route (including the 9.8-mile segment from Sevey Corners to Piercefield), approximately 18 miles are either cross-country or offset from the road, and would not be visible to the general public. However, segments of the cross-country route may be visible to recreational users, such as hikers, hunters, and snowmobilers, as discussed above. The Newton Falls Route requires more new ROW than the Preferred Route, and includes three water crossings, including the Oswegatchie River, the Tooley Pond Outlet and the South Branch Grasse River. Any comparison between the Preferred Route and the Alternate Route must consider type of viewers and landscape quality, as well as pure visibility. While more viewers will see the replacement poles along 15.5 miles of the Preferred Route, these will be overbuild structures in an area where utility structures already exist. This constitutes a consolidation of visual intrusions with no appreciable change in landscape character or quality, and as such, can be classified as "substantially invisible," as defined by the APA's Towers & Tall Structures Policy.

Conversely, the Newton Falls Alternate Route introduces new, man-made elements into the existing landscape character where none currently exist, and requires new ROW clearing and three water crossings. While efforts have been made to offset and minimize the effects of the new line, certain road and river crossings are unavoidable.

Considering the potential impacts to the existing landscape quality caused by a power line being introduced into areas currently devoid of utility structures, the Stark Falls Preferred Route will have less visual impact potential than the Newton Fall Alternate Route.

Potential Visibility Figures



Tri-Lakes Reliability Project

Potential Visibility (Non-Vegetated)

New York Power Authority

Figure 3.3-1

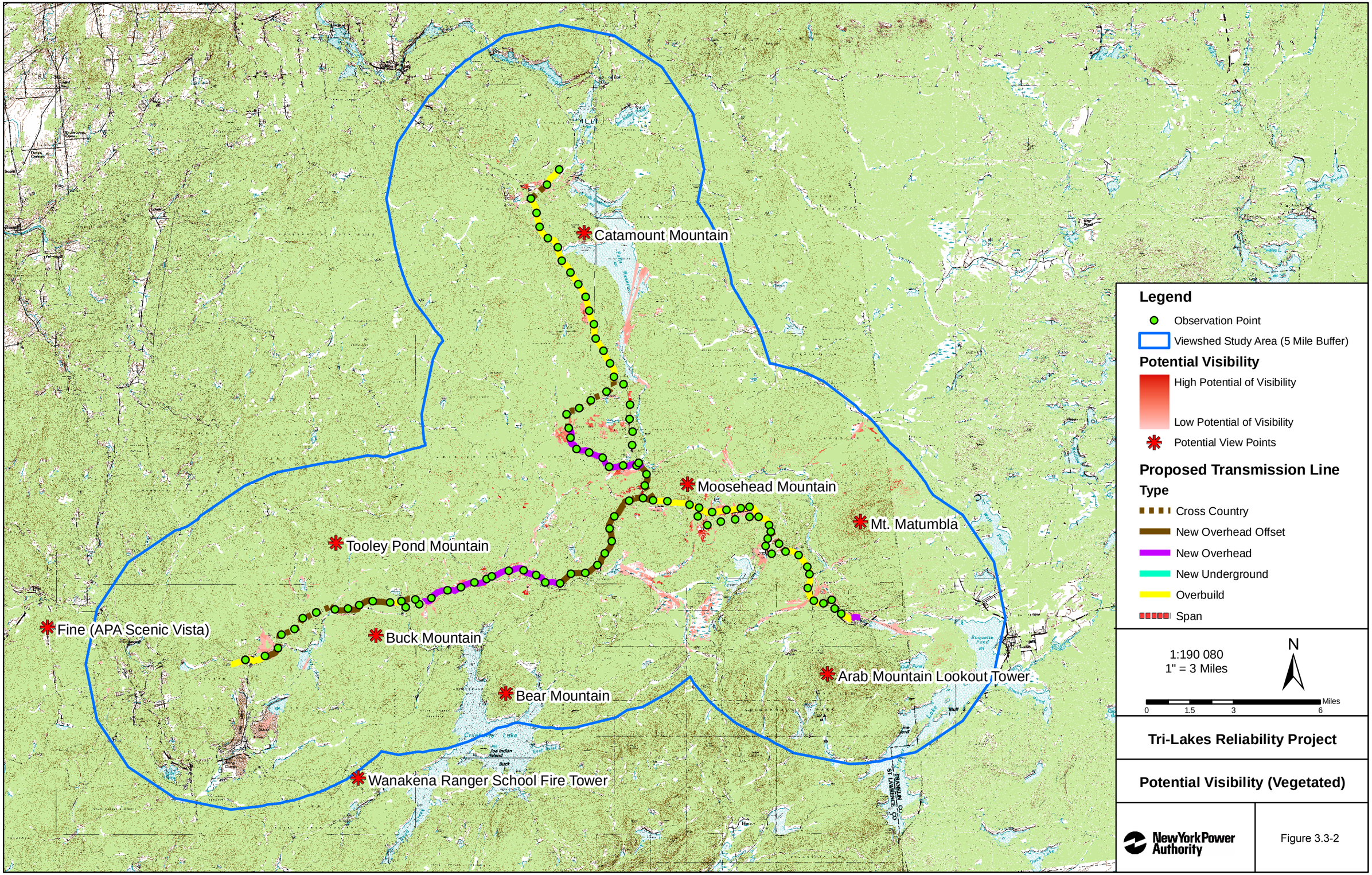
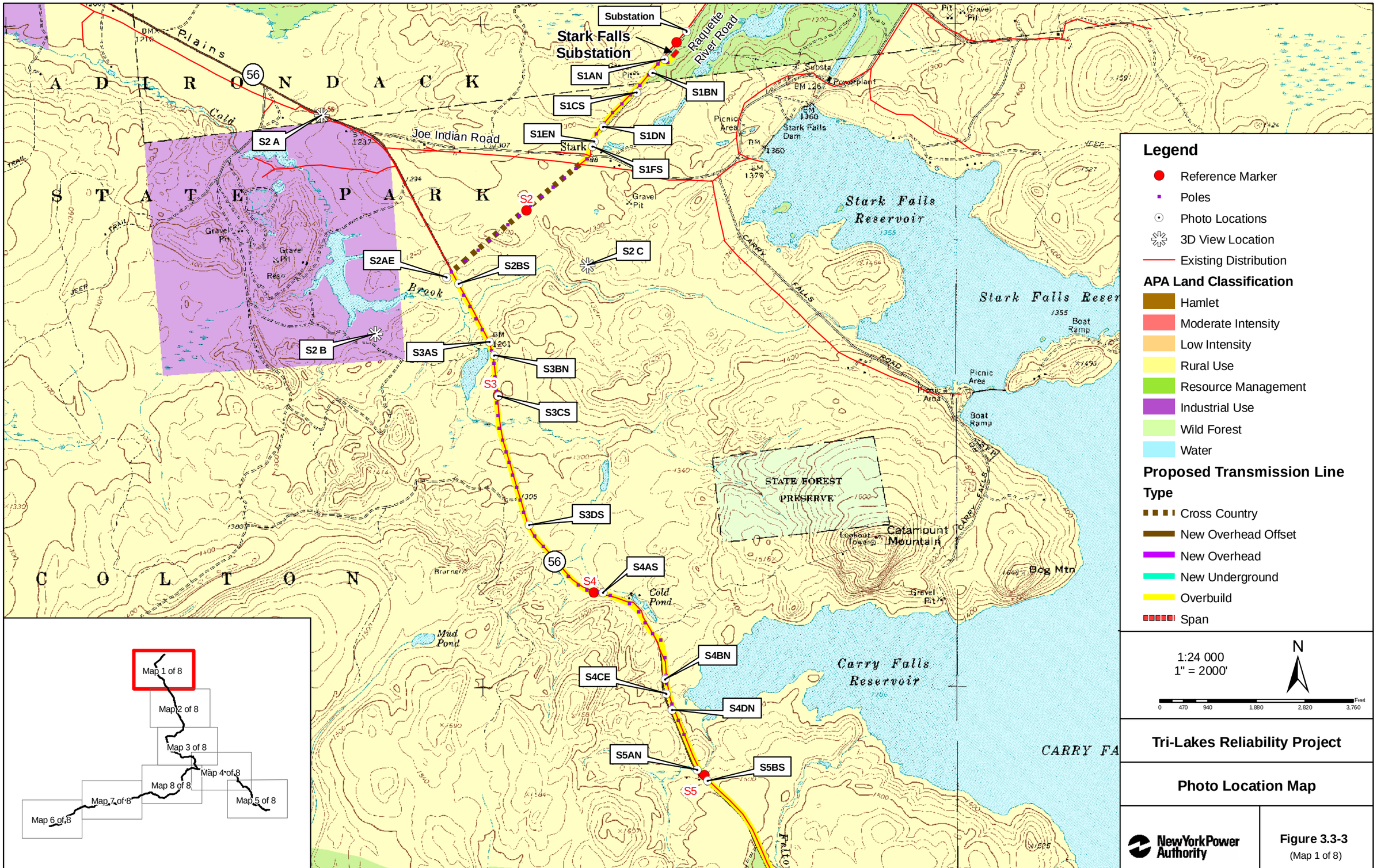

Catamount Mountain
Moosehead Mountain
Mt. Matumbla
Tooley Pond Mountain
Fine (APA Scenic Vista)
Buck Mountain
Bear Mountain
Arab Mountain Lookout Tower
Wanakena Ranger School Fire Tower
Legend
Observation Point
Viewshed Study Area (5 Mile Buffer)
Potential Visibility
High Potential of Visibility
Low Potential of Visibility
Potential View Points
Proposed Transmission Line
Type
Cross Country
New Overhead Offset
New Overhead
New Underground
Overbuild
Span
1:190 080
1" = 3 Miles
N
0
1.5
3
6
Miles
Tri-Lakes Reliability Project
Potential Visibility (Vegetated)
NewYorkPower Authority
Figure 3.3-2

Photo Location Maps



Tri-Lakes Reliability Project

Photo Location Map

New York Power Authority

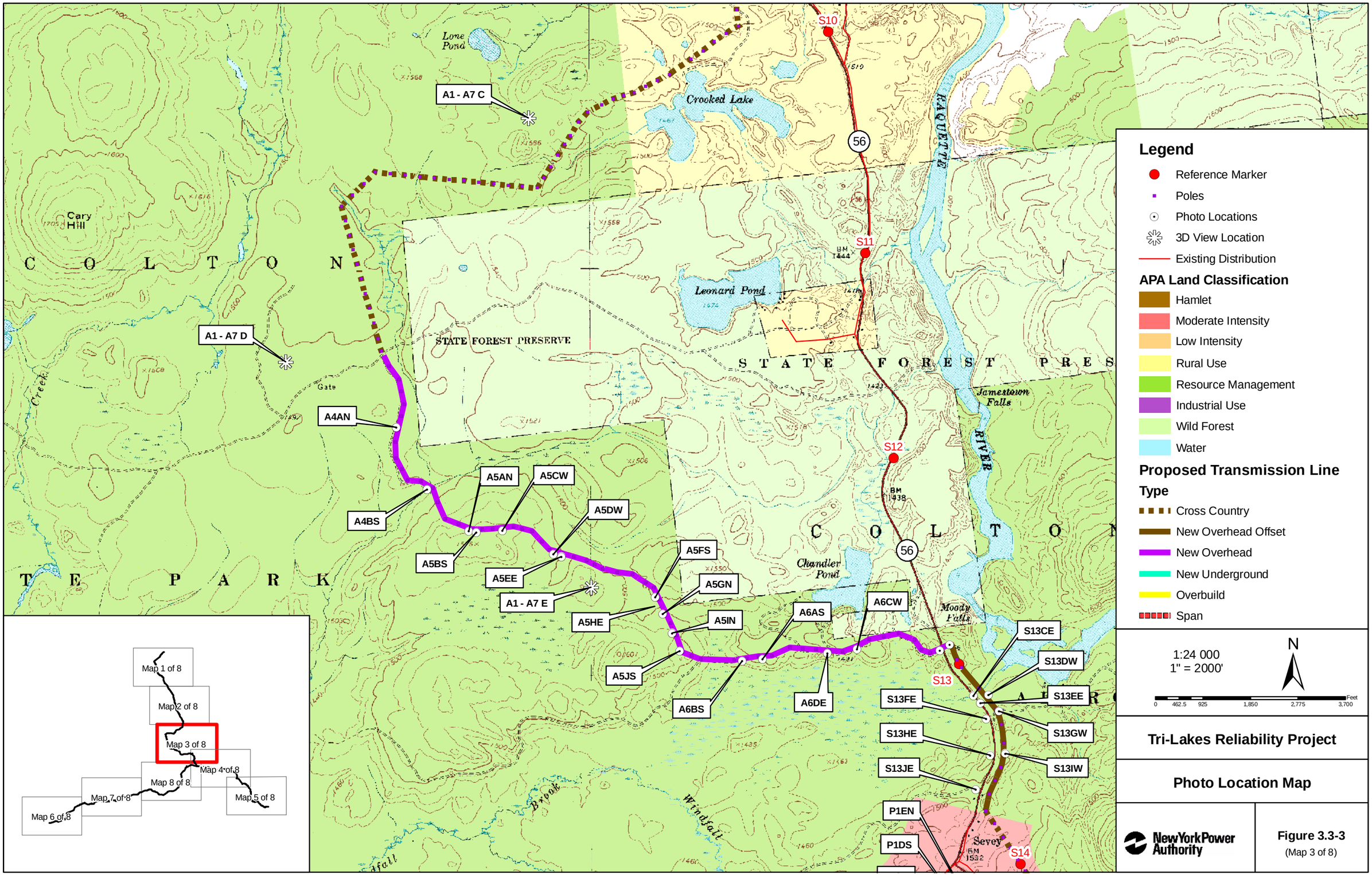
Figure 3.3-3
(Map 1 of 8)

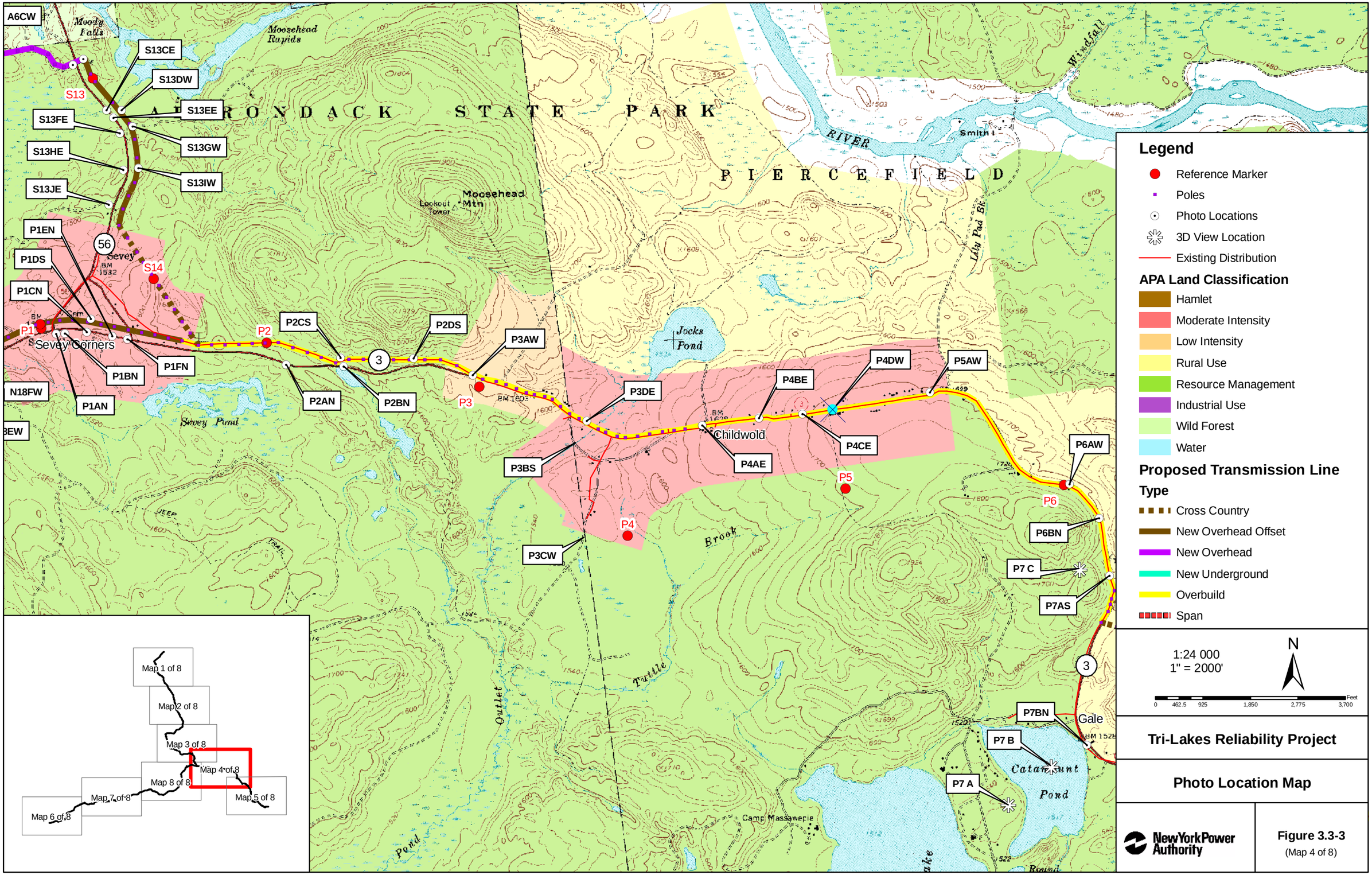
Tri-Lakes Reliability Project

Photo Location Map

NewYorkPower Authority

Figure 3.3-3
(Map 2 of 8)


Legend
Reference Marker
Poles
Photo Locations
3D View Location
Existing Distribution
APA Land Classification
Hamlet
Moderate Intensity
Low Intensity
Rural Use
Resource Management
Industrial Use
Wild Forest
Water
Proposed Transmission Line
Type
Cross Country
New Overhead Offset
New Overhead
New Underground
Overbuild
Span
1:24 000
1" = 2000'
N
0 462.5 925 1,850 2,775 3,700 Feet
Tri-Lakes Reliability Project
Photo Location Map
NewYorkPower Authority
Figure 3.3-3
(Map 3 of 8)
Map 1 of 8
Map 2 of 8
Map 3 of 8
Map 4 of 8
Map 5 of 8
Map 6 of 8
Map 7 of 8
Map 8 of 8
A1 - A7 C
A1 - A7 D
A1 - A7 E
A4AN
A4BS
A5AN
A5BS
A5CW
A5DW
A5EE
A5FS
A5GN
A5HE
A5IN
A5JS
A6AS
A6BS
A6CW
A6DE
S10
S11
S12
S13
S14
S13CE
S13DW
S13EE
S13FE
S13GW
S13HE
S13IW
S13JE
P1EN
P1DS
56
Lone Pond
Crooked Lake
Leonard Pond
Chandler Pond
Cary Hill
C O L T O N
T E P A R K
STATE FOREST PRESERVE
STATE FOREST PRES
RAQUETTE RIVER
Jamestown Falls
Moody Falls
Sevey
Gate
Creek
Brook
Windfall

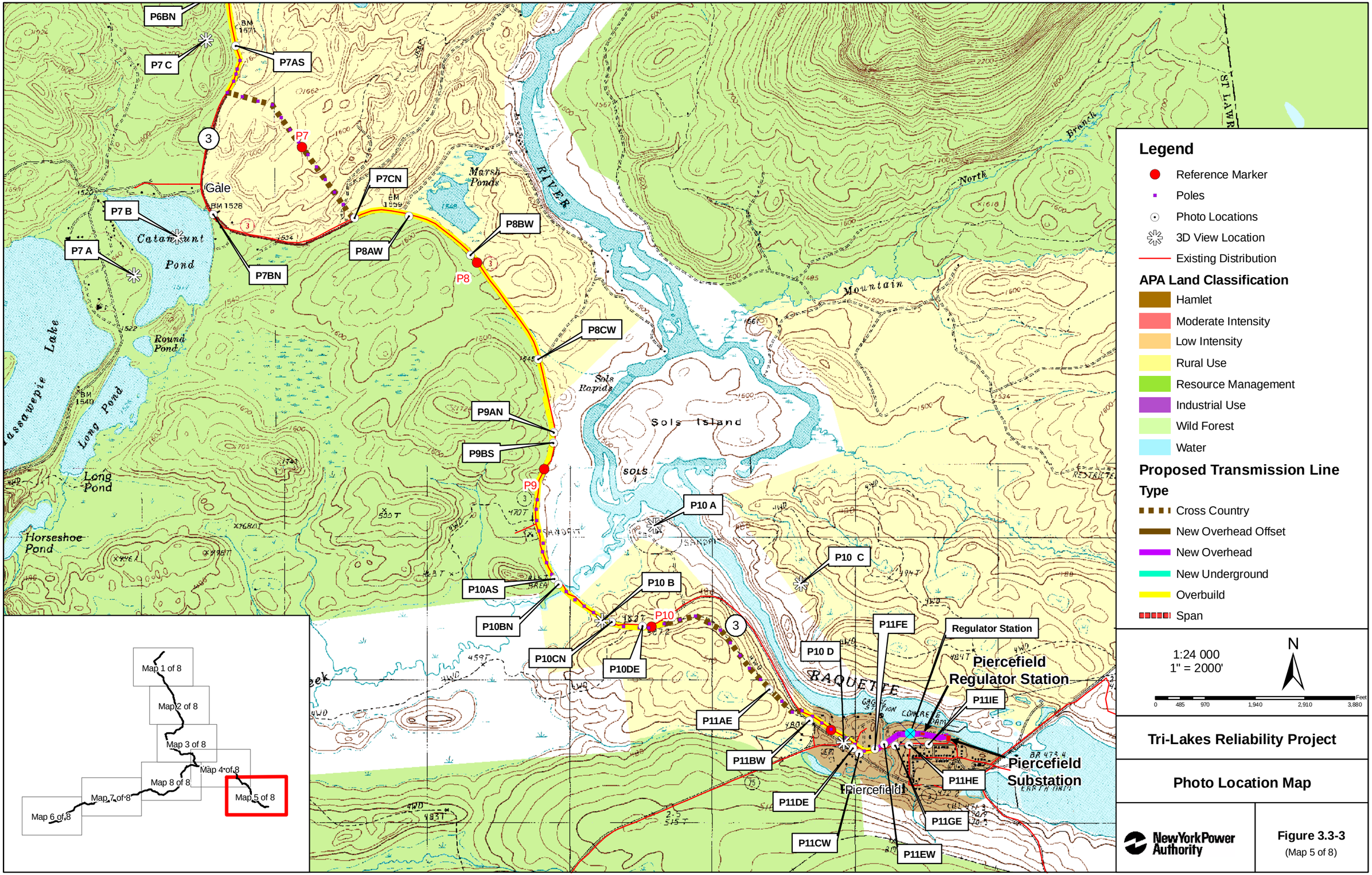


Tri-Lakes Reliability Project

Photo Location Map

NewYorkPower Authority

Figure 3.3-3
(Map 4 of 8)

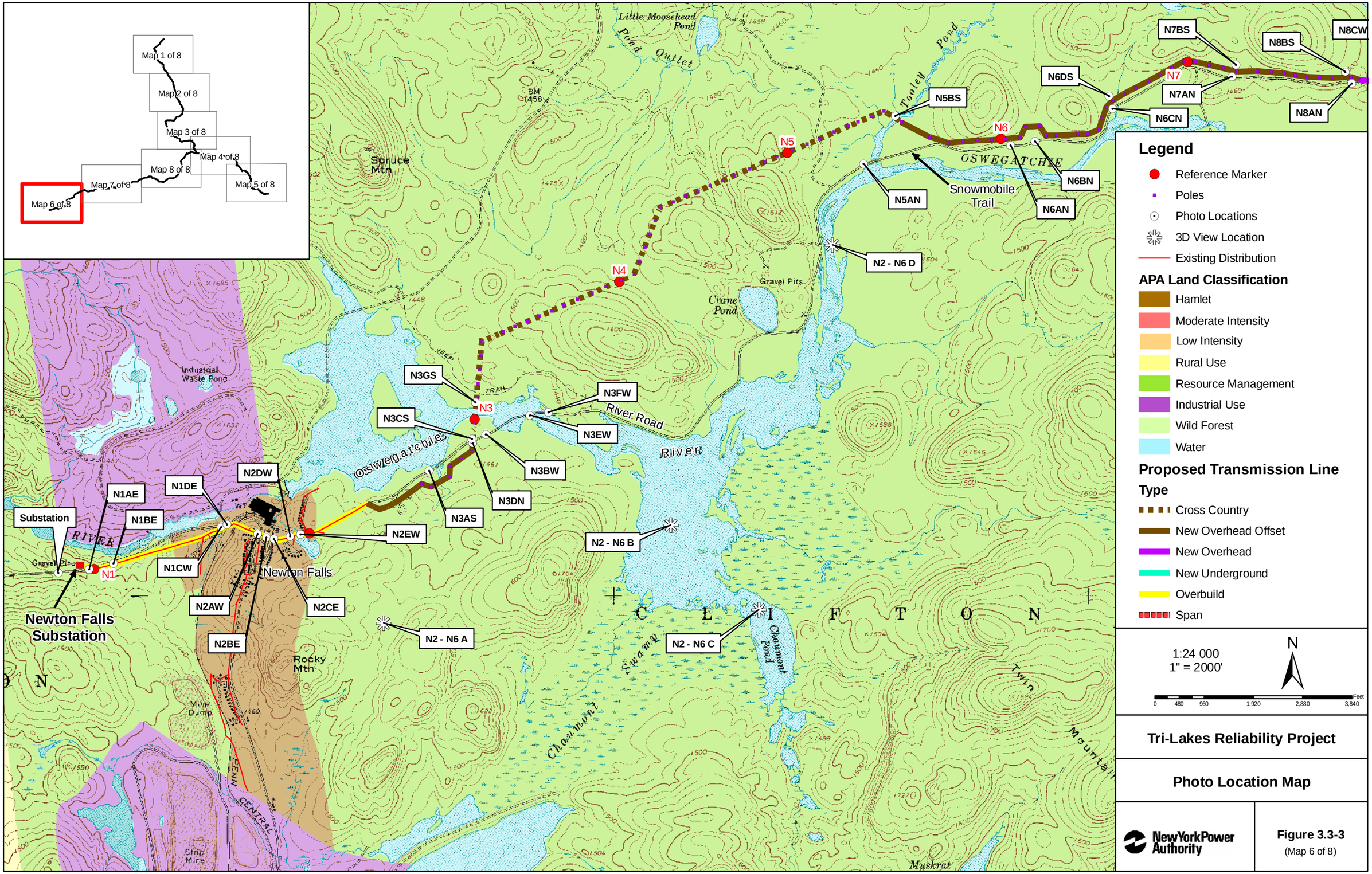


Tri-Lakes Reliability Project

Photo Location Map

NewYorkPower Authority

Figure 3.3-3
(Map 5 of 8)

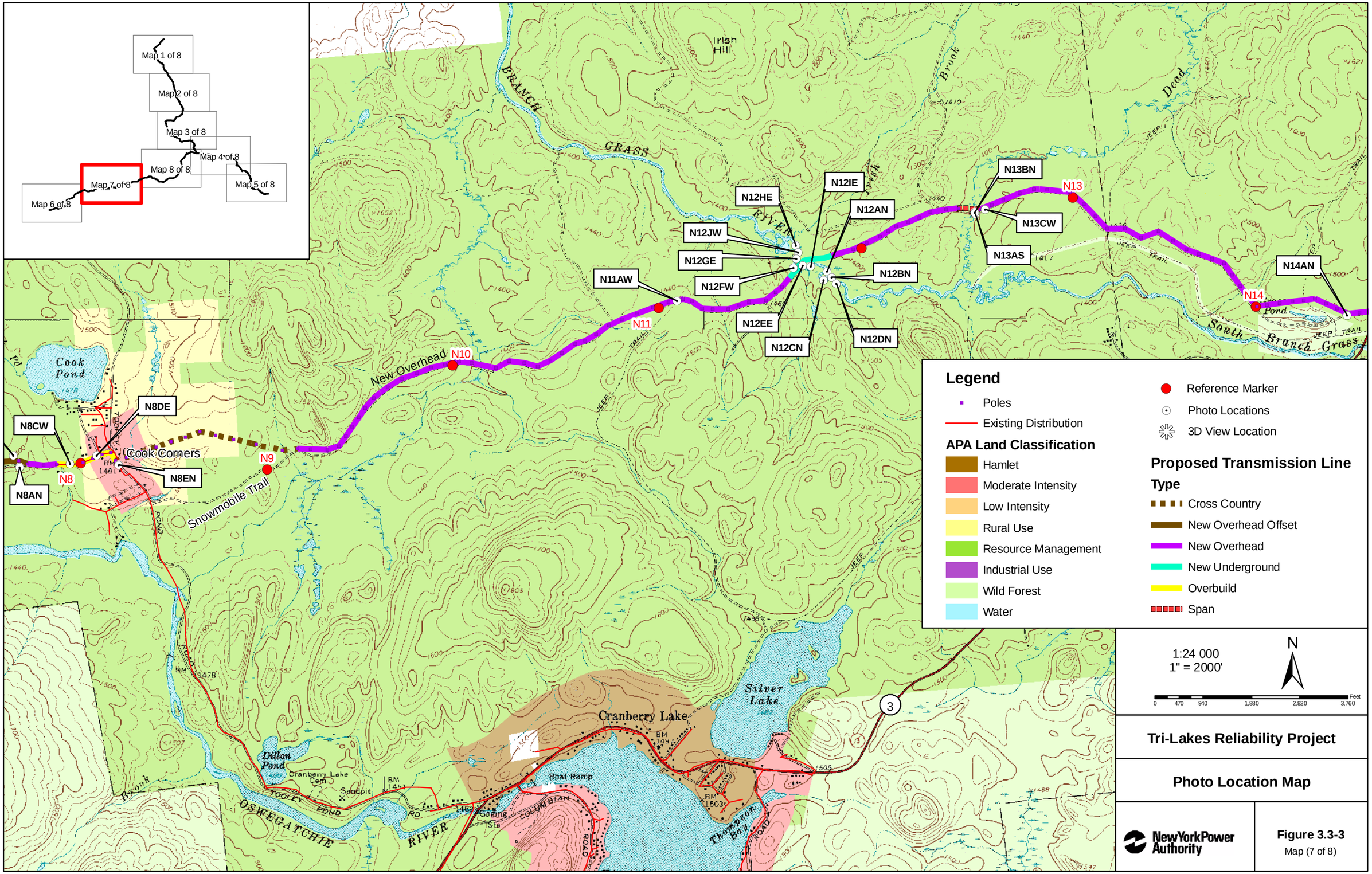


Tri-Lakes Reliability Project

Photo Location Map

New York Power Authority

Figure 3.3-3
(Map 6 of 8)


Map 1 of 8
Map 2 of 8
Map 3 of 8
Map 4 of 8
Map 5 of 8
Map 6 of 8
Map 7 of 8
Map 8 of 8
N8AN
N8CW
N8
N8DE
N8EN
N9
N10
N11
N11AW
N12HE
N12JW
N12GE
N12FW
N12EE
N12CN
N12IE
N12AN
N12BN
N12DN
N13BN
N13CW
N13AS
N13
N14
N14AN
New Overhead
Snowmobile Trail
Cook Pond
Cook Corners
Irish Hill
GRASS RIVER
BRANCH
Dead Brook
South Branch Grass
Cranberry Lake
Silver Lake
Dillon Pond
Cranberry Lake Cem
Sandpit
TOOLEY POND RD
OSWEGATCHIE RIVER
Boat Ramp
COLUMBIAN ROAD
Thompson Bay
JEEP TRAIL
Legend
Poles
Existing Distribution
APA Land Classification
Hamlet
Moderate Intensity
Low Intensity
Rural Use
Resource Management
Industrial Use
Wild Forest
Water
Reference Marker
Photo Locations
3D View Location
Proposed Transmission Line
Type
Cross Country
New Overhead Offset
New Overhead
New Underground
Overbuild
Span
1:24 000
1" = 2000'
N
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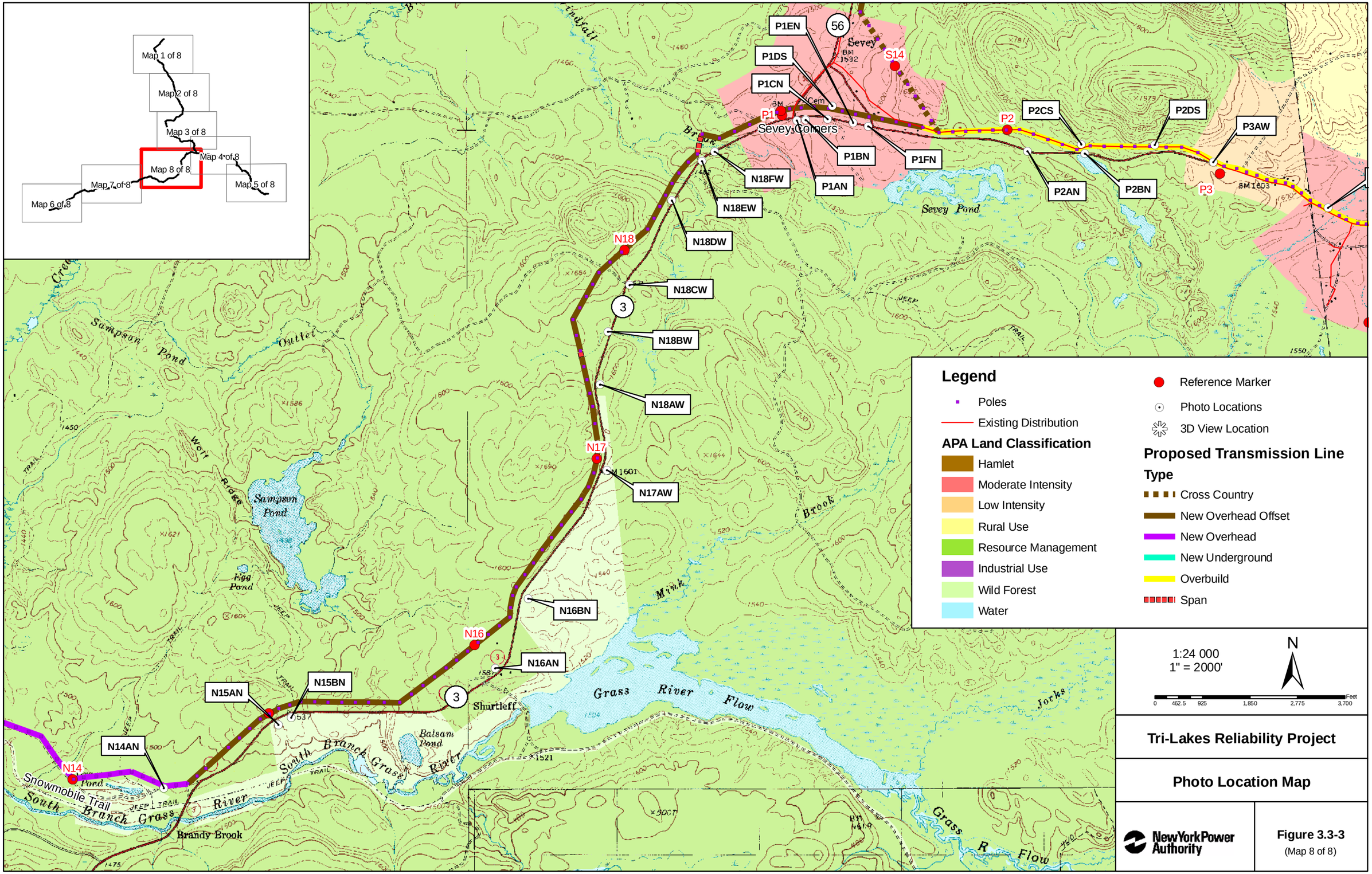
Tri-Lakes Reliability Project
Photo Location Map
NewYorkPower Authority
Figure 3.3-3
Map (7 of 8)


Map 1 of 8
Map 2 of 8
Map 3 of 8
Map 4 of 8
Map 5 of 8
Map 6 of 8
Map 7 of 8
Map 8 of 8
P1EN
P1DS
P1CN
P1
P1BN
P1AN
P1FN
P2
P2CS
P2AN
P2DS
P2BN
P3
P3AW
S14
N18FW
N18EW
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N18CW
N18BW
N18AW
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N17AW
N16BN
N16
N16AN
N15AN
N15BN
N14AN
N14
Sevey
Sevey Corners
Sevey Pond
Shurtleff
Grass River Flow
Sampson Pond
Egg Pond
Balsam Pond
South Branch Grass River
Brandy Brook
Snowmobile Trail
Legend
Poles
Existing Distribution
APA Land Classification
Hamlet
Moderate Intensity
Low Intensity
Rural Use
Resource Management
Industrial Use
Wild Forest
Water
Reference Marker
Photo Locations
3D View Location
Proposed Transmission Line
Type
Cross Country
New Overhead Offset
New Overhead
New Underground
Overbuild
Span
1:24 000
1" = 2000'
N
0 462.5 925 1,850 2,775 3,700 Feet
Tri-Lakes Reliability Project
Photo Location Map
NewYorkPower Authority
Figure 3.3-3
(Map 8 of 8)

Photographs

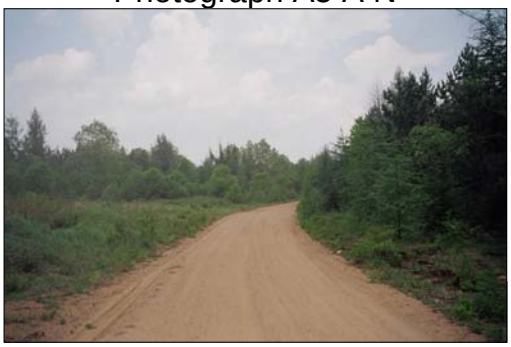
Photograph A1 NE

Photograph A2 NE

Photograph A4 A N

Photograph A4 B S

Photograph A5 A N



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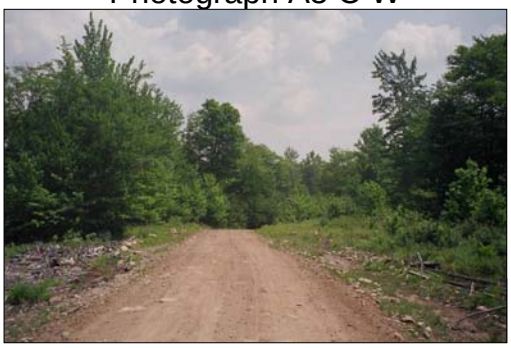
Photograph A5 C W



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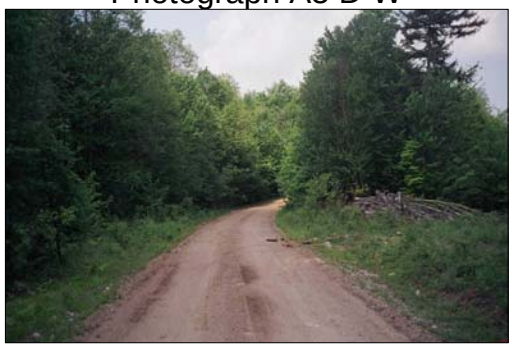

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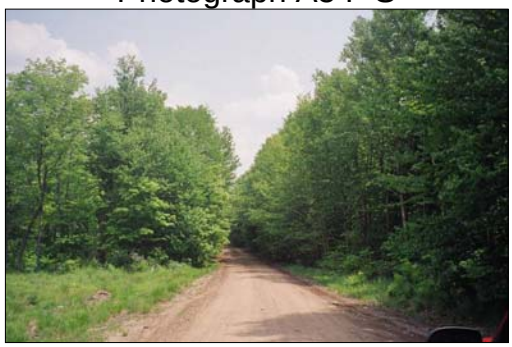
Photograph A5 F S



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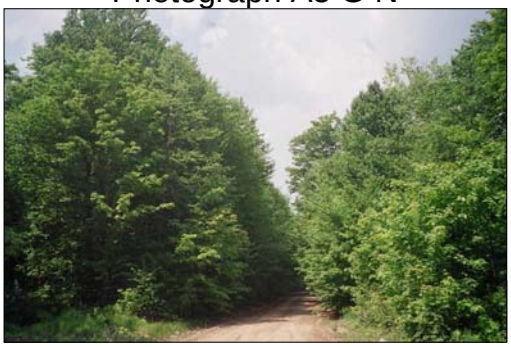

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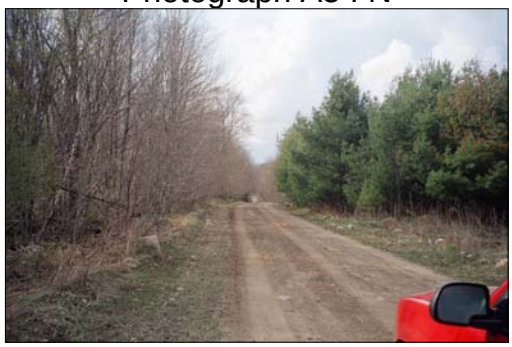

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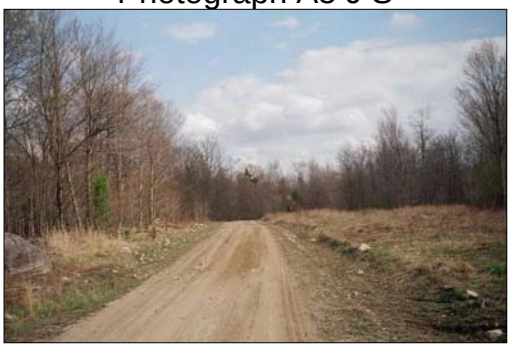

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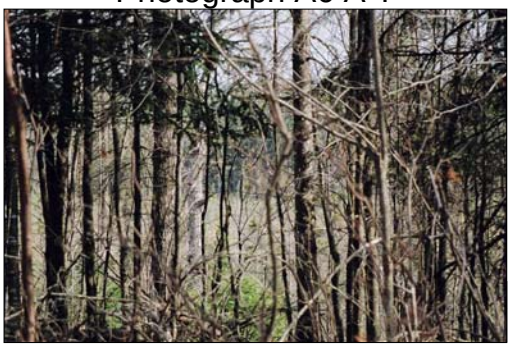
Photograph A6 A T



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Photograph A6 C W

Photograph A6 D E

Photograph B1 N

Photograph B2 N

Photograph C1 NW

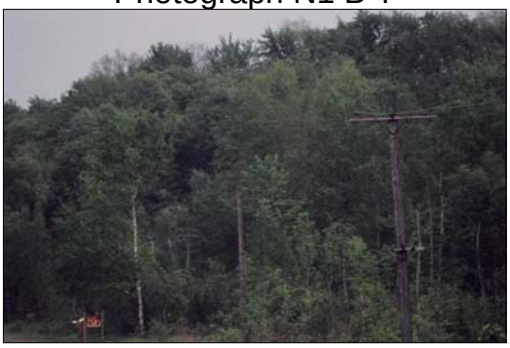
Photograph C2 W T

Photograph C3 W

Photograph N1 A E

Photograph N1 B E

Photograph N1 B T



Photograph N1 C W

Photograph N1 D E

Photograph N11 A W west of grass

Photograph N12 A N

Photograph N12 A T

Photograph N12 B N

Photograph N12 C N

Photograph N12 D N

Photograph N12 D T

Photograph N12 E E

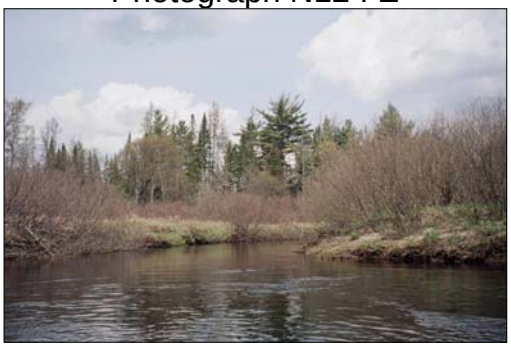
Photograph N12 F W

Photograph N12 G E

Photograph N12 H E

Photograph N12 H T

Photograph N12 I E



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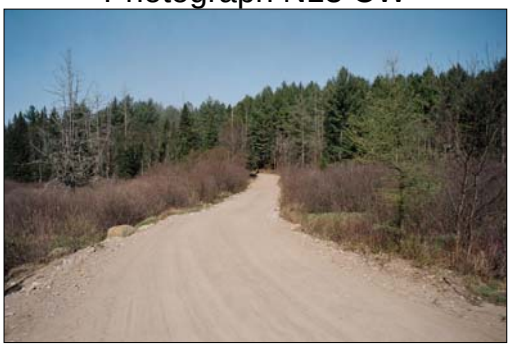
Photograph N13 A S

Photograph N13 B N

Photograph N13 CW



Photograph N14 A N

Photograph N15 A N

Photograph N15 B N

Photograph N16 A N

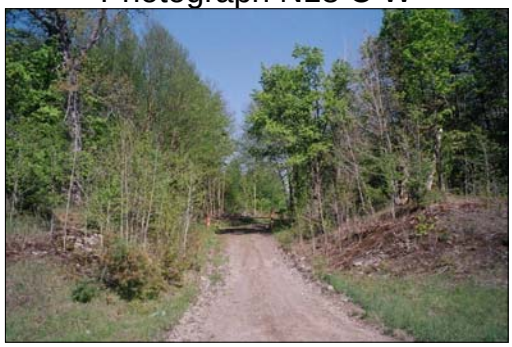
Photograph N16 B N

Photograph N17 A W

Photograph N18 A W

Photograph N18 B W

Photograph N18 C W

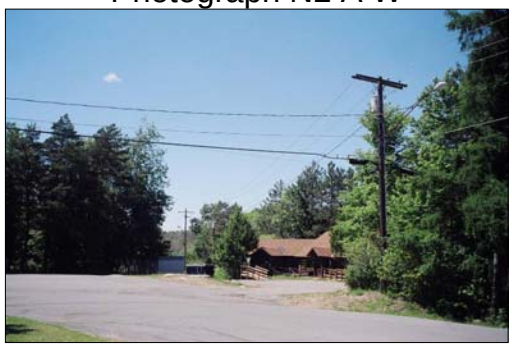


Photograph N18 D W

Photograph N18 E W

Photograph N18 F W

Photograph N2 A W



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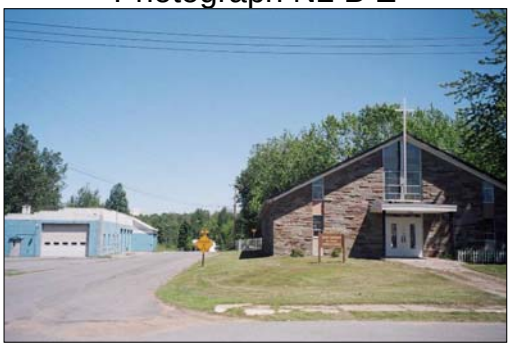

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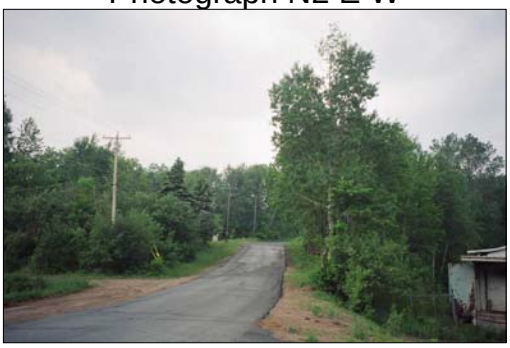
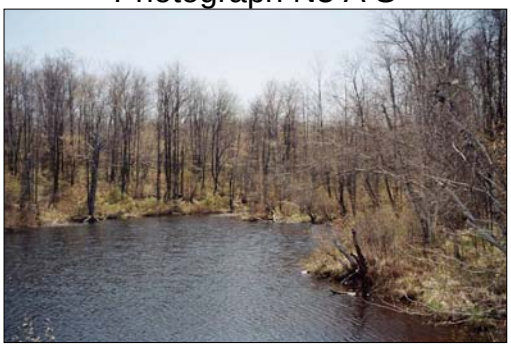
Photograph N2 D W

Photograph N2 E W



Photograph N3 A S



Photograph N3 B W

Photograph N3 C S

Photograph N3 D N

Photograph N3 E W

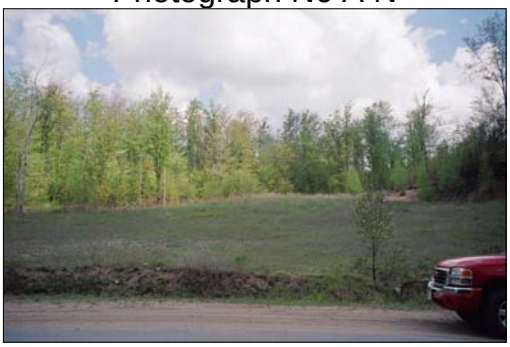
Photograph N3 F W road view

Photograph N3 G S

Photograph N5 A N

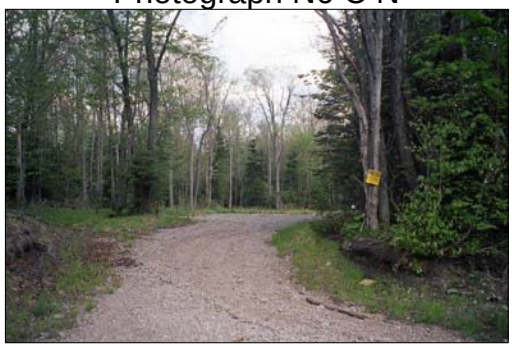
Photograph N5 B S

Photograph N6 A N



Photograph N6 B N

Photograph N6 C N

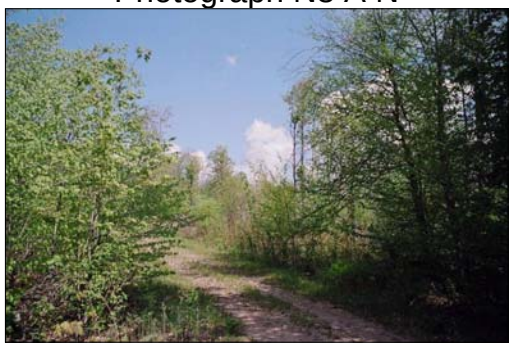


Photograph N6 D S

Photograph N7 A N

Photograph N7 B S

Photograph N8 A N



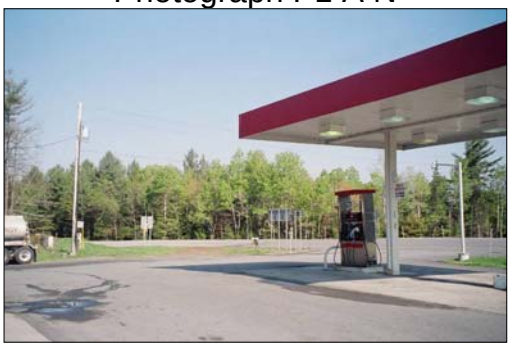
Photograph N8 B S

Photograph N8 CW last pole

Photograph N8 D E

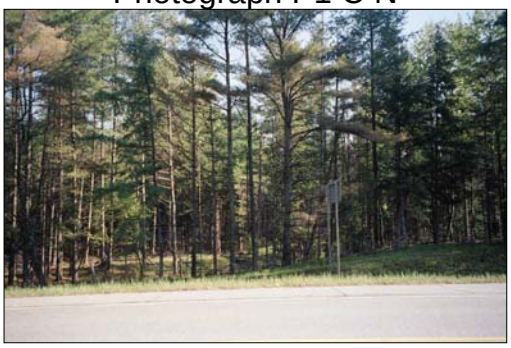
Photograph N8 E N

Photograph P1 A N

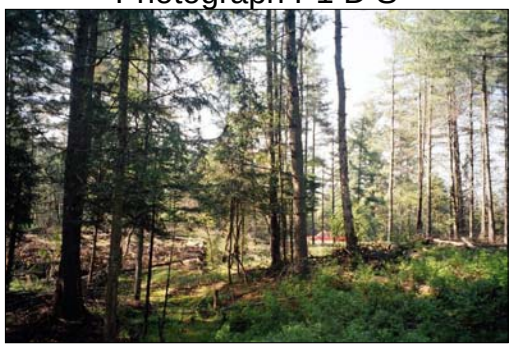


Photograph P1 B N

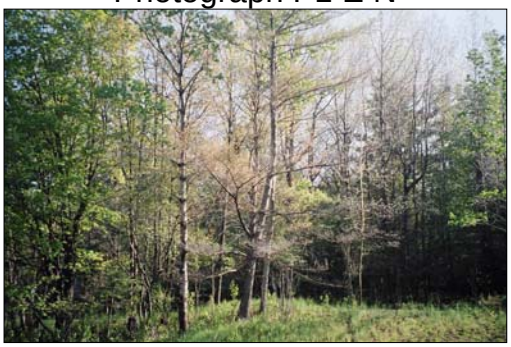
Photograph P1 C N



Photograph P1 D S

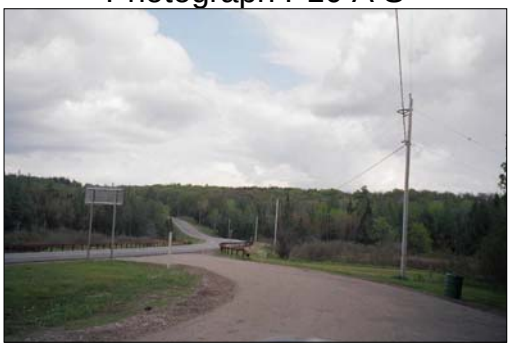


Photograph P1 E N



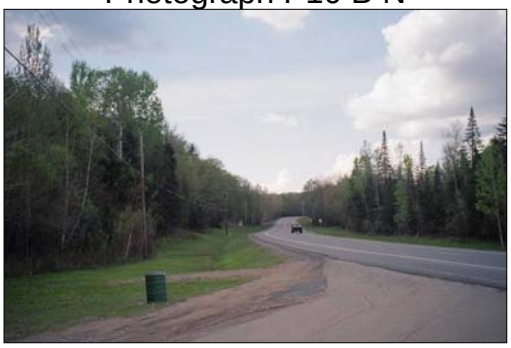
Photograph P1 F N

Photograph P10 A S



Photograph P10 A T

Photograph P10 B N



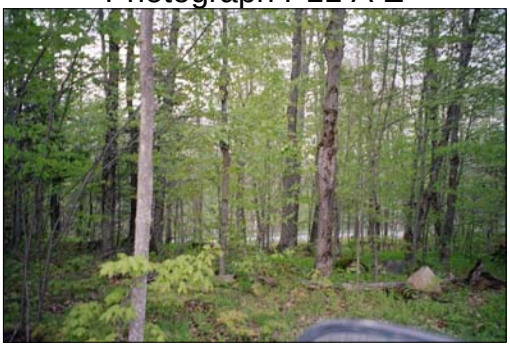
Photograph P10 B T

Photograph P10 C N

Photograph P10 D E

Photograph P10 D T

Photograph P11 A E



Photograph P11 B W

Photograph P11 C W

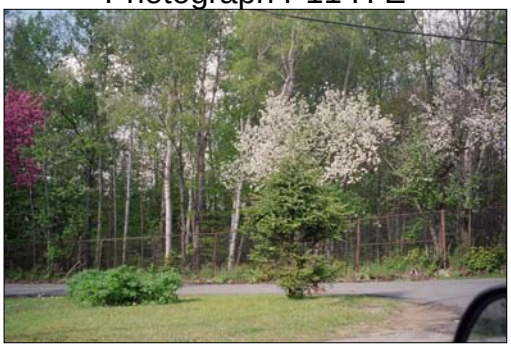
Photograph P11 D E

Photograph P11 E W

Photograph P11 F E

Photograph P11 G E

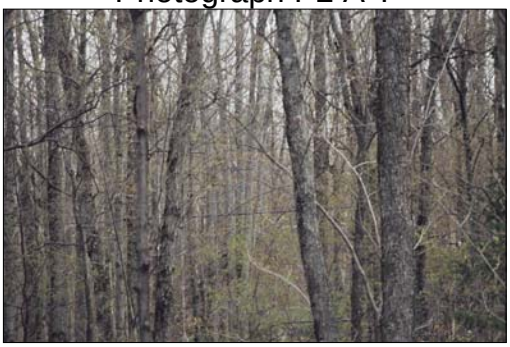
Photograph P11 H E



Photograph P11 I E

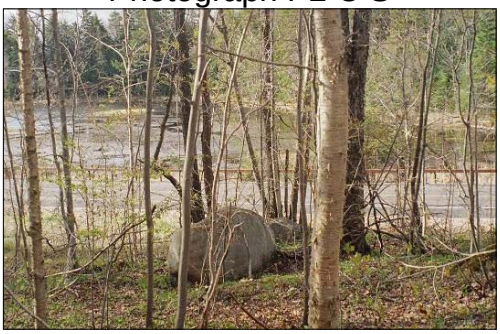
Photograph P2 A N

Photograph P2 A T



Photograph B N

Photograph P2 C S



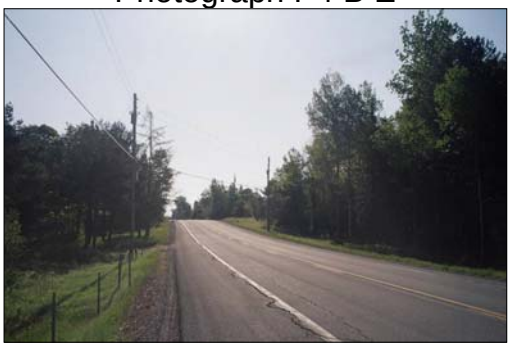
Photograph P2 D S

Photograph P3 A W

Photograph P3 D E

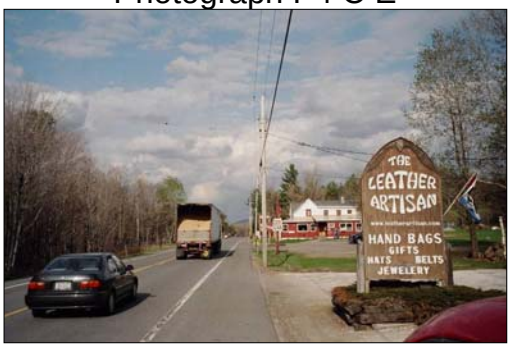
Photograph P4 A E

Photograph P4 B E

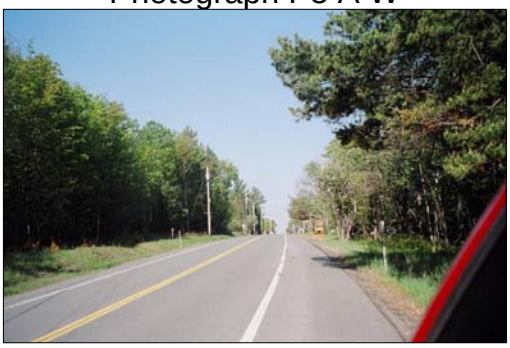


Photograph P4 B T

Photograph P4 C E

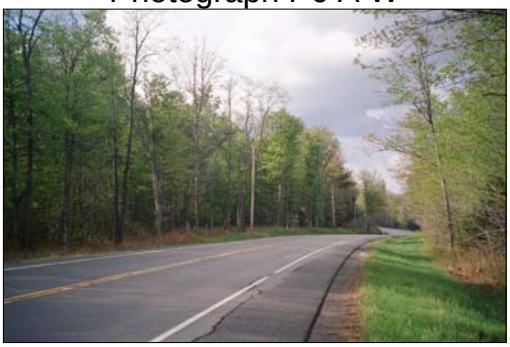


Photograph P5 A W



Photograph P6 A T

Photograph P6 A W



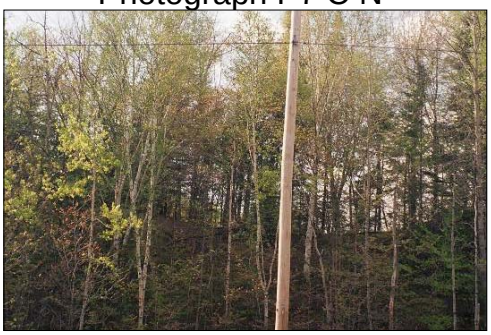
Photograph P7 A S

Photograph P7 A T

Photograph P7 B N

Photograph B W

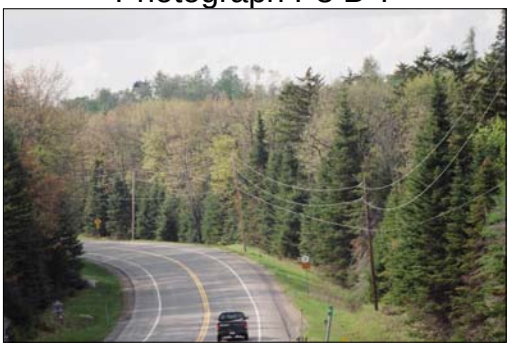
Photograph P7 C N



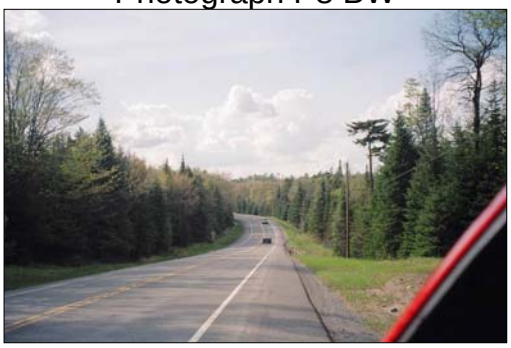
Photograph P8 A T

Photograph P8 A W

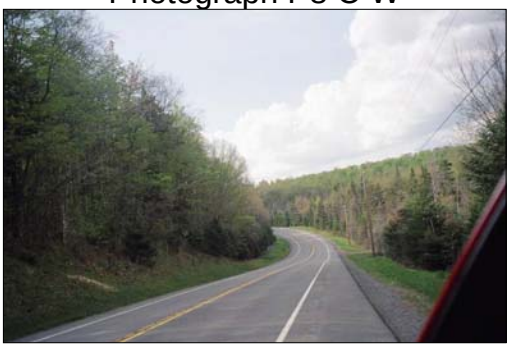
Photograph P8 B T



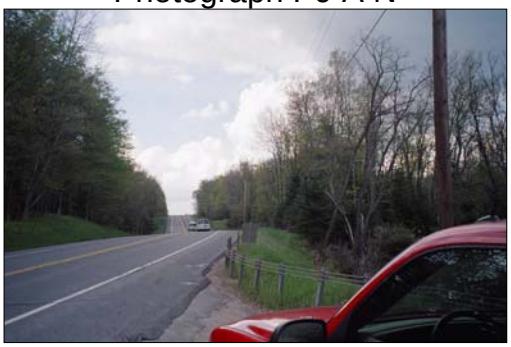
Photograph P8 BW



Photograph P8 C W



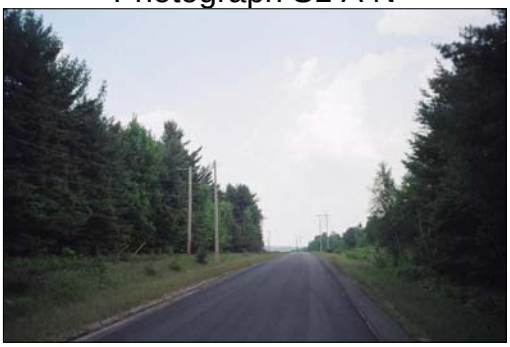
Photograph P9 A N



Photograph P9 A T

Photograph R1

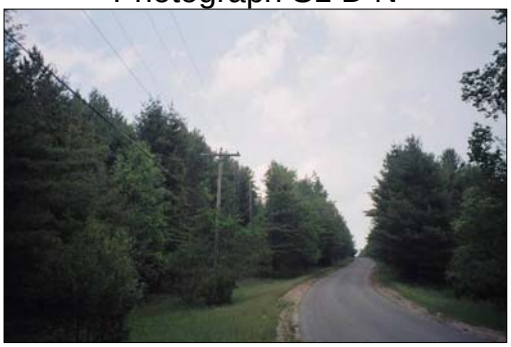
Photograph S1 A N



Photograph S1 B N

Photograph S1 C S

Photograph S1 D N

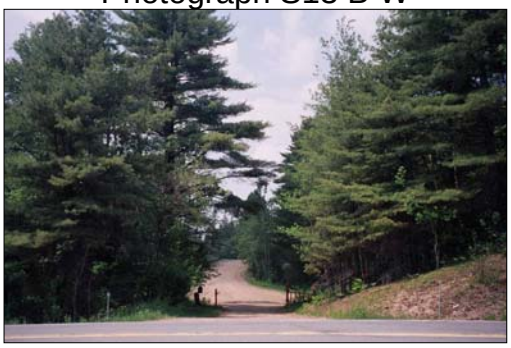


Photograph S1 E N

Photograph S1 F S

Photograph S13 A E

Photograph S13 B W



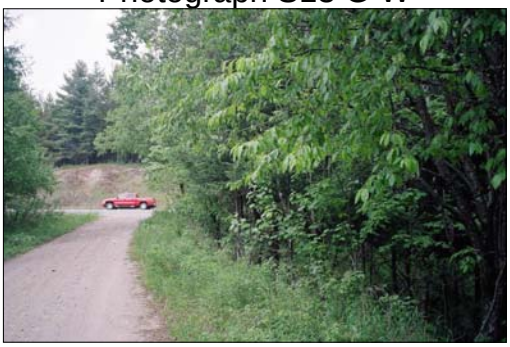
Photograph S13 C E

Photograph S13 D W

Photograph S13 E E

Photograph S13 F E

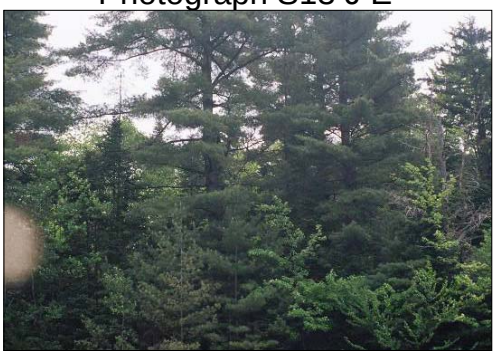
Photograph S13 G W



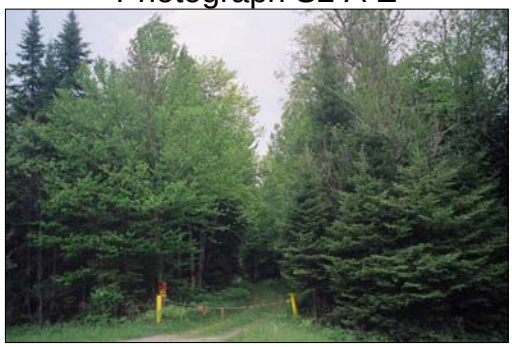
Photograph S13 H E

Photograph S13 I W

Photograph S13 J E



Photograph S2 A E

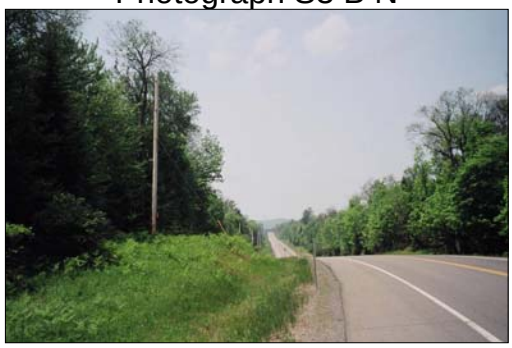


Photograph S2 B S

Photograph S2 B T

Photograph S3 A S

Photograph S3 B N

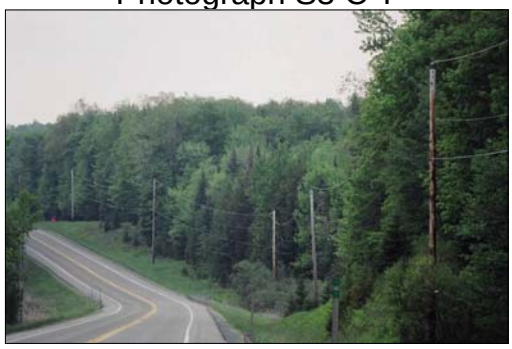


Photograph S3 B T

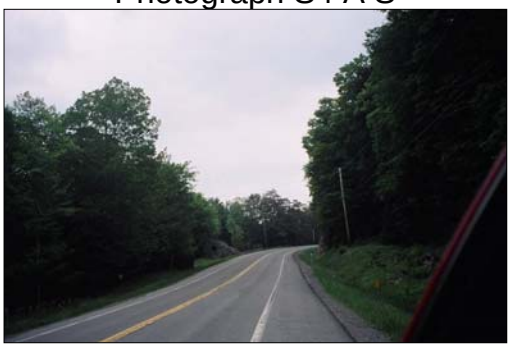
Photograph S3 C S

Photograph S3 D S

Photograph S3 C T



Photograph S4 A S



Photograph S4 A T

Photograph S4 B N

Photograph S4 C E

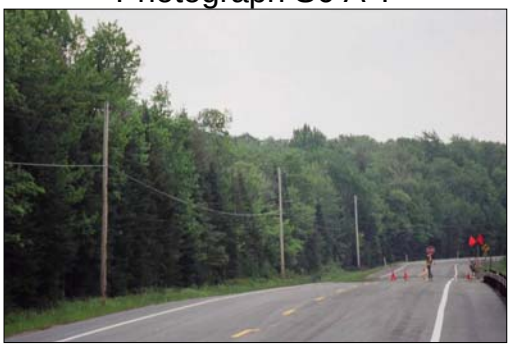
Photograph S4 D S

Photograph S5 A N

Photograph S5 B S

Photograph S6 A S

Photograph S6 A T



Photograph S7 A S

Photograph S7 A T

Photograph S7 B N

Photograph S7 B S

Photograph S7 C N

Photograph S7 C S

Photograph S8 A N

Photograph S8 A T

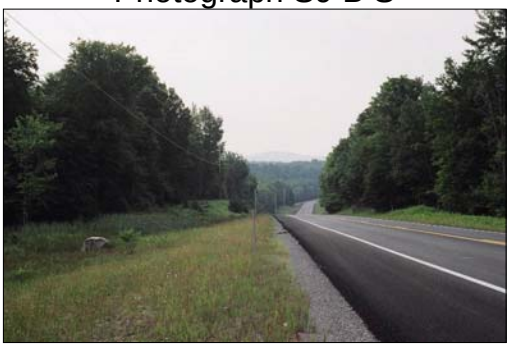
Photograph S8 B S

Photograph S8 C N

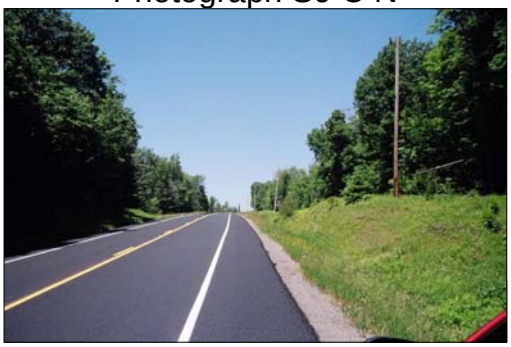
Photograph S8 D N

Photograph S9 A N

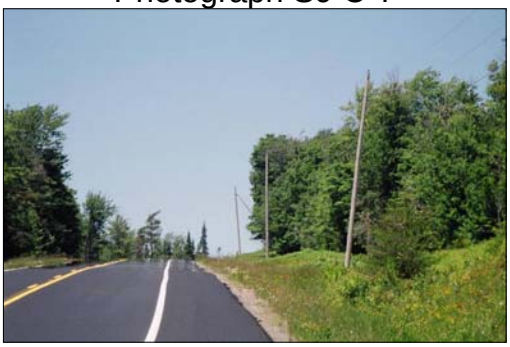
Photograph S9 B S



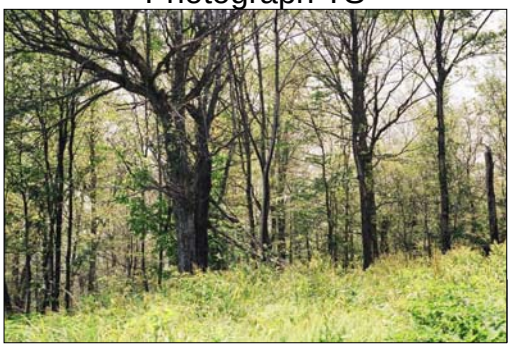
Photograph S9 C N



Photograph S9 C T



Photograph TS



Visual Impact Assessment
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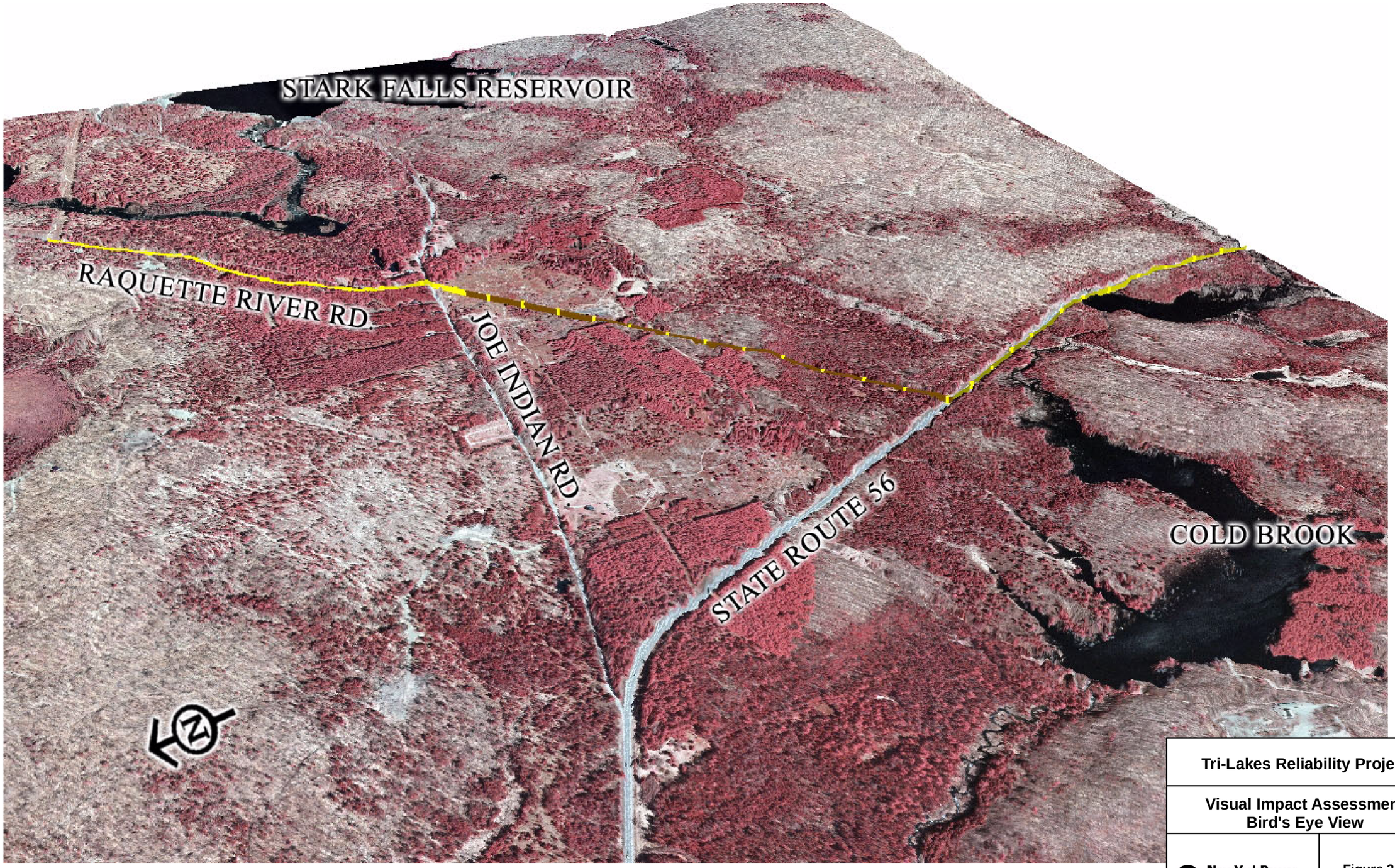

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Figure 3.4-1

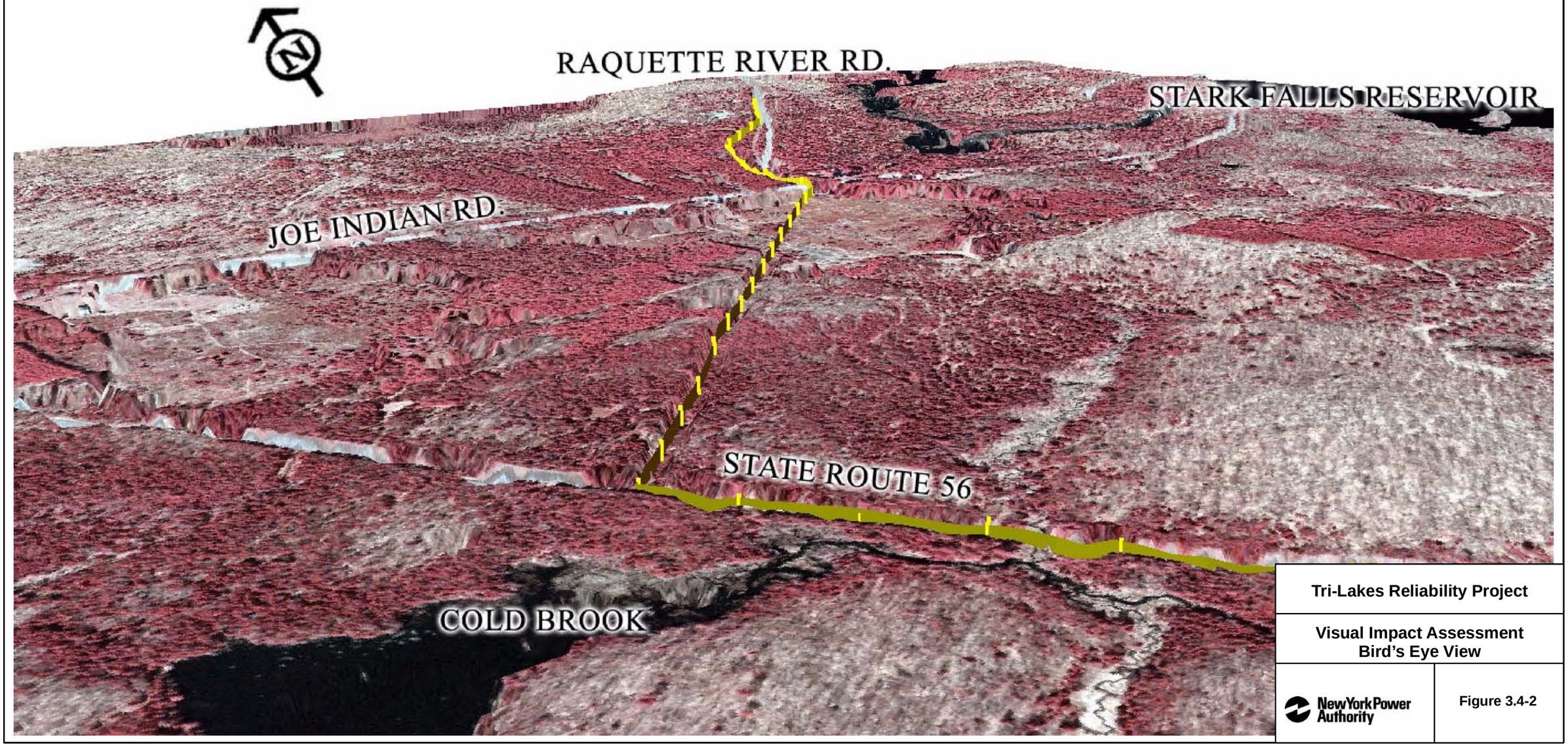

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Figure 3.4-2

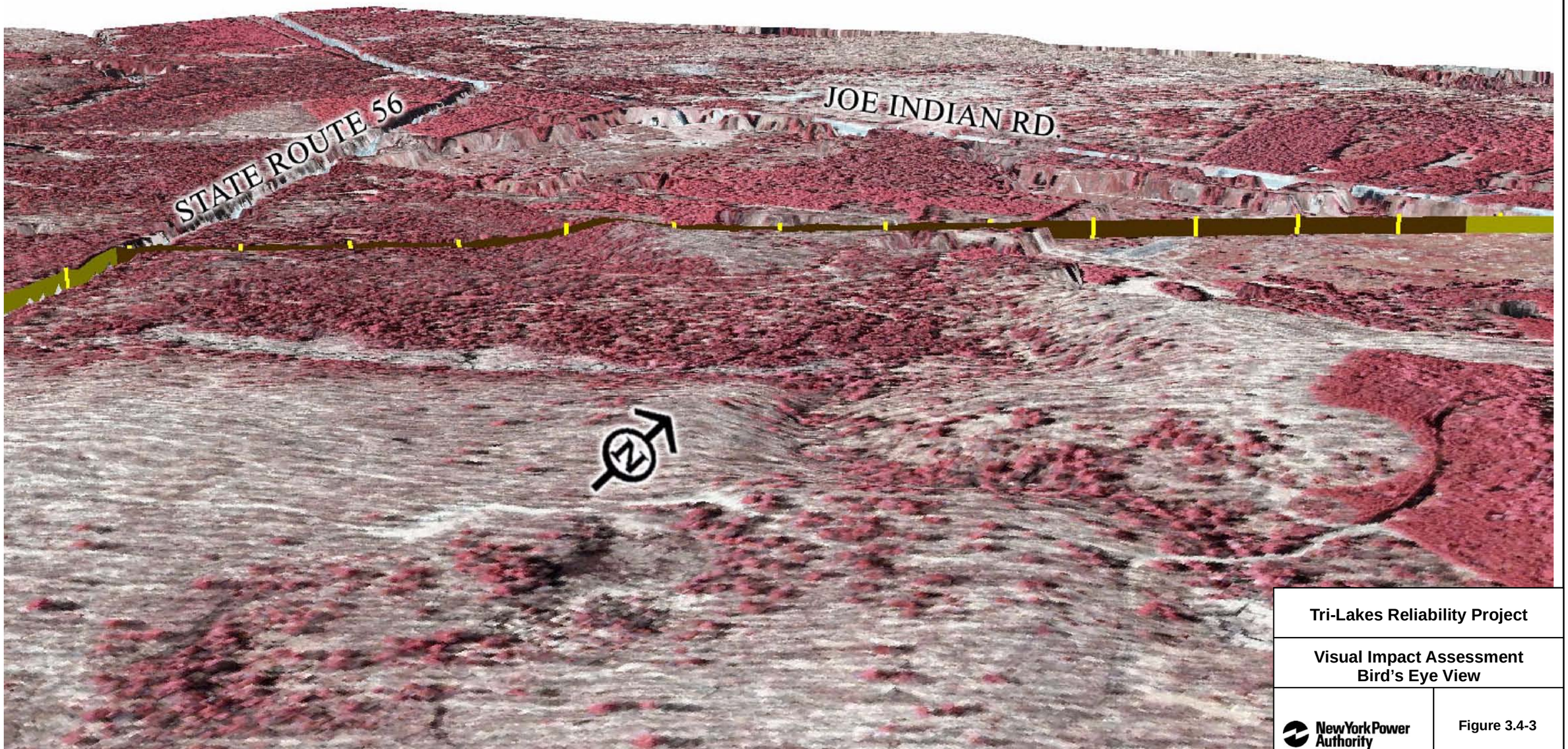

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Figure 3.4-3

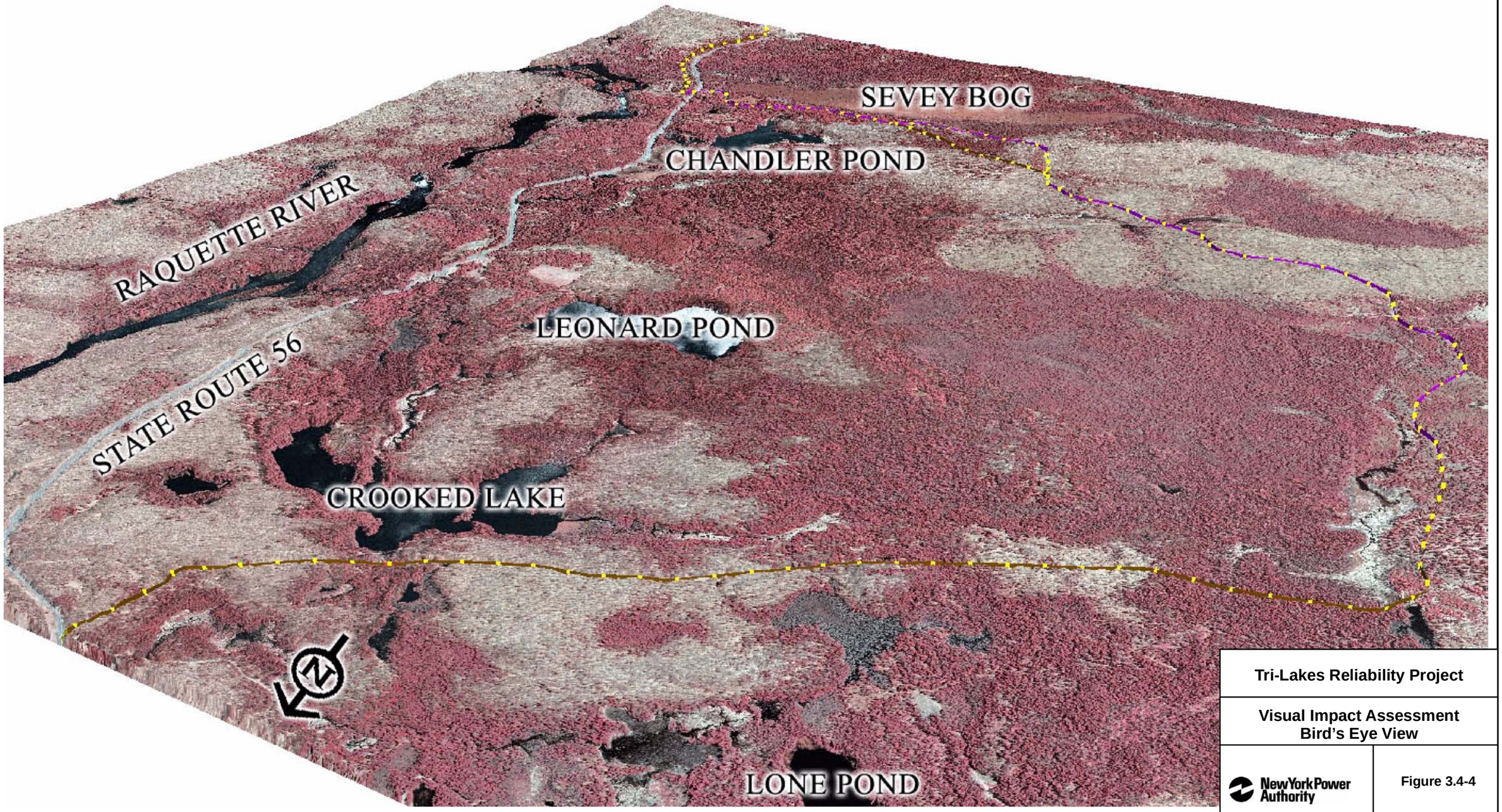

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Figure 3.4-4

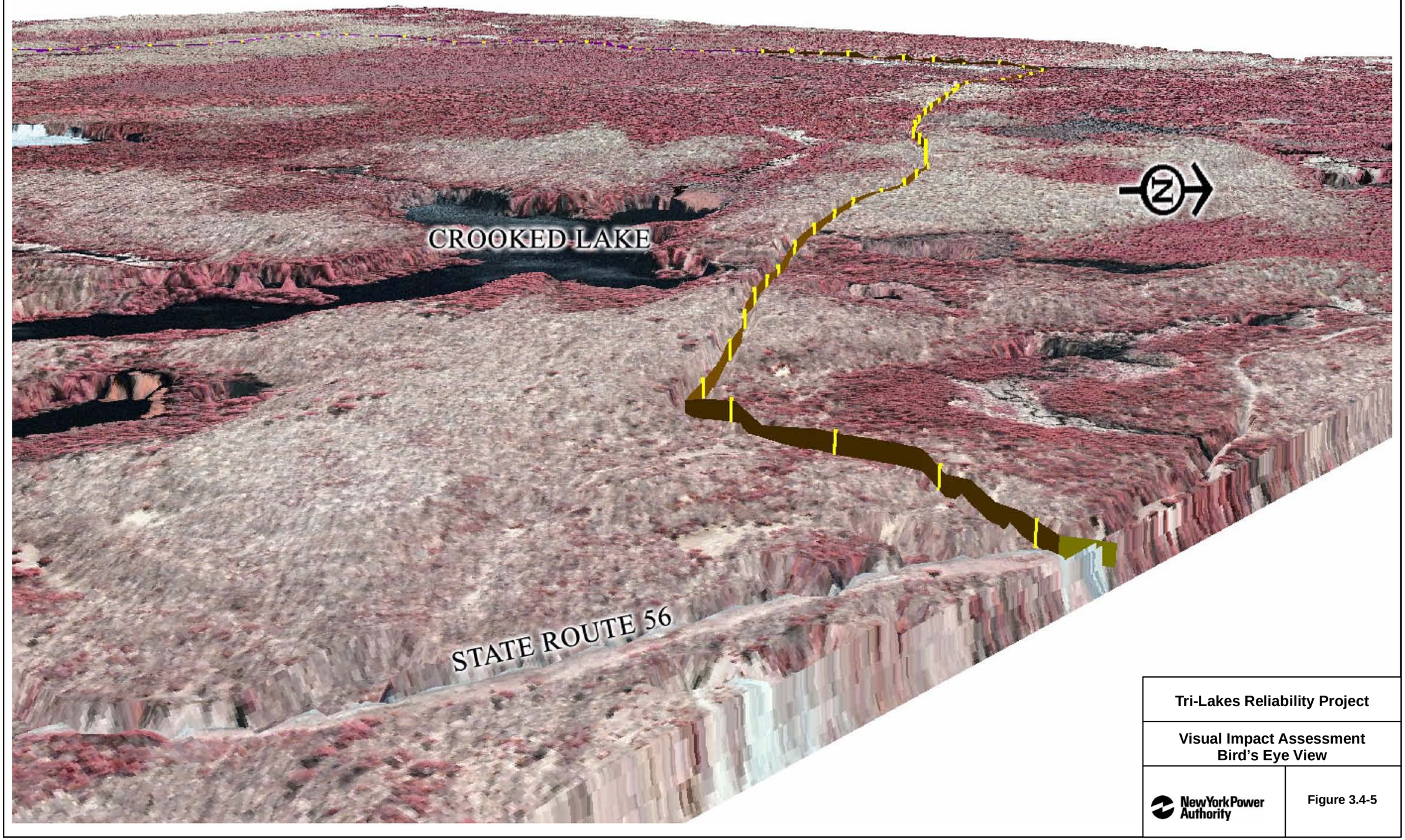

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Figure 3.4-5

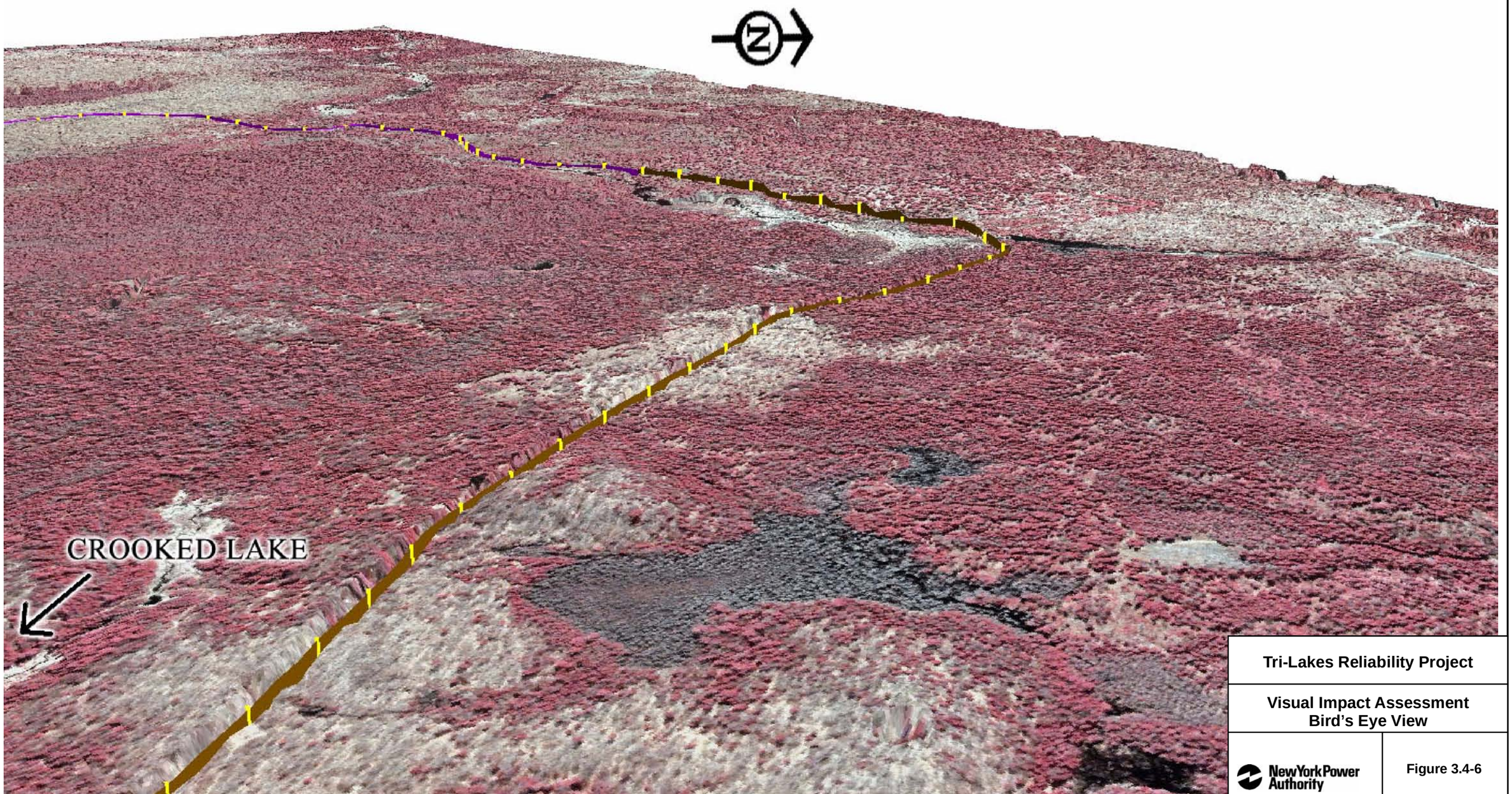

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Figure 3.4-6

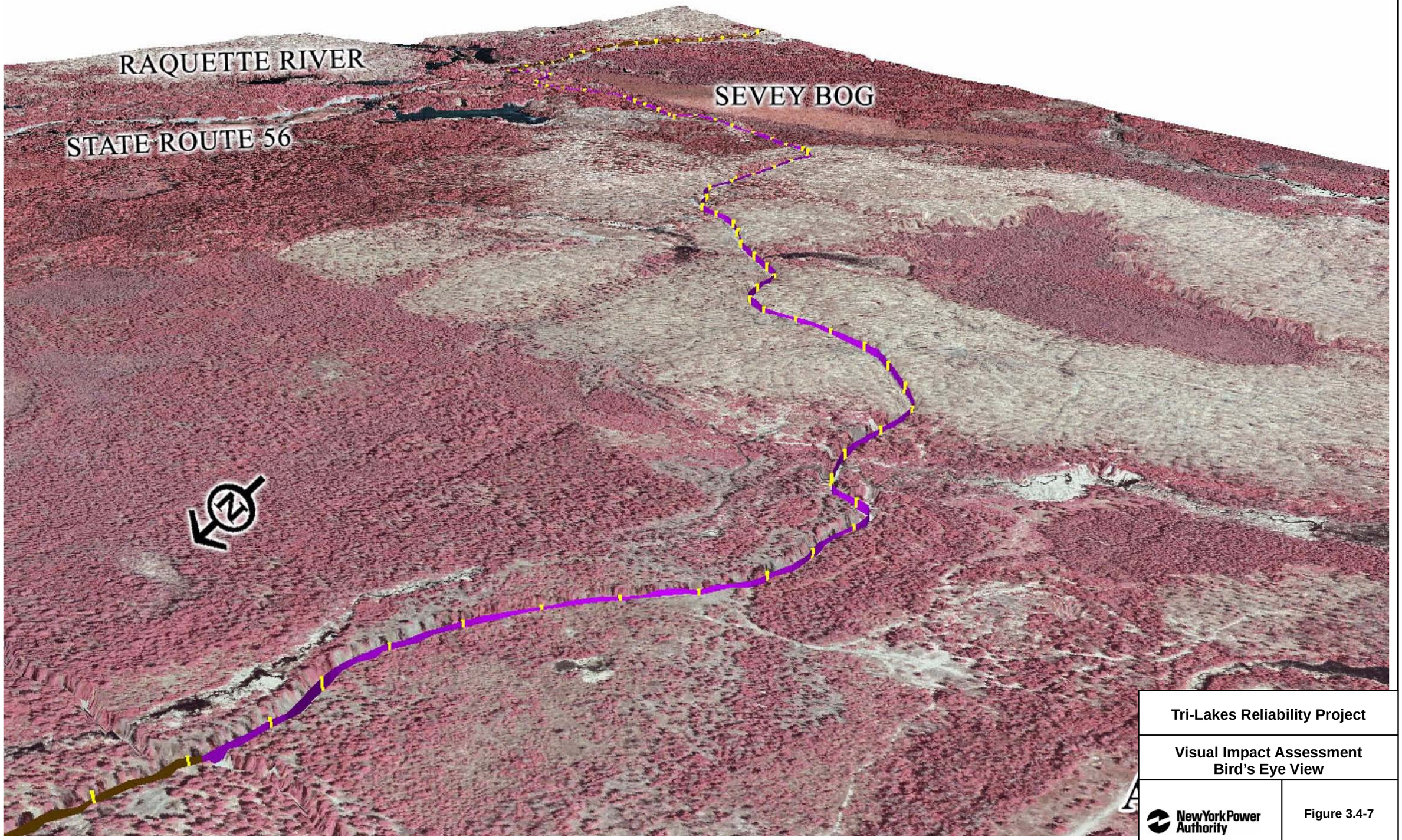

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Figure 3.4-7

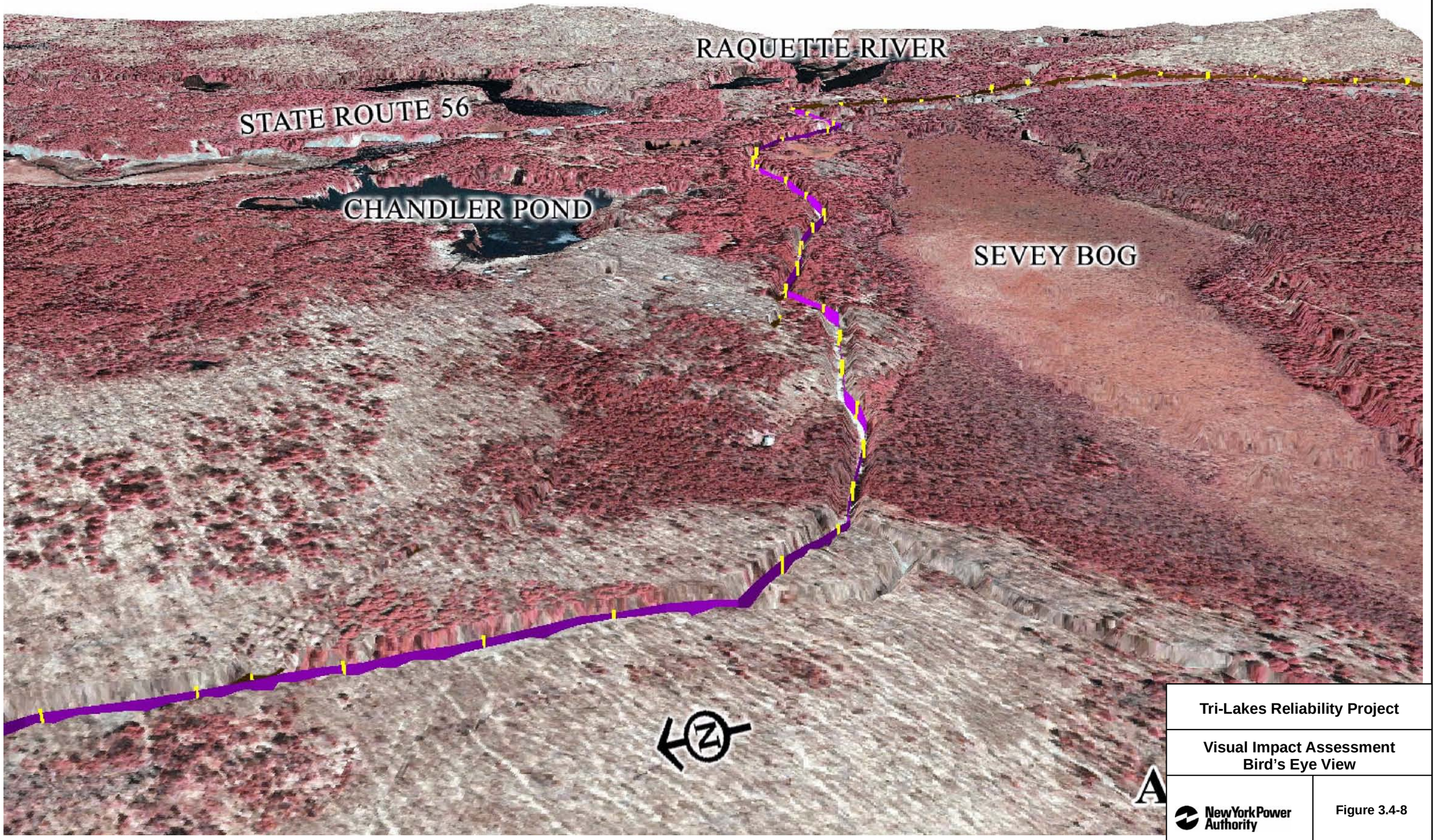

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Figure 3.4-8

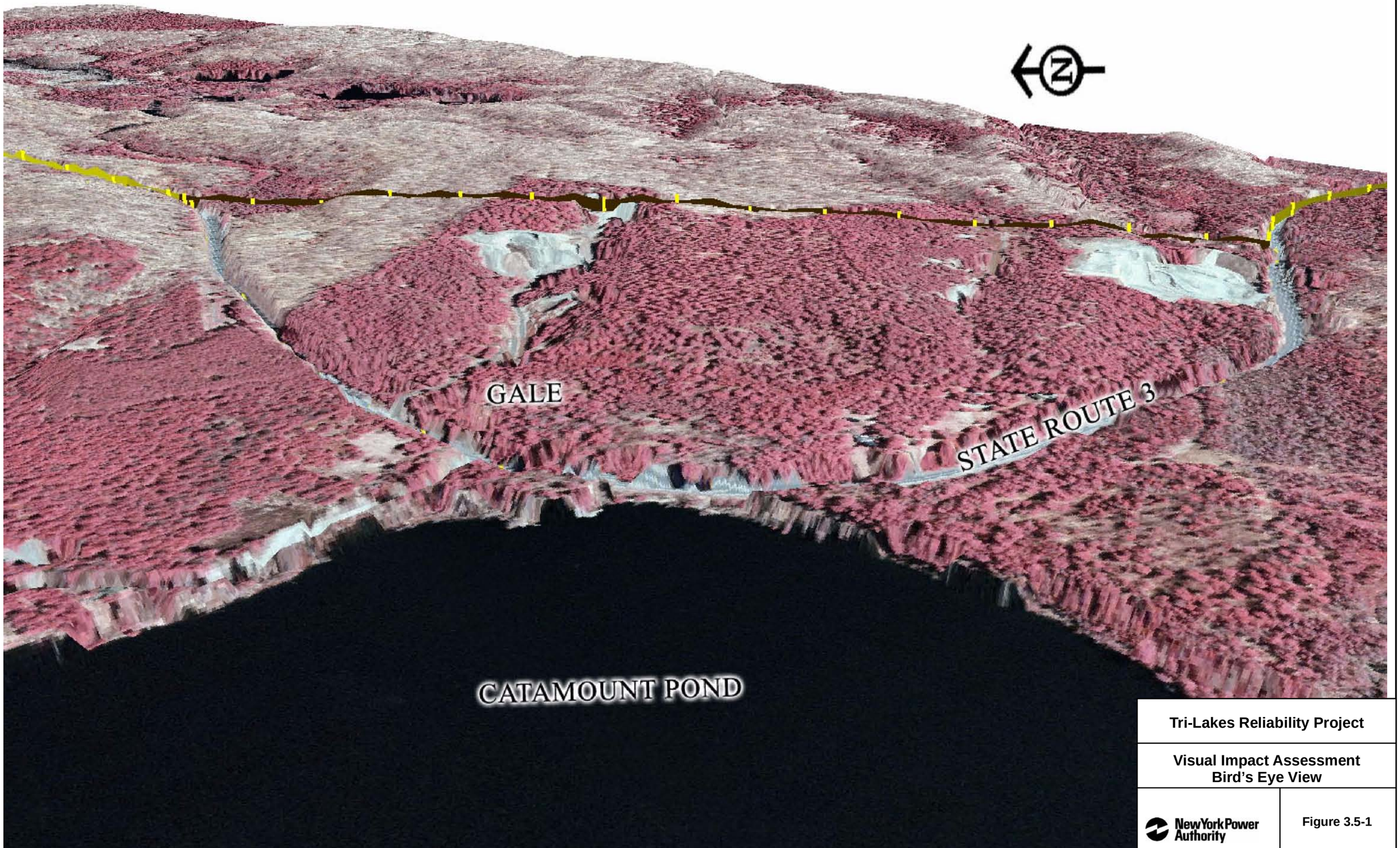

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Figure 3.5-1

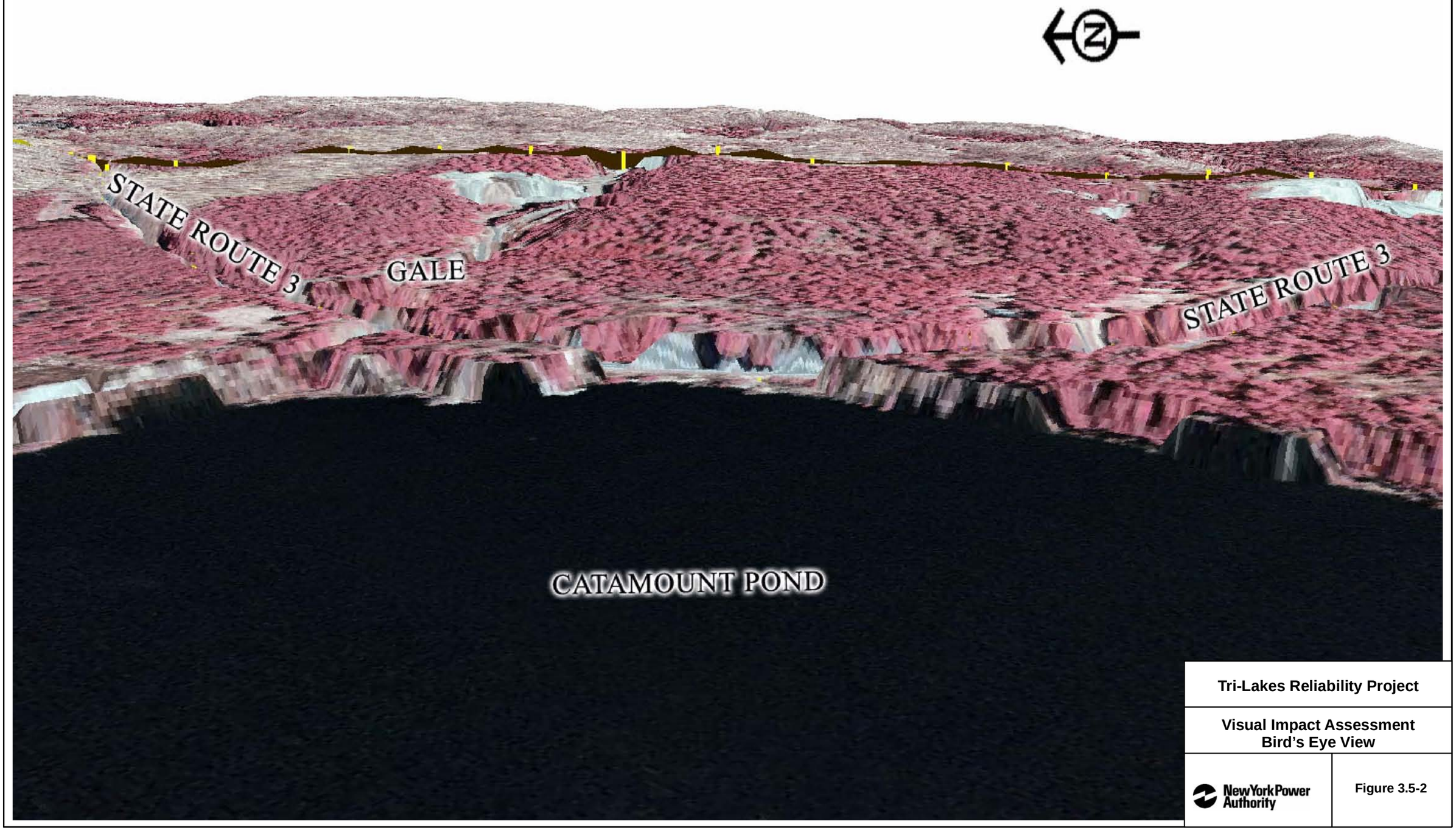

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Figure 3.5-2

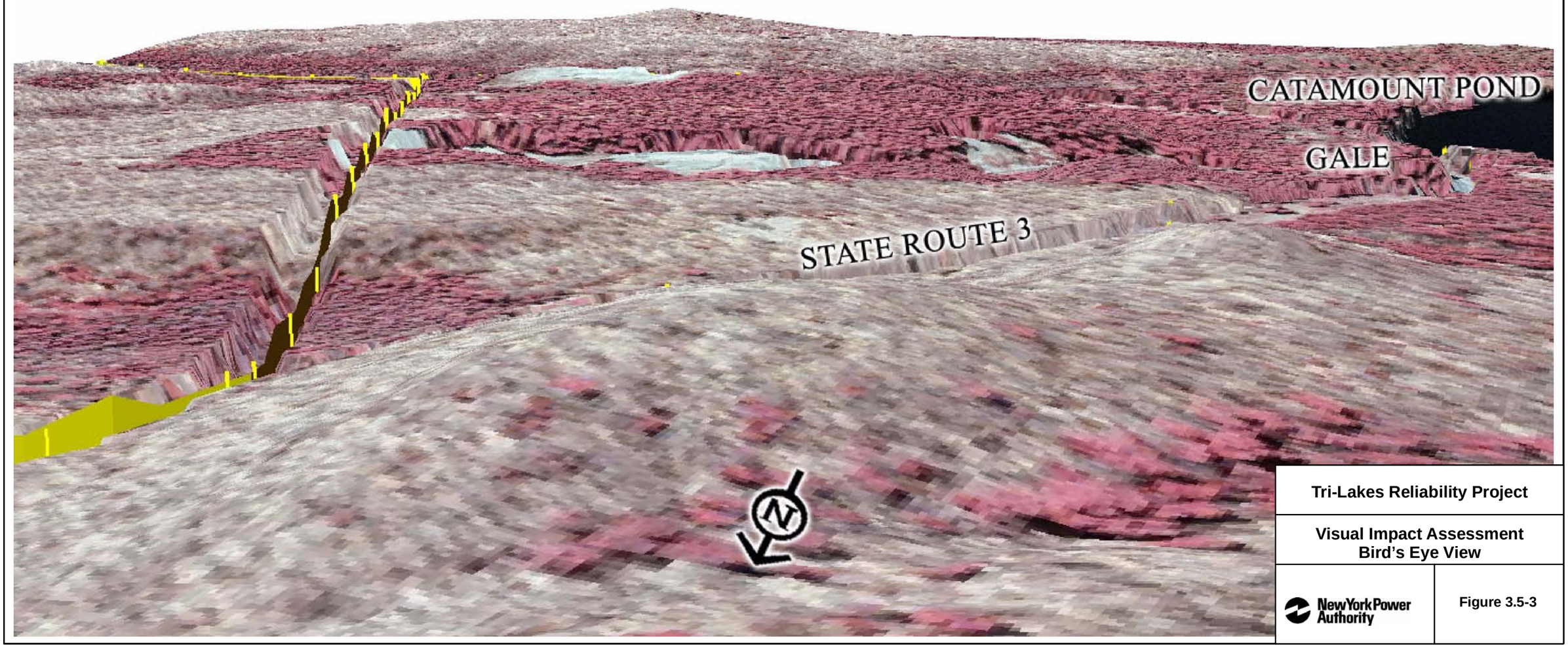

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Figure 3.5-3

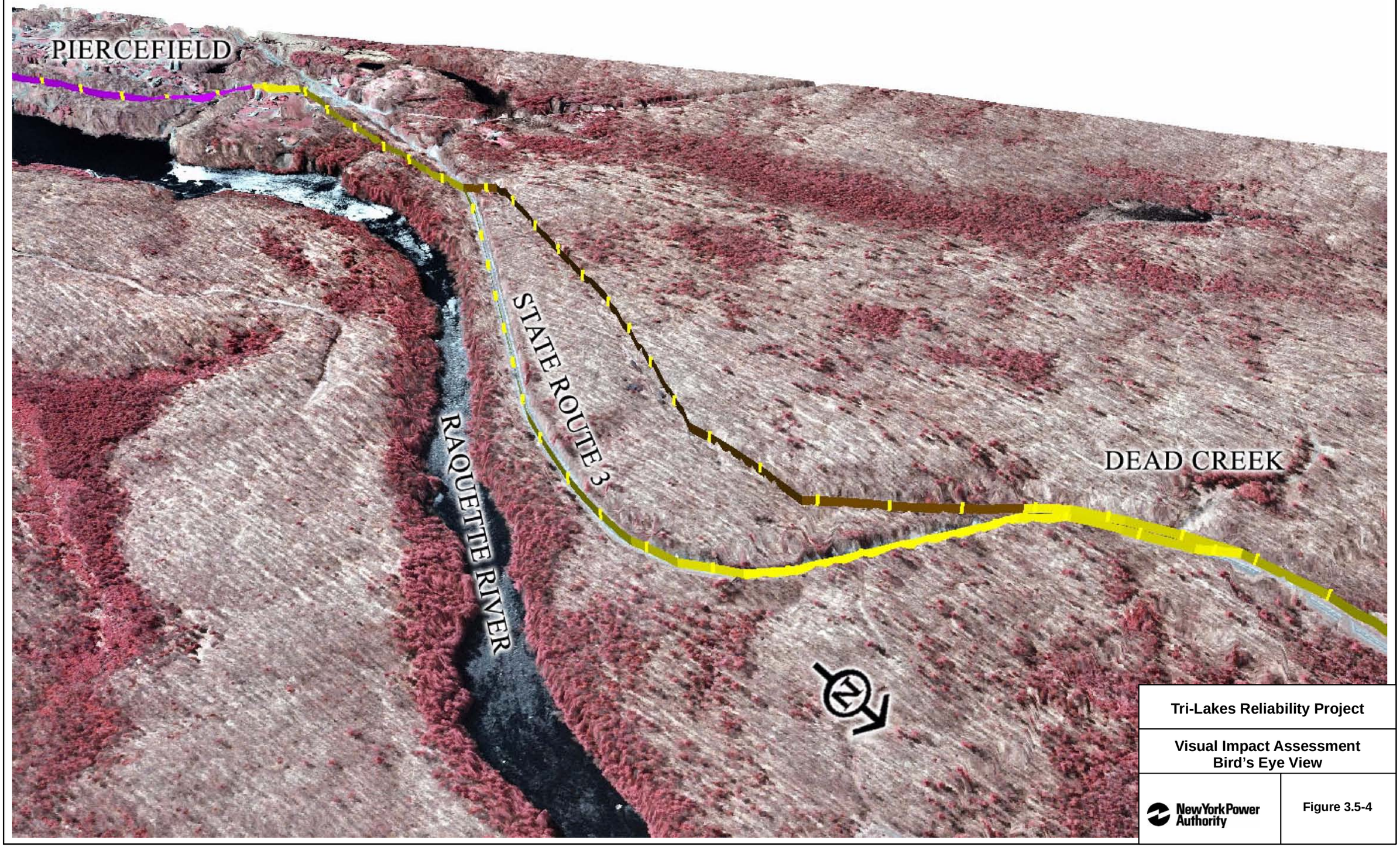

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Figure 3.5-4

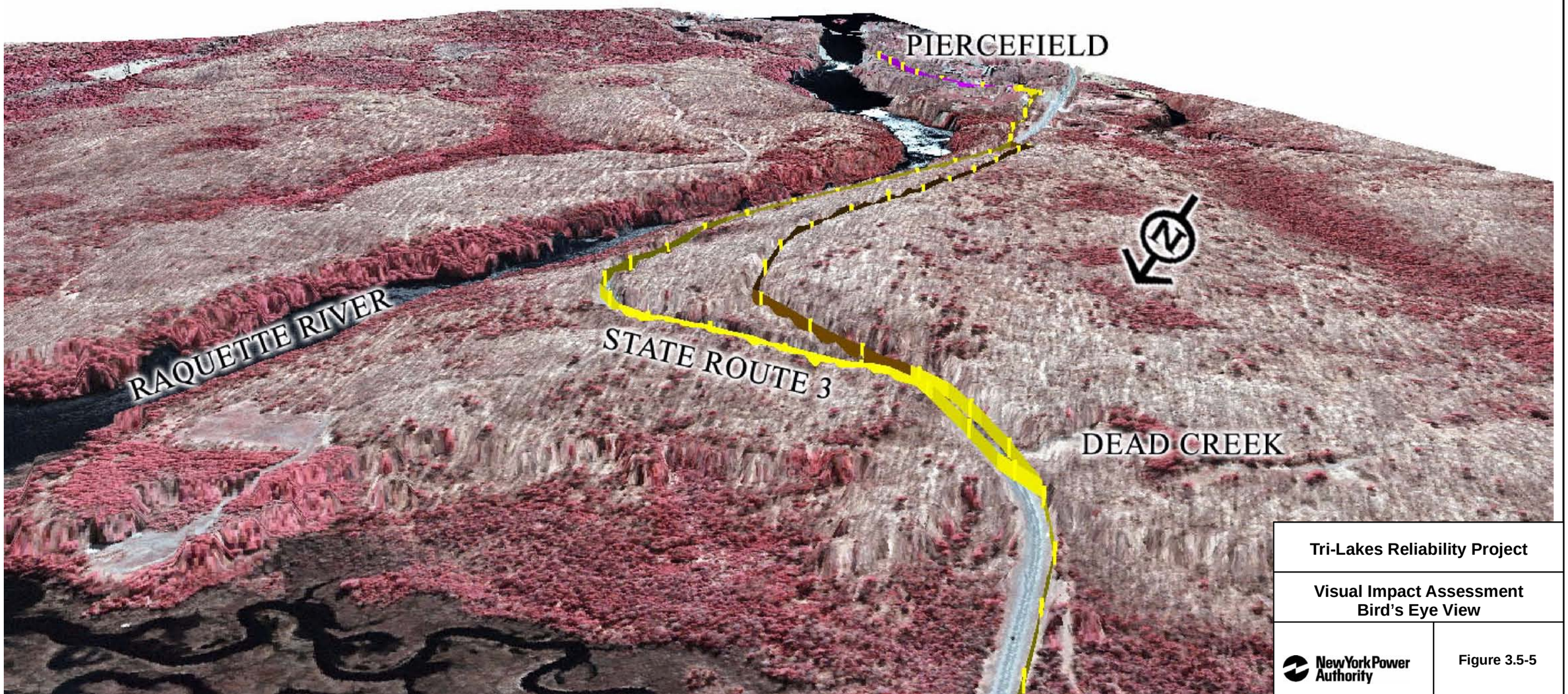

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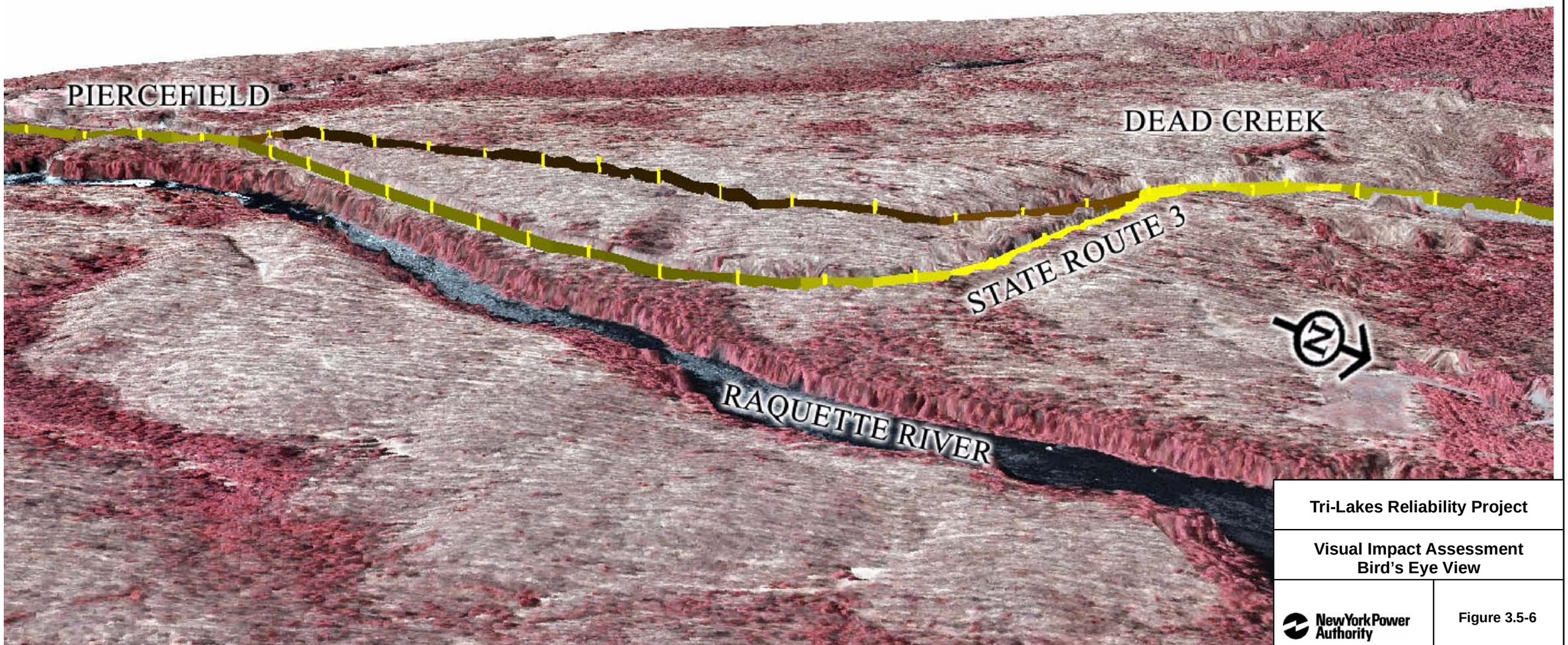
Figure 3.5-5



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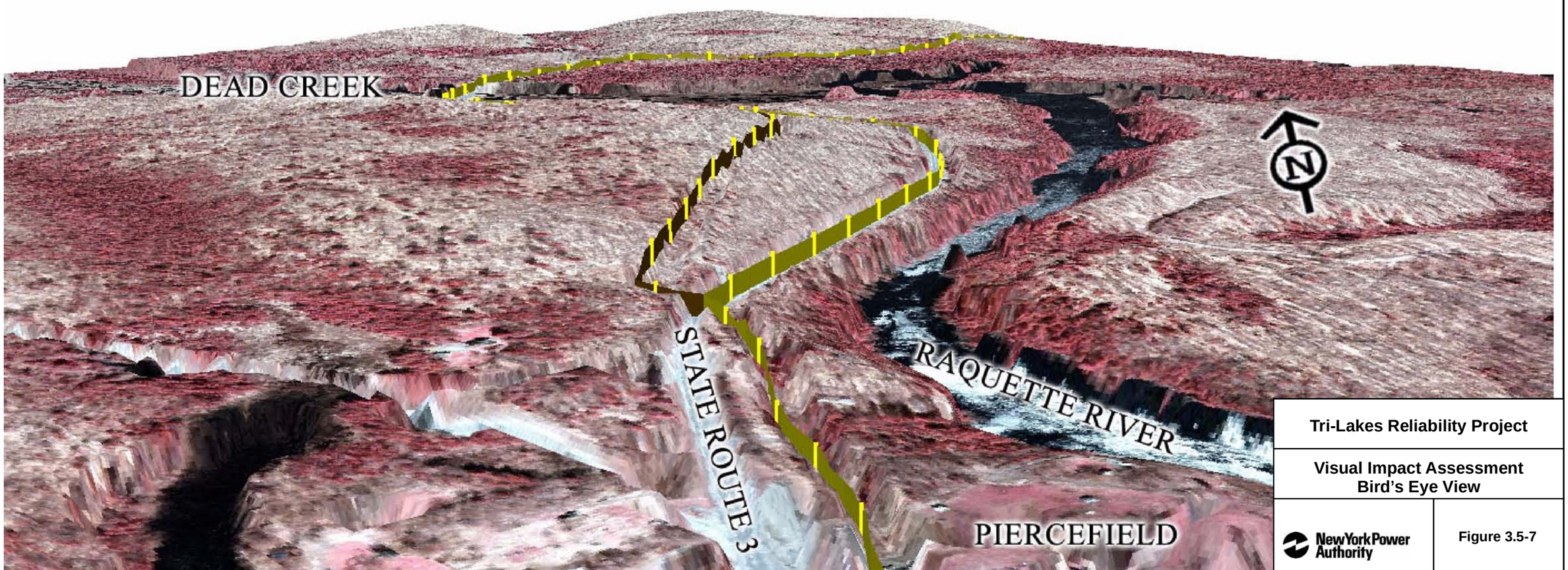
New York Power Authority

Figure 3.5-6

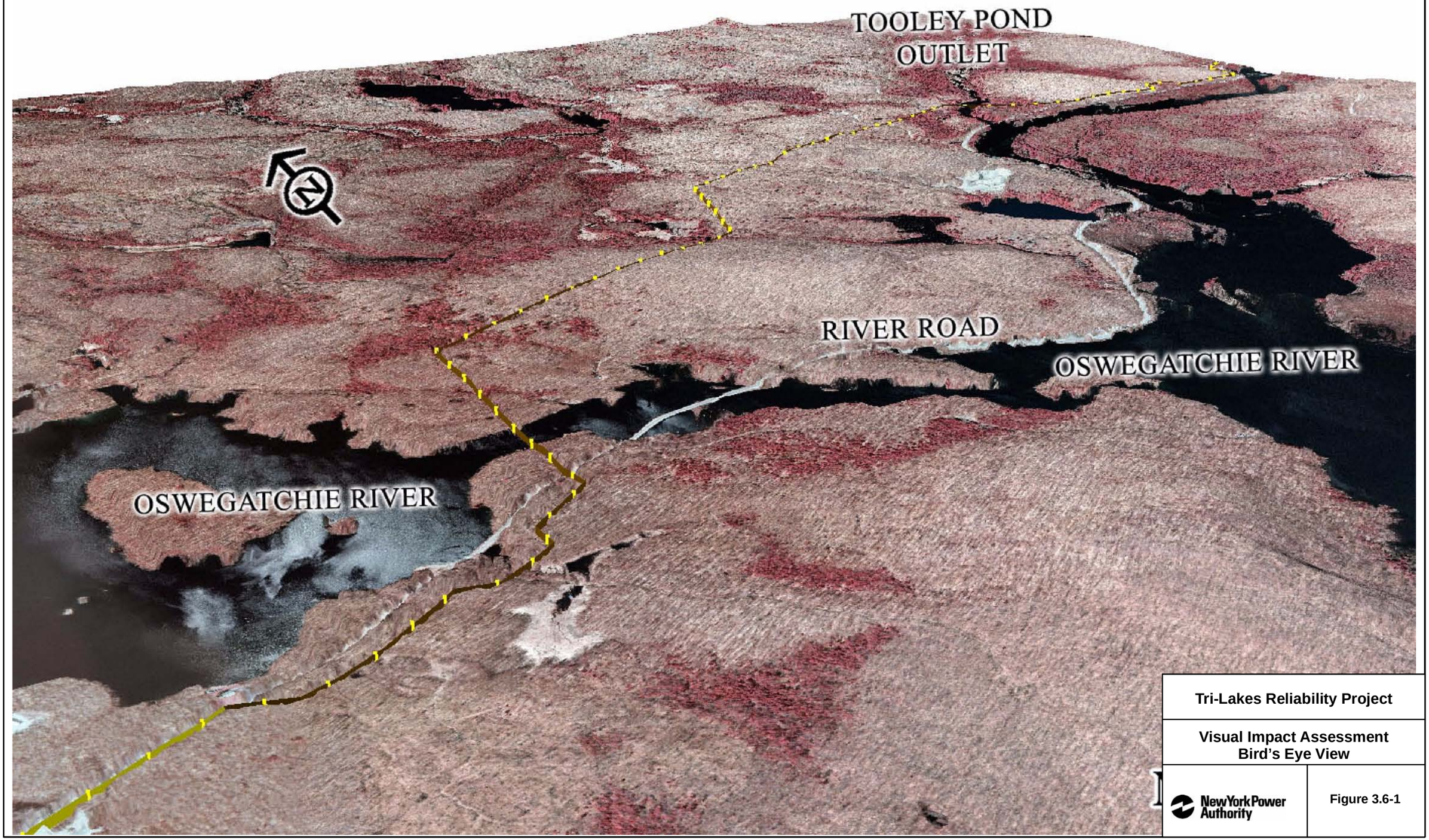


Tri-Lakes Reliability Project

Visual Impact Assessment
Bird's Eye View

New York Power Authority

Figure 3.5-7

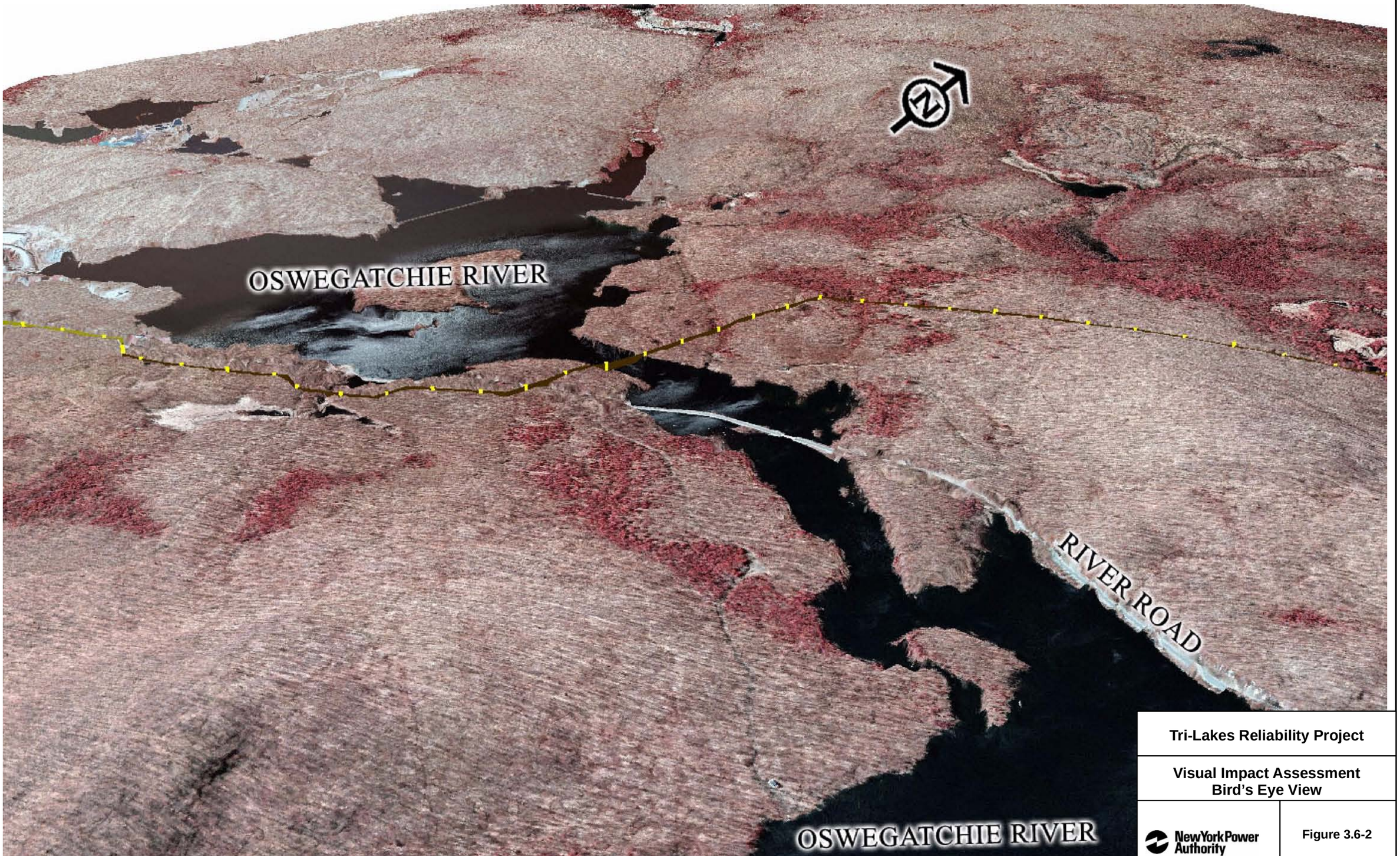


Tri-Lakes Reliability Project

Visual Impact Assessment
Bird's Eye View

New York Power Authority

Figure 3.6-1



Tri-Lakes Reliability Project

Visual Impact Assessment
Bird's Eye View

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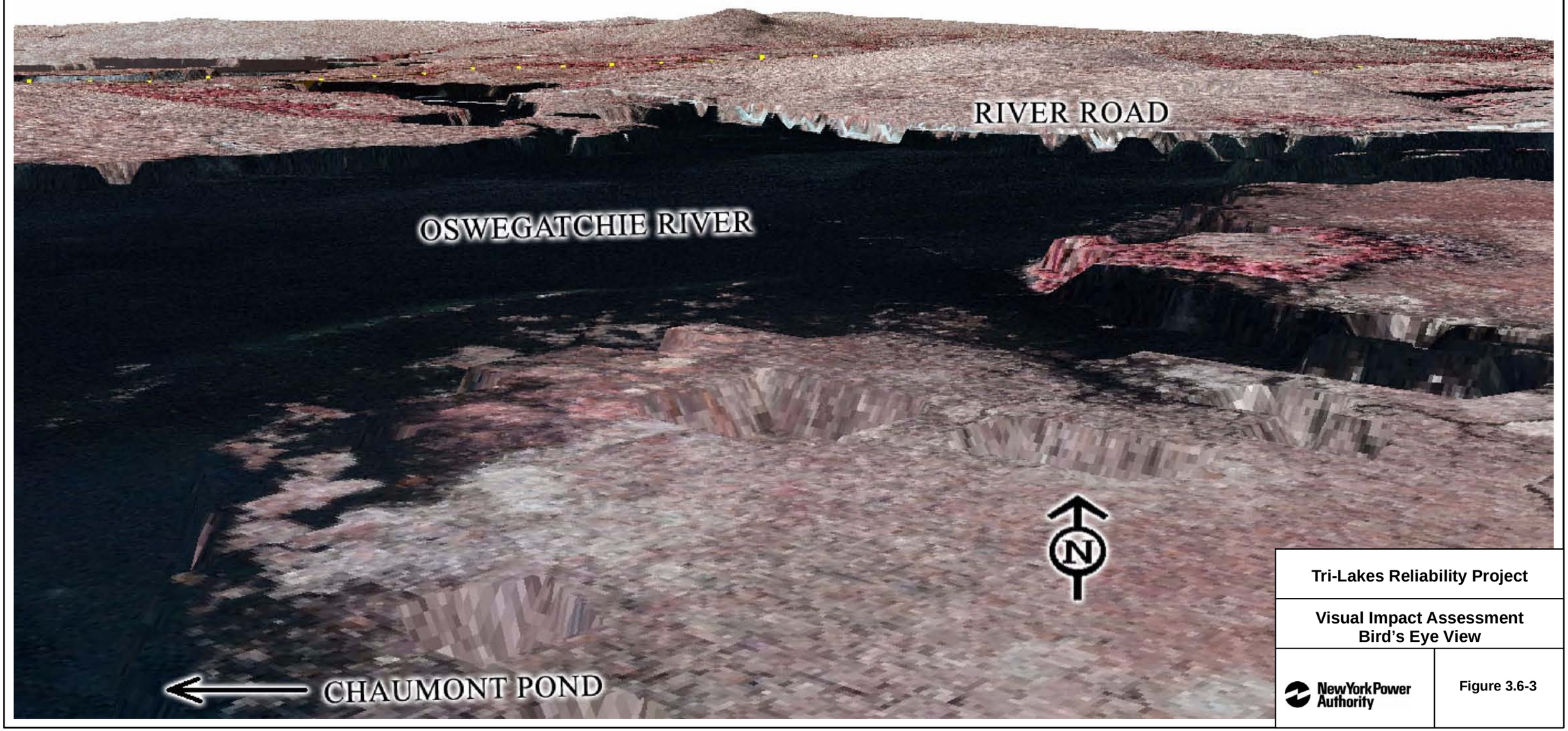
Figure 3.6-2

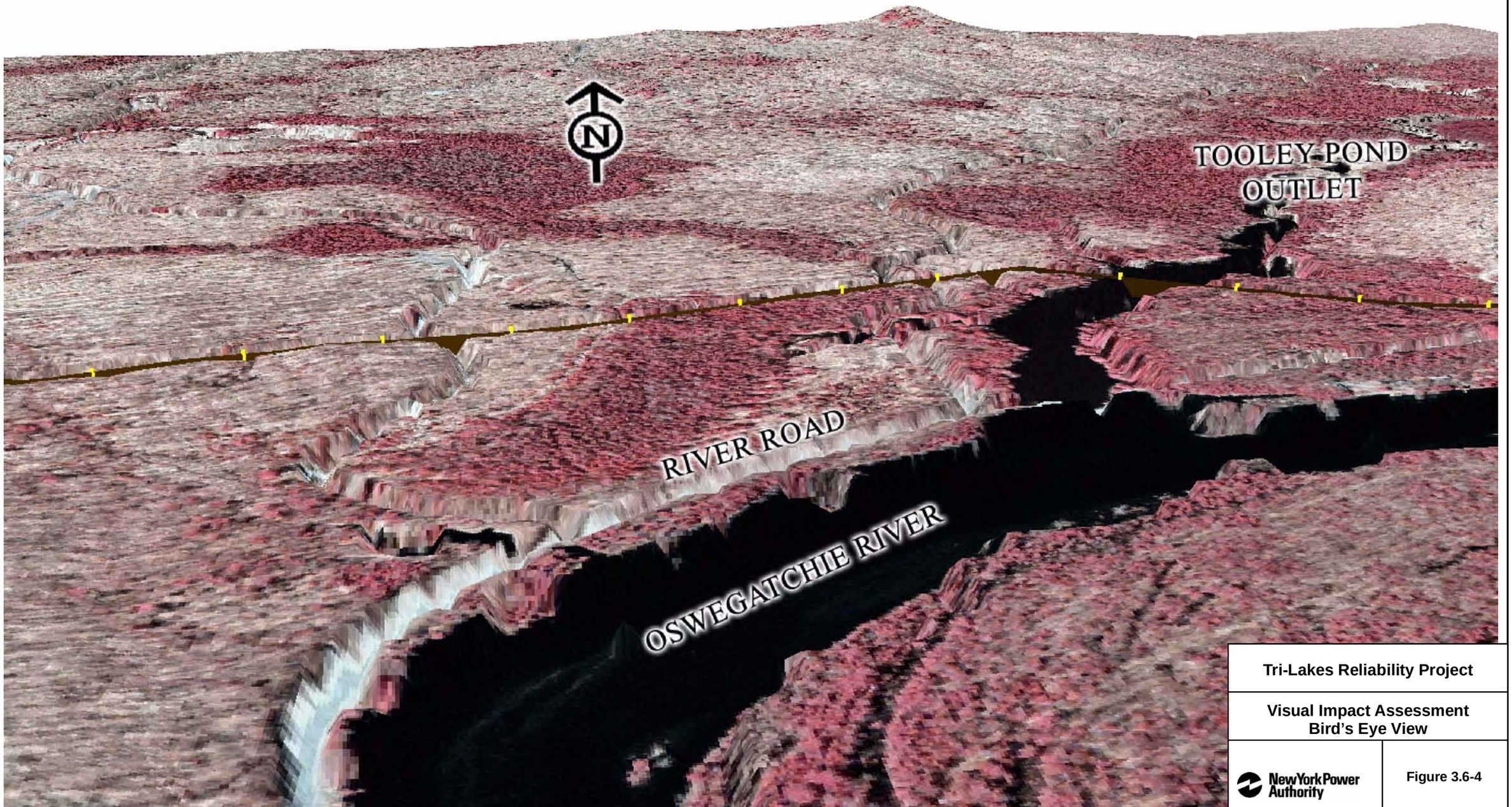


Tri-Lakes Reliability Project

Visual Impact Assessment
Bird's Eye View

New York Power Authority

Figure 3.6-3



Tri-Lakes Reliability Project

Visual Impact Assessment
Bird's Eye View

New York Power Authority

Figure 3.6-4

Photo Simulations

Existing S1CS

Proposed S1CS

Photo Simulations
Preferred (Stark) Route

Existing S1FS

Proposed S1FS

Photo Simulations
Preferred (Stark) Route

Existing S3AS

Proposed S3AS

Photo Simulations
Preferred (Stark) Route

Existing S3CT

Proposed S3CT

Photo Simulations
Preferred (Stark) Route

Existing S5AN

Proposed S5AN

Photo Simulations
Preferred (Stark) Route

Existing S6AT

Proposed S6AT

Photo Simulations
Preferred (Stark) Route

Existing S7AT

Proposed S7AT

Photo Simulations
Preferred (Stark) Route

Existing S9CT

Proposed S9CT

Photo Simulations
Preferred (Stark) Route

Existing A5AN

Proposed A5AN

Photo Simulations
Preferred (Stark) Route

Existing S13AE

Proposed S13AE

Photo Simulations
Preferred (Stark) Route

Existing S13BW

Proposed S13BW

Photo Simulations
Preferred (Stark) Route

Existing S13CE

Proposed S13CE

Photo Simulations
Preferred (Stark) Route

Existing S13FE

Proposed S13FE

Photo Simulations
Preferred (Stark) Route

Existing P1CN

Proposed P1CN

Photo Simulations
Preferred (Piercefield) Route

Existing P3AW

Proposed P3AW

Photo Simulations
Preferred (Piercefield) Route

Existing P3DE

Proposed P3DE

Photo Simulations
Preferred (Piercefield) Route

Existing P4CE

Proposed P4CE

Photo Simulations
Preferred (Piercefield) Route

Existing P4DW

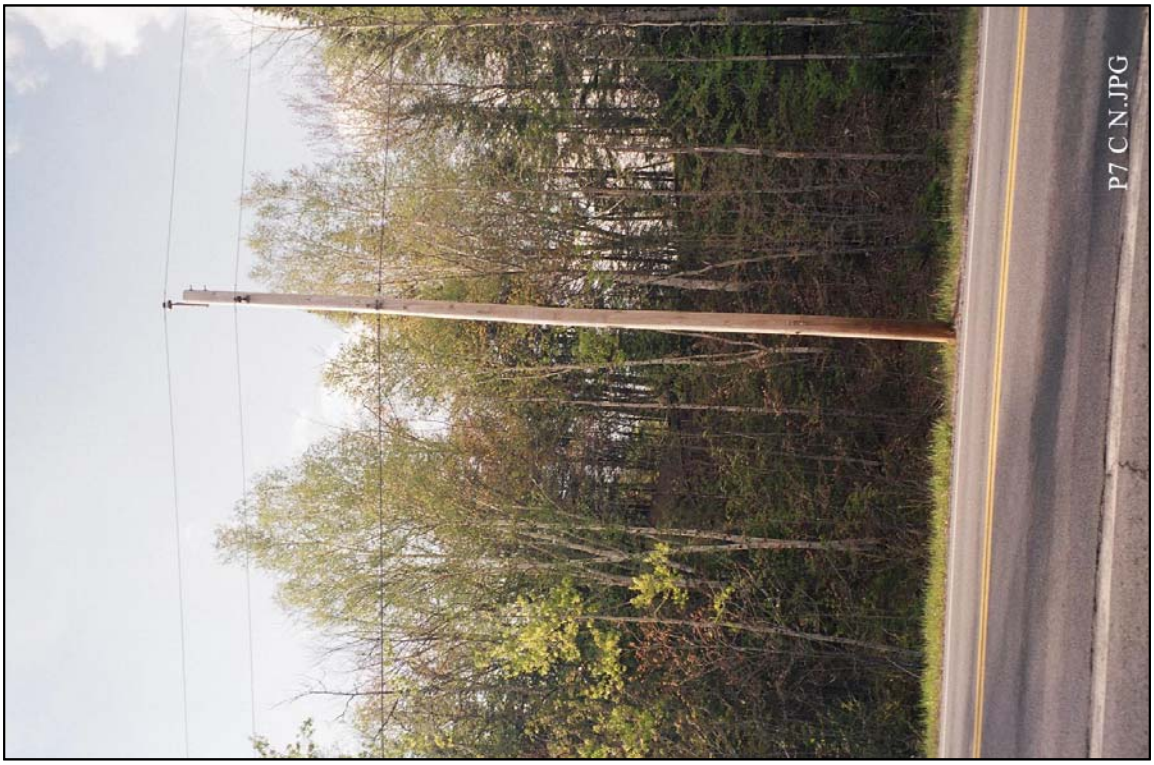
Proposed P4DW

Photo Simulations
Preferred (Piercefield) Route

Existing P7AS

Proposed P7AS

Photo Simulations
Preferred (Piercefield) Route



Existing P7CN

Proposed P7CN

Photo Simulations
Preferred (Piercefield) Route

Existing P8BT

Proposed P8BT

Photo Simulations
Preferred (Piercefield) Route

Existing P9AT

Proposed P9AT

Photo Simulations
Preferred (Piercefield) Route

Existing P10CN

Proposed P10CN

Photo Simulations
Preferred (Piercefield) Route

Existing P11BW

Proposed P11BW

Photo Simulations
Preferred (Piercefield) Route

Existing P11FE

Proposed P11FE

Photo Simulations
Preferred (Piercefield) Route

Existing N2AW

Proposed N2AW

Photo Simulations
Alternate (Newton Falls) Route

Existing N3BW

Proposed N3BW

Photo Simulations
Alternate (Newton Falls) Route

Existing N3EW

Proposed N3EW

Photo Simulations
Alternate (Newton Falls) Route

Existing N5AN

Proposed N5AN

Photo Simulations
Alternate (Newton Falls) Route

Existing N6CN

Proposed N6CN

Photo Simulations
Alternate (Newton Falls) Route

Existing N8AN

Proposed N8AN

Photo Simulations
Alternate (Newton Falls) Route

Existing N8DE

Proposed N8DE

Photo Simulations
Alternate (Newton Falls) Route

Existing N11AW

Proposed N11AW

Photo Simulations
Alternate (Newton Falls) Route

Existing N12DN

Proposed N12DN

Photo Simulations
Alternate (Newton Falls) Route

Existing N13CW

Proposed N13CW

Photo Simulations
Alternate (Newton Falls) Route

Existing N16BN

Proposed N16BN

Photo Simulations
Alternate (Newton Falls) Route

Existing Conditions at Location of Proposed Stark Falls Substation

Simulation with Proposed Stark Falls Substation

Photo Simulations
Stark Falls Substation

Existing Conditions at Location of Proposed Piercefield Regulating Station

Simulation with Proposed Piercefield Regulating Station

Photo Simulations
Piercefield Regulating Station

Existing Conditions at Location of Proposed Newton Falls Substation

Simulation with Proposed Newton Falls Substation

Photo Simulations
Newton Falls Substation