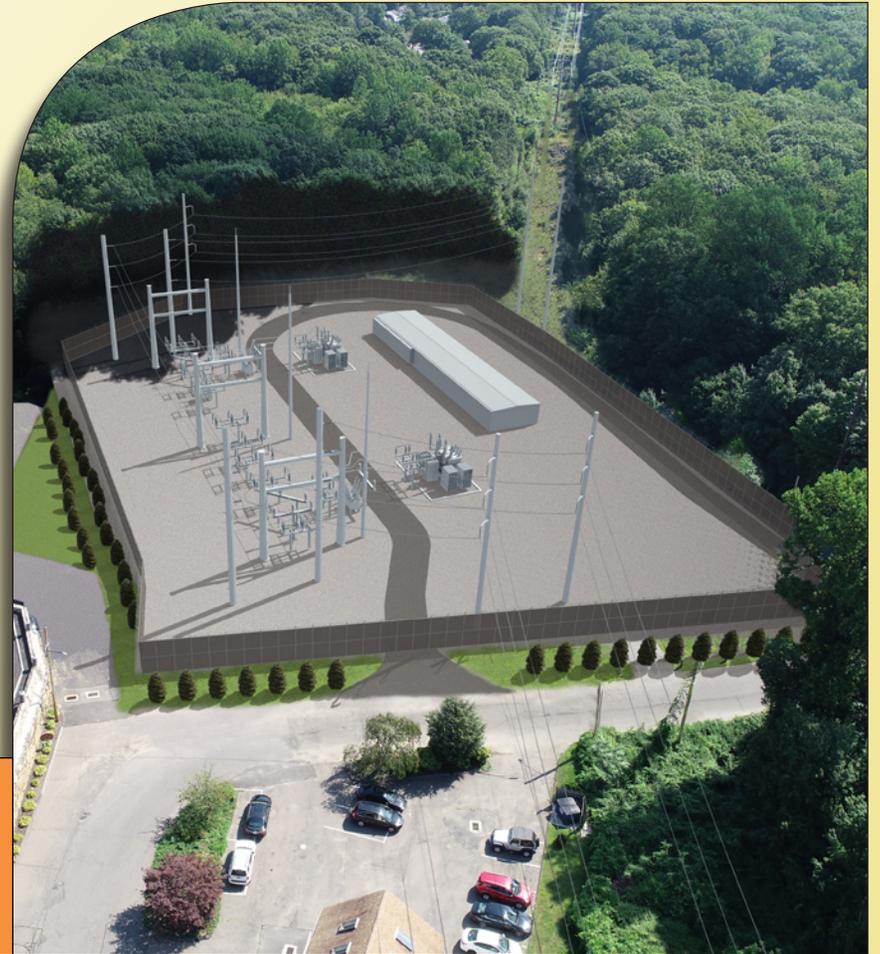


Visual Assessment & Photo-Simulations

OLD TOWN SUBSTATION
REBUILD PROJECT
280-330 KAEICHELE PLACE
BRIDGEPORT, CT 06606

Prepared in June 2020 by:
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Prepared for
The United Illuminating Company



VISUAL ASSESSMENT & PHOTO-SIMULATIONS

The United Illuminating Company (“UI” or the “Company”) is proposing to rebuild its existing Old Town Substation (the “Substation” or the “Project”) located at 280 Kaechele Place in Bridgeport, Connecticut. At the request of UI, All-Points Technology Corporation, P.C. (“APT”) completed this visibility assessment to evaluate potential views of the rebuilt Substation from nearby locations under both “leaf on” and “leaf off” conditions.

Project Undertaking

The existing Substation is located approximately 0.55 mile southeast of Exit 48 of the Merritt Parkway (CT Route 15) and approximately 0.5-mile northwest of Lake Forest. It is on an approximately 0.9-acre Company-owned parcel of land in a mixed commercial and residential area. UI is proposing to rebuild the Substation on adjacent Company-owned land at 312 and 330 Kaechele Place, two abutting undeveloped and mostly wooded parcels which encompass an additional ± 3 acres. Combined, the three lots total approximately 3.9 acres and are collectively referred to herein as the “Property”.

Project Setting

Commercial development exists west of the Property, along Kaechele Place and Main Street. A single commercially-developed property, which fronts on Main Street, and multiple residentially-developed properties, located along Sequoia Road, abut the Property to the north. Elton Rogers Woodland Park (a City of Bridgeport Park), a large wooded property, abuts the Property to the east and south. The park is undeveloped but does have some blazed hiking trails. An electrical transmission corridor (“Eversource ROW”) extends from the east through Elton Rogers Woodland Park and the existing Substation and continues west over Main Street and beyond. The Eversource ROW contains several steel transmission structures rising to approximately 105 feet in height.

UI proposed to rebuild its facility, encompassing the land currently occupied by the existing Substation and adjoining parcels to the north and east. The new ± 2.25 -acre fenced Substation would accommodate new equipment and infrastructure, including nine (9) ± 95 -foot tall steel monopoles, three (3) lightning masts, bus work, transformers, and an enclosure. The Project would require clearing on the north and east sides of the Property; some limited clearing may also be required along the southern property line. Once the new Substation is complete and operative, the existing facility will be demolished.

Methodology

APT personnel conducted multiple field reconnaissance visits to the property on August 21, 2019, January 15, 2020 and May 21, 2020 to assess existing conditions in the vicinity of the Project and to identify locations from which the proposed Substation components may be visible. These reconnaissance efforts allowed APT to evaluate potential visibility in both leaf-on and leaf-off conditions.

During the reconnaissance, APT obtained photo-documentation of representative locations from which the Project was visible. At each photo location, the geographic coordinates of the camera’s position were logged using global positioning system (“GPS”) technology. Photographs were taken with a Canon EOS

6D digital camera body¹ and Canon EF 24 to 105 millimeter (“mm”) zoom lens. In addition to the ground-level photographs, APT also completed a small unmanned aircraft system (“drone”) flight to obtain high-resolution digital photographic imagery of the existing Substation and adjacent area.

Three-dimensional computer models were developed for the existing Substation and the proposed rebuild from AutoCAD information supplied by UI. The computer models were used to generate photographic simulations to portray scaled renderings of the Project. Using field data, site plan information, and image editing software, the proposed Substation rebuild was scaled to the correct location, orientation, and height relative to the existing Substation and the surrounding area. For presentation purposes, all of the photographs were produced in an approximate 7-inch by 10.5-inch format.

The Attachment to this report includes aerial/drone photographs depicting existing leaf-on and leaf-off settings, and three (3) ground-level photographs from nearby locations under similar, multi-seasonal conditions. Companion photographic simulations of proposed post-build conditions² (based upon the computer-generated model) are also included. The locations of the three (3) ground-level photographs are depicted on the attached Photolog Map. The drone photograph presented in the Attachment is an oblique aerial view of the existing Substation; the accompanying simulation is intended to depict the overall size, shape, and configuration of the completed Project from a bird’s-eye perspective. It is not intended to specifically address potential visibility.

Conclusions

The most prominent views of the rebuilt Substation would be from nearby locations along Kaechele Place and Main Street immediately west of the Property. During those times of the year when leaves are off the deciduous trees, portions of the Substation’s infrastructure also will be visible from locations on Sequoia Road north of the Property. Photos 1 and 2 represent views of the Substation that may be attained from the western end of this neighborhood, particularly from properties along the south side of the road. Photo 3 depicts a narrow view of the Project from Main Street looking eastward directly down Kaechele Place. In general, views of the Substation from Main Street will be screened by existing intervening commercial buildings. Many nearby views of the Substation will be mitigated seasonally by foliage (including new plantings) and screening elements incorporated into the facility design. No views of the Project were identified from the blazed hiking trails in Elton Rogers Woodland Park.

Limitations

The photo-simulations provide a representation of the Project under similar settings as those encountered during the field reviews. Views of the Project can change throughout the seasons and the time of day, and are dependent on weather and other atmospheric conditions (e.g., haze, fog, clouds); the location, angle and intensity of the sun; and the specific viewer location.

¹ The Canon EOS 6D is a full-framed camera which includes a lens receptor of the same size as the film used in 35mm cameras. As such, the images produced are comparable to those taken with a conventional 35mm camera.

² Proposed new monopole structure heights are approximate, based on currently available information, and may change as detailed engineering design for the Project proceeds. Similarly, landscaping depicted outside of the new Substation fence is for illustrative purposes only. A landscaping plan for the new Substation would be provided, as appropriate, in the Development and Management Plan that UI will submit to the Connecticut Siting Council for the Project

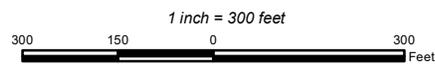
Attachment



PHOTO LOG

Legend

- Photographic Location
- Project Area
- Municipal Boundary



AN OBLIQUE AERIAL VIEW IS PRESENTED IN THE ATTACHMENT TO THIS REPORT (NOT DEPICTED ON THIS MAP).





EXISTING CONDITIONS

LOCATION

OBLIQUE AERIAL VIEW OVER KAECHLE PLACE - AUGUST 2019

ORIENTATION

EAST



PROPOSED CONDITIONS

LOCATION

OBLIQUE AERIAL VIEW OVER KAECHELE PLACE

ORIENTATION

EAST



EXISTING CONDITIONS

LOCATION

OBLIQUE AERIAL VIEW OVER KAEHELE PLACE - OCTOBER 2019

ORIENTATION

EAST



PROPOSED CONDITIONS

LOCATION

OBLIQUE AERIAL VIEW OVER KAECHLE PLACE

ORIENTATION

EAST



EXISTING CONDITIONS

PHOTO

1

LOCATION

SEQUOIA ROAD - JANUARY 2020

ORIENTATION

SOUTHWEST



PROPOSED CONDITIONS

PHOTO

1

LOCATION
SEQUOIA ROAD

ORIENTATION
SOUTHWEST



NOT VISIBLE FROM THIS LOCATION DURING "LEAF-ON" CONDITIONS

EXISTING CONDITIONS

PHOTO	LOCATION	ORIENTATION
1	SEQUOIA ROAD - MAY 2020	SOUTHWEST



EXISTING CONDITIONS

PHOTO

2

LOCATION

SEQUOIA ROAD - JANUARY 2020

ORIENTATION

SOUTHWEST



PROPOSED CONDITIONS

PHOTO

2

LOCATION
SEQUOIA ROAD

ORIENTATION
SOUTHWEST



EXISTING CONDITIONS

PHOTO

2

LOCATION

SEQUOIA ROAD - MAY 2020

ORIENTATION

SOUTHWEST



PROPOSED CONDITIONS

PHOTO

2

LOCATION
SEQUOIA ROAD

ORIENTATION
SOUTHWEST



EXISTING CONDITIONS

PHOTO

3

LOCATION

MAIN STREET - JANUARY 2020

ORIENTATION

EAST



PROPOSED CONDITIONS

PHOTO

3

LOCATION
MAIN STREET

ORIENTATION
EAST



EXISTING CONDITIONS

PHOTO

3

LOCATION

MAIN STREET - MAY 2020

ORIENTATION

EAST



PROPOSED CONDITIONS

PHOTO

3

LOCATION
MAIN STREET

ORIENTATION
EAST