DRAFT

Petition No. 1539
New Cingular Wireless PCS, LLC
24 Town House Road, Durham, Connecticut
Small Wireless Facilities
Staff Report
December 2, 2022

Introduction

On August 29, 2022, the Connecticut Siting Council (Council) received a petition (Petition) from New Cingular Wireless PCS, LLC (AT&T) for a declaratory ruling, pursuant to Connecticut General Statutes (CGS) §4-176 and §16-50k, for the proposed installation of three small wireless facilities on new AT&T-owned utility poles to be located at the Durham Fairgrounds, 24 Town House Road, Durham, Connecticut (Petition or Project).

The small wireless facilities would be installed on new wood utility poles that will not be used principally for electric distribution service. They would provide capacity relief to the AT&T network at the Durham Fairgrounds and eliminate the need for temporary facilities during events of statewide significance.

On August 25, 2022, AT&T provided notice of the proposed small wireless facilities to the Town of Durham (Town) and abutting property owners. No comments from the Town or abutting property owners were received.

On August 30, 2022, the Council sent correspondence to the Town stating that the Council has received the Petition and invited the Town to contact the Council with any questions or comments by September 28, 2022. No comments were received.

The Council issued interrogatories to AT&T on October 27, 2022. AT&T provided responses to the Council's interrogatories on November 10, 2022.

Pursuant to CGS §4-176(e) of the Uniform Administrative Procedure Act, an administrative agency is required to take action on a petition within 60 days of receipt. On October 27, 2022, pursuant to CGS §4-176(e), the Council voted to set the date by which to render a decision on the Petition as no later than November 27, 2022, which was within the 180-day statutory deadline for a final decision under CGS §4-176(i) and was the 90-day decision deadline for a small wireless facility on a new structure under Federal Communications Commission (FCC) regulations.

On November 2, 2022, in response to a written request from the Council, AT&T consented to an extension of the decision deadline until December 23, 2022.

Jurisdiction

Pursuant to CGS §16-50i(a)(6), the Council has exclusive jurisdiction over telecommunications towers, including associated equipment, owned or operated by the state, a public service company or a certified telecommunications provider or used in a cellular system.

Under Regulations of Connecticut State Agencies §16-50j-2a (30), "Tower" means a structure, whether free standing or attached to a building or another structure, that has a height greater than its diameter and that is high relative to its surroundings, or that is used to support antennas for sending or receiving radio frequency signals, or for sending or receiving signals to or from satellites, or any of these, which is or is to be:

a) **Used principally to support one or more antennas** for receiving or sending radio frequency signals, or for sending or receiving signals to or from satellites, or any of these, and
b) Owned or operated by the state, a public service company as defined in Section 16-1 of the Connecticut General Statutes, or a certified telecommunications provider, or used in a cellular system, as defined in Section 16-50i(a) of the Connecticut General Statutes.

The three proposed utility poles will be used principally to support the small wireless facilities. They would be owned and operated by AT&T, a certified telecommunications provider. Thus, the Council has jurisdiction over the proposed small wireless facilities.

The FCC specifically defined "small wireless facility" in its 2018 Report and Order as facilities that meet any of the following conditions:

1. Mounted on structures 50 feet or less in height including their antennas; or
2. Mounted on structures no more than 10 percent taller than other adjacent structures; or
3. Do not extend existing structures on which they are located to a height of more than 50 feet or by more than 10 percent, whichever is greater.

The proposed utility poles are 50 feet or less in height including the antennas. Each proposed facility is a "small wireless facility" under the FCC definition.

Proposed Small Wireless Facilities

AT&T's proposed facility would provide network coverage/capacity needs at the fairgrounds and surrounding areas. AT&T's facility would operate in the 1900 MHz and 2100 MHz frequency bands. All frequencies are capable of supporting 5G services.

The proposed site is located on an approximately 45-acre parcel owned by Durham Agricultural Fair Association at 24 Town House Road. Main Street (Route 17) is located to the east. Durham Cemetery is located to the north. Land use surrounding the site is largely residential and agricultural. The proposed poles are located approximately 425 feet, 595 feet and 325 feet, respectively to the nearest property lines.

AT&T investigated the use of existing utility poles at the fairgrounds and determined it was not feasible to use those poles due to potential interference with the Fair Association's use and maintenance of the existing utility poles.

Facility #1

The proposed utility pole would have a height of approximately 38.5 feet[1] above ground level (agl) and be located approximately 125 feet to the northeast of an existing building/barn across an interior fairgrounds access road. AT&T would install one panel antenna measuring 25.2 inches high by 24.1 inches wide, at the top of the pole with a centerline height of approximately 37 feet agl and extending to a height of approximately 38 feet agl. AT&T would also attach two remote radio units (RRUs) to the pole at centerline heights of approximately 33 feet and 37 feet. A service disconnect box would be attached to the pole at approximately 10.8 feet agl. Electrical and telephone service would run overhead from an existing pole directly to the southeast.

[1] The proposed wood pole would be approximately 45 feet in length. Approximately 6.5 feet would be buried.

Facility #2

The proposed utility pole would have a height of approximately 39 feet[2] agl and be located approximately 30 feet to the northwest of an existing building/barn along the western parcel boundary. AT&T would install two panel antennas measuring 25.2 inches high by 24.1 inches wide, at the top of the pole with a centerline height of approximately 37 feet agl and extending to a height of approximately 38 feet agl. AT&T would attach four RRUs to a ground-mounted steel H-frame structure (next to the pole) that would reach a height of about 6 feet agl. An electrical panel would be attached to the pole at approximately 10.8 feet agl. Electrical and telephone service would run overhead from an existing pole directly to the south.

Facility #3

The proposed utility pole would have a height of approximately 34 feet[3] agl and be located approximately 76 feet east of an existing building/barn along the eastern parcel boundary. AT&T would install three panel antennas measuring 25.2 inches high by 24.1 inches wide, at the top of the pole with a centerline height of approximately 30 feet agl and extending to a height of approximately 31 feet agl. AT&T would attach six RRUs to a ground-mounted steel H-frame structure (next to the pole) that would reach a height of about 6 feet agl. An electrical panel would be attached to the pole at approximately 10.8 feet agl. Electrical and telephone service would run overhead from an existing pole directly to the northwest.

Backup Power

No backup power is proposed for these small wireless facilities. Given the primary network objective is to address capacity needs during fair events, AT&T does not anticipate any need to install emergency backup generators. Commercial Mobile Radio Service (CMRS) providers are licensed by and are under the jurisdiction and authority of the Federal Communications Commission (FCC). At present, no standards for backup power for CMRS providers have been promulgated by the FCC.

Cost

The estimated cost of the facilities is $75,000 total or about $25,000 per facility.

Public Safety

A Professional Engineer duly licensed in the State of Connecticut has certified that the proposed poles would be structurally adequate to support the proposed loading.

The calculated cumulative power densities for each of the facilities would be 1.02 percent, 4.65 percent, and 2.92 percent, respectively, of the applicable limit at ground level at distances of approximately 3 feet, 112 feet and 5 feet, respectively, from the facilities using a far field approximation.

A radio frequency (RF) safety/caution sign with an emergency contact number visible from the ground would be placed on opposite sides of the antennas.

The H-frame structures with RRUs at Facility #2 and #3 are not enclosed. AT&T could install a 6-foot tall chain link fence around each H-frame.

The installation will not impact or interfere with any of the existing public utilities within the Project area. AT&T will contact Call Before You Dig prior to any excavation activities to confirm the proposed installation will not impact any existing underground utilities.

[2] The proposed wood pole would be approximately 45 feet in length. Approximately 6 feet would be buried.
[3] The proposed wood pole would be approximately 40 feet in length. Approximately 6 feet would be buried.

Environmental

The Project is located on a parcel used as a fairgrounds. Development of the facility would not require tree removal and would result in minimal ground disturbance.

Facility#1 and Facility #3 are not located within a Federal Emergency Management Agency (FEMA)-designated flood zone. Facility #2 is located in FEMA Zone AE. The nearest wetlands from the three facilities are 310 feet, 81 feet and 530 feet, respectively. The Durham Fairgrounds are located within a Department of Energy and Environmental Protection Natural Diversity Database buffer area. In Petition 1494, DEEP indicated no negative impacts to state-listed species would occur from development of a similar small wireless facility proposed by Verizon Wireless that is located northwest of Facility #3 and was approved by the Council on April 22, 2022.[4]

The proposed poles would not have a significant visual impact on the surrounding area due to existing utility poles and telecommunications facilities on the host parcel.

Facility Construction

The construction of the small wireless facilities would be completed within approximately two weeks. Work hours are Monday through Friday between 8:00 a.m. to 5:00 p.m.

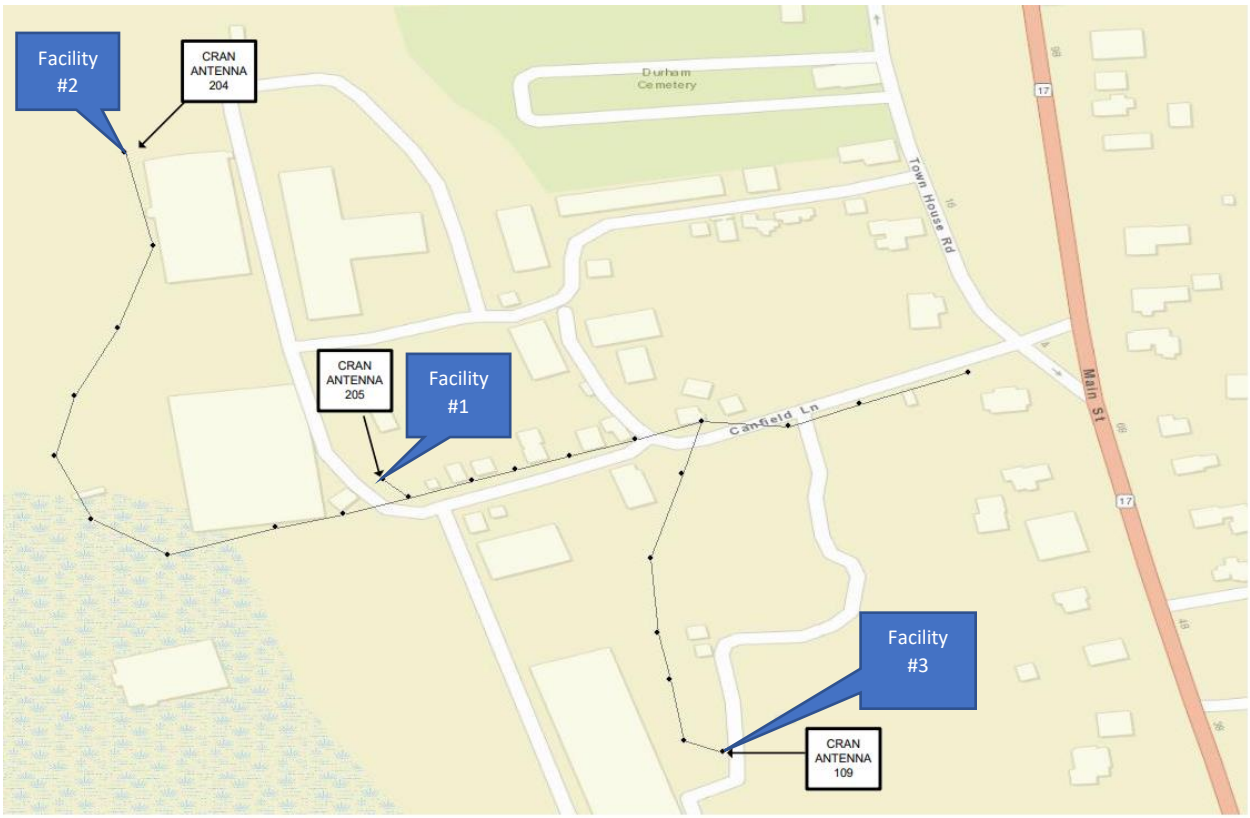
Conclusion

If approved, staff recommends the following conditions:

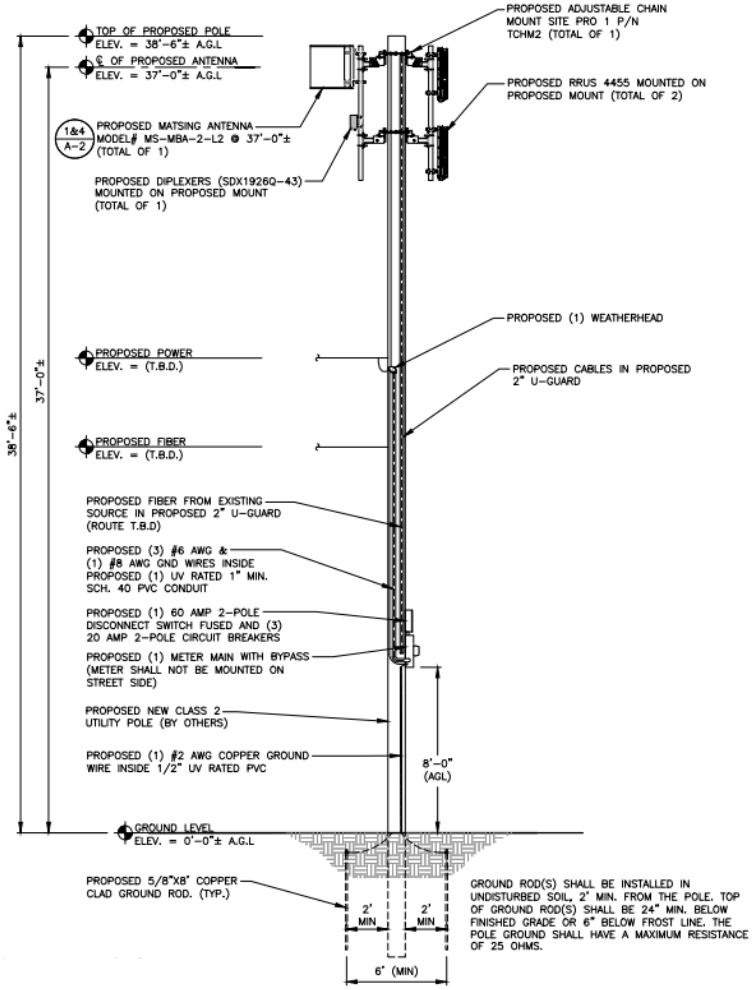
1. Approval of any project changes be delegated to Council staff;
2. RF access restriction and caution signage shall be installed at each facility in compliance with FCC guidance; and
3. Deployment of any 5G services must comply with FCC and FAA guidance relative to air navigation, as applicable.

[4] https://portal.ct.gov/CSC/3_Petitions/Petition-Nos-1491-1500/PE1494

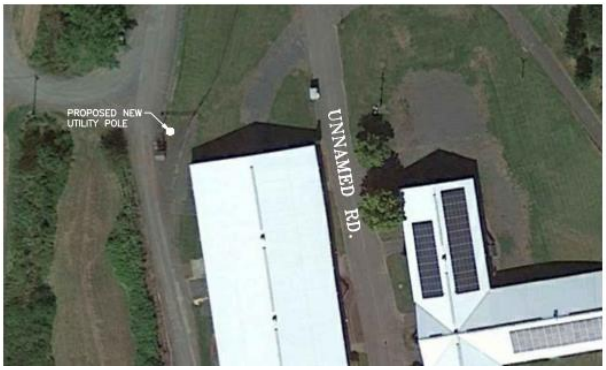
Location Map

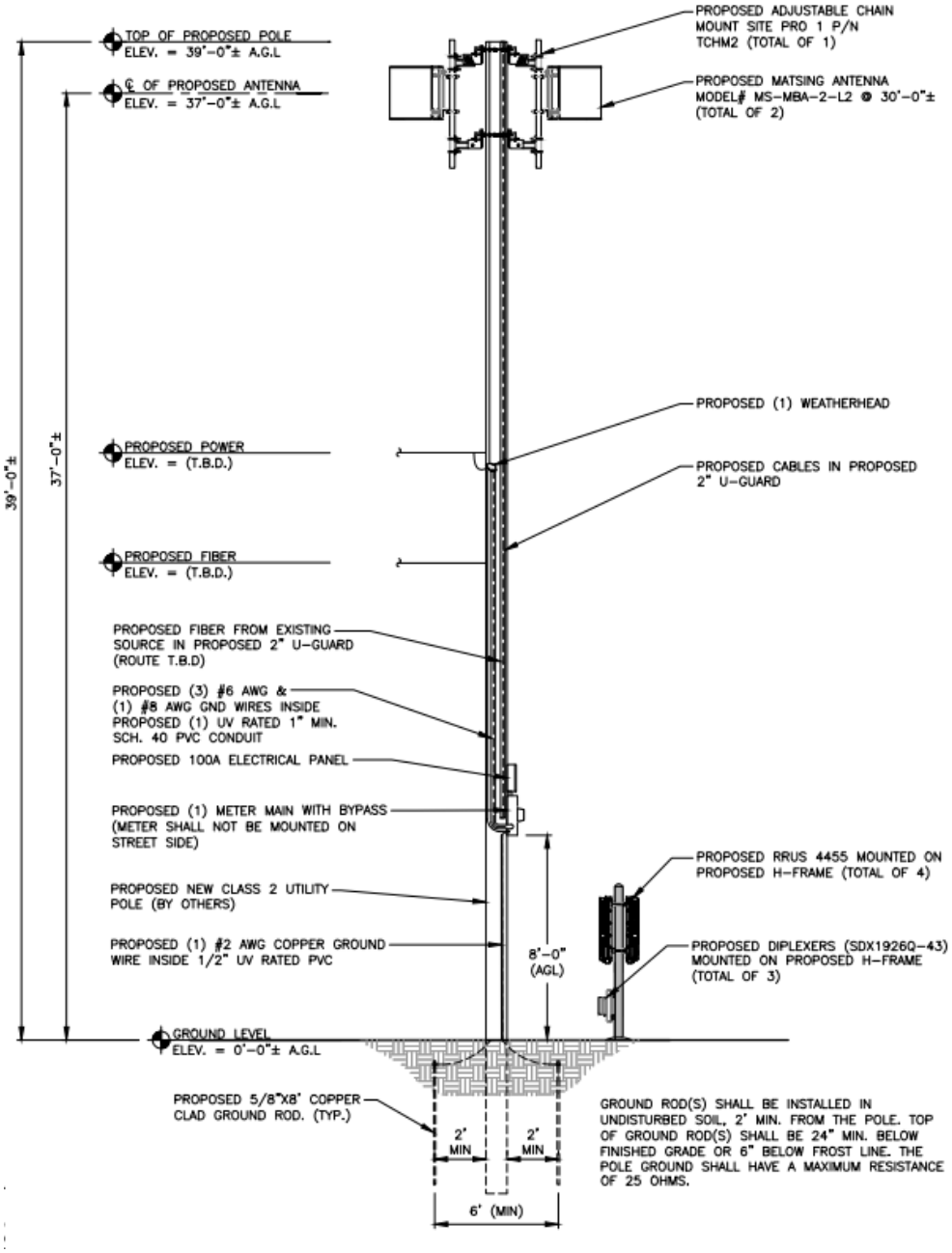


Site Plan – Facility #1

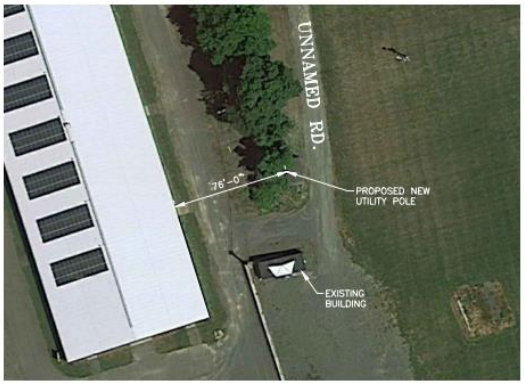


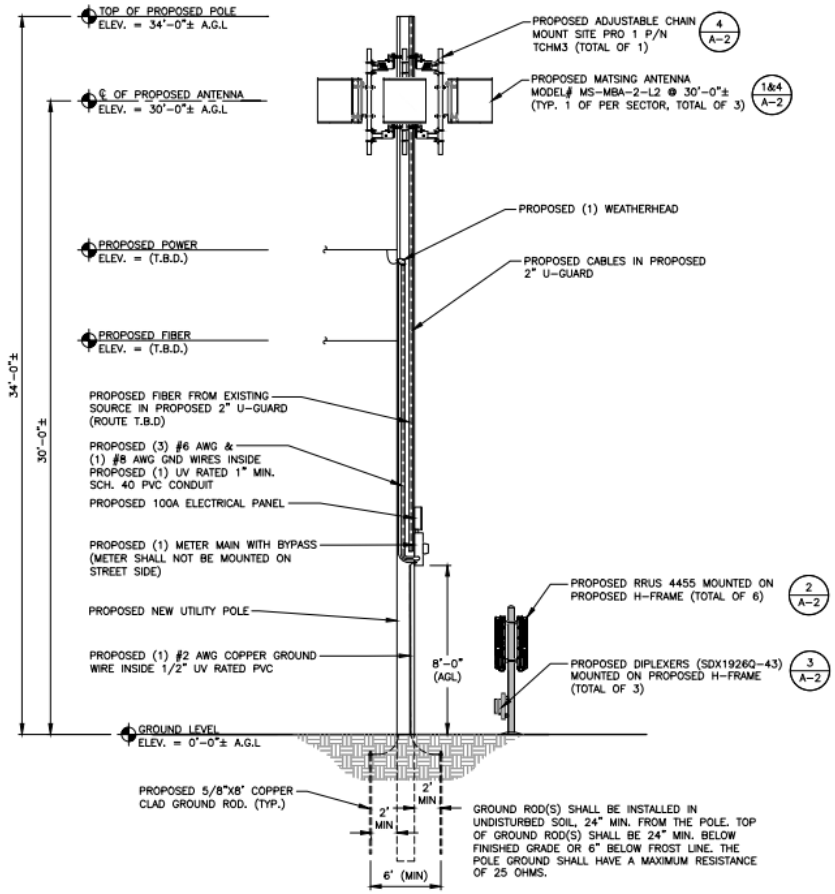
Site Plan – Facility #2





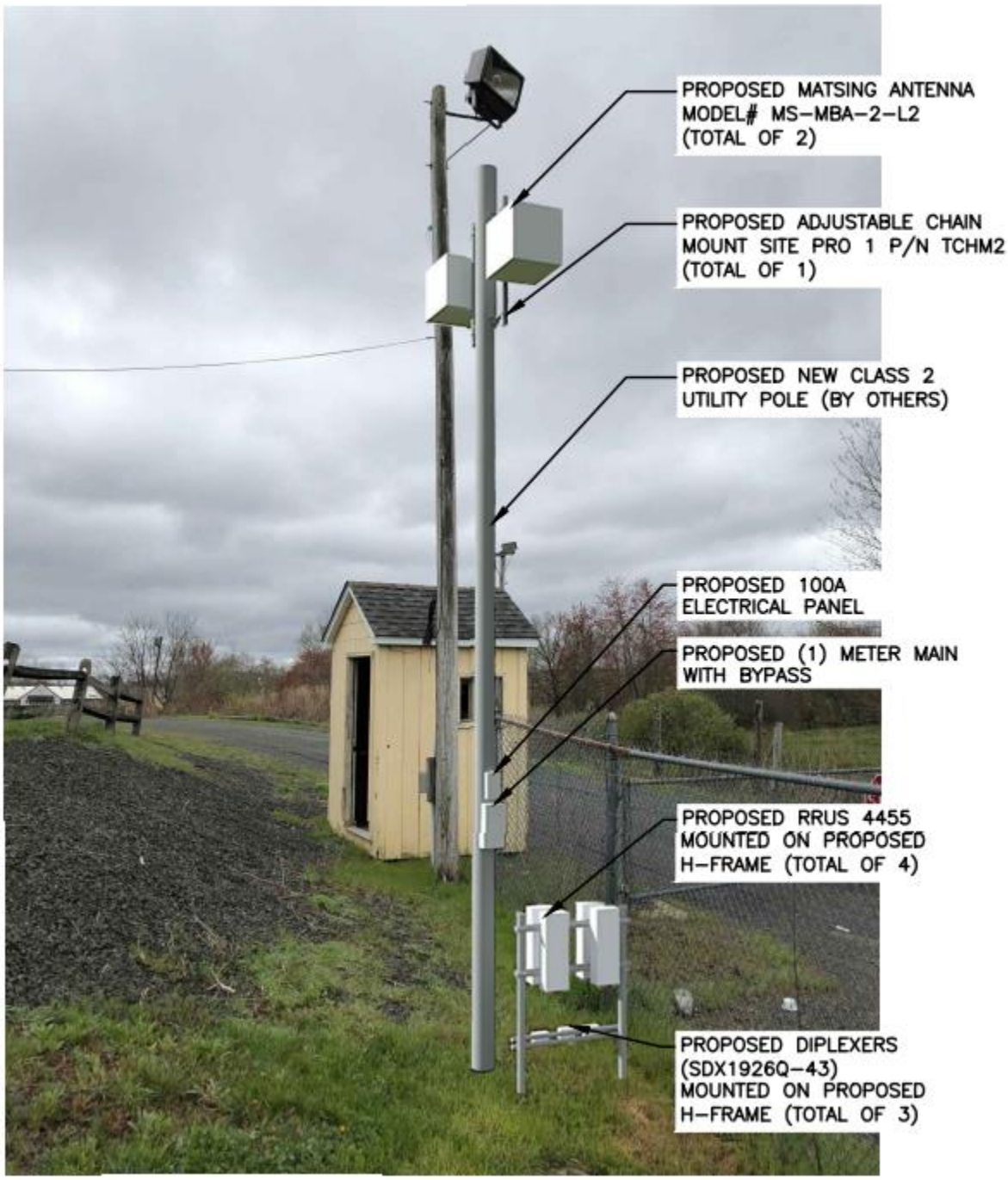
Site Plan – Facility #3





Photosimulation of Proposed Facility #1

Photosimulation of Proposed Facility #2



Photosimulation of Proposed Facility #3