



October 22, 2019

**Mr. Alan Grattidge, Supervisor
Town of Charlton Town Hall
758 Charlton Road
Charlton, N.Y. 12019**

**Re: Cellco Partnership – Proposed Telecommunications Tower
764 Charlton Road - Tax map parcel No. 246.00-2-26.1**

Dear Supervisor Grattidge:

We have received an updated application dated September 19, 2019 from Cellco Partnership d/b/a Verizon Wireless for the proposed 120 foot tall monopole at 764 Charlton Road. This application has been dormant for two years but has now been reopened as a continuation of the same action.

We commented on the November 10, 2016 application by our letter dated January 5, 2017. The vast majority of the approximately 200 page application has not changed from the 2016 version. Many of the changes that have been made appear to be in response to our first comment letter though the submittal lacks a cover letter from the applicant explaining the revisions.

In the interest of continuity, we have repeated our prior letter here with updated statements added in bold lettering. Additionally, there are some new comments pertaining to the current version of the application. Because of the lengthy nature of this letter, we have also consolidated the substance of all comments into a single page check list that, assuming the application is approved, can help Town officials and the applicant coordinate the items remaining before a building permit can be issued.

2019 New Comments:

1. The 2019 application does not contain a copy of the Visual EAF Addendum. This is a required element of the application in accordance with Section 3(a)(v)(5) of Charlton's telecommunication towers law in Appendix B-14 of the Zoning Ordinance.
2. Section 6 of the application contains the report detailing existing wireless coverage and the projected improvement that the proposed tower will provide. Figure 2 on page 4 and Exhibit 2 at the end of the report each display a plot of the coverage that will result after the tower is built. Figure 2 has one obvious and one presumed typographical error. The caption below the plot incorrectly notes that it is for the Fernwood Site in the Town of Moreau. More importantly, the top heading of the diagram claims that the coverage represents a new tower site at a height of 150

feet. Both Figure 2 and Exhibit 2 also show tower sites at both 764 Charlton Road and at the Cherry Lane Water Tower which was previously considered. The water tower site even implies greater importance on the diagram as its center point is highlighted in yellow. Please revise these diagrams to remove the errors and clarify that the predicted coverage represents the tower at 764 Charlton Road at a height of 120 feet. The date on page 5 of the coverage report should also be revised to the date of the current application.

3. The Saratoga County Planning Board in its letter of October 18, 2019 pointed out that any work within the right of way of Charlton Road (County Route 51) would require a permit from the Saratoga County Department of Public Works. While the application does not propose any improvement of the driveway, the utility work on the existing pole to route power and fiber below ground is likely within the county right of way and may require a permit. It is the applicant's responsibility to review the work with the DPW and obtain any necessary permit.

APPLICATION MATERIALS:

The application for an exceptional use permit for a telecommunication tower is specifically outlined in Local Law #1 of 2015 in Appendix B-14 of Charlton's Zoning Ordinance. As part of our review, we examined the applicant's materials for compliance with the required submittals. We offer the following comments on the application format.

1. Section 3(a)(v)(9) of the local law requires the applicant to evaluate existing towers or tall structures as an alternative to constructing a new tower. Cellco Partnership did evaluate the Town's water tower on Cherry Lane in early 2016 but usage of the water tower could not be arranged. Cellco already occupies the tower on Jockey Street in Charlton and several other communication towers in neighboring towns. In order to achieve the desired coverage area, it would not seem that there are any other practical existing structures that could be considered. **No response is required from the applicant. This comment merely summarized the completion of the applicant's due diligence in consideration of alternative antenna locations.**
2. The applicant has demonstrated the need for signal coverage with propagation plots included in section 6 of their application. Their existing coverage for 4G service indicates unsatisfactory signal strength along much of the central and western limits of the Town. Service need was also anecdotally confirmed by many town residents that spoke at the public hearing for consideration of placing antenna on the water tower. While the propagation plot for the proposed 120 foot monopole on Charlton Road does close much of the poorly served areas in Town, there remains an absence of coverage on Sacandaga Road between Charlton Road and NYS Route 67. As required by 3(a)(v)(8) of the ordinance, the applicant should inform the Board of any plans to supplement their current proposal over the next five years and how service to the Sacandaga Road corridor might

otherwise be improved. **New material is included in section 6 of the application. A letter dated September 10, 2019 from Radio Frequency Engineer Rich Andras of Verizon Wireless explains that "... current priorities and forecasts indicate that no new Verizon Wireless facilities will be developed in Charlton in the next 5 years." The letter does admit that such long range predictions can be difficult.**

3. Section 3(a)(v)(17) of the local law requires the applicant to notify the legislative bodies of every municipality that border Charlton. Cellco should confirm the notification. **On page 7 of the application narrative, Cellco has confirmed that they have notified the requisite adjacent municipalities. They have promised to provide an affidavit of mailing with a copy of the notice under separate cover. We have not seen these other materials.**
4. Section 3(r) of the local law requires the applicant to name the Town of Charlton as an additional insured party. There are no supporting materials in the application and no mention that the required insurance coverage will be provided. The Town Attorney should approve the format of the insurance coverage and may require an endorsement page to be included with the certificate. **On page 7 of the application narrative and in the September 16, 2019 letter in section 11, the applicant has agreed to name the Town as an additional insured. The proof of insurance should be supplied prior to the issuance of a building permit and must be approved by the Town Attorney.**
5. Section 3(a)(v)(14) of the local law requires the applicant to assess the use of alternative facility designs and color schemes. There are no such alternatives offered in the application. Cellco should seek direction from the Board as to whether consideration of alternative designs is warranted for this application. **The current application still does not contain any alternative designs or color schemes. Such measures are not always appropriate, and it is up to the Town Board to request this additional information if it believes consideration is warranted.**
6. In section 11 of the application, Cellco has included a letter expressing their intent to negotiate in good faith to share space on the tower with other providers. The letter also commits to notifying the Code Enforcement Officer if the use of the tower is to be terminated and that they will remove the tower upon its discontinuance. They also have agreed to post a removal bond in the amount of \$100,000. The bond should be approved by the Town Attorney and be in place prior to the issuance of a building permit for the tower. **No response is required from the applicant. The removal bond and its approval by the Town Attorney remains necessary before a building permit.**
7. Section 3(a)(v)(18) of the local law requires the applicant to demonstrate compliance with FCC maximum permitted exposure levels for radio frequency (RF) emissions. Section 7 of

the application includes an analysis report by a Cellco retained Professional Engineer that confirms that exposure from this facility will be less than 1% of the federal safety standards. This is typical of wireless communications equipment. The Federal Telecommunication Act of 1996 precludes state or local governments from regulating telecommunication facilities on the basis of environmental effects of RF emissions as long as the federal guidelines are met. **Section 7 contains the original October 27, 2016 report by Radio Frequency Engineer Paul Dugan confirming that the facility is well within FCC maximum permitted exposure levels. As a practical matter, we believe that the applicant should apply a current date to that report so that the record will eliminate any uncertainty that there could have been changes in the standards or to the equipment proposed to be used. We note that other exhibits in the application such as the non-interference and commitment to co-locate letters were given more recent dates.**

8. Section 3(a)(v)(19) of the local law requires that an air safety analysis in compliance with Federal Aviation Regulations (FAR) Part 77 be performed. In section 10 of the application, Cellco has submitted results from two online federal government analysis tools relevant to this requirement. The FCC Towair tool determined that registration of the tower was not required as it was more than 5 miles from the nearest airport. The FAA Notice Criteria Tool did conclude that the project should be filed in accordance with FAR 77.9. It should be noted that these online tools do not constitute the required compliance with FAR Part 77 or Charlton's local law. Prior to the issuance of a building permit, the applicant should submit a disposition from the FAA to show that they did indeed follow up with the Part 77 filing.

We note that the proposed tower height of 120 feet does not require FAA obstruction lighting. Additionally, the proposed location of the tower is 8.8 miles from the Saratoga County Airport, 6.0 miles from the Schenectady County Airport and 3.9 miles from the privately owned "Snow" airport on Sacandaga Road just north of Route 67. The proposed tower does not align with any of the runways from those nearest airports. We do not anticipate that any changes to the proposed tower will result from the FAA review. **The Towair analysis and FAA Notice Criteria Tool in section 10 are the same as in the original 2016 application. During the 2019 balloon test, it appeared that the applicant had shifted the proposed tower location approximately 150 feet to the east. A comparison of the Site Plan drawings from the two applications, though at very small scales, also seems to indicate a move to the east. Although we do not believe that such a small adjustment will make any difference, considering the ease by which the reports can be repeated, we suggest updating each so that the record will be correct. Submittal of the final disposition from the FAA remains necessary prior to a building permit.**

VISUAL IMPACTS:

On May 9, 2019, Cellco Partnership conducted a second balloon test to study visual impacts. As mentioned, we believe that the location of the proposed tower was

shifted approximately 150 feet due east from the 2016 balloon test. Three balloons were suspended at heights of 120, 140 and 160 feet above ground level. We drove the perimeter roads during both the 2016 and 2019 tests, took photos and prepared a sketch map of the viewshed. Our viewshed maps and key photos are included with this letter. Section 9 of the current application includes the applicant's 2019 photos from 55 locations. Photo simulations of the view after construction are included for areas where portions of the tower will be visible. The applicant's photos and simulations are consistent with our observations. In our opinion, the shift of the tower location to the east had no observable difference in the visual impact of the proposed tower from any location. Repeated below are the comments from our 2017 letter that summarized our observations from various locations on the roads around the tower location. These comments remain true for the current proposed tower location.

Charlton's Telecommunications Law requires an applicant to supply the following materials related to the visual impacts of their proposal.

- A Visual Environmental Assessment Form
- A Zone of Visibility Map
- "Before" and "After" photo simulations from key viewpoints
- An assessment of the visual impacts of the tower base and accessory buildings

Section 9 of the application includes information related to the first three visual impact items listed above. On pages 4 and 5 of the application narrative preceding section 1, the visual impact of the tower base and accessory equipment is discussed. The applicant discounts the need for any proposed screening or new vegetation at the base as it will not be visible from any location other than the Hunt property.

Perhaps more practical than the information supplied in the application was the performance of a field balloon test on December 16th. A large balloon was suspended at the proposed tower height and location that morning allowing interested parties to drive the perimeter roads and observe the view that will result from building the tower. We participated in this test and have attached a highlighted area map and several photos summarizing our observations. Based on the balloon test, the bottom third of the tower and the accessory buildings will certainly not be visible from any location other than the Hunt property. We would agree that there would be little benefit to screening the base facilities.

Generally, the tower is either not visible or is significantly muted by the tree lines from most areas. The tower is more than 1,000 from any roadway and does not line up with any roads so that a prolonged view for travelers would result. The tower will not be visible from the Elmer Smith Park or the Cherry Lane residential area. It is also unlikely that homes on the south side of Charlton Road will have any view of the tower. It will not be visible from the east and west ends of Charlton Road near the Maple Avenue and Jockey Street intersections respectively. The central portion of Charlton Road including the Town Hall will have a marginal visibility of the very top of the tower just above the tree line from the rear yard of those properties. (Photo #6)

Jockey Street will have very limited views of the tower. An obstructed view of the tower through the trees may be possible for a short stretch just north of the Town Garage. A clearer view of the top section will be visible about 0.6 miles north of Charlton Road. An open field on the east side of Jockey Street will allow a view of the top 20-30 feet of the tower just above the tree line. (Photo #5) This view is available for a length of only a few hundred feet on Jockey Street. The tower will not be visible at any point farther north. For the most part, Jockey Street views will be from the roadway and yards. Due to vegetation and terrain, there did not seem to be any significant views of the balloon directly from any homes along Jockey Street.

Maple Avenue will have the most direct views of the cell tower. Working north from the Charlton Road intersection, there is no visibility of the tower for the first 0.25 miles. For the next 0.15 miles, north, there is an obstructed view of the top 20-30 feet of the tower through and/or above the tree line. (Photo #4) There are three homes on the west side of Maple Avenue within that partial view zone. From about 0.4 miles to 0.6 miles north of the Charlton Road intersection, there will be a direct view of the top one third to two thirds of the tower. There are two homes within that direct view range. (Photos #1, 2 & 3)

SITE PLAN COMMENTS:

Included in section 12 of the application were several 11"x17" plans depicting the layout of the 120 foot monopole and its associated equipment platform. Section 3g of Charlton's telecommunications law requires a site plan review of the proposed facility. Site plans for telecommunications towers are much less detailed than other commercial applications as there are little or no water, sanitary or stormwater management facilities. Generally, site plan issues are concerned with the safe setback of the tower and issues related to the access. We offer the following comments related to the layout of the proposed facilities.

1. Approval of the facility should be contingent upon the applicant submitting plans signed by a Professional Engineer for the tower and its foundation prior to the issuance of a building permit. **Submittal of plans for the tower and its foundation remain necessary before a building permit is issued.**
2. The overall site plan (sheet C-1) calls for utilization of an existing gravel drive with notes for "contractor to install new gravel drive as needed." From aerial photos, it appears that several hundred feet of new gravel drive will need to be constructed. Topographic mapping also suggests that a small stream crossing may be necessary about one third of a mile from Charlton Road. Additionally, the plans call for utility trenching along the entire length of the access road. We estimate that the disturbance associated with this work and the tower complex is less than half an acre. Although a SPDES construction permit does not appear necessary, basic erosion and sediment control practices should be implemented especially in the area of any stream crossing. The applicant should also determine if a stream crossing permit is necessary and inform the Town. The plans should detail any stream crossing and new culvert and should also call out erosion and sediment control practices. **The plans now indicate that there is an existing culvert where the small stream is crossed so presumably no stream permit will be**

necessary. The new site plan (C-1) also includes a note calling for the installation of silt fence. However, the note is somewhat confusing, and it is difficult to know where the silt fence is proposed. Silt fence should be used to prevent any disturbed soils or newly placed gravel from eroding into the wetland areas. A larger scale plan showing the installation of silt fence on each side of the access road to protect the wetlands would better illustrate the required erosion protection to the contractor.

3. The applicant should provide information on any utility connections or new utility facilities on Charlton Road. For example, will there be a new transformer, electrical upgrades, meters or communications equipment? **Page 3 of the application narrative explains that power and fiber will come off utility pole NM #36 on Charlton road next to the existing driveway. Those utilities will be brought to the ground and will run along the access road back to the proposed tower. The location of the proposed underground utilities is also shown on the site plan.**
4. The applicant should discuss the need to identify access to the site on Charlton Road with the Board. The site address should also be coordinated and displayed on Charlton Road. We also recommend that a sign be posted on the front gate of the facility with a telephone number so that emergency responders can contact the facility manager. Notes and/or details should be added to the plans to illustrate these requirements. **The plans and new text on page 5 of the application narrative call for the site address to be posted near Charlton Road. More specific information should also be displayed on the entrance gate of the 75'x75' fenced compound that will allow first responders to make immediate contact with a representative of the company in the event of an emergency. Details of the two signs should be added to sheet C-5.**
5. Will an emergency generator be included within the complex? If so, the applicant should provide model information and the schedule for exercising the generator. The anticipated noise levels at the nearest home (roughly 800 feet) should also be provided. **New text on page 3 of the application narrative confirms that a generator will be on site and will run weekly for approximately 20 minutes typically on Tuesday morning at 9:00 am. The narrative notes that a noise report will be submitted under separate cover. We have not seen that report. Charlton does not have a specific noise ordinance. Generally, noises above 85 db (decibels) are considered harmful with prolonged exposure. This may be a reasonable benchmark to use for the sound level at the nearest home. Higher noise levels are safe for limited times like the 20 minute generator cycle but can be an annoyance.**
6. Record mapping indicates that there are New York State DEC jurisdictional wetlands in the vicinity of the proposed access road. Extension of the gravel may, at the very least,

encroach into the 100 foot wetland adjacent area. The applicant should provide a delineation of the wetlands and determine the need for a permit. **New text on page 3 of the application narrative indicates that the wetlands adjacent to the access road have been field verified by NYS DEC. As some of the proposed work will be done within the 100 foot buffer of the state wetlands, the applicant must secure a permit from DEC.**

7. Section 3(h)(i) requires the lease parcel to be sized so that it meets the setback requirements. The setback requirements must be sufficient to include ice-fall and a tower failure. The full height of the tower is normally considered to be the setback. Although the lease parcel is not large enough to meet this requirement, the legislation does provide for the possibility of a waiver by the Board. A 124 foot radius from the tower would encumber only lands owned by the tower lessor used for agricultural purposes. There are no structures or occupancy within the tower radius. A waiver may be warranted under these conditions.
8. Sheet C-5 shows an abrupt 90 degree turn in the access road where it leaves the tree line and approaches the tower compound. A very small tee turnaround is also proposed outside the front gate to the compound. The applicant should ensure that the gravel surface is sufficient to provide for the turning radius and turnaround needs of a 30 foot long fire truck. A cross sectional detail of the gravel road should be added to the plans for the necessary extension. The cross section should be sufficient to support the 50,000 lb. weight of a fire truck. **The access and turnaround near the fenced compound have been greatly improved by the new plans. The thickness of the proposed gravel is also now shown on sheet C-5 and is a satisfactory design. Since most of the access road will simply utilize the existing surface, confirmation of its adequacy for a fire truck is unavailable. We suggest that the Town have a representative on site when some of the initial gravel is delivered. This will provide a means to proof roll the first half of the access road.**

Very truly yours,



Michael S. McNamara, P.E.

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Cc: Town Board
Planning Board
James Craig, Esq. Town Attorney
David Brennan, Esq. Applicant's Counsel

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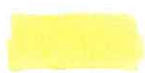
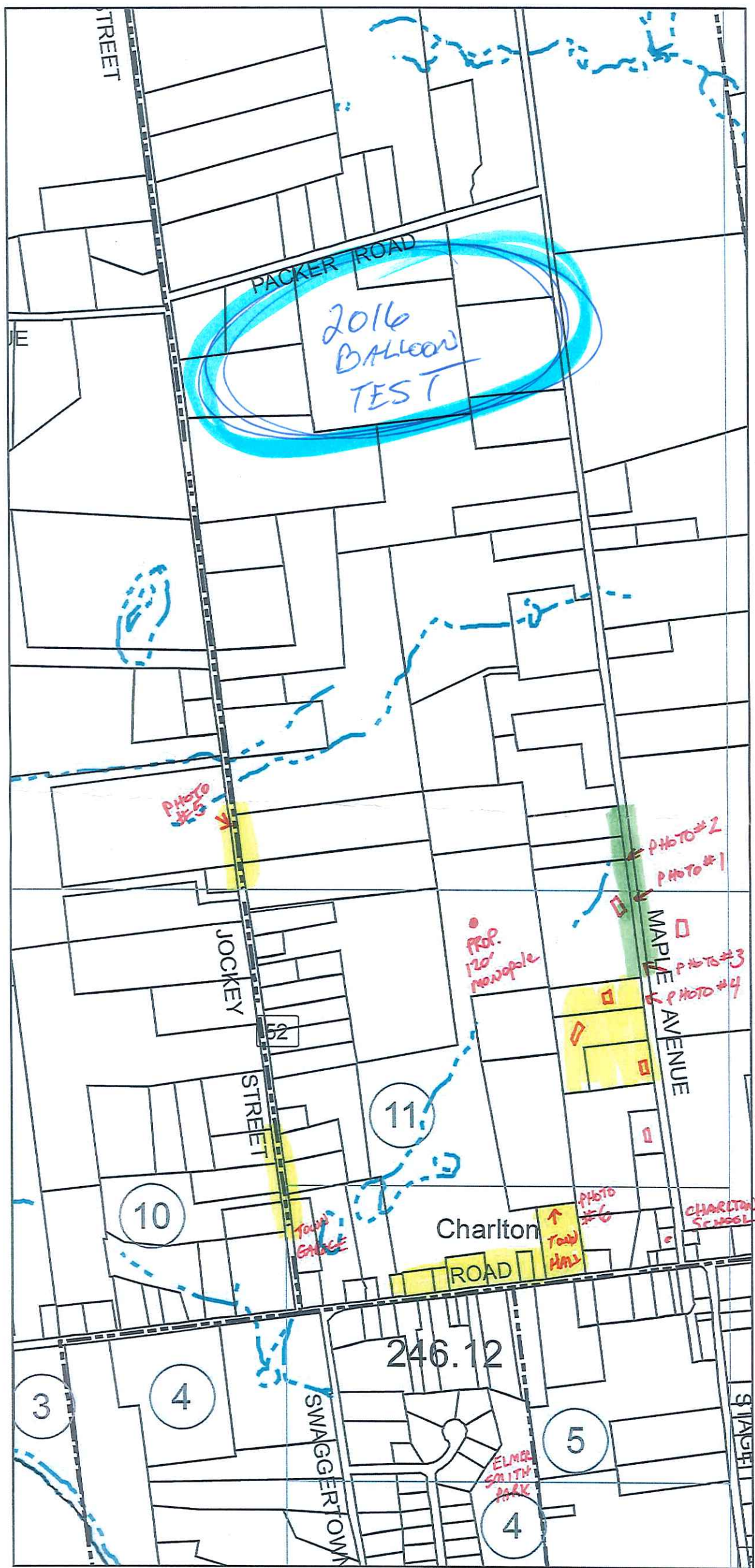
**SUGGESTED CHECK LIST
CELLCO PARTNERSHIP APPLICATION
OCTOBER 22, 2019**

REVISIONS TO APPLICATION:

1. Provide Visual EAF Addendum for 2019 application.
2. Renew date on wireless coverage report (Sect. 6), correct diagram labels on Fig. 2 and Exhibit 2.
3. Renew date on Maximum Permitted Exposure letter in Section 7.
4. Provide affidavit of mailing to adjacent municipalities if not already submitted.
5. Provide noise report on generator/confirm reasonable noise level at adjacent homes.
6. Revise tower location on TOWAIR analysis and FAA Notice Criteria Tool.
7. Illustrate necessary silt fence protection along access road in vicinity of wetlands.
8. Add details on sheet C-5 for contact information sign on gate of compound and address marker on Charlton Road.

PRIOR TO BUILDING PERMIT:

1. Obtain permit from NYS DEC for disturbance within 100-foot wetland buffer & confirm with Building Department.
2. Consult with Saratoga County DPW on work within Charlton Road right of way and obtain permit if necessary & confirm with Building Department.
3. Provide final disposition from FAA showing compliance with Part 77 filing.
4. Provide proof of insurance in form and amount to be approved by Town Attorney and naming the Town of Charlton as an additional insured.
5. Provide a removal bond in form and amount to be approved by Town Attorney.
6. Submit plans stamped by a Professional Engineer for the Tower and its foundation to the Town of Charlton Building Department.
7. Coordinate with Town Building Department to witness an informal proof rolling of the existing driveway when heavy equipment/material delivery will be on site.
8. Ensure satisfaction of any conditions of approval.



limited view. top of tower coincides
with tree line.



Unobstructed view of top 1/3 to 2/3 of tower

PHOTO #1





PHOTO #2



PHOTO #3



PHOTO #4

PHOTO #5





PHOTO #6

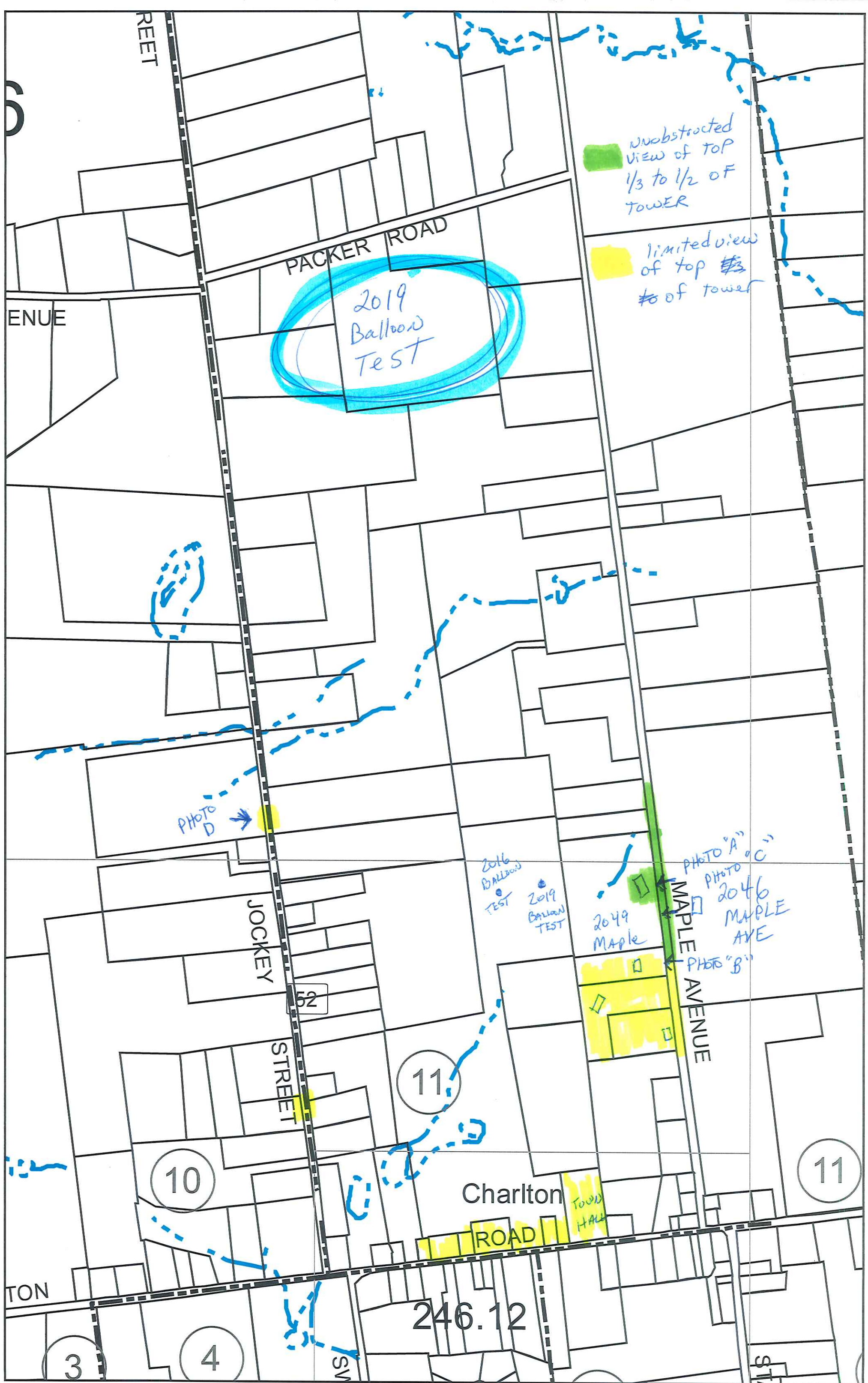


PHOTO A

120 FT HEIGHT
(BOTTOM
BALLOON)





PHOTO B
VIEW FROM FIELD AT 2046
MAPLE AVE.



120 FT.
BALLOON
HEIGHT

PHOTO C

PHOTO D
VIEW FROM JOCKEY STREET

120 FT. HEIGHT
(BOTTOM BALLOON)

