

Matthew T. Kerwin
Counsel

October 16, 2018

VIA OVERNIGHT MAIL
VIA ELECTRONIC MAIL

Town of Dryden
93 East Main Street
Dryden, New York 13053
Attn: David Sprout, Code Enforcement Officer

Re: Crown Castle (“Crown”) and Sprint
Eligible Facilities Request Pursuant to Section 6409 of TRA
Site Name: Tompkins Community College (Site BU-5800126)
Site Address: 20 Far View Drive, Dryden, NY 13053

Dear Mr. Sprout:

We represent Crown and Sprint which together propose to install wireless telecommunications equipment for use by Sprint on the existing Crown-owned tower at the above referenced address.

Introduction to Section 6409

Sprint is a federally licensed wireless provider and seeks approval to upgrade and install its equipment pursuant to Section 6409 of the federal Middle Class Tax Relief and Job Creation Act of 2012 (47 U.S.C.A. §1455) (“TRA”), signed into law by the President on February 22, 2012.¹ While the Town retains discretionary zoning review over construction of new towers, simple co-locations and/or equipment upgrades, such as reflected in this application, must now be approved through a non-discretionary review process, thus the submission of the enclosed building permit application. A copy of Section 6409 is enclosed for your review.

The law provides that:

“a State or local government may not deny, and shall approve, any eligible facilities request for a modification of an existing wireless tower or base station that

¹ See February 2012 link located at <http://www.whitehouse.gov/briefing-room/signed-legislation>.

does not substantially change the physical dimensions of such tower or base station.”
(Emphasis added.)

The federal law defines an “eligible facilities request” (“EFR”) as “(A) collocation of new transmission equipment; (B) removal of transmission equipment; or (C) replacement of transmission equipment.” The new law authorizes the immediate installation of these eligible facilities to help improve the economy, create jobs, and speed the deployment of the services they provide.

FCC’s New Rules

The FCC issued a Report and Order on October 21, 2014 concerning the implementation of Section 6409². The Report and Order states at paragraph 107: “State and local governments may only require applicants to provide documentation that is reasonably related to determining whether the request meets the requirements of [Section 6409].” As a result, for an EFR submittal a wireless carrier is not required to provide information relative to need (*i.e.*, RF maps showing signal coverage) or any information related to collocation on alternate sites.

In addition, the Report and Order requires a maximum 60-day period for review of a wireless provider’s EFR, including the time to determine whether the application is complete. The FCC found this 60-day period appropriate in light of the very limited scope of non-discretionary review applicable to EFRs submitted under Section 6409. Based on this standard, this EFR must be approved by December 15, 2018.

Section 6409 Benefits Your Community and has been Embraced Across the Country

Acknowledging that there is no valid basis in zoning to deny an application such as the one proposed here, municipalities across the nation have approved installations under Section 6409 with the issuance of a building permit. With the new federal law providing guidance, municipalities have been quick to embrace the benefits of a streamlined administrative review for simple collocations and equipment modifications. Unlike the construction of a new tower, simple collocations such as this one have been quickly approved to expedite the deployment of wireless broadband. Municipalities want their residents, businesses and emergency responders to benefit from improved wireless coverage and the latest technology (4G LTE for the iPhone and other handsets) as quickly as possible.

Application Must Be Approved

The present application must be approved under this federal law because the proposed installation involves “a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station.”

² A copy of the Final Rule as published in the Federal Register can be found at:
<http://www.gpo.gov/fdsys/pkg/FR-2015-01-08/pdf/2014-28897.pdf>

As shown on the enclosed plans prepared by Dewberry Engineers, Inc., Sprint's proposed installation will consist primarily of the following:

- 1) Installation of six (6) panel antennas at a centerline height of 126' on the existing 140' monopole tower;
- 2) Installation of twelve (12) RRHs on the tower at a height of 126';
- 3) Installation of three (3) hybrid cables to be mounted inside the tower and connect the antennas to Sprint's ground equipment;
- 4) Installation of one (1) 10' by 10' steel equipment platform within Sprint's 12' by 20' lease area, which will be contained entirely within the existing tower compound;
- 5) Installation of one (1) cable bridge from the tower to the equipment platform; and
- 6) Installation of ECAB and BCAB equipment cabinets, as well as one PPC mounted to h-frame and related equipment on the equipment platform.

Evaluating the proposed collocation under Section 6409 and the FCC's Report and Order, it is clear that the modification does not result in a significant change to the eligible support structure because:

1. it does not increase the height of the tower by more than 10% or the height of one additional antenna array with separation from the nearest existing antenna not to exceed twenty feet, whichever is greater. In fact, Sprint's antennas will be located below the existing antenna array on the tower;
2. it does not involve adding an appurtenance to the body of a tower that would protrude from the edge of the tower more than twenty feet, or more than the width of the tower structure at the level of the appurtenance, whichever is greater;
3. it does not involve installation of more than the standard number of equipment cabinets for the technology involved;
4. it does not entail any excavation or deployment outside the current site; and
5. it does not defeat the concealment elements of the eligible support structure.

As a result, Sprint's installation "does not substantially change the physical dimensions of such tower or base station." The installation will enhance wireless communication services to the community and will enable users to access a state-of-the-art system for voice communications, messaging, and data transmission and reception.

Sprint respectfully requests that the Town approve the EFR as soon as possible so that work can commence. Enclosed are the following materials in support of the EFR:

- Exhibit 1: completed application forms;
- Exhibit 2: insurance certificates listing the Town as certificate holder;
- Exhibit 3: environmental assessment form;
- Exhibit 4: structural analysis report;
- Exhibit 5: RF emissions compliance report;
- Exhibit 6: redacted Crown lease agreement; and
- Exhibit 7: Section 6409.

We have also enclosed the following for your review:

- 7 sets of project plans;
- Checks for \$1,000 (application fee) and \$7,500.00 (escrow fee); and
- 7 sets of this EFR package.

Please place this matter on the next agenda of the Town Board. If you have any questions, please contact me at the number below.

Very truly yours,



Matthew T. Kerwin

Enclosures

1



Planning Department

Director of Planning Ray Burger
 Code Enforcement Officer David Sprout
 Code Enforcement Officer Steve Cortright
 Zoning Officer Ray Burger
 Stormwater Manager David Sprout
 Administrative Coordinator Joy Foster

93 East Main Street
 Dryden, NY 13053
 T 607 844-8888 Ext. 216
 F 607 844-8008
 joy@dryden.ny.us
 www.dryden.ny.us

General Permit Application – Sheet 1 General Information

DO NOT FILL IN SHADED SECTIONS

Date: 10/16/18 Tax Parcel #: 37.-1-8.2 Zoning District: RR

(COMPLETE)

Project Address: 20 Far View Drive

Project Description: Crown Castle and Sprint propose to install antennas and related equipment on the existing tower and within Sprint's ground lease area to be used by Sprint to provide wireless service.

Estimated project cost: \$20,000

Principal Use: Residential _____ Commercial: _____ Other: public utility telecommunications facility

Permit(s) Required: Building Zoning Special Use Site Plan Review Subdivision Pool
 Heating Demolition Pre-built Shed

Permit Application - Contact Information

Owner - Print name: Crown Castle

Owner Signature required & dated: Matthew T. Kerwin, Attorney

COMPLETE MAILING address, PRINT :



Agent / Applicant - Print : Matthew T. Kerwin, Attorney

Address: Barclay Damon, LLP 125 E. Jefferson St. Syracuse State: NY Zip Code: 13202



General Contractor: Crown Castle

Address: 3 Corporate Park Dr., Ste. 101 City: Clifton Park State: NY Zip Code: 12065



Mason Contractor: N/A
Address: _____ City: _____ State: _____ Zip Code: _____
E-mail: _____ Telephone No: _____

Electrical Contractor: TBD
Address: _____ City: _____ State: _____ Zip Code: _____
E-mail: _____ Telephone No: _____

HVAC Contractor: N/A
Address: _____ City: _____ State: _____ Zip Code: _____
E-mail: _____ Telephone No: _____

Plumbing Contractor: N/A
Address: _____ City: _____ State: _____ Zip Code: _____
E-mail: _____ Telephone No: _____

Surveyor: N/A
Address: _____ City: _____ State: _____ Zip Code: _____
E-mail: _____ Telephone No: _____

Note: The Town of Dryden will keep your contact information private.

To be completed by Planning Department personnel:

Worksheets / sections required:

- | | |
|---|---|
| <input type="checkbox"/> Site Plan Sketch Fee : \$250 | <input type="checkbox"/> Driveway or Roadcut Compliance |
| <input type="checkbox"/> Site Plan Review (See Fee Schedule) | <input type="checkbox"/> Notices and Disclaimer Acknowledgement |
| <input type="checkbox"/> Special Use Permit (See Fee Schedule) | <input type="checkbox"/> Agricultural Data Statement |
| <input type="checkbox"/> Notice of Ground Disturbance | <input type="checkbox"/> County Review |
| <input type="checkbox"/> Zoning Permit Fee : \$25 | <input type="checkbox"/> Minor Subdivision Fee : \$25 |
| <input type="checkbox"/> Varna Compliance Worksheet | <input type="checkbox"/> Major Subdivision (See Fee Schedule) |
| <input type="checkbox"/> Residential Design Guidelines Compliance | <input type="checkbox"/> Demolition |
| <input type="checkbox"/> Commercial Design Guidelines Compliance | <input type="checkbox"/> Lot line Adjustment |
| <input type="checkbox"/> Sign Compliance Worksheet | |

Notes:

Building Permit Information

Type of Construction: Wood _____ Steel Masonry _____ Other _____
Number of Stories N/A
Type of Heat & Fuel Source N/A
Number of dwelling units: circle Single Duplex Multi Commercial N/A
Number of Baths: N/A Number of Bedrooms: N/A

* existing tower
see plans for installation information and specifications

Site-built: _____ Modular: _____ Manufactured: _____
Square Footage: First Floor: N/A Second Floor: _____
Basement: N/A Garage: _____
Project Cost: \$ 20,000

Fee: _____

Basic Building Information

Is this an Existing Building? existing tower, Current Occupancy: _____ New Occupancy _____

Is this a New Building? NO, Zoning Permit Needed? _____

Number of Dwelling Units: NA, Proposed Change: N/A

Zoning Permit Information

Zoning District: RR, Subdivision Plat: _____, Lot Area: _____, Height of Building: _____

Zoning Use: telecommunications facility, Site Plan Review and/or Special Use Permit on file: _____

Other Permit(s) Required: Special Use, Site Plan Review, Sign: _____

ZONING COMPLIANCE

Site Plan: Please complete the Site Plan Worksheet

Principal Use: telecommunications tower

New or Change of Use: Y/N Zoning Permit Required (New use and building)? _____

Required Setbacks: Front _____ Side _____ Rear _____ Frontage _____ no change

Does this project comply with Zoning Regulations? Y/N Project cost: \$ 20,000

Building Permit Approved _____ Building Permit Denied _____

Under Section _____ (of the NYS Building Code)

Signature of Code Enforcement Officer _____ Date _____

Zoning Permit Approved _____ Zoning Permit Denied _____

Building Permit # _____ Zoning Permit # _____

N/A

Pre-built Shed

Dimensions _____ Electric Yes / No Plumbing Yes / No Heat Yes / No

Placed on _____

Installers Insurance submitted Yes / No **OR** Homeowners Insurance waiver signed Yes / No

Does this project comply with Zoning Regulations? Yes / No Project cost: _____

Heating Appliance

Type of Appliance: Boiler _____ Forced Air _____ Freestanding _____ Insert _____ Fireplace _____
Type of Fuel Source: Oil _____ Propane _____ Nat. Gas _____ Coal _____ Wood _____ Biomass _____ Other _____
Chimney or vent type: Masonry _____ Metal _____ Other _____

Manufacturer and number _____
Provide manufactures specifications and location of appliance in the structure including location of vent or chimney. _____

Installers Insurance submitted Yes / No **OR** Homeowners Insurance waiver signed Yes / No

Does this project comply with Zoning Regulations? Yes / No Project cost: _____

Demolition

Demolition of _____ Location _____

Debris buried and where _____ Debris removed and where _____

Required Disconnects Obtained - Date: Tompkins Co. Health Dept. _____ Electric Co. _____

Demolisher's Insurance submitted Yes / No **OR** Homeowners Insurance waiver signed Yes / No

- Site Plan: where the demolished structure is now situated and where it is to be buried.
- **Copy of the receipts or the tipping fees** from the land fill if debris is removed from site.
- Asbestos survey of the structure to be demolished has to be submitted with this application. Single-family residence and farm building are exempt from this requirement if the owner is performing the work.
- Delineation of any DEC or Federal Wetlands, any streams or watercourses and any other water shall be noted on the site-plan submitted with this application

Swimming Pool

Aboveground pool Yes / No In-ground pool Yes / No Pool dimensions _____

Location site _____

Installers Insurance submitted Yes / No **OR** Homeowners Insurance waiver signed Yes / No Safety handout given Yes / No

Does this project comply with Zoning Regulations? Yes / No Project cost: _____

- Renters / Tenants must provide proof of owner approval for this project
- Barriers & Alarms are required. Pools with a deck need a building permit
- Inspection sheet will be mailed with permit
- A **final** inspection from the Town of Dryden Code Enforcement is **Mandatory** to close out permit and allow pool use

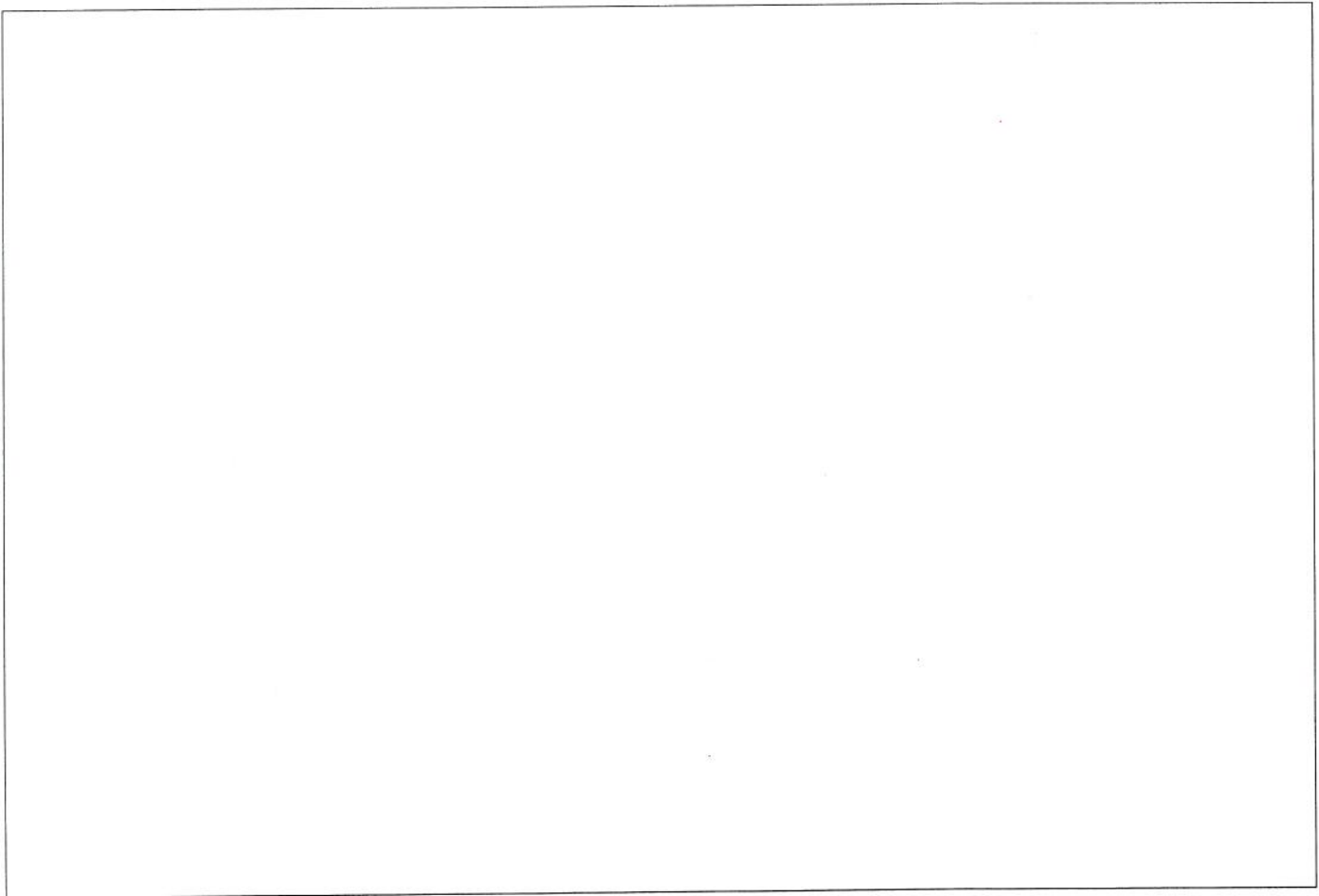
* see plans

Permit Application Worksheet – Site Plan Sketch Worksheet

In the space below, or on an attached plan, please provide a simple site plan sketch showing the proposed and existing structures (building, garage, fence etc.) as well as any wells and septic systems, or water and sewer lines. You may show the information on a copy of a survey or tax map as long as it is accurate. You are encouraged to write a description of what you want to do in a letter to accompany the drawing, or on the drawing itself.

Please show the following as they apply to your project (see Zoning Section 1102):

- The lot, dimensions and features including road frontage.
- Location of proposed and existing structures, parking areas, stormwater management and other features as applicable.
- All existing and proposed driveway & road cuts.
- Topographical features (hills, ravines, etc.) and proposed changes.
- **Yard dimensions and setbacks** including nearby streets, buildings, rights of way and easements within 500 or so feet and names of adjoining property owners.
- Waterbodies and wetlands.
- Water and Sewer Facilities, and/or Well and Septic Facilities.
- Utilities (power lines, phone lines, gas lines etc.),
- Scale (estimate okay)
- North arrow



NOTICE

To: All APPLICANTS of Building Permits, Special Permits, Zoning Variances and All other Type of Required Reviews or Permits Issued by the Town of Dryden.
Effective Date: September 14th, 1988.

Sub: Violation of any Part or Parts of, the Town of Dryden Zoning Ordinance or Title 19 N.Y.C.R.R. (Administration and Enforcement of the Uniform Building & Fire Prevention Code).

Be Advised as Follows:

Due to the ongoing disregard of both the N.Y.S. Building & Fire Prevention Code and the Dryden Town Zoning Ordinance, the Town of Dryden will **STRICTLY ENFORCE** all REQUIREMENTS & REGULATIONS of both. The following will be the general policy of the Town and this office:

- 1). No BUILDING PERMITS will be issued to any applicant until such time that all other required permits, certificates and documents have been submitted to this office and found to be acceptable and complete.
- 2). No PUBLIC HEARINGS or TOWN REVIEWS will be scheduled for any purpose until this office has reviewed and found that all applications & supporting documents are 100% complete and that all necessary supporting documents are found to be accurate and complete.
- 3). If at any time prior to the issuance of any above permit or authority to proceed has been granted, it is found that CONSTRUCTION or OCCUPANCY has begun or taken place, the violator and property owner will be PROSECUTED in a court of law by this office or the Dryden Town Legal Authority.
- 4). After necessary permits have issued, if it is found that any holder of any permit takes occupancy, opens its doors to the public or uses a permitted device without obtaining a CERTIFICATE OF OCCUPANCY or CERTIFICATE of COMPLIANCE, the holder of that permit will be PROSECUTED in a court of law by this office or the Dryden Town Legal Authority.
- 5). In summary, no violation or noncompliance of either the Dryden Town Zoning Ordinance or the New York State Building & Fire Prevention Code will be tolerated by the Town of Dryden. No violation of any local, county, state or federal law or regulation will be tolerated either. Action will be taken against all violators. Penalties for such violations are, \$100.00 per day not more than 15 days in jail or both. Each day's breach shall constitute a new and additional violation.
- 6). All fees and reimbursable expenses must be paid within, 10 days of billing by the Town of Dryden. There may be more than one billing. No permits will be issued until such fees are paid.

Applicants Signature *W. J. Kelly T. Korman*, Attorney

Date 10/16/18

Applicable Laws and Resolutions

**Town of Dryden Zoning Ordinance
Adopted August 6, 2012
Section 1202: Town Board Action**

The Board shall not issue a Special Use Permit unless it determines that the proposed use will satisfy the standards set forth herein. In order to make such a determination, the Board may attach reasonable conditions to its approval. Such conditions must be directly related and incidental to the proposed Special Use Permit. The Town Board shall consider the standards outlined below in their determination:

- A. Compatibility of the proposed use with the other permitted uses in the district and the purposes of the district set forth in this Ordinance;
- B. Compatibility of the proposed use with adjoining properties and with the natural and manmade environment;
- C. Adequacy of parking, vehicular circulation, and infrastructure for the proposed use, and accessibility for fire, police, and emergency vehicles;
- D. The overall impact on the site and its surroundings considering the environmental, social and economic impacts of traffic, noise, dust, odors, release of harmful substances, solid waste disposal, glare, or any other nuisances;
- E. Restrictions and/or conditions on design of Structures or operation of the use (including hours of operation) necessary either to ensure compatibility with the surrounding uses or to protect the natural or scenic resources of the Town;
- F. Compliance with the requirements for site plan review, including conformity to the Town's Residential and Commercial Design Guidelines.

General Permit Application Worksheet – Special Use Permit

Responses

A. Compatibility of the proposed use with the other permitted uses in the district and the purposes of the district set forth in this Ordinance;

Response: The proposed installation of antennas and related equipment by Crown Castle/Sprint on the existing tower located at 20 Far View Drive will not be incompatible with the underlying zoning district and uses in the area. The Crown Castle tower is a preexisting structure and was approved by the Town with the understanding that it would be used to accommodate future wireless carriers seeking to collocate antennas on the structure. Sprint's proposed installation qualifies as an Eligible Facilities Request under Section 6409 of the federal Middle Class Tax Relief and Job Creation Act of 2012, and therefore must be approved by the Town.

B. Compatibility of the proposed use with adjoining properties and with the natural and manmade environment;

Response: As mentioned above, the tower currently exists and was designed to accommodate collocation by wireless carriers. Sprint simply intends to install its equipment on the tower as depicted in the accompanying plans. The installation will be contained entirely within the previously approved tower compound area and is therefore compatible with the surrounding environment.

C. Adequacy of parking, vehicular circulation, and infrastructure for the proposed use, and accessibility for fire, police, and emergency vehicles;

Response: The proposed installation will not require parking or vehicular circulation improvements as the existing access road and parking/turnaround are more than adequate. Sprint technicians will visit the site periodically to monitor and maintain Sprint's equipment. Additionally, Sprint's installation will not impede in any way emergency access to the site.

D. The overall impact on the site and its surroundings considering the environmental, social and economic impacts of traffic, noise, dust, odors, release of harmful substances, solid waste disposal, glare, or any other nuisances;

Response: The Crown Castle tower is a preexisting structure and was approved by the Town with the understanding that it would be used to accommodate future wireless carriers seeking to collocate antennas on the structure. As such, there will be no additional impacts. Further, Sprint's proposed installation qualifies as an Eligible Facilities Request under Section 6409 of the federal Middle Class Tax Relief and Job Creation Act of 2012, and therefore must be approved by the Town.

E. Restorations and/or conditions on design of structures or operation of the use (including hours of operation) necessary to ensure compatibility with the surrounding uses or to protect the natural or scenic resources of the Town;

Response: The Crown Castle tower is a preexisting structure and was approved by the Town with the understanding that it would be used to accommodate future wireless carriers seeking to collocate antennas on the structure. Sprint's installation, like other wireless carriers, will operate 24 hours per day, 7 days per week in order to provide continuous reliable service to the surrounding area. Sprint's proposed installation qualifies as an Eligible Facilities Request under Section 6409 of the federal Middle Class Tax Relief and Job Creation Act of 2012, and therefore must be approved by the Town.

F. Compliance with the requirements for the site plan review, including conformity to the Town residential and commercial design guidelines.

Response: The tower and related tower improvements are existing and were previously approved by the Town. Sprint's proposed installation qualifies as an Eligible Facilities Request under Section 6409 of the federal Middle Class Tax Relief and Job Creation Act of 2012, and therefore must be approved by the Town.

Notices and Disclaimers – Signature Required

1.) Right to Farm Law

Be advised:

“This property may border a farm, as defined in Town of Dryden Local Law #1 of the year 1992, a Local Law known as “Right to Farm Law.” Residents should be aware that farmers have the right to undertake good or acceptable farm practices which may generate dust, odor, smoke, noise, and vibration.”

Amendment #12, Local Law #1 of 1992, “Right to Farm Law” Adopted by Dryden Town Board July 14, 1992, Resolution #130. Local Law #1 of 1992. Effective July 20, 1992.

Enforcement

The Town of Dryden will strictly enforce all requirements and regulations of both the N.Y.S. Building & Fire Prevention Code and the Town of Dryden Zoning Ordinance. The following is the general policy of the Town of Dryden Planning Department.

- 1) No Building Permits will be issued to any applicant until such time that all other required permits, certificates and documents have been submitted to this office and found to be acceptable and complete.
- 2) No Public Hearings or Town Review will be scheduled for any purpose until this office has reviewed and found that all application and supporting documents are accurate and complete.
- 3) If at any time prior to the issue of an above permit or authority to proceed has been granted, it is found that construction or occupancy has begun or taken place, the violator, and property owner may be prosecuted in a court of law.
- 4) If after permits have been issued a permit holder takes occupancy, opens its doors to the public or uses a permitted device without obtaining a Certificate of Occupancy or Certificate of Compliance, the holder of that permit may be prosecuted in a court of law.
- 5) The Town of Dryden will not tolerate a violation of either the Dryden Town Zoning Ordinance or the New York State Building and Fire Prevention Code. Action will be taken against all violators.
- 6) **Inspections are required** per inspection sheet . A **mandatory final inspection** is required from the Town of Dryden Code Enforcement Officer, to close out permit and to allow use. Permits expire one year from date of issue and will need to be renewed by applicant and a fee of one-half of the permit fee at time of issue will be due. Demolition permits expire six months after issue.

Fees

- 1) FEES MUST BE SUBMITTED WITH THIS APPLICATION
- 2) You are responsible for complying with these terms and conditions.
- 3) All plans that are for Commercial Use or are more than 1500 Sq. Ft. of usable space in single-family construction must be stamped by a N.Y.S. Licensed Architect or Engineer as to code and construction compliance.

Escrow

Reimbursable Costs, fees and disbursements. The reasonable and necessary costs, fees or disbursements incurred by the Town or its officials for consultation or review by professionals including architects, landscape architect, engineers, surveyors, attorneys or others, on any Application for a Zoning Permit, Certificate of Occupancy, Appeal to the Zoning Board of Appeals, Application for Subdivision Approval, Application for a Planned Unit Development or application for a Special Permit or a Special Permit for a mobile home park shall be paid by the applicant.

Signature required

By signing you agree that you have read and understand and will be responsible for issued permits.

Owner or responsible party signature: Matthew T. Kerwin Attorney Date: 10/16/18
Print name: Matthew T. Kerwin

Permit Application Worksheet - Road Cuts

- For all New York State Routes call NYS DOT in Cortland at 756-7072, 8:00 am -4:00 pm daily.
- For Tompkins County Routes, call Tompkins County Highway Dept. in Ithaca, NY at 274-0300 8:00 am – 4:00 pm daily.
- For Dryden Town Routes call Dryden Town Highway at 844-8888 ext.402, 7:00 am – 4:00 pm Monday – Thursday.

Notice of Ground Disturbance / Area Tally Form

Please complete this form and submit to the Town of Dryden **Stormwater Management Officer, David Sprout**. "Land Development Activity" resulting in Ground Disturbance is defined as all areas where soil will be disturbed as a result of clearing, grubbing, grading, excavating, stockpiling, placement of fill, paving, installation of utilities, and construction of buildings or structures. This form will enable Town of Dryden staff to assist applicants in meeting local stormwater standards, and it is helpful to submit this form prior to finalizing your SWPPP.

Owner's Name: Crown Castle Date: 10/16/18
Phone # 201-236-9224 Mailing Address: 3 Corporate Park Drive, Ste. 101, Clifton Park, NY 12065
Project Site Address: 20 Far View Drive Tax Parcel # 37-1-8.2
Project Sponsor Name (If Different than Owner): Crown Castle / Sprint Phone: same
Address: same

Brief Description of the Project:

Crown Castle and Sprint propose to install antennas and related equipment on Crown's existing tower for use by Sprint.

(Attach additional sheets of paper as necessary and include a project sketch)

Project and Site Characteristics (Check yes or no as appropriate)

1. Will the project involve multiple phases? YES NO If YES, how many phases? _____
2. What is the shortest distance from the project area of disturbance to the edge of any stream, pond, lake, or wetland in the vicinity of the project? N/A feet. *work will occur within existing tower compound*
3. Does the site show any field or map indicators of potential wetland presence? YES NO
Check all that are applicable:
 Mapped NWI Wetlands Mapped DEC Wetlands Mapped Hydric Soils
 Field indicators of Hydric Soils Vegetation indicative of wetlands Wetland Delineation
4. Please describe the slope on site (e.g. steep or flat areas, stream banks, gullies, bluffs etc.).
N/A - work will occur on existing tower and within existing tower compound
5. Will the project include a linear excavation that is more than 500 feet long and 3 feet wide?
 YES NO
6. Will the project involve excavation or fill resulting in the movement of more than 250 cubic yards of soil, sand, or similar material? YES NO
7. Does the project require any state or federal environmental permits? YES NO
Permit(s): _____
8. Do connected Impervious Areas exceed 1/2 acre. YES NO
(If YES a Full SWPPP is required)

Town of Dryden Notice of Ground Disturbance / Area Tally Form

9. Area Tally

9A) Fill in the approximate area to be disturbed by the following, in square feet, as applicable. If it has been determined that a Full SWPPP is necessary from the Notice of Ground Disturbance, then please present this information when the final draft is complete.

Driveway _____

Parking Area _____

House / Main Building _____

Other Buildings _____

Septic System _____

Other Grading / Clearing / Lawn _____

Wells and Ditches _____

Drainage Structures _____

Utility Laying _____

Additional Area _____ (for construction access, stockpiling, etc.)

Total (do not total overlapping areas): project involves installation of 10' x 10' steel equipment platform within existing tower compound

9B) For subdivisions only: N/A
Total from Above: _____ x _____ (# of lots) + _____ (road area) = _____

9C) As estimated above, the total Area of Disturbance is: < .1 acre

10. Is more than half of the project site area over soils in Hydrologic Soil Group A, B, or C according to the Tompkins County Soil Survey? YES NO

11. Is the project redevelopment, as defined by Chapter 9 of the DEC's design manual? YES NO

12. Total Parcel Acreage: .08

13. Area of existing impervious surface prior to development: entire fenced compound is gravel

14. Total Impervious Area expected after project completion: no change

Signature: Matthew T. Jani, Attorney Date: 10/16/18

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CERTIFICATE OF NYS WORKERS' COMPENSATION INSURANCE COVERAGE

Form with fields 1a-1d and 2-3d. 1a: Legal Name & Address of Insured (CROWN CASTLE INTERNATIONAL CORPORATION). 1b: Business Telephone Number (724) 416-2253. 1c: NYS Unemployment Insurance Employer Registration Number (LNY614813). 1d: Federal Employer Identification Number (25-1695742). 2: Name and Address of the Entity Requesting Proof of Coverage (TOWN OF DRYDEN). 3a: Name of Insurance Carrier (The Charter Oak Fire Insurance Company). 3b: Policy Number (TC2JUB-474M969-4-18). 3c: Policy effective period (04/01/2018 to 04/01/2019). 3d: The Proprietor, Partners or Executive Officers are included (checked).

This certifies that the insurance carrier indicated above in box "3" insures the business referenced above in box "1a" for workers' compensation under the New York State Workers' Compensation Law. (To use this form, New York (NY) must be listed under Item 3A on the INFORMATION PAGE of the workers' compensation insurance policy). The Insurance Carrier or its licensed agent will send this Certificate of Insurance to the entity listed above as the certificate holder in box "2".

Will the carrier notify the certificate holder within 10 days of a policy being cancelled for non-payment of premium or within 30 days if cancelled for any other reason or if the insured is otherwise eliminated from the coverage indicated on this certificate prior to the end of the policy effective period? [X] YES [] NO

This certificate is issued as a matter of information only and confers no rights upon the certificate holder. This certificate does not amend, extend or alter the coverage afforded by the policy listed, nor does it confer any rights or responsibilities beyond those contained in the referenced policy.

This certificate may be used as evidence of a Workers' Compensation contract of insurance only while the underlying policy is in effect.

Please Note: Upon cancellation of the workers' compensation policy indicated on this form, if the business continues to be named on a permit, license or contract issued by a certificate holder, the business must provide that certificate holder with a new Certificate of Workers' Compensation Coverage or other authorized proof that the business is complying with the mandatory coverage requirements of the New York State Workers' Compensation Law.

Under penalty of perjury, I certify that I am an authorized representative or licensed agent of the insurance carrier referenced above and that the named insured has the coverage as depicted on this form.

Approved by: Lamar Garcia (Print name of authorized representative or licensed agent of insurance carrier)
Approved by: [Signature] (Signature) 3-26-2018 (Date)
Title: Service Center Senior Specialist - Compliance

Telephone Number of authorized representative or licensed agent of insurance carrier: 214-570-6243

Please Note: Only insurance carriers and their licensed agents are authorized to issue Form C-105.2. Insurance brokers are NOT authorized to issue it.



CERTIFICATE OF INSURANCE COVERAGE under the NYS DISABILITY AND PAID FAMILY LEAVE BENEFITS LAW

PART 1. To be completed by Disability and Paid Family Leave Benefits Carrier or Licensed Insurance Agent of that Carrier

1a. Legal Name and Address of Insured (Use street address only)
CROWN CASTLE USA INC
2000 CORPORATE DRIVE
CANONSBURG, PA 15317
1b. Business Telephone Number Of Insured
1c. Federal Employer Identification Number of Insured Or Social Security Number
25-1695742
2. Name and Address of the Entity Requesting Proof of Coverage (Entity Being Listed as the Certificate Holder)
Town of Dryden
93 East Main Street
Dryden,, NY 13053
3a. Name of Insurance Carrier
WESCO INSURANCE COMPANY
3b. Policy Number of entity listed in box "1a.":
0991191
3c. Policy effective period:
9/12/2018 to 12/31/2019

4. Policy provides the following benefits:
[X] A. Both disability and paid family leave benefits.
[] B. Disability benefits only.
[] C. Paid family leave benefits only.
5. Policy covers:
[X] A. All of the employer's employees eligible under the NYS Disability and Paid Family Leave Benefits Law.
[] B. Only the following class or classes of employer's employees:

Under penalty of perjury, I certify that I am an authorized representative or licensed agent of the insurance carrier referenced above and that the named insured has NYS Disability and/or Paid Family Leave Benefits insurance coverage as described above.

Date Signed 9/12/2018 By [Signature]
(Signature of insurance carrier's authorized representative or NYS Licensed Insurance Agent of that insurance carrier)

Telephone Number 800-535-2711 Title Vice President

IMPORTANT: If Boxes 4A and 5A are checked, and this form is signed by the insurance carrier's authorized representative or NYS Licensed Insurance Agent of that carrier, this certificate is COMPLETE. Mail it directly to the certificate holder. If Box 4B, 4C or 5B is checked, this certificate is NOT COMPLETE for purposes of Section 220, Subd. 8 of the NYS Disability and Paid Family Leave Benefits Law. It must be mailed for completion to the Workers' Compensation Board, Plans Acceptance Unit, PO Box 5200, Binghamton, NY 13902-5200.

PART 2. To be completed by the NYS Workers' Compensation Board (Only if Box 4C or 5B of Part 1 has been checked)

State of New York Workers' Compensation Board

According to information maintained by the NYS Workers' Compensation Board, the above-named employer has complied with the NYS Disability and Paid Family Leave Benefits Law with respect to all of his/her employees.

Date Signed By
(Signature of Authorized NYS Workers' Compensation Board Employee)

Telephone Number Title

Please Note: Only insurance carriers licensed to write NYS disability and paid family leave benefits insurance policies and NYS licensed insurance agents of those insurance carriers are authorized to issue Form DB-120.1. Insurance brokers are NOT authorized to issue this form.



Additional Instructions for Form DB-120.1

By signing this form, the insurance carrier identified in Box 3 on this form is certifying that it is insuring the business referenced in box "1a" for disability and/or paid family leave benefits under the New York State Disability and Paid Family Leave Benefits Law. The Insurance Carrier or its licensed agent will send this Certificate of Insurance to the entity listed as the certificate holder in Box 2.

The insurance carrier must notify the above certificate holder and the Workers' Compensation Board within 10 days IF a policy is cancelled due to nonpayment of premiums or within 30 days IF there are reasons other than nonpayment of premiums that cancel the policy or eliminate the insured from coverage indicated on this Certificate. (These notices may be sent by regular mail.) Otherwise, this Certificate is valid for one year after this form is approved by the insurance carrier or its licensed agent, or until the policy expiration date listed in Box 3c, whichever is earlier.

This certificate is issued as a matter of information only and confers no rights upon the certificate holder. This certificate does not amend, extend or alter the coverage afforded by the policy listed, nor does it confer any rights or responsibilities beyond those contained in the referenced policy.

This certificate may be used as evidence of a Disability and/or Paid Family Leave Benefits contract of insurance only while the underlying policy is in effect.

Please Note: Upon the cancellation of the disability and/or paid family leave benefits policy indicated on this form, if the business continues to be named on a permit, license or contract issued by a certificate holder, the business must provide that certificate holder with a new Certificate of NYS Disability and/or Paid Family Leave Benefits Coverage or other authorized proof that the business is complying with the mandatory coverage requirements of the New York State Disability and Paid Family Leave Benefits Law.

DISABILITY AND PAID FAMILY LEAVE BENEFITS LAW

§220. Subd. 8

(a) The head of a state or municipal department, board, commission or office authorized or required by law to issue any permit for or in connection with any work involving the employment of employees in employment as defined in this article, and notwithstanding any general or special statute requiring or authorizing the issue of such permits, shall not issue such permit unless proof duly subscribed by an insurance carrier is produced in a form satisfactory to the chair, that the payment of disability benefits and after January first, two thousand and twenty-one, the payment of family leave benefits for all employees has been secured as provided by this article. Nothing herein, however, shall be construed as creating any liability on the part of such state or municipal department, board, commission or office to pay any disability benefits to any such employee if so employed.

(b) The head of a state or municipal department, board, commission or office authorized or required by law to enter into any contract for or in connection with any work involving the employment of employees in employment as defined in this article and notwithstanding any general or special statute requiring or authorizing any such contract, shall not enter into any such contract unless proof duly subscribed by an insurance carrier is produced in a form satisfactory to the chair, that the payment of disability benefits and after January first, two thousand eighteen, the payment of family leave benefits for all employees has been secured as provided by this article.



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
09/12/2018

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Willis of Pennsylvania, Inc. c/o 26 Century Blvd P.O. Box 305191 Nashville, TN 372305191 USA	CONTACT NAME: PHONE (A/C, No, Ext): 1-877-945-7378 FAX (A/C, No): 1-888-467-2378 E-MAIL ADDRESS: certificates@willis.com	
	INSURER(S) AFFORDING COVERAGE	
INSURED Crown Castle International See Attached Named Insured List 1220 Augusta Dr. Suite 600 Houston, TX 77057	INSURER A: Federal Insurance Company NAIC # 20281	
	INSURER B: Travelers Property Casualty Company of Ame 25674	
	INSURER C: Berkshire Hathaway Specialty Insurance Com 22276	
	INSURER D:	
	INSURER E:	
	INSURER F:	

COVERAGES **CERTIFICATE NUMBER: W7476343** **REVISION NUMBER:**

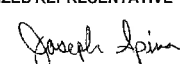
THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:			7021-02-28	04/01/2018	04/01/2019	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 1,000,000 MED EXP (Any one person) \$ 5,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000	
B	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> NON-OWNED AUTOS ONLY <input type="checkbox"/> AUTOS ONLY			TC2JCAP-474M9749TIL18	04/01/2018	04/01/2019	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$	
C	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED <input checked="" type="checkbox"/> RETENTION \$ 25,000			47-UMO-303445-02	04/01/2018	04/01/2019	EACH OCCURRENCE \$ 5,000,000 AGGREGATE \$ 5,000,000	
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N	No	N/A	TC2JUB-474M969-4-18	04/01/2018	04/01/2019	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

RE: Building Permit Applicaiton = BU#5800126 - Tompkins Community College, 20 Far View Drive, Dryden, NY 13053

CERTIFICATE HOLDER CANCELLATION

Town of Dryden 93 East Main Street Dryden, NY 13053	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE 

Crown Castle International Corp. Consolidated Subsidiaries as Named Insureds

Entity Name

5/16/2018 Edition

24/7 Chesapeake Holdings, LLC	Crown Castle International Corp.	Global Signal GP LLC
24/7 Mid-Atlantic Network of Virginia, LLC	Crown Castle International Corp. de Puerto Rico	Global Signal Holdings III LLC
24/7 Mid-Atlantic Network, LLC	Crown Castle International LLC	Global Signal Holdings IV LLC
Access Fiber Group Holdings LLC	Crown Castle Investment Corp.	Global Signal Operating Partnership, L.P.
Access Fiber Group, Inc.	Crown Castle Investment II Corp.	Global Signal Services LLC
AirComm of Avon, L.L.C.	Crown Castle MM Holding Corp.	GoldenState Towers, LLC
Atlantic Coast Communications LLC	Crown Castle MM Holding LLC	GS Savings Inc.
CA - CLEC LLC	Crown Castle MU LLC	GSPN Intangibles LLC
CC Castle International LLC	Crown Castle MUPA LLC	High Point Management Co. LLC
CC Edge LLC	Crown Castle NG Atlantic LLC	ICB Towers, LLC
CC Edge Solutions LLC	Crown Castle NG Central LLC	InfraSource FI, LLC
CC Finance LLC	Crown Castle NG East LLC	InSITE Fiber of Virginia LLC
CC FN Holdings LLC	Crown Castle NG Networks LLC	InSITE Solutions LLC
CC Holdings GS V LLC	Crown Castle NG West LLC	Interstate Tower Communications LLC
CC Site Acquisitions II LLC	Crown Castle Operating Company	Intracoastal City Towers LLC
CC Sunesys Fiber Networks LLC	Crown Castle Operating LLC	IX2 Center, LLC
CC TM PA LLC	Crown Castle Orlando Corp.	IX2 Wilshire, LLC
CC Towers Guarantor LLC	Crown Castle PR LLC	JBCM Towers LLC
CC Towers Holding LLC	Crown Castle PR Solutions LLC	Light Tower Clearinghouse LLC
CC TS LLC	Crown Castle PT Inc.	Light Tower Fiber New York, Inc. (NY)
CCATT Holdings LLC	Crown Castle Puerto Rico Corp.	Light Tower Holdings LLC
CCATT LCC	Crown Castle Services LLC	Light Tower Management, Inc.
CCATT PR LLC	Crown Castle Solutions LLC	Light Tower Metro Fiber LLC
CCGS Holdings Corp.	Crown Castle South LLC	Lighttower Fiber Infrastructure Corp.
CCPE Acquisitions LLC	Crown Castle TDC LLC	Lighttower Fiber Networks I, LLC
CCPR VI Tower Newco LLC	Crown Castle TLA LLC	Lighttower Fiber Networks II, LLC n/k/a Crown Castle Fiber LLC
CCS & E LLC	Crown Castle Towers 05 LLC	LTS Buyer LLC
CCT2 Holdings LLC	Crown Castle Towers 06-2 LLC	LTS Group Holdings LLC
CCTM Holdings LLC	Crown Castle Towers 09 LLC	LTS Intermediate Holdings A LLC
CCTM1 LLC	Crown Castle Towers LLC	LTS Intermediate Holdings B LLC
CCTM2 LLC	Crown Castle USA Inc.	LTS Intermediate Holdings C LLC
CCTMO LLC	Crown Communication LLC	Md7 Capitol One, LLC
Chesapeake Fiber, LLC	Crown Communication New York, Inc.	Mobile Media California LLC
Coastal Antennas LLC	Crown Mobile Systems, Inc.	Mobile Media National LLC
ComSite Venture, Inc.	DAS Development Corporation	Modeo LLC
Coverage Plus Antenna Systems LLC	Fiber Technologies Networks, L.L.C.	MW Cell REIT 1 LLC
Cross Connect Solutions, Inc. (PA)	Fibernet Direct Florida LLC	MW Cell TRS 1 LLC
Crown Atlantic Company LLC	Fibernet Direct Holdings LLC	NEON Transcom, Inc.
Crown Castle AS LLC	Fibernet Direct TEL LLC	NewPath Networks Holding LLC
Crown Castle Atlantic LLC	Fibernet Direct Texas LLC	NewPath Networks LLC
Crown Castle Augusta LLC	Fibertech Facilities Corp. (NY)	NY - CLEC LLC
Crown Castle BP ATT LLC	Fibertech Holdings Corp.	OP 2 LLC
Crown Castle CA Corp.	Fibertech Networks, LLC	OP LLC
Crown Castle Fiber LLC f/k/a Lighttower Fiber Networks II, LLC	Freedom Telecommunications, LLC	P3 CHB-1, LLC
Crown Castle GS III Corp.	Global Signal Acquisitions II LLC	P3 Holdings 2014 LLC
Crown Castle GT Company LLC	Global Signal Acquisitions III LLC	P3 OASA-1, LLC
Crown Castle GT Corp.	Global Signal Acquisitions IV LLC	P3 PBA-1, LLC
Crown Castle GT Holding Sub LLC	Global Signal Acquisitions LLC	PA - CLEC LLC

Crown Castle International Corp. Consolidated Subsidiaries as Named Insureds

Entity Name

5/16/2018 Edition

Pinnacle San Antonio L.L.C.	Towers Finco LLC
Pinnacle St. Louis LLC	TriStar Investors LLC
Pinnacle Towers Acquisition Holdings LLC	TVHT, LLC
Pinnacle Towers Acquisition LLC	WA - CLEC LLC
Pinnacle Towers Asset Holding LLC	WCP Wireless Lease Subsidiary, LLC
Pinnacle Towers Canada, Inc.	WCP Wireless Site Funding LLC
Pinnacle Towers III LLC	WCP Wireless Site Holdco LLC
Pinnacle Towers Limited	WCP Wireless Site Non-RE Funding LLC
Pinnacle Towers LLC	WCP Wireless Site Non-RE Holdco LLC
Pinnacle Towers V Inc.	WCP Wireless Site RE Funding LLC
PR Site Development Corporation	WCP Wireless Site RE Holdco LLC
PR TDC Corporation	Wilcon Holdings LLC
Princeton Ancillary Services II LLC	Wilcon Operations LLC
Princeton Ancillary Services III LLC	Wilshire Connection, LLC
Radio Station WGLD LLC	Wilshire Services, LLC
RGP Tower Group, LLC	Wireless Funding, LLC
Shaffer & Associates, Inc.	Wireless Realty Holdings II, LLC
Sidera Networks UK Limited (UK)	Wireless Revenue Properties, LLC
Sidera Networks, Inc.	Yankee Metro Parent, Inc.
Sierra Towers, Inc.	
Sunesys Enterprise LLC	
Sunesys of Massachusetts, LLC	
Sunesys of Virginia, Inc.	
Sunesys, LLC	
Thunder Towers LLC	
Tower Development Corporation	
Tower Systems LLC	
Tower Technology Company of Jacksonville LLC	
Tower Ventures III, LLC	
TowerOne 2012, LLC	
TowerOne Allentown 001, LLC	
TowerOne Bethlehem 001, LLC	
TowerOne Doylestown, LLC	
TowerOne East Rockhill 001, LLC	
TowerOne Marple, LLC	
TowerOne Middletown 001, LLC	
TowerOne Middletown 002, LLC	
TowerOne Middletown 003, LLC	
TowerOne North Coventry, LLC	
TowerOne Partners, LLC	
TowerOne Richland, LLC	
TowerOne Upper Pottsgrove 002, LLC	
TowerOne Upper Pottsgrove, LLC	
TowerOne Warminster 001, LLC	
TowerOne Warrington 002, LLC	
Towers Finco II LLC	
Towers Finco III LLC	

3

Short Environmental Assessment Form

Part 1 - Project Information

Instructions for Completing

Part 1 - Project Information. The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

Part 1 - Project and Sponsor Information			
Name of Action or Project: Crown Castle - Sprint Tompkins Community College			
Project Location (describe, and attach a location map): 20 Far View Drive, Dryden, NY 13053			
Brief Description of Proposed Action: The project involves the installation for Sprint of 6 panel antennas, 12 RRHs, and related cabling and equipment at a centerline height of 126' on the existing Crown Castle monopole telecommunications tower. Additionally, Sprint's installation will include related ground-based equipment on a 10' by 10' steel equipment platform located within Sprint's 12' by 20' lease area.			
Name of Applicant or Sponsor: Crown Castle (for Sprint)		Telephone: 201-236-9224 E-Mail: AnneMarie.Zsamba@crowncastle.com	
Address: 3 Corporate Park Dr., Suite 101			
City/PO: Clifton Park		State: NY	Zip Code: 12065
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.			NO <input type="checkbox"/>
2. Does the proposed action require a permit, approval or funding from any other governmental Agency? If Yes, list agency(s) name and permit or approval:			YES <input type="checkbox"/>
3.a. Total acreage of the site of the proposed action? _____ .08 acres			
b. Total acreage to be physically disturbed? _____ <.1 acres			
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? _____ .23 acres			
4. Check all land uses that occur on, adjoining and near the proposed action.			
<input type="checkbox"/> Urban <input checked="" type="checkbox"/> Rural (non-agriculture) <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Residential (suburban)			
<input checked="" type="checkbox"/> Forest <input type="checkbox"/> Agriculture <input type="checkbox"/> Aquatic <input checked="" type="checkbox"/> Other (specify): educational			
<input type="checkbox"/> Parkland			

5. Is the proposed action, a. A permitted use under the zoning regulations?	NO	YES	N/A
	<input type="checkbox"/>	<input checked="checked" type="checkbox"/>	<input type="checkbox"/>
b. Consistent with the adopted comprehensive plan?	NO	YES	N/A
	<input type="checkbox"/>	<input checked="checked" type="checkbox"/>	<input type="checkbox"/>
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?	NO	YES	
	<input type="checkbox"/>	<input checked="checked" type="checkbox"/>	
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area? If Yes, identify: _____ _____	NO	YES	
	<input checked="checked" type="checkbox"/>	<input type="checkbox"/>	
8. a. Will the proposed action result in a substantial increase in traffic above present levels?	NO	YES	
	<input checked="checked" type="checkbox"/>	<input type="checkbox"/>	
b. Are public transportation service(s) available at or near the site of the proposed action?	NO	YES	
	<input checked="checked" type="checkbox"/>	<input type="checkbox"/>	
c. Are any pedestrian accommodations or bicycle routes available on or near site of the proposed action?	NO	YES	
	<input checked="checked" type="checkbox"/>	<input type="checkbox"/>	
9. Does the proposed action meet or exceed the state energy code requirements? If the proposed action will exceed requirements, describe design features and technologies: _____ _____	NO	YES	
	<input type="checkbox"/>	<input checked="checked" type="checkbox"/>	
10. Will the proposed action connect to an existing public/private water supply? If No, describe method for providing potable water: _____ _____	NO	YES	
	<input checked="checked" type="checkbox"/>	<input type="checkbox"/>	
11. Will the proposed action connect to existing wastewater utilities? If No, describe method for providing wastewater treatment: _____ _____	NO	YES	
	<input checked="checked" type="checkbox"/>	<input type="checkbox"/>	
12. a. Does the site contain a structure that is listed on either the State or National Register of Historic Places?	NO	YES	
	<input checked="checked" type="checkbox"/>	<input type="checkbox"/>	
b. Is the proposed action located in an archeological sensitive area?	NO	YES	
	<input checked="checked" type="checkbox"/>	<input type="checkbox"/>	
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency?	NO	YES	
	<input checked="checked" type="checkbox"/>	<input type="checkbox"/>	
b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody? If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____ _____ _____	NO	YES	
	<input checked="checked" type="checkbox"/>	<input type="checkbox"/>	
14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply: <input type="checkbox"/> Shoreline <input checked="checked" type="checkbox"/> Forest <input type="checkbox"/> Agricultural/grasslands <input type="checkbox"/> Early mid-successional <input type="checkbox"/> Wetland <input type="checkbox"/> Urban <input type="checkbox"/> Suburban			
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered?	NO	YES	
	<input checked="checked" type="checkbox"/>	<input type="checkbox"/>	
16. Is the project site located in the 100 year flood plain?	NO	YES	
	<input checked="checked" type="checkbox"/>	<input type="checkbox"/>	
17. Will the proposed action create storm water discharge, either from point or non-point sources? If Yes, a. Will storm water discharges flow to adjacent properties? <input type="checkbox"/> NO <input type="checkbox"/> YES b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)? If Yes, briefly describe: <input type="checkbox"/> NO <input type="checkbox"/> YES _____ _____	NO	YES	
	<input checked="checked" type="checkbox"/>	<input type="checkbox"/>	

<p>18. Does the proposed action include construction or other activities that result in the impoundment of water or other liquids (e.g. retention pond, waste lagoon, dam)?</p> <p>If Yes, explain purpose and size: _____</p> <p>_____</p>	<p>NO</p> <p><input checked="" type="checkbox"/></p>	<p>YES</p> <p><input type="checkbox"/></p>
<p>19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility?</p> <p>If Yes, describe: _____</p> <p>_____</p>	<p>NO</p> <p><input checked="" type="checkbox"/></p>	<p>YES</p> <p><input type="checkbox"/></p>
<p>20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste?</p> <p>If Yes, describe: _____</p> <p>_____</p>	<p>NO</p> <p><input checked="" type="checkbox"/></p>	<p>YES</p> <p><input type="checkbox"/></p>
<p>I AFFIRM THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE</p> <p>Applicant/sponsor name: <u>Anne Marie Zamba as agent for Sprint</u> Date: <u>10/12/18</u></p> <p>Signature: <u>[Handwritten Signature]</u></p>		

Disclaimer: The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, OpenStreetMap contributors, and the GIS User Community

Part 1 / Question 7 [Critical Environmental Area]	No
Part 1 / Question 12a [National Register of Historic Places]	No
Part 1 / Question 12b [Archeological Sites]	No
Part 1 / Question 13a [Wetlands or Other Regulated Waterbodies]	No
Part 1 / Question 15 [Threatened or Endangered Animal]	No
Part 1 / Question 16 [100 Year Flood Plain]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
Part 1 / Question 20 [Remediation Site]	No

Project:

Date:

Short Environmental Assessment Form
Part 2 - Impact Assessment

Part 2 is to be completed by the Lead Agency.

Answer all of the following questions in Part 2 using the information contained in Part 1 and other materials submitted by the project sponsor or otherwise available to the reviewer. When answering the questions the reviewer should be guided by the concept "Have my responses been reasonable considering the scale and context of the proposed action?"

	No, or small impact may occur	Moderate to large impact may occur
1. Will the proposed action create a material conflict with an adopted land use plan or zoning regulations?	<input type="checkbox"/>	<input type="checkbox"/>
2. Will the proposed action result in a change in the use or intensity of use of land?	<input type="checkbox"/>	<input type="checkbox"/>
3. Will the proposed action impair the character or quality of the existing community?	<input type="checkbox"/>	<input type="checkbox"/>
4. Will the proposed action have an impact on the environmental characteristics that caused the establishment of a Critical Environmental Area (CEA)?	<input type="checkbox"/>	<input type="checkbox"/>
5. Will the proposed action result in an adverse change in the existing level of traffic or affect existing infrastructure for mass transit, biking or walkway?	<input type="checkbox"/>	<input type="checkbox"/>
6. Will the proposed action cause an increase in the use of energy and it fails to incorporate reasonably available energy conservation or renewable energy opportunities?	<input type="checkbox"/>	<input type="checkbox"/>
7. Will the proposed action impact existing:	<input type="checkbox"/>	<input type="checkbox"/>
a. public / private water supplies?	<input type="checkbox"/>	<input type="checkbox"/>
b. public / private wastewater treatment utilities?	<input type="checkbox"/>	<input type="checkbox"/>
8. Will the proposed action impair the character or quality of important historic, archaeological, architectural or aesthetic resources?	<input type="checkbox"/>	<input type="checkbox"/>
9. Will the proposed action result in an adverse change to natural resources (e.g., wetlands, waterbodies, groundwater, air quality, flora and fauna)?	<input type="checkbox"/>	<input type="checkbox"/>
10. Will the proposed action result in an increase in the potential for erosion, flooding or drainage problems?	<input type="checkbox"/>	<input type="checkbox"/>
11. Will the proposed action create a hazard to environmental resources or human health?	<input type="checkbox"/>	<input type="checkbox"/>

Project:

Date:

Short Environmental Assessment Form
Part 3 Determination of Significance

For every question in Part 2 that was answered “moderate to large impact may occur”, or if there is a need to explain why a particular element of the proposed action may or will not result in a significant adverse environmental impact, please complete Part 3. Part 3 should, in sufficient detail, identify the impact, including any measures or design elements that have been included by the project sponsor to avoid or reduce impacts. Part 3 should also explain how the lead agency determined that the impact may or will not be significant. Each potential impact should be assessed considering its setting, probability of occurring, duration, irreversibility, geographic scope and magnitude. Also consider the potential for short-term, long-term and cumulative impacts.

<input type="checkbox"/> Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action may result in one or more potentially large or significant adverse impacts and an environmental impact statement is required.	
<input type="checkbox"/> Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action will not result in any significant adverse environmental impacts.	
Name of Lead Agency	Date
Print or Type Name of Responsible Officer in Lead Agency	Title of Responsible Officer
Signature of Responsible Officer in Lead Agency	Signature of Preparer (if different from Responsible Officer)

PRINT FORM

4

Date: August 31, 2018

Holly Haas
Crown Castle
3530 Toringdon Way, Suite 300
Charlotte, NC 28277

JACOBS[®]

Jacobs Civil Consultants, Inc.
5449 Bells Ferry Road
Acworth, GA 30102
770-701-2500

Subject: Structural Analysis Report

Carrier Designation: Sprint PCS Co-Locate
Carrier Site Number: AL90XC488
Carrier Site Name: AL90XC488N18.A

Crown Castle Designation: Crown Castle BU Number: 5800126
Crown Castle Site Name: Tompkins Community College
Crown Castle JDE Job Number: 527297
Crown Castle Work Order Number: 1622328
Crown Castle Application Number: 456831 Rev. 0

Engineering Firm Designation: Jacobs Civil Consultants, Inc. Project Number: 1622328

Site Data: 20 Far View Drive, Dryden, Tompkins County, NY
Latitude 42° 29' 59.45", Longitude -76° 16' 47.6"
140 Foot - Monopole Tower

Dear Holly Haas,

Jacobs Civil Consultants, Inc. is pleased to submit this "Structural Analysis Report" to determine the structural integrity of the above mentioned tower.

The purpose of the analysis is to determine acceptability of the tower stress level. Based on our analysis we have determined the tower stress level for the structure and foundation, under the following load case, to be:

LC7: Proposed Equipment Configuration

Sufficient Capacity

The analysis has been performed in accordance with the TIA-222-H Standard. This analysis utilizes an ultimate 3-second gust wind speed of 115 mph from the 2016 New York State Uniform Code. Exposure Category C with a maximum topographic factor, Kzt, of 1.617 and Risk Category II were used in this analysis.

Structural analysis prepared by:



Kelvin Klein Lagata
Structural Engineer

Respectfully submitted by:




Paul L. Mucci, P.E.
Senior Project Manager

2018-08-31 16:26:00-04:00

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1) INTRODUCTION

This tower is a 140 ft Monopole tower designed by ROHN PRODUCTS LLC in August of 2009. The tower was originally designed for a wind speed of 90 mph per ANSI/TIA/EIA-222-G.

2) ANALYSIS CRITERIA

Building Code: 2015 IBC
TIA-222 Revision: TIA-222-H
Risk Category: II
Wind Speed: 115 mph
Exposure Category: C
Topographic Factor: 1.617
Ice Thickness: 1.275 in
Wind Speed with Ice: 40 mph
Service Wind Speed: 60 mph

Table 1 - Proposed Equipment Configuration

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
126.0	126.0	3	alcatel lucent	1900MHZ RRH (65MHZ)	3	1-5/8
		6	alcatel lucent	800MHZ 2X50W RRH		
		3	nokia	FZHN		
		3	rfs celwave	APXVBBLL20X_43-C-I20		
		3	rfs celwave	APXVTM14-ALU-I20		
		1	site pro 1	RMQP-496-HK [Mount]		

Table 2 – Other Considered Equipment

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
136.0	136.0	3	andrew	DBXLH-9090C-VTM w/ Mount Pipe	2 4 12	3/8 3/4 1-5/8
		6	ericsson	RRUS 11		
		3	ericsson	RRUS 12		
		3	ericsson	RRUS 32 B2		
		1	ericsson	RRUS 32 B66		
		2	raycap	DC6-48-60-18-8F		
		1	tower mounts	Sector Mount [SM 801-3]		

3) ANALYSIS PROCEDURE

Table 3 - Documents Provided

Document	Remarks	Reference	Source
4-GEOTECHNICAL REPORTS	Armor Tower, Inc.	2540378	CCISITES
4-TOWER FOUNDATION DRAWINGS/DESIGN/SPECS	Rohn Products, LLC	2523658	CCISITES
4-TOWER MANUFACTURER DRAWINGS	Rohn Products, LLC	2523655	CCISITES
4-EXPOSURE CATEGORY/TOPOGRAPHIC FACTOR	Crown Castle	7252574	CCISITES
MOUNT SPECIFICATION	Site Pro 1	Dwg No. RMQP-496-HK	CROWN CASTLE EMAIL

3.1) Analysis Method

tnxTower (version 8.0.4.0), a commercially available analysis software package, was used to create a three-dimensional model of the tower and calculate member stresses for various loading cases. Selected output from the analysis is included in Appendix A.

3.2) Assumptions

- 1) Tower and structures were built and maintained in accordance with the manufacturer's specifications.
- 2) The configuration of antennas, transmission cables, mounts and other appurtenances are as specified in Tables 1 and 2 and the referenced drawings.
- 3) Base plate design methodology of the manufacturer has been reviewed and found to be an acceptable means of designing to resist the full capacity of the bolts and shaft.

This analysis may be affected if any assumptions are not valid or have been made in error. Jacobs Civil Consultants, Inc. should be notified to determine the effect on the structural integrity of the tower.

4) ANALYSIS RESULTS

Table 4 - Section Capacity (Summary)

Section No.	Elevation (ft)	Component Type	Size	Critical Element	P (K)	SF*P_allow (K)	% Capacity	Pass / Fail
L1	140 - 103.667	Pole	TP32.689x24x0.25	1	-8.87	1797.19	22.5	Pass
L2	103.667 - 59.75	Pole	TP42.531x31.2126x0.3125	2	-16.55	2884.06	36.9	Pass
L3	59.75 - 30	Pole	TP48.861x40.668x0.4375	3	-25.38	4934.89	30.6	Pass
L4	30 - 0	Pole	TP55x46.5815x0.5	4	-39.78	6511.36	31.8	Pass
							Summary	
						Pole (L2)	36.9	Pass
						Rating =	36.9	Pass

Table 5 - Tower Component Stresses vs. Capacity - LC7

Notes	Component	Elevation (ft)	% Capacity	Pass / Fail
1	Anchor Rods	0	32.3	Pass
2	Base Plate	0	36.9	Pass
1	Base Foundation Structural	0	58.2	Pass
1	Base Foundation Soil Interaction	0	44.7	Pass

Structure Rating (max from all components) =	58.2%
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Notes:

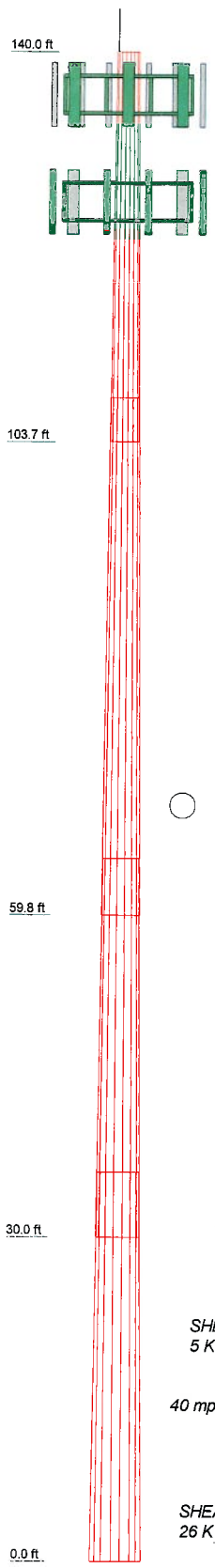
- 1) See additional documentation in "Appendix C – Additional Calculations" for calculations supporting the % capacity consumed.
- 2) Base plate is assumed to have the same capacity as its respective anchor bolts or shaft.

4.1) Recommendations

The tower and its foundation have sufficient capacity to carry the proposed load configuration. No modifications are required at this time.

APPENDIX A
TNXTOWER OUTPUT

Section	1	2	3	4	25.8
Length (ft)	36.33	48.00	35.00	36.00	
Number of Sides	18	18	18	18	
Thickness (in)	0.2500	0.3125	0.4375	0.5000	
Socket Length (ft)	4.08	5.25	6.00	46.5815	
Top Dia (in)	24.0000	31.2128	40.6680	55.0000	
Bot Dia (in)	32.6890	42.5310	48.8610		
Grade			A572-65		
Weight (K)	2.8	5.9	7.3	9.8	



DESIGNED APPURTENANCE LOADING

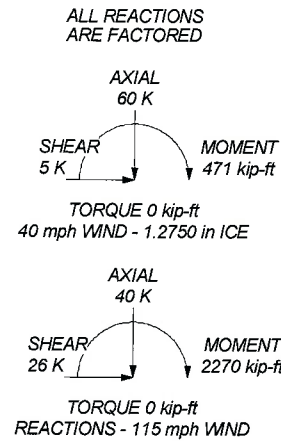
TYPE	ELEVATION	TYPE	ELEVATION
Lightning Rod 5/8"x4"	140	12' x 2" Horizontal Pipe	136
DBXLH-9090C-VTM w/ Mount Pipe	136	Sector Mount [SM 801-3]	136
DBXLH-9090C-VTM w/ Mount Pipe	136	APXVTM14-ALU-I20	126
DBXLH-9090C-VTM w/ Mount Pipe	136	APXVTM14-ALU-I20	126
RRUS 11	136	APXVTM14-ALU-I20	126
RRUS 11	136	APXVBLL20X_43-C-I20	126
(2) RRUS 11	136	APXVBLL20X_43-C-I20	126
RRUS 12	136	APXVBLL20X_43-C-I20	126
DC6-48-60-18-8F	136	FZHN	126
RRUS 11	136	FZHN	126
RRUS 11	136	FZHN	126
RRUS 32 B2	136	1900MHZ RRH (65MHZ)	126
RRUS 32 B2	136	1900MHZ RRH (65MHZ)	126
RRUS 32 B2	136	1900MHZ RRH (65MHZ)	126
RRUS 32 B66	136	(2) 800MHZ 2X50W RRH	126
RRUS 12	136	(2) 800MHZ 2X50W RRH	126
RRUS 12	136	(2) 800MHZ 2X50W RRH	126
DC6-48-60-18-8F	136	Platform Mount [LP 301-1]	126
12' x 2" Horizontal Pipe	136	Miscellaneous [NA 509-3]	126
12' x 2" Horizontal Pipe	136		

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-65	65 ksi	80 ksi			

TOWER DESIGN NOTES

1. Tower is located in Tompkins County, New York.
2. Tower designed for Exposure C to the TIA-222-H Standard.
3. Tower designed for a 115 mph basic wind in accordance with the TIA-222-H Standard.
4. Tower is also designed for a 40 mph basic wind with 1.27 in ice. Ice is considered to increase in thickness with height.
5. Deflections are based upon a 60 mph wind.
6. Tower Risk Category II.
7. Topographic Category 5 with Crest Height of 205.00 ft
8. TIA-222-H Annex S
9. TOWER RATING: 36.9%



Jacobs Civil Consultants, Inc. 5449 Bells Ferry Road Acworth, GA 30102 Phone: 770-701-2500 FAX: 770-701-2501	Job: Tompkins Community College		
	Project: BU#5800126 WO#1622328		
	Client: Crown Castle	Drawn by: Kelvin Klein Lagata	App'd:
	Code: TIA-222-H	Date: 08/31/18	Scale: NTS
	Path:		Dwg No. E-1

Tower Input Data

The tower is a monopole.

This tower is designed using the TIA-222-H standard.

The following design criteria apply:

- 1) Tower is located in Tompkins County, New York.
- 2) Tower base elevation above sea level: 1408.00 ft.
- 3) Basic wind speed of 115 mph.
- 4) Risk Category II.
- 5) Exposure Category C.
- 6) Crest Height 205.00 ft.
- 7) Rigorous Topographic Factor Procedure for wind speed-up calculations is used.
- 8) Topographic Feature: Hill.
- 9) Slope Distance L: 1080.00 ft.
- 10) Distance from Crest x: 263.00 ft.
- 11) Horizontal Distance Downwind: No.
- 12) Nominal ice thickness of 1.2750 in.
- 13) Ice thickness is considered to increase with height.
- 14) Ice density of 56 pcf.
- 15) A wind speed of 40 mph is used in combination with ice.
- 16) Temperature drop of 50 °F.
- 17) Deflections calculated using a wind speed of 60 mph.
- 18) TIA-222-H Annex S.
- 19) A non-linear (P-delta) analysis was used.
- 20) Pressures are calculated at each section.
- 21) Stress ratio used in pole design is 1.05.
- 22) Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Options

Consider Moments - Legs	Distribute Leg Loads As Uniform	Use ASCE 10 X-Brace Ly Rules
Consider Moments - Horizontals	Assume Legs Pinned	Calculate Redundant Bracing Forces
Consider Moments - Diagonals	√ Assume Rigid Index Plate	Ignore Redundant Members in FEA
Use Moment Magnification	√ Use Clear Spans For Wind Area	SR Leg Bolts Resist Compression
Use Code Stress Ratios	Use Clear Spans For KL/r	All Leg Panels Have Same Allowable
Use Code Safety Factors - Guys	Retension Guys To Initial Tension	Offset Girt At Foundation
Escalate Ice	√ Bypass Mast Stability Checks	√ Consider Feed Line Torque
Always Use Max Kz	√ Use Azimuth Dish Coefficients	Include Angle Block Shear Check
Use Special Wind Profile	√ Project Wind Area of Appurt.	Use TIA-222-H Bracing Resist. Exemption
Include Bolts In Member Capacity	Autocalc Torque Arm Areas	Use TIA-222-H Tension Splice Exemption
Leg Bolts Are At Top Of Section	Add IBC .6D+W Combination	Poles
Secondary Horizontal Braces Leg	Sort Capacity Reports By Component	√ Include Shear-Torsion Interaction
Use Diamond Inner Bracing (4 Sided)	Triangulate Diamond Inner Bracing	Always Use Sub-Critical Flow
SR Members Have Cut Ends	Treat Feed Line Bundles As Cylinder	Use Top Mounted Sockets
SR Members Are Concentric	Ignore KL/ry For 60 Deg. Angle Legs	Pole Without Linear Attachments
		Pole With Shroud Or No Appurtenances
		Outside and Inside Corner Radii Are Known

Tapered Pole Section Geometry

Section	Elevation ft	Section Length ft	Splice Length ft	Number of Sides	Top Diameter in	Bottom Diameter in	Wall Thickness in	Bend Radius in	Pole Grade
L1	140.00-103.67	36.33	4.08	18	24.0000	32.6890	0.2500	1.0000	A572-65 (65 ksi)
L2	103.67-59.75	48.00	5.25	18	31.2126	42.5310	0.3125	1.2500	A572-65 (65 ksi)
L3	59.75-30.00	35.00	6.00	18	40.6680	48.8610	0.4375	1.7500	A572-65 (65 ksi)
L4	30.00-0.00	36.00		18	46.5815	55.0000	0.5000	2.0000	A572-65 (65 ksi)

Tapered Pole Properties

Section	Tip Dia. in	Area in ²	I in ⁴	r in	C in	I/C in ³	J in ⁴	It/Q in ²	w in	w/t
L1	24.3317	18.8456	1342.9976	8.4313	12.1920	110.1540	2687.7623	9.4246	3.7840	15.136
	33.1547	25.7403	3422.0532	11.5158	16.6060	206.0731	6848.6092	12.8726	5.3133	21.253
L2	32.6235	30.6490	3697.1933	10.9695	15.8560	233.1735	7399.2514	15.3274	4.9434	15.819
	43.1389	41.8755	9429.8067	14.9876	21.6057	436.4490	18872.021	20.9417	6.9355	22.193
L3	42.4758	55.8651	11423.263	14.2818	20.6594	552.9338	22861.557	27.9379	6.3876	14.6
	49.5473	67.2421	19920.074	17.1903	24.8214	802.5367	39866.360	33.6274	7.8295	17.896
L4	48.6477	73.1313	19619.774	16.3589	23.6634	829.1190	39265.364	36.5726	7.3183	14.637
	55.7713	86.4915	32456.664	19.3475	27.9400	1161.6558	64956.035	43.2540	8.8000	17.6

Tower Elevation ft	Gusset Area (per face) ft ²	Gusset Thickness in	Gusset Grade	Adjust. Factor A _r	Adjust. Factor A _r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in	Double Angle Stitch Bolt Spacing Redundants in
L1 140.00- 103.67				1	1	1			
L2 103.67- 59.75				1	1	1			
L3 59.75- 30.00				1	1	1			
L4 30.00-0.00				1	1	1			

Feed Line/Linear Appurtenances - Entered As Round Or Flat

Description	Sector	Exclude From Torque Calculation	Componen t Type	Placement ft	Total Number	Number Per Row	Start/En d Position	Width or Diamete r in	Perimete r in	Weight plf
** FACE B ** Safety Line 5/8	B	No	Surface Ar (CaAa)	140.00 - 0.00	1	1	0.000 0.000	0.8800		0.40

Feed Line/Linear Appurtenances - Entered As Area

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Componen t Type	Placement ft	Total Number		C _A A _A ft ² /ft	Weight plf
HB158-21U6S12-60M-01(1-5/8)	B	No	No	Inside Pole	126.00 - 0.00	3	No Ice	0.00	1.90
							1/2" Ice	0.00	1.90
							1" Ice	0.00	1.90
							2" Ice	0.00	1.90
** FACE C **									
FB-L98B-002-75000(3/8")	C	No	No	Inside Pole	136.00 - 0.00	2	No Ice	0.00	0.06
							1/2" Ice	0.00	0.06
							1" Ice	0.00	0.06
							2" Ice	0.00	0.06
WR-VG86ST-BRD(3/4")	C	No	No	Inside Pole	136.00 - 0.00	4	No Ice	0.00	0.58
							1/2" Ice	0.00	0.58
							1" Ice	0.00	0.58
							2" Ice	0.00	0.58
LDF7-50A(1-5/8")	C	No	No	Inside Pole	136.00 - 0.00	12	No Ice	0.00	0.82
							1/2" Ice	0.00	0.82
							1" Ice	0.00	0.82
							2" Ice	0.00	0.82

Feed Line/Linear Appurtenances Section Areas

Tower Section	Tower Elevation ft	Face	A _R ft ²	A _F ft ²	C _A A _A In Face ft ²	C _A A _A Out Face ft ²	Weight K
L1	140.00-103.67	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	3.197	0.000	0.14
		C	0.000	0.000	0.000	0.000	0.40
L2	103.67-59.75	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	3.865	0.000	0.27
		C	0.000	0.000	0.000	0.000	0.54
L3	59.75-30.00	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	2.618	0.000	0.18
		C	0.000	0.000	0.000	0.000	0.37
L4	30.00-0.00	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	2.640	0.000	0.18
		C	0.000	0.000	0.000	0.000	0.37

Feed Line/Linear Appurtenances Section Areas - With Ice

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A _R ft ²	A _F ft ²	C _A A _A In Face ft ²	C _A A _A Out Face ft ²	Weight K
L1	140.00-103.67	A	1.563	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	14.553	0.000	0.31
		C		0.000	0.000	0.000	0.000	0.40
L2	103.67-59.75	A	1.537	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	17.591	0.000	0.47
		C		0.000	0.000	0.000	0.000	0.54
L3	59.75-30.00	A	1.489	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	11.764	0.000	0.32
		C		0.000	0.000	0.000	0.000	0.37
L4	30.00-0.00	A	1.370	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	11.571	0.000	0.31
		C		0.000	0.000	0.000	0.000	0.37

Feed Line Center of Pressure

Section	Elevation	CP _x	CP _z	CP _x Ice	CP _z Ice
	ft	in	in	in	in
L1	140.00-103.67	0.6064	-0.3501	1.4130	-0.8158
L2	103.67-59.75	0.6090	-0.3516	1.4732	-0.8506
L3	59.75-30.00	0.6106	-0.3525	1.4933	-0.8622
L4	30.00-0.00	0.6114	-0.3530	1.4815	-0.8553

Note: For pole sections, center of pressure calculations do not consider feed line shielding.

Shielding Factor Ka

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L1	2	Safety Line 5/8	103.67 - 140.00	1.0000	1.0000
L2	2	Safety Line 5/8	59.75 - 103.67	1.0000	1.0000
L3	2	Safety Line 5/8	30.00 - 59.75	1.0000	1.0000

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert	Azimuth Adjustment t	Placement ft	C _A A _A Front ft ²	C _A A _A Side ft ²	Weight K
Lightning Rod 5/8"x4'	C	From Leg	0.00 0.00 2.00	0.0000	140.00	No Ice	0.25	0.03
						1/2" Ice	0.66	0.03
						Ice	0.97	0.04
						1" Ice	1.49	0.06
						2" Ice	1.49	0.06
Level 136 DBXLH-9090C-VTM w/ Mount Pipe	A	From Face	4.00 0.00 0.00	0.0000	136.00	No Ice	14.31	0.08
						1/2" Ice	15.02	0.17
						Ice	15.74	0.28
						1" Ice	17.11	0.52
						2" Ice	17.11	0.52
DBXLH-9090C-VTM w/ Mount Pipe	B	From Face	4.00 0.00 0.00	0.0000	136.00	No Ice	14.31	0.08
						1/2" Ice	15.02	0.17
						Ice	15.74	0.28
						1" Ice	17.11	0.52
						2" Ice	17.11	0.52
DBXLH-9090C-VTM w/ Mount Pipe	C	From Face	4.00 0.00 0.00	0.0000	136.00	No Ice	14.31	0.08
						1/2" Ice	15.02	0.17
						Ice	15.74	0.28
						1" Ice	17.11	0.52
						2" Ice	17.11	0.52
RRUS 11	A	From Face	4.00 0.00 0.00	0.0000	136.00	No Ice	2.78	0.05
						1/2" Ice	2.99	0.07
						Ice	3.21	0.10

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C _{AA} Front	C _{AA} Side	Weight	
			Horz	Lateral Vert						
			ft	ft	°	ft	ft ²	ft ²	K	
RRUS 11	B	From Face	4.00	0.00	0.0000	136.00	1" Ice	3.66	1.83	0.15
							2" Ice			
							No Ice	2.78	1.19	0.05
							1/2" Ice	2.99	1.33	0.07
(2) RRUS 11	C	From Face	4.00	0.00	0.0000	136.00	1" Ice	3.66	1.83	0.15
							2" Ice			
							No Ice	2.78	1.19	0.05
							1/2" Ice	2.99	1.33	0.07
RRUS 12	A	From Face	4.00	0.00	0.0000	136.00	1" Ice	4.07	1.95	0.17
							2" Ice			
							No Ice	3.15	1.29	0.06
							1/2" Ice	3.36	1.44	0.08
DC6-48-60-18-8F	A	From Face	4.00	0.00	0.0000	136.00	1" Ice	2.04	2.04	0.12
							2" Ice			
							No Ice	0.92	0.92	0.03
							1/2" Ice	1.46	1.46	0.05
RRUS 11	B	From Face	4.00	0.00	0.0000	136.00	1" Ice	3.66	1.83	0.15
							2" Ice			
							No Ice	2.78	1.19	0.05
							1/2" Ice	2.99	1.33	0.07
RRUS 11	C	From Face	4.00	0.00	0.0000	136.00	1" Ice	3.66	1.83	0.15
							2" Ice			
							No Ice	2.78	1.19	0.05
							1/2" Ice	2.99	1.33	0.07
RRUS 32 B2	A	From Face	4.00	0.00	0.0000	136.00	1" Ice	3.66	2.46	0.16
							2" Ice			
							No Ice	2.73	1.67	0.05
							1/2" Ice	2.95	1.86	0.07
RRUS 32 B2	B	From Face	4.00	0.00	0.0000	136.00	1" Ice	3.66	2.46	0.16
							2" Ice			
							No Ice	2.73	1.67	0.05
							1/2" Ice	2.95	1.86	0.07
RRUS 32 B2	C	From Face	4.00	0.00	0.0000	136.00	1" Ice	3.66	2.46	0.16
							2" Ice			
							No Ice	2.73	1.67	0.05
							1/2" Ice	2.95	1.86	0.07
RRUS 32 B66	B	From Face	4.00	0.00	0.0000	136.00	1" Ice	3.68	2.46	0.16
							2" Ice			
							No Ice	2.74	1.67	0.05
							1/2" Ice	2.96	1.86	0.07
RRUS 12	A	From Face	4.00	0.00	0.0000	136.00	1" Ice	4.07	1.95	0.17
							2" Ice			
							No Ice	3.15	1.29	0.06
							1/2" Ice	3.36	1.44	0.08
RRUS 12	B	From Face	4.00	0.00	0.0000	136.00	1" Ice	4.07	1.95	0.17
							2" Ice			
							No Ice	3.15	1.29	0.06
							1/2" Ice	3.36	1.44	0.08
DC6-48-60-18-8F	C	From Face	4.00	0.00	0.0000	136.00	1" Ice	2.04	2.04	0.12
							2" Ice			
							No Ice	0.92	0.92	0.03

Description	Face or Leg	Offset Type	Offsets:			Azimuth Adjustment	Placement	C _A A _A Front	C _A A _A Side	Weight
			Horz	Lateral	Vert					
12' x 2" Horizontal Pipe	A	From Face	4.00	0.00	0.00	136.00	1" Ice	2.04	2.04	0.12
							2" Ice			
							No Ice	2.40	0.03	0.04
							1/2" Ice	3.21	0.06	0.06
							Ice	4.04	0.09	0.10
12' x 2" Horizontal Pipe	B	From Face	4.00	0.00	0.00	136.00	1" Ice	5.70	0.18	0.19
							2" Ice			
							No Ice	2.40	0.03	0.04
							1/2" Ice	3.21	0.06	0.06
							Ice	4.04	0.09	0.10
12' x 2" Horizontal Pipe	C	From Face	4.00	0.00	0.00	136.00	1" Ice	5.70	0.18	0.19
							2" Ice			
							No Ice	2.40	0.03	0.04
							1/2" Ice	3.21	0.06	0.06
							Ice	4.04	0.09	0.10
Sector Mount [SM 801-3]	C	None			0.0000	136.00	1" Ice	5.70	0.18	0.19
							2" Ice			
							No Ice	20.40	20.40	0.88
							1/2" Ice	26.30	26.30	1.25
							Ice	32.20	32.20	1.63
Level 126 APXVTM14-ALU-I20	A	From Leg	4.00	0.00	0.0000	126.00	1" Ice	7.88	5.07	0.25
							2" Ice			
							No Ice	6.34	3.61	0.06
							1/2" Ice	6.72	3.97	0.10
							Ice	7.10	4.33	0.14
APXVTM14-ALU-I20	B	From Leg	4.00	0.00	0.0000	126.00	1" Ice	7.88	5.07	0.25
							2" Ice			
							No Ice	6.34	3.61	0.06
							1/2" Ice	6.72	3.97	0.10
							Ice	7.10	4.33	0.14
APXVTM14-ALU-I20	C	From Leg	4.00	0.00	0.0000	126.00	1" Ice	7.88	5.07	0.25
							2" Ice			
							No Ice	6.34	3.61	0.06
							1/2" Ice	6.72	3.97	0.10
							Ice	7.10	4.33	0.14
APXVBLL20X_43-C-I20	A	From Leg	4.00	0.00	0.0000	126.00	1" Ice	16.60	9.40	0.47
							2" Ice			
							No Ice	14.35	7.27	0.09
							1/2" Ice	14.90	7.79	0.17
							Ice	15.46	8.32	0.26
APXVBLL20X_43-C-I20	B	From Leg	4.00	0.00	0.0000	126.00	1" Ice	16.60	9.40	0.47
							2" Ice			
							No Ice	14.35	7.27	0.09
							1/2" Ice	14.90	7.79	0.17
							Ice	15.46	8.32	0.26
APXVBLL20X_43-C-I20	C	From Leg	4.00	0.00	0.0000	126.00	1" Ice	16.60	9.40	0.47
							2" Ice			
							No Ice	14.35	7.27	0.09
							1/2" Ice	14.90	7.79	0.17
							Ice	15.46	8.32	0.26
FZHN	A	From Leg	4.00	0.00	0.0000	126.00	1" Ice	2.77	1.09	0.12
							2" Ice			
							No Ice	2.02	0.61	0.04
							1/2" Ice	2.20	0.71	0.06
							Ice	2.38	0.83	0.07
FZHN	B	From Leg	4.00	0.00	0.0000	126.00	1" Ice	2.77	1.09	0.12
							2" Ice			
							No Ice	2.02	0.61	0.04
							1/2" Ice	2.20	0.71	0.06
							Ice	2.38	0.83	0.07
FZHN	C	From Leg	4.00	0.00	0.0000	126.00	No Ice	2.02	0.61	0.04
								2.20	0.71	0.06

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment	Placement ft	C _A A _{Front} ft ²	C _A A _{Side} ft ²	Weight K
			0.00			1/2" 2.38 Ice 2.77	0.83 1.09	0.07 0.12
1900MHZ RRH (65MHZ)	A	From Leg	4.00 0.00 0.00	0.0000	126.00	No Ice 2.31 1/2" 2.52 Ice 2.73 1" Ice 3.17 2" Ice	2.38 2.58 2.79 3.24	0.06 0.08 0.11 0.18
1900MHZ RRH (65MHZ)	B	From Leg	4.00 0.00 0.00	0.0000	126.00	No Ice 2.31 1/2" 2.52 Ice 2.73 1" Ice 3.17 2" Ice	2.38 2.58 2.79 3.24	0.06 0.08 0.11 0.18
1900MHZ RRH (65MHZ)	C	From Leg	4.00 0.00 0.00	0.0000	126.00	No Ice 2.31 1/2" 2.52 Ice 2.73 1" Ice 3.17 2" Ice	2.38 2.58 2.79 3.24	0.06 0.08 0.11 0.18
(2) 800MHZ 2X50W RRH	A	From Leg	4.00 0.00 0.00	0.0000	126.00	No Ice 2.13 1/2" 2.32 Ice 2.51 1" Ice 2.92 2" Ice	1.77 1.95 2.13 2.51	0.05 0.07 0.10 0.16
(2) 800MHZ 2X50W RRH	B	From Leg	4.00 0.00 0.00	0.0000	126.00	No Ice 2.13 1/2" 2.32 Ice 2.51 1" Ice 2.92 2" Ice	1.77 1.95 2.13 2.51	0.05 0.07 0.10 0.16
(2) 800MHZ 2X50W RRH	C	From Leg	4.00 0.00 0.00	0.0000	126.00	No Ice 2.13 1/2" 2.32 Ice 2.51 1" Ice 2.92 2" Ice	1.77 1.95 2.13 2.51	0.05 0.07 0.10 0.16
Platform Mount [LP 301-1]	C	None		0.0000	126.00	No Ice 30.10 1/2" 40.80 Ice 51.50 1" Ice 72.90 2" Ice	30.10 40.80 51.50 72.90	1.59 2.03 2.47 3.35
Miscellaneous [NA 509-3]	C	None		0.0000	126.00	No Ice 11.84 1/2" 16.96 Ice 22.08 1" Ice 32.32 2" Ice	11.84 16.96 22.08 32.32	0.28 0.30 0.32 0.36

Load Combinations

Comb. No.	Description
1	Dead Only
2	1.2 Dead+1.0 Wind 0 deg - No Ice
3	0.9 Dead+1.0 Wind 0 deg - No Ice
4	1.2 Dead+1.0 Wind 30 deg - No Ice
5	0.9 Dead+1.0 Wind 30 deg - No Ice
6	1.2 Dead+1.0 Wind 60 deg - No Ice
7	0.9 Dead+1.0 Wind 60 deg - No Ice
8	1.2 Dead+1.0 Wind 90 deg - No Ice
9	0.9 Dead+1.0 Wind 90 deg - No Ice
10	1.2 Dead+1.0 Wind 120 deg - No Ice
11	0.9 Dead+1.0 Wind 120 deg - No Ice
12	1.2 Dead+1.0 Wind 150 deg - No Ice

Comb. No.	Description
13	0.9 Dead+1.0 Wind 150 deg - No Ice
14	1.2 Dead+1.0 Wind 180 deg - No Ice
15	0.9 Dead+1.0 Wind 180 deg - No Ice
16	1.2 Dead+1.0 Wind 210 deg - No Ice
17	0.9 Dead+1.0 Wind 210 deg - No Ice
18	1.2 Dead+1.0 Wind 240 deg - No Ice
19	0.9 Dead+1.0 Wind 240 deg - No Ice
20	1.2 Dead+1.0 Wind 270 deg - No Ice
21	0.9 Dead+1.0 Wind 270 deg - No Ice
22	1.2 Dead+1.0 Wind 300 deg - No Ice
23	0.9 Dead+1.0 Wind 300 deg - No Ice
24	1.2 Dead+1.0 Wind 330 deg - No Ice
25	0.9 Dead+1.0 Wind 330 deg - No Ice
26	1.2 Dead+1.0 Ice+1.0 Temp
27	1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp
28	1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp
29	1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp
30	1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp
31	1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp
32	1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp
33	1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp
34	1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp
35	1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp
36	1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp
37	1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp
38	1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp
39	Dead+Wind 0 deg - Service
40	Dead+Wind 30 deg - Service
41	Dead+Wind 60 deg - Service
42	Dead+Wind 90 deg - Service
43	Dead+Wind 120 deg - Service
44	Dead+Wind 150 deg - Service
45	Dead+Wind 180 deg - Service
46	Dead+Wind 210 deg - Service
47	Dead+Wind 240 deg - Service
48	Dead+Wind 270 deg - Service
49	Dead+Wind 300 deg - Service
50	Dead+Wind 330 deg - Service

Maximum Member Forces

Sectio n No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L1	140 - 103.667	Pole	Max Tension	36	0.00	-0.00	-0.00
			Max. Compression	26	-18.80	-0.21	0.30
			Max. Mx	8	-8.87	-255.40	0.57
			Max. My	2	-8.87	-0.46	254.39
			Max. Vy	8	12.24	-255.40	0.57
			Max. Vx	2	-12.20	-0.46	254.39
			Max. Torque	25			
L2	103.667 - 59.75	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-29.96	-0.51	0.47
			Max. Mx	8	-16.55	-880.50	1.23
			Max. My	2	-16.55	-1.14	877.77
			Max. Vy	8	17.14	-880.50	1.23
			Max. Vx	2	-17.10	-1.14	877.77
			Max. Torque	13			
L3	59.75 - 30	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-41.67	-0.75	0.61
			Max. Mx	8	-25.38	-1432.36	1.68
			Max. My	2	-25.38	-1.60	1428.46
			Max. Vy	8	20.94	-1432.36	1.68
			Max. Vx	2	-20.90	-1.60	1428.46
			Max. Torque	13			

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L4	30 - 0	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-59.71	-1.07	0.79
			Max. Mx	8	-39.78	-2269.64	2.24
			Max. My	2	-39.78	-2.16	2264.32
			Max. Vy	8	25.52	-2269.64	2.24
			Max. Vx	2	-25.48	-2.16	2264.32
			Max. Torque	13			0.14

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Pole	Max. Vert	26	59.71	0.00	0.00
	Max. H _x	20	39.78	25.51	-0.01
	Max. H _z	2	39.78	-0.01	25.47
	Max. M _x	2	2264.32	-0.01	25.47
	Max. M _z	8	2269.64	-25.51	0.01
	Max. Torsion	13	0.14	-12.74	-22.05
	Min. Vert	13	29.84	-12.74	-22.05
	Min. H _x	8	39.78	-25.51	0.01
	Min. H _z	14	39.78	0.01	-25.47
	Min. M _x	14	-2263.92	0.01	-25.47
	Min. M _z	20	-2269.39	25.51	-0.01
	Min. Torsion	25	-0.14	12.74	22.05

Tower Mast Reaction Summary

Load Combination	Vertical K	Shear _x K	Shear _z K	Overturning Moment, M _x kip-ft	Overturning Moment, M _z kip-ft	Torque kip-ft
Dead Only	33.15	0.00	0.00	-0.16	-0.10	0.00
1.2 Dead+1.0 Wind 0 deg - No Ice	39.78	0.01	-25.47	-2264.32	-2.16	0.10
0.9 Dead+1.0 Wind 0 deg - No Ice	29.84	0.01	-25.47	-2253.21	-2.12	0.11
1.2 Dead+1.0 Wind 30 deg - No Ice	39.78	12.77	-22.06	-1962.00	-1136.65	0.04
0.9 Dead+1.0 Wind 30 deg - No Ice	29.84	12.77	-22.06	-1952.37	-1131.06	0.04
1.2 Dead+1.0 Wind 60 deg - No Ice	39.78	22.10	-12.75	-1134.02	-1966.60	-0.03
0.9 Dead+1.0 Wind 60 deg - No Ice	29.84	22.10	-12.75	-1128.43	-1956.96	-0.03
1.2 Dead+1.0 Wind 90 deg - No Ice	39.78	25.51	-0.01	-2.24	-2269.64	-0.10
0.9 Dead+1.0 Wind 90 deg - No Ice	29.84	25.51	-0.01	-2.17	-2258.52	-0.10
1.2 Dead+1.0 Wind 120 deg - No Ice	39.78	22.08	12.72	1130.10	-1964.56	-0.14
0.9 Dead+1.0 Wind 120 deg - No Ice	29.84	22.08	12.72	1124.63	-1954.94	-0.14
1.2 Dead+1.0 Wind 150 deg - No Ice	39.78	12.74	22.05	1959.57	-1133.12	-0.14
0.9 Dead+1.0 Wind 150 deg - No Ice	29.84	12.74	22.05	1950.05	-1127.55	-0.14
1.2 Dead+1.0 Wind 180 deg - No Ice	39.78	-0.01	25.47	2263.92	1.92	-0.10
0.9 Dead+1.0 Wind 180 deg - No Ice	29.84	-0.01	25.47	2252.92	1.94	-0.11

Load Combination	Vertical K	Shear _x K	Shear _z K	Overturning Moment, M _x kip-ft	Overturning Moment, M _z kip-ft	Torque kip-ft
1.2 Dead+1.0 Wind 210 deg - No Ice	39.78	-12.77	22.06	1961.61	1136.40	-0.04
0.9 Dead+1.0 Wind 210 deg - No Ice	29.84	-12.77	22.06	1952.08	1130.88	-0.04
1.2 Dead+1.0 Wind 240 deg - No Ice	39.78	-22.10	12.75	1133.63	1966.36	0.03
0.9 Dead+1.0 Wind 240 deg - No Ice	29.84	-22.10	12.75	1128.14	1956.78	0.03
1.2 Dead+1.0 Wind 270 deg - No Ice	39.78	-25.51	0.01	1.84	2269.39	0.10
0.9 Dead+1.0 Wind 270 deg - No Ice	29.84	-25.51	0.01	1.88	2258.34	0.10
1.2 Dead+1.0 Wind 300 deg - No Ice	39.78	-22.08	-12.72	-1130.49	1964.32	0.14
0.9 Dead+1.0 Wind 300 deg - No Ice	29.84	-22.08	-12.72	-1124.92	1954.75	0.14
1.2 Dead+1.0 Wind 330 deg - No Ice	39.78	-12.74	-22.05	-1959.96	1132.87	0.14
0.9 Dead+1.0 Wind 330 deg - No Ice	29.84	-12.74	-22.05	-1950.34	1127.37	0.14
1.2 Dead+1.0 Ice+1.0 Temp	59.71	0.00	0.00	-0.79	-1.07	0.00
1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp	59.71	0.00	-5.26	-470.00	-1.39	-0.00
1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp	59.71	2.64	-4.56	-407.29	-236.30	-0.00
1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp	59.71	4.56	-2.63	-235.66	-408.20	-0.00
1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp	59.71	5.27	-0.00	-1.12	-471.01	-0.00
1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp	59.71	4.56	2.63	233.50	-407.92	-0.00
1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp	59.71	2.63	4.56	405.33	-235.82	-0.00
1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp	59.71	-0.00	5.26	468.33	-0.83	0.00
1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp	59.71	-2.64	4.56	405.61	234.08	0.00
1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp	59.71	-4.56	2.63	233.99	405.97	0.00
1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp	59.71	-5.27	0.00	-0.55	468.78	0.00
1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp	59.71	-4.56	-2.63	-235.18	405.69	0.00
1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp	59.71	-2.63	-4.56	-407.00	233.59	0.00
Dead+Wind 0 deg - Service	33.15	0.00	-6.20	-549.96	-0.60	0.03
Dead+Wind 30 deg - Service	33.15	3.11	-5.37	-476.55	-276.08	0.01
Dead+Wind 60 deg - Service	33.15	5.38	-3.10	-275.49	-477.62	-0.01
Dead+Wind 90 deg - Service	33.15	6.21	-0.00	-0.66	-551.21	-0.02
Dead+Wind 120 deg - Service	33.15	5.38	3.10	274.31	-477.13	-0.03
Dead+Wind 150 deg - Service	33.15	3.10	5.37	475.73	-275.23	-0.03
Dead+Wind 180 deg - Service	33.15	-0.00	6.20	549.63	0.39	-0.03
Dead+Wind 210 deg - Service	33.15	-3.11	5.37	476.22	275.88	-0.01
Dead+Wind 240 deg - Service	33.15	-5.38	3.10	275.16	477.42	0.01
Dead+Wind 270 deg - Service	33.15	-6.21	0.00	0.33	551.00	0.02
Dead+Wind 300 deg - Service	33.15	-5.38	-3.10	-274.63	476.92	0.03
Dead+Wind 330 deg - Service	33.15	-3.10	-5.37	-476.05	275.02	0.03

Solution Summary

Load Comb.	Sum of Applied Forces			Sum of Reactions			% Error
	PX K	PY K	PZ K	PX K	PY K	PZ K	
1	0.00	-33.15	0.00	0.00	33.15	0.00	0.000%
2	0.01	-39.78	-25.47	-0.01	39.78	25.47	0.000%
3	0.01	-29.84	-25.47	-0.01	29.84	25.47	0.000%
4	12.77	-39.78	-22.06	-12.77	39.78	22.06	0.000%
5	12.77	-29.84	-22.06	-12.77	29.84	22.06	0.000%
6	22.10	-39.78	-12.75	-22.10	39.78	12.75	0.000%
7	22.10	-29.84	-12.75	-22.10	29.84	12.75	0.000%
8	25.51	-39.78	-0.01	-25.51	39.78	0.01	0.000%
9	25.51	-29.84	-0.01	-25.51	29.84	0.01	0.000%
10	22.08	-39.78	12.72	-22.08	39.78	-12.72	0.000%
11	22.08	-29.84	12.72	-22.08	29.84	-12.72	0.000%
12	12.74	-39.78	22.05	-12.74	39.78	-22.05	0.000%
13	12.74	-29.84	22.05	-12.74	29.84	-22.05	0.000%
14	-0.01	-39.78	25.47	0.01	39.78	-25.47	0.000%
15	-0.01	-29.84	25.47	0.01	29.84	-25.47	0.000%
16	-12.77	-39.78	22.06	12.77	39.78	-22.06	0.000%
17	-12.77	-29.84	22.06	12.77	29.84	-22.06	0.000%
18	-22.10	-39.78	12.75	22.10	39.78	-12.75	0.000%
19	-22.10	-29.84	12.75	22.10	29.84	-12.75	0.000%
20	-25.51	-39.78	0.01	25.51	39.78	-0.01	0.000%
21	-25.51	-29.84	0.01	25.51	29.84	-0.01	0.000%
22	-22.08	-39.78	-12.72	22.08	39.78	12.72	0.000%
23	-22.08	-29.84	-12.72	22.08	29.84	12.72	0.000%
24	-12.74	-39.78	-22.05	12.74	39.78	22.05	0.000%
25	-12.74	-29.84	-22.05	12.74	29.84	22.05	0.000%
26	0.00	-59.71	0.00	0.00	59.71	0.00	0.000%
27	0.00	-59.71	-5.26	-0.00	59.71	5.26	0.000%
28	2.64	-59.71	-4.56	-2.64	59.71	4.56	0.000%
29	4.56	-59.71	-2.63	-4.56	59.71	2.63	0.000%
30	5.27	-59.71	-0.00	-5.27	59.71	0.00	0.000%
31	4.56	-59.71	2.63	-4.56	59.71	-2.63	0.000%
32	2.63	-59.71	4.56	-2.63	59.71	-4.56	0.000%
33	-0.00	-59.71	5.26	0.00	59.71	-5.26	0.000%
34	-2.64	-59.71	4.56	2.64	59.71	-4.56	0.000%
35	-4.56	-59.71	2.63	4.56	59.71	-2.63	0.000%
36	-5.27	-59.71	0.00	5.27	59.71	-0.00	0.000%
37	-4.56	-59.71	-2.63	4.56	59.71	2.63	0.000%
38	-2.63	-59.71	-4.56	2.63	59.71	4.56	0.000%
39	0.00	-33.15	-6.20	-0.00	33.15	6.20	0.000%
40	3.11	-33.15	-5.37	-3.11	33.15	5.37	0.000%
41	5.38	-33.15	-3.10	-5.38	33.15	3.10	0.000%
42	6.21	-33.15	-0.00	-6.21	33.15	0.00	0.000%
43	5.38	-33.15	3.10	-5.38	33.15	-3.10	0.000%
44	3.10	-33.15	5.37	-3.10	33.15	-5.37	0.000%
45	-0.00	-33.15	6.20	0.00	33.15	-6.20	0.000%
46	-3.11	-33.15	5.37	3.11	33.15	-5.37	0.000%
47	-5.38	-33.15	3.10	5.38	33.15	-3.10	0.000%
48	-6.21	-33.15	0.00	6.21	33.15	-0.00	0.000%
49	-5.38	-33.15	-3.10	5.38	33.15	3.10	0.000%
50	-3.10	-33.15	-5.37	3.10	33.15	5.37	0.000%

Non-Linear Convergence Results

Load Combination	Converged?	Number of Cycles	Displacement Tolerance	Force Tolerance
1	Yes	4	0.00000001	0.00000001
2	Yes	4	0.00000001	0.00004451
3	Yes	4	0.00000001	0.00002286
4	Yes	5	0.00000001	0.00002679
5	Yes	4	0.00000001	0.00068001
6	Yes	5	0.00000001	0.00002682
7	Yes	4	0.00000001	0.00068051
8	Yes	4	0.00000001	0.00004444
9	Yes	4	0.00000001	0.00002277
10	Yes	5	0.00000001	0.00002637
11	Yes	4	0.00000001	0.00066925
12	Yes	5	0.00000001	0.00002677
13	Yes	4	0.00000001	0.00067957
14	Yes	4	0.00000001	0.00004298
15	Yes	4	0.00000001	0.00002160
16	Yes	5	0.00000001	0.00002664
17	Yes	4	0.00000001	0.00067623
18	Yes	5	0.00000001	0.00002668
19	Yes	4	0.00000001	0.00067726
20	Yes	4	0.00000001	0.00004295
21	Yes	4	0.00000001	0.00002154
22	Yes	5	0.00000001	0.00002681
23	Yes	4	0.00000001	0.00068056
24	Yes	5	0.00000001	0.00002635
25	Yes	4	0.00000001	0.00066873
26	Yes	4	0.00000001	0.00000001
27	Yes	4	0.00000001	0.00074726
28	Yes	4	0.00000001	0.00076524
29	Yes	4	0.00000001	0.00076602
30	Yes	4	0.00000001	0.00074887
31	Yes	4	0.00000001	0.00076260
32	Yes	4	0.00000001	0.00076052
33	Yes	4	0.00000001	0.00074318
34	Yes	4	0.00000001	0.00075910
35	Yes	4	0.00000001	0.00075978
36	Yes	4	0.00000001	0.00074453
37	Yes	4	0.00000001	0.00076105
38	Yes	4	0.00000001	0.00076168
39	Yes	4	0.00000001	0.00000930
40	Yes	4	0.00000001	0.00002286
41	Yes	4	0.00000001	0.00002287
42	Yes	4	0.00000001	0.00000932
43	Yes	4	0.00000001	0.00002222
44	Yes	4	0.00000001	0.00002298
45	Yes	4	0.00000001	0.00000928
46	Yes	4	0.00000001	0.00002256
47	Yes	4	0.00000001	0.00002260
48	Yes	4	0.00000001	0.00000931
49	Yes	4	0.00000001	0.00002304
50	Yes	4	0.00000001	0.00002222

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	140 - 103.667	10.366	41	0.6477	0.0003
L2	107.75 - 59.75	6.148	41	0.5667	0.0001
L3	65 - 30	2.124	41	0.3083	0.0000
L4	36 - 0	0.658	41	0.1637	0.0000

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
140.00	Lightning Rod 5/8"x4'	41	10.366	0.6477	0.0003	69680
136.00	DBXLH-9090C-VTM w/ Mount Pipe	41	9.819	0.6412	0.0003	69680
126.00	APXVTM14-ALU-I20	41	8.467	0.6228	0.0002	24885

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	140 - 103.667	42.698	6	2.6688	0.0012
L2	107.75 - 59.75	25.325	6	2.3354	0.0005
L3	65 - 30	8.747	6	1.2704	0.0002
L4	36 - 0	2.712	6	0.6744	0.0001

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
140.00	Lightning Rod 5/8"x4'	6	42.698	2.6688	0.0012	16992
136.00	DBXLH-9090C-VTM w/ Mount Pipe	6	40.447	2.6421	0.0011	16992
126.00	APXVTM14-ALU-I20	6	34.877	2.5664	0.0009	6068

Compression Checks

Pole Design Data

Section No.	Elevation ft	Size	L ft	L _u ft	KI/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
L1	140 - 103.667 (1)	TP32.689x24x0.25	36.33	0.00	0.0	24.965 5	-8.87	1711.61	0.005
L2	103.667 - 59.75 (2)	TP42.531x31.2126x0.312 5	48.00	0.00	0.0	40.647 6	-16.55	2746.72	0.006
L3	59.75 - 30 (3)	TP48.861x40.668x0.4375	35.00	0.00	0.0	65.291 7	-25.38	4699.90	0.005
L4	30 - 0 (4)	TP55x46.5815x0.5	36.00	0.00	0.0	86.491 5	-39.78	6201.30	0.006

Pole Bending Design Data

Section No.	Elevation ft	Size	M_{ux} kip-ft	ϕM_{nx} kip-ft	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	M_{uy} kip-ft	ϕM_{ny} kip-ft	Ratio $\frac{M_{uy}}{\phi M_{ny}}$
L1	140 - 103.667 (1)	TP32.689x24x0.25	255.55	1107.28	0.231	0.00	1107.28	0.000
L2	103.667 - 59.75 (2)	TP42.531x31.2126x0.312 5	880.79	2315.18	0.380	0.00	2315.18	0.000
L3	59.75 - 30 (3)	TP48.861x40.668x0.4375	1432.74	4537.66	0.316	0.00	4537.66	0.000
L4	30 - 0 (4)	TP55x46.5815x0.5	2270.13	6940.73	0.327	0.00	6940.73	0.000

Pole Shear Design Data

Section No.	Elevation ft	Size	Actual V_u K	ϕV_n K	Ratio $\frac{V_u}{\phi V_n}$	Actual T_u kip-ft	ϕT_n kip-ft	Ratio $\frac{T_u}{\phi T_n}$
L1	140 - 103.667 (1)	TP32.689x24x0.25	12.25	438.14	0.028	0.03	1188.13	0.000
L2	103.667 - 59.75 (2)	TP42.531x31.2126x0.312 5	17.15	713.37	0.024	0.03	2521.28	0.000
L3	59.75 - 30 (3)	TP48.861x40.668x0.4375	20.95	1145.87	0.018	0.03	4630.94	0.000
L4	30 - 0 (4)	TP55x46.5815x0.5	25.52	1517.93	0.017	0.03	7112.49	0.000

Pole Interaction Design Data

Section No.	Elevation ft	Ratio P_u ϕP_n	Ratio M_{ux} ϕM_{nx}	Ratio M_{uy} ϕM_{ny}	Ratio V_u ϕV_n	Ratio T_u ϕT_n	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
L1	140 - 103.667 (1)	0.005	0.231	0.000	0.028	0.000	0.237	1.050	4.8.2 ✓
L2	103.667 - 59.75 (2)	0.006	0.380	0.000	0.024	0.000	0.387	1.050	4.8.2 ✓
L3	59.75 - 30 (3)	0.005	0.316	0.000	0.018	0.000	0.321	1.050	4.8.2 ✓
L4	30 - 0 (4)	0.006	0.327	0.000	0.017	0.000	0.334	1.050	4.8.2 ✓

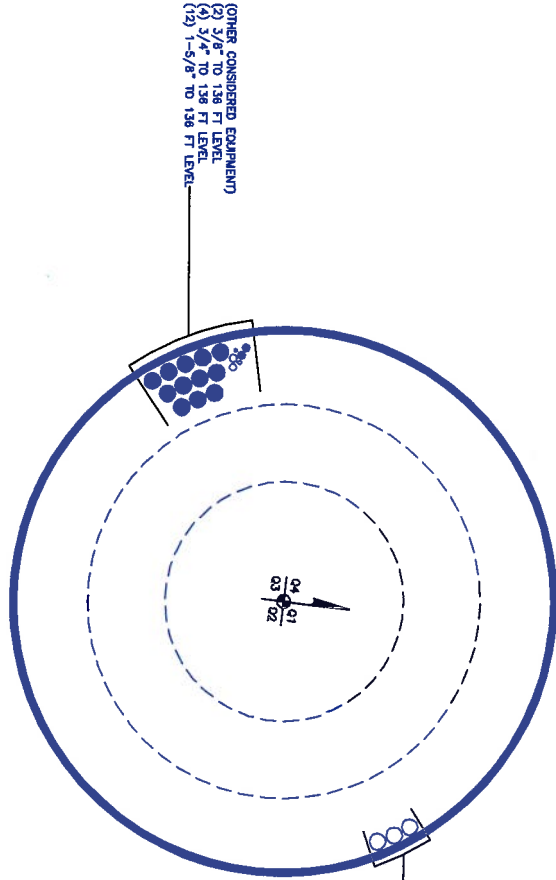
Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
L1	140 - 103.667	Pole	TP32.689x24x0.25	1	-8.87	1797.19	22.5	Pass
L2	103.667 - 59.75	Pole	TP42.531x31.2126x0.3125	2	-16.55	2884.06	36.9	Pass
L3	59.75 - 30	Pole	TP48.861x40.668x0.4375	3	-25.38	4934.89	30.6	Pass
L4	30 - 0	Pole	TP55x46.5815x0.5	4	-39.78	6511.36	31.8	Pass
Summary								
Pole (L2)							36.9	Pass
RATING =							36.9	Pass

APPENDIX B
BASE LEVEL DRAWING



(PROPOSED EQUIPMENT CONFIGURATION)
(3) 1-5/8" TO 126 FT LEVEL



(OTHER CONSIDERED EQUIPMENT)
(2) 3/4" TO 136 FT LEVEL
(4) 3/4" TO 136 FT LEVEL
(12) 1-5/8" TO 136 FT LEVEL

BUSINESS UNIT: 5800126 TOWER ID: C-BASEL001

BASE LEVEL DRAWING

10/11/2016 10:00:00 AM 10/11/2016 10:00:00 AM 10/11/2016 10:00:00 AM

CROWN REGION ADDRESS
USA

12/1/13	UPDATED PER WORK ORDER # 082250
8/4/2015	UPDATED PER WORK ORDER 1027440
14/2/2016	UPDATED PER WORK ORDER 1107008
08/05/16	UPDATED PER WORK ORDER 1204822
06/05/16	UPDATED PER WORK ORDER 1263114
06/11/17	UPDATED PER WORK ORDER 1480404
02/04/16	UPDATED PER WORK ORDER 1497913
02/04/16	UPDATED PER WORK ORDER 1850643
04/04/16	UPDATED PER WORK ORDER 1852282

DRAWN BY: WJM
CHECKED BY: WJM
DRAWING DATE: 08/11/09

SITE NUMBER: _____
 SITE NAME: _____
 TOWPKINS COMMUNITY COLLEGE
 BUSINESS UNIT NUMBER
 5800126
 SITE ADDRESS
 20 FAR VIEW DRIVE
 DRYDEN, NY 13825
 COUNTY
 USA
 SHEET TITLE
 BASE LEVEL
 SHEET NUMBER
 A1-0

1

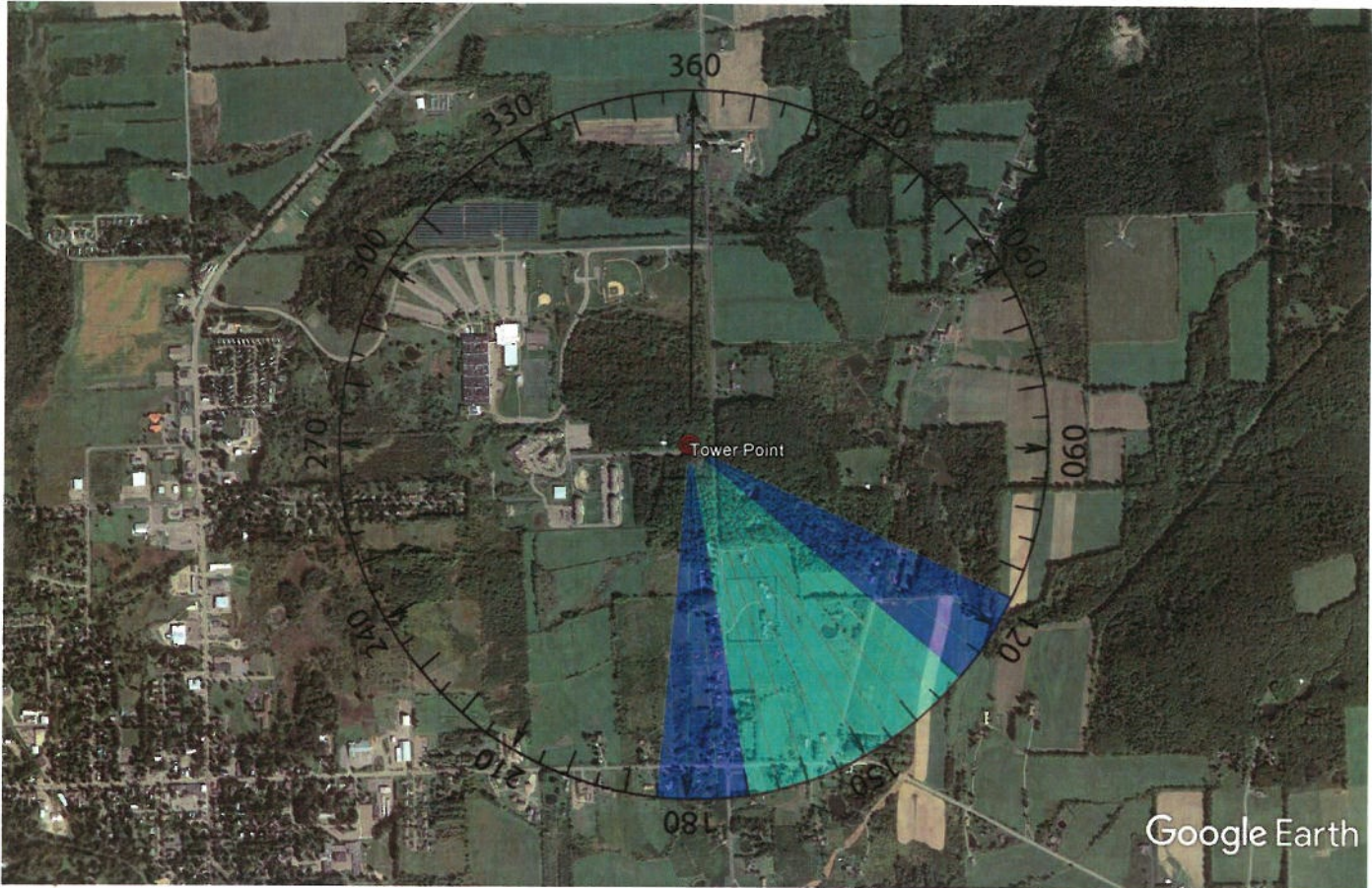
APPENDIX C
ADDITIONAL CALCULATIONS

Exposure Category Determination

BU#5800126



- Latitude/Longitude = 42° 29' 59.45", -76° 16' 47.60"
- Tower Height = 140 ft
- Upwind Fetch Radius = Greater of 25 x Tower Height or 3250 ft = 3500 ft
- Minimum Open Patch = 164 ft x 164 ft
- Maximum continuous surface roughness category C arc angle = 50 degrees
- Kmz file saved in folder ... R:\SA Models - Letters\Work Area\Exposure_Topo_KMZ



Exposure Category for this site is **C**.

The determination is based on Crown Castle standard ENG-PRC-10202, Determination of Exposure Category, revision C.

Completed by: Jared Koski

Approved by: Ali Abbaszadeh

Date: 08/09/2017

Date: 12/13/2017



Unmitigated Percentage (B/C)

Inputs

Tower Height (ft):	140'
Starting Azimuth:	130°
Upwind Fetch Radius (ft):	3500'
20% Unmitigated Limit (ft):	700'
Overlay Size Selected:	40°

Subsector (Degrees)	Total Unmitigated Length (ft)	Percentage of Subsector Unmitigated
115°		0.0%
120°	770'	22.0%
125°	1260'	36.0%
130°	1440'	41.1%
135°	1520'	43.4%
140°	2155'	61.6%
145°	2105'	60.1%
150°	1740'	49.7%
155°	1615'	46.1%
160°	1970'	56.3%
165°	1330'	38.0%
170°	645'	18.4%
175°	960'	27.4%
180°	760'	21.7%

THIS SITE IS EXPOSURE:	C
------------------------	----------

Length measurements should be taken to the nearest 5' increment.

The determination is based on Crown Castle standard ENG-PRC-10202, Determination of Exposure Category, revision C.

This chart is intended only for use with Exposures B and C and is Not applicable for Exposure D.

LEGEND	
	Considered Subsector
	Bookending Subsector

Topographic Category Determination

BU#5800126



- Latitude/Longitude = 42° 29' 59.45", -76° 16' 47.60"
- Tower Height = 140 ft
- Topo Radius = 10,560 ft
- Maximum continuous effective topo arc angle = 115 degrees
- Critical wind azimuth used in topo tool = 240-355
- Kmz file saved in folder ... R:\SA Models - Letters\Work Area\Exposure_Topo_KMZ



Exposure Category for this site is **C**.
Topo feature is a Hill.
Topographic Factor (K_{ZT}) at base is 1.617.

The determination is based on Crown Castle standard ENG-PRC-10040, Determination of Topographic Factor, initial release.

Completed by: Jared Koski

Approved by: Ali Abbaszadeh

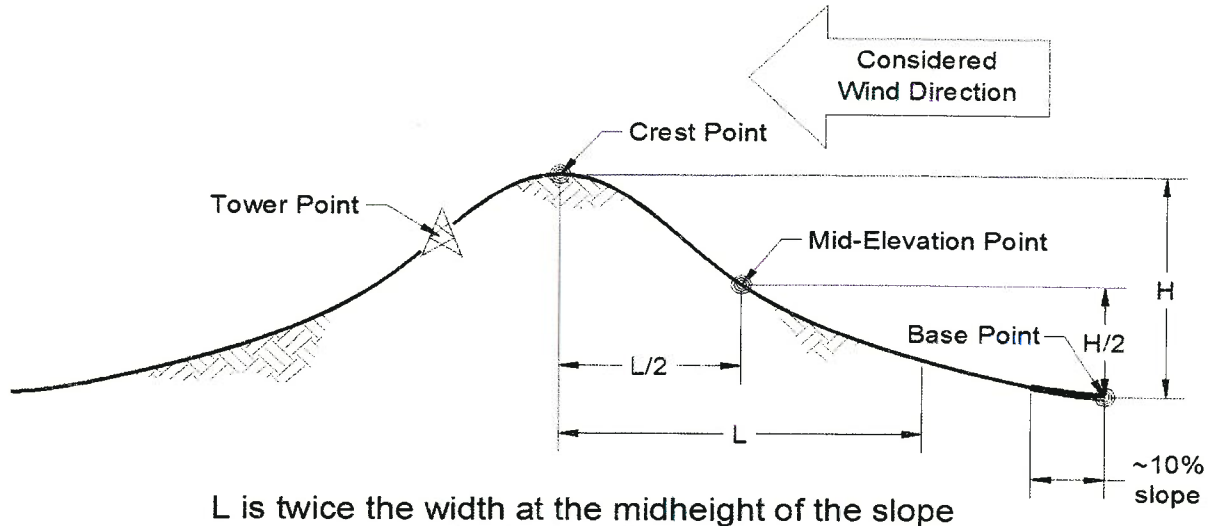
Date: 08/09/2017

Date: 12/13/2017

Topographic Factors for use in tnxDTower

(v. 3.1, effective 10.14.13)
per SEAW RSM-03 Figure 3-3

BU#: 806329
Site Name: Tompkins Community College
App#:



Topographic Feature

- Continuous Ridge
- Flat Topped Ridge
- Hill
- Flat Topped Hill
- Continuous Escarpment

Exposure Category

- Exposure B
- Exposure C
- Exposure D

Notes:
1) Feature is assumed to be isolated per section 1.8 of the Crown Castle standard for the Determination of Topographic Factors (ENG-PRC-10040).
2) Base K_{zt} may differ slightly from TNX value due to differences in where the base line is established. This does not effect the results in anyway.

Topographic Input

Crest Point Elevation (ft. AMSL)	1490
Base Point Elevation (ft. AMSL)	1285
Mid-Height Elevation (ft. AMSL)	1387.5
Crest to Mid-Height Distance (L/2) (ft.)	540
Tower Point Elevation (ft. AMSL)	1440
Structure Upwind/Downwind Distance (x)(ft.)	263

tnxDTower Input

Topographic Category	5	K_{ZT} (RSM-03) At Base: 1.617²
Crest Height, H (ft.)	205	
Slope Distance, L (ft.)	1080	
Distance from Crest, x (ft.)	263	

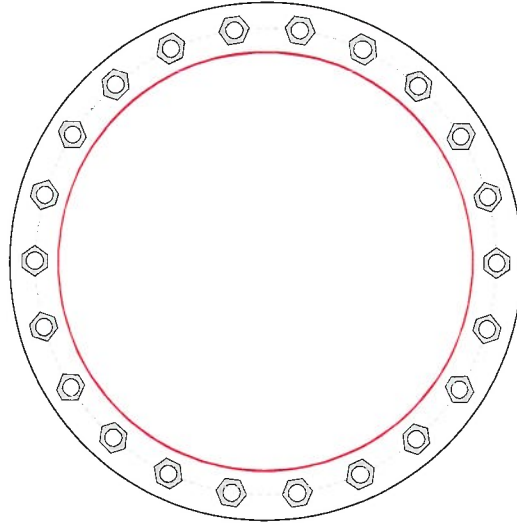
Monopole Base Plate Connection



Site Info	
BU #	5800126
Site Name	Tompkins Community College
Order #	456831 Rev. 0

Analysis Considerations	
TIA-222 Revision	H
Grout Considered:	No
l_{ar} (in)	2

Applied Loads	
Moment (kip-ft)	2270.14
Axial Force (kips)	39.78
Shear Force (kips)	25.52



Connection Properties	Analysis Results
-----------------------	------------------

Anchor Rod Data
(22) 2-1/4" ϕ bolts (A615-75 N; Fy=75 ksi, Fu=100 ksi) on 61.25" BC
Base Plate Data
68" OD x 2.25" Plate (A572-50; Fy=50 ksi, Fu=65 ksi)
Stiffener Data
N/A
Pole Data
55" x 0.5" 18-sided pole (A572-65; Fy=65 ksi, Fu=80 ksi)

Anchor Rod Summary		(units of kips, kip-in)
$P_u = 82.63$	$\phi P_n = 243.75$	Stress Rating
$V_u = 1.16$	$\phi V_n = 73.13$	32.3%
$M_u = n/a$	$\phi M_n = n/a$	Pass
Base Plate Summary		
Max Stress (ksi):	-	
Allowable Stress (ksi):	-	
Stress Rating:	Rohn/Pirod OK	

Pier and Pad Foundation



BU # : 5800126
Site Name: Tompkins Community College
App. Number: 456831 Rev. 0

TIA-222 Revision: H
Tower Type: Monopole

Block Foundation?:

Superstructure Analysis Reactions		
Compression, P_{comp}	40	kips
Base Shear, V_u_{comp}	26	kips
Moment, M_u	2270	ft-kips
Tower Height, H	140	ft
BP Dist. Above Fdn, bp_{dist}	0	in

Foundation Analysis Checks				
	Capacity	Demand	Rating*	Check
<i>Lateral (Sliding) (kips)</i>	152.63	26.00	16.2%	Pass
<i>Bearing Pressure (ksf)</i>	6.00	1.85	29.4%	Pass
<i>Overtuning (kip*ft)</i>	5450.47	2439.00	44.7%	Pass
<i>Pier Flexure (Comp.) (kip*ft)</i>	5674.10	2361.00	39.6%	Pass
<i>Pier Compression (kip)</i>	35802.00	75.44	0.2%	Pass
<i>Pad Flexure (kip*ft)</i>	3848.73	814.47	20.2%	Pass
<i>Pad Shear - 1-way (kips)</i>	962.32	118.96	11.8%	Pass
<i>Pad Shear - 2-way (Comp) (ksi)</i>	0.190	0.023	11.3%	Pass
<i>Flexural 2-way (Comp) (kip*ft)</i>	2319.83	1416.60	58.2%	Pass

Pier Properties		
Pier Shape:	Square	
Pier Diameter, d_{pier}	7.5	ft
Ext. Above Grade, E	0.5	ft
Pier Rebar Size, S_c	9	
Pier Rebar Quantity, m_c	32	
Pier Tie/Spiral Size, S_t	5	
Pier Tie/Spiral Quantity, m_t	27	
Pier Reinforcement Type:	Tie	
Pier Clear Cover, cc_{pier}	3	in

*Rating per TIA-222-H Section 15.5

Soil Rating*:	44.7%
Structural Rating*:	58.2%

Pad Properties		
Depth, D	6	ft
Pad Width, W	27	ft
Pad Thickness, T	3	ft
Pad Rebar Size, S_p	9	
Pad Rebar Quantity, m_p	28	
Pad Clear Cover, cc_{pad}	3	in

Material Properties		
Rebar Grade, F_y	60000	psi
Concrete Compressive Strength, F'_c	4000	psi
Dry Concrete Density, δ_c	150	pcf

Soil Properties		
Total Soil Unit Weight, γ	120	pcf
Ultimate Gross Bearing, Q_{ult}	8 000	ksf
Cohesion, C_u	0 000	ksf
Friction Angle, ϕ	30	degrees
SPT Blow Count, N_{blows}	50	
Base Friction, μ		
Neglected Depth, N	5.00	ft
Foundation Bearing on Rock?	Yes	
Groundwater Depth, gw	3	ft

<--Toggle between Gross and Net

5

RF EMISSIONS COMPLIANCE REPORT

Crown Castle on Behalf of Sprint

Site: Tompkins Community College
Crown Castle Site ID: 5800126
App ID: 456831
20 Far View Drive
Dryden, NY
9/25/2018

Report Status:

Sprint Is Compliant



Prepared By:

Sitesafe, LLC

Engineering Statement in Re:
Electromagnetic Energy Analysis
Sprint
Dryden, NY

My signature on the cover of this document indicates:

That I am registered as a Professional Engineer in the jurisdiction indicated; and

That I have extensive professional experience in the wireless communications engineering industry; and

That I am an employee of Sitesafe, LLC in Arlington, Virginia; and

That I am thoroughly familiar with the Rules and Regulations of the Federal Communications Commission ("the FCC" and "the FCC Rules") both in general and specifically as they apply to the FCC's Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields; and

That the technical information serving as the basis for this report was supplied by Sprint (See attached Site Summary and Carrier documents), and that Sprint's installations involve communications equipment, antennas and associated technical equipment at a location referred to as the "Tompkins Community College" ("the site"); and

That Sprint proposes to operate at the site with transmit antennas listed in the carrier summary and with a maximum effective radiated power as specified by Sprint and shown on the worksheet, and that worst-case 100% duty cycle have been assumed; and

That this analysis has been performed with the assumption that the ground immediately surrounding the tower is primarily flat or falling; and

That at this time, the FCC requires that certain licensees address specific levels of radio-frequency energy to which workers or members of the public might possibly be exposed (at §1.1307(b) of the FCC Rules); and

That such consideration of possible exposure of humans to radio-frequency radiation must utilize the standards set by the FCC, which is the Federal Agency having jurisdiction over communications facilities; and

That the FCC rules define two tiers of permissible exposure guidelines: 1) "uncontrolled environments," defined as situations in which persons may not be aware of (the "general public"), or may not be able to control their exposure to a transmission facility; and (2) "controlled environments," which defines situations in which persons are aware of their potential for exposure (industry personnel); and

That this statement specifically addresses the uncontrolled environment (which is more conservative than the controlled environment) and the limit set forth in the FCC rules for licensees of Sprint's operating frequency as shown on the attached antenna worksheet; and

That when applying the uncontrolled environment standards, the predicted Maximum Power Density at two meters above ground level from the proposed Sprint operation is no more than 0.494% of the maximum in any accessible area on the ground and

That it is understood per FCC Guidelines and OET65 Appendix A, that regardless of the existent radio-frequency environment, only those licenses whose contributions exceed five percent of the exposure limit pertinent to their operation(s) bear any responsibility for bringing any non-compliant area(s) into compliance; and

That when applying the uncontrolled environment standards, the cumulative predicted energy density from the proposed operation is no more than 1.204% of the maximum in any accessible area up to two meters above the ground per OET-65; and

That the calculations provided in this report are based on data provided by the client and antenna pattern data supplied by the antenna manufacturer, in accordance with FCC guidelines listed in OET-65. Horizontal and vertical antenna patterns are combined for modeling purposes to accurately reflect the energy two meters above ground level where on-axis energy refers to maximum energy two meters above the ground along the azimuth of the antenna and where area energy refers to the maximum energy anywhere two meters above the ground regardless of the antenna azimuth, accounting for cumulative energy from multiple antennas for the carrier and frequency range indicated; and

That the Occupational Safety and Health Administration has policies in place which address worker safety in and around communications sites, thus individual companies will be responsible for their employees' training regarding Radio Frequency Safety.

In summary, it is stated here that the proposed operation at the site would not result in exposure of the Public to excessive levels of radio-frequency energy as defined in the FCC Rules and Regulations, specifically 47 CFR 1.1307 and that Sprint's proposed operation is completely compliant.

Finally, it is stated that access to the tower should be restricted to communication industry professionals, and approved contractor personnel trained in radio-frequency safety; and that the instant analysis addresses exposure levels at two meters above ground level and does not address exposure levels on the tower, or in the immediate proximity of the antennas.

Sprint
Tompkins Community College
Site Summary

Carrier	Area Maximum Percentage MPE
Crown Castle	0.305 %
Crown Castle	0.405 %
Sprint	0.091 %
Sprint	0.217 %
Sprint	0.186 %
Composite Site MPE:	1.204 %

Crown Castle Tompkins Community College Carrier Summary

Frequency: 850 MHz
Maximum Permissible Exposure (MPE): 566.67 $\mu\text{W}/\text{cm}^2$
Maximum power density at ground level: 1.73095 $\mu\text{W}/\text{cm}^2$
Highest percentage of Maximum Permissible Exposure: 0.30546 %

Antenna Make	Model	Height (feet)	Orientation (degrees true)	ERP (Watts)	On Axis		Area	
					Max Power Density ($\mu\text{W}/\text{cm}^2$)	Percent of MPE	Max Power Density ($\mu\text{W}/\text{cm}^2$)	Percent of MPE
ANDREW	SBNH-1D6565C	136	60	1615	1.180724	0.208363	1.671353	0.294945
ANDREW	SBNH-1D6565C	136	180	1615	1.180724	0.208363	1.671353	0.294945
ANDREW	SBNH-1D6565C	136	300	1615	1.168897	0.206276	1.671353	0.294945

Crown Castle Tompkins Community College Carrier Summary

Frequency: 1900 MHz
Maximum Permissible Exposure (MPE): 1000 $\mu\text{W}/\text{cm}^2$
Maximum power density at ground level: 4.04699 $\mu\text{W}/\text{cm}^2$
Highest percentage of Maximum Permissible Exposure: 0.4047 %

Antenna Make	Model	Height (feet)	Orientation (degrees true)	ERP (Watts)	On Axis		Area	
					Max Power Density ($\mu\text{W}/\text{cm}^2$)	Percent of MPE	Max Power Density ($\mu\text{W}/\text{cm}^2$)	Percent of MPE
ANDREW	SBNH-1D8585C	136	60	1812	0.599932	0.059993	1.199966	0.119997
ANDREW	DBXLH-9090C-VTM	136	60	2229	0.42351	0.042351	1.377138	0.137714
ANDREW	DBXLH-9090C-VTM	136	180	2229	0.421895	0.042189	1.377138	0.137714
ANDREW	DBXLH-9090C-VTM	136	180	2229	0.421895	0.042189	1.377138	0.137714
ANDREW	DBXLH-9090C-VTM	136	300	2229	0.421895	0.042189	1.377138	0.137714
ANDREW	DBXLH-9090C-VTM	136	300	2229	0.421895	0.042189	1.377138	0.137714

Sprint Tompkins Community College Carrier Summary

Frequency: 2496 MHz
Maximum Permissible Exposure (MPE): 1000 $\mu\text{W}/\text{cm}^2$
Maximum power density at ground level: 0.90857 $\mu\text{W}/\text{cm}^2$
Highest percentage of Maximum Permissible Exposure: 0.09086 %

Antenna Make	Model	Height (feet)	Orientation (degrees true)	ERP (Watts)	On Axis		Area	
					Max Power Density ($\mu\text{W}/\text{cm}^2$)	Percent of MPE	Max Power Density ($\mu\text{W}/\text{cm}^2$)	Percent of MPE
RFS	APXVTM14-C-I20	126	0	1600	0.370855	0.037085	0.702209	0.070221
RFS	APXVTM14-C-I20	126	120	1600	0.370647	0.037065	0.702209	0.070221
RFS	APXVTM14-C-I20	126	240	1600	0.370855	0.037085	0.702209	0.070221

Sprint Tompkins Community College Carrier Summary

Frequency: 1930 MHz
Maximum Permissible Exposure (MPE): 1000 $\mu\text{W}/\text{cm}^2$
Maximum power density at ground level: 2.17188 $\mu\text{W}/\text{cm}^2$
Highest percentage of Maximum Permissible Exposure: 0.21719 %

Antenna Make	Model	Height (feet)	Orientation (degrees true)	ERP (Watts)	On Axis		Area	
					Max Power Density ($\mu\text{W}/\text{cm}^2$)	Percent of MPE	Max Power Density ($\mu\text{W}/\text{cm}^2$)	Percent of MPE
RFS	APXVBLL20X_43-C-I20 (Left Array)	126	0	1960	0.48869	0.048869	0.869077	0.086908
RFS	APXVBLL20X_43-C-I20 (Left Array)	126	120	1960	0.489031	0.048903	0.869077	0.086908
RFS	APXVBLL20X_43-C-I20 (Left Array)	126	240	1960	0.48869	0.048869	0.869077	0.086908
RFS	APXVBLL20X_43-C-I20 (Right Array)	126	0	2028	0.54895	0.054895	0.727847	0.072785
RFS	APXVBLL20X_43-C-I20 (Right Array)	126	120	2028	0.549328	0.054933	0.727847	0.072785
RFS	APXVBLL20X_43-C-I20 (Right Array)	126	240	2028	0.549322	0.054932	0.727847	0.072785

Sprint Tompkins Community College Carrier Summary

Frequency: 861 MHz
Maximum Permissible Exposure (MPE): 574 $\mu\text{W}/\text{cm}^2$
Maximum power density at ground level: 1.06755 $\mu\text{W}/\text{cm}^2$
Highest percentage of Maximum Permissible Exposure: 0.18598 %

Antenna Make	Model	Height (feet)	Orientation (degrees true)	ERP (Watts)	On Axis		Area	
					Max Power Density ($\mu\text{W}/\text{cm}^2$)	Percent of MPE	Max Power Density ($\mu\text{W}/\text{cm}^2$)	Percent of MPE
RFS	APXVBLL20X_43-C-I20 (Left Array)	126	0	861	0.380724	0.066328	0.459866	0.080116
RFS	APXVBLL20X_43-C-I20 (Left Array)	126	120	861	0.380724	0.066328	0.459866	0.080116
RFS	APXVBLL20X_43-C-I20 (Left Array)	126	240	861	0.382156	0.066578	0.459866	0.080116
RFS	APXVBLL20X_43-C-I20 (Right Array)	126	0	871	0.321358	0.055986	0.558108	0.097231
RFS	APXVBLL20X_43-C-I20 (Right Array)	126	120	871	0.321358	0.055986	0.558108	0.097231
RFS	APXVBLL20X_43-C-I20 (Right Array)	126	240	871	0.321033	0.055929	0.558108	0.097231

6

Market: Upstate New York
Crown Site Name: Tompkins Community College (TC3)
LOC ID - 7628_4250
Crown BUN: 807708

LEASE AGREEMENT

THIS LEASE AGREEMENT ("**Agreement**"), dated as of the latter of the signature dates below ("**Effective Date**"), is entered into by Tompkins Cortland Community College ("TC3"), an Education Institution of the State University of New York, having a mailing address of 170 North Street, Dryden, New York 13053 (hereinafter referred to as "**Landlord**") and Crown Communication Inc., a Delaware corporation, having a mailing address of 2000 Corporate Drive, Canonsburg, PA 15317 (hereinafter referred to as "**Tenant**").

BACKGROUND

Landlord owns or controls that certain plot, parcel or tract of land, together with all rights and privileges arising in connection therewith, located at **20 Far View Dr** in the County of **Tompkins**, State of **New York** (collectively, the "**Property**"). Tenant desires to use a portion of the Property in connection with its federally licensed communications business. Landlord desires to grant to Tenant the right to use a portion of the Property in accordance with this Agreement.

The parties agree as follows:

- 1. LEASE OF PREMISES.** Landlord leases to Tenant a certain portion of the Property containing approximately 10,000 square feet including the air space above such room/cabinet/ground space as described on attached **Exhibit 1**, together with unrestricted access for Tenant's uses from the nearest public right-of-way along the Property to the Premises as described on the attached **Exhibit 1** (collectively, the "**Premises**").
- 2. PERMITTED USE.** Tenant may use the Premises for the transmission and reception of communications signals and the installation, construction, maintenance, operation, repair, replacement and upgrade of its communications fixtures and related equipment, cables, accessories and improvements, which may include a suitable support structure, associated antennas, equipment shelters or cabinets and fencing and any other items necessary to the successful and secure use of the Premises (collectively, the "**Communication Facility**"), as well as the right to test, survey and review title on the Property; Tenant further has the right but not the obligation to add, modify and/or replace equipment in order to be in compliance with any current or future federal, state or local mandated application, including, but not limited to, emergency 911 communication services, at no additional cost to Tenant or Landlord (collectively, the "**Permitted Use**"). Landlord and Tenant agree that any portion of the Communication Facility that may be conceptually described on **Exhibit 1** will not be deemed to limit Tenant's Permitted Use. If **Exhibit 1** includes drawings of the initial installation of the Communication Facility, Landlord's execution of this Agreement will signify Landlord's approval of **Exhibit 1**. For a period of ninety (90) days following the start of construction, Landlord grants Tenant, its subtenants, licensees and sublicensees, the right to use such portions of Landlord's contiguous, adjoining or surrounding property as described on **Exhibit 1** hereto (the "**Surrounding Property**"), as may reasonably be required during construction and installation of the Communications Facility. Tenant has the right to install and operate transmission cables from the equipment shelter or cabinet to the antennas, electric lines from the main feed to the equipment shelter or cabinet and communication lines from the main entry point to the equipment shelter or cabinet, and to make Property improvements, alterations, upgrades or additions appropriate for Tenant's use ("**Tenant Changes**"). Tenant Changes include the right to construct a fence around the Premises and undertake any other appropriate means to secure the Premises, at Tenant's expense. Tenant agrees to comply with all applicable governmental laws, rules, statutes and regulations, relating to its use of the Communication Facility on the Property. Tenant may make changes with reasonable notice to and consent of TC3 which consent is not to be reasonably withheld, within the Premises at any time during the term of this Agreement. Tenant will be allowed to make such alterations to the Property in order to accomplish Tenant's Changes or to insure that Tenant's Communication Facility complies with all applicable federal, state or local laws, rules or regulations. In the event Tenant desires to modify or upgrade the Communication Facility, and Tenant requires an additional portion of the Property (the "**Additional**

By: (Initials) AMB Date 5/26/09 Doc No. 11
BUN: 5800126 Lease/Lt. 226691

Premises") for such modification or upgrade, Landlord agrees to lease to Tenant the Additional Premises, upon the same terms and conditions set forth herein, except that the Rent shall increase, in conjunction with the lease of the Additional Premises, by a reasonable amount consistent with rental rates then charged for comparable portions of real property being in the same area. Landlord agrees to take such actions and enter into and deliver to Tenant such documents as Tenant reasonably requests in order to effect and memorialize the lease of the Additional Premises to Tenant.

3. **TERM.**

(a) The initial lease term will be five (5) years ("**Initial Term**"), commencing on the Effective Date. The Initial Term will terminate on the fifth (5th) annual anniversary of the Effective Date.

(b) This Agreement will automatically renew for four (4) additional five (5) year term(s) (each five (5) year term shall be defined as the "**Extension Term**"), upon the same terms and conditions unless the Tenant notifies the Landlord in writing of Tenant's intention not to renew this Agreement at least sixty (60) days prior to the expiration of the existing Term.

(c) If, at least sixty (60) days prior to the end of the fourth (4th) extended term, either Landlord or Tenant has not given the other written notice of its desire that the term of this Agreement end at the expiration of the fourth (4th) extended term, then upon the expiration of the fourth (4th) extended term this Agreement shall continue in force upon the same covenants, terms and conditions for a further term of one (1) year, and for annual terms thereafter until terminated by either party by giving to the other written notice of its intention to so terminate at least six (6) months prior to the end of any such annual term. Monthly rental during such annual terms shall be equal to the rent paid for the last month of the fourth (4th) extended term. If Tenant remains in possession of the Premises after the termination of this Agreement then Tenant will be deemed to be occupying the Premises on a month to month basis (the "**Holdover Term**"), subject to the terms and conditions of this Agreement.

(d) The Initial Term, the Extension Term and the Holdover Term are collectively referred to as the Term ("**Term**").

4. **RENT.**

(a) Commencing on the first day of the month following the date that Tenant commences construction (the "**Rent Commencement Date**"), Tenant will pay the Landlord a monthly rental payment of [REDACTED] ("**Rent**"), at the address set forth above, on or before the fifth (5th) day of each calendar month in advance. In partial months occurring after the Rent Commencement Date, Rent will be prorated. The initial Rent payment will be forwarded by Tenant to Landlord within thirty (30) days after the Rent Commencement Date.

(b) In year one (1) of each Extension Term, the monthly Rent will increase by [REDACTED] over the Rent paid during the previous Term.

(c) All charges payable under this Agreement such as utilities and taxes shall be billed by Landlord within one (1) year from the end of the calendar year in which the charges were incurred; any charges beyond such period shall not be billed by Landlord, and shall not be payable by Tenant. The foregoing shall not apply to monthly Rent which is due and payable without a requirement that it be billed by Landlord. The provisions of the foregoing sentence shall survive the termination or expiration of this Agreement.

(d) Tenant is to provide reasonable advance notice of no fewer than (10) ten business days, of any arrangement whereby Tenant proposes to lease Communication Facility space to any other person or entity ("**Subtenant**"). Any such sublease arrangement requires the approval of TC3, which approval will not be unreasonably withheld.

5. **APPROVALS.**

(a) Landlord agrees that Tenant's ability to use the Premises is contingent upon the suitability of the Premises for Tenant's Permitted Use and Tenant's ability to obtain and maintain all governmental licenses, permits, approvals or other relief required of or deemed necessary or appropriate by Tenant for its use of the Premises, including without limitation applications for zoning variances, zoning ordinances, amendments, special use permits, and construction permits (collectively, the "**Government Approvals**"). Landlord authorizes Tenant to prepare, execute and file all required applications to obtain Governmental Approvals for Tenant's Permitted Use under this Agreement and agrees to reasonably assist Tenant with such applications and with obtaining and maintaining the Government Approvals. In addition, Tenant shall have the right to initiate the ordering and/or scheduling of necessary utilities.

(b) Tenant has the right to obtain a title report or commitment for a leasehold title policy from a title insurance company of its choice and to have the Property surveyed by a surveyor of Tenant's choice. In the event Tenant determines, in its sole discretion, due to the title report results or survey results, that the condition of the Premises is unsatisfactory, Tenant will have the right to terminate this Agreement upon notice to Landlord.

(c) Tenant may also perform and obtain, at Tenant's sole cost and expense, soil borings, percolation tests, engineering procedures, environmental investigation or other tests or reports on, over, and under the Property, necessary to determine if the Tenant's use of the Premises will be compatible with Tenant's engineering specifications, system, design, operations or Governmental Approvals.

6. **TERMINATION.** This Agreement may be terminated, without penalty or further liability, as follows:

(a) by either party on thirty (30) days prior written notice, if the other party remains in default under Paragraph 15 of this Agreement after the applicable cure periods;

(b) by Tenant upon written notice to Landlord, if Tenant is unable to obtain, or maintain, any required approval(s) or the issuance of a license or permit by any agency, board, court or other governmental authority necessary for the construction or operation of the Communication Facility as now or hereafter intended by Tenant; or if Tenant determines in its sole discretion that the cost of obtaining or retaining the same is commercially unreasonable;

(c) By Tenant upon written notice to Landlord for any reason, at any time prior to commencement of construction by Tenant; or

(d) by Tenant on the grounds of a default of this Lease as defined in Section 15(d) herein. Landlord shall have the opportunity to cure the default within 30 days of the receipt of such notice and to provide notice of such cure within 5 business days thereof. In event that the default has been cured to a reasonable extent, the cancellation will be void and of no effect.

7. **INSURANCE.**

Tenant will carry during the Term, at its own cost and expense, the following insurance: (i) "All Risk" property insurance for its property's replacement cost; (ii) commercial general liability insurance with a minimum limit of liability of Two Million Five Hundred Thousand Dollars \$2,500,000 combined single limit for bodily injury or death/property damage arising out of any one occurrence; and (iii) Workers' Compensation Insurance as required by law. The coverage afforded by Tenant's commercial general liability insurance shall apply to Landlord as an additional insured, but only with respect to Landlord's liability arising out of its interest in the Property. TC3 is to be named as an additional insured on each such policy of insurance at all times. A current declaration page evidencing the existence of such policy is to be produced to Landlord at each renewal term.

8. **INTERFERENCE.**

(a) Where there are existing radio frequency user(s) on the Property, the Landlord will provide Tenant with a list of all existing radio frequency user(s) on the Property to allow Tenant to evaluate the potential for interference. Tenant warrants that its use of the Premises will not interfere with existing radio frequency user(s) on the Property so disclosed by Landlord, as long as the existing radio frequency user(s) operate and continue to operate within their respective frequencies and in accordance with all applicable laws and regulations.

(b) Landlord will not grant, after the date of this Agreement, a lease, license or any other right to any third party for the use of the Property, if such use may in any way adversely affect or interfere with the Communication Facility, the operations of Tenant or the rights of Tenant under this Agreement. Landlord will notify Tenant in writing prior to granting any third party the right to install and operate communications equipment on the Property.

(c) Landlord will not use, nor will Landlord permit its employees, tenants, licensees, invitees or agents to use, any portion of the Property in any way which interferes with the Communication Facility, the operations of Tenant or the rights of Tenant under this Agreement. Landlord will cause such interference to cease within twenty-four (24) hours after receipt of notice of interference from Tenant. In the event any such interference does not cease within the aforementioned cure period then the parties acknowledge that Tenant will suffer irreparable injury, and therefore, Tenant will have the right, in addition to any other rights that it may have at law or in equity, for Landlord's breach of this Agreement, to elect to enjoin such interference or to terminate this Agreement upon notice to Landlord.

9. **INDEMNIFICATION.**

(a) Tenant agrees to indemnify, defend and hold Landlord harmless from and against any and all injury, loss, damage or liability (or any claims in respect of the foregoing), costs or expenses (including reasonable attorneys' fees and court costs) arising directly from the installation, use, maintenance, repair or removal of the Communication Facility or Tenant's breach of any provision of this Agreement, except to the extent attributable to the negligent or intentional act or omission of Landlord, its employees, agents or independent contractors.

(b) Landlord agrees to indemnify, defend and hold Tenant harmless from and against any and all injury, loss, damage or liability (or any claims in respect of the foregoing), costs or expenses (including reasonable attorneys' fees and court costs) arising directly from the actions or failure to act of Landlord or its employees or agents, or Landlord's breach of any provision of this Agreement, except to the extent attributable to the negligent or intentional act or omission of Tenant, its employees, agents or independent contractors.

(c) Notwithstanding anything to the contrary in this Agreement, Tenant and Landlord each waives any claims that each may have against the other with respect to consequential, incidental or special damages.

10. **WARRANTIES.**

(a) Tenant and Landlord each acknowledge and represent that it is duly organized, validly existing and in good standing and has the right, power and authority to enter into this Agreement and bind itself hereto through the party set forth as signatory for the party below.

(b) Landlord represents that to the best of its knowledge : (i) Landlord solely owns the Property as a legal lot in fee simple, or controls the Property by lease or license; (ii) the Property is not encumbered by any liens, restrictions, mortgages, covenants, conditions, easements, leases, or any other agreements of record or not of record, which would adversely affect Tenant's Permitted Use and enjoyment of the Premises under this Agreement; (iii) as long as Tenant is not in default then Landlord grants to Tenant sole, actual, quiet and peaceful use, enjoyment and possession of the Premises; (iv) Landlord's execution and performance of this Agreement will not violate any laws, ordinances, covenants or the provisions of any mortgage, lease or other agreement binding on the Landlord; and (v) if the Property is or becomes encumbered by a deed to secure a debt, mortgage or other security interest, Landlord will use best efforts to provide promptly to Tenant a mutually agreeable Subordination, Non-Disturbance and Attornment Agreement.

(c) The parties acknowledge and understand that Landlord is relying upon Tenant to provide mobile telecommunications services to its faculty, staff and entire student body. Landlord has been induced by Tenant to enter into this agreement in reliance upon Tenant's representation that territorial coverage of the telecommunications services to be provided by Tenant will include the entire Property throughout the term of this lease.

11. **ENVIRONMENTAL.**

(a) Landlord represents that to the best of its knowledge the Property is free of hazardous substances as of the date of this Agreement, and, to the best of Landlord's knowledge, the Property has never been subject to any contamination or hazardous conditions resulting in any environmental investigation, inquiry or remediation. Landlord and Tenant agree that each will be responsible for compliance with any and all environmental and industrial hygiene laws, including any regulations, guidelines, standards, or policies of any governmental authorities regulating or imposing standards of liability or standards of conduct with regard to any environmental or industrial hygiene condition or other matters as may now or at any time hereafter be in effect, that are now or were related to that party's activity conducted in or on the Property.

(b) Landlord and Tenant agree to hold harmless and indemnify the other from, and to assume all duties, responsibilities and liabilities at the sole cost and expense of the indemnifying party for, payment of penalties, sanctions, forfeitures, losses, costs or damages, and for responding to any action, notice, claim, order, summons, citation, directive, litigation, investigation or proceeding which is related to (i) the indemnifying party's failure to comply with any environmental or industrial hygiene law, including without limitation any regulations, guidelines, standards or policies of any governmental authorities regulating or imposing standards of liability or standards of conduct with regard to any environmental or industrial hygiene conditions or matters as may now or hereafter be in effect, or (ii) any environmental or industrial hygiene conditions that arise out of or are in any way related to the condition of the Property and activities conducted by the party thereon, unless the environmental conditions are caused by the other party.

(c) The indemnifications of this Paragraph 11 specifically include reasonable costs, expenses and fees incurred in connection with any investigation of Property conditions or any clean-up, remediation, removal or restoration work required by any governmental authority. The provisions of this Paragraph 11 will survive the expiration or termination of this Agreement.

(d) In the event Tenant becomes aware of any hazardous materials on the Property, or any environmental or industrial hygiene condition or matter relating to the Property that, in Tenant's sole determination, renders the condition of the Premises or Property unsuitable for Tenant's use, or if Tenant believes that the leasing or continued leasing of the Premises would expose Tenant to undue risks of government action, intervention or third-party liability, Tenant will have the right, in addition to any other rights it may have at law or in equity, to terminate the Agreement upon notice to Landlord.

12. ACCESS. At all times throughout the Term of this Agreement, and at no additional charge to Tenant, Tenant and its employees, agents, and subcontractors, will have twenty-four (24) hour per day, seven (7) day per week pedestrian and vehicular access to and over the Property, from an open and improved public road to the Premises, for the installation, maintenance and operation of the Communication Facility and any utilities serving the Premises. Landlord grants to Tenant an easement for such access and Landlord agrees to provide to Tenant such codes, keys and other instruments necessary for such access at no additional cost to Tenant. Landlord acknowledges that in the event Tenant cannot access the Premises, Tenant shall incur significant damage. If Landlord willfully fails to provide the access granted by this Paragraph 12, such failure shall be a default under this Lease. In connection with such default, in addition to any other rights or remedies available to Tenant under this Lease or at law or equity, Landlord shall pay Tenant, as liquidated damages and not as a penalty, [REDACTED] per day in consideration of Tenant's damages, including, but not limited to, its lost profits, until Landlord cures such default. Landlord and Tenant agree that Tenant's damages in the event of a denial of access are difficult, if not impossible, to ascertain, and the liquidated damages set forth herein are a reasonable approximation of such damages. Upon Tenant's request, Landlord will execute a separate recordable easement evidencing this right. In the event any public utility is unable to use the access or easement provided to Tenant then the Landlord agrees to grant additional access or an easement either to Tenant or to the public utility, for the benefit of Tenant, at no cost to Tenant. Tenant acknowledges that the maintenance and upkeep of the improved public road is beyond the control of Landlord; and any failure of access caused by circumstances over which Landlord lacks control, including the acts or omissions of third parties, natural conditions, or weather conditions, are specifically exempted from these requirements.

13. REMOVAL/RESTORATION. All portions of the Communication Facility brought onto the Property by Tenant will be and remains Tenant's personal property and, at Tenant's option, may be removed by Tenant at any time during the Term. Landlord covenants and agrees that no part of the Communication Facility constructed, erected or placed on the Premises by Tenant will become, or be considered as being affixed to or a part of, the Property, it being the specific intention of the Landlord that all improvements of every kind and nature constructed, erected or placed by Tenant on the Premises will be and remain the property of the Tenant and may be removed by Tenant at any time during the Term. Within one hundred twenty (120) days of the termination of this Agreement, Tenant will remove all of Tenant's above-ground improvements and Tenant will, to the extent reasonable, restore the Premises to its condition at the commencement of the Agreement, reasonable wear and tear and loss by casualty or other causes beyond Tenant's control excepted. Notwithstanding the foregoing, Tenant will not be responsible for the replacement of any trees, shrubs or other vegetation, nor will Tenant be required to remove from the Premises or the Property any foundations or underground utilities.

14. MAINTENANCE/UTILITIES.

(a) Tenant will keep and maintain the Premises in good condition, reasonable wear and tear and damage from the elements excepted. Landlord will maintain and repair the Property and access thereto, in good and tenable condition, subject to reasonable wear and tear and damage from the elements. Improvements and access made by the Tenant for the Tenant's use and benefit will be repaired and maintained by the Tenant.

(b) Tenant will be responsible for securing required services from the local utility suppliers and paying on a monthly or quarterly basis all utilities charges for electricity, telephone service or any other utility used or consumed by Tenant on the Premises. In the event Tenant cannot secure its own metered electrical supply, Tenant will have the right, at its own cost and expense, to submeter from the Landlord. When submetering is required under this Agreement, Landlord

If to Landlord: James Turner
Tompkins Cortland Community College
170 North Street
P.O. Box 139
Dryden, NY 13053

With a copy to: John Petrella
Tompkins Cortland Community College
170 North Street
P.O. Box 139
Dryden, NY 13053

Either party hereto may change the place for the giving of notice to it by thirty (30) days prior written notice to the other as provided herein.

In the event of a change in ownership, transfer or sale of the Property, within ten (10) days of such transfer, Landlord will send the below documents (in section 17(b)(i) to Tenant. In the event Tenant does not receive such appropriate documents, Tenant shall not be responsible for any failure to pay the current landlord

- a. Old deed to Property
- b. New deed to Property
- c. Bill of Sale or Transfer
- d. Copy of current Tax Bill – Landlord is Tax Exempt
- e. New W-9
- f. New Payment Direction Form
- g. Full contact information for new Landlord including all phone numbers

18. CONDEMNATION. In the event Landlord receives notification of any condemnation proceedings affecting the Property, Landlord will provide notice of the proceeding to Tenant within five (5) business days. If a condemning authority takes all of the Property, or a portion sufficient, in Tenant's sole determination, to render the Premises unsuitable for Tenant, this Agreement will terminate as of the date the title vests in the condemning authority. The parties will each be entitled to pursue their own separate awards in the condemnation proceeds, which for Tenant will include, where applicable, the value of its Communication Facility, moving expenses, prepaid Rent, and business dislocation expenses, provided that any award to Tenant will not diminish Landlord's recovery. Tenant will be entitled to reimbursement for any prepaid Rent on a prorata basis.

19. CASUALTY. Landlord will provide notice to Tenant of any casualty affecting the Property within forty-eight (48) hours of the casualty. If any part of the Communication Facility or Property is damaged by fire or other casualty so as to render the Premises unsuitable, only in Tenant's reasonable determination with prior advance notice to Landlord, then Tenant may terminate this Agreement by providing written notice to the Landlord, which termination will be effective as of the date of such damage or destruction. Upon such termination, Tenant will be entitled to collect all insurance proceeds payable to Tenant on account thereof and to be reimbursed for any prepaid Rent on a prorata basis. If notice of termination is given, or if Landlord or Tenant undertake to rebuild the Communications Facility, Landlord agrees to use its reasonable efforts to permit Tenant to place temporary transmission and reception facilities on the Property at no additional Rent until such time as Tenant is able to activate a replacement transmission facility at another location or the reconstruction of the Communication Facility is completed.

20. WAIVER OF LANDLORD'S LIENS. Landlord waives any and all lien rights it may have, statutory or otherwise, concerning the Communication Facility or any portion thereof. The Communication Facility shall be deemed personal property for purposes of this Agreement, regardless of whether any portion is deemed real or personal property under applicable law and Landlord consents to Tenant's right to remove all or any portion of the Communication Facility from time to time in Tenant's sole discretion and without Landlord's consent.

21. **TAXES.** Landlord shall be responsible for payment of all ad valorem taxes levied upon the lands, improvements and other property of Landlord. Tenant shall be responsible for all taxes levied upon Tenant's leasehold improvements (including Tenant's equipment building and tower) on the Premises. Landlord shall provide Tenant with copies of all assessment notices on or including the Premises immediately upon receipt, but in no event later than thirty (30) days after receipt by Landlord. If Landlord fails to provide such notice within such time frame, Landlord shall be responsible for all increases in taxes for the year covered by the assessment. Tenant shall have the right to contest, in good faith, the validity or the amount of any tax or assessment levied against the Premises by such appellate or other proceedings as may be appropriate in the jurisdiction, and may defer payment of such obligations, pay same under protest, or take such other steps as Tenant may deem appropriate. This right shall include the ability to institute any legal, regulatory or informal action in the name of Landlord, Tenant, or both, with respect to the valuation of the Premises. Landlord shall cooperate in the institution and prosecution of any such proceedings and will execute any documents required therefore. The expense of any such proceedings shall be borne by Tenant and any refunds or rebates secured as a result of Tenant's action shall belong to Tenant.

22. **SALE OF PROPERTY/RIGHT OF FIRST REFUSAL.**

(a) If Landlord, at any time during the Term of this Agreement, decides to sell, subdivide or rezone any of the Premises, all or any part of the Property or Surrounding Property, to a purchaser other than Tenant, Landlord shall promptly notify Tenant in writing, and such sale, subdivision or rezoning shall be subject to this Agreement and Tenant's rights hereunder. Landlord agrees not to sell, lease or use any areas of the Property or Surrounding Property for the installation, operation or maintenance of other wireless communications facilities if such installation, operation or maintenance would interfere with Tenant's Permitted Use or communications equipment as determined by radio propagation tests performed by Tenant in its sole discretion, any such testing to be at the expense of Landlord or Landlord's prospective purchaser, and not Tenant. If the radio frequency propagation tests demonstrate levels of interference unacceptable to Tenant, Landlord shall be prohibited from selling, leasing or using any areas of the Property or the Surrounding Property for purposes of any installation, operation or maintenance of any other wireless communications facility or equipment. Landlord shall not be prohibited from the selling, leasing or use of any of the Property or the Surrounding Property for non-wireless communication use. In the event the Property is transferred, the new landlord shall have a duty at the time of such transfer to provide Tenant with a completed IRS Form W-9, or its equivalent, and other related paper work to effect a transfer in Rent to the new landlord. The provisions of this Paragraph 22 shall in no way limit or impair the obligations of Landlord under Paragraph 8 above.

(b) If at any time after the Effective Date, Landlord receives a bona fide written offer from a third party seeking an assignment of the rental stream associated with this Agreement ("**Purchase Offer**"), Landlord shall immediately furnish Tenant with a copy of the Purchase Offer, together with a representation that the Purchase Offer is valid, genuine and true in all respects. Tenant shall have the right within thirty (30) days after it receives such copy and representation to match the Purchase Offer and agree in writing to match the terms of the Purchase Offer. Such writing shall be in the form of a contract substantially similar to the Purchase Offer. If Tenant chooses not to exercise this right of first refusal or fails to provide written notice to Landlord within the thirty (30) day period, Landlord may assign the rental stream pursuant to the Purchase Offer, subject to the terms of this Agreement (including without limitation the terms of this Paragraph 22, to the person or entity that made the Purchase Offer provided that (i) the assignment is on the same terms contained in the Purchase Offer and (ii) the assignment occurs within ninety (90) days of Tenant's receipt of a copy of the Purchase Offer. If such third party modifies the Purchase Offer or the assignment does not occur within such ninety (90) day period, Landlord shall re-offer to Tenant, pursuant to the procedure set forth in this Subparagraph 22(b), the assignment on the terms set forth in the Purchase Offer, as amended. The right of first refusal hereunder shall (i) survive any transfer of all or any part of the Property or assignment of all or any part of the Agreement; (ii) bind and inure to the benefit of, Landlord and Tenant and their respective heirs, successors and assigns; (iii) run with the land; and (iv) terminate upon the expiration or earlier termination of this Agreement.

23. **MISCELLANEOUS.**

(a) **Amendment/Waiver.** This Agreement cannot be amended, modified or revised unless done in writing and signed by an authorized agent of the Landlord and an authorized agent of the Tenant. No provision may be waived except in a writing signed by both parties.

(b) **Memorandum/Short Form Lease.** Either party will, at any time upon fifteen (15) business days' prior written notice from the other, execute, acknowledge and deliver to the other a recordable Memorandum or Short Form of Lease. Either party may record this Memorandum or Short Form of Lease at any time, in its absolute discretion.

(c) **Bind and Benefit.** The terms and conditions contained in this Agreement will run with the Property and bind and inure to the benefit of the parties, their respective heirs, executors, administrators, successors and assigns.

(d) **Entire Agreement.** This Agreement and the exhibits attached hereto, all being a part hereof, constitute the entire agreement of the parties hereto and will supersede all prior offers, negotiations and agreements with respect to the subject matter of this Agreement.

(e) **Governing Law.** This Agreement will be governed by the laws of the state in which the Premises are located, without regard to conflicts of law.

(f) **Interpretation.** Unless otherwise specified, the following rules of construction and interpretation apply: (i) captions are for convenience and reference only and in no way define or limit the construction of the terms and conditions hereof; (ii) use of the term "including" will be interpreted to mean "including but not limited to"; (iii) whenever a party's consent is required under this Agreement, except as otherwise stated in the Agreement or as same may be duplicative, such consent will not be unreasonably withheld, conditioned or delayed; (iv) exhibits are an integral part of the Agreement and are incorporated by reference into this Agreement; (v) use of the terms "termination" or "expiration" are interchangeable; and (vi) reference to a default will take into consideration any applicable notice, grace and cure periods; and (vii) to the extent there is any issue with respect to any alleged, perceived or actual ambiguity in this Agreement, the ambiguity shall not be resolved on the basis of who drafted the Agreement.

(g) **Estoppel.** Either party will, at any time upon twenty (20) business days prior written notice from the other, execute, acknowledge and deliver to the other a statement in writing (i) certifying that this Agreement is unmodified and in full force and effect (or, if modified, stating the nature of such modification and certifying this Agreement, as so modified, is in full force and effect) and the date to which the Rent and other charges are paid in advance, if any, and (ii) acknowledging that there are not, to such party's knowledge, any uncured defaults on the part of the other party hereunder, or specifying such defaults if any are claimed. Any such statement may be conclusively relied upon by any prospective purchaser or encumbrance of the Premises. The requested party's failure to deliver such a statement within such time will be conclusively relied upon by the requesting party that (i) this Agreement is in full force and effect, without modification except as may be properly represented by the requesting party, (ii) there are no uncured defaults in either party's performance, and (iii) no more than one month's Rent has been paid in advance.

(h) **W-9.** Landlord agrees to provide Tenant with a completed IRS Form W-9, or its equivalent, upon execution of this Agreement and at such other times as may be reasonably requested by Tenant.

(i) **No Electronic Signature/No Option.** The submission of this Agreement to any party for examination or consideration does not constitute an offer, reservation of or option for the Premises based on the terms set forth herein. This Agreement will become effective as a binding Agreement only upon the handwritten legal execution, acknowledgment and delivery hereof by Landlord and Tenant.

(j) **Severability.** If any term or condition of this Agreement is found unenforceable, the remaining terms and conditions will remain binding upon the parties as though said unenforceable provision were not contained herein. However, if the invalid, illegal or unenforceable provision materially affects this Agreement then the Agreement may be terminated by either party on ten (10) business days' prior written notice to the other party hereto.

(k) **Counterparts.** This Agreement may be executed in two (2) or more counterparts, all of which shall be considered on and the same agreement and shall become effective when one or more counterparts have been signed by each of the parties. It being understood that all parties need not sign the same counterpart.

(l) Any dispute arising from or related to this Agreement shall be resolved in a competent jurisdiction within Tompkins County, New York. Landlord and Tenant agree legal remedies may be inadequate to enforce the provisions of this agreement; and accordingly a party may seek injunctive relief.

[SIGNATURES APPEAR ON THE NEXT PAGE]

IN WITNESS WHEREOF, the parties have caused this Agreement to be effective as of the last date written below.

WITNESSES:

Cathy A. Northrop

Print Name: Cathy A. Northrop

Print Name: _____

Lois H. Warren

Print Name: LOIS H. WARREN

Print Name: _____

"LANDLORD"

Tompkins Cortland
Community College

By: Carl Haynes
Carl Haynes
President

Date: 4/7/09

"TENANT"

Crown Communication Inc.

By: David Janczos
David Janczos

Vice President - National Site Development

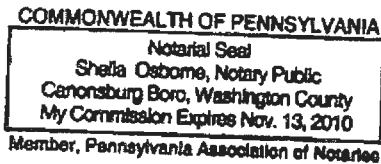
Date: 4-30-09

[ACKNOWLEDGMENTS APPEAR ON THE NEXT PAGE]

TENANT ACKNOWLEDGMENT

COMMONWEALTH OF PENNSYLVANIA)
) ss:
COUNTY OF WASHINGTON)

On the 30th day of April, 2009, before me personally appeared David J. Tanczos, and acknowledged under oath that he is the Vice President – National Site Development of Crown Communication Inc., the corporation named in the attached instrument, and as such was authorized to execute this instrument on behalf of the corporation.



Notary Public: Sheila Osborne
My Commission Expires: 11/13/10

LANDLORD ACKNOWLEDGMENT

FOR INDIVIDUAL ACTING AS TRUSTEE:

STATE OF NEW YORK
COUNTY OF TOMPKINS

On the 17th day of April, in the year 2009, before me, the undersigned, personally appeared Carl Haynes, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

Witness my hand and official seal.

Name: Tracey L. Brunner

Notary Public

TRACEY L. BRUNNER
Notary Public, State Of New York
No. 01BR5054600
Qualified In Tompkins County
Commission Expires October 1, 2009

My Commission Expires: 10/1/2009

This Indenture

1881 484 n1034

Made the 14th day of October,

Nineteen Hundred and Sixty-nine

Between **PAY H. STAFFORD**, of 31 Main Street,
Freeville, New York,

party of the first part, and

TOMPKINS COUNTY as a tenant in common of a
2/3 interest and **CORTLAND COUNTY** as tenant
in common of a 1/3 interest, both of the
State of New York,

Witnesseth that the party of the first part, in consideration of

-----ONE----- Dollars (\$1,000.00) lawful money of the United States, and other good and valuable consideration paid by the parties of the second part, do as hereby grant and release unto the parties of the second part, their respective successors and assigns forever, all THAT TRACT OR PARCEL OF LAND situate in the Town of Dryden, Tompkins County, New York, being a part of Lot 39 in said Town, bounded and described as follows: Beginning at a concrete monument in the north line of said Lot 39 at the intersection of said north line with the east right of way line of New York State Route 13, being also at the southwest corner of the premises now owned by Walter Yaples and Hazel Yaples (265 of Deeds at page 221); thence south 86° 06' 51" east 4,376.71 feet along the north line of said Lot 39, being also the south line of said Yaples premises and the south lines of the premises now owned by J. Kenneth and Aune E. Harmon (271 of Deeds at page 402) and Earl Stuttle and Gertrude Stuttle (397 of Deeds at page 206) to a pin at a southeast corner of said Stuttle premises; thence north 3° 53' 09" east 330 feet along an east line of said Stuttle premises to an iron pin; thence south 86° 06' 51" east 276.375 feet along a south line of said Stuttle premises to an iron pin in the west line of Lot 30 in said Town; thence south 3° 53' 09" west 2,417.681 feet along the west line of said Lot 30 and the east line of said Lot 39 to a corner which is also the northeast corner of the premises now owned by John Sisco and Helen Sisco (340 of Deeds at page 513); thence north 86° 06' 08" west 1,478.40 feet passing through an iron pin adjacent to Livermore Road and along a north line of said Sisco premises to a pin in a corner of said Sisco premises; thence north 3° 42' 16" east 240.329 feet along an east line of said Sisco premises to a pin; thence north 83° 57' 26" west 2,954.25 feet along a north line of said Sisco premises to a pin in the east line of the premises now owned by Donald C. Rose (351 of Deeds at page 615); thence north 3° 58' 27" east 222.42 feet to a pin in the northeast corner of said Rose premises, being also in the south line of the premises described in a deed to Donald E. Portzline and Cleo B. Portzline from Glenn A. Portzline and Drisse K. Portzline dated September 30, 1968, and recorded in said

1881 484 n1034

Clerk's Office in Liber 478 of Deeds at page 144; thence south 85° 01' 33" east 106 feet to a pin at the southeast corner of said Portzline premises; thence north 14° 08' 15" east 779.99 feet along the east line of said Portzline premises to a pin; thence north 84° 11' 01" west 919.352 feet to a pin in the east line of said New York State Route #13 right of way; thence the following courses and distances along the east line of New York State Route #13 right of way; north 16° 49' 40" east, 301.435 feet; north 31° 45' 54" east, 282.579 feet; north 40° 40' 13" east 175.01 feet; north 52° 02' 20" east 200.299 feet to the place of beginning.

TOGETHER WITH all the right, title and interest of the party of the first part in and to those premises which abut the above described premises on the west from the east line of New York State Route #13 right of way to the center line of said road and on the east from the east line of the above described premises to the center line of Livermore Road.

Being the same premises described in a deed to Fay H. Stafford from Glenn A. Portzline and Drissie K. Portzline, dated September 30, 1968 and recorded in said Clerk's Office in Liber 478 of Deeds at page 5.

The above described premises comprising 206.612 acres of land more or less are on a "MAP SHOWING LANDS OF FAY H. STAFFORD FOR TOMPKINS-CORTLAND COMMUNITY COLLEGE" dated September 23, 1969 made by F. Donald McKee, Licensed Surveyor No. J2422, a copy of which is filed in said Clerk's Office concurrently herewith.

Subject to the following:

1. The rights of the public in, over and across those portions of the above described premises which lie within the bounds of the public highways.

2. A right of way for a transmission line granted to New York State Electric & Gas Corp. by instrument dated November 14, 1928 and recorded in said Clerk's Office in Liber 215 of Deeds at page 521.

3. A right of way for a gas pipe line granted to New York State Electric & Gas Corporation by instrument dated October 16, 1958, and recorded in said Clerk's Office in Liber 413 of Deeds at page 436.

4. A right of way for a pole line, etc., insofar as it may affect the above described premises granted to New York State Electric & Gas Corporation by instrument dated August 1, 1947, and recorded in said Clerk's Office in Liber 302 of Deeds at page 453.

TOGETHER with the right insofar as it may affect the above described premises to take water from a certain pipe line extending from the Village of Dryden water main across the premises of Gridley, Palmer, Collins, Wells and Bowker to the buildings on the above described premises, TOGETHER with the right to enter upon the premises where said pipe line is laid at any time it becomes necessary to repair and maintain said pipe line; provided, however, that any damage done to the owner of any of the lands which said pipe line crosses caused in repairing and maintaining said pipe line shall be borne by the one making said repairs or maintenance.

Together with the appurtenances and all the estate and rights of the party of the first part in and to said premises,

Do hereby and to hold the premises herein granted unto the parties of the second part, their respective successors and assigns forever.

And said party of the first part

Third. That the parties of the second part shall quietly enjoy the said premises; covenants as follows:

Second. That said party of the first part

will forever warrant the title to said premises.

Third. That, in Compliance with Sec. 19 of the Lien Law, the grantor will receive the consideration for this conveyance and will hold the right to receive such consideration as a trust fund to be applied first for the purpose of paying the cost of the improvement and will apply the same first to the payment of the cost of the improvement before using any part of the total of the same for any other purpose.

In Witness Whereof, the party of the first part has hereunto set his hand and seal the day and year first above written.

In Presence of

Fay H. Stafford

State of New York On this 14th day of October,
County of TOWNE On this 14th day of October,
before me, the subscriber, personally appeared
FAY H. STAFFORD

to me personally known and known to me to be the same person described in and who executed the within instrument, and he duly acknowledged to me that he executed the same.

Louis R. Thaler

Notary Public

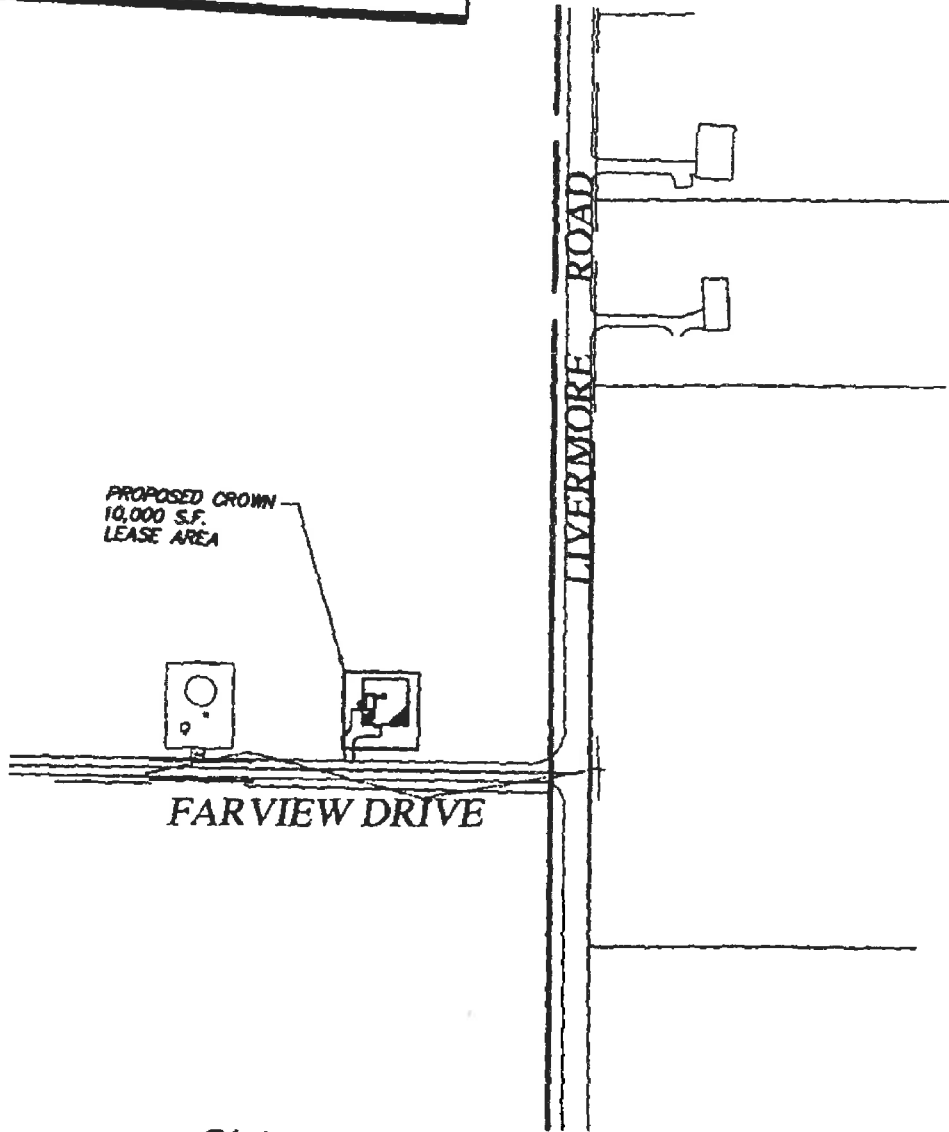
NOTARY PUBLIC, State of New York
No. 88-8216300
Qualified in Hamilton County
Ex. Com. Expires Dec 31, 1960

RECEIVED STATE OF NEW YORK
TRANSFER TAX DEPT. OF REVENUE
NOV 19 1969
\$71.00

A true copy of the original recorded on this 26th day of Nov. 1969. at 10:21 AM and examined.

Bally Robinson
Clerk

NOTE:
 THESE DRAWINGS ARE FOR INFORMATIONAL PURPOSES ONLY. NO FIELD SURVEY WAS PERFORMED AND ALL INFORMATION MUST BE FIELD VERIFIED PRIOR TO CONSTRUCTION.



OVERALL SITE PLAN
 SCALE: 1" = 200'

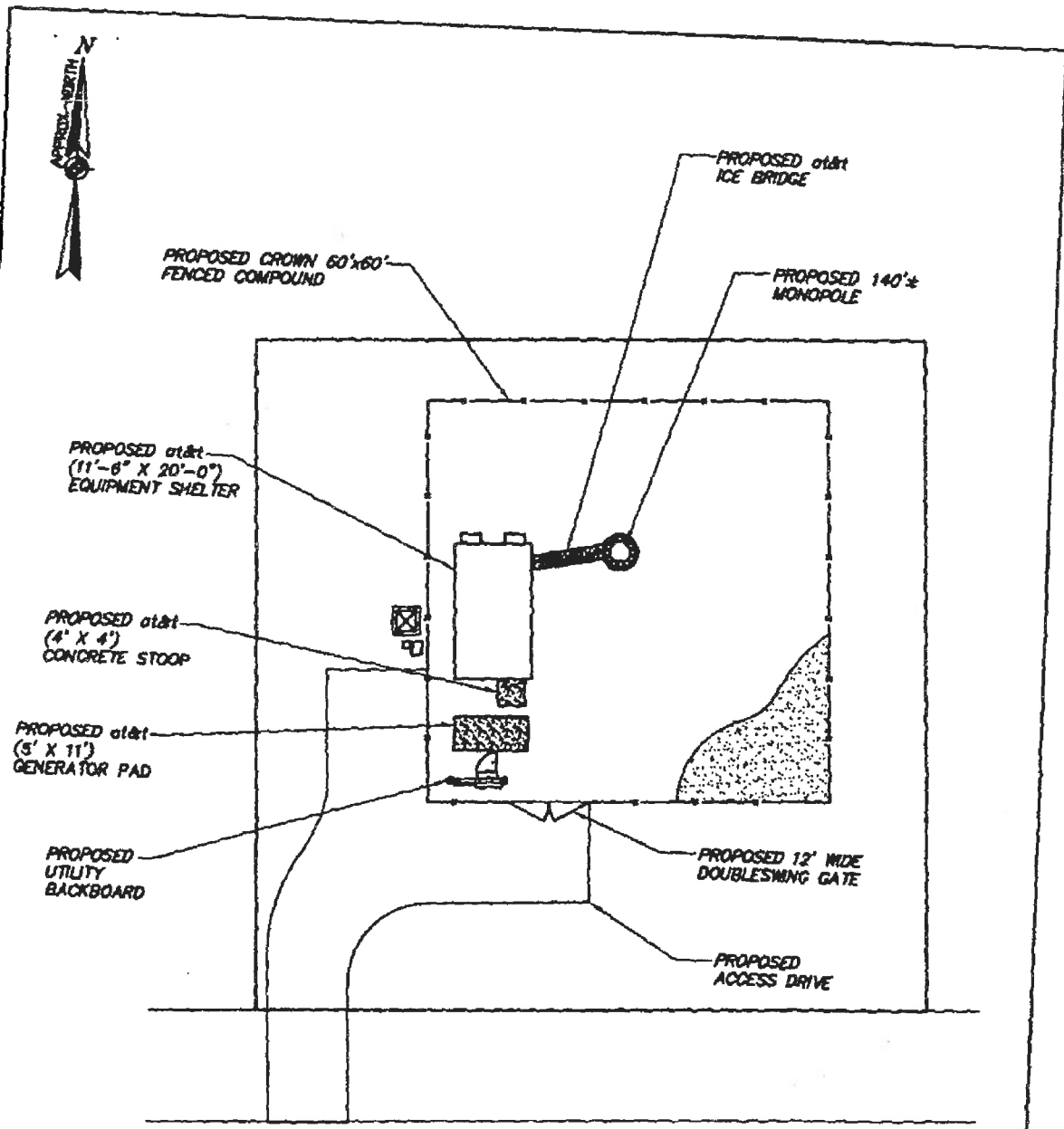
CROWN CASTLE
 CROWDING THE AIRSPACE WITHIN
 CROWN CASTLE INTERNATIONAL
 48 BROADWAY
 ALBANY, NY 12204

BLACK & VEATCH
 Building the World in Partnership
 BLACK & VEATCH
 6816 TOMPATH ROAD
 EAST SYRACUSE, NY 13057

CICG CARPENTER
 COMMUNITY GROUP
 DEVELOPMENT DESIGN
 140 WORTH ROAD & TRUSTEES' BUILDING
 600 W. WASHINGTON ST. 13050-1000

SITE NAME: TOMPKINS/CORTLAND
 COMMUNITY COLLEGE
 ADDRESS: FARVIEW DRIVE
 DRYDEN, NY 13053

SITE TYPE: MONOPOLE	DATE: 3/2009
DRAWN BY: DCM	SCALE: AS SHOWN



SITE PLAN
SCALE: 1"=20'

<p>CROWN CASTLE INTERNATIONAL "making the wireless world" CROWN CASTLE INTERNATIONAL 40 BROADWAY ALBANY, NY 12204</p>	<p>BLACK & VEATCH Building a world of difference BLACK & VEATCH 9515 TOMPKINS ROAD EAST SYRACUSE, NY 13057</p>	<p>CICG CAPSTONE COMMUNITY COLLEGE DESIGN 100 HARRIS BLVD SUITE 100 DRYDEN, NY 13053 www.cicgdesign.com</p>	<p>SITE NAME: TOMPKINS/ CORTLAND COMMUNITY COLLEGE ADDRESS: FARVIEW DRIVE DRYDEN, NY 13053</p>	<p>SITE TYPE: MONOPOLE</p> <p>DRAWN BY: DCM</p>	<p>DATE: 3/20/09</p> <p>SCALE: AS SHOWN</p>
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PROPOSED LOW-PROFILE
MOUNT WITH HANDRAILS

PROPOSED at&t
PANEL ANTENNAS

PROPOSED 140'±
MONOPOLE

140.0'±

PROPOSED at&t
ICE BRIDGE

PROPOSED at&t
EQUIPMENT
SHELTER

PROPOSED at&t
CHAINLINK FENCE

ELEVATION

SCALE: 1" = 20'

CROWN CASTLE
shaping the wireless world™
CROWN CASTLE INTERNATIONAL
48 BROADWAY
ALBANY, NY 12204

BLACK & VEATCH
Building a world of difference
BLACK & VEATCH
8815 TONYPATH ROAD
EAST SYRACUSE, NY 13067

CICG COMMUNITY
COLLEGE
DEVELOPMENT DESIGN
100 WADSWORTH AVENUE, SUITE 1100
ALBANY, NY 12206
TEL: 518.486.3112 FAX: 518.486.3170
WWW.CICG-DCM.COM

SITE NAME: TOMPKINS/ CORTLAND
COMMUNITY COLLEGE
ADDRESS: FARVIEW DRIVE
DRYDEN, NY 13053

SITE TYPE:
MONOPOLE
DRAWN BY:
DCM

DATE:
3/20/09
SCALE:
AS SHOWN

W-9 FORM

[FOLLOWS ON NEXT PAGE]

7

SEC. 6409. WIRELESS FACILITIES DEPLOYMENT.

(a) FACILITY MODIFICATIONS.

(1) **IN GENERAL.** Notwithstanding section 704 of the Telecommunications Act of 1996 (Public Law 104–104) or any other provision of law, a State or local government may not deny, and shall approve, any eligible facilities request for a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station.

(2) **ELIGIBLE FACILITIES REQUEST.** For purposes of this subsection, the term “eligible facilities request” means any request for modification of an existing wireless tower or base station that involves —
(A) collocation of new transmission equipment;
(B) removal of transmission equipment; or
(C) replacement of transmission equipment.

(3) **APPLICABILITY OF ENVIRONMENTAL LAWS.** Nothing in paragraph (1) shall be construed to relieve the Commission from the requirements of the National Historic Preservation Act or the National Environmental Policy Act of 1969.