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July 26, 2021

Via Electronic Mail

Melanie A. Bachman, Esq.
Executive Director/Staff Attorney
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: **Notice of Exempt Modification – Facility Modification
170 Mt. Tobe Road, Plymouth, Connecticut**

Dear Attorney Bachman:

Cellco Partnership d/b/a Verizon Wireless (“Cellco”) currently maintains an existing wireless telecommunications facility at the above-referenced property address (the “Property”). The facility consists of antennas and remote radio heads attached to a tower and related equipment on the ground, near the base of the tower. The tower was approved by the Town of Plymouth (“Town”) in September 2001. Cellco’s shared use of the tower was approved by the Council in March 2004 (EM-VER-111-040202). A copy of the Town’s approval and Cellco’s 2004 approval are included in Attachment 1.

Cellco now intends to modify its facility by replacing nine (9) existing antennas with three (3) new Samsung MT6407-77A antennas and six (6) new Quintel QS6656-5D antennas and replacing six (6) remote radio heads (“RRHs”) with six (6) new RRHs all on Cellco’s existing antenna platform. A set of project plans showing Cellco’s proposed facility modifications and new antennas and RRHs specifications are included in Attachment 2. Please note that Cellco refers to its facility as its Thomaston S CT facility.

Please accept this letter as notification pursuant to R.C.S.A. § 16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to Plymouth’s Chief Elected Official and Land Use Officer.

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The planned modifications to the facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2).

1. The proposed modifications will not result in an increase in the height of the existing tower. Cellco's replacement antennas will be installed on Cellco's existing antenna platform.

2. The proposed modifications will not involve any change to ground-mounted equipment and, therefore, will not require the extension of the site boundary.

3. The proposed modifications will not increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.

4. The installation of Cellco's new antennas will not increase radio frequency (RF) emissions at the facility to a level at or above the Federal Communications Commission (FCC) safety standard. A cumulative general power density table for Cellco's modified facility is included in Attachment 3. The modified facility will be capable of providing Cellco's 5G wireless service.

5. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.

6. According to the attached Structural Analysis ("SA") and Mount Analysis ("MA"), the existing tower, tower foundation and antenna platform, with certain modifications, can support Cellco's proposed modifications. Copies of the SA and MA are included in Attachment 4. Also included in Attachment 4 is a separate letter prepared by the consulting engineer responsible for the preparation of the SA verifying that the antenna model described in the SA as a VZS01 Antenna, is the Samsung 64T64R (MT6407-77A) model antenna that will be installed on the tower.

A copy of the parcel map and Property owner information is included in Attachment 5. A Certificate of Mailing verifying that this filing was sent to municipal officials and the property owner is included in Attachment 6.

For the foregoing reasons, Cellco respectfully submits that the proposed modifications to the above-referenced telecommunications facility constitutes an exempt modification under R.C.S.A. § 16-50j-72(b)(2).

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Sincerely,

A handwritten signature in black ink, appearing to read "Kenneth C. Baldwin". The signature is fluid and cursive, with the first name "Kenneth" being more prominent and the last name "Baldwin" following in a similar style.

Kenneth C. Baldwin

Enclosures

Copy to:

David V. Merchant, Mayor for the Town of Plymouth
Margus Laan, Plymouth Director of Planning and Economic Development
Susan and Walter MacDonald, Property Owner
Karla Hanna

ATTACHMENT 1

Minutes on Decision for
Cell Tower at 170 Mount Tobe Road
September 27, 2001
Noted as Item #6

PLANNING & ZONING REGULAR MEETING
SEPTEMBER 27, 2001

PAGE 2

9. Greystone Road – Special Permit Review – Edwards – Attorney Kenneth Slater, Mr. Edwards and Mr. Massimo were in attendance. Attorney Slater stated that there is no value of an as-built at this time. The project hasn't proceeded at the rate it was supposed to because of the mica schist. Mr. Hrica was engaged to write a report as to what was done and was presented at the last meeting. They had one promising location but it was not permitted. There are some projects coming up where the contractor might be able to get rid of the mica schists. Chairman Herzing stated that it was more than the as-built. They requested a time frame that work was being done because there is a big impact on the neighbors with the traffic, noise and safety. They should have looked into the marketability of the material they had to remove to complete this project and the time restraints. There is a big hole in the side of a mountain causing safety issues with kids playing. It shouldn't be put on hold and let the hole sit there waiting for someone to get hurt. Mica is not a marketable material and research should have been done in advance. Attorney Slater told the Commission that they did not want to come back to them but they learned about the mica when they blasted. Chairman Herzing said they could have created something better than what was there and should clean up the mess and maybe sit on it. Attorney Slater said the engineering report indicated no immediate hazard. This project wouldn't take long to complete if there was a place to bring this material. Chairman Herzing feels they should get in and clean up the gaping hole in the side of the hill. They were supposed to be in 500 feet by the last meeting. Attorney Slater said the General Statutes give 5 years. Properties are left unsafe a lot longer than this. The applicant expected to be 1/2 done by this time. There is no value in an as-built. Chairman Herzing said that on 7/26/01 the Commission gave them 6 weeks. At that time they needed an as-built so they could see what they had or had not done. Good faith would have had them bring us an as-built. The fear that this was not a driveway – just an excavation operation. Attorney Slater said that they thought they would find a legal location before September but this didn't happen and they have no way to move the material. The Commission said nothing about it being shored up and is reasonably safe right now. When they find a location, the project will continue. The Commission and Attorney Slater went back and forth regarding a time line, a location for the mica schist and the as-built. The permit is over tomorrow (9/28/01) so they have to come in for a renewal. Attorney Slater stated that the permit is effective to 1/11/02. Gaye Zukauskas stated that our special permits run 1 year from the date of approval. Chairman Herzing asked if the Commission could give them a two week extension? Discussion was had. **MOTION:** Gaye Zukauskas made a motion to give a two week extension to Mr. Edwards-Greystone Road-driveway permit to allow them time to prepare a site plan and exhaust all other avenues for solid waste removal. Peter Tonn seconded. **VOTE:** S. Panasuk – Aye, J. Purney – Aye, P. Tonn – Aye, G. Zukauskas – Aye and Chairman Herzing so voted. It was made clear that the permit stays in effect for the two weeks.

6. 170 Mt. Tobe Road – Special Permit – SBA – Mr. Kuehn informed the Commission that the energy goes horizontal from the antenna and the antenna is vertical to the horizon. It goes parallel to the horizon – not down. Steve Panasuk asked if it met all

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FCC regulations and the answer was yes. He also recommended a bond for removing the tower if it is not used for one year. The building is ok in size. The Siting Council has to go over the permit. Discussion was had. **MOTION:** Steve Panasuk made a motion to grant a special permit for SBA for 170 Mt. Tobe Road covering sheet T-1-cover sheet, S-1-site plan, C-1-vicinity plan, C-2-overall site and grading and C-3-site details. Bond to be set by the town engineer for removal of the tower if it is not used for 12 consecutive months. Gaye Zukauskas modified the motion to include: report entitled "Visual Simulations" dated July 9, 2001; View Shed Map, undated, for 160' monopole; and, maps and overlays as submitted to Commission at its meeting of July 26, 2001. Plan sheets for South Plymouth Communications Facility dated 3/16/00, revised 7/16/01 prepared by Erdman Anthony Consulting Engineers. Jamie Purney seconded. **VOTE:** S. Panasuk – Aye, J. Purney – Aye, G. Zukauskas – Aye and Chairman Herzing so voted. Peter Tonn was not here for the public hearing so didn't vote.

10. 591 Main Street – Site Plan Modification – KCK Properties

11. 10 Todd Hollow Road – Site Plan – KCK Properties – Kim Pelletier of 1 Cynthia Court, Bristol and Brian Ireland represented KCK Properties. They plan to modify 591 Main Street by removing the mountain of rock between 10 Todd Hollow Road and 591 Main Street. This would improve the sight line to Route 6 and provide additional parking area and extend the approved area to the south. This would bring the property up to grade. It would be the same building. Most of the material will be used on site. The rock will be crushed and what is not used will go to Scalia Brothers. Mr. Kuehn told the Commission that he hasn't received all reviews. Ten Todd Hollow Road was changed to Commercial. Gaye Zukauskas asked if they plan to build for themselves or to sell. The back building will be for a shop and executive businesses. Mr. Pelletier installs dump bodies on trucks. The Police Chief would like them to come out on Todd Hollow Road and not Route 6 because of the traffic. Mr. Pelletier said they would like an entrance on both. Mr. Kuehn said they need the elevations for the building on the corner and what it is going to look like – architectural sketches. Also what signage is necessary. Chairman Herzing asked why they were removing the hill. They need more parking area and a place to put dump bodies. Mr. Pelletier asked if it would be possible to make the building 60' by 120' instead of 50' x 100'. They were told to do everything at one time. Item 11 is about the same. They need a landscape design. They are in front of Wetlands on October 3. Discussion was had. **MOTION:** Gaye Zukauskas made a motion to table 591 Main Street-Site Plan Modification-KCK Properties and 10 Todd Hollow Road-Site Plan-KCK Properties until October 11 pending Wetlands approval. **VOTE:** S. Panasuk – Aye, J. Purney – Aye, P. Tonn – Aye, G. Zukauskas – Aye and Chairman Herzing so voted.

12. 6 Hove Street – Front Yard Setback – Denski – Mr. Kuehn stated that this is an existing house which encroaches on the front yard. The Commission can allow this if it is consistent with neighboring properties (notes to table 3.12). It will be an additional overhang. Discussion was had. **MOTION:** Gaye Zukauskas made a motion to approve

PLANNING & ZONING REGULAR MEETING
SEPTEMBER 27, 2001

Chairman Herzing called the regular meeting to order at 8:45 p.m.

ATTENDANCE

Steve Panasuk, Jamie Purney, Peter Tonn, William Kuehn-Town Planner, Gaye Zukauskas, Pat Pierzanowski-Recording and Office Secretary and Patrick Herzing-Chairman.

MINUTES

3. July 26, 2001 – Steve Panasuk made a motion to accept the July 26 minutes as mailed. Gaye Zukauskas seconded. VOTE: S. Panasuk – Aye, J. Purney – Aye, G. Zukauskas – Aye and Chairman Herzing so voted.

4. August 15, 2001 - Gaye Zukauskas made a motion to accept the August 15, 2001 minutes. Jamie Purney seconded. VOTE: J. Purney – Aye, G. Zukauskas – Aye and Chairman Herzing so voted.

5. September 13, 2001 – Gaye Zukauskas made a motion to accept the minutes of the September 13, 2001 meeting. Peter Tonn seconded. VOTE: S. Panasuk – Aye, J. Purney – abstained, P. Tonn – Aye, G. Zukauskas – Aye and Chairman Herzing – abstained. Motion carried.

OLD BUSINESS

6. 170 Mt. Tobe Rd. – Special Permit – SBA – Esther McNany represented SBA. Gaye Zukauskas said that the overlays were great but more coverage in the Greystone area would be nice. Steve Panasuk asked staff if they got a letter from SBA of other sites they looked at. Also how many EMF's are generated at 5' and 50' from the tower when it is at maximum output. Discussion was had. **MOTION:** Gaye Zukauskas made a motion to move item #6 - 170 Mt. Tobe Road-Special Permit-SBA to item #9 and items #8 and #9 be moved up. Peter Tonn seconded. VOTE: S. Panasuk – Aye, J. Purney – Aye, P. Tonn – Aye G. Zukauskas – Aye and Vice Chairman Panasuk so voted.

7. a. and b. Public Hearing Items – They were both continued.

8. Proposed Amendment – Signs – Commission – **MOTION:** Steve Panasuk made a motion to table the proposed amendment-signs-Commission. Gaye Zukauskas seconded. VOTE: S. Panasuk – Aye, J. Purney – Aye, P. Tonn – Aye, G. Zukauskas – Aye and Vice Chairman Panasuk so voted.

Wetlands action. Peter Tonn seconded. VOTE: G. Zukauskas – Aye, P. Tonn – Aye and Vice Chairman Panasuk so voted.

8. Proposed Amendment to the Zoning Regulations – Wireless Communications – Commission – Mr. Kuehn read the existing language and the proposed language into the record. The only difference is 600 sq. ft. The original draft in 1998 was sent to CCRPA and they suggested 150 sq. ft. It was approved as 750 sq. ft. and should have been 150 sq. ft. The Council of Governments of the Central Naugatuck Valley acknowledged receipt of the proposal. Mr. Kuehn read the letter from CCRPA into the record. FOR – No one. AGAINST – No one. FOR NOR AGAINST – No one. Discussion was had. **MOTION:** Gaye Zukauskas made a motion to close the public hearing for Proposed Amendment to the Zoning Regulations-Wireless Communications-Commission. VOTE: G. Zukauskas – Aye, P. Tonn – Aye and Vice Chairman Panasuk so voted.

PLANNING & ZONING REGULAR MEETING
SEPTEMBER 13, 2001
ATTENDANCE

Gaye Zukauskas, William Kuehn-Town Planner, Peter Tonn, Pat Pierzanowski-Recording and Office Secretary and Steve Panasuk-Vice Chairman.

MINUTES

9. July 26, 2001 and 10. August 15, 2001 – MOTION: Gaye Zukauskas made a motion to table the minutes of the July 26, 2001 and August 15, 2001 meetings until the next meeting when we have a quorum. Peter Tonn seconded. VOTE: G. Zukauskas - Aye, P. Tonn - Aye and Vice Chairman Panasuk so voted.

OLD BUSINESS

11. 170 Mt. Tobe Rd. – Special Permit – SBA – Esther McNany was here and Mr. Kuehn talked to her. Only two commissioners who were here for this item are in attendance tonight so she asked to have the item continued. Gaye Zukauskas felt the overlays were a big help. Steve Panasuk asked staff to get a letter from SBA of other sites they looked at. He would also like to know how much RFP's will be generated at 5' and 50' when it is at maximum output. **MOTION:** Gaye Zukauskas made a motion to table 170 Mt. Tobe Road-Special Permit-SBA to the next meeting. We have to act on this then. Peter Tonn seconded. VOTE: G. Zukauskas – Aye, P. Tonn – Aye and Vice Chairman Panasuk so voted.

12. a., b., c., d., e., f. and g Public Hearing Items – They were all continued.

12. h. Proposed Amendment to the Zoning Regulations – Wireless Communications – Commission – Discussion was had. **MOTION:** Gaye Zukauskas made a motion to approve the amendment change for wireless communications as written by staff – removing 750 sq. ft. and replacing it with 150 sq. ft. of building area. Peter Tonn seconded. VOTE: G. Zukauskas – Aye, P. Tonn – Aye and Vice Chairman Panasuk seconded.

13. Proposed Amendment – Signs – Commission – **MOTION:** Gaye Zukauskas made a motion to table the proposed amendment-signs-Commission. Peter Tonn seconded. VOTE: G. Zukauskas – Aye, P. Tonn – Aye and Vice Chairman Panasuk so voted.

14. Greystone Road – Special Permit Review – Edwards – No one was in the audience for this item. Gaye Zukauskas would like a special meeting to finalize this item. She is very upset with it and doesn't want to wait 2 weeks. Mr. Kuehn said he would check and set up a special meeting for Monday or Tuesday of next week. People in the audience wanted to speak. Tom Napiello of 385 Greystone Road stated that he is a schoolteacher and was home every day in August. From August 1 to this date, they have worked on the

PLANNING & ZONING PUBLIC HEARINGS
JULY 26, 2001

Chairman Patrick Herzing called the meeting to order at 7:00 p.m.

ATTENDANCE

Steve Panasuk, Gaye Zukauskas, William Kuehn-Town Planner, Jamie Purney, Pat Pierzanowski-Recording and Office Secretary and Patrick Herzing-Chairman.

Chairman Herzing went over the procedure to be followed for the public hearings.

1. 170 Mt. Tobe Rd. – Special Permit – SBA – The representative from SBA stopped by the office this morning. No one was in attendance for them. FOR – No one. AGAINST – No one. FOR NOR AGAINST – No one. **MOTION:** Gaye Zukauskas made a motion to close the public hearing for 170 Mt. Tobe Rd.-Special Permit-SBA. seconded. VOTE: S. Panasuk – Aye, G. Zukauskas – Aye, J. Purney – Aye and Chairman Herzing so voted.

2. 111 Hosier Road – Special Permit – Russell - Mr. Kuehn read the legal notice for the public hearing into the record. Mark Russell of 111 Hosier Road represented himself. They put on a deck and would now like to enclose it. There is no problem with coverage. It is 12' x 14' and would have a sliding door to the deck. FOR – No one. AGAINST – No one. FOR NOR AGAINST – No one. Discussion was had. **MOTION:** Steve Panasuk made a motion to close the public hearing for 111 Hosier Road – Special Permit – Russell. Gaye Zukauskas seconded. VOTE: S. Panasuk – Aye, G. Zukauskas – Aye, J. Purney – Aye and Chairman Herzing so voted.

MOTION: Gaye Zukauskas made a motion to re-open the public hearing for 170 Mt. Tobe Road – Special Permit – SBA. Steve Panasuk seconded. VOTE: S. Panasuk – Aye, G. Zukauskas – Aye, J. Purney – Aye and Chairman Herzing so voted.

1. 170 Mt. Tobe Road – Special Permit – SBA – Esther McNany represented SBA and apologized for being late. There was a traffic jam on Rt. 84. This is a continuation of a public hearing. At the last meeting there were a number of questions the Commission asked to have information for them. There were four particular items. One, revising their site plan to reflect the changes they made in their application in making all the utilities underground and also reducing the tower height from the initial 195 feet down to a maximum height of 160 feet total and all the changes are reflected in the plan on the appropriate pages. They submitted some visual impact studies so they revised the visual simulations utilizing the 160 foot tower. They were previously submitted and dated July 9, 2001. The power lines and the overlapping of the RF studies go together. The power lines north of the site from the mile 39 marker the poles are wood, not the steel lattice poles. Ms. McNany went over the overlays. Chairman Herzing asked how many years are they going to be used before they become obsolete with the satellites and all? Ms. McNany stated that they feel they will be here for a long time and they have raised their

PLANNING AND ZONING PUBLIC HEARINGS
JULY 26, 2001

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lease time from 15-20 years to 99 years. The town could use the pole at no cost. She did not know why Watertown and Thomaston had denied them. FOR: No one. AGAINST: No one. FOR NOR AGAINST: No one. Discussion was had. **MOTION:** Gaye Zukauskas made a motion to close the public hearing for 170 Mt. Tobe Road-Special Permit-SBA. Steve Panasuk seconded. **VOTE:** S. Panasuk – Aye, G. Zukauskas – Aye, J. Purney – Aye and Chairman Herzing so voted.

PLANNING & ZONING REGULAR MEETING
JULY 26, 2001

Chairman Patrick Herzing called the meeting to order at 7:25 p.m.

ATTENDANCE

Steve Panasuk, Gaye Zukauskas, William Kuehn-Town Planner, Jamie Purney, Pat Pierzanowski-Recording and Office Secretary and Patrick Herzing-Chairman.

MINUTES

3. July 12, 2001 – MOTION: Gaye Zukauskas made a motion to accept the minutes for July 12, 2001 as mailed. Jamie Purney seconded. VOTE: S. Panasuk – Aye, G. Zukauskas – Aye, J. Purney – Aye and Chairman Herzing so voted.

OLD BUSINESS

4.a. 170 Mt. Tobe Rd. – Special Permit – SBA – Gaye Zukauskas would like more time to go over the information. **MOTION:** Gaye Zukauskas made a motion to table 170 Mt. Tobe Road-Special Permit-SBA until 9/13/01. Jamie Purney seconded. VOTE: S. Panasuk – Aye, G. Zukauskas – Aye, J. Purney – Aye and Chairman Herzing so voted.

4.b. 111 Hosier Rd. – Special Permit – Russell – **MOTION:** Gaye Zukauskas made a motion to approve 111 Hosier Rd.-Special Permit-Russell for the screened in deck on the porch that is being built. Jamie Purney seconded. VOTE: S. Panasuk – Aye, G. Zukauskas – Aye, J. Purney – Aye and Chairman Herzing so voted.

5. Proposed Amendment – Signs – Commission – **MOTION:** Gaye Zukauskas made a motion to table Proposed Amendment-Signs-Commission until the next meeting. Steve Panasuk seconded. Steve Panasuk remarked that the Commission keeps postponing this item. Maybe we should have a special meeting to discuss this and get it finished. Mr. Kuehn will get it put together during the month of August. VOTE: S. Panasuk – Aye, G. Zukauskas – Aye, J. Purney – Aye and Chairman Herzing so voted.

6. Wilton Rd. – Subdivision – Zappone – Michael Zappone and his father Joseph Zappone were both in attendance. Mr. Kuehn has been working off maps received on June 6 and dated May 16, 2001. Revised plans were supposedly done to include the easements for wetlands and the culvert crossing the driveway. Mr. Zappone that at the last meeting everything was supposed to be all set except for the wetlands. Mr. Zimbouski stated that the town wants discharge rights onto the property. He would like a map filed which clarifies. Mr. Kuehn is uncomfortable because there are some things he doesn't have his hands on and would like a motion written ahead to be sure everything is taken care of. He wrote a letter to the Commission regarding his concerns. Discussion was had. **MOTION:** Gaye Zukauskas made a motion to table Wilton Rd.-Subdivision-

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PLANNING & ZONING PUBLIC HEARINGS
JULY 12, 2001

Chairman Patrick Herzing called the meeting to order at 7:00 p.m.

ATTENDANCE

Steve Panasuk, William Kuehn-Town Planner will be a little late, Gaye Zukauskas, Jamie Purney, Pat Pierzanowski-Recording and Office Secretary and Patrick Herzing-Chairman.

Chairman Herzing went over the procedure to be followed for the public hearings.

1. Proposed Amendment – Signs – Commission – Gaye Zukauskas read the letter from Cindy Scoville, President of the Plymouth Chamber of Commerce dated 7/6/01 regarding a frame signs that could be put out during the day and taken in at night. FOR – No one. AGAINST – No one. FOR NOR AGAINST – No one. Discussion was had. **MOTION:** Gaye Zukauskas made a motion to close the public hearing for Proposed Amendment-Signs-Commission. Steve Panasuk seconded. VOTE: S. Panasuk – Aye, G. Zukauskas – Aye, J. Purney – Aye and Chairman Herzing so voted.

2. 170 Mt. Tobe Rd. – Special Permit – SBA – The representative from SBA was unable to make the meeting so asked that the public hearing be continued until July 26, 2001. FOR – No one. AGAINST – No one. FOR NOR AGAINST – No one. **MOTION:** Gaye Zukauskas made a motion to continue the public hearing for 170 Mt. Tobe Rd.-Special Permit-SBA until 7/26/01. Jamie Purney seconded. VOTE: S. Panasuk – Aye, G. Zukauskas – Aye, J. Purney – Aye and Chairman Herzing so voted.

Chairman Herzing read the legal notice for the next two public hearings into the record.

3. Wilton Road – Subdivision – Zappone – Michael Zappone of 197 Pine Hill Road in Thomaston stated that he is buying a piece of property from his father. He has gone to Wetlands and has made the changes that they want. Chairman Herzing read the letter dated 6/11/01 from Michael Zappone regarding a waiver of sidewalks into the record. Chairman Herzing asked if the rest of the land could be subdivided. Steve Panasuk informed Mr. Zappone that if the sidewalks are waived that he would still have to grade for them and provide a snow shelf. FOR – No one. AGAINST – No one. FOR NOR AGAINST – No one. Wetlands wanted a pipe underneath the driveway to catch the water. Sidewalks now or later was discussed. Open space – on 3 parcels or more. There is no correspondence from the other departments. Discussion was had. **MOTION:** Gaye Zukauskas made a motion to close the public hearing for Wilton Road – Subdivision – Zappone. Steve Panasuk seconded. VOTE: S. Panasuk – Aye, G. Zukauskas – Aye, J. Purney – Aye and Chairman Herzing so voted.

4. Proposed Amendments – Plan of Development – Commission – These amendments are mainly for the preservation of the Waterwheel. Dave Philbrick of 1 Magnolia Lane

P & Z CONTINUED PUBLIC HEARING AND PUBLIC HEARINGS

June 28, 2001

The Public Hearing was called to order at 7:10 p.m. by Chairman Patrick Herzing.

ATTENDANCE: Patrick Herzing, Steven Panasuk, Gaye Zukauskas, William Kuehn, Town Planner, and Robin Gudeczauskas, Recording Secretary.

1. **Proposed Amendment – Signs - Commission** – W. Kuehn gave a brief update and recommended the matter be continued one more meeting. **MOTION:** Gaye Zukauskas made a motion to continue the Public Hearing for the Proposed Amendment, Signs, for two weeks from today. Steve Panasuk seconded. **VOTE:** S. Panasuk – Aye, G. Zukauskas – Aye, and Chairman Herzing so voted.

2. **170 Mt. Tobe Rd. – Special Permit - SBA** – Esther McNany, Territory Manager for SBA stated she has reviewed the 5/24/01 minutes and had the following responses: reviewed the location of utilities stating they will remain underground the additional 6800' to the facility; the stated tower height of 195' has been amended to 155' – 157' and submitted RF Engineering information to backup the request (distributed and reviewed) noting gap in coverage, coverage from the surrounding sites with the Mt. Tobe site at 155', coverage from the proposed SBA site at 170 Mt. Tobe Road, coverage from the Voicestream tower at 150', coverage from the SNET tower at 170'. The main coverage objective from the proposed facility is Rt. 8. Tower heights reviewed, lack of accessibility on Greystone and Wolcott Roads noting restriction is from Waterbury airport, FAA restrictions, and height limitations to reach this area. State forest is restricted for any type of telecommunications. Discussion held. S. Panasuk noted that first priority would be to use existing towers, high tension towers are not mentioned for telecommunication use and if feasible the information submitted will need to be revised. E. McNany reviewed concerns of SBA in utilizing utility lines as being safety of workers and access issues. Commission requested 7 sets of information for next meeting on (a) use of power lines to attach antennae, (b) review of all site plans and update on all visuals to reflect lower height and overlay of all facilities. Commission asked W. Kuehn to obtain from CCRPA a traffic study on Greystone and Rt. 262. Applicant submitted a written request to extend the Public Hearing for 35 days and to continue the public hearing at the next meeting; W. Kuehn read letter dated 6/28/01 into record. **MOTION:** Gaye Zukauskas made a motion to accept the letter requesting a 35-day extension for the public hearing on 170 Mt. Tobe Rd., Special Permit, SBA. Steven Panasuk seconded. **VOTE:** S. Panasuk – Aye, G. Zukauskas – Aye, and Chairman Herzing so voted. **MOTION:** Gaye Zukauskas made a motion to continue the public hearing on 170 Mt. Tobe Rd., Special Permit, SBA to July 12, 2001. Steve Panasuk seconded. **VOTE:** : S. Panasuk – Aye, G. Zukauskas – Aye, J. Purney – Aye and Chairman Herzing so voted.

extension of the public hearing for Towill Farms Subdivision – Harwinton Avenue – Towill. Jamie Purney seconded.

VOTE: G. Zukauskas – Aye, J. Purney – Aye and Chairman Herzing so voted.

MOTION: Gaye Zukauskas made a motion to continue the public hearing for Harwinton Avenue – Towill Farms Subdivision – Towill. Jamie Purney seconded.

VOTE: G. Zukauskas – Aye, J. Purney – Aye and Chairman Herzing so voted.

4. 41 Fall Mountain Lake Road – Special Permit – Hultslander – Mark Hultslander of 41 Fall Mountain Lake Road represented himself. The addition is one floor and will be put on piers. He had the size of the deck corrected at town hall. It was 16 x 20. He wants to change the existing deck into living space. Not going any higher. Vincent Lago of Lago Builders showed the Commission the plans. The existing closed in porch will be changed to a bedroom and the existing deck will be changed to living space. There is nothing else on the property. FOR – No one. AGAINST – No one. FOR NOR AGAINST – No one. Discussion was had. **MOTION:** Gaye Zukauskas made a motion to close the public hearing. Jamie Purney seconded. VOTE: G. Zukauskas – Aye, J. Purney – Aye and Chairman Herzing so voted. **MOTION:** Gaye Zukauskas made a motion to accept the application for a special permit – 41 Fall Mountain Lake Road – Hultslander approval based on plans dated March 27, 2001 by Lago Builders designed by Vincent Lago. The whole square footage of the total framing of the house not to exceed 20' x 40'. Silt fence to be put up during building process. Jamie Purney seconded. VOTE: G. Zukauskas – Aye, J. Purney – Aye and Chairman Herzing so voted.

5. 170 Mt. Tobe Road – Special Permit – SBA – Mr. Thomas Flynn represented SBA Inc. from Glastonbury, CT. Mr. Flynn felt the Commission has been educated on telecommunication towers so would explain why and where they are building it. He showed the Commission a topo map and showed them the locations of towers and how their tower relates to these other towers. They are trying to cover the blind spots up along Route 8. Thomaston recently denied 2 towers. They are proposing a tower on property across from the airport. It is a large parcel of land – over 150 acres – with nothing on it except 1 house. It has an existing road and existing utilities. They will have a lease with the landowner to cross and re-cross. They will be approximately 600' away from the house. It is way back in the property. It is approximately 2000' from Plymouth properties. It is next to the state forest. It is a simple site plan consisting of a compound 100' x 100' with a 70' x 70' compound within it. It will service up to 5 carriers – possibly 6. It will be self contained and fence secured. There will be no lighting except for maintenance and no water or sewer. It will be serviced a couple of times a month. There will be nothing outside the fenced area. The yellow areas on the map are partially visible to the Town of Plymouth. In the green areas, views are screened by vegetation. In the purple areas, views are blocked by topography. The tower will be galvanized, gray mat finish. It will have an ID # and emergency call number on it. It complies with all the regulations in terms of height and tower fall zone. It meets FCC regulations. Utilities are

PLANNING & ZONING PUBLIC HEARING
MAY 24, 2001

PAGE 3

already underground but would like to propose above ground from there on. Chairman Herzing had concerns as to the need of the tower and height of the tower. Mr. Flynn stated that the issue in this part of Connecticut is the depth of the river valley. They need the height so they will be able to get it down into the valley. Signals don't roll with the terrain. It varies from carrier to carrier as to where they are on the facility and how high a carrier may need to be. NEXTEL has signed on for this tower. Sprint could probably use this site as well. Chairman Herzing asked how high they need to go to get into the valley. (Since NEXTEL has signed on, what are their requirements?) There are three towers in town that aren't used to their capacity. Mr. Flynn said the lower they put a tower, the smaller the number of co-habitators that can be put on it. They need 10 feet from the mid line separation. Patrick Herzing asked if in the event all antennas are used by your provider, what do you need for height to get into the hole? FOR – Susan Macdonald asked if this tower would cover the dead spot on Route 6 up to Watertown. Mr. Flynn said yes. She also spoke in favor of the tower but she would rather see underground utilities rather than above. There was no one else who wanted to speak for the application. AGAINST – No one. FOR NOR AGAINST – No one. Discussion was had. The Commission would like more information from Mr. Flynn regarding NEXTEL, etc. **MOTION:** Gaye Zukauskas made a motion to continue the public hearing for 170 Mt. Tobe Road-Special Permit-SBA to 6/14. Jamie Purney seconded. VOTE: G. Zukauskas – Aye, J. Purney – Aye and Chairman Herzing so voted.

6. 403 Greystone Road – Modification of Special Permit – Edwards – Connie

Massimo of 214 Christian Street, Oxford spoke for the applicant. They would like to extend their hours of operation. The hours at the present time are 8:00 a.m. to 3:00 p.m. which only gives them 6 ½ hours. Chairman Herzing stated that they knew that going into the project. Ms. Massimo stated that it is hard to hire trucks for only 6 ½ hours. They really need more hours. Chairman Herzing stated that he didn't think they were moving that much material from there. The majority was to be used on site to finish the driveway. 35,000 yds. of which 20,000 were to be used on site. This would leave 15,000 yds. to be hauled off. It is 22,000 yds. to be taken out. They had a rough winter and they have a hard time with the blasting because they don't have the time for the blasters to get in and blast. It takes 2 days because by the time they drill their holes, it is 3:00. She really needs to extend the hours. They have been working on this project since January and have had a lot of bad weather and she had a stopping point because of blasting. Chairman Herzing asked her how much material has been removed so far. What percentage of the job is completed. She stated maybe a quarter. Chairman Herzing asked if all that had been removed or has some of it been moved up into the property filling. Some for the road base. Mike Massimo of 214 Christian Street, Oxford stated they took some material out for the swale and some 50' to 75' from the road and then they hit ledge. They have removed about 1000 yds. They have to remove the rock that has been blasted. FOR – No one. AGAINST – Joan Cavalari of 410 Greystone Road lives across the road. Their hours are supposed to be 8-3 and already they have extended them on



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: siting.council@po.state.ct.us

Web Site: www.ct.gov/csc

March 12, 2004

Kenneth C. Baldwin
Robinson & Cole
280 Trumbull Street
Hartford, CT 06103-3597

RE: **EM-VER-111-040202** - Cellco Partnership d/b/a Verizon Wireless notice of intent to modify an existing telecommunications facility located at Mount Tobe Road, Plymouth, Connecticut.

Dear Attorney Baldwin:

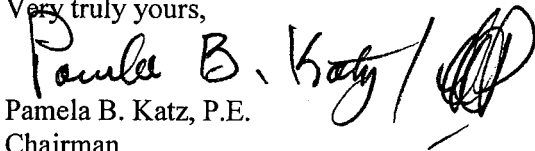
At a public meeting held on March 4, 2004, the Connecticut Siting Council (Council) acknowledged your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified here and in your notice dated February 2, 2004. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

Thank you for your attention and cooperation.

Very truly yours,



Pamela B. Katz, P.E.
Chairman

PBK/laf

- c: Honorable Richard G. Covello, Mayor, Town of Plymouth
William Kuehn, Town Planner, Town of Plymouth
Sheila R. Becker, Regional Director of Compliance, SBA, Inc.
Stephen J. Humes, Esq., LeBoeuf, Lamb, Greene & MacRae, LLP
Thomas J. Regan, Esq., Brown Rudnick Berlack Israels LLP
Thomas F. Flynn III, Nextel Communications
Michele G. Briggs, Southwestern Bell Mobile Systems

ATTACHMENT 2

verizon

WIRELESS COMMUNICATIONS FACILITY

THOMASTON S CT 170 MT. TOBE ROAD PLYMOUTH, CT 06782

DRAWING INDEX

T-1 TITLE SHEET

C-1 COMPOUND PLAN, TOWER ELEVATION, EQUIPMENT CONFIGURATION PLANS & ELEVATIONS.

B-1 RF BILL OF MATERIALS, MECHANICAL SPECIFICATIONS & EQUIPMENT DETAILS.

N-1 NOTES & SPECIFICATIONS

SITE DIRECTIONS

**START: 20 ALEXANDER DRIVE
WALLINGFORD, CONNECTICUT 06492**

**END: 170 MT. TOBE ROAD
PLYMOUTH, CT 06782**

1. HEAD SOUTH TOWARDS ALEXANDER DRIVE 279 FT
2. SLIGHT RIGHT TOWARDS ALEXANDER DRIVE 289 FT
3. TURN RIGHT TOWARDS ALEXANDER DRIVE 167 FT
4. TURN RIGHT ONTO ALEXANDER DRIVE 0.3 MI
5. TURN RIGHT ONTO BARNES INDUSTRIAL RD S. 0.1 MI
6. TURN LEFT AT 1ST CROSS STREET ONTO CT-68W 0.4 MI
7. TURN RIGHT 0.2 MI
8. TURN RIGHT ONTO N COLONY ROAD 0.3 MI
9. TURN RIGHT TO MERGE ONTO CT-15 N TOWARD HARTFORD 0.5 MI
10. MERGE ONTO CT-15 N 3.1 MI
11. USE THE MIDDLE LANE TO STAY ON CT-15 N 0.1 FT
12. TAKE EXIT 68W TO MERGE ONTO I-891 W TOWARD MERIDEN/WATERBURY 7.9 MI
13. USE LEFT 2 LANES TO TAKE EXIT 1 FOR I-84 W TOWARD WATERBURY/DANBURY 1.0 MI
14. WATERBURY/DANBURY 1.0 MI
15. MERGE ONTO I-84 7.4 MI
16. TAKE EXIT 20 TO MERGE ONTO CT-8 N TOWARD TORRINGTON 3.9 MI
17. TAKE EXIT 37 TO MERGE ONTO CT-262/STATE HWY 262 TOWARD WATERTOWN 0.3 MI
18. MERGE ONTO CT-262/STATE HWY 262 0.7 MI
19. TURN RIGHT ONTO CT-262 0.2 MI
20. TURN RIGHT TO STAY ON CT-262 0.6 MI
21. TURN LEFT ONTO CT-262/SPRUCE BROOK ROAD (DESTINATION WILL BE ON THE LEFT) 2.0 MI



LOCATION MAP
SCALE: 1" = 500'

SITE INFORMATION

VZ SITE NAME: THOMASTON S CT
VZ PROJ FUZE I.D.: 16244621
VZ LOCATION CODE: 468080
VZ PROJECT CODE: 20212223030
LOCATION: 170 MT. TOBE ROAD
PLYMOUTH, CT 06782

PROJECT SCOPE: REFER TO NOTES ON DRAWING C-1 FOR SCOPE OF WORK.

PARCEL ID: 093-138-002

ZONING DISTRICT: RA-1 (SINGLE FAMILY RESIDENCE - 1 ACRES)

LATITUDE: 41° 37' 48.1116" N (41.630031° N)

LONGITUDE: 73° 03' 23.5872" W (73.056552° W)

SITE COORDINATES AND GROUND ELEVATION
OBTAINED FROM GOOGLE EARTH.

GROUND ELEVATION: 841'± AMSL

PROPERTY OWNER: SUSAN & WALTER T. MACDONALD
42 SOUTH STREET
PLYMOUTH, CT 06782

APPLICANT: CELCO PARTNERSHIP
d/b/a VERIZON WIRELESS
20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

LEGAL/REGULATORY COUNSEL: ROBINSON & COLE, LLP
KENNETH C. BALDWIN, ESQ.
280 TRUMBULL STREET
HARTFORD, CT 06103

ENGINEER CONTACT: ALL-POINTS TECHNOLOGY CORP., P.C.
567 VAUXHALL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385
(860) 663-1697

VERIZON SMART TOOL PROJECT #: 10037872/10068349

Cellco Partnership d/b/a

verizon

20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

ALL-POINTS
TECHNOLOGY CORPORATION

567 VAUXHALL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385 PHONE: (860) 663-1697
WWW.ALLPOINTSTECH.COM FAX: (860) 663-0835

CONSTRUCTION DOCUMENTS

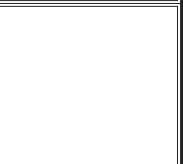
NO	DATE	REVISION
0	06/07/21	FOR REVIEW: JRM
1	06/09/21	FOR REVIEW: JRM
2		
3		
4		
5		
6		



DESIGN PROFESSIONALS OF RECORD

PROF. MICHAEL S. TRODDEN P.E.
COMP: ALL-POINTS TECHNOLOGY
CORPORATION, P.C.
ADD: 567 VAUXHALL STREET EXT.
SUITE 311
WATERFORD, CT 06385

OWNER: SUSAN & WALTER T.
ADDRESS: MACDONALD
42 SOUTH STREET
PLYMOUTH, CT 06782



THOMASTON S CT

SITE: 170 MT. TOBE ROAD

ADDRESS: PLYMOUTH, CT 06782

APT FILING NUMBER: CT141_12190

DRAWN BY: DRA

DATE: 06/07/21 CHECKED BY: JRM

VZ PROJECT CODE: 20212223030

VZ LOCATION CODE: 468080

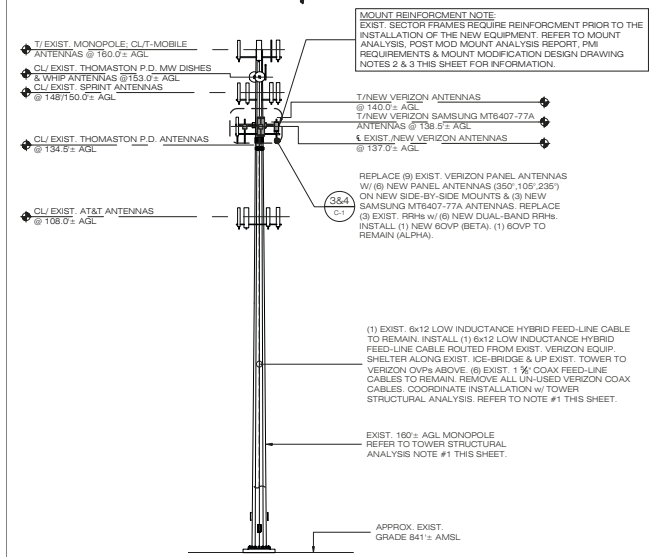
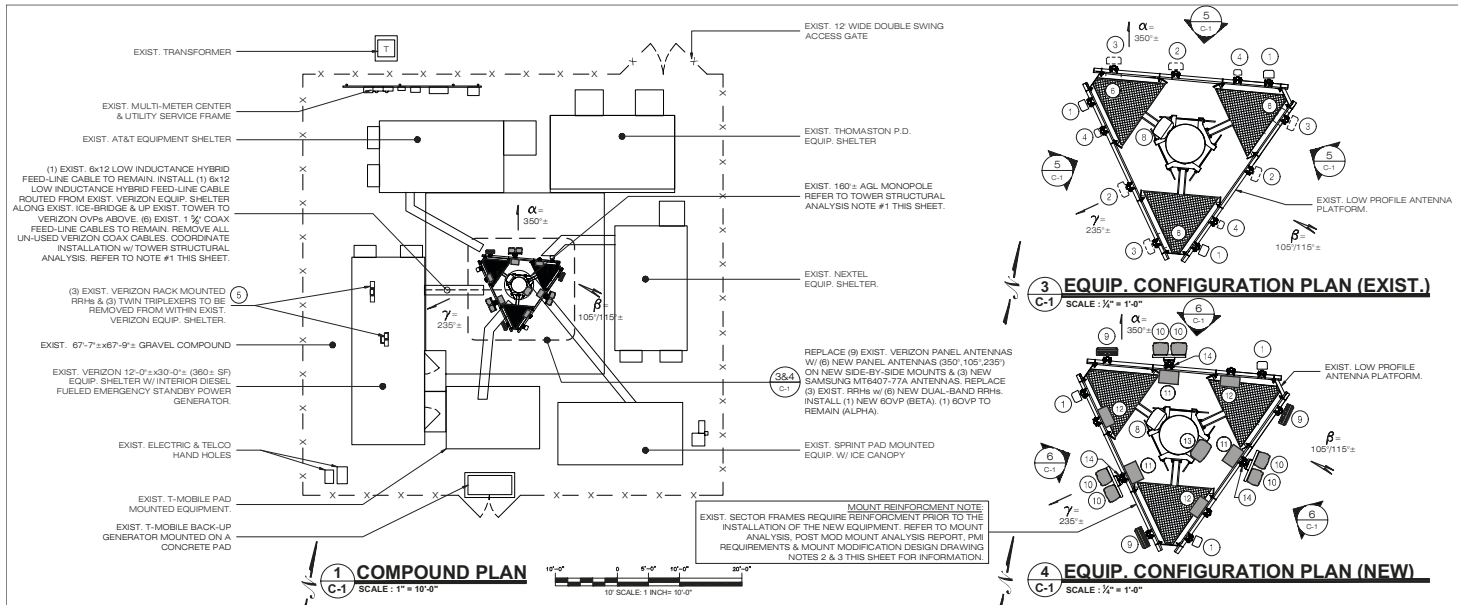
VZ FUZE ID: 16244621

SHEET TITLE:

TITLE SHEET

SHEET NUMBER:

T-1



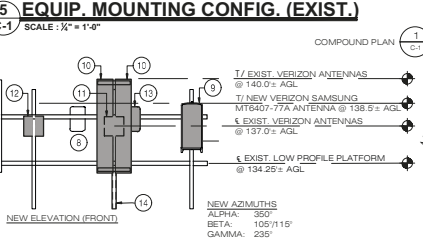
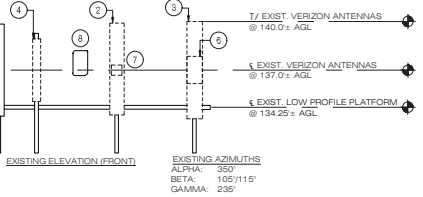
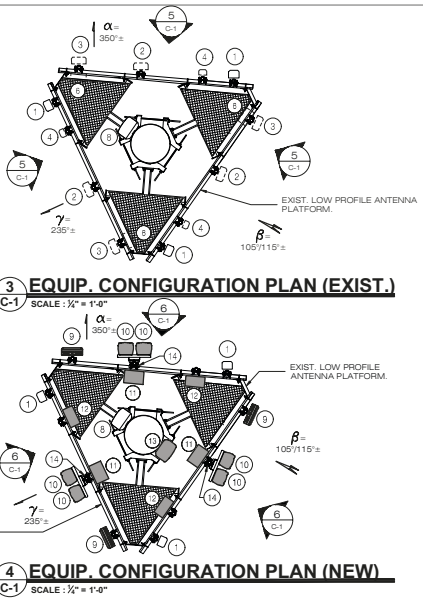
2 TOWER ELEVATION
C-1 SCALE: 1" = 20'-0"

GENERAL ABBREVIATION LIST:

ABP	ABOVE BASE PLATE
AGL	ABOVE GROUND LEVEL
AMSL	ABOVE MEAN SEA LEVEL
AWG	ADVANCED WIRELESS SERVICE
HOG	HOT DIP GALVANIZED
OVVP	OVER VOLTAGE PROTECTION
RRH	REMOTE RADIO HEAD
V.I.F.	VERIFY IN FIELD
W.P.	WORK POINT
A.F.R.	ABOVE FINISH ROOF

SCOPE OF WORK (ALL) SECTORS

1	EXIST. ANTENNA (TO BE REPLACED)
2	EXIST. ANTENNA (TO REMAIN)
3	EXIST. ANTENNA & PIPE MAST (TO BE REPLACED)
4	EXIST. ANTENNA (TO BE REPLACED)
5	EXIST. ANTENNA (TO BE REPLACED)
6	EXIST. ANTENNA (TO BE REPLACED)
7	EXIST. ANTENNA (TO BE REPLACED)
8	EXIST. ANTENNA (TO BE REPLACED)
9	EXIST. ANTENNA (TO BE REPLACED)
10	EXIST. ANTENNA (TO BE REPLACED)
11	EXIST. ANTENNA (TO BE REPLACED)
12	EXIST. ANTENNA (TO BE REPLACED)
13	EXIST. ANTENNA (TO BE REPLACED)
14	EXIST. ANTENNA (TO BE REPLACED)
15	EXIST. ANTENNA (TO BE REPLACED)
16	EXIST. ANTENNA (TO BE REPLACED)
17	EXIST. ANTENNA (TO BE REPLACED)
18	EXIST. ANTENNA (TO BE REPLACED)
19	EXIST. ANTENNA (TO BE REPLACED)
20	EXIST. ANTENNA (TO BE REPLACED)



6 EQUIP. MOUNTING CONFIG. (NEW)
C-1 SCALE: 1/2" = 1'-0"

- NOTES:**
- REFER TO MONOPOLE TOWER STRUCTURAL ANALYSIS REPORT PREPARED BY SBA COMMUNICATIONS CORP., DATED 05/28/21. AVAILABLE UNDER SEPARATE COVER.
 - REFER TO MOUNT ANALYSIS REPORT PREPARED BY MASER CONSULTING, P.A., PROJECT #20777092A, MARKED REV0, DATED 04/20/21. AVAILABLE UNDER SEPARATE COVER.
 - REFER TO POST MOD MOUNT ANALYSIS REPORT, PMI REQUIREMENTS & MOUNT MODIFICATION DESIGN DRAWINGS PREPARED BY MASER CONSULTING, P.A., PROJECT #21777092A, DATED 05/18/21. AVAILABLE UNDER SEPARATE COVER.
 - BASE MAPPING FROM FIELD MEASUREMENTS TAKEN BY ALL-POINTS TECH. CORP., P.C. ON 03/23/21.
 - PROJECT SCOPE INCLUDES THE FOLLOWING:
 - REPLACEMENT OF (8) EXIST. PANEL ANTENNAS W/ (8) NEW PANEL ANTENNAS ON NEW DUAL MOUNT ANTENNA BRACKET (QUINTEL AS-005245-Q05) & (3) NEW SAMSUNG MT6407-77A ANTENNAS.
 - REPLACEMENT OF (3) EXIST. RRHs W/ (6) NEW DUAL-BAND RRHs.
 - REMOVAL OF (3) EXIST. RRHs FROM WITHIN EXIST. VERIZON EQUIP. SHELTER.
 - INSTALLATION OF (1) NEW 60VP (BETA SECTOR).
 - INSTALLATION OF (1) NEW 6x12 LOW INDUCTANCE HYBRID FEED-LINE CABLE.
 - ALL EXPOSED STEEL AND HARDWARE TO BE HOT DIP GALV. (HDG). PAINT TO MATCH EXIST. (WHERE APPLICABLE).
 - CAP & WEATHERPROOF ALL UN-EQUIPPED CABLE ENTRY PORTS (WHERE APPLICABLE).
 - MOUNT & GROUND ALL NEW EQUIPMENT IN ACCORDANCE WITH NEC (NFPA-70), NESC AND MANUFACTURERS SPECIFICATION.
 - SECURE ALL NEW ANTENNA CABLES PER MANUFACTURER RECOMMENDATIONS.
 - CONTRACTOR SHALL INSTALL NEW SIDE-BY-SIDE & DUAL-MOUNT BRACKETS PER ANTENNA MOUNT MANUFACTURER RECOMMENDATIONS, INCLUDING VERIFICATION OF MINIMUM PIPE MAST DIAMETER REQUIRED TO INSTALL NEW MOUNT BRACKETS. CONTRACTOR SHALL NOTIFY ENGINEER OF RECORD SHOULD EXIST. PIPE MASTS REQUIRE REPLACEMENT TO SUPPORT THE NEW MOUNT BRACKETS.
 - ANTENNA CONFIGURATIONS SHOWN HEREIN ARE FRONT ELEVATIONS.
 - ANTENNA SPACING DIMENSIONS ARE TO THE CENTER OF THE EXIST. ANTENNA AND PROP. ANTENNA FACE.
 - REFER TO THE FINAL RFDS PROVIDED BY VERIZON FOR THE LATEST INFORMATION REGARDING EQUIPMENT MODELS, REQUIRED CABLEING & DOWN-TILT INFORMATION.
 - APPLY 3M FILM OVER ALL EXPOSED MMWAVE ANTENNAS COLOR TO MATCH EXIST. STRUCTURE (WHERE APPLICABLE). COORDINATE WITH VERIZON CONSTRUCTION MANAGER AND LL.
 - PAINT ALL NEW NON SAMSUNG MT6407-77A ANTENNAS & SUPPORTS TO MATCH EXIST. STRUCTURE (WHERE APPLICABLE). COORDINATE W/ VERIZON CONSTRUCTION MANAGER & BUILDING OWNER.



LOCATION PLAN
SCALE: 1" = 200'

Cellco Partnership d/b/a

verizon

20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

587 VAUXHALL STREET EXTENSION, SUITE 311
WATERFORD, CT 06385
PHONE: (860)463-1907
WWW.ALLPOINTS24.COM FAX: (860)463-0835

ALL-POINTS
TECHNOLOGY CORPORATION

587 VAUXHALL STREET EXTENSION, SUITE 311
WATERFORD, CT 06385
PHONE: (860)463-1907
WWW.ALLPOINTS24.COM FAX: (860)463-0835

NO	DATE	REVISION
6	08/07/21	FOR REVIEW: JRM
1	08/09/21	FOR REVIEW: JRM
2		
3		
4		
5		
6		

CONSTRUCTION DOCUMENTS

STATE OF CONNECTICUT
MICHAEL S. TRODDEN
33313
LICENSED
PROFESSIONAL ENGINEER

DESIGN PROFESSIONALS OF RECORD

PROF. MICHAEL S. TRODDEN P.E.
CORP. ALL-POINTS TECHNOLOGY
CORPORATION, P.C.
ADD: 587 VAUXHALL STREET EXT.
SUITE 311
WATERFORD, CT 06385

OWNER: SUSAN A. WALTER
ADDRESS: MACDONALD
42 SOUTH STREET
PLYMOUTH, CT 06782

THOMASTON S CT

SITE: 170 MT. TOBE ROAD
ADDRESS: PLYMOUTH, CT 06782

APT FILING NUMBER: CT141_12196

DRAWN BY: JRM
CHECKED BY: JRM

DATE: 06/07/21

VZ PROJECT CODE: 2021223030

VZ LOCATION CODE: 468080

VZ FUZE ID: 16244621

SHEET TITLE:
COMPOUND PLAN,
TOWER ELEVATION,
EQUIP. CONFIGURATION
PLANS & ELEVATIONS

SHEET NUMBER:

C-1

EQUIPMENT DATA									
EQUIPMENT SPECIFICATIONS									
SECTOR	ANTENNA MAKE/MODEL	QTY	AZMUTH	EQUIPMENT STATUS	HEIGHT (ft)	WIDTH (ft)	DEPTH (ft)	WEIGHT (LBS)	
ALPHA	SAMSUNG MT6407-77A	1	350°	NEW	35.1 ⁽¹⁾	16.1 ⁽²⁾	5.5 ⁽³⁾	87.1 ⁽⁴⁾	
	700/850/1900/2100 QUNTEL Q56656-5D	1	350°	NEW	72.0	12.0	9.6	72.0 ⁽⁵⁾	
	700/850/1900/2100 QUNTEL Q56656-5D	1	350°	NEW	72.0	12.0	9.6	72.0 ⁽⁵⁾	
	850: ANTEL EXA-70080-6CF	1	350°	ETR	71.0	8.0	5.9	18.0 ⁽⁵⁾	
BETA	SAMSUNG MT6407-77A	1	105°	NEW	35.1 ⁽¹⁾	16.1 ⁽²⁾	5.5 ⁽³⁾	87.1 ⁽⁴⁾	
	700/850/1900/2100 QUNTEL Q56656-5D	1	105°	NEW	72.0	12.0	9.6	72.0 ⁽⁵⁾	
	700/850/1900/2100 QUNTEL Q56656-5D	1	105°	NEW	72.0	12.0	9.6	72.0 ⁽⁵⁾	
	850: ANTEL EXA-70080-6CF	1	115°	ETR	71.0	8.0	5.9	18.0 ⁽⁵⁾	
GAMMA	SAMSUNG MT6407-77A	1	235°	NEW	35.1 ⁽¹⁾	16.1 ⁽²⁾	5.5 ⁽³⁾	87.1 ⁽⁴⁾	
	700/850/1900/2100 QUNTEL Q56656-5D	1	235°	NEW	72.0	12.0	9.6	72.0 ⁽⁵⁾	
	700/850/1900/2100 QUNTEL Q56656-5D	1	235°	NEW	72.0	12.0	9.6	72.0 ⁽⁵⁾	
	850: ANTEL EXA-70080-6CF	1	235°	ETR	71.0	8.0	5.9	18.0 ⁽⁵⁾	
	APPURTENANCE MAKE/MODEL								
	SAMSUNG B2/B66A RRR-BR049 (RFV01U-D1A)	3	-	NEW	14.9	14.9	10.04	97.5	
	SAMSUNG B5/B13 RRR-BR04C (RFV01U-D2A)	3	-	NEW	14.9	14.9	8.14	82.0	
	RAYCAP RC2DC-3315-PF-48	1	-	ETR	28.9	15.73	10.25	32.0	
	RAYCAP RHSDC-3315-PF-48	1	-	NEW	28.9	15.73	10.25	32.0	

(1) ETR DENOTES EXIST. TO REMAIN
(2) WEIGHT WITHOUT MOUNTING BRACKET
(3) ANTENNA DATA BASED ON RFDS REV2 DATED 06/09/21
(4) EQUIPMENT CONFIGURATION AS VIEWED FROM BEHIND
(5) NOT TO EXCEED

BILL OF MATERIALS				COMMENTS
	QUANTITY	LENGTH		
① 700/850/1900/2100	6			(QUNTEL Q5-6656-5D) MOUNTED ON NEW DUAL MOUNT ANTENNA BRACKET (QUNTEL P/N AS-005245-Q05)
② SAMSUNG MT6407-77A	3			MOUNTED TO EXIST. PIPE MAST
③ 1/2" JUMPER CABLE	36	15 FT		ROUTE FROM RRR TO ANTENNAS & FROM DIPLEXERS
④ ANTENNA LINK CABLES	6	15 M		ROUTE FROM UPPER OVP TO ANTENNAS
⑤ ANTENNA POWER CABLES	3	15 M		PROPRIETARY POWER CABLE FROM UPPER OVP TO ANTENNAS
⑥ AWS/PCS RRR	3			SAMSUNG B2/B66 RRR-BR049 (RFV01U-D1A) MOUNTED TO EXIST. PIPE MAST
⑦ 700/850 RRR	3			SAMSUNG B5/B13 RRR-BR04C (RFV01U-D2A) MOUNTED TO EXIST. PIPE MAST
⑧ RRR CABLES	6	15M		PROPRIETARY POWER & FIBER CABLES
⑨ UPPER 60VP	1			(RHSDC-3315-PF-48)
⑩ HYBRID CABLE	1	250 ± FT		6x12 LOW INDUCTANCE HYBRID CABLE

NOTES: 1. INFORMATION SHOWN HEREON IS FOR USE BY VERIZON EQUIPMENT OPERATIONS.
2. INFORMATION IS BASED ON RFDS REV2 DATED 06/09/21
3. * DENOTES EQUIPMENT DESIGNATED FOR LEASING ONLY (WHERE APPLICABLE)
4. INSTALL ALARM BORDERS AT ALL OVPS WHERE REQUIRED. COORDINATE W/ VERIZON EQUIPMENT ENGINEERING.
5. INSTALL UP-CONVERTERS LOCATED AT BASE OVPS WHERE REQUIRED. COORDINATE W/ VERIZON EQUIPMENT ENGINEERING AS NECESSARY.
6. COORDINATE ANTENNA CABLEING REQUIREMENTS WITH VERIZON ENGINEERING.
7. CONTRACTOR SHALL INSTALL NEW SIDE-BY-SIDE & DUAL-MOUNT BRACKETS PER ANTENNA MOUNT MANUFACTURER RECOMMENDATIONS, INCLUDING VERIFICATION OF MINIMUM PIPE MAST DIAMETER REQUIRED TO INSTALL NEW MOUNT BRACKETS. CONTRACTOR SHALL NOTIFY ENGINEER OF RECORD SHOULD EXIST. PIPE MAST REQUIRE REPLACEMENT TO SUPPORT THE NEW MOUNT BRACKETS.

Cellco Partnership d/b/a

20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

567 VAUXHALL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385 PHONE: (860)463-1607
WWW.ALLPOINTS360.COM FAX: (860)463-0835

CONSTRUCTION DOCUMENTS

NO	DATE	REVISION
0	08/07/21	FOR REVIEW: JRM
1	08/09/21	FOR REVIEW: JRM
2		
3		
4		
5		
6		

STATE OF CONNECTICUT
MICHAEL S. TRODDEN
33313
LICENSED PROFESSIONAL ENGINEER

DESIGN PROFESSIONALS OF RECORD

PROF. MICHAEL S. TRODDEN P.E.
COMP: ALL-POINTS TECHNOLOGY CORPORATION, P.C.
ADD: 567 VAUXHALL STREET EXT. SUITE 311
WATERFORD, CT 06385

OWNER: SUSAN A. WALTER T.
ADDRESS: MACDONALD 42 SOUTH STREET
PLYMOUTH, CT 06782

THOMASTON S CT

SITE 170 MT. TOBE ROAD
ADDRESS: PLYMOUTH, CT 06782

APT FILING NUMBER: CT141.12196

DATE: 06/07/21 CHECKED BY: JRM

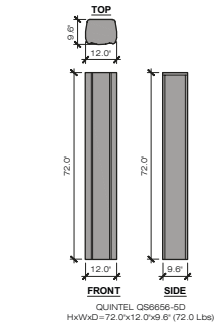
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VZ LOCATION CODE: 460800

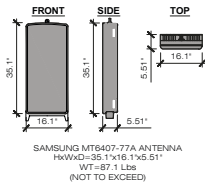
VZ FUZE ID: 16244621

SHEET TITLE:
RF BILL OF MATERIALS,
MECHANICAL
SPECIFICATIONS &
EQUIPMENT DETAILS

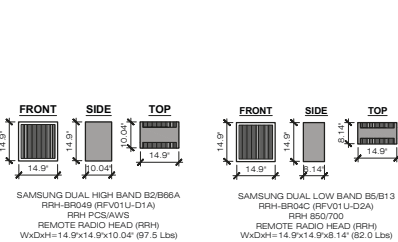
SHEET NUMBER:
B-1



2 NEW ANTENNA DETAIL
B-1 SCALE: 1/2" = 1'-0"

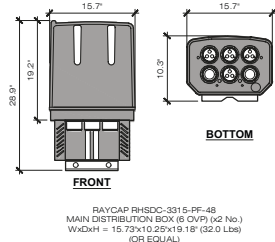


3 NEW ANTENNA DETAIL
B-1 SCALE: 1/2" = 1'-0"

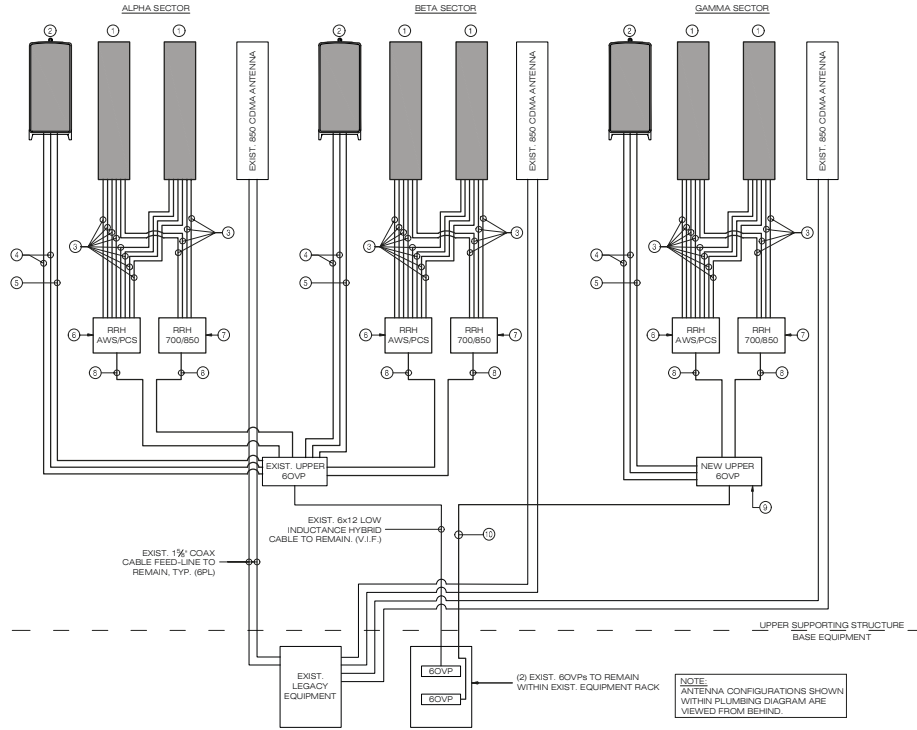


NOTE: WEIGHTS INCLUDE SOLAR SHIELD & MOUNTING BRACKET

4 RRH EQUIPMENT DETAILS
B-1 SCALE: 1/2" = 1'-0"



5 OVER VOLTAGE PROTECTION BOX (OVP)
B-1 SCALE: 1" = 1'-0"



1 PLUMBING DIAGRAM
B-1 SCALE: 1/2" = 1'-0"

[illegible]

Cellco Partnership d/b/a



29 ALEXANDER DRIVE
WALLINGFORD, CT 06492



567 VALUHXALL STREET EXTENSION - SUITE 311
WATERFORD, CT 06386 PHONE: (860)-663-1887
WWW.ALLPOINTS-TECH.COM FAX: (860)-663-0935

CONSTRUCTION DOCUMENTS		
NO	DATE	REVISION
8	06/07/21	FOR REVIEW- JRM
1	06/09/21	FOR REVIEW- JRM
2		
3		
4		
5		
6		



DESIGN PROFESSIONALS OF RECORD	
PROF. MICHAEL S. TRODDEN P.E.	
COMP: ALL-POINTS TECHNOLOGY CORPORATION, P.C.	
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WATERFORD, CT 06385	
OWNER: SUSAN & WALTER T.	
ADDRESS: MACDONALD	
42 SOUTH STREET	
PLYMOUTH, CT 06782	

THOMASTON S CT

SITE	170 MT. TOBE ROAD
ADDRESS:	PLYMOUTH, CT 06782
APT FILING NUMBER: CT141, 12190	
DATE:	DRAWN BY: DIRA
06/07/21	CHECKED BY: JRM
VZ PROJECT CODE: 20212223030	
VZ LOCATION CODE: 668080	
VZ FILING ID: 16244621	

SHEET TITLE:

NOTES & SPECIFICATIONS

SHEET NUMBER:

N-1

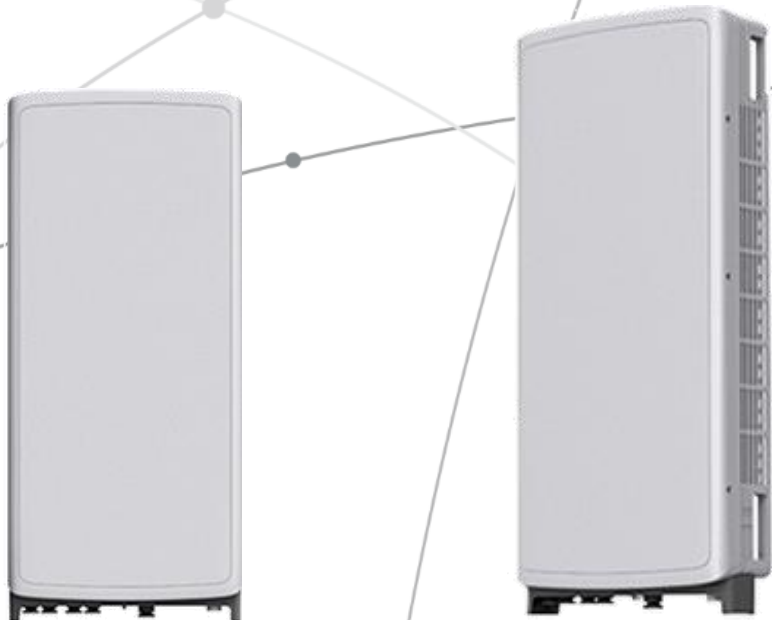
SAMSUNG

SAMSUNG C-Band 64T64R Massive MIMO Radio

for High Capacity and Wide Coverage

Samsung C-Band 64T64R Massive MIMO Radio enables mobile operators to increase coverage range, boost data speeds and ultimately offer enriched 5G experiences to users in the U.S..

Model Code : MT6407-77A



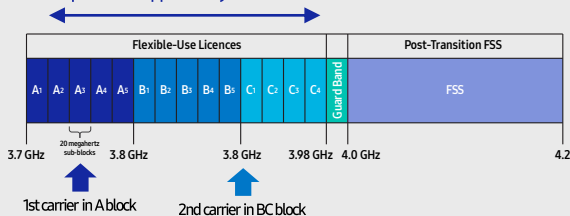
Points of Differentiation

Wide Bandwidth

With capability to support up to 2 CC carrier configuration, Samsung C-Band massive MIMO Radio supports 200 MHz bandwidth in the C-Band spectrum.

Samsung C-Band massive MIMO Radio covers the entire C-Band 280 MHz spectrum, so it can meet the operator's needs in current A block and future B/C blocks

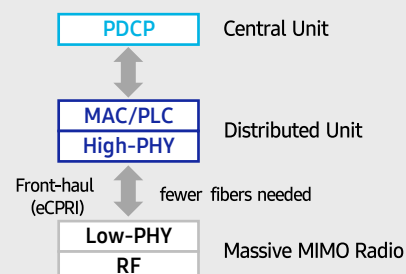
C-Band spectrum supported by Massive MIMO Radio



Future Proof Product

Samsung C-Band 64T64R Massive MIMO radio supports not only CPRI but also eCPRI as front-haul interface.

It enables operators can cut down on OPEX/CAPEX by reducing front-haul bandwidth through low layer split and using ethernet based higher efficient line.



Enhanced Performance

C-Band massive MIMO Radio creates sharp beams and extends networks' coverage on the critical mid-band spectrum using a large number of antenna elements and high output power to boost data speeds.

This helps operators reduce their CAPEX as they now need less products to cover the same area than before.

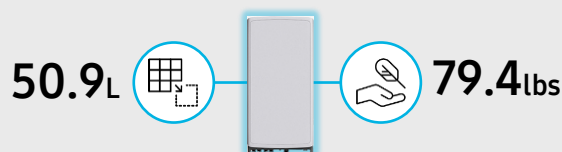
Furthermore, as C-Band massive MIMO Radio supports MU-MIMO (Multi-user MIMO), it enables to increase user throughput by minimizing interference.



Well Matched Design

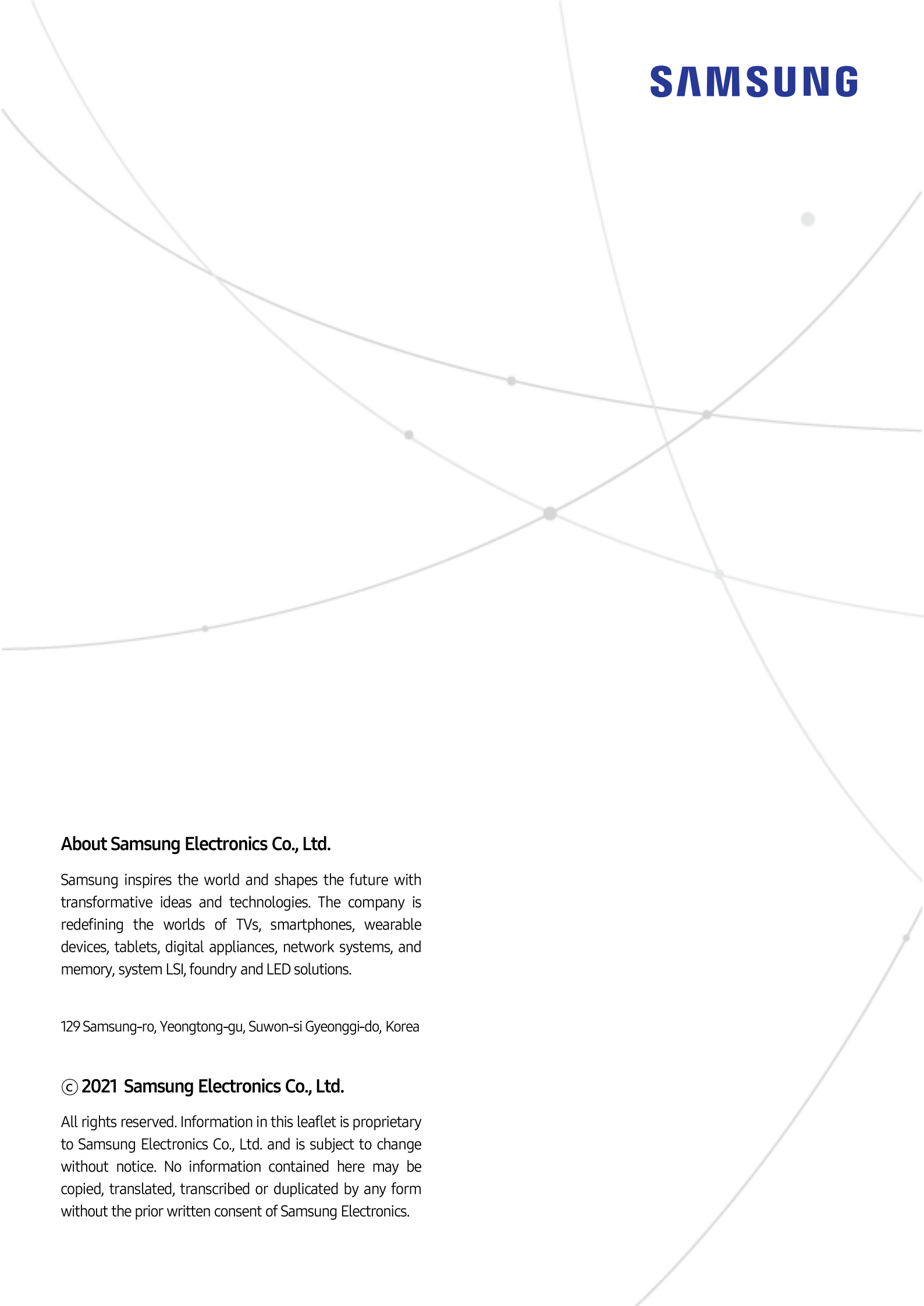
Samsung C-Band Massive MIMO radio utilizes 64 antennas, supports up to 280MHz bandwidth, and delivers a 200W output power. Despite the above advanced performance, the Radio has a compact size of 50.9L and 79.4lbs. This makes it easy to install the Radio.

It is designed to look solid and compact, with a low profile appearance so that, when installed, harmonizes well with the surrounding environment.



Technical Specifications

Item	Specification
Tech	NR
Band	n77
Frequency Band	3700 - 3980 MHz
EIRP	78.5dBm (53.0 dBm+25.5 dBi)
IBW/OBW	280 MHz / 200 MHz
Installation	Pole/Wall
Size/ Weight	16.06 x 35.06 x 5.51 inch (50.86L)/ 79.4 lbs



SAMSUNG

About Samsung Electronics Co., Ltd.

Samsung inspires the world and shapes the future with transformative ideas and technologies. The company is redefining the worlds of TVs, smartphones, wearable devices, tablets, digital appliances, network systems, and memory, system LSI, foundry and LED solutions.

129 Samsung-ro, Yeongtong-gu, Suwon-si Gyeonggi-do, Korea

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- Independent Tilts at 700 & 850MHz with Dual-Band Radios
- Optimized Azimuth patterns for Min Inter-Sector Interference
- Industry leading Minimal Wind-Load Radome design

- AISG & 3GPP compliant internal (RET) with Smart Bias T
- Best in class Quality and Internal PIM performance
- Slimline 12" Form factor

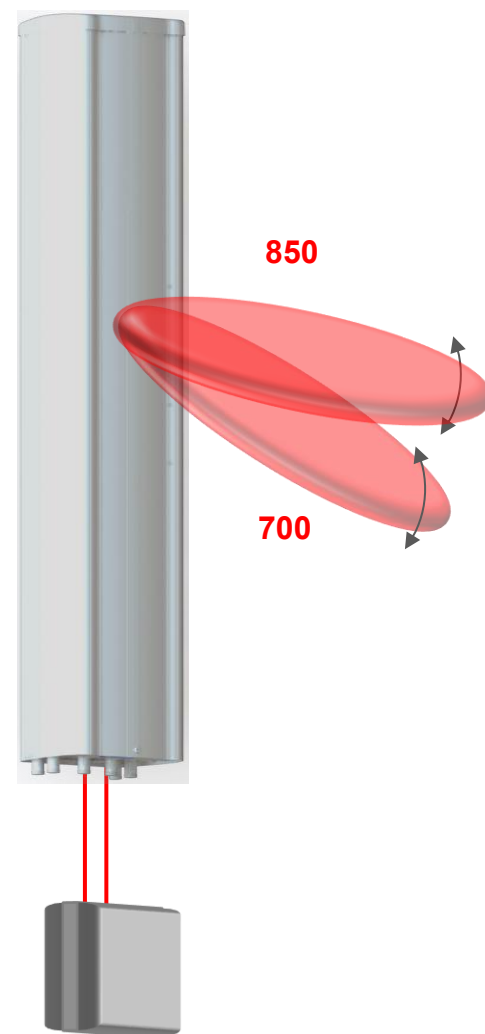
Electrical Characteristics	4x Ports 1 2		8x Ports 3 4 5 6			
Operating Frequency (MHz)	698-806 & 824-894		1695-2400			
	698-806	824-894	1695-1780	1850-1990	2110-2180	2300-2400
Peak Gain (dBi)	13.8	13.6	17.1	17.7	18.0	18.2
Azimuth beamwidth ¹	67°	63°	73°	66°	61°	60°
Elevation beamwidth ¹	11.9°	10.4°	6.4°	5.8°	5.3°	4.7°
Gain ¹ (dBi)	13.4	13.2	16.6	17.1	17.4	17.7
Polarization	2x ±45°		2x ±45°			
Electrical down-tilt range	2°-14°	2°-14°	0°–8°			
USLS 20°>mainbeam (dB) ¹	17	17	16	18	17	16
FTB at 180°±10° (dB) ¹	30	28	28	33	35	36
Port to Port isolation ¹	25	25	30	30	30	30
Return loss/VSWR (dB)	14/1.5	14/1.5	14/1.5	14/1.5	14/1.5	14/1.5
X Polar at 0° (dB)	16	16	19	19	19	18
Max Power handling (port)	250 Watts		250 Watts			
Max Power (all ports)	700 Watts					
PIM (dBc: 2x43dBm)	>153		>153			

¹ Typical Performance across ports, frequencies and Downtilt.

Mechanical Characteristics

Dimensions	L 72"(1828mm) x W 12"(304mm) x D 9.6"(245mm)
Weight (excl mounting brackets)	92.5lbs (42.0kg)
No. of Connectors	6x 4.3-10.0 DIN Female Long Neck
Max Wind Speed	150mph (67m/s)
Equivalent Projected Area ²	Front: 2.6ft² (0.24m²) Side: 5ft² (0.48m²)
Wind Load ² @161km/h (45m/s)	Front: 64lbs (285N), Side: 120lbs (535N)
Operating Temperature	-40°C to +65°C.

² Equivalent Projected Area and Wind Load derived from wind tunnel measurements.



700/850MHz
Dual-Band Radio

Tel: +1 (585) 420-8720
info@quintelsolutions.com
www.quintelsolutions.com

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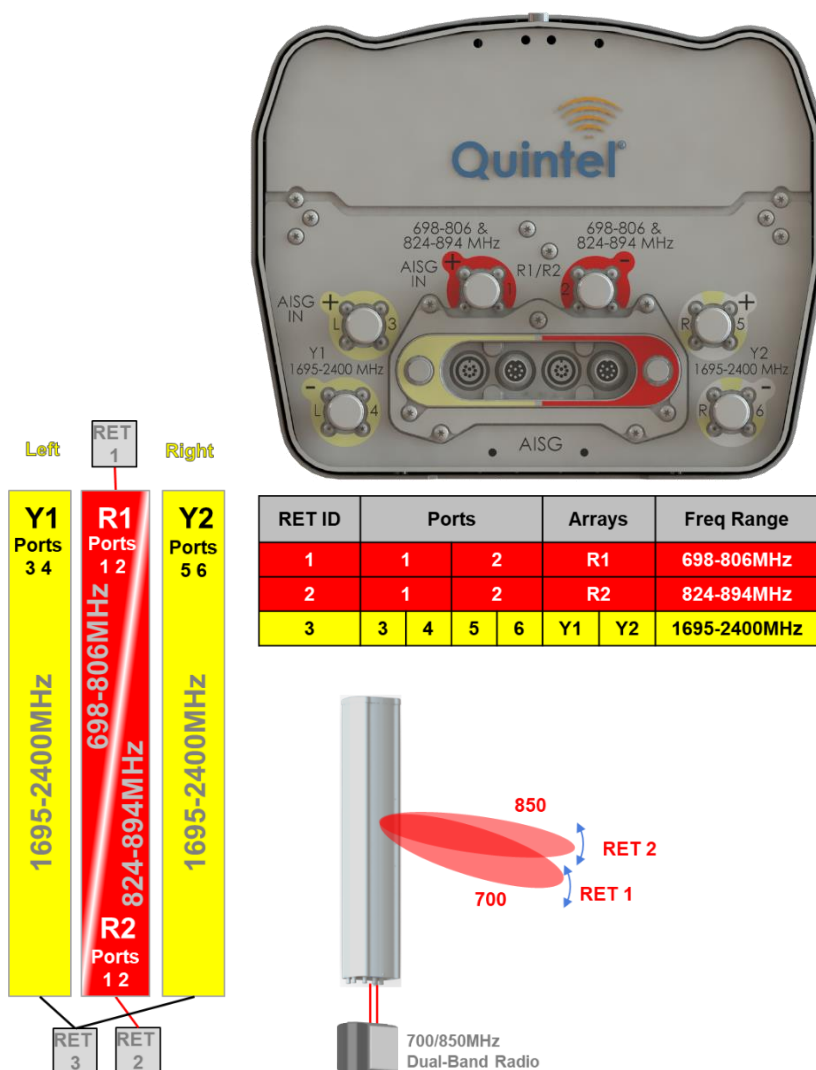
- Independent Tilts at 700 & 850MHz with Dual-Band Radios
- Optimized Azimuth patterns for Min Inter-Sector Interference
- Industry leading Minimal Wind-Load Radome design

- AISG & 3GPP compliant internal (RET) with Smart Bias T
- Best in class Quality and Internal PIM performance
- Slimline 12" Form factor

Fully Integrated RET Characteristics

Protocol	V 1.1/2.0/3GPP
Surge immunity	IEC 61000-4-5:2005 4KV(AISG PIN)
AISG Data rate	9.6 kbps
RET Connectors	2x 8-Pin DIN Female & 2x 8-Pin DIN Male

Port Layout, Array Configuration and RET ID



Tel: +1 (585) 420-8720
info@quintelsolutions.com
www.quintelsolutions.com

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SAMSUNG

Dual-Band Radio Unit AWS/PCS (B66/B2)

RFV01U-D1A

Samsung's RFV01U-D1A is a compact remote Radio Unit (RU) designed for deployments that require flexibility in installation and rapid onlining, without compromising on coverage, capacity or operational expenses.



The RFV01U-D1A RU targets dual-band support across Band 66 (AWS) and Band 2 (PCS), making it an ideal product for broad coverage footprints across multiple common mid-range frequencies.

The RU handles all Radio Frequency (RF) processing in a single, compact unit, and is designed to interface via CPRI with Samsung's CDU baseband offerings, in both distributed- and central-RAN configurations.

In addition to its minimal footprint and ease of installation, the RU is also designed to reduce cost of ownership through its integrated spectrum analyzer, which allows for remote RF monitoring, greatly reducing the need for on-site maintenance visits.

Features and Benefits

- Dual-band support for broad frequency coverage
- Minimal footprint reduces site costs
- Rapid, easy installation
- Flexibly deployable in any location
- Remote RF monitoring capability
- Convection cooled, silent operation
- Built-in Broadcast Auxiliary Services (BAS) filter ensures compliant AWS operation without impacting footprint

Key Technical Specifications

Duplex Type: FDD

Operating Frequencies:

B66: DL(2,110-2,180MHz)/UL(1,710-1,780MHz)

B2: DL(1,930-1,990MHz)/UL(1,850-1,910MHz)

Instantaneous Bandwidth:

70MHz(B66) + 60MHz(B2)

RF Chain: 4T4R/2T4R/2T2R

Output Power: Total 320W

DU-RU Interface: CPRI (10Gbps)

Dimensions: 380 x 380 x 255mm (36.8L)

Weight: 38.3kg

Input Power: -48V DC

Operating Temp.: -40 - 55°(w/o solar load)

Cooling: Natural convection

SAMSUNG

Dual-Band Radio Unit 700/850MHz (B13/B5) RFV01U-D2A

Samsung's RFV01U-D2A is a compact remote Radio Unit (RU) designed for deployments that require flexibility in installation and rapid onlining, without compromising on coverage, capacity or operational expenses.



The RFV01U-D2A RU targets dual-band support across Band 13 (700MHz) and Band 5 (850MHz), making it an ideal product for broad coverage footprints across multiple common low-end, long-range frequencies.

The RU handles all Radio Frequency (RF) processing in a single, compact unit, and is designed to interface via CPRI with Samsung's CDU baseband offerings, in both distributed- and central-RAN configurations.

In addition to its minimal footprint and ease of installation, the RU is also designed to reduce cost of ownership through its integrated spectrum analyzer, which allows for remote RF monitoring, greatly reducing the need for on-site maintenance visits.

Features and Benefits

- Dual-band support for broad frequency coverage
- Minimal footprint reduces site costs
- Rapid, easy installation
- Flexibly deployable in any location
- Remote RF monitoring capability
- Convection cooled, silent operation

Key Technical Specifications

Duplex Type: FDD
Operating Frequencies:
 B13: DL(746-756MHz)/UL(777-787MHz)
 B5: DL(869-894MHz)/UL(824-849MHz)
Instantaneous Bandwidth: 10MHz(B13) + 25MHz(B5)
RF Chain: 4T4R/2T4R/2T2R
Output Power: Total 320W
DU-RU Interface: CPRI (10Gbps)
Dimensions: 380 x 380 x 207mm (29.9L)
Weight: 31.9kg
Input Power: -48V DC
Operating Temp.: -40 - 55°(w/o solar load)
Cooling: Natural convection

ATTACHMENT 3

	General	Power	Density					
Site Name: Thomaston S								
Tower Height: Verizon @ 137ft								
CARRIER	# OF CHAN.	WATTS ERP	HEIGHT	CALC. POWER DENS	FREQ.	MAX. PERMISS. EXP.	FRACTION MPE	Total
*T-Mobile	2	24	169	2100	0.0006	1.0000	0.01%	
*T-Mobile	2	12	169	1950	0.0003	1.0000	0.00%	
*T-Mobile	2	12	169	2100	0.0003	1.0000	0.00%	
VZW 700	4	380	137	0.0029	751	0.5007	0.58%	
VZW CDMA	2	463	137	0.0018	877.26	0.5845	0.30%	
VZW Cellular	4	436	137	0.0033	874	0.5827	0.57%	
VZW PCS	4	1412	137	0.0108	1980	1.0000	1.08%	
VZW AWS	4	2343	137	0.0180	2120	1.0000	1.80%	
VZW CBAND	4	6531	137	0.0501	3730.08	1.0000	5.01%	
								9.36%
* Source: Siting Council								

ATTACHMENT 4

SBA Communications Corporation
8051 Congress Avenue
Boca Raton, FL 33487-1307

T + 561 995 7670
F + 561 995 7626

sbasite.com



Structural Analysis Report

Client: Verizon

Client Site ID / Name: 468080 / THOMASTON S CT
Application #: 152551, v1

SBA Site ID / Name: CT03538-S / South Plymouth

160 ft Monopole

170 Mount Tobe Road
Plymouth, Connecticut 06782
Lat: 41.630031, Long: -73.056553

Project number: CT03538-VZW-052721

Analysis Results

Tower	61.2%	Pass
Foundation	52.0%	Pass

Change in tower stress due to mount modification / replacement	0.8%
--	------

Prepared by:

Elizabeth Zubeldia
Structural Engineer I
561-322-7936
ezubeldia@sbasite.com

Reviewed by:

Anantha (Shan) Shanubhogue, P. E.
Senior Manager, Structural Engineering
(561) 981-7390
SShanubhogue@sbasite.com

May 28, 2021

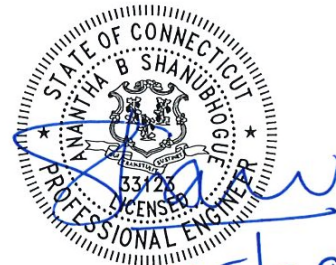


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Analysis Criteria 3

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 Proposed Loading: 5

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 Tower 6

 Foundation..... 6

Conclusions..... 7

Installation Requirements..... 7

Assumptions and Limitations 8

 Assumptions 8

 Limitations..... 8

Appendix 9

 Tower Geometry.....

 Coax Layout.....

 TESPole Report.....

 Foundation Analysis Report.....



Introduction

The purpose of this report is to summarize the analysis results on the 160 ft Monopole to support the proposed antennas and transmissions lines in addition to those currently installed.

Table 1 List of Documents Used

Item	Document
Tower design/drawings	PJF Job No. 29201-1019, Summit No: 15616, dated 8/21/2001
Foundation drawings	PJF Job No. 29201-1019, Summit No: 15616, dated 8/21/2001
Geotechnical report	Jaworski Geotech, Inc., Project No. 00244G, dated 7/31/ 2001
Modification drawings	N/A
Latest SA	TES Project #: 107186, dated 5/3/2021

Analysis Criteria

Table 2 Code Related Data

Jurisdiction (State/County/City)	Connecticut/Litchfield/Plymouth
Governing Codes	ANSI/TIA/EIA 222-G, 2015 IBC, 2018 Connecticut State Building
Basic Wind Speed (3-Sec gust)	93 mph (Ultimate Wind Speed: 120 mph)
Wind Speed with Ice (3-Sec gust)	40 mph
Service Wind Speed (3-Sec gust)	50 mph
Ice Thickness	0.75"
Structural Class*	II
Exposure Category	B
Topographic Category	1
Crest Height	0 ft
Ground Elevation	834.77 ft.
Seismic Parameter S_s**	0.186
Seismic Parameter S₁	0.065

*This structural analysis is based upon the tower being classified as a structural class II; however, if a different classification is required subsequent to the date hereof, the tower classification will be changed to meet such requirement and a new structural analysis will be run.

**Earthquake effects were ignored as per section 2.7.3 of the TIA-222-G code provisions for $S_s < 1.0$.

Appurtenance Loading

Existing Loading:

Table 3 Existing Appurtenances

Items	Elevation (ft)	Qty.	Antenna Descriptions	Mount Type & Qty.	Transmission Lines	Owner
			Ericsson - Air 21 B2A/B4P - Panel	Modified Low Profile Platform w/ support rail + end connection kit	(2) 1 5/8" Fiber (1) 1.9" Fiber	T-Mobile
			Ericsson - Air 32 KRD901146-1_B66A_B2A - Panel			
		3	RFS - APXVAARR24_43-U-NA20 - Panel			
			Ericsson KRY 112 144/1			
			Ericsson 4449 B71 + B85 RRUs			
			Lone Star Electronics LS-230C - Whip	(1) 4 ft Sidearm		Thomaston
			Andrew VHLP-2.6-11 - Dish	(2) Pipe Mounts		
			Hutton HPD 3.4-4.7 - Dish			
			Motorola ODU-A-RF			
			RFS APXVTM14-C-120 - Panel	Low Profile Platform		Sprint
			RFS APXVSPP18-C-A20 - Panel			
			ALU 1900MHz RRH			
			ALU 800 MHz RRH			
			ALU TD-RRH8x20-25			
			ALU 800 MHz Filter			
			Antel BXA-70063-6CF-2 - Panel	Low Profile Platform	Hybriflex	Verizon
			Commscope HBXX-6517DS-A2M - Panel			
			Antel BXA-70080-6CF-2 - Panel			
			- Dist. Box			
			RFS FD9R6004/2C-3 - Displexer	(1) Pipe Mount		Thomaston
			Bird Technologies CSA 10-67 DIM - Whip			
			Powerwave - 7770 - Panel	Low Profile Platform	(2) 7/16" Fiber	
		3	KMW - AM-X-CD-17-65-00T-RET - Panel			
			Powerwave LGP21401 TMA			
			Powerwave 21903 Diplexer			
			Ericsson RRU 11			
			Andrew ABT-DFDM-ADBH BIAS-T			
			Raycap DC6-48-60-18-8F			
			KMW - EPBQ-652L8H6-L2 - Panel			
			Powerwave 7020 RET			
			Ericsson RRUS 32 B2 RRU			
			Ericsson B14 4478 RRU			

Proposed Loading:

Information pertaining to proposed antennas and transmission lines were based upon the Application #: 152551, v1 from Verizon and is listed in Table 4.

Table 4 Proposed Appurtenances

Items	Elevation (ft)	Qty.	Antenna Descriptions	Mount Type & Qty.	Transmission Lines	Owner
			Antel BXA-70080-6CF-2 - Panel	Low Profile Platform w/ Handrail	Hybrid	Verizon
			Samsung VZS01- Panel			
		6	Quintel Technology QS6656-5D - Panel			
			Samsung B5/B13 RRH-BR04C - RRU			
			Samsung B2/B66A RRH-BR049			

Analysis Results

Tower

The results of the structural analysis are shown below in table 5. Additional information for the tower analysis is provided within the Appendix.

Table 5 Tower Analysis Summary

	Pole shafts	Anchor Bolts	Base Plate
Max. Usage:			
Pass/Fail	Pass	Pass	Pass

Foundation

The results of the foundation analysis are shown below in table 6. Additional information for the foundation analysis is provided within the Appendix.

Table 6 Foundation Analysis Summary

Structural Component	Max Usage (%)	Analysis Result
Foundation	52.0%	Pass

Conclusions

Based on the analysis results, the existing tower and foundation were found to be sufficient to safely support the equipment listed in this analysis. No modification to the tower and foundation is needed at this time.

Installation Requirements

This analysis was performed under the assumption that the carrier will place the proposed equipment and feed lines at the installation height listed in Table 4 and in accordance with the coax layout shown. TMAs and RRUs are to be installed on existing mounts behind tenant's antennas unless otherwise noted. No equipment is to be installed directly in the climbing path. All equipment is to be installed per mount manufacturer specifications. In case site conditions do not allow for the required installation parameters to be met the carrier must notify SBA Communications Corporation engineers for approval of an alternative placement.

Assumptions and Limitations

Assumptions

This analysis was completed based on the following assumptions:

Tower and foundation were built in accordance to manufacturer specifications.

Tower and foundation have been properly maintained in accordance with the manufacturer's specifications

All existing structural members were assumed to be in good condition with no physical damage or deterioration associated with corrosion

Welds and bolts are assumed able to carry their intended original design loads.

The configuration of antennas, transmission cables, mounts and other appurtenances are as specified in Table 3 and 4.

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

Limitations

The computer generated analysis performed by the tower software is limited to theoretical capacities of the towers structural members and does not account for any missing or damaged members or connections. The tower and foundation are assumed to have been properly designed, fabricated, installed and maintained, barring any conflicting findings from the most recent inspection.

SBA Communications Corporation has used its due diligence to verify the information provided to perform this analysis. It is unreasonable to perform a more detailed inspection of a tower and its components. This report is not a condition assessment of the tower or foundation.

Appendix

Usage Diagram - Max Ratio 61.25% at 45.0ft

Structure: CT03538-S
Site Name: South Plymouth
Height: 160.00 (ft)
Base Elev: 0.000 (ft)

Code: EIA/TIA-222-G
Exposure: B
Gh: 1.1

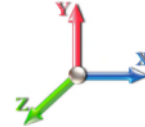
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Page: 1



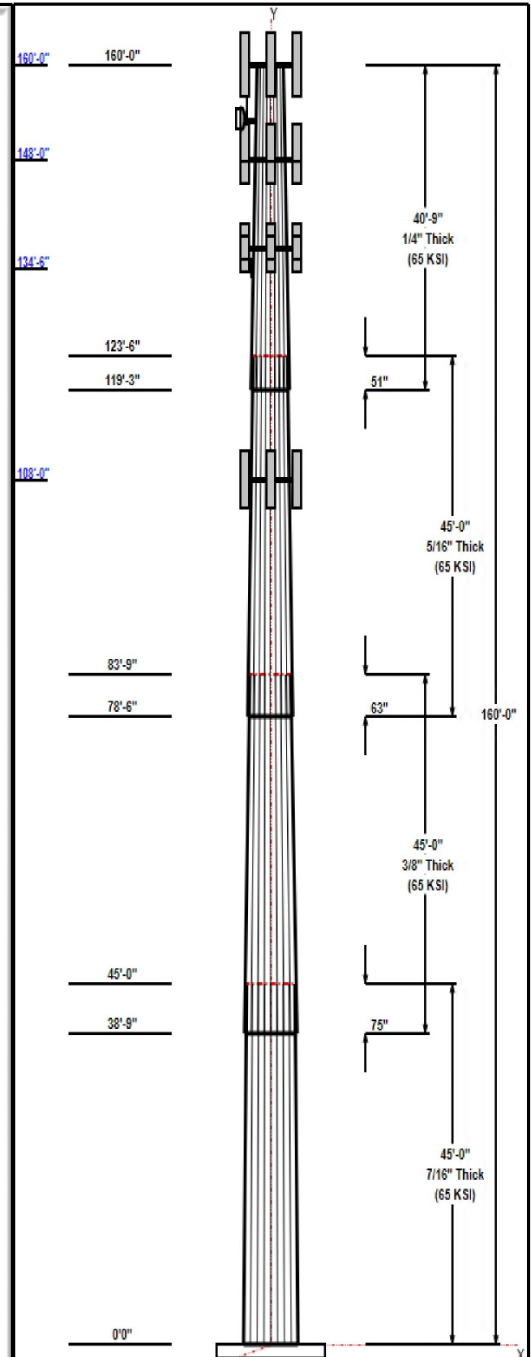
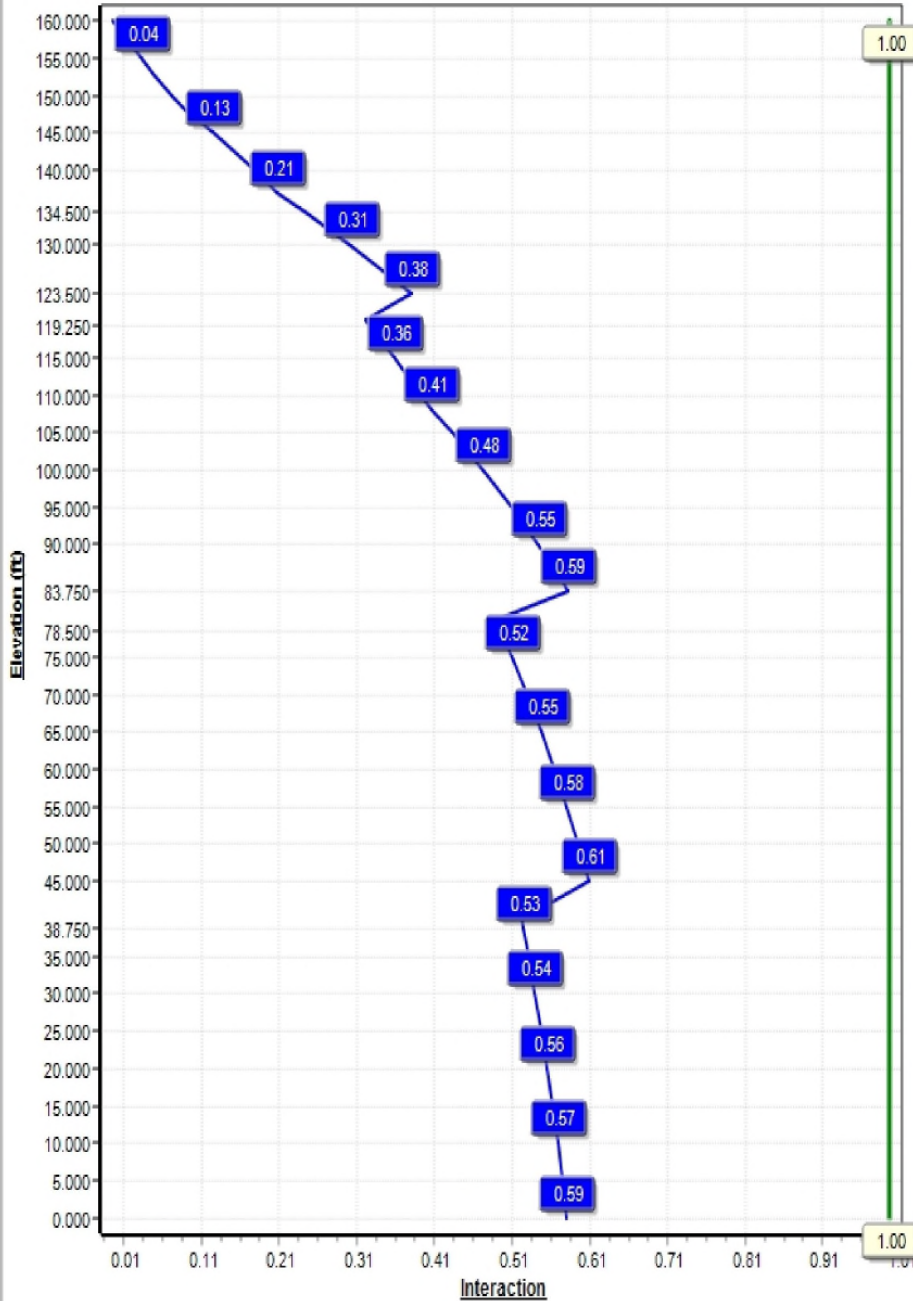
Dead Load Factor: 1.20
Wind Load Factor: 1.60

Load Case : 1.2D + 1.6W 9 93 mph Wind



Iterations: 25

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Structure: CT03538-S

Type: Tapered
Site Name: South Plymouth
Height: 160.00 (ft)
Base Elev: 0.00 (ft)

Base Shape: 18 Sided
Taper: 0.21503

5/28/2021

Page: 2



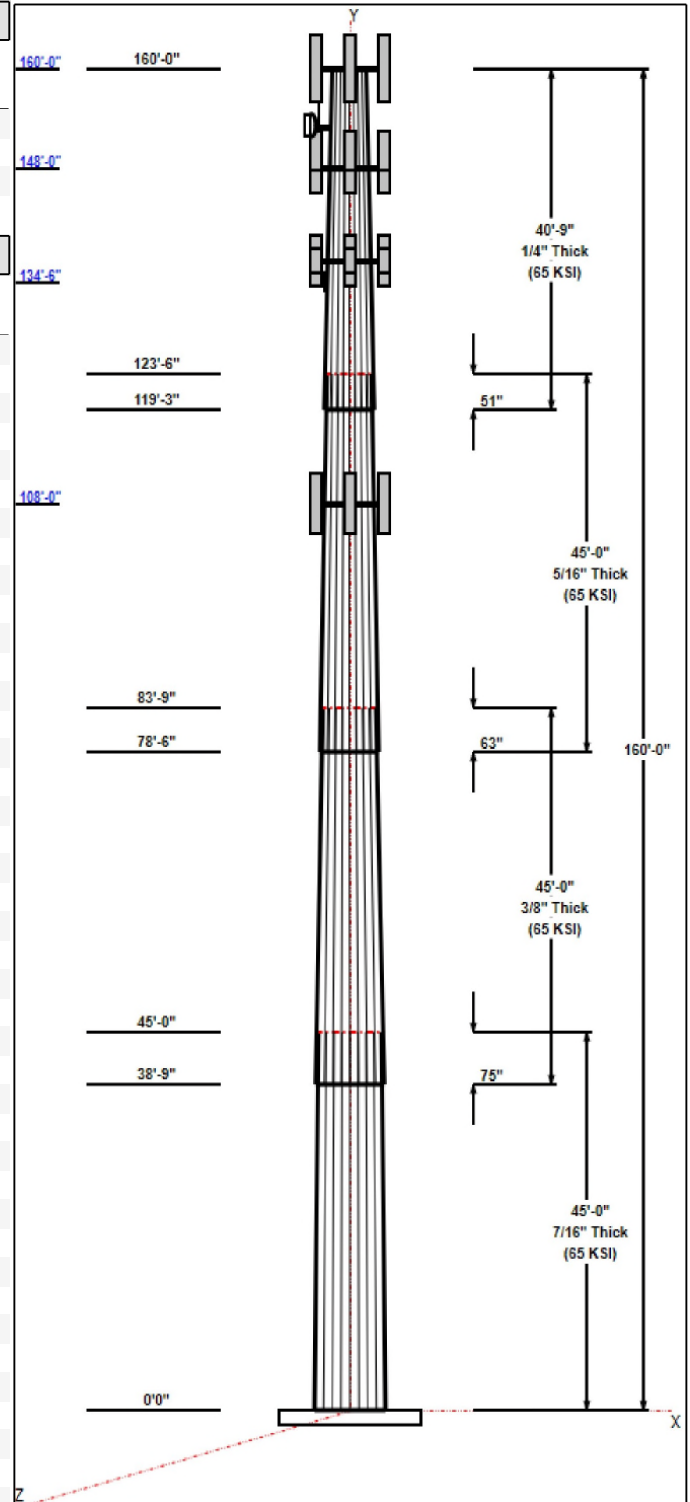
Shaft Properties

Seq	Length (ft)	Top (in)	Bottom (in)	Thick (in)	Joint Type	Taper	Grade (ksi)
1	45.00	46.85	56.53	0.438		0.21503	65
2	45.00	39.27	48.95	0.375	Slip	0.21503	65
3	45.00	31.35	41.03	0.313	Slip	0.21503	65
4	40.75	24.00	32.76	0.250	Slip	0.21503	65

Discrete Appurtenances

Attach Elev (ft)	Force Elev (ft)	Qty	Description	Carrier
160.00	160.00	1	Low Profile Platform	T-Mobile
160.00	160.00	3	Air 21 B2A/B4P	T-Mobile
160.00	160.00	3	Air 32	T-Mobile
160.00	160.00	3	APXVAARR24_43-U-NA20	T-Mobile
160.00	160.00	3	Ericsson KRY 112 144/1	T-Mobile
160.00	160.00	3	Ericsson Radio 4449	T-Mobile
160.00	160.00	3	4449 B71 + B85	T-Mobile
160.00	160.00	1	MS-HRECP-35	T-Mobile
153.00	156.50	1	Lone Star Electronics	Thomaston P.D.
153.00	153.00	1	VHLP-2.6-11	Thomaston P.D.
153.00	153.00	1	Hutton HPD 3.4-4.7	Thomaston P.D.
153.00	153.00	3	Motorola ODU-A-RF	Thomaston P.D.
153.00	153.00	2	Pipe Mounts	Thomaston P.D.
153.00	153.00	1	4 ft Sidearm	Thomaston P.D.
148.00	150.00	3	RFS APXVTM14-C-120	Sprint
148.00	148.00	3	RFS APXVSP18-C-A20	Sprint
148.00	148.00	3	ALU 1900MHz RRH	Sprint
148.00	148.00	3	ALU 800 MHz RRH	Sprint
148.00	148.00	3	ALU TD-RRH8x20-25	Sprint
148.00	148.00	3	ALU 800 MHz Filter	Sprint
148.00	148.00	4	RFS ACU-A20-N	Sprint
148.00	148.00	1	Low Profile Platform	Sprint
137.00	137.00	3	Antel BXA-70063-6CF-2	Verizon
137.00	137.00	1	Low Profile Platform	Verizon
137.00	137.00	3	Samsung VZS01	Verizon
137.00	137.00	6	Quintel QS6656-5D	Verizon
137.00	137.00	3	Samsung B2/B66A	Verizon
137.00	137.00	3	RFS DB-T1-6Z-8AB-0Z	Verizon
137.00	137.00	1	Platform Handrail	Verizon
137.00	137.00	3	Samsung B5/B13	Verizon
134.50	134.50	1	Bird Technologies CSA	Thomaston P.D.
134.50	134.50	1	Pipe Mount	Thomaston P.D.
108.00	108.00	6	7770	AT&T
108.00	108.00	3	AM-X-CD-17-65-00T-RET	AT&T
108.00	108.00	6	Powerwave LGP21401	AT&T
108.00	108.00	6	Powerwave 21903 Diplexer	AT&T
108.00	108.00	6	Ericsson RRU 11	AT&T
108.00	108.00	3	Andrew ABT-DFDM-ADBH	AT&T
108.00	108.00	2	Raycap DC6-48-60-18-8F	AT&T
108.00	108.00	1	Low Profile Platform	AT&T
108.00	108.00	3	EPBQ-652L8H6-L2	AT&T
108.00	108.00	12	Powerwave 7020 RET	AT&T
108.00	108.00	3	Ericsson RRUS 32 B2	AT&T
108.00	108.00	3	Ericsson B14 4478 RRU	AT&T

Linear Appurtenances



Structure: CT03538-S

Type: Tapered	Base Shape: 18 Sided	5/28/2021
Site Name: South Plymouth	Taper: 0.21503	
Height: 160.00 (ft)		
Base Elev: 0.00 (ft)		Page: 3



Elev From (ft)	Elev To (ft)	Placement	Description	Carrier
0.00	160.00	Inside	1 5/8" Coax	T-Mobile
0.00	160.00	Inside	1 5/8" Fiber	T-Mobile
0.00	160.00	Inside	1.9" Fiber	T-Mobile
0.00	153.00	Inside	7/8" Coax	Thomaston P.D.
0.00	153.00	Inside	EW90	Thomaston P.D.
0.00	148.00	Inside	1 1/4" Coax	Sprint
0.00	137.00	Inside	1 5/8" Coax	Verizon
0.00	137.00	Inside	1 5/8" Hybrid	Verizon
0.00	134.50	Inside	7/8" Coax	Thomaston P.D.
0.00	108.00	Inside	1 5/8" Coax	AT&T
0.00	108.00	Inside	3/4" DC	AT&T
0.00	108.00	Inside	7/16" Fiber	AT&T

Anchor Bolts

Qty	Specifications	Grade (ksi)	Arrangement
20	2.25" 18J	75.0	Cluster

Base Plate

Thickness (in)	Specifications (in)	Grade (ksi)	Geometry
3.0000	64.0	55.0	Clipped

Reactions

Load Case	Moment (FT-Kips)	Shear (Kips)	Axial (Kips)
1.2D + 1.6W 9 93 mph Wind	3548.1	29.4	55.0
0.9D + 1.6W 9 93 mph Wind	3504.0	29.3	41.2
1.2D + 1.0Di + 1.0Wi 40 mph Wind	698.8	5.8	82.5
1.2D + 1.0E	310.8	2.4	55.0
0.9D + 1.0E	306.6	2.4	41.3
1.0D + 1.0W 50 mph Wind	636.3	5.3	45.8

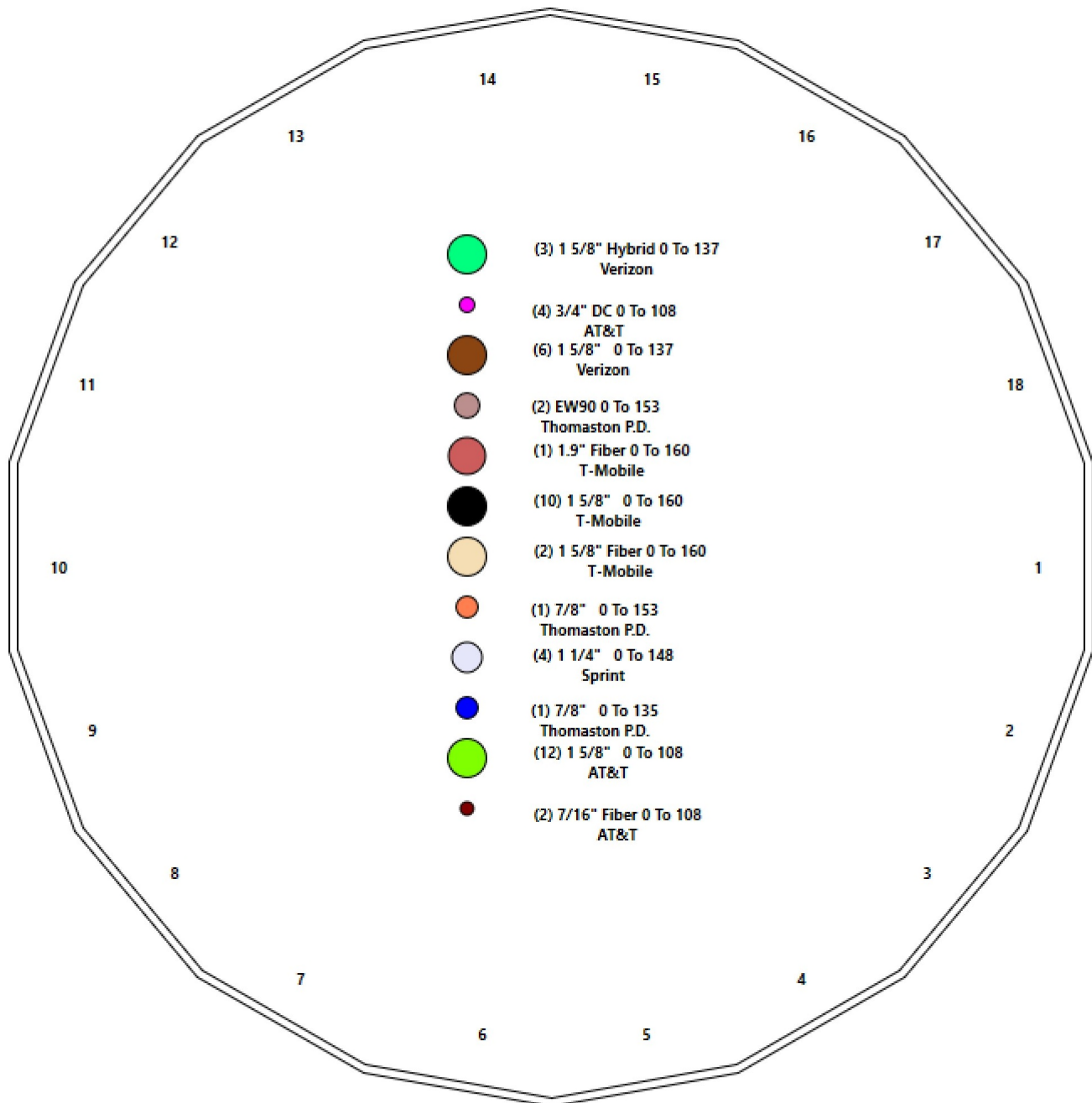
Structure: CT03538-S - Coax Line Placement

Type: Monopole
Site Name: South Plymouth
Height: 160.00 (ft)

5/28/2021



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Shaft Properties

Structure: CT03538-S	Code: EIA/TIA-222-G	5/28/2021
Site Name: South Plymouth	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 5



Sec. No.	Shape	Length (ft)	Thick (in)	Fy (ksi)	Joint Type	Overlap (in)	Weight (lb)
1	18	45.000	0.4375	65		0.00	10,898
2	18	45.000	0.3750	65	Slip	75.00	7,971
3	18	45.000	0.3125	65	Slip	63.00	5,448
4	18	40.750	0.2500	65	Slip	51.00	3,095
Total Shaft Weight:							27,412

Bottom

Top

Sec. No.	Dia (in)	Elev (ft)	Area (sqin)	Ix (in^4)	W/t Ratio	D/t Ratio	Dia (in)	Elev (ft)	Area (sqin)	Ix (in^4)	W/t Ratio	D/t Ratio	Taper
1	56.53	0.00	77.89	30962.56	21.37	129.21	46.85	45.00	64.45	17543.9	17.47	107.0	0.215031
2	48.95	38.75	57.81	17232.49	21.60	130.53	39.27	83.75	46.29	8849.01	17.05	104.7	0.215031
3	41.03	78.50	40.38	8456.28	21.74	131.28	31.35	123.50	30.78	3746.26	16.28	100.3	0.215031
4	32.76	119.2	25.80	3445.37	21.70	131.05	24.00	160.00	18.84	1343.00	15.52	96.00	0.215031

Load Summary

Structure: CT03538-S	Code: EIA/TIA-222-G	5/28/2021
Site Name: South Plymouth	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 6



Discrete Appurtenances

No.	Elev (ft)	Description	Qty	No Ice			Ice			Hor. Ecc. (ft)	Vert Ecc (ft)
				Weight (lb)	CaAa (sf)	CaAa Factor	Weight (lb)	CaAa (sf)	CaAa Factor		
1	160.00	Low Profile Platform	1	1600.00	22.00	1.00	3005.21	39.776	1.00	0.00	0.00
2	160.00	Air 21 B2A/B4P	3	91.50	6.09	0.86	261.69	7.195	0.86	0.00	0.00
3	160.00	Air 32 KRD901146-1_B66A_B2A	3	132.20	6.51	0.87	317.99	7.698	0.87	0.00	0.00
4	160.00	APXVAARR24_43-U-NA20	3	128.00	20.24	0.70	548.99	22.153	0.70	0.00	0.00
5	160.00	Ericsson KRY 112 144/1	3	11.00	0.41	0.70	21.85	0.888	0.70	0.00	0.00
6	160.00	Ericsson Radio 4449 B71+B12	3	70.00	1.65	0.67	138.80	2.192	0.67	0.00	0.00
7	160.00	4449 B71 + B85	3	73.20	1.97	0.67	131.32	2.543	0.67	0.00	0.00
8	160.00	MS-HRECP-35	1	514.00	12.25	1.00	1127.94	24.300	1.00	0.00	0.00
9	153.00	Lone Star Electronics LS-230C	1	20.00	2.10	1.00	63.02	3.977	1.00	0.00	3.50
10	153.00	VHLP-2.6-11	1	47.60	8.43	1.00	220.63	10.140	1.00	0.00	0.00
11	153.00	Hutton HPD 3.4-4.7	1	105.00	8.92	1.00	112.34	9.544	1.00	0.00	0.00
12	153.00	Motorola ODU-A-RF	3	10.40	1.44	1.00	41.95	2.299	1.00	0.00	0.00
13	153.00	Pipe Mounts	2	50.00	5.00	1.00	91.97	8.497	1.00	0.00	0.00
14	153.00	4 ft Sidearm	1	50.00	3.50	1.00	150.62	11.509	1.00	0.00	0.00
15	148.00	RFS APXVTM14-C-120	3	96.00	6.34	0.89	256.15	7.452	0.94	0.00	2.00
16	148.00	RFS APXVSP18-C-A20	3	97.00	8.02	0.93	390.76	10.810	0.98	0.00	0.00
17	148.00	ALU 1900MHz RRH	3	44.00	3.80	0.67	153.02	5.188	0.67	0.00	0.00
18	148.00	ALU 800 MHz RRH	3	53.00	2.49	0.67	126.86	3.632	0.00	0.00	0.00
19	148.00	ALU TD-RRH8x20-25	3	70.00	4.05	0.69	180.28	4.862	0.75	0.00	0.00
20	148.00	ALU 800 MHz Filter	3	10.00	0.42	0.99	32.93	0.745	0.67	0.00	0.00
21	148.00	RFS ACU-A20-N	4	1.00	0.14	0.79	5.29	0.436	0.67	0.00	0.00
22	148.00	Low Profile Platform	1	1200.00	25.00	1.00	2245.72	45.914	1.00	0.00	0.00
23	137.00	Antel BXA-70063-6CF-2	3	17.00	7.57	0.83	163.96	10.309	0.88	0.00	0.00
24	137.00	Low Profile Platform	1	1500.00	22.00	1.00	2797.10	39.502	1.00	0.00	0.00
25	137.00	Samsung VZS01	3	87.10	4.70	0.70	198.27	5.594	0.71	0.00	0.00
26	137.00	Quintel QS6656-5D	6	92.50	8.13	0.92	300.02	9.373	0.92	0.00	0.00
27	137.00	Samsung B2/B66A RRH-BR049	3	84.40	1.88	0.83	141.68	2.420	0.85	0.00	0.00
28	137.00	RFS DB-T1-6Z-8AB-OZ	3	44.00	4.80	0.71	158.08	5.640	0.72	0.00	0.00
29	137.00	Platform Handrail	1	358.00	9.70	1.00	667.57	14.733	1.00	0.00	0.00
30	137.00	Samsung B5/B13 RRH-BR04C	3	70.30	1.88	0.77	118.01	2.420	0.79	0.00	0.00
31	134.50	Bird Technologies CSA 10-67 DIM	1	4.60	3.81	1.00	126.00	30.053	1.00	0.00	0.00
32	134.50	Pipe Mount	1	50.00	5.00	1.00	91.43	8.453	1.00	0.00	0.00
33	108.00	7770	6	35.00	5.50	0.83	164.84	6.529	0.88	0.00	0.00
34	108.00	AM-X-CD-17-65-00T-RET	3	48.50	8.02	0.75	205.53	10.723	0.75	0.00	0.00
35	108.00	Powerwave LGP21401 TMA	6	14.10	1.29	0.50	38.29	2.099	0.50	0.00	0.00
36	108.00	Powerwave 21903 Diplexer	6	5.50	0.27	0.84	13.66	0.655	0.89	0.00	0.00
37	108.00	Ericsson RRU 11	6	51.00	2.52	0.67	120.94	3.133	0.67	0.00	0.00
38	108.00	Andrew ABT-DFDM-ADBH BIAS-T	3	1.10	0.05	0.98	3.26	0.236	1.00	0.00	0.00
39	108.00	Raycap DC6-48-60-18-8F	2	31.80	0.92	1.00	91.63	1.344	1.00	0.00	0.00
40	108.00	Low Profile Platform	1	1500.00	22.00	1.00	2766.61	39.091	1.00	0.00	0.00
41	108.00	EPBQ-652L8H6-L2	3	99.00	15.71	0.71	409.92	17.333	0.71	0.00	0.00
42	108.00	Powerwave 7020 RET	12	2.20	0.40	1.00	12.10	0.869	1.00	0.00	0.00
43	108.00	Ericsson RRUS 32 B2 RRU	3	77.00	1.65	0.67	123.42	2.209	0.67	0.00	0.00
44	108.00	Ericsson B14 4478 RRU	3	58.00	3.15	0.67	149.65	3.839	0.67	0.00	0.00
Totals:			131	12,749.90			30,557.34				

Linear Appurtenances

Discrete Appurtenances

No.	Elev (ft)	Description	Qty	No Ice			Ice			Hor. Ecc. (ft)	Vert Ecc (ft)
				Weight (lb)	CaAa (sf)	CaAa Factor	Weight (lb)	CaAa (sf)	CaAa Factor		
Bottom Elev. (ft)	Top Elev. (ft)	Description		Exposed Width	Exposed						
0.00	160.00	(10) 1 5/8" Coax		0.00	Inside						
0.00	160.00	(2) 1 5/8" Fiber		0.00	Inside						
0.00	160.00	(1) 1.9" Fiber		0.00	Inside						
0.00	153.00	(1) 7/8" Coax		0.00	Inside						
0.00	153.00	(2) EW90		0.00	Inside						
0.00	148.00	(4) 1 1/4" Coax		0.00	Inside						
0.00	137.00	(6) 1 5/8" Coax		0.00	Inside						
0.00	137.00	(3) 1 5/8" Hybrid		0.00	Inside						
0.00	134.50	(1) 7/8" Coax		0.00	Inside						
0.00	108.00	(12) 1 5/8" Coax		0.00	Inside						
0.00	108.00	(4) 3/4" DC		0.00	Inside						
0.00	108.00	(2) 7/16" Fiber		0.00	Inside						

Shaft Section Properties

Structure: CT03538-S	Code: EIA/TIA-222-G	5/28/2021
Site Name: South Plymouth	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 8

Increment Length: 5 (ft)

Elev (ft)	Description	Thick (in)	Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Fpy (ksi)	S (in^3)	Weight (lb)
0.00		0.4375	56.530	77.889	30962.6	21.37	129.21	76.3	1078.	0.0
5.00		0.4375	55.455	76.396	29216.0	20.94	126.75	76.8	1037.	1312.5
10.00		0.4375	54.380	74.903	27536.5	20.51	124.30	77.3	997.4	1287.1
15.00		0.4375	53.305	73.410	25922.5	20.07	121.84	77.8	957.8	1261.7
20.00		0.4375	52.229	71.917	24372.9	19.64	119.38	78.3	919.1	1236.3
25.00		0.4375	51.154	70.424	22886.3	19.21	116.92	78.8	881.2	1210.9
30.00		0.4375	50.079	68.931	21461.4	18.77	114.47	79.3	844.1	1185.5
35.00		0.4375	49.004	67.438	20097.0	18.34	112.01	79.8	807.8	1160.1
38.75	Bot - Section 2	0.4375	48.198	66.318	19112.5	18.01	110.17	80.2	781.0	853.4
40.00		0.4375	47.929	65.945	18791.6	17.91	109.55	80.3	772.2	526.5
45.00	Top - Section 1	0.3750	47.604	56.212	15841.3	20.97	126.94	0.0	0.0	2076.6
50.00		0.3750	46.528	54.932	14783.9	20.47	124.08	77.3	625.8	945.5
55.00		0.3750	45.453	53.652	13774.6	19.96	121.21	77.9	596.9	923.7
60.00		0.3750	44.378	52.373	12812.3	19.46	118.34	78.5	568.6	902.0
65.00		0.3750	43.303	51.093	11895.9	18.95	115.47	79.1	541.1	880.2
70.00		0.3750	42.228	49.814	11024.3	18.45	112.61	79.7	514.2	858.4
75.00		0.3750	41.153	48.534	10196.3	17.94	109.74	80.3	488.0	836.6
78.50	Bot - Section 3	0.3750	40.400	47.638	9642.1	17.59	107.73	80.7	470.1	572.7
80.00		0.3750	40.077	47.254	9410.9	17.43	106.87	80.9	462.5	447.5
83.75	Top - Section 2	0.3125	39.896	39.261	7772.2	21.10	127.67	0.0	0.0	1102.9
85.00		0.3125	39.627	38.994	7614.9	20.95	126.81	76.8	378.5	166.4
90.00		0.3125	38.552	37.928	7007.1	20.34	123.37	77.5	358.0	654.4
95.00		0.3125	37.477	36.861	6432.5	19.74	119.93	78.2	338.1	636.2
100.00		0.3125	36.402	35.795	5890.2	19.13	116.49	78.9	318.7	618.1
105.00		0.3125	35.327	34.728	5379.3	18.52	113.05	79.6	299.9	599.9
108.00		0.3125	34.682	34.089	5087.4	18.16	110.98	80.0	288.9	351.3
110.00		0.3125	34.252	33.662	4898.8	17.92	109.61	80.3	281.7	230.5
115.00		0.3125	33.176	32.596	4447.9	17.31	106.16	81.0	264.1	563.7
119.25	Bot - Section 4	0.3125	32.263	31.689	4087.0	16.79	103.24	81.6	249.5	464.8
120.00		0.3125	32.101	31.529	4025.5	16.70	102.72	81.8	247.0	146.3
123.50	Top - Section 3	0.2500	31.849	25.073	3162.9	21.05	127.39	0.0	0.0	673.2
125.00		0.2500	31.526	24.817	3067.1	20.82	126.10	76.9	191.6	127.3
130.00		0.2500	30.451	23.964	2761.5	20.07	121.80	77.8	178.6	415.0
134.50		0.2500	29.483	23.196	2504.5	19.38	117.93	78.6	167.3	361.1
135.00		0.2500	29.376	23.110	2476.9	19.31	117.50	78.7	166.1	39.4
137.00		0.2500	28.946	22.769	2368.8	19.01	115.78	79.0	161.2	156.1
140.00		0.2500	28.301	22.257	2212.6	18.55	113.20	79.6	154.0	229.8
145.00		0.2500	27.225	21.404	1967.8	17.79	108.90	80.5	142.4	371.4
148.00		0.2500	26.580	20.892	1830.0	17.34	106.32	81.0	135.6	215.9
150.00		0.2500	26.150	20.551	1741.8	17.03	104.60	81.4	131.2	141.0
153.00		0.2500	25.505	20.039	1614.9	16.58	102.02	81.9	124.7	207.2
155.00		0.2500	25.075	19.698	1533.8	16.28	100.30	82.3	120.5	135.2
160.00		0.2500	24.000	18.845	1343.0	15.52	96.00	82.5	110.2	327.9

27412.2

Wind Loading - Shaft

Structure: CT03538-S	Code: EIA/TIA-222-G	5/28/2021	
Site Name: South Plymouth	Exposure: B		
Height: 160.00 (ft)	Crest Height: 0.00		
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil		
Gh: 1.1	Topography: 1	Struct Class: II	Page: 9

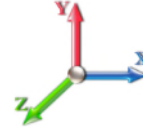


Load Case: 1.2D + 1.6W 9 93 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.60

Iterations 25



Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.70	14.724	16.20	372.20	0.650	0.000	0.00	0.000	0.00	0.0	0.0	0.0
5.00		1.00	0.70	14.724	16.20	365.12	0.650	0.000	5.00	23.690	15.40	399.0	0.0	1575.0
10.00		1.00	0.70	14.724	16.20	358.04	0.650	0.000	5.00	23.235	15.10	391.4	0.0	1544.5
15.00		1.00	0.70	14.724	16.20	350.96	0.650	0.000	5.00	22.780	14.81	383.7	0.0	1514.0
20.00		1.00	0.70	14.724	16.20	343.89	0.650	0.000	5.00	22.325	14.51	376.1	0.0	1483.5
25.00		1.00	0.70	14.724	16.20	336.81	0.650	0.000	5.00	21.871	14.22	368.4	0.0	1453.1
30.00		1.00	0.70	14.736	16.21	329.87	0.650	0.000	5.00	21.416	13.92	361.0	0.0	1422.6
35.00		1.00	0.73	15.400	16.94	329.97	0.650	0.000	5.00	20.961	13.62	369.3	0.0	1392.1
38.75 Bot - Section 2		1.00	0.75	15.854	17.44	329.30	0.650	0.000	3.75	15.422	10.02	279.7	0.0	1024.1
40.00		1.00	0.76	15.999	17.60	328.95	0.650	0.000	1.25	5.163	3.36	94.5	0.0	631.8
45.00 Top - Section 1		1.00	0.79	16.546	18.20	327.03	0.650	0.000	5.00	20.368	13.24	385.6	0.0	2491.9
50.00		1.00	0.81	17.052	18.76	329.68	0.650	0.000	5.00	19.913	12.94	388.5	0.0	1134.6
55.00		1.00	0.83	17.523	19.28	326.48	0.650	0.000	5.00	19.458	12.65	390.1	0.0	1108.5
60.00		1.00	0.85	17.964	19.76	322.74	0.650	0.000	5.00	19.004	12.35	390.5	0.0	1082.3
65.00		1.00	0.87	18.380	20.22	318.54	0.650	0.000	5.00	18.549	12.06	390.0	0.0	1056.2
70.00		1.00	0.89	18.773	20.65	313.94	0.650	0.000	5.00	18.094	11.76	388.6	0.0	1030.1
75.00		1.00	0.91	19.147	21.06	308.98	0.650	0.000	5.00	17.639	11.47	386.4	0.0	1004.0
78.50 Bot - Section 3		1.00	0.92	19.398	21.34	305.31	0.650	0.000	3.50	12.077	7.85	268.0	0.0	687.2
80.00		1.00	0.93	19.503	21.45	303.69	0.650	0.000	1.50	5.187	3.37	115.7	0.0	537.0
83.75 Top - Section 2		1.00	0.94	19.760	21.74	299.54	0.650	0.000	3.75	12.788	8.31	289.1	0.0	1323.5
85.00		1.00	0.94	19.844	21.83	302.89	0.650	0.000	1.25	4.206	2.73	95.5	0.0	199.7
90.00		1.00	0.96	20.170	22.19	297.09	0.650	0.000	5.00	16.539	10.75	381.6	0.0	785.2
95.00		1.00	0.97	20.484	22.53	291.05	0.650	0.000	5.00	16.084	10.45	376.9	0.0	763.5
100.00		1.00	0.99	20.787	22.87	284.78	0.650	0.000	5.00	15.629	10.16	371.7	0.0	741.7
105.00		1.00	1.00	21.079	23.19	278.30	0.650	0.000	5.00	15.174	9.86	365.9	0.0	719.9
108.00 Appurtenance(s)		1.00	1.01	21.249	23.37	274.32	0.650	0.000	3.00	8.886	5.78	216.0	0.0	421.5
110.00		1.00	1.02	21.361	23.50	271.63	0.650	0.000	2.00	5.833	3.79	142.5	0.0	276.6
115.00		1.00	1.03	21.634	23.80	264.78	0.650	0.000	5.00	14.264	9.27	353.0	0.0	676.4
119.25 Bot - Section 4		1.00	1.04	21.859	24.05	258.82	0.650	0.000	4.25	11.767	7.65	294.3	0.0	557.8
120.00		1.00	1.04	21.898	24.09	257.76	0.650	0.000	0.75	2.074	1.35	52.0	0.0	175.6
123.50 Top - Section 3		1.00	1.05	22.079	24.29	252.75	0.650	0.000	3.50	9.544	6.20	241.1	0.0	807.9
125.00		1.00	1.05	22.155	24.37	254.62	0.650	0.000	1.50	4.022	2.61	101.9	0.0	152.8
130.00		1.00	1.07	22.405	24.65	247.32	0.650	0.000	5.00	13.111	8.52	336.1	0.0	498.0
134.50 Appurtenance(s)		1.00	1.08	22.624	24.89	240.63	0.650	0.000	4.50	11.411	7.42	295.3	0.0	433.3
135.00		1.00	1.08	22.648	24.91	239.88	0.650	0.000	0.50	1.245	0.81	32.3	0.0	47.3
137.00 Appurtenance(s)		1.00	1.08	22.743	25.02	236.86	0.650	0.000	2.00	4.935	3.21	128.4	0.0	187.3
140.00		1.00	1.09	22.884	25.17	232.30	0.650	0.000	3.00	7.266	4.72	190.2	0.0	275.8
145.00		1.00	1.10	23.115	25.43	224.60	0.650	0.000	5.00	11.746	7.64	310.6	0.0	445.7
148.00 Appurtenance(s)		1.00	1.11	23.251	25.58	219.92	0.650	0.000	3.00	6.829	4.44	181.7	0.0	259.1
150.00		1.00	1.11	23.340	25.67	216.78	0.650	0.000	2.00	4.462	2.90	119.1	0.0	169.2
153.00 Appurtenance(s)		1.00	1.12	23.472	25.82	212.03	0.650	0.000	3.00	6.557	4.26	176.1	0.0	248.6
155.00		1.00	1.12	23.560	25.92	208.84	0.650	0.000	2.00	4.280	2.78	115.4	0.0	162.3
160.00 Appurtenance(s)		1.00	1.13	23.774	26.15	200.79	0.650	0.000	5.00	10.382	6.75	282.4	0.0	393.5
Totals:									160.00			11,575.3		32,894.6

Discrete Appurtenance Forces

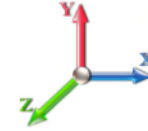
Structure: CT03538-S	Code: EIA/TIA-222-G	5/28/2021	
Site Name: South Plymouth	Exposure: B		
Height: 160.00 (ft)	Crest Height: 0.00		
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil		
Gh: 1.1	Topography: 1	Struct Class: II	Page: 10



Load Case: 1.2D + 1.6W 9 93 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.60



Iterations 25

No.	Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	CaAa x Ka	Ka	Total CaAa (sf)	Dead Load (lb)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)
1	160.00	APXVAARR24_43-U-NA2	3	23.774	26.152	0.63	0.90	38.25	460.80	0.000	0.000	1600.64	0.00	0.00
2	160.00	Low Profile Platform	1	23.774	26.152	1.00	1.00	22.00	1920.00	0.000	0.000	920.54	0.00	0.00
3	160.00	Air 21 B2A/B4P	3	23.774	26.152	0.77	0.90	14.14	329.40	0.000	0.000	591.70	0.00	0.00
4	160.00	Air 32	3	23.774	26.152	0.78	0.90	15.29	475.92	0.000	0.000	639.86	0.00	0.00
5	160.00	MS-HRECP-35	1	23.774	26.152	1.00	1.00	12.25	616.80	0.000	0.000	512.57	0.00	0.00
6	160.00	Ericsson KRY 112 144/1	3	23.774	26.152	0.63	0.90	0.77	39.60	0.000	0.000	32.42	0.00	0.00
7	160.00	Ericsson Radio 4449	3	23.774	26.152	0.60	0.90	2.98	252.00	0.000	0.000	124.89	0.00	0.00
8	160.00	4449 B71 + B85	3	23.774	26.152	0.60	0.90	3.56	263.52	0.000	0.000	149.12	0.00	0.00
9	153.00	Lone Star Electronics	1	23.625	25.987	1.00	1.00	2.10	24.00	0.000	3.500	87.32	0.00	305.61
10	153.00	VHLP-2.6-11	1	23.472	25.820	1.00	1.00	8.43	57.12	0.000	0.000	348.25	0.00	0.00
11	153.00	Hutton HPD 3.4-4.7	1	23.472	25.820	1.00	1.00	8.92	126.00	0.000	0.000	368.50	0.00	0.00
12	153.00	Motorola ODU-A-RF	3	23.472	25.820	1.00	1.00	4.32	37.44	0.000	0.000	178.47	0.00	0.00
13	153.00	Pipe Mounts	2	23.472	25.820	1.00	1.00	10.00	120.00	0.000	0.000	413.11	0.00	0.00
14	153.00	4 ft Sidearm	1	23.472	25.820	1.00	1.00	3.50	60.00	0.000	0.000	144.59	0.00	0.00
15	148.00	Low Profile Platform	1	23.251	25.576	1.00	1.00	25.00	1440.00	0.000	0.000	1023.03	0.00	0.00
16	148.00	RFS ACU-A20-N	4	23.251	25.576	0.63	0.80	0.35	4.80	0.000	0.000	14.48	0.00	0.00
17	148.00	ALU 800 MHz Filter	3	23.251	25.576	0.79	0.80	1.00	36.00	0.000	0.000	40.84	0.00	0.00
18	148.00	ALU TD-RRH8x20-25	3	23.251	25.576	0.55	0.80	6.71	252.00	0.000	0.000	274.45	0.00	0.00
19	148.00	ALU 800 MHz RRH	3	23.251	25.576	0.54	0.80	4.00	190.80	0.000	0.000	163.84	0.00	0.00
20	148.00	ALU 1900MHz RRH	3	23.251	25.576	0.54	0.80	6.11	158.40	0.000	0.000	250.04	0.00	0.00
21	148.00	RFS APXVSP18-C-A20	3	23.251	25.576	0.74	0.80	17.90	349.20	0.000	0.000	732.51	0.00	0.00
22	148.00	RFS APXVTM14-C-120	3	23.340	25.674	0.71	0.80	13.54	345.60	0.000	2.000	556.29	0.00	1112.58
23	137.00	Samsung B5/B13	3	22.743	25.017	0.58	0.75	3.26	253.08	0.000	0.000	130.38	0.00	0.00
24	137.00	Platform Handrail	1	22.743	25.017	1.00	1.00	9.70	429.60	0.000	0.000	388.27	0.00	0.00
25	137.00	RFS DB-T1-6Z-8AB-OZ	3	22.743	25.017	0.53	0.75	7.67	158.40	0.000	0.000	306.93	0.00	0.00
26	137.00	Samsung B2/B66A	3	22.743	25.017	0.62	0.75	3.51	303.84	0.000	0.000	140.53	0.00	0.00
27	137.00	Quintel QS6656-5D	6	22.743	25.017	0.69	0.75	33.66	666.00	0.000	0.000	1347.27	0.00	0.00
28	137.00	Samsung VZS01	3	22.743	25.017	0.52	0.75	7.40	313.56	0.000	0.000	296.31	0.00	0.00
29	137.00	Low Profile Platform	1	22.743	25.017	1.00	1.00	22.00	1800.00	0.000	0.000	880.62	0.00	0.00
30	137.00	Antel BXA-70063-6CF-2	3	22.743	25.017	0.62	0.75	14.14	61.20	0.000	0.000	565.87	0.00	0.00
31	134.50	Pipe Mount	1	22.624	24.886	1.00	1.00	5.00	60.00	0.000	0.000	199.09	0.00	0.00
32	134.50	Bird Technologies CSA	1	22.624	24.886	1.00	1.00	3.81	5.52	0.000	0.000	151.71	0.00	0.00
33	108.00	Powerwave 21903	6	21.249	23.374	0.67	0.80	1.09	39.60	0.000	0.000	40.71	0.00	0.00
34	108.00	Powerwave LGP21401	6	21.249	23.374	0.40	0.80	3.10	101.52	0.000	0.000	115.78	0.00	0.00
35	108.00	Ericsson RRU 11	6	21.249	23.374	0.54	0.80	8.10	367.20	0.000	0.000	303.09	0.00	0.00
36	108.00	Andrew ABT-DFDM-ADBH	3	21.249	23.374	0.78	0.80	0.12	3.96	0.000	0.000	4.40	0.00	0.00
37	108.00	AM-X-CD-17-65-00T-RET	3	21.249	23.374	0.60	0.80	14.44	174.60	0.000	0.000	539.88	0.00	0.00
38	108.00	7770	6	21.249	23.374	0.66	0.80	21.91	252.00	0.000	0.000	819.47	0.00	0.00
39	108.00	Ericsson RRUS 32 B2	3	21.249	23.374	0.54	0.80	2.65	277.20	0.000	0.000	99.22	0.00	0.00
40	108.00	Raycap DC6-48-60-18-8F	2	21.249	23.374	0.80	0.80	1.47	76.32	0.000	0.000	55.05	0.00	0.00
41	108.00	Low Profile Platform	1	21.249	23.374	1.00	1.00	22.00	1800.00	0.000	0.000	822.76	0.00	0.00
42	108.00	EPBQ-652L8H6-L2	3	21.249	23.374	0.57	0.80	26.77	356.40	0.000	0.000	1001.14	0.00	0.00
43	108.00	Powerwave 7020 RET	12	21.249	23.374	0.80	0.80	3.84	31.68	0.000	0.000	143.61	0.00	0.00
44	108.00	Ericsson B14 4478 RRU	3	21.249	23.374	0.54	0.80	5.07	208.80	0.000	0.000	189.43	0.00	0.00
Totals:								15,299.88				17,709.00		

Total Applied Force Summary

Structure: CT03538-S	Code: EIA/TIA-222-G	5/28/2021
Site Name: South Plymouth	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.2D + 1.6W 9 93 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.60



Iterations 25

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
5.00		399.04	1826.39	0.00	0.00
10.00		391.38	1795.91	0.00	0.00
15.00		383.72	1765.42	0.00	0.00
20.00		376.06	1734.94	0.00	0.00
25.00		368.39	1704.46	0.00	0.00
30.00		361.04	1673.98	0.00	0.00
35.00		369.28	1643.50	0.00	0.00
38.75		279.72	1212.62	0.00	0.00
40.00		94.50	694.66	0.00	0.00
45.00		385.55	2743.26	0.00	0.00
50.00		388.46	1385.99	0.00	0.00
55.00		390.07	1359.87	0.00	0.00
60.00		390.54	1333.74	0.00	0.00
65.00		390.01	1307.62	0.00	0.00
70.00		388.59	1281.49	0.00	0.00
75.00		386.36	1255.36	0.00	0.00
78.50		267.99	863.21	0.00	0.00
80.00		115.72	612.38	0.00	0.00
83.75		289.07	1512.08	0.00	0.00
85.00		95.48	262.56	0.00	0.00
90.00		381.63	1036.64	0.00	0.00
95.00		376.91	1014.87	0.00	0.00
100.00		371.66	993.10	0.00	0.00
105.00		365.90	971.33	0.00	0.00
108.00	(54) attachments	4350.56	4261.62	0.00	0.00
110.00		142.54	342.65	0.00	0.00
115.00		353.02	841.38	0.00	0.00
119.25		294.25	698.06	0.00	0.00
120.00		51.96	200.36	0.00	0.00
123.50		241.06	923.37	0.00	0.00
125.00		101.94	202.29	0.00	0.00
130.00		336.05	662.97	0.00	0.00
134.50	(2) attachments	646.13	647.30	0.00	0.00
135.00		32.26	63.46	0.00	0.00
137.00	(23) attachments	4184.59	4237.77	0.00	0.00
140.00		190.23	338.57	0.00	0.00
145.00		310.62	550.35	0.00	0.00
148.00	(23) attachments	3237.14	3098.65	0.00	1112.58
150.00		119.14	204.75	0.00	0.00
153.00	(9) attachments	1716.30	726.46	0.00	305.61
155.00		115.36	195.00	0.00	0.00
160.00	(20) attachments	4854.11	4833.34	0.00	0.00
Totals:		29,284.32	55,013.73	0.00	1,418.19

Calculated Forces

Structure: CT03538-S	Code: EIA/TIA-222-G	5/28/2021	
Site Name: South Plymouth	Exposure: B		
Height: 160.00 (ft)	Crest Height: 0.00		
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil		
Gh: 1.1	Topography: 1	Struct Class: II	Page: 12



Load Case: 1.2D + 1.6W 9 93 mph Wind

Iterations 25

Dead Load Factor 1.20

Wind Load Factor 1.60



Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-54.97	-29.36	0.00	-3548.1	0.00	3548.15	5345.98	2672.99	12322.4	6170.37	0.00	0.000	0.000	0.585
5.00	-53.06	-29.11	0.00	-3401.3	0.00	3401.34	5278.55	2639.27	11931.9	5974.86	0.09	-0.160	0.000	0.579
10.00	-51.19	-28.86	0.00	-3255.7	0.00	3255.79	5209.75	2604.88	11544.5	5780.84	0.34	-0.322	0.000	0.573
15.00	-49.34	-28.60	0.00	-3111.5	0.00	3111.51	5139.58	2569.79	11160.2	5588.39	0.77	-0.486	0.000	0.567
20.00	-47.53	-28.35	0.00	-2968.4	0.00	2968.49	5068.05	2534.02	10779.2	5397.62	1.36	-0.653	0.000	0.559
25.00	-45.75	-28.10	0.00	-2826.7	0.00	2826.75	4995.14	2497.57	10401.7	5208.61	2.14	-0.822	0.000	0.552
30.00	-43.99	-27.84	0.00	-2686.2	0.00	2686.27	4920.87	2460.43	10028.0	5021.46	3.09	-0.993	0.000	0.544
35.00	-42.28	-27.55	0.00	-2547.0	0.00	2547.08	4845.22	2422.61	9658.13	4836.24	4.23	-1.167	0.000	0.536
38.75	-41.04	-27.31	0.00	-2443.7	0.00	2443.75	4787.59	2393.79	9383.39	4698.67	5.20	-1.299	0.000	0.529
40.00	-40.29	-27.28	0.00	-2409.6	0.00	2409.62	4768.21	2384.10	9292.33	4653.07	5.54	-1.345	0.000	0.526
45.00	-37.47	-26.94	0.00	-2273.2	0.00	2273.23	3881.96	1940.98	7532.86	3772.03	7.04	-1.522	0.000	0.612
50.00	-36.01	-26.63	0.00	-2138.5	0.00	2138.52	3822.99	1911.49	7248.21	3629.49	8.73	-1.701	0.000	0.599
55.00	-34.57	-26.32	0.00	-2005.3	0.00	2005.36	3762.64	1881.32	6966.27	3488.31	10.62	-1.900	0.000	0.584
60.00	-33.16	-26.00	0.00	-1873.7	0.00	1873.76	3700.92	1850.46	6687.23	3348.59	12.72	-2.100	0.000	0.569
65.00	-31.78	-25.67	0.00	-1743.7	0.00	1743.75	3637.84	1818.92	6411.28	3210.40	15.03	-2.301	0.000	0.552
70.00	-30.43	-25.34	0.00	-1615.4	0.00	1615.40	3573.38	1786.69	6138.59	3073.86	17.54	-2.502	0.000	0.534
75.00	-29.12	-24.98	0.00	-1488.7	0.00	1488.71	3507.56	1753.78	5869.35	2939.04	20.27	-2.702	0.000	0.515
78.50	-28.23	-24.72	0.00	-1401.2	0.00	1401.28	3460.67	1730.33	5683.03	2845.74	22.31	-2.843	0.000	0.501
80.00	-27.58	-24.63	0.00	-1364.2	0.00	1364.20	3440.37	1720.18	5603.74	2806.03	23.21	-2.905	0.000	0.494
83.75	-26.04	-24.30	0.00	-1271.8	0.00	1271.86	2706.01	1353.00	4401.17	2203.86	25.55	-3.054	0.000	0.587
85.00	-25.72	-24.26	0.00	-1241.4	0.00	1241.48	2693.89	1346.95	4351.48	2178.97	26.36	-3.104	0.000	0.580
90.00	-24.62	-23.91	0.00	-1120.2	0.00	1120.21	2644.58	1322.29	4154.08	2080.13	29.73	-3.325	0.000	0.548
95.00	-23.54	-23.56	0.00	-1000.6	0.00	1000.66	2593.89	1296.95	3958.97	1982.43	33.32	-3.540	0.000	0.514
100.00	-22.49	-23.21	0.00	-882.86	0.00	882.86	2541.84	1270.92	3766.36	1885.98	37.14	-3.749	0.000	0.477
105.00	-21.48	-22.84	0.00	-766.83	0.00	766.83	2488.42	1244.21	3576.41	1790.86	41.17	-3.948	0.000	0.437
108.00	-17.51	-18.23	0.00	-698.32	0.00	698.32	2455.70	1227.85	3463.79	1734.47	43.69	-4.064	0.000	0.410
110.00	-17.13	-18.10	0.00	-661.87	0.00	661.87	2433.62	1216.81	3389.31	1697.17	45.41	-4.140	0.000	0.397
115.00	-16.27	-17.73	0.00	-571.38	0.00	571.38	2377.46	1188.73	3205.24	1605.00	49.84	-4.319	0.000	0.363
119.25	-15.57	-17.41	0.00	-496.03	0.00	496.03	2328.64	1164.32	3051.30	1527.92	53.75	-4.464	0.000	0.332
120.00	-15.36	-17.36	0.00	-482.97	0.00	482.97	2319.93	1159.96	3024.39	1514.44	54.45	-4.490	0.000	0.326
123.50	-14.43	-17.06	0.00	-422.22	0.00	422.22	1729.39	864.70	2245.31	1124.33	57.78	-4.602	0.000	0.384
125.00	-14.21	-16.97	0.00	-396.63	0.00	396.63	1717.71	858.86	2207.21	1105.25	59.23	-4.648	0.000	0.368
130.00	-13.53	-16.62	0.00	-311.77	0.00	311.77	1677.90	838.95	2081.35	1042.22	64.19	-4.813	0.000	0.308
134.50	-12.92	-15.93	0.00	-236.99	0.00	236.99	1640.90	820.45	1969.70	986.31	68.78	-4.940	0.000	0.249
135.00	-12.85	-15.90	0.00	-229.02	0.00	229.02	1636.72	818.36	1957.39	980.15	69.30	-4.953	0.000	0.242
137.00	-8.98	-11.38	0.00	-197.22	0.00	197.22	1619.86	809.93	1908.38	955.61	71.38	-5.002	0.000	0.212
140.00	-8.65	-11.17	0.00	-163.09	0.00	163.09	1594.17	797.08	1835.53	919.13	74.54	-5.067	0.000	0.183
145.00	-8.12	-10.82	0.00	-107.25	0.00	107.25	1550.24	775.12	1715.94	859.24	79.89	-5.154	0.000	0.130
148.00	-5.32	-7.32	0.00	-73.69	0.00	73.69	1523.23	761.62	1645.35	823.90	83.14	-5.193	0.000	0.093
150.00	-5.12	-7.18	0.00	-59.05	0.00	59.05	1504.95	752.48	1598.80	800.59	85.32	-5.214	0.000	0.077
153.00	-4.55	-5.41	0.00	-37.20	0.00	37.20	1477.12	738.56	1529.77	766.02	88.60	-5.238	0.000	0.052
155.00	-4.37	-5.28	0.00	-26.38	0.00	26.38	1458.29	729.15	1484.30	743.26	90.79	-5.249	0.000	0.039
160.00	0.00	-4.85	0.00	0.00	0.00	0.00	1400.09	700.04	1362.73	682.38	96.29	-5.261	0.000	0.000

Wind Loading - Shaft

Structure: CT03538-S	Code: EIA/TIA-222-G	5/28/2021
Site Name: South Plymouth	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



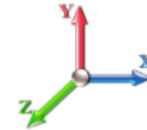
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Load Case: 0.9D + 1.6W 9 93 mph Wind

Iterations 24

Dead Load Factor 0.90

Wind Load Factor 1.60



Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.70	14.724	16.20	372.20	0.650	0.000	0.00	0.000	0.00	0.0	0.0	0.0
5.00		1.00	0.70	14.724	16.20	365.12	0.650	0.000	5.00	23.690	15.40	399.0	0.0	1181.2
10.00		1.00	0.70	14.724	16.20	358.04	0.650	0.000	5.00	23.235	15.10	391.4	0.0	1158.4
15.00		1.00	0.70	14.724	16.20	350.96	0.650	0.000	5.00	22.780	14.81	383.7	0.0	1135.5
20.00		1.00	0.70	14.724	16.20	343.89	0.650	0.000	5.00	22.325	14.51	376.1	0.0	1112.7
25.00		1.00	0.70	14.724	16.20	336.81	0.650	0.000	5.00	21.871	14.22	368.4	0.0	1089.8
30.00		1.00	0.70	14.736	16.21	329.87	0.650	0.000	5.00	21.416	13.92	361.0	0.0	1066.9
35.00		1.00	0.73	15.400	16.94	329.97	0.650	0.000	5.00	20.961	13.62	369.3	0.0	1044.1
38.75 Bot - Section 2		1.00	0.75	15.854	17.44	329.30	0.650	0.000	3.75	15.422	10.02	279.7	0.0	768.1
40.00		1.00	0.76	15.999	17.60	328.95	0.650	0.000	1.25	5.163	3.36	94.5	0.0	473.9
45.00 Top - Section 1		1.00	0.79	16.546	18.20	327.03	0.650	0.000	5.00	20.368	13.24	385.6	0.0	1868.9
50.00		1.00	0.81	17.052	18.76	329.68	0.650	0.000	5.00	19.913	12.94	388.5	0.0	850.9
55.00		1.00	0.83	17.523	19.28	326.48	0.650	0.000	5.00	19.458	12.65	390.1	0.0	831.4
60.00		1.00	0.85	17.964	19.76	322.74	0.650	0.000	5.00	19.004	12.35	390.5	0.0	811.8
65.00		1.00	0.87	18.380	20.22	318.54	0.650	0.000	5.00	18.549	12.06	390.0	0.0	792.2
70.00		1.00	0.89	18.773	20.65	313.94	0.650	0.000	5.00	18.094	11.76	388.6	0.0	772.6
75.00		1.00	0.91	19.147	21.06	308.98	0.650	0.000	5.00	17.639	11.47	386.4	0.0	753.0
78.50 Bot - Section 3		1.00	0.92	19.398	21.34	305.31	0.650	0.000	3.50	12.077	7.85	268.0	0.0	515.4
80.00		1.00	0.93	19.503	21.45	303.69	0.650	0.000	1.50	5.187	3.37	115.7	0.0	402.7
83.75 Top - Section 2		1.00	0.94	19.760	21.74	299.54	0.650	0.000	3.75	12.788	8.31	289.1	0.0	992.6
85.00		1.00	0.94	19.844	21.83	302.89	0.650	0.000	1.25	4.206	2.73	95.5	0.0	149.8
90.00		1.00	0.96	20.170	22.19	297.09	0.650	0.000	5.00	16.539	10.75	381.6	0.0	588.9
95.00		1.00	0.97	20.484	22.53	291.05	0.650	0.000	5.00	16.084	10.45	376.9	0.0	572.6
100.00		1.00	0.99	20.787	22.87	284.78	0.650	0.000	5.00	15.629	10.16	371.7	0.0	556.3
105.00		1.00	1.00	21.079	23.19	278.30	0.650	0.000	5.00	15.174	9.86	365.9	0.0	539.9
108.00 Appurtenance(s)		1.00	1.01	21.249	23.37	274.32	0.650	0.000	3.00	8.886	5.78	216.0	0.0	316.1
110.00		1.00	1.02	21.361	23.50	271.63	0.650	0.000	2.00	5.833	3.79	142.5	0.0	207.5
115.00		1.00	1.03	21.634	23.80	264.78	0.650	0.000	5.00	14.264	9.27	353.0	0.0	507.3
119.25 Bot - Section 4		1.00	1.04	21.859	24.05	258.82	0.650	0.000	4.25	11.767	7.65	294.3	0.0	418.4
120.00		1.00	1.04	21.898	24.09	257.76	0.650	0.000	0.75	2.074	1.35	52.0	0.0	131.7
123.50 Top - Section 3		1.00	1.05	22.079	24.29	252.75	0.650	0.000	3.50	9.544	6.20	241.1	0.0	605.9
125.00		1.00	1.05	22.155	24.37	254.62	0.650	0.000	1.50	4.022	2.61	101.9	0.0	114.6
130.00		1.00	1.07	22.405	24.65	247.32	0.650	0.000	5.00	13.111	8.52	336.1	0.0	373.5
134.50 Appurtenance(s)		1.00	1.08	22.624	24.89	240.63	0.650	0.000	4.50	11.411	7.42	295.3	0.0	325.0
135.00		1.00	1.08	22.648	24.91	239.88	0.650	0.000	0.50	1.245	0.81	32.3	0.0	35.5
137.00 Appurtenance(s)		1.00	1.08	22.743	25.02	236.86	0.650	0.000	2.00	4.935	3.21	128.4	0.0	140.5
140.00		1.00	1.09	22.884	25.17	232.30	0.650	0.000	3.00	7.266	4.72	190.2	0.0	206.8
145.00		1.00	1.10	23.115	25.43	224.60	0.650	0.000	5.00	11.746	7.64	310.6	0.0	334.3
148.00 Appurtenance(s)		1.00	1.11	23.251	25.58	219.92	0.650	0.000	3.00	6.829	4.44	181.7	0.0	194.3
150.00		1.00	1.11	23.340	25.67	216.78	0.650	0.000	2.00	4.462	2.90	119.1	0.0	126.9
153.00 Appurtenance(s)		1.00	1.12	23.472	25.82	212.03	0.650	0.000	3.00	6.557	4.26	176.1	0.0	186.5
155.00		1.00	1.12	23.560	25.92	208.84	0.650	0.000	2.00	4.280	2.78	115.4	0.0	121.7
160.00 Appurtenance(s)		1.00	1.13	23.774	26.15	200.79	0.650	0.000	5.00	10.382	6.75	282.4	0.0	295.1
Totals:									160.00			11,575.3		24,670.9

Discrete Appurtenance Forces

Structure: CT03538-S	Code: EIA/TIA-222-G	5/28/2021
Site Name: South Plymouth	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 14



Load Case: 0.9D + 1.6W 9 93 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.60



Iterations 24

No.	Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	CaAa x Ka	Ka	Total CaAa (sf)	Dead Load (lb)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)
1	160.00	APXVAARR24_43-U-NA2	3	23.774	26.152	0.63	0.90	38.25	345.60	0.000	0.000	1600.64	0.00	0.00
2	160.00	Low Profile Platform	1	23.774	26.152	1.00	1.00	22.00	1440.00	0.000	0.000	920.54	0.00	0.00
3	160.00	Air 21 B2A/B4P	3	23.774	26.152	0.77	0.90	14.14	247.05	0.000	0.000	591.70	0.00	0.00
4	160.00	Air 32	3	23.774	26.152	0.78	0.90	15.29	356.94	0.000	0.000	639.86	0.00	0.00
5	160.00	MS-HRECP-35	1	23.774	26.152	1.00	1.00	12.25	462.60	0.000	0.000	512.57	0.00	0.00
6	160.00	Ericsson KRY 112 144/1	3	23.774	26.152	0.63	0.90	0.77	29.70	0.000	0.000	32.42	0.00	0.00
7	160.00	Ericsson Radio 4449	3	23.774	26.152	0.60	0.90	2.98	189.00	0.000	0.000	124.89	0.00	0.00
8	160.00	4449 B71 + B85	3	23.774	26.152	0.60	0.90	3.56	197.64	0.000	0.000	149.12	0.00	0.00
9	153.00	Lone Star Electronics	1	23.625	25.987	1.00	1.00	2.10	18.00	0.000	3.500	87.32	0.00	305.61
10	153.00	VHLP-2.6-11	1	23.472	25.820	1.00	1.00	8.43	42.84	0.000	0.000	348.25	0.00	0.00
11	153.00	Hutton HPD 3.4-4.7	1	23.472	25.820	1.00	1.00	8.92	94.50	0.000	0.000	368.50	0.00	0.00
12	153.00	Motorola ODU-A-RF	3	23.472	25.820	1.00	1.00	4.32	28.08	0.000	0.000	178.47	0.00	0.00
13	153.00	Pipe Mounts	2	23.472	25.820	1.00	1.00	10.00	90.00	0.000	0.000	413.11	0.00	0.00
14	153.00	4 ft Sidearm	1	23.472	25.820	1.00	1.00	3.50	45.00	0.000	0.000	144.59	0.00	0.00
15	148.00	Low Profile Platform	1	23.251	25.576	1.00	1.00	25.00	1080.00	0.000	0.000	1023.03	0.00	0.00
16	148.00	RFS ACU-A20-N	4	23.251	25.576	0.63	0.80	0.35	3.60	0.000	0.000	14.48	0.00	0.00
17	148.00	ALU 800 MHz Filter	3	23.251	25.576	0.79	0.80	1.00	27.00	0.000	0.000	40.84	0.00	0.00
18	148.00	ALU TD-RRH8x20-25	3	23.251	25.576	0.55	0.80	6.71	189.00	0.000	0.000	274.45	0.00	0.00
19	148.00	ALU 800 MHz RRH	3	23.251	25.576	0.54	0.80	4.00	143.10	0.000	0.000	163.84	0.00	0.00
20	148.00	ALU 1900MHz RRH	3	23.251	25.576	0.54	0.80	6.11	118.80	0.000	0.000	250.04	0.00	0.00
21	148.00	RFS APXVSP18-C-A20	3	23.251	25.576	0.74	0.80	17.90	261.90	0.000	0.000	732.51	0.00	0.00
22	148.00	RFS APXVTM14-C-120	3	23.340	25.674	0.71	0.80	13.54	259.20	0.000	2.000	556.29	0.00	1112.58
23	137.00	Samsung B5/B13	3	22.743	25.017	0.58	0.75	3.26	189.81	0.000	0.000	130.38	0.00	0.00
24	137.00	Platform Handrail	1	22.743	25.017	1.00	1.00	9.70	322.20	0.000	0.000	388.27	0.00	0.00
25	137.00	RFS DB-T1-6Z-8AB-OZ	3	22.743	25.017	0.53	0.75	7.67	118.80	0.000	0.000	306.93	0.00	0.00
26	137.00	Samsung B2/B66A	3	22.743	25.017	0.62	0.75	3.51	227.88	0.000	0.000	140.53	0.00	0.00
27	137.00	Quintel QS6656-5D	6	22.743	25.017	0.69	0.75	33.66	499.50	0.000	0.000	1347.27	0.00	0.00
28	137.00	Samsung VZS01	3	22.743	25.017	0.52	0.75	7.40	235.17	0.000	0.000	296.31	0.00	0.00
29	137.00	Low Profile Platform	1	22.743	25.017	1.00	1.00	22.00	1350.00	0.000	0.000	880.62	0.00	0.00
30	137.00	Antel BXA-70063-6CF-2	3	22.743	25.017	0.62	0.75	14.14	45.90	0.000	0.000	565.87	0.00	0.00
31	134.50	Pipe Mount	1	22.624	24.886	1.00	1.00	5.00	45.00	0.000	0.000	199.09	0.00	0.00
32	134.50	Bird Technologies CSA	1	22.624	24.886	1.00	1.00	3.81	4.14	0.000	0.000	151.71	0.00	0.00
33	108.00	Powerwave 21903	6	21.249	23.374	0.67	0.80	1.09	29.70	0.000	0.000	40.71	0.00	0.00
34	108.00	Powerwave LGP21401	6	21.249	23.374	0.40	0.80	3.10	76.14	0.000	0.000	115.78	0.00	0.00
35	108.00	Ericsson RRU 11	6	21.249	23.374	0.54	0.80	8.10	275.40	0.000	0.000	303.09	0.00	0.00
36	108.00	Andrew ABT-DFDM-ADBH	3	21.249	23.374	0.78	0.80	0.12	2.97	0.000	0.000	4.40	0.00	0.00
37	108.00	AM-X-CD-17-65-00T-RET	3	21.249	23.374	0.60	0.80	14.44	130.95	0.000	0.000	539.88	0.00	0.00
38	108.00	7770	6	21.249	23.374	0.66	0.80	21.91	189.00	0.000	0.000	819.47	0.00	0.00
39	108.00	Ericsson RRUS 32 B2	3	21.249	23.374	0.54	0.80	2.65	207.90	0.000	0.000	99.22	0.00	0.00
40	108.00	Raycap DC6-48-60-18-8F	2	21.249	23.374	0.80	0.80	1.47	57.24	0.000	0.000	55.05	0.00	0.00
41	108.00	Low Profile Platform	1	21.249	23.374	1.00	1.00	22.00	1350.00	0.000	0.000	822.76	0.00	0.00
42	108.00	EPBQ-652L8H6-L2	3	21.249	23.374	0.57	0.80	26.77	267.30	0.000	0.000	1001.14	0.00	0.00
43	108.00	Powerwave 7020 RET	12	21.249	23.374	0.80	0.80	3.84	23.76	0.000	0.000	143.61	0.00	0.00
44	108.00	Ericsson B14 4478 RRU	3	21.249	23.374	0.54	0.80	5.07	156.60	0.000	0.000	189.43	0.00	0.00
Totals:								11,474.91				17,709.00		

Total Applied Force Summary

Structure: CT03538-S	Code: EIA/TIA-222-G	5/28/2021	
Site Name: South Plymouth	Exposure: B		
Height: 160.00 (ft)	Crest Height: 0.00		
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil		
Gh: 1.1	Topography: 1	Struct Class: II	Page: 15



Load Case: 0.9D + 1.6W 9 93 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.60



Iterations 24

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
5.00		399.04	1369.79	0.00	0.00
10.00		391.38	1346.93	0.00	0.00
15.00		383.72	1324.07	0.00	0.00
20.00		376.06	1301.21	0.00	0.00
25.00		368.39	1278.35	0.00	0.00
30.00		361.04	1255.49	0.00	0.00
35.00		369.28	1232.63	0.00	0.00
38.75		279.72	909.47	0.00	0.00
40.00		94.50	521.00	0.00	0.00
45.00		385.55	2057.45	0.00	0.00
50.00		388.46	1039.50	0.00	0.00
55.00		390.07	1019.90	0.00	0.00
60.00		390.54	1000.31	0.00	0.00
65.00		390.01	980.71	0.00	0.00
70.00		388.59	961.12	0.00	0.00
75.00		386.36	941.52	0.00	0.00
78.50		267.99	647.41	0.00	0.00
80.00		115.72	459.28	0.00	0.00
83.75		289.07	1134.06	0.00	0.00
85.00		95.48	196.92	0.00	0.00
90.00		381.63	777.48	0.00	0.00
95.00		376.91	761.15	0.00	0.00
100.00		371.66	744.82	0.00	0.00
105.00		365.90	728.49	0.00	0.00
108.00	(54) attachments	4350.56	3196.22	0.00	0.00
110.00		142.54	256.99	0.00	0.00
115.00		353.02	631.04	0.00	0.00
119.25		294.25	523.54	0.00	0.00
120.00		51.96	150.27	0.00	0.00
123.50		241.06	692.53	0.00	0.00
125.00		101.94	151.71	0.00	0.00
130.00		336.05	497.22	0.00	0.00
134.50	(2) attachments	646.13	485.47	0.00	0.00
135.00		32.26	47.59	0.00	0.00
137.00	(23) attachments	4184.59	3178.33	0.00	0.00
140.00		190.23	253.93	0.00	0.00
145.00		310.62	412.76	0.00	0.00
148.00	(23) attachments	3237.14	2323.99	0.00	1112.58
150.00		119.14	153.56	0.00	0.00
153.00	(9) attachments	1716.30	544.84	0.00	305.61
155.00		115.36	146.25	0.00	0.00
160.00	(20) attachments	4854.11	3625.00	0.00	0.00
Totals:		29,284.32	41,260.30	0.00	1,418.19

Calculated Forces

Structure: CT03538-S	Code: EIA/TIA-222-G	5/28/2021
Site Name: South Plymouth	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 16

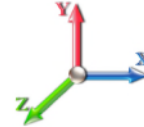


Load Case: 0.9D + 1.6W 9 93 mph Wind

Iterations 24

Dead Load Factor 0.90

Wind Load Factor 1.60



Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-41.22	-29.34	0.00	-3503.9	0.00	3503.97	5345.98	2672.99	12322.4	6170.37	0.00	0.000	0.000	0.576
5.00	-39.77	-29.05	0.00	-3357.2	0.00	3357.27	5278.55	2639.27	11931.9	5974.86	0.08	-0.158	0.000	0.570
10.00	-38.34	-28.76	0.00	-3212.0	0.00	3212.02	5209.75	2604.88	11544.5	5780.84	0.34	-0.318	0.000	0.563
15.00	-36.94	-28.47	0.00	-3068.2	0.00	3068.22	5139.58	2569.79	11160.2	5588.39	0.76	-0.480	0.000	0.556
20.00	-35.56	-28.19	0.00	-2925.8	0.00	2925.85	5068.05	2534.02	10779.2	5397.62	1.35	-0.644	0.000	0.549
25.00	-34.21	-27.90	0.00	-2784.9	0.00	2784.91	4995.14	2497.57	10401.7	5208.61	2.11	-0.811	0.000	0.542
30.00	-32.88	-27.62	0.00	-2645.4	0.00	2645.40	4920.87	2460.43	10028.0	5021.46	3.05	-0.980	0.000	0.534
35.00	-31.58	-27.31	0.00	-2507.3	0.00	2507.30	4845.22	2422.61	9658.13	4836.24	4.17	-1.150	0.000	0.525
38.75	-30.63	-27.06	0.00	-2404.8	0.00	2404.88	4787.59	2393.79	9383.39	4698.67	5.12	-1.281	0.000	0.518
40.00	-30.06	-27.01	0.00	-2371.0	0.00	2371.06	4768.21	2384.10	9292.33	4653.07	5.47	-1.325	0.000	0.516
45.00	-27.93	-26.66	0.00	-2236.0	0.00	2236.01	3881.96	1940.98	7532.86	3772.03	6.95	-1.500	0.000	0.600
50.00	-26.82	-26.33	0.00	-2102.7	0.00	2102.71	3822.99	1911.49	7248.21	3629.49	8.61	-1.675	0.000	0.587
55.00	-25.72	-26.00	0.00	-1971.0	0.00	1971.06	3762.64	1881.32	6966.27	3488.31	10.47	-1.871	0.000	0.572
60.00	-24.65	-25.66	0.00	-1841.0	0.00	1841.08	3700.92	1850.46	6687.23	3348.59	12.54	-2.068	0.000	0.557
65.00	-23.60	-25.31	0.00	-1712.8	0.00	1712.80	3637.84	1818.92	6411.28	3210.40	14.81	-2.266	0.000	0.540
70.00	-22.57	-24.96	0.00	-1586.2	0.00	1586.24	3573.38	1786.69	6138.59	3073.86	17.29	-2.463	0.000	0.523
75.00	-21.57	-24.60	0.00	-1461.4	0.00	1461.44	3507.56	1753.78	5869.35	2939.04	19.97	-2.660	0.000	0.504
78.50	-20.90	-24.33	0.00	-1375.3	0.00	1375.35	3460.67	1730.33	5683.03	2845.74	21.97	-2.798	0.000	0.490
80.00	-20.40	-24.23	0.00	-1338.8	0.00	1338.85	3440.37	1720.18	5603.74	2806.03	22.86	-2.858	0.000	0.483
83.75	-19.24	-23.92	0.00	-1247.9	0.00	1247.98	2706.01	1353.00	4401.17	2203.86	25.17	-3.005	0.000	0.574
85.00	-18.99	-23.86	0.00	-1218.0	0.00	1218.08	2693.89	1346.95	4351.48	2178.97	25.96	-3.054	0.000	0.566
90.00	-18.15	-23.50	0.00	-1098.8	0.00	1098.80	2644.58	1322.29	4154.08	2080.13	29.27	-3.271	0.000	0.535
95.00	-17.33	-23.14	0.00	-981.29	0.00	981.29	2593.89	1296.95	3958.97	1982.43	32.81	-3.482	0.000	0.502
100.00	-16.53	-22.78	0.00	-865.57	0.00	865.57	2541.84	1270.92	3766.36	1885.98	36.57	-3.686	0.000	0.466
105.00	-15.77	-22.41	0.00	-751.65	0.00	751.65	2488.42	1244.21	3576.41	1790.86	40.53	-3.881	0.000	0.426
108.00	-12.85	-17.87	0.00	-684.42	0.00	684.42	2455.70	1227.85	3463.79	1734.47	43.01	-3.995	0.000	0.400
110.00	-12.56	-17.74	0.00	-648.67	0.00	648.67	2433.62	1216.81	3389.31	1697.17	44.70	-4.070	0.000	0.388
115.00	-11.91	-17.38	0.00	-559.96	0.00	559.96	2377.46	1188.73	3205.24	1605.00	49.05	-4.245	0.000	0.354
119.25	-11.39	-17.06	0.00	-486.11	0.00	486.11	2328.64	1164.32	3051.30	1527.92	52.89	-4.387	0.000	0.323
120.00	-11.22	-17.01	0.00	-473.31	0.00	473.31	2319.93	1159.96	3024.39	1514.44	53.58	-4.412	0.000	0.318
123.50	-10.53	-16.73	0.00	-413.78	0.00	413.78	1729.39	864.70	2245.31	1124.33	56.86	-4.522	0.000	0.374
125.00	-10.35	-16.64	0.00	-388.68	0.00	388.68	1717.71	858.86	2207.21	1105.25	58.28	-4.568	0.000	0.358
130.00	-9.84	-16.29	0.00	-305.50	0.00	305.50	1677.90	838.95	2081.35	1042.22	63.15	-4.729	0.000	0.299
134.50	-9.40	-15.61	0.00	-232.22	0.00	232.22	1640.90	820.45	1969.70	986.31	67.67	-4.854	0.000	0.242
135.00	-9.34	-15.58	0.00	-224.42	0.00	224.42	1636.72	818.36	1957.39	980.15	68.18	-4.867	0.000	0.235
137.00	-6.52	-11.15	0.00	-193.25	0.00	193.25	1619.86	809.93	1908.38	955.61	70.22	-4.914	0.000	0.206
140.00	-6.27	-10.94	0.00	-159.81	0.00	159.81	1594.17	797.08	1835.53	919.13	73.33	-4.978	0.000	0.178
145.00	-5.88	-10.60	0.00	-105.10	0.00	105.10	1550.24	775.12	1715.94	859.24	78.58	-5.063	0.000	0.126
148.00	-3.85	-7.18	0.00	-72.17	0.00	72.17	1523.23	761.62	1645.35	823.90	81.78	-5.102	0.000	0.090
150.00	-3.70	-7.05	0.00	-57.82	0.00	57.82	1504.95	752.48	1598.80	800.59	83.92	-5.122	0.000	0.075
153.00	-3.31	-5.29	0.00	-36.38	0.00	36.38	1477.12	738.56	1529.77	766.02	87.14	-5.145	0.000	0.050
155.00	-3.17	-5.16	0.00	-25.80	0.00	25.80	1458.29	729.15	1484.30	743.26	89.29	-5.156	0.000	0.037
160.00	0.00	-4.85	0.00	0.00	0.00	0.00	1400.09	700.04	1362.73	682.38	94.69	-5.168	0.000	0.000

Wind Loading - Shaft

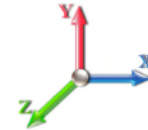
Structure: CT03538-S	Code: EIA/TIA-222-G	5/28/2021
Site Name: South Plymouth	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 17



Load Case: 1.2D + 1.0Di + 1.0Wi 40 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 24

Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.70	2.724	3.00	0.00	1.200	0.000	0.00	0.000	0.00	0.0	0.0	0.0
5.00		1.00	0.70	2.724	3.00	0.00	1.200	1.242	5.00	24.725	29.67	88.9	441.2	2016.1
10.00		1.00	0.70	2.724	3.00	0.00	1.200	1.331	5.00	24.345	29.21	87.5	464.6	2009.1
15.00		1.00	0.70	2.724	3.00	0.00	1.200	1.386	5.00	23.936	28.72	86.1	474.9	1989.0
20.00		1.00	0.70	2.724	3.00	0.00	1.200	1.427	5.00	23.514	28.22	84.5	479.5	1963.1
25.00		1.00	0.70	2.724	3.00	0.00	1.200	1.459	5.00	23.086	27.70	83.0	480.8	1933.9
30.00		1.00	0.70	2.726	3.00	0.00	1.200	1.486	5.00	22.654	27.18	81.5	479.9	1902.5
35.00		1.00	0.73	2.849	3.13	0.00	1.200	1.509	5.00	22.218	26.66	83.6	477.4	1869.5
38.75 Bot - Section 2		1.00	0.75	2.933	3.23	0.00	1.200	1.524	3.75	16.375	19.65	63.4	356.0	1380.1
40.00		1.00	0.76	2.960	3.26	0.00	1.200	1.529	1.25	5.482	6.58	21.4	120.2	752.0
45.00 Top - Section 1		1.00	0.79	3.061	3.37	0.00	1.200	1.547	5.00	21.658	25.99	87.5	476.3	2968.2
50.00		1.00	0.81	3.155	3.47	0.00	1.200	1.564	5.00	21.216	25.46	88.3	471.0	1605.6
55.00		1.00	0.83	3.242	3.57	0.00	1.200	1.579	5.00	20.774	24.93	88.9	465.0	1573.5
60.00		1.00	0.85	3.323	3.66	0.00	1.200	1.592	5.00	20.331	24.40	89.2	458.5	1540.8
65.00		1.00	0.87	3.400	3.74	0.00	1.200	1.605	5.00	19.886	23.86	89.3	451.5	1507.7
70.00		1.00	0.89	3.473	3.82	0.00	1.200	1.617	5.00	19.441	23.33	89.1	444.1	1474.2
75.00		1.00	0.91	3.542	3.90	0.00	1.200	1.628	5.00	18.996	22.80	88.8	436.3	1440.3
78.50 Bot - Section 3		1.00	0.92	3.588	3.95	0.00	1.200	1.636	3.50	13.031	15.64	61.7	301.5	988.7
80.00		1.00	0.93	3.608	3.97	0.00	1.200	1.639	1.50	5.596	6.72	26.7	130.4	667.3
83.75 Top - Section 2		1.00	0.94	3.655	4.02	0.00	1.200	1.646	3.75	13.817	16.58	66.7	321.3	1644.8
85.00		1.00	0.94	3.671	4.04	0.00	1.200	1.649	1.25	4.549	5.46	22.0	106.6	306.3
90.00		1.00	0.96	3.731	4.10	0.00	1.200	1.658	5.00	17.921	21.50	88.3	417.6	1202.8
95.00		1.00	0.97	3.789	4.17	0.00	1.200	1.667	5.00	17.473	20.97	87.4	408.7	1172.2
100.00		1.00	0.99	3.845	4.23	0.00	1.200	1.676	5.00	17.025	20.43	86.4	399.6	1141.3
105.00		1.00	1.00	3.899	4.29	0.00	1.200	1.684	5.00	16.577	19.89	85.3	390.3	1110.2
108.00 Appurtenance(s)		1.00	1.01	3.931	4.32	0.00	1.200	1.689	3.00	9.730	11.68	50.5	230.8	652.3
110.00		1.00	1.02	3.952	4.35	0.00	1.200	1.692	2.00	6.397	7.68	33.4	152.3	429.0
115.00		1.00	1.03	4.002	4.40	0.00	1.200	1.699	5.00	15.680	18.82	82.8	371.1	1047.5
119.25 Bot - Section 4		1.00	1.04	4.044	4.45	0.00	1.200	1.706	4.25	12.975	15.57	69.3	308.4	866.2
120.00		1.00	1.04	4.051	4.46	0.00	1.200	1.707	0.75	2.287	2.74	12.2	55.0	230.6
123.50 Top - Section 3		1.00	1.05	4.084	4.49	0.00	1.200	1.712	3.50	10.542	12.65	56.8	251.8	1059.7
125.00		1.00	1.05	4.099	4.51	0.00	1.200	1.714	1.50	4.450	5.34	24.1	107.0	259.8
130.00		1.00	1.07	4.145	4.56	0.00	1.200	1.720	5.00	14.545	17.45	79.6	346.6	844.5
134.50 Appurtenance(s)		1.00	1.08	4.185	4.60	0.00	1.200	1.726	4.50	12.706	15.25	70.2	303.6	736.9
135.00		1.00	1.08	4.190	4.61	0.00	1.200	1.727	0.50	1.389	1.67	7.7	33.6	80.9
137.00 Appurtenance(s)		1.00	1.08	4.207	4.63	0.00	1.200	1.729	2.00	5.512	6.61	30.6	132.9	320.2
140.00		1.00	1.09	4.233	4.66	0.00	1.200	1.733	3.00	8.133	9.76	45.4	195.6	471.3
145.00		1.00	1.10	4.276	4.70	0.00	1.200	1.739	5.00	13.196	15.83	74.5	315.4	761.1
148.00 Appurtenance(s)		1.00	1.11	4.301	4.73	0.00	1.200	1.743	3.00	7.701	9.24	43.7	185.4	444.5
150.00		1.00	1.11	4.318	4.75	0.00	1.200	1.745	2.00	5.044	6.05	28.7	121.9	291.1
153.00 Appurtenance(s)		1.00	1.12	4.342	4.78	0.00	1.200	1.749	3.00	7.431	8.92	42.6	179.0	427.6
155.00		1.00	1.12	4.358	4.79	0.00	1.200	1.751	2.00	4.864	5.84	28.0	117.6	279.9
160.00 Appurtenance(s)		1.00	1.13	4.398	4.84	0.00	1.200	1.757	5.00	11.845	14.21	68.8	283.2	676.7
Totals:									160.00			2,674.4		46,039.2

Discrete Appurtenance Forces

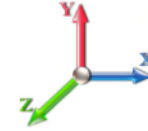
Structure: CT03538-S	Code: EIA/TIA-222-G	5/28/2021
Site Name: South Plymouth	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 18



Load Case: 1.2D + 1.0Di + 1.0Wi 40 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 24

No.	Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	CaAa x Ka	Ka	Total CaAa (sf)	Dead Load (lb)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)
1	160.00	APXVAARR24_43-U-NA2	3	4.398	4.838	0.63	0.90	41.87	1723.76	0.000	0.000	202.56	0.00	0.00
2	160.00	Low Profile Platform	1	4.398	4.838	1.00	1.00	39.78	2925.21	0.000	0.000	192.43	0.00	0.00
3	160.00	Air 21 B2A/B4P	3	4.398	4.838	0.77	0.90	16.71	839.98	0.000	0.000	80.82	0.00	0.00
4	160.00	Air 32	3	4.398	4.838	0.78	0.90	18.08	1033.29	0.000	0.000	87.48	0.00	0.00
5	160.00	MS-HRECP-35	1	4.398	4.838	1.00	1.00	24.30	1744.74	0.000	0.000	117.56	0.00	0.00
6	160.00	Ericsson KRY 112 144/1	3	4.398	4.838	0.63	0.90	1.68	62.85	0.000	0.000	8.12	0.00	0.00
7	160.00	Ericsson Radio 4449	3	4.398	4.838	0.60	0.90	3.96	458.41	0.000	0.000	19.18	0.00	0.00
8	160.00	4449 B71 + B85	3	4.398	4.838	0.60	0.90	4.60	262.67	0.000	0.000	22.26	0.00	0.00
9	153.00	Lone Star Electronics	1	4.370	4.807	1.00	1.00	3.98	55.02	0.000	3.500	19.12	0.00	66.92
10	153.00	VHLP-2.6-11	1	4.342	4.776	1.00	1.00	10.14	180.75	0.000	0.000	48.43	0.00	0.00
11	153.00	Hutton HPD 3.4-4.7	1	4.342	4.776	1.00	1.00	9.54	238.34	0.000	0.000	45.59	0.00	0.00
12	153.00	Motorola ODU-A-RF	3	4.342	4.776	1.00	1.00	6.90	135.09	0.000	0.000	32.95	0.00	0.00
13	153.00	Pipe Mounts	2	4.342	4.776	1.00	1.00	16.99	103.94	0.000	0.000	81.17	0.00	0.00
14	153.00	4 ft Sidearm	1	4.342	4.776	1.00	1.00	11.51	126.62	0.000	0.000	54.97	0.00	0.00
15	148.00	Low Profile Platform	1	4.301	4.731	1.00	1.00	45.91	2185.72	0.000	0.000	217.24	0.00	0.00
16	148.00	RFS ACU-A20-N	4	4.301	4.731	0.54	0.80	0.94	16.76	0.000	0.000	4.43	0.00	0.00
17	148.00	ALU 800 MHz Filter	3	4.301	4.731	0.54	0.80	1.20	104.80	0.000	0.000	5.67	0.00	0.00
18	148.00	ALU TD-RRH8x20-25	3	4.301	4.731	0.60	0.80	8.75	582.85	0.000	0.000	41.41	0.00	0.00
19	148.00	ALU 800 MHz RRH	3	4.301	4.731	0.00	0.80	10.90	349.08	0.000	0.000	51.56	0.00	0.00
20	148.00	ALU 1900MHz RRH	3	4.301	4.731	0.54	0.80	8.34	391.85	0.000	0.000	39.47	0.00	0.00
21	148.00	RFS APXVSP18-C-A20	3	4.301	4.731	0.78	0.80	25.43	1201.97	0.000	0.000	120.29	0.00	0.00
22	148.00	RFS APXVTM14-C-120	3	4.318	4.749	0.75	0.80	16.81	826.06	0.000	2.000	79.84	0.00	159.69
23	137.00	Samsung B5/B13	3	4.207	4.628	0.59	0.75	4.30	333.51	0.000	0.000	19.91	0.00	0.00
24	137.00	Platform Handrail	1	4.207	4.628	1.00	1.00	14.73	-702.83	0.000	0.000	68.18	0.00	0.00
25	137.00	RFS DB-T1-6Z-8AB-OZ	3	4.207	4.628	0.54	0.75	9.14	359.05	0.000	0.000	42.29	0.00	0.00
26	137.00	Samsung B2/B66A	3	4.207	4.628	0.64	0.75	4.63	455.27	0.000	0.000	21.42	0.00	0.00
27	137.00	Quintel QS6656-5D	6	4.207	4.628	0.69	0.75	38.80	1918.92	0.000	0.000	179.59	0.00	0.00
28	137.00	Samsung VZS01	3	4.207	4.628	0.53	0.75	8.94	634.77	0.000	0.000	41.36	0.00	0.00
29	137.00	Low Profile Platform	1	4.207	4.628	1.00	1.00	39.50	2797.10	0.000	0.000	182.82	0.00	0.00
30	137.00	Antel BXA-70063-6CF-2	3	4.207	4.628	0.66	0.75	20.41	374.57	0.000	0.000	94.47	0.00	0.00
31	134.50	Pipe Mount	1	4.185	4.604	1.00	1.00	8.45	51.43	0.000	0.000	38.91	0.00	0.00
32	134.50	Bird Technologies CSA	1	4.185	4.604	1.00	1.00	30.05	91.72	0.000	0.000	138.36	0.00	0.00
33	108.00	Powerwave 21903	6	3.931	4.324	0.71	0.80	2.80	74.13	0.000	0.000	12.10	0.00	0.00
34	108.00	Powerwave LGP21401	6	3.931	4.324	0.40	0.80	5.04	204.08	0.000	0.000	21.78	0.00	0.00
35	108.00	Ericsson RRU 11	6	3.931	4.324	0.54	0.80	10.08	690.82	0.000	0.000	43.57	0.00	0.00
36	108.00	Andrew ABT-DFDM-ADBH	3	3.931	4.324	0.80	0.80	0.57	8.34	0.000	0.000	2.45	0.00	0.00
37	108.00	AM-X-CD-17-65-00T-RET	3	3.931	4.324	0.60	0.80	19.30	506.20	0.000	0.000	83.46	0.00	0.00
38	108.00	7770	6	3.931	4.324	0.70	0.80	27.58	1031.06	0.000	0.000	119.24	0.00	0.00
39	108.00	Ericsson RRUS 32 B2	3	3.931	4.324	0.54	0.80	3.55	416.47	0.000	0.000	15.36	0.00	0.00
40	108.00	Raycap DC6-48-60-18-8F	2	3.931	4.324	0.80	0.80	2.15	160.57	0.000	0.000	9.30	0.00	0.00
41	108.00	Low Profile Platform	1	3.931	4.324	1.00	1.00	39.09	2766.61	0.000	0.000	169.03	0.00	0.00
42	108.00	EPBQ-652L8H6-L2	3	3.931	4.324	0.57	0.80	29.53	1289.15	0.000	0.000	127.71	0.00	0.00
43	108.00	Powerwave 7020 RET	12	3.931	4.324	0.80	0.80	8.34	115.65	0.000	0.000	36.05	0.00	0.00
44	108.00	Ericsson B14 4478 RRU	3	3.931	4.324	0.54	0.80	6.17	483.75	0.000	0.000	26.69	0.00	0.00
Totals:								29,610.12				3,066.57		

Total Applied Force Summary

Structure: CT03538-S	Code: EIA/TIA-222-G	5/28/2021
Site Name: South Plymouth	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

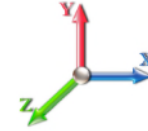


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Load Case: 1.2D + 1.0Di + 1.0Wi 40 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 24

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
5.00		88.90	2267.54	0.00	0.00
10.00		87.53	2260.48	0.00	0.00
15.00		86.06	2240.36	0.00	0.00
20.00		84.55	2214.48	0.00	0.00
25.00		83.01	2185.28	0.00	0.00
30.00		81.52	2153.88	0.00	0.00
35.00		83.55	2120.91	0.00	0.00
38.75		63.39	1568.67	0.00	0.00
40.00		21.42	814.88	0.00	0.00
45.00		87.51	3219.60	0.00	0.00
50.00		88.34	1857.01	0.00	0.00
55.00		88.89	1824.90	0.00	0.00
60.00		89.18	1792.24	0.00	0.00
65.00		89.25	1759.11	0.00	0.00
70.00		89.12	1725.57	0.00	0.00
75.00		88.81	1691.66	0.00	0.00
78.50		61.72	1164.66	0.00	0.00
80.00		26.65	742.76	0.00	0.00
83.75		66.67	1833.35	0.00	0.00
85.00		22.04	369.12	0.00	0.00
90.00		88.27	1454.25	0.00	0.00
95.00		87.40	1423.60	0.00	0.00
100.00		86.42	1392.73	0.00	0.00
105.00		85.33	1361.65	0.00	0.00
108.00	(54) attachments	717.23	8549.97	0.00	0.00
110.00		33.37	494.98	0.00	0.00
115.00		82.84	1212.53	0.00	0.00
119.25		69.26	1006.43	0.00	0.00
120.00		12.23	255.36	0.00	0.00
123.50		56.84	1175.15	0.00	0.00
125.00		24.08	309.29	0.00	0.00
130.00		79.58	1009.53	0.00	0.00
134.50	(2) attachments	247.46	1028.54	0.00	0.00
135.00		7.68	97.09	0.00	0.00
137.00	(23) attachments	680.63	6555.33	0.00	0.00
140.00		45.45	534.13	0.00	0.00
145.00		74.48	865.77	0.00	0.00
148.00	(23) attachments	603.62	6166.38	0.00	159.69
150.00		28.75	326.67	0.00	0.00
153.00	(9) attachments	324.82	1320.67	0.00	66.92
155.00		27.98	312.62	0.00	0.00
160.00	(20) attachments	799.18	9809.42	0.00	0.00
Totals:		5,741.00	82,468.56	0.00	226.61

Calculated Forces

Structure: CT03538-S	Code: EIA/TIA-222-G	5/28/2021
Site Name: South Plymouth	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 20

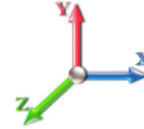


Load Case: 1.2D + 1.0Di + 1.0Wi 40 mph Wind

Iterations 24

Dead Load Factor 1.20

Wind Load Factor 1.00



Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-82.47	-5.76	0.00	-698.76	0.00	698.76	5345.98	2672.99	12322.4	6170.37	0.00	0.000	0.000	0.129
5.00	-80.20	-5.72	0.00	-669.94	0.00	669.94	5278.55	2639.27	11931.9	5974.86	0.02	-0.031	0.000	0.127
10.00	-77.93	-5.67	0.00	-641.35	0.00	641.35	5209.75	2604.88	11544.5	5780.84	0.07	-0.063	0.000	0.126
15.00	-75.69	-5.63	0.00	-612.98	0.00	612.98	5139.58	2569.79	11160.2	5588.39	0.15	-0.096	0.000	0.124
20.00	-73.47	-5.58	0.00	-584.85	0.00	584.85	5068.05	2534.02	10779.2	5397.62	0.27	-0.129	0.000	0.123
25.00	-71.28	-5.53	0.00	-556.95	0.00	556.95	4995.14	2497.57	10401.7	5208.61	0.42	-0.162	0.000	0.121
30.00	-69.13	-5.49	0.00	-529.28	0.00	529.28	4920.87	2460.43	10028.0	5021.46	0.61	-0.196	0.000	0.119
35.00	-67.00	-5.43	0.00	-501.85	0.00	501.85	4845.22	2422.61	9658.13	4836.24	0.83	-0.230	0.000	0.118
38.75	-65.43	-5.38	0.00	-481.49	0.00	481.49	4787.59	2393.79	9383.39	4698.67	1.02	-0.256	0.000	0.116
40.00	-64.62	-5.38	0.00	-474.76	0.00	474.76	4768.21	2384.10	9292.33	4653.07	1.09	-0.265	0.000	0.116
45.00	-61.39	-5.31	0.00	-447.87	0.00	447.87	3881.96	1940.98	7532.86	3772.03	1.39	-0.300	0.000	0.135
50.00	-59.53	-5.25	0.00	-421.30	0.00	421.30	3822.99	1911.49	7248.21	3629.49	1.72	-0.335	0.000	0.132
55.00	-57.71	-5.19	0.00	-395.03	0.00	395.03	3762.64	1881.32	6966.27	3488.31	2.09	-0.374	0.000	0.129
60.00	-55.91	-5.13	0.00	-369.06	0.00	369.06	3700.92	1850.46	6687.23	3348.59	2.51	-0.414	0.000	0.125
65.00	-54.15	-5.07	0.00	-343.41	0.00	343.41	3637.84	1818.92	6411.28	3210.40	2.96	-0.453	0.000	0.122
70.00	-52.42	-5.00	0.00	-318.08	0.00	318.08	3573.38	1786.69	6138.59	3073.86	3.46	-0.493	0.000	0.118
75.00	-50.73	-4.92	0.00	-293.09	0.00	293.09	3507.56	1753.78	5869.35	2939.04	3.99	-0.532	0.000	0.114
78.50	-49.56	-4.87	0.00	-275.86	0.00	275.86	3460.67	1730.33	5683.03	2845.74	4.39	-0.560	0.000	0.111
80.00	-48.82	-4.85	0.00	-268.56	0.00	268.56	3440.37	1720.18	5603.74	2806.03	4.57	-0.572	0.000	0.110
83.75	-46.98	-4.78	0.00	-250.36	0.00	250.36	2706.01	1353.00	4401.17	2203.86	5.03	-0.602	0.000	0.131
85.00	-46.61	-4.78	0.00	-244.39	0.00	244.39	2693.89	1346.95	4351.48	2178.97	5.19	-0.611	0.000	0.129
90.00	-45.16	-4.71	0.00	-220.49	0.00	220.49	2644.58	1322.29	4154.08	2080.13	5.86	-0.655	0.000	0.123
95.00	-43.73	-4.64	0.00	-196.95	0.00	196.95	2593.89	1296.95	3958.97	1982.43	6.57	-0.697	0.000	0.116
100.00	-42.33	-4.56	0.00	-173.78	0.00	173.78	2541.84	1270.92	3766.36	1885.98	7.32	-0.738	0.000	0.109
105.00	-40.97	-4.48	0.00	-150.97	0.00	150.97	2488.42	1244.21	3576.41	1790.86	8.11	-0.777	0.000	0.101
108.00	-32.43	-3.66	0.00	-137.53	0.00	137.53	2455.70	1227.85	3463.79	1734.47	8.61	-0.800	0.000	0.093
110.00	-31.94	-3.63	0.00	-130.22	0.00	130.22	2433.62	1216.81	3389.31	1697.17	8.95	-0.815	0.000	0.090
115.00	-30.72	-3.55	0.00	-112.07	0.00	112.07	2377.46	1188.73	3205.24	1605.00	9.82	-0.851	0.000	0.083
119.25	-29.72	-3.47	0.00	-97.00	0.00	97.00	2328.64	1164.32	3051.30	1527.92	10.59	-0.879	0.000	0.076
120.00	-29.46	-3.46	0.00	-94.40	0.00	94.40	2319.93	1159.96	3024.39	1514.44	10.73	-0.884	0.000	0.075
123.50	-28.29	-3.39	0.00	-82.28	0.00	82.28	1729.39	864.70	2245.31	1124.33	11.39	-0.906	0.000	0.090
125.00	-27.97	-3.37	0.00	-77.19	0.00	77.19	1717.71	858.86	2207.21	1105.25	11.67	-0.915	0.000	0.086
130.00	-26.97	-3.29	0.00	-60.32	0.00	60.32	1677.90	838.95	2081.35	1042.22	12.65	-0.947	0.000	0.074
134.50	-25.94	-3.03	0.00	-45.50	0.00	45.50	1640.90	820.45	1969.70	986.31	13.55	-0.971	0.000	0.062
135.00	-25.84	-3.03	0.00	-43.99	0.00	43.99	1636.72	818.36	1957.39	980.15	13.65	-0.974	0.000	0.061
137.00	-19.30	-2.24	0.00	-37.93	0.00	37.93	1619.86	809.93	1908.38	955.61	14.07	-0.983	0.000	0.052
140.00	-18.77	-2.19	0.00	-31.22	0.00	31.22	1594.17	797.08	1835.53	919.13	14.69	-0.996	0.000	0.046
145.00	-17.90	-2.10	0.00	-20.28	0.00	20.28	1550.24	775.12	1715.94	859.24	15.74	-1.012	0.000	0.035
148.00	-11.75	-1.39	0.00	-13.81	0.00	13.81	1523.23	761.62	1645.35	823.90	16.38	-1.020	0.000	0.024
150.00	-11.42	-1.36	0.00	-11.03	0.00	11.03	1504.95	752.48	1598.80	800.59	16.81	-1.024	0.000	0.021
153.00	-10.11	-1.01	0.00	-6.90	0.00	6.90	1477.12	738.56	1529.77	766.02	17.45	-1.028	0.000	0.016
155.00	-9.79	-0.98	0.00	-4.88	0.00	4.88	1458.29	729.15	1484.30	743.26	17.88	-1.030	0.000	0.013
160.00	0.00	-0.80	0.00	0.00	0.00	0.00	1400.09	700.04	1362.73	682.38	18.96	-1.032	0.000	0.000

Seismic Segment Forces (Factored)

Structure: CT03538-S	Code: EIA/TIA-222-G	5/28/2021	
Site Name: South Plymouth	Exposure: B		
Height: 160.00 (ft)	Crest Height: 0.00		
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil		
Gh: 1.1	Topography: 1	Struct Class: II	Page: 21



Load Case: 1.2D + 1.0E

Iterations 22

Gust Response Factor 1.10

Sds 0.20

Ss 0.19

Dead Load Factor 1.20 **Seismic Load Factor** 1.00

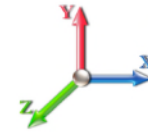
Sd1 0.10

S1 0.07

Wind Load Factor 0.00 **Structure Frequency (f1)** 0.32

SA 0.03

Seismic Importance Factor 1.00



Top Elev (ft)	Description	Wz (lb)	a	b	c	Lateral Fs (lb)	R: 1.50
0.00		0.00	0.00	0.00	0.00	0.00	
5.00		1312.4	0.00	0.03	0.02	25.48	
10.00		1287.0	0.01	0.05	0.03	36.25	
15.00		1261.6	0.02	0.06	0.04	41.10	
20.00		1236.2	0.03	0.07	0.04	43.13	
25.00		1210.8	0.05	0.07	0.04	43.85	
30.00		1185.4	0.07	0.07	0.04	44.04	
35.00		1160.0	0.09	0.07	0.04	44.09	
38.75	Bot - Section 2	853.39	0.11	0.07	0.04	32.98	
40.00		526.51	0.12	0.07	0.03	20.46	
45.00	Top - Section 1	2076.5	0.15	0.07	0.03	82.33	
50.00		945.50	0.18	0.06	0.03	37.91	
55.00		923.72	0.22	0.06	0.02	36.74	
60.00		901.95	0.27	0.05	0.02	34.35	
65.00		880.18	0.31	0.04	0.01	30.20	
70.00		858.41	0.36	0.03	0.01	23.76	
75.00		836.64	0.42	0.01	0.01	14.86	
78.50	Bot - Section 3	572.69	0.45	0.00	0.01	5.15	
80.00		447.46	0.47	-0.01	0.01	2.19	
83.75	Top - Section 2	1102.9	0.52	-0.02	0.01	-6.48	
85.00		166.43	0.53	-0.03	0.01	-1.58	
90.00		654.37	0.60	-0.05	0.01	-15.09	
95.00		636.22	0.67	-0.08	0.02	-21.43	
100.00		618.08	0.74	-0.10	0.04	-24.74	
105.00		599.94	0.81	-0.11	0.06	-24.93	
108.00	Appurtenance(s)	3425.6	0.86	-0.12	0.07	-137.58	
110.00		230.54	0.89	-0.12	0.08	-8.82	
115.00		563.65	0.98	-0.12	0.12	-17.09	
119.25	Bot - Section 4	464.84	1.05	-0.09	0.16	-9.27	
120.00		146.34	1.06	-0.09	0.17	-2.60	
123.50	Top - Section 3	673.22	1.13	-0.05	0.20	-4.26	
125.00		127.32	1.15	-0.03	0.22	-0.09	
130.00		414.97	1.25	0.05	0.29	8.63	
134.50	Appurtenance(s)	415.66	1.34	0.17	0.37	18.32	
135.00		39.39	1.35	0.19	0.38	1.85	
137.00	Appurtenance(s)	3477.5	1.39	0.26	0.42	203.84	
140.00		229.82	1.45	0.38	0.48	17.84	
145.00		371.43	1.55	0.64	0.61	41.99	
148.00	Appurtenance(s)	2529.8	1.62	0.83	0.69	345.63	
150.00		141.02	1.66	0.98	0.76	21.62	
153.00	Appurtenance(s)	560.98	1.73	1.23	0.86	100.88	
155.00		135.22	1.77	1.42	0.93	26.84	
160.00	Appurtenance(s)	3959.5	1.89	1.98	1.14	984.95	
Totals:		40,162.1				2,097.3	
						Total Wind:	29,284.3

Seismic Base Shear is Less Than 50% of Wind Force - An Analysis is NOT Required

Calculated Forces

Structure: CT03538-S	Code: EIA/TIA-222-G	5/28/2021
Site Name: South Plymouth	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 22



Load Case: 1.2D + 1.0E

Iterations 22

Gust Response Factor 1.10

Sds 0.20

Ss 0.19

Dead Load Factor 1.20

Seismic Load Factor 1.00

Sd1 0.10

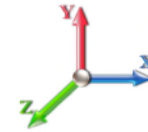
S1 0.07

Wind Load Factor 0.00

Structure Frequency (f1) 0.32

SA 0.03

Seismic Importance Factor 1.00



Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-55.01	-2.38	0.00	-310.85	0.00	310.85	5345.98	2672.99	12322.4	6170.37		0.00	0.00	0.061
5.00	-53.19	-2.36	0.00	-298.96	0.00	298.96	5278.55	2639.27	11931.9	5974.86		0.01	-0.01	0.060
10.00	-51.39	-2.34	0.00	-287.14	0.00	287.14	5209.75	2604.88	11544.5	5780.84		0.03	-0.03	0.060
15.00	-49.62	-2.31	0.00	-275.44	0.00	275.44	5139.58	2569.79	11160.2	5588.39		0.07	-0.04	0.059
20.00	-47.89	-2.28	0.00	-263.89	0.00	263.89	5068.05	2534.02	10779.2	5397.62		0.12	-0.06	0.058
25.00	-46.18	-2.24	0.00	-252.50	0.00	252.50	4995.14	2497.57	10401.7	5208.61		0.19	-0.07	0.058
30.00	-44.51	-2.21	0.00	-241.28	0.00	241.28	4920.87	2460.43	10028.0	5021.46		0.27	-0.09	0.057
35.00	-42.87	-2.17	0.00	-230.22	0.00	230.22	4845.22	2422.61	9658.13	4836.24		0.37	-0.10	0.056
38.75	-41.65	-2.14	0.00	-222.07	0.00	222.07	4787.59	2393.79	9383.39	4698.67		0.46	-0.12	0.056
40.00	-40.96	-2.13	0.00	-219.39	0.00	219.39	4768.21	2384.10	9292.33	4653.07		0.49	-0.12	0.056
45.00	-38.21	-2.05	0.00	-208.74	0.00	208.74	3881.96	1940.98	7532.86	3772.03		0.62	-0.14	0.065
50.00	-36.83	-2.02	0.00	-198.48	0.00	198.48	3822.99	1911.49	7248.21	3629.49		0.78	-0.15	0.064
55.00	-35.47	-1.99	0.00	-188.37	0.00	188.37	3762.64	1881.32	6966.27	3488.31		0.95	-0.17	0.063
60.00	-34.13	-1.97	0.00	-178.40	0.00	178.40	3700.92	1850.46	6687.23	3348.59		1.13	-0.19	0.063
65.00	-32.82	-1.94	0.00	-168.57	0.00	168.57	3637.84	1818.92	6411.28	3210.40		1.34	-0.21	0.062
70.00	-31.54	-1.92	0.00	-158.86	0.00	158.86	3573.38	1786.69	6138.59	3073.86		1.57	-0.23	0.061
75.00	-30.29	-1.91	0.00	-149.24	0.00	149.24	3507.56	1753.78	5869.35	2939.04		1.82	-0.25	0.059
78.50	-29.42	-1.91	0.00	-142.54	0.00	142.54	3460.67	1730.33	5683.03	2845.74		2.01	-0.26	0.059
80.00	-28.81	-1.91	0.00	-139.67	0.00	139.67	3440.37	1720.18	5603.74	2806.03		2.10	-0.27	0.058
83.75	-27.30	-1.91	0.00	-132.51	0.00	132.51	2706.01	1353.00	4401.17	2203.86		2.31	-0.28	0.070
85.00	-27.03	-1.91	0.00	-130.13	0.00	130.13	2693.89	1346.95	4351.48	2178.97		2.39	-0.29	0.070
90.00	-26.00	-1.92	0.00	-120.56	0.00	120.56	2644.58	1322.29	4154.08	2080.13		2.70	-0.31	0.068
95.00	-24.98	-1.92	0.00	-110.96	0.00	110.96	2593.89	1296.95	3958.97	1982.43		3.05	-0.34	0.066
100.00	-23.99	-1.93	0.00	-101.35	0.00	101.35	2541.84	1270.92	3766.36	1885.98		3.41	-0.36	0.063
105.00	-23.02	-1.93	0.00	-91.71	0.00	91.71	2488.42	1244.21	3576.41	1790.86		3.80	-0.38	0.060
108.00	-18.75	-1.90	0.00	-85.93	0.00	85.93	2455.70	1227.85	3463.79	1734.47		4.05	-0.40	0.057
110.00	-18.41	-1.91	0.00	-82.12	0.00	82.12	2433.62	1216.81	3389.31	1697.17		4.22	-0.41	0.056
115.00	-17.57	-1.91	0.00	-72.59	0.00	72.59	2377.46	1188.73	3205.24	1605.00		4.65	-0.43	0.053
119.25	-16.87	-1.90	0.00	-64.49	0.00	64.49	2328.64	1164.32	3051.30	1527.92		5.04	-0.45	0.049
120.00	-16.67	-1.91	0.00	-63.06	0.00	63.06	2319.93	1159.96	3024.39	1514.44		5.12	-0.45	0.049
123.50	-15.75	-1.90	0.00	-56.40	0.00	56.40	1729.39	864.70	2245.31	1124.33		5.45	-0.47	0.059
125.00	-15.54	-1.90	0.00	-53.55	0.00	53.55	1717.71	858.86	2207.21	1105.25		5.60	-0.47	0.057
130.00	-14.88	-1.89	0.00	-44.03	0.00	44.03	1677.90	838.95	2081.35	1042.22		6.11	-0.50	0.051
134.50	-14.23	-1.87	0.00	-35.51	0.00	35.51	1640.90	820.45	1969.70	986.31		6.58	-0.51	0.045
135.00	-14.17	-1.87	0.00	-34.57	0.00	34.57	1636.72	818.36	1957.39	980.15		6.64	-0.52	0.044
137.00	-9.93	-1.63	0.00	-30.83	0.00	30.83	1619.86	809.93	1908.38	955.61		6.85	-0.52	0.038
140.00	-9.59	-1.61	0.00	-25.93	0.00	25.93	1594.17	797.08	1835.53	919.13		7.19	-0.53	0.034
145.00	-9.04	-1.57	0.00	-17.87	0.00	17.87	1550.24	775.12	1715.94	859.24		7.75	-0.55	0.027
148.00	-5.95	-1.19	0.00	-13.17	0.00	13.17	1523.23	761.62	1645.35	823.90		8.10	-0.55	0.020
150.00	-5.74	-1.17	0.00	-10.79	0.00	10.79	1504.95	752.48	1598.80	800.59		8.33	-0.56	0.017
153.00	-5.02	-1.06	0.00	-7.28	0.00	7.28	1477.12	738.56	1529.77	766.02		8.69	-0.56	0.013
155.00	-4.82	-1.03	0.00	-5.16	0.00	5.16	1458.29	729.15	1484.30	743.26		8.92	-0.56	0.010
160.00	0.00	-0.98	0.00	0.00	0.00	0.00	1400.09	700.04	1362.73	682.38		9.51	-0.57	0.000

Seismic Segment Forces (Factored)

Structure: CT03538-S	Code: EIA/TIA-222-G	5/28/2021
Site Name: South Plymouth	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 0.9D + 1.0E

Iterations 22

Gust Response Factor 1.10

Sds 0.20

Ss 0.19

Dead Load Factor 0.90 **Seismic Load Factor** 1.00

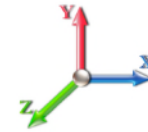
Sd1 0.10

S1 0.07

Wind Load Factor 0.00 **Structure Frequency (f1)** 0.32

SA 0.03

Seismic Importance Factor 1.00



Top Elev (ft)	Description	Wz (lb)	a	b	c	Lateral Fs (lb)	R: 1.50
0.00		0.00	0.00	0.00	0.00	0.00	
5.00		1312.4	0.00	0.03	0.02	25.48	
10.00		1287.0	0.01	0.05	0.03	36.25	
15.00		1261.6	0.02	0.06	0.04	41.10	
20.00		1236.2	0.03	0.07	0.04	43.13	
25.00		1210.8	0.05	0.07	0.04	43.85	
30.00		1185.4	0.07	0.07	0.04	44.04	
35.00		1160.0	0.09	0.07	0.04	44.09	
38.75	Bot - Section 2	853.39	0.11	0.07	0.04	32.98	
40.00		526.51	0.12	0.07	0.03	20.46	
45.00	Top - Section 1	2076.5	0.15	0.07	0.03	82.33	
50.00		945.50	0.18	0.06	0.03	37.91	
55.00		923.72	0.22	0.06	0.02	36.74	
60.00		901.95	0.27	0.05	0.02	34.35	
65.00		880.18	0.31	0.04	0.01	30.20	
70.00		858.41	0.36	0.03	0.01	23.76	
75.00		836.64	0.42	0.01	0.01	14.86	
78.50	Bot - Section 3	572.69	0.45	0.00	0.01	5.15	
80.00		447.46	0.47	-0.01	0.01	2.19	
83.75	Top - Section 2	1102.9	0.52	-0.02	0.01	-6.48	
85.00		166.43	0.53	-0.03	0.01	-1.58	
90.00		654.37	0.60	-0.05	0.01	-15.09	
95.00		636.22	0.67	-0.08	0.02	-21.43	
100.00		618.08	0.74	-0.10	0.04	-24.74	
105.00		599.94	0.81	-0.11	0.06	-24.93	
108.00	Appurtenance(s)	3425.6	0.86	-0.12	0.07	-137.58	
110.00		230.54	0.89	-0.12	0.08	-8.82	
115.00		563.65	0.98	-0.12	0.12	-17.09	
119.25	Bot - Section 4	464.84	1.05	-0.09	0.16	-9.27	
120.00		146.34	1.06	-0.09	0.17	-2.60	
123.50	Top - Section 3	673.22	1.13	-0.05	0.20	-4.26	
125.00		127.32	1.15	-0.03	0.22	-0.09	
130.00		414.97	1.25	0.05	0.29	8.63	
134.50	Appurtenance(s)	415.66	1.34	0.17	0.37	18.32	
135.00		39.39	1.35	0.19	0.38	1.85	
137.00	Appurtenance(s)	3477.5	1.39	0.26	0.42	203.84	
140.00		229.82	1.45	0.38	0.48	17.84	
145.00		371.43	1.55	0.64	0.61	41.99	
148.00	Appurtenance(s)	2529.8	1.62	0.83	0.69	345.63	
150.00		141.02	1.66	0.98	0.76	21.62	
153.00	Appurtenance(s)	560.98	1.73	1.23	0.86	100.88	
155.00		135.22	1.77	1.42	0.93	26.84	
160.00	Appurtenance(s)	3959.5	1.89	1.98	1.14	984.95	
Totals:		40,162.1				2,097.3	
						Total Wind:	29,284.3

Seismic Base Shear is Less Than 50% of Wind Force - An Analysis is NOT Required

Calculated Forces

Structure: CT03538-S	Code: EIA/TIA-222-G	5/28/2021
Site Name: South Plymouth	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 24



Load Case: 0.9D + 1.0E

Iterations 22

Gust Response Factor 1.10

Sds 0.20

Ss 0.19

Dead Load Factor 0.90 **Seismic Load Factor** 1.00

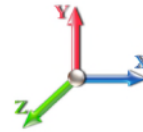
Sd1 0.10

S1 0.07

Wind Load Factor 0.00 **Structure Frequency (f1)** 0.32

SA 0.03

Seismic Importance Factor 1.00



Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-41.26	-2.37	0.00	-306.64	0.00	306.64	5345.98	2672.99	12322.4	6170.37		0.00	0.00	0.057
5.00	-39.89	-2.36	0.00	-294.77	0.00	294.77	5278.55	2639.27	11931.9	5974.86		0.01	-0.01	0.057
10.00	-38.54	-2.33	0.00	-282.97	0.00	282.97	5209.75	2604.88	11544.5	5780.84		0.03	-0.03	0.056
15.00	-37.22	-2.30	0.00	-271.32	0.00	271.32	5139.58	2569.79	11160.2	5588.39		0.07	-0.04	0.056
20.00	-35.92	-2.26	0.00	-259.82	0.00	259.82	5068.05	2534.02	10779.2	5397.62		0.12	-0.06	0.055
25.00	-34.64	-2.23	0.00	-248.50	0.00	248.50	4995.14	2497.57	10401.7	5208.61		0.19	-0.07	0.055
30.00	-33.38	-2.19	0.00	-237.36	0.00	237.36	4920.87	2460.43	10028.0	5021.46		0.27	-0.09	0.054
35.00	-32.15	-2.15	0.00	-226.40	0.00	226.40	4845.22	2422.61	9658.13	4836.24		0.37	-0.10	0.053
38.75	-31.24	-2.12	0.00	-218.33	0.00	218.33	4787.59	2393.79	9383.39	4698.67		0.45	-0.11	0.053
40.00	-30.72	-2.11	0.00	-215.68	0.00	215.68	4768.21	2384.10	9292.33	4653.07		0.48	-0.12	0.053
45.00	-28.66	-2.03	0.00	-205.15	0.00	205.15	3881.96	1940.98	7532.86	3772.03		0.62	-0.13	0.062
50.00	-27.62	-2.00	0.00	-195.01	0.00	195.01	3822.99	1911.49	7248.21	3629.49		0.76	-0.15	0.061
55.00	-26.60	-1.96	0.00	-185.04	0.00	185.04	3762.64	1881.32	6966.27	3488.31		0.93	-0.17	0.060
60.00	-25.60	-1.94	0.00	-175.22	0.00	175.22	3700.92	1850.46	6687.23	3348.59		1.12	-0.19	0.059
65.00	-24.62	-1.91	0.00	-165.54	0.00	165.54	3637.84	1818.92	6411.28	3210.40		1.32	-0.21	0.058
70.00	-23.65	-1.89	0.00	-155.99	0.00	155.99	3573.38	1786.69	6138.59	3073.86		1.55	-0.23	0.057
75.00	-22.71	-1.88	0.00	-146.54	0.00	146.54	3507.56	1753.78	5869.35	2939.04		1.80	-0.24	0.056
78.50	-22.07	-1.87	0.00	-139.97	0.00	139.97	3460.67	1730.33	5683.03	2845.74		1.98	-0.26	0.056
80.00	-21.61	-1.87	0.00	-137.16	0.00	137.16	3440.37	1720.18	5603.74	2806.03		2.06	-0.26	0.055
83.75	-20.47	-1.87	0.00	-130.13	0.00	130.13	2706.01	1353.00	4401.17	2203.86		2.28	-0.28	0.067
85.00	-20.27	-1.88	0.00	-127.79	0.00	127.79	2693.89	1346.95	4351.48	2178.97		2.35	-0.29	0.066
90.00	-19.50	-1.88	0.00	-118.41	0.00	118.41	2644.58	1322.29	4154.08	2080.13		2.66	-0.31	0.064
95.00	-18.73	-1.88	0.00	-109.01	0.00	109.01	2593.89	1296.95	3958.97	1982.43		3.00	-0.33	0.062
100.00	-17.99	-1.89	0.00	-99.59	0.00	99.59	2541.84	1270.92	3766.36	1885.98		3.36	-0.35	0.060
105.00	-17.26	-1.89	0.00	-90.16	0.00	90.16	2488.42	1244.21	3576.41	1790.86		3.74	-0.38	0.057
108.00	-14.06	-1.87	0.00	-84.50	0.00	84.50	2455.70	1227.85	3463.79	1734.47		3.98	-0.39	0.054
110.00	-13.80	-1.87	0.00	-80.76	0.00	80.76	2433.62	1216.81	3389.31	1697.17		4.15	-0.40	0.053
115.00	-13.17	-1.87	0.00	-71.41	0.00	71.41	2377.46	1188.73	3205.24	1605.00		4.58	-0.42	0.050
119.25	-12.65	-1.87	0.00	-63.46	0.00	63.46	2328.64	1164.32	3051.30	1527.92		4.96	-0.44	0.047
120.00	-12.50	-1.87	0.00	-62.06	0.00	62.06	2319.93	1159.96	3024.39	1514.44		5.03	-0.44	0.046
123.50	-11.81	-1.87	0.00	-55.51	0.00	55.51	1729.39	864.70	2245.31	1124.33		5.36	-0.46	0.056
125.00	-11.65	-1.87	0.00	-52.71	0.00	52.71	1717.71	858.86	2207.21	1105.25		5.51	-0.46	0.054
130.00	-11.16	-1.86	0.00	-43.37	0.00	43.37	1677.90	838.95	2081.35	1042.22		6.01	-0.49	0.048
134.50	-10.67	-1.84	0.00	-35.00	0.00	35.00	1640.90	820.45	1969.70	986.31		6.47	-0.51	0.042
135.00	-10.62	-1.84	0.00	-34.08	0.00	34.08	1636.72	818.36	1957.39	980.15		6.53	-0.51	0.041
137.00	-7.45	-1.61	0.00	-30.40	0.00	30.40	1619.86	809.93	1908.38	955.61		6.74	-0.51	0.036
140.00	-7.19	-1.59	0.00	-25.58	0.00	25.58	1594.17	797.08	1835.53	919.13		7.07	-0.52	0.032
145.00	-6.78	-1.54	0.00	-17.64	0.00	17.64	1550.24	775.12	1715.94	859.24		7.63	-0.54	0.025
148.00	-4.46	-1.18	0.00	-13.01	0.00	13.01	1523.23	761.62	1645.35	823.90		7.97	-0.55	0.019
150.00	-4.31	-1.15	0.00	-10.66	0.00	10.66	1504.95	752.48	1598.80	800.59		8.20	-0.55	0.016
153.00	-3.76	-1.05	0.00	-7.20	0.00	7.20	1477.12	738.56	1529.77	766.02		8.54	-0.55	0.012
155.00	-3.62	-1.02	0.00	-5.10	0.00	5.10	1458.29	729.15	1484.30	743.26		8.77	-0.56	0.009
160.00	0.00	-0.98	0.00	0.00	0.00	0.00	1400.09	700.04	1362.73	682.38		9.36	-0.56	0.000

Wind Loading - Shaft

Structure: CT03538-S	Code: EIA/TIA-222-G	5/28/2021
Site Name: South Plymouth	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

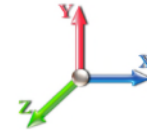


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Load Case: 1.0D + 1.0W 50 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 23

Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.70	4.256	4.68	200.11	0.650	0.000	0.00	0.000	0.00	0.0	0.0	0.0
5.00		1.00	0.70	4.256	4.68	196.30	0.650	0.000	5.00	23.690	15.40	72.1	0.0	1312.5
10.00		1.00	0.70	4.256	4.68	192.50	0.650	0.000	5.00	23.235	15.10	70.7	0.0	1287.1
15.00		1.00	0.70	4.256	4.68	188.69	0.650	0.000	5.00	22.780	14.81	69.3	0.0	1261.7
20.00		1.00	0.70	4.256	4.68	184.88	0.650	0.000	5.00	22.325	14.51	67.9	0.0	1236.3
25.00		1.00	0.70	4.256	4.68	181.08	0.650	0.000	5.00	21.871	14.22	66.6	0.0	1210.9
30.00		1.00	0.70	4.260	4.69	177.35	0.650	0.000	5.00	21.416	13.92	65.2	0.0	1185.5
35.00		1.00	0.73	4.451	4.90	177.40	0.650	0.000	5.00	20.961	13.62	66.7	0.0	1160.1
38.75 Bot - Section 2		1.00	0.75	4.583	5.04	177.04	0.650	0.000	3.75	15.422	10.02	50.5	0.0	853.4
40.00		1.00	0.76	4.625	5.09	176.85	0.650	0.000	1.25	5.163	3.36	17.1	0.0	526.5
45.00 Top - Section 1		1.00	0.79	4.783	5.26	175.82	0.650	0.000	5.00	20.368	13.24	69.7	0.0	2076.6
50.00		1.00	0.81	4.929	5.42	177.25	0.650	0.000	5.00	19.913	12.94	70.2	0.0	945.5
55.00		1.00	0.83	5.065	5.57	175.53	0.650	0.000	5.00	19.458	12.65	70.5	0.0	923.7
60.00		1.00	0.85	5.193	5.71	173.52	0.650	0.000	5.00	19.004	12.35	70.6	0.0	902.0
65.00		1.00	0.87	5.313	5.84	171.26	0.650	0.000	5.00	18.549	12.06	70.5	0.0	880.2
70.00		1.00	0.89	5.426	5.97	168.79	0.650	0.000	5.00	18.094	11.76	70.2	0.0	858.4
75.00		1.00	0.91	5.534	6.09	166.12	0.650	0.000	5.00	17.639	11.47	69.8	0.0	836.6
78.50 Bot - Section 3		1.00	0.92	5.607	6.17	164.15	0.650	0.000	3.50	12.077	7.85	48.4	0.0	572.7
80.00		1.00	0.93	5.637	6.20	163.28	0.650	0.000	1.50	5.187	3.37	20.9	0.0	447.5
83.75 Top - Section 2		1.00	0.94	5.712	6.28	161.04	0.650	0.000	3.75	12.788	8.31	52.2	0.0	1102.9
85.00		1.00	0.94	5.736	6.31	162.85	0.650	0.000	1.25	4.206	2.73	17.2	0.0	166.4
90.00		1.00	0.96	5.830	6.41	159.73	0.650	0.000	5.00	16.539	10.75	68.9	0.0	654.4
95.00		1.00	0.97	5.921	6.51	156.48	0.650	0.000	5.00	16.084	10.45	68.1	0.0	636.2
100.00		1.00	0.99	6.008	6.61	153.11	0.650	0.000	5.00	15.629	10.16	67.1	0.0	618.1
105.00		1.00	1.00	6.093	6.70	149.62	0.650	0.000	5.00	15.174	9.86	66.1	0.0	599.9
108.00 Appurtenance(s)		1.00	1.01	6.142	6.76	147.48	0.650	0.000	3.00	8.886	5.78	39.0	0.0	351.3
110.00		1.00	1.02	6.174	6.79	146.04	0.650	0.000	2.00	5.833	3.79	25.8	0.0	230.5
115.00		1.00	1.03	6.253	6.88	142.35	0.650	0.000	5.00	14.264	9.27	63.8	0.0	563.7
119.25 Bot - Section 4		1.00	1.04	6.318	6.95	139.15	0.650	0.000	4.25	11.767	7.65	53.2	0.0	464.8
120.00		1.00	1.04	6.330	6.96	138.58	0.650	0.000	0.75	2.074	1.35	9.4	0.0	146.3
123.50 Top - Section 3		1.00	1.05	6.382	7.02	135.89	0.650	0.000	3.50	9.544	6.20	43.5	0.0	673.2
125.00		1.00	1.05	6.404	7.04	136.89	0.650	0.000	1.50	4.022	2.61	18.4	0.0	127.3
130.00		1.00	1.07	6.476	7.12	132.97	0.650	0.000	5.00	13.111	8.52	60.7	0.0	415.0
134.50 Appurtenance(s)		1.00	1.08	6.539	7.19	129.37	0.650	0.000	4.50	11.411	7.42	53.4	0.0	361.1
135.00		1.00	1.08	6.546	7.20	128.97	0.650	0.000	0.50	1.245	0.81	5.8	0.0	39.4
137.00 Appurtenance(s)		1.00	1.08	6.574	7.23	127.35	0.650	0.000	2.00	4.935	3.21	23.2	0.0	156.1
140.00		1.00	1.09	6.615	7.28	124.89	0.650	0.000	3.00	7.266	4.72	34.4	0.0	229.8
145.00		1.00	1.10	6.681	7.35	120.75	0.650	0.000	5.00	11.746	7.64	56.1	0.0	371.4
148.00 Appurtenance(s)		1.00	1.11	6.721	7.39	118.24	0.650	0.000	3.00	6.829	4.44	32.8	0.0	215.9
150.00		1.00	1.11	6.746	7.42	116.55	0.650	0.000	2.00	4.462	2.90	21.5	0.0	141.0
153.00 Appurtenance(s)		1.00	1.12	6.785	7.46	113.99	0.650	0.000	3.00	6.557	4.26	31.8	0.0	207.2
155.00		1.00	1.12	6.810	7.49	112.28	0.650	0.000	2.00	4.280	2.78	20.8	0.0	135.2
160.00 Appurtenance(s)		1.00	1.13	6.872	7.56	107.95	0.650	0.000	5.00	10.382	6.75	51.0	0.0	327.9
Totals:									160.00			2,091.2		27,412.2

Discrete Appurtenance Forces

Structure: CT03538-S	Code: EIA/TIA-222-G	5/28/2021
Site Name: South Plymouth	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
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Load Case: 1.0D + 1.0W 50 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00

Iterations 23



No.	Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	CaAa x Ka	Ka	Total CaAa (sf)	Dead Load (lb)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)
1	160.00	APXVAARR24_43-U-NA2	3	6.872	7.559	0.63	0.90	38.25	384.00	0.000	0.000	289.17	0.00	0.00
2	160.00	Low Profile Platform	1	6.872	7.559	1.00	1.00	22.00	1600.00	0.000	0.000	166.30	0.00	0.00
3	160.00	Air 21 B2A/B4P	3	6.872	7.559	0.77	0.90	14.14	274.50	0.000	0.000	106.89	0.00	0.00
4	160.00	Air 32	3	6.872	7.559	0.78	0.90	15.29	396.60	0.000	0.000	115.59	0.00	0.00
5	160.00	MS-HRECP-35	1	6.872	7.559	1.00	1.00	12.25	514.00	0.000	0.000	92.60	0.00	0.00
6	160.00	Ericsson KRY 112 144/1	3	6.872	7.559	0.63	0.90	0.77	33.00	0.000	0.000	5.86	0.00	0.00
7	160.00	Ericsson Radio 4449	3	6.872	7.559	0.60	0.90	2.98	210.00	0.000	0.000	22.56	0.00	0.00
8	160.00	4449 B71 + B85	3	6.872	7.559	0.60	0.90	3.56	219.60	0.000	0.000	26.94	0.00	0.00
9	153.00	Lone Star Electronics	1	6.829	7.512	1.00	1.00	2.10	20.00	0.000	3.500	15.77	0.00	55.21
10	153.00	VHLP-2.6-11	1	6.785	7.463	1.00	1.00	8.43	47.60	0.000	0.000	62.91	0.00	0.00
11	153.00	Hutton HPD 3.4-4.7	1	6.785	7.463	1.00	1.00	8.92	105.00	0.000	0.000	66.57	0.00	0.00
12	153.00	Motorola ODU-A-RF	3	6.785	7.463	1.00	1.00	4.32	31.20	0.000	0.000	32.24	0.00	0.00
13	153.00	Pipe Mounts	2	6.785	7.463	1.00	1.00	10.00	100.00	0.000	0.000	74.63	0.00	0.00
14	153.00	4 ft Sidearm	1	6.785	7.463	1.00	1.00	3.50	50.00	0.000	0.000	26.12	0.00	0.00
15	148.00	Low Profile Platform	1	6.721	7.393	1.00	1.00	25.00	1200.00	0.000	0.000	184.82	0.00	0.00
16	148.00	RFS ACU-A20-N	4	6.721	7.393	0.63	0.80	0.35	4.00	0.000	0.000	2.62	0.00	0.00
17	148.00	ALU 800 MHz Filter	3	6.721	7.393	0.79	0.80	1.00	30.00	0.000	0.000	7.38	0.00	0.00
18	148.00	ALU TD-RRH8x20-25	3	6.721	7.393	0.55	0.80	6.71	210.00	0.000	0.000	49.58	0.00	0.00
19	148.00	ALU 800 MHz RRH	3	6.721	7.393	0.54	0.80	4.00	159.00	0.000	0.000	29.60	0.00	0.00
20	148.00	ALU 1900MHz RRH	3	6.721	7.393	0.54	0.80	6.11	132.00	0.000	0.000	45.17	0.00	0.00
21	148.00	RFS APXVSP18-C-A20	3	6.721	7.393	0.74	0.80	17.90	291.00	0.000	0.000	132.33	0.00	0.00
22	148.00	RFS APXVTM14-C-120	3	6.746	7.421	0.71	0.80	13.54	288.00	0.000	2.000	100.50	0.00	201.00
23	137.00	Samsung B5/B13	3	6.574	7.231	0.58	0.75	3.26	210.90	0.000	0.000	23.55	0.00	0.00
24	137.00	Platform Handrail	1	6.574	7.231	1.00	1.00	9.70	358.00	0.000	0.000	70.14	0.00	0.00
25	137.00	RFS DB-T1-6Z-8AB-OZ	3	6.574	7.231	0.53	0.75	7.67	132.00	0.000	0.000	55.45	0.00	0.00
26	137.00	Samsung B2/B66A	3	6.574	7.231	0.62	0.75	3.51	253.20	0.000	0.000	25.39	0.00	0.00
27	137.00	Quintel QS6656-5D	6	6.574	7.231	0.69	0.75	33.66	555.00	0.000	0.000	243.39	0.00	0.00
28	137.00	Samsung VZS01	3	6.574	7.231	0.52	0.75	7.40	261.30	0.000	0.000	53.53	0.00	0.00
29	137.00	Low Profile Platform	1	6.574	7.231	1.00	1.00	22.00	1500.00	0.000	0.000	159.09	0.00	0.00
30	137.00	Antel BXA-70063-6CF-2	3	6.574	7.231	0.62	0.75	14.14	51.00	0.000	0.000	102.23	0.00	0.00
31	134.50	Pipe Mount	1	6.539	7.193	1.00	1.00	5.00	50.00	0.000	0.000	35.97	0.00	0.00
32	134.50	Bird Technologies CSA	1	6.539	7.193	1.00	1.00	3.81	4.60	0.000	0.000	27.41	0.00	0.00
33	108.00	Powerwave 21903	6	6.142	6.756	0.67	0.80	1.09	33.00	0.000	0.000	7.36	0.00	0.00
34	108.00	Powerwave LGP21401	6	6.142	6.756	0.40	0.80	3.10	84.60	0.000	0.000	20.92	0.00	0.00
35	108.00	Ericsson RRU 11	6	6.142	6.756	0.54	0.80	8.10	306.00	0.000	0.000	54.75	0.00	0.00
36	108.00	Andrew ABT-DFDM-ADBH	3	6.142	6.756	0.78	0.80	0.12	3.30	0.000	0.000	0.79	0.00	0.00
37	108.00	AM-X-CD-17-65-00T-RET	3	6.142	6.756	0.60	0.80	14.44	145.50	0.000	0.000	97.53	0.00	0.00
38	108.00	7770	6	6.142	6.756	0.66	0.80	21.91	210.00	0.000	0.000	148.04	0.00	0.00
39	108.00	Ericsson RRUS 32 B2	3	6.142	6.756	0.54	0.80	2.65	231.00	0.000	0.000	17.93	0.00	0.00
40	108.00	Raycap DC6-48-60-18-8F	2	6.142	6.756	0.80	0.80	1.47	63.60	0.000	0.000	9.95	0.00	0.00
41	108.00	Low Profile Platform	1	6.142	6.756	1.00	1.00	22.00	1500.00	0.000	0.000	148.64	0.00	0.00
42	108.00	EPBQ-652L8H6-L2	3	6.142	6.756	0.57	0.80	26.77	297.00	0.000	0.000	180.86	0.00	0.00
43	108.00	Powerwave 7020 RET	12	6.142	6.756	0.80	0.80	3.84	26.40	0.000	0.000	25.94	0.00	0.00
44	108.00	Ericsson B14 4478 RRU	3	6.142	6.756	0.54	0.80	5.07	174.00	0.000	0.000	34.22	0.00	0.00
Totals:									12,749.90			3,199.25		

Total Applied Force Summary

Structure: CT03538-S	Code: EIA/TIA-222-G	5/28/2021	
Site Name: South Plymouth	Exposure: B		
Height: 160.00 (ft)	Crest Height: 0.00		
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil		
Gh: 1.1	Topography: 1	Struct Class: II	Page: 27



Load Case: 1.0D + 1.0W 50 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00

Iterations 23



Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
5.00		72.09	1521.99	0.00	0.00
10.00		70.71	1496.59	0.00	0.00
15.00		69.32	1471.19	0.00	0.00
20.00		67.94	1445.79	0.00	0.00
25.00		66.55	1420.39	0.00	0.00
30.00		65.22	1394.99	0.00	0.00
35.00		66.71	1369.58	0.00	0.00
38.75		50.53	1010.52	0.00	0.00
40.00		17.07	578.88	0.00	0.00
45.00		69.65	2286.05	0.00	0.00
50.00		70.18	1155.00	0.00	0.00
55.00		70.47	1133.22	0.00	0.00
60.00		70.55	1111.45	0.00	0.00
65.00		70.46	1089.68	0.00	0.00
70.00		70.20	1067.91	0.00	0.00
75.00		69.80	1046.14	0.00	0.00
78.50		48.41	719.34	0.00	0.00
80.00		20.91	510.31	0.00	0.00
83.75		52.22	1260.07	0.00	0.00
85.00		17.25	218.80	0.00	0.00
90.00		68.94	863.87	0.00	0.00
95.00		68.09	845.72	0.00	0.00
100.00		67.14	827.58	0.00	0.00
105.00		66.10	809.44	0.00	0.00
108.00	(54) attachments	785.96	3551.35	0.00	0.00
110.00		25.75	285.54	0.00	0.00
115.00		63.78	701.15	0.00	0.00
119.25		53.16	581.71	0.00	0.00
120.00		9.39	166.97	0.00	0.00
123.50		43.55	769.47	0.00	0.00
125.00		18.42	168.57	0.00	0.00
130.00		60.71	552.47	0.00	0.00
134.50	(2) attachments	116.73	539.41	0.00	0.00
135.00		5.83	52.88	0.00	0.00
137.00	(23) attachments	755.97	3531.48	0.00	0.00
140.00		34.37	282.14	0.00	0.00
145.00		56.11	458.63	0.00	0.00
148.00	(23) attachments	584.81	2582.21	0.00	201.00
150.00		21.52	170.62	0.00	0.00
153.00	(9) attachments	310.06	605.38	0.00	55.21
155.00		20.84	162.50	0.00	0.00
160.00	(20) attachments	876.93	4027.78	0.00	0.00
Totals:		5,290.41	45,844.78	0.00	256.21

Calculated Forces

Structure: CT03538-S	Code: EIA/TIA-222-G	5/28/2021
Site Name: South Plymouth	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 28

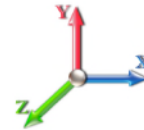


Load Case: 1.0D + 1.0W 50 mph Wind

Iterations 23

Dead Load Factor 1.00

Wind Load Factor 1.00



Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-45.84	-5.30	0.00	-636.33	0.00	636.33	5345.98	2672.99	12322.4	6170.37	0.00	0.000	0.000	0.112
5.00	-44.32	-5.25	0.00	-609.83	0.00	609.83	5278.55	2639.27	11931.9	5974.86	0.02	-0.029	0.000	0.110
10.00	-42.82	-5.20	0.00	-583.57	0.00	583.57	5209.75	2604.88	11544.5	5780.84	0.06	-0.058	0.000	0.109
15.00	-41.35	-5.15	0.00	-557.57	0.00	557.57	5139.58	2569.79	11160.2	5588.39	0.14	-0.087	0.000	0.108
20.00	-39.90	-5.10	0.00	-531.81	0.00	531.81	5068.05	2534.02	10779.2	5397.62	0.24	-0.117	0.000	0.106
25.00	-38.47	-5.05	0.00	-506.30	0.00	506.30	4995.14	2497.57	10401.7	5208.61	0.38	-0.147	0.000	0.105
30.00	-37.08	-5.00	0.00	-481.04	0.00	481.04	4920.87	2460.43	10028.0	5021.46	0.55	-0.178	0.000	0.103
35.00	-35.71	-4.95	0.00	-456.02	0.00	456.02	4845.22	2422.61	9658.13	4836.24	0.76	-0.209	0.000	0.102
38.75	-34.69	-4.90	0.00	-437.47	0.00	437.47	4787.59	2393.79	9383.39	4698.67	0.93	-0.233	0.000	0.100
40.00	-34.11	-4.90	0.00	-431.34	0.00	431.34	4768.21	2384.10	9292.33	4653.07	0.99	-0.241	0.000	0.100
45.00	-31.82	-4.83	0.00	-406.85	0.00	406.85	3881.96	1940.98	7532.86	3772.03	1.26	-0.273	0.000	0.116
50.00	-30.67	-4.78	0.00	-382.68	0.00	382.68	3822.99	1911.49	7248.21	3629.49	1.57	-0.305	0.000	0.113
55.00	-29.53	-4.72	0.00	-358.80	0.00	358.80	3762.64	1881.32	6966.27	3488.31	1.90	-0.340	0.000	0.111
60.00	-28.42	-4.66	0.00	-335.21	0.00	335.21	3700.92	1850.46	6687.23	3348.59	2.28	-0.376	0.000	0.108
65.00	-27.33	-4.60	0.00	-311.92	0.00	311.92	3637.84	1818.92	6411.28	3210.40	2.69	-0.412	0.000	0.105
70.00	-26.26	-4.54	0.00	-288.93	0.00	288.93	3573.38	1786.69	6138.59	3073.86	3.14	-0.448	0.000	0.101
75.00	-25.21	-4.47	0.00	-266.25	0.00	266.25	3507.56	1753.78	5869.35	2939.04	3.63	-0.484	0.000	0.098
78.50	-24.49	-4.42	0.00	-250.60	0.00	250.60	3460.67	1730.33	5683.03	2845.74	4.00	-0.509	0.000	0.095
80.00	-23.98	-4.41	0.00	-243.97	0.00	243.97	3440.37	1720.18	5603.74	2806.03	4.16	-0.520	0.000	0.094
83.75	-22.71	-4.35	0.00	-227.44	0.00	227.44	2706.01	1353.00	4401.17	2203.86	4.58	-0.547	0.000	0.112
85.00	-22.49	-4.34	0.00	-222.01	0.00	222.01	2693.89	1346.95	4351.48	2178.97	4.72	-0.556	0.000	0.110
90.00	-21.63	-4.28	0.00	-200.31	0.00	200.31	2644.58	1322.29	4154.08	2080.13	5.32	-0.595	0.000	0.104
95.00	-20.78	-4.21	0.00	-178.92	0.00	178.92	2593.89	1296.95	3958.97	1982.43	5.97	-0.634	0.000	0.098
100.00	-19.95	-4.15	0.00	-157.86	0.00	157.86	2541.84	1270.92	3766.36	1885.98	6.65	-0.671	0.000	0.092
105.00	-19.14	-4.08	0.00	-137.11	0.00	137.11	2488.42	1244.21	3576.41	1790.86	7.38	-0.707	0.000	0.084
108.00	-15.60	-3.26	0.00	-124.86	0.00	124.86	2455.70	1227.85	3463.79	1734.47	7.83	-0.727	0.000	0.078
110.00	-15.31	-3.23	0.00	-118.34	0.00	118.34	2433.62	1216.81	3389.31	1697.17	8.13	-0.741	0.000	0.076
115.00	-14.61	-3.17	0.00	-102.17	0.00	102.17	2377.46	1188.73	3205.24	1605.00	8.93	-0.773	0.000	0.070
119.25	-14.03	-3.11	0.00	-88.71	0.00	88.71	2328.64	1164.32	3051.30	1527.92	9.63	-0.799	0.000	0.064
120.00	-13.86	-3.10	0.00	-86.37	0.00	86.37	2319.93	1159.96	3024.39	1514.44	9.75	-0.803	0.000	0.063
123.50	-13.09	-3.05	0.00	-75.51	0.00	75.51	1729.39	864.70	2245.31	1124.33	10.35	-0.823	0.000	0.075
125.00	-12.92	-3.03	0.00	-70.94	0.00	70.94	1717.71	858.86	2207.21	1105.25	10.61	-0.832	0.000	0.072
130.00	-12.37	-2.97	0.00	-55.76	0.00	55.76	1677.90	838.95	2081.35	1042.22	11.50	-0.861	0.000	0.061
134.50	-11.83	-2.85	0.00	-42.39	0.00	42.39	1640.90	820.45	1969.70	986.31	12.32	-0.884	0.000	0.050
135.00	-11.78	-2.84	0.00	-40.97	0.00	40.97	1636.72	818.36	1957.39	980.15	12.41	-0.886	0.000	0.049
137.00	-8.26	-2.03	0.00	-35.28	0.00	35.28	1619.86	809.93	1908.38	955.61	12.79	-0.895	0.000	0.042
140.00	-7.98	-2.00	0.00	-29.18	0.00	29.18	1594.17	797.08	1835.53	919.13	13.35	-0.907	0.000	0.037
145.00	-7.52	-1.94	0.00	-19.19	0.00	19.19	1550.24	775.12	1715.94	859.24	14.31	-0.922	0.000	0.027
148.00	-4.95	-1.31	0.00	-13.18	0.00	13.18	1523.23	761.62	1645.35	823.90	14.89	-0.929	0.000	0.019
150.00	-4.78	-1.29	0.00	-10.56	0.00	10.56	1504.95	752.48	1598.80	800.59	15.28	-0.933	0.000	0.016
153.00	-4.18	-0.97	0.00	-6.65	0.00	6.65	1477.12	738.56	1529.77	766.02	15.87	-0.937	0.000	0.012
155.00	-4.01	-0.94	0.00	-4.71	0.00	4.71	1458.29	729.15	1484.30	743.26	16.26	-0.939	0.000	0.009
160.00	0.00	-0.88	0.00	0.00	0.00	0.00	1400.09	700.04	1362.73	682.38	17.25	-0.941	0.000	0.000

Final Analysis Summary

Structure: CT03538-S	Code: EIA/TIA-222-G	5/28/2021	
Site Name: South Plymouth	Exposure: B		
Height: 160.00 (ft)	Crest Height: 0.00		
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil		
Gh: 1.1	Topography: 1	Struct Class: II	Page: 29



Reactions

Load Case	Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)
1.2D + 1.6W 9 93 mph Wind	29.4	0.00	54.97	0.00	0.00	3548.15
0.9D + 1.6W 9 93 mph Wind	29.3	0.00	41.22	0.00	0.00	3503.97
1.2D + 1.0Di + 1.0Wi 40 mph Wind	5.8	0.00	82.47	0.00	0.00	698.76
1.2D + 1.0E	2.4	0.00	55.01	0.00	0.00	310.85
0.9D + 1.0E	2.4	0.00	41.26	0.00	0.00	306.64
1.0D + 1.0W 50 mph Wind	5.3	0.00	45.84	0.00	0.00	636.33

Max Stresses

Load Case	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Elev (ft)	Stress Ratio
1.2D + 1.6W 9 93 mph Wind	-37.47	-26.94	0.00	-2273.2	0.00	-2273.2	3881.96	1940.9	7532.86	3772.03	45.00	0.612
0.9D + 1.6W 9 93 mph Wind	-27.93	-26.66	0.00	-2236.0	0.00	-2236.0	3881.96	1940.9	7532.86	3772.03	45.00	0.600
1.2D + 1.0Di + 1.0Wi 40 mph Wind	-61.39	-5.31	0.00	-447.87	0.00	-447.87	3881.96	1940.9	7532.86	3772.03	45.00	0.135
1.2D + 1.0E	-27.30	-1.91	0.00	-132.51	0.00	-132.51	2706.01	1353.0	4401.17	2203.86	83.75	0.070
0.9D + 1.0E	-20.47	-1.87	0.00	-130.13	0.00	-130.13	2706.01	1353.0	4401.17	2203.86	83.75	0.067
1.0D + 1.0W 50 mph Wind	-31.82	-4.83	0.00	-406.85	0.00	-406.85	3881.96	1940.9	7532.86	3772.03	45.00	0.116

Base Plate Summary

Structure: CT03538-S	Code: EIA/TIA-222-G	5/28/2021
Site Name: South Plymouth	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 30



Reactions	Base Plate	Anchor Bolts
Original Design	Yield (ksi): 55.00	Bolt Circle: 64.00
Moment (kip-ft): 4450.00	Width (in): 64.00	Number Bolts: 20.00
Axial (kip): 37.00	Style: Clipped	Bolt Type: 2.25" 18J
Shear (kip): 38.00	Polygon Sides: 0.00	Bolt Diameter (in): 2.25
Analysis	Clip Length (in): 12.00	Yield (ksi): 75.00
Moment (kip-ft): 3548.15	Effective Len (in): 8.91	Ultimate (ksi): 100.00
Axial (kip): 54.97	Moment (kip-in): 512.36	Arrangement: Clustered
Shear (kip): 29.36	Allow Stress (ksi): 74.25	Cluster Dist (in): 6.00
	Applied Stress (ksi): 38.61	Start Angle (deg): 45.00
	Stress Ratio: 0.52	Compression
		Force (kip): 137.18
		Allowable (kip): 260.00
		Ratio: 0.54
		Tension
		Force (kip): 128.93
		Allowable (kip): 260.00
		Ratio: 0.51

	Monopole Mat Foundation Design		Date	
	Customer Name:	Verizon	EIA/TIA Standard:	EIA-222-G
	Site Name:		Structure Height (Ft.):	160
	Site Number:	CT03538-VZW-052721	Engineer Name:	SBA Engineer
	Engr. Number:		Engineer Login ID:	

Foundation Info Obtained from:

Structure Type:

Analysis or Design?

Base Reactions (Factored):

Axial Load (Kips):

55.0

Shear Force (Kips):

Uplift Force (Kips):

0.0

Moment (Kips-ft):

Allowable overstress %:

5.0%

Foundation Geometries:

Anchor Bolt Circle (ft.):

5.33

Mods required -Yes/No ?:

Thickness of Pad (ft):

Length of Pad (ft.):

28.5

Width of Pad (ft.):

Final Length of pad (ft)

28.5

Final width of pad (ft):

Material Properties and Rebar Info:

Concrete Strength (psi):

3000

Steel Elastic Modulus:

29000

ksi

Pad Rebar Yield (Ksi):

Tie Spacing (in):

Pad Steel Rebar Size (#):

Concrete Cover (in.):

Unit Weight of Concrete:

150.0

pcf

Rebar at the bottom of the concrete pad:

Qty. of Rebar in Pad (L):

Qty. of Rebar in Pad (W):

Rebar at the top of the concrete pad:

Qty. of Rebar in Pad (L):

Qty. of Rebar in Pad (W):

Apply 1.35 factor for e/w Per G:

Soil Design Parameters:

Water Table B.G.S. (ft):

99.0

Unit Weight of Water:

pcf

Angle from Top of Pad:

Ultimate Bearing Pressure (psf):

20000

Ultimate Skin Friction:

Psf

Angle from Botm of Pad:

Consider Friction for O.T.M. (Y/N):

Consider Friction for bearing (Y/N):

Angle from Botm of Pad:

Consider soil hor. resist. for OTM.:

Reduction factor on the maximum soil bearing pressure:

Foundation Analysis and Design:

Uplift Strength Reduction Factor:

0.75

Compression Strength Reduction Factor:

Total Dry Soil Volume (cu. Ft.):

0.00

Total Dry Soil Weight (Kips):

Total Buoyant Soil Volume (cu. Ft.):

0.00

Total Buoyant Soil Weight (Kips):

Total Effective Soil Weight (Kips):

0.00

Weight from the Concrete Block at Top (K):

Total Dry Concrete Volume (cu. Ft.):

3249.00

Total Dry Concrete Weight (Kips):

Total Buoyant Concrete Volume (cu. Ft.):

0.00

Total Buoyant Concrete Weight (Kips):

Total Effective Concrete Weight (Kips):

487.35

Total Vertical Load on Base (Kips):

Check Soil Capacities:

Calculated Maxium Net Soil Pressure under the base (psf):

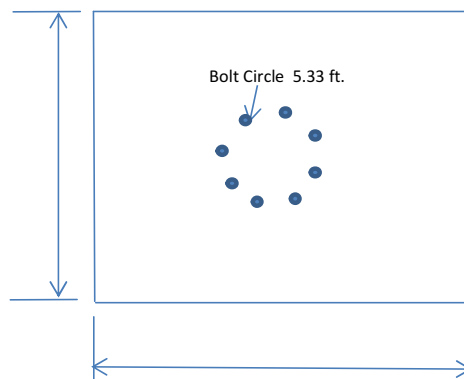
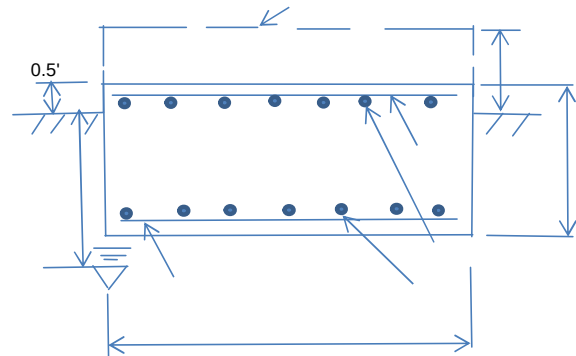
< Allowable Factored Soil Bearing (psf): 15000

Allowable Foundation Overturning Resistance (kips-ft.):

Design Factored Momont (kips-ft):

Factor of Safety Against Overturning (O. R. Moment/Design Moment):

Load/
Capacity
Ratio



Check the capacities of Reinforcing Concrete:

Strength reduction factor (Flexure and axial tension):

0.90

Strength reduction factor (Shear):

Strength reduction factor (Axial compression):

0.65

Wind Load Factor on Concrete Design:

Concrete Pad:

One-Way Design Shear Capacity (L-Direction, Kips):

One-Way Design Shear Capacity (W-Direction, Kips):

One-Way Design Shear Capacity (Corner-Corner, Kips):

Lower Steel Pad Reinforcement Ratio (L-Direct.):

Lower Steel Pad Moment Capacity (L-Direction, Kips-ft):

Lower Steel Pad Moment Capacity (W-Direction, Kips-ft):

Lower Steel Pad Moment Capacity (Corner-Corner, K-ft):

Upper Steel Pad Reinforcement Ratio (L-Direct.):

Upper Steel Pad Moment Capacity (L-Direction, Kips-ft):

Upper Steel Pad Moment Capacity (W-Direction, Kips-ft):

Upper Steel Pad Moment Capacity (Corner-Corner, K-ft):

One-Way Factored Shear (L-D, Kips): 284.0

One-Way Factored Shear (W-D., Kips)

One-Way Factored Shear (C-C, Kips): 462.2

Lower Steel Pad Reinf. Ratio (W-Direct

Moment at Bottom (L-Direct, K-Ft): 1083.9

Moment at Bottom (W-Direct, K-Ft): 1083.9

Moment at Bottom (C-C Dir, K-Ft):

Upper Steel Reinf. Ratio (W-Direct.):

Moment at the top (L-Dir Kips-Ft):

Moment at the top (W-Dir Kips-Ft):

Moment at the top (C-C Direc, K-Ft): 534.3



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July 21, 2021

Mr. Andrew Leone
Verizon Wireless
20 Alexander Dr.
Wallingford, CT 06492

Re: Verizon Wireless antenna Model Clarification for CT Siting Council

Dear Mr. Leone,

This letter is intended to clarify and confirm the antenna naming convention used by Verizon Wireless as a part of antenna upgrade project on numerous wireless facilities.

The antenna naming convention "Licensed Sub-6, L-Sub6, nLSub6, VZS01" and any other slight variants refer to the 64T64RMMU, Model Code: MT6407-77A manufactured by Samsung Electronics. These names are interchangeable and are used in various documents, including but not limited to the "Structural Analysis".

If you have any questions or comments, or require additional information, please do not hesitate to contact me.

Sincerely,

SBA Communications, Corporation



07/21/21



Maser Consulting Connecticut
2000 Midlantic Drive, Suite 100
Mt. Laurel, NJ 08054
(856) 797-0412
peter.albano@colliersengineering.com

Post-Mod Antenna Mount Analysis Report and PMI Requirements

Mount Fix

SMART Tool Project #: 10068349
Maser Consulting Connecticut Project #: 21777092A

May 18, 2021

Site Information

Site ID: 468080-VZW / THOMASTON S CT
Site Name: THOMASTON S CT
Carrier Name: Verizon Wireless
Address: 170 Mount Tobe Rd
Plymouth, Connecticut 06782
Litchfield County
Latitude: 41.630031°
Longitude: -73.056552°

Structure Information

Tower Type: 142-Ft Monopole
Mount Type: 14.38-Ft Platform

FUZE ID # 16244621

Analysis Results

Platform: 89.6% Pass

***Contractor PMI Requirements:

Included at the end of this MA report

Available & Submitted via portal at <https://pmi.vzwsmart.com>

Contractor - Please Review Specific Site PMI Requirements Upon Award

Requirements also Noted on Mount Modification Drawings

Requirements may also be Noted on A & E drawings

Report Prepared By: Selene Chen



Digitally signed by Derek Hartzell
Date: 2021.07.06 15:40:12-07'00'

Executive Summary:

The objective of this report is to summarize the analysis results of the antenna support mount including the proposed modifications at the subject facility for the final wireless telecommunications configuration, per the applicable codes and standards.

This analysis is inclusive of the mount structure only and does not address the structural capacity of the supporting structure. This mounting frame was not analyzed as an anchor attachment point for fall protection. All climbing activities are required to have a fall protection plan completed by a competent person.

Sources of Information:

Document Type	Remarks
Radio Frequency Data Sheet (RFDS)	Verizon RFDS Site ID: 324963, dated November 18, 2020
Mount Mapping Report	Roaming Network Inc, Site ID: 468080, dated April 5, 2021
Mount Analysis Report	Maser Consulting Connecticut, Project #: 21777092A, dated May 3, 2021
Mount Modification Drawings	Maser Consulting Connecticut, Project #: 21777092A, dated May 17, 2021

Analysis Criteria:

Codes and Standards:	ANSI/TIA-222-H	
Wind Parameters:	Basic Wind Speed (Ultimate 3-sec. Gust), Ice Wind Speed (3-sec. Gust): Design Ice Thickness: Risk Category: Exposure Category: Topographic Category: Topographic Feature Considered: Topographic Method: Ground Elevation Factor, K _e :	116 mph 50 mph 1.00 in II B 1 N/A N/A 0.970
Seismic Parameters:	S _s : S ₁ :	0.188 0.054
Maintenance Parameters:	Wind Speed (3-sec. Gust): Maintenance Live Load, L _v : Maintenance Live Load, L _m :	30 mph 250 lbs. 500 lbs.
Analysis Software:	RISA-3D (V17)	

Final Loading Configuration:

The following equipment has been considered for the analysis of the mount:

Mount Elevation (ft)	Equipment Elevation (ft)	Quantity	Manufacturer	Model	Status
			Quintel		Added
			Samsung		
			Samsung		
			Samsung		
			Raycap		
			Amphenol Antel		Retained

Standard Conditions:

1. All engineering services are performed on the basis that the information provided to Maser Consulting Connecticut and used in this analysis is current and correct. The existing equipment loading has been applied at locations determined from the supplied documentation. Any deviation from the loading locations specified in this report shall be communicated to Maser Consulting Connecticut to verify deviation will not adversely impact the analysis.
2. Mounts are assumed to have been properly fabricated, installed and maintained in good condition, twist free and plumb in accordance with its original design and manufacturer's specifications.

Obvious safety and structural issues/deficiencies noticed at the time of the mount mapping and reported in the Mount Mapping Report are assumed to be corrected and documented as part of the PMI process and are not considered in the mount analysis.

The mount analysis and the mount mapping are not a condition assessment of the mount. Proper maintenance and condition assessments are still required post analysis.

3. For mount analyses completed from other data sources (including new replacement mounts) and not specifically mapped by Maser Consulting Connecticut, the mounts are assumed to have been properly fabricated, installed and maintained in good condition, twist free and plumb in accordance with its original design and manufacturer's specifications.
4. All member connections are assumed to have been designed to meet or exceed the load carrying capacity of the connected member unless otherwise specified in this report.
5. The mount was checked up to, and including, the bolts that fasten it to the mount collar/attachment and threaded rod connections in collar members if applicable. Local deformation and interaction between the mount collar/attachment and the supporting tower structure are outside the scope of this analysis.
6. All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. Maser Consulting Connecticut is not responsible for the conclusion, opinions, and recommendations made by others based on the information supplied.
7. Structural Steel Grades have been assumed as follows, if applicable, unless otherwise noted in this analysis:
 - o Channel, Solid Round, Angle, Plate ASTM A36 (Gr. 36)
 - o HSS (Rectangular) ASTM 500 (Gr. B-46)
 - o Pipe ASTM A53 (Gr. B-35)
 - o Threaded Rod F1554 (Gr. 36)
 - o Bolts ASTM A325

8. Any mount modifications listed under Sources of Information are assumed to have been installed per the design specifications.

Discrepancies between in-field conditions and the assumptions listed above may render this analysis invalid unless explicitly approved by Maser Consulting Connecticut.

Analysis Results:

Component	Utilization %	Pass/Fail
Standoff Horizontal		Pass
Platform Crossmember		Pass
Corner Plate		Pass
Grating Support		Pass
Cross Arm Plate		Pass
Face Horizontal		Pass
Mount Pipe		Pass
Support Rail		Pass
Support Rail Angle		Pass
Mount Connection		Pass
Structure Rating – (Controlling Utilization of all Components)		89.6%

Recommendation:

The existing mounts will be **SUFFICIENT** for the final loading after the proposed modifications are successfully completed.

ANSI/ASSP rigging plan review services compliant with the requirements of ANSI/TIA 322 are available for a Construction Class IV site or other, if required. Separate review fees will apply.

Attachments:

Mount Photos
Mount Mapping Report (for reference only)
Analysis Calculations
Contractor Required PMI Report Deliverables
Antenna Placement Diagrams
TIA Adoption and Wind Speed Usage letter



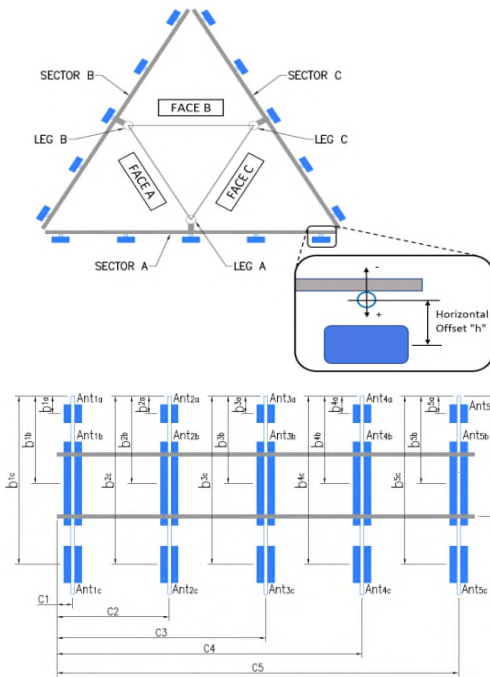
Antenna Mount Mapping Form (PATENT PENDING)

560

1231144

Tower Owner:	SBA	Mapping Date:	04.05.2021.
Site Name:	THOMASTON S CT	Tower Type:	Monopole
Site Number or ID:	468080	Tower Height (Ft.):	142
Mapping Contractor:	Roaming Networks inc.	Mount Elevation (Ft.):	141

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Antenna Layout (Looking Out From Tower)

Mount Pipe Configuration and Geometries [Unit = Inches]							
Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "H"	Horizontal Offset "C1, C2, C3, etc."	Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "H"	Horizontal Offset "C1, C2, C3, etc."
A1	PIPE1 2.36"Ø x 0.12" x 94"	59.00	12.00	C1	PIPE1 2.36"Ø x 0.12" x 94"	59.00	12.00
A2	PIPE2 2.36"Ø x 0.12" x 94"	59.00	72.00	C2	PIPE2 2.36"Ø x 0.12" x 94"	59.00	72.00
A3	PIPE3 2.36"Ø x 0.12" x 94"	59.00	134.00	C3	PIPE3 2.36"Ø x 0.12" x 94"	59.00	134.00
A4	PIPE4 2.36"Ø x 0.12" x 94"	59.00	163.00	C4	PIPE4 2.36"Ø x 0.12" x 94"	59.00	163.00
A5				C5			
A6				C6			
B1	PIPE1 2.36"Ø x 0.12" x 94"	59.00	12.00	D1			
B2	PIPE2 2.36"Ø x 0.12" x 94"	59.00	72.00	D2			
B3	PIPE3 2.36"Ø x 0.12" x 94"	59.00	134.00	D3			
B4	PIPE4 2.36"Ø x 0.12" x 94"	59.00	163.00	D4			
B5				D5			
B6				D6			
Distance between bottom rail and mount CL elevation (dim d). Unit is inches. See 'Mount Elev Ref' tab for details. .							
Distance from top of bottom support rail to lowest tip of ant./eqpt. of Carrier above. (N/A if > 10 ft.) :							170
Distance from top of bottom support rail to highest tip of ant./eqpt. of Carrier below. (N/A if > 10 ft.) :							
Please enter additional information or comments below.							
Tower Face Width at Mount Elev. (ft.):		Tower Leg Size or Pole Shaft Diameter at Mount Elev. (in.):					57

[illegible]

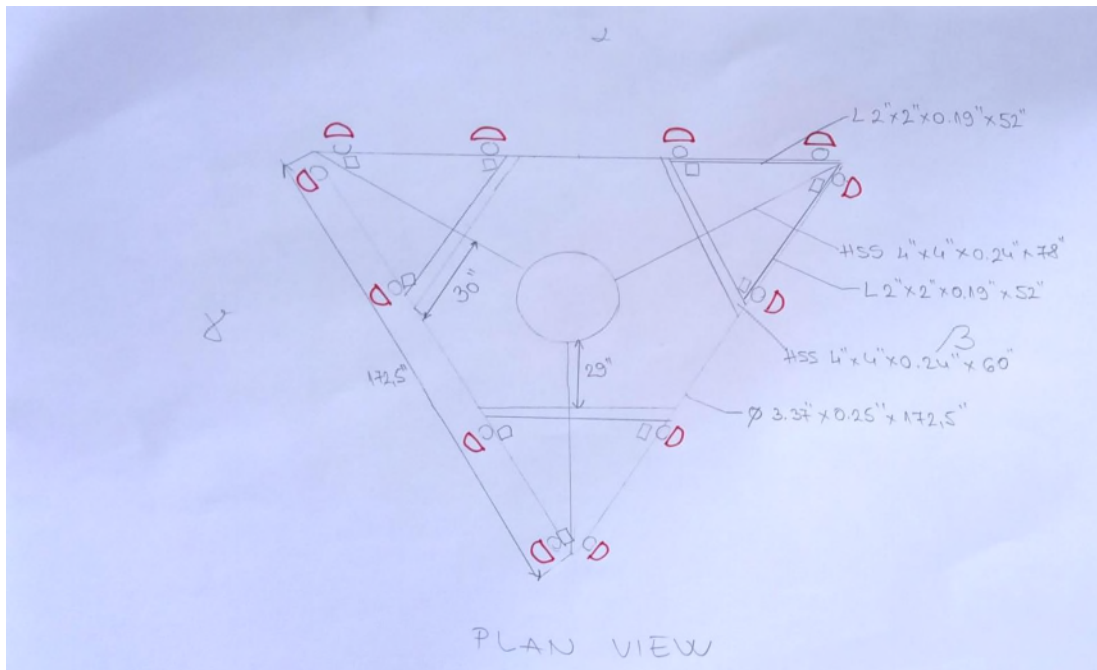
Observed Safety and Structural Issues During the Mount Mapping		
Issue #	Description of Issue	Photo #

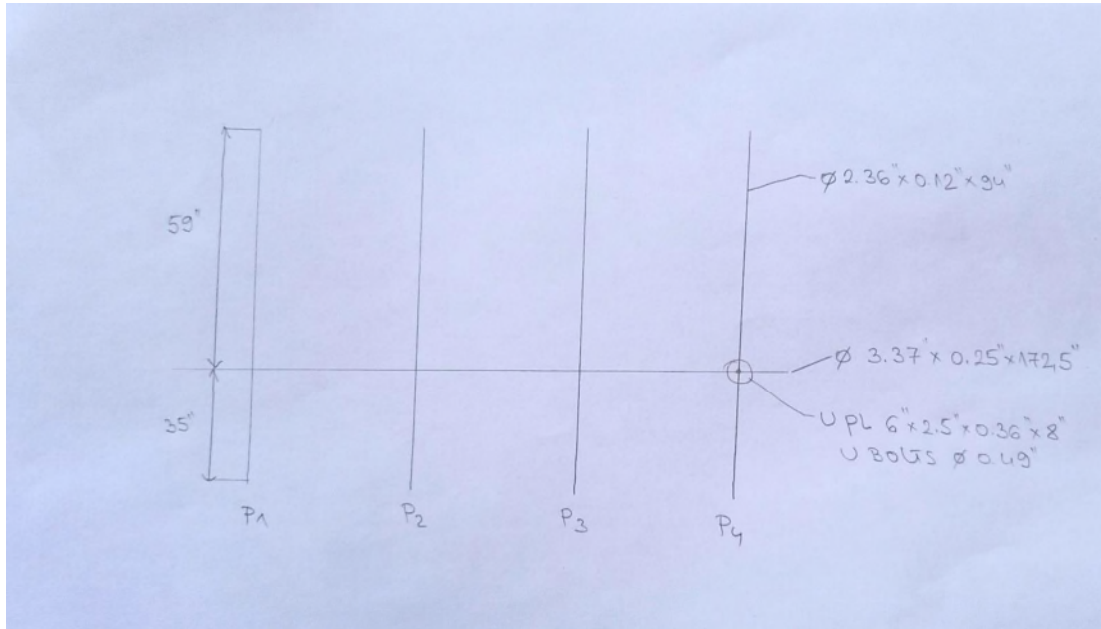
Mapping Notes
1. Please report any visible structural or safety issues observed on the antenna mounts (Damaged members, loose connections, tilting mounts, safety climb issues, etc.) 2. If the thickness of the existing pipes or tubing can't be obtained from a general tool (such as Caliper), please use an ultrasonic measurement tool (thickness gauge) to measure the thickness. 3. Please create all required detail sketches of the mounts and insert them into the "Sketches" tab. 4. Please measure and enter the bolt sizes and types under the Members Box in the spreadsheet of the mount type. 5. Take and label the photos of the tower, mounts, connections, antennas and all measurements. Minimum 50 photos are required. 6. Please measure and report the size and length of all existing antenna mounting pipes. 7. Please measure and report the antenna information for all sectors. 8. Don't delete or rearrange any sheet or contents of any sheet from this mapping form.
Standard Conditions
1. Obvious safety and structural issues/deficiencies noticed at the time of the mount mapping are to be reported in this mapping. However, this mount mapping is not a condition assessment of the mount.

Antenna Mount Mapping Form (PATENT PENDING)
FCC #
1231144

Tower Owner:	SBA	Mapping Date:	04.05.2021
Site Name:	THOMASTON S CT	Tower Type:	Monopole
Site Number or ID:	468080	Tower Height (Ft.):	142
Mapping Contractor:	Roaming Networks inc.	Mount Elevation (Ft.):	141

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Please Insert Sketches of the Antenna Mount






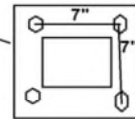
BENT PL 35"x6"x0.38"
BOLTS Ø0.71"x24"

BOLTS Ø0.71" x24"

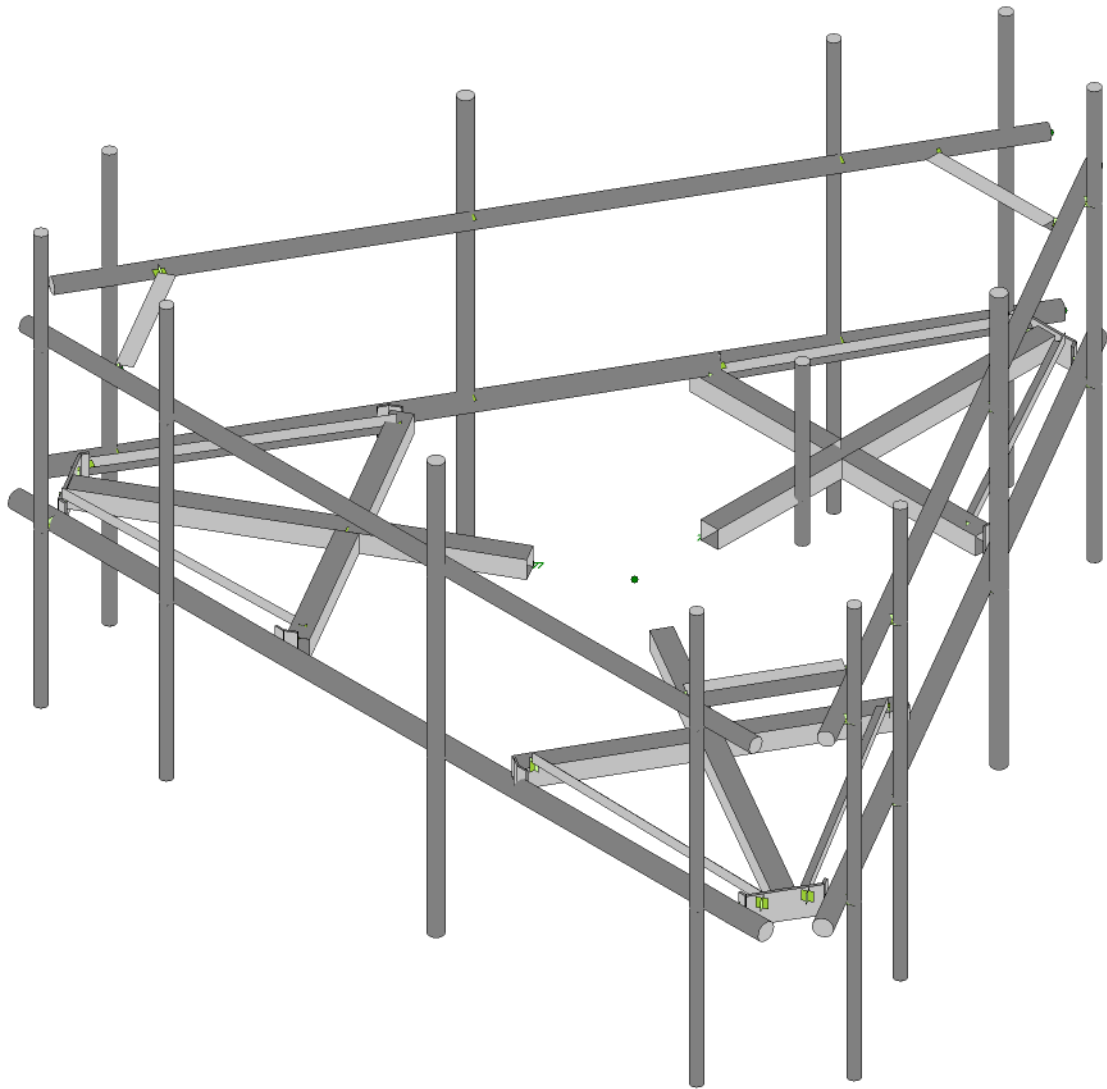
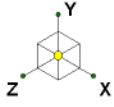
PL 10"x10"x0.49"

PL 10"x10"x0.57"
BOLTS Ø0.58"

HSS 4"x4"x0.24"x78"







Envelope Only Solution

Maser Consulting

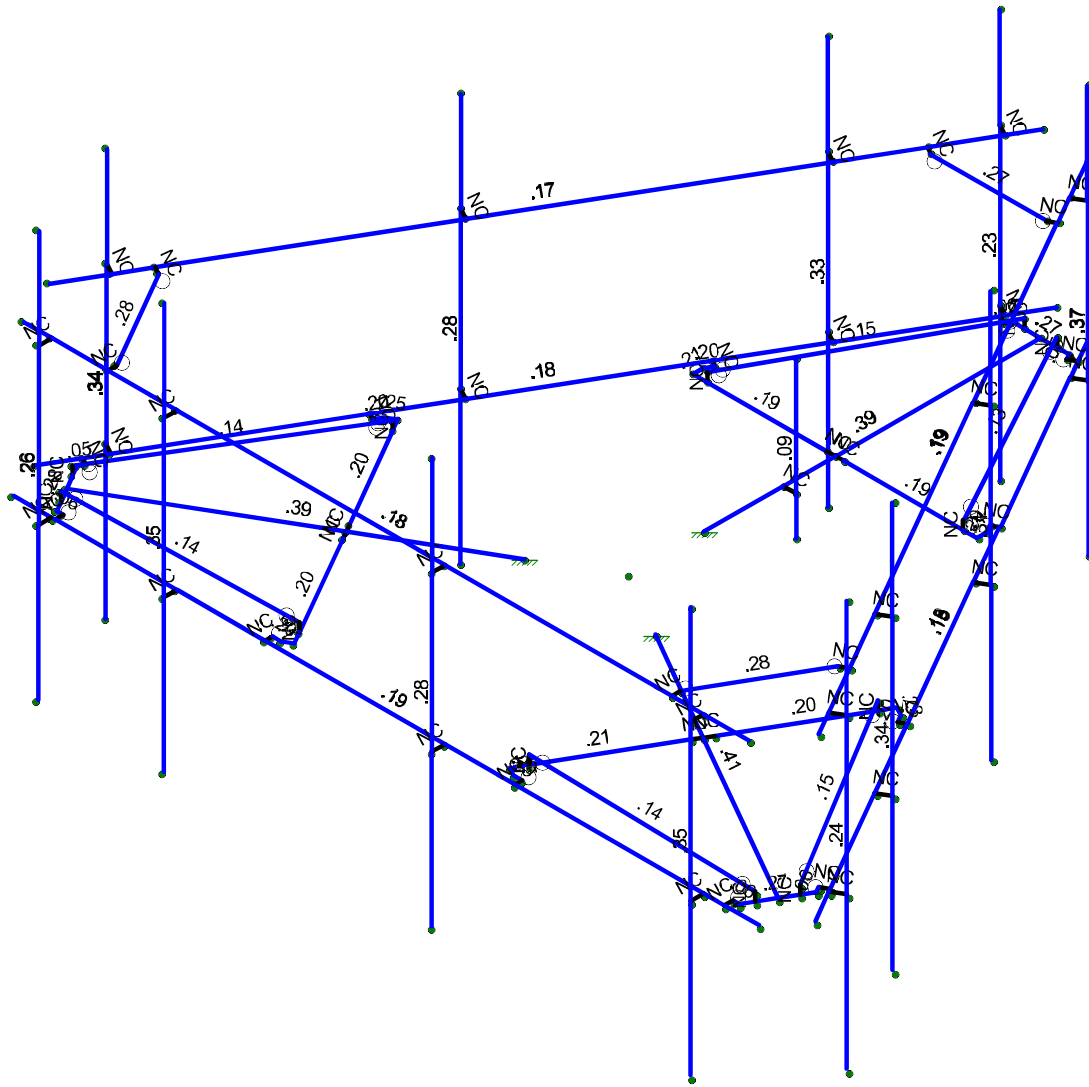
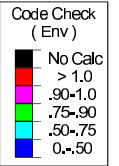
Mo

468080-VZW_MT_LO_H

SK - 1

May 14, 2021 at 3:36 PM

MOD_468080-VZW_MT_LO_H.r3d

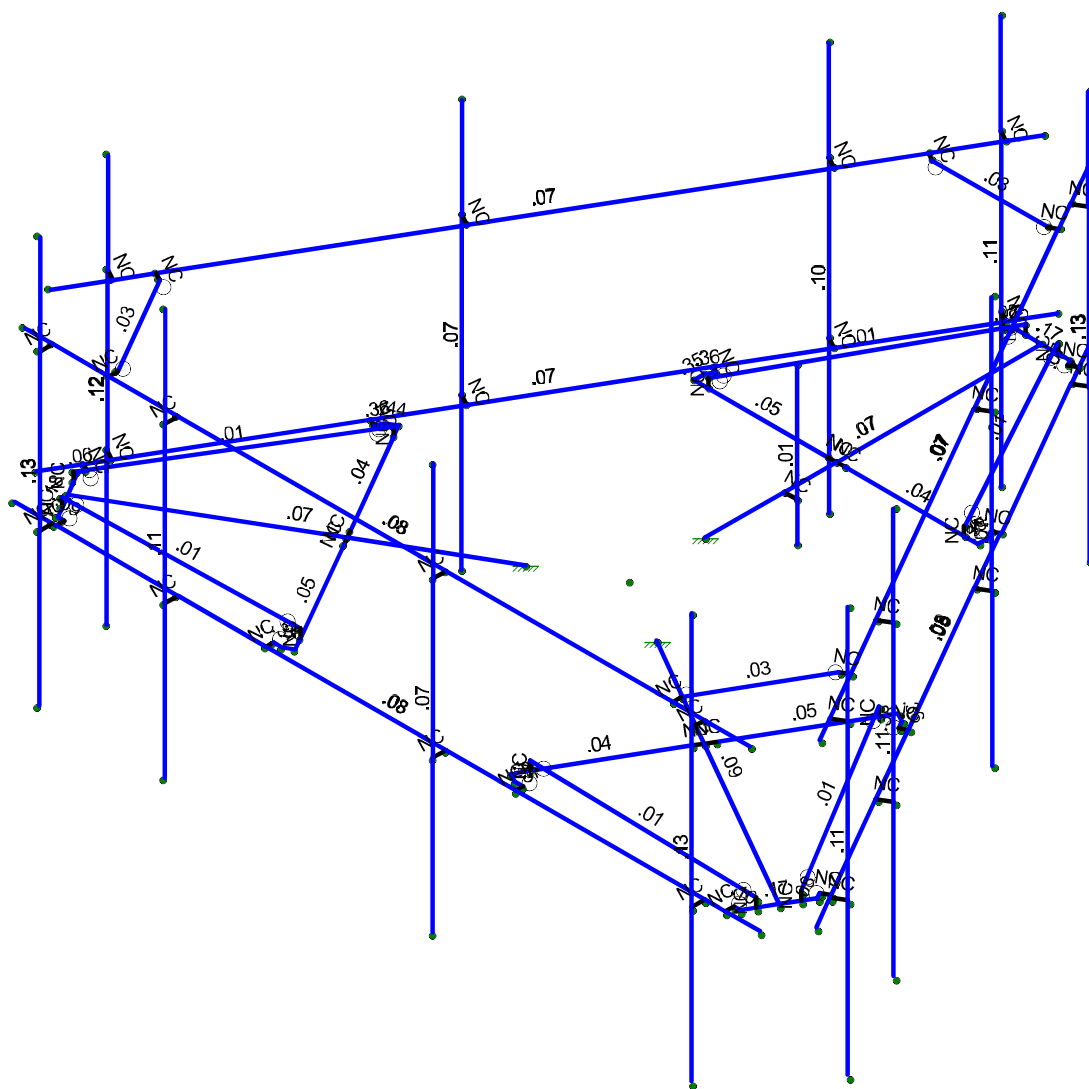
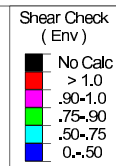
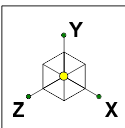


Maser Consulting

Mo

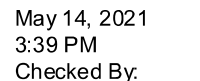
468080-VZW_MT_LO_H

SK - 2
May 14, 2021 at 3:37 PM
MOD_468080-VZW_MT_LO_H.r3d

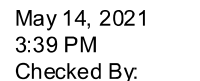


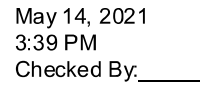
Member Shear Checks Displayed (Enveloped)
Envelope Only Solution

Maser Consulting	468080-VZW_MT_LO_H	SK - 3
Mo		May 14, 2021 at 3:38 PM
		MCD_468080-VZW_MT_LO_H.r3d

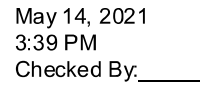


BLC Description		Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed Area(Me...	Surface(P...
1	Antenna D	None					93		
2	Antenna Di	None					93		
3	Antenna Wo (0 Deg)	None					93		
4	Antenna Wo (30 Deg)	None					93		
5	Antenna Wo (60 Deg)	None					93		
6	Antenna Wo (90 Deg)	None					93		
7	Antenna Wo (120 Deg)	None					93		
8	Antenna Wo (150 Deg)	None					93		
9	Antenna Wo (180 Deg)	None					93		
10	Antenna Wo (210 Deg)	None					93		
11	Antenna Wo (240 Deg)	None					93		
12	Antenna Wo (270 Deg)	None					93		
13	Antenna Wo (300 Deg)	None					93		
14	Antenna Wo (330 Deg)	None					93		
15	Antenna Wi (0 Deg)	None					93		
16	Antenna Wi (30 Deg)	None					93		
17	Antenna Wi (60 Deg)	None					93		
18	Antenna Wi (90 Deg)	None					93		
19	Antenna Wi (120 Deg)	None					93		
20	Antenna Wi (150 Deg)	None					93		
21	Antenna Wi (180 Deg)	None					93		
22	Antenna Wi (210 Deg)	None					93		
23	Antenna Wi (240 Deg)	None					93		
24	Antenna Wi (270 Deg)	None					93		
25	Antenna Wi (300 Deg)	None					93		
26	Antenna Wi (330 Deg)	None					93		
27	Antenna W m (0 Deg)	None					93		
28	Antenna W m (30 Deg)	None					93		
29	Antenna W m (60 Deg)	None					93		
30	Antenna W m (90 Deg)	None					93		
31	Antenna W m (120 De...	None					93		
32	Antenna W m (150 De...	None					93		
33	Antenna W m (180 De...	None					93		
34	Antenna W m (210 De...	None					93		
35	Antenna W m (240 De...	None					93		
36	Antenna W m (270 De...	None					93		
37	Antenna W m (300 De...	None					93		
38	Antenna W m (330 De...	None					93		
39	Structure D	None		-1					3
40	Structure Di	None						58	3
41	Structure Wo (0 Deg)	None						116	
42	Structure Wo (30 Deg)	None						116	
43	Structure Wo (60 Deg)	None						116	
44	Structure Wo (90 Deg)	None						116	
45	Structure Wo (120 D...	None						116	
46	Structure Wo (150 D...	None						116	
47	Structure Wo (180 D...	None						116	
48	Structure Wo (210 D...	None						116	
49	Structure Wo (240 D...	None						116	
50	Structure Wo (270 D...	None						116	
51	Structure Wo (300 D...	None						116	

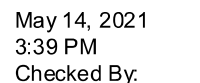




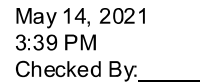
RISA-3D Version 17.0.4 [\\.\...\RISA\MOD 468080-VZW MT LO H.r3d] Page 3



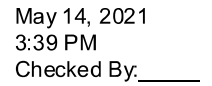
	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	CP	0	0	0	0	
2	N36	-7.249996	0	4.595516	0	
3	N53A	7.124996	0	4.595516	0	
4	N112A	0.	0	-1.458331	0	
5	N113A	0.	0	-3.982034	0	
6	N114	0.	0	-7.91675	0	
7	N115	-2.739574	0	-3.982034	0	
8	N116A	2.466038	0.166667	-3.982034	0	
9	N117	-2.466035	0.166667	-3.982034	0	
10	N119	2.466038	0	-3.982034	0	
11	N120B	-2.466035	0	-3.982034	0	
12	N121	0.316678	0.166667	-7.916155	0	
13	N122	-0.315987	0.166667	-7.917344	0	
14	N123	0.317021	0	-7.91675	0	
15	N124A	-0.31633	0	-7.91675	0	
16	N125	2.739578	0	-3.982034	0	
17	N126	-0.166665	0	-3.982034	0	
18	N127	0.166669	0	-3.982034	0	
19	N128	0.546877	0	-7.91675	0	
20	N129	-0.546873	0	-7.91675	0	
21	N130	-2.739574	0	-4.169534	0	
22	N131	2.739578	0	-4.169534	0	
23	N132	-2.656241	0	-4.313872	0	
24	N133	-2.775932	0	-4.382976	0	
25	N134	-0.609373	0	-7.808497	0	
26	N135	-0.750998	0	-7.890264	0	
27	N136	2.656245	0	-4.313872	0	
28	N137	2.775933	0	-4.382974	0	
29	N138	0.609377	0	-7.808497	0	
30	N139	0.750999	0	-7.890263	0	
31	N95	6.058329	0	4.595516	0	
32	N103A	6.058329	0	4.845516	0	
33	N111A	6.058329	4.916667	4.845516	0	
34	N115A	6.058329	-2.916667	4.845516	0	
35	N167	-0.	0	-2.982031	0	
36	N168	0.25	2.25	-2.982031	0	
37	N169	0.25	-.75	-2.982031	0	
38	N92	1.058329	0	4.595516	0	
39	N93A	1.058329	0	4.845516	0	
40	N94A	1.058329	4.916667	4.845516	0	
41	N95B	1.058329	-2.916667	4.845516	0	
42	N96	-4.108337	0	4.595516	0	
43	N97	-4.108337	0	4.845516	0	
44	N98	-4.108337	4.916667	4.845516	0	
45	N99A	-4.108337	-2.916667	4.845516	0	
46	N100A	-6.525004	0	4.595516	0	
47	N101A	-6.525004	0	4.845516	0	
48	N102A	-6.525004	4.916667	4.845516	0	
49	N103B	-6.525004	-2.916667	4.845516	0	
50	N104A	7.604831	0	3.980923	0	
51	N105A	0.417335	0	-8.468186	0	



RISA-3D Version 17.0.4 [\\...\RISA\MOD 468080-VZW MT LO H.r3d] Page 8

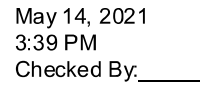


	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
45	M90B	N132A	N133A			RIGID	None	None	RIGID	Typical
46	MP3B	N134A	N135A			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
47	M47	N79	N81			Standoff Horiz...	Beam	SquareTube	A500 Gr.B...	Typical
48	M48	N91	N93			Platform Cross...	Beam	SquareTube	A500 Gr.B...	Typical
49	M49	N92A	N82			Platform Cross...	Beam	SquareTube	A500 Gr.B...	Typical
50	M50	N95A	N94			Corner Plate	Beam	BAR	A36 Gr.36	Typical
51	M51	N84	N86			RIGID	None	None	RIGID	Typical
52	M52	N83	N85			RIGID	None	None	RIGID	Typical
53	M53	N88	N90			RIGID	None	None	RIGID	Typical
54	M54	N87	N89			RIGID	None	None	RIGID	Typical
55	M55	N92A	N80			RIGID	None	None	RIGID	Typical
56	M56	N80	N93			RIGID	None	None	RIGID	Typical
57	M57	N82	N96A			Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
58	M58	N96A	N98A			Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
59	M59	N98A	N99			RIGID	None	None	RIGID	Typical
60	M60	N95A	N100			Corner Plate	Beam	BAR	A36 Gr.36	Typical
61	M61	N100	N101			RIGID	None	None	RIGID	Typical
62	M62	N91	N97A			Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
63	M63	N97A	N102			Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
64	M64	N102	N103			RIGID	None	None	RIGID	Typical
65	M65	N94	N104			Corner Plate	Beam	BAR	A36 Gr.36	Typical
66	M66	N104	N105			RIGID	None	None	RIGID	Typical
67	M68	N110	N112			Standoff Horiz...	Beam	SquareTube	A500 Gr.B...	Typical
68	M69	N122B	N124			Platform Cross...	Beam	SquareTube	A500 Gr.B...	Typical
69	M70	N123B	N113			Platform Cross...	Beam	SquareTube	A500 Gr.B...	Typical
70	M71	N126B	N125B			Corner Plate	Beam	BAR	A36 Gr.36	Typical
71	M72	N115C	N117B			RIGID	None	None	RIGID	Typical
72	M73B	N114B	N116			RIGID	None	None	RIGID	Typical
73	M74B	N119A	N121A			RIGID	None	None	RIGID	Typical
74	M75B	N118	N120			RIGID	None	None	RIGID	Typical
75	M76B	N123B	N111			RIGID	None	None	RIGID	Typical
76	M77C	N111	N124			RIGID	None	None	RIGID	Typical
77	M78B	N113	N127B			Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
78	M79B	N127B	N129B			Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
79	M80B	N129B	N130B			RIGID	None	None	RIGID	Typical
80	M81B	N126B	N131B			Corner Plate	Beam	BAR	A36 Gr.36	Typical
81	M82B	N131B	N132B			RIGID	None	None	RIGID	Typical
82	M83B	N122B	N128B			Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
83	M84B	N128B	N133B			Cross Arm Plate	Column	RECT	A36 Gr.36	Typical
84	M85B	N133B	N134B			RIGID	None	None	RIGID	Typical
85	M86	N125B	N135B			Corner Plate	Beam	BAR	A36 Gr.36	Typical
86	M87	N135B	N136B			RIGID	None	None	RIGID	Typical
87	M89	N139B	N140			RIGID	None	None	RIGID	Typical
88	MP4C	N141	N142			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
89	M91B	N136A	N144			RIGID	None	None	RIGID	Typical
90	MP4B	N145	N146			Mount Pipe	Column	Pipe	A53 Gr.B	Typical
91	M93	N146A	N167			RIGID	None	None	RIGID	Typical
92	M92A	N87	N83			Grating Support	Beam	Single Angle	A36 Gr.36	Typical
93	M93B	N84	N88			Grating Support	Beam	Single Angle	A36 Gr.36	Typical
94	M94	N118	N114B			Grating Support	Beam	Single Angle	A36 Gr.36	Typical
95	M95	N115C	N119A			Grating Support	Beam	Single Angle	A36 Gr.36	Typical
96	M96	N141A	N142A			Support Rail	Beam	Pipe	A53 Gr.B	Typical

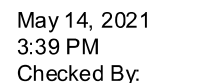


	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
97	M97	N143	N144A			RIGID	None	None	RIGID	Typical
98	M98	N145A	N146B			RIGID	None	None	RIGID	Typical
99	M99	N147	N148			RIGID	None	None	RIGID	Typical
100	M100	N149	N150			RIGID	None	None	RIGID	Typical
101	M101	N151	N152			Support Rail	Beam	Pipe	A53 Gr.B	Typical
102	M102	N153	N154			RIGID	None	None	RIGID	Typical
103	M103	N155	N156			RIGID	None	None	RIGID	Typical
104	M104	N157	N158			RIGID	None	None	RIGID	Typical
105	M105	N159	N160			RIGID	None	None	RIGID	Typical
106	M106	N161	N162			Support Rail	Beam	Pipe	A53 Gr.B	Typical
107	M107	N163	N164			RIGID	None	None	RIGID	Typical
108	M108	N165	N166			RIGID	None	None	RIGID	Typical
109	M109	N167A	N168A			RIGID	None	None	RIGID	Typical
110	M110	N169A	N170			RIGID	None	None	RIGID	Typical
111	M111	N171	N172			RIGID	None	None	RIGID	Typical
112	M112	N173	N174			RIGID	None	None	RIGID	Typical
113	M113	N175	N176			RIGID	None	None	RIGID	Typical
114	M114	N177	N178			RIGID	None	None	RIGID	Typical
115	M115	N179	N180			RIGID	None	None	RIGID	Typical
116	M116	N181	N182			RIGID	None	None	RIGID	Typical
117	M117	N172	N182		90	Support Rail C...	Beam	Single Angle	A36 Gr.36	Typical
118	M118	N180	N178		90	Support Rail C...	Beam	Single Angle	A36 Gr.36	Typical
119	M119	N176	N174		90	Support Rail C...	Beam	Single Angle	A36 Gr.36	Typical

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
1	M20						Yes				None
2	M72A						Yes	Default			None
3	M73						Yes				None
4	M74						Yes				None
5	M75						Yes				None
6	M76						Yes	** NA **			None
7	M77						Yes	** NA **			None
8	M78	OOOOOX	OOOOOX				Yes				None
9	M79	OOOOOX	OOOOOX				Yes				None
10	M80						Yes	** NA **			None
11	M81						Yes	** NA **			None
12	M82						Yes	** NA **			None
13	M83						Yes	** NA **			None
14	M84						Yes	** NA **			None
15	M85						Yes	** NA **			None
16	M86A		BenPIN				Yes	** NA **			None
17	M87A						Yes				None
18	M88		BenPIN				Yes	** NA **			None
19	M89A						Yes	** NA **			None
20	M90A						Yes	** NA **			None
21	M91		BenPIN				Yes	** NA **			None
22	M92						Yes				None
23	M93A		BenPIN				Yes	** NA **			None
24	M77A						Yes	** NA **			None



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Member Point Loads (BLC 1 : Antenna D) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
57	MP2A	Mz	.036	2.5
58	MP2B	Y	-84.4	2.5
59	MP2B	My	-.06	2.5
60	MP2B	Mz	.036	2.5
61	MP2C	Y	-84.4	2.5
62	MP2C	My	-.06	2.5
63	MP2C	Mz	.036	2.5
64	MP3A	Y	-70.3	2.5
65	MP3A	My	-.05	2.5
66	MP3A	Mz	.03	2.5
67	MP3B	Y	-70.3	2.5
68	MP3B	My	-.05	2.5
69	MP3B	Mz	.03	2.5
70	MP3C	Y	-70.3	2.5
71	MP3C	My	-.05	2.5
72	MP3C	Mz	.03	2.5
73	O1	Y	-32	1
74	O1	My	0	1
75	O1	Mz	0	1
76	MP4A	Y	-9	2
77	MP4A	My	-.00047	2
78	MP4A	Mz	-.004	2
79	MP4A	Y	-9	5
80	MP4A	My	-.00047	5
81	MP4A	Mz	-.004	5
82	MP4B	Y	-9	2
83	MP4B	My	.004	2
84	MP4B	Mz	.002	2
85	MP4B	Y	-9	5
86	MP4B	My	.004	5
87	MP4B	Mz	.002	5
88	MP4C	Y	-9	2
89	MP4C	My	-.003	2
90	MP4C	Mz	.003	2
91	MP4C	Y	-9	5
92	MP4C	My	-.003	5
93	MP4C	Mz	.003	5

Member Point Loads (BLC 2 : Antenna Di)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	Y	-68.7	2
2	MP2A	My	-.049	2
3	MP2A	Mz	-.022	2
4	MP2A	Y	-68.7	5
5	MP2A	My	-.049	5
6	MP2A	Mz	-.022	5
7	MP2B	Y	-68.7	2
8	MP2B	My	.048	2
9	MP2B	Mz	-.024	2
10	MP2B	Y	-68.7	5
11	MP2B	My	.048	5

Member Point Loads (BLC 2 : Antenna Di) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
64	MP3A	Y	-40.245	2.5
65	MP3A	My	-.029	2.5
66	MP3A	Mz	.017	2.5
67	MP3B	Y	-40.245	2.5
68	MP3B	My	-.029	2.5
69	MP3B	Mz	.017	2.5
70	MP3C	Y	-40.245	2.5
71	MP3C	My	-.029	2.5
72	MP3C	Mz	.017	2.5
73	O1	Y	-75.706	1
74	O1	My	0	1
75	O1	Mz	0	1
76	MP4A	Y	-44.386	2
77	MP4A	My	-.002	2
78	MP4A	Mz	-.022	2
79	MP4A	Y	-44.386	5
80	MP4A	My	-.002	5
81	MP4A	Mz	-.022	5
82	MP4B	Y	-44.386	2
83	MP4B	My	.02	2
84	MP4B	Mz	.009	2
85	MP4B	Y	-44.386	5
86	MP4B	My	.02	5
87	MP4B	Mz	.009	5
88	MP4C	Y	-44.386	2
89	MP4C	My	-.017	2
90	MP4C	Mz	.015	2
91	MP4C	Y	-44.386	5
92	MP4C	My	-.017	5
93	MP4C	Mz	.015	5

Member Point Loads (BLC 3 : Antenna Wo (0 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	0	2
2	MP2A	Z	-105.996	2
3	MP2A	Mx	.033	2
4	MP2A	X	0	5
5	MP2A	Z	-105.996	5
6	MP2A	Mx	.033	5
7	MP2B	X	0	2
8	MP2B	Z	-121.493	2
9	MP2B	Mx	.042	2
10	MP2B	X	0	5
11	MP2B	Z	-121.493	5
12	MP2B	Mx	.042	5
13	MP2C	X	0	2
14	MP2C	Z	-116.08	2
15	MP2C	Mx	-.091	2
16	MP2C	X	0	5
17	MP2C	Z	-116.08	5
18	MP2C	Mx	-.091	5

Member Point Loads (BLC 3 : Antenna Wo (0 Deg)) (Continued)

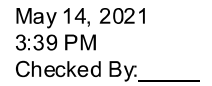
	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
71	MP3C	Z	-50.457	2.5
72	MP3C	Mx	-.022	2.5
73	O1	X	0	1
74	O1	Z	-105.984	1
75	O1	Mx	0	1
76	MP4A	X	0	2
77	MP4A	Z	-70.252	2
78	MP4A	Mx	.035	2
79	MP4A	X	0	5
80	MP4A	Z	-70.252	5
81	MP4A	Mx	.035	5
82	MP4B	X	0	2
83	MP4B	Z	-85.423	2
84	MP4B	Mx	-.017	2
85	MP4B	X	0	5
86	MP4B	Z	-85.423	5
87	MP4B	Mx	-.017	5
88	MP4C	X	0	2
89	MP4C	Z	-80.542	2
90	MP4C	Mx	-.026	2
91	MP4C	X	0	5
92	MP4C	Z	-80.542	5
93	MP4C	Mx	-.026	5

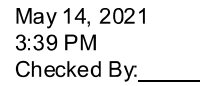
Member Point Loads (BLC 4 : Antenna Wo (30 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	57.507	2
2	MP2A	Z	-99.606	2
3	MP2A	Mx	-.01	2
4	MP2A	X	57.507	5
5	MP2A	Z	-99.606	5
6	MP2A	Mx	-.01	5
7	MP2B	X	62.324	2
8	MP2B	Z	-107.949	2
9	MP2B	Mx	.081	2
10	MP2B	X	62.324	5
11	MP2B	Z	-107.949	5
12	MP2B	Mx	.081	5
13	MP2C	X	53.305	2
14	MP2C	Z	-92.326	2
15	MP2C	Mx	-.071	2
16	MP2C	X	53.305	5
17	MP2C	Z	-92.326	5
18	MP2C	Mx	-.071	5
19	MP2A	X	57.507	2
20	MP2A	Z	-99.606	2
21	MP2A	Mx	.09	2
22	MP2A	X	57.507	5
23	MP2A	Z	-99.606	5
24	MP2A	Mx	.09	5
25	MP2B	X	62.324	2

Member Point Loads (BLC 4 : Antenna Wo (30 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
26	MP2B	Z	-107.949	2
27	MP2B	Mx	-.068	2
28	MP2B	X	62.324	5
29	MP2B	Z	-107.949	5
30	MP2B	Mx	-.068	5
31	MP2C	X	53.305	2
32	MP2C	Z	-92.326	2
33	MP2C	Mx	-.029	2
34	MP2C	X	53.305	5
35	MP2C	Z	-92.326	5
36	MP2C	Mx	-.029	5
37	MP1A	X	25.496	3
38	MP1A	Z	-44.161	3
39	MP1A	Mx	.018	3
40	MP1A	X	25.496	4
41	MP1A	Z	-44.161	4
42	MP1A	Mx	.018	4
43	MP1B	X	35.855	3
44	MP1B	Z	-62.102	3
45	MP1B	Mx	.004	3
46	MP1B	X	35.855	4
47	MP1B	Z	-62.102	4
48	MP1B	Mx	.004	4
49	MP1C	X	16.459	3
50	MP1C	Z	-28.508	3
51	MP1C	Mx	-.016	3
52	MP1C	X	16.459	4
53	MP1C	Z	-28.508	4
54	MP1C	Mx	-.016	4
55	MP2A	X	21.438	2.5
56	MP2A	Z	-37.131	2.5
57	MP2A	Mx	-.031	2.5
58	MP2B	X	21.438	2.5
59	MP2B	Z	-37.131	2.5
60	MP2B	Mx	-.031	2.5
61	MP2C	X	21.438	2.5
62	MP2C	Z	-37.131	2.5
63	MP2C	Mx	-.031	2.5
64	MP3A	X	18.647	2.5
65	MP3A	Z	-32.298	2.5
66	MP3A	Mx	-.027	2.5
67	MP3B	X	18.647	2.5
68	MP3B	Z	-32.298	2.5
69	MP3B	Mx	-.027	2.5
70	MP3C	X	18.647	2.5
71	MP3C	Z	-32.298	2.5
72	MP3C	Mx	-.027	2.5
73	O1	X	43.158	1
74	O1	Z	-74.751	1
75	O1	Mx	0	1
76	MP4A	X	38.207	2
77	MP4A	Z	-66.177	2



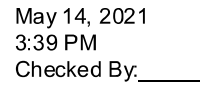
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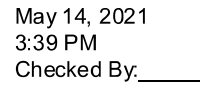
Member Point Loads (BLC 7 : Antenna Wo (120 Deg)) (Continued)

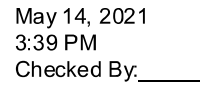
	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft, %]
47	MP1B	Z	14.371	4
48	MP1B	Mx	.014	4
49	MP1C	X	58.486	3
50	MP1C	Z	33.767	3
51	MP1C	Mx	-.011	3
52	MP1C	X	58.486	4
53	MP1C	Z	33.767	4
54	MP1C	Mx	-.011	4
55	MP2A	X	45.871	2.5
56	MP2A	Z	26.484	2.5
57	MP2A	Mx	-.021	2.5
58	MP2B	X	45.871	2.5
59	MP2B	Z	26.484	2.5
60	MP2B	Mx	-.021	2.5
61	MP2C	X	45.871	2.5
62	MP2C	Z	26.484	2.5
63	MP2C	Mx	-.021	2.5
64	MP3A	X	44.386	2.5
65	MP3A	Z	25.626	2.5
66	MP3A	Mx	-.021	2.5
67	MP3B	X	44.386	2.5
68	MP3B	Z	25.626	2.5
69	MP3B	Mx	-.021	2.5
70	MP3C	X	44.386	2.5
71	MP3C	Z	25.626	2.5
72	MP3C	Mx	-.021	2.5
73	O1	X	92.815	1
74	O1	Z	53.587	1
75	O1	Mx	0	1
76	MP4A	X	71.106	2
77	MP4A	Z	41.053	2
78	MP4A	Mx	-.024	2
79	MP4A	X	71.106	5
80	MP4A	Z	41.053	5
81	MP4A	Mx	-.024	5
82	MP4B	X	60.84	2
83	MP4B	Z	35.126	2
84	MP4B	Mx	.035	2
85	MP4B	X	60.84	5
86	MP4B	Z	35.126	5
87	MP4B	Mx	.035	5
88	MP4C	X	74.927	2
89	MP4C	Z	43.259	2
90	MP4C	Mx	-.014	2
91	MP4C	X	74.927	5
92	MP4C	Z	43.259	5
93	MP4C	Mx	-.014	5

Member Point Loads (BLC 8 : Antenna Wo (150 Deg))

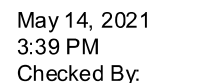
	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	52.82	2

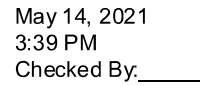






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Member Point Loads (BLC 14 : Antenna Wo (330 Deg)) (Continued)

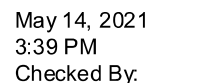
	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
44	MP1B	Z	-37.619	3
45	MP1B	Mx	-.018	3
46	MP1B	X	-21.719	4
47	MP1B	Z	-37.619	4
48	MP1B	Mx	-.018	4
49	MP1C	X	-35.295	3
50	MP1C	Z	-61.133	3
51	MP1C	Mx	-.007	3
52	MP1C	X	-35.295	4
53	MP1C	Z	-61.133	4
54	MP1C	Mx	-.007	4
55	MP2A	X	-28.719	2.5
56	MP2A	Z	-49.743	2.5
57	MP2A	Mx	-.000835	2.5
58	MP2B	X	-28.719	2.5
59	MP2B	Z	-49.743	2.5
60	MP2B	Mx	-.000835	2.5
61	MP2C	X	-28.719	2.5
62	MP2C	Z	-49.743	2.5
63	MP2C	Mx	-.000835	2.5
64	MP3A	X	-28.718	2.5
65	MP3A	Z	-49.741	2.5
66	MP3A	Mx	-.000835	2.5
67	MP3B	X	-28.718	2.5
68	MP3B	Z	-49.741	2.5
69	MP3B	Mx	-.000835	2.5
70	MP3C	X	-28.718	2.5
71	MP3C	Z	-49.741	2.5
72	MP3C	Mx	-.000835	2.5
73	O1	X	-58.206	1
74	O1	Z	-100.816	1
75	O1	Mx	0	1
76	MP4A	X	-36.549	2
77	MP4A	Z	-63.305	2
78	MP4A	Mx	.033	2
79	MP4A	X	-36.549	5
80	MP4A	Z	-63.305	5
81	MP4A	Mx	.033	5
82	MP4B	X	-38.207	2
83	MP4B	Z	-66.177	2
84	MP4B	Mx	-.031	2
85	MP4B	X	-38.207	5
86	MP4B	Z	-66.177	5
87	MP4B	Mx	-.031	5
88	MP4C	X	-43.9	2
89	MP4C	Z	-76.037	2
90	MP4C	Mx	-.008	2
91	MP4C	X	-43.9	5
92	MP4C	Z	-76.037	5
93	MP4C	Mx	-.008	5

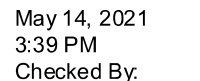
Member Point Loads (BLC 15 : Antenna Wi (0 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
53	MP1C	Z	-11.403	4
54	MP1C	Mx	-.004	4
55	MP2A	X	0	2.5
56	MP2A	Z	-11.733	2.5
57	MP2A	Mx	-.005	2.5
58	MP2B	X	0	2.5
59	MP2B	Z	-11.733	2.5
60	MP2B	Mx	-.005	2.5
61	MP2C	X	0	2.5
62	MP2C	Z	-11.733	2.5
63	MP2C	Mx	-.005	2.5
64	MP3A	X	0	2.5
65	MP3A	Z	-11.341	2.5
66	MP3A	Mx	-.005	2.5
67	MP3B	X	0	2.5
68	MP3B	Z	-11.341	2.5
69	MP3B	Mx	-.005	2.5
70	MP3C	X	0	2.5
71	MP3C	Z	-11.341	2.5
72	MP3C	Mx	-.005	2.5
73	O1	X	0	1
74	O1	Z	-22.514	1
75	O1	Mx	0	1
76	MP4A	X	0	2
77	MP4A	Z	-15.242	2
78	MP4A	Mx	.008	2
79	MP4A	X	0	5
80	MP4A	Z	-15.242	5
81	MP4A	Mx	.008	5
82	MP4B	X	0	2
83	MP4B	Z	-18.186	2
84	MP4B	Mx	-.004	2
85	MP4B	X	0	5
86	MP4B	Z	-18.186	5
87	MP4B	Mx	-.004	5
88	MP4C	X	0	2
89	MP4C	Z	-17.239	2
90	MP4C	Mx	-.006	2
91	MP4C	X	0	5
92	MP4C	Z	-17.239	5
93	MP4C	Mx	-.006	5

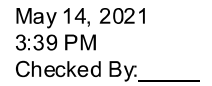
Member Point Loads (BLC 16 : Antenna Wi (30 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	11.859	2
2	MP2A	Z	-20.54	2
3	MP2A	Mx	-.002	2
4	MP2A	X	11.859	5
5	MP2A	Z	-20.54	5
6	MP2A	Mx	-.002	5
7	MP2B	X	12.773	2

[illegible]

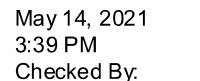


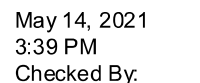
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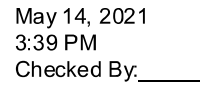


Member Point Loads (BLC 19 : Antenna Wi (120 Deg)) (Continued)

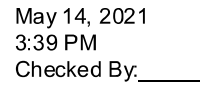
	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
29	MP2B	Z	10.877	5
30	MP2B	Mx	.012	5
31	MP2C	X	21.804	2
32	MP2C	Z	12.589	2
33	MP2C	Mx	-.018	2
34	MP2C	X	21.804	5
35	MP2C	Z	12.589	5
36	MP2C	Mx	-.018	5
37	MP1A	X	9.22	3
38	MP1A	Z	5.323	3
39	MP1A	Mx	-.004	3
40	MP1A	X	9.22	4
41	MP1A	Z	5.323	4
42	MP1A	Mx	-.004	4
43	MP1B	X	5.668	3
44	MP1B	Z	3.273	3
45	MP1B	Mx	.003	3
46	MP1B	X	5.668	4
47	MP1B	Z	3.273	4
48	MP1B	Mx	.003	4
49	MP1C	X	12.319	3
50	MP1C	Z	7.112	3
51	MP1C	Mx	-.002	3
52	MP1C	X	12.319	4
53	MP1C	Z	7.112	4
54	MP1C	Mx	-.002	4
55	MP2A	X	10.262	2.5
56	MP2A	Z	5.925	2.5
57	MP2A	Mx	-.005	2.5
58	MP2B	X	10.262	2.5
59	MP2B	Z	5.925	2.5
60	MP2B	Mx	-.005	2.5
61	MP2C	X	10.262	2.5
62	MP2C	Z	5.925	2.5
63	MP2C	Mx	-.005	2.5
64	MP3A	X	9.962	2.5
65	MP3A	Z	5.751	2.5
66	MP3A	Mx	-.005	2.5
67	MP3B	X	9.962	2.5
68	MP3B	Z	5.751	2.5
69	MP3B	Mx	-.005	2.5
70	MP3C	X	9.962	2.5
71	MP3C	Z	5.751	2.5
72	MP3C	Mx	-.005	2.5
73	O1	X	19.701	1
74	O1	Z	11.374	1
75	O1	Mx	0	1
76	MP4A	X	15.192	2
77	MP4A	Z	8.771	2
78	MP4A	Mx	-.005	2
79	MP4A	X	15.192	5
80	MP4A	Z	8.771	5

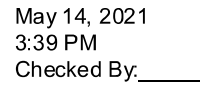


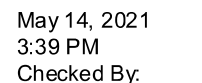


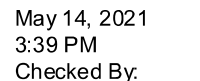


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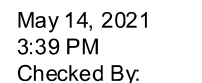






Member Point Loads (BLC 26 : Antenna Wi (330 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft, %]
29	MP2B	Z	-19.963	5
30	MP2B	Mx	-.018	5
31	MP2C	X	-12.723	2
32	MP2C	Z	-22.038	2
33	MP2C	Mx	.013	2
34	MP2C	X	-12.723	5
35	MP2C	Z	-22.038	5
36	MP2C	Mx	.013	5
37	MP1A	X	-3.48	3
38	MP1A	Z	-6.027	3
39	MP1A	Mx	.003	3
40	MP1A	X	-3.48	4
41	MP1A	Z	-6.027	4
42	MP1A	Mx	.003	4
43	MP1B	X	-4.727	3
44	MP1B	Z	-8.188	3
45	MP1B	Mx	-.004	3
46	MP1B	X	-4.727	4
47	MP1B	Z	-8.188	4
48	MP1B	Mx	-.004	4
49	MP1C	X	-7.415	3
50	MP1C	Z	-12.843	3
51	MP1C	Mx	-.001	3
52	MP1C	X	-7.415	4
53	MP1C	Z	-12.843	4
54	MP1C	Mx	-.001	4
55	MP2A	X	-6.381	2.5
56	MP2A	Z	-11.052	2.5
57	MP2A	Mx	-.000186	2.5
58	MP2B	X	-6.381	2.5
59	MP2B	Z	-11.052	2.5
60	MP2B	Mx	-.000186	2.5
61	MP2C	X	-6.381	2.5
62	MP2C	Z	-11.052	2.5
63	MP2C	Mx	-.000186	2.5
64	MP3A	X	-6.381	2.5
65	MP3A	Z	-11.052	2.5
66	MP3A	Mx	-.000186	2.5
67	MP3B	X	-6.381	2.5
68	MP3B	Z	-11.052	2.5
69	MP3B	Mx	-.000186	2.5
70	MP3C	X	-6.381	2.5
71	MP3C	Z	-11.052	2.5
72	MP3C	Mx	-.000186	2.5
73	O1	X	-12.286	1
74	O1	Z	-21.28	1
75	O1	Mx	0	1
76	MP4A	X	-7.897	2
77	MP4A	Z	-13.678	2
78	MP4A	Mx	.007	2
79	MP4A	X	-7.897	5
80	MP4A	Z	-13.678	5



Member Point Loads (BLC 27 : Antenna Wm (0 Deg)) (Continued)

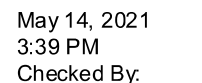
	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
36	MP2C	Mx	.000993	5
37	MP1A	X	0	3
38	MP1A	Z	-2.114	3
39	MP1A	Mx	.001	3
40	MP1A	X	0	4
41	MP1A	Z	-2.114	4
42	MP1A	Mx	.001	4
43	MP1B	X	0	3
44	MP1B	Z	-4.342	3
45	MP1B	Mx	-.000883	3
46	MP1B	X	0	4
47	MP1B	Z	-4.342	4
48	MP1B	Mx	-.000883	4
49	MP1C	X	0	3
50	MP1C	Z	-3.564	3
51	MP1C	Mx	-.001	3
52	MP1C	X	0	4
53	MP1C	Z	-3.564	4
54	MP1C	Mx	-.001	4
55	MP2A	X	0	2.5
56	MP2A	Z	-3.504	2.5
57	MP2A	Mx	-.002	2.5
58	MP2B	X	0	2.5
59	MP2B	Z	-3.504	2.5
60	MP2B	Mx	-.002	2.5
61	MP2C	X	0	2.5
62	MP2C	Z	-3.504	2.5
63	MP2C	Mx	-.002	2.5
64	MP3A	X	0	2.5
65	MP3A	Z	-3.375	2.5
66	MP3A	Mx	-.001	2.5
67	MP3B	X	0	2.5
68	MP3B	Z	-3.375	2.5
69	MP3B	Mx	-.001	2.5
70	MP3C	X	0	2.5
71	MP3C	Z	-3.375	2.5
72	MP3C	Mx	-.001	2.5
73	O1	X	0	1
74	O1	Z	-7.089	1
75	O1	Mx	0	1
76	MP4A	X	0	2
77	MP4A	Z	-4.699	2
78	MP4A	Mx	.002	2
79	MP4A	X	0	5
80	MP4A	Z	-4.699	5
81	MP4A	Mx	.002	5
82	MP4B	X	0	2
83	MP4B	Z	-5.713	2
84	MP4B	Mx	-.001	2
85	MP4B	X	0	5
86	MP4B	Z	-5.713	5
87	MP4B	Mx	-.001	5

Member Point Loads (BLC 27 : Antenna Wm (0 Deg)) (Continued)

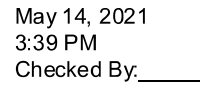
	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
88	MP4C	X	0	2
89	MP4C	Z	-5.387	2
90	MP4C	Mx	-.002	2
91	MP4C	X	0	5
92	MP4C	Z	-5.387	5
93	MP4C	Mx	-.002	5

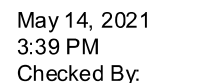
Member Point Loads (BLC 28 : Antenna Wm (30 Deg))

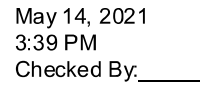
	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	3.846	2
2	MP2A	Z	-6.662	2
3	MP2A	Mx	-.000671	2
4	MP2A	X	3.846	5
5	MP2A	Z	-6.662	5
6	MP2A	Mx	-.000671	5
7	MP2B	X	4.169	2
8	MP2B	Z	-7.22	2
9	MP2B	Mx	.005	2
10	MP2B	X	4.169	5
11	MP2B	Z	-7.22	5
12	MP2B	Mx	.005	5
13	MP2C	X	3.565	2
14	MP2C	Z	-6.175	2
15	MP2C	Mx	-.005	2
16	MP2C	X	3.565	5
17	MP2C	Z	-6.175	5
18	MP2C	Mx	-.005	5
19	MP2A	X	3.846	2
20	MP2A	Z	-6.662	2
21	MP2A	Mx	.006	2
22	MP2A	X	3.846	5
23	MP2A	Z	-6.662	5
24	MP2A	Mx	.006	5
25	MP2B	X	4.169	2
26	MP2B	Z	-7.22	2
27	MP2B	Mx	-.005	2
28	MP2B	X	4.169	5
29	MP2B	Z	-7.22	5
30	MP2B	Mx	-.005	5
31	MP2C	X	3.565	2
32	MP2C	Z	-6.175	2
33	MP2C	Mx	-.002	2
34	MP2C	X	3.565	5
35	MP2C	Z	-6.175	5
36	MP2C	Mx	-.002	5
37	MP1A	X	1.705	3
38	MP1A	Z	-2.954	3
39	MP1A	Mx	.001	3
40	MP1A	X	1.705	4
41	MP1A	Z	-2.954	4
42	MP1A	Mx	.001	4



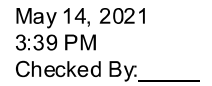
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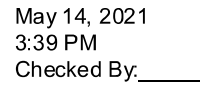
[\\...\\RISA\\MOD 468080-VZW MT LO H.r3d] Page 66

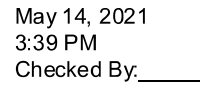


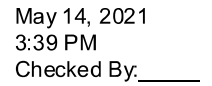
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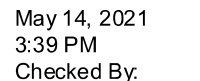
[\\...\\RISA\\MOD 468080-VZW MT LO H.r3d] Page 70

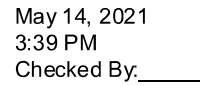


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Member Point Loads (BLC 36 : Antenna Wm (270 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-8.248	2
2	MP2A	Z	0	2
3	MP2A	Mx	.006	2
4	MP2A	X	-8.248	5
5	MP2A	Z	0	5
6	MP2A	Mx	.006	5
7	MP2B	X	-7.212	2
8	MP2B	Z	0	2
9	MP2B	Mx	-.005	2
10	MP2B	X	-7.212	5
11	MP2B	Z	0	5
12	MP2B	Mx	-.005	5
13	MP2C	X	-7.574	2
14	MP2C	Z	0	2
15	MP2C	Mx	-.000144	2
16	MP2C	X	-7.574	5
17	MP2C	Z	0	5
18	MP2C	Mx	-.000144	5
19	MP2A	X	-8.248	2
20	MP2A	Z	0	2
21	MP2A	Mx	-.004	2
22	MP2A	X	-8.248	5
23	MP2A	Z	0	5
24	MP2A	Mx	-.004	5
25	MP2B	X	-7.212	2
26	MP2B	Z	0	2
27	MP2B	Mx	-.002	2
28	MP2B	X	-7.212	5
29	MP2B	Z	0	5
30	MP2B	Mx	-.002	5
31	MP2C	X	-7.574	2
32	MP2C	Z	0	2
33	MP2C	Mx	.006	2
34	MP2C	X	-7.574	5
35	MP2C	Z	0	5
36	MP2C	Mx	.006	5
37	MP1A	X	-4.605	3
38	MP1A	Z	0	3
39	MP1A	Mx	.000635	3
40	MP1A	X	-4.605	4
41	MP1A	Z	0	4
42	MP1A	Mx	.000635	4
43	MP1B	X	-2.376	3
44	MP1B	Z	0	3
45	MP1B	Mx	-.001	3
46	MP1B	X	-2.376	4
47	MP1B	Z	0	4
48	MP1B	Mx	-.001	4
49	MP1C	X	-3.155	3
50	MP1C	Z	0	3
51	MP1C	Mx	.001	3
52	MP1C	X	-3.155	4

Member Point Loads (BLC 38 : Antenna Wm (330 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
67	MP3B	X	-1.921	2.5
68	MP3B	Z	-3.327	2.5
69	MP3B	Mx	-5.6e-5	2.5
70	MP3C	X	-1.921	2.5
71	MP3C	Z	-3.327	2.5
72	MP3C	Mx	-5.6e-5	2.5
73	O1	X	-3.893	1
74	O1	Z	-6.743	1
75	O1	Mx	0	1
76	MP4A	X	-2.445	2
77	MP4A	Z	-4.234	2
78	MP4A	Mx	.002	2
79	MP4A	X	-2.445	5
80	MP4A	Z	-4.234	5
81	MP4A	Mx	.002	5
82	MP4B	X	-2.555	2
83	MP4B	Z	-4.426	2
84	MP4B	Mx	-.002	2
85	MP4B	X	-2.555	5
86	MP4B	Z	-4.426	5
87	MP4B	Mx	-.002	5
88	MP4C	X	-2.936	2
89	MP4C	Z	-5.086	2
90	MP4C	Mx	-.00056	2
91	MP4C	X	-2.936	5
92	MP4C	Z	-5.086	5
93	MP4C	Mx	-.00056	5

Member Point Loads (BLC 77 : Lm1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M20	Y	-500	%93

Member Point Loads (BLC 78 : Lm2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M20	Y	-500	%58

Member Point Loads (BLC 79 : Lv1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M20	Y	-250	0

Member Point Loads (BLC 80 : Lv2)

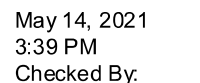
	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M20	Y	-250	%50

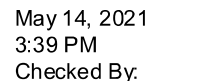
Member Distributed Loads (BLC 40 : Structure Di)

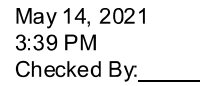
	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M20	Y	-6.538	-6.538	0	%100
2	M72A	Y	-9.57	-9.57	0	%100

Member Distributed Loads (BLC 40 : Structure Di) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
3	M73	Y	-9.57	-9.57	0	%100
4	M74	Y	-9.57	-9.57	0	%100
5	M75	Y	-10.081	-10.081	0	%100
6	M78	Y	-5.594	-5.594	0	%100
7	M79	Y	-5.594	-5.594	0	%100
8	M84	Y	-10.069	-10.069	0	%100
9	M85	Y	-10.069	-10.069	0	%100
10	M87A	Y	-10.081	-10.081	0	%100
11	M89A	Y	-10.069	-10.069	0	%100
12	M90A	Y	-10.069	-10.069	0	%100
13	M92	Y	-10.081	-10.081	0	%100
14	MP1A	Y	-4.956	-4.956	0	%100
15	O1	Y	-4.956	-4.956	0	%100
16	MP2A	Y	-5.659	-5.659	0	%100
17	MP3A	Y	-4.956	-4.956	0	%100
18	MP4A	Y	-4.956	-4.956	0	%100
19	M77B	Y	-6.538	-6.538	0	%100
20	MP1C	Y	-4.956	-4.956	0	%100
21	MP2C	Y	-5.659	-5.659	0	%100
22	MP3C	Y	-4.956	-4.956	0	%100
23	M85A	Y	-6.538	-6.538	0	%100
24	MP1B	Y	-4.956	-4.956	0	%100
25	MP2B	Y	-5.659	-5.659	0	%100
26	MP3B	Y	-4.956	-4.956	0	%100
27	M47	Y	-9.57	-9.57	0	%100
28	M48	Y	-9.57	-9.57	0	%100
29	M49	Y	-9.57	-9.57	0	%100
30	M50	Y	-10.081	-10.081	0	%100
31	M57	Y	-10.069	-10.069	0	%100
32	M58	Y	-10.069	-10.069	0	%100
33	M60	Y	-10.081	-10.081	0	%100
34	M62	Y	-10.069	-10.069	0	%100
35	M63	Y	-10.069	-10.069	0	%100
36	M65	Y	-10.081	-10.081	0	%100
37	M68	Y	-9.57	-9.57	0	%100
38	M69	Y	-9.57	-9.57	0	%100
39	M70	Y	-9.57	-9.57	0	%100
40	M71	Y	-10.081	-10.081	0	%100
41	M78B	Y	-10.069	-10.069	0	%100
42	M79B	Y	-10.069	-10.069	0	%100
43	M81B	Y	-10.081	-10.081	0	%100
44	M83B	Y	-10.069	-10.069	0	%100
45	M84B	Y	-10.069	-10.069	0	%100
46	M86	Y	-10.081	-10.081	0	%100
47	MP4C	Y	-4.956	-4.956	0	%100
48	MP4B	Y	-4.956	-4.956	0	%100
49	M92A	Y	-5.594	-5.594	0	%100
50	M93B	Y	-5.594	-5.594	0	%100
51	M94	Y	-5.594	-5.594	0	%100
52	M95	Y	-5.594	-5.594	0	%100
53	M96	Y	-5.659	-5.659	0	%100
54	M101	Y	-5.659	-5.659	0	%100







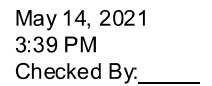
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Member Distributed Loads (BLC 42 : Structure Wo (30 Deg)) (Continued)

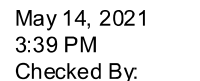
	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
81	M78B	X	9.273	9.273	0	%100
82	M78B	Z	-16.061	-16.061	0	%100
83	M79B	X	7.04	7.04	0	%100
84	M79B	Z	-12.193	-12.193	0	%100
85	M81B	X	7.296	7.296	0	%100
86	M81B	Z	-12.637	-12.637	0	%100
87	M83B	X	9.273	9.273	0	%100
88	M83B	Z	-16.061	-16.061	0	%100
89	M84B	X	7.04	7.04	0	%100
90	M84B	Z	-12.193	-12.193	0	%100
91	M86	X	7.296	7.296	0	%100
92	M86	Z	-12.637	-12.637	0	%100
93	MP4C	X	3.648	3.648	0	%100
94	MP4C	Z	-6.318	-6.318	0	%100
95	MP4B	X	3.648	3.648	0	%100
96	MP4B	Z	-6.318	-6.318	0	%100
97	M92A	X	.003	.003	0	%100
98	M92A	Z	-.005	-.005	0	%100
99	M93B	X	3.734	3.734	0	%100
100	M93B	Z	-6.467	-6.467	0	%100
101	M94	X	3.943	3.943	0	%100
102	M94	Z	-6.829	-6.829	0	%100
103	M95	X	3.943	3.943	0	%100
104	M95	Z	-6.829	-6.829	0	%100
105	M96	X	3.312	3.312	0	%100
106	M96	Z	-5.736	-5.736	0	%100
107	M101	X	3.312	3.312	0	%100
108	M101	Z	-5.736	-5.736	0	%100
109	M106	X	0	0	0	%100
110	M106	Z	0	0	0	%100
111	M117	X	4.216	4.216	0	%100
112	M117	Z	-7.302	-7.302	0	%100
113	M118	X	4.216	4.216	0	%100
114	M118	Z	-7.302	-7.302	0	%100
115	M119	X	0	0	0	%100
116	M119	Z	0	0	0	%100

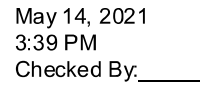
Member Distributed Loads (BLC 43 : Structure Wo (60 Deg))

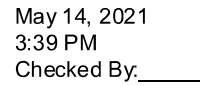
	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M20	X	2.328	2.328	0	%100
2	M20	Z	-1.344	-1.344	0	%100
3	M72A	X	7.586	7.586	0	%100
4	M72A	Z	-4.38	-4.38	0	%100
5	M73	X	2.026	2.026	0	%100
6	M73	Z	-1.17	-1.17	0	%100
7	M74	X	2.026	2.026	0	%100
8	M74	Z	-1.17	-1.17	0	%100
9	M75	X	3.99	3.99	0	%100
10	M75	Z	-2.304	-2.304	0	%100
11	M78	X	8.863	8.863	0	%100
12	M78	Z	-5.117	-5.117	0	%100



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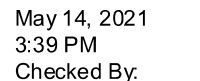
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Member Distributed Loads (BLC 44 : Structure Wo (90 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
105	M96	X	0	0	0	%100
106	M96	Z	0	0	0	%100
107	M101	X	6.624	6.624	0	%100
108	M101	Z	0	0	0	%100
109	M106	X	6.624	6.624	0	%100
110	M106	Z	0	0	0	%100
111	M117	X	8.432	8.432	0	%100
112	M117	Z	0	0	0	%100
113	M118	X	0	0	0	%100
114	M118	Z	0	0	0	%100
115	M119	X	8.432	8.432	0	%100
116	M119	Z	0	0	0	%100

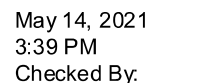
Member Distributed Loads (BLC 45 : Structure Wo (120 Deg))

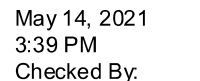
	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M20	X	2.328	2.328	0	%100
2	M20	Z	1.344	1.344	0	%100
3	M72A	X	7.586	7.586	0	%100
4	M72A	Z	4.38	4.38	0	%100
5	M73	X	2.026	2.026	0	%100
6	M73	Z	1.17	1.17	0	%100
7	M74	X	2.026	2.026	0	%100
8	M74	Z	1.17	1.17	0	%100
9	M75	X	3.99	3.99	0	%100
10	M75	Z	2.304	2.304	0	%100
11	M78	X	2.4	2.4	0	%100
12	M78	Z	1.386	1.386	0	%100
13	M79	X	8.863	8.863	0	%100
14	M79	Z	5.117	5.117	0	%100
15	M84	X	12.045	12.045	0	%100
16	M84	Z	6.954	6.954	0	%100
17	M85	X	16.258	16.258	0	%100
18	M85	Z	9.386	9.386	0	%100
19	M87A	X	16.849	16.849	0	%100
20	M87A	Z	9.728	9.728	0	%100
21	M89A	X	12.045	12.045	0	%100
22	M89A	Z	6.954	6.954	0	%100
23	M90A	X	4.064	4.064	0	%100
24	M90A	Z	2.347	2.347	0	%100
25	M92	X	4.212	4.212	0	%100
26	M92	Z	2.432	2.432	0	%100
27	MP1A	X	6.318	6.318	0	%100
28	MP1A	Z	3.648	3.648	0	%100
29	O1	X	5.167	5.167	0	%100
30	O1	Z	2.983	2.983	0	%100
31	MP2A	X	7.648	7.648	0	%100
32	MP2A	Z	4.416	4.416	0	%100
33	MP3A	X	6.318	6.318	0	%100
34	MP3A	Z	3.648	3.648	0	%100
35	MP4A	X	6.318	6.318	0	%100
36	MP4A	Z	3.648	3.648	0	%100



Member Distributed Loads (BLC 46 : Structure Wo (150 Deg)) (Continued)

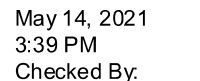
	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
21	M89A	X	2.318	2.318	0	%100
22	M89A	Z	4.015	4.015	0	%100
23	M90A	X	0	0	0	%100
24	M90A	Z	0	0	0	%100
25	M92	X	0	0	0	%100
26	M92	Z	0	0	0	%100
27	MP1A	X	3.648	3.648	0	%100
28	MP1A	Z	6.318	6.318	0	%100
29	O1	X	2.983	2.983	0	%100
30	O1	Z	5.167	5.167	0	%100
31	MP2A	X	4.416	4.416	0	%100
32	MP2A	Z	7.648	7.648	0	%100
33	MP3A	X	3.648	3.648	0	%100
34	MP3A	Z	6.318	6.318	0	%100
35	MP4A	X	3.648	3.648	0	%100
36	MP4A	Z	6.318	6.318	0	%100
37	M77B	X	0	0	0	%100
38	M77B	Z	0	0	0	%100
39	MP1C	X	3.648	3.648	0	%100
40	MP1C	Z	6.318	6.318	0	%100
41	MP2C	X	4.416	4.416	0	%100
42	MP2C	Z	7.648	7.648	0	%100
43	MP3C	X	3.648	3.648	0	%100
44	MP3C	Z	6.318	6.318	0	%100
45	M85A	X	4.032	4.032	0	%100
46	M85A	Z	6.983	6.983	0	%100
47	MP1B	X	3.648	3.648	0	%100
48	MP1B	Z	6.318	6.318	0	%100
49	MP2B	X	4.416	4.416	0	%100
50	MP2B	Z	7.648	7.648	0	%100
51	MP3B	X	3.648	3.648	0	%100
52	MP3B	Z	6.318	6.318	0	%100
53	M47	X	5.84	5.84	0	%100
54	M47	Z	10.115	10.115	0	%100
55	M48	X	0	0	0	%100
56	M48	Z	0	0	0	%100
57	M49	X	0	0	0	%100
58	M49	Z	0	0	0	%100
59	M50	X	0	0	0	%100
60	M50	Z	0	0	0	%100
61	M57	X	9.273	9.273	0	%100
62	M57	Z	16.061	16.061	0	%100
63	M58	X	7.04	7.04	0	%100
64	M58	Z	12.193	12.193	0	%100
65	M60	X	7.296	7.296	0	%100
66	M60	Z	12.637	12.637	0	%100
67	M62	X	9.273	9.273	0	%100
68	M62	Z	16.061	16.061	0	%100
69	M63	X	7.04	7.04	0	%100
70	M63	Z	12.193	12.193	0	%100
71	M65	X	7.296	7.296	0	%100
72	M65	Z	12.637	12.637	0	%100





Member Distributed Loads (BLC 48 : Structure Wo (210 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
41	MP2C	X	-4.416	-4.416	0	%100
42	MP2C	Z	7.648	7.648	0	%100
43	MP3C	X	-3.648	-3.648	0	%100
44	MP3C	Z	6.318	6.318	0	%100
45	M85A	X	0	0	0	%100
46	M85A	Z	0	0	0	%100
47	MP1B	X	-3.648	-3.648	0	%100
48	MP1B	Z	6.318	6.318	0	%100
49	MP2B	X	-4.416	-4.416	0	%100
50	MP2B	Z	7.648	7.648	0	%100
51	MP3B	X	-3.648	-3.648	0	%100
52	MP3B	Z	6.318	6.318	0	%100
53	M47	X	-1.46	-1.46	0	%100
54	M47	Z	2.529	2.529	0	%100
55	M48	X	-3.51	-3.51	0	%100
56	M48	Z	6.079	6.079	0	%100
57	M49	X	-3.51	-3.51	0	%100
58	M49	Z	6.079	6.079	0	%100
59	M50	X	-6.912	-6.912	0	%100
60	M50	Z	11.971	11.971	0	%100
61	M57	X	-2.318	-2.318	0	%100
62	M57	Z	4.015	4.015	0	%100
63	M58	X	-7.04	-7.04	0	%100
64	M58	Z	12.193	12.193	0	%100
65	M60	X	-7.296	-7.296	0	%100
66	M60	Z	12.637	12.637	0	%100
67	M62	X	-2.318	-2.318	0	%100
68	M62	Z	4.015	4.015	0	%100
69	M63	X	0	0	0	%100
70	M63	Z	0	0	0	%100
71	M65	X	0	0	0	%100
72	M65	Z	0	0	0	%100
73	M68	X	-5.84	-5.84	0	%100
74	M68	Z	10.115	10.115	0	%100
75	M69	X	0	0	0	%100
76	M69	Z	0	0	0	%100
77	M70	X	0	0	0	%100
78	M70	Z	0	0	0	%100
79	M71	X	0	0	0	%100
80	M71	Z	0	0	0	%100
81	M78B	X	-9.273	-9.273	0	%100
82	M78B	Z	16.061	16.061	0	%100
83	M79B	X	-7.04	-7.04	0	%100
84	M79B	Z	12.193	12.193	0	%100
85	M81B	X	-7.296	-7.296	0	%100
86	M81B	Z	12.637	12.637	0	%100
87	M83B	X	-9.273	-9.273	0	%100
88	M83B	Z	16.061	16.061	0	%100
89	M84B	X	-7.04	-7.04	0	%100
90	M84B	Z	12.193	12.193	0	%100
91	M86	X	-7.296	-7.296	0	%100
92	M86	Z	12.637	12.637	0	%100

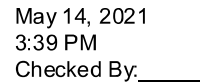


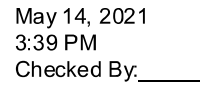
Member Distributed Loads (BLC 49 : Structure Wo (240 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
77	M70	X	-2.026	-2.026	0	%100
78	M70	Z	1.17	1.17	0	%100
79	M71	X	-3.99	-3.99	0	%100
80	M71	Z	2.304	2.304	0	%100
81	M78B	X	-12.045	-12.045	0	%100
82	M78B	Z	6.954	6.954	0	%100
83	M79B	X	-16.258	-16.258	0	%100
84	M79B	Z	9.386	9.386	0	%100
85	M81B	X	-16.849	-16.849	0	%100
86	M81B	Z	9.728	9.728	0	%100
87	M83B	X	-12.045	-12.045	0	%100
88	M83B	Z	6.954	6.954	0	%100
89	M84B	X	-4.064	-4.064	0	%100
90	M84B	Z	2.347	2.347	0	%100
91	M86	X	-4.212	-4.212	0	%100
92	M86	Z	2.432	2.432	0	%100
93	MP4C	X	-6.318	-6.318	0	%100
94	MP4C	Z	3.648	3.648	0	%100
95	MP4B	X	-6.318	-6.318	0	%100
96	MP4B	Z	3.648	3.648	0	%100
97	M92A	X	-2.038	-2.038	0	%100
98	M92A	Z	1.177	1.177	0	%100
99	M93B	X	-2.039	-2.039	0	%100
100	M93B	Z	1.177	1.177	0	%100
101	M94	X	-2.4	-2.4	0	%100
102	M94	Z	1.386	1.386	0	%100
103	M95	X	-8.863	-8.863	0	%100
104	M95	Z	5.117	5.117	0	%100
105	M96	X	-1.912	-1.912	0	%100
106	M96	Z	1.104	1.104	0	%100
107	M101	X	-7.648	-7.648	0	%100
108	M101	Z	4.416	4.416	0	%100
109	M106	X	-1.912	-1.912	0	%100
110	M106	Z	1.104	1.104	0	%100
111	M117	X	-9.736	-9.736	0	%100
112	M117	Z	5.621	5.621	0	%100
113	M118	X	-2.434	-2.434	0	%100
114	M118	Z	1.405	1.405	0	%100
115	M119	X	-2.434	-2.434	0	%100
116	M119	Z	1.405	1.405	0	%100

Member Distributed Loads (BLC 50 : Structure Wo (270 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M20	X	0	0	0	%100
2	M20	Z	0	0	0	%100
3	M72A	X	-11.68	-11.68	0	%100
4	M72A	Z	0	0	0	%100
5	M73	X	0	0	0	%100
6	M73	Z	0	0	0	%100
7	M74	X	0	0	0	%100
8	M74	Z	0	0	0	%100





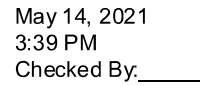
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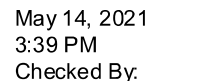
Member Distributed Loads (BLC 50 : Structure Wo (270 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
113	M118	X	0	0	0	%100
114	M118	Z	0	0	0	%100
115	M119	X	-8.432	-8.432	0	%100
116	M119	Z	0	0	0	%100

Member Distributed Loads (BLC 51 : Structure Wo (300 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M20	X	-2.328	-2.328	0	%100
2	M20	Z	-1.344	-1.344	0	%100
3	M72A	X	-7.586	-7.586	0	%100
4	M72A	Z	-4.38	-4.38	0	%100
5	M73	X	-2.026	-2.026	0	%100
6	M73	Z	-1.17	-1.17	0	%100
7	M74	X	-2.026	-2.026	0	%100
8	M74	Z	-1.17	-1.17	0	%100
9	M75	X	-3.99	-3.99	0	%100
10	M75	Z	-2.304	-2.304	0	%100
11	M78	X	-2.4	-2.4	0	%100
12	M78	Z	-1.386	-1.386	0	%100
13	M79	X	-8.863	-8.863	0	%100
14	M79	Z	-5.117	-5.117	0	%100
15	M84	X	-12.045	-12.045	0	%100
16	M84	Z	-6.954	-6.954	0	%100
17	M85	X	-16.258	-16.258	0	%100
18	M85	Z	-9.386	-9.386	0	%100
19	M87A	X	-16.849	-16.849	0	%100
20	M87A	Z	-9.728	-9.728	0	%100
21	M89A	X	-12.045	-12.045	0	%100
22	M89A	Z	-6.954	-6.954	0	%100
23	M90A	X	-4.064	-4.064	0	%100
24	M90A	Z	-2.347	-2.347	0	%100
25	M92	X	-4.212	-4.212	0	%100
26	M92	Z	-2.432	-2.432	0	%100
27	MP1A	X	-6.318	-6.318	0	%100
28	MP1A	Z	-3.648	-3.648	0	%100
29	O1	X	-5.167	-5.167	0	%100
30	O1	Z	-2.983	-2.983	0	%100
31	MP2A	X	-7.648	-7.648	0	%100
32	MP2A	Z	-4.416	-4.416	0	%100
33	MP3A	X	-6.318	-6.318	0	%100
34	MP3A	Z	-3.648	-3.648	0	%100
35	MP4A	X	-6.318	-6.318	0	%100
36	MP4A	Z	-3.648	-3.648	0	%100
37	M77B	X	-2.328	-2.328	0	%100
38	M77B	Z	-1.344	-1.344	0	%100
39	MP1C	X	-6.318	-6.318	0	%100
40	MP1C	Z	-3.648	-3.648	0	%100
41	MP2C	X	-7.648	-7.648	0	%100
42	MP2C	Z	-4.416	-4.416	0	%100
43	MP3C	X	-6.318	-6.318	0	%100
44	MP3C	Z	-3.648	-3.648	0	%100





Member Distributed Loads (BLC 52 : Structure Wo (330 Deg)) (Continued)

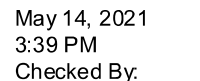
	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
29	O1	X	-2.983	-2.983	0	%100
30	O1	Z	-5.167	-5.167	0	%100
31	MP2A	X	-4.416	-4.416	0	%100
32	MP2A	Z	-7.648	-7.648	0	%100
33	MP3A	X	-3.648	-3.648	0	%100
34	MP3A	Z	-6.318	-6.318	0	%100
35	MP4A	X	-3.648	-3.648	0	%100
36	MP4A	Z	-6.318	-6.318	0	%100
37	M77B	X	0	0	0	%100
38	M77B	Z	0	0	0	%100
39	MP1C	X	-3.648	-3.648	0	%100
40	MP1C	Z	-6.318	-6.318	0	%100
41	MP2C	X	-4.416	-4.416	0	%100
42	MP2C	Z	-7.648	-7.648	0	%100
43	MP3C	X	-3.648	-3.648	0	%100
44	MP3C	Z	-6.318	-6.318	0	%100
45	M85A	X	-4.032	-4.032	0	%100
46	M85A	Z	-6.983	-6.983	0	%100
47	MP1B	X	-3.648	-3.648	0	%100
48	MP1B	Z	-6.318	-6.318	0	%100
49	MP2B	X	-4.416	-4.416	0	%100
50	MP2B	Z	-7.648	-7.648	0	%100
51	MP3B	X	-3.648	-3.648	0	%100
52	MP3B	Z	-6.318	-6.318	0	%100
53	M47	X	-5.84	-5.84	0	%100
54	M47	Z	-10.115	-10.115	0	%100
55	M48	X	0	0	0	%100
56	M48	Z	0	0	0	%100
57	M49	X	0	0	0	%100
58	M49	Z	0	0	0	%100
59	M50	X	0	0	0	%100
60	M50	Z	0	0	0	%100
61	M57	X	-9.273	-9.273	0	%100
62	M57	Z	-16.061	-16.061	0	%100
63	M58	X	-7.04	-7.04	0	%100
64	M58	Z	-12.193	-12.193	0	%100
65	M60	X	-7.296	-7.296	0	%100
66	M60	Z	-12.637	-12.637	0	%100
67	M62	X	-9.273	-9.273	0	%100
68	M62	Z	-16.061	-16.061	0	%100
69	M63	X	-7.04	-7.04	0	%100
70	M63	Z	-12.193	-12.193	0	%100
71	M65	X	-7.296	-7.296	0	%100
72	M65	Z	-12.637	-12.637	0	%100
73	M68	X	-1.46	-1.46	0	%100
74	M68	Z	-2.529	-2.529	0	%100
75	M69	X	-3.51	-3.51	0	%100
76	M69	Z	-6.079	-6.079	0	%100
77	M70	X	-3.51	-3.51	0	%100
78	M70	Z	-6.079	-6.079	0	%100
79	M71	X	-6.912	-6.912	0	%100
80	M71	Z	-11.971	-11.971	0	%100

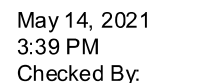
Member Distributed Loads (BLC 52 : Structure Wo (330 Deg)) (Continued)

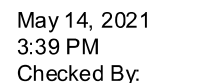
	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
81	M78B	X	-2.318	-2.318	0	%100
82	M78B	Z	-4.015	-4.015	0	%100
83	M79B	X	0	0	0	%100
84	M79B	Z	0	0	0	%100
85	M81B	X	0	0	0	%100
86	M81B	Z	0	0	0	%100
87	M83B	X	-2.318	-2.318	0	%100
88	M83B	Z	-4.015	-4.015	0	%100
89	M84B	X	-7.04	-7.04	0	%100
90	M84B	Z	-12.193	-12.193	0	%100
91	M86	X	-7.296	-7.296	0	%100
92	M86	Z	-12.637	-12.637	0	%100
93	MP4C	X	-3.648	-3.648	0	%100
94	MP4C	Z	-6.318	-6.318	0	%100
95	MP4B	X	-3.648	-3.648	0	%100
96	MP4B	Z	-6.318	-6.318	0	%100
97	M92A	X	-3.943	-3.943	0	%100
98	M92A	Z	-6.829	-6.829	0	%100
99	M93B	X	-3.943	-3.943	0	%100
100	M93B	Z	-6.829	-6.829	0	%100
101	M94	X	-3.734	-3.734	0	%100
102	M94	Z	-6.467	-6.467	0	%100
103	M95	X	-.003	-.003	0	%100
104	M95	Z	-.005	-.005	0	%100
105	M96	X	-3.312	-3.312	0	%100
106	M96	Z	-5.736	-5.736	0	%100
107	M101	X	0	0	0	%100
108	M101	Z	0	0	0	%100
109	M106	X	-3.312	-3.312	0	%100
110	M106	Z	-5.736	-5.736	0	%100
111	M117	X	0	0	0	%100
112	M117	Z	0	0	0	%100
113	M118	X	-4.216	-4.216	0	%100
114	M118	Z	-7.302	-7.302	0	%100
115	M119	X	-4.216	-4.216	0	%100
116	M119	Z	-7.302	-7.302	0	%100

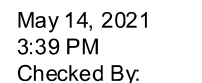
Member Distributed Loads (BLC 53 : Structure Wi (0 Deg))

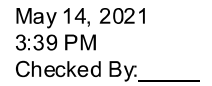
	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M20	X	0	0	0	%100
2	M20	Z	-3.311	-3.311	0	%100
3	M72A	X	0	0	0	%100
4	M72A	Z	0	0	0	%100
5	M73	X	0	0	0	%100
6	M73	Z	-2.77	-2.77	0	%100
7	M74	X	0	0	0	%100
8	M74	Z	-2.77	-2.77	0	%100
9	M75	X	0	0	0	%100
10	M75	Z	-4.268	-4.268	0	%100
11	M78	X	0	0	0	%100
12	M78	Z	-.73	-.73	0	%100



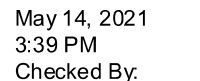


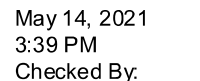


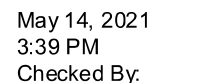


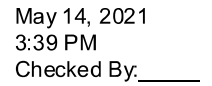


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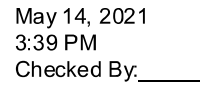


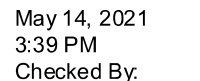






	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
5	M73	X	.6	.6	0	%100
6	M73	Z	.346	.346	0	%100
7	M74	X	.6	.6	0	%100
8	M74	Z	.346	.346	0	%100
9	M75	X	.924	.924	0	%100
10	M75	Z	.534	.534	0	%100
11	M78	X	.745	.745	0	%100
12	M78	Z	.43	.43	0	%100
13	M79	X	2.749	2.749	0	%100
14	M79	Z	1.587	1.587	0	%100
15	M84	X	2.736	2.736	0	%100
16	M84	Z	1.579	1.579	0	%100
17	M85	X	3.684	3.684	0	%100
18	M85	Z	2.127	2.127	0	%100
19	M87A	X	3.794	3.794	0	%100
20	M87A	Z	2.19	2.19	0	%100
21	M89A	X	2.736	2.736	0	%100
22	M89A	Z	1.579	1.579	0	%100
23	M90A	X	.921	.921	0	%100
24	M90A	Z	.532	.532	0	%100
25	M92	X	.948	.948	0	%100
26	M92	Z	.548	.548	0	%100
27	MP1A	X	2.311	2.311	0	%100
28	MP1A	Z	1.334	1.334	0	%100
29	O1	X	1.9	1.9	0	%100
30	O1	Z	1.097	1.097	0	%100
31	MP2A	X	2.558	2.558	0	%100
32	MP2A	Z	1.477	1.477	0	%100
33	MP3A	X	2.311	2.311	0	%100
34	MP3A	Z	1.334	1.334	0	%100
35	MP4A	X	2.311	2.311	0	%100
36	MP4A	Z	1.334	1.334	0	%100
37	M77B	X	.717	.717	0	%100
38	M77B	Z	.414	.414	0	%100
39	MP1C	X	2.311	2.311	0	%100
40	MP1C	Z	1.334	1.334	0	%100
41	MP2C	X	2.558	2.558	0	%100
42	MP2C	Z	1.477	1.477	0	%100
43	MP3C	X	2.311	2.311	0	%100
44	MP3C	Z	1.334	1.334	0	%100
45	M85A	X	2.867	2.867	0	%100
46	M85A	Z	1.655	1.655	0	%100
47	MP1B	X	2.311	2.311	0	%100
48	MP1B	Z	1.334	1.334	0	%100
49	MP2B	X	2.558	2.558	0	%100
50	MP2B	Z	1.477	1.477	0	%100
51	MP3B	X	2.311	2.311	0	%100
52	MP3B	Z	1.334	1.334	0	%100
53	M47	X	2.263	2.263	0	%100
54	M47	Z	1.306	1.306	0	%100
55	M48	X	.6	.6	0	%100
56	M48	Z	.346	.346	0	%100





Member Distributed Loads (BLC 58 : Structure Wi (150 Deg)) (Continued)

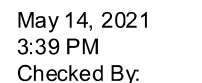
	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
41	MP2C	X	1.477	1.477	0	%100
42	MP2C	Z	2.558	2.558	0	%100
43	MP3C	X	1.334	1.334	0	%100
44	MP3C	Z	2.311	2.311	0	%100
45	M85A	X	1.242	1.242	0	%100
46	M85A	Z	2.151	2.151	0	%100
47	MP1B	X	1.334	1.334	0	%100
48	MP1B	Z	2.311	2.311	0	%100
49	MP2B	X	1.477	1.477	0	%100
50	MP2B	Z	2.558	2.558	0	%100
51	MP3B	X	1.334	1.334	0	%100
52	MP3B	Z	2.311	2.311	0	%100
53	M47	X	1.742	1.742	0	%100
54	M47	Z	3.017	3.017	0	%100
55	M48	X	0	0	0	%100
56	M48	Z	0	0	0	%100
57	M49	X	0	0	0	%100
58	M49	Z	0	0	0	%100
59	M50	X	0	0	0	%100
60	M50	Z	0	0	0	%100
61	M57	X	2.106	2.106	0	%100
62	M57	Z	3.647	3.647	0	%100
63	M58	X	1.595	1.595	0	%100
64	M58	Z	2.763	2.763	0	%100
65	M60	X	1.643	1.643	0	%100
66	M60	Z	2.845	2.845	0	%100
67	M62	X	2.106	2.106	0	%100
68	M62	Z	3.647	3.647	0	%100
69	M63	X	1.595	1.595	0	%100
70	M63	Z	2.763	2.763	0	%100
71	M65	X	1.643	1.643	0	%100
72	M65	Z	2.845	2.845	0	%100
73	M68	X	.435	.435	0	%100
74	M68	Z	.754	.754	0	%100
75	M69	X	1.039	1.039	0	%100
76	M69	Z	1.799	1.799	0	%100
77	M70	X	1.039	1.039	0	%100
78	M70	Z	1.799	1.799	0	%100
79	M71	X	1.601	1.601	0	%100
80	M71	Z	2.772	2.772	0	%100
81	M78B	X	.526	.526	0	%100
82	M78B	Z	.912	.912	0	%100
83	M79B	X	0	0	0	%100
84	M79B	Z	0	0	0	%100
85	M81B	X	0	0	0	%100
86	M81B	Z	0	0	0	%100
87	M83B	X	.526	.526	0	%100
88	M83B	Z	.912	.912	0	%100
89	M84B	X	1.595	1.595	0	%100
90	M84B	Z	2.763	2.763	0	%100
91	M86	X	1.643	1.643	0	%100
92	M86	Z	2.845	2.845	0	%100

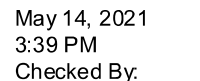
Member Distributed Loads (BLC 58 : Structure Wi (150 Deg)) (Continued)

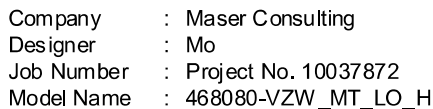
	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
93	MP4C	X	1.334	1.334	0	%100
94	MP4C	Z	2.311	2.311	0	%100
95	MP4B	X	1.334	1.334	0	%100
96	MP4B	Z	2.311	2.311	0	%100
97	M92A	X	1.223	1.223	0	%100
98	M92A	Z	2.118	2.118	0	%100
99	M93B	X	1.223	1.223	0	%100
100	M93B	Z	2.119	2.119	0	%100
101	M94	X	1.158	1.158	0	%100
102	M94	Z	2.006	2.006	0	%100
103	M95	X	.000882	.000882	0	%100
104	M95	Z	.002	.002	0	%100
105	M96	X	1.108	1.108	0	%100
106	M96	Z	1.919	1.919	0	%100
107	M101	X	0	0	0	%100
108	M101	Z	0	0	0	%100
109	M106	X	1.108	1.108	0	%100
110	M106	Z	1.919	1.919	0	%100
111	M117	X	0	0	0	%100
112	M117	Z	0	0	0	%100
113	M118	X	1.154	1.154	0	%100
114	M118	Z	1.998	1.998	0	%100
115	M119	X	1.154	1.154	0	%100
116	M119	Z	1.998	1.998	0	%100

Member Distributed Loads (BLC 59 : Structure Wi (180 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M20	X	0	0	0	%100
2	M20	Z	3.311	3.311	0	%100
3	M72A	X	0	0	0	%100
4	M72A	Z	0	0	0	%100
5	M73	X	0	0	0	%100
6	M73	Z	2.77	2.77	0	%100
7	M74	X	0	0	0	%100
8	M74	Z	2.77	2.77	0	%100
9	M75	X	0	0	0	%100
10	M75	Z	4.268	4.268	0	%100
11	M78	X	0	0	0	%100
12	M78	Z	.73	.73	0	%100
13	M79	X	0	0	0	%100
14	M79	Z	.73	.73	0	%100
15	M84	X	0	0	0	%100
16	M84	Z	0	0	0	%100
17	M85	X	0	0	0	%100
18	M85	Z	1.063	1.063	0	%100
19	M87A	X	0	0	0	%100
20	M87A	Z	1.095	1.095	0	%100
21	M89A	X	0	0	0	%100
22	M89A	Z	0	0	0	%100
23	M90A	X	0	0	0	%100
24	M90A	Z	1.063	1.063	0	%100

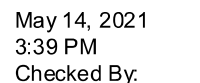


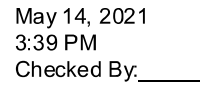


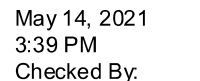


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	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
9	M75	X	-1.601	-1.601	0	%100
10	M75	Z	2.772	2.772	0	%100
11	M78	X	-1.158	-1.158	0	%100
12	M78	Z	2.006	2.006	0	%100
13	M79	X	-.000882	-.000882	0	%100
14	M79	Z	.002	.002	0	%100
15	M84	X	-.526	-.526	0	%100
16	M84	Z	.912	.912	0	%100
17	M85	X	0	0	0	%100
18	M85	Z	0	0	0	%100
19	M87A	X	0	0	0	%100
20	M87A	Z	0	0	0	%100
21	M89A	X	-.526	-.526	0	%100
22	M89A	Z	.912	.912	0	%100
23	M90A	X	-1.595	-1.595	0	%100
24	M90A	Z	2.763	2.763	0	%100
25	M92	X	-1.643	-1.643	0	%100
26	M92	Z	2.845	2.845	0	%100
27	MP1A	X	-1.334	-1.334	0	%100
28	MP1A	Z	2.311	2.311	0	%100
29	O1	X	-1.097	-1.097	0	%100
30	O1	Z	1.9	1.9	0	%100
31	MP2A	X	-1.477	-1.477	0	%100
32	MP2A	Z	2.558	2.558	0	%100
33	MP3A	X	-1.334	-1.334	0	%100
34	MP3A	Z	2.311	2.311	0	%100
35	MP4A	X	-1.334	-1.334	0	%100
36	MP4A	Z	2.311	2.311	0	%100
37	M77B	X	-1.242	-1.242	0	%100
38	M77B	Z	2.151	2.151	0	%100
39	MP1C	X	-1.334	-1.334	0	%100
40	MP1C	Z	2.311	2.311	0	%100
41	MP2C	X	-1.477	-1.477	0	%100
42	MP2C	Z	2.558	2.558	0	%100
43	MP3C	X	-1.334	-1.334	0	%100
44	MP3C	Z	2.311	2.311	0	%100
45	M85A	X	0	0	0	%100
46	M85A	Z	0	0	0	%100
47	MP1B	X	-1.334	-1.334	0	%100
48	MP1B	Z	2.311	2.311	0	%100
49	MP2B	X	-1.477	-1.477	0	%100
50	MP2B	Z	2.558	2.558	0	%100
51	MP3B	X	-1.334	-1.334	0	%100
52	MP3B	Z	2.311	2.311	0	%100
53	M47	X	-.435	-.435	0	%100
54	M47	Z	.754	.754	0	%100
55	M48	X	-1.039	-1.039	0	%100
56	M48	Z	1.799	1.799	0	%100
57	M49	X	-1.039	-1.039	0	%100
58	M49	Z	1.799	1.799	0	%100
59	M50	X	-1.601	-1.601	0	%100
60	M50	Z	2.772	2.772	0	%100





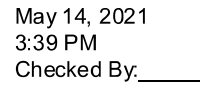


Member Distributed Loads (BLC 62 : Structure Wi (270 Deg)) (Continued)

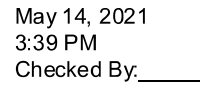
	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
81	M78B	X	-1.053	-1.053	0	%100
82	M78B	Z	0	0	0	%100
83	M79B	X	-3.19	-3.19	0	%100
84	M79B	Z	0	0	0	%100
85	M81B	X	-3.286	-3.286	0	%100
86	M81B	Z	0	0	0	%100
87	M83B	X	-1.053	-1.053	0	%100
88	M83B	Z	0	0	0	%100
89	M84B	X	0	0	0	%100
90	M84B	Z	0	0	0	%100
91	M86	X	0	0	0	%100
92	M86	Z	0	0	0	%100
93	MP4C	X	-2.669	-2.669	0	%100
94	MP4C	Z	0	0	0	%100
95	MP4B	X	-2.669	-2.669	0	%100
96	MP4B	Z	0	0	0	%100
97	M92A	X	-2.317	-2.317	0	%100
98	M92A	Z	0	0	0	%100
99	M93B	X	-.002	-.002	0	%100
100	M93B	Z	0	0	0	%100
101	M94	X	-.002	-.002	0	%100
102	M94	Z	0	0	0	%100
103	M95	X	-2.317	-2.317	0	%100
104	M95	Z	0	0	0	%100
105	M96	X	0	0	0	%100
106	M96	Z	0	0	0	%100
107	M101	X	-2.216	-2.216	0	%100
108	M101	Z	0	0	0	%100
109	M106	X	-2.216	-2.216	0	%100
110	M106	Z	0	0	0	%100
111	M117	X	-2.308	-2.308	0	%100
112	M117	Z	0	0	0	%100
113	M118	X	0	0	0	%100
114	M118	Z	0	0	0	%100
115	M119	X	-2.308	-2.308	0	%100
116	M119	Z	0	0	0	%100

Member Distributed Loads (BLC 63 : Structure Wi (300 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M20	X	- .717	- .717	0	%100
2	M20	Z	- .414	- .414	0	%100
3	M72A	X	-2.263	-2.263	0	%100
4	M72A	Z	-1.306	-1.306	0	%100
5	M73	X	- .6	- .6	0	%100
6	M73	Z	- .346	- .346	0	%100
7	M74	X	- .6	- .6	0	%100
8	M74	Z	- .346	- .346	0	%100
9	M75	X	- .924	- .924	0	%100
10	M75	Z	- .534	- .534	0	%100
11	M78	X	- .745	- .745	0	%100
12	M78	Z	- .43	- .43	0	%100



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Member Distributed Loads (BLC 64 : Structure Wi (330 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M20	X	-1.242	-1.242	0	%100
2	M20	Z	-2.151	-2.151	0	%100
3	M72A	X	-.435	-.435	0	%100
4	M72A	Z	-.754	-.754	0	%100
5	M73	X	-1.039	-1.039	0	%100
6	M73	Z	-1.799	-1.799	0	%100
7	M74	X	-1.039	-1.039	0	%100
8	M74	Z	-1.799	-1.799	0	%100
9	M75	X	-1.601	-1.601	0	%100
10	M75	Z	-2.772	-2.772	0	%100
11	M78	X	-.000882	-.000882	0	%100
12	M78	Z	-.002	-.002	0	%100
13	M79	X	-1.158	-1.158	0	%100
14	M79	Z	-2.006	-2.006	0	%100
15	M84	X	-.526	-.526	0	%100
16	M84	Z	-.912	-.912	0	%100
17	M85	X	-1.595	-1.595	0	%100
18	M85	Z	-2.763	-2.763	0	%100
19	M87A	X	-1.643	-1.643	0	%100
20	M87A	Z	-2.845	-2.845	0	%100
21	M89A	X	-.526	-.526	0	%100
22	M89A	Z	-.912	-.912	0	%100
23	M90A	X	0	0	0	%100
24	M90A	Z	0	0	0	%100
25	M92	X	0	0	0	%100
26	M92	Z	0	0	0	%100
27	MP1A	X	-1.334	-1.334	0	%100
28	MP1A	Z	-2.311	-2.311	0	%100
29	O1	X	-1.097	-1.097	0	%100
30	O1	Z	-1.9	-1.9	0	%100
31	MP2A	X	-1.477	-1.477	0	%100
32	MP2A	Z	-2.558	-2.558	0	%100
33	MP3A	X	-1.334	-1.334	0	%100
34	MP3A	Z	-2.311	-2.311	0	%100
35	MP4A	X	-1.334	-1.334	0	%100
36	MP4A	Z	-2.311	-2.311	0	%100
37	M77B	X	0	0	0	%100
38	M77B	Z	0	0	0	%100
39	MP1C	X	-1.334	-1.334	0	%100
40	MP1C	Z	-2.311	-2.311	0	%100
41	MP2C	X	-1.477	-1.477	0	%100
42	MP2C	Z	-2.558	-2.558	0	%100
43	MP3C	X	-1.334	-1.334	0	%100
44	MP3C	Z	-2.311	-2.311	0	%100
45	M85A	X	-1.242	-1.242	0	%100
46	M85A	Z	-2.151	-2.151	0	%100
47	MP1B	X	-1.334	-1.334	0	%100
48	MP1B	Z	-2.311	-2.311	0	%100
49	MP2B	X	-1.477	-1.477	0	%100
50	MP2B	Z	-2.558	-2.558	0	%100
51	MP3B	X	-1.334	-1.334	0	%100
52	MP3B	Z	-2.311	-2.311	0	%100

Member Distributed Loads (BLC 64 : Structure Wi (330 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
105	M96	X	-1.108	-1.108	0	%100
106	M96	Z	-1.919	-1.919	0	%100
107	M101	X	0	0	0	%100
108	M101	Z	0	0	0	%100
109	M106	X	-1.108	-1.108	0	%100
110	M106	Z	-1.919	-1.919	0	%100
111	M117	X	0	0	0	%100
112	M117	Z	0	0	0	%100
113	M118	X	-1.154	-1.154	0	%100
114	M118	Z	-1.998	-1.998	0	%100
115	M119	X	-1.154	-1.154	0	%100
116	M119	Z	-1.998	-1.998	0	%100

Member Distributed Loads (BLC 65 : Structure Wm (0 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M20	X	0	0	0	%100
2	M20	Z	-.719	-.719	0	%100
3	M72A	X	0	0	0	%100
4	M72A	Z	0	0	0	%100
5	M73	X	0	0	0	%100
6	M73	Z	-.626	-.626	0	%100
7	M74	X	0	0	0	%100
8	M74	Z	-.626	-.626	0	%100
9	M75	X	0	0	0	%100
10	M75	Z	-1.233	-1.233	0	%100
11	M78	X	0	0	0	%100
12	M78	Z	-.157	-.157	0	%100
13	M79	X	0	0	0	%100
14	M79	Z	-.157	-.157	0	%100
15	M84	X	0	0	0	%100
16	M84	Z	0	0	0	%100
17	M85	X	0	0	0	%100
18	M85	Z	-.314	-.314	0	%100
19	M87A	X	0	0	0	%100
20	M87A	Z	-.325	-.325	0	%100
21	M89A	X	0	0	0	%100
22	M89A	Z	0	0	0	%100
23	M90A	X	0	0	0	%100
24	M90A	Z	-.314	-.314	0	%100
25	M92	X	0	0	0	%100
26	M92	Z	-.325	-.325	0	%100
27	MP1A	X	0	0	0	%100
28	MP1A	Z	-.488	-.488	0	%100
29	O1	X	0	0	0	%100
30	O1	Z	-.399	-.399	0	%100
31	MP2A	X	0	0	0	%100
32	MP2A	Z	-.591	-.591	0	%100
33	MP3A	X	0	0	0	%100
34	MP3A	Z	-.488	-.488	0	%100
35	MP4A	X	0	0	0	%100
36	MP4A	Z	-.488	-.488	0	%100

Member Distributed Loads (BLC 65 : Structure Wm (0 Deg)) (Continued)

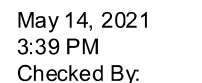
	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
37	M77B	X	0	0	0	%100
38	M77B	Z	-.18	-.18	0	%100
39	MP1C	X	0	0	0	%100
40	MP1C	Z	-.488	-.488	0	%100
41	MP2C	X	0	0	0	%100
42	MP2C	Z	-.591	-.591	0	%100
43	MP3C	X	0	0	0	%100
44	MP3C	Z	-.488	-.488	0	%100
45	M85A	X	0	0	0	%100
46	M85A	Z	-.18	-.18	0	%100
47	MP1B	X	0	0	0	%100
48	MP1B	Z	-.488	-.488	0	%100
49	MP2B	X	0	0	0	%100
50	MP2B	Z	-.591	-.591	0	%100
51	MP3B	X	0	0	0	%100
52	MP3B	Z	-.488	-.488	0	%100
53	M47	X	0	0	0	%100
54	M47	Z	-.586	-.586	0	%100
55	M48	X	0	0	0	%100
56	M48	Z	-.156	-.156	0	%100
57	M49	X	0	0	0	%100
58	M49	Z	-.156	-.156	0	%100
59	M50	X	0	0	0	%100
60	M50	Z	-.308	-.308	0	%100
61	M57	X	0	0	0	%100
62	M57	Z	-.93	-.93	0	%100
63	M58	X	0	0	0	%100
64	M58	Z	-1.256	-1.256	0	%100
65	M60	X	0	0	0	%100
66	M60	Z	-1.301	-1.301	0	%100
67	M62	X	0	0	0	%100
68	M62	Z	-.93	-.93	0	%100
69	M63	X	0	0	0	%100
70	M63	Z	-.314	-.314	0	%100
71	M65	X	0	0	0	%100
72	M65	Z	-.325	-.325	0	%100
73	M68	X	0	0	0	%100
74	M68	Z	-.586	-.586	0	%100
75	M69	X	0	0	0	%100
76	M69	Z	-.156	-.156	0	%100
77	M70	X	0	0	0	%100
78	M70	Z	-.156	-.156	0	%100
79	M71	X	0	0	0	%100
80	M71	Z	-.308	-.308	0	%100
81	M78B	X	0	0	0	%100
82	M78B	Z	-.93	-.93	0	%100
83	M79B	X	0	0	0	%100
84	M79B	Z	-.314	-.314	0	%100
85	M81B	X	0	0	0	%100
86	M81B	Z	-.325	-.325	0	%100
87	M83B	X	0	0	0	%100
88	M83B	Z	-.93	-.93	0	%100

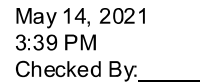
Member Distributed Loads (BLC 65 : Structure Wm (0 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
89	M84B	X	0	0	0	%100
90	M84B	Z	-1.256	-1.256	0	%100
91	M86	X	0	0	0	%100
92	M86	Z	-1.301	-1.301	0	%100
93	MP4C	X	0	0	0	%100
94	MP4C	Z	-.488	-.488	0	%100
95	MP4B	X	0	0	0	%100
96	MP4B	Z	-.488	-.488	0	%100
97	M92A	X	0	0	0	%100
98	M92A	Z	-.185	-.185	0	%100
99	M93B	X	0	0	0	%100
100	M93B	Z	-.684	-.684	0	%100
101	M94	X	0	0	0	%100
102	M94	Z	-.684	-.684	0	%100
103	M95	X	0	0	0	%100
104	M95	Z	-.185	-.185	0	%100
105	M96	X	0	0	0	%100
106	M96	Z	-.591	-.591	0	%100
107	M101	X	0	0	0	%100
108	M101	Z	-.148	-.148	0	%100
109	M106	X	0	0	0	%100
110	M106	Z	-.148	-.148	0	%100
111	M117	X	0	0	0	%100
112	M117	Z	-.188	-.188	0	%100
113	M118	X	0	0	0	%100
114	M118	Z	-.752	-.752	0	%100
115	M119	X	0	0	0	%100
116	M119	Z	-.188	-.188	0	%100

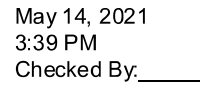
Member Distributed Loads (BLC 66 : Structure Wm (30 Deg))

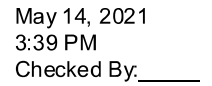
	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M20	X	.27	.27	0	%100
2	M20	Z	-.467	-.467	0	%100
3	M72A	X	.098	.098	0	%100
4	M72A	Z	-.169	-.169	0	%100
5	M73	X	.235	.235	0	%100
6	M73	Z	-.407	-.407	0	%100
7	M74	X	.235	.235	0	%100
8	M74	Z	-.407	-.407	0	%100
9	M75	X	.462	.462	0	%100
10	M75	Z	-.801	-.801	0	%100
11	M78	X	.25	.25	0	%100
12	M78	Z	-.433	-.433	0	%100
13	M79	X	.00019	.00019	0	%100
14	M79	Z	-.000329	-.000329	0	%100
15	M84	X	.155	.155	0	%100
16	M84	Z	-.269	-.269	0	%100
17	M85	X	0	0	0	%100
18	M85	Z	0	0	0	%100
19	M87A	X	0	0	0	%100
20	M87A	Z	0	0	0	%100



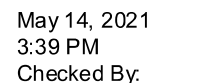


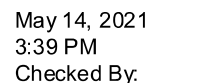
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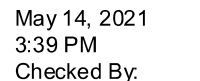


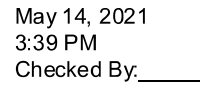


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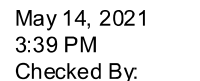


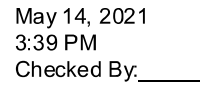
Member Distributed Loads (BLC 70 : Structure Wm (150 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
113	M118	X	.282	.282	0	%100
114	M118	Z	.488	.488	0	%100
115	M119	X	.282	.282	0	%100
116	M119	Z	.488	.488	0	%100

Member Distributed Loads (BLC 71 : Structure Wm (180 Deg))

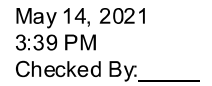
	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M20	X	0	0	0	%100
2	M20	Z	.719	.719	0	%100
3	M72A	X	0	0	0	%100
4	M72A	Z	0	0	0	%100
5	M73	X	0	0	0	%100
6	M73	Z	.626	.626	0	%100
7	M74	X	0	0	0	%100
8	M74	Z	.626	.626	0	%100
9	M75	X	0	0	0	%100
10	M75	Z	1.233	1.233	0	%100
11	M78	X	0	0	0	%100
12	M78	Z	.157	.157	0	%100
13	M79	X	0	0	0	%100
14	M79	Z	.157	.157	0	%100
15	M84	X	0	0	0	%100
16	M84	Z	0	0	0	%100
17	M85	X	0	0	0	%100
18	M85	Z	.314	.314	0	%100
19	M87A	X	0	0	0	%100
20	M87A	Z	.325	.325	0	%100
21	M89A	X	0	0	0	%100
22	M89A	Z	0	0	0	%100
23	M90A	X	0	0	0	%100
24	M90A	Z	.314	.314	0	%100
25	M92	X	0	0	0	%100
26	M92	Z	.325	.325	0	%100
27	MP1A	X	0	0	0	%100
28	MP1A	Z	.488	.488	0	%100
29	O1	X	0	0	0	%100
30	O1	Z	.399	.399	0	%100
31	MP2A	X	0	0	0	%100
32	MP2A	Z	.591	.591	0	%100
33	MP3A	X	0	0	0	%100
34	MP3A	Z	.488	.488	0	%100
35	MP4A	X	0	0	0	%100
36	MP4A	Z	.488	.488	0	%100
37	M77B	X	0	0	0	%100
38	M77B	Z	.18	.18	0	%100
39	MP1C	X	0	0	0	%100
40	MP1C	Z	.488	.488	0	%100
41	MP2C	X	0	0	0	%100
42	MP2C	Z	.591	.591	0	%100
43	MP3C	X	0	0	0	%100
44	MP3C	Z	.488	.488	0	%100

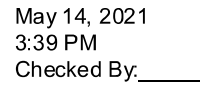


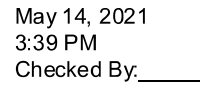


Member Distributed Loads (BLC 72 : Structure Wm (210 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
29	O1	X	-.2	-.2	0	%100
30	O1	Z	.346	.346	0	%100
31	MP2A	X	-.295	-.295	0	%100
32	MP2A	Z	.512	.512	0	%100
33	MP3A	X	-.244	-.244	0	%100
34	MP3A	Z	.423	.423	0	%100
35	MP4A	X	-.244	-.244	0	%100
36	MP4A	Z	.423	.423	0	%100
37	M77B	X	-.27	-.27	0	%100
38	M77B	Z	.467	.467	0	%100
39	MP1C	X	-.244	-.244	0	%100
40	MP1C	Z	.423	.423	0	%100
41	MP2C	X	-.295	-.295	0	%100
42	MP2C	Z	.512	.512	0	%100
43	MP3C	X	-.244	-.244	0	%100
44	MP3C	Z	.423	.423	0	%100
45	M85A	X	0	0	0	%100
46	M85A	Z	0	0	0	%100
47	MP1B	X	-.244	-.244	0	%100
48	MP1B	Z	.423	.423	0	%100
49	MP2B	X	-.295	-.295	0	%100
50	MP2B	Z	.512	.512	0	%100
51	MP3B	X	-.244	-.244	0	%100
52	MP3B	Z	.423	.423	0	%100
53	M47	X	-.098	-.098	0	%100
54	M47	Z	.169	.169	0	%100
55	M48	X	-.235	-.235	0	%100
56	M48	Z	.407	.407	0	%100
57	M49	X	-.235	-.235	0	%100
58	M49	Z	.407	.407	0	%100
59	M50	X	-.462	-.462	0	%100
60	M50	Z	.801	.801	0	%100
61	M57	X	-.155	-.155	0	%100
62	M57	Z	.269	.269	0	%100
63	M58	X	-.471	-.471	0	%100
64	M58	Z	.816	.816	0	%100
65	M60	X	-.488	-.488	0	%100
66	M60	Z	.845	.845	0	%100
67	M62	X	-.155	-.155	0	%100
68	M62	Z	.269	.269	0	%100
69	M63	X	0	0	0	%100
70	M63	Z	0	0	0	%100
71	M65	X	0	0	0	%100
72	M65	Z	0	0	0	%100
73	M68	X	-.391	-.391	0	%100
74	M68	Z	.677	.677	0	%100
75	M69	X	0	0	0	%100
76	M69	Z	0	0	0	%100
77	M70	X	0	0	0	%100
78	M70	Z	0	0	0	%100
79	M71	X	0	0	0	%100
80	M71	Z	0	0	0	%100

[illegible]



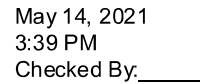


Member Distributed Loads (BLC 74 : Structure Wm (270 Deg))

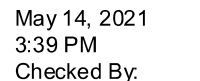
	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M20	X	0	0	0	%100
2	M20	Z	0	0	0	%100
3	M72A	X	-.781	-.781	0	%100
4	M72A	Z	0	0	0	%100
5	M73	X	0	0	0	%100
6	M73	Z	0	0	0	%100
7	M74	X	0	0	0	%100
8	M74	Z	0	0	0	%100
9	M75	X	0	0	0	%100
10	M75	Z	0	0	0	%100
11	M78	X	-.527	-.527	0	%100
12	M78	Z	0	0	0	%100
13	M79	X	-.527	-.527	0	%100
14	M79	Z	0	0	0	%100
15	M84	X	-1.24	-1.24	0	%100
16	M84	Z	0	0	0	%100
17	M85	X	-.942	-.942	0	%100
18	M85	Z	0	0	0	%100
19	M87A	X	-.976	-.976	0	%100
20	M87A	Z	0	0	0	%100
21	M89A	X	-1.24	-1.24	0	%100
22	M89A	Z	0	0	0	%100
23	M90A	X	-.942	-.942	0	%100
24	M90A	Z	0	0	0	%100
25	M92	X	-.976	-.976	0	%100
26	M92	Z	0	0	0	%100
27	MP1A	X	-.488	-.488	0	%100
28	MP1A	Z	0	0	0	%100
29	O1	X	-.399	-.399	0	%100
30	O1	Z	0	0	0	%100
31	MP2A	X	-.591	-.591	0	%100
32	MP2A	Z	0	0	0	%100
33	MP3A	X	-.488	-.488	0	%100
34	MP3A	Z	0	0	0	%100
35	MP4A	X	-.488	-.488	0	%100
36	MP4A	Z	0	0	0	%100
37	M77B	X	-.539	-.539	0	%100
38	M77B	Z	0	0	0	%100
39	MP1C	X	-.488	-.488	0	%100
40	MP1C	Z	0	0	0	%100
41	MP2C	X	-.591	-.591	0	%100
42	MP2C	Z	0	0	0	%100
43	MP3C	X	-.488	-.488	0	%100
44	MP3C	Z	0	0	0	%100
45	M85A	X	-.539	-.539	0	%100
46	M85A	Z	0	0	0	%100
47	MP1B	X	-.488	-.488	0	%100
48	MP1B	Z	0	0	0	%100
49	MP2B	X	-.591	-.591	0	%100
50	MP2B	Z	0	0	0	%100
51	MP3B	X	-.488	-.488	0	%100
52	MP3B	Z	0	0	0	%100

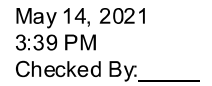
Member Distributed Loads (BLC 74 : Structure Wm (270 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
53	M47	X	-.195	-.195	0	%100
54	M47	Z	0	0	0	%100
55	M48	X	-.469	-.469	0	%100
56	M48	Z	0	0	0	%100
57	M49	X	-.469	-.469	0	%100
58	M49	Z	0	0	0	%100
59	M50	X	-.925	-.925	0	%100
60	M50	Z	0	0	0	%100
61	M57	X	-.31	-.31	0	%100
62	M57	Z	0	0	0	%100
63	M58	X	0	0	0	%100
64	M58	Z	0	0	0	%100
65	M60	X	0	0	0	%100
66	M60	Z	0	0	0	%100
67	M62	X	-.31	-.31	0	%100
68	M62	Z	0	0	0	%100
69	M63	X	-.942	-.942	0	%100
70	M63	Z	0	0	0	%100
71	M65	X	-.976	-.976	0	%100
72	M65	Z	0	0	0	%100
73	M68	X	-.195	-.195	0	%100
74	M68	Z	0	0	0	%100
75	M69	X	-.469	-.469	0	%100
76	M69	Z	0	0	0	%100
77	M70	X	-.469	-.469	0	%100
78	M70	Z	0	0	0	%100
79	M71	X	-.925	-.925	0	%100
80	M71	Z	0	0	0	%100
81	M78B	X	-.31	-.31	0	%100
82	M78B	Z	0	0	0	%100
83	M79B	X	-.942	-.942	0	%100
84	M79B	Z	0	0	0	%100
85	M81B	X	-.976	-.976	0	%100
86	M81B	Z	0	0	0	%100
87	M83B	X	-.31	-.31	0	%100
88	M83B	Z	0	0	0	%100
89	M84B	X	0	0	0	%100
90	M84B	Z	0	0	0	%100
91	M86	X	0	0	0	%100
92	M86	Z	0	0	0	%100
93	MP4C	X	-.488	-.488	0	%100
94	MP4C	Z	0	0	0	%100
95	MP4B	X	-.488	-.488	0	%100
96	MP4B	Z	0	0	0	%100
97	M92A	X	-.499	-.499	0	%100
98	M92A	Z	0	0	0	%100
99	M93B	X	-.00038	-.00038	0	%100
100	M93B	Z	0	0	0	%100
101	M94	X	-.00038	-.00038	0	%100
102	M94	Z	0	0	0	%100
103	M95	X	-.499	-.499	0	%100
104	M95	Z	0	0	0	%100



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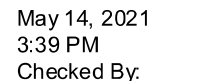
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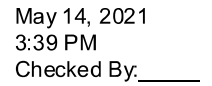
Member Distributed Loads (BLC 76 : Structure Wm (330 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
73	M68	X	-.098	-.098	0	%100
74	M68	Z	-.169	-.169	0	%100
75	M69	X	-.235	-.235	0	%100
76	M69	Z	-.407	-.407	0	%100
77	M70	X	-.235	-.235	0	%100
78	M70	Z	-.407	-.407	0	%100
79	M71	X	-.462	-.462	0	%100
80	M71	Z	-.801	-.801	0	%100
81	M78B	X	-.155	-.155	0	%100
82	M78B	Z	-.269	-.269	0	%100
83	M79B	X	0	0	0	%100
84	M79B	Z	0	0	0	%100
85	M81B	X	0	0	0	%100
86	M81B	Z	0	0	0	%100
87	M83B	X	-.155	-.155	0	%100
88	M83B	Z	-.269	-.269	0	%100
89	M84B	X	-.471	-.471	0	%100
90	M84B	Z	-.816	-.816	0	%100
91	M86	X	-.488	-.488	0	%100
92	M86	Z	-.845	-.845	0	%100
93	MP4C	X	-.244	-.244	0	%100
94	MP4C	Z	-.423	-.423	0	%100
95	MP4B	X	-.244	-.244	0	%100
96	MP4B	Z	-.423	-.423	0	%100
97	M92A	X	-.264	-.264	0	%100
98	M92A	Z	-.457	-.457	0	%100
99	M93B	X	-.264	-.264	0	%100
100	M93B	Z	-.457	-.457	0	%100
101	M94	X	-.25	-.25	0	%100
102	M94	Z	-.433	-.433	0	%100
103	M95	X	-.00019	-.00019	0	%100
104	M95	Z	-.000329	-.000329	0	%100
105	M96	X	-.222	-.222	0	%100
106	M96	Z	-.384	-.384	0	%100
107	M101	X	0	0	0	%100
108	M101	Z	0	0	0	%100
109	M106	X	-.222	-.222	0	%100
110	M106	Z	-.384	-.384	0	%100
111	M117	X	0	0	0	%100
112	M117	Z	0	0	0	%100
113	M118	X	-.282	-.282	0	%100
114	M118	Z	-.488	-.488	0	%100
115	M119	X	-.282	-.282	0	%100
116	M119	Z	-.488	-.488	0	%100

Member Distributed Loads (BLC 81 : BLC 39 Transient Area Loads)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M20	Y	.014	-.877	0	1.078
2	M20	Y	-.877	-1.972	1.078	2.156
3	M20	Y	-1.972	-2.29	2.156	3.234
4	M20	Y	-2.29	-2.516	3.234	4.312





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Member Distributed Loads (BLC 82 : BLC 40 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
65	M72A	Y	-15.067	-7.777	4.65	5.554
66	M72A	Y	-7.777	-6.259	5.554	6.458
67	M73	Y	-.225	-4.541	0	.515
68	M73	Y	-4.541	-8.475	.515	1.029
69	M73	Y	-8.475	-8.831	1.029	1.544
70	M73	Y	-8.831	-7.316	1.544	2.058
71	M73	Y	-7.316	-2.809	2.058	2.573
72	M74	Y	-1.518	-7.047	0	.515
73	M74	Y	-7.047	-9.951	.515	1.029
74	M74	Y	-9.951	-9.414	1.029	1.544
75	M74	Y	-9.414	-4.507	1.544	2.058
76	M74	Y	-4.507	-.276	2.058	2.573
77	M75	Y	-2.107	-1.838	0	.365
78	M75	Y	-1.838	-1.832	.365	.729
79	M75	Y	-1.832	-2.088	.729	1.094
80	M82	Y	-.81	-.81	0	.162
81	M83	Y	-.813	-.813	.005	.167
82	M87A	Y	-5.185	-5.185	0	.125
83	M92	Y	-5.138	-5.138	0	.125
84	M77B	Y	-3.358	-4.946	10.062	11.141
85	M77B	Y	-4.946	-4.61	11.141	12.219
86	M77B	Y	-4.61	-1.789	12.219	13.297
87	M77B	Y	-1.789	-.099	13.297	14.375
88	M85A	Y	.027	-1.693	0	1.078
89	M85A	Y	-1.693	-3.807	1.078	2.156
90	M85A	Y	-3.807	-4.419	2.156	3.234
91	M85A	Y	-4.419	-4.856	3.234	4.312

Member Area Loads (BLC 39 : Structure D)

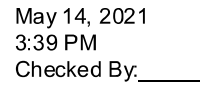
	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N85	N89	N90	N86	Y	Two Way	-.005
2	N120B	N124A	N123	N119	Y	Two Way	-.005
3	N117B	N121A	N120	N116	Y	Two Way	-.005

Member Area Loads (BLC 40 : Structure Di)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N85	N89	N90	N86	Y	Two Way	-.01
2	N116	N117B	N121A	N120	Y	Two Way	-.01
3	N119	N123	N124A	N120B	Y	Two Way	-.01

Envelope Joint Reactions

	Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
1	N112A	max	797.743	10	2518.249	13	2077.306	1	6.221	13	1.212	4	.195	4
2		min	-783.57	4	510.559	7	-2144.135	7	.095	7	-1.251	10	-.179	10
3	N79	max	1722.664	9	2443.853	21	1106.38	2	-.21	3	1.142	12	-.35	3
4		min	-1743.489	3	528.092	3	-1050.839	8	-3.149	21	-1.101	6	-5.388	21
5	N110	max	1703.833	11	2528.647	17	1152.044	12	-.269	11	1.189	8	5.722	17
6		min	-1697.364	5	554.09	11	-1138.723	6	-3.444	29	-1.213	2	.454	11



Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
7	Totals:	max	4066.52	10	7028.013	13	4135.949	1					
8		min	-4066.51	4	3450.622	7	-4135.937	7					

	Member	Shape	Code C...	Loc[ft]	LC	Shear ...	Loc[ft]	Dir	LC	phi*Pnc [lb]	phi*Pnt [lb]	phi*Mn y...	phi*Mn z...	Cb	Eqn
1	M20	PIPE 3.0	.186	9.583	19	.085	9.583		6	21637.495	65205	5.749	5.749	2...	H1-1b
2	M72A	HSS4X4X4	.389	0	24	.068	0	y	14	117170.28	139518	16.181	16.181	3...	H1-1b
3	M73	HSS4X4X4	.193	2.573	14	.040	2.573	y	24	135705.7...	139518	16.181	16.181	1...	H1-1b
4	M74	HSS4X4X4	.194	0	24	.046	0	y	24	135705.7...	139518	16.181	16.181	1...	H1-1b
5	M75	PL1/2X6	.270	.547	1	.170	0	y	11	62895.024	97200	1.012	12.15	2...	H1-1b
6	M78	L2x2x3	.134	4.483	2	.010	0	y	17	8528.669	23392.8	.558	1.054	1...	H2-1
7	M79	L2x2x3	.148	4.484	1	.010	4.484	y	21	8523.447	23392.8	.558	1.054	1...	H2-1
8	M84	PL3/8x6	.211	0	2	.347	0	y	24	71260.778	72900	.57	9.113	1...	H1-1b
9	M85	PL3/8x6	.203	.167	1	.362	0	y	24	71601.728	72900	.57	9.113	1...	H1-1b
10	M87A	PL1/2X6	.057	.125	7	.081	.125	y	9	96648.928	97200	1.012	12.15	1...	H1-1b
11	M89A	PL3/8x6	.235	0	11	.446	0	y	16	71260.778	72900	.57	9.113	1...	H1-1b
12	M90A	PL3/8x6	.199	.167	7	.356	0	y	13	71601.728	72900	.57	9.113	1...	H1-1b
13	M92	PL1/2X6	.054	.125	1	.072	.125	y	5	96648.928	97200	1.012	12.15	1...	H1-1b
14	MP1A	PIPE 2.0	.348	4.896	9	.132	4.896		8	15395.584	32130	1.872	1.872	2...	H1-1b
15	O1	PIPE 2.0	.087	2.25	12	.013	2.25		12	28843.414	32130	1.872	1.872	1...	H1-1b
16	MP2A	PIPE 2.5	.280	4.896	10	.067	4.896		4	30694.206	50715	3.596	3.596	1...	H1-1b
17	MP3A	PIPE 2.0	.355	4.896	5	.107	4.896		7	15395.584	32130	1.872	1.872	1...	H1-1b
18	MP4A	PIPE 2.0	.256	4.896	5	.126	1.958		7	15395.584	32130	1.872	1.872	1...	H1-1b
19	M77B	PIPE 3.0	.184	4.941	16	.075	9.583		2	21637.495	65205	5.749	5.749	3...	H1-1b
20	MP1C	PIPE 2.0	.366	4.896	5	.130	4.896		4	15395.584	32130	1.872	1.872	2...	H1-1b
21	MP2C	PIPE 2.5	.312	4.896	6	.074	4.896		6	30694.206	50715	3.596	3.596	1...	H1-1b
22	MP3C	PIPE 2.0	.336	4.896	1	.108	2.448		3	15395.584	32130	1.872	1.872	2...	H1-1b
23	M85A	PIPE 3.0	.175	9.583	23	.075	9.583		10	21637.495	65205	5.749	5.749	2...	H1-1b
24	MP1B	PIPE 2.0	.339	4.896	1	.120	4.896		12	15395.584	32130	1.872	1.872	1...	H1-1b
25	MP2B	PIPE 2.5	.276	4.896	2	.066	2.448		2	30694.206	50715	3.596	3.596	1...	H1-1b
26	MP3B	PIPE 2.0	.328	4.896	9	.095	4.896		11	15395.584	32130	1.872	1.872	1...	H1-1b
27	M47	HSS4X4X4	.391	0	21	.074	0	y	44	117170.28	139518	16.181	16.181	3...	H1-1b
28	M48	HSS4X4X4	.199	2.573	22	.041	2.573	y	20	135705.7...	139518	16.181	16.181	1...	H1-1b
29	M49	HSS4X4X4	.198	0	20	.048	0	y	20	135705.7...	139518	16.181	16.181	1...	H1-1b
30	M50	PL1/2X6	.279	.547	3	.176	0	y	7	62895.024	97200	1.012	12.15	1...	H1-1b
31	M57	PL3/8x6	.215	0	10	.357	0	y	20	71260.778	72900	.57	9.113	1...	H1-1b
32	M58	PL3/8x6	.198	.167	3	.375	0	y	20	71601.728	72900	.57	9.113	1...	H1-1b
33	M60	PL1/2X6	.061	.125	9	.092	.125	y	5	96648.928	97200	1.012	12.15	1...	H1-1b
34	M62	PL3/8x6	.248	0	7	.438	0	y	24	71260.778	72900	.57	9.113	1...	H1-1b
35	M63	PL3/8x6	.198	.167	9	.360	0	y	21	71601.728	72900	.57	9.113	1...	H1-1b
36	M65	PL1/2X6	.053	.125	9	.064	.125	y	1	96648.928	97200	1.012	12.15	1...	H1-1b
37	M68	HSS4X4X4	.409	0	17	.092	0	y	42	117170.28	139518	16.181	16.181	3...	H1-1b
38	M69	HSS4X4X4	.205	2.573	18	.044	2.573	y	17	135705.7...	139518	16.181	16.181	1...	H1-1b
39	M70	HSS4X4X4	.204	0	16	.049	0	y	16	135705.7...	139518	16.181	16.181	1...	H1-1b
40	M71	PL1/2X6	.275	.547	5	.171	.547	y	36	62895.024	97200	1.012	12.15	2...	H1-1b
41	M78B	PL3/8x6	.230	0	6	.360	0	y	16	71260.778	72900	.57	9.113	1...	H1-1b
42	M79B	PL3/8x6	.203	.167	5	.379	0	y	16	71601.728	72900	.57	9.113	1...	H1-1b
43	M81B	PL1/2X6	.062	.125	5	.083	.125	y	25	96648.928	97200	1.012	12.15	1...	H1-1b
44	M83B	PL3/8x6	.246	0	3	.452	0	y	20	71260.778	72900	.57	9.113	1...	H1-1b
45	M84B	PL3/8x6	.195	.167	11	.374	0	y	17	71601.728	72900	.57	9.113	1...	H1-1b



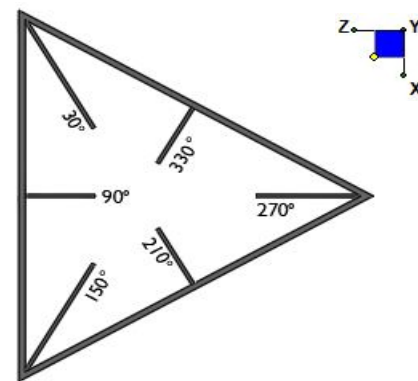
Client:	Verizon Wireless	Date:	5/14/2021
Site Name:	Thomaston S CT		
Project No.	21777092A		
Title:	Mount Fix	Page:	1

Version 3.1

I. Mount-to-Tower Connection Check

RISA Model Data

Nodes (labeled per RISA)	Orientation (per graphic of typical platform)
N112A	270
N79	30
N110	150



TYPICAL PLATFORM

Tower Connection Bolt Checks

Any moment resistance?:

Bolt Quantity per Reaction:

d_x (in) (Delta X of typ. bolt config. sketch):

d_y (in) (Delta Y of typ. bolt config. sketch):

Bolt Type:

Bolt Diameter (in):

Required Tensile Strength (kips):

Required Shear Strength (kips):

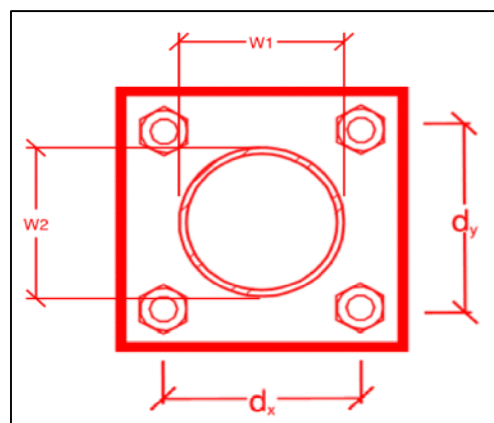
Tensile Strength / bolt (kips):

Shear Strength / bolt (kips):

Tensile Capacity Overall:

Shear Capacity Overall:

yes
4
7
7
A325N
0.5
25.1
5.1
13.3
8.0
47.4%*
16.0%



*Note: Tension reduction not required if tension or shear capacity < 30%

Tower Connection Plate and Weld Check

Connecting Standoff Member Shape:

Plate Width (in):

Plate Height (in):

W1 (in):

W2 (in):

Fy (ksi, plate):

t_{plate} (in):

Weld Size (1/16 in):

$\Phi \cdot R_n$ (kip/in):

Required Weld Strength (kip/in):

Plate Bending Capacity:

Weld Capacity:

Rect
10
10
4
4
36
0.5
3
4.18
3.74
85.5%
89.6%

Max Plate Bending Strengths

Mu_{xx} (kip-in):	17.3
$\Phi \cdot Mn_{xx}$ (kip-in):	20.3
Mu_{yy} (kip-in):	0.0
$\Phi \cdot Mn_{yy}$ (kip-in):	20.3

Mount Desktop – Post Modification Inspection (PMI) Report Requirements

Documents & Photos Required from Contractor – Mount Modification

Purpose – to provide Maser Consulting Connecticut the proper documentation in order to complete the required Mount Desktop review of the Post Modification Inspection Report.

- Contractor is responsible for making certain the photos provided as noted below provide confirmation that the modification was completed in accordance with the modification drawings.
- Contractor shall relay any data that can impact the performance of the mount or the mount modification, this includes safety issues.

Base Requirements:

- Any special photos outside of the standard requirements will be indicated on the drawings
- Provide “as built drawings” showing contractor’s name, preparer’s signature, and date. Any deviations from the drawings (proposed modification) must be shown.
- Notation that all hardware was properly installed, and the existing hardware was inspected for any issues.
- Verification that loading is as communicated in the modification drawings. NOTE If loading is different than what is conveyed in the modification drawing contact Maser Consulting Connecticut immediately.
- Each photo should be time and date stamped
- Photos should be high resolution and submitted in a Zip File and should be organized in the file structure as depicted in Schedule A attached.
- Contractor shall ensure that the safety climb wire rope is supported and not adversely impacted by the install of the modification components. This may involve the install of wire rope guides, or other items to protect the wire rope.
- The photos in the file structure should be uploaded to <https://pmi.vzwsmart.com> as depicted on the drawings

Photo Requirements:

- Base and “During Installation Photos”
 - Base pictures include
 - Photo of Gate Signs showing the tower owner, site name, and number
 - Photo of carrier shelter showing the carrier site name and number if available
 - Photos of the galvanizing compound and/or paint used (if applicable), clearly showing the label and name
 - “During Installation Photos if provided - must be placed only in this folder
- Photos taken at ground level
 - Overall tower structure before and after installation of the modifications
 - Photos of the appropriate mount before and after installation of the modifications; if the mounts are at different rad elevations, pictures must be provided for all elevations that the modifications were installed

- Photos taken at Mount Elevation
 - Photos showing each individual sector before and also after installation of modifications. Each entire sector must be in one photo to show in the inter-connection of members.
 - These photos should also certify that the placement and geometry of the equipment on the mount is as depicted on the sketch and table in the mount analysis
 - Close-up photos of each installed modification per the modification drawings; pictures should also include connection hardware (U-bolts, bolts, nuts, all-threaded rods, etc.)
 - Photos showing the measurements of the installed modification member sizes (i.e. lengths, widths, depths, diameters, thicknesses)
 - Photos showing the elevation or distances of the installed modifications from the appropriate reference locations shown in the modification drawings
 - Photos showing the installed modifications onto the tower with tape drop measurements (if applicable) (i.e. ring/collar mounts, tie-backs, V-bracing kits, etc.); if the existing mount elevation needs to be changed according to the modification drawings, a tape drop measurement shall be provided before the elevation change
 - Photos showing the safety climb wire rope above and below the mount prior to modification.
 - Photos showing the climbing facility and safety climb if present.

Material Certification:

- Materials utilized must be as per specification on the drawings or the equivalent as validated by Maser Consulting Connecticut.
 - If the drawings are as specified on the drawings
 - The contractor should provide the packing list or the materials utilized to perform the mount modification
 - If an equivalent is utilized
 - It is required that the Maser Consulting Connecticut certification of such is included in the contractor submission package. There may be an additional charge for this certification if the equivalent submission doesn't meet specifications as prescribed in the drawings.
- The contractor must certify that the materials meet these specifications by one of these methods.

☐ The Material utilized was as specified on the Maser Consulting Connecticut Mount Modification Drawings and included in the Material certification folder is a packing list or invoice for these materials

☐ The material utilized was an "equivalent" and included as part of the contractor submission is the Maser Consulting Connecticut certification, invoices, or specifications validating accepted status

Certifying Individual: Company _____

Name _____

Antenna & equipment placement and Geometry Confirmation:

- The contractor must certify that the antenna & equipment placement and geometry is in accordance with the antenna placement diagrams as included in this mount analysis.
- The contractor certifies that the photos support and the equipment on the mount is as depicted on the antenna placement diagrams as included in this mount analysis.
- The contractor notes that the equipment on the mount is not in accordance with the antenna placement diagrams and has accordingly marked up the diagrams or provided a diagram outlining the differences.

Certifying Individual:

Special Instructions / Validation as required from the MA or Mod Drawings:

Issue:

Install new 36" long P2.0 STD pipe on the existing standoff horizontal member between Beta & Gamma sector for new OVP - connect to standoff using crossover plates (Site Pro 1 Part #: SQCX4-K or EOR approved equivalent)
Contractor shall install new safety climb wire rope guides to the existing mount collar assemblies to prevent interference with mount connection.

Response:

--

Schedule A – Photo & Document File Structure



VzW Site Number / Name



Base & “During Installation” Photos



Pre-Installation Photos



Alpha



Beta



Gamma



Ground Level



Tape Drop



Post-Installation Photos



Alpha



Beta



Gamma



Ground Level



Tape Drop



Photos of climbing facility and safety climb – If Present



Certifications – Submission of this document including certifications



Specific Required Additional Photos

Sector: A

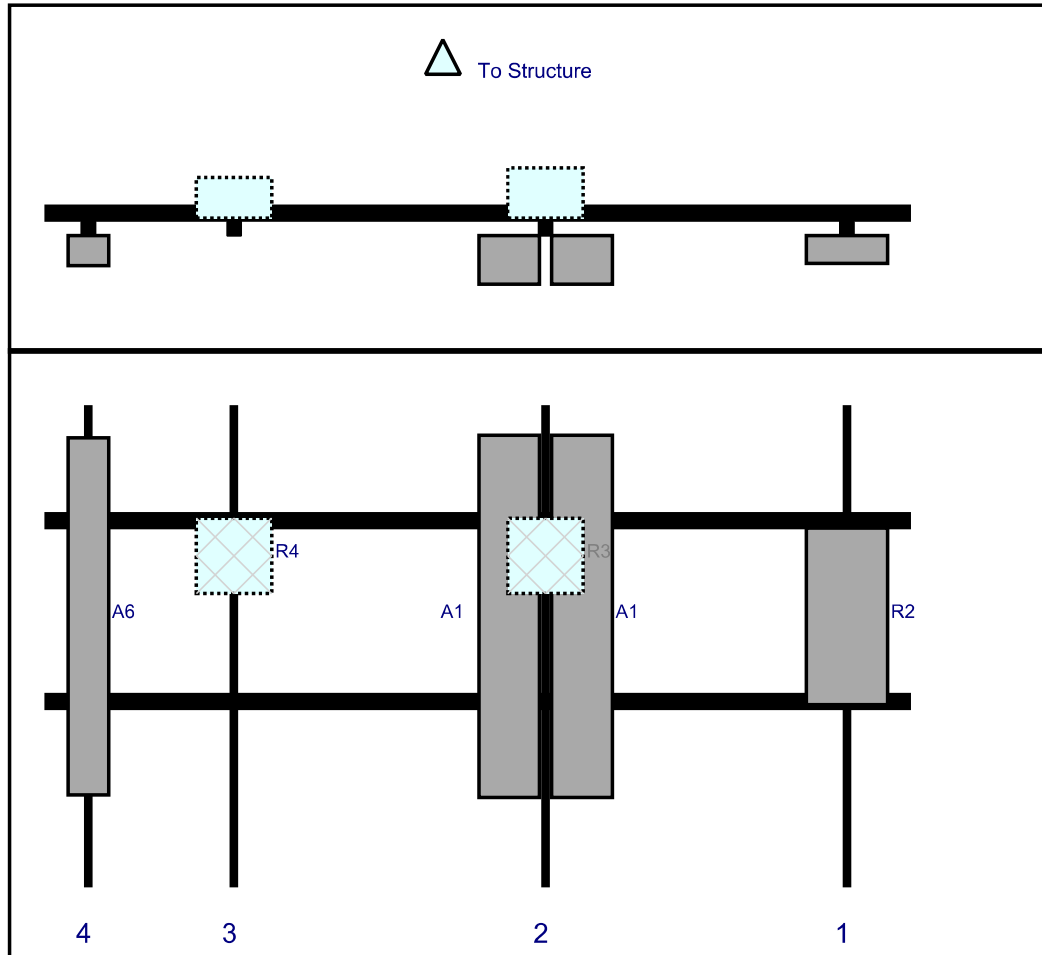
5/14/2021

Structure Type: Self Support

Mount Elev: 134.25

Page: 1

Plan View

Front View
Looking at Structure

Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
R2	MT6407-77A	35.1	16.1	159.75	1	a	Front	42	0	Added	
A1	QS6656-5	72	12	99.75	2	a	Front	42	7.25	Added	
A1	QS6656-5	72	12	99.75	2	b	Front	42	-7.25	Added	
R3	B2/B66A RRH-BR049 (RFV01U-D1A)	15	15	99.75	2	a	Behind	30	0	Added	
R4	B5/B13 RRH-BR04C (RFV01U-D2A)	15	15	37.75	3	a	Behind	30	0	Added	
A6	BXA-70080-6CF-EDIN-0	71	8	8.75001	4	a	Front	42	0	Retained	04/05/2021

Sector: **B**

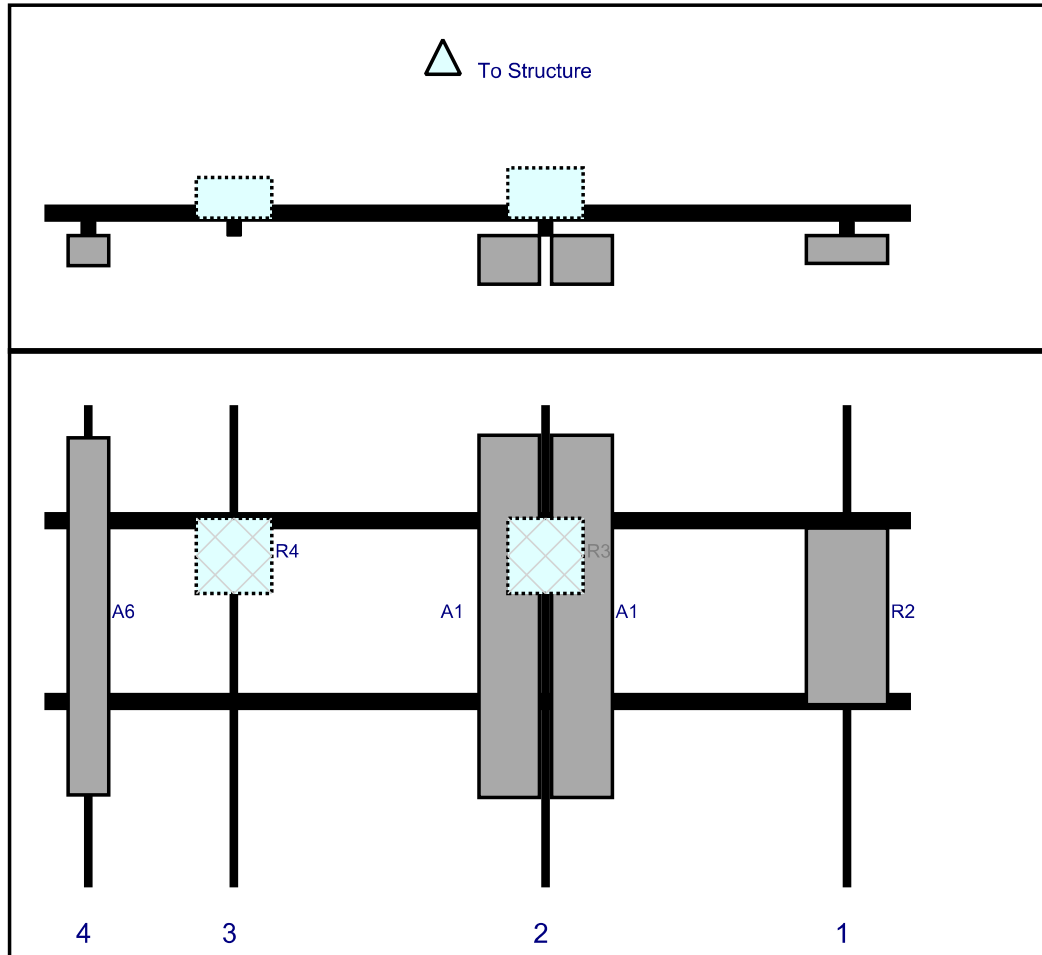
5/14/2021

Structure Type: Self Support

Mount Elev: 134.25

Page: 2

Plan View

Front View
Looking at Structure

Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
R2	MT6407-77A	35.1	16.1	159.75	1	a	Front	42	0	Added	
A1	QS6656-5	72	12	99.75	2	a	Front	42	7.25	Added	
A1	QS6656-5	72	12	99.75	2	b	Front	42	-7.25	Added	
R3	B2/B66A RRH-BR049 (RFV01U-D1A)	15	15	99.75	2	a	Behind	30	0	Added	
R4	B5/B13 RRH-BR04C (RFV01U-D2A)	15	15	37.75	3	a	Behind	30	0	Added	
A6	BXA-70080-6CF-EDIN-0	71	8	8.75001	4	a	Front	42	0	Retained	04/05/2021

Sector: C

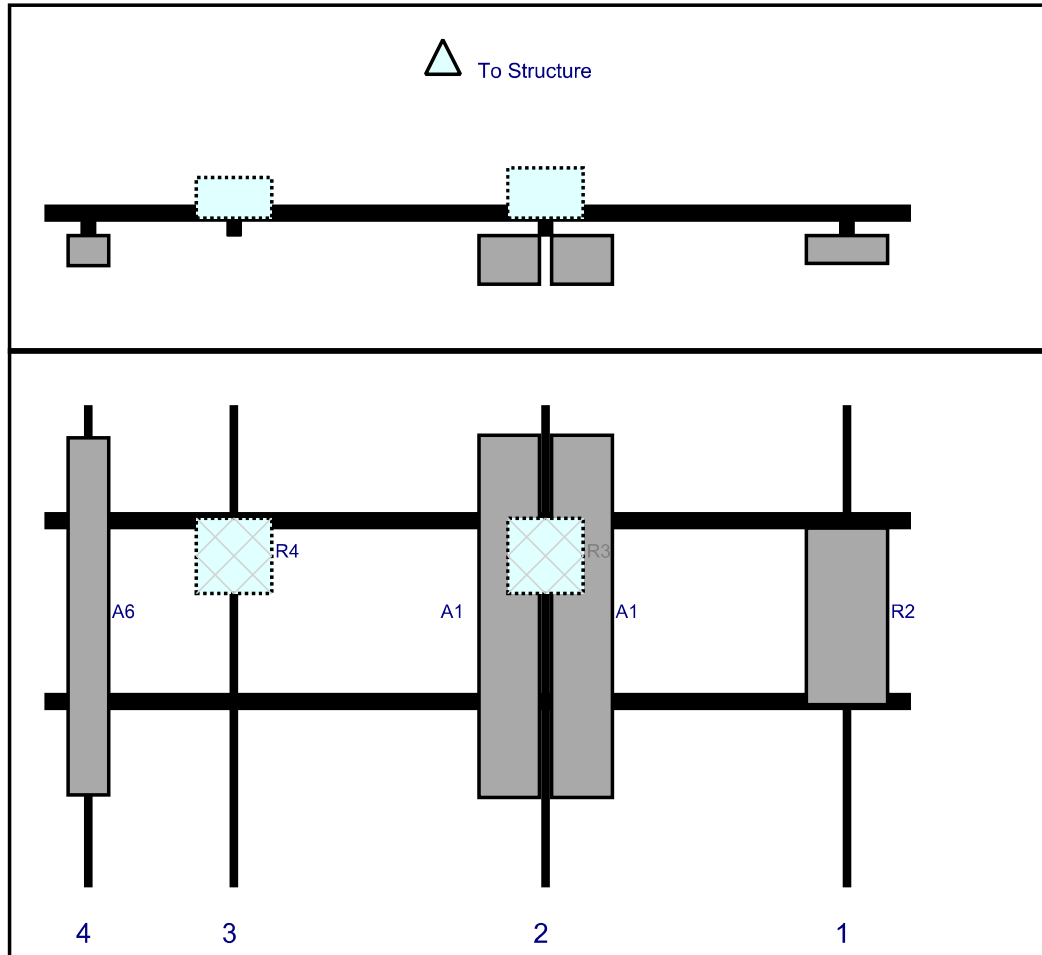
5/14/2021

Structure Type: Self Support

Mount Elev: 134.25

Page: 3

Plan View

Front View
Looking at Structure

Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
R2	MT6407-77A	35.1	16.1	159.75	1	a	Front	42	0	Added	
A1	QS6656-5	72	12	99.75	2	a	Front	42	7.25	Added	
A1	QS6656-5	72	12	99.75	2	b	Front	42	-7.25	Added	
R3	B2/B66A RRH-BR049 (RFV01U-D1A)	15	15	99.75	2	a	Behind	30	0	Added	
R4	B5/B13 RRH-BR04C (RFV01U-D2A)	15	15	37.75	3	a	Behind	30	0	Added	
A6	BXA-70080-6CF-EDIN-0	71	8	8.75001	4	a	Front	42	0	Retained	04/05/2021



Maser Consulting Connecticut

Subject

TIA-222-H Usage

Site Information

Site ID: 468080-VZW / THOMASTON S CT
Site Name: THOMASTON S CT
Carrier Name: Verizon Wireless
Address: 170 Mount Tobe RD
Plymouth, Connecticut 06782
Latitude: 41.630031°
Longitude: -73.056552°

Structure Information

Tower Type: 142-Ft Monopole
Mount Type: 12.42-Ft Platform

To Whom It May Concern,

We respectfully submit the above referenced Antenna Mount Structural Analysis report in conformance with ANSI/TIA-222-H, Structural Standard for Antenna Supporting Structures and Antennas and Small Wind Turbine Support Structures.

The 2015 International Building Code states that, in Section 3108, telecommunication towers shall be designed and constructed in accordance with the provisions of TIA-222. The TIA-222-H is the latest revision of the TIA-222 Standard, effective as of January 01, 2018.

As with all ANSI standards and engineering best practice is to apply the most current revision of the standard. This ensures the engineer is applying all updates. As an example, the TIA-222-H standard includes updates to bring it in line with the latest AISC and ACI standards and it also incorporates the latest wind speed maps by ASCE 7 based on updated studies of the wind data.

The TIA-222-H standard clarifies these specific requirements for the antenna mount analysis such as modeling methods, seismic analysis, 30-degree increment wind directions and maintenance loading. Therefore, it is our opinion that TIA-222-H is the most appropriate standard for antenna mount structural analysis and is acceptable for use at this site to ensure the engineer is taking into account the most current engineering standard available.

Sincerely,

A handwritten signature in black ink, appearing to read 'Derek Hartzell'.

Derek Hartzell
Technical Specialist

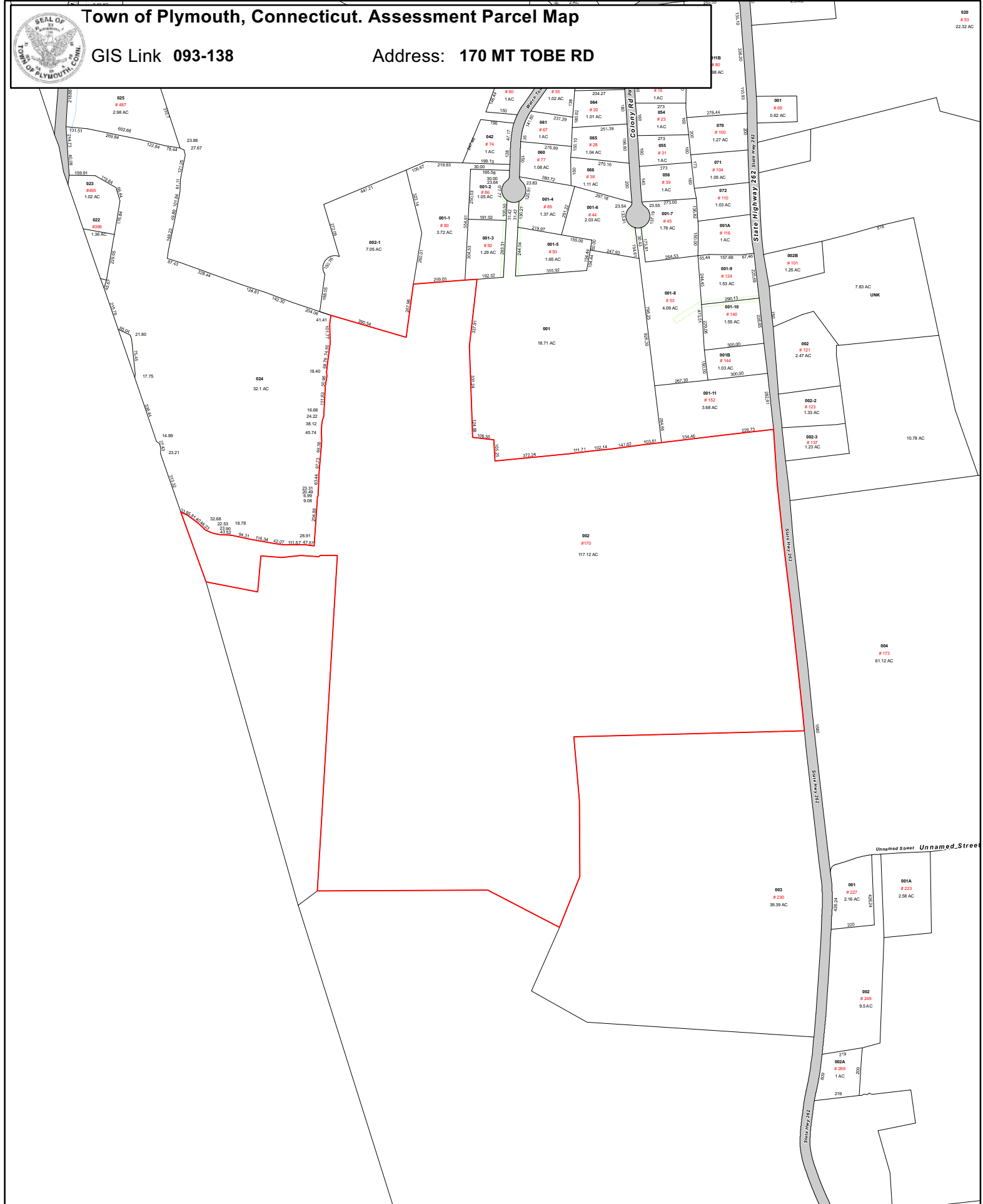
ATTACHMENT 5



Town of Plymouth, Connecticut. Assessment Parcel Map

GIS Link 093-138

Address: 170 MT TOBE RD



1 inch = 600 feet

0 300 600 900 1,200 Feet

Disclaimer: This map is for informational purposes only. All information is subject to verification by any user. The Town of Plymouth and its mapping contractors assume no legal responsibility for the information contained herein.

Map Produced: October 2020



Town of Plymouth
Property Listing Report

Parcel ID 093-138-002

Account 00483500

Property Information

Owner	MACDONALD SUSAN A & WALTER T
Address	170 MT TOBE RD
Mailing Address	42 SOUTH ST PLYMOUTH, CT 06782
Land Use	-
Land Class	R

Census Tract	4254
Neighborhood	103
Zoning	RA1
Acreage	117.12
Utilities	
Lot Setting/ Desc	/ 3

Photo



PARCEL VALUATIONS (Assessed value = 70% of Appraised Value)

	Appraised	Assessed
Buildings	142500	
Outbuildings		
Improvements		
Extras		
Land	429400	
Total	251200	175840
Previous		

Construction Details

Year Built	
Stories	
Building Style	
Building Use	
Building Condition	
Total Rooms	
Bedrooms	
Full Bathrooms	
Half Bathrooms	
Bath Style	
Kitchen Style	
Roof Style	
Roof Cover	

EXTERIOR WALLS:

Primary	
Secondary	

INTERIOR WALLS:

Primary	
Secondary	

FLOORS:

Primary	
Secondary	

HEATING/AC:

Heating Type	
Heating Fuel	
AC Type	

BUILDING AREA:

Effective Building Area	
Gross Building Area	
Total Living Area	

SALES HISTORY:

Sale Date	19920601
Sale Price	260000
Book/ Page	230/661

ATTACHMENT 6



THOMASTON SOUTH
Certificate of Mailing — Firm

Name and Address of Sender Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103	TOTAL NO. of Pieces Listed by Sender 3	TOTAL NO. of Pieces Received at Post Office™ 3	Affix Stamp Here <i>Postmark with Date of Receipt.</i> neopost® 07/26/2021 US POSTAGE \$002.89⁰  ZIP 06103 041L12203937			
	Postmaster, per (name of receiving employee) V-P					
USPS® Tracking Number Firm-specific Identifier	Address (Name, Street, City, State, and ZIP Code™)		Postage	Fee	Special Handling	Parcel Airlift
1.	David V. Merchant, Mayor Town of Plymouth 80 Main Street Terryville, CT 06786					
	Margus Laan, Director of Planning and Economic Development Town of Plymouth 80 Main Street Terryville, CT 06786					
3.	Susan and Walter MacDonald 42 South Street Plymouth, CT 06782					
4.						
5.						
6.						