Robinson+Cole

KENNETH C. BALDWIN

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Also admitted in Massachusetts and New York

February 2, 2022

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**
1365 (a/k/a 1385) Post Road East, Westport, 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 inside a faux-chimney structure on the roof of the building and associated equipment inside the building's parking garage. The telecommunications facility was approved by the Siting Council ("Council") in November of 2017 (Petition No. 1326). A copy of the Council's Decision and Staff Report is included in Attachment 1.

Cellco now intends to modify its facility by replacing its six (6) existing antennas with three (3) new MX08FIT265-01 antennas and three (3) NNH4-65A-R6H4 antennas within the same faux-chimney structure. Cellco also intends to install six (6) remote radio heads ("RRHs') within the faux-chimney structure. A set of project plans showing Cellco's proposed facility modifications and the specifications for Cellco's new antennas and RRHs are included in Attachment 2.

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 the Town's Chief Elected Official and Land Use Officer.

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 its existing antenna mounts.

2. The proposed modifications will not involve any change to ground-mounted equipment and, therefore, will not require the extension of the site boundary. Cellco's associated equipment is inside the building's existing parking garage.

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 general power density calculations 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 Mount and Building Structural Analysis ("SA"), the existing structure, faux-chimney and new mounts can support Cellco's proposed modifications. A copy of the SA is included in Attachment 4.

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).

Sincerely,

Kenneth C. Baldwin

Enclosures
Copy to:
Jennifer Tooker, Westport First Selectwoman
Mary Young, Planning & Zoning Director
AP 1365 Post Road E Westport LP
Alex Tyurin, Verizon Wireless

ATTACHMENT 1

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@ct.gov
www.ct.gov/csc

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

November 9, 2017

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

RE: **PETITION NO. 1326** - Cellco Partnership d/b/a Verizon Wireless petition for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the proposed installation of a wireless telecommunications facility on the roof of an existing commercial building located at 1385 Post Road East, Westport, Connecticut.

Dear Attorney Baldwin:

At a public meeting held on November 9, 2017, the Connecticut Siting Council (Council) considered and ruled that the above-referenced proposal would not have a substantial adverse environmental effect, and pursuant to Connecticut General Statutes § 16-50k, would not require a Certificate of Environmental Compatibility and Public Need with the following conditions:

1. Approval of any minor project changes be delegated to Council staff;

2. Unless otherwise approved by the Council, if the facility authorized herein is not fully constructed within three years from the date of the mailing of the Council's decision, this decision shall be void, and the facility owner/operator shall dismantle the facility and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made. The time between the filing and resolution of any appeals of the Council's decision shall not be counted in calculating this deadline. Authority to monitor and modify this schedule, as necessary, is delegated to the Executive Director. The facility owner/operator shall provide written notice to the Executive Director of any schedule changes as soon as is practicable;

3. Any request for extension of the time period to fully construct the facility shall be filed with the Council not later than 60 days prior to the expiration date of this decision and shall be served on all parties and intervenors, if applicable, and the Town of Westport;

4. Within 45 days after completion of construction, the Council shall be notified in writing that construction has been completed;

5. Any nonfunctioning antenna and associated antenna mounting equipment on this facility owned and operated by the Petitioner shall be removed within 60 days of the date the antenna ceased to function;

6. The facility owner/operator shall remit timely payments associated with annual assessments and invoices submitted by the Council for expenses attributable to the facility under Conn. Gen. Stat. §16-50v;

7. If the facility ceases to provide wireless services for a period of one year the Petitioner shall dismantle the tower and remove all associated equipment or reapply for any continued or new use to the Council within 90 days from the one year period of cessation of service. The Petitioner may submit a written request to the Council for an extension of the 90 day period not later than 60 days prior to the expiration of the 90 day period; and

8. This Declaratory Ruling may be transferred or partially transferred, provided both the facility owner/operator/transferor and the transferee are current with payments to the Council for their respective annual assessments and invoices under Conn. Gen. Stat. §16-50v. The Council shall be notified of such sale and/or transfer and of any change in contact information for the individual or representative responsible for management and operations of the facility within 30 days of the sale and/or transfer. Both the facility owner/operator/transferor and the transferee shall provide the Council with a written agreement as to the entity responsible for any quarterly assessment charges under Conn. Gen. Stat. §16-50v(b)(2) that may be associated with this facility.

This decision is under the exclusive jurisdiction of the Council and is not applicable to any other modification or construction. All work is to be implemented as specified in the petition dated September 19, 2017.

Enclosed for your information is a copy of the staff report on this project.

Very truly yours,

Robert Stein MAB

Robert Stein
Chairman

RS/MAB/bm

Enclosure: Staff Report dated November 9, 2017.

c: The Honorable Jim Marpe, First Selectman, Town of Westport
Mary Young, Director, Planning & Zoning, Town of Westport
Dante R. Gallucci, Estate of Sadie Costa, DeSiena & Gallucci
Capfor Westport LLC, Property Owner

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@ct.gov
www.ct.gov/csc

Petition No. 1326
Cellco Partnership d/b/a Verizon Wireless
1385 Post Road East, Westport
Rooftop Wireless Telecommunications Facility
Staff Report
November 9, 2017

On September 20, 2017, the Connecticut Siting Council (Council) received a petition from Cellco Partnership d/b/a Verizon Wireless (Cellco) for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the proposed installation of a wireless telecommunications facility on the roof of a commercial building at 1385 Post Road East in Westport, Connecticut. Initially, Cellco proposes to use this site to provide service in the 1900 MHz and 2100 MHz frequencies.

Cellco proposes to install a tower on the roof of the building that would be enclosed by a faux chimney extending ten feet above the building's 28-foot roof. The tower would support six antennas and six remote radio heads. Equipment would be installed in an equipment room inside the existing parking garage on the property. Electrical and telephone service would extend from existing service on the property.

The commercial building is located on a 3.5-acre parcel in Westport's General Business District zone. Surrounding land uses include commercial uses to the east and west along Post Road East, residential properties to the north and a condominium complex across Post Road East to the south.

Visibility of the proposed facility would be generally occur on the host property and at locations along Post Road East where the top of the building is currently visible. Existing vegetation and buildings would provide screening of the facility from other nearby locations. Additionally, at locations where the proposed facility would be visible, it would appear as an architectural component of the building due to the faux chimney enclosure.

There are no wetland areas on the subject property. No tree removal is required.

The calculated power density would be 57.5 percent of the applicable limit using a -10 dB off-beam adjustment. Notice is not required to the Federal Aviation Administration.

Notice was provided to the Town of Westport, the property owner, and abutting property owners on or about September 19, 2017. On October 10, 2017, the Council received a request for party status from representatives of the Estate of Sadie Costa, owner of the abutting property to the east of the proposed facility. On October 26, 2017, the Council approved the request for party status. The request stated that the party was interested in monitoring the proceedings and wanted to be advised of all proceedings and hearings. No further comment was received by the party.

Cellco contends that this proposed project would not have a substantial adverse environmental impact.

Staff recommends the following conditions:

1. Approval of any minor project changes be delegated to Council staff.

Site Location

Legend

- Approximate Location of Proposed Antenna Equipment
- Approximate Subject Property
- Approximate Parcel Boundary (CTDEEP GIS)

Map Notes:
Base Map Source: 2016 Aerial Photograph (CTECO)
Map Scale: 1 inch = 115 feet
Map Date: September 2017

115 57.5 0 115 Feet

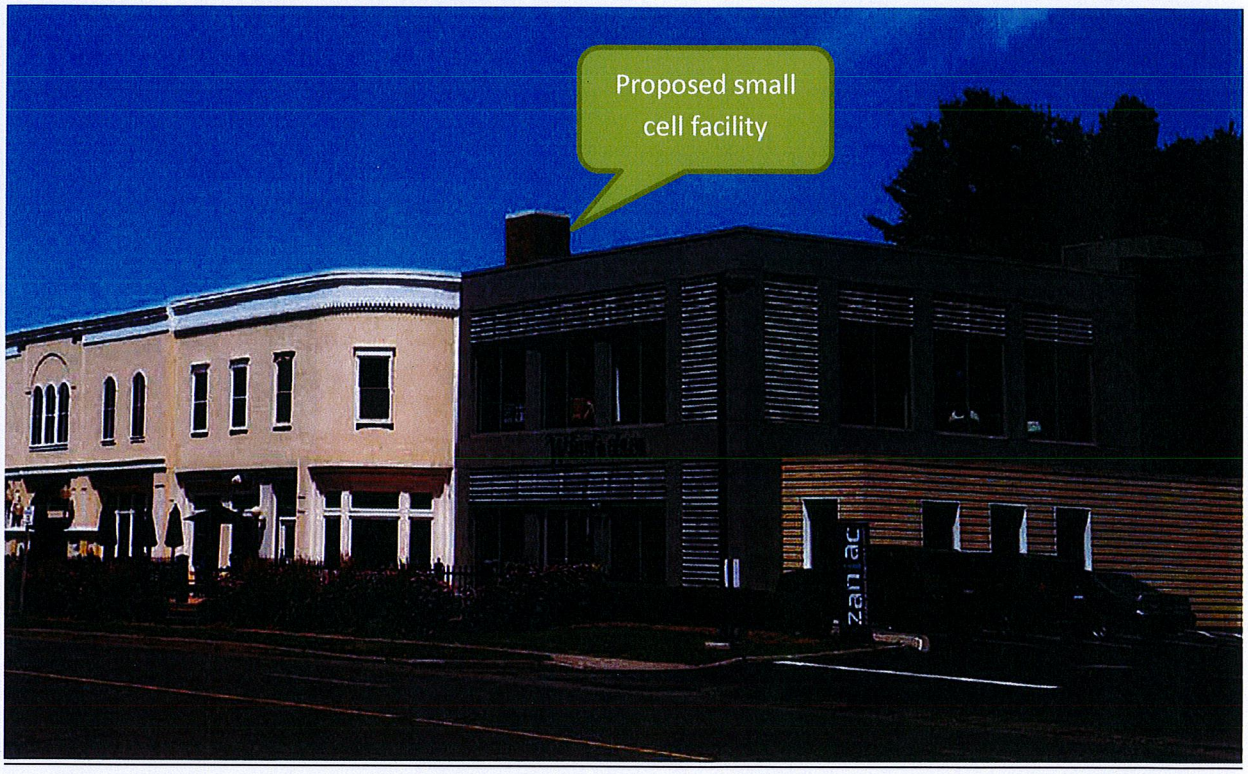
Site Schematic

Proposed Wireless
Telecommunications Facility
Westport 9 CT
1385 Post Road E
Westport, Connecticut

verizon

ALL-POINTS TECHNOLOGY CORPORATION

Photo-simulation as viewed from Post Road East (Route 1)



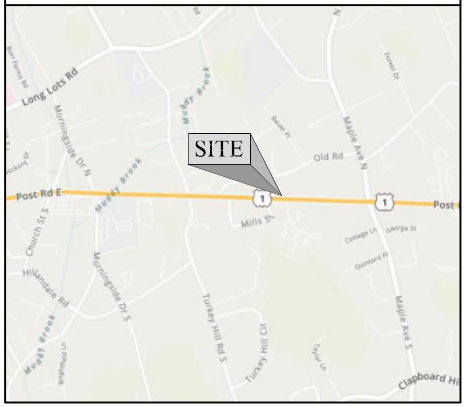
ATTACHMENT 2

DO NOT SCALE DRAWINGS

CONTRACTOR SHALL VERIFY ALL PLANS & EXISTING DIMENSIONS & CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE PROJECT OWNERS REPRESENTATIVE IN WRITING OF DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

SHEET INDEX

VICINITY MAP



APPLICANT:
CELLCO PARTNERSHIP d/b/a
VERIZON WIRELESS

SCOPE OF WORK:
PROPOSED EQUIPMENT & ANTENNA MODIFICATIONS
TO AN EXISTING VERIZON WIRELESS INSTALLATION
AT A 28'-0"± ROOFTOP

Digitally signed by Jiazhu Hu, Ph.D., P.E.
DN: cn=Jiazhu Hu, Ph.D., P.E., o=Nexius, ou=Engineering, email=Jiazhu.Hu@Nexius.com, c=US
Date: 2022.01.26 08:48:23 -05'00'

SITE NAME
WESTPORT_9_CT

LOCATION CODE
470895

ADDRESS
1385 POST ROAD E
WESTPORT, CT 06880

COORDINATES
41° 08' 20.38" N
73° 18' 57.85" W

NOTES

GENERAL NOTES:

1. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CONTRACTOR.
2. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. SUBCONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
3. DRAWINGS PROVIDED HERE ARE NOT TO BE SCALED AND ARE INTENDED TO SHOW OUTLINE ONLY.
4. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
5. "KITTING LIST" SUPPLIED WITH THE BID PACKAGE IDENTIFIES ITEMS THAT WILL BE SUPPLIED BY CONTRACTOR. ITEMS NOT INCLUDED IN THE BILL OF MATERIALS AND KITTING LIST SHALL BE SUPPLIED BY THE SUBCONTRACTOR.
6. THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
7. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION SPACE FOR APPROVAL BY THE CONTRACTOR.
8. THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.
9. SUBCONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
10. SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION.
11. ALL CONCRETE REPAIR WORK SHALL BE DONE IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE (ACI) 301.
12. ANY NEW CONCRETE NEEDED FOR THE CONSTRUCTION SHALL BE AIR-ENTRAINED AND SHALL HAVE 4000 PSI STRENGTH AT 28 DAYS. ALL CONCRETE WORK SHALL BE DONE IN ACCORDANCE WITH ACI 318 CODE REQUIREMENTS.
13. ALL STRUCTURAL STEEL WORK SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH AISC SPECIFICATIONS. ALL STRUCTURAL STEEL SHALL BE ASTM A36 (Fy = 36 ksi) UNLESS OTHERWISE NOTED. PIPES SHALL BE ASTM A53 GRADE B (Fy = 35 ksi). ALL STEEL EXPOSED TO WEATHER SHALL BE HOT DIPPED GALVANIZED. TOUCHUP ALL SCRATCHES AND OTHER MARKS IN THE FIELD AFTER STEEL IS ERECTED USING A COMPATIBLE ZINC RICH PAINT.
14. SUBCONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS MUST BE VERIFIED. SUBCONTRACTOR SHALL NOTIFY THE CONTRACTOR OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
15. THE EXISTING CELL SITE IS IN FULL COMMERCIAL OPERATION. ANY CONSTRUCTION WORK BY SUBCONTRACTOR SHALL NOT DISRUPT THE EXISTING NORMAL OPERATION. ANY WORK ON EXISTING EQUIPMENT MUST BE COORDINATED WITH CONTRACTOR. ALSO, WORK SHOULD BE SCHEDULED FOR AN APPROPRIATE MAINTENANCE WINDOW USUALLY IN LOW TRAFFIC PERIODS AFTER MIDNIGHT.
16. SINCE THE CELL SITE IS ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE ADVISED TO BE WORN TO ALERT OF ANY DANGEROUS EXPOSURE LEVELS.
17. APPLICABLE BUILDING CODES:
    SUBCONTRACTOR'S WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ) FOR THE LOCATION. THE EDITION OF THE AHJ ADOPTED CODES AND STANDARDS IN EFFECT ON THE DATE OF CONTRACT AWARD SHALL GOVERN THE DESIGN.
    BUILDING CODE: 2018 CONNECTICUT STATE BUILDING CODE (IBC 2015)
    ELECTRICAL CODE: REFER TO ELECTRICAL DRAWINGS
    LIGHTENING CODE: REFER TO ELECTRICAL DRAWINGS

    SUBCONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING STANDARDS:

    ACI 318-14: BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE.

    AISC 360-10: SPECIFICATIONS STEEL FOR STRUCTURAL STEEL BUILDINGS.

    ANSI/TIA-222-G WITH ADDENDUMS, STRUCTURAL STANDARD FOR ANTENNA SUPPORTING STRUCTURES AND ANTENNAS.

FOR ANY CONFLICTS BETWEEN SECTIONS OF LISTED CODES AND STANDARDS REGARDING MATERIAL, METHODS OF CONSTRUCTION, OR OTHER REQUIREMENTS, THE MOST RESTRICTIVE REQUIREMENT SHALL GOVERN. WHERE THERE IS CONFLICT BETWEEN A GENERAL REQUIREMENT AND A SPECIFIC REQUIREMENT, THE SPECIFIC REQUIREMENT SHALL GOVERN.

ELECTRICAL & GROUNDING NOTES

1. ALL ELECTRICAL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE (NEC) AS WELL AS APPLICABLE STATE AND LOCAL CODES.
2. ALL ELECTRICAL ITEMS SHALL BE U.L. APPROVED OR LISTED AND PROCURED PER SPECIFICATION REQUIREMENTS.
3. THE ELECTRICAL WORK INCLUDES ALL LABOR AND MATERIAL DESCRIBED BY DRAWINGS AND SPECIFICATION INCLUDING INCIDENTAL WORK TO PROVIDE COMPLETE OPERATING AND APPROVED ELECTRICAL SYSTEM.
4. GENERAL CONTRACTOR SHALL PAY FEES FOR PERMITS, AND IS RESPONSIBLE FOR OBTAINING SAID PERMITS AND COORDINATION OF INSPECTIONS.
5. ALL EQUIPMENT LOCATED OUTSIDE SHALL HAVE NEMA 3R ENCLOSURE.
6. GROUNDING SHALL COMPLY WITH NEC ART. 250.
7. GROUND COAXIAL CABLE SHIELDS MINIMUM AT BOTH ENDS USING MANUFACTURERS COAX CABLE GROUNDING KITS SUPPLIED BY PROJECT OWNER.
8. USE #6 COPPER STRANDED WIRE WITH GREEN COLOR INSULATION FOR ABOVE GRADE GROUNDING (UNLESS OTHERWISE SPECIFIED) AND #2 SOLID TINNED BARE COPPER WIRE FOR BELOW GRADE GROUNDING AS INDICATED ON THE DRAWING.
9. ALL GROUND CONNECTIONS TO BE BURNDY HYGROUND COMPRESSION TYPE CONNECTORS OR CADWELD EXOTHERMIC WELD. DO NOT ALLOW BARE COPPER WIRE TO BE IN CONTACT WITH GALVANIZED STEEL.
10. ROUTE GROUNDING CONDUCTORS ALONG THE SHORTEST AND STRAIGHTEST PATH POSSIBLE. GROUNDING LEADS SHOULD NEVER BE BENT AT RIGHT ANGLE. ALWAYS MAKE AT LEAST 12" RADIUS BENDS. #6 WIRE CAN BE BENT AT 6" RADIUS WHEN NECESSARY. BOND ANY METAL OBJECTS WITHIN 7 FEET OF PROPOSED EQUIPMENT OR CABINET TO MASTER GROUND BAR.
11. CONNECTIONS TO MGB SHALL BE ARRANGED IN THREE MAIN GROUPS: SURGE PRODUCERS (COAXIAL CABLE GROUND KITS, TELCO AND POWER PANEL GROUND); (GROUNDING ELECTRODE RING OR BUILDING STEEL); NON-SURGING OBJECTS (EGB GROUND IN BTS UNIT).
12. CONNECTIONS TO GROUND BARS SHALL BE MADE WITH TWO HOLE COMPRESSION TYPE COPPER LUGS. APPLY OXIDE INHIBITING COMPOUND TO ALL LOCATIONS
13. APPLY OXIDE INHIBITING COMPOUND TO ALL COMPRESSION TYPE GROUND CONNECTIONS.
14. BOND ANTENNA MOUNTING BRACKETS, COAXIAL CABLE GROUND KITS, AND ALNA TO EGB PLACED NEAR THE ANTENNA LOCATION.
15. BOND ANTENNA EGB'S AND MGB TO WATER MAIN.
16. TEST COMPLETED GROUND SYSTEM AND RECORD RESULTS FOR PROJECT CLOSE-OUT DOCUMENTATION.
17. BOND ANY METAL OBJECTS WITHIN 7 FEET OF PROPOSED EQUIPMENT OR CABINET TO MASTER GROUND BAR.

PREPARED BY:

nexius
TRANFORM YOUR BUSINESS...THROUGH WIRELESS

A&E OFFICE:
300 APOLLO DRIVE, SUITE 7
CHELMSFORD, MA 01824
1 (978) 923-7965

APPLICANT:
CELLCO PARTNERSHIP d/b/a
verizon

118 FLANDERS ROAD, 3RD FLOOR
WESTBOROUGH, MA 01581

PROFESSIONAL STAMP:

SUBMITTALS

REV	DATE	DESCRIPTION	BY
0	10/07/21	FOR CONSTRUCTION	AA
1	10/15/21	REVISED PER RFDS	AA
2	01/03/22	REVISED PER MA & SA	AA
3	01/25/22	REVISED PER NEW RFDS	AA

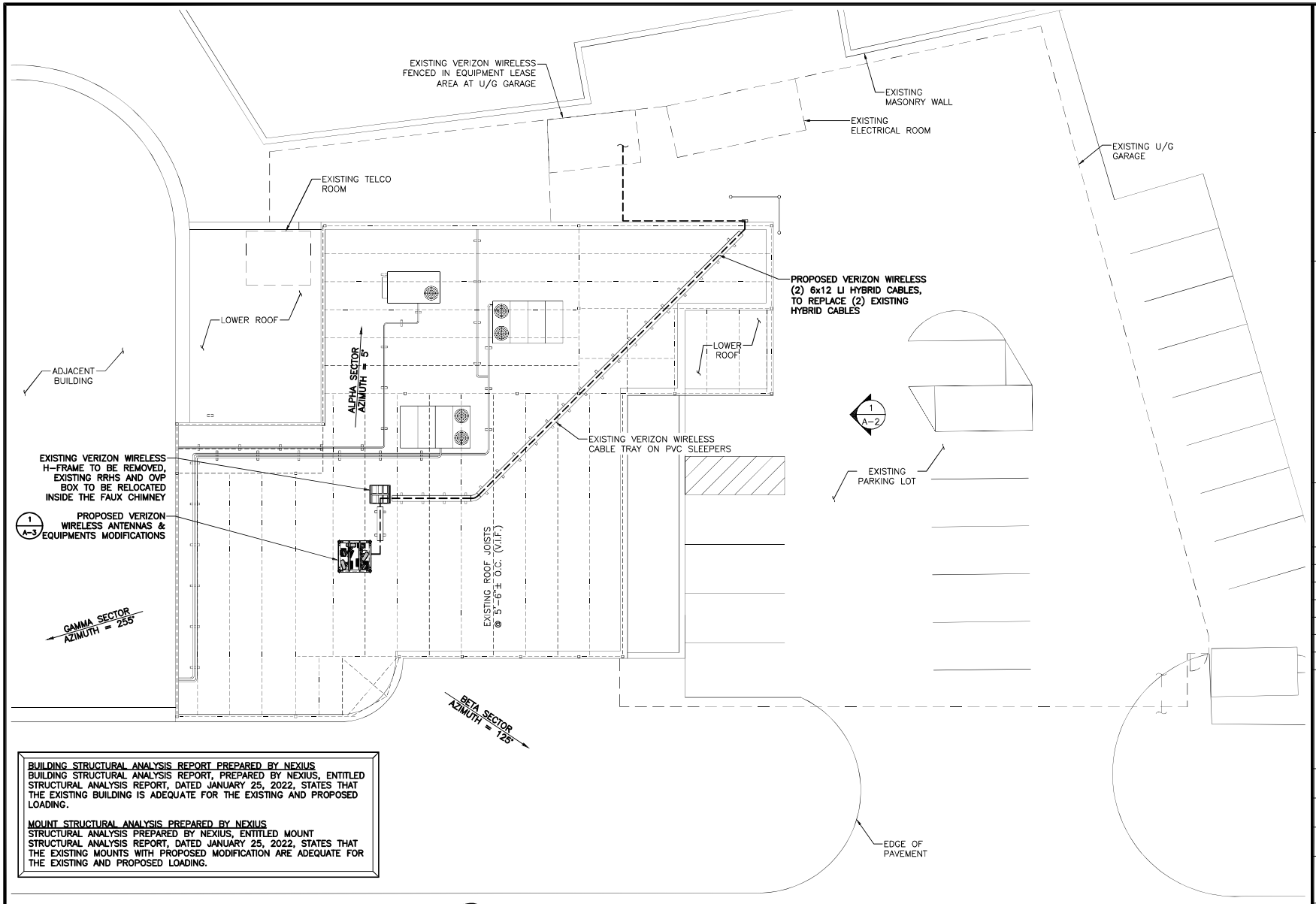
SITE INFORMATION:
SITE NAME:
WESTPORT_9_CT
LOCATION CODE:
470895
SITE ADDRESS:
1385 POST ROAD E
WESTPORT, CT 06880

DRAWN BY:	DATE:
AA	01/25/22
CHECKED BY:	DATE:
KB	01/25/22

NEXIUS PROJECT NO.:
VZ11509

SHEET TITLE:
TITLE SHEET

SHEET NUMBER:
T-1



BUILDING STRUCTURAL ANALYSIS REPORT PREPARED BY NEXIUS
BUILDING STRUCTURAL ANALYSIS REPORT, PREPARED BY NEXIUS, ENTITLED STRUCTURAL ANALYSIS REPORT, DATED JANUARY 25, 2022, STATES THAT THE EXISTING BUILDING IS ADEQUATE FOR THE EXISTING AND PROPOSED LOADING.

MOUNT STRUCTURAL ANALYSIS PREPARED BY NEXIUS
STRUCTURAL ANALYSIS PREPARED BY NEXIUS, ENTITLED MOUNT STRUCTURAL ANALYSIS REPORT, DATED JANUARY 25, 2022, STATES THAT THE EXISTING MOUNTS WITH PROPOSED MODIFICATION ARE ADEQUATE FOR THE EXISTING AND PROPOSED LOADING.

APPROX. NORTH

1 ROOFTOP PLAN
SCALE: 1/8" = 1'-0"

GRAPHIC SCALE: 1/8"=1'-0"

PREPARED BY:
nexius
TRANFORM YOUR BUSINESS...THROUGH WIRELESS
A&E OFFICE:
300 APOLLO DRIVE, SUITE 7
CHELMSFORD, MA 01824
1 (978) 923-7965

APPLICANT:
CELLCO PARTNERSHIP d/b/a
verizon
118 FLANDERS ROAD, 3RD FLOOR
WESTBOROUGH, MA 01581

PROFESSIONAL STAMP:
STATE OF CONNECTICUT
JIAZHU HU
31530
LICENSED
PROFESSIONAL ENGINEER

SUBMITTALS

REV	DATE	DESCRIPTION	BY
0	10/07/21	FOR CONSTRUCTION	AA
1	10/15/21	REVISED PER RFDS	AA
2	01/03/22	REVISED PER MA & SA	AA
3	01/25/22	REVISED PER NEW RFDS	AA

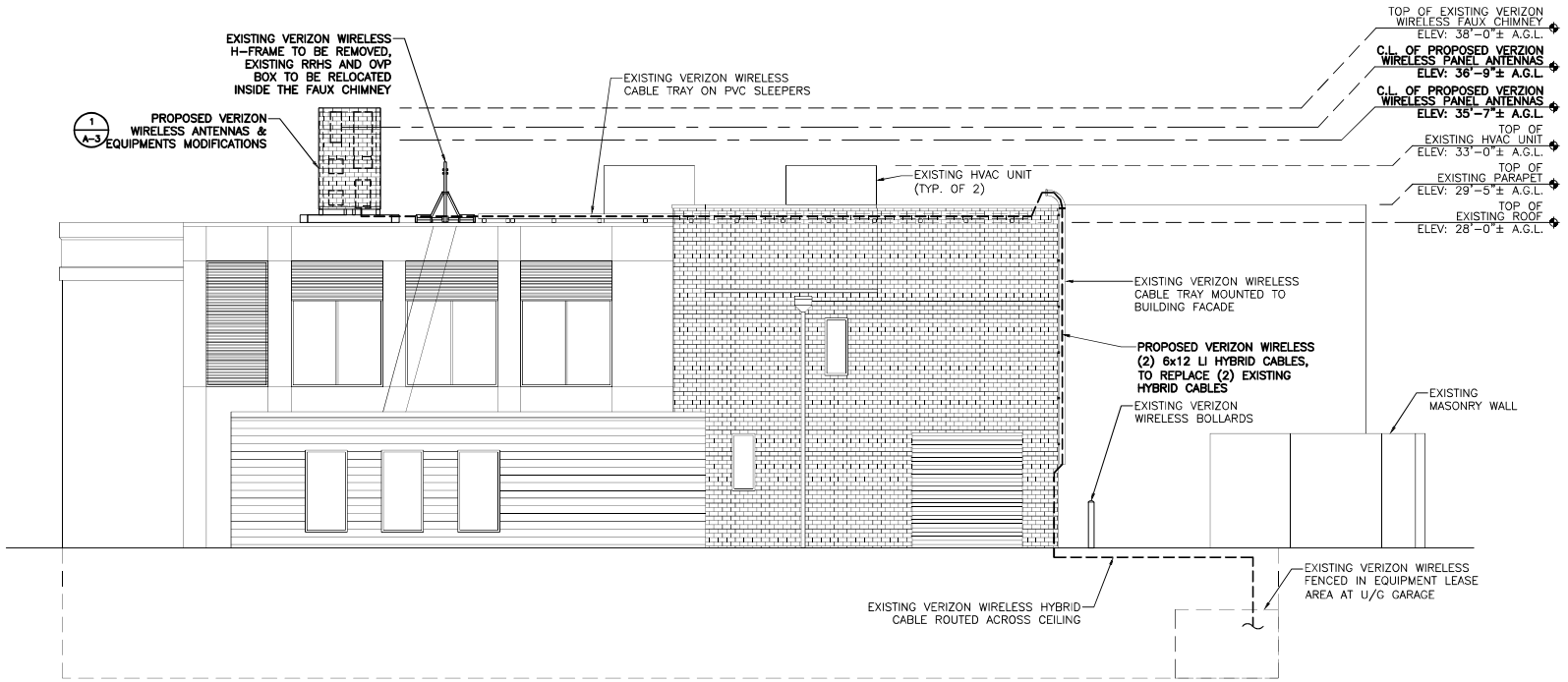
SITE INFORMATION:
SITE NAME:
WESTPORT_9_CT
LOCATION CODE:
470895
SITE ADDRESS:
1385 POST ROAD E
WESTPORT, CT 06880

DRAWN BY:	DATE:
AA	01/25/22
CHECKED BY:	DATE:
KB	01/25/22

NEXIUS PROJECT NO.:
VZ11509

SHEET TITLE:
ROOFTOP PLAN

SHEET NUMBER:
A-1



1 BUILDING ELEVATION
SCALE: 3/16" = 1'-0"

GRAPHIC SCALE: 3/16"=1'-0"

PREPARED BY:

nexius
TRANFORM YOUR BUSINESS...THROUGH WIRELESS

A&E OFFICE:
300 APOLLO DRIVE, SUITE 7
CHELMSFORD, MA 01824
1 (978) 923-7965

APPLICANT:

CELLCO PARTNERSHIP d/b/a

verizon

118 FLANDERS ROAD, 3RD FLOOR
WESTBOROUGH, MA 01581

PROFESSIONAL STAMP:

STATE OF CONNECTICUT
JIAZHU HU
31530
LICENSED
PROFESSIONAL ENGINEER

SUBMITTALS

REV	DATE	DESCRIPTION	BY
0	10/07/21	FOR CONSTRUCTION	AA
1	10/15/21	REVISED PER RFDS	AA
2	01/03/22	REVISED PER MA & SA	AA
3	01/25/22	REVISED PER NEW RFDS	AA

SITE INFORMATION:

SITE NAME:
WESTPORT_9_CT

LOCATION CODE:
470895

SITE ADDRESS:
1385 POST ROAD E
WESTPORT, CT 06880

DRAWN BY:	DATE:
AA	01/25/22
CHECKED BY:	DATE:
KB	01/25/22

NEXIUS PROJECT NO.:
VZ11509

SHEET TITLE:
BUILDING ELEVATION

SHEET NUMBER:
A-2

SCOPE OF WORK:

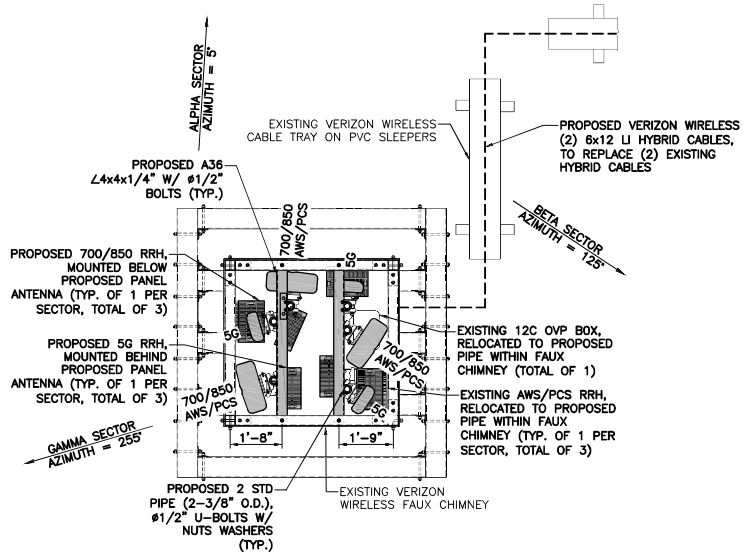
ALPHA SECTOR:
- REMOVE (2) EXISTING PANEL ANTENNAS.
- INSTALL (1) NEW COMMSCOPE NNH4-65A-R6HA 700/850/AWS/PCS ANTENNA AS SHOWN ON PLANS.
- INSTALL (1) NEW JMA WIRELESS MX08FIT265-01 5G ANTENNA AS SHOWN ON PLANS.
- INSTALL (1) NEW SAMSUNG RF4440d-13A 700/850 RRH AT ANTENNAS, AS SHOWN ON PLANS.
- INSTALL (1) NEW SAMSUNG R7-8808-77A 5G RRH AT ANTENNAS, AS SHOWN ON PLANS.
- INSTALL (1) NEW SAMSUNG JUMPER FROM EXISTING 12C OVP BOX TO 700/850 RRH.
- INSTALL (1) NEW POWER CABLE FROM EXISTING 12C OVP BOX TO 700/850 RRH.
- INSTALL (1) 1x2 HYBRID CABLE FROM EXISTING 12C OVP BOX TO 5G RRH.
- INSTALL 1/2" ANTENNA JUMPERS, AS REQUIRED.

BETA SECTOR:
- REMOVE (2) EXISTING PANEL ANTENNAS.
- INSTALL (1) NEW COMMSCOPE NNH4-65A-R6HA 700/850/AWS/PCS ANTENNA AS SHOWN ON PLANS.
- INSTALL (1) NEW JMA WIRELESS MX08FIT265-01 5G ANTENNA AS SHOWN ON PLANS.
- INSTALL (1) NEW SAMSUNG RF4440d-13A 700/850 RRH AT ANTENNAS, AS SHOWN ON PLANS.
- INSTALL (1) NEW SAMSUNG R7-8808-77A 5G RRH AT ANTENNAS, AS SHOWN ON PLANS.
- INSTALL (1) NEW SAMSUNG JUMPER FROM EXISTING 12C OVP BOX TO 700/850 RRH.
- INSTALL (1) NEW POWER CABLE FROM EXISTING 12C OVP BOX TO 700/850 RRH.
- INSTALL (1) 1x2 HYBRID CABLE FROM EXISTING 12C OVP BOX TO 5G RRH.
- INSTALL 1/2" ANTENNA JUMPERS, AS REQUIRED.

GAMMA SECTOR:
- REMOVE (2) EXISTING PANEL ANTENNAS.
- INSTALL (1) NEW COMMSCOPE NNH4-65A-R6HA 700/850/AWS/PCS ANTENNA AS SHOWN ON PLANS.
- INSTALL (1) NEW JMA WIRELESS MX08FIT265-01 5G ANTENNA AS SHOWN ON PLANS.
- INSTALL (1) NEW SAMSUNG RF4440d-13A 700/850 RRH AT ANTENNAS, AS SHOWN ON PLANS.
- INSTALL (1) NEW SAMSUNG R7-8808-77A 5G RRH AT ANTENNAS, AS SHOWN ON PLANS.
- INSTALL (1) NEW SAMSUNG JUMPER FROM EXISTING 12C OVP BOX TO 700/850 RRH.
- INSTALL (1) NEW POWER CABLE FROM EXISTING 12C OVP BOX TO 700/850 RRH.
- INSTALL (1) 1x2 HYBRID CABLE FROM EXISTING 12C OVP BOX TO 5G RRH.
- INSTALL 1/2" ANTENNA JUMPERS, AS REQUIRED.

REMOVE (2) EXISTING 6x12 HYBRID CABLES.
INSTALL (2) NEW 6x12 LI HYBRID CABLES AS SHOWN ON THE PLANS.

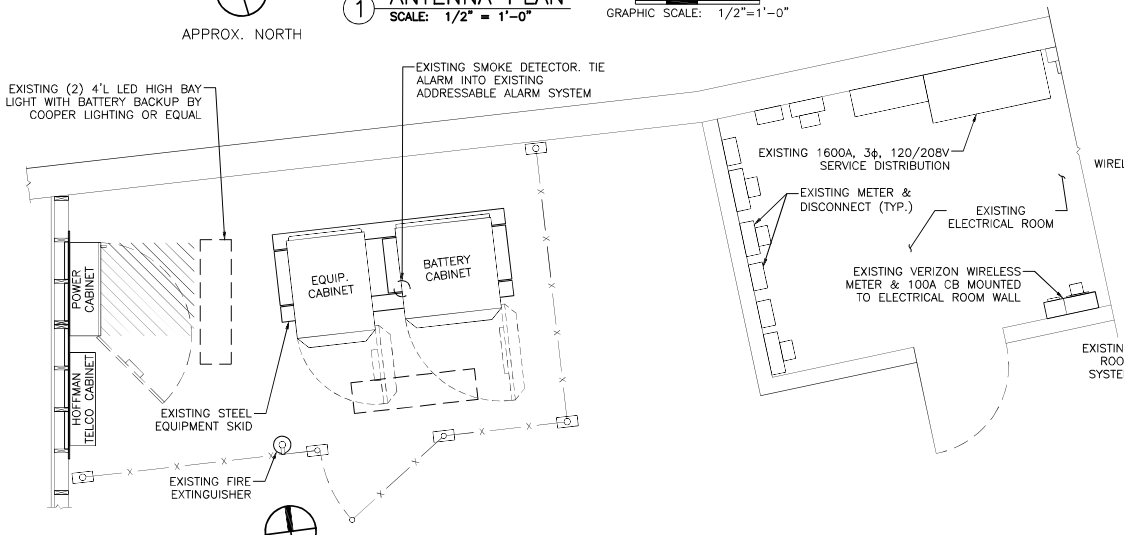
DESIGN SHOWN HEREIN IS BASED OFF A RFDS PROVIDED BY VERIZON WIRELESS DATED 01/21/22.



APPROX. NORTH

1 ANTENNA PLAN
SCALE: 1/2" = 1'-0"

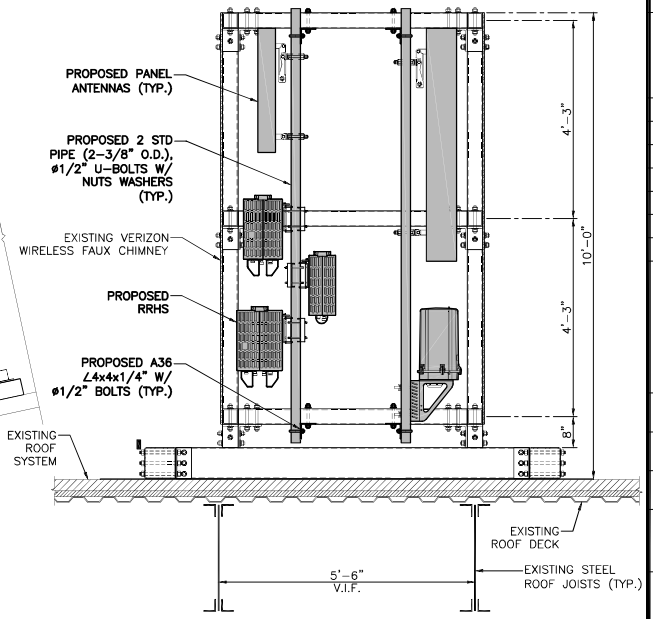
GRAPHIC SCALE: 1/2"=1'-0"



APPROX. NORTH

2 SHELTER PLAN
SCALE: 1/2" = 1'-0"

GRAPHIC SCALE: 1/2"=1'-0"



3 FAUX CHIMNEY SECTION
SCALE: N.F.S.

PREPARED BY:
nexius
TRANFORM YOUR BUSINESS...THROUGH WIRELESS
A&E OFFICE:
300 APOLLO DRIVE, SUITE 7
CHELMSFORD, MA 01824
1 (978) 923-7965

APPLICANT:
CELLCO PARTNERSHIP d/b/a
verizon
118 FLANDERS ROAD, 3RD FLOOR
WESTBOROUGH, MA 01581

PROFESSIONAL STAMP:

STATE OF CONNECTICUT
JIAZHU HU
31530
LICENSED
PROFESSIONAL ENGINEER

SUBMITTALS

REV	DATE	DESCRIPTION	BY
0	10/07/21	FOR CONSTRUCTION	AA
1	10/15/21	REVISED PER RFDS	AA
2	01/03/22	REVISED PER MA & SA	AA
3	01/25/22	REVISED PER NEW RFDS	AA

SITE INFORMATION:
SITE NAME:
WESTPORT_9_CT
LOCATION CODE:
470895
SITE ADDRESS:
1385 POST ROAD E
WESTPORT, CT 06880

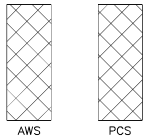
DRAWN BY:	DATE:
AA	01/25/22
CHECKED BY:	DATE:
KB	01/25/22

NEXIUS PROJECT NO.:
VZ11509

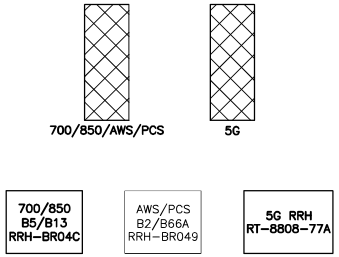
SHEET TITLE:
ANTENNA PLAN, DETAILS & NOTES

SHEET NUMBER:
A-3

NOTE: ALL ANTENNAS ARE VIEWED FROM THE REAR

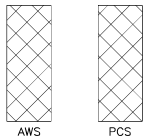


EXISTING CONFIGURATION

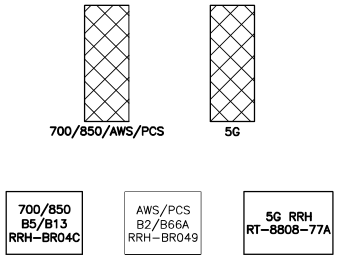


PROPOSED CONFIGURATION

ALPHA SECTOR ANTENNA CONFIGURATION

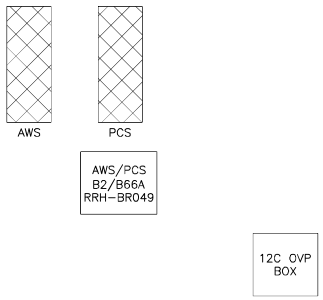


EXISTING CONFIGURATION

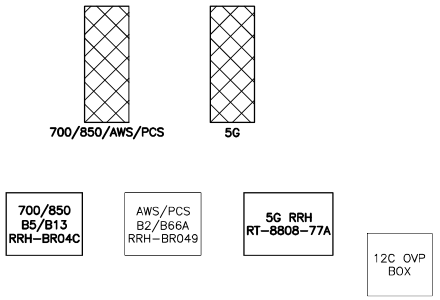


PROPOSED CONFIGURATION

BETA SECTOR ANTENNA CONFIGURATION



EXISTING CONFIGURATION



PROPOSED CONFIGURATION

GAMMA SECTOR ANTENNA CONFIGURATION

GENERAL NOTES:

1. INSTALL ALL EQUIPMENT, MOUNTING BRACKETS, AND HARDWARE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
2. GROUND DISTRIBUTION BOXES, MOUNTING PIPES, AND RRH'S IN ACCORDANCE WITH THE NEC ARTICLE 250 & THE EQUIPMENT MANUFACTURER'S RECOMMENDATIONS.
3. INSTALLED EQUIPMENT AND MOUNTING BRACKETS SHALL NOT INTERFERE WITH CLIMBING ACCESS NOR ANY INSTALLED SAFETY DEVICES.

PREPARED BY:

nexius
TRANFORM YOUR BUSINESS...THROUGH WIRELESS

A&E OFFICE:
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CHELMSFORD, MA 01824
1 (978) 923-7965

APPLICANT:

CELLCO PARTNERSHIP d/b/a

verizon

118 FLANDERS ROAD, 3RD FLOOR
WESTBOROUGH, MA 01581

PROFESSIONAL STAMP:

SUBMITTALS

REV	DATE	DESCRIPTION	BY
0	10/07/21	FOR CONSTRUCTION	AA
1	10/15/21	REVISED PER RFDS	AA
2	01/03/22	REVISED PER MA & SA	AA
3	01/25/22	REVISED PER NEW RFDS	AA

SITE INFORMATION:

SITE NAME:
WESTPORT_9_CT

LOCATION CODE:
470895

SITE ADDRESS:
1385 POST ROAD E
WESTPORT, CT 06880

DRAWN BY:	DATE:
AA	01/25/22
CHECKED BY:	DATE:
KB	01/25/22

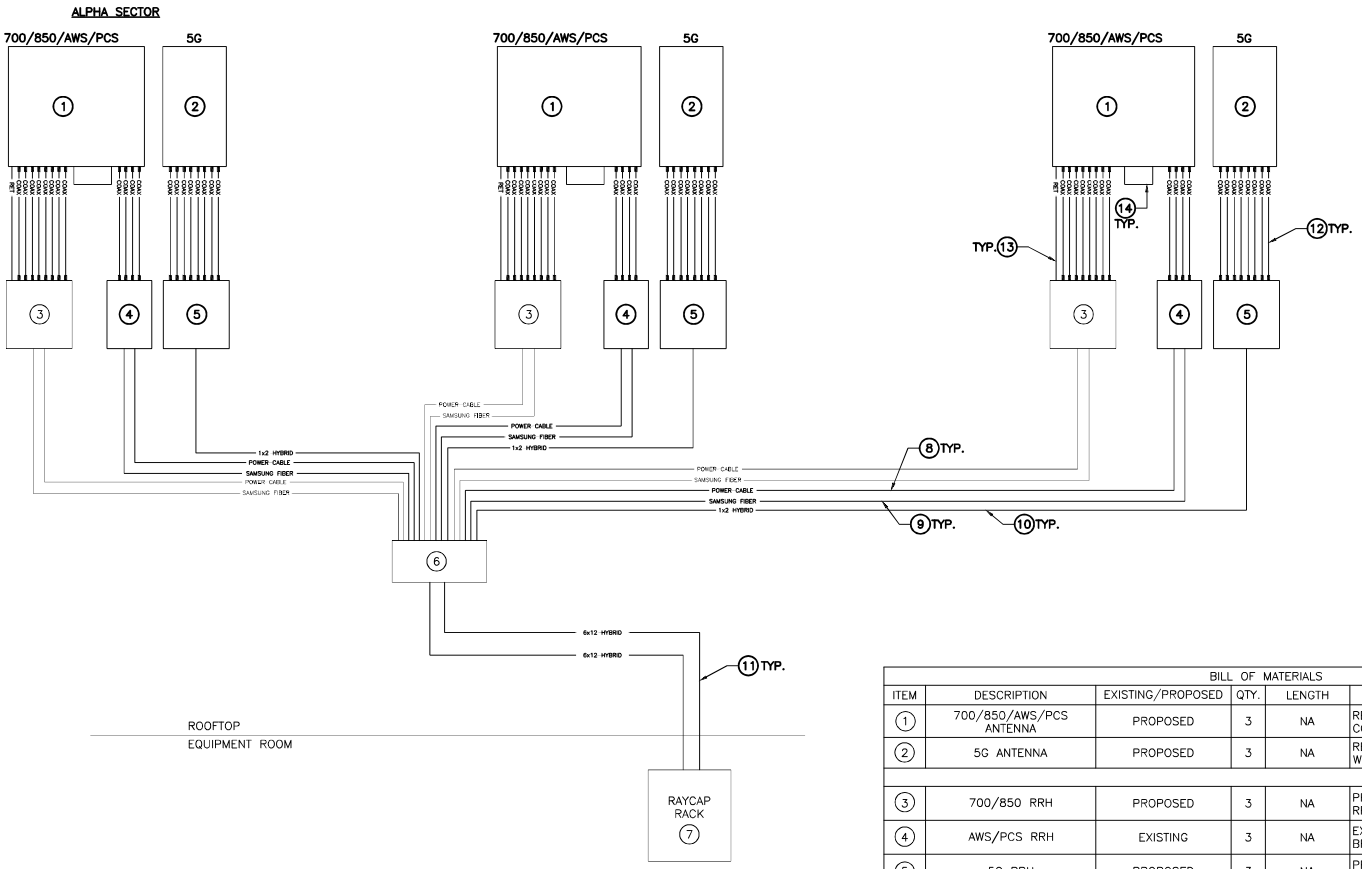
NEXIUS PROJECT NO.:
VZ11509

SHEET TITLE:
ANTENNA SECTOR CONFIGURATIONS, DETAILS & NOTES

SHEET NUMBER:

A-4

NOTE: ALL ANTENNAS ARE VIEWED FROM THE REAR



GENERAL NOTES:

1. CONTRACTOR SHALL REFER TO THE LATEST VERIZON WIRELESS RFDS WHICH MAY INCLUDE ANTENNA SECTOR AZIMUITHS/ANTENNA CHANGES, ETC. THAT ARE REQUIRED AS PART OF THE PROJECT.
2. CONTRACTOR SHALL SECURE ALL CONTROL CABLES IN ACCORDANCE WITH INDUSTRY STANDARDS & MANUFACTURERS INSTRUCTIONS. EXTERIOR CONTROL CABLES MAY BE TAPED OR TIE-WRAPPED TO EXISTING COAXIAL CABLES EVERY 4' MAX. FOR HORIZONTAL RUNS. CONTRACTOR MAY USE HOISTING GRIPS AT TOP OF VERTICAL CABLE RUNS IN CERTAIN APPLICATIONS.
3. RET CABLES SHALL BE ROUTED & SECURED ON STRUCTURAL MEMBERS ONLY. DO NOT LOOP THE CABLES IN MID-AIR BETWEET ANTENNAS.
4. CONTRACTOR SHALL VERIFY ALL CABLE LENGTHS PRIOR TO CONSTRUCTION.

BILL OF MATERIALS

ITEM	DESCRIPTION	EXISTING/PROPOSED	QTY.	LENGTH	COMMENTS
1	700/850/AWS/PCS ANTENNA	PROPOSED	3	NA	REPLACE EXISTING PANEL ANTENNA W/ COMMSCOPE NNH4-65A-R6H4 PANEL ANTENNA
2	5G ANTENNA	PROPOSED	3	NA	REPLACE EXISTING PANEL ANTENNA W/ JAM WIRELESS MX08FIT265_01 PANEL ANTENNA
3	700/850 RRH	PROPOSED	3	NA	PROPOSED 700/850 SAMSUNG B5/B13 RRH RF4440d-13A AT ANTENNAS
4	AWS/PCS RRH	EXISTING	3	NA	EXISTING AWS/PCS SAMSUNG B2/B66A RRH BR049, TO REMAIN
5	5G RRH	PROPOSED	3	NA	PROPOSED 5G SAMSUNG RRH RT-8808-77A AT ANTENNAS
6	UPPER 12C OVP BOX	EXISTING	1	NA	EXISTING 12C OVP BOX, TO REMAIN
7	LOWER OVP RACK MOUNT	EXISTING	1	NA	EXISTING RAYCAP WITHIN EQUIPMENT ROOM, TO REMAIN
8	SUMSUNG FIBER	PROPOSED	3	15'	INSTALL AT NEW 700/850 RRH
9	POWER CABLES	PROPOSED	3	15'	INSTALL AT NEW 700/850 RRH
10	1x2 HYBRID	PROPOSED	3	15'	INSTALL AT NEW 5G RRH
11	6x12 HYBRID	PROPOSED	2	180	ROUTED FROM SHELTER TO ROOFTOP
12	1/2" COAX CABLES	PROPOSED	60	15' EA.	ROUTED AS SHOWN ON SCHEMATIC
13	RET CABLE	PROPOSED	3	6.6'± (2M)	ROUTED AS SHOWN ON SCHEMATIC
14	RET DAISY CHAIN	PROPOSED	3	1.5'± (0.5M)	ROUTED AS SHOWN ON SCHEMATIC

1. ITEMS SHOWN ARE FOR MAJOR DESIGN ELEMENTS ONLY, REFER TO VERIZON WIRELESS' B.O.M. FOR ALL MANUFACTURERS PART NUMBERS & ACCESSORY ITEMS REQUIRED FOR A COMPLETE INSTALLATION.
2. CONTRACTOR SHALL REFER TO THE LATEST VERIZON WIRELESS RFDS WHICH MAY INCLUDE ANTENNA SECTOR AZIMUTHS/ANTENNA CHANGES, ETC. THAT ARE REQUIRED AS PART OF THE PROJECT.

* SIGNIFIES LEASE ONLY.

PREPARED BY:

nexius
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APPLICANT:

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PROFESSIONAL STAMP:

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SITE INFORMATION:

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WESTPORT, CT 06880

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CHECKED BY:	DATE:
KB	01/25/22

NEXIUS PROJECT NO.:
VZ11509

SHEET TITLE:
RET SYSTEM WIRING SCHEMATIC

SHEET NUMBER:
A-5

SAMSUNG

700/850MHZ MACRO RADIO

DUAL-BAND AND HIGH POWER FOR MACRO COVERAGE

Samsung's future proof dual-band radio is designed to help effectively increase the coverage areas in wireless networks. This 700/850MHz 4T4R dual-band radio has 4Tx/4Rx to 2Tx/2Rx RF chains options and a total output power of 320W, making it ideal for macro sites.

Model Code	RF4440d-13A

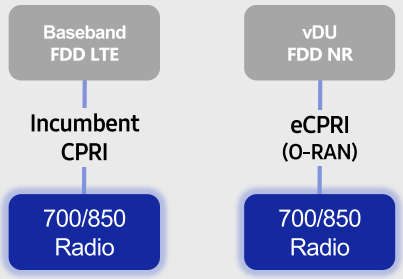
Homepage
samsungnetworks.com

Youtube
www.youtube.com/samsung5g

Points of Differentiation

Continuous Migration

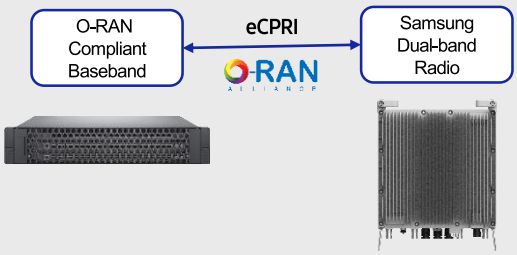
Samsung's 700/850MHz macro radio can support each incumbent CPRI interface as well as an advanced eCPRI interface. This feature provides installable options for both legacy LTE networks and added NR networks.



O-RAN Compliant

A standardized O-RAN radio can help when implementing cost-effective networks because it is capable of sending more data without compromising additional investments.

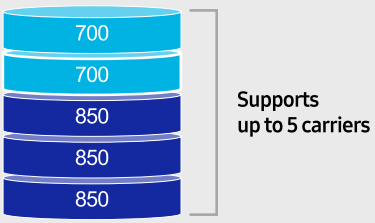
Samsung's state-of-the-art O-RAN technology will help accelerate the effort toward constructing a solid O-RAN ecosystem.



Optimum Spectrum Utilization

The number of required carriers varies according to site (region). The ability to support many carriers is essential for using all frequencies that the operator has available.

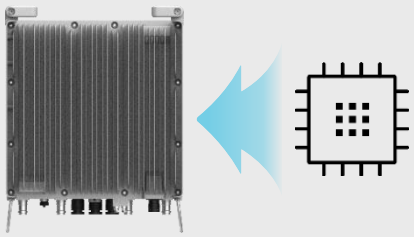
The new 700/850MHz dual-band radio can support up to 2 carriers in the B13 (700MHz) band and 3 carriers in the B5 (850MHz) band, respectively.



Secured Integrity

Access to sensitive data is allowed only to authorized software.

The Samsung radio's CPU can protect root of trust, which is credential information to verify SW integrity, and secure storage provides access control to sensitive data by using dedicated hardware (TPM).



Technical Specifications

Item	Specification
Tech	LTE / NR
Brand	B13(700MHz), B5(850MHz)
Frequency Band	DL: 746 – 756MHz, UL: 777 – 787MHz DL: 869 – 894MHz, UL: 824 – 849MHz
RF Power	(B13) 4 × 40W or 2 × 60W (B5) 4 × 40W or 2 × 60W
IBW/OBW	(B13) 10MHz / 10MHz (B5) 25MHz / 25MHz
Installation	Pole, Wall
Size/ Weight	14.96 x 14.96 x 9.05inch (33.2L) / 70.33 lb

NNH4-65B-R6H4

12-port sector antenna, 4x 698–896 and 8x 1695–2360 MHz, 65° HPBW, 6x RET

- Features broadband Low Band (698-896 MHz) and High Band (1695-2360 MHz) arrays for 4T4R (4X MIMO) capability for Band 14, AWS, PCS and WCS applications
- Non-stacked high band array design provides higher gain and narrower vertical beamwidth than traditional antenna designs.
- Independent tilt for all arrays.
- Array configuration provides capability for 4T4R (4x MIMO) on Low band and Dual 4T4R (4x MIMO) on High band
- Optimized SPR performance across all operating bands
- Excellent wind loading characteristics
- Supports re-configurable antenna sharing capability enabling control of the internal RET system using up to two separate RET compatible OEM radios

General Specifications

Antenna Type	Sector
Band	Multiband
Color	Light gray
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Performance Note	Outdoor usage | Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN
Radome Material	Fiberglass, UV resistant
Radiator Material	Low loss circuit board
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, high band	8
RF Connector Quantity, low band	4
RF Connector Quantity, total	12

Remote Electrical Tilt (RET) Information

RET Hardware	CommRET v2
RET Interface	8-pin DIN Female | 8-pin DIN Male
RET Interface, quantity	2 female | 2 male

NNH4-65B-R6H4

Input Voltage	10–30 Vdc
Internal RET	High band (4) | Low band (2)
Power Consumption, active state, maximum	8 W
Power Consumption, idle state, maximum	1 W
Protocol	3GPP/AISG 2.0 (Multi-RET)

Dimensions

Width	498 mm | 19.606 in
Depth	197 mm | 7.756 in
Length	1828 mm | 71.969 in
Net Weight, without mounting kit	34 kg | 74.957 lb

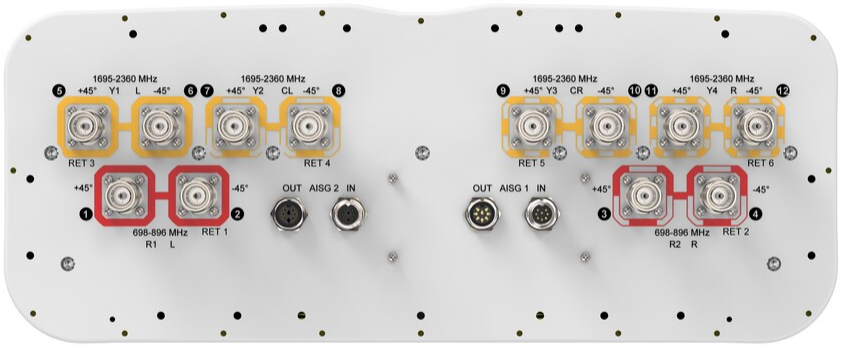
Array Layout

Array	Freq (MHz)	Conns	RET (MRET)	AISG RET UID
R1	698-896	1-2	1	CPxxxxxxxxxxxxxxxxmm.1
R2	698-896	3-4	2	CPxxxxxxxxxxxxxxxxmm.2
Y1	1695-2360	5-6	3	CPxxxxxxxxxxxxxxxxmm.3
Y2	1695-2360	7-8	4	CPxxxxxxxxxxxxxxxxmm.4
Y3	1695-2360	9-10	5	CPxxxxxxxxxxxxxxxxmm.5
Y4	1695-2360	11-12	6	CPxxxxxxxxxxxxxxxxmm.6

(Sizes of colored boxes are not true depictions of array sizes)

Port Configuration

NNH4-65B-R6H4



Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2360 MHz | 698 – 896 MHz
Polarization	±45°
Total Input Power, maximum	900 W @ 50 °C

Electrical Specifications

Frequency Band, MHz	**698–806**	**806–896**	**1695–1880**	**1850–1990**	**1920–2180**	**2300–2360**
Gain, dBi	14.2	14.8	16.7	17.3	17.9	18.4
Beamwidth, Horizontal, degrees	68	64	70	67	61	59
Beamwidth, Vertical, degrees	11.5	10.2	6.9	6.5	6	5.4
Beam Tilt, degrees	2–14	2–14	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	16	18	16	19	19	19
Front-to-Back Ratio at 180°, dB	30	30	33	34	34	34
Isolation, Cross Polarization, dB	25	25	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25	25	25
VSWR | Return loss, dB	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0

PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-150
Input Power per Port at 50°C, maximum, watts	300	300	250	250	250	200

Electrical Specifications, BASTA

Frequency Band, MHz	**698–806**	**806–896**	**1695–1880**	**1850–1990**	**1920–2180**	**2300–2360**
Gain by all Beam Tilts, average, dBi	13.8	14.5	16.1	16.9	17.5	18
Gain by all Beam Tilts Tolerance, dB	±0.6	±0.5	±0.7	±0.6	±0.6	±0.5
Gain by Beam Tilt, average, dBi	2 ° | 14.0 8 ° | 13.9 14 ° | 13.5	2 ° | 14.6 8 ° | 14.6 14 ° | 14.1	2 ° | 15.9 7 ° | 16.2 12 ° | 16.0	2 ° | 16.6 7 ° | 17.0 12 ° | 16.9	2 ° | 17.1 7 ° | 17.6 12 ° | 17.4	2 ° | 17.7 7 ° | 18.0 12 ° | 17.9
Beamwidth, Horizontal Tolerance, degrees	±5.7	±3.2	±6.4	±7.5	±5.9	±3.6
Beamwidth, Vertical Tolerance, degrees	±0.9	±0.7	±0.5	±0.3	±0.4	±0.2
USLS, beampeak to 20° above beampeak, dB	16	15	12	15	15	16
Front-to-Back Total Power at 180° ± 30°, dB	20	21	27	26	27	28
CPR at Boresight, dB	24	23	19	19	20	17
CPR at Sector, dB	12	10	7	5	6	8

Mechanical Specifications

Effective Projective Area (EPA), frontal	0.65 m² | 6.997 ft²
Effective Projective Area (EPA), lateral	0.22 m² | 2.368 ft²
Wind Loading at Velocity, frontal	156.0 lbf @ 150 km/h | 694.0 N @ 150 km/h
Wind Loading at Velocity, lateral	235.0 N @ 150 km/h | 52.8 lbf @ 150 km/h
Wind Loading at Velocity, maximum	202.3 lbf @ 150 km/h | 900.0 N @ 150 km/h
Wind Loading at Velocity, rear	128.4 lbf @ 150 km/h | 571.0 N @ 150 km/h
Wind Speed, maximum	241.402 km/h | 150 mph

Packaging and Weights

Width, packed	608 mm | 23.937 in
Depth, packed	352 mm | 13.858 in
Length, packed	2030 mm | 79.921 in
Weight, gross	47.8 kg | 105.381 lb

NNH4-65B-R6H4

Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Above maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
ROHS	Compliant/Exempted

Included Products

BSAMNT-3	–	Wide Profile Antenna Downtilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor top bracket set and one bottom bracket set.

* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance

MX08FIT265-01

NWAV™ Panel Antenna

8-Port 32 in. FIT (Form in Tighter), 3700 - 4200 MHz

- 5G C-Band 8T8R beamforming antenna
- Optimized antenna array design for all C-Band beam-forming combinations
- Excellent passive intermodulation (PIM) performance reduces harmful interference
- Integrated (internal RET) for remote electrical tilt control

Electrical specification (minimum/maximum)	Ports 1, 2, 3, 4, 5, 6, 7, 8
Frequency bands, MHz	3700-4200
Gain, dBi	17.1
Horizontal beamwidth (HBW), degrees	85
Horizontal beamwidth tolerance, degrees	±5
Front-to-back ratio, co-polar power @180°± 30°, dB	27
Vertical beamwidth (VBW), degrees[1]	5.5
Vertical beamwidth tolerance, degrees	±0.3
Remote electrical downtilt (EDT) range, degrees	2-12
First upper side lobe (USLS) suppression, dB[1]	15
Coupling level, Amp, Antenna port to Cal port, dB	26
Coupling level, max Amp Δ, Antenna port to Cal port, dB	±0.6
Coupler, max Amp Δ, Antenna port to Cal port, dB	0.65
Coupler, max Phase Δ, Antenna port to Cal port, degrees	4
Cross-polar isolation, port-to-port, dB[1]	25
Max VSWR / return loss, dB	1.5:1 / -14.0
Max passive intermodulation (PIM), 2x20W carrier, dBc	-145
Max input power per port at 50 °C, watts	75

[1] Typical value over frequency and tilt

Electrical specification, Broadcast 65°	Ports 1, 2, 3, 4, 5, 6, 7, 8
Frequency bands, MHz	3700-4200
Gain over all tilts, dBi	22.5
Horizontal beamwidth (HBW), degrees1	65
Horizontal beamwidth tolerance, degrees	±6
Vertical beamwidth (VBW), degrees[1]	5.5
Vertical beamwidth tolerance, degrees	±0.3
First upper side lobe (USLS) suppression, dB[1]	<-16

Electrical specification, Service Beam	Ports 1, 2, 3, 4, 5, 6, 7, 8
Frequency bands, MHz	3700-4200
Steered 0° gain, dBi	22.5
Steered 0° Gain tolerance, dBi	±0.6
Steered 0° Beamwidth, Horizontal, degrees	22
Steered 0° CPR at beampeak, dB	18
Steered 0° Horizontal Sidelobe, dB	12
Steered 30° Gain, dBi (max)	21.8
Steered 30° Gain tolerance, dBi	±0.6
Steered 30° Gain, dBi	21
Steered 30° Beamwidth, Horizontal, degree	22.2
Steered 30° CPR at beampeak, dB	18
Steered 30° Horizontal Sidelobe, dB	10

Electrical specification, Soft Split	Ports 1, 2, 3, 4, 5, 6, 7, 8
Frequency bands, MHz	3700-4200
Gain over all tilts, dBi	21.8
Horizontal beamwidth (HBW), degrees[1]	32
First upper side lobe (USLS) suppression, dB[1]	15

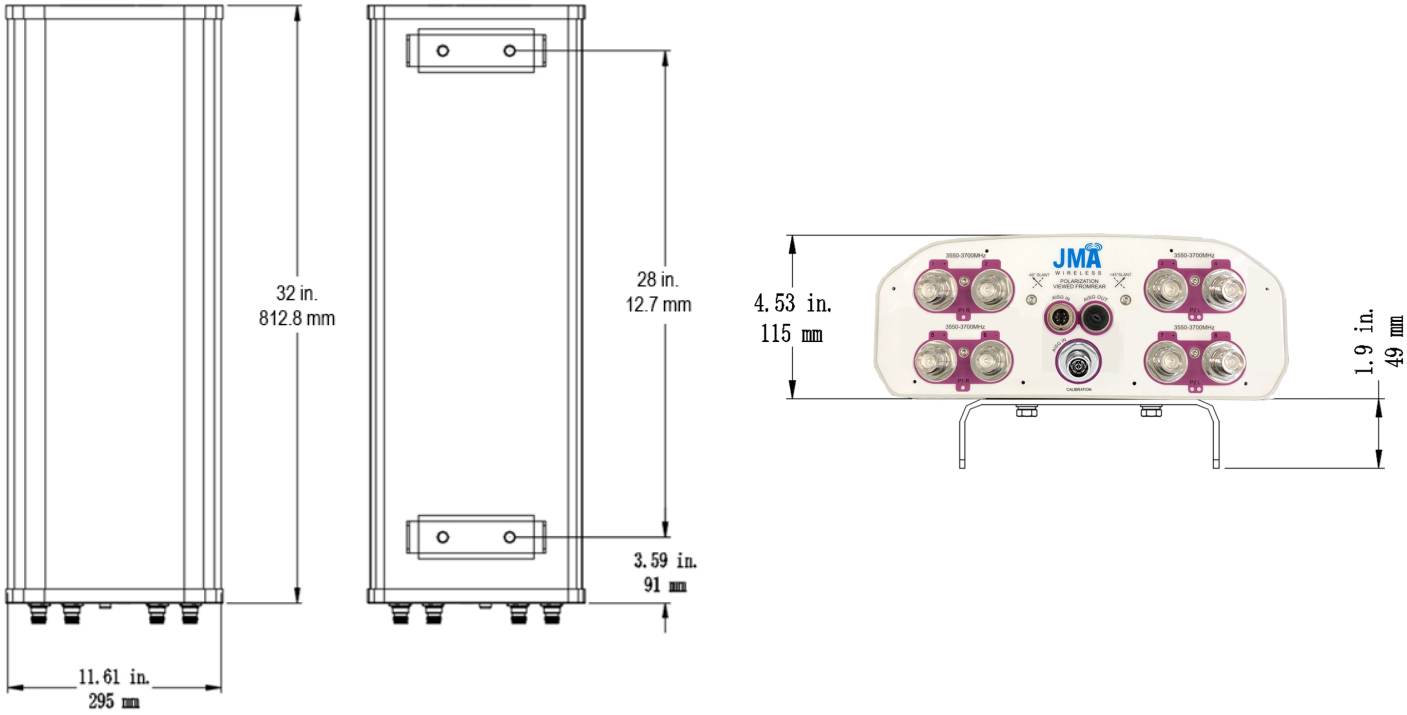
Beamforming weighting table available upon request

MX08FIT265-01

NWAV™ Panel Antenna

Mechanical specifications	
Dimensions height/width/depth, inches (mm)	32.0/ 11.6/ 4.53 (812.8/ 295/ 115)
Shipping dimensions length/width/height, inches (mm)	37.0/ 16.9/ 11.8 (939.8/ 430/ 300)
No. of RF input ports, connector type, and location	8 x 4.3-10 female, bottom
Calibration interface port, connector type, and location	1 x 4.3-10 female, bottom
RF connector torque	96 lbf·in (10.85 N·m or 8 lbf·ft)
Net antenna weight, lb (kg)	23.2 (10.52)
Weight with supplied pipe mount bracket, lb (kg)	26.5 (12.02)
Shipping weight, lb (kg)	49.1 (22.27)
Rated wind survival speed, mph (km/h)	150 (241)
Frontal wind loading @ 150 km/h, lbf (N)	56.9

Front view **Back view** **Bottom view**



Ordering information	
Antenna model	**Description**
MX08FIT265-01	32-inch 8T8R beamforming antenna, 3700-4200 MHz with RET
Mounting kit (included)	91900330 BRACKET KIT, range of mechanical up/down tilt -2° to 12°
Optional accessories	
AISG cables	M/F cables for AISG connections
PCU-1000 RET controller	Stand-alone controller for RET control and configurations

Remote electrical tilt (RET 1000) information	
RET location	Integrated into antenna
RET interface connector type	8-pin AISG connector per IEC 60130-9 or RF port Bias-T
RET connector torque	Min 0.5 N·m to max 1.0 N·m (hand pressure & finger tight)
RET interface connector quantity	1 pair of AISG male/female connectors and 1 RF port Bias-T
RET interface connector location	Bottom of the antenna
Total no. of internal RETs	1
RET input operating voltage, vdc	10-30
RET max power consumption, idle state, W	≤ 2.0
RET max power consumption, normal operating conditions, W	≤ 13.0
RET communication protocol	AISG 2.0 / 3GPP

RET and RF connector topology

Each RET device can be controlled either via the designated external AISG connector or RF port as shown below:

RET device	Band	RF port
1	3700-4200	1-8

Array topology

1 set of radiating arrays

P1: 3700-4200 MHz

Band	RF port
3700-4200	1-8

SAMSUNG

Radio Access Network

102 RRU
Product Specification

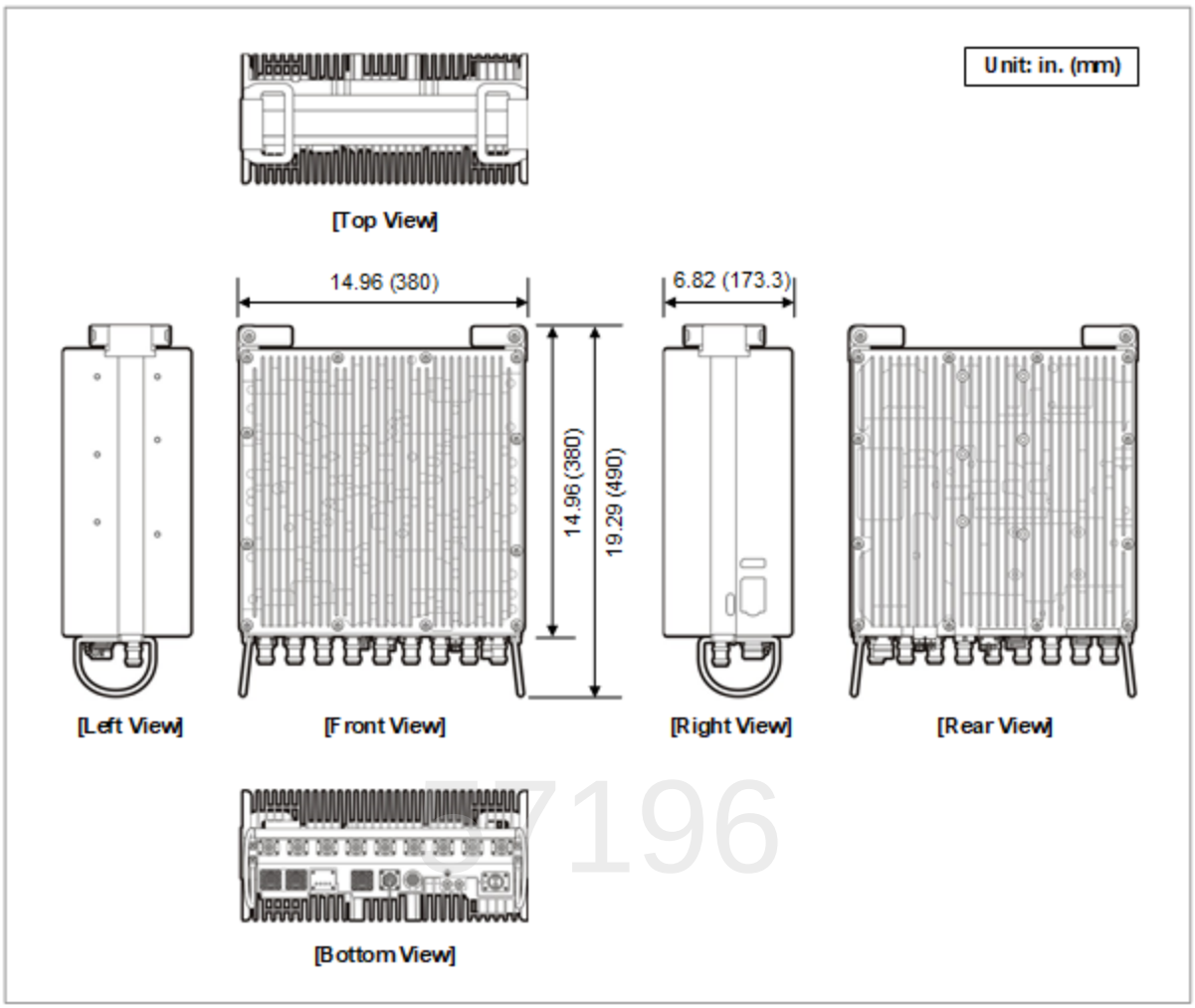
for RT8808-77A

Specifies hardware configuration, functions, specifications, components, ports, and LED information for the radio units.

Document Version 1.0
June 2021

Document Number: 2600-00T7PZGA2

Figure 1. Appearance



The RT8808-77A can be mounted on a wall or pole as displayed in the following installation scenario:

Specifications

The following table outlines the main specifications of RT8808-77A.

Table 2. Specifications (RT8808-77A)

Item	RT8808-77A
Radio Technology	5G NR
Operating Frequency	3700 to 3980 MHz
Channel Bandwidth	20/40/60/80/100 MHz
RF Chain	• 8T8R, 4T4R+4T4R Bi-sector • 2T2R+2T2R+2T2R Tri-sector • 4T8R+4T8R split mode
RF Output Power	Max. 320W (8 x 40W)
Capacity	Total Max 2C
CPRI interface	15km, 2 ports (25Gbps x 2), SFP28, single mode, Bi-di (Option: Duplex)
Input Voltage	-48 V DC (-38 V DC to -57 V DC)
Power Consumption (Max.)	1,192 W (100% load, 25°C) (w/o RET)
Operating Humidity	5% to 100%RH (Condensing, not to exceed 30g/m3 absolute humidity)
Operating Temperature	-40°C to 55°C (without solar load)
Dimension (in./mm)	14.96/380 (W) × 6.82/173.3(D) × 14.96/380 (H)
Weight (kg)	27 or less than
Cooling	Natural convection
Waterproof/Dustproof	IP65
Wind Resistance	Telcordia GR-487-CORE Issue5 • Wind Resistance (Section 3.36)
Earthquake Specification	Telcordia GR-63-CORE, Issue5, □ Earthquake (Section 4.4.1)
Vibration Specification	Telcordia GR-63-CORE, Issue5, • Office Vibration (Section 4.4.4) • Transportation Vibration (Section 4.4.5)
Altitude	Telcordia GR-63-CORE, Issue5, • Altitude (Section 4.1.3)
EMC	FCC Title 47 CFR Part 15
RF	FCC Title 47 CFR Part 27, 24
Safety	UL 62368-1, 2nd Edition
Installation	Pole, Wall, Tower

The power consumption is predicted with a simulation and the measured value is subject to change by ±10%

ATTACHMENT 3

Site Name: ***WESTPORT 9 CT***
Cumulative Power Density

Operator	Operating Frequency	Number of Trans.	ERP Per Trans.	Total ERP	Distance to Target	Calculated Power Density	Maximum Permissible Exposure*	Fraction of MPE
	(MHz)		(watts)	(watts)	(feet)	(mW/cm^2)	(mW/cm^2)	(%)
VZW 700	751	4	466	1862	34.5	0.0563	0.5007	11.24%
VZW Cellular	874	4	530	2119	34.5	0.0640	0.5827	10.99%
VZW PCS	1980	4	1237	4947	34.5	0.1495	1.0000	14.95%
VZW AWS	2120	4	1466	5862	34.5	0.1771	1.0000	17.71%
VZW CBAND	3730.08	2	4569	9138	36	0.2536	1.0000	25.36%
Total Percentage of Maximum Permissible Exposure								80.24%

*Guidelines adopted by the FCC on August 1, 1996, 47 CFR Part 1 based on NCRP Report 86, 1986 and generally on ANSI/IEEE C95.1-1992
**Calculation includes a -10 dB Off Beam Antenna Pattern Adjustment pursuant to Attachments B and C of the Siting Council's November 10, 2015 Memorandum for Exempt Modification filings

MHz = Megahertz
mW/cm^2 = milliwatts per square centimeter
ERP = Effective Radiated Power

Absolute worst case maximum values used.

ATTACHMENT 4

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Mount and Building Structural Analysis Report

Property Owner	N/A
Structural Type	28.42 ft BUILDING
Site Address	1385 Post Rd E Westport, CT 06880
Latitude	41.138994
Longitude	-73.316069

Client	**Verizon Wireless** *118 Flanders Road, 3rd Floor* *Westborough, MA 01581*
Site Type	Macro
Site ID	5066758
Site Name	WESTPORT_9_CT
Location Code	470895

Prepared by	Nexius Solutions, Inc. *2595 North Dallas Parkway Suite 300* *Frisco, TX 75034*
Job/Task Numbers	VZW470895A01-NX062
Rev	2
Email	structurals@nexius.com
Phone	972-581-9888
Date	01/25/2022
Result	**Adequate (66%)**

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Dear Sir / Madam:

Nexius Solutions is pleased to submit this analysis to determine the structural integrity of the referred structure. Referenced documents used for this analysis are listed in the section DOCUMENTS & REFERENCES. This analysis has been performed in compliance with

2018 Connecticut State Building Code (IBC 2015 w/ State Amendments)
ANSI/TIA-222-G w/ Addendums, Structural Standard for Antenna Supporting Structures and Antennas.

Detailed design parameters are listed in Table 1. Analysis loading is detailed in Table 2

Based on our analysis we have determined the following result:

Existing Mount and Building Structure **66% Adequate**

Nexius Solutions appreciates the opportunity of providing continued engineering services. Should you have any questions, comments or require additional information, please do not hesitate to contact us.

Sincerely,

Prepared by:

Akshay Doddamani, EIT

Approved by:

Jiazhu Hu, P.E.
Engineering Manager
License #: 31530

Digitally signed by Jiazhu Hu, Ph.D., P.E.
DN: cn=Jiazhu Hu, Ph.D., P.E., o=Nexius, ou=Engineering, email=Jiazhu.Hu@Nexius.com, c=US
Date: 2022.01.28 09:04:17 -05'00'

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DOCUMENTS & REFERENCES

Construction Drawings (FOR CONSTRUCTION), Location Code: 470895, Verizon Site Name: WESTPORT_9_CT, by Nexius, dated 01/25/2022.
RFDS, Location Code: 470895, Site Name: WESTPORT_9_CT, by Verizon Wireless, dated 01/10/2022.
Structural Analysis, Location Code: 470895, Verizon Site Name: WESTPORT_9_CT, by Nexius, dated 04/27/2017.
Steel Framing Plan, Job Name: VERIZON WESTPORT 9, by Eastern Inc. dated 05/11/2019.
Structural Analysis Report, Location Code: 470895, Verizon Site Name: WESTPORT_9_CT, by Nexius, dated 10/15/2021.

DESIGN STANDARDS & PARAMETERS

TABLE 1 STANDARDS & DESIGN PARAMETERS

Codes and Standards	
Building Code	2018 Connecticut State Building Code (IBC 2015 w/ State Amendments)
TIA Standard	ANSI/TIA-222-G w/ Addendums
Wind Parameters	
Ultimate Wind Speed	121 mph
Nominal Wind Speed	94 mph
Nominal Wind Speed with Ice	50 mph
Radial Ice Thickness	1 in
Exposure Category	B
Structure Class	II
Topographic Category	1
Seismic Design Parameters*	
S_S0.221	
$S_1$0.066	

* In accordance with Section 2.7.3 of TIA-222-G, seismic effects need not to be considered for site with Ss values less than 1, therefore no further seismic analysis is needed at this time.

RESULTS & RECOMMENDATIONS

The proposed loading replaces existing loading of similar size and weight and are installed inside existing enclosure. The change in vertical and lateral loading due to proposed installation is minimal compared to the existing structure's overall capacity. Based on our analysis, it is determined that the existing mount and building structure are **ADEQUATE** for the proposed and existing installations.

Additionally, it is required that all structural components and connections should be checked for tightness and good condition prior to installing the proposed equipment. If the site conditions are different or do not meet requirements, the analysis result would not be valid and Nexius should be notified for re-evaluation.

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LOADING

TABLE 2 LOADING

Mount Elev. ft	Ant. Ctr. Elev. ft	Qty	Description	Mount Type	Status
34.5	36.0	**3**	**JMA Wireless MX08FIT265-01**	**Proposed Pipe Mounts Enclosed Inside Faux Chimney**	**Proposed**
	34.5	**3**	**CommScope NNH4-65A-R6H4**		
		3	**Samsung B5/B13 RRH ORAN**		
		3	**Samsung RT-8808-77A**		
		3	B2/B66A RRH BR049		Existing to remain
		1	Raycap RHSDC-6627-PF-48		
		6	*CommScope JAHH-65A-R3B*		*Existing to be removed*

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Standard Conditions for Providing Structural Consulting Services on Existing Structures

1. Mounting hardware is analyzed to the best of our ability using all information that is provided or can be obtained during fieldwork (if authorized by client). If the existing conditions are not as we have represented in this analysis, we should be contacted to evaluate the significance of the deviation and revise the assessment accordingly.
2. The structural analysis has been performed assuming that the hardware is in "like new" condition. No allowance was made for excessive corrosion, damaged or missing structural members, loose bolts, misaligned parts, or any reduction in strength due to the age or fatigue of the product.
3. The structural analysis provided is an assessment of the primary load carrying capacity of the hardware. We provided a limited scope of service. In some cases, we cannot verify the capacity of every weld, plate, connection detail, etc. In some cases, structural fabrication details are unknown at the time of our analysis, and the detailed field measurement of some of the required details may not be possible. In instances where we cannot perform connection capacity calculations, it is assumed that the existing manufactured connections develop the full capacity of the primary members being connected.
4. We cannot be held responsible for mounting hardware that is installed improperly or hardware that is loose or has a tendency of working loose over the lifetime of the mounting hardware. Our analysis has been performed assuming fully tightened connections, and proper installation and symmetry of the mounting hardware per manufacturer's instructions.
5. The structural analysis has been performed using information currently provided by the client and potentially field verified. We have been provided with a mounting arrangement for all telecommunications equipment, including antennas RRH's, TMA's, RRU's, diplexers, surge protection devices, etc. Our analysis has been based upon a particular mounting arrangement. We are not responsible for deviations in the mounting arrangements that may occur over time. If deviations in equipment type or mounting arrangements are proposed, then we should be contacted to revise the recommendations of this structural report.
6. We cannot be held responsible for temporary and unbalanced loads on mounting hardware. Our analysis is based on a particular mounting arrangement or as-build field condition. We are not responsible for the methods and means of how the mounting arrangement is accomplished by the contractor. These methods and means may include rigging of equipment or hardware to lift and locate, temporary hanging of equipment in locations other than the final arrangement, movement and tie off of tower riggers, personnel, and their equipment, etc.
7. Steel grade and strength is unknown and cannot be field tested. We cannot be held responsible for equipment manufactured from inferior steel or bolts. Our analysis assumes that standard structural grade steel has been used by the equipment manufacturer for all assembled parts of the mounting apparatus. Acceptable steels and connection components are specified by the American Institute of Steel Construction. It is assumed all welded connections are performed in the shop under the latest American
8. Welding Society Code. No field welds are permitted or assumed for the existing pre-manufactured equipment. In case no accurate info available, following material assumptions were used:

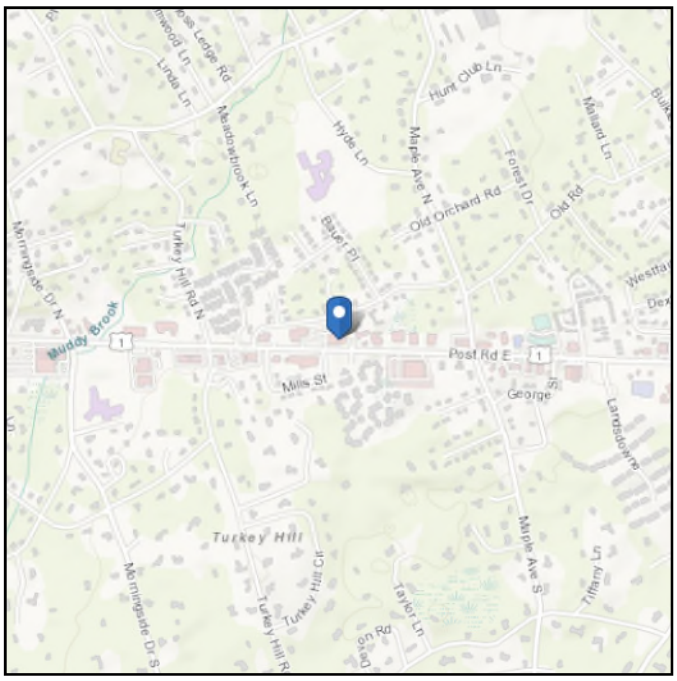
Channel, Solid Round, Angle, Plate	ASTM A36 (GR 36)
HSS (Rectangular)	ASTM 500 (GR B-46)
HSS (Round)	ASTM 500 (GR B-42)
Pipe	ASTM A53 (GR 35)
Connection Bolts	ASTM A325
U-Bolts	SAE 429 Gr.2

ASCE 7 Hazards Report

Address:
No Address at This Location

Standard: ASCE/SEI 7-10
Risk Category: II
Soil Class: D - Stiff Soil

Elevation: 80.29 ft (NAVD 88)
Latitude: 41.138994
Longitude: -73.316069



Wind

Results:

Wind Speed	121 Vmph
10-year MRI	76 Vmph
25-year MRI	86 Vmph
50-year MRI	92 Vmph
100-year MRI	99 Vmph

Data Accessed: Tue Jan 25 2022
Date Source: ASCE/SEI 7-10 Fig. 26.5-1A and Figs. CC-1–CC-4, and Section 26.5.2, incorporating errata of March 12, 2014

Value provided is 3-second gust wind speeds at 33 ft above ground for Exposure C Category, based on linear interpolation between contours. Wind speeds are interpolated in accordance with the 7-10 Standard. Wind speeds correspond to approximately a 7% probability of exceedance in 50 years (annual exceedance probability = 0.00143, MRI = 700 years).

Site is in a hurricane-prone region as defined in ASCE/SEI 7-10 Section 26.2. Glazed openings need not be protected against wind-borne debris.

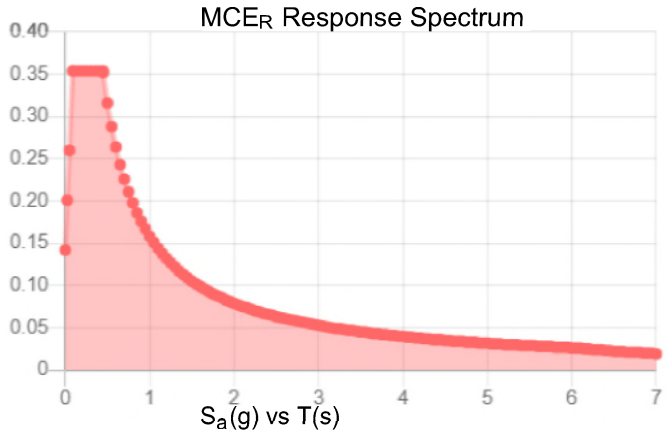
Seismic

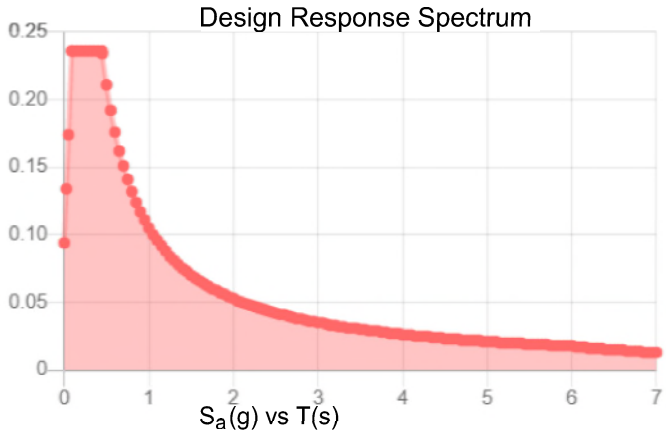
Site Soil Class: D - Stiff Soil

Results:

S_S :	0.221	S_{DS} :	0.236
S_1 :	0.066	S_{D1} :	0.105
F_a :	1.6	T_L :	6
F_v :	2.4	PGA :	0.123
S_{MS} :	0.354	PGA_M :	0.191
S_{M1} :	0.158	F_{PGA} :	1.554
		I_e :	1

Seismic Design Category B





Data Accessed: Tue Jan 25 2022

Date Source:

USGS Seismic Design Maps based on ASCE/SEI 7-10, incorporating Supplement 1 and errata of March 31, 2013, and ASCE/SEI 7-10 Table 1.5-2. Additional data for site-specific ground motion procedures in accordance with ASCE/SEI 7-10 Ch. 21 are available from USGS.

Ice

Results:

Ice Thickness:	1.00 in.
Concurrent Temperature:	15 F
Gust Speed	50 mph
Data Source:	Standard ASCE/SEI 7-10, Figs. 10-2 through 10-8
Date Accessed:	Tue Jan 25 2022

Ice thicknesses on structures in exposed locations at elevations higher than the surrounding terrain and in valleys and gorges may exceed the mapped values.

Values provided are equivalent radial ice thicknesses due to freezing rain with concurrent 3-second gust speeds, for a 50-year mean recurrence interval, and temperatures concurrent with ice thicknesses due to freezing rain. Thicknesses for ice accretions caused by other sources shall be obtained from local meteorological studies. Ice thicknesses in exposed locations at elevations higher than the surrounding terrain and in valleys and gorges may exceed the mapped values.

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Appendix #1: Loading Parameters and Calculations

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Mount Analysis Loading Calculations

Site Name	
Site ID	
Job Number	
TIA-222 Code Rev.	

Legend
Input
Calculated
Notes

Basic Parameters		
Mount Height		ft
Exposure Category		(B,C, or D)
Nominal Wind Speed		mph
Ice Wind Speed		mph
Design Ice Thickness, t_i		in
Maintenance Wind Speed		mph
Run Earthquake Analysis?	Yes	
Ground Elevation		ft, ASCE Hazard Tool
Vertical Seismic Loads, E_v		
Seismic Response Coefficient, C_s		
$_s$ Min		

Wind Parameters		
Gust Effect Factor, G_h		
$_{Zt}$		
$_d$		Table 2-2
		Table 2-3
q_z		psf, 2.6.9.6
		Table 2-8
t_{iz}		in, 2.6.8
q_{iz}		psf, 2.6.9.6
$_{iz}$		Table 2-8
$q_{Maintenance}$		psf, 2.6.9.6
$_{Maintenance}$		Table 2-8
Ice Dead, Grating		ksf

Mounting Pipes (Orientation Drawn Top-Down			
Risa 3D Label	Elevation (ft)	Length (in)	Diameter (in)

Appurtenances					
Model	Type	Height (in)	Width (in)	Depth (in)	Weight (lbs)
	Antenna				
	Antenna				
	RRU, TMA, Etc.				
	RRU, TMA, Etc.				
	RRU, TMA, Etc.				
FRP Panel	Antenna				
	RRU, TMA, Etc.				

Pipe Mount	Antenna	Elevation (ft)	Quantity	Orientation (deg)	Front Exposed (%)	Side Exposed (%)	Type	Height (in)	Width (in)	Depth (in)	Weight (lbs)	Front CaAa (ft^2)	Side CaAa (ft^2)	Front F_A (kips)	Side F_A (kips)		Bottom %	Front F_A (ksf)
							Antenna	59.016	19.606	7.756	73.800	9.824	4.515	0.000	0.000	22.7%	77.3%	
							RRU, TMA, Etc.	15.900	15.700	11.700	97.500	2.080	1.550	0.000	0.000	59.3%	74.0%	
							Antenna	32.000	11.600	4.530	23.200	3.123	1.411	0.000	0.000	18.5%	48.1%	
							RRU, TMA, Etc.	15.500	15.900	10.000	82.000	2.054	1.292	0.000	0.000	48.4%	62.7%	
							RRU, TMA, Etc.	14.960	14.960	6.820	59.520	1.865	0.850	0.000	0.000	59.7%	73.6%	
							Antenna	59.016	19.606	7.756	73.800	9.824	4.515	0.000	0.000	22.7%	77.3%	
							RRU, TMA, Etc.	14.960	14.960	6.820	59.520	1.865	0.850	0.000	0.000	59.7%	73.6%	
							Antenna	32.000	11.600	4.530	23.200	3.123	1.411	0.000	0.000	18.5%	48.1%	
							RRU, TMA, Etc.	15.500	15.900	10.000	82.000	2.054	1.292	0.000	0.000	48.4%	62.7%	
							RRU, TMA, Etc.	15.900	15.700	11.700	97.500	2.080	1.550	0.000	0.000	48.2%	62.9%	
							Antenna	59.016	19.606	7.756	73.800	9.824	4.515	0.000	0.000	22.7%	77.3%	
							RRU, TMA, Etc.	35.000	21.000	18.000	45.150	6.125	5.250	0.000	0.000	50.5%	82.9%	
							Antenna	32.000	11.600	4.530	23.200	3.123	1.411	0.000	0.000	18.5%	48.1%	
							RRU, TMA, Etc.	15.900	15.700	11.700	97.500	2.080	1.550	0.000	0.000	48.2%	62.9%	
							RRU, TMA, Etc.	14.960	14.960	6.820	59.520	1.865	0.850	0.000	0.000	59.7%	73.6%	
							RRU, TMA, Etc.	15.500	15.900	10.000	82.000	2.054	1.292	0.000	0.000	59.5%	73.8%	
	FRP Panel						Antenna	102.000	68.000	0.500	220.469	57.800	0.708	1.519	0.019			

WIND LOAD BASED ON ASCE 7-10

Wind pressure at roof joist:

Risk Category,	II		
Exposure Category,	B		
Ultimate Wind Speed (mph),	$V := 121$		(ASCE 7 Hazards Report)
Gust Effect Factor,	$G_h := 0.85$		(26.9.1, ASCE 7-10)
Velocity Pressure Exp. Co-eff.,	$K_z := 0.76$		(Table 29.3-1, ASCE 7-10)
Topographic Factor,	$K_{zt} := 1$		(26.8.1, ASCE 7-10)
Wind Directionality Factor,	$K_d := 0.85$		(Chimney - Table 26.6-1, ASCE 7-10)
External pressure coefficient	$Gcp := 0.2$	$Gcpn := -0.9$	(Table 26.11-1, ASCE 7-10)
Internal pressure coefficient	$Gcpi := 0.18$		

$$q_z := 0.00256 \cdot \frac{lb}{ft^2} \cdot K_z \cdot K_{zt} \cdot K_d \cdot V^2 = 24.213 \ \frac{lb}{ft^2}$$

Design wind pressure,

$$P := q_z \cdot [(Gcp) - (Gcpi)]$$

$P := q_z \cdot (Gcp + Gcpi) = 9.201 \ \frac{lb}{ft^2}$ (Downward) (In the analysis, Downward pressure considered)

$P := q_z \cdot (Gcpn - Gcpi) = -26.15 \ \frac{lb}{ft^2}$ (Upward)

Snow load at roof:

Ground snow load	$P_g := 30 \ psf$	(ASCE 7 Hazards Report)
Exposure factor	$C_e := 0.9$	(Table 7-2, ASCE 7-10)
Thermal factor	$Ct := 1.2$	(Table 7-3, ASCE 7-10)
Importance factor	$I := 1$	

$p_f := 0.7 \cdot C_e \cdot Ct \cdot I \cdot P_g = 22.68 \ psf$ (Eq. 7-1, ASCE 7-10)

Live Load: $L_r := 20 \ psf$ (Table 4-1, ASCE 7-10)

Load Combination (ASD):

LC 1 - DL+SL
LC 2 - DL + 0.6WL
LC 3 - DL + 0.75 (0.6W)+0.75(SL)

Roof Joist Check:

Total weight of chimney: $W := 7766\ lb$ (Risa 3D Output)

$$P_c := \frac{W}{11\ ft \cdot 11\ ft} = 64.182\ \frac{lb}{ft^2}$$

Weight of the chimney is assumed to be equally distributed to 11'-0" x 11'-0" area.

Section properties of 28KCS4:

Moment capacity (ASD):	$M_x := 1303\ kip \cdot in$
Length of joist	$L := 44\ ft$
Tributary width	$L_{tr} := 5.5\ ft$
Self weight	$W_D := 16.5\ plf$
Uniform distributed load due to faux chimney	$W_{fc} := 354\ plf$
Uniform distributed roof live load	$W_{rl} := 110\ plf$
Uniform distributed snow load	$W_s := 125\ plf$
Uniform distributed wind load	$W_{wl} := 50.6\ plf$

Maximum moment at the mid span:

LC 1: $M_{LC1} := 860.4\ kip \cdot in$ (Governs)
LC 2: $M_{LC2} := 538 \cdot kip \cdot in$
LC 3: $M_{LC3} := 800\ kip \cdot in$

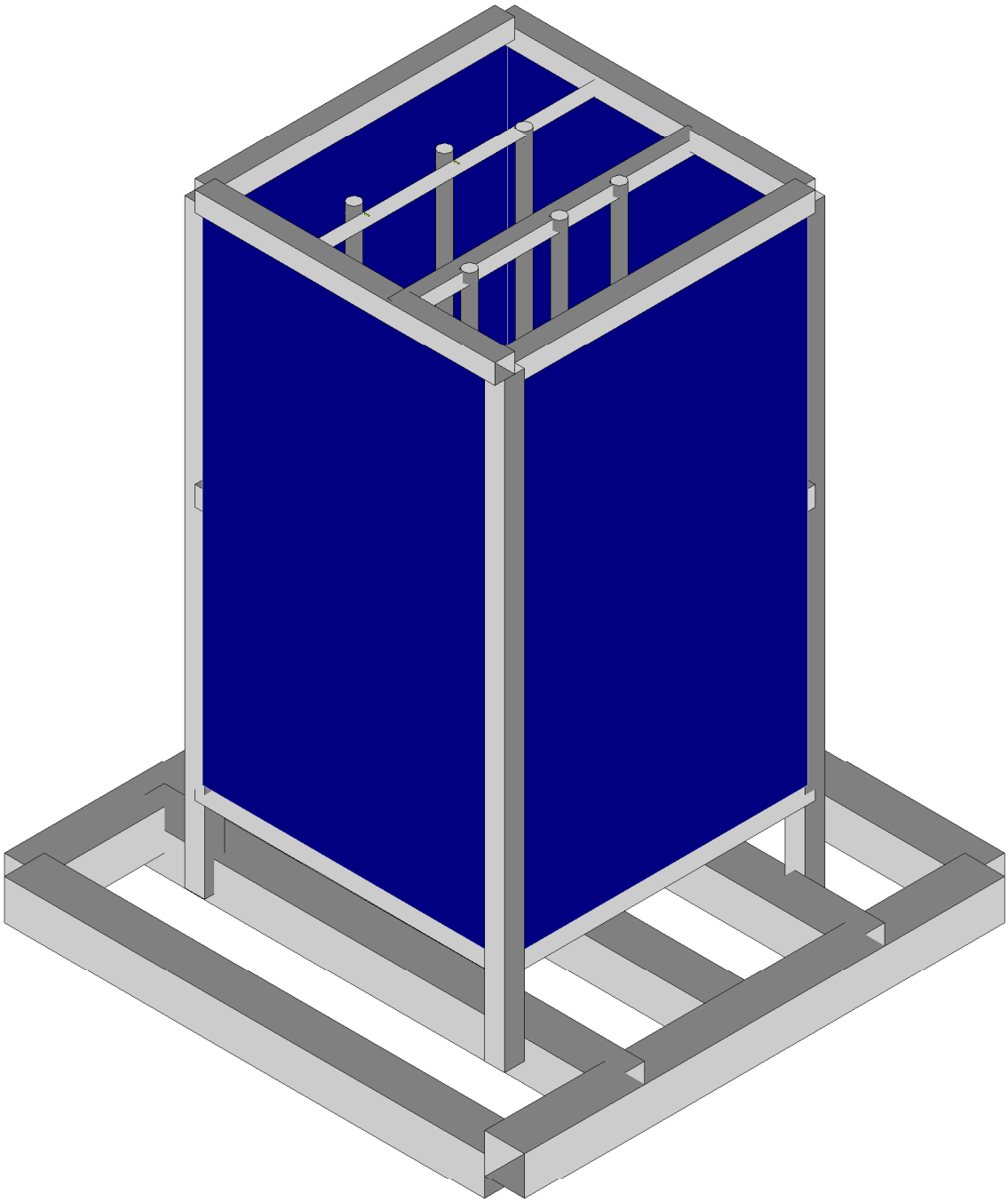
Stress Ratio: $SR := \frac{M_{LC1}}{M_x} = 0.66$

Maximum moment due to faux chimney is less than moment capacity of the joist. It is determined that the existing joist is **Adequate** under proposed loading

ASD

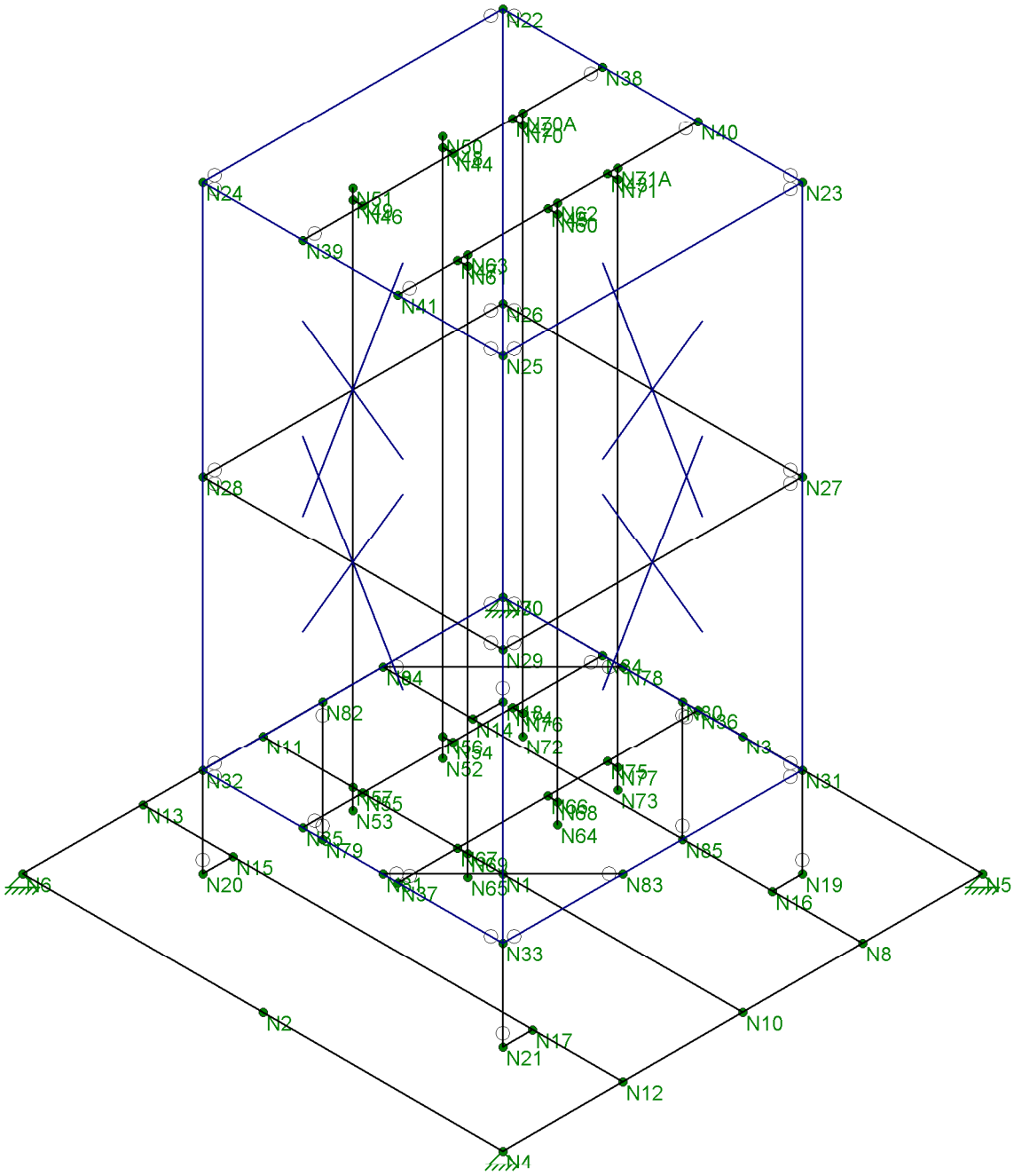
STANDARD LOAD TABLE FOR KCS OPEN WEB STEEL JOISTS Based on a 50 ksi Maximum Yield Strength							
JOIST DESIGNATION	DEPTH (in.)	MOMENT CAPACITY (k-in.)	SHEAR CAPACITY* (lbs)	APPROX. WEIGHT** (lbs/ft.)	GROSS MOMENT OF INERTIA (in^4)	ERECTION STABILITY BRIDGING REQ'D (ft.)	BRIDGING TABLE SECTION NUMBER
10KCS1	10	172	2000	6.0	29	NA	1
10KCS2	10	225	2500	7.5	37	NA	1
10KCS3	10	296	3000	10.0	47	NA	1
12KCS1	12	209	2400	6.0	43	NA	3
12KCS2	12	274	3000	8.0	55	NA	5
12KCS3	12	362	3500	10.0	71	NA	5
14KCS1	14	247	2900	6.5	59	NA	4
14KCS2	14	324	3400	8.0	77	NA	6
14KCS3	14	428	3900	10.0	99	NA	6
16KCS2	16	349	4000	8.5	99	NA	6
16KCS3	16	470	4800	10.5	128	NA	9
16KCS4	16	720	5300	14.5	192	NA	9
16KCS5	16	934	5800	18.0	245	NA	9
18KCS2	18	395	4700	9.0	127	35-0	6
18KCS3	18	532	5200	11.0	164	NA	9
18KCS4	18	817	5700	15.0	247	NA	10
18KCS5	18	1062	6200	18.5	316	NA	10
20KCS2	20	442	5200	9.5	159	36-0	6
20KCS3	20	595	6000	11.5	205	39-0	9
20KCS4	20	914	7900	16.5	308	NA	10
20KCS5	20	1191	8400	20.0	396	NA	10
22KCS2	22	488	5900	10.0	194	36-0	6
22KCS3	22	658	6600	12.5	251	40-0	9
22KCS4	22	1012	7900	16.5	377	NA	11
22KCS5	22	1319	8600	20.5	485	NA	11
24KCS2	24	534	6300	10.0	232	39-0	6
24KCS3	24	720	7200	12.5	301	44-0	9
24KCS4	24	1108	8400	16.5	453	NA	12
24KCS5	24	1448	8900	20.5	584	NA	12
26KCS2	26	580	6600	10.0	274	39-0	6
26KCS3	26	783	7800	12.5	355	44-0	9
26KCS4	26	1206	8500	16.5	536	NA	12
26KCS5	26	1576	9200	20.5	691	NA	12
28KCS2	28	626	6900	10.5	320	40-0	6
28KCS3	28	846	8000	12.5	414	45-0	9
28KCS4	28	1303	8500	16.5	626	53-0	12
28KCS5	28	1704	9200	20.5	808	53-0	12
30KCS3	30	908	8000	13.0	478	45-0	9
30KCS4	30	1400	8500	16.5	722	54-0	12
30KCS5	30	1833	9200	21.0	934	54-0	12

*Maximum uniformly distributed load capacity is 550 plf and single concentrated load cannot exceed shear capacity
**Does not include accessories



Envelope Only Solution

Nexius	WESTPORT_9_CT	Rendered
Akshay Doddamani		Jan 25, 2022 at 12:07 PM
470895		470895_WESTPORT_9_CT_16486...



Envelope Only Solution

Nexius	WESTPORT_9_CT	Nodes
Akshay Doddamani		Jan 25, 2022 at 12:07 PM
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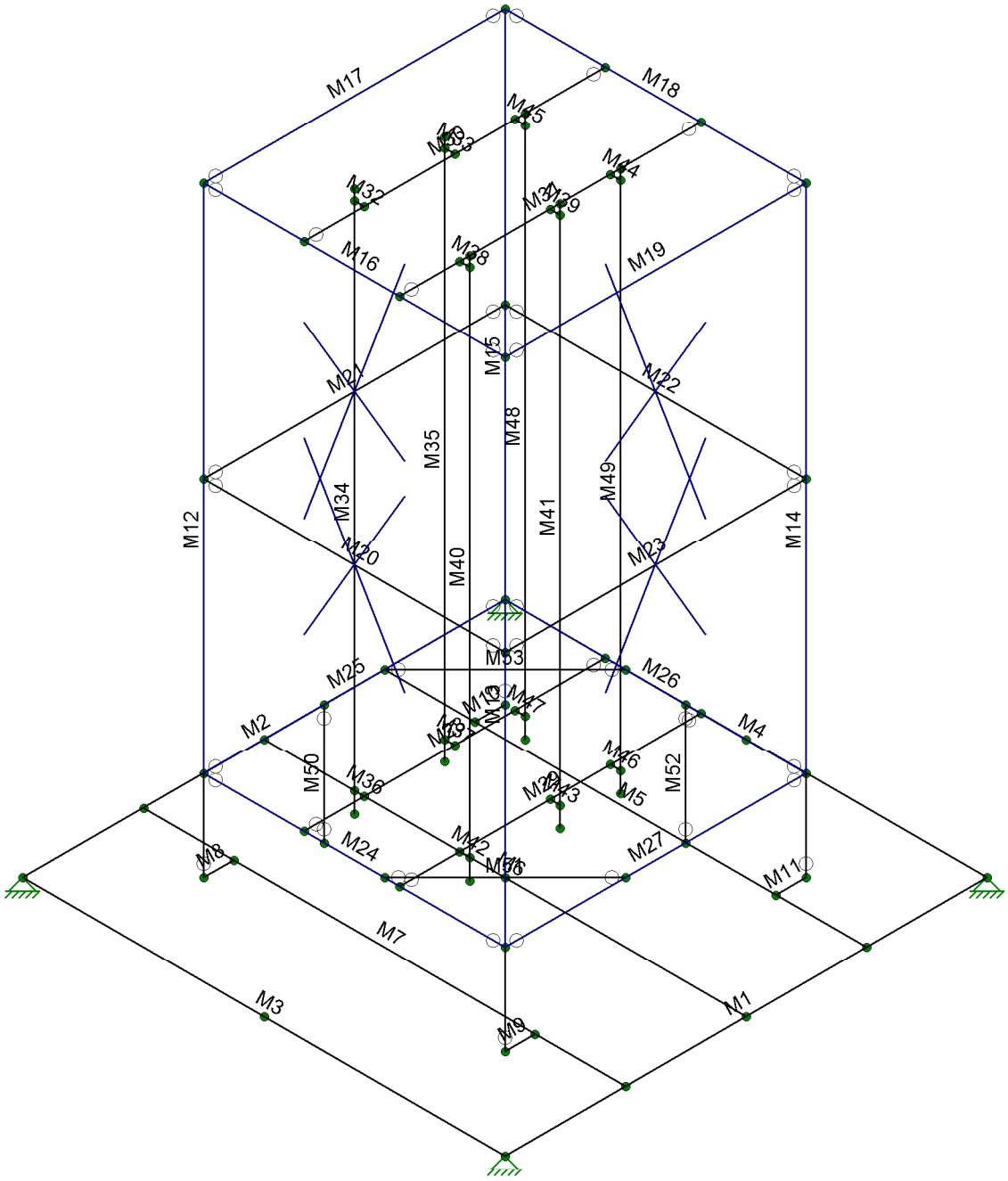
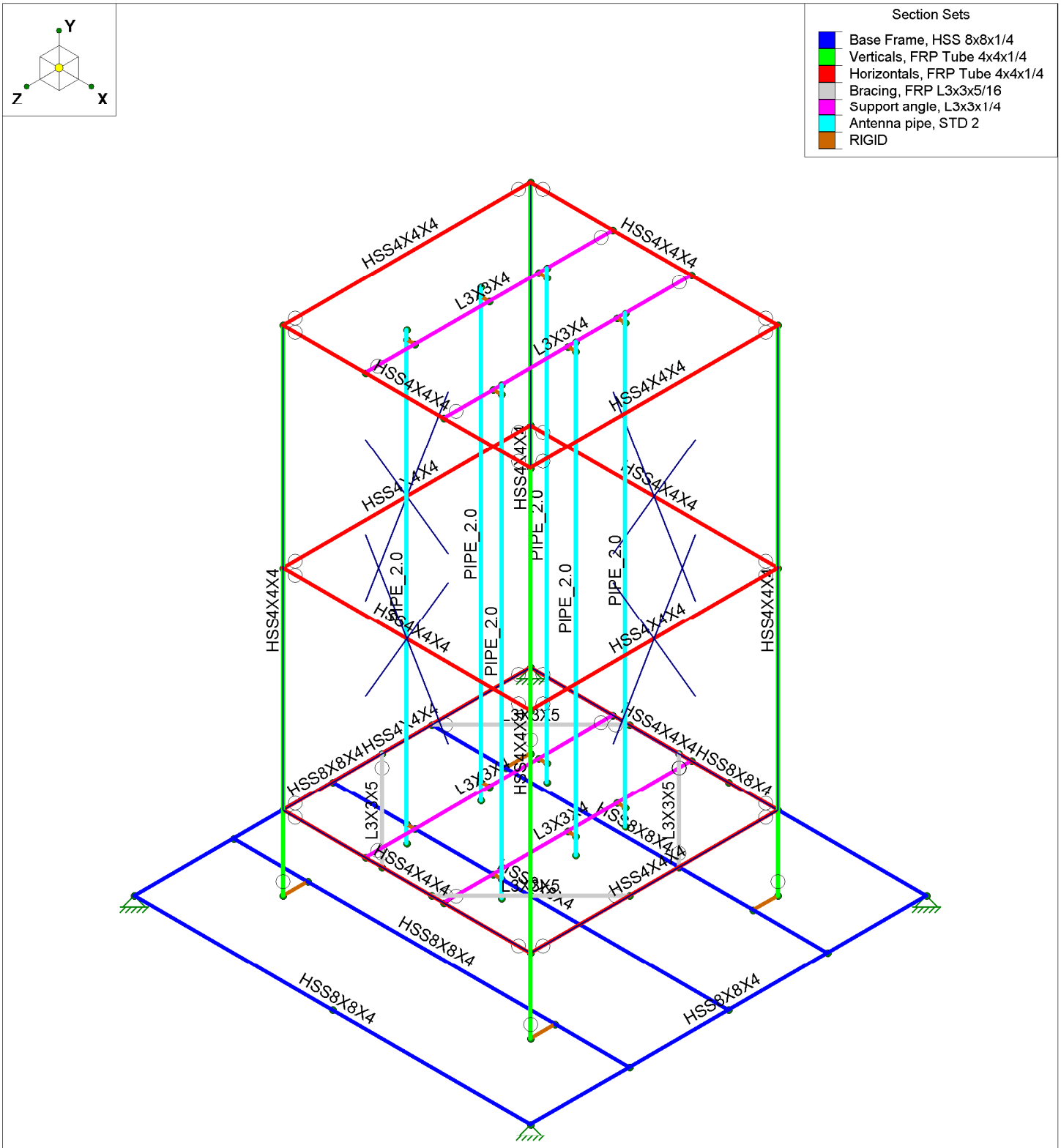


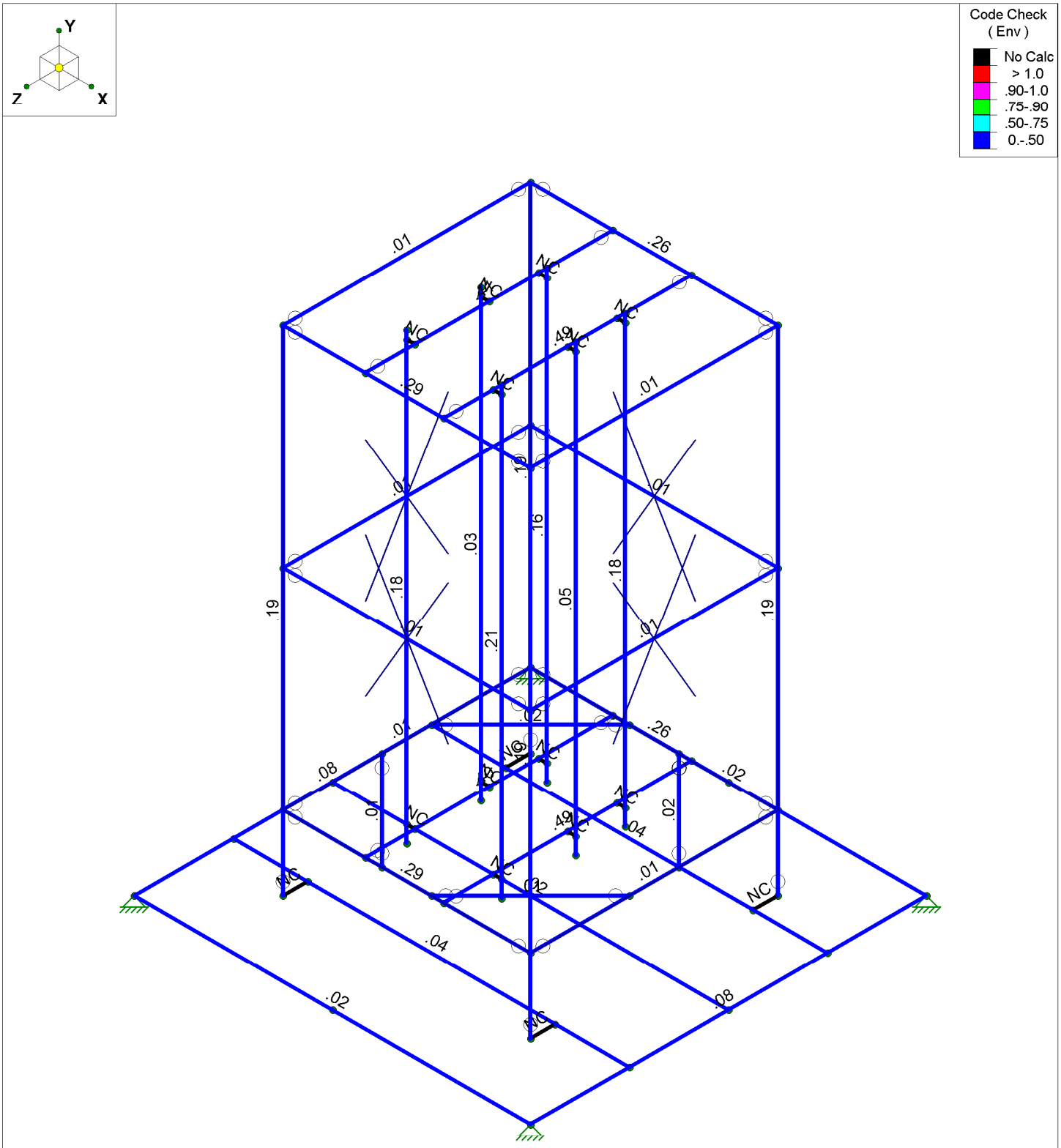
Envelope Only Solution

Nexius	WESTPORT_9_CT	Member Label
Akshay Doddamani		Jan 25, 2022 at 12:08 PM
470895		470895_WESTPORT_9_CT_16486...



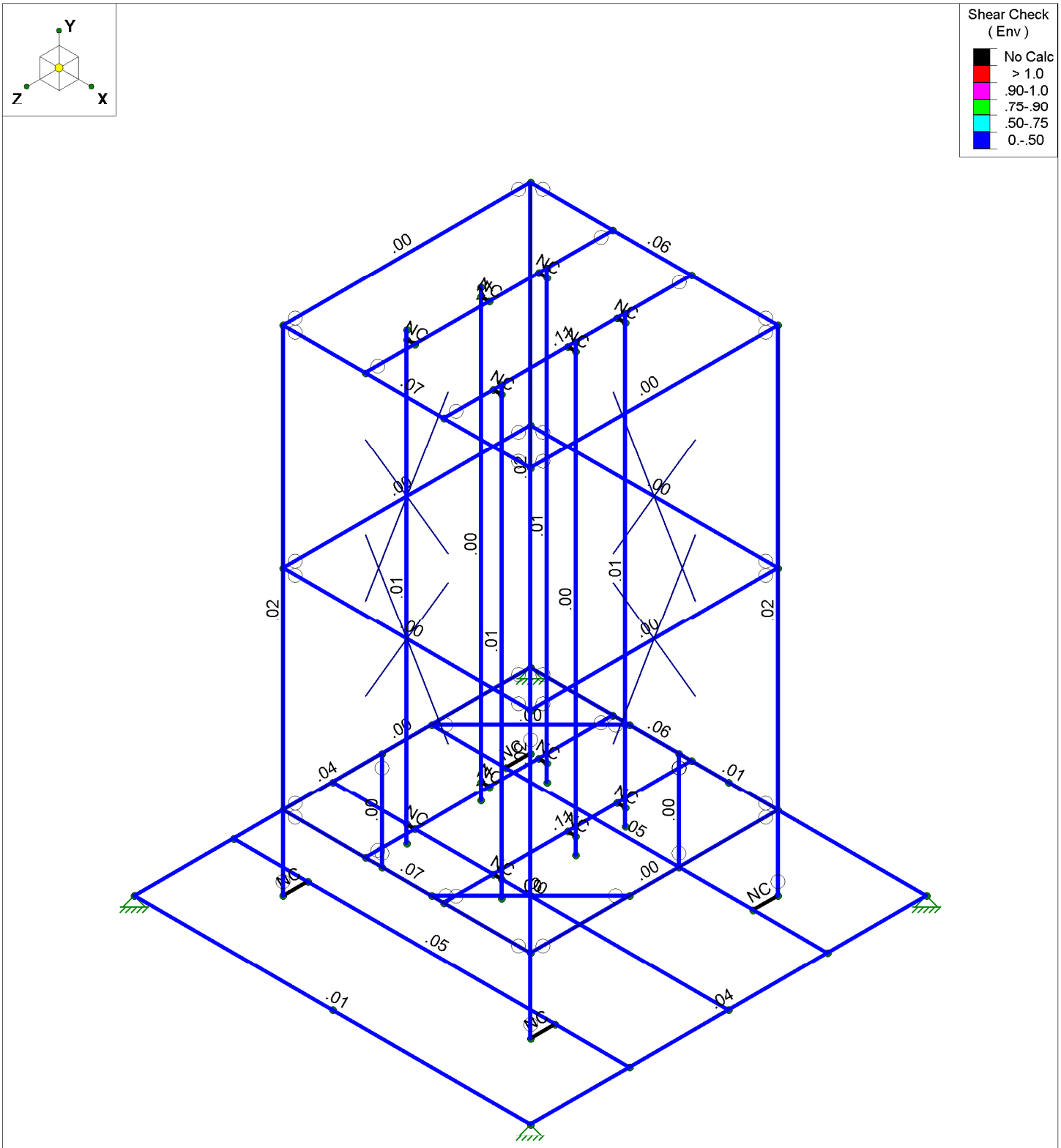
Envelope Only Solution

Nexius	WESTPORT_9_CT	Shape
Akshay Doddamani		Jan 25, 2022 at 12:08 PM
470895		470895_WESTPORT_9_CT_16486...



Member Code Checks Displayed (Enveloped)
Envelope Only Solution

Nexius	WESTPORT_9_CT	Ratio_Flexural
Akshay Doddamani		Jan 25, 2022 at 12:08 PM
470895		470895_WESTPORT_9_CT_16486...



Member Shear Checks Displayed (Enveloped)
Envelope Only Solution

Nexius	WESTPORT_9_CT	Ratio_Shear
Akshay Doddamani		Jan 25, 2022 at 12:08 PM
470895		470895_WESTPORT_9_CT_16486...

Hot Rolled Steel Properties

	Label	E [k...	G [k...	Nu	Therm (/1E5 F)	Density[k/ft^3]	Yield[ksi]	Ry	Fu[ksi]	Rt
1	A992	290...	111...	.3	.65	.49	50	1.1	65	1.1
2	A36 Gr....	290...	111...	.3	.65	.49	36	1.5	58	1.2
3	A572 Gr..	290...	111...	.3	.65	.49	50	1.1	65	1.1
4	A500 Gr..	290...	111...	.3	.65	.527	42	1.4	58	1.3
5	A500 Gr..	290...	111...	.3	.65	.527	46	1.4	58	1.3
6	A500 Gr..	290...	111...	.3	.65	.527	46	1.4	62	1.3
7	A500 Gr..	290...	111...	.3	.65	.527	50	1.4	62	1.3
8	A53 Gr.B	290...	111...	.3	.65	.49	35	1.6	60	1.2
9	A1085	290...	111...	.3	.65	.49	50	1.4	65	1.3
10	A913 Gr..	290...	111...	.3	.65	.49	65	1.1	80	1.1
11	FRP Co..	2800	450	.3	.65	.107	30	1.5	30	1.2
12	FRP Be...	2800	450	.3	.65	.107	10	1.5	10	1.2

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design ...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Base Frame, HSS 8x8...	HSS8X8X4	Beam	SquareTube	A500 Gr.B ...	Typical	7.1	70.7	70.7	111
2	Verticals, FRP Tube 4...	HSS4X4X4	Column	SquareTube	FRP Column	Typical	3.37	7.8	7.8	12.8
3	Horizontals, FRP Tube...	HSS4X4X4	Beam	SquareTube	FRP Beam	Typical	3.37	7.8	7.8	12.8
4	Bracing, FRP L3x3x5/16	L3X3X5	Beam	Single Angle	FRP Beam	Typical	1.78	1.5	1.5	.06
5	Support angle, L3x3x1/4	L3X3X4	Beam	Single Angle	A36 Gr.36	Typical	1.44	1.23	1.23	.031
6	Antenna pipe, STD 2	PIPE_2.0	Column	Pipe	A53 Gr.B	Typical	1.02	.627	.627	1.25

Joint Coordinates and Temperatures

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From D...
1	N1	0	0	0	0	
2	N2	0	0	4	0	
3	N3	0	0	-4	0	
4	N4	4	0	4	0	
5	N5	4	0	-4	0	
6	N6	-4	0	4	0	
7	N7	-4	0	-4	0	
8	N8	4	0	-2	0	
9	N9	-4	0	-2	0	
10	N10	4	0	0	0	
11	N11	-4	0	0	0	
12	N12	4	0	2	0	
13	N13	-4	0	2	0	
14	N14	-2.5	0	-2	0	
15	N15	-2.5	0	2	0	
16	N16	2.5	0	-2	0	
17	N17	2.5	0	2	0	
18	N18	-2.5	0	-2.5	0	
19	N19	2.5	0	-2.5	0	
20	N20	-2.5	0	2.5	0	
21	N21	2.5	0	2.5	0	
22	N22	-2.5	10	-2.5	0	
23	N23	2.5	10	-2.5	0	

Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From D...
24	N24	-2.5	10	2.5	0	
25	N25	2.5	10	2.5	0	
26	N26	-2.5	5.75	-2.5	0	
27	N27	2.5	5.75	-2.5	0	
28	N28	-2.5	5.75	2.5	0	
29	N29	2.5	5.75	2.5	0	
30	N30	-2.5	1.5	-2.5	0	
31	N31	2.5	1.5	-2.5	0	
32	N32	-2.5	1.5	2.5	0	
33	N33	2.5	1.5	2.5	0	
34	N34	-0.833333	1.5	-2.5	0	
35	N35	-0.833333	1.5	2.5	0	
36	N36	.75	1.5	-2.5	0	
37	N37	.75	1.5	2.5	0	
38	N38	-0.833333	10	-2.5	0	
39	N39	-0.833333	10	2.5	0	
40	N40	.75	10	-2.5	0	
41	N41	.75	10	2.5	0	
42	N42	-0.833333	10	-1	0	
43	N43	.75	10	-1	0	
44	N44	-0.833333	10	0	0	
45	N45	.75	10	0	0	
46	N46	-0.833333	10	1.5	0	
47	N47	.75	10	1.5	0	
48	N48	-1	10	0	0	
49	N49	-1	10	1.5	0	
50	N50	-1	10.166667	0	0	
51	N51	-1	10.166667	1.5	0	
52	N52	-1	1.166667	0	0	
53	N53	-1	1.166667	1.5	0	
54	N54	-0.833333	1.5	0	0	
55	N55	-0.833333	1.5	1.5	0	
56	N56	-1	1.5	0	0	
57	N57	-1	1.5	1.5	0	
58	N60	0.916667	10	0	0	
59	N61	0.916667	10	1.5	0	
60	N62	0.916667	10.166667	0	0	
61	N63	0.916667	10.166667	1.5	0	
62	N64	0.916667	1.166667	0	0	
63	N65	0.916667	1.166667	1.5	0	
64	N66	.75	1.5	0	0	
65	N67	.75	1.5	1.5	0	
66	N68	0.916667	1.5	0	0	
67	N69	0.916667	1.5	1.5	0	
68	N70	-0.666667	10	-1	0	
69	N71	0.916667	10	-1	0	
70	N70A	-0.666667	10.166667	-1	0	
71	N71A	0.916667	10.166667	-1	0	
72	N72	-0.666667	1.166667	-1	0	
73	N73	0.916667	1.166667	-1	0	
74	N74	-0.833333	1.5	-1	0	
75	N75	.75	1.5	-1	0	
76	N76	-0.666667	1.5	-1	0	
77	N77	0.916667	1.5	-1	0	
78	N78	-.5	1.5	-2.5	0	
79	N79	-.5	1.5	2.5	0	
80	N80	.5	1.5	-2.5	0	

Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From D...
81	N81	.5	1.5	2.5	0	
82	N82	-2.5	1.5	.5	0	
83	N83	2.5	1.5	.5	0	
84	N84	-2.5	1.5	-.5	0	
85	N85	2.5	1.5	-.5	0	

Member Point Loads (BLC 1 : Dead)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	M34	Y	-.037	%22.7
2	M34	Y	-.098	%66.7
3	M35	Y	-.012	%18.5
4	M35	Y	-.082	%55.6
5	M35	Y	-.06	%66.7
6	M48	Y	-.037	%22.7
7	M48	Y	-.06	%66.7
8	M40	Y	-.012	%18.5
9	M40	Y	-.082	%55.6
10	M40	Y	-.098	%55.6
11	M41	Y	-.037	%22.7
12	M41	Y	-.045	%66.7
13	M49	Y	-.012	%18.5
14	M49	Y	-.098	%55.6
15	M49	Y	-.06	%66.7
16	M49	Y	-.082	%66.7
17	M34	Y	-.037	%77.3
18	M35	Y	-.012	%48.1
19	M48	Y	-.037	%77.3
20	M40	Y	-.012	%48.1
21	M41	Y	-.037	%77.3
22	M49	Y	-.012	%48.1

Member Point Loads (BLC 2 : Ice Dead)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	M34	Y	-.14	%22.7
2	M34	Y	-.071	%66.7
3	M35	Y	-.048	%18.5
4	M35	Y	-.066	%55.6
5	M35	Y	-.057	%66.7
6	M48	Y	-.14	%22.7
7	M48	Y	-.057	%66.7
8	M40	Y	-.048	%18.5
9	M40	Y	-.066	%55.6
10	M40	Y	-.071	%55.6
11	M41	Y	-.14	%22.7
12	M41	Y	-.213	%66.7
13	M49	Y	-.048	%18.5
14	M49	Y	-.071	%55.6
15	M49	Y	-.057	%66.7
16	M49	Y	-.066	%66.7
17	M34	Y	-.14	%77.3
18	M35	Y	-.048	%48.1
19	M48	Y	-.14	%77.3
20	M40	Y	-.048	%48.1
21	M41	Y	-.14	%77.3
22	M49	Y	-.048	%48.1

Member Distributed Loads (BLC 2 : Ice Dead)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,F,ksf]	Start Location[ft,..	End Location[ft,...
1	M1	PY	-.033	-.033	0	%100
2	M2	PY	-.033	-.033	0	%100
3	M3	PY	-.033	-.033	0	%100
4	M4	PY	-.033	-.033	0	%100
5	M5	PY	-.033	-.033	0	%100
6	M6	PY	-.033	-.033	0	%100
7	M7	PY	-.033	-.033	0	%100
8	M8	PY	-.005	-.005	0	%100
9	M9	PY	-.005	-.005	0	%100
10	M10	PY	-.005	-.005	0	%100
11	M11	PY	-.005	-.005	0	%100
12	M12	PY	-.005	-.005	0	%100
13	M13	PY	-.005	-.005	0	%100
14	M14	PY	-.005	-.005	0	%100
15	M15	PY	-.005	-.005	0	%100
16	M16	PY	-.005	-.005	0	%100
17	M17	PY	-.005	-.005	0	%100
18	M18	PY	-.005	-.005	0	%100
19	M19	PY	-.005	-.005	0	%100
20	M20	PY	-.005	-.005	0	%100
21	M21	PY	-.005	-.005	0	%100
22	M22	PY	-.005	-.005	0	%100
23	M23	PY	-.005	-.005	0	%100
24	M24	PY	-.005	-.005	0	%100
25	M25	PY	-.005	-.005	0	%100
26	M26	PY	-.005	-.005	0	%100
27	M27	PY	-.005	-.005	0	%100
28	M28	PY	-.005	-.005	0	%100
29	M29	PY	-.005	-.005	0	%100
30	M30	PY	-.005	-.005	0	%100
31	M31	PY	-.005	-.005	0	%100
32	M32	PY	-.005	-.005	0	%100
33	M33	PY	-.005	-.005	0	%100
34	M34	PY	-.005	-.005	0	%100
35	M35	PY	-.005	-.005	0	%100
36	M36	PY	-.005	-.005	0	%100
37	M37	PY	-.005	-.005	0	%100
38	M38	PY	-.005	-.005	0	%100
39	M39	PY	-.005	-.005	0	%100
40	M40	PY	-.005	-.005	0	%100
41	M41	PY	-.005	-.005	0	%100
42	M42	PY	-.005	-.005	0	%100
43	M43	PY	-.005	-.005	0	%100
44	M44	PY	-.005	-.005	0	%100
45	M45	PY	-.005	-.005	0	%100
46	M46	PY	-.005	-.005	0	%100
47	M47	PY	-.005	-.005	0	%100
48	M48	PY	-.005	-.005	0	%100
49	M49	PY	-.005	-.005	0	%100
50	M50	PY	-.005	-.005	0	%100
51	M51	PY	-.005	-.005	0	%100
52	M52	PY	-.005	-.005	0	%100
53	M53	PY	-.005	-.005	0	%100

Member Area Loads

Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
No Data to Print ...						

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distribut...	Area(Me...	Surface(...
1	Dead	DL		-1			22			
2	Ice Dead	SL					22	53		
3	Wind_PX	None								1
4	Wind_NX	None								1
5	Wind_PZ	None								1
6	Wind_NZ	None								1
7	Ice Wind_PX	None								1
8	Ice Wind_NX	None								1
9	Ice Wind_PZ	None								1
10	Ice Wind_NZ	None								1

Load Combinations

	Description	S...	PDe...	SR...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
1	1.D	Yes	Y		1	1																		
2	1.D+0.6W_PX	Yes	Y		1	1	3	1.6																
3	1.D+0.6W_NX	Yes	Y		1	1	4	1.6																
4	1.D+0.6W_PZ	Yes	Y		1	1	5	1.6																
5	1.D+0.6W_NZ	Yes	Y		1	1	6	1.6																
6	1.D+0.75Di+0.45Wi_PX	Yes	Y		1	1	2	.75	7	.45														
7	1.D+0.75Di+0.45Wi_NX	Yes	Y		1	1	2	.75	8	.45														
8	1.D+0.75Di+0.45Wi_PZ	Yes	Y		1	1	2	.75	9	.45														
9	1.D+1.0Di+0.45Wi_NZ	Yes	Y		1	1	2	.75	10	.45														

Envelope Joint Reactions

	Joint		X [k]	LC	Y [k]	LC	Z [k]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
1	N6	m...	.306	3	1.976	7	.307	5	0	9	0	9	0	9
2		m...	-.306	2	.711	2	-.305	4	0	1	0	1	0	1
3	N4	m...	.306	3	2.002	8	.307	5	0	9	0	9	0	9
4		m...	-.306	2	.725	3	-.305	4	0	1	0	1	0	1
5	N5	m...	.306	3	1.954	9	.305	5	0	9	0	9	0	9
6		m...	-.306	2	.7	3	-.307	4	0	1	0	1	0	1
7	N7	m...	.306	3	1.928	7	.305	5	0	9	0	9	0	9
8		m...	-.306	2	.686	2	-.307	4	0	1	0	1	0	1
9	Totals:	m...	1.224	3	7.766	8	1.224	5						
10		m...	-1.224	2	4.581	5	-1.224	4						

Envelope AISC 14th(360-10): ASD Steel Code Checks

	Member	Shape	Code C...	Loc[ft]	LC	Shear ...	Loc[ft]	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mnyy/om ...	Mnzz/om ...	Cb	Eqn
1	M1	HSS8X8X4	.079	6	8	.044	8	y	8	183.765	195.569	44.104	44.104	1....	H1-1b
2	M2	HSS8X8X4	.078	6	8	.044	8	y	8	183.765	195.569	44.104	44.104	1....	H1-1b
3	M3	HSS8X8X4	.020	4	8	.007	0	y	2	183.765	195.569	44.104	44.104	1....	H1-1b
4	M4	HSS8X8X4	.020	4	9	.007	0	y	2	183.765	195.569	44.104	44.104	1....	H1-1b
5	M5	HSS8X8X4	.037	1.5	2	.047	0	y	5	183.765	195.569	44.104	44.104	1....	H1-1b
6	M6	HSS8X8X4	.022	4	8	.004	8	y	6	183.765	195.569	44.104	44.104	1....	H1-1b
7	M7	HSS8X8X4	.038	1.5	2	.048	0	y	4	183.765	195.569	44.104	44.104	1....	H1-1b
8	M12	HSS4X4X4	.190	10	3	.019	8.542	z	4	7.861	60.539	5.74	5.74	4....	H1-1b*

Envelope AISC 14th(360-10): ASD Steel Code Checks (Continued)

	Member	Shape	Code C...	Loc[ft]	LC	Shear ...	Loc[ft]	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mnyy/om ...	Mnzz/om ...	Cb	Eqn
9	M13	HSS4X4X4	.193	10	2	.019	8.542	z	4	7.861	60.539	5.74	5.74	4....	H1-1b*
10	M14	HSS4X4X4	.188	10	2	.019	8.542	z	5	7.861	60.539	5.74	5.74	4....	H1-1b*
11	M15	HSS4X4X4	.185	10	3	.019	8.542	z	5	7.861	60.539	5.74	5.74	4....	H1-1b*
12	M16	HSS4X4X4	.294	1.771	8	.073	5	y	7	15.944	20.18	2.34	2.34	1....	H1-1b
13	M17	HSS4X4X4	.008	2.5	7	.003	0	y	9	15.944	20.18	2.34	2.34	1....	H1-1b
14	M18	HSS4X4X4	.263	3.229	9	.065	5	y	7	15.944	20.18	2.34	2.34	1....	H1-1b
15	M19	HSS4X4X4	.008	2.5	6	.003	0	y	9	15.944	20.18	2.34	2.34	1....	H1-1b
16	M20	HSS4X4X4	.008	2.5	8	.003	0	y	9	15.944	20.18	2.34	2.34	1....	H1-1b
17	M21	HSS4X4X4	.008	2.5	7	.003	0	y	9	15.944	20.18	2.34	2.34	1....	H1-1b
18	M22	HSS4X4X4	.008	2.5	9	.003	0	y	9	15.944	20.18	2.34	2.34	1....	H1-1b
19	M23	HSS4X4X4	.008	2.5	6	.003	0	y	9	15.944	20.18	2.34	2.34	1....	H1-1b
20	M24	HSS4X4X4	.292	1.771	6	.073	5	y	6	15.944	20.18	2.34	2.34	1....	H1-1b
21	M25	HSS4X4X4	.015	2.24	7	.004	0	y	9	15.944	20.18	2.34	2.34	1....	H1-1b
22	M26	HSS4X4X4	.261	3.229	6	.065	5	y	7	15.944	20.18	2.34	2.34	1....	H1-1b
23	M27	HSS4X4X4	.015	2.865	6	.004	5	y	9	15.944	20.18	2.34	2.34	1....	H1-1b
24	M28	L3X3X4	.401	3.542	7	.111	0	z	8	17.842	31.042	1.123	2.324	1....	H2-1
25	M29	L3X3X4	.488	3.542	7	.108	0	y	8	17.842	31.042	1.123	2.323	1....	H2-1
26	M30	L3X3X4	.408	3.542	6	.112	0	z	9	17.842	31.042	1.123	2.311	1....	H2-1
27	M31	L3X3X4	.492	3.542	6	.109	0	y	9	17.842	31.042	1.123	2.325	1....	H2-1
28	M34	PIPE_2.0	.175	8.625	8	.008	.188		9	8.08	21.377	1.245	1.245	2....	H1-1b
29	M35	PIPE_2.0	.034	8.625	9	.001	.188		9	8.08	21.377	1.245	1.245	2....	H1-1b
30	M40	PIPE_2.0	.207	8.625	8	.010	.188		9	8.08	21.377	1.245	1.245	2....	H1-1b
31	M41	PIPE_2.0	.050	8.625	9	.002	.188		9	8.08	21.377	1.245	1.245	2....	H1-1b
32	M48	PIPE_2.0	.158	8.625	9	.007	.188		9	8.08	21.377	1.245	1.245	2....	H1-1b
33	M49	PIPE_2.0	.184	8.625	9	.009	.188		9	8.08	21.377	1.245	1.245	2....	H1-1b
34	M50	L3X3X5	.015	1.414	8	.004	0	y	9	6.06	10.659	.372	.723	1....	H2-1
35	M51	L3X3X5	.015	1.414	8	.004	0	z	9	6.06	10.659	.372	.723	1....	H2-1
36	M52	L3X3X5	.015	1.414	8	.004	2.828	z	8	6.06	10.659	.372	.723	1....	H2-1
37	M53	L3X3X5	.015	1.414	8	.004	0	z	8	6.06	10.659	.372	.723	1....	H2-1

ATTACHMENT 5

Parcel #: G09104000

Documents & Links | Assessment | Properties on Sewer

+ BuildingPhoto (11)

Vision Online Property Records

Tie_Card

G09084000
G09093000
G09083000
G09085000
G09074000
G09082000
G09079000
G09075000
G09080000
G09081000
G09086000
G09076000
G09078000
G09077000
BOWLING LANE
H09041000
H09042000
G09104000
H09021000
H09022000
H09023000
POST ROAD EAST
G09126000
G09127000
G09128000
G09119000
G09120000
H09020000
H09019000

1365 POST RD E

Location	1365 POST RD E	**Mblu**	G09/ / 104/000 /
Acct#	8365	**Owner**	AP 1365 POST RD E WESTPORT LP
Assessment	$15,217,500	**Appraisal**	$21,739,300
PID	4288	**Building Count**	3

Current Value

Appraisal			
Valuation Year	**Improvements**	**Land**	**Total**
2020	$16,165,700	$5,573,600	$21,739,300
Assessment			
Valuation Year	**Improvements**	**Land**	**Total**
2020	$11,316,000	$3,901,500	$15,217,500

Owner of Record

Owner	AP 1365 POST RD E WESTPORT LP	**Sale Price**	$28,000,000
Co-Owner	C/O ASANA PARTNERS LP	**Certificate**	
Address	1616 CAMDEN RD SUITE 210 CHARLOTTE, NC 28203	**Book & Page**	3836/0152
		Sale Date	01/16/2018
		Instrument	07

Ownership History

Ownership History					
Owner	**Sale Price**	**Certificate**	**Book & Page**	**Instrument**	**Sale Date**
AP 1365 POST RD E WESTPORT LP	$28,000,000		3836/0152	07	01/16/2018
CAPFOR WESTPORT LLC	$18,250,000		3361/0298	00	10/22/2012
157 EASTON ROAD CORP	$0	1	1220/0149	29	03/29/1993

Building Information

Building 1 : Section 1

Year Built:	1944
Living Area:	17,117
Replacement Cost:	$7,999,839

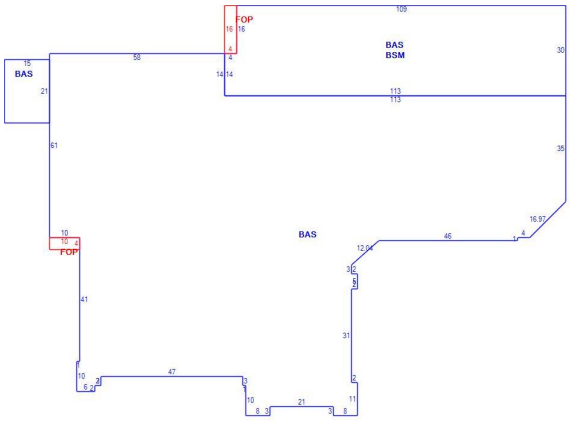
Building Percent Good: 91
Replacement Cost Less Depreciation: $7,279,900

Building Attributes	
Field	**Description**
Style	National Retail
Model	Commercial
Grade	Excellent ++
Stories:	1
Occupancy	2.00
Exterior Wall 1	Stucco/Masonry
Exterior Wall 2	
Roof Structure	Flat
Roof Cover	T&G/Rubber
Interior Wall 1	Drywall
Interior Wall 2	
Interior Floor 1	Hardwood
Interior Floor 2	Carpet
Heating Fuel	Gas
Heating Type	Forced Air
AC Type	Central
Struct Class	
Bldg Use	Retail
Income Adj	
1st Floor Use:	320
Heat/AC	Heat/AC Pkgs
Frame Type	Steel
Baths/Plumbing	Average
Ceiling/Walls	Sus-Ceil & WL
Rooms/Prtns	Average
Wall Height	16.00
% Comn Wall	

Building Photo

(http://images.vgsi.com/photos2/WestportCTPhotos//\00\03\52\58.jpg)

Building Layout



(ParcelSketch.ashx?pid=4288&bid=4288)

Building Sub-Areas (sq ft)			Legend
Code	**Description**	**Gross Area**	**Living Area**
BAS	First Floor	17,117	17,117
BSM	Basement Area	3,326	0
FOP	Porch, Open	104	0
		20,547	17,117

Building 2 : Section 1

Year Built: 1900
Living Area: 28,639
Replacement Cost: $7,106,312
Building Percent Good: 91
Replacement Cost Less Depreciation: $6,466,700

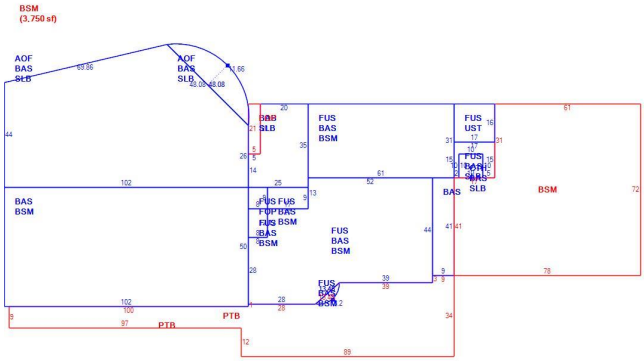
Building Attributes : Bldg 2 of 3	
Field	**Description**
Style	Neigh Shop Ctr

Model	Commercial
Grade	Good +20
Stories:	2
Occupancy	4.00
Exterior Wall 1	Stucco/Masonry
Exterior Wall 2	
Roof Structure	Flat
Roof Cover	T&G/Rubber
Interior Wall 1	Drywall
Interior Wall 2	
Interior Floor 1	Hardwood
Interior Floor 2	
Heating Fuel	Gas
Heating Type	Forced Air
AC Type	Central
Struct Class	
Bldg Use	Office/Ret
Income Adj	
1st Floor Use:	320
Heat/AC	Heat/AC Split
Frame Type	Steel
Baths/Plumbing	Average
Ceiling/Walls	Ceil & Walls
Rooms/Prtns	Average
Wall Height	10.00
% Comn Wall	

Building Photo

(http://images.vgsi.com/photos2/WestportCTPhotos//\00\02\69\55.jpg)

Building Layout



(ParcelSketch.ashx?pid=4288&bid=20327)

Building Sub-Areas (sq ft)			Legend
Code	**Description**	**Gross Area**	**Living Area**
BAS	First Floor	17,317	17,317
FUS	Upper Story, Finished	5,933	5,933
AOF	Office Area	5,389	5,389
BSM	Basement Area	19,373	0
CTH	Cathedral Ceiling	100	0
FOP	Porch, Open	177	0
PTB	Patio - Brick	3,302	0
SLB	Slab	6,414	0
UST	Utility, Storage	272	0
		58,277	28,639

Building 3 : Section 1

Year Built: 1985
Living Area: 0
Replacement Cost: $151,025
Building Percent Good: 87

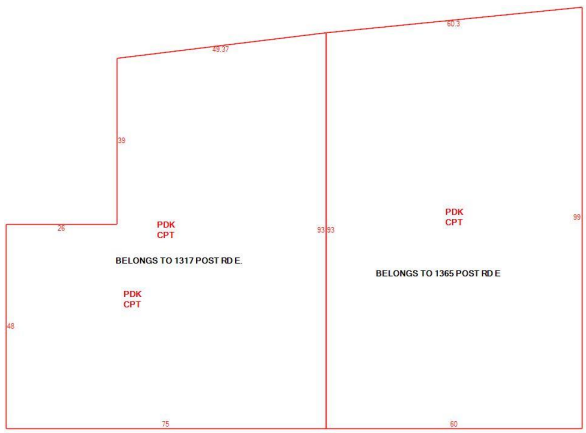
Replacement Cost
Less Depreciation: $131,400

Building Attributes : Bldg 3 of 3	
Field	**Description**
Style	Prkng Garage
Model	Commercial
Grade	Average +10
Stories:	1
Occupancy	1.00
Exterior Wall 1	Minimum
Exterior Wall 2	
Roof Structure	Flat
Roof Cover	Concrete Tile
Interior Wall 1	Minimum
Interior Wall 2	
Interior Floor 1	Concr-Finished
Interior Floor 2	
Heating Fuel	None
Heating Type	None
AC Type	None
Struct Class	
Bldg Use	Park Gar
Income Adj	
1st Floor Use:	332
Heat/AC	None
Frame Type	Steel
Baths/Plumbing	Average
Ceiling/Walls	None
Rooms/Prtns	Average
Wall Height	9.00
% Comn Wall	

Building Photo

(http://images.vgsi.com/photos2/WestportCTPhotos//\00\01\10\19.jpg)

Building Layout



(ParcelSketch.ashx?pid=4288&bid=20328)

Building Sub-Areas (sq ft)			Legend
Code	**Description**	**Gross Area**	**Living Area**
CPT	Covered Parking	5,760	0
PDK	Parking Deck	5,760	0
		11,520	0

Extra Features

Extra Features				Legend
Code	**Description**	**Size**	**Value**	**Bldg #**
ELEV	Elevator	2.00 UNITS	$91,000	2
SPR	Sprinklers	45962.00 S.F.	$104,600	2
ELEV	Elevator	2.00 UNITS	$91,000	2
ELV2	Freight Elevator	3.00 UNITS	$163,800	2
SPR	Sprinklers	5829.00 S.F.	$14,300	2

Land

Land

Land Use

Use Code	320
Description	Retail
Zone	GBD
Neighborhood	I
Alt Land Appr	No
Category	

Land Line Valuation

Size (Acres)	3.47
Frontage	
Depth	
Assessed Value	$3,901,500
Appraised Value	$5,573,600

Outbuildings

Outbuildings						Legend
Code	**Description**	**Sub Code**	**Sub Description**	**Size**	**Value**	**Bldg #**
LT1	1Pole - 1 Lt			3.00 UNITS	$4,500	1
LT4	1Pole - 4 Lts			1.00 UNITS	$3,600	3
LT1	1Pole - 1 Lt			7.00 UNITS	$10,400	1
LT2	1Pole - 2 Lts			7.00 UNITS	$15,400	1
LT4	1Pole - 4 Lts			1.00 UNITS	$3,600	1

Valuation History

Appraisal			
Valuation Year	**Improvements**	**Land**	**Total**
2020	$16,165,700	$5,573,600	$21,739,300
2019	$11,618,100	$6,192,900	$17,811,000
2018	$11,618,100	$6,192,900	$17,811,000

Assessment			
Valuation Year	**Improvements**	**Land**	**Total**
2020	$11,316,000	$3,901,500	$15,217,500
2019	$8,132,800	$4,335,000	$12,467,800
2018	$8,132,800	$4,335,000	$12,467,800

ATTACHMENT 6

UNITED STATES POSTAL SERVICE®

WESTPORT 9

Certificate of Mailing — Firm

Name and Address of Sender	TOTAL NO. of Pieces Listed by Sender	TOTAL NO. of Pieces Received at Post Office™	Affix Stamp Here ***Postmark with Date of Receipt.***
Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103	3	3	neopost 02/02/2022 US POSTAGE $002.99 ZIP 06103 041L12203937
	Postmaster, per *(name of receiving employee)*		

USPS® Tracking Number / Firm-specific Identifier	Address (Name, Street, City, State, and ZIP Code™)	Postage	Fee	Special Handling	Parcel Airlift
1.	Jennifer Tooker, First Selectwoman Town of Westport 110 Myrtle Avenue Westport, CT 06880				
2.	Mary Young, Planning & Zoning Director Town of Westport 110 Myrtle Avenue Westport, CT 06880				
3.	AP 1365 Post Road E Westport LP c/o Asana Partners LP 1616 Camden Road, Suite 210 Charlotte, NC 28203				
4.					
5.					
6.					

OLD STATE HOUSE STATION 06103 FEB 02 2022 USPS

See Reverse for Instructions