



# 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](mailto:siting.council@ct.gov)

[www.ct.gov/csc](http://www.ct.gov/csc)

### VIA ELECTRONIC MAIL

December 16, 2019

Kristina Cottone  
Smartlink, LLC  
85 Rangeway Road, Building 3, Suite 102  
North Billerica, MA 01862

RE: **EM-AT&T-163-191104** – AT&T Mobility, LLC notice of intent to modify an existing telecommunications facility located at 193 Windham Center Road, Windham, Connecticut.

Dear Ms. Cottone:

The Connecticut Siting Council (Council) is in receipt of your correspondence of November 20, 2019 and December 10, 2019, submitted in response to the Council's November 7, 2019 and November 21, 2019 notifications of an incomplete request for exempt modification with regard to the above-referenced matter.

The submission renders the request for exempt modification complete and the Council will process the request in accordance with the Federal Communications Commission 60-day timeframe.

Thank you for your attention and cooperation.

Sincerely,

Melanie A. Bachman  
Executive Director

MAB/IN/emr



## Robidoux, Evan

---

**From:** Kristina Cottone <kristina.cottone@smartlinkllc.com>  
**Sent:** Tuesday, December 10, 2019 1:09 PM  
**To:** Robidoux, Evan  
**Cc:** CSC-DL Siting Council  
**Subject:** RE: Council Incomplete Letter for EM-AT&T-163-191104 (193 Windham Center Road, Windham)  
**Attachments:** 10035442\_AE201\_191209\_CTL01064\_REV4.pdf; 10035442\_DE125\_191209\_CTL01064 (1).pdf

Hello,

Please see attached, hard copies are in the mail as well.

Thank you,



**Kristina Cottone | Real Estate Specialist**

**Smartlink**

85 Rangeway Road – Building 3 Suite 102

North Billerica MA, 01862

(m) 978.551.8627

[Kristina.cottone@Smartlinkllc.com](mailto:Kristina.cottone@Smartlinkllc.com)

contents (including any attachments) by persons other than the intended recipient(s) is strictly prohibited. If you have received this message in error, please notify us immediately by reply email that we may correct our internal records. Please then delete the original message (including any attachments) in its entirety. Thank you.

**From:** Robidoux, Evan <Evan.Robidoux@ct.gov>

**Sent:** Monday, November 25, 2019 3:40 PM

**To:** Kristina Cottone <kristina.cottone@smartlinkllc.com>

**Cc:** CSC-DL Siting Council <Siting.Council@ct.gov>

**Subject:** Council Incomplete Letter for EM-AT&T-163-191104 (193 Windham Center Road, Windham)

**Warning:** This message was sent from outside the company and could contain attachments. Please do not open unless you recognize the source of this email and know the content is safe.

Please see the attached correspondence.

Evan Robidoux

Clerk Typist

Connecticut Siting Council

10 Franklin Square

New Britain, CT 06051

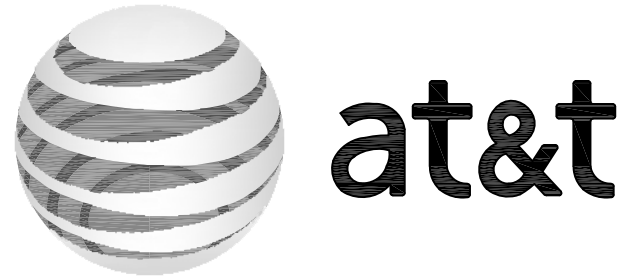
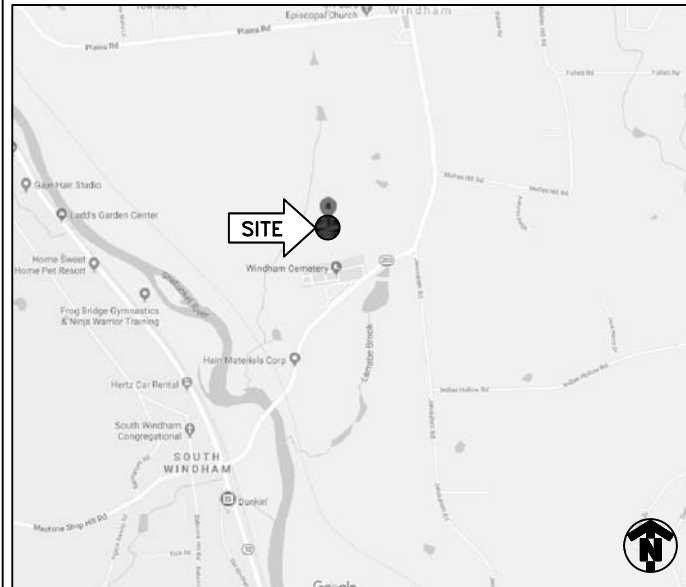
SHEET INDEX	
NO.	DESCRIPTION
T1	TITLE SHEET
C1	GENERAL NOTES
C2	OVERALL SITE PLAN
C2A	ENLARGED SITE PLAN
C3	ELEVATION VIEW
C4	ANTENNA ORIENTATION PLAN
C5	EQUIPMENT DETAILS
C6	PLUMBING DIAGRAM
C7	GROUNDING DETAILS

**DRIVING DIRECTIONS**

FROM 550 COCHITUATE RD.:

GET ON I-90 WEST/MASSACHUSETTS TURNPIKE. HEAD NORTHEAST TOWARD LEGGATT MCCALL CONN. TURN LEFT ONTO LEGGATT MCCALL CONN. CONTINUE ONTO BURR STREET. TURN LEFT ONTO COCHITUATE ROAD. USE THE RIGHT LANE TO TAKE THE RAMP TO I-90 EAST/MASSPIKE WEST/SPRINGFIELD/BOSTON. KEEP LEFT AT THE FORK, FOLLOW SIGNS FOR I-90 WEST/MASSACHUSETTS TURNPIKE/WORCESTER/SPRINGFIELD AND MERGE ONTO I-90 WEST/MASSACHUSETTS TURNPIKE. FOLLOW I-90 WEST/MASSACHUSETTS TURNPIKE AND I-395 SOUTH TO CT-14 WEST IN PLAINFIELD. TAKE EXIT 32 FROM I-395 SOUTH. MERGE ONTO I-90 WEST/MASSACHUSETTS TURNPIKE. TAKE EXIT 10 TOWARD MA-12 NORTH/AUBURN/WORCESTER. KEEP RIGHT AT THE FORK, FOLLOW SIGNS FOR I-395 SOUTH/US-20 EAST/NORWICH CT AND MERGE ONTO I-395 SOUTH. TAKE EXIT 32 FOR CT-14 TOWARD STERLING MOOSUP. FOLLOW CT-14 WEST TO YOUR DESTINATION IN WINDHAM. TURN RIGHT ONTO CT-14 WEST. TURN RIGHT ONTO CT-12 NORTH/CT-14 WEST. SLIGHT LEFT ONTO CT-14 WEST. TURN RIGHT TO STAY ON CT-14 WEST. TURN LEFT ONTO CT-203 SOUTH. TURN RIGHT. CONTINUE STRAIGHT. TURN RIGHT.

**LOCATION MAP**



PROJECT  
**LTE 2C/3C/4C/5C/RETROFIT**

SITE NAME  
**WINDHAM WINDHAM CTR**

CELL SITE ID  
**CTL01064**  
FA SITE NUMBER  
**10035442**

PACE ID  
**MRCTB040530/MRCTB040444/MRCTB040469  
MRCTB040708/MRCTB040763**

SITE ADDRESS  
**193 WINDHAM CENTER ROAD  
WINDHAM, CT 06280**

STRUCTURE TYPE  
**MONOPOLE**

**PROJECT TEAM**

**PROJECT MANAGER**

1033 Watervliet Shaker Rd  
Albany, NY 12205  
Office # (518) 690-0790  
Fax # (518) 690-0793

**ENGINEER**

- SCOPE OF WORK (PER LTE RFDS, DATED 07/30/2019 V2.00):**
- HANDICAP ACCESS REQUIREMENTS ARE NOT REQUIRED.
  - FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION.
  - FACILITY HAS NO PLUMBING OR REFRIGERANTS.
  - THIS FACILITY SHALL MEET OR EXCEED ALL FAA AND FCC REGULATORY REQUIREMENTS.
  - ALL NEW MATERIAL SHALL BE FURNISHED AND INSTALLED BY CONTRACTOR UNLESS NOTED OTHERWISE. EQUIPMENT, ANTENNAS/RRU AND CABLES FURNISHED BY OWNER AND INSTALLED BY CONTRACTOR.
- TOWER**
- REMOVE (6) PANEL ANTENNAS,(3) POWERWAVE 7770,(3) AM-X-CD-17-65-00T-RET
  - INSTALL (6) PANEL ANTENNAS,(6) CCI DMP65R-BU8DA
  - REMOVE (3) RRUS-11 B12
  - INSTALL (3) B14 4478
  - INSTALL (3) 4449 B5/B12
  - INSTALL (3) 8843 B2/B66A
  - INSTALL (2) DC6 SQUID W/ (1) FIBER AND (4) DC CABLES IN (3) 3" CONDUITS
  - REPLACE EXISTING ANTENNA PLATFORM MOUNT
- GROUND**
- SWAP BB W/ 6630
  - ADD XMU
  - ADD 6630
  - ADD IDLe CABLE

**PROJECT SUMMARY**

**SITE NAME:** WINDHAM WINDHAM CTR

**CELL SITE ID:** CTL01064

**FA SITE #:** 10035442

**SITE ADDRESS:** 193 WINDHAM CENTER ROAD  
WINDHAM, CT 06280

**COUNTY:** WINDHAM

**SITE COORDINATES:**  
**LATITUDE:** 41.6900481° N (NAD 83)  
**LONGITUDE:** 72.1625269° W (NAD 83)

**RAD CENTER:** ±147' (AGL)

**LANDLORD:** SBA COMMUNICATIONS

**APPLICANT:** AT&T MOBILITY  
550 COCHITUATE RD.  
FRAMINGHAM, MA 01701

**CLIENT REPRESENTATIVE:** SMARTLINK, LLC  
85 RANGEWAY RD., BUILDING 3, SUITE 102  
NORTH BILLERICA, MA 01862

**CONTACT:** SHARON KEEFE  
(978) 930-3918

**ENGINEER:** INFINIGY  
1033 WATERVLIET SHAKER ROAD  
ALBANY, NY 12205

**CONTACT:** ALEX WELLER  
(518) 690-0790

**BUILDING CODE:** 2018 CT STATE BUILDING CODE  
2015 INTERNATIONAL BUILDING CODE  
ANSI/TIA-222 G  
2015 INTERNATIONAL PLUMBING CODE  
2015 INTERNATIONAL MECHANICAL CODE  
2015 INTERNATIONAL ENERGY CONSERVATION CODE  
2017 NFPA 70

**ELECTRICAL CODE:** NATIONAL ELECTRICAL CODE (LATEST EDITION)

**Know what's below. Call before you dig.**

TO OBTAIN LOCATION OF PARTICIPANTS UNDERGROUND FACILITIES BEFORE YOU DIG IN CONNECTICUT, CONTACT CALL BEFORE YOU DIG TOLL FREE: 1-800-922-4455 OR www.cbyd.com

CONNECTICUT STATUTE REQUIRES MIN OF 2 WORKING DAYS NOTICE BEFORE YOU EXCAVATE

INFINIGY ENGINEERING, PLLC  
1033 Watervliet Shaker Rd  
Albany, NY 12205  
Office # (518) 690-0790  
Fax # (518) 690-0793



No.	Submittal / Revision	App'd	Date
3	REVISED FOR PERMIT	ASW	11/20/19
2	REVISED FOR PERMIT	BMM	10/16/19
1	ISSUED FOR PERMIT	ASW	10/04/19
0	ISSUED FOR REVIEW	BMM	09/13/19

Drawn: BMM Date: 09/13/19  
Designed: ASW Date: 09/13/19  
Checked: AD Date: 09/13/19

Project Number: 499-006

Project Title:  
**WINDHAM  
WINDHAM CTR**  
CTL01064  
FA# 10035442  
193 WINDHAM CENTER ROAD  
WINDHAM, CT 06280

Prepared For:

Drawing Scale:  
AS NOTED

Date:  
11/20/19

**CD**

Drawing Title:  
**TITLE PAGE**

Drawing Number:  
**T1**



# GENERAL NOTES

## PART 1 – GENERAL REQUIREMENTS

- 1.1 THE WORK SHALL COMPLY WITH APPLICABLE NATIONAL CODES AND STANDARDS, LATEST EDITION, AND PORTIONS THEREOF, INCLUDED BUT NOT LIMITED TO THE FOLLOWING:
  - A. GR-63-CORE NEBS REQUIREMENTS: PHYSICAL PROTECTION
  - B. GR-78-CORE GENERIC REQUIREMENTS FOR THE PHYSICAL DESIGN AND MANUFACTURE OF TELECOMMUNICATIONS EQUIPMENT.
  - C. NATIONAL FIRE PROTECTION ASSOCIATION CODES AND STANDARDS (NFPA) INCLUDING NFPA 70 (NATIONAL ELECTRICAL CODE – "NEC").
  - D. AND NFPA 101 (LIFE SAFETY CODE).
  - E. AMERICAN SOCIETY FOR TESTING OF MATERIALS (ASTM).
  - F. INSTITUTE OF ELECTRONIC AND ELECTRICAL ENGINEERS (IEEE).
- 1.2 DEFINITIONS:
  - A. WORK: THE SUM OF TASKS AND RESPONSIBILITIES IDENTIFIED IN THE CONTRACT DOCUMENTS.
  - B. COMPANY: AT&T CORPORATION
  - C. ENGINEER: SYNONYMOUS WITH ARCHITECT & ENGINEER AND "A&E". THE DESIGN PROFESSIONAL HAVING PROFESSIONAL RESPONSIBILITY FOR DESIGN OF THE PROJECT.
  - D. CONTRACTOR: CONSTRUCTION CONTRACTOR; CONSTRUCTION VENDOR; INDIVIDUAL OR ENTITY WHO AFTER EXECUTION OF A CONTRACT IS BOUND TO ACCOMPLISH THE WORK.
  - E. THIRD PARTY VENDOR OR AGENCY: A VENDOR OR AGENCY ENGAGED SEPARATELY BY THE COMPANY, A&E, OR CONTRACTOR TO PROVIDE MATERIALS OR TO ACCOMPLISH SPECIFIC TASKS RELATED TO BUT NOT INCLUDED IN THE WORK.
- 1.3 POINT OF CONTACT: COMMUNICATION BETWEEN THE COMPANY AND THE CONTRACTOR SHALL FLOW THROUGH THE SINGLE COMPANY SITE DEVELOPMENT SPECIALIST OR OTHER PROJECT COORDINATOR APPOINTED TO MANAGE THE PROJECT FOR THE COMPANY.
- 1.4 ON-SITE SUPERVISION: THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL EMPLOY A COMPETENT SUPERINTENDENT WHO SHALL BE IN ATTENDANCE AT THE SITE AT ALL TIMES DURING PERFORMANCE OF THE WORK.
- 1.5 DRAWINGS, SPECIFICATIONS AND DETAILS REQUIRED AT JOBSITE: THE CONSTRUCTION CONTRACTOR SHALL MAINTAIN A FULL SET OF THE CONSTRUCTION DRAWINGS, STANDARD CONSTRUCTION DETAILS FOR WIRELESS SITES, AND THE STANDARD CONSTRUCTION SPECIFICATIONS FOR WIRELESS SITES AT THE JOBSITE FROM MOBILIZATION THROUGH CONSTRUCTION COMPLETION.
  - A. THE JOBSITE DRAWINGS, SPECIFICATIONS AND DETAILS SHALL BE CLEARLY MARKED DAILY IN PENCIL WITH ANY CHANGES IN CONSTRUCTION OVER WHAT IS DEPICTED IN THE DOCUMENTS. AT CONSTRUCTION COMPLETION, THIS JOBSITE MARKUP SET SHALL BE DELIVERED TO THE COMPANY OR COMPANY'S DESIGNATED REPRESENTATIVE TO BE FORWARDED TO THE COMPANY'S A&E VENDOR FOR PRODUCTION OF "AS-BUILT" DRAWINGS.
- 1.6 USE OF JOB SITE: THE CONTRACTOR SHALL CONFINE ALL CONSTRUCTION AND RELATED OPERATIONS INCLUDING STAGING AND STORAGE OF MATERIALS AND EQUIPMENT, PARKING, TEMPORARY FACILITIES, AND WASTE STORAGE TO THE LEASE PARCEL UNLESS OTHERWISE PERMITTED BY THE CONTRACT DOCUMENTS.
- 1.7 NOTICE TO PROCEED:
  - A. NO WORK SHALL COMMENCE PRIOR TO COMPANY'S WRITTEN NOTICE TO PROCEED.
  - B. UPON RECEIVING NOTICE TO PROCEED, CONTRACTOR SHALL FULLY PERFORM ALL WORK NECESSARY TO PROVIDE AT&T WITH AN OPERATIONAL WIRELESS FACILITY.

## PART 2 – EXECUTION

- 2.1 TEMPORARY UTILITIES AND FACILITIES: THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY UTILITIES AND FACILITIES NECESSARY EXCEPT AS OTHERWISE INDICATED IN THE CONSTRUCTION DOCUMENTS. TEMPORARY UTILITIES AND FACILITIES INCLUDE, POTABLE WATER, HEAT, HVAC, ELECTRICITY, SANITARY FACILITIES, WASTE DISPOSAL FACILITIES, AND TELEPHONE/COMMUNICATION SERVICES. PROVIDE TEMPORARY UTILITIES AND FACILITIES IN ACCORDANCE WITH OSHA AND THE AUTHORITY HAVING JURISDICTION. CONTRACTOR MAY UTILIZE THE COMPANY ELECTRICAL SERVICE IN THE COMPLETION OF THE WORK WHEN IT BECOMES AVAILABLE. USE OF THE LESSORS OR SITE OWNER'S UTILITIES OR FACILITIES IS EXPRESSLY FORBIDDEN EXCEPT AS OTHERWISE ALLOWED IN THE CONTRACT DOCUMENTS.
- 2.2 ACCESS TO WORK: THE CONTRACTOR SHALL PROVIDE ACCESS TO THE JOB SITE FOR AUTHORIZED COMPANY PERSONNEL AND AUTHORIZED REPRESENTATIVES OF THE ARCHITECT/ENGINEER DURING ALL PHASES OF THE WORK.
- 2.3 TESTING: REQUIREMENTS FOR TESTING BY THIS CONTRACTOR SHALL BE AS INDICATED HERewith, ON THE CONSTRUCTION DRAWINGS, AND IN THE INDIVIDUAL SECTIONS OF THESE SPECIFICATIONS. SHOULD COMPANY CHOOSE TO ENGAGE ANY THIRD-PARTY TO CONDUCT ADDITIONAL TESTING, THE CONTRACTOR SHALL COOPERATE WITH AND PROVIDE A WORK AREA FOR COMPANY'S TEST AGENCY.

- 2.4 COMPANY FURNISHED MATERIAL AND EQUIPMENT: ALL HANDLING, STORAGE AND INSTALLATION OF COMPANY FURNISHED MATERIAL AND EQUIPMENT SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS AND WITH THE MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS.
  - A. CONTRACTOR SHALL PROCURE ALL OTHER REQUIRED WORK RELATED MATERIALS NOT PROVIDED BY AT&T TO SUCCESSFULLY CONSTRUCT A WIRELESS FACILITY.
- 2.5 DIMENSIONS: VERIFY DIMENSIONS INDICATED ON DRAWINGS WITH FIELD DIMENSIONS BEFORE FABRICATION OR ORDERING OF MATERIALS. DO NOT SCALE DRAWINGS.
- 2.6 EXISTING CONDITIONS: NOTIFY THE COMPANY REPRESENTATIVE OF EXISTING CONDITIONS DIFFERING FROM THOSE INDICATED ON THE DRAWINGS. DO NOT REMOVE OR ALTER STRUCTURAL COMPONENTS WITHOUT PRIOR WRITTEN APPROVAL FROM THE ARCHITECT AND ENGINEER.

## PART 3 – RECEIPT OF MATERIAL & EQUIPMENT

- 3.1 RECEIPT OF MATERIAL AND EQUIPMENT: CONTRACTOR IS RESPONSIBLE FOR AT&T PROVIDED MATERIAL AND EQUIPMENT AND UPON RECEIPT SHALL:
  - A. ACCEPT DELIVERIES AS SHIPPED AND TAKE RECEIPT.
  - B. VERIFY COMPLETENESS AND CONDITION OF ALL DELIVERIES.
  - C. TAKE RESPONSIBILITY FOR EQUIPMENT AND PROVIDE INSURANCE PROTECTION AS REQUIRED IN AGREEMENT.
  - D. RECORD ANY DEFECTS OR DAMAGES AND WITHIN TWENTY-FOUR HOURS AFTER RECEIPT, REPORT TO AT&T OR ITS DESIGNATED PROJECT REPRESENTATIVE OF SUCH.
  - E. PROVIDE SECURE AND NECESSARY WEATHER PROTECTED WAREHOUSING.
  - F. COORDINATE SAFE AND SECURE TRANSPORTATION OF MATERIAL AND EQUIPMENT, DELIVERING AND OFF-LOADING FROM CONTRACTOR'S WAREHOUSE TO SITE.

## PART 4 – GENERAL REQUIREMENTS FOR CONSTRUCTION

- 4.1 CONTRACTOR SHALL KEEP THE SITE FREE FROM ACCUMULATING WASTE MATERIAL, DEBRIS, AND TRASH. AT THE COMPLETION OF THE WORK, CONTRACTOR SHALL REMOVE FROM THE SITE ALL REMAINING RUBBISH, IMPLEMENTS, TEMPORARY FACILITIES, AND SURPLUS MATERIALS.
- 4.2 EQUIPMENT ROOMS SHALL AT ALL TIMES BE MAINTAINED "BROOM CLEAN" AND CLEAR OF DEBRIS.
- 4.3 CONTRACTOR SHALL TAKE ALL REASONABLE PRECAUTIONS TO DISCOVER AND LOCATE ANY HAZARDOUS CONDITION.
  - A. IN THE EVENT CONTRACTOR ENCOUNTERS ANY HAZARDOUS CONDITION WHICH HAS NOT BEEN ABATED OR OTHERWISE MITIGATED, CONTRACTOR AND ALL OTHER PERSONS SHALL IMMEDIATELY STOP WORK IN THE AFFECTED AREA AND NOTIFY COMPANY IN WRITING. THE WORK IN THE AFFECTED AREA SHALL NOT BE RESUMED EXCEPT BY WRITTEN NOTIFICATION BY COMPANY.
  - B. CONTRACTOR AGREES TO USE CARE WHILE ON THE SITE AND SHALL NOT TAKE ANY ACTION THAT WILL OR MAY RESULT IN OR CAUSE THE HAZARDOUS CONDITION TO BE FURTHER RELEASED IN THE ENVIRONMENT, OR TO FURTHER EXPOSE INDIVIDUALS TO THE HAZARD.
- 4.4 CONTRACTOR'S ACTIVITIES SHALL BE RESTRICTED TO THE PROJECT LIMITS. SHOULD AREAS OUTSIDE THE PROJECT LIMITS BE AFFECTED BY CONTRACTOR'S ACTIVITIES, CONTRACTOR SHALL IMMEDIATELY RETURN THEM TO ORIGINAL CONDITION.
- 4.5 CONDUCT TESTING AS REQUIRED HEREIN.

## PART 5 – TESTS AND INSPECTIONS

- 5.1 TESTS AND INSPECTIONS:
  - A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION TESTS, INSPECTIONS AND PROJECT DOCUMENTATION.
  - B. CONTRACTOR SHALL COORDINATE TEST AND INSPECTION SCHEDULES WITH COMPANY'S REPRESENTATIVE WHO MUST BE ON SITE TO WITNESS SUCH TESTS AND INSPECTIONS.
  - C. WHEN THE USE OF A THIRD PARTY INDEPENDENT TESTING AGENCY IS REQUIRED, THE AGENCY THAT IS SELECTED MUST PERFORM SUCH WORK ON A REGULAR BASIS IN THE STATE WHERE THE PROJECT IS LOCATED AND HAVE A THOROUGH UNDERSTANDING OF LOCAL AVAILABLE MATERIALS, INCLUDING THE SOIL, ROCK, AND GROUNDWATER CONDITIONS.
  - D. THE THIRD PARTY TESTING AGENCY IS TO BE FAMILIAR WITH THE APPLICABLE REQUIREMENTS FOR THE TESTS TO BE DONE, EQUIPMENT TO BE USED, AND ASSOCIATED HEALTH AND SAFETY ISSUES.
  - E. SITE RESISTANCE TO EARTH TESTING PER EXHIBIT: CELL SITE GROUNDING SYSTEM DESIGN.

- F. ANTENNA AND COAX SWEEP TESTS PER EXHIBIT: ANTENNA TRANSMISSION LINE ACCEPTANCE STANDARDS.
- G. ALL OTHER TESTS REQUIRED BY COMPANY OR JURISDICTION.

## PART 6 – TRENCHING AND BACKFILLING

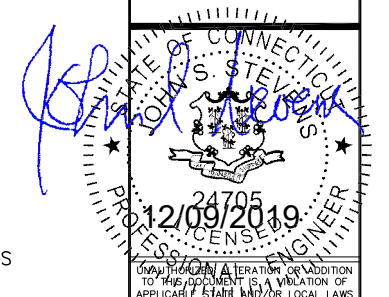
- 6.1 TRENCHING AND BACKFILLING: THE CONTRACTOR SHALL PERFORM ALL EXCAVATION OF EVERY DESCRIPTION AND OF WHATEVER SUBSTANCES ENCOUNTERED, TO THE DEPTHS INDICATED ON THE CONSTRUCTION DRAWINGS OR AS OTHERWISE SPECIFIED.
  - A. PROTECTION OF EXISTING UTILITIES: THE CONTRACTOR SHALL CHECK WITH THE LOCAL UTILITIES AND THE RESPECTIVE UTILITY LOCATOR COMPANIES PRIOR TO STARTING EXCAVATION OPERATIONS IN EACH RESPECTIVE AREA TO ASCERTAIN THE LOCATIONS OF KNOWN UTILITY LINES. THE LOCATIONS, NUMBER AND TYPES OF EXISTING UTILITY LINES DETAILED ON THE CONSTRUCTION DRAWINGS ARE APPROXIMATE AND DO NOT REPRESENT EXACT INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ALL LINES DAMAGED DURING EXCAVATION AND ALL ASSOCIATED OPERATIONS. ALL UTILITY LINES UNCOVERED DURING THE EXCAVATION OPERATIONS, SHALL BE PROTECTED FROM DAMAGE DURING EXCAVATION AND ASSOCIATED OPERATIONS. ALL REPAIRS SHALL BE APPROVED BY THE UTILITY COMPANY.
  - B. HAND DIGGING: UNLESS APPROVED IN WRITING OTHERWISE, ALL DIGGING WITHIN AN EXISTING CELL SITE COMPOUND IS TO BE DONE BY HAND.
  - C. DURING EXCAVATION, MATERIAL SUITABLE FOR BACKFILLING SHALL BE STOCKPILED IN AN ORDERLY MANNER A SUFFICIENT DISTANCE FROM THE BANKS OF THE TRENCH TO AVOID OVERLOADING AND TO PREVENT SLIDES OR CAVE-INS. ALL EXCAVATED MATERIALS NOT REQUIRED OR SUITABLE FOR BACKFILL SHALL BE REMOVED AND DISPOSED OF AT THE CONTRACTOR'S EXPENSE.
  - D. GRADING SHALL BE DONE AS MAY BE NECESSARY TO PREVENT SURFACE WATER FROM FLOWING INTO TRENCHES OR OTHER EXCAVATIONS, AND ANY WATER ACCUMULATING THEREIN SHALL BE REMOVED BY PUMPING OR BY OTHER APPROVED METHOD.
  - E. SHEETING AND SHORING SHALL BE DONE AS NECESSARY FOR THE PROTECTION OF THE WORK AND FOR THE SAFETY OF PERSONNEL. UNLESS OTHERWISE INDICATED, EXCAVATION SHALL BE BY OPEN CUT, EXCEPT THAT SHORT SECTIONS OF A TRENCH MAY BE TUNNELED IF, THE CONDUIT CAN BE SAFELY AND PROPERLY INSTALLED AND BACKFILL CAN BE PROPERLY TAMPED IN SUCH TUNNEL SECTIONS. EARTH EXCAVATION SHALL COMPRISE ALL MATERIALS AND SHALL INCLUDE CLAY, SILT, SAND, MUCK, GRAVEL, HARDPAN, LOOSE SHALE, AND LOOSE STONE.
  - F. TRENCHES SHALL BE OF NECESSARY WIDTH FOR THE PROPER LAYING OF THE CONDUIT OR CABLE, AND THE BANKS SHALL BE AS NEARLY VERTICAL AS PRACTICABLE. THE BOTTOM OF THE TRENCHES SHALL BE ACCURATELY GRADED TO PROVIDE UNIFORM BEARING AND SUPPORT FOR EACH SECTION OF THE CONDUIT OR CABLE ON UNDISTURBED SOIL AT EVERY POINT ALONG ITS ENTIRE LENGTH. EXCEPT WHERE ROCK IS ENCOUNTERED, CARE SHALL BE TAKEN NOT TO EXCAVATE BELOW THE DEPTHS INDICATED. WHERE ROCK EXCAVATIONS ARE NECESSARY, THE ROCK SHALL BE EXCAVATED TO A MINIMUM OVER DEPTH OF 6 INCHES BELOW THE TRENCH DEPTHS INDICATED ON THE CONSTRUCTION DRAWINGS OR SPECIFIED. OVER DEPTHS IN THE ROCK EXCAVATION AND UNAUTHORIZED OVER DEPTHS SHALL BE THOROUGHLY BACK FILLED AND TAMPED TO THE APPROPRIATE GRADE. WHENEVER WET OR OTHERWISE UNSTABLE SOIL THAT IS INCAPABLE OF PROPERLY SUPPORTING THE CONDUIT OR CABLE IS ENCOUNTERED IN THE BOTTOM OF THE TRENCH, SUCH SOLID SHALL BE REMOVED TO A MINIMUM OVER DEPTH OF 6 INCHES AND THE TRENCH BACKFILLED TO THE PROPER GRADE WITH EARTH OF OTHER SUITABLE MATERIAL, AS HEREINAFTER SPECIFIED.
  - G. BACKFILLING OF TRENCHES. TRENCHES SHALL NOT BE BACKFILLED UNTIL ALL SPECIFIED TESTS HAVE BEEN PERFORMED AND ACCEPTED. WHERE COMPACTED BACKFILL IS NOT INDICATED THE TRENCHES SHALL BE CAREFULLY BACKFILLED WITH SELECT MATERIAL SUCH AS EXCAVATED SOILS THAT ARE FREE OF ROOTS, SOD, RUBBISH OR STONES, DEPOSITED IN 6 INCH LAYERS AND THOROUGHLY AND CAREFULLY RAMMED UNTIL THE CONDUIT OR CABLE HAS A COVER OF NOT LESS THAN 1 FOOT. THE REMAINDER OF THE BACKFILL MATERIAL SHALL BE GRANULAR IN NATURE AND SHALL NOT CONTAIN ROOTS, SOD, RUBBING, OR STONES OF 2-1/2 INCH MAXIMUM DIMENSION. BACKFILL SHALL BE CAREFULLY PLACED IN THE TRENCH AND IN 1 FOOT LAYERS AND EACH LAYER TAMPED. SETTLING THE BACKFILL WITH WATER WILL BE PERMITTED. THE SURFACE SHALL BE GRADED TO A REASONABLE UNIFORMITY AND THE MOUNDING OVER THE TRENCHES LEFT IN A UNIFORM AND NEAT CONDITION.

SYMBOL	DESCRIPTION
	CIRCUIT BREAKER
	NON-FUSIBLE DISCONNECT SWITCH
	FUSIBLE DISCONNECT SWITCH
	SURFACE MOUNTED PANEL BOARD
	TRANSFORMER
	KILOWATT HOUR METER
	JUNCTION BOX
	PULL BOX TO NEC/TELCO STANDARDS
-----	UNDERGROUND UTILITIES
	EXOTHERMIC WELD CONNECTION
	MECHANICAL CONNECTION
	GROUND ROD
	GROUND ROD WITH INSPECTION SLEEVE
	GROUND BAR
	120AC DUPLEX RECEPTACLE
	GROUND CONDUCTOR
	DC POWER AND FIBER OPTIC TRUNK CABLES
	DC POWER CABLES
	REPRESENTS DETAIL NUMBER
	REF. DRAWING NUMBER

## ABBREVIATIONS

CIGBE	COAX ISOLATED GROUND BAR EXTERNAL
MIGB	MASTER ISOLATED GROUND BAR
SST	SELF SUPPORTING TOWER
GPS	GLOBAL POSITIONING SYSTEM
TYP.	TYPICAL
DWG	DRAWING
BCW	BARE COPPER WIRE
BFG	BELOW FINISH GRADE
PVC	POLYVINYL CHLORIDE
CAB	CABINET
C	CONDUIT
SS	STAINLESS STEEL
G	GROUND
AWG	AMERICAN WIRE GAUGE
RGS	RIGID GALVANIZED STEEL
AHJ	AUTHORITY HAVING JURISDICTION
TTLNA	TOWER TOP LOW NOISE AMPLIFIER
UNO	UNLESS NOTED OTHERWISE
EMT	ELECTRICAL METALLIC TUBING
AGL	ABOVE GROUND LEVEL

**INFINIGY**  
 INFINIGY ENGINEERING, PLLC  
 1033 WaterVest Shaker Rd  
 Albany, NY 12205  
 Office # (518) 690-0790  
 Fax # (518) 690-0793



(Under Seal and Seal) & FERRIS FOR ADDITION TO THIS DOCUMENT IS A VIOLATION OF APPLICABLE STATE AND/OR LOCAL LAWS

3	REVISED FOR PERMIT	ASW	11/20/19
2	REVISED FOR PERMIT	BMM	10/16/19
1	ISSUED FOR PERMIT	ASW	10/04/19
0	ISSUED FOR REVIEW	BMM	09/13/19
No.	Submission / Revision	App'd	Date
Drawn:	BMM	Date:	09/13/19
Designed:	ASW	Date:	09/13/19
Checked:	ASW	Date:	09/13/19
Project Number:			
499-006			

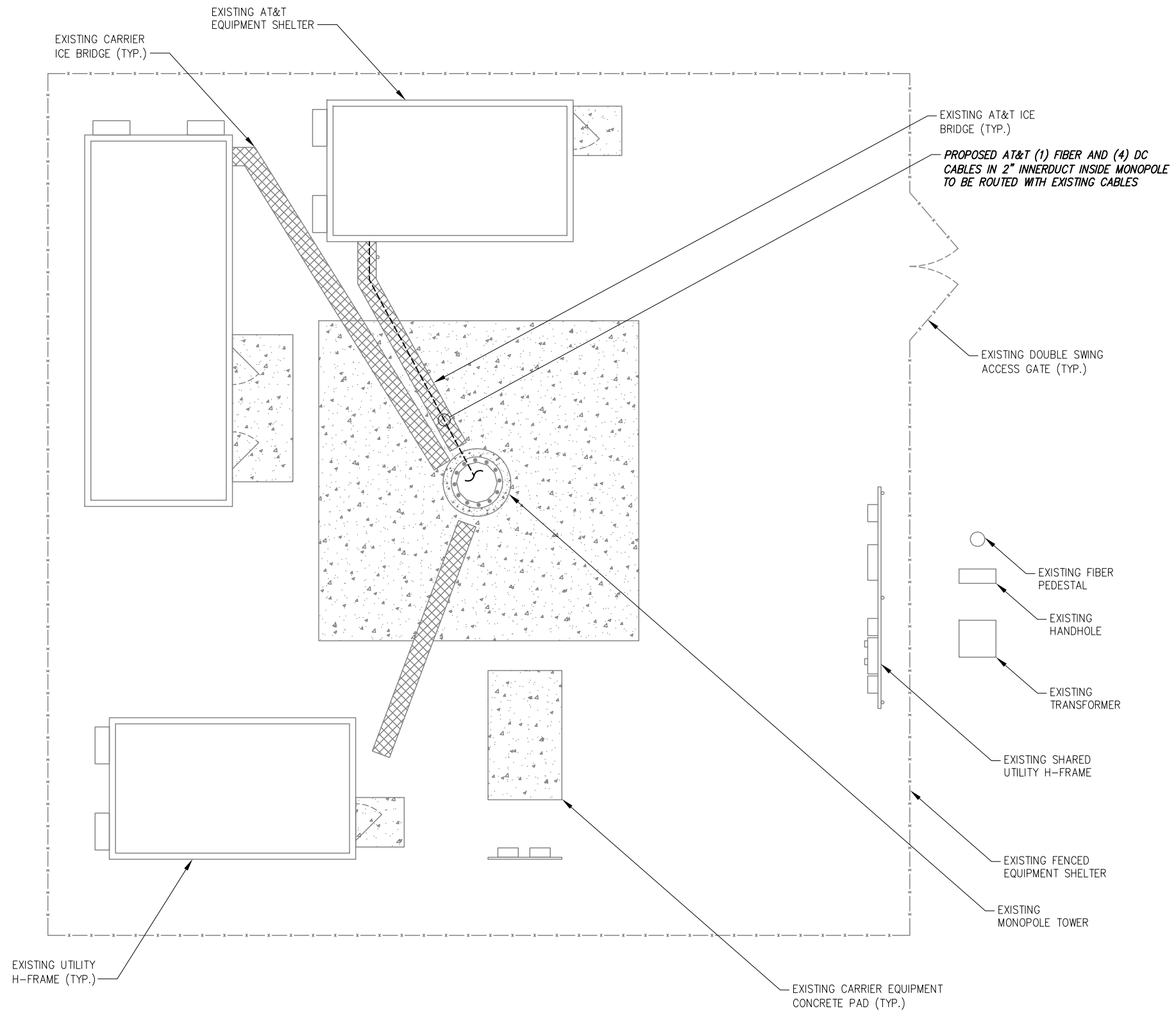
Project Title:  
**WINDHAM  
 WINDHAM CTR**  
**CTL01064**  
**FA# 10035442**  
 193 WINDHAM CENTER ROAD  
 WINDHAM, CT 06280

Prepared For:

Drawing Scale:  
**AS NOTED**  
 Date:  
 11/20/19

Drawing Title:  
**GENERAL  
 NOTES**

Drawing Number:  
**C1**



EXISTING UTILITY H-FRAME (TYP.)

EXISTING CARRIER EQUIPMENT CONCRETE PAD (TYP.)

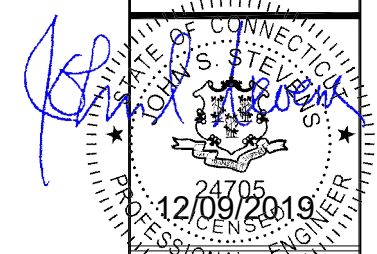
TRUE NORTH

1 SITE PLAN  
SCALE: AS NOTED

GRAPHIC SCALE:  
10' 5' 0 5' 10'  
SCALE (11x17): 1" = 10'-0"  
SCALE (22x34): 1" = 5'-0"

BASEMAPPING PREPARED FROM A SITE WALK PERFORMED BY INFINIGY ENGINEERING AND PROVIDED INFORMATION, AND DOES NOT REPRESENT AN ACTUAL FIELD SURVEY.

**INFINIGY**  
INFINIGY ENGINEERING, PLLC  
1033 Waterlily Shaker Rd  
Albany, NY 12205  
Office # (518) 690-0790  
Fax # (518) 690-0793

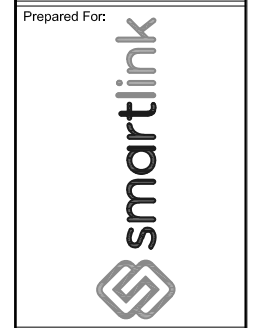


UNLAWFUL REPRODUCTION OR ADDITION TO THIS DOCUMENT IS A VIOLATION OF APPLICABLE STATE AND/OR LOCAL LAWS.

No.	Submittal / Revision	App'd	Date
3	REVISED FOR PERMIT	ASW	11/20/19
2	REVISED FOR PERMIT	BMM	10/16/19
1	ISSUED FOR PERMIT	ASW	10/04/19
0	ISSUED FOR REVIEW	BMM	09/13/19

Drawn: BMM Date: 09/13/19  
Designed: ASW Date: 09/13/19  
Checked: AD Date: 09/13/19

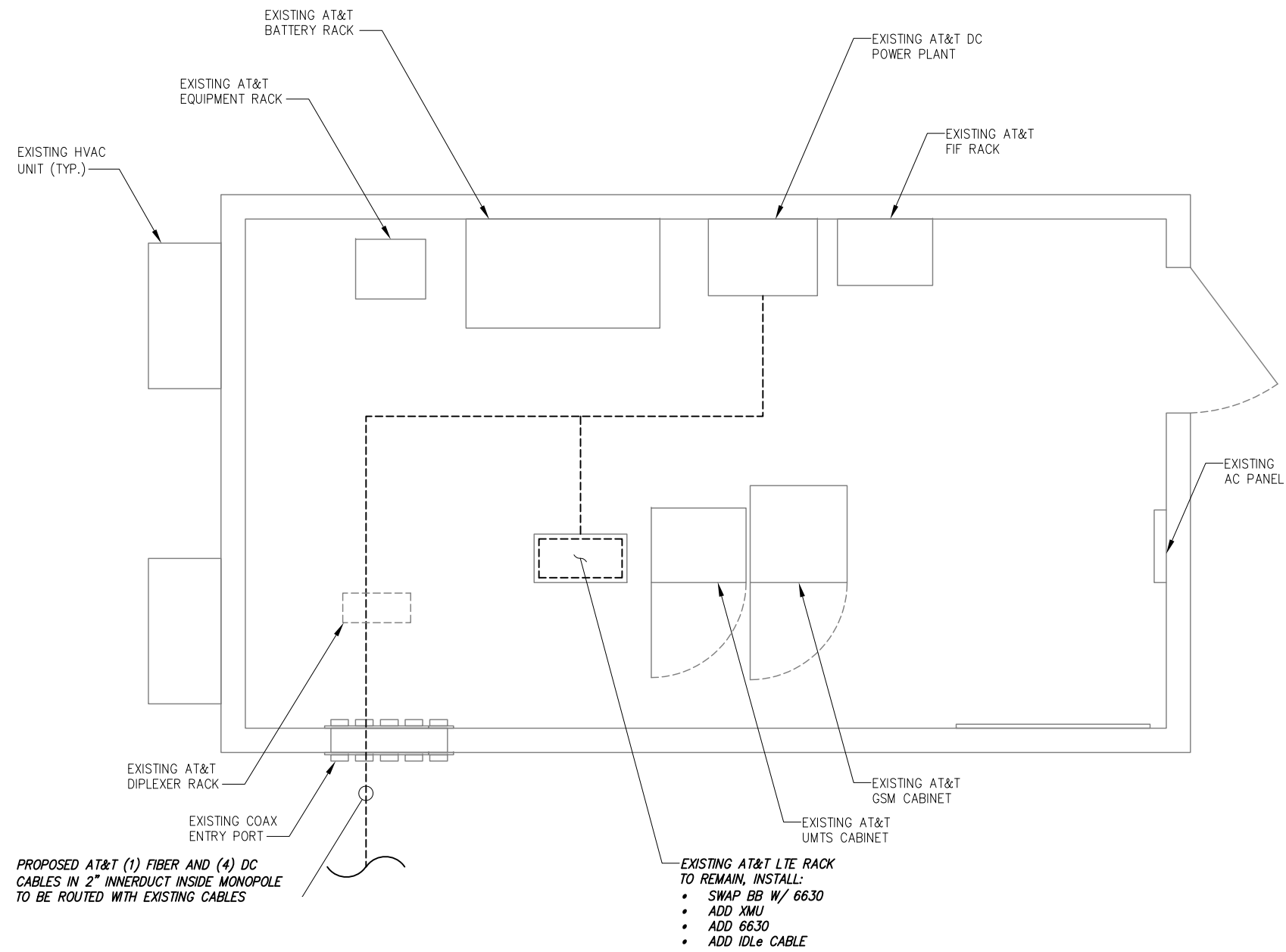
Project Number: 499-006  
Project Title: WINDHAM WINDHAM CTR  
CTL01064  
FA# 10035442  
193 WINDHAM CENTER ROAD  
WINDHAM, CT 06280



Drawing Scale: AS NOTED  
Date: 11/20/19  
**CD**

Drawing Title: **OVERALL SITE PLAN**

Drawing Number: **C2**



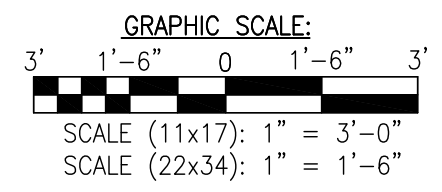
PROPOSED AT&T (1) FIBER AND (4) DC CABLES IN 2" INNERDUCT INSIDE MONOPOLE TO BE ROUTED WITH EXISTING CABLES

- EXISTING AT&T LTE RACK TO REMAIN, INSTALL:
- SWAP BB W/ 6630
  - ADD XMU
  - ADD 6630
  - ADD IDLe CABLE

TRUE NORTH

**2 ENLARGED EQUIPMENT PLAN**  
SCALE: AS NOTED

BASEMAPPING PREPARED FROM A SITE WALK PERFORMED BY INFINIGY ENGINEERING AND PROVIDED INFORMATION, AND DOES NOT REPRESENT AN ACTUAL FIELD SURVEY.



**INFINIGY**  
INFINIGY ENGINEERING, PLLC  
1033 Waterlily Shaker Rd  
Albany, NY 12205  
Office # (518) 690-0790  
Fax # (518) 690-0793



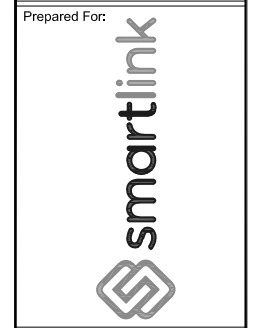
UNAUTHORIZED ALTERATION OR ADDITION TO THIS DOCUMENT IS A VIOLATION OF APPLICABLE STATE AND/OR LOCAL LAWS.

No.	Submittal / Revision	App'd	Date
3	REVISED FOR PERMIT	ASW	11/20/19
2	REVISED FOR PERMIT	BMM	10/16/19
1	ISSUED FOR PERMIT	ASW	10/04/19
0	ISSUED FOR REVIEW	BMM	09/13/19

Drawn: BMM Date: 09/13/19  
Designed: ASW Date: 09/13/19  
Checked: AD Date: 09/13/19

Project Number: 499-006

Project Title:  
WINDHAM  
WINDHAM CTR  
CTL01064  
FA# 10035442  
193 WINDHAM CENTER ROAD  
WINDHAM, CT 06280



Drawing Scale: AS NOTED  
Date: 11/20/19  
**CD**

Drawing Title:  
**ENLARGED SITE PLAN**

Drawing Number:  
**C2A**

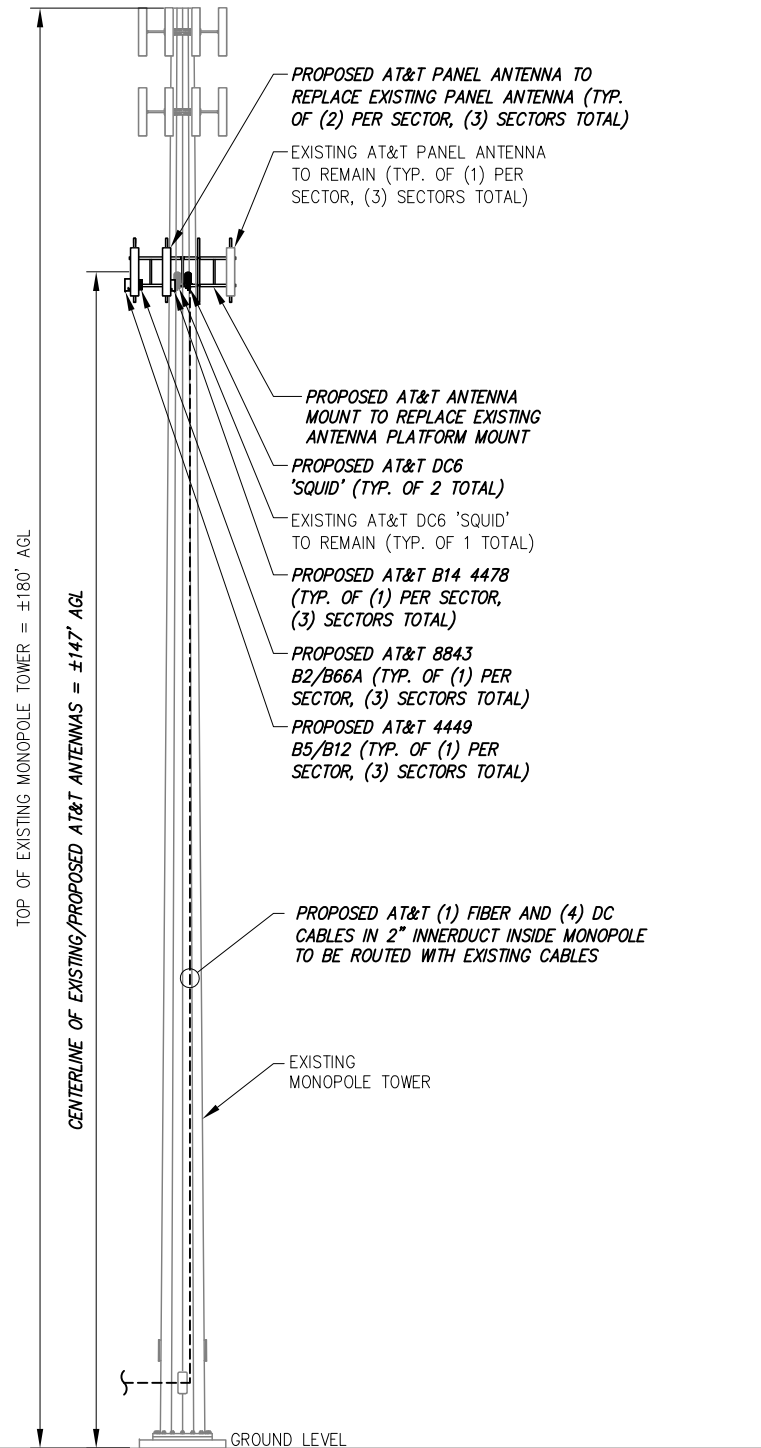


**NOTE:**

- INFINIGY ENGINEERING HAS NOT EVALUATED THE TOWER LOADING FOR THIS SITE, AND ASSUMES NO RESPONSIBILITY FOR ITS STRUCTURAL INTEGRITY REGARDING ITS EXISTING OR PROPOSED LOADING. FINAL INSTALLATION TO COMPLY STRUCTURAL ANALYSIS.
- FOR ADDITIONAL STRUCTURAL INFORMATION PERTAINING TO THE ANTENNA MOUNT, SEE 'MOUNT ANALYSIS REPORT' COMPLETED BY INFINIGY, DATED 12/09/19. MOUNT TO BE REPLACED PRIOR TO INSTALLATION OF PROPOSED EQUIPMENT.

**NOTE:**

- 3' MINIMUM SEPARATION BETWEEN ALL LTE ANTENNAS
- 6' MINIMUM SEPARATION BETWEEN 700 BC/700 DE ANTENNAS



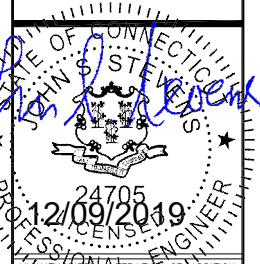
1 ELEVATION VIEW  
NOT TO SCALE

FINAL ANTENNA CONFIGURATION & CABLE SCHEDULE BASED ON LTE RFDS DATED 07/30/19, V 2.00

SECTOR	ANTENNA POSITION	ANTENNA STATUS & TECHNOLOGY	ANTENNA MANF/MODEL	TMA/DIPLEXER	RRUS	AZIMUTH	ANTENNA HEIGHT	CABLE FEEDER		RAYCAP UNIT
								TYPE	LENGTH	
ALPHA	A-1	(E) UMTS 850	POWERWAVE 7770	(2) (E) TT08-19DB111-001	--	143°	±147'	(2) (E) 1-5/8" COAX CABLES	±185'	(1) (E) DC6 'SQUID' (2) (P) DC6 'SQUID'
	A-2	--	--	--	--	--	--	(2) (E) 1-5/8" COAX CABLES	±185'	
	A-3	(P) LTE 700/AWS	CCI DMP65R-BU8DA	--	(1) (P) B14 4478	30°	±147'	(1) (E) FIBER CABLE (2) (E) DC CABLES	--	
	A-4	(P) LTE 700/850/1900/5G 850	CCI DMP65R-BU8DA	--	(1) (P) 4449 B5/B12 (1) (P) 8843 B2/B66A	30°	±147'	SEE A-3 FOR CABLE INFORMATION	--	
BETA	B-1	(E) UMTS 850	POWERWAVE 7770	(2) (E) TT08-19DB111-001	--	263°	±147'	(2) (E) 1-5/8" COAX CABLES	±185'	
	B-2	--	--	--	--	--	--	(2) (E) 1-5/8" COAX CABLES	±185'	
	B-3	(P) LTE 700/AWS	CCI DMP65R-BU8DA	--	(1) (P) B14 4478	160°	±147'	(1) (P) FIBER CABLE (4) (P) DC CABLES	--	
	B-4	(P) LTE 700/850/1900/5G 850	CCI DMP65R-BU8DA	--	(1) (P) 4449 B5/B12 (1) (P) 8843 B2/B66A	160°	±147'	SEE A-3 FOR CABLE INFORMATION	--	
GAMMA	G-1	(E) UMTS 850	POWERWAVE 7770	(2) (E) TT08-19DB111-001	--	23°	±147'	(2) (E) 1-5/8" COAX CABLES	±185'	
	G-2	--	--	--	--	--	--	(2) (E) 1-5/8" COAX CABLES	±185'	
	G-3	(P) LTE 700/AWS	CCI DMP65R-BU8DA	--	(1) (P) B14 4478	270°	±147'	SEE A-3 FOR CABLE INFORMATION	--	
	G-4	(P) LTE 700/850/1900/5G 850	CCI DMP65R-BU8DA	--	(1) (P) 4449 B5/B12 (1) (P) 8843 B2/B66A	270°	±147'	SEE A-3 FOR CABLE INFORMATION	--	

2 AT&T ANTENNA SCHEDULE  
NOT TO SCALE

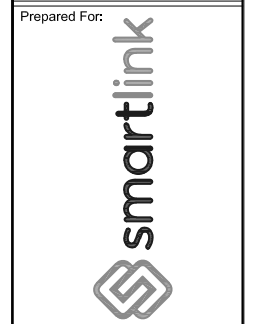
**INFINIGY**  
INFINIGY ENGINEERING, PLLC  
1033 Waterlily Shaker Rd  
Albany, NY 12205  
Office # (518) 690-0790  
Fax # (518) 690-0793



UNAUTHORIZED ALTERATION OR ADDITION TO THIS DOCUMENT IS A VIOLATION OF APPLICABLE STATE AND/OR LOCAL LAWS.

3	REVISED FOR PERMIT	ASW	11/20/19
2	REVISED FOR PERMIT	BMM	10/16/19
1	ISSUED FOR PERMIT	ASW	10/04/19
0	ISSUED FOR REVIEW	BMM	09/13/19
No.	Submital / Revision	App'd	Date
Drawn:	BMM	Date:	09/13/19
Designed:	ASW	Date:	09/13/19
Checked:	AD	Date:	09/13/19
Project Number:	499-006		

Project Title:  
WINDHAM  
WINDHAM CTR  
CTL01064  
FA# 10035442  
193 WINDHAM CENTER ROAD  
WINDHAM, CT 06280



Drawing Scale:  
AS NOTED  
Date:  
11/20/19  
CD

Drawing Title:  
**ELEVATION VIEW**

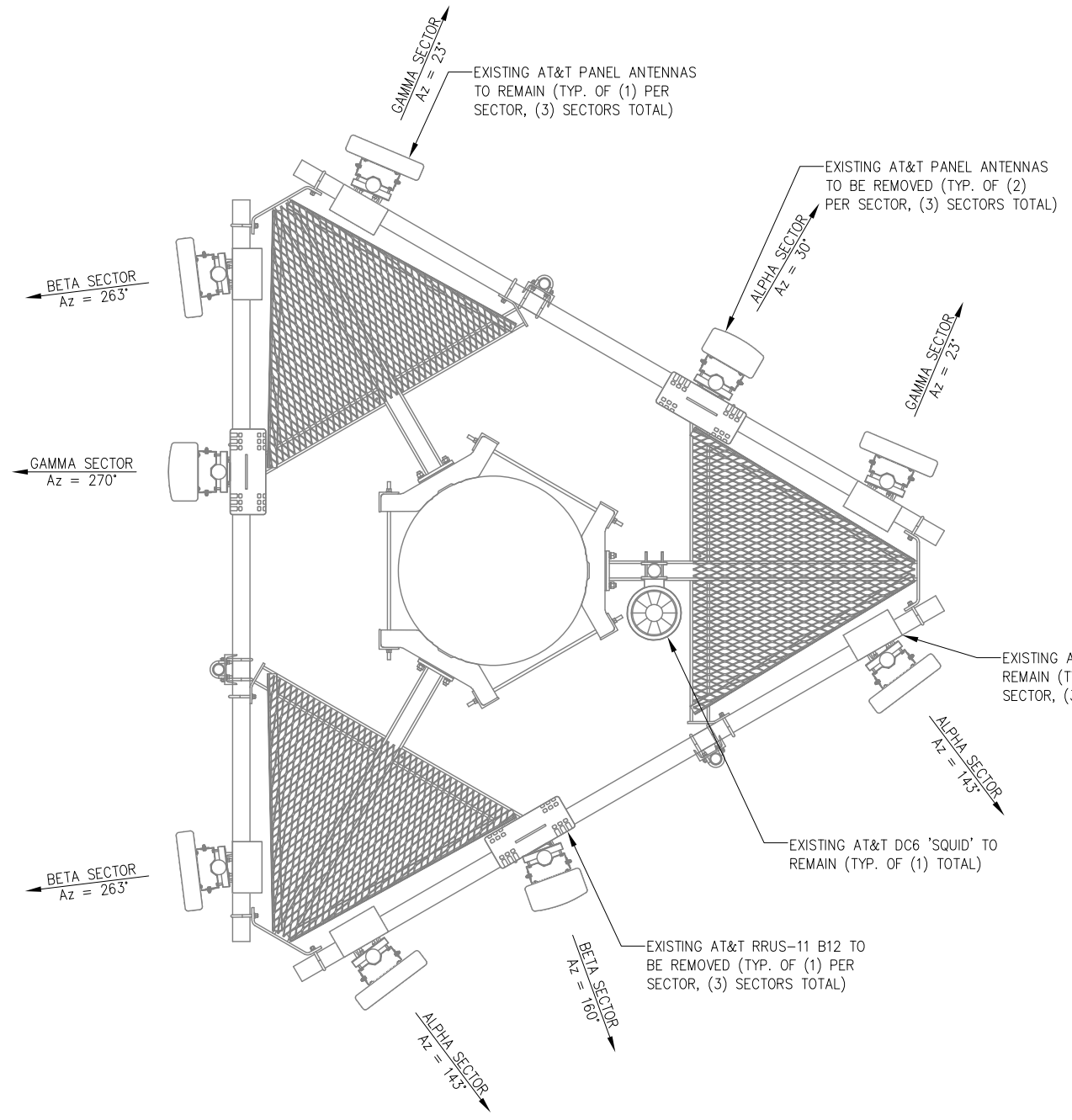
Drawing Number:  
**C3**

**NOTE:**

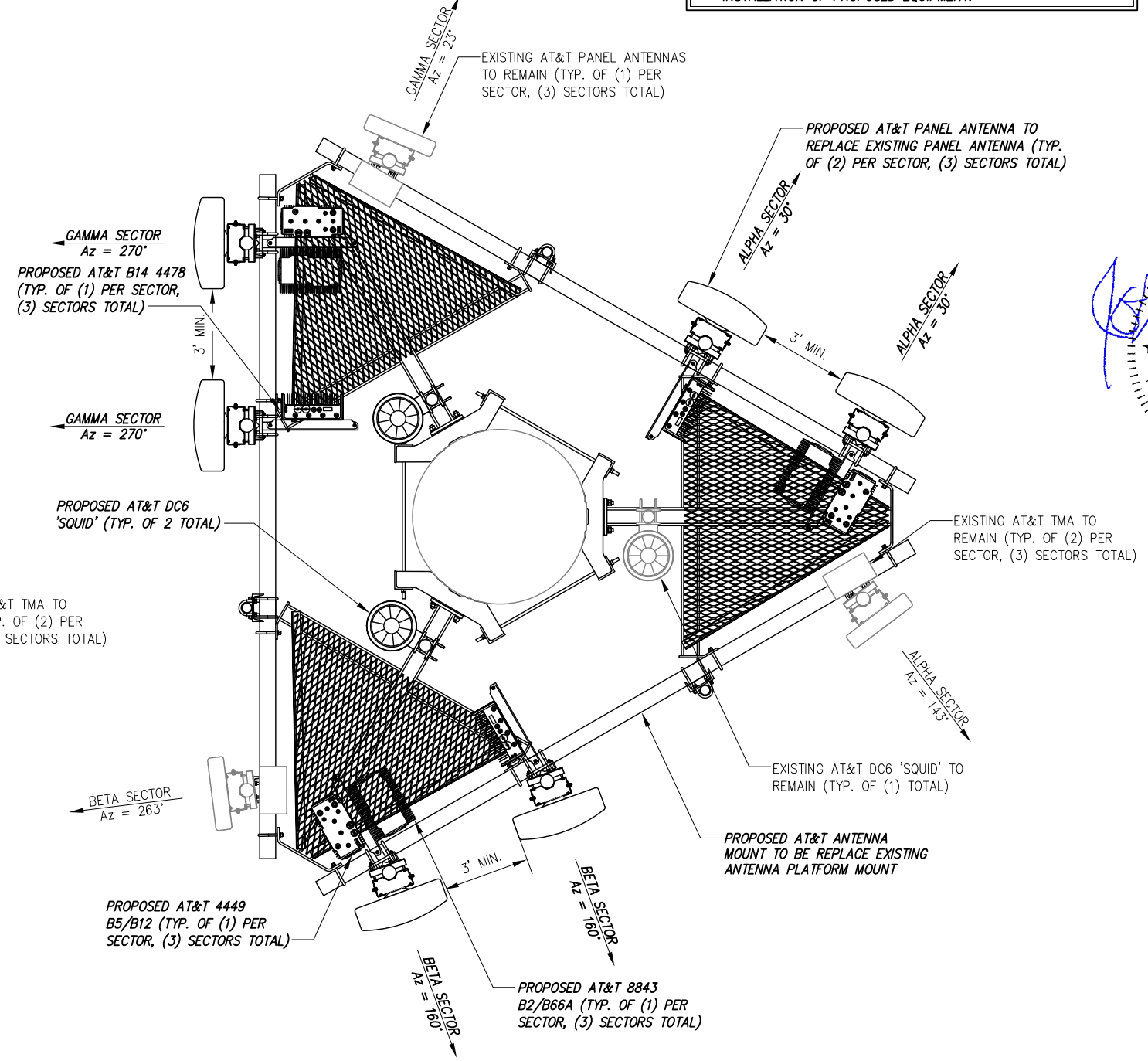
- 3' MINIMUM SEPARATION BETWEEN ALL LTE ANTENNAS
- 6' MINIMUM SEPARATION BETWEEN 700 BC/700 DE ANTENNAS

**NOTE:**

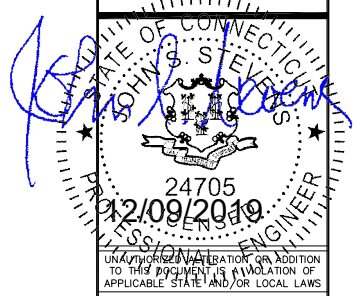
- INFINIGY ENGINEERING HAS NOT EVALUATED THE TOWER LOADING FOR THIS SITE, AND ASSUMES NO RESPONSIBILITY FOR ITS STRUCTURAL INTEGRITY REGARDING ITS EXISTING OR PROPOSED LOADING. FINAL INSTALLATION TO COMPLY STRUCTURAL ANALYSIS. FOR ADDITIONAL STRUCTURAL INFORMATION PERTAINING TO THE ANTENNA MOUNT, SEE 'MOUNT ANALYSIS REPORT' COMPLETED BY INFINIGY, DATED 12/09/19. MOUNT TO BE REPLACED PRIOR TO INSTALLATION OF PROPOSED EQUIPMENT.



**1** EXISTING ANTENNA ORIENTATION PLAN  
--- NOT TO SCALE



**2** PROPOSED ANTENNA ORIENTATION PLAN  
--- NOT TO SCALE



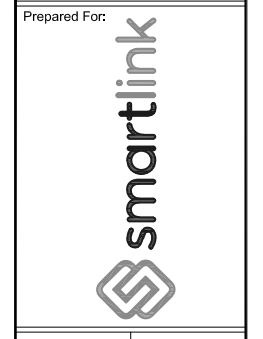
UNAUTHORIZED REPRODUCTION OR ADDITION TO THIS DOCUMENT IS A VIOLATION OF APPLICABLE STATE AND/OR LOCAL LAWS.

No.	Submital / Revision	App'd	Date
3	REVISED FOR PERMIT	ASW	11/20/19
2	REVISED FOR PERMIT	BMM	10/16/19
1	ISSUED FOR PERMIT	ASW	10/04/19
0	ISSUED FOR REVIEW	BMM	09/13/19

Drawn: BMM Date: 09/13/19  
Designed: ASW Date: 09/13/19  
Checked: AD Date: 09/13/19

Project Number: 499-006

Project Title:  
WINDHAM  
WINDHAM CTR  
CTL01064  
FA# 10035442  
193 WINDHAM CENTER ROAD  
WINDHAM, CT 06280

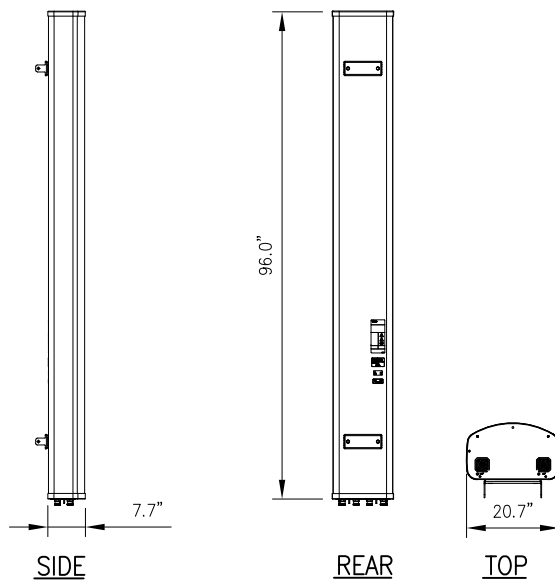


Drawing Scale: AS NOTED  
Date: 11/20/19  
**CD**

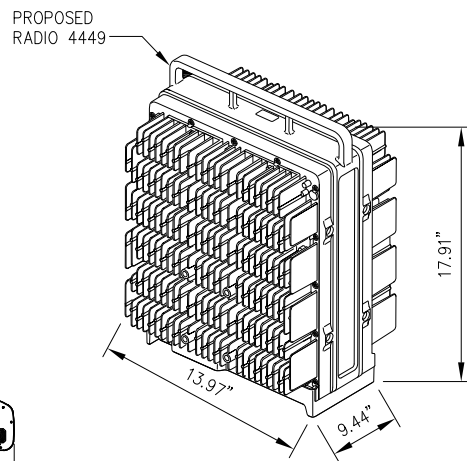
Drawing Title:  
**ANTENNA ORIENTATION PLAN**

Drawing Number:  
**C4**

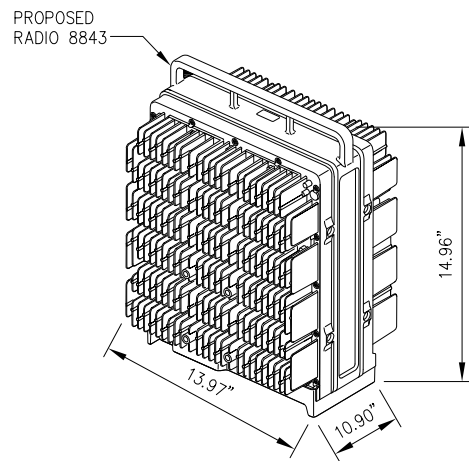




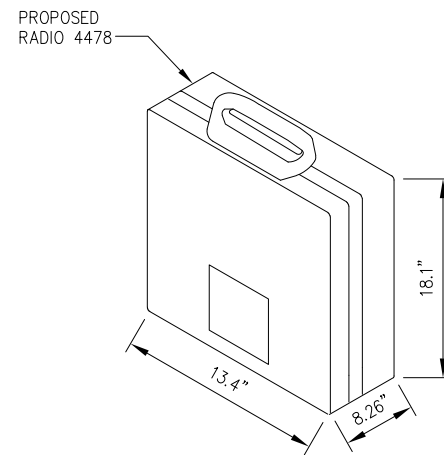
<b>CCI MODEL NO.:</b>	<b>DMP65R-BU8DA</b>
RADOME MATERIAL:	FIBERGLASS
RADOME COLOR:	LIGHT GRAY
DIMENSIONS, HxWxD:	(96.0"x20.7"x7.7")
WEIGHT, W/ PRE-MOUNTED BRACKETS:	95.7 LBS
CONNECTOR:	7-16 DIN FEMALE



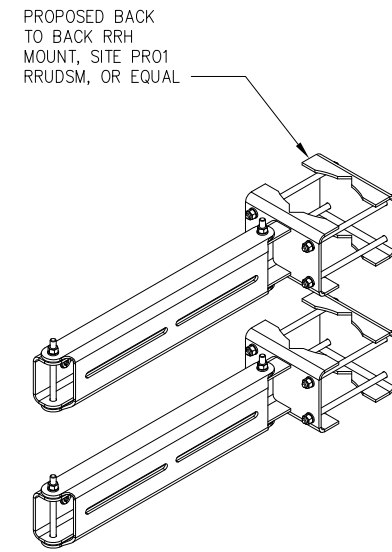
<b>RADIO 4449 SPECIFICATIONS</b>
• HxWxD, (INCHES) : 17.91"x13.97"x9.44"
• WEIGHT (LBS) : 70.54
• COLOR : GRAY



<b>RADIO 8843 SPECIFICATIONS</b>
• HxWxD, (INCHES) : 14.96"x13.97"x10.90"
• WEIGHT (LBS) : 71.87
• COLOR : GRAY



<b>RADIO 4478-B14 SPECIFICATIONS</b>
• HxWxD, (INCHES) : 18.1"x13.4"x8.26"
• WEIGHT (LBS) : 59.5
• COLOR : GRAY
• MOUNTING BRACKET: SXK1250244/1



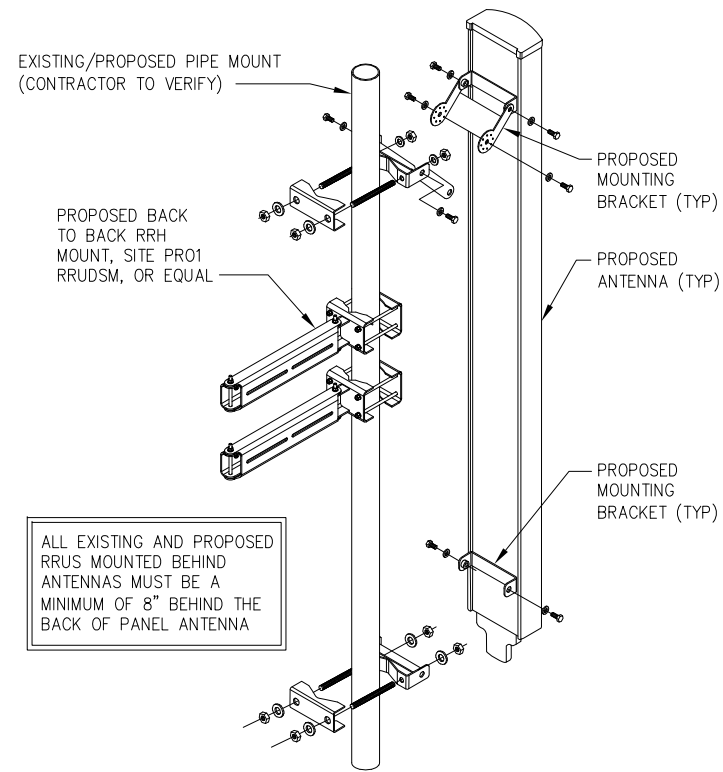
**5 BACK TO BACK PIPE MOUNT DETAIL**  
--- NOT TO SCALE

**1 ANTENNA DETAIL**  
--- NOT TO SCALE

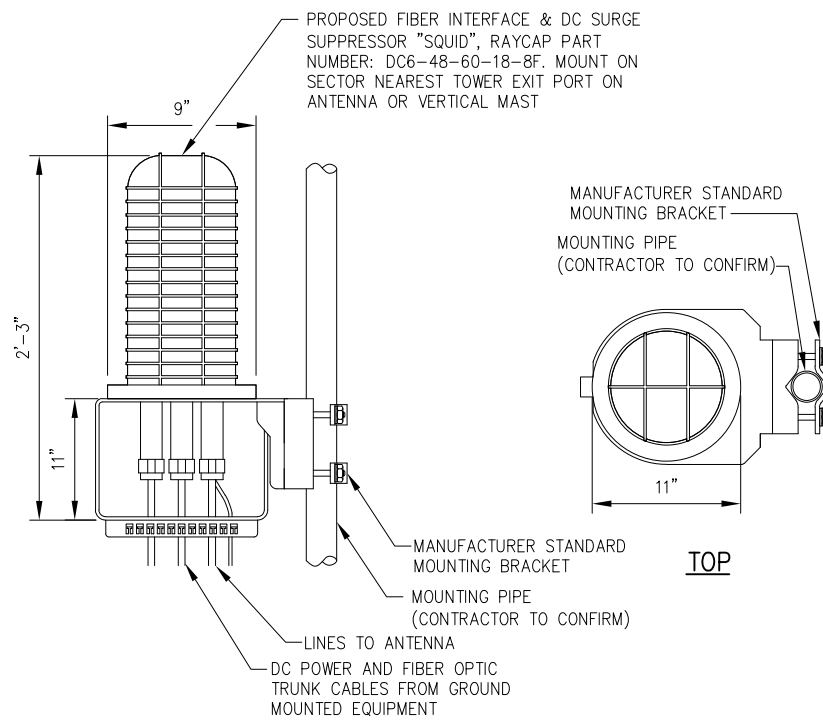
**2 ERICSSON RADIO 4449 DETAIL**  
--- NOT TO SCALE

**3 ERICSSON RADIO 8843 DETAIL**  
--- NOT TO SCALE

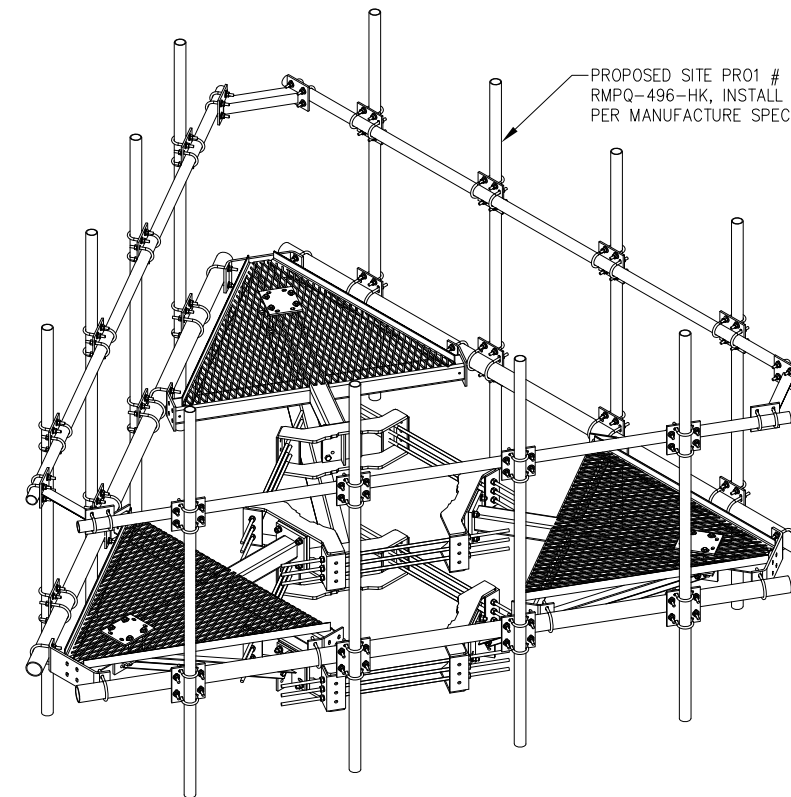
**4 ERICSSON RADIO 4478-B14 DETAIL**  
--- NOT TO SCALE



**6 ANTENNA MOUNTING DETAIL**  
--- NOT TO SCALE

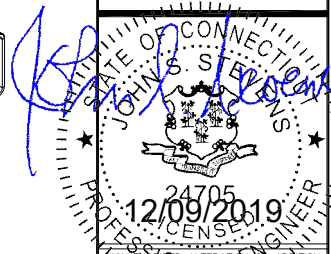


**7 SQUID DETAIL**  
--- NOT TO SCALE



**8 PLATFORM MOUNT DETAIL**  
--- NOT TO SCALE

**INFINIGY**  
INFINIGY ENGINEERING, PLLC  
1033 Waterlily Shaker Rd  
Albany, NY 12205  
Office # (518) 690-0790  
Fax # (518) 690-0793



CONTRACTOR'S ACCEPTANCE AND NOTATION TO THIS DOCUMENT IS A VIOLATION OF APPLICABLE STATE AND/OR LOCAL LAWS

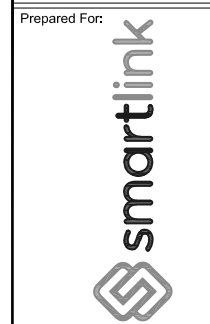
No.	Submital / Revision	App'd	Date
3	REVISED FOR PERMIT	ASW	11/20/19
2	REVISED FOR PERMIT	BMM	10/16/19
1	ISSUED FOR PERMIT	ASW	10/04/19
0	ISSUED FOR REVIEW	BMM	09/13/19

Drawn:	BMM	Date:	09/13/19
Designed:	ASW	Date:	09/13/19
Checked:	ASW	Date:	09/13/19

Project Number:			
499-006			

Project Title:

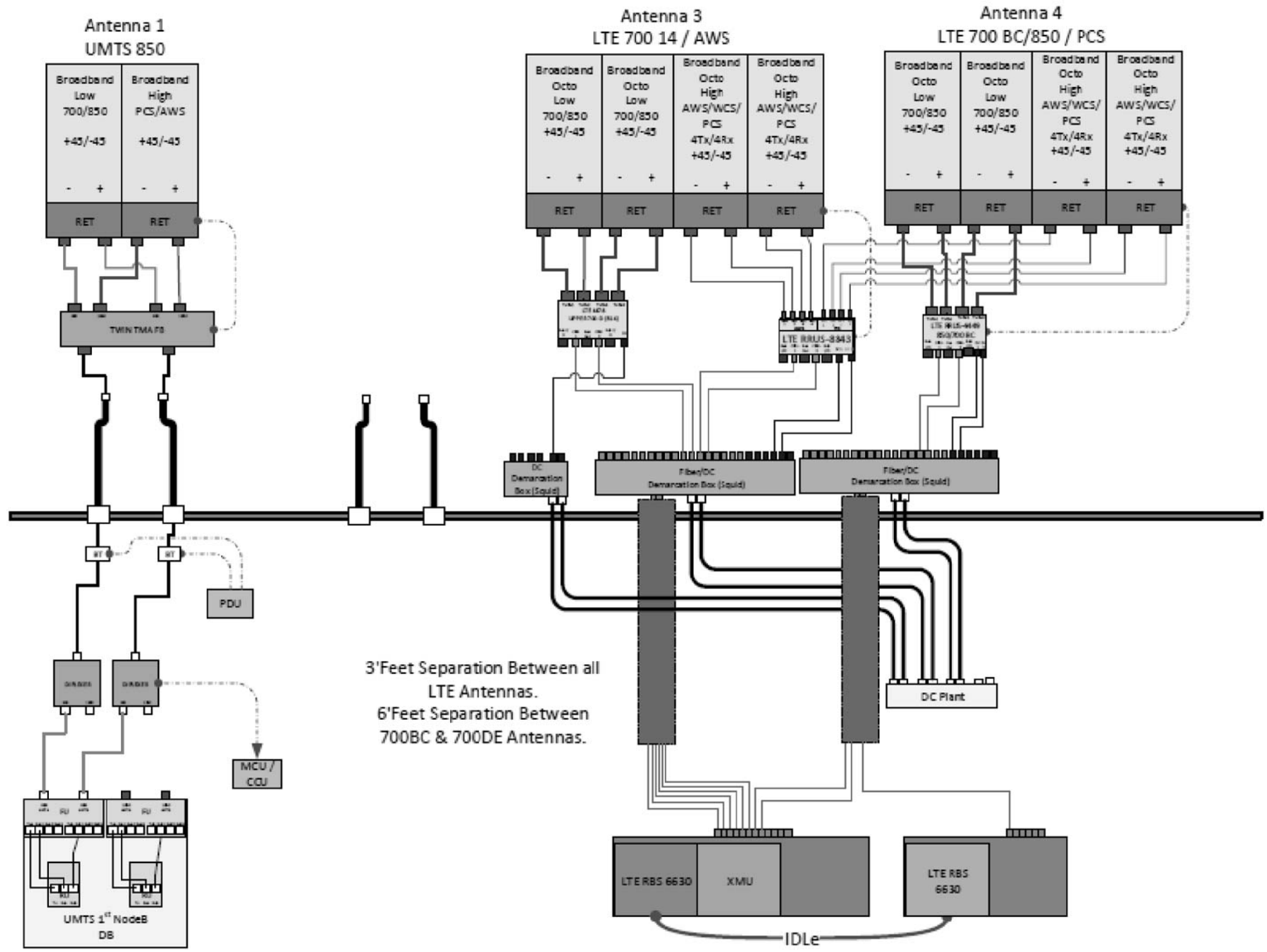
**WINDHAM  
WINDHAM CTR  
CTL01064  
FA# 10035442  
193 WINDHAM CENTER ROAD  
WINDHAM, CT 06280**



Drawing Scale:	AS NOTED	<b>CD</b>
Date:	11/20/19	

Drawing Title  
**EQUIPMENT  
DETAILS**

Drawing Number	<b>C5</b>
----------------	-----------



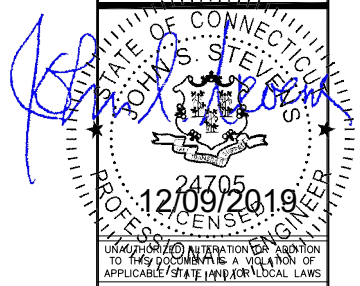
3' Feet Separation Between all LTE Antennas.  
6' Feet Separation Between 700BC & 700DE Antennas.

ALPHA/BETA/GAMMA

1 PLUMBING DIAGRAM (FINAL CONFIGURATION)  
-- NOT TO SCALE

\*BASED ON LTE RFDS,  
DATED 07/30/2019, V2.00

**INFINIGY**  
INFINIGY ENGINEERING, PLLC  
1033 Waterlily Shaker Rd  
Albany, NY 12205  
Office # (518) 690-0790  
Fax # (518) 690-0793

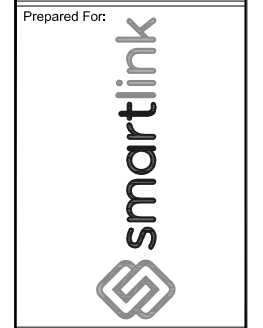


UNAUTHORIZED REPRODUCTION OR ALTERATION OF THIS DOCUMENT IS A VIOLATION OF APPLICABLE STATE AND LOCAL LAWS.

3	REVISED FOR PERMIT	ASW	11/20/19
2	REVISED FOR PERMIT	BMM	10/16/19
1	ISSUED FOR PERMIT	ASW	10/04/19
0	ISSUED FOR REVIEW	BMM	09/13/19
No.	Submital / Revision	App'd	Date
Drawn:	BMM	Date:	09/13/19
Designed:	ASW	Date:	09/13/19
Checked:	AD	Date:	09/13/19

Project Number: 499-006

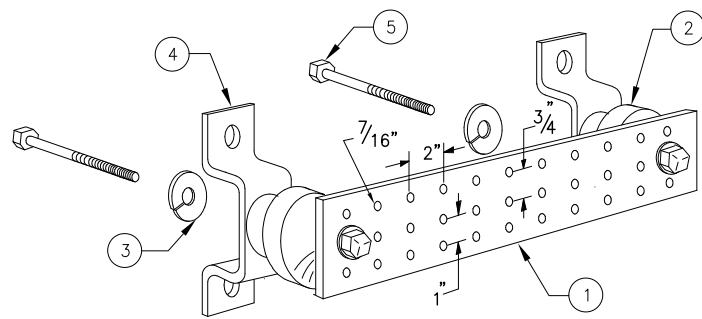
Project Title:  
WINDHAM  
WINDHAM CTR  
CTL01064  
FA# 10035442  
193 WINDHAM CENTER ROAD  
WINDHAM, CT 06280



Drawing Scale: AS NOTED  
Date: 11/20/19  
**CD**

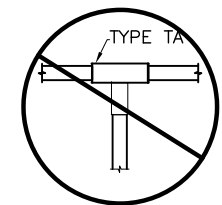
Drawing Title:  
**PLUMBING DIAGRAM**

Drawing Number:  
**C6**

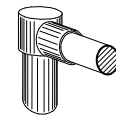


**LEGEND**

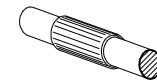
- 1 - SOLID TINNED COPPER GROUND BAR, 1/4"x 4"x 20" MIN., NEWTON INSTRUMENT CO. HOLE CENTERS TO MATCH NEMA DOUBLE LUG CONFIGURATION
- 2 - INSULATORS, NEWTON INSTRUMENT CAT. NO. 3061-4
- 3 - 5/8" LOCKWASHERS, NEWTON INSTRUMENT CO. CAT. NO. 3015-8
- 4 - WALL MOUNTING BRACKET, NEWTON INSTRUMENT CO. CAT NO. A-6056
- 5 - 5/8-11 X 1" H.H.C.S. BOLTS, NEWTON INSTRUMENT CO. CAT NO. 3012-1
- 6 - GROUND BAR SHALL BE SIZED TO ACCOMMODATE ALL GROUNDING CONNECTIONS REQUIRED PLUS PROVIDE 50% SPARE CAPACITY
- 7 - GROUND BARS SHALL NEITHER BE FIELD FABRICATED NOR NEW HOLES DRILLED
- 8 - GROUND LUGS SHALL MATCH THE HOLE SPACING ON THE BAR
- 9 - HARDWARE DIAMETER SHALL BE MINIMUM 3/8"



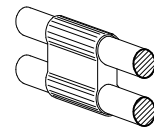
NOT PERMITTED



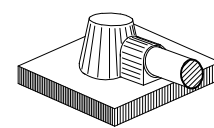
TYPE GR



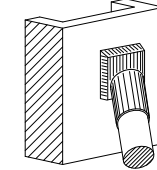
TYPE SV



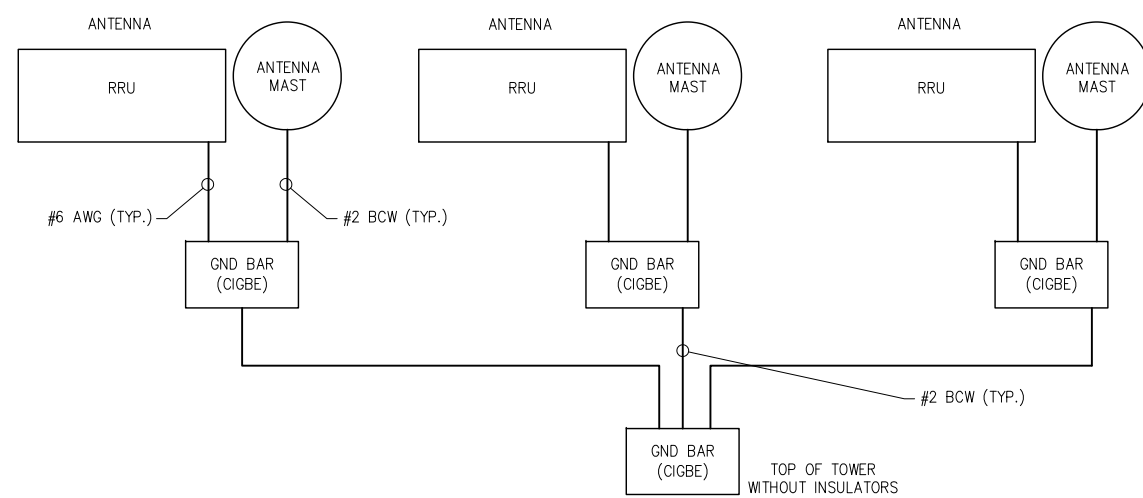
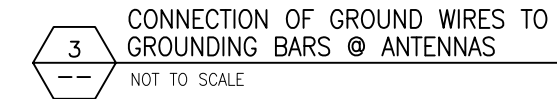
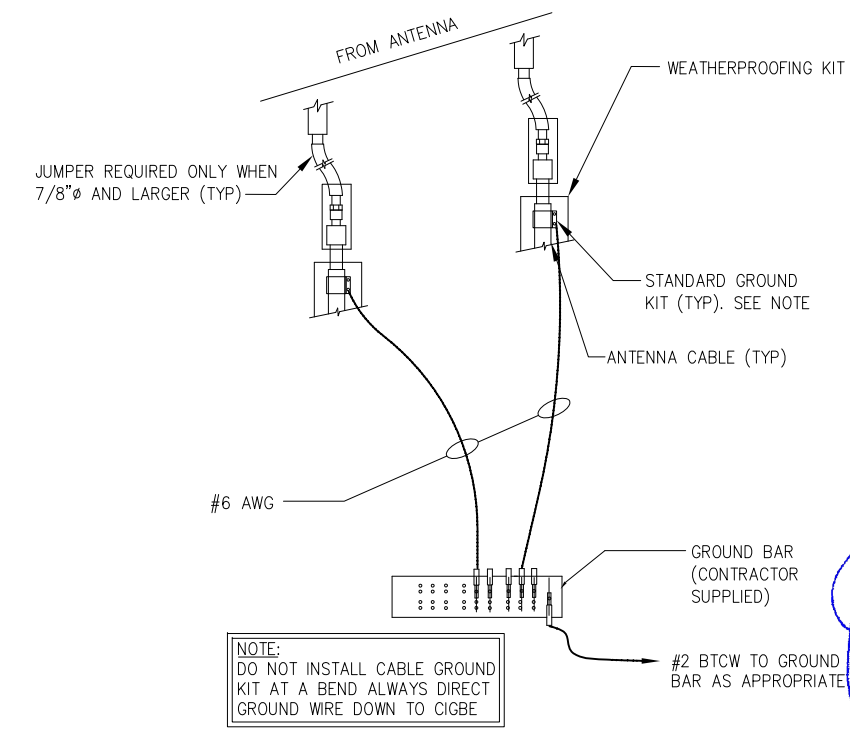
TYPE PH



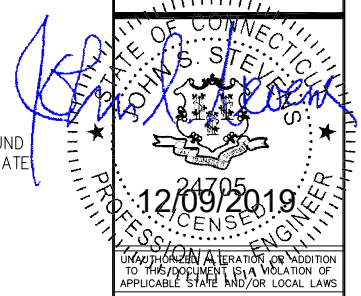
TYPE KA



TYPE VS



**INFINIGY**  
 INFINIGY ENGINEERING, PLLC  
 1033 Waterlily Shaker Rd  
 Albany, NY 12205  
 Office # (518) 690-0790  
 Fax # (518) 690-0793

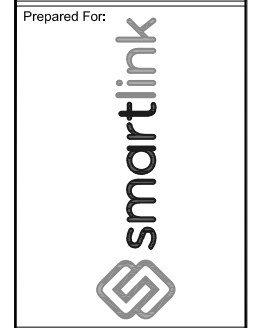


UNAPPROVED ALTERATION OR ADDITION TO THIS DOCUMENT IS A VIOLATION OF APPLICABLE STATE AND/OR LOCAL LAWS

3	REVISED FOR PERMIT	ASW	11/20/19
2	REVISED FOR PERMIT	BMM	10/16/19
1	ISSUED FOR PERMIT	ASW	10/04/19
0	ISSUED FOR REVIEW	BMM	09/13/19
No.	Submittal / Revision	App'd	Date
Drawn:	BMM	Date:	09/13/19
Designed:	ASW	Date:	09/13/19
Checked:	ASW	Date:	09/13/19

Project Number:  
499-006

Project Title:  
WINDHAM  
WINDHAM CTR  
CTL01064  
FA# 10035442  
193 WINDHAM CENTER ROAD  
WINDHAM, CT 06280



Drawing Scale:  
AS NOTED

Date:  
11/20/19

Drawing Title  
**GROUNDING DETAILS**

Drawing Number  
**C7**



# INFINIGY

FROM ZERO TO INFINIGY  
the solutions are endless

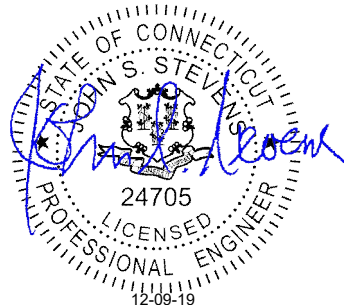
1033 WATERVLIET SHAKER RD, ALBANY, NY 12205

## Mount Analysis Report

December 9, 2019

Site Name	Windham Windham CTR
Site Number	CTL01064
FA Number	10035442
PACE Number	MRCTB040530, MRCTB040444, MRCTB040469 MRCTB040708, MRCTB040763
PTN Number	2051A0PQEN, 2051A0PQWE, 2051A0PQF7 2051A0PQM8, 2051A0PQS4
Infinigy Job Number	1106-A0001-B
Client	Smartlink
Carrier	AT&T Mobility
Site Location	193 Windham Center Road Windham, CT 6280 41.6900481 N NAD83 144.3250538 W NAD83
Mount Centerline EL.	147.0 ft
Mount Type	Platform
Structural Usage Ratio	69.4%
<b>Overall Result</b>	<b>Pass</b>
<b>Note</b>	<b>SitePro1 RMQP-496-HK to be installed prior to installation of proposed appurtenances.</b>

Upon reviewing the results of this analysis, it is our opinion that the proposed mount meets the specified TIA code requirements. The mounts and connections for the proposed carrier are therefore deemed adequate to support the final loading configuration as listed in this report.



Mike Downing

AZ CA CO FL GA MD NC NH NJ NY TX WA

INFINIGY

**Contents**

Introduction.....	3
Supporting Documentation.....	3
Analysis Code Requirements.....	3
Conclusion.....	3
Final Configuration Loading.....	4
Mount Usages.....	4
Mount Connection Usages.....	4
Assumptions and Limitations.....	5
Calculations.....	Appended

**Introduction**

Infinigy Engineering has been requested to perform a mount analysis on the proposed AT&T Mobility mounts. All referenced supporting documents have been obtained from the client and are assumed to be accurate and applicable to this site. The mount was analyzed using RISA-3D Version 17.0.4 analysis software.

**Supporting Documentation**

<b>RFDS</b>	AT&T RFDS ID #3167712, dated July 30, 2019
<b>Construction Drawings</b>	Infinigy Engineering, PLLC, Job No. 499-006, dated November 20, 2019
<b>Prior Mount Analysis</b>	Infinigy Engineering, PLLC, Job No. 1106-A0001-B, dated September 11, 2019
<b>Site Photos</b>	Smartlink Provided, dated June 26, 2019
<b>Assembly Drawings</b>	Site Pro 1 Part No. RMQP-496-HK, dated July 14, 2014

**Analysis Code Requirements**

Wind Speed	121 mph (3-Second Gust)
Wind Speed w/ Ice	50 mph (3 Second Gust) w/ 1" Ice
TIA Revision	ANSI/TIA-222-H
Adopted IBC	2018 IBC/ 2018 Connecticut State Building Code
Structure Class	II
Exposure Category	C
Topographic Category	1
Spectral Response	$S_s = 0.191 \text{ g}$ , $S_1 = 0.055 \text{ g}$
Site Class	D - Stiff Soil
HMSL	205 ft.

**Conclusion**

Upon reviewing the results of this analysis, it is our opinion that the proposed mount meets the specified TIA code requirements. The mount and connections are therefore deemed adequate to support the final loading configuration as listed in this report.

If you have any questions, require additional information, or actual conditions differ from those as detailed in this report please contact me via the information below:

Mike Downing | [INFINIGY](#)  
 1033 Watervilet Shaker Road, Albany, NY 12205  
 (O) (518) 690-0799  
 mdowning@infinigy.com | [www.infinigy.com](http://www.infinigy.com)



**Final Configuration Loading**

Mount CL (ft)	Vert. O/S (ft)	Rad. HT (ft)	Horiz. O/S (ft)*	Qty	Appurtenance	Carrier
147.0	0.0	147.0	1.5	3	POWERWAVE 7770.00	AT&T Mobility
			8.0, 11.5	6	CCI DMP65R-BU8DA	
			8.0	3	ERICSSON B14 4478	
			11.5	3	ERICSSON 4449 B5/B12	
			11.5	3	ERICSSON 8843 B2/B66A	
			1.5	6	POWERWAVE TT08-19DB111-001	
			--	3	RAYCAP DC6-48-60-18-8F	

\*Horizontal Offset is defined as the distance from the left most edge of the mount face horizontal when viewed facing the tower

**Mount Usages**

Horizontals	16.6%	Pass
Standoffs	23.7%	Pass
Mount Pipes	69.4%	Pass
Handrails	56.4%	Pass
<b>Max Usage</b>	<b>69.4%</b>	<b>Pass</b>

**Mount Connection Usages**

Reaction Data	Design Capacity*	Analysis Reactions	Results
Max Tension (lbs.)	20340	4032	19.8%
Max Shear (lbs.)	12425	913	7.3%
Unity Check	-	-	4.5%

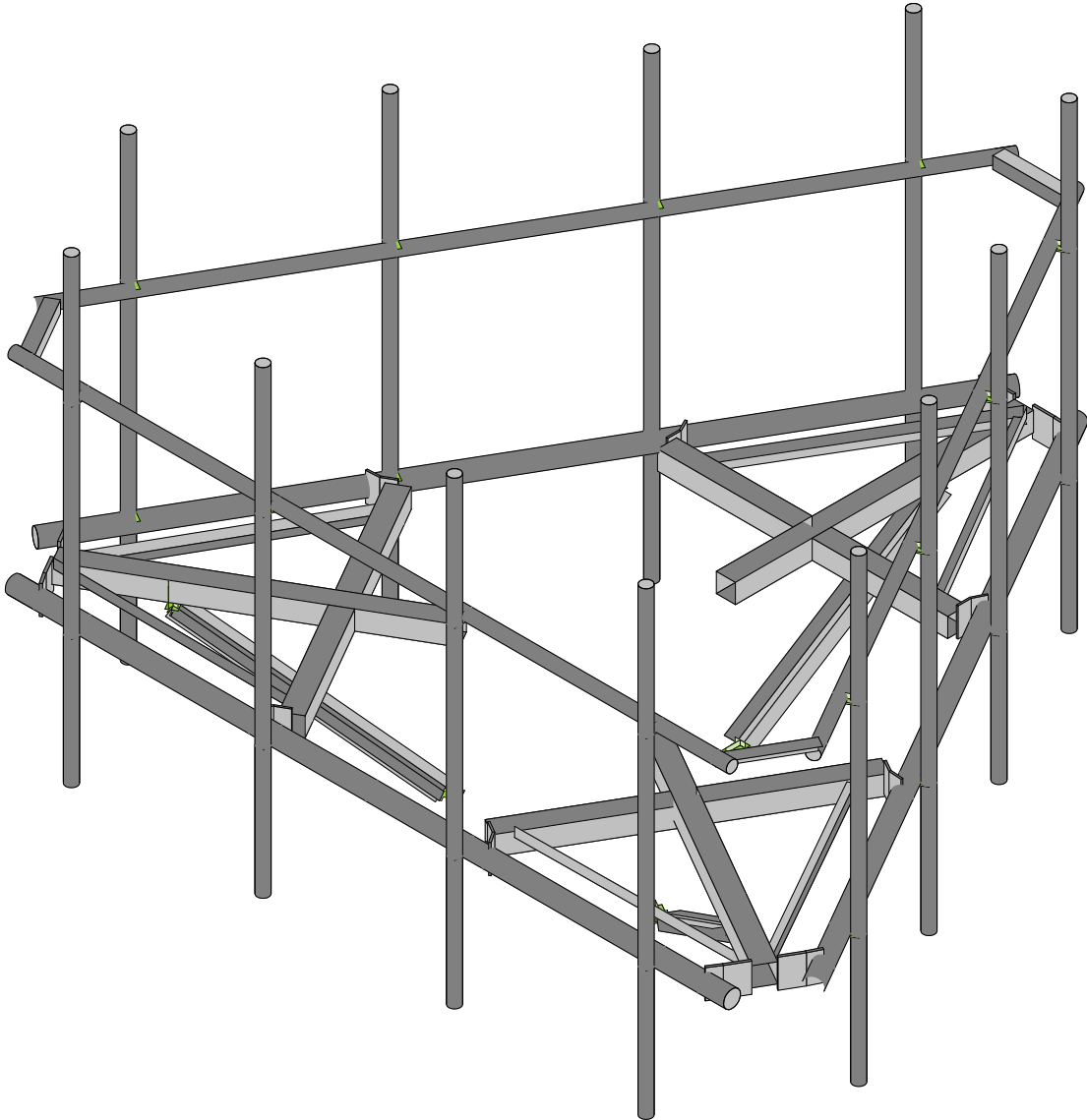
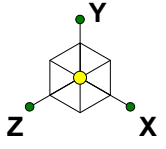
\*Install (4) 5/8" A325 Bolts as per manufacture specifications.

## **Assumptions and Limitations**

Our structural calculations are completed assuming all information provided to Infinigy Engineering is accurate and applicable to this site. For the purposes of calculations, we assume an overall structure condition of “like new” and all members and connections to be free of corrosion and/or structural defects. The structure owner and/or contractor shall verify the structure’s condition prior to installation of any proposed equipment. If actual conditions differ from those described in this report Infinigy Engineering should be notified immediately to complete a revised evaluation.

Our evaluation is completed using standard TIA, AISC, ACI, and ASCE methods and procedures. Our structural results are proprietary and should not be used by others as their own. Infinigy Engineering is not responsible for decisions made by others that are or are not based on our supplied assumptions and conclusions.

This report is an evaluation of the proposed carriers mount structure only and does not reflect adequacy of the existing tower, other mounts, or coax mounting attachments. These elements are assumed to be adequate for the purposes of this analysis and are assumed to have been installed per their manufacturer requirements.



Envelope Only Solution

Infinigy Engineering, PLLC

MD

1106-A0001-B

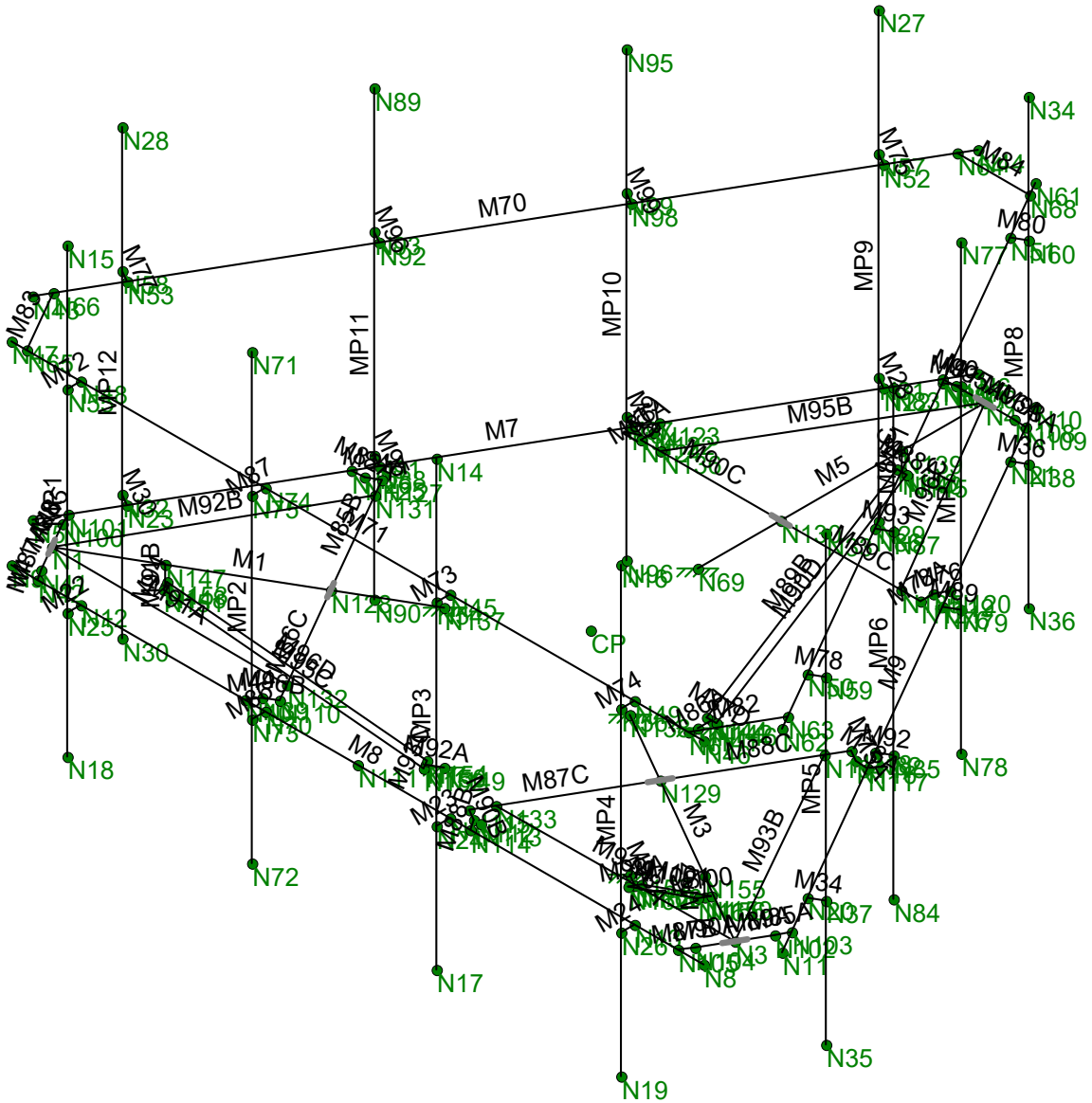
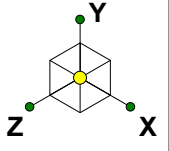
CTL01064

Final Configuration

Dec 9, 2019 at 11:24 AM

CTL01064\_loaded.r3d





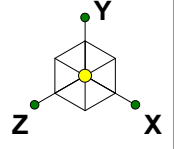
Envelope Only Solution

Infinigy Engineering, PLLC
MD
1106-A0001-B

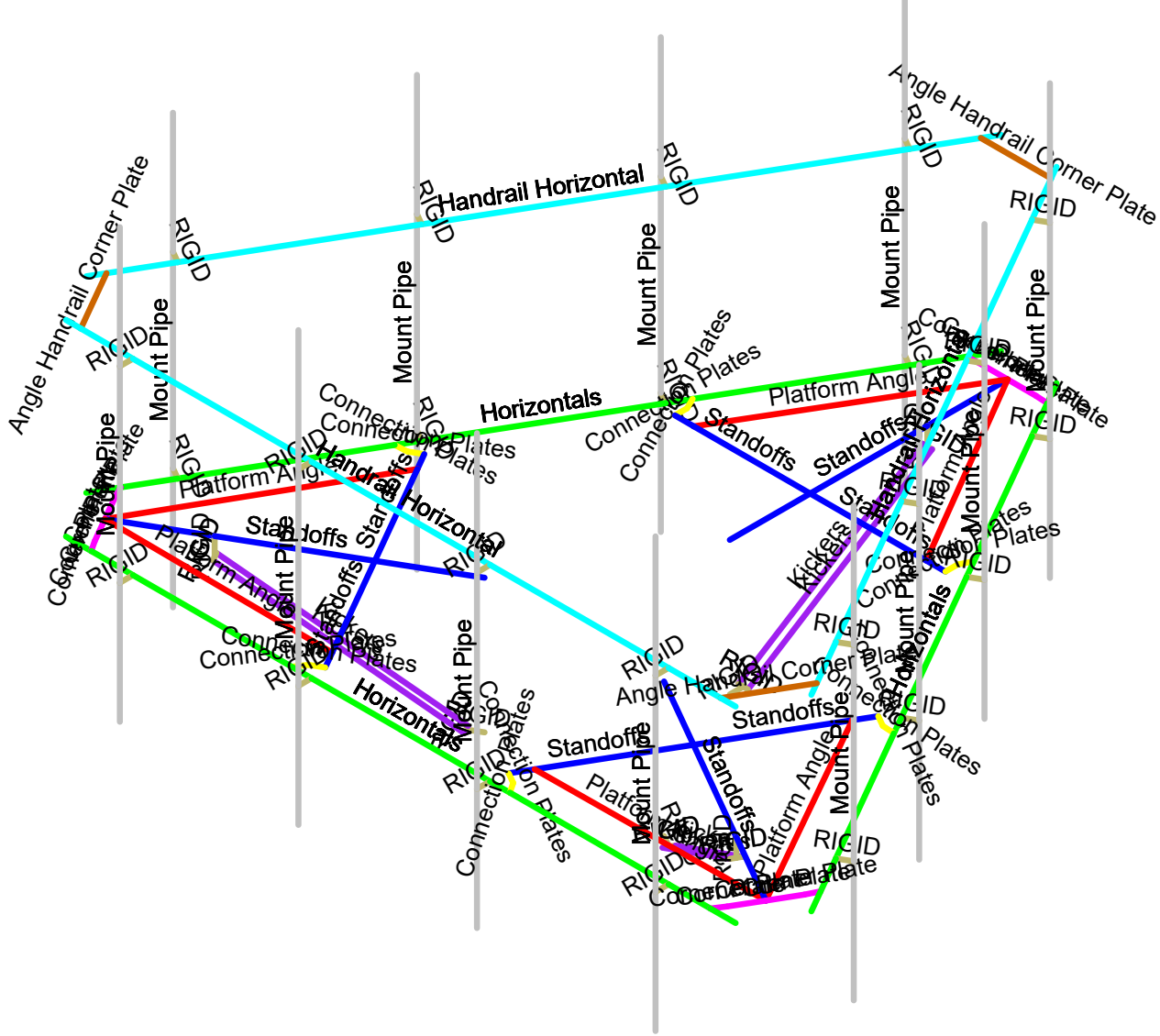
CTL01064

Wire Frame

Dec 9, 2019 at 11:23 AM
CTL01064_loaded.r3d

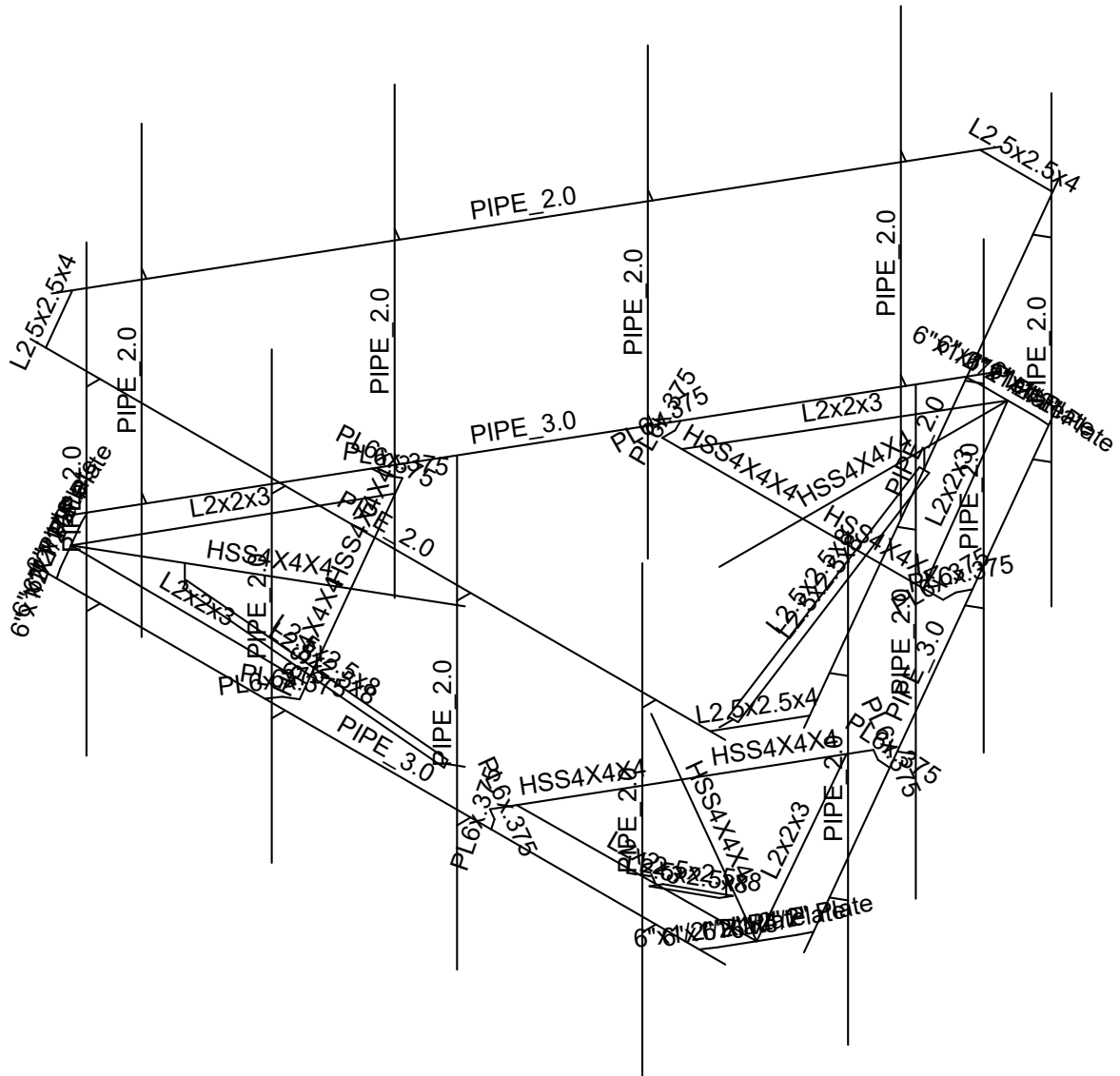
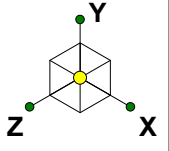


- Section Sets
- █ Standoffs
  - █ Horizontals
  - █ Platform Angle
  - █ Mount Pipe
  - █ Corner Plate
  - █ Handrail Horizontal
  - █ Angle Handrail Corner Plate
  - █ Connection Plates
  - █ Kickers
  - █ RIGID



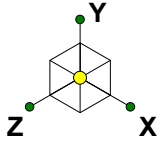
Envelope Only Solution

Infinigy Engineering, PLLC	CTL01064	Section Set
MD		Dec 9, 2019 at 11:26 AM
1106-A0001-B		CTL01064_loaded.r3d



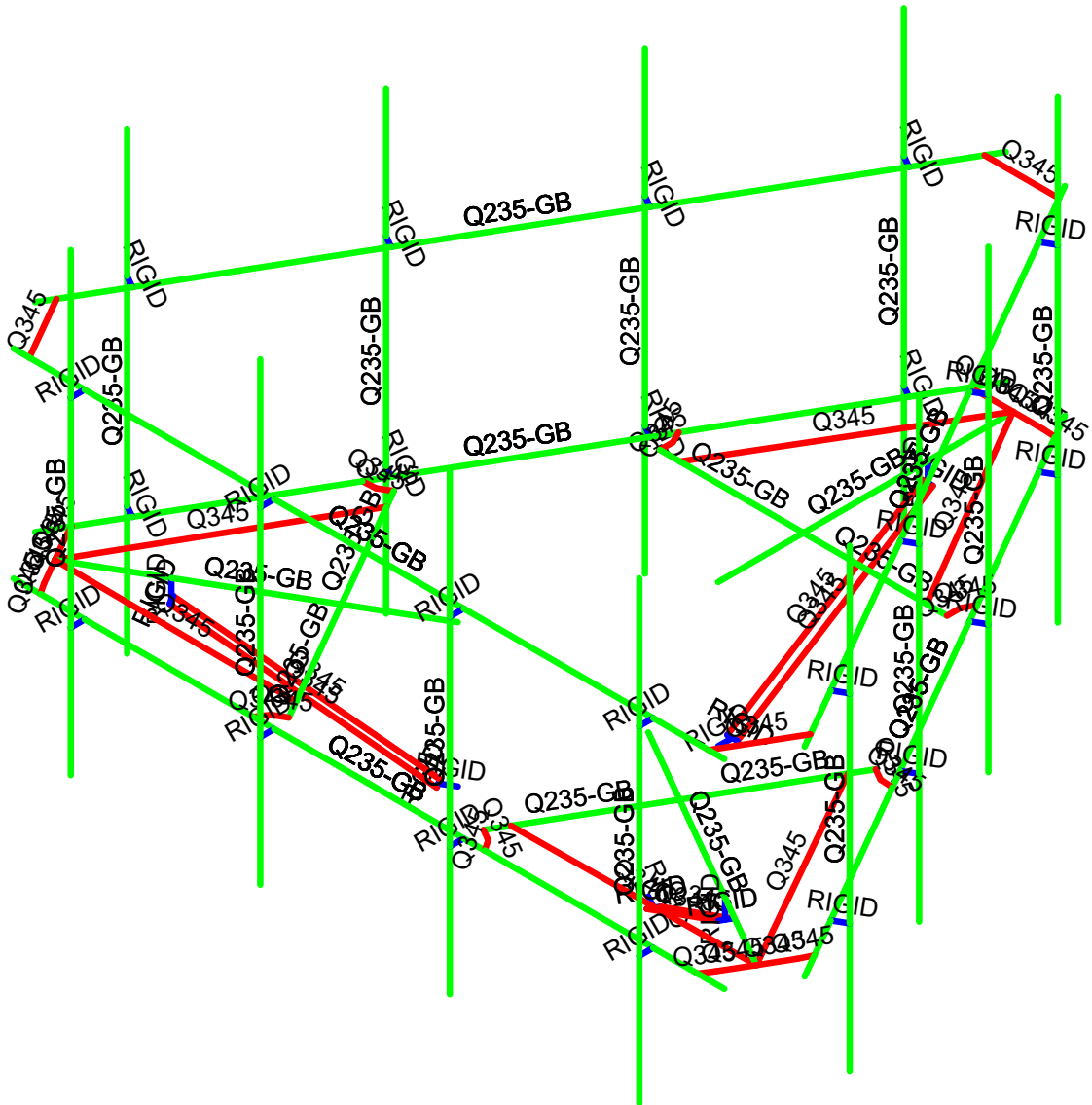
Envelope Only Solution

Infinigy Engineering, PLLC	CTL01064	Member Shape
MD		Dec 9, 2019 at 11:26 AM
1106-A0001-B		CTL01064_loaded.r3d



Material Sets

- RIGID
- Q235-GB
- Q345



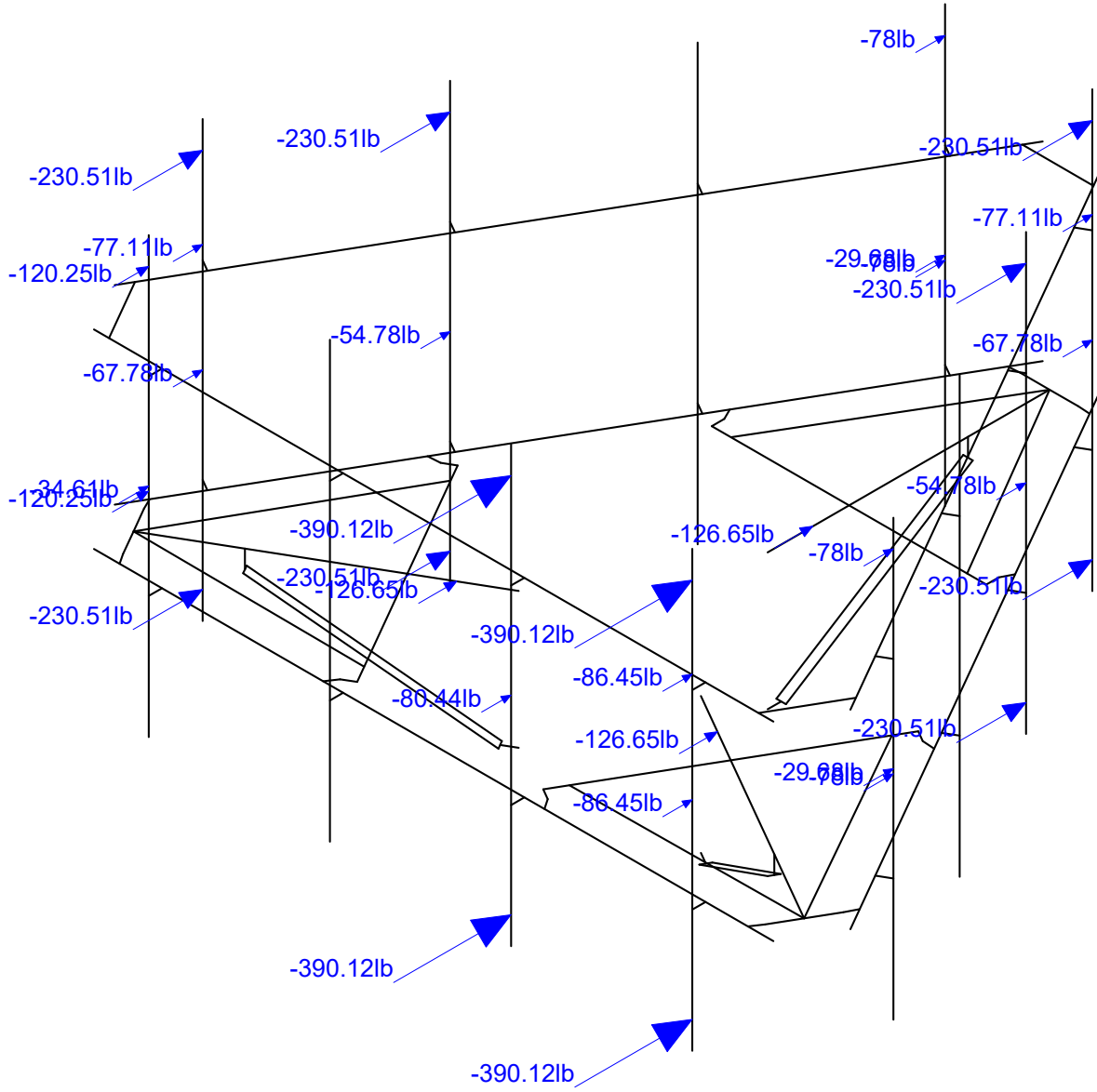
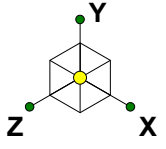
Envelope Only Solution

Infinigy Engineering, PLLC	CTL01064	Material Set
MD		Dec 9, 2019 at 11:27 AM
1106-A0001-B		CTL01064_loaded.r3d



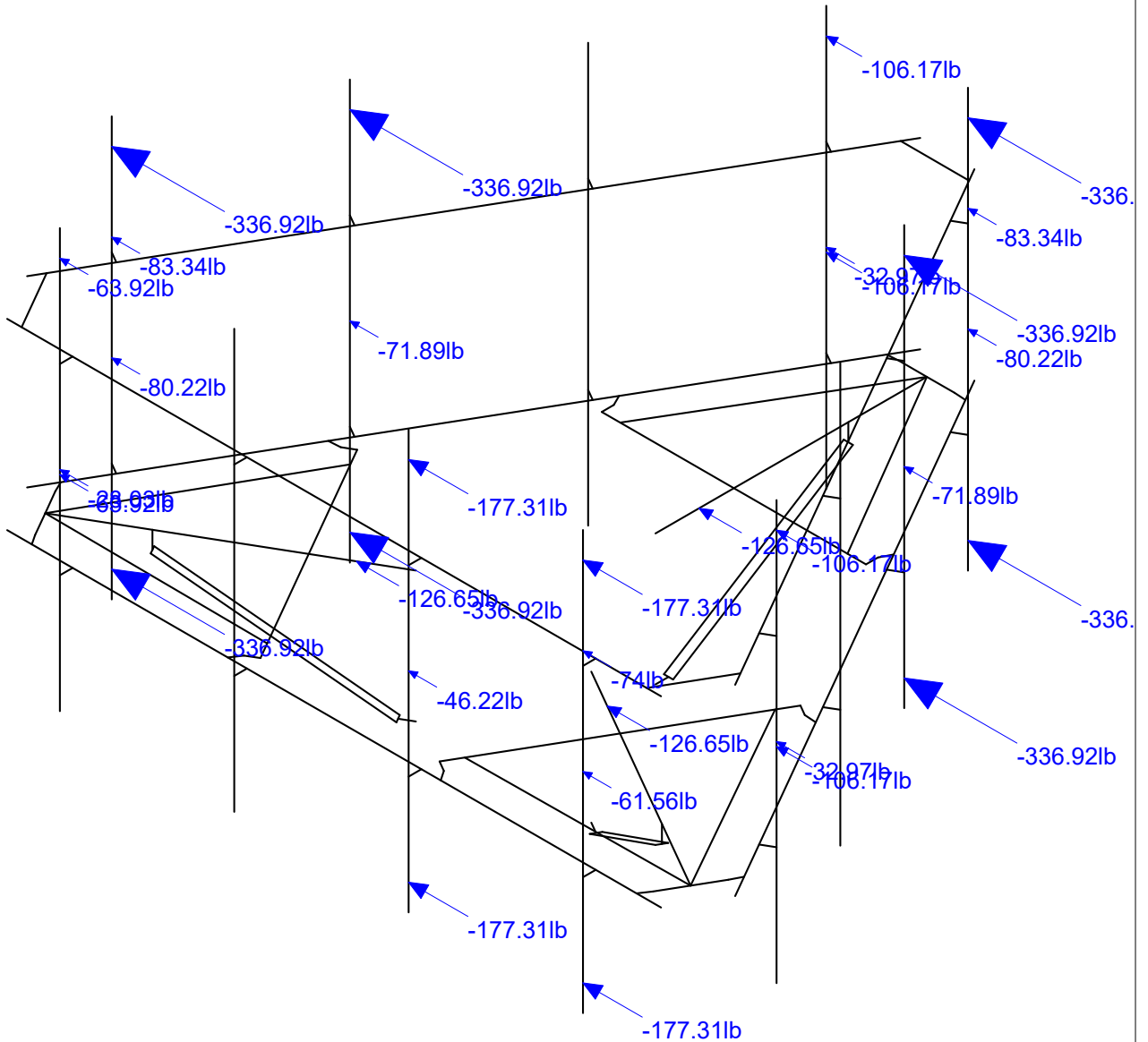
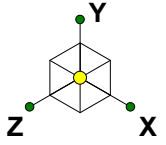






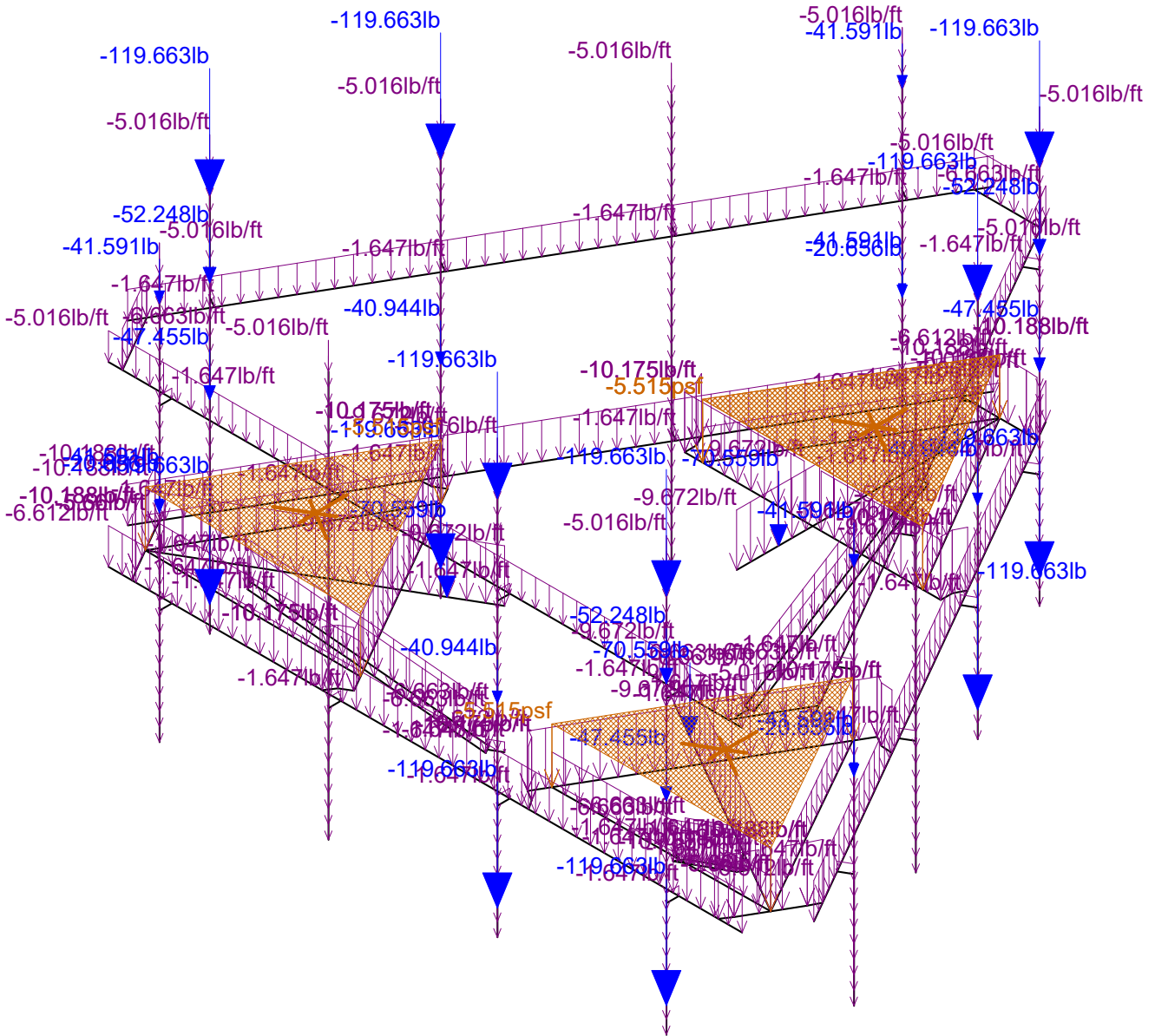
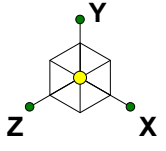
Loads: BLC 2, Wind Load AZI 0  
Envelope Only Solution

Infinigy Engineering, PLLC	CTL01064	Wind Load 000
MD		Dec 9, 2019 at 11:29 AM
1106-A0001-B		CTL01064_loaded.r3d



Loads: BLC 5, Wind Load AZI 90  
Envelope Only Solution

Infinigy Engineering, PLLC	CTL01064	Wind Load 090
MD		Dec 9, 2019 at 11:29 AM
1106-A0001-B		CTL01064_loaded.r3d

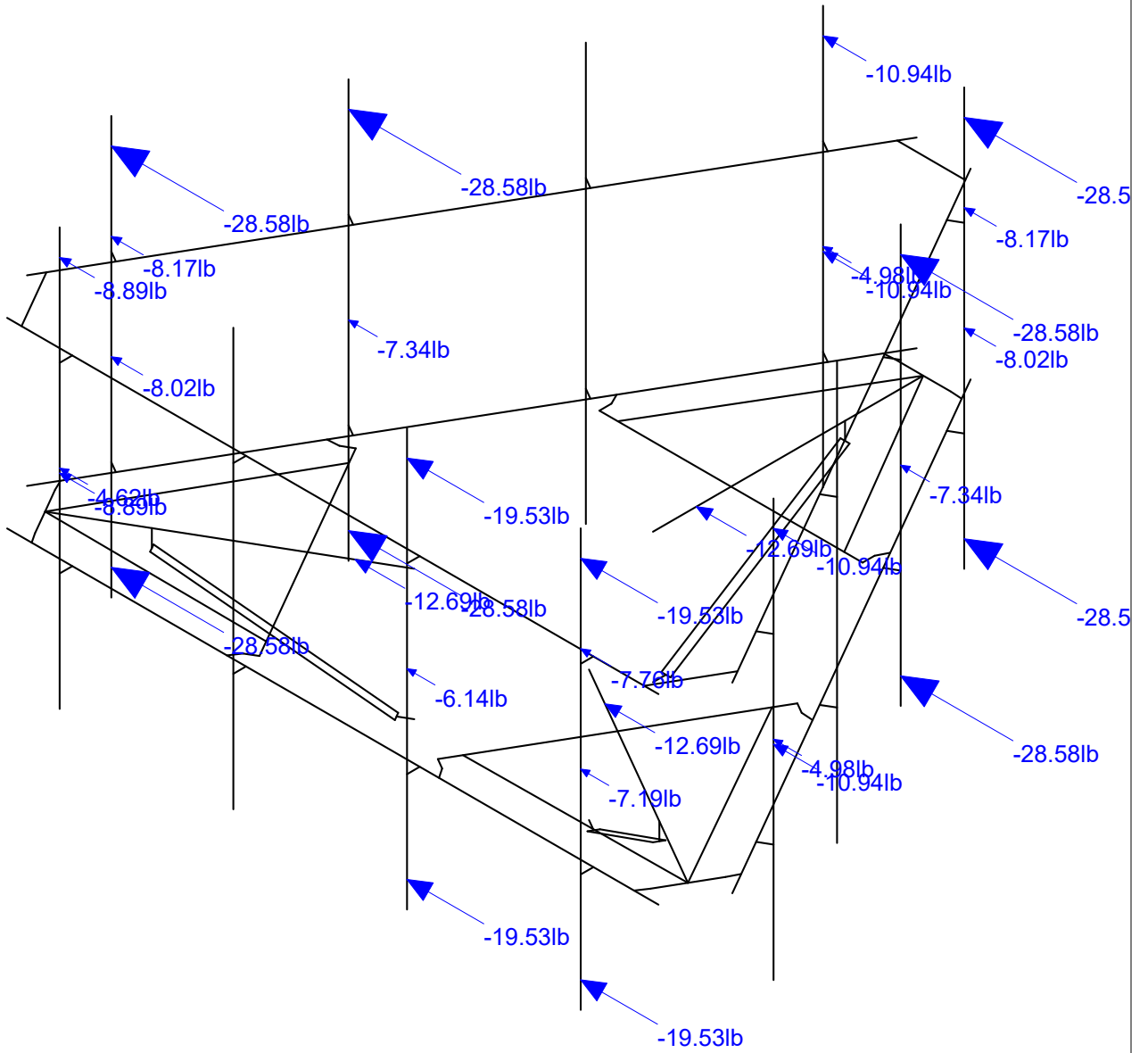
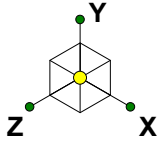


Loads: BLC 16, Ice Weight  
Envelope Only Solution

Infinigy Engineering, PLLC	CTL01064	Ice Weight
MD		Dec 9, 2019 at 11:30 AM
1106-A0001-B		CTL01064_loaded.r3d

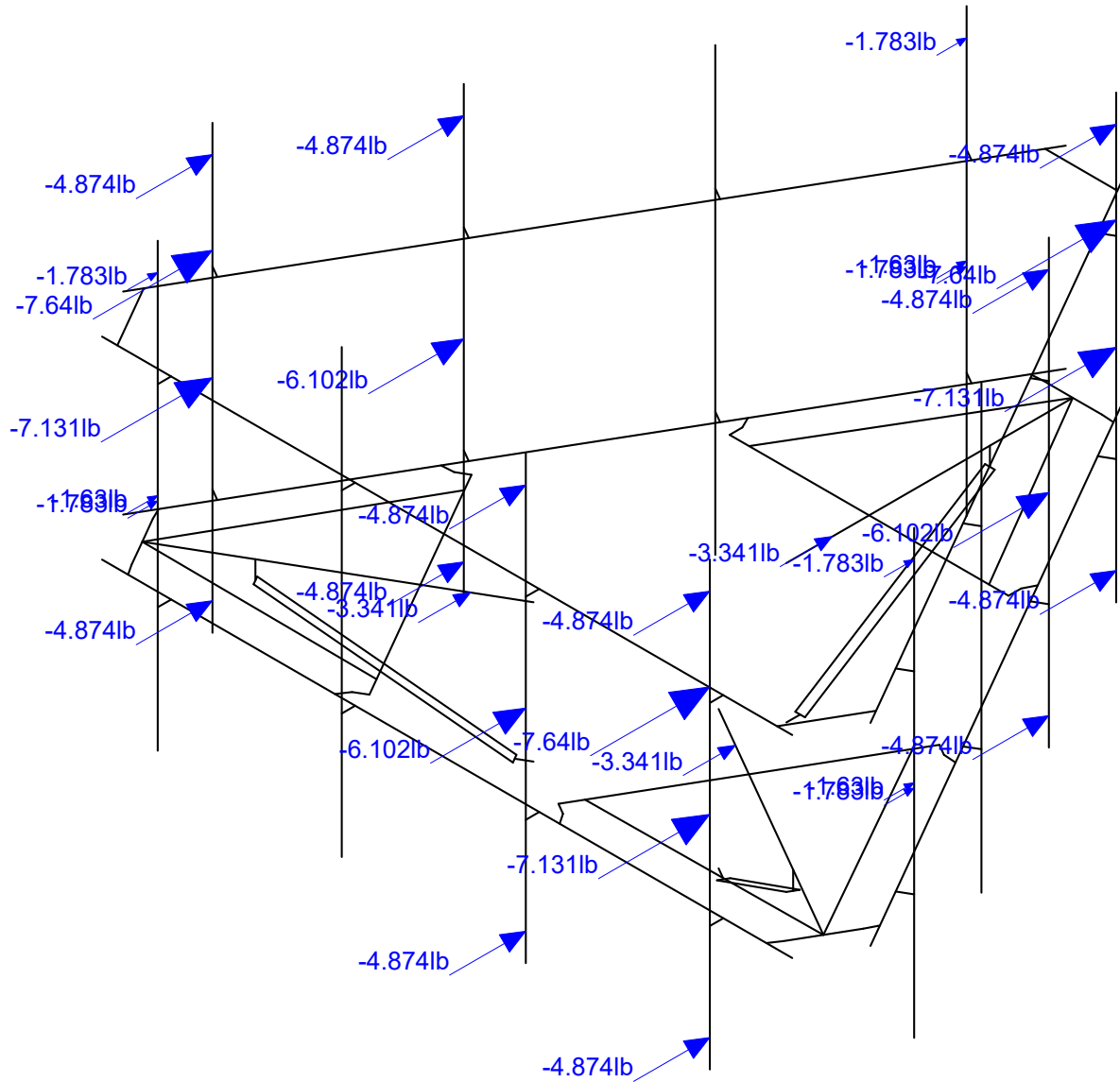
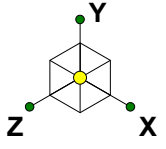






Loads: BLC 20, Ice Wind Load AZI 90  
Envelope Only Solution

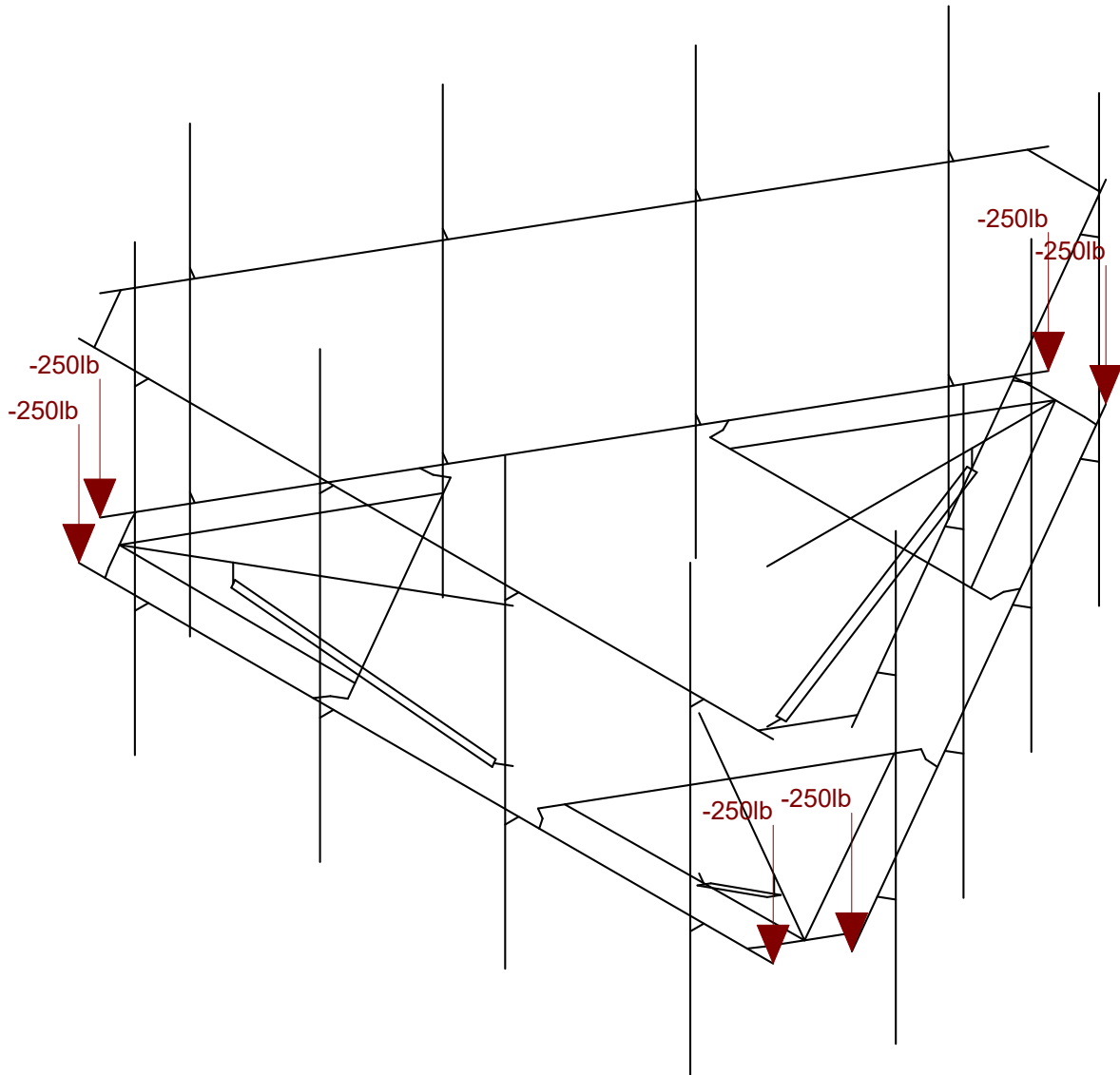
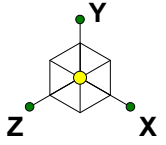
Infinigy Engineering, PLLC	CTL01064	Wind + Ice 090
MD		Dec 9, 2019 at 11:31 AM
1106-A0001-B		CTL01064_loaded.r3d



Loads: BLC 31, Seismic Load Z  
Envelope Only Solution

Infinigy Engineering, PLLC	CTL01064	Seismic Load 000
MD		Dec 9, 2019 at 11:32 AM
1106-A0001-B		CTL01064_loaded.r3d





Loads: BLC 33, Service Live Loads  
Envelope Only Solution

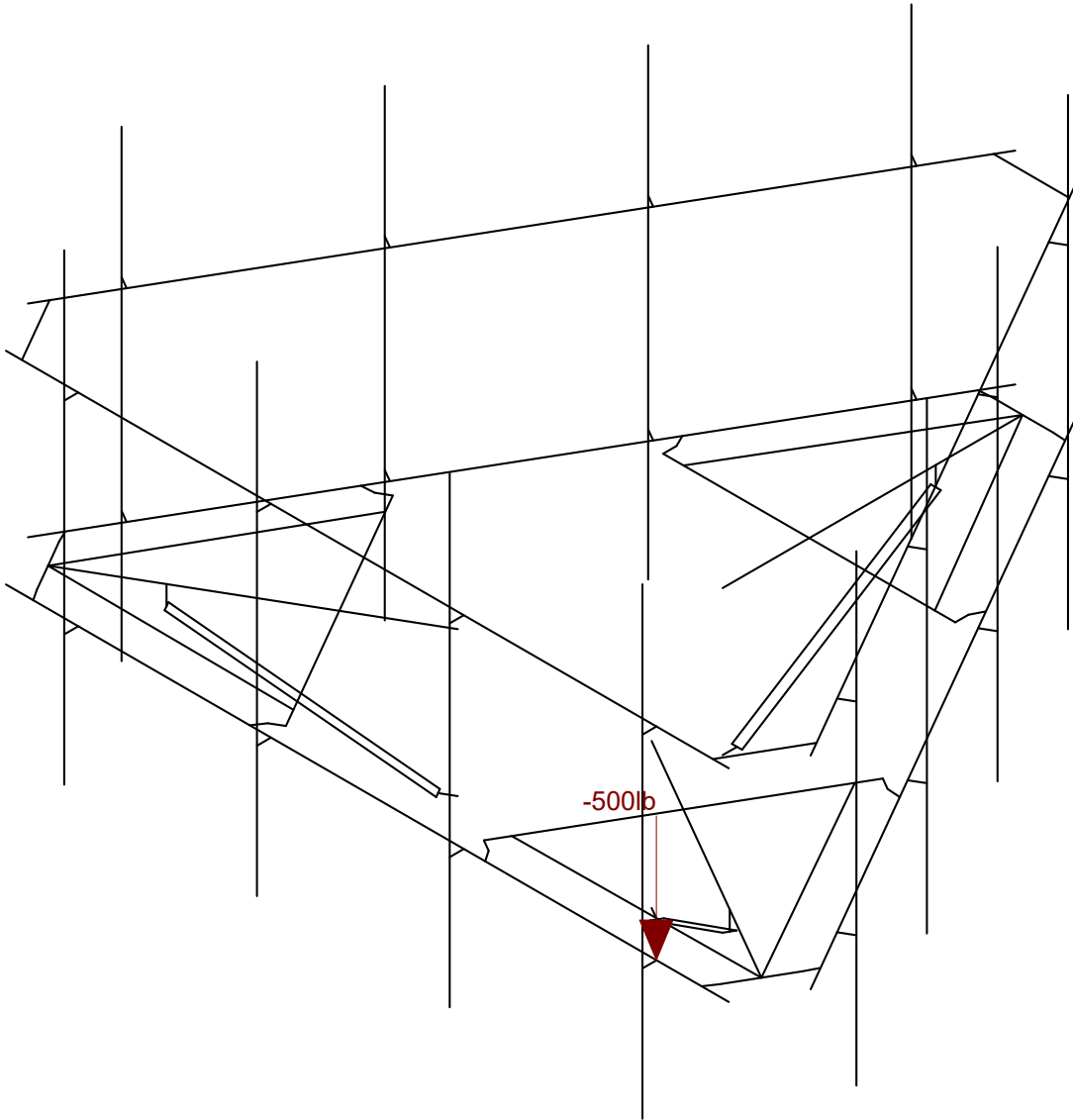
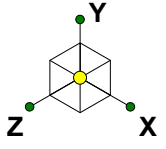
Infinigy Engineering, PLLC  
MD  
1106-A0001-B

CTL01064

Service Load

Dec 9, 2019 at 11:35 AM

CTL01064\_loaded.r3d

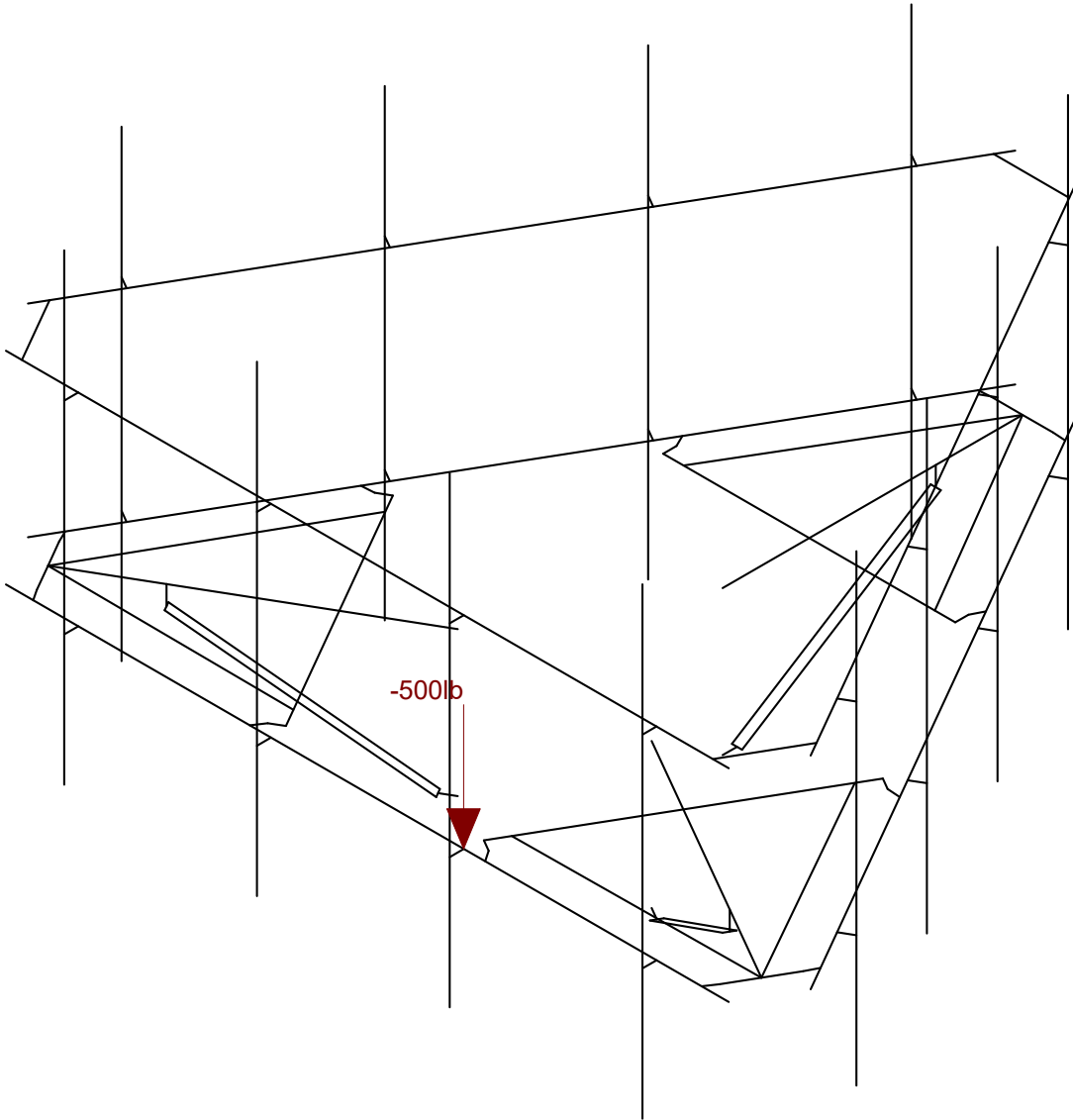
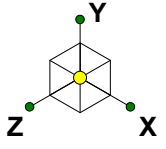


Loads: BLC 34, Maintenance Load 1  
Envelope Only Solution

Infinigy Engineering, PLLC  
MD  
1106-A0001-B

CTL01064

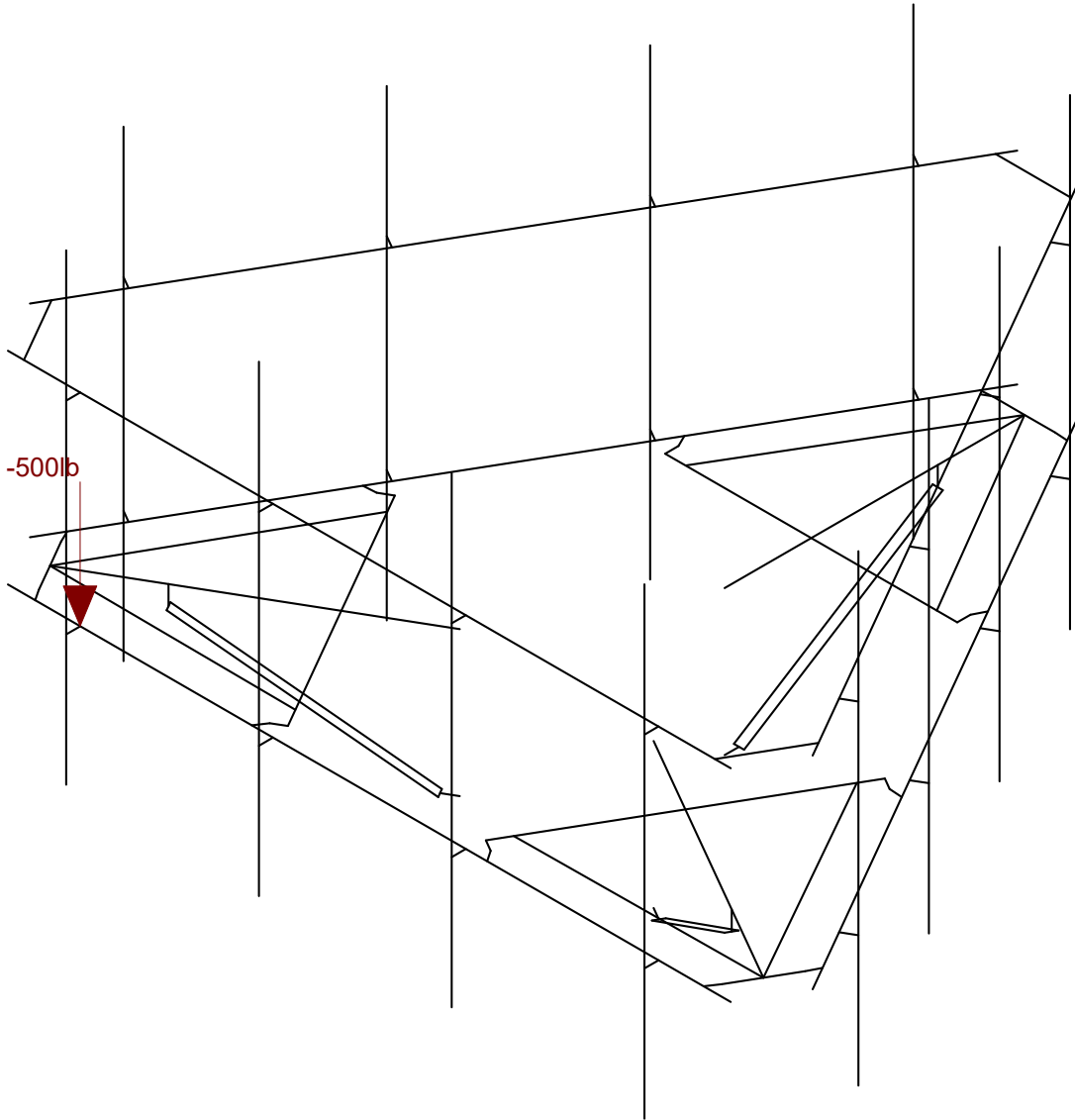
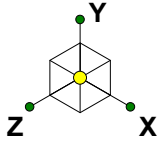
Maintenance Load 1  
Dec 9, 2019 at 11:35 AM  
CTL01064\_loaded.r3d



Loads: BLC 35, Maintenance Load 2  
Envelope Only Solution

Infinigy Engineering, PLLC	CTL01064	Maintenance Load 2
MD		Dec 9, 2019 at 11:36 AM
1106-A0001-B		CTL01064_loaded.r3d



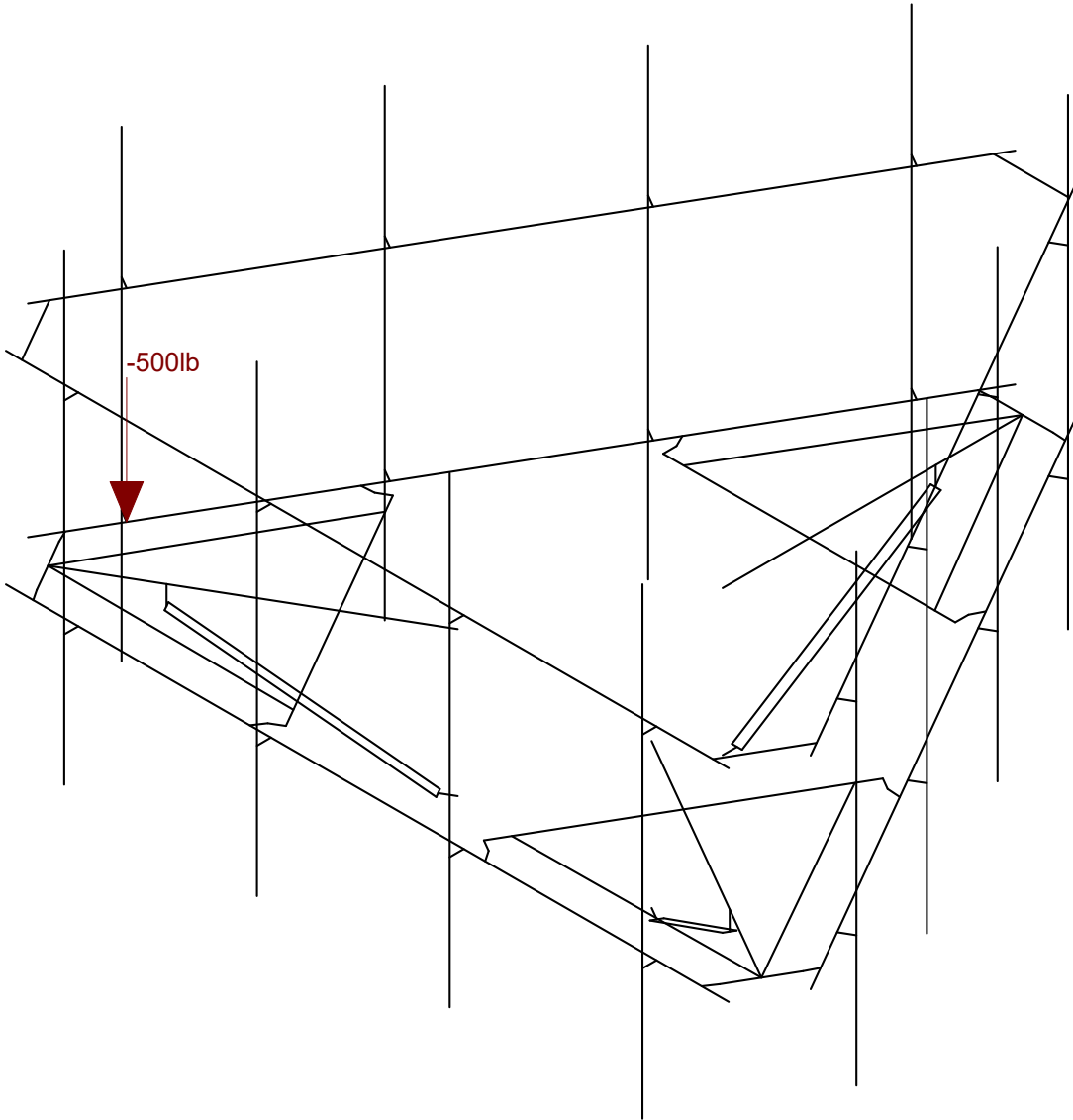
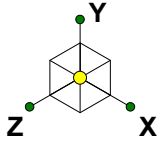


Loads: BLC 36, Maintenance Load 3  
Envelope Only Solution

Infinigy Engineering, PLLC  
MD  
1106-A0001-B

CTL01064

Maintenance Load 3  
Dec 9, 2019 at 11:36 AM  
CTL01064\_loaded.r3d



Loads: BLC 37, Maintenance Load 4  
Envelope Only Solution

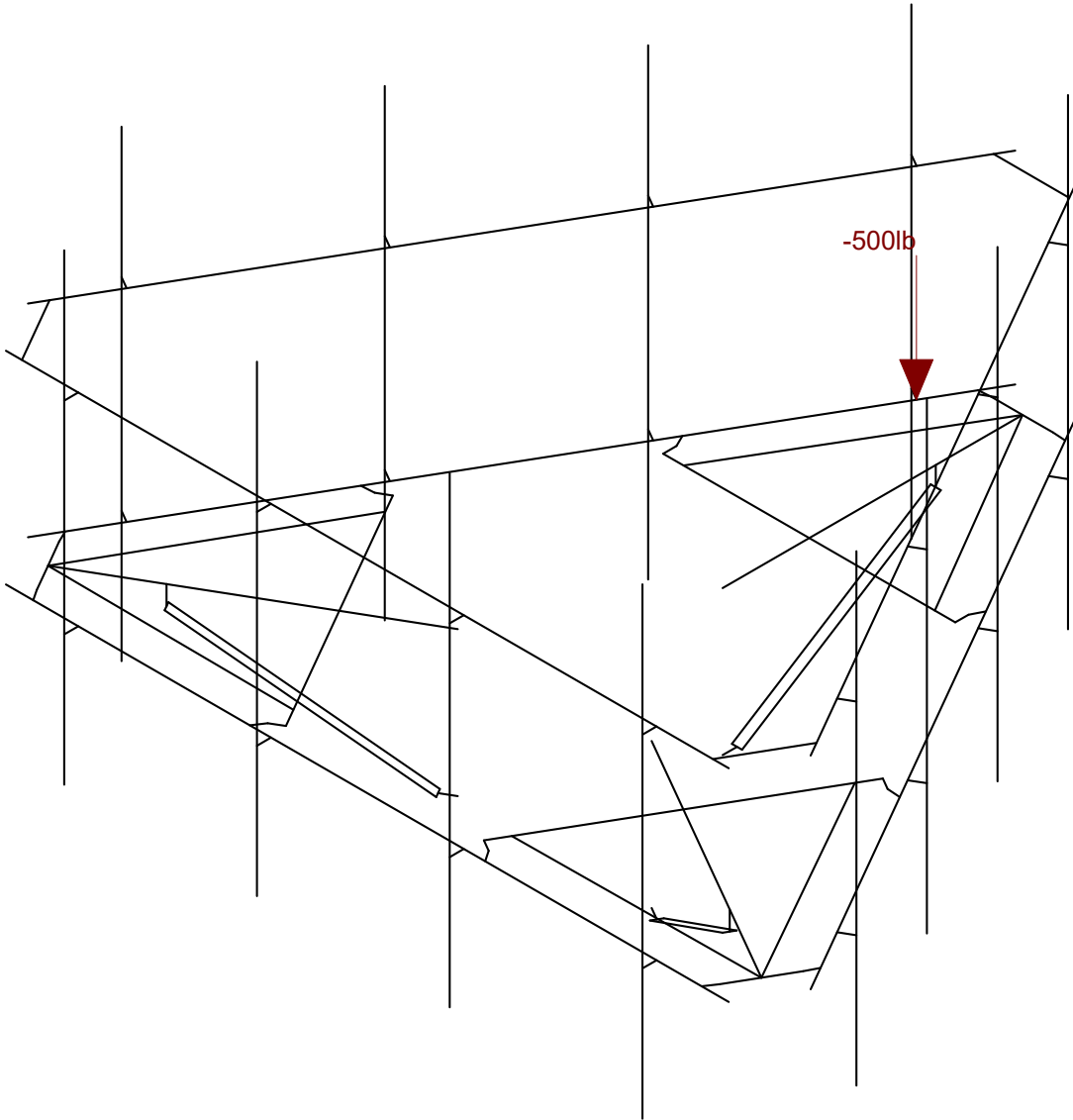
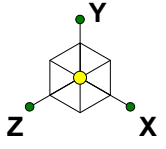
Infinigy Engineering, PLLC  
MD  
1106-A0001-B

CTL01064

Maintenance Load 4

Dec 9, 2019 at 11:36 AM

CTL01064\_loaded.r3d

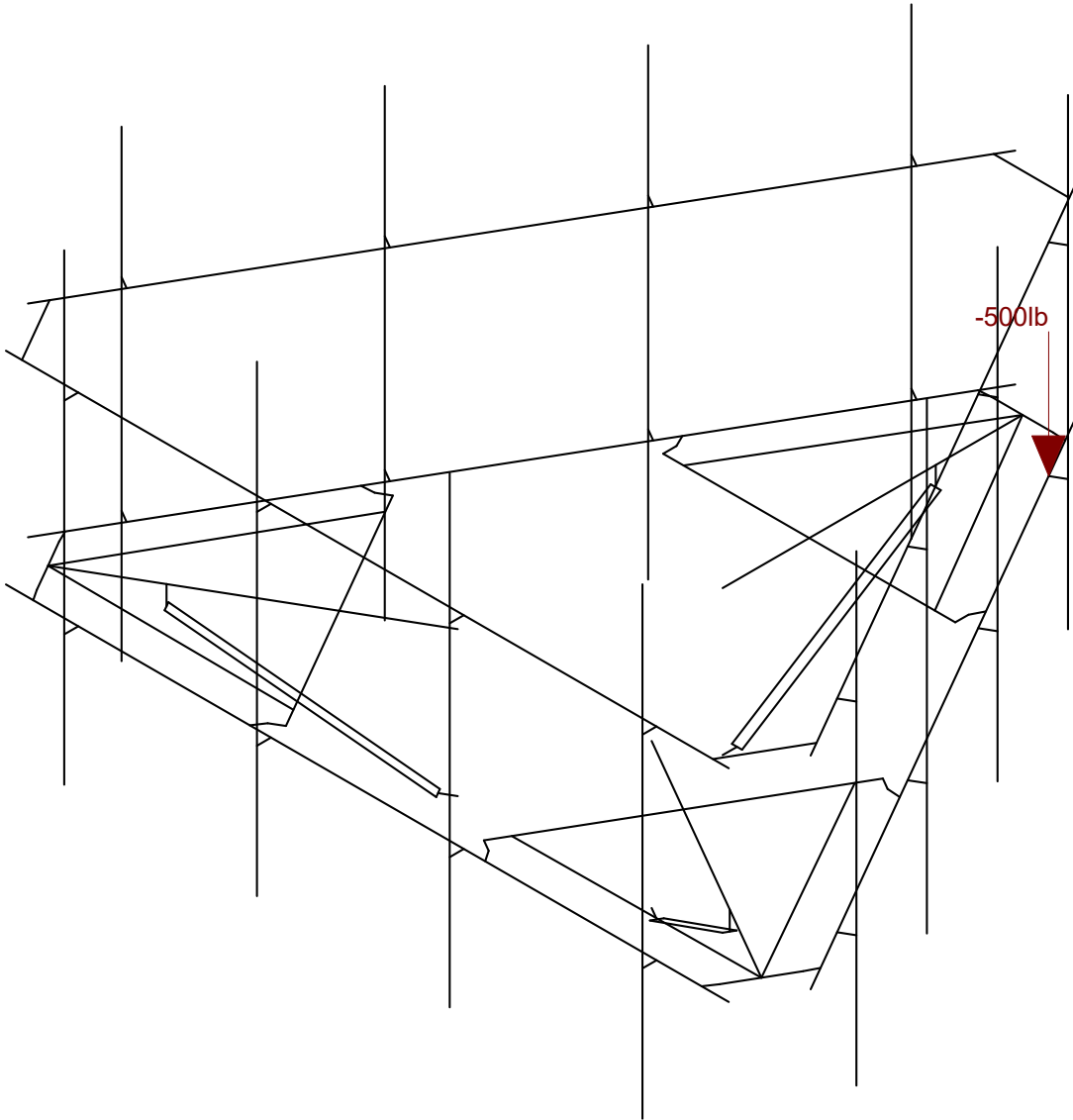
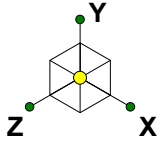


Loads: BLC 38, Maintenance Load 5  
Envelope Only Solution

Infinigy Engineering, PLLC
MD
1106-A0001-B

CTL01064

Maintenance Load 5
Dec 9, 2019 at 11:37 AM
CTL01064_loaded.r3d

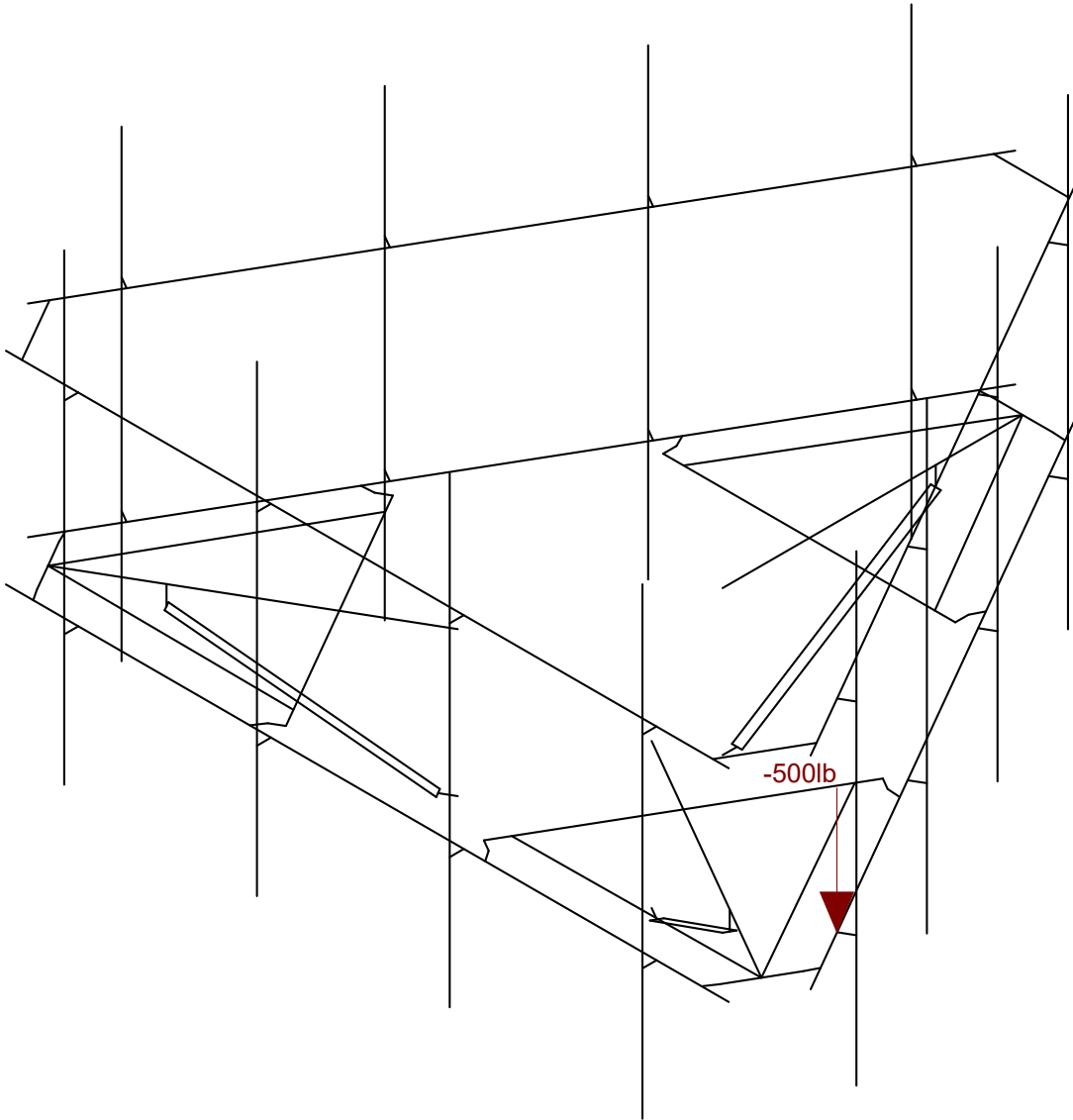
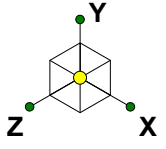


Loads: BLC 39, Maintenance Load 6  
Envelope Only Solution

Infinigy Engineering, PLLC  
MD  
1106-A0001-B

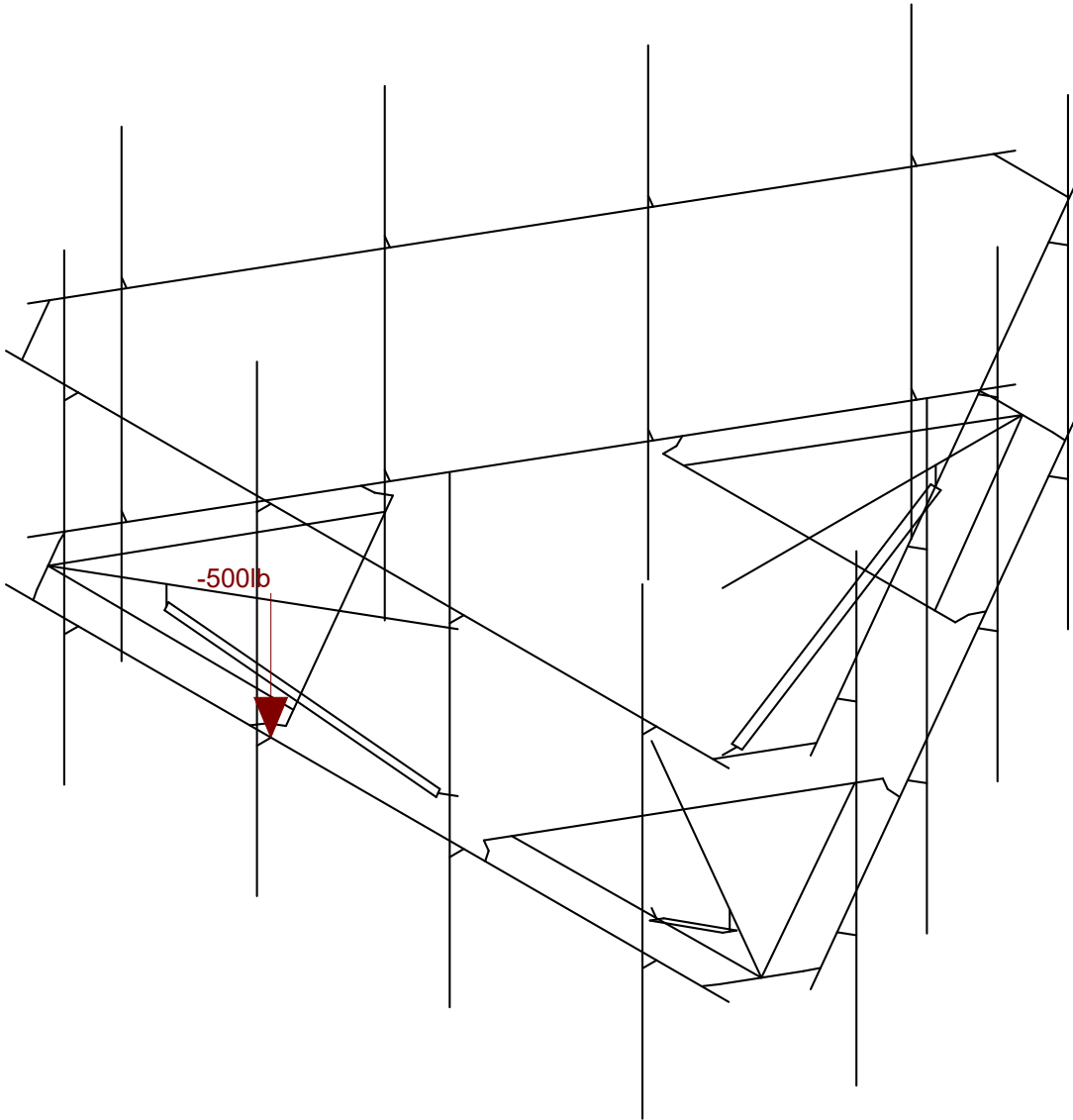
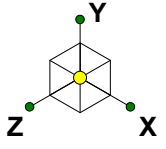
CTL01064

Maintenance Load 6  
Dec 9, 2019 at 11:37 AM  
CTL01064\_loaded.r3d



Loads: BLC 40, Maintenance Load 7  
Envelope Only Solution

Infinigy Engineering, PLLC	CTL01064	Maintenance Load 7
MD		Dec 9, 2019 at 11:37 AM
1106-A0001-B		CTL01064_loaded.r3d



Loads: BLC 41, Maintenance Load 8  
Envelope Only Solution

Infinigy Engineering, PLLC

MD

1106-A0001-B

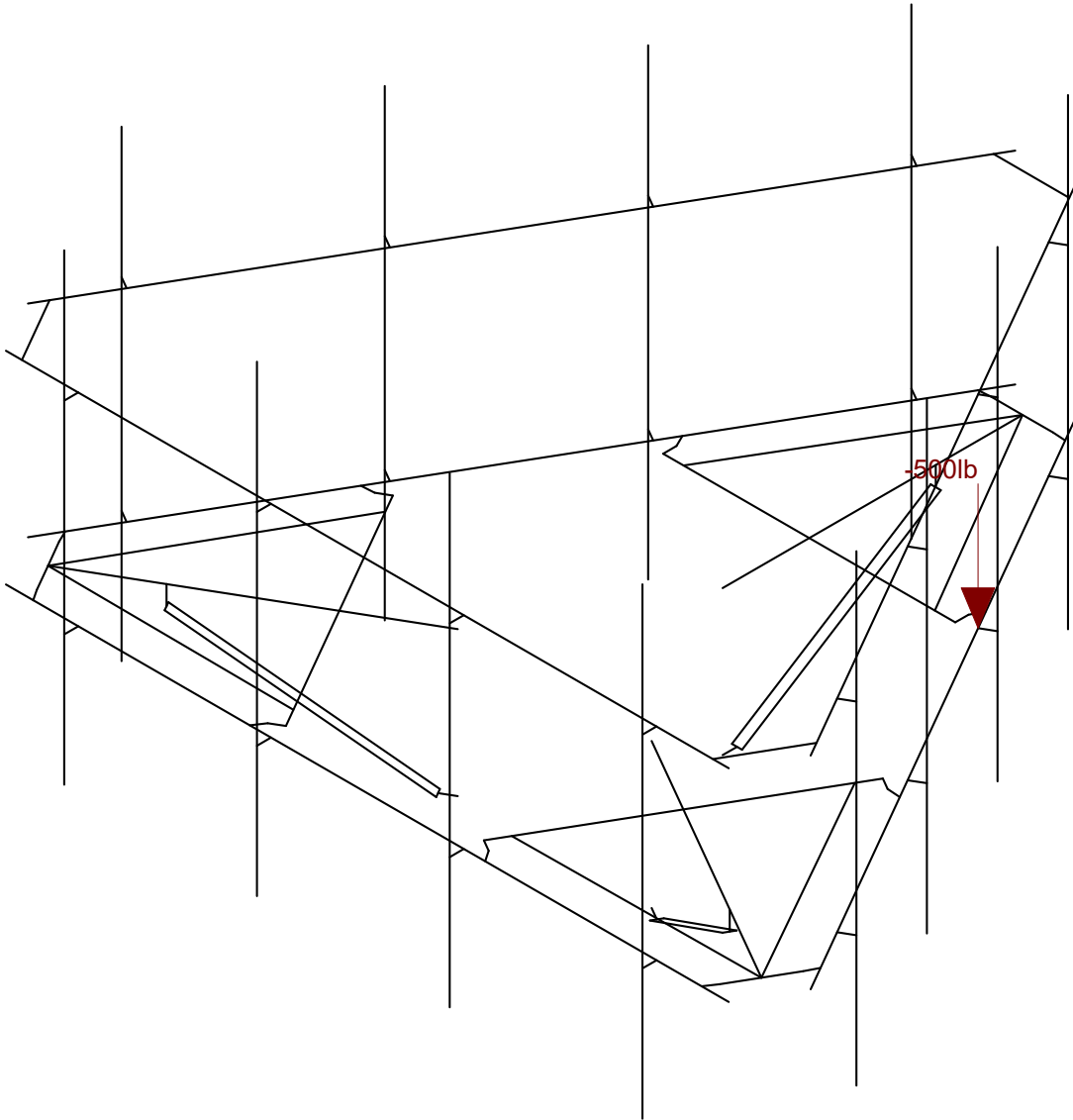
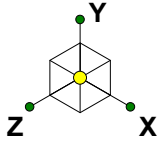
CTL01064

Maintenance Load 8

Dec 9, 2019 at 11:38 AM

CTL01064\_loaded.r3d



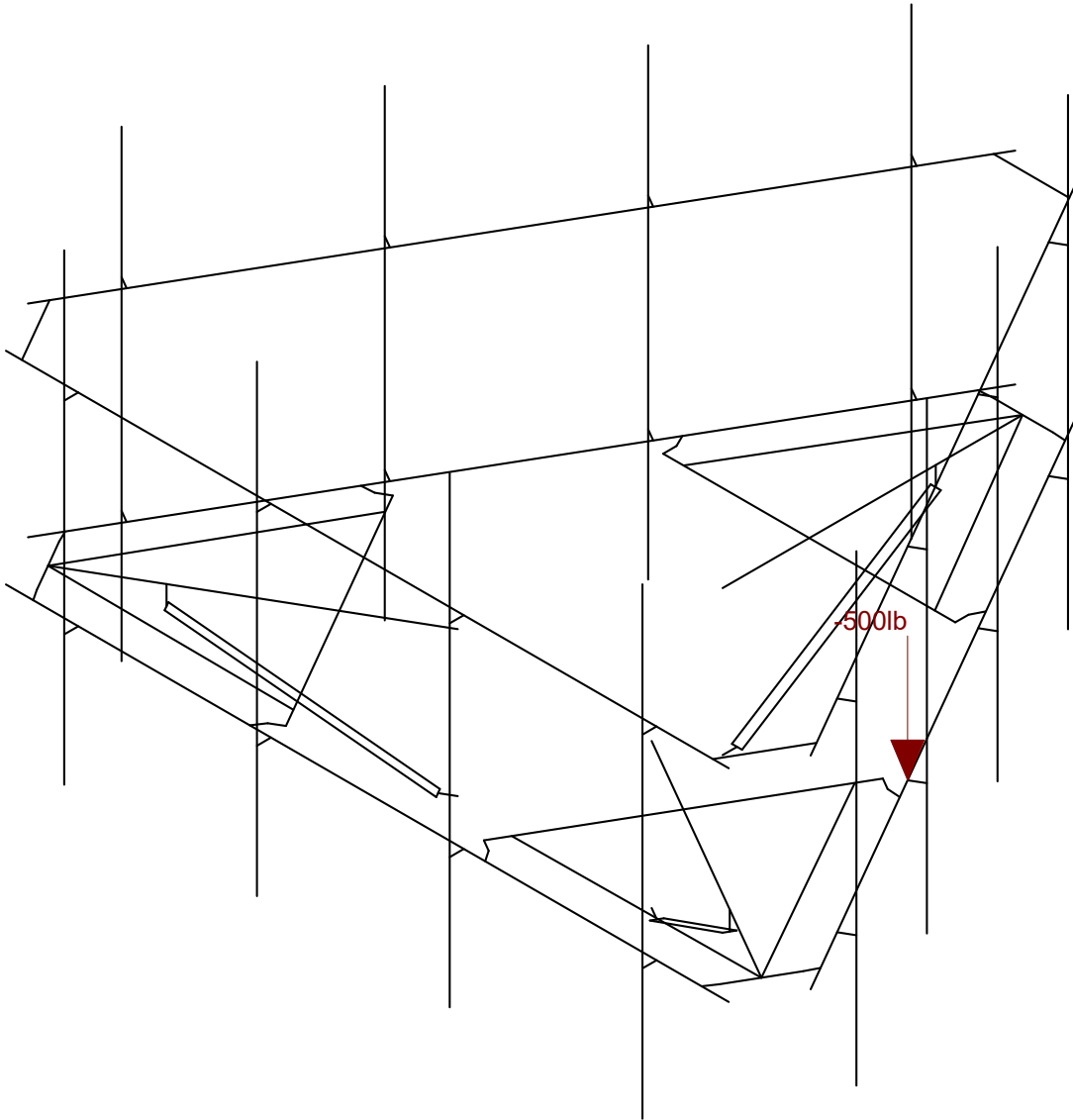
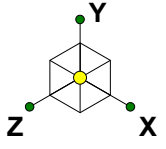


Loads: BLC 42, Maintenance Load 9  
Envelope Only Solution

Infinigy Engineering, PLLC  
MD  
1106-A0001-B

CTL01064

Maintenance Load 9  
Dec 9, 2019 at 11:38 AM  
CTL01064\_loaded.r3d

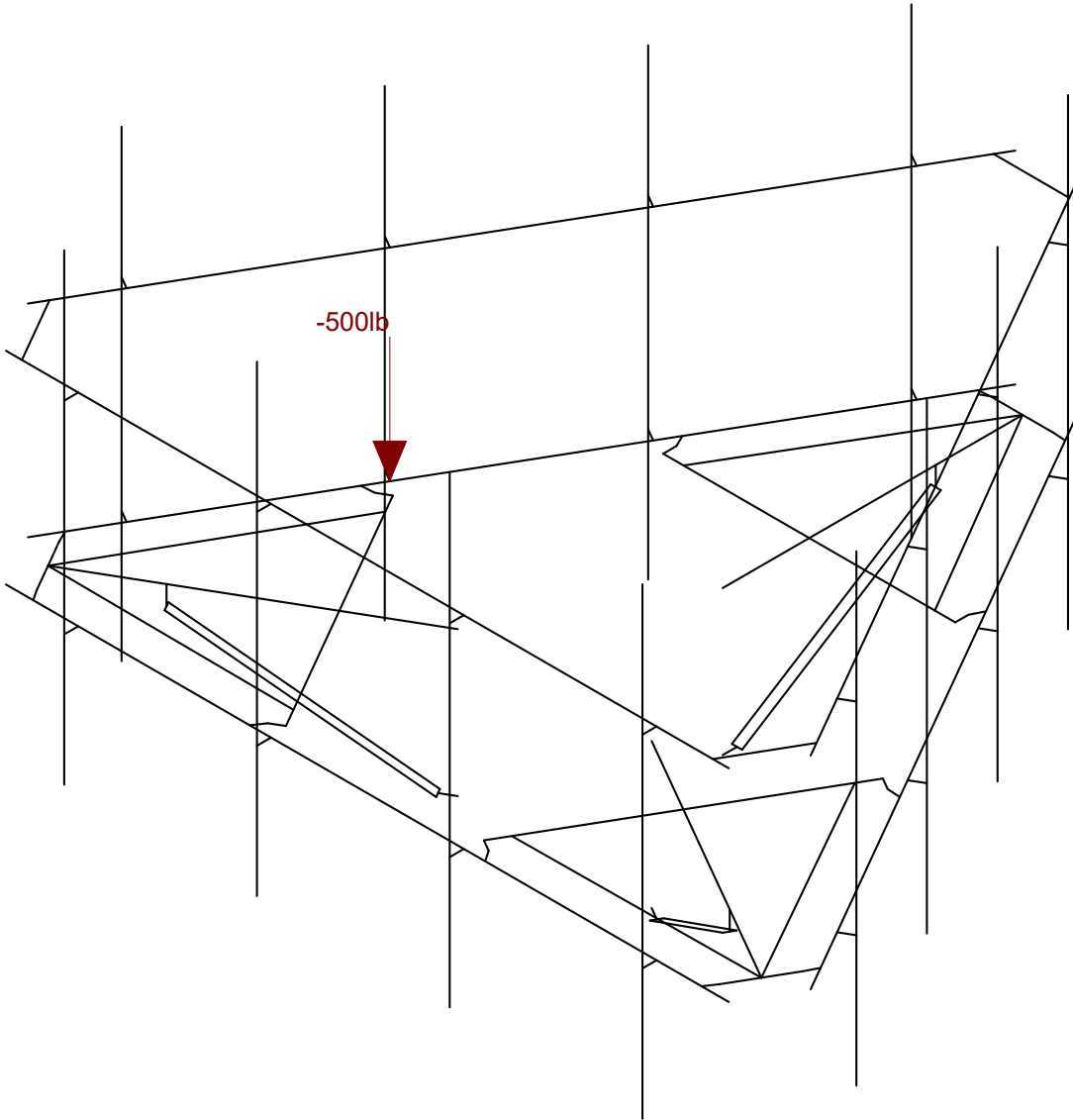
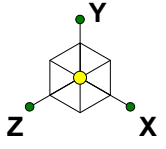


Loads: BLC 43, Maintenance Load 10  
Envelope Only Solution

Infinigy Engineering, PLLC
MD
1106-A0001-B

CTL01064

Maintenance Load 10
Dec 9, 2019 at 11:38 AM
CTL01064_loaded.r3d

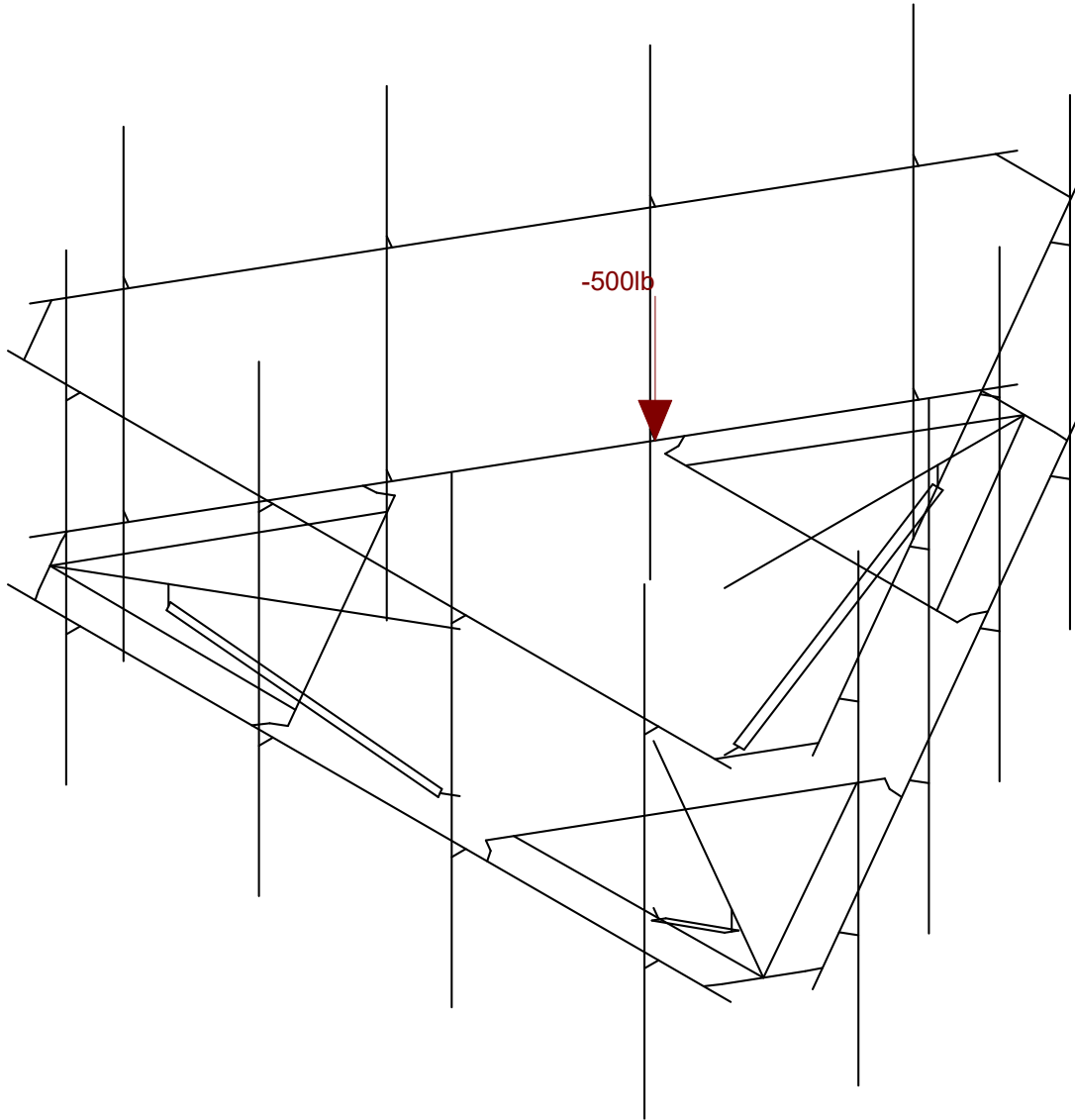
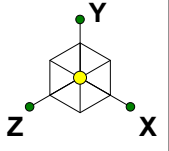


Loads: BLC 44, Maintenance Load 11  
Envelope Only Solution

Infinigy Engineering, PLLC  
MD  
1106-A0001-B

CTL01064

Maintenance Load 11  
Dec 9, 2019 at 11:39 AM  
CTL01064\_loaded.r3d



Loads: BLC 45, Maintenance Load 12  
Envelope Only Solution

Infinigy Engineering, PLLC	CTL01064	Maintenance Load 12
MD		Dec 9, 2019 at 11:39 AM
1106-A0001-B		CTL01064_loaded.r3d

## Program Inputs

PROJECT INFORMATION		
Client:	Smartlink	
Carrier:	AT&T Mobility	
Engineer:	Mike Downing	

SITE INFORMATION		
Risk Category:	II	
Exposure Category:	C	
Topo Category:	1	
Site Class:	D - Stiff Soil	
Ground Elevation:	205	ft *Rev H

MOUNT INFORMATION		
Mount Type:	Platform	
Num Sectors:	3	
Centerline AGL:	147.0	ft
Tower Height AGL:	180.0	ft

TOPOGRAPHIC DATA		
Topo Feature:	N/A	
Crest Height:	N/A	ft
Slope Distance:	N/A	ft
Crest Distance:	N/A	ft

FACTORS		
Directionality Fact. ( $K_d$ ):	0.95	
Ground Ele. Factor ( $K_e$ ):	0.99	*Rev H Only
Rooftop Speed-Up ( $K_s$ ):	1.00	*Rev H Only
Topographic Factor ( $K_{zt}$ ):	1.00	
Gust Effect Factor ( $G_h$ ):	1.0	

CODE STANDARDS		
Building Code:	2018 IBC	
TIA Standard:	TIA-222-H	
ASCE Standard:	ASCE 7-16	

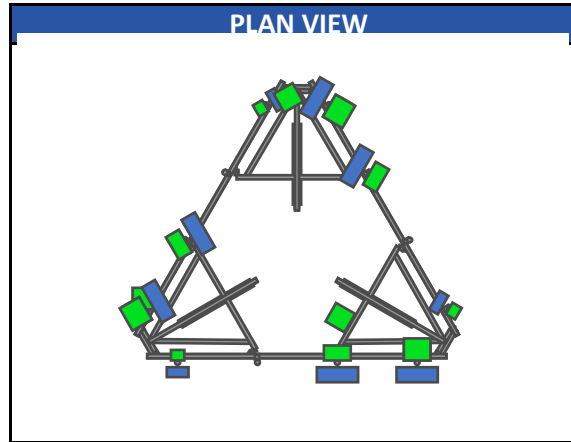
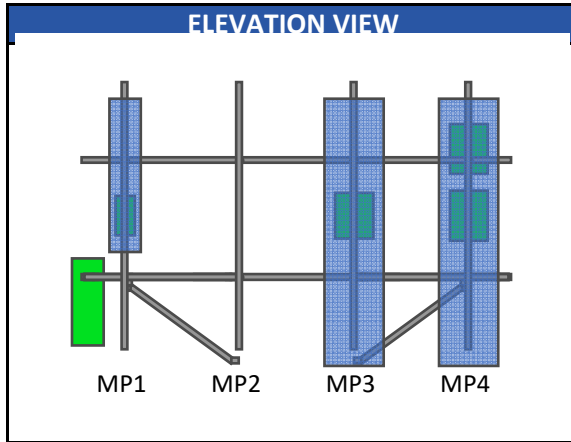
WIND AND ICE DATA		
Ultimate Wind ( $V_{ult}$ ):	121	mph
Design Wind ( $V$ ):	N/A	mph
Ice Wind ( $V_{ice}$ ):	50	mph
Base Ice Thickness ( $t_i$ ):	1	in
Flat Pressure:	97.02	psf
Round Pressure:	58.21	psf
Ice Wind Pressure:	9.94	psf

SEISMIC DATA		
Short-Period Accel. ( $S_s$ ):	0.19	g
1-Second Accel. ( $S_1$ ):	0.06	g
Short-Period Design ( $S_{DS}$ ):	0.20	
1-Second Design ( $S_{D1}$ ):	0.09	
Short-Period Coeff. ( $F_a$ ):	1.60	
1-Second Coeff. ( $F_v$ ):	2.40	
Amplification Factor ( $a_p$ ):	1.00	
Response Mod. ( $R_p$ ):	2.50	
Overstrength ( $\Omega_o$ ):	1.00	



Infinigy Wind Load Calculator V2.1.3

# Program Inputs



Infinigy Wind Load Calculator V2.1.3

APPURTENANCE INFORMATION												
Appurtenance Name	Elevation	Qty.	$K_a$	$q_z$ (psf)	$EPA_N$ (ft <sup>2</sup> )	$EPA_T$ (ft <sup>2</sup> )	Wind $F_z$ (lbs)	Wind $F_x$ (lbs)	Weight (lbs)	Seismic F (lbs)	Member ( $\alpha$ sector)	
POWERWAVE 7770.00	147.0	3	0.90	48.51	5.51	2.93	240.50	127.85	35.00	3.57	MP1	
CCI DMP65R-BU8DA	147.0	3	0.90	48.51	17.87	8.12	780.25	354.61	95.70	9.75	MP3	
CCI DMP65R-BU8DA	147.0	3	0.90	48.51	17.87	8.12	780.25	354.61	95.70	9.75	MP4	
ERICSSON B14 4478	147.0	3	0.90	48.51	1.84	1.06	80.44	46.22	59.90	6.10	MP3	
ERICSSON 4449 B5/B12	147.0	3	0.90	48.51	1.98	1.41	86.45	61.56	70.00	7.13	MP4	
ERICSSON 8843 B2/B66A	147.0	3	0.90	48.51	1.98	1.70	86.45	74.00	75.00	7.64	MP4	
POWERWAVE TT08-19DB111-001	147.0	6	0.90	48.51	0.79	0.64	34.61	28.03	16.00	1.63	MP1	
RAYCAP DC6-48-60-18-8F	147.0	3	0.90	48.51	2.90	2.90	126.65	126.65	32.80	3.34	M1	









































































**A Ya Vyf'Dc]bhi@UXg'f6 @ '%&: 'K ]pX'@UX'5 NÉ'' \$L'f7 cb]bi YXL**

	T^{\ a\ Éca^}	Öá&ç}	T æ} ä á^Za]aÉcá	Š &ca} Ž Éá
Hí	T Úí	Ý	Í Í ÉÍ	ÍÍ
Hí	T Úí	Z	ÉG ÉU	ÍÍ
Hí	T Úí	Ý	Í Í ÉÍ	ÍÍ
Hí	T Úí	Z	ÉH ÉJ	ÍÍ
HJ	T Úí	Ý	Í Í ÉÍ	G
I €	T Úí	Z	ÉH ÉÍ	G
IF	T Úí	Ý	G ÉÉ	ÍÍ
IG	T Úí	Z	ÉÍ ÉÍ	ÍÍ
I H	T H	Ý	FÉJ ÉÍ	FÉ
I I	T H	Z	É HÉG	FÉ
I Í	T ÚJ	Ý	FÉ ÉÍ	Í
I Î	T ÚJ	Z	É ÉFG	Í
I Ï	T ÚJ	Ý	FÉ ÉÍ	I J
I Ì	T ÚJ	Z	É ÉFG	I J
I J	T ÚFF	Ý	HÍ ÉÍ	Í
I €	T ÚFF	Z	ÉJÍ ÉÍ	Í
I F	T ÚFF	Ý	HÍ ÉÍ	JÉ
I G	T ÚFF	Z	ÉJÍ ÉÍ	JÉ
I H	T ÚFG	Ý	HÍ ÉÍ	Í
I I	T ÚFG	Z	ÉJÍ ÉÍ	Í
I Í	T ÚFG	Ý	HÍ ÉÍ	JÉ
I Î	T ÚFG	Z	ÉJÍ ÉÍ	JÉ
I Ï	T ÚFF	Ý	Í JÉÍ	ÍÍ
I Ì	T ÚFF	Z	É ÉGG	ÍÍ
I J	T ÚFG	Ý	Í Í ÉÍ	ÍÍ
I €	T ÚFG	Z	É HÉG	ÍÍ
I F	T ÚFG	Ý	Í Í ÉÍ	G
I G	T ÚFG	Z	É HÉG	G
I H	T ÚJ	Ý	G ÉÍ	ÍÍ
I I	T ÚJ	Z	ÉÍ ÉF	ÍÍ
I Í	T Í	Ý	FÉJ ÉÍ	FÉ
I Î	T Í	Z	É HÉG	FÉ

**A Ya Vyf'Dc]bhi@UXg'f6 @ '% : 'K ]pX'@UX'5 NÉ'' ' \$L**

	T^{\ a\ Éca^}	Öá&ç}	T æ} ä á^Za]aÉcá	Š &ca} Ž Éá
F	T ÚF	Ý	Í HÉ	Í
G	T ÚF	Z	ÉFÉÍ	Í
H	T ÚF	Ý	Í HÉ	I J
I	T ÚF	Z	ÉFÉÍ	I J
Í	T ÚH	Ý	FÍ ÉÍ	Í
Î	T ÚH	Z	ÉGFÉÍ	Í
Ï	T ÚH	Ý	FÍ ÉÍ	JÉ
Ì	T ÚH	Z	ÉGFÉÍ	JÉ
J	T ÚI	Ý	FÍ ÉÍ	Í
F€	T ÚI	Z	ÉGFÉÍ	Í
FF	T ÚI	Ý	FÍ ÉÍ	JÉ
FG	T ÚI	Z	ÉGFÉÍ	JÉ
FH	T ÚH	Ý	HÍ ÉÍ	ÍÍ
FI	T ÚH	Z	É GÉ	ÍÍ
FÍ	T ÚI	Ý	I ÉFF	ÍÍ
FÎ	T ÚI	Z	É JÉÍ	ÍÍ





























































## A Ya Vyf'8 Jgh|Vi hyX' @ UXg'f6 @ ' & : '8 Jgh''=WK jbx' @ UX'NLi7 cb|jbi YXL

	T^{ ã^ ãæ^ )	Öã^&çã}	ÚçæóT æ} æ^ã^ZãDæË) áT æ} æ^ã^ZãDæË ÚçæóS } çã} Zã Æ á	Ò) áS } çã} Zã Æ á		
JG	T JGE	UZ	€	€	€	Ã FEE
JH	T JHÖ	UZ	€	€	€	Ã FEE
JI	T JI	UZ	€	€	€	Ã FEE
JÍ	T JÍÖ	UZ	ËÍ ÆÍ J	ËÍ ÆÍ J	€	Ã FEE
JÏ	T JÏÖ	UZ	ËÍ ÆÍ J	ËÍ ÆÍ J	€	Ã FEE
JË	T JË	UZ	€	€	€	Ã FEE
JÌ	T JÌœ	UZ	€	€	€	Ã FEE
JJ	T JJœ	UZ	€	€	€	Ã FEE
FEE	T FEE	UZ	€	€	€	Ã FEE
FÆ	T FÆ	UZ	ËÍ ÆÍ J	ËÍ ÆÍ J	€	Ã FEE
FÆG	T FÆG	UZ	ËÍ ÆÍ J	ËÍ ÆÍ J	€	Ã FEE

## A Ya Vyf'8 Jgh|Vi hyX' @ UXg'f6 @ ' \$ : '8 Jgh''=WK jbx' @ UX'L L

	T^{ ã^ ãæ^ )	Öã^&çã}	ÚçæóT æ} æ^ã^ZãDæË) áT æ} æ^ã^ZãDæË ÚçæóS } çã} Zã Æ á	Ò) áS } çã} Zã Æ á		
F	TF	UY	ËÍ ÆGF	ËÍ ÆGF	€	Ã FEE
G	TH	UY	ËÍ ÆGF	ËÍ ÆGF	€	Ã FEE
H	TÍ	UY	ËÍ ÆGF	ËÍ ÆGF	€	Ã FEE
I	TÍÍÖ	UY	ËÍ ÆGF	ËÍ ÆGF	€	Ã FEE
Í	TÍÍÖ	UY	ËÍ ÆGF	ËÍ ÆGF	€	Ã FEE
Ï	TÍÍÖ	UY	ËÍ ÆGF	ËÍ ÆGF	€	Ã FEE
Ë	TÍÍÖ	UY	ËÍ ÆGF	ËÍ ÆGF	€	Ã FEE
Ì	TÍJÖ	UY	ËÍ ÆGF	ËÍ ÆGF	€	Ã FEE
J	TJœÖ	UY	ËÍ ÆGF	ËÍ ÆGF	€	Ã FEE
F€	TGG	UY	€	€	€	Ã FEE
FF	TGH	UY	€	€	€	Ã FEE
FG	TG	UY	€	€	€	Ã FEE
FH	TG	UY	€	€	€	Ã FEE
FI	THE	UY	€	€	€	Ã FEE
FÍ	TH	UY	€	€	€	Ã FEE
FÏ	TH	UY	€	€	€	Ã FEE
FË	TIG	UY	€	€	€	Ã FEE
FÌ	TIH	UY	€	€	€	Ã FEE
FJ	TII	UY	€	€	€	Ã FEE
G€	TII	UY	€	€	€	Ã FEE
GF	TII	UY	€	€	€	Ã FEE
GG	TII	UY	€	€	€	Ã FEE
GH	TI€	UY	€	€	€	Ã FEE
G	TII	UY	€	€	€	Ã FEE
Ğ	TII	UY	€	€	€	Ã FEE
Ĝ	TIJ	UY	€	€	€	Ã FEE
Ĝ	TJ€	UY	€	€	€	Ã FEE
Ĝ	TJG	UY	€	€	€	Ã FEE
GJ	TJH	UY	€	€	€	Ã FEE
H€	TJÍ	UY	€	€	€	Ã FEE
HF	TJÏ	UY	€	€	€	Ã FEE
HG	TJÌ	UY	€	€	€	Ã FEE
HH	TJJ	UY	€	€	€	Ã FEE
HI	TJFOE	UY	ËÍ ÆEF	ËÍ ÆEF	€	Ã FEE
HÍ	TJGÖ	UY	ËÍ ÆEF	ËÍ ÆEF	€	Ã FEE
HÏ	TJHÖ	UY	ËÍ ÆEF	ËÍ ÆEF	€	Ã FEE
HË	TJIOE	UY	ËÍ ÆEF	ËÍ ÆEF	€	Ã FEE











**Input Forces**



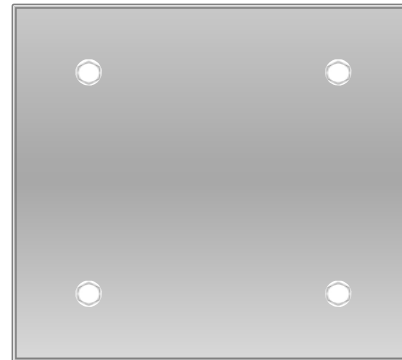
**Bolt Calculation Tool, V1.0**

PROJECT DATA	
Site Name:	Windham Windham CTR
Site Number:	CTL01064
Job Code:	1106-A0001-B

APPLIED LOADS		
Bolt Tension:	4031.57	lbs
Bolt Shear:	913.14	lbs

BOLT PROPERTIES		
Bolt Type:	Bolt	-
Bolt Diameter:	0.625	in
Bolt Grade:	A325	-
# of Bolts:	4	-
Threads Excluded?	No	-

BOLT CHECK	
Tensile Strength	20340.15
Shear Strength	12425.24
Tensile Usage	19.8%
Shear Usage	7.3%
Combined Shear and Tension	4.5%
Result	Pass



# Mount Analysis and Mapping Checklist

## Mount Detail

Mount Type	Platform
Mount Model Number	RMQP-496-HK
If RT, then how is it attached	
If WT, then how is it attached	

## Inspector

(Vendor name)
(Inspector name)
(Contact phone)
(Contact email)

## Mount Mapping Detail

Material condition (discoloration, cracks, pitting)	
Mfg. drawing, cutsheet, spec. available?	
Date of mount mapping	
Searched prior OOM for material?	
Photos of installation available?	
Original tower drawings show mounts?	
Searched for previous mapping?	
Is latest mod design (dwgs) available?	
Is the latest structural analysis available?	

## Project Detail

Market	Connecticut
	MRCTB040530, MRCTB040444v
	MRCTB040469, MRCTB040708
	MRCTB040763
PACE Project ID	Windham Windham CTR
Site Name	Windham, CT
City, State	2
RFDS Version Number	
Initiative (list mult., if applicable)	
Tower Owner	
SA Vendor	
A&E firm (for structural analysis)	
A&E firm (for mapping, if different)	
Last amendment date or last site visit	

## Site Information

Original Lease Date	
FA Code	10035442
Tower Type	Monopole
Tower Height (Ft)	180
AT&T Rad Center # 1	147
AT&T Rad Center # 2	

## Measurements and Deliverables on sketches

Pipe / Angle dimensions and lengths	
bolt diameters and lengths	
U-Bolt diameters and lengths	
Steel Grade if indicated	
welds :length and sizes	
appurtenance relative locations	
Grounding Condition	

Equipment Detail Alpha Sector	Model Number for Ant, MW, RRU, TMA, Squid / Size of Coax, DC-Fiber	Height / COAX-DC-Fiber			
	Trunks & Jumpers	Trunk & Jumper	Lengths in feet	Approz Az	mount position location
Antennas	0	0	0	0	0
MW	0	0	0	0	0
RRU	0	0	0	0	0
TMA	0	0	0	0	0
Coax	0	0	0	0	0
RET (not imbedded in antenna)	0	0	0	0	0
DC Cable	0	0	0	0	0
Fiber Cable	0	0	0	0	0
Squid	0	0	0	0	0

Equipment Detail Beta Sector	Model Number for Ant, MW, RRU, TMA, Squid / Size of Coax, DC-Fiber	Height / COAX-DC-Fiber			
	Trunks & Jumpers	Trunk & Jumper	Lengths in feet	Approz Az	mount position location
Antennas	0	0	0	0	0
MW	0	0	0	0	0
RRU	0	0	0	0	0
TMA	0	0	0	0	0
Coax	0	0	0	0	0
RET (not imbedded in antenna)	0	0	0	0	0
DC Cable	0	0	0	0	0
Fiber Cable	0	0	0	0	0
Squid	0	0	0	0	0

Equipment Detail Gamma Sector	Model Number for Ant, MW, RRU, TMA, Squid / Size of Coax, DC-Fiber	Height / COAX-DC-Fiber			
	Trunks & Jumpers	Trunk & Jumper	Lengths in feet	Approz Az	mount position location
Antennas	0	0	0	0	0
MW	0	0	0	0	0
RRU	0	0	0	0	0
TMA	0	0	0	0	0
Coax	0	0	0	0	0
RET (not imbedded in antenna)	0	0	0	0	0
DC Cable	0	0	0	0	0
Fiber Cable	0	0	0	0	0
Squid	0	0	0	0	0

## Comments

--

