



**City of Batavia**  
 Community Development Department  
 100 North Island Avenue  
 Batavia IL 60510  
 Phone (630) 454-2700  
 Fax (630) 454-2775

# Application for Certificate of Appropriateness

**Property**

Address 901 N Batavia Ave, Batavia, IL 60510

Owner's Name T-Mobile Central, LLC

Property Identification Number 12 - 15 - 176 - 008

Phone Number 773-444-5400

Existing/Proposed Zoning Ordinances  Yes  No  
 Zoning MU

Mobile Number \_\_\_\_\_

E-Mail \_\_\_\_\_

Submittal Date 10 / 06 / 16

**Project Description :**

Swapping antennas and tower-mounted amplifiers; adding ancillary equipment. Please refer to enclosed construction drawings.

Applicant's Name Amanda Wegrzyn, NTP Wireless

Applicant Address 520 W. Erie, Suite 400

Phone Number 773-275-5712 ext. 290

Mobile Number \_\_\_\_\_

E-Mail amanda.wegrzyn@ntpwireless.com

Applicant Signature *Amanda Wegrzyn* as agent on behalf of T-Mobile Central LLC

Owner Signature \_\_\_\_\_

**TYPE OF WORK**  
 (Check All That Apply)

- |  |   |  |
|--|---|--|
| <input checked="" type="checkbox"/> Exterior Alteration/Repair | <input type="checkbox"/> New Construction   | <input type="checkbox"/> Demolition              |
|  | <input type="checkbox"/> Primary Structure  | <input type="checkbox"/> Whole Primary Structure |
|  | <input type="checkbox"/> Addition           | <input type="checkbox"/> Part Primary Structure  |
|  | <input type="checkbox"/> Garage/Outbuilding | <input type="checkbox"/> Garage/outbuilding      |
|  | <input type="checkbox"/> Other _____        | <input type="checkbox"/> Relocation of Building  |

**Additional Information to be Submitted with Application – Digital Format If Available**

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> Exterior Alteration/Repair            | <input type="checkbox"/> Porch – Maintenance and Minor Repair        |
| <input type="checkbox"/> Architectural Feature (Decorative Ornamentation) | <input type="checkbox"/> Porch – Major Repair and Reconstruction     |
| <input type="checkbox"/> Awning or Canopy                                 | <input type="checkbox"/> Retaining Walls                             |
| <input type="checkbox"/> Deck   | <input type="checkbox"/> Roof (Change in Shape, Features, Materials) |
| <input type="checkbox"/> Door   | <input type="checkbox"/> Satellite Dish                              |
| <input type="checkbox"/> Fence  | <input type="checkbox"/> Security Doors or Windows                   |
| <input type="checkbox"/> Gutters  | <input type="checkbox"/> Sidewalks                                   |
| <input type="checkbox"/> Light Fixture                                    | <input type="checkbox"/> Shutters                                    |
| <input type="checkbox"/> Mechanical System Units                          | <input type="checkbox"/> Siding                                      |
| <input type="checkbox"/> Masonry Cleaning, Repointing, Painting           | <input type="checkbox"/> Signs                                       |
| <input type="checkbox"/> Material Change (wood, brick, etc)               | <input type="checkbox"/> Solar Collectors                            |
| <input type="checkbox"/> Painting (paint removal etc)                     | <input type="checkbox"/> Storm Doors or Windows                      |
| <input type="checkbox"/> Paving (Parking Lot, Driveways, Landscaping)     | <input type="checkbox"/> Windows, Skylights                          |
| <input type="checkbox"/> Photographs of building(s)                       | <input checked="" type="checkbox"/> Others <u>Cell Tower</u>         |

Attach a detailed description of all work to be done for each item. Include the following materials where appropriate and check appropriate box if included

- A. Drawings, photographs, specifications, manufacturer's illustrations or other description of proposed changes to the building's exterior, to-scale drawings with dimensions will be required for major changes in design (e.g., roofs, facades, porches, and other prominent architectural features)
- B. If application is for any feature not on the primary structure, include a site plan. A site plan will not be required if there is no change to the existing structure or any proposed new structure.
- C. If changes to building materials are proposed, include samples.

**New Construction/Additions**

Include the following materials where appropriate and check appropriate box if included.

- For primary structure, outbuilding or addition:
  - 1. Fully dimensioned site plan
  - 2. Elevation drawings of each façade with dimensions and specifications
  - 3. Drawings, photographs, samples and manufacturer's illustrations
- Drawings or other descriptions of site improvements, e.g., fences sidewalks, lighting, pavements, decks.

**Structure Demolition**

- 1. Photographic evidence supporting the reason for demolition
- 2. Describe the proposed reuse of the site, including drawings of any proposed new structure
- 3. If economic hardship is claimed, include evidence that hardship exists (Criteria set forth in Section 7-2 of Title 12)

**Structure Relocation**

- 1. Explain what will be moved, where and why.
- 2. If a structure will be moved into the district from outside, include photographs.
- 3. Include a site plan showing proposed location of the structure on the new parcel. Describe any site features that may be altered or disturbed (e.g., foundations, walls)

**THIS FORM IS NOT A BUILDING PERMIT APPLICATION**

**FOR OFFICE USE ONLY BELOW**

Property is: Significant      Contributing      Non-Contributing

\_\_\_\_\_  
Signature of Historic Preservation Commission Chair

\_\_\_\_\_  
Date of Commission Review

City Council Action:    Date \_\_\_\_\_ Vote Record \_\_\_\_\_ Not Applicable \_\_\_\_\_

Conditions: YES\*/ NO

\*See Attachment

The Batavia Historic Preservation Commission, or its authorized agent, has reviewed the proposed work and has determined that it is in accordance with the applicable criteria set forth in Section 6-2 of Title 12 of the Code of the City of Batavia. Accordingly, this Certificate of Appropriateness is issued.

Any change in the proposed work after issuance of this Certificate of Appropriateness shall require inspection by Commission staff to determine whether the work is still in substantial compliance with the Certificate of Appropriateness.

***This certificate is not a permit, does not authorize work to begin, does not ensure building code compliance, and does not imply that any zoning review has taken place.***

# T-Mobile® stick together®

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stick together

8550 BRYN MAWR, SUITE 100  
CHICAGO, ILLINOIS 60631

SITE NAME: CAMPANA RT

PROJECT TYPE: L700

SITE NUMBER: CH47840A

JURISDICTION: CITY OF BATAVIA

CITY: BATAVIA, IL 60510

SITE TYPE: ROOFTOP

SITE ADDRESS: 901 NORTH BATAVIA AVE.

**FULLERTON**  
ENGINEERING DESIGN

1100 E. WOODFIELD ROAD, SUITE 500  
SCHAUMBURG, ILLINOIS 60173  
TEL: 847-908-8400  
www.FullertonEngineering.com

REGIONAL MAP	SCOPE OF WORK	PROJECT INFORMATION	SHEET INDEX																																				
	<p>SCOPE OF WORK:</p> <ol style="list-style-type: none"> <li>REPLACE (3) EXISTING ANTENNAS W/ (3) NEW ANTENNAS</li> <li>REMOVE (3) EXISTING TMA UNITS</li> <li>REMOVE (3) EXISTING FRIA(S) RF MODULES</li> <li>REMOVE (1) EXISTING FXFB(S) RF MODULE</li> <li>INSTALL (3) NEW FRBG RF MODULES</li> <li>INSTALL (2) NEW FXFC RF MODULES</li> <li>INSTALL NEW RF JUMPERS</li> <li>REPLACE (2) EXISTING FSME W/ (1) NEW FSMF W/ (1) FBBA</li> <li>INSTALL (2) NEW FBBC SUB-MODULES</li> <li>REUSE EXISTING COAX CABLES</li> </ol>	<p>SITE NAME: CAMPANA RT SITE NUMBER: CH47840A</p> <p>SITE ADDRESS: 901 NORTH BATAVIA AVE. BATAVIA, IL 60510 KANE CITY OF BATAVIA</p> <p>COUNTY: ZONING JURISDICTION:</p> <p>SOURCE: (FROM RFDS) LATITUDE: 41.86544300' (41° 51' 55.59") LONGITUDE: -88.31532090' (-88° 18' 55.16") GROUND ELEVATION: 711'</p> <p><u>BUILDING OWNER:</u> - CONTACT: - ADDRESS: -</p> <p>EMAIL: - PHONE: -</p> <p><u>PROJECT MANAGER:</u> T-MOBILE CONTACT: CHRISTOPHER LYTLE ADDRESS: 8550 W BRYN MAWR AVE. STE 100 CHICAGO, IL 60631 EMAIL: Chris.Lytile@T-Mobile.com PHONE: 815-641-5714</p> <p><u>CONSTRUCTION MANAGER:</u> T-MOBILE CONTACT: - EMAIL: - PHONE: -</p> <p><u>A&amp;E FIRM:</u> FULLERTON ENGINEERING CONSULTANTS, INC. CONTACT: POLINA KOSEVA EMAIL: pkoseva@fullertonengineering.com PHONE: 847-908-8476</p>	<table border="1"> <thead> <tr> <th>SHEET</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>T-1</td> <td>TITLE SHEET</td> </tr> <tr> <td>C-1</td> <td>ROOF PLAN</td> </tr> <tr> <td>C-2</td> <td>EQUIPMENT PLAN</td> </tr> <tr> <td>C-3</td> <td>ELEVATION</td> </tr> <tr> <td>C-4</td> <td>ANTENNA LAYOUT</td> </tr> <tr> <td>C-5</td> <td>ANTENNA DETAILS AND SPECIFICATIONS</td> </tr> <tr> <td>C-5A</td> <td>RFDS AND CABLE SPECIFICATIONS</td> </tr> <tr> <td>C-6</td> <td>CONFIGURATION DIAGRAM</td> </tr> <tr> <td>EG-1</td> <td>GROUNDING DETAILS</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>#</th> <th>DATE</th> <th>DESCRIPTION</th> <th>INT.</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>9/21/16</td> <td>90% REVIEW</td> <td>RD</td> </tr> <tr> <td>B</td> <td>9/22/16</td> <td>REVISION</td> <td>RD</td> </tr> <tr> <td>O</td> <td>9/23/16</td> <td>FINAL</td> <td>PK</td> </tr> </tbody> </table>	SHEET	DESCRIPTION	T-1	TITLE SHEET	C-1	ROOF PLAN	C-2	EQUIPMENT PLAN	C-3	ELEVATION	C-4	ANTENNA LAYOUT	C-5	ANTENNA DETAILS AND SPECIFICATIONS	C-5A	RFDS AND CABLE SPECIFICATIONS	C-6	CONFIGURATION DIAGRAM	EG-1	GROUNDING DETAILS	#	DATE	DESCRIPTION	INT.	A	9/21/16	90% REVIEW	RD	B	9/22/16	REVISION	RD	O	9/23/16	FINAL	PK
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	<p>CONTRACTOR SHALL FURNISH ALL MATERIAL WITH THE EXCEPTION OF T-MOBILE SUPPLIED MATERIAL. ALL MATERIAL SHALL BE INSTALLED BY CONTRACTOR, UNLESS STATED OTHERWISE</p>	<p><u>BUILDING OWNER:</u> - CONTACT: - ADDRESS: -</p> <p>EMAIL: - PHONE: -</p> <p><u>PROJECT MANAGER:</u> T-MOBILE CONTACT: CHRISTOPHER LYTLE ADDRESS: 8550 W BRYN MAWR AVE. STE 100 CHICAGO, IL 60631 EMAIL: Chris.Lytile@T-Mobile.com PHONE: 815-641-5714</p> <p><u>CONSTRUCTION MANAGER:</u> T-MOBILE CONTACT: - EMAIL: - PHONE: -</p> <p><u>A&amp;E FIRM:</u> FULLERTON ENGINEERING CONSULTANTS, INC. CONTACT: POLINA KOSEVA EMAIL: pkoseva@fullertonengineering.com PHONE: 847-908-8476</p>	<p><b>APPLICABLE CODES</b></p> <p>ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THIS PLANS NEEDS TO BE CONSTRUCTED TO PERMIT WORK NOT CONFORMING TO THESE CODES.</p> <p><u>BUILDING CODE:</u> 2006 INTERNATIONAL BUILDING CODE</p> <p><u>ELECTRICAL CODE:</u> 2005 NATIONAL ELECTRICAL CODE</p> <p><u>ACCESSIBILITY REQUIREMENTS:</u></p> <ul style="list-style-type: none"> <li>FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION</li> <li>ADA ACCESS REQUIREMENTS ARE NOT REQUIRED</li> <li>THIS FACILITY DOES NOT REQUIRE POTABLE WATER AND WILL NOT PRODUCE ANY SEWAGE</li> </ul>																																				
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I HEREBY CERTIFY THAT THESE DRAWING WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND CONTROL, AND TO THE BEST OF MY KNOWLEDGE AND BELIEF COMPLY WITH THE REQUIREMENTS OF ALL APPLICABLE CODES.



SITE NAME  
**CAMPANA RT**

SITE NO.  
**CH47840A**

SITE ADDRESS  
901 NORTH BATAVIA AVE.  
BATAVIA, IL 60510

SHEET NAME  
**TITLE SHEET**

SHEET NUMBER  
**T-1**



DRAWING SCALED TO 11"x17"

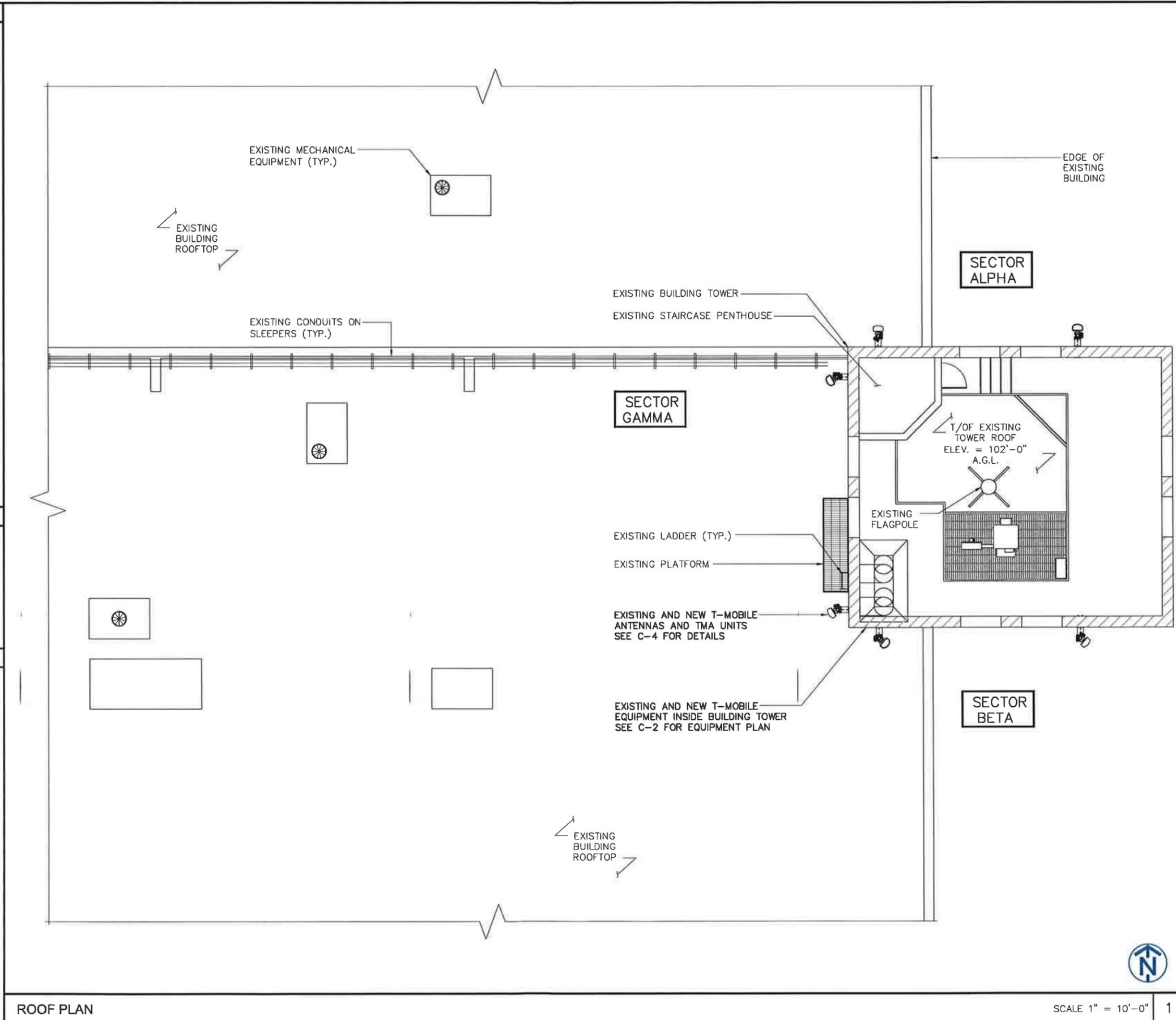
GENERAL ABBREVIATIONS	
AFF	ABOVE FINISHED FLOOR
AGL	ABOVE GRADE LEVEL
AMSL	ABOVE MEAN SEA LEVEL
APPROX	APPROXIMATE
ATS	AUTOMATIC TRANSFER SWITCH
AWG	AMERICAN WIRE GAUGE
BLDG	BUILDING
CL	CENTERLINE
CLR	CLEAR
COL	COLUMN
CONC	CONCRETE
CND	CONDUIT
DWG	DRAWING
FT	FOOT(FEET)
EGB	EQUIPMENT GROUND BAR
ELEC	ELECTRICAL
EMT	ELECTRICAL METALLIC TUBING
ELEV	ELEVATION
EQUIP	EQUIPMENT
(E)	EXISTING
EXT	EXTERIOR
FND	FOUNDATION
F	FIBER
GA	GAUGE
GALV	GALVANIZED
GPS	GLOBAL POSITIONING SYSTEM
GND	GROUND
LP	LIQUID PROPANE
MAX	MAXIMUM
MFR	MANUFACTURER
MGB	MASTER GROUND BAR
MIN	MINIMUM
MTS	MANUAL TRANSFER SWITCH
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
OE/OT	OVERHEAD ELECTRIC/TELCO
PPC	POWER PROTECTION CABINET
PL	PROPERTY LINE
RGS	RIGID GALVANIZED STEEL
IN	INCH(ES)
INT	INTERIOR
LB(S), #	POUND(S)
SF	SQUARE FOOT
STL	STEEL
TYP	TYPICAL
UE/UT	UNDERGROUND ELECTRIC/TELCO
UNO	UNLESS NOTED OTHERWISE
VIF	VERIFY IN FIELD
W/	WITH
XFMR	TRANSFORMER

**TELECOM ABBREVIATIONS**

RRU	REMOTE RADIO UNIT
TMA	TOWER MOUNTED AMPLIFIER

**SYMBOLS**

	REVISION
	WORK POINT
	UTILITY POLE
	BRICK
	COMPRESSED STONE
	CONCRETE
	EARTH
	GRAVEL
	CENTERLINE
	PROPERTY LINE
	LEASE LINE
	EASEMENT LINE
	FENCE
	CHAINLINK
	WOOD
	WROUGHT IRON
	ELECTRIC
	OVERHEAD
	UNDERGROUND
	FIBER
	OVERHEAD
	UNDERGROUND
	TELEPHONE
	OVERHEAD
	UNDERGROUND
	DCPOWER



ROOF PLAN

SCALE 1" = 10'-0" 1

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TEL: 847-908-8400  
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LICENSED PROFESSIONAL ENGINEER  
STATE OF ILLINOIS

DANIEL W. SMITH  
062-066258

SITE NAME  
**CAMPANA RT**

SITE NO.  
**CH47840A**

SITE ADDRESS  
901 NORTH BATAVA AVE.  
BATAVA, IL 60510

SHEET NAME  
**ROOF PLAN**

SHEET NUMBER  
**C-1**

NOTES  
 MAX. DISTANCE BETWEEN CUBE &  
 FRBG SHOULD NOT EXCEED 32.8 FT.

1. NOTES:  
 2. INSTALL (1) NEW 25A DC BREAKER PER  
 FRBG IN SSC  
 3. REPLACE EXISTING SAR-F WITH SAR-M

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SITE NAME

CAMPANA RT

SITE NO.

CH47840A

SITE ADDRESS

901 NORTH BATAVA AVE.  
 BATAMA, IL 60510

SHEET NAME

EQUIPMENT PLAN

SHEET NUMBER

C-2

PROJECT# 2016.0332.0027

- (1) EXISTING FSMF SYSTEM MODULE  
 (1) EXISTING FXFB RF MODULE  
 (2) EXISTING FRIE RF MODULE  
 MOUNTED INSIDE EXISTING RACK

EXISTING ACCESS GATE  
 (TYP.)  
 EXISTING ACCESS DOOR  
 (TYP.)

- (1) EXISTING ESMB SYSTEM MODULE  
 (2) EXISTING FSMF SYSTEM MODULES  
 (1) EXISTING FXFB RF MODULE  
 (2) EXISTING FRIE RF MODULE  
 TO BE REUSED

EXISTING ENTRY PORTS  
 (ABOVE)

EXISTING MODULES  
 TO REMAIN

EXISTING T-MOBILE  
 SSC CABINET TO  
 REMAIN

EXISTING CONDUITS  
 ATTACHED TO WALL

EXISTING CIENA

EXISTING CHAIN-LINK FENCES

EXISTING WINDOW (TYP.)

EXISTING BUILDING TOWER



- EXISTING RACK W/ (2) NEW FXFC,  
 (1) NEW FSMF W/ (1) FBBA, (2)  
 NEW FBBC INSTALLED ON EXISTING  
 FSMF AND (3) EXISTING MODULES  
 [(1) ESMB, (1) FXFB AND (2) FRIE]

EXISTING ACCESS GATE  
 (TYP.)  
 EXISTING ACCESS DOOR  
 (TYP.)

- 1" CONDUIT FROM SSC TELCO  
 BOX TO CUBE TELCO BOX  
 2" CONDUIT FROM SSC POWER  
 BOX TO CUBE POWER BOX

EXISTING ENTRY PORTS  
 (ABOVE)

EXISTING MODULES  
 TO REMAIN

EXISTING T-MOBILE  
 SSC CABINET

- 2" CONDUIT FROM  
 SSC POWER BOX  
 TO HOFFMAN BOX

EXISTING CONDUITS  
 ATTACHED TO WALL

EXISTING CIENA

EXISTING CHAIN-LINK FENCES

- (3) NEW FRBG RF MODULES AND  
 (1) NEW 12"x12"x4" HOFFMAN  
 BOX MOUNTED ON EXISTING WALL

EXISTING WINDOW (TYP.)

EXISTING BUILDING TOWER



EXISTING EQUIPMENT PLAN

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

FINAL EQUIPMENT PLAN

SCALE: 3/16" = 1'-0" 2

**NOTES:**

1. CALCULATIONS FOR THE STRUCTURE AND ANTENNA MOUNTS WERE PREPARED BY FULLERTON AND THOSE CALCULATIONS CERTIFY THE CAPACITY OF THE STRUCTURE TO SUPPORT THE NEW EQUIPMENT
2. CABLES NOT SHOWN FOR CLARITY



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CAMPANA RT

SITE NO.

CH47840A

SITE ADDRESS

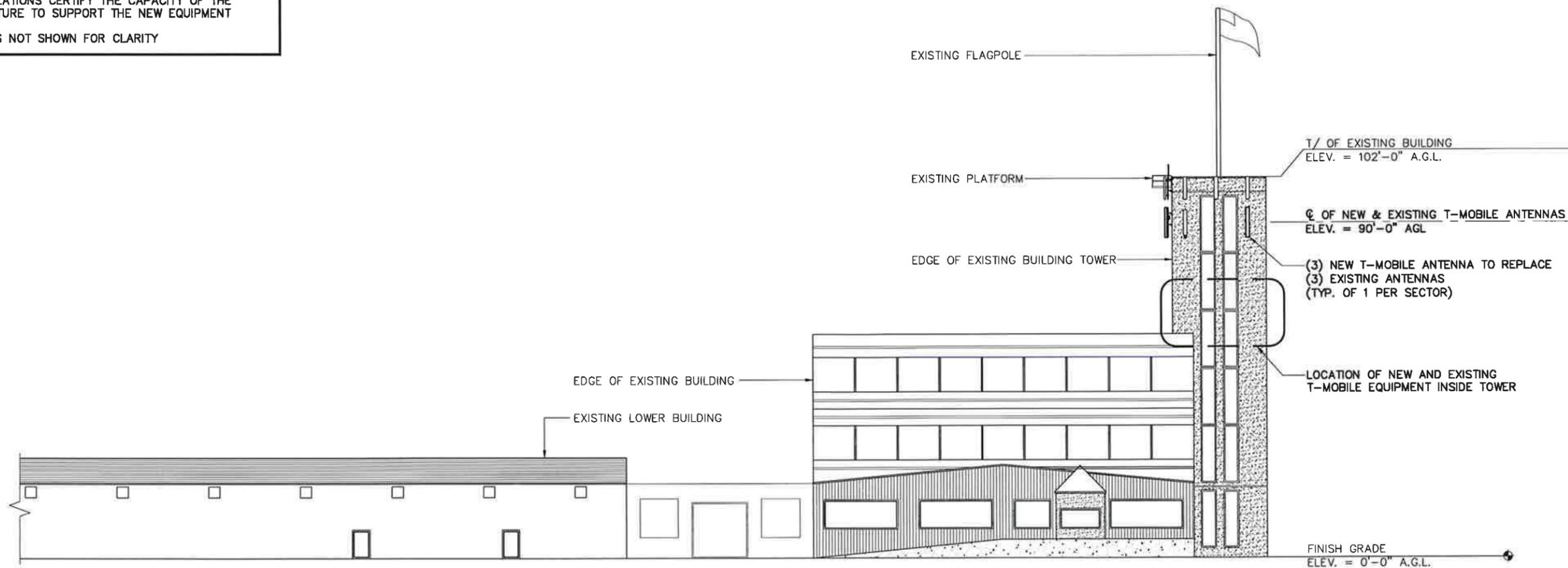
901 NORTH BATAMA AVE.  
BATAMA, IL 60510

SHEET NAME

ELEVATION

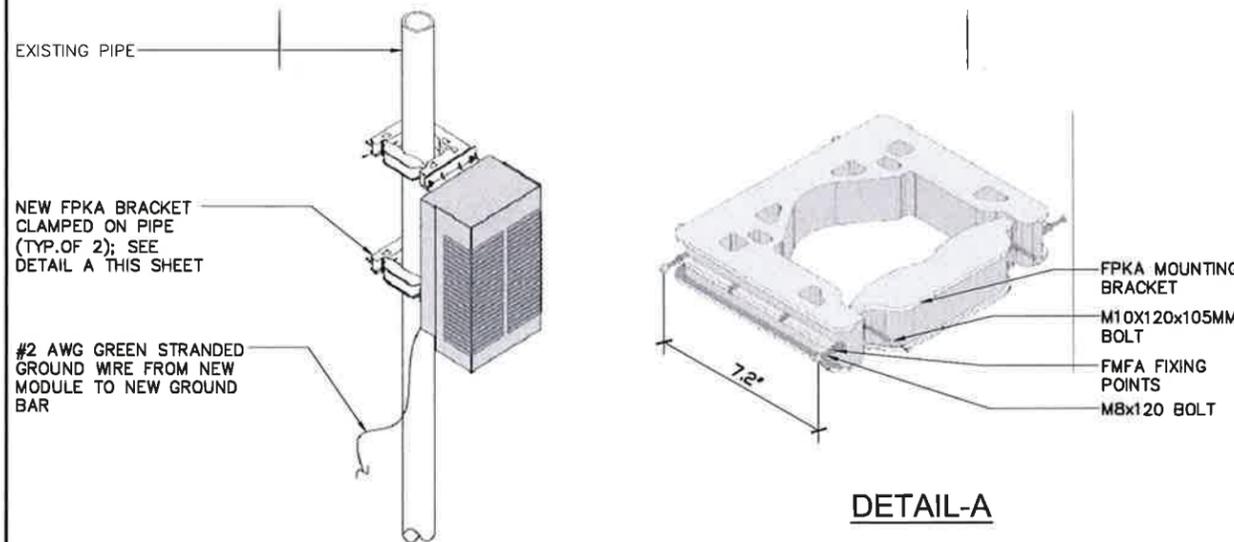
SHEET NUMBER

C-3



**ELEVATION**

SCALE: N.T.S. 1

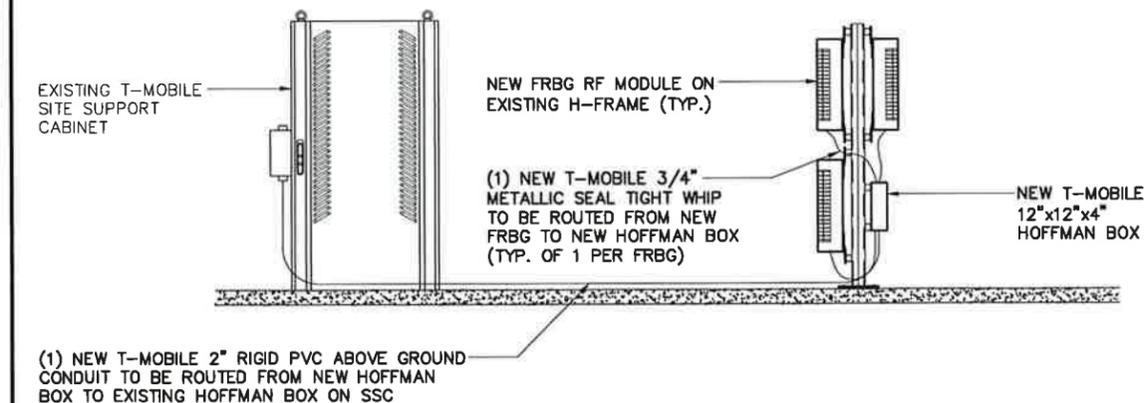


**TYPICAL FRBG UNIT MOUNTING DETAIL**

SCALE: N.T.S. 2

**NOTES:**

1. G.C. TO ZIP TIE DC RUBBER BOOT TO THE OUTSIDE OF EACH 3/4" SEAL TIGHT WHIP
2. GC TO INSTALL (2) #8 TELCO FLEX WIRES (1) BLACK & (1) BLUE PER FRBG



**POWER ROUTING DIAGRAM FOR FRBG**

SCALE: N.T.S. 3

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**CH47840A**

SITE ADDRESS

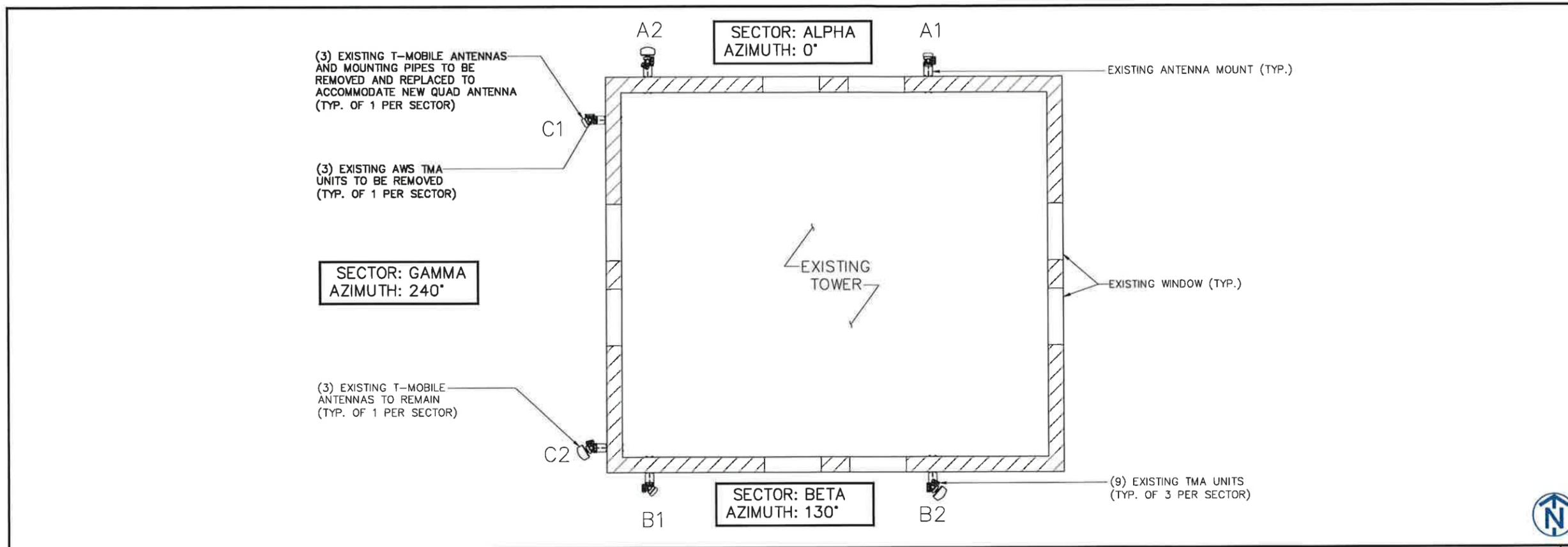
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BATAVIA, IL 60510

SHEET NAME

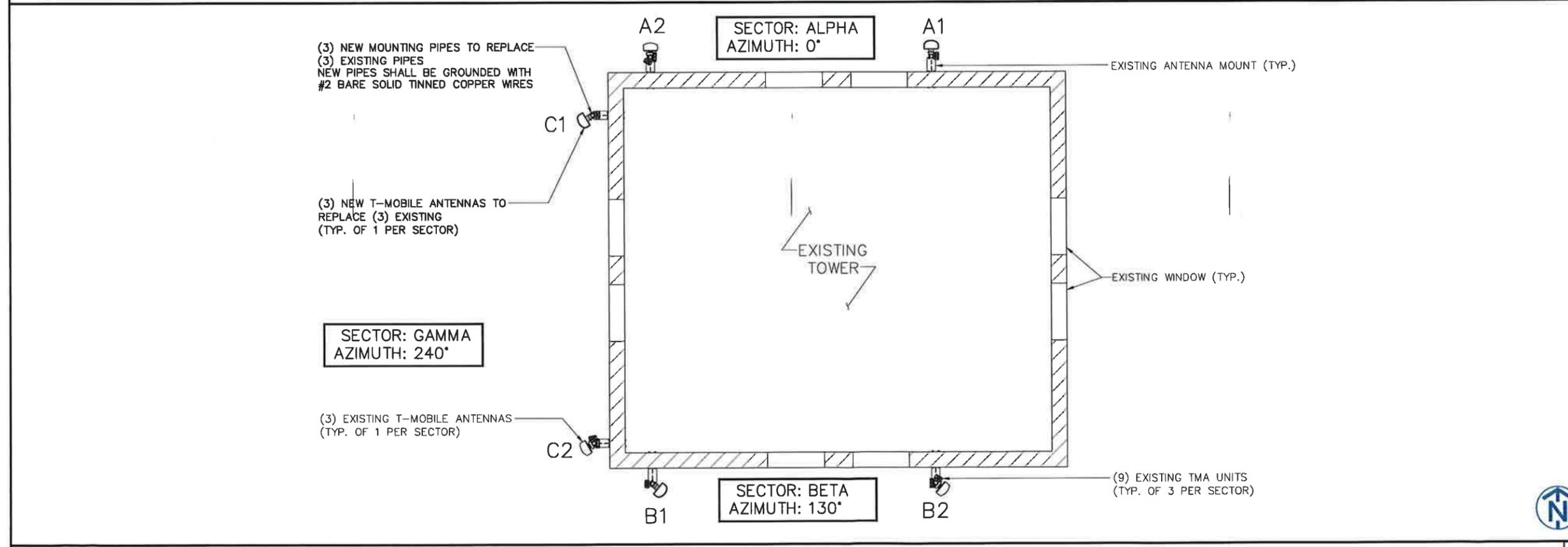
**ANTENNA LAYOUT**

SHEET NUMBER

**C-4**



EXISTING ANTENNA LAYOUT SCALE: 1/8" = 1'-0" 1



FINAL ANTENNA LAYOUT SCALE: 1/8" = 1'-0" 2

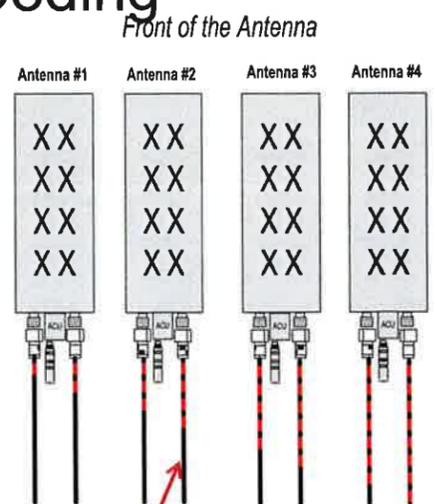
LOC.	AZI. (DEG)	ANT. C (FT)	TECH.	ANTENNA MODEL #	MECH-TILT (DEG)	ELEC-TILT (DEG)	RRU TYPE	TMA QTY. AND MODEL #	HCS CABLE DIA. (IN) AND TYPE	FACTORY LENGTH (FT)	ACTUAL LENGTH (FT)	COAX CABLE DIA. AND QTY
ALPHA	A1	0	90	LTE 700 UMS-LTE PCS	(N) SBNH-1D65C	(E) 3/3	-	(E) ETW190VS12UB	N/A	N/A	(E)	(4) (E) 7/8"
ALPHA	A2	0	90	LTE AWS GSM PCS	(E) TMBXX-6517-A2M	(E) 2/3	-	(E) ETW190VS12UB & (E) ETW200VS12UB	N/A	N/A	(E)	(4) (E) 7/8"
BETA	B1	130	90	LTE 700 UMS-LTE PCS	(N) SBNH-1D65C	(E) 3/3	-	(E) ETW190VS12UB	N/A	N/A	(E)	(4) (E) 7/8"
BETA	B2	130	90	LTE AWS GSM PCS	(E) TMBXX-6517-A2M	(E) 2/3	-	(E) ETW190VS12UB & (E) ETW200VS12UB	N/A	N/A	(E)	(4) (E) 7/8"
GAMMA	C1	240	90	LTE 700 UMS-LTE PCS	(N) SBNH-1D65C	(E) 3/3	-	(E) ETW190VS12UB	N/A	N/A	(E)	(4) (E) 7/8"
GAMMA	C2	240	90	LTE AWS GSM PCS	(E) TMBXX-6517-A2M	(E) 2/3	-	(E) ETW190VS12UB & (E) ETW200VS12UB	N/A	N/A	(E)	(4) (E) 7/8"

ANTENNA AND CABLE SCHEDULE SCALE: N.T.S. 1

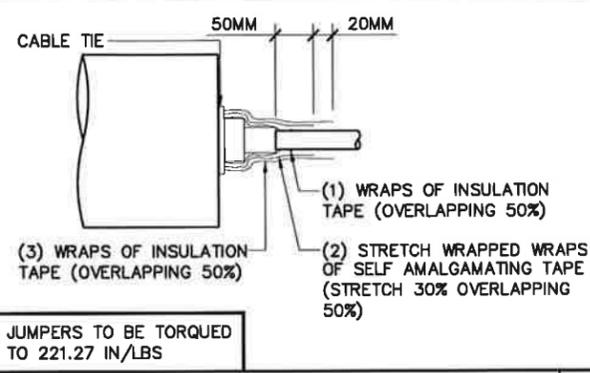
### Coax Color Coding

- Antennas will be labeled (back of antenna view) Right to left 1 - X ports
- Coax/Jumper lines will be identified by sector color and by number of bands around the coax/jumper

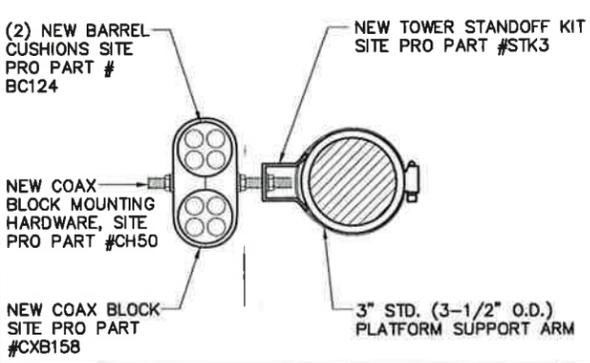
Sector A	Red
Sector B	Green
Sector C	Blue
Sector D	Yellow
Sector E	White
Sector F	Purple
LMU	Brown + Sector Color Bands (1,2)
Fiber ID	Gray
Unused Coax	Pink
Microwave	Orange
PWE T-1's + GPS	ID w/Label Maker
Downlink cable	



Example - Coax with four bands of RED tape will represent Alpha sector and the 4th port of antenna.

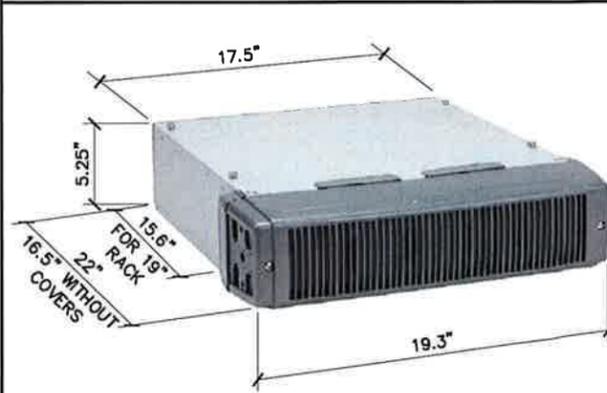


RF JUMPER CONNECTION DETAIL SCALE: N.T.S. 3

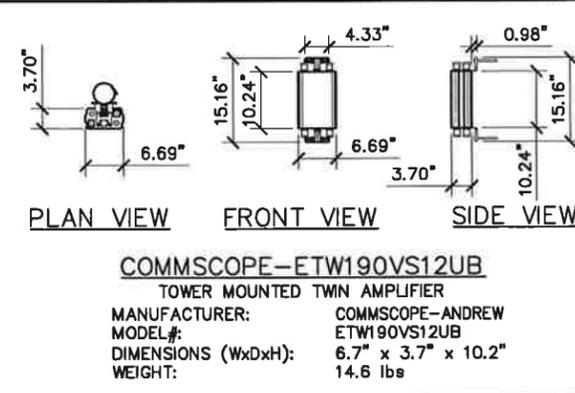


RF JUMPER MOUNTING DETAIL SCALE: N.T.S. 5

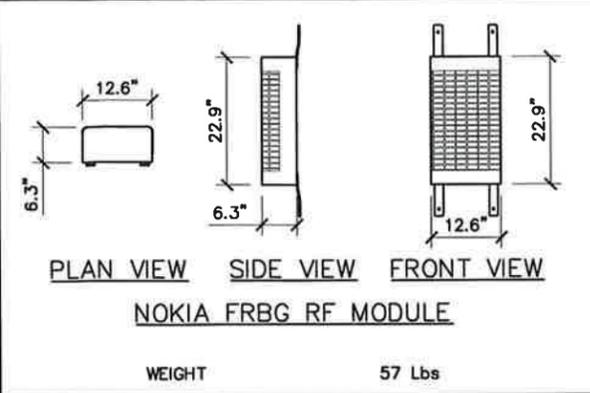
COLOR CODING SCALE: N.T.S. 2



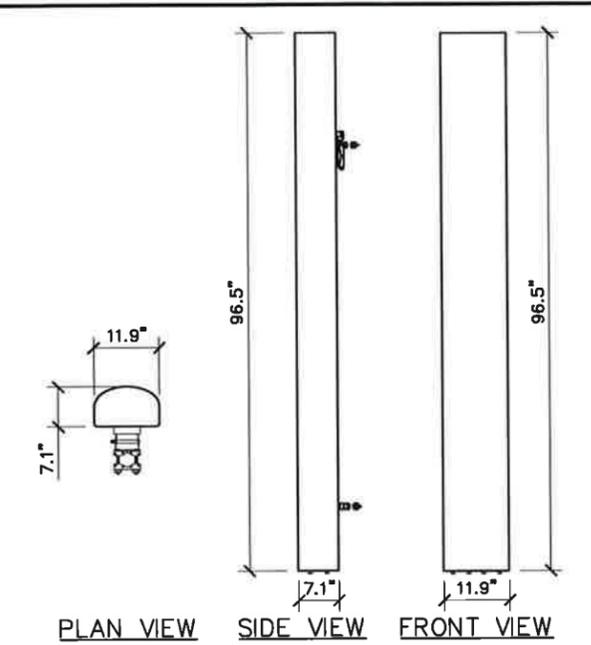
FSMF MODULE SPEC SCALE: N.T.S. 6



TMA SPEC SCALE: N.T.S. 7



RF MODULE SPEC SCALE: N.T.S. 8



COMMSCOPE -SBNH-1D65C  
 ANDREW® DUALBAND ANTENNA  
 FREQUENCY RANGE 698-806 MHz, 806-896 MHz, 1710-1880 MHz, 1850-1990 MHz, 1920-2200 MHz, 2300-2360 MHz  
 ANTENNA BRACKET TOTAL WEIGHT 49.6 Lbs, 12.3 Lbs, 61.9 Lbs

ANTENNA DETAIL SCALE: N.T.S. 4

**T-Mobile**  
 stick together  
 8550 BRYN MAWR, SUITE 100  
 CHICAGO, ILLINOIS 60631

**FULLERTON**  
 ENGINEERING DESIGN  
 1100 E. WOODFIELD ROAD, SUITE 500  
 SCHAUMBURG, ILLINOIS 60173  
 TEL: 847-908-8400  
 www.FullertonEngineering.com

#	DATE	DESCRIPTION	INT.
A	9/21/16	90% REVIEW	RD
B	9/22/16	REVISION	RD
0	9/23/16	FINAL	PK

I HEREBY CERTIFY THAT THESE DRAWING WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND CONTROL, AND TO THE BEST OF MY KNOWLEDGE AND BELIEF COMPLY WITH THE REQUIREMENTS OF ALL APPLICABLE CODES.



SITE NAME  
**CAMPANA RT**

SITE NO.  
**CH47840A**

SITE ADDRESS  
 901 NORTH BATAMA AVE.  
 BATAVIA, IL 60510

SHEET NAME  
**ANTENNA  
 DETAILS AND  
 SPECIFICATIONS**

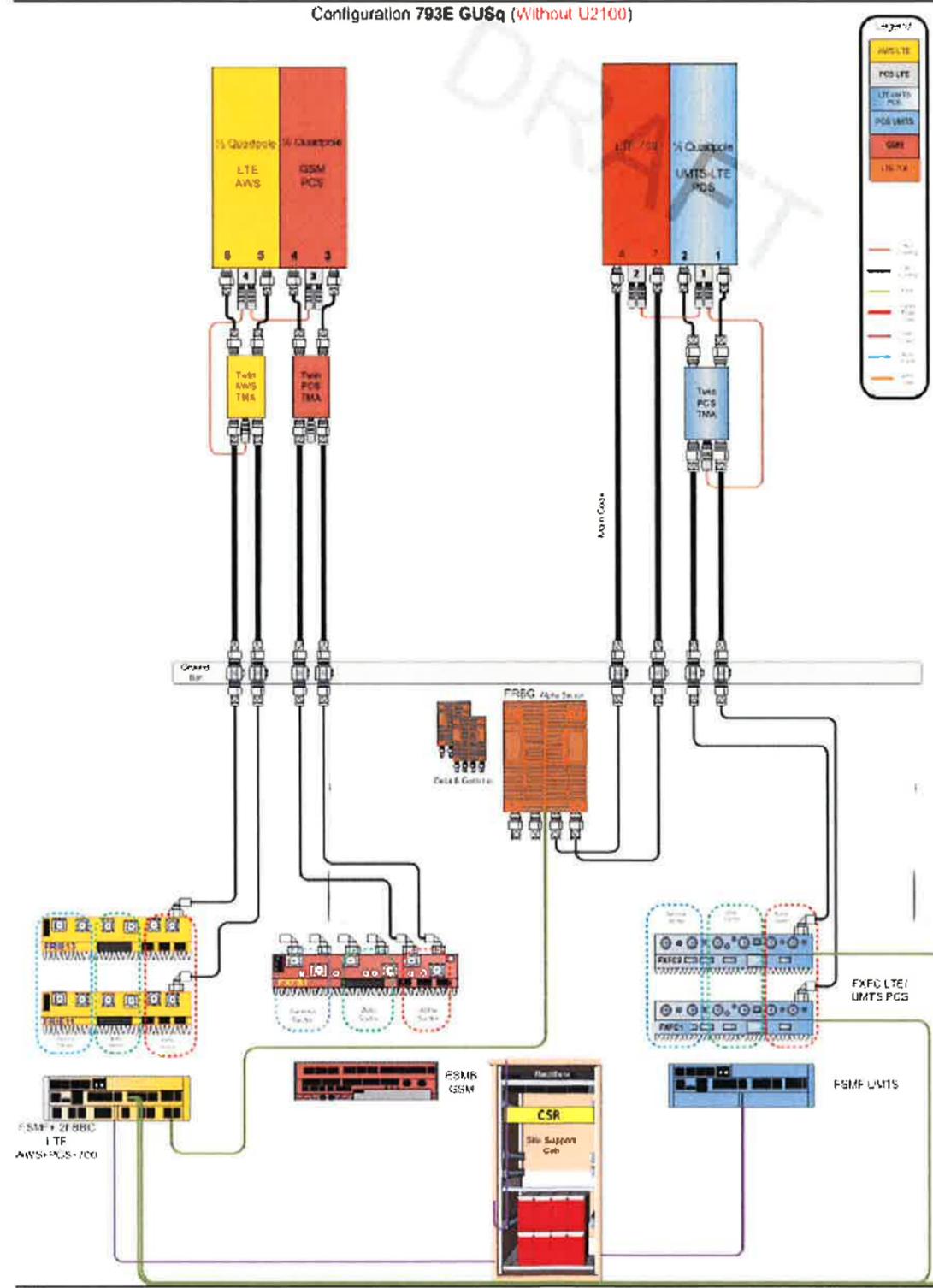
SHEET NUMBER  
**C-5**

NOT USED SCALE: N.T.S. 9

Section 3 - Proposed Template Images

793E\_GUSq\_No U2100.png

Configuration 793E GUSq (Without U2100)



Notes:



8550 BRYN MAWR, SUITE 100  
CHICAGO, ILLINOIS 60631



1100 E. WOODFIELD ROAD, SUITE 500  
SCHAUMBURG, ILLINOIS 60173  
TEL: 847-908-8400  
www.FullertonEngineering.com

#	DATE	DESCRIPTION	INT.
A	9/21/16	90% REVIEW	RD
B	9/22/16	REVISION	RD
D	9/23/16	FINAL	PK

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SITE NAME	CAMPANA RT
SITE NO.	CH47840A
SITE ADDRESS	901 NORTH BATAVA AVE. BATAVA, IL 60510
SHEET NAME	RFDS AND CABLE SPECIFICATIONS

SHEET NUMBER	C-5A
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8550 BRYN MAWR, SUITE 100  
CHICAGO, ILLINOIS 60631



1100 E. WOODFIELD ROAD, SUITE 500  
SCHAUMBURG, ILLINOIS 60173  
TEL: 847-908-8400  
www.FullertonEngineering.com

#	DATE	DESCRIPTION	INT.
A	9/21/16	90% REVIEW	RD
B	9/22/16	REVISION	RD
O	9/23/16	FINAL	PK

I HEREBY CERTIFY THAT THESE DRAWING WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND CONTROL, AND TO THE BEST OF MY KNOWLEDGE AND BELIEF COMPLY WITH THE REQUIREMENTS OF ALL APPLICABLE CODES.



SITE NAME

**CAMPANA RT**

SITE NO.

**CH47840A**

SITE ADDRESS  
901 NORTH BATAVA AVE.  
BATAVA, IL 60510

SHEET NAME

**793E\_GUSq  
CONFIGURATION  
DIAGRAM**

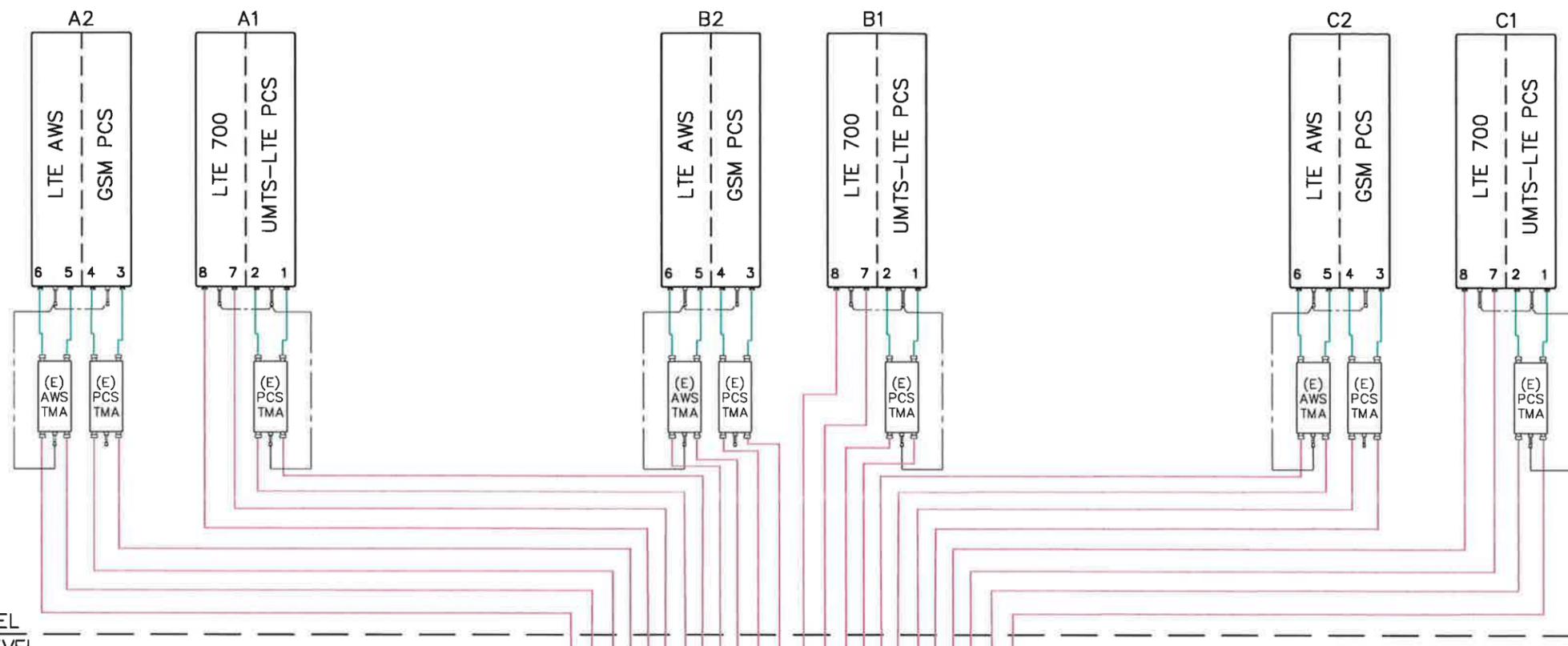
SHEET NUMBER

**C-6**

**SECTOR ALPHA**

**SECTOR BETA**

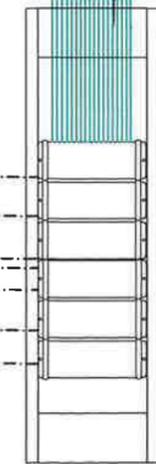
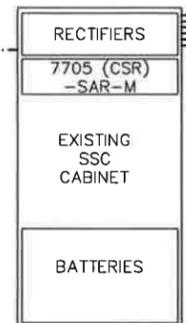
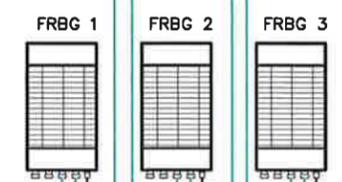
**SECTOR GAMMA**



ANTENNA LEVEL  
EQUIPMENT LEVEL

**GROUND BAR**

LTE GPS ANTENNA



**LEGEND**

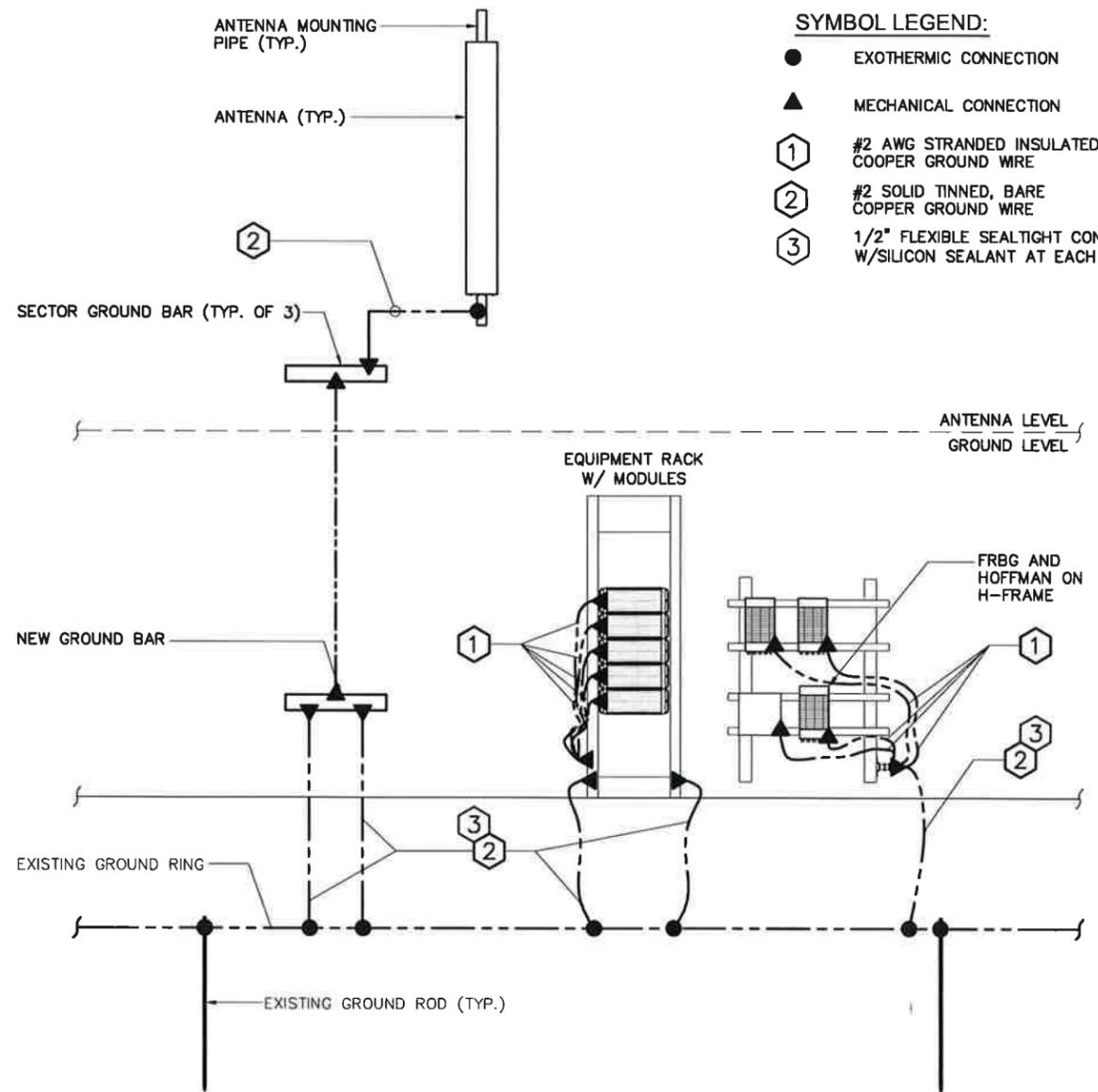
- RET CABLE
- C- COAX CABLE
- F- FIBER/DC
- RF JUMPERS
- MAIN POWER & FIBER JUMPERS

SYSTEM CONNECTION DIAGRAM

SCALE: N.T.S. 1

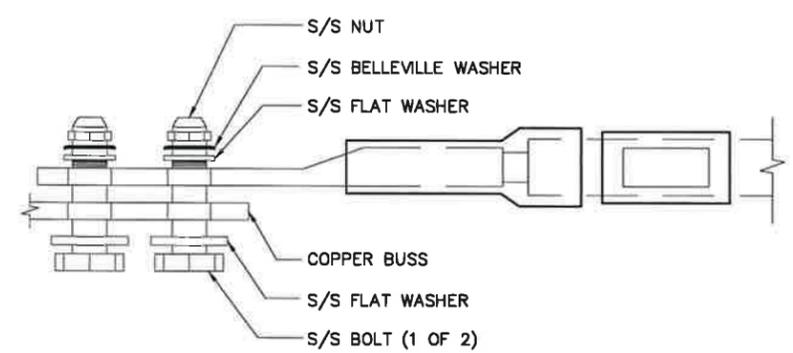
#	DATE	DESCRIPTION	INT.
A	9/21/16	90% REVIEW	RD
B	9/22/16	REVISION	RD
O	9/23/16	FINAL	PK

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TYPICAL GROUNDING DIAGRAM

SCALE: N.T.S. 1

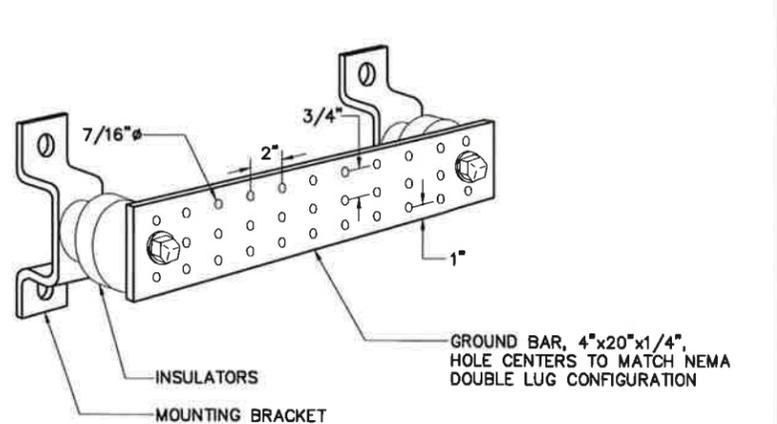


**NOTES:**

- ALL HARDWARE 18-9 STAINLESS STEEL INCLUDING BELLEVILLES. COAT ALL SURFACES WITH KOPR-SHIELD BEFORE MATING
- FOR GROUND BOND TO STEEL ONLY: INSERT A DRAGON TOOTH WASHER BETWEEN LUG AND STEEL. COAT ALL SURFACES WITH KOPR-SHIELD.

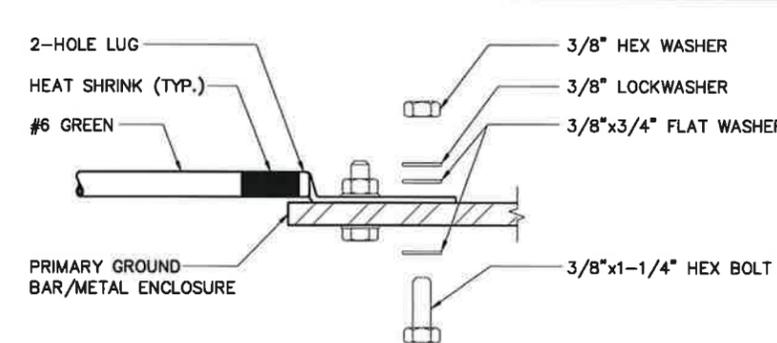
STANDARD LUG CONNECTION OF GROUND LEADS TO GROUND BAR DETAIL

SCALE: N.T.S. 2



GROUNDING - STANDARD GROUND BAR DETAIL

SCALE: N.T.S. 3



**INSTALLATION NOTES:**

- SELECT BOLT LENGTH TO PROVIDE A MINIMUM OF TWO EXPOSED THREADS
- BURNISH MOUNTING SURFACE TO REMOVE PAINT IN THE AREA OF LUG CONTACT AND REMOVE OXIDATION FROM OUTDOOR WEATHERED BARS
- APPLY ANTI-OXIDANT COMPOUND TO MATING SURFACE OF LUG AND WIPE CLEAN OF EXCESS COMPOUND
- USE SOLID COPPER WIRE AND MECHANICAL 2-HOLE LUG FOR ALL EXTERIOR GROUNDING

MECHANICAL GROUND CONNECTION

SCALE: N.T.S. 4

SITE NAME	CAMPANA RT
SITE NO.	CH47840A
SITE ADDRESS	901 NORTH BATAVA AVE. BATAVA, IL 60510
SHEET NAME	GROUNDING DETAILS
SHEET NUMBER	EG-1