

September 24, 2019

Melanie Bachman, Executive Director Connecticut Siting Council Ten Franklin Square New Britain, CT 06051

RE: Response to fill question for Petition #1373

Dear Melanie Bachman,

Please find the following response regarding the required backfill for this project -

• For the fill calculation we have a 68' long wall that will be 10' high and the width of the proposed area is 16'. Based on the elevations this translates to 201 yd^3 of backfill assuming the wall is straight. Based on the bends in the wall the fill will be less than 201 yd^3 so we provided 200 yd^3 conservatively."

Sincerely,

Haleluya

Haleluya Haile
Real Estate Specialist
978.235.6131
haleluya.haile@smartlinkllc.com

PROIECT NOTES

- SITE INFORMATION OBTAINED FROM THE FOLLOWING
 - LIMITED FIELD OBSERVATION BY MASER CONSULTING ON
- THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES, ORDINANCES, LAWS AND REGULATIONS OF ALL MUNICIPALITIES, UTILITY COMPANIES OR OTHER PUBLIC/GOVERNING AUTHORITIES
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS THAT MAY BE REQUIRED BY ANY FEDERAL. STATE. COUNTY OR MUNICIPAL AUTHORITIES.
- THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER, IN WRITING, OF ANY CONFLICTS, ERRORS OR OMISSIONS PRIOR TO THE SUBMISSION OF BIDS OR PERFORMANCE
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING SITE IMPROVEMENTS PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL REPAIR ANY DAMAGE AS A RESULT OF CONSTRUCTION OF THIS FACILITY AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER
- THE SCOPE OF WORK FOR THIS PROJECT SHALL INCLUDE PROVIDING ALL MATERIALS, EQUIPMENT AND LABOR REQUIRED TO COMPLETE THIS PROJECT. ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- THE CONTRACTOR SHALL VISIT THE PROJECT SITE PRIOR TO SUBMITTING THE BID TO VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND CONSTRUCTION DRAWINGS.
- THE CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THESE DRAWINGS MUST BE VERIFIED. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
- SINCE THE CELL SITE MAY BE ACTIVE ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE REQUIRED TO BE WORN TO ALERT OF ANY POTENTIALLY DANGEROUS EXPOSURE LEVELS.
- THE PROPOSED FACILITY WILL CAUSE AN INSIGNIFICANT OR "DE-MINIMUS" INCREASE IN STORM WATER RUNOFF, THEREFORE, NO DRAINAGE STRUCTURES ARE PROPOSED.
- NO NOISE SMOKE DUST OR ODOR WILL RESULT FROM THIS FACILITY AS TO CAUSE A NUISANCE.
- THE FACILITY IS LINMANNED AND NOT FOR HUMAN HARITATION (NO HANDICAP ACCESS IS REQUIRED).
- THE FACILITY DOES NOT REQUIRE POTABLE WATER OR SANITARY
- CONTRACTOR SHALL VERIFY ANTENNA ELEVATION AND AZIMUTHS WITH RF ENGINEERING PRIOR TO INSTALLATION.
- 15. THE TOWER, MOUNTS AND ANTENNAS SHALL BE DESIGNED TO MEET EIA/TIA-222-H AS PER IBC REQUIREMENTS.
- 16. ALL STRUCTURAL ELEMENTS SHALL BE HOT DIPPED GALVANIZED
- CONTRACTOR MUST FIELD LOCATE ALL EXISTING UNDERGROUND LITILITIES PRIOR TO ANY EXCAVATION
- 18. CONSTRUCTION SHALL NOT COMMENCE UNTIL COMPLETION OF A PASSING STRUCTURAL ANALYSIS CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER. THE STRUCTURAL ANALYSIS IS TO BE
- CONTRACTOR SHALL CONTACT STATE SPECIFIC ONE CALL SYSTEM THREE WORKING DAYS PRIOR TO ANY EARTH MOVING ACTIVITIES.

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SITE NAME: SIMSBURY-BUSHY HILL RD. FA NUMBER: 12906926 SITE NUMBER: CT2413S

1C - MRCTB032789

345 BUSHY HILL ROAD SIMSBURY, CT 06070 HARTFORD COUNTY

CODE COMPLIANCE

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 THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THE LATEST EDITIONS OF THE FOLLOWING CODES.

- I. 2018 CONNECTICUT STATE BUILDING CODE. INCORPORATING THE 2015 IBC
- 3 2015 NFPA 101
- 4. AMERICAN INSTITUTE OF STEEL CONSTRUCTION
- 5. AMERICAN CONCRETE INSTITUTE

7. TIA 607 FOR GROUNDING

6. TIA-222-H

- INSTITUTE FOR ELECTRICAL AND ELECTRONICS ENGINEERS 81 IEEE C2 LATEST EDITION
- 2. 2017 NATIONAL ELECTRICAL CODE NFPA 70 TELCORDIA GR-1275
 - ANSITI 311
 - PROPOSED USE: UNMANNED TELECOM FACILITY
 - HANDICAP REQUIREMENTS: FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION, HANDICAPPED ACCESS NOT REQUIRED
 - CONSTRUCTION TYPE: IIB
 - USE GROUP: U

PROIECT INFORMATION

SITE INFORMATION

41.841378° N LONGITUDE: 72.850436° W HARTFORD COUNTY **IURISDICTION**

APPLICANT/LESSEE

NEW CINGULAR WIRELESS PCS, LLC ADDRESS: 550 COCHITUATE ROAD CITY, STATE, ZIP FRAMINGHAM, MA 01701

STRUCTURE OWNER

SIMSBURY FIRE DISTRICT ADDRESS: 871 HOPEMEADOW STREET CITY, STATE, ZIP SIMSBURY, CT 06070

CLIENT REPRESENTATIVE

COMPANY: SMARTLINK, LLC

85 RANGEWAY ROAD, BUILDING 3, STE. 102 NORTH BILLERICA, MA 01862 ADDRESS: CITY, STATE, ZIP:

TODD OLIVER

CONTACT: TODD.OLIVER@SMARTLINKLLC.COM

SITE ACQUISITION

COMPANY. SMARTLINK, LLC ADDRESS:

85 RANGEWAY ROAD, BUILDING 3, STE. 102 NORTH BILLERICA, MA 01862

CITY, STATE, ZIP: CONTACT

HALELUYA HAILE HALELUYA.HAILE@SMARTLINKLLC.COM

CONSTRUCTION MANAGER

ADDRESS: CITY STATE 7IP CONTACT:

E-MAIL:

E-MAIL:

85 RANGEWAY ROAD, BUILDING 3, STE. 102 NORTH BILLERICA, MA 01862 ROBERT PICARD

ROBERT.PICARD@SMARTLINKLLC.COM

ENGINEER

COMPANY: MASER CONSULTING P.A. 331 NEWMAN SPRINGS ROAD, SUITE 203 ADDRESS:

CITY, STATE, ZIP: CONTACT: ROBERT ANDREWS PHONE (856) 797-0412

RANDREWS@MASERCONSULTING.COM

PROJECT DESCRIPTION/ SCOPE OF WORK

- INSTALL (15) NEW RRU'S, (5) PER SECTOR
- INSTALL (9) NEW PANEL ANTENNAS, (3) PER SECTOR
- INSTALL (3) NEW ANTENNA SECTOR FRAMES
- INSTALL (3) NEW DC-6 SURGE SUPPR. DOMES, (I) PER SECTOR INSTALL (2) NEW 18-PAIR FIBER TRUNKS
- INSTALL (6) NEW 6/C DC CABLES INSTALL (I) 10' MONOPOLE EXTENSION
- INSTALL (6) 12" STAND-OFF MOUNTS, (2) PER SECTOR MODIFY EXISTING MONOPOLE

SHEET DESCRIPTION

T-I TITLE SHEET

C-2

C-5

E-2

S-004

USGS MAP

GN-I GENERAL NOTES

C-I COMPOUND PLAN

C-4 EROSION CONTROL PLAN

A-I CONSTRUCTION DETAILS

A-2 CONSTRUCTION DETAILS

A-3 CONSTRUCTION DETAILS

A-4 CONSTRUCTION DETAILS

A-5 CONSTRUCTION DETAILS

A-6 CONSTRUCTION DETAILS

A-7 RF PLUMBING DIAGRAMS

E-I UTILITY PLAN

G-I GROUNDING DETAILS AND NOTES

S-001 GENERAL NOTES - STRUCTURAL

S-002 GENERAL NOTES - STRUCTURAL

S-003 GENERAL NOTES - STRUCTURAL

GROUNDING PLAN AND DETAILS

GENERAL NOTES - STRUCTURAL

S-I STRUCTURAL MODIFICATION DETAILS

S-2 STRUCTURAL MODIFICATION DETAILS

S-4 STRUCTURAL MODIFICATION DETAILS

ANTENNA MOUNT DETAIL

ANTENNA MOUNT DETAIL

S-5 ANTENNA MOUNT DETAIL

STRUCTURAL MODIFICATION DETAILS

EROSION CONTROL DETAILS

PROPOSED PROJECT SCOPE BASED ON RFDS ID# 2592584, VERSION 7.00, LAST UPDATED 05/08/2019.

EQUIPMENT LAYOUT AND ELEVATION VIEW

C-3 ANTENNA LAYOUT AND ANTENNA SCHEDULE

SHEET INDEX



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MASER CONSULTING -CONNECTICUT-

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ı	<u> </u>	08/28/19	REVISED PER C	OMMENTS	MLH	RA		
11	10	06/26/19	REVISED PER C	OMMENTS	NL	RA		
11	9	06/05/19	REVISED PER C	OMMENTS	NL	RA		
11	7	04/19/19	REVISED PER C	OMMENTS	AJC	RA		
11	6	04/09/19	REVISEDATELL	MINUMANIS	AJC	RA		
11	5	03/28/10	REVISED FER	WW.	Mayer	RA		
П	4	03/3/19	RE ISED PER	OMMENTS	Ajç	RA		
11	3	02/12/19	DEVISED PER N	IEW RFBS	AJG	MA		
	REV	DATE	DESCRIPTION	N TO	DRAWN BY	CHE ED B		

LICENSED PROFFESIONAL ENGINEER, ALTER THIS DOCUMENT.

SITE NAME: SIMSBURY -BUSHY HILL RD. FA# 12906926 SITE# CT2413S

345 BUSHY HILL ROAD SIMSBURY, CT 06070 HARTFORD COUNTY



TITLE SHEET

T-I

VICINITY MAP



PROJECT LOCATION SCALE: 1" = 1000' FOR 22"X34" (SCALE: 1" = 2000' FOR 11"X17")

GENERAL NOTES:

- I. THE SUBCONTRACTOR SHALL REVIEW AND INSPECT THE EXISTING FACILITY GROUNDING SYSTEM (AS DESIGNED AND INSTALLED) FOR STRICT COMPLIANCE WITH THE NEC (AS ADOPTED BY THE AHJ), THE SITE-SPECIFIC (UL, LPI, OR NFPA) LIGHTING PROTECTION CODE, AND GENERAL COMPLIANCE WITH TELCORDIA AND TIA GROUNDING STANDARDS. THE SUBCONTRACTOR SHALL REPORT ANY VIOLATIONS OR ADVERSE FINDINGS TO THE CONTRACTOR FOR RESOLUTION.
- ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION, AND
 AC POWER GES'S) SHALL BE BONDED TOGETHER, AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING
 CONDUCTORS IN ACCORDANCE WITH THE NEC.
- THE SUBCONTRACTOR SHALL PERFORM IEEE FALL-OF-POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE I 100
 AND 81) FOR GROUND ELECTRODE SYSTEMS. THE SUBCONTRACTOR SHALL FURNISH AND INSTALL
 SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 50 HMS OR LESS.
- 4. THE SUBCONTRACTOR IS RESPONSIBLE FOR PROPERLY SEQUENCING GROUNDING AND UNDERGROUND CONDUIT INSTALLATION AS TO PREVENT ANY LOSS OF CONTINUITY IN THE GROUNDING SYSTEM OR DAMAGE TO THE CONDUIT.
- METAL CONDUIT AND TRAY SHALL BE GROUNDED AND MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH #6 AWG COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.
- 6. METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO BTS EQUIPMENT.
- EACH BTS CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE EQUIPMENT GROUND RING WITH GREEN
 INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES, 6 AWG STRANDED COPPER OR LARGER FOR INDOOR
 BTS; 2 AWG STRANDED COPPER FOR OUTDOOR BTS.
- 8. CONNECTIONS TO THE GROUND BUS SHALL NOT BE DOUBLED UP OR STACKED, BACK TO BACK CONNECTIONS ON OPPOSITE SIDES OF THE GROUND BUS ARE PERMITTED.
- 9. ALL EXTERIOR GROUND CONDUCTORS BETWEEN EQUIPMENT/GROUND BARS AND THE GROUND RING, SHALL BE #2 AWG SOLID TINNED COPPER UNLESS OTHERWISE INDICATED.
- 10. ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING
- 11. USE OF 90° BENDS IN THE PROTECTION GROUNDING CONDUCTORS SHALL BE AVOIDED WHEN 45° BENDS CAN BE ADEQUATELY SUPPORTED. ALL BENDS SHALL BE MADE WITH 12" RADIUS OR LARGER.
- 12. EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE
- 13. ALL GROUND CONNECTIONS ABOVE GRADE (INTERIOR) SHALL BE FORMED USING HIGH PRESS CRIMPS EXCEPT FOR GROUND BAR CONNECTION FROM MGB TO OUTSIDE EXTERIOR GROUND SHALL ALL BE CADWELD CONNECTIONS.
- 14. COMPRESSION GROUND CONNECTIONS MAY BE REPLACED BY EXOTHERMIC WELD CONNECTIONS.
- 15. ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED TO THE TOWER GROUND BAR.
- 16. APPROVED ANTIOXIDANT COATINGS (I.E. CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
- 17. ALL EXTERIOR AND INTERIOR GROUND CONNECTIONS SHALL BE COATED WITH A CORROSION RESISTANT
- 18. MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING. IN ACCORDANCE WITH THE NEC.
- BOND ALL METALLIC OBJECTS WITHIN 6 FT OF MAIN GROUND WIRES WITH 1-#2 AWG TIN-PLATED COPPER GROUND CONDUCTOR.
- 20. GROUND CONDUCTORS USED IN THE FACILITY GROUND AND LIGHTNING PROTECTION SYSTEMS SHALL NOT BE ROUTED THROUGH METALLIC OBJECTS THAT FORM A RING AROUND THE CONDUCTOR, SUCH AS METALLIC CONDUITS, METAL SUPPORT CLIPS OR SLEEVES THROUGH WALLS OR FLOORS. WHEN IT IS REQUIRED TO BE HOUSED IN CONDUIT TO MEET CODE REQUIREMENTS OR LOCAL CONDUITIONS, NON-METALLIC MATERIAL SUCH AS PVC PLASTIC CONDUIT SHALL BE USED. WHERE USE OF METAL CONDUIT IS UNAVOIDABLE (E.G. NON-METALLIC CONDUIT PROHIBITED BY LOCAL CODE) THE GROUND CONDUCTOR SHALL BE BONDED TO EACH END OF THE METAL CONDUIT
- 21. ALL NEW STRUCTURES WITH A FOUNDATION AND/OR FOOTING HAVING 20 FT. OR MORE OF 1/4" IN. OR GREATER ELECTRICALLY CONDUCTIVE REINFORCING STEEL MUST HAVE IT BONDED TO THE GROUND RING USING AN EXOTHERMIC WELD CONNECTION USING #2 AWG SOLID BARE TINNED COPPER GROUND WIRE, PER NEC 250.50.
- 22. FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:

CONTRACTOR - SMARTLINK
SUBCONTRACTOR - GENERAL CONTRACTOR (CONSTRUCTION)
OWNER - AT&T (NEW CINGULAR WIRELESS PCS, LLC)

- ${\bf 23.} \ \ {\bf ALL} \ {\bf SITE} \ {\bf WORK} \ {\bf SHALL} \ {\bf BE} \ {\bf COMPLETED} \ {\bf AS} \ {\bf INDICATED} \ {\bf ON} \ {\bf THE} \ {\bf DRAWINGS} \ {\bf AND} \ {\bf PROJECT} \ {\bf SPECIFICATIONS}.$
- 24. DRAWINGS PROVIDED HERE ARE NOT TO BE SCALED AND ARE INTENDED TO SHOW OUTLINE ONLY
- 25. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. SUBCONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY

REGARDING THE PERFORMANCE OF THE WORK.

- 26. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
- UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
- 28. THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- 29. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION SPACE FOR APPROVAL BY THE CONTRACTOR.
- 30. THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.
- 31. THE SUBCONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
- 32. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY THE RESPONSIBLE ENGINEER. EXTREME CAUTION SHOULD BE USED BY THE SUBCONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. SUBCONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION B) CONFINED SPACE C) ELECTRICAL SAFETY D) TRENCHING & EXCAVATION.
- 33. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, AS DIRECTED BY THE RESPONSIBLE ENGINEER, AND SUBJECT TO THE APPROVAL OF THE OWNER AND/OR LOCAL UTILITIES.
- 34. THE AREAS OF THE OWNER'S PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY SHALL BE GRADED TO A UNIFORM SLOPE AND STABILIZED TO PREVENT EROSION.
- 35. SUBCONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.
- 36. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.
- 37. THE SUBGRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
- 38. THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE BTS EQUIPMENT AND TOWER ARFAS
- 39. IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
- 40. THE SUBCONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION FOR SITE SIGNAGE.
- 41. SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION.
- 42. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF THE CONTRACTOR.
- 43. SUBCONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER AND TI CABLES, GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWING. SUBCONTRACTOR SHALL UTILIZE EXISTING TRAYS AND/OR SHALL ADD NEW TRAYS AS NECESSARY. SUBCONTRACTOR SHALL CONFIRM THE ACTUAL ROUTING WITH THE CONTRACTOR.
- 44. ALL CONCRETE REPAIR WORK SHALL BE DONE IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE (ACI) 301.
- 45. ANY NEW CONCRETE NEEDED FOR THE CONSTRUCTION SHALL BE AIR-ENTRAINED AND SHALL HAVE 4000 PSI STRENGTH AT 28 DAYS.
- 46. ALL STRUCTURAL STEEL WORK SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH AISC SPECIFICATIONS. ALL STRUCTURAL STEEL SHALL BE ASTM A36 (Fy = 36 ksi) UNLESS OTHERWISE NOTED. PIPES SHALL BE ASTM A53 TYPE E (Fy = 36 ksi). ALL STEEL EXPOSED TO WEATHER SHALL BE HOT DIPPED GALVANIZED. TOUCHUP ALL SCRATCHES AND OTHER MARKS IN THE FIELD AFTER STEEL IS ERECTED USING A COMPATIBLE ZINC RICH PAINT
- 47. CONSTRUCTION SHALL COMPLY WITH SPECIFICATIONS AND "GENERAL CONSTRUCTION SERVICES FOR CONSTRUCTION OF AT&T MOBILITY SITES."
- 48. SUBCONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS MUST BE VERIFIED. SUBCONTRACTOR SHALL NOTIFY THE CONTRACTOR OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
- 49. THE EXISTING CELL SITE IS IN FULL COMMERCIAL OPERATION, ANY CONSTRUCTION WORK BY SUBCONTRACTOR SHALL NOT DISRUPT THE EXISTING NORMAL OPERATION. ANY WORK ON EXISTING EQUIPMENT MUST BE COORDINATED WITH CONTRACTOR. ALSO, WORK SHOULD BE SCHEDULED FOR AN APPROPRIATE MAINTENANCE WINDOW USUALLY IN LOW TRAFFIC PERIODS AFTER MIDNIGHT.
- 50. SINCE THE CELL SITE IS ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE ADVISED TO BE WORN ALERT OF DANGEROUS EXPOSURE LEVELS.



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AS SHOWN JOB NUMBER: 18946092A

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10	06/26/19	REVISED PER COMMENTS	NL	RA		
9	06/05/19	REVISED PER COMMENTS	NL	RA		
7	04/19/19	REVISED PER COMMENTS	AJC	RA		
6	04/09/19	REVISED PER RF COMMENT	S AJC	RA		
5	03/28/19	REVISED PER NEW RFDS	AJC	RA		
4	03/13/19	REVISED PER COMMENTS	AJC	RA		
3	02/12/19	REVISED PER NEW RFDS	AJC	RA		
REV	DATE	DESCRIPTION	DRAWN BY	CHECKED BY		

PETROS E. TSOUKALAS
CONNECTICUT PROFESSIONAL
ENGINEER - LICENSE NUMBER: 32577

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLI THEY ARE ACTING UNDER THE DIRECTION OF TH RESPONSIBLE LICENSED PROFFESIONAL ENGINEER, 1 ALTER THIS DOCUMENT.

> SITE NAME: SIMSBURY -BUSHY HILL RD. FA# 12906926 SITE# CT2413S

345 BUSHY HILL ROAD SIMSBURY, CT 06070 HARTFORD COUNTY



RED BANK OFFICE
331 Newman Springs Road

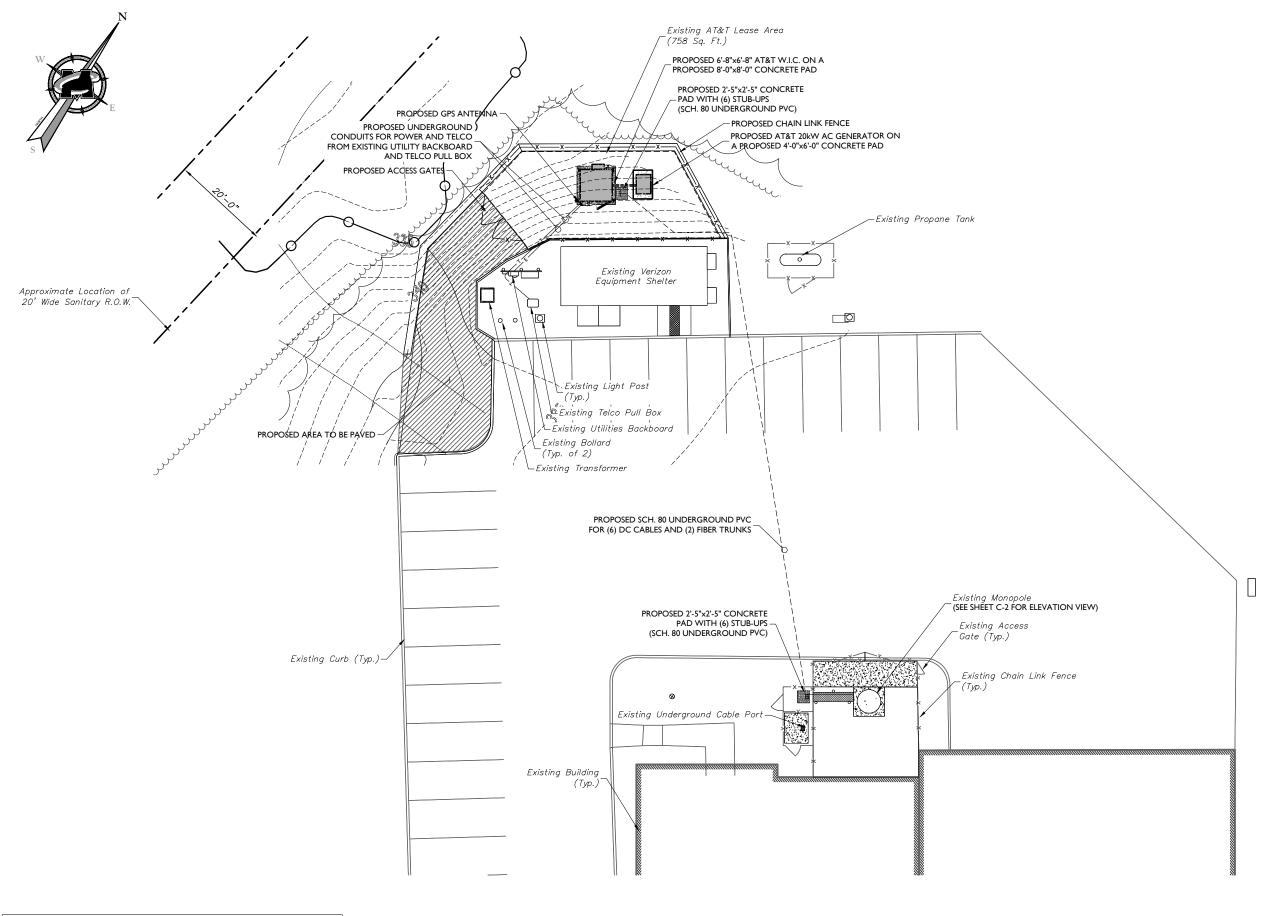
Suite 203 Red Bank, NJ 07701-5669 Phone: .732.383.1950 Fax: .732.383.1984

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GENERAL NOTES

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—CONNECTICUT—

Customer Loyalty through Client Satisfaction
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Engineers Planners Surveyors
andscape Architects Environmental Scientis







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	10	06/26/19	REVISED PER C	OMMENTS	NL	RA	
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П	7	04/19/19	REVISED PER C	OMMENTS	AJC	RA	
П	6	04/09/19	REVISED PER R	F COMMENTS	AJC	RA	
П	5	03/28/19	REVISED PER N	IEW RFDS	AJC	RA	
ш	4	03/13/19	REVISED PER C	OMMENTS	AJC	RA	
П	3	02/12/19	REVISED PER N	IEW RFDS	AJC	RA	
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PETROS E. TSOUKALAS

CONNECTICUT PROFESSIONAL

ENGINEER - LICENSE NUMBER: 32577

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SITE NAME: SIMSBURY -BUSHY HILL RD. FA# 12906926 SITE# CT2413S

345 BUSHY HILL ROAD SIMSBURY, CT 06070 HARTFORD COUNTY



RED BANK OFFICE
331 Newman Springs Road
Suite 203
Red Bank, NJ 07701-5669
Phone: .732.383.1950
Fax: .732.383.1984

COMPOUND PLAN

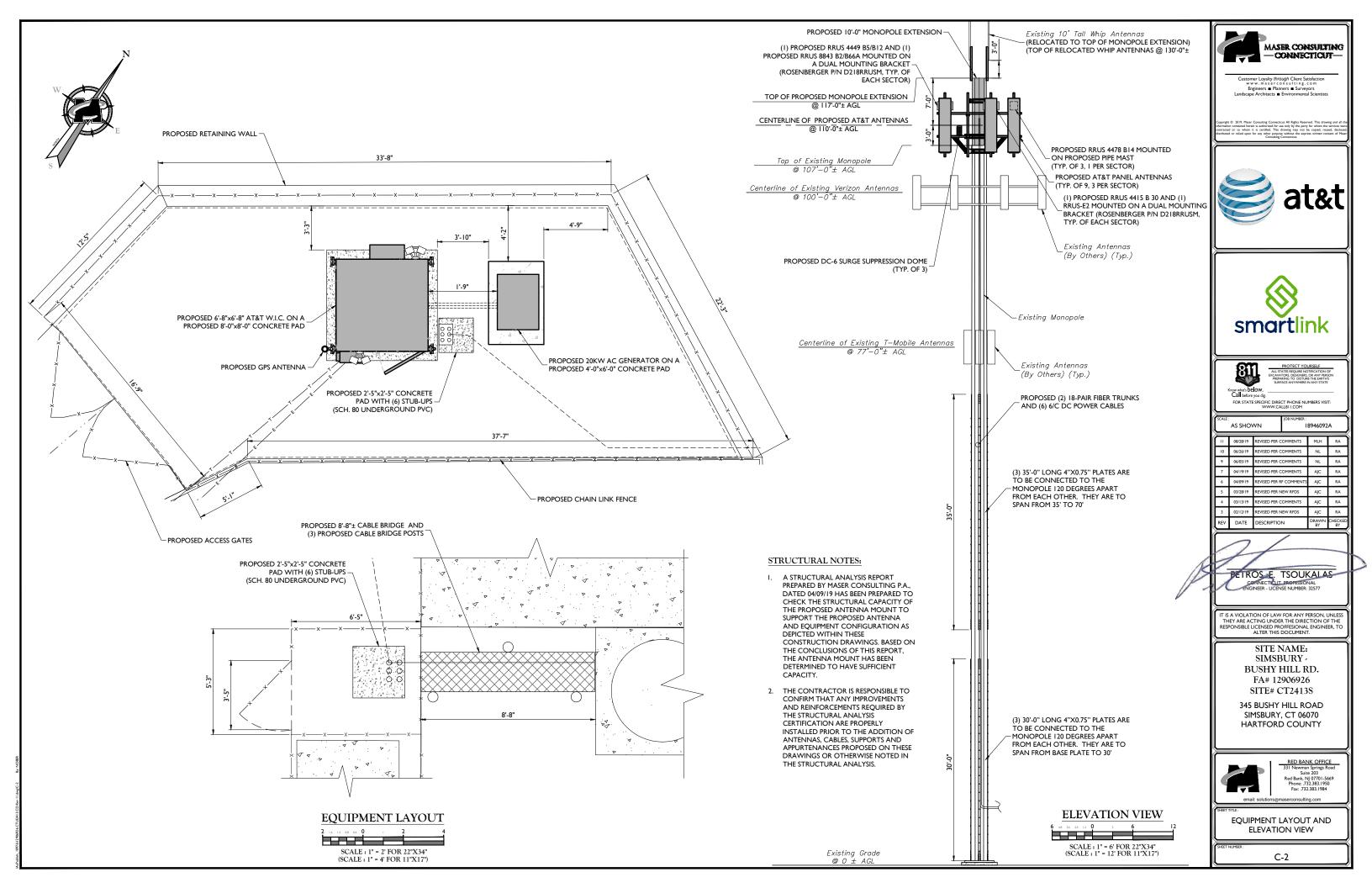
C-I

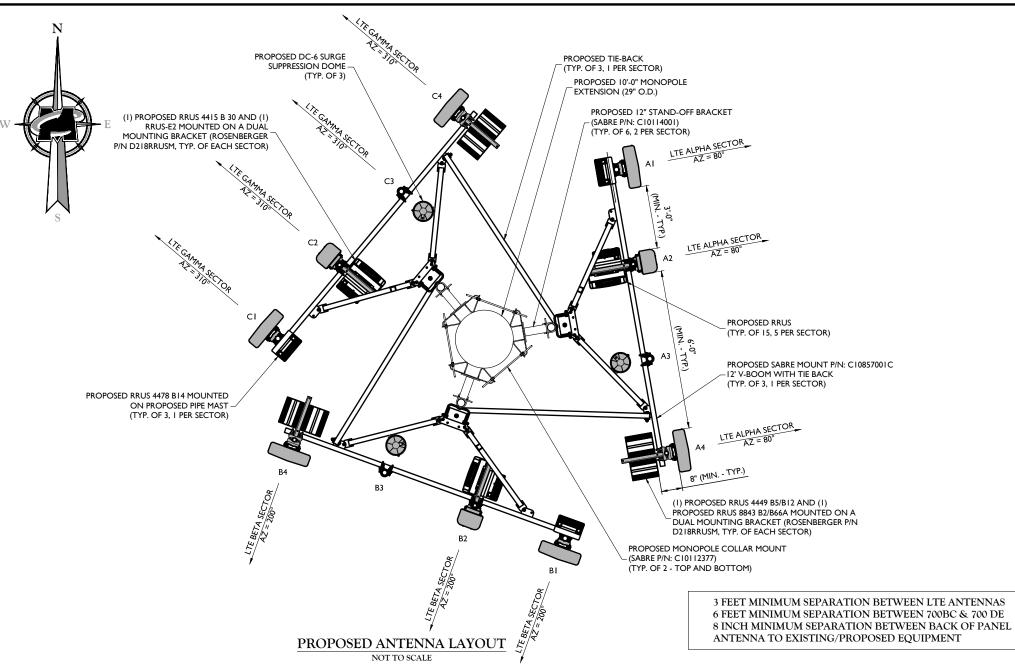
NOTES:

• EXISTING GROUND ELEVATION: 335'

• 100-YEAR FLOODPLAIN ELEVATION: 308'







	ANTENNA SCHEDULE																
SEC	TOR	PROPOSED ANTENNA	TECHNOLOGY	ANTENNA STATUS	HEIGHT (in)	WIDTH (in)	DEPTH (in)	WEIGHT (lbs)	ANTENNA AZIMUTH (DEG.)	ANT. CL. ELEV. (ft.)	REMOTE RADIO/TMA CONFIGURATION	DOWN MECH. (°)	VTILT ELEC. (°)	OUANTITY	TRANSMISS	SION CABLE	STATUS
		KMW		PROPOSED	2/ 22	21.22		24.00		110'	(I) RRUS 4478 BI4						
	1	EPBQ-654L8H8-L2	LTE	PROPOSED	96.00	21.00	6.30	86.00	80	110	(I) KKOS 4476 BI4	0	2/2	1/2	220'	FIBER/DC	PROPOSED
r.1	2	CCI HPA65R-BU8A	LTE	PROPOSED	96.00	11.70	7.60	57.30	80	110'	(I) RRUS 4415 B30 (I) RRUS-E2	0	3	-	-	-	-
Sector 1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4	KMW EPBQ-654L8H8-L2	LTE	PROPOSED	96.00	21.00	6.30	95.40	80	110'	(I) RRUS 4449 B5/BI2 (I) RRUS 8843 B2/B66A	0	2/2/2	-	-	-	-
	1	KMW EPBQ-654L8H8-L2	LTE	PROPOSED	96.00	21.00	6.30	86.00	200	110'	(I) RRUS 4478 BI4	0	2/2	1/2	220'	FIBER/DC	PROPOSED
r 2	2	CCI HPA65R-BU8A	LTE	PROPOSED	96.00	11.70	7.60	57.30	200	110'	(I) RRUS 44 5 B30 (I) RRUS-E2	0	3	-	-	-	-
Sector 2	3	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-
	4	KMW EPBQ-654L8H8-L2	LTE	PROPOSED	96.00	21.00	6.30	95.40	80	110'	(I) RRUS 4449 B5/BI2 (I) RRUS 8843 B2/B66A	0	2/2/2	-	-	-	-
	1	KMW EPBQ-654L8H8-L2	LTE	PROPOSED	96.00	21.00	6.30	86.00	310	110'	(I) RRUS 4478 BI4	0	2/2	2	220'	DC	PROPOSED
3	2	CCI HPA65R-BU8A	LTE	PROPOSED	96.00	11.70	7.60	57.30	310	110'	(I) RRUS 4415 B30 (I) RRUS-E2	0	3	-	-	-	-
Sector 3	3	-		-	-	-	-		-	-	-	-	-	-		-	-
	4	KMW EPBQ-654L8H8-L2	LTE	PROPOSED	96.00	21.00	6.30	95.40	80	110'	(I) RRUS 4449 B5/BI2 (I) RRUS 8843 B2/B66A	0	2/2/2	-		-	-



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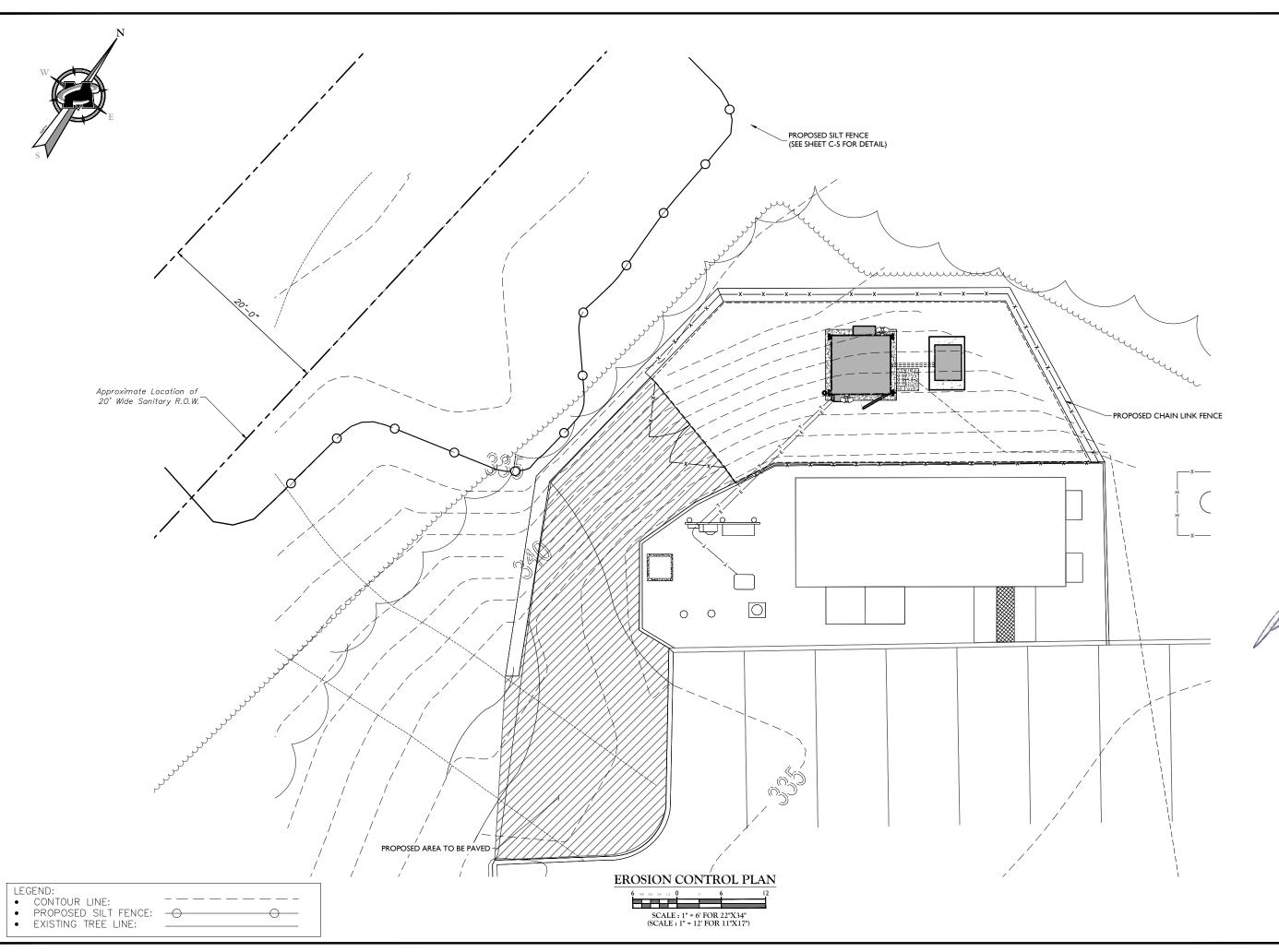


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ANTENNA LAYOUTS AND

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C-3





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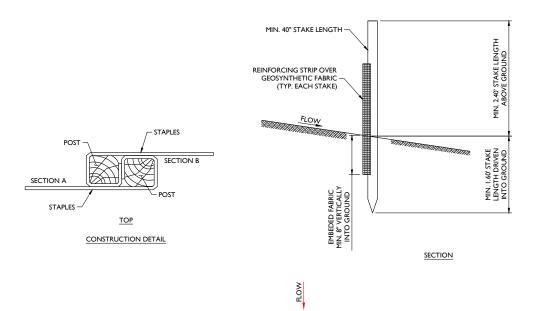
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EROSION CONTROL PLAN

SHEET NUME

C-4



SILT FENCE MATERIALS

ENDS PLACED UPSLOPE __
TO CONTAIN RUNOFF

- I. <u>STAKES:</u> STEEL (EITHER T OR U) OR 2" X 2" HARDWARE
- 2. GEOSYNTHETIC FABRIC: TYPE GD-I
- 3. REINFORCING STRIP: WOODEN LATH, PLASTIC STRIP OR OTHER APPROVED EQUIVALENT
- 4. <u>PREFABRICATED UNIT:</u>: GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.

CONSTRUCTION NOTES:

- GEOSYNTHETIC FABRIC TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
- 2. WHEN TWO (2) SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY SIX (6) INCHES AND FOLDED.

2"x2" WOODEN POST (TYP.)

SILT FENCE MUST BE INSPECTED ON A REGULAR BASIS. REPAIRS SHOULD BE MADE IMMEDIATELY. ACCUMULATED SEDIMENT SHOULD BE REMOVED WHEN IT HAS REACHED 1/2 THE EXPOSED HEIGHT OF THE FABRIC OR WHEN "BULGES" DEVELOP IN THE SILT FENCE.

SILT FENCE DETAIL NOT TO SCALE

<u>PLAN</u>



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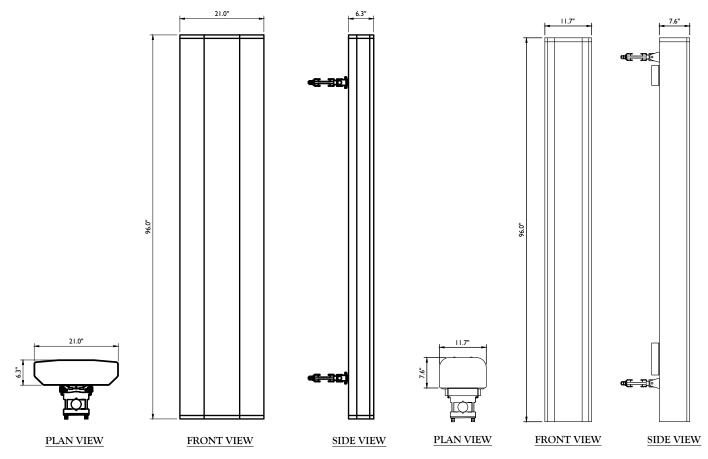
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EROSION CONTROL DETAILS

C-5

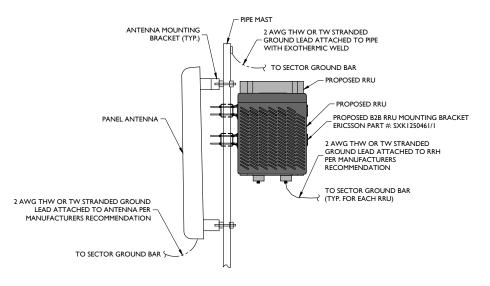


WEIGHT WITHOUT MOUNTING BRACKET = 86 LBS

KMW EPBQ-654L8H8-L2 NOT TO SCALE

WEIGHT WITHOUT MOUNTING BRACKET = 54 LBS WEIGHT WITH MOUNTING BRACKET = 66.6 LBS

CCI HPA65R-BU8A ANTENNA NOT TO SCALE



ANTENNA & RRU MOUNTING DETAIL NOT TO SCALE



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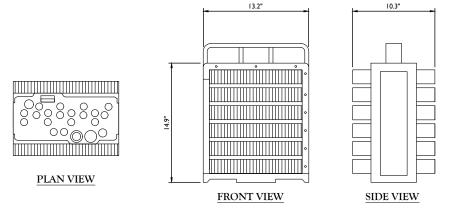
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CONSTRUCTION DETAILS

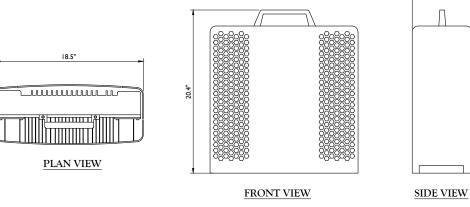
A-I



WEIGHT = 72.0 LBS W/O MOUNTING HARDWARE (INCLUDES SUNSHIELD AND DOUBLE FILTER CHASSIS) WEIGHT: 72.0 LBS

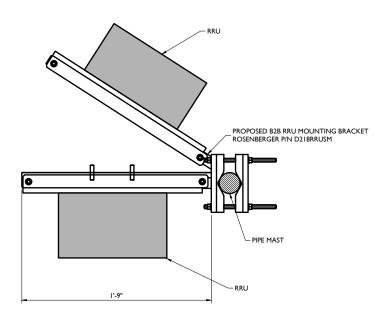
ERICSSON DUAL BAND RRU-8843 B2+B66A DETAIL

NOT TO SCALE

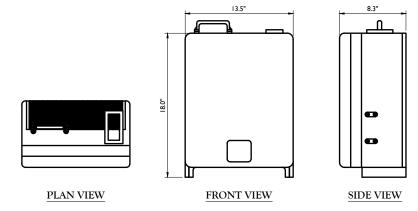


WEIGHT = <60 LBS WITHOUT MOUNTING HARDWARE

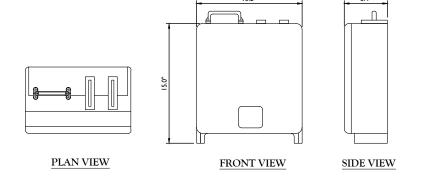
ERICSSON RRUS E2 B29 DETAIL NOT TO SCALE



RRU MOUNTING DETAIL NOT TO SCALE



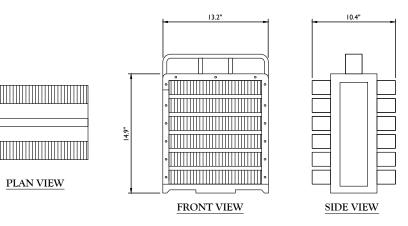
WEIGHT INCLUDES SUNSHIELD = 59.9 LBS ERICSSON RRUS 4478 B14 NOT TO SCALE



WEIGHT INCLUDES SUNSHIELD = 44 LBS

ERICSSON RRUS 4415 B30

NOT TO SCALE



WEIGHT = 73 LBS W/O MOUNTING HARDWARE DIMENSIONS (H X W X D): 14.9"H X 13.2"W X10.4" (INCLUDES SUNSHIELD) WEIGHT: 73.0 LBS

ERICSSON DUAL BAND RRUS-4449 B5+B12 DETAIL NOT TO SCALE

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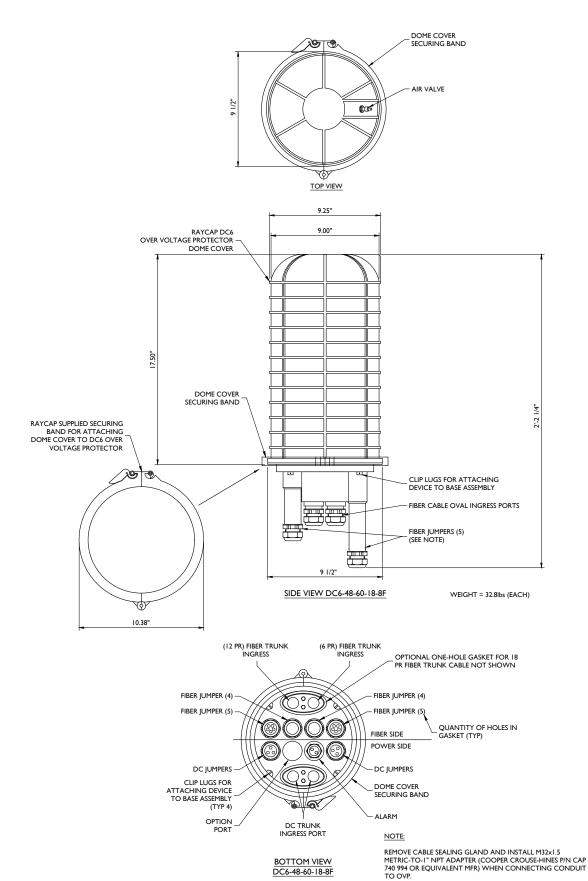
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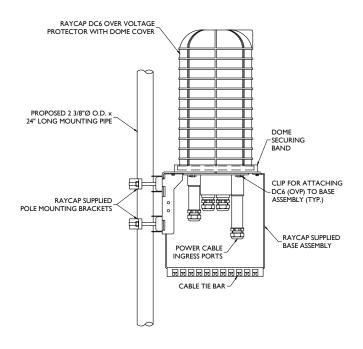


CONSTRUCTION DETAILS

A-2



DC6 SURGE SUPPRESSION DOME DETAIL



NOTES:

RAYCAP VIA AT&T SUPPLIES THE DC6 OVER VOLTAGE PROTECTOR AND PIPE MOUNTING BRACKETS. SUBCONTRACTOR SHALL SUPPLY THE PIPE.

DC6 SURGE SUPPRESSION DOME ANTENNA PLATFORM MOUNT ASSEMBLY

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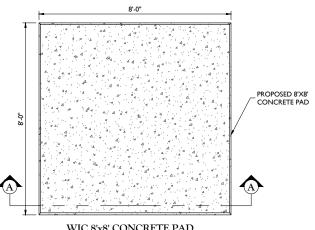
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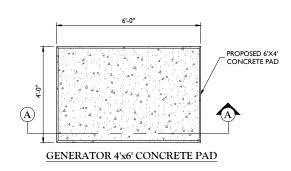
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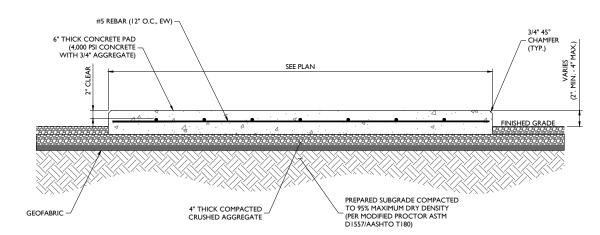
CONSTRUCTION DETAILS

A-3





WIC 8'x8' CONCRETE PAD



SECTION A-A

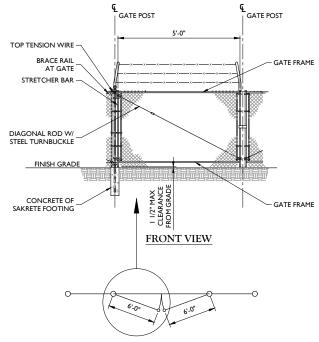
NOTE:

CONCRETE EQUIPMENT PAD

ANCHORS ARE TO BE INSTALLED A MINIMUM OF 4" FROM THE EDGE OF ANY SLAB.

FENCE NOTES:

- GATE POST, CORNER, TERMINAL OR PULL POST SHALL BE 3"Ø SCHEDULE 40 FOR GATE WIDTHS UP THROUGH 7 FEET OR 14 FEET FOR DOUBLE SWING GATE PER ASTM-F1083.
- 2. LINE POST: 2-3/8"Ø SCHEDULE 40 PIPE PER ASTM-F1083
- 3. GATE FRAME: 1 1/2"Ø SCHEDULE 40 PIPE PER ASTM-F1083.
- 4. TOP RAIL & BRACE RAIL: 1 1/4"Ø SCHEDULE 40 PIPE PER
- 5. FABRIC: 9 GA. CORE WIRE SIZE 2" MESH, CONFORMING TO ASTM-A392 CLASS I.
- TIE WIRE: MINIMUM I I GA GALVANIZED STEEL INSTALL A SINGLE WRAP TIE WIRE AT POSTS AND RAILS AT MAX. 24" INTERVALS. INSTALL HOG RINGS ON TENSION WIRE AT 24"
- 7. TENSION WIRE: 7 GA. GALVANIZED STEEL.
- BARBED WIRE: 3 STRANDS OF DOUBLE STRANDED 12-1/2
 GAUGE TWISTED WIRE, 4 PT. BARBS SPACED ON
 APPROXIMATELY 5" CENTERS.
- 9. GATE LATCH: 1-3/8" O.D. PLUNGER ROD W/ MUSHROOM TYPE CATCH AND LOCK.
- LOCAL ORDINANCE FOR BARBED WIRE PERMIT SHALL GOVERN INSTALLATION.
- 11. HEIGHT TO MATCH EXISTING FENCE
- 12. ALL WORK SHALL CONFORM WITH THE PROJECT SPECIFICATIONS.



TOP VIEW

WOVEN WIRE SWING GATE, DOUBLE

NOT TO SCALE

CONCRETE NOTES:

DESIGN INFORMATION:

- I. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ACI 336A, ASTM A184, ASTM A185 AND THE DESIGN & CONSTRUCTION SPECIFICATION FOR CAST-IN-PLACE CONCRETE.
- 2. THE DESIGN SHALL CONFORM TO THE INTERNATIONAL BUILDING CODE AS SHOWN ON SHEET T-I.

- FOUNDATIONS HAVE BEEN DESIGNED TO BEAR ON (UNDISTURBED RESIDUAL SOILS/COMPACTED STRUCTURAL FILL), CAPABLE OF SAFELY SUPPORTING AN ALLOWABLE BEARING PRESSURE OF 1,500 PSF. IF FOUNDATION CONDITIONS PROVE UNACCEPTABLE AT ELEVATIONS SHOWN, EXCAVATION SHALL BE CARRIED DEEPER AND SHALL BE BACKFILLED WITH LEAN CONCRETE TO PLAN FOOTING BOTTOM, OR REDISIGN OF FOUNDATIONS WILL BE REQUIRED AT THE DIRECTION OF THE ENGINEER.
- 2. DESIGN FURNISH AND INSTALL TEMPORARY SHEETING, SHORING, AND DRAINAGE TO MAINTAIN THE EXCAVATION AND PROTECT SURROUNDING STRUCTURES AND UTILITIES.
- 3. THOROUGHLY COMPACT ALL BOTTOM OF FOOTINGS PRIOR TO PLACING ANY CONCRETE.

CONCRETE

- I.a. CONCRETE CONSTRUCTION SHALL CONFORM TO "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR
- I.b. FORMWORK SHALL CONFORM TO ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS"

2. REINFORCEMENT

- 2.a. REINFORCING STEEL ASTM A615, GRADE 60. WELDED WIRE ASTM A185 (FLAT SHEET), LAPS 40 BAR DIAMETERS UNLESS NOTED. BARS SHALL BE SECURELY HELD IN ACCURATE POSITION BY SUITABLE ACCESSORIES, TIE BARS, SUPPORT BARS, ETC. HOOK LENGTHS SHALL BE 12 BAR DIAMETERS.
- 2.b. CONCRETE COVER FOR REINFORCING BARS SHALL BE AS FOLLOWS, UNLESS OTHERWISE NOTED.

2.b.1.	FOOTINGS AND SLABS CAST AGAINST GROUND	3"
2.b.2.	CONCRETE TO BE IN CONTACT WITH GROUND OR WEATHER AT BARS GREATER THAN 5"	2"
2.b.3.	AT BARS #5 OR LESS	1 1/2"
2.b.4.	CONCRETE NOT TO BE EXPOSED TO GROUND OR WEATHER BEAMS, GIRDERS, AND COLUMNS	1 1/2"
2.b.5.	SLABS AND WALLS	3/4"

2.c. CAST IN PLACE CONCRETE

2.c.1. MINIMUM 28 DAY CYLINDER STRENGTH AND MAXIMUM SLUMP, PRIOR TO ADDITION F SUPER

TICIZERS, AS FOLLOWS.			
CLASS I FOOTINGS	3000	PSI	3"
CLASS III INTERIOR ELEVATED SLABS AND WALLS	4000	PSI	4"
CLASS V OTHER WORK	4000	PSI	4"
CLASS VI LEAN CONCRETE FOR OVEREXCAVATION OF FOUNDATIONS	2000	PSI	N/A
	ICLASS I FOOTINGS CLASS III INTERIOR ELEVATED SLABS AND WALLS CLASS V OTHER WORK CLASS V 1 LEAN CONCRETE FOR OVEREXCAVATION OF FOUNDATIONS	CLASS I FOOTINGS 3000 CLASS III INTERIOR ELEVATED SLABS AND WALLS 4000 CLASS V OTHER WORK 4000	CLASS I FOOTINGS 3000 PSI CLASS III INTERIOR ELEVATED SLABS AND WALLS 4000 PSI CLASS V OTHER WORK 4000 PSI

- MIX DESIGN TO BE IN ACCORDANCE WITH ACI 318, CHAPTER 5. NO CALCIUM CHLORIDE ADMIXTURE CONTAINING CHLORIDES SHALL BE USED IN ANY CONCRETE
- COARSE AGGREGATE FOR NORMAL WIEGHT CONCRETE SHALL CONFORM TO ASTM C33 SIZE #57.
 COARSE AGGREGATE FOR LIGHTWEIGHT CONCRETE SHALL CONFORM TO ASTM C330 GRADED 3/4" TO
- 2.c.4. COLD WEATHER PLACEMENT SHALL COMPLY WITH ACI 306.1
- 2.c.5. HOT WEATHER PLACEMENT SHALL COMPLY WITH ACI 305 R
- CHAMFER ALL EXPOSED EDGES 3/4"
- 2.c.7. THE MAXIMUM TEMPERATURE OF ALL CONCRETE AT DELIVERY TO THE SITE SHALL BE 85°F
- TOTAL DELIVERY TIME SHALL BE LESS THAN 75 MINUTES.



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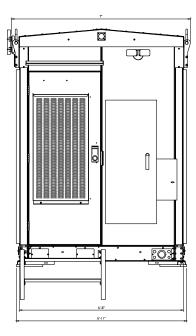
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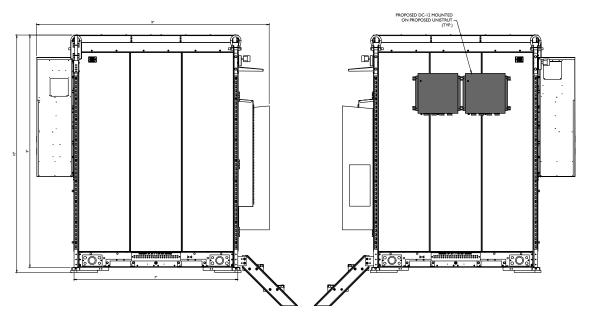


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CONSTRUCTION DETAILS

- Color Pebble-Gray, RAL7032.
- Finish Standard finish is multistage dry powder polyester paint for maximum durability and performance against corrosion. Optional exterior finishes also available upon request.
- NetSure™ 7100 DC Power System in 23" rack with three (3) battery trays (Third Party Integrated).
- NCU system and generator control (Third Party Integrated).
- (2) 19" or 23" equipment welded frames installed. One with fiber patch panel and the other without. (Third Party Integrated.)





Vertiv | XTE 802 Series Walk-In-Cabinet (WIC) (631-205-434)



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ALL STATES REQUIRE NOTIFICATION O EXCAVATORS, DESIGNERS, OR ANY PERS PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

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FOR STATE SPECIFIC DIRECT PHONE NUMBERS V

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9	06/05/19	REVISED PER C	OMMENTS	NL	RA	
7	04/19/19	REVISED PER C	OMMENTS	AJC	RA	
6	04/09/19	REVISED PER R	F COMMENTS	AJC	RA	
5	03/28/19	REVISED PER N	IEW RFDS	AJC	RA	
4	03/13/19	REVISED PER C	OMMENTS	AJC	RA	
3	02/12/19	REVISED PER N	IEW RFDS	AJC	RA	
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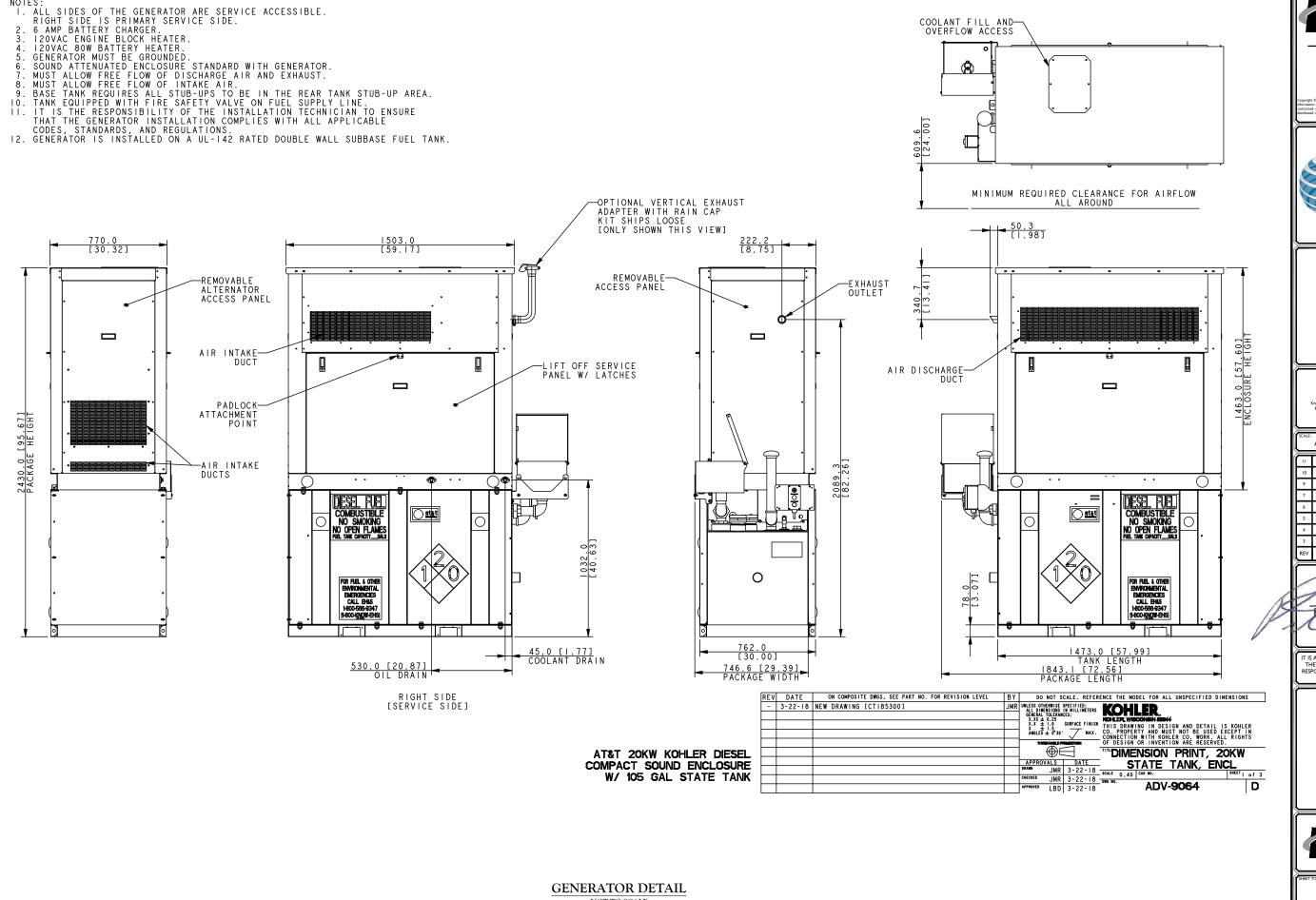
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331 Newman Springs Road

Suite 203 Red Bank, NJ 07701-566 Phone: .732.383.1950 Fax: .732.383.1984

CONSTRUCTION DETAILS

NUMBER :

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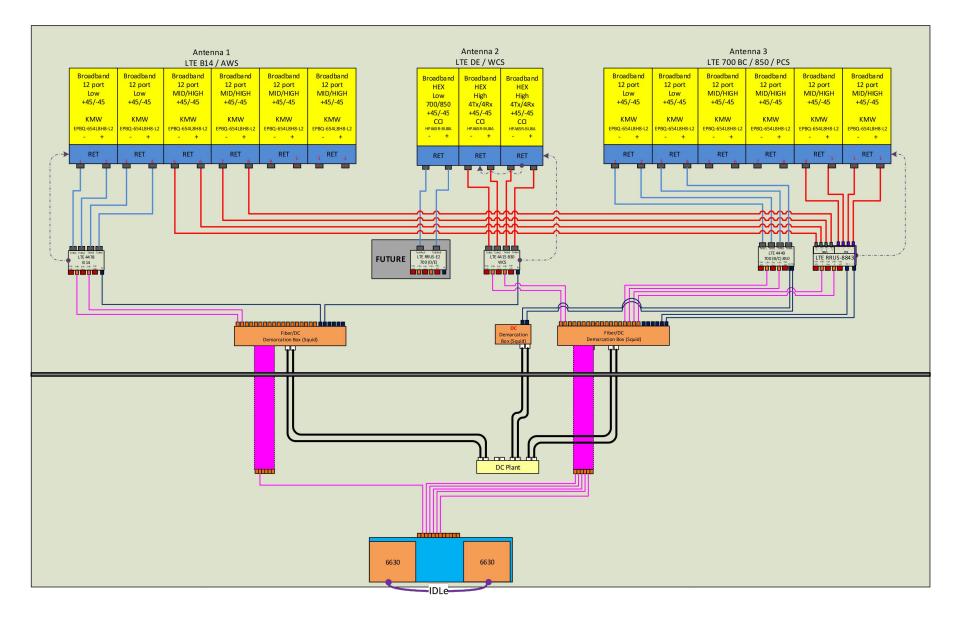
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CONSTRUCTION DETAILS

A-6

NOT TO SCALE



ALL SECTORS

BASED ON: RF ENGINEERING DESIGN ENTITLED "NEW-ENGLAND_CONNECTICUT_CT2413_2020-New-Site_New_ra9161_2051A0L9JY_12906926_151205_10-04-2018_As-Built-In-Progress_v7.00", LAST REVISED ON 05/08/2019.

RF PLUMBING DIAGRAMS



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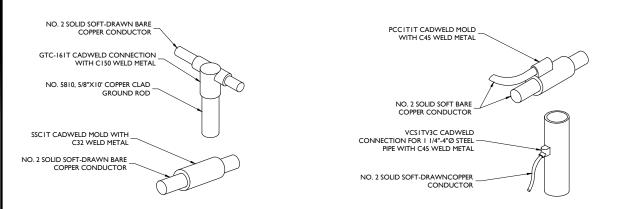
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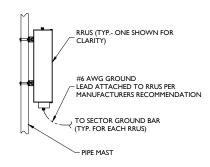


RF PLUMBING DIAGRAMS

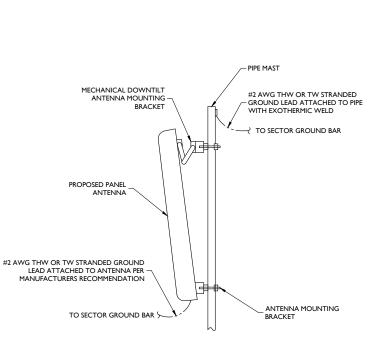
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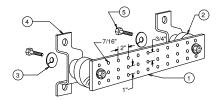
CADWELD DETAILS NOT TO SCALE



RRU GROUNDING NOT TO SCALE



ANTENNA GROUNDING



LEGEND

- I- TINNED COPPER GROUND BAR, I/4"x4"x20", NEWTON INSTRUMENT CO. CAT. NO. B-6142 OR EQUAL. 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-5056
- 5- 5/8-11 X I" HHCS BOLTS, NEWTON INSTRUMENT CO. CAT NO. 3012-1
- 6- EACH GROUND CONDUCTOR TERMINATING ON ANY GROUND BAR HAVE AN IDENTIFICATION TAG ATTACHED AT EACH END THAT WILL IDENTIFY ITS ORIGIN AND DESTINATION.

SECTION "P" - SURGE PRODUCERS

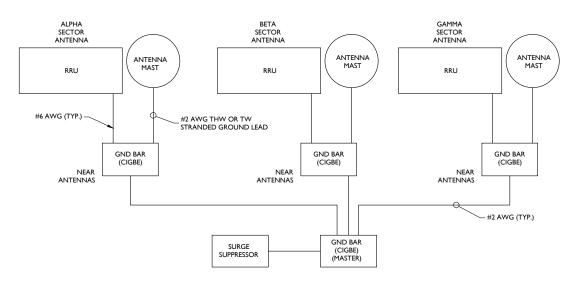
CABLE ENTRY PORTS (HATCH PLATES) (#2) GENERATOR FRAMEWORK (IF AVAILABLE) (#2) TELCO GROUND BAR
COMMERCIAL POWER COMMON NEUTRAL/GROUND BOND (#2) +24V POWER SUPPLY RETURN BAR (#2) -48V POWER SUPPLT RETURN BAR (#2) RECTIFIER FRAMES.

SECTION "A" - SURGE ABSORBERS

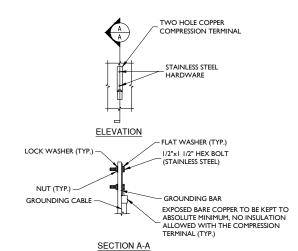
INTERIOR GROUND RING (#2) EXTERNAL EARTH GROUND FIELD (BURIED GROUND RING) (#2) METALLIC COLD WATER PIPE (IF AVAILABLE) (#2)
BUILDING STEEL (IF AVAILABLE) (#2)

MASTER GROUND BAR

NOT TO SCALE

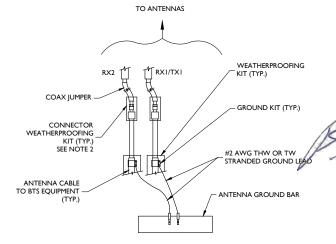


SCHEMATIC DIAGRAM GROUNDING SYSTEM



TYPICAL GROUND BAR CONNECTION DETAIL

NOT TO SCALE



- DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO ANTENNA GROUND BAR.
- WEATHER PROOFING SHALL BE TWO-PART TAPE KIT, COLD SHRINK SHALL NOT BE USED.

TYPICAL GROUND WIRE TO GROUNDING BAR NOT TO SCALE



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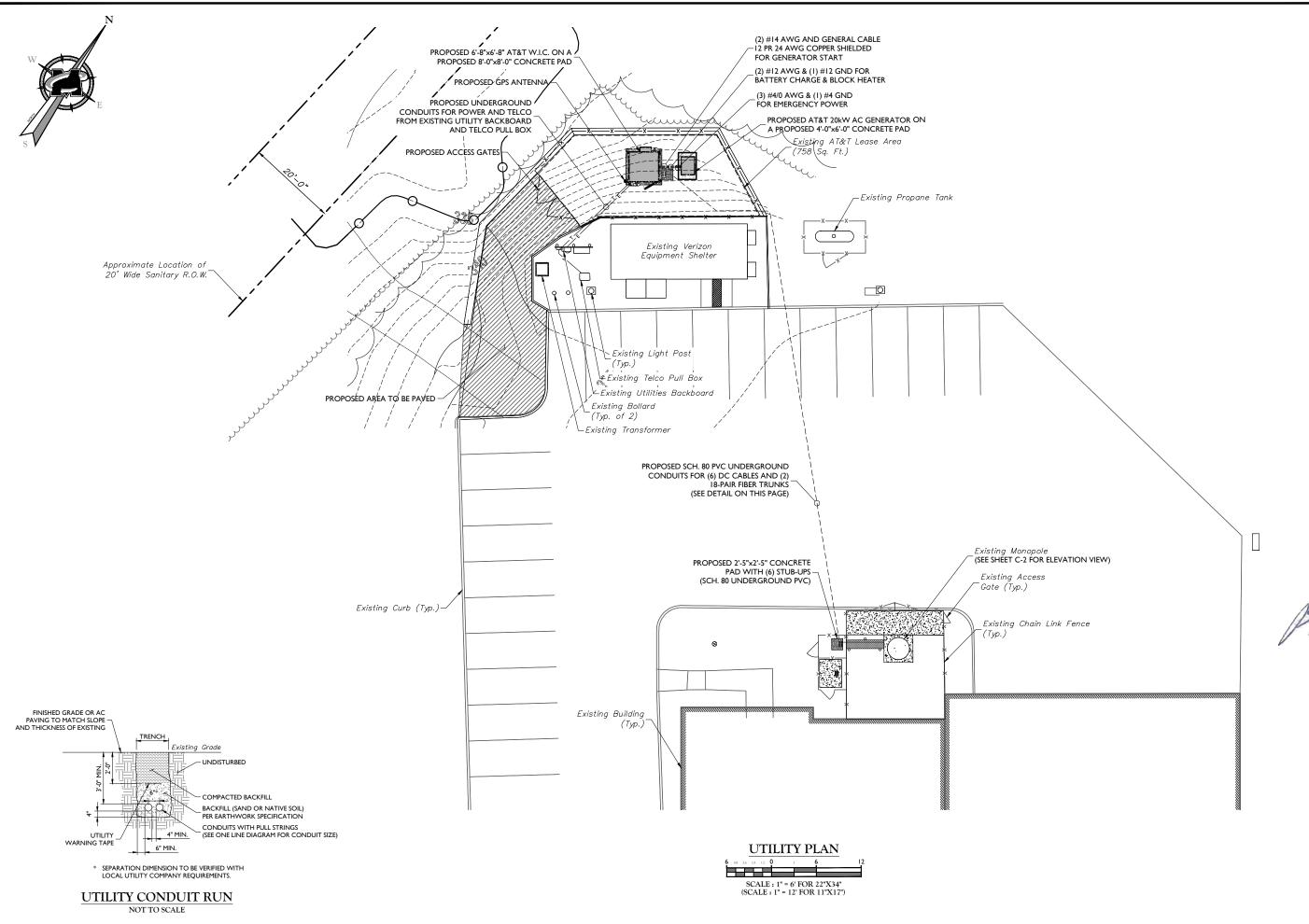
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GROUNDING DETAILS

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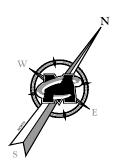
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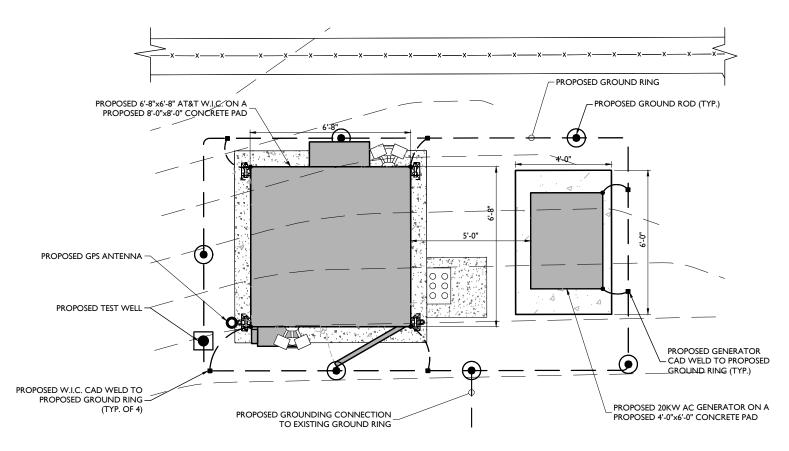


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UTILITY PLAN

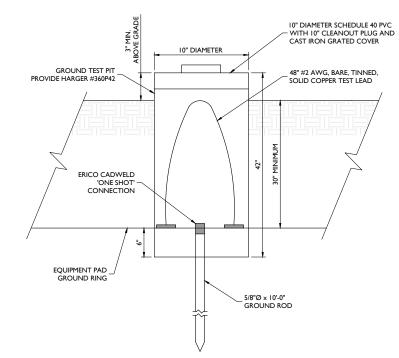
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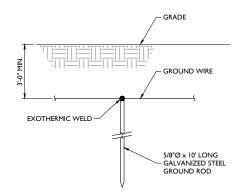


GROUNDING PLAN



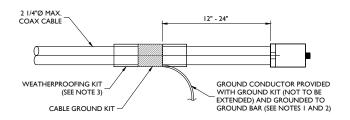


GROUND TEST PIT DETAIL NOT TO SCALE



GROUND ROD DETAIL

NOT TO SCALE



CONNECTION OF CABLE GROUND KIT TO ANTENNA CABLE NOT TO SCALE



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GROUNDING PLAN AND DETAILS

E-2

GENERAL NOTES

- I. THESE MODIFICATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE GOVERNING PROVISIONS OF THE 2018 CONNECTICUT STATE BUILDING CODE ALONG WITH THE STRUCTURAL STANDARD FOR ANTENNA SUPPORTING STRUCTURES AND ANTENNAS, TIA-222-G. MATERIALS AND SERVICES PROVIDED BY THE CONTRACTOR SHALL CONFORM TO THE ABOVE-MENTIONED CODES.
- 2. CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT DAMAGE TO EXISTING STRUCTURES AND UTILITIES, ANY DAMAGE TO EXISTING STRUCTURES AND UTILITIES AS A RESULT OF THE CONTRACTOR'S WORK OR FROM DAMAGE DUE TO OTHER CAUSES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
- a. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES IN THE AREA OF PROPOSED CONSTRUCTION, BY HAND
- 3. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING ANY PROBLEMS WITH ACCESS, INTERFERENCE, ETC. SHALL BE RESOLVED PRIOR TO BIDDING. THE CONTRACTOR MUST RESOLVE ALL ISSUES WITH THE OWNER PREVENTING A CONTINUOUS INSTALLATION PRIOR TO ORDERING ANY MATERIAL.
- 4. ANY CARRIER DOWNTIME MUST BE COORDINATED WITH THE TOWER OWNER IN WRITING.
- 5. CONTRACTOR SHALL ONLY WORK WITHIN THE LIMITS OF THE OWNER'S PROPERTY OR LEASE AREA AND APPROVED EASEMENTS, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIEY WORK IS WITHIN THESE BOUNDARIES, CONTRACTOR SHALL EMPLOY A SURVEYOR AS REQUIRED. ANY WORK OUTSIDE THESE BOUNDARIES SHALL BE APPROVED IN WRITING BY THE LAND OWNER PRIOR TO MOBILIZATION. CONSTRUCTION STAKING AND BOUNDARY MARKING IS THE RESPONSIBILITY OF THE CONTRACTOR.
- 6. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS BEFORE BEGINNING WORK, ORDERING MATERIAL, AND PREPARING OF SHOP DRAWINGS. ANY DISCREPANCIES BETWEEN FIELD CONDITIONS AND THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER. IF THE CONTRACTOR DISCOVERS ANY EXISTING CONDITIONS THAT ARE NOT REPRESENTED ON THESE DRAWINGS, OR ANY CONDITIONS THAT WOULD INTERFERE WITH THE INSTALLATION OF THE PROPOSED DESIGN, NOTIFY THE ENGINEER IMMEDIATELY.
- 7. IT IS ASSUMED THAT ANY STRUCTURAL WORK SPECIFIED ON THESE PLANS WILL BE ACCOMPLISHED BY KNOWLEDGEABLE WORKMEN WITH APPLICABLE CONSTRUCTION EXPERIENCE.
- 8 THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION METHODS, MEANS, TECHNIQUES, SEQUENCES, AND PROCEDURES.
- 9. ALL CONSTRUCTION MEANS AND METHODS: INCLUDING BUT NOT LIMITED TO, ERECTION PLANS, RIGGING PLANS, CLIMBING PLANS, AND RESCUE PLANS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR RESPONSIBLE FOR THE EXECUTION OF THE WORK CONTAINED HEREIN AND SHALL MEET ANSI/TIA-322 (LATEST EDITION). OSHA, AND GENERAL INDUSTRY STANDARDS. ALL RIGGING PLANS SHALL ADHERE TO ANSI/TIA-322 (LATEST EDITION) INCLUDING THE REQUIRED INVOLVEMENT OF A QUALIFIED ENGINEER FOR CLASS IV
- 10. WORK SHALL ONLY BE PERFORMED DURING CALM DRY DAYS (WINDS LESS THAN 30-MPH). THE STRUCTURE SHOWN ON THE DRAWINGS IS STRUCTURALLY SOUND ONLY IN THE COMPLETED FORM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STRENGTH AND STABILITY OF THE STRUCTURE DURING ERECTION. CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT, SHORING, BRACING AND ANY OTHER STRUCTURAL SYSTEMS AS REQUIRED TO RESIST ALL FORCES THAT MAY OCCUR DURING HANDLING AND ERECTION UNTIL THE CONSTRUCTION IS FULLY COMPLETED. TEMPORARY SUPPORTS, BRACING AND OTHER STRUCTURAL SYSTEMS REQUIRED DURING CONSTRUCTION SHALL REMAIN THE CONTRACTOR'S PROPERTY AFTER THEIR USE.
- II. ALL INSTALLATIONS PERFORMED ON THIS STRUCTURE SHALL BE COMPLETED IN ACCORDANCE WITH THE GOVERNING PROVISIONS OF THE STANDARD FOR INSTALLATION, ALTERATION AND MAINTENANCE OF ANTENNA SUPPORTING STRUCTURES AND ANTENNAS, ANSI/TIA-322.
- 12. CONNECTIONS BETWEEN ITEMS SUPPORTED BY THE STRUCTURE AND THE STRUCTURE NOT SPECIFICALLY DETAILED IN THE CONTRACT DOCUMENTS ARE THE RESPONSIBILITY OF THE CONTRACTOR. SUCH CONNECTIONS SHALL BE DESIGNED, COORDINATED AND INSPECTED BY A PROFESSIONAL STRUCTURAL ENGINEER LICENSED IN THE STATE OF THE PROJECT, SUBMIT SIGNED AND SEALED CALCULATIONS DURING SHOP DRAWING REVIEW.
- 13. DO NOT SCALE DRAWINGS.

14.DO NOT USE THESE DRAWINGS FOR ANY OTHER SITE.

- 15.ALL MATERIAL UTILIZED FOR THIS PROJECT MUST BE NEW AND FREE OF ANY DEFECTS. ANY MATERIAL SUBSTITUTIONS, INCLUDING BUT NOT LIMITED TO ALTERED SIZE AND/OR STRENGTHS, MUST BE APPROVED BY THE OWNER AND ENGINEER IN WRITING.
- 16.CONTRACTOR SHALL SECURE SITE BACK TO EXISTING CONDITION UNDER SUPERVISION OF OWNER. ALL FENCE, STONE, GEOFABRIC, GROUNDING, AND SURROUNDING GRADE SHALL BE REPLACED AND REPAIRED AS REQUIRED TO ACHIEVE OWNER APPROVAL, POSITIVE DRAINAGE AWAY FROM SITE SHALL BE MAINTAINED.
- 17.CONTRACTOR SHALL BUDGET \$900 DURING BID TO ACCOUNT FOR EOR CONSTRUCTION ADMINISTRATION AND SHOP DRAWING REVIEW.

DESIGN LOADS

WIND LOADS

- a. BASIC WIND SPEED (NOMINAL 3 SECOND GUST), V = 93 MPH
- b. EXPOSURE CATEGORY = B
- c. TOPOGRAPHIC CATEGORY = I
- a. MAXIMUM TOPOGRAPHIC FACTOR, $K_{zt} = 1.0$
- d. WIND IMPORTANCE FACTOR, I_M = 1.0

- a. ICE WIND SPEED (NOMINAL 3 SECOND GUST), V = 50 MPH
- b. ICE THICKNESS = 1.0 IN

STRUCTURAL STEEL

- I. DESIGN, DETAILING, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING PUBLICATIONS EXCEPT AS SPECIFICALLY INDICATED IN THE CONTRACT DOCUMENTS.
 - c. AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) MANUAL OF STEEL CONSTRUCTION 15TH EDITION
 - d. SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH STRENGTH BOLTS (ASTM A325 OR A490 BOLTS), DECEMBER 31, 2009
 - e. AISC 303-10, CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS
- 2. PERFORM ALL WELDING BY AN APPROVED METHOD IN ACCORDANCE WITH THE AWS DI.I "STRUCTURAL WELDING CODE" CURRENT EDITION. WELDING ELECTRODES TO BE E70.
- 3. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING UNLESS OTHERWISE SHOWN:

PLATES ASTM 572 (GR 65) STEEL PIPE ASTM A53 (GR 35) **BOLTS** ASTM A325 ASTM A563 **NUTS** WASHERS ASTM F436

- LOCK WASHERS LOCKING STRUCTURAL GRADE
- 4. ALL SUBSTITUTIONS PROPOSED BY THE CONTRACTOR SHALL BE APPROVED IN WRITING BY THE ENGINEER CONTRACTOR SHALL PROVIDE DOCUMENTATION TO ENGINEER FOR VERIFYING THE SUBSTITUTE IS SUITABLE FOR USE AND MEETS ORIGINAL DESIGN CRITERIA. DIFFERENCES FROM THE ORIGINAL DESIGN, INCLUDING MAINTENANCE, REPAIR AND REPLACEMENT, SHALL BE NOTED. ESTIMATES OF COSTS/CREDITS ASSOCIATED WITH THE SUBSTITUTION (INCLUDING RE-DESIGN COSTS AND COSTS TO SUB-CONTRACTORS) SHALL BE PROVIDED TO THE ENGINEER. CONTRACTOR SHALL PROVIDE ADDITIONAL DOCUMENTATION AND/OR SPECIFICATIONS TO THE
- 5. PROVIDE STRUCTURAL STEEL SHOP DRAWINGS TO ENGINEER FOR APPROVAL PRIOR TO FABRICATION.
 - a. SUBMIT SHOP DRAWINGS TO RANDREWS@MASERCONSULTING.COM
- 6. ALL BOLT ASSEMBLES FOR STRUCTURAL MEMBERS REPRESENTED IN THIS DRAWING REQUIRE LOCKING DEVICES TO BE INSTALLED IN ACCORDANCE WITH TIA-222-G SECTION 4.9.2 REQUIREMENTS.
- 7. ALL BOLTS SHALL BE INSTALLED TO A SNUG TIGHT CONDITION U.N.O.
- 8. ALL WELDING SHALL BE DONE IN ACCORDANCE WITH AWS D1.0 (LATEST EDITION) AND ENG-PLN-10015 CUTTING AND WELDING SAFETY PLAN (REV. D). THIS SHALL INCLUDE A CERTIFIED WELD INSPECTION (CWI) FOR ACCEPTANCE OR REJECTION OF ALL WELDING OPERATIONS. PRE, DURING, AND POST INSTALLATION, USING THE ACCEPTANCE CRITERIA OF AWS DI.I.
- 9. CONTRACTOR IS RESPONSIBLE FOR COMMISSIONING A THIRD-PARTY

CERTIFIED WELD INSPECTOR (CWI) THROUGHOUT THE ENTIRETY OF THE PROJECT. A PASSING CWI REPORT SHALL BE PROVIDED TO THE ENGINEER UPON COMPLETION OF THE PROJECT.

- 10. THE CERTIFIED WELD INSPECTOR SHALL INDICATE. IN A WRITTEN CWI REPORT, THAT ALL WELDING OPERATIONS PRE, DURING. AND POST INSTALLATION WERE CONDUCTED IN ACCORDANCE WITH AWS DI.I WITH PHOTOGRAPHS AND DOCUMENTATION SUPPORTING THE ACCEPTANCE OR REJECTION OF ALL WELDING. ALL CWI WELD INSPECTION DOCUMENTATION AND PHOTOS SHALL BE SUBMITTED TO THE MI INSPECTOR.
- I I.IN CASES WHERE A WELD IS SPECIFIED BETWEEN TWO MEMBERS IN WHICH THERE IS A GAP IN BETWEEN, THE WELD IS TO BE BUILT-UP SUCH THAT THE SIZE OF WELD ON THE MEMBER IS EQUAL TO THAT SHOWN IN
- 12.OXY FUEL GAS WELDING OR BRAZING IS STRICTLY PROHIBITED. SPECIFICALLY, NO TORCH CUTTING IS PERMITTED ON SITE. ALL HOLES SHALL BE CUT WITH A GRINDER.
- 13.COAX IS FLAMMABLE AND CAN CATCH FIRE IF PROPER PRECAUTIONS ARE NOT MADE TO SHIELD COAX FROM ALL WELDING AND GRINDING PROCEDURES. ALL COAX SHALL BE SHIELDED AT AND BELOW EACH WELDING OR GRINDING PROCEDURE AND ELEVATION. IN ADDITION, COAX SHALL BE PUSHED AWAY FROM TOWER FACE WHERE WELDING OR GRINDING IS BEING PERFORMED. INSTALL 3000° (NFPA 701) FIRE BLANKET AROUND ALL COAX.
- 14.CONTRACTOR SHALL EXERCISE CAUTION WHEN WELDING A GALVANIZED SURFACE.
- 15.ALL FIELD WELDS SHALL BE TOUCHED UP WITH A GALVANIZING PAINT REPAIR (ZRC OR APPROVED EQUIVALENT).
- 16 AFTER FINAL INSPECTION, THE AREA OF THE WELDS, THE INSTALLATION AND ALL SURFACES DAMAGED BY WELDING OR GRINDING SHALL BE CLEANED AND COLD GALVANIZED PAINTED IN ACCORDANCE WITH ENG-BUL-10149 COLD GALVANIZING COMPOUNDS, PHOTO DOCUMENTATION IS REQUIRED TO BE SUBMITTED TO THE MI
- 17.DRILL NO HOLES IN ANY NEW OR EXISTING STRUCTURAL STEEL MEMBERS OTHER THAN THOSE SHOWN ON STRUCTURAL DRAWINGS WITHOUT THE APPROVAL OF THE ENGINEER OF RECORD.
- 18.WHERE CONNECTIONS ARE NOT FULLY DETAILED ON THESE DRAWINGS, FABRICATOR SHALL DESIGN CONNECTIONS TO RESIST LOADS AND FORCES WHERE SHOWN ON DRAWINGS AND AS OUTLINED
- 19.ALL BOLTS SHALL BE OF SUFFICIENT LENGTH SUCH THAT THE END OF THE BOLT IS AT LEAST FLUSH WITH THE FACE OF THE NUT. IT IS NOT PERMITTED FOR THE BOLT END TO BE BELOW THE FACE OF THE NUT AFTER TIGHTENING IS COMPLETED.
- 20. GALVANIZED ASTM A325 BOLTS SHALL NOT BE REUSED.
- 21. A490 BOLTS SHALL NOT BE COATED BY HOT-DIP ZINC COATING, MECHANICAL DEPOSITION, OR ELECTROPLATING WITH ZINC. INSTEAD, A490 BOLTS SHALL BE COATED WITH ZINC/ALUMINUM CORROSION PROTECTIVE COATINGS PER ASTM F1136 GRADE 3 (DACROMENT OR EQUIVALENT)
- 22. ALL NEW STEEL (EXCEPT A490 BOLTS) SHALL BE HOT BE DIPPED GALVANIZED FOR FULL WEATHER PROTECTION, ALL GALVANIZING COMPOUNDS MUST BE IN ACCORDANCE WITH CROWN DOCUMENT ENG-BUL-10149. CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION TO PROTECT STEEL BY ANY OTHER MEANS.
- 23. ALL EXISTING PAINTED/GALVANIZED SURFACES DAMAGED DURING REHAB INCLUDING AREAS UNDER STIFFENER PLATES SHALL BE WIRE BRUSHED CLEAN, REPAIRED BY COLD GALVANIZING BRUSH APPLIED PAINT (ZRC OR EQUAL), AND REPAINTED TO MATCH THE EXISTING
- 24. ALL HOLES IN STEEL MEMBERS SHALL BE SIZED 1/16" LARGER THAN THE BOLT DIAMETER, STANDARD HOLES SHALL BE USED UNLESS NOTED OTHERWISE.



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	3	02/12/19	REVISED PER NEW RFDS		AJC	RA	
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ETROS E. TSOUKALAS

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> SITE NAME: SIMSBURY -BUSHY HILL RD. FA# 12906926 SITE# CT2413S

345 BUSHY HILL ROAD SIMSBURY, CT 06070 HARTFORD COUNTY



RED BANK OFFICE

GENERAL NOTES -STRUCTURAL

MODIFICATION INSPECTION NOTES

Γ	MI CHECKLIST					
CONSTRUCTION/INSTALLATION INSPECTIONS AND TESTING REQUIRED (COMPLETED BY EOR)	REPORT ITEM					
PRE-CONSTRUCTION						
X	MI CHECKLIST DRAWING					
X	EOR APPROVED SHOP DRAWINGS					
X	FABRICATION INSPECTION					
X	FABRICATOR CERTIFIED WELD INSPECTION					
X	MATERIAL TEST REPORT (MTR)					
N/A	FABRICATOR NDE INSPECTION					
NA	NDE REPORT OF MONOPOLE BASE PLATE					
X	PACKING SLIPS					
	CONSTRUCTION					
X	CONSTRUCTION INSPECTIONS					
NA	FOUNDATION INSPECTIONS					
	CONCRETE COMP. STRENGTH AND SLUMP TESTS					
NA	CONCRETE COMP. STRENGTH AND SLUMP TESTS					
NA NA	CONCRETE COMP. STRENGTH AND SLUMP TESTS POST INSTALLED ANCHOR ROD VERIFICATION					
NA	POST INSTALLED ANCHOR ROD VERIFICATION BASE PLATE GROUT VERIFICATION					
NA NA	POST INSTALLED ANCHOR ROD VERIFICATION BASE PLATE GROUT VERIFICATION					
NA NA X	POST INSTALLED ANCHOR ROD VERIFICATION BASE PLATE GROUT VERIFICATION CONTRACTOR'S CERTIFIED WELD INSPECTION AND NDE REPORTS					
NA NA X NA	POST INSTALLED ANCHOR ROD VERIFICATION BASE PLATE GROUT VERIFICATION CONTRACTOR'S CERTIFIED WELD INSPECTION AND NDE REPORTS EARTHWORK: LIFT AND DENSITY					
NA NA X NA X	POST INSTALLED ANCHOR ROD VERIFICATION BASE PLATE GROUT VERIFICATION CONTRACTOR'S CERTIFIED WELD INSPECTION AND NDE REPORTS EARTHWORK: LIFT AND DENSITY ON SITE COLD GALVANIZING VERIFICATION					
NA NA X NA X	POST INSTALLED ANCHOR ROD VERIFICATION BASE PLATE GROUT VERIFICATION CONTRACTOR'S CERTIFIED WELD INSPECTION AND NDE REPORTS EARTHWORK: LIFT AND DENSITY ON SITE COLD GALVANIZING VERIFICATION GUY WIRE TENSION REPORT GC AS-BUILT DOCUMENTS					
NA NA X NA X NA X ODITIONAL TESTING AND INSPECTION	POST INSTALLED ANCHOR ROD VERIFICATION BASE PLATE GROUT VERIFICATION CONTRACTOR'S CERTIFIED WELD INSPECTION AND NDE REPORTS EARTHWORK: LIFT AND DENSITY ON SITE COLD GALVANIZING VERIFICATION GUY WIRE TENSION REPORT GC AS-BUILT DOCUMENTS ONS:					
NA NA X NA X NA X ODITIONAL TESTING AND INSPECTION	POST INSTALLED ANCHOR ROD VERIFICATION BASE PLATE GROUT VERIFICATION CONTRACTOR'S CERTIFIED WELD INSPECTION AND NDE REPORTS EARTHWORK: LIFT AND DENSITY ON SITE COLD GALVANIZING VERIFICATION GUY WIRE TENSION REPORT GC AS-BUILT DOCUMENTS ONS: POST-CONSTRUCTION					
NA NA X NA X NA X ODITIONAL TESTING AND INSPECTION	POST INSTALLED ANCHOR ROD VERIFICATION BASE PLATE GROUT VERIFICATION CONTRACTOR'S CERTIFIED WELD INSPECTION AND NDE REPORTS EARTHWORK: LIFT AND DENSITY ON SITE COLD GALVANIZING VERIFICATION GUY WIRE TENSION REPORT GC AS-BUILT DOCUMENTS ONS:					

NOTE: X DENOTES A DOCUMENT REQUIRED FOR THE MI REPORT NA DENOTES A DOCUMENT THAT IS NOT REQUIRED FOR THE MI REPORT THE MODIFICATION INSPECTION (MI) IS A VISUAL INSPECTION OF TOWER MODIFICATIONS AND A REVIEW OF CONSTRUCTION INSPECTIONS AND OTHER REPORTS TO ENSURE THE INSTALLATION WAS CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, NAMELY THE MODIFICATION DRAWINGS, AS DESIGNED BY THE ENGINEER OF RECORD (EOR).

THE MI IS TO CONFIRM INSTALLATION CONFIGURATION AND WORKMANSHIP ONLY AND IS NOT A REVIEW OF THE MODIFICATION DESIGN ITSELF, NOR DOES THE MI INSPECTOR TAKE OWNERSHIP OF THE MODIFICATION DESIGN. OWNERSHIP OF THE STRUCTURAL MODIFICATION DESIGN EFFECTIVENESS AND INTEGRITY RESIDES WITH THE FOR AT ALL TIMES

TO ENSURE THAT THE REQUIREMENTS OF THE MI ARE MET, IT IS VITAL THAT THE GENERAL CONTRACTOR (GC) AND THE MI INSPECTOR BEGIN COMMUNICATING AND COORDINATING AS SOON AS A PURCHASE ORDER (PO) IS RECEIVED. IT IS EXPECTED THAT EACH PARTY WILL BE

MI INSPECTOR

THE MI INSPECTOR IS REQUIRED TO CONTACT THE GC AS SOON AS RECEIVING A PO FOR THE MI TO, AT A MINIMUM:

- REVIEW THE REQUIREMENTS OF THE MI CHECKLIST
- WORK WITH THE GC TO DEVELOP A SCHEDULE TO CONDUCT ON-SITE INSPECTIONS, INCLUDING FOUNDATION INSPECTIONS

THE MI INSPECTOR IS RESPONSIBLE FOR COLLECTING ALL GC INSPECTION AND TEST REPORTS, REVIEWING THE DOCUMENTS FOR ADHERENCE TO THE CONTRACT DOCUMENTS. CONDUCTING THE IN-FIELD INSPECTIONS, AND SUBMITTING THE MI REPORT TO EOR.

GENERAL CONTRACTOR

THE GC IS REQUIRED TO CONTACT THE MI INSPECTOR AS SOON AS RECEIVING A PO FOR THE MODIFICATION INSTALLATION OR TURNKEY PROJECT TO, AT A MINIMUM:

- REVIEW THE REQUIREMENTS OF THE MI CHECKLIST
- WORK WITH THE MI INSPECTOR TO DEVELOP A SCHEDULE TO CONDUCT ON-SITE MI INSPECTIONS, INCLUDING FOUNDATION INSPECTIONS
- BETTER UNDERSTAND ALL INSPECTION AND TESTING REQUIREMENTS

THE GC SHALL PERFORM AND RECORD THE TEST AND INSPECTION RESULTS IN ACCORDANCE WITH THE REQUIREMENTS OF THE MI CHECKLIST.

RECOMMENDATIONS

THE FOLLOWING RECOMMENDATIONS AND SUGGESTIONS ARE OFFERED TO ENHANCE THE EFFICIENCY AND EFFECTIVENESS OF DELIVERING AN MI REPORT:

- IT IS SUGGESTED THAT THE GC PROVIDE A MINIMUM OF 5 BUSINESS DAYS NOTICE, PREFERABLY 10, TO THE MI INSPECTOR AS TO WHEN THE SITE WILL BE READY FOR THE MI TO BE CONDUCTED
- THE GC AND MI INSPECTOR COORDINATE CLOSELY THROUGHOUT THE ENTIRE PROJECT.
- WHEN POSSIBLE, IT IS PREFERRED TO HAVE THE GC AND MI INSPECTOR ON-SITE
- SIMULTANEOUSLY FOR ANY GUY WIRE TENSIONING OR RE-TENSIONING OPERATIONS. IT MAY BE BENEFICIAL TO INSTALL ALL TOWER MODIFICATIONS PRIOR TO CONDUCTING THE FOUNDATION INSPECTIONS TO ALLOW THE FOUNDATION AND MI INSPECTION(S) TO COMMENCE WITH ONE SITE VISIT.
- WHEN POSSIBLE, IT IS PREFERRED TO HAVE THE GC AND MI INSPECTOR ON-SITE DURING THE MI TO HAVE ANY DEFICIENCIES CORRECTED DURING THE INITIAL MI. THEREFORE, THE GC MAY CHOOSE TO COORDINATE THE MI CAREFULLY TO ENSURE ALL CONSTRUCTION FACILITIES ARE AT THEIR DISPOSAL WHEN THE MI INSPECTOR IS ON SITE

CORRECTION OF FAILING MI'S

IF THE MODIFICATION INSTALLATION WOULD FAIL THE MI ("FAILED MI"), THE GC SHALL WORK

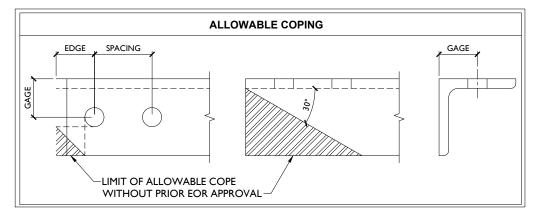
 CORRECT FAILING ISSUES TO COMPLY WITH THE SPECIFICATIONS CONTAINED IN THE ORIGINAL CONTRACT DOCUMENTS AND COORDINATE A SUPPLEMENT MI.

REQUIRED PHOTOS

BETWEEN THE GC AND THE MI INSPECTOR THE FOLLOWING PHOTOGRAPHS, AT A MINIMUM. ARE TO BE TAKEN AND INCLUDED IN THE MI REPORT:

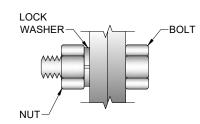
- PRE-CONSTRUCTION GENERAL SITE CONDITION
 PHOTOGRAPHS DURING THE REINFORCEMENT MODIFICATION
- CONSTRUCTION/ERECTION AND INSPECTION
- PHOTOS OF ALL CRITICAL DETAILS
- FOUNDATION MODIFICATIONS
- WELD PREPARATION
- **BOLT INSTALLATION**
- FINAL INSTALLED CONDITION
- SURFACE COATING REPAIR
- POST CONSTRUCTION PHOTOGRAPHS FINAL INFIELD CONDITION

PHOTOS OF ELEVATED MODIFICATIONS TAKEN ONLY FROM THE GROUND SHALL BE CONSIDERED INADEQUATE.



BOLT SCHEDULE (IN.)											
BOLT DIAMETER	STANDARD HOLE	SHORT SLOT	MIN. EDGE DISTANCE	SPACING							
1/2 9/16		9/16 x 11/16	7/8	1 1/2							
5/8	11/16	11/16 x 7/8 13/16 x 1	1 1/8	1 7/8 2 1/4							
3/4	13/16		1 1/4								
7/8	7/8 15/16		1 1/2	2 5/8							
1	1 1/16	1 1/16 x 1 5/16	1 3/4	3							

WORKABLE GAGES (IN.)							
LEG	GAGE						
4	2 1/2						
3 1/2	2						
3	1 3/4						
2 1/2	1 3/8						
2	1 1/8						



TYP. BOLT ASSEMBLY

NOTES:

- ALL DIMENSIONS REPRESENTED IN THE ABOVE TABLES ARE AISC MINIMUM REQUIREMENTS, CONTRACTOR SHALL VERIFY EXISTING CONDITIONS IN FIELD AND NOTIFY ENGINEER IF DISTANCES
- ARE LESS THAN THOSE PROVIDED.
 THE DIMENSIONS PROVIDED ARE MINIMUM REQUIREMENTS. ACTUAL DIMENSIONS OF PROPOSED MEMBERS WITHIN THESE DRAWINGS MAY VARY FROM THE AISC MINIMUM REQUIREMENTS.
- SHORT SLOT HOLES SHALL ONLY BE USED WHEN DEPICTED IN THE DRAWINGS.
- MATCH EXISTING GAGES WHEN APPLICABLE, UNLESS MINIMUM EDGE DISTANCES ARE COMPROMISED.



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RA 4 03/13/19 REVISED PER COMMENTS DATE DESCRIPTION

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> SITE NAME: SIMSBURY. BUSHY HILL RD. FA# 12906926 SITE# CT2413S

345 BUSHY HILL ROAD SIMSBURY, CT 06070 HARTFORD COUNTY



RED BANK OFFICE 331 Newman Springs Road

GENERAL NOTES -

S-002

STRUCTURAL

AJAX/DTI BOLT SPECIFICATIONS AND TIGHTENING PROCEDURE

M20 AJAX/DTI BOLT ASSEMBLY COMPONENT SPECIFICATIONS:

BOLT:

AJAX ONESIDE™ BLIND BOLT (M8.8; EQUIVALENT TO A325) FINISH: HOT DIP GALVANIZED PER ASTM A153.

SDI IT WASHED.

AJAX ONESIDE™ SPLIT WASHER FINISH: HOT DIP GALVANIZED PER ASTM A153.

SHEAR SLEEVE:

 F_U = 120 KSI MIN. (ASTM A519) 29MM O.D. x 20MM I.D. LENGTH = NOMINAL [GRIP-6MM] = [GRIP-0.25"] (TOL. -0", +1/32") SLEEVES SHALL BE ROUND, WITH ENDS CUT SQUARE AND DEBURRED. FINISH: GALVANIZED (COLD GALVANIZED AS PER CROWN ENG-BUL-10149, HOT DIP GALVANIZED PER ASTM A123, MECHANICALLY GALVANIZED AND SPUN) OR CADMIUM PLATED.

SOLID WASHER:

AJAX ONESIDE™ SOLID WASHER FINISH: HOT DIP GALVANIZED PER ASTM A153.

DIRECT TENSION INDICATOR WASHER:

SQUIRTER® DTI, ASTM F959M

FINISH: COLD MECHANICALLY GALVANIZED (TO ASTM B695) AND EPOXY COATED.

MANUFACTURER

APPLIED BOLTING TECHNOLOGY PRODUCTS, INC. 1413 ROCKINGHAM ROAD, BELLOWS FALLS, VERMONT, USA 05101

PHONE: 1-800-552-1999

WEBSITE: WWW.APPLIEDBOLTING.COM

DISTRIBUTORS OF SQUIRTER® DTI'S:

http://www.appliedbolting.com/applied-bolting-distributors.html

FLAT WASHER:

HARDENED FLAT WASHER, ASTM F436M (MINIMUM HARDNESS RC38) FINISH: COLD MECHANICALLY GALVANIZED

HEX NUT

AJAX ONESIDE™ HEAVY HEX NUT

FINISH: HOT DIP GALVANIZED PER ASTM A153.

BOLT ASSEMBLY AND INSTALLATION:

BOLT ASSEMBLY SHALL ADHERE TO THE REQUIREMENTS OF DETAIL 1.

NON-PETROLEUM BASED, WATER SOLUBLE, INERT BOLT LUBRICANT SHALL BE USED ON ALL AJAX BOLTS TO ENSURE PROPER TENSIONING OF THE ASSEMBLY. CARE SHOULD BE TAKEN TO ENSURE THE BOLT HEAD AND SPLIT WASHER ARE NOT LUBRICATED AS THIS MAY CAUSE EXCESSIVE BOLT SLIPPAGE UPON APPLYING TORQUE, WHICH MAY LEAD TO DIFFICULTIES IN ENGAGING THE SQUIRTER® DTI WASHER PROPERLY. **NOTE**: ONLY LUBRICATING THE THREADS OF THE NUT MAY ACHIEVE BETTER RESULTS. THE TYPICAL RULE OF THUMB WHEN USING AN IMPACT WRENCH IS TO ENGAGE FOR NO MORE THAN 10 SECONDS. IF THE BOLT IS NOT SPINNING AND THE SQUIRTER ® DTI "BUMPS" HAVE NOT ENGAGED AFTER 10 SECONDS USING AN IMPACT WRENCH, REMOVE THE NUT AND REAPPLY LUBRICANT. **NOTE**: PROLONGED USE OF THE IMPACT WRENCH TENDS TO HEAT THE BOLT THREAD/NUT, THEREBY, INCREASING FRICTION ON THE THREADS WHICH WOULD REQUIRE ADDITIONAL TORQUE. HOLDING FOR LONGER THAN 10 SECONDS CAN BE COUNTERPRODUCTIVE.

A MINIMUM OF 4 OUT OF 5 SQUIRTER® DTI "BUMPS" SHALL BE ENGAGED IN ANY AJAX/DTI BOLT ASSEMBLY IN THE END CONNECTION OF REINFORCING MEMBERS. INTERMEDIATE BOLTS SHALL ENGAGE A MINIMUM OF 3 OUT OF 5 SQUIRTER® DTI "BUMPS".

DTI WASHERS MUST BE PLACED DIRECTLY AGAINST THE OUTER AJAX WASHER WITH THE "BUMPS" FACING AWAY FROM THE AJAX WASHER. PLACE A HARDENED WASHER BETWEEN THE DTI AND THE AJAX NUT. THE DTI "BUMPS" SHALL BEAR AGAINST THE UNDERSIDE OF A HARDENED FLAT WASHER, NEVER DIRECTLY AGAINST THE NUT.

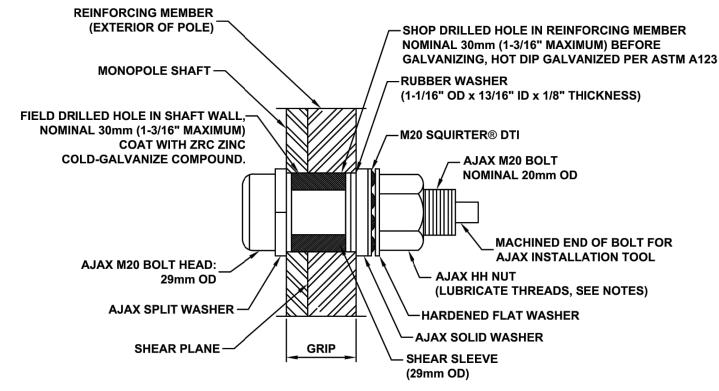
FOLLOW THE DTI MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION, LUBRICATION, TIGHTENING, AND INSPECTION.

INSPECTION:

VISUALLY INSPECT ALL BOLT ASSEMBLIES TO ENSURE THE MINIMUM "BUMP" ENGAGEMENT AS DEFINED IN THE SECTION "BOLT ASSEMBLY AND INSTALLATION" HAS BEEN ACHIEVED. FOR MORE INFORMATION ON INSPECTION. SEE THE MANUFACTURER'S GUIDELINES.

WHERE FEASIBLE, CHECK A SAMPLE OF THE END CONNECTION DTI WASHERS WITH THE APPROPRIATE FEELER GAGE. IF THE FEELER GAGE CANNOT BE INSERTED TO THE BOLT SHANK HALF WAY AROUND THE BOLT, THE INSTALLATION IS NOT OKAY. IF YOU FIND MORE THAN ONE SUCH "NOT OKAY" BOLT IN ANY ONE END CONNECTION, CHECK ALL BOLTS IN THAT END CONNECTION. A MINIMUM OF THREE BOLTS SHALL BE CHECKED IN EACH END CONNECTION. PHOTOS SHALL BE TAKEN TO INDICATE THE BOLTS TESTED.

ALL BOLT ASSEMBLIES AND DTI WASHERS SHALL BE VISUALLY INSPECTED. THE BOLT INSPECTOR SHALL PROVIDE COMPLETE PHOTO DOCUMENTATION OF ALL BOLTS AFTER TIGHTENING CLEARLY SHOWING THE CONDITION OF THE DTI WASHERS.



DETAIL 1: M20 AJAX/DTI BOLT ASSEMBLY



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REV DATE DESCRIPTION DRAWN CHECKED

PETROS E. TSOUKALAS

CONNECTICUT PROFESSIONAL
ENGINEER - LICENSE NUMBER: 32577

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> SITE NAME: SIMSBURY -BUSHY HILL RD. FA# 12906926 SITE# CT2413S

345 BUSHY HILL ROAD SIMSBURY, CT 06070 HARTFORD COUNTY



RED BANK OFFICE
331 Newman Springs Road
Suite 203
Red Bank, NJ 07701-5669

GENERAL NOTES -STRUCTURAL

FORGBolt™ NOTE SHEET: A325/PC8.8 LANDSCAPE VERSION DATE 01/21/2015

NOTES: 1. ALL STRUCTURAL BOLTS SHALL BE INSTALLED AND TIGHTENED TO THE PRETENSIONED CONDITION ACCORDING TO THE REQUIREMENTS OF THE AISC 'SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS', DEC. 31, 2009.

2. ALL STRUCTURAL BOLTS SHALL BE INSPECTED ACCORDING TO THE REQUIREMENTS OF THE AISC 'SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS', DEC. 31, 2009.

FORGBolt™				•	A Material: AST Stress, Fu = 120			
GROUP A		FORGBolt™ Size (mm)	Overall Length (inches)	Estimated Weight Each (lbs)	Grip Range (inch)	Comment	Color Code	
Σ ∞	1	135	5.31	1.3	3/8" to 1"	-	RED	
Bolt™ PC8.8	2	160	6.30	1.6	3/4" to 1-1/2"		GREEN	
8 9	3	195	7.68	1.9	1-1/4" to 2-1/4"	-	BLUE	
	4	4	260	10.24	2.6	2" to 3-1/2"	Splice Bolt	YELLOW
FORG A325	5	365	14.37	3.6	3-1/2" to 5-1/2"	Flange Jump Bolt	ORANGE	
╙⋖	6	440	17.32	4.3	5-1/2" to 8-1/2"	Flange Jump Bolt	BLACK	
DTI Each Group A (A325/PC8.8) FORGBolt™ assembly shall have								

'Squirter' DTI that is compatible with a M20-PC8.8 bolt.

FORGBolt™ Installation

Follow all Manufacturer/Distributer Recommendations for Installation, Tightening, and Inspection.

- 1. FIELD DRILL HOLES TO 30 MM DIAMETER.
- 2. SELECT CORRECT BOLT SIZE FOR INSTALLATION GRIP (REFER TO PLANS).
- 3. INSERT BOLT ASSEMBLY THROUGH HOLES IN SHAFT REINFORCING PLATES AND SEAT THE HARDENED WASHER W1 FLUSH AGAINST OUTSIDE OF PLATE.
- 4. HAND TIGHTEN NUT TO FINGER TIGHT.

INTERIOR OF POLE SHAFT

- 5. TIGHTEN NUT TO PRETENSIONED CONDITION AND UNTIL DTI SHOWS PROPER INDICATION.
- 6. PROPERLY DOCUMENT AND INSPECT BOLT TIGHTENING PER PLAN REQUIREMENTS.

BOLT HOLE NOTES:

- 1. ALL SHOP-DRILLED HOLES SHALL BE NOMINAL 30 MM DIAMETER. THE MAXIMUM SHOP-DRILLED HOLE **DIAMETER PERMITTED IS 1-3/16".**
- 2. ALL FIELD-DRILLED HOLES SHALL BE NOMINAL 30 MM DIAMETER. THE MAXIMUM FIELD-DRILLED HOLE **DIAMETER PERMITTED IS 30 MM.**



MASER CONSULTING

-CONNECTICUT-



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GENERAL NOTES -

STRUCTURAL

S-004

OVERALL LENGTH (SEE CHART) INTEGRAL SHEAR SLEEVE -KNURLED CONE SILICONE BAND THREADS — SILICONE BAND -**COLOR-CODED WRAP (SEE CHART)** - DTI SOUIRTER WASHER HARDENED WASHER W2 HARDENED WASHER W1

PRE-INSTALLED FORGBolt™ ASSEMBLY DETAIL

EXTERIOR OF POLE SHAFT (SEE CHART) SHOP DRILL 30 MM NOMINAL (1-3/16" MAX.) DIAMETER HOLE FIELD DRILL 30 MM DIAMETER HOLE IN EXISTING SHAFT **BOLT THREADS HEX END** SHEAR SLEEVE HARDENED WASHER W2 - DTI SOUIRTER WASHER INTEGRAL SEAR SLEEVE HARDENED WASHER W2 **EXISTING POLE SHAFT** HARDENED WASHER W1 NEW SHIM PLATE (AS NECESSARY)

INSTALLED FORGBolt™ ASSEMBLY DETAIL

MINIMUM / MAXIMUM GRIP LENGTH

AISC GROUP A MATERIAL: ASTM A325 AND PC8.8 (Fu = 120 KSI MIN. TENSILE STRESS)

CONTAINS PROPRIETARY INFORMATION PATENT PENDING

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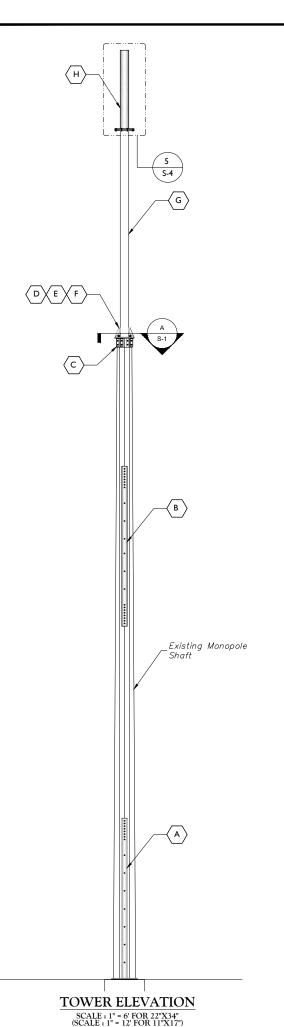
FORGBolt[™] **DETAILS**

DISTRIBUTOR CONTACT:

PRECISION TOWER PRODUCTS

PHONE: 440-214-2372

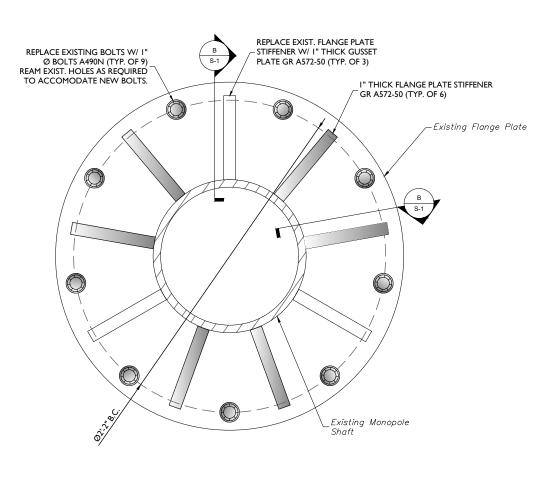
EMAIL: info@precisiontowerproducts.com www.precisiontowerproducts.com



	MODIFICATION SCHEDULE											
SYMBOL	SYMBOL ELEVATION MEMBER TY		EXISTING MEMBER	MODIFIED MEMBER	NOTES	REFERENCE						
$\langle A \rangle$	0' - 20'-0"	SHAFT	-	SHAFT REINFORCEMENT #1	INSTALL NEW MEMBER ON FLAT 6,12,18	I /S-2 & 3 /S-3						
B	42.5' - 62.5'	SHAFT	-	SHAFT REINFORCEMENT #2	INSTALL NEW MEMBER ON FLAT 3,9,15	2 /S-2						
⟨C⟩		SHAFT SLEEVE	3/4" Ø BOLTS	AJAX ONESIDE HI-SHEAR M20 BOLT	REPLACE EXIST. BOLTS	4 /S-3						
D	80'-0"		3/4" Ø BOLTS	I" Ø BOLTS A490N	REPLACE EXIST. BOLTS	A /S-I						
(E)	80-0	FLANGE	7x7x1 GUSSET	- I4x7x I GUSSET	REPLACE EXIST. STIFFENER	B /S-I						
⟨ F ⟩			-	14x/x1 GUSSE1	INSTALL NEW STIFFENER	B /S-I						
G	80'-0" - 106'-0"	SHAFT	-	-	VERIFY MEMBER THICKNESS	NOTE I						
$\langle H \rangle$	106'-0"	SHAFT	-	P12 STD MONOPOLE EXTENSION	INSTALL NEW MEMBER	5 /S-4						

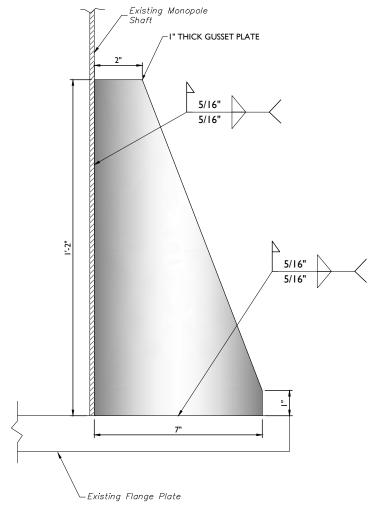
NOTE:

1. VERIFY SHAFT THICKNESS IN A MINIMUM OF 5/8" THICK, SHOULD THE TOWER SHAFT THICKNESS BE FOUND TO BE LESS THAN 5/8" THE RESULTS OF THE ANALYSIS ARE VOID AND FURTHER MODIFICATION SHALL BE REQUIRED. MASER CONSULTING SHALL BE CONTACTED IMMEDIATELY.



SECTION A - FLANGE PLATE DETAIL

SCALE : 1" = 6' FOR 22"X34" (SCALE : 1" = 12' FOR 11"X17")



SECTION B - STIFFENER

SCALE: 6" = 1' FOR 22"X34" (SCALE: 6" = 2' FOR 11"X17")







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ĺ	Ш	08/28/19	REVISED PER COMMENTS	MLH	RA
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	7	04/19/19	REVISED PER COMMENTS	AJC	RA
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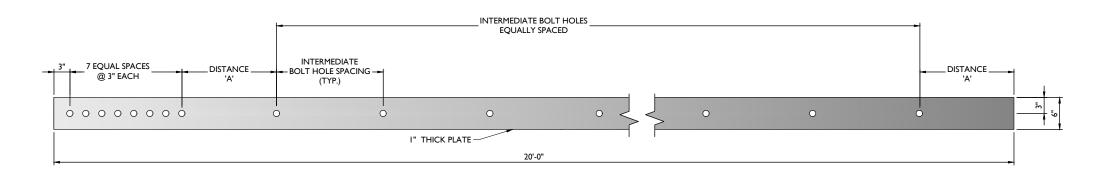
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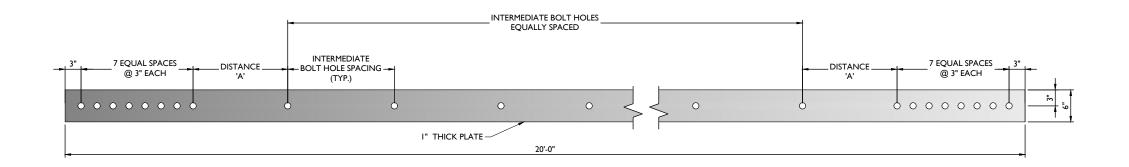
STRUCTURAL MODIFICATION DETAILS

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DETAIL 1 - SHAFT REINFORCEMENT #1

SCALE: N.T.S.



DETAIL 2 - SHAFT REINFORCEMENT #2

SCALE: N.T.S.

	SHAFT REINFORCEMENT PLATE SCHEDULE									
REINFORCEMENT NUMBER	PART NUMBER	BLACK WEIGHT (LBS)	LENGTH	DISTANCE 'A'	TOTAL QTY OF I $\frac{3}{16}$ "Ø BOLT HOLES	QTY OF BOLT HOLES (EACH END)	INTERMEDIATE BOLT HOLE SPACING			
#1	PL 6"X1" A572-65 (65 KSI)	408.3	20'-0"	1'-4"	20	0	1'-4"			
#2	PL 6"X1" A572-65 (65 KSI)	408.3	20'-0"	1'-4"	20	0	1 -4			



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Fax: .732.383.1984

STRUCTURAL MODIFICATION DETAILS



EXISTING

EXISTING

1) CLEAN GALVANIZING FROM EXISTING WELD AND ALL WELD CONTACT SURFACES.

② INSTALL PROPOSED FLAT PLATE.

NOTES:

EXISTING

EXISTING

EXISTING

EXISTING

ANCHOR ROD

FXISTING

BASE PLATE

TOWER SHAF

FXISTING

3 BUILD A PLATFORM WITH WELD (BUTTER) TO MATCH THE HEIGHT OF THE EXISTING FILLET WELD PER SECTION 5.22.4.3 OF AWS D1.1/D1.1M: 2010. ENGINEERING APPROVAL IS PROVIDED FOR CORRECTING ROOT OPENINGS GREATER THAN THOSE PERMITTED IN SECTION 5.22.4.3 IN ACCORDANCE WITH SECTION 5.22.4.4.

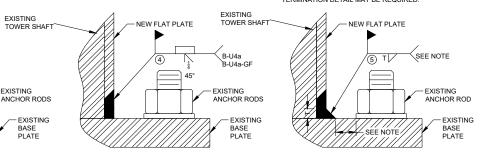
> NEW FLAT PLATE

NOTES:

4 PERFORM A CJP WELD USING THE EXISTING TOWER LEG AS A BACKING BAR.

NOTES:

5) REINFORCING FILLET WELD SIZED TO MATCH EXISTING FILLET WELD. PRIOR TO CONSTRUCTION CONTRACTOR SHALL VERIEY THAT THERE IS ADEQUATE CLEARANCE BETWEEN THE PROPOSED WELD AND THE EXISTING FLANGE BOLTS. IF INTERFERENCE OCCURS AN ALTERNATIVE SLEEVE TERMINATION DETAIL MAY BE REQUIRED.



WELD OPTION 1 NOT TO SCALE

FXISTING

EXISTING

EXISTING

EXISTING

ANCHOR RODS

- FXISTING

BASE PLATE

TOWER SHAF

NOTES:

1 CLEAN GALVANIZING FROM EXISTING WELD AND ALL WELD CONTACT SURFACES.

2 PARTIALLY GRIND THE HEIGHT OF THE EXISTING FILLET WELD TO FORM A PLATFORM WITH TOP WIDTH TO MATCH THE FLAT PLATE THICKNESS.

NOTES:

(3) INSTALL PROPOSED HALF PIPE.

- NEW FLAT PLATE

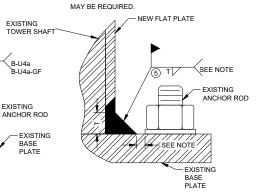
NOTES:

4 PERFORM A CJP WELD USING THE EXISTING TOWER LEG AS A BACKING BAR.

- NEW FLAT PLATE

5 BUILD UP FILLET WELD TO MATCH EXISTING FILLET WELD. PRIOR TO CONSTRUCTION CONTRACTOR SHALL VERIFY THAT THERE IS ADEQUATE CLEARANCE BETWEEN THE PROPOSED WELD AND THE EXISTING FLANGE BOLTS, IF INTERFERENCE OCCURS AN ALTERNATIVE SLEEVE TERMINATION DETAIL

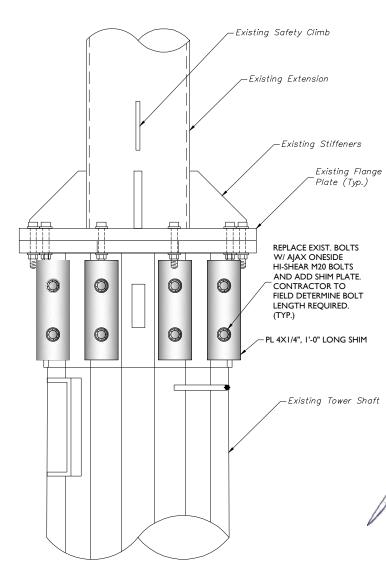
NOTES:



WELD OPTION 2 NOT TO SCALE

DETAIL 3 - REINFORCEMENT TO BASEPLATE CONNECTION

NOT TO SCALE



DETAIL 4 - CONNECTION DETAIL NOT TO SCALE

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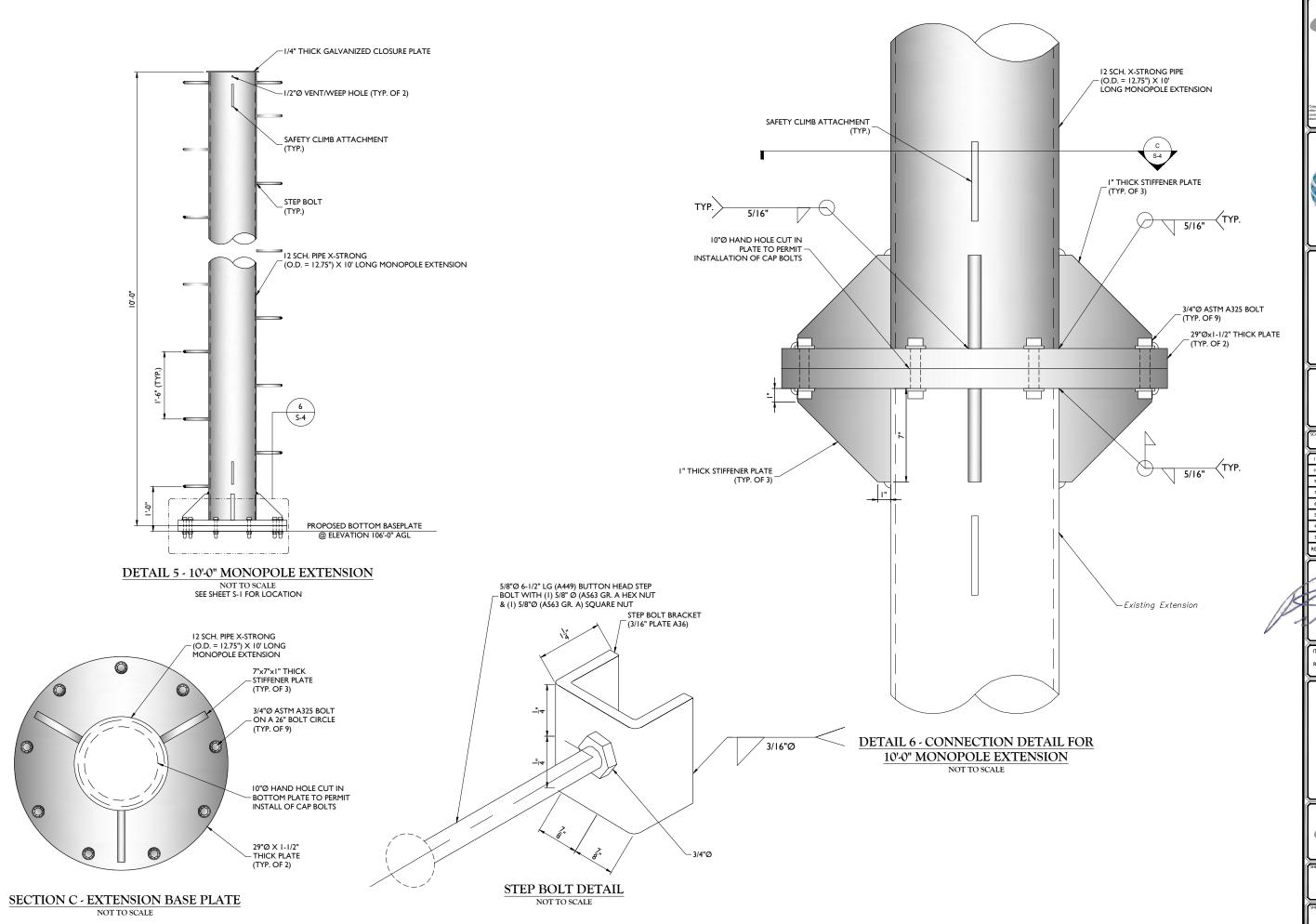
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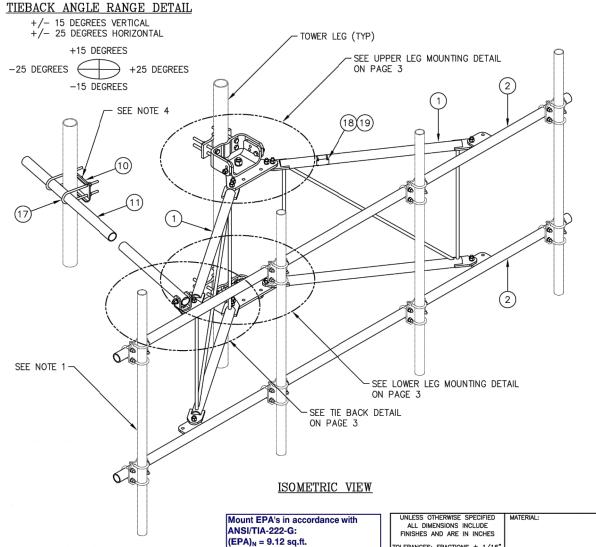
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STRUCTURAL

MODIFICATION DETAILS



		C108570010	C 12' HD V-BOOM ASSEMBLY	Y W/TIEBACK			
ITEM	QTY.	PART NO.	DESCRIPTION		WEIGHT		
1.	2	CW01222	WELDMENT, STANDOFF ARM	ELDMENT, STANDOFF ARM			
2.	2	CW01223	WELDMENT, FACE PIPE		147		
3.	2	CS03109	PLATE, ROTATING		34		
4.	1	CS03110	PLATE, PIVOTING (UPPER)		16		
5.	1	CS03111	PLATE, LEG CLAMP (UPPER)		17		
6.	1	CS03112	PLATE, PIVOTING (LOWER)		14		
7.	1	CS03113	PLATE, LEG CLAMP (LOWER)		17		
8.	2	CS03114	PLATE, LEG CLAMP (BACK)	PLATE, LEG CLAMP (BACK)			
9.	1	CS00098	PLATE, TIE BACK SWIVEL	PLATE, TIE BACK SWIVEL			
10.	1	CS03285	PLATE, TIE BACK CLAMP		4		
11.	1	CS03333	PIPE, TIE BACK		38		
12.	2	C40026073	BOLT ASSEMBLY, 1 Ø X 3 A325		4		
13.	8	C40140004	BOLT ASSEMBLY, 5/8 Ø X 8 A307		13		
14.	1	C40026033	BOLT ASSEMBLY, 5/8 ø X 4 1/2 A3	25	1		
15.	12	C40026025	BOLT ASSEMBLY, 5/8 ø X 2 1/2 A3	25	6		
16.	5	C40026024	BOLT ASSEMBLY, 5/8 Ø X 2 1/4 A3	25	3		
17.	2	C40034183	U-BOLT ASSEMBLY, 1/2 Ø X 2 9/16	C-C	3		
18.	1	Z30992001	MOUNT CLASSIFICATION TAG C108570	001C	1		
19.	2	C40062103	STAINLESS STEEL SELF-LOCKING CAE	BLE TIE	1		
				TOTAL WEIGHT	462		

PACKAGING NOTE

CK00386 INCLUDES ITEMS 1, 3, 4, 5, 6, 7, 12 & 15 (8 QTY)

CK00387 INCLUDES ITEMS 2, 8, 9, 10, 11, 13, 14, 15 (4 QTY), 16, 17, 18 & 19

This mount satisfies the Heavy-10 requirements as specified in AT&T RPF No. 20160229.002.P for Antenna Sector Mounts.

It satisfies ANSI/TIA-222-G for the following parameters:

Structure Class II, Exposure Category C, Topographic Category 1 Mount and antenna centerline at 300' AGL

Gust effect factor = 1.0, Wind direction probability factor = 0.95 Four mount pipes symmetrically placed as shown

Bare condition

Basic wind speed = 120 mph

 $(EPA)_N = (EPA)_T = 15.0 \text{ sq.ft. per mount pipe}$

Factored Weight = 663 lbs per mount pipe

Iced condition

Basic wind speed = 60 mph, Design ice thickness, t_i = 1.0 in

(EPA)_N = (EPA)_T = 24.0 sq.ft. per mount pipe

Factored Weight = 1325 lbs per mount pipe

 $(EPA)_T = 5.23 \text{ sq.ft.}$

*Excludes mount pipes

1. MOUNTING PIPES & CROSSOVER PLATE KITS MUST BE PURCHASED SEPARATELY.
2. QUANTITIES SHOWN IN LISTS OF MATERIAL ARE FOR ONE (1) V-BOOM ONLY.
3. THIS V-BOOM WILL MOUNT TO THE FOLLOWING: 1 1/2" Ø TO 5 9/16" Ø ROUND LEG.
4. TIEBACK MUST BE CONNECTED TO A RIGID MEMBER THAT PROVIDES ADEQUATE SUPPORT WITHIN THE LIMITS NOTED ABOVE IN THE TIEBACK ANGLE RANGE DETAIL UNLESS APPROVED BY THE ENGINEER OF RECORD.

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1	01/21/16	KLE	EK	REVISED NOTE	S & ADDED	TIEBACK ANGL	E RANGE DETAIL	© 2015 Sabre Communications Corporation.
REV	DATE	DRW	снк		DES	CRIPTION		All rights reserved.

12' HD V-BOOM ASSEMBLY W/TIEBACK (3' STANDOFF) W/NO ANTENNA MOUNTING PIPES

			SIZE		WING NO.		REV
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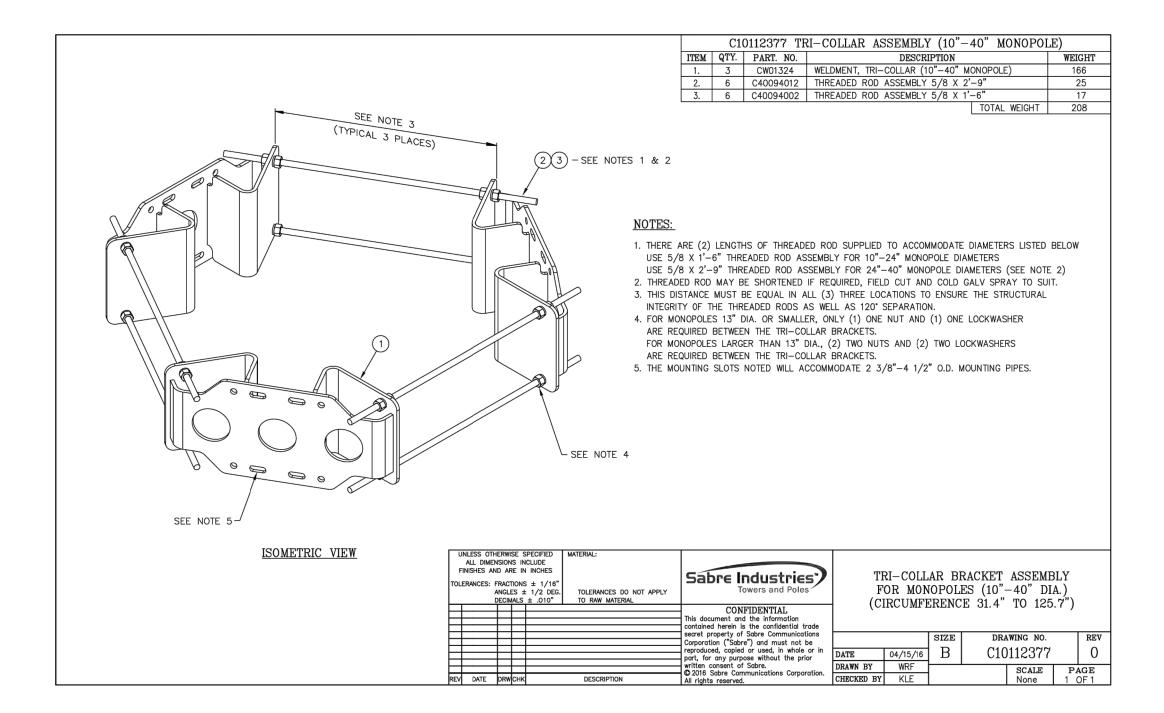
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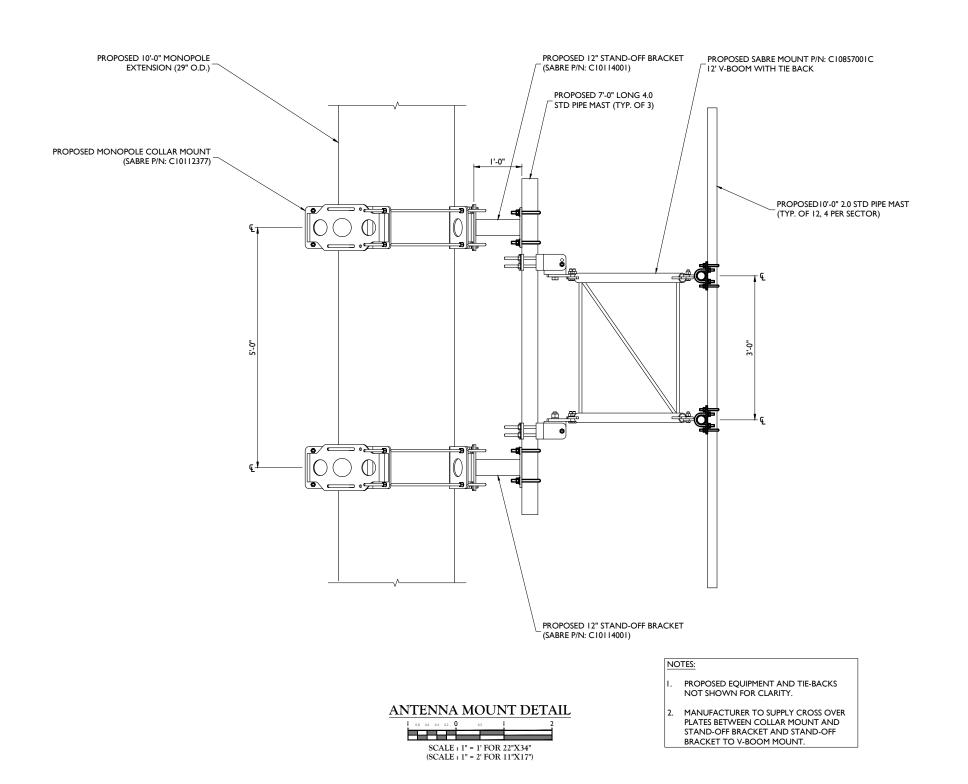
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