



6521 Meridien Drive
 Raleigh, NC 27616
 (919) 755-1012 P
 (919) 755-1031 F

September 9, 2015

Mark Luther
 Regional Site Manager
 SBA Network Services
 120 South White Cedar Drive.
 Milton, DE 19968

Subject: Modification Inspection

SBA Designation: SBA Site Number: CT01499-S-00
 SBA Site Name: Torrington
 Carrier: AT&T

Inspection Firm Designation: FDH Velocitel Project Number: 15BHCA1700

Site Data: 1925-1931 East Main Street, Torrington, CT 06790
 Latitude: 41.8230° Longitude: -73.0772°
 153' Monopole Tower

Velocitel, Inc., d.b.a. FDH Velocitel is pleased to submit this “**Modification Inspection**” (MI Report) to SBA Network Services for the modification/reinforcement to the subject structure. This Modification Inspection (MI) was performed as a review of the General Contractor supplied closeout documents. The purpose of this MI is to document that the modification installation is in accordance with the contract document(s) listed in Table 2. The MI is not a review of the adequacy or effectiveness of the modification solution.

Table 1 – General Information

	Company	Contact
MI Inspector	FDH Velocitel	Paul Drumheller, EI 919-755-1012
Independent	EOR	Turnkey
Modification Design EOR	FDH Engineering, Inc.	Dennis D. Abel, PE 919-755-1012
General Contractor	Patriot Towers, Inc.	Douglas Harradine 585-889-3391
Sub to the General Contractor	NA	NA
Field CWI for the General Contractor	NA	NA
Field NDE for the General Contractor	NA	NA

Table 2 – Design Documents

Document(s)	Remarks	Source
Tower Modification Drawings	FDH Engineering Project No. 15BFJD1400 Dated 3-10-15	FDH Velocitel

Based on our review, FDH Velocitel determines this project:

X_PASSING MI

The configuration, materials, and workmanship of the modifications are in accordance with the Contract Documents as per the closeout documentation.

We at FDH Velocitel appreciate the opportunity of providing our continuing professional services to you and SBA Network Services. If you have any questions or need further assistance on this or any other projects please give us a call.

Respectfully submitted,

Dennis D. Abel, PE
Connecticut License No. 23247



Project Closeout Information - Table of Contents

PRE-CONSTRUCTION

	Reference Document
• MI Checklist Drawing	8
• EOR Approved Shop Drawings	NA
• Fabrication Inspection	9
• Fabricator Certified Welding Inspection (CWI)	NA
• Material Testing Report (MTR)	10-13
• Fabricator NDE Inspection	NA
• NDE Report of Monopole Base Plate	NA
• Packing Slips	14-18

CONSTRUCTION

• Construction Inspections	19-20
• Foundation Inspections	NA
• Concrete Compression Strength and Slump Tests	NA
• Post Installed Anchor Rod Verification	NA
• Base Plate Grout Verification	NA
• Contractor's Certified Weld Inspection	NA
• Earthwork: Lift and Density	NA
• Galvanization Verification	21
• Guy Wire Tension Report	NA
• GC As-Built Documents	22-29

POST-CONSTRUCTION

• MI Inspector Redline/Record Drawings	NA
• Engineer Approval	NA
• Post Installed Anchor Rod Pull-out Testing	NA
• Photographs	5-7 (see Table 3)

CONTRACTOR CLOSEOUT DOCUMENTS

Table 3.0 – Photographs

PH#01 Site Sign –	PH#02 Installation of Modification –
	
PH#03 Installation of Modification –	PH#04 Installation of Modification –
	

Table 3.1 – Photographs

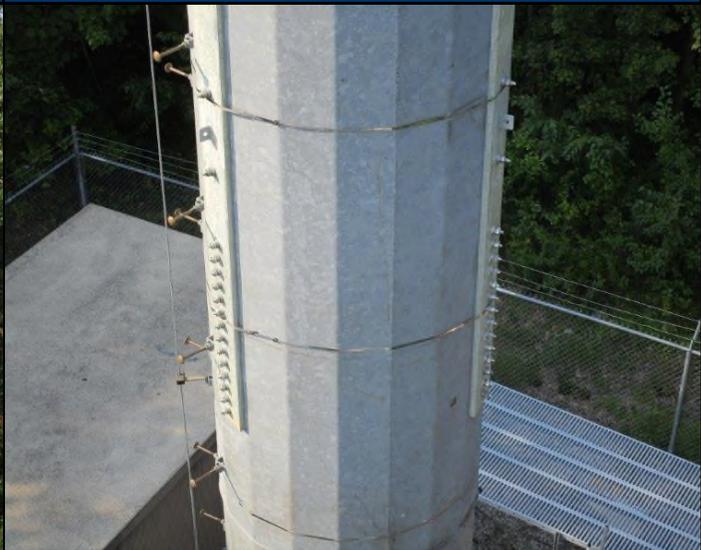
PH#05 Installation of Modification –	PH#06 Installation of Modification –
	
PH#07 Installation of Modification –	PH#08 Installation of Modification –
	

Table 3.2 – Photographs



MI CHECKLIST

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

NOTE: X DENOTES A DOCUMENT NEEDED FOR THE MI REPORT
 N/A DENOTES A DOCUMENT THAT IS NOT REQUIRED FOR THE MI REPORT

MODIFICATION INSPECTION NOTES:

GENERAL

1. THE POST CONSTRUCTION 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).
2. 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 EOR AT ALL TIMES.
3. ALL MI'S SHALL BE CONDUCTED BY A MI INSPECTOR THAT IS APPROVED TO PERFORM ELEVATED WORK FOR FDH ENGINEERING, INC.
4. 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 PO IS RECEIVED. IT IS EXPECTED THAT EACH PARTY WILL BE PROACTIVE IN REACHING OUT TO THE OTHER PARTY. IF CONTACT INFORMATION IS NOT KNOWN, CONTACT YOUR FDH POINT OF CONTACT (POC).
5. REFER TO CCR-01 : CONTRACTOR CLOSEOUT REQUIREMENTS FOR FURTHER DETAILS AND REQUIREMENTS.

MI INSPECTOR

1. 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
2. THE MI INSPECTOR IS RESPONSIBLE FOR COLLECTING ALL GENERAL CONTRACTOR (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 FDH.

CORRECTION OF FAILING MI'S

1. IF THE MODIFICATION INSTALLATION WOULD FAIL THE MI ("FAILED MI"), THE GC SHALL WORK WITH FDH TO COORDINATE A REMEDIATION PLAN IN ONE OF TWO WAYS:
 - CORRECT FAILING ISSUES TO COMPLY WITH THE SPECIFICATIONS CONTAINED IN THE ORIGINAL CONTRACT DOCUMENTS AND COORDINATE A SUPPLEMENT MI.
 - OR, WITH FDH'S APPROVAL, THE GC MAY WORK WITH THE EOR TO RE-ANALYZE THE MODIFICATION/REINFORCEMENT USING THE AS-BUILT CONDITION.

REQUIRED PHOTOS

1. 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
 - RAW MATERIALS
 - PHOTOS OF ALL CRITICAL DETAILS
 - FOUNDATION MODIFICATIONS
 - WELD PREPARATION
 - BOLT INSTALLATION AND TORQUE
 - FINAL INSTALLED CONDITION
 - SURFACE COATING REPAIR
 - POST CONSTRUCTION PHOTOGRAPHS
 - FINAL INFIELD CONDITION
2. PHOTOS OF ELEVATED MODIFICATIONS TAKEN FROM THE GROUND SHALL BE CONSIDERED INADEQUATE.

PREPARED BY:



6521 MERIDIEN DRIVE
 RALEIGH, NC 27616
 PHONE: 919-755-1012
 FAX: 919-755-1031

ENGINEERING INNOVATION

PREPARED FOR:



5900 BROKEN SOUND PARKWAY, NW
 BOCA RATON, FL 33487
 (800) 487-SITE



DENNIS D. ABEL, P.E.
 CONNECTICUT LIC. NO. 23247

DRAWN BY: JK
 CHECKED BY: MSG
 ENG APPVD: DDA
 PROJECT NO: 15BFJD1400

SUBMITTALS		
DATE	DESCRIPTION	REV
03/10/15	CONSTRUCTION	0

THE INFORMATION CONTAINED IN THIS SET OF DOCUMENTS IS PROPRIETARY BY NATURE. REPRODUCTION OR CAUSING TO BE REPRODUCED THE WHOLE OR ANY PART OF THESE DRAWINGS WITHOUT THE PERMISSION OF FDH ENGINEERING, INC. IS PROHIBITED.

SITE NAME:
TORRINGTON

SITE NUMBER:
CT01499-S-00

SITE ADDRESS:
 1925-1931 EAST MAIN STREET
 TORRINGTON, CT 06790

SHEET TITLE
**MODIFICATION
 INSPECTION NOTES**

SHEET NUMBER
N-1



SBA
5900 Broken Sound Parkway, NW
Boca Raton, FL 33487

DATE: September 1, 2015

RE: Fabrication Inspection Letter for Torrington CT01499-S-00

To Whom It May Concern:

Patriot Towers Inc. completed all fabrication of materials in accordance with industry standards and per structural drawings for site Torrington CT01499-S-00.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Douglas Harradine', is written over a light blue horizontal line.

Douglas Harradine, Vice President

Patriot Towers, Inc.
870 Scottsville-Chili Road
Scottsville, NY 14546
O- 585-889-3391



P.O.Box 279
Winton, NC 27986
(252) 356-3700

Mill Test Report

Page 3



Heat Number

5502672

Shipper No

629430

Customer PO#

TORRINGTON

Customer Name

D & D Welding Inc

Issuing Date : 05/29/2015 B/L No. : 417186 Load No. : 423113 Our Order No. : 12792014 Cust. Order No. : AC2169
 Vehicle No: J POTTER 950 Sold To: KLEIN STEEL SERVICE INC Ship To: KLEIN STEEL SERVICE INC
 Specification: 1.2500" x 96.000" x 240.000" 105 VANGUARD PKWY 105 VANGUARD PARKWAY
 ASTM A572 Grade 65-15 ROCHESTER, NY 14606 ANNE COMELLA (585) 328-4000
 ROCHESTER, NY 14606
 Marking : P114A57265

Heat No	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al(tot)	V	Nb	Ti	N	Ca	B	Sn	Ceq	Pcm
5502672	0.14	1.42	0.018	0.001	0.04	0.19	0.07	0.11	0.01	0.042	0.058	0.042	0.002	0.0149	0.0015	0.0002	0.007	0.43	0.24

Plate Serial No	Pieces	Tons	Tensile Test				Charpy Impacts							Mn Ave.						
			Dir.	(psi) Yield	(psi) Tensile	Elongation % in 2"	Elongation % in 8"	Dir.	1	(%) shear	2	(%) shear	3		(%) shear	Ave.	(%) shear	Size	Temp	
5502672-02	1	4.08	T	87,100	88,600		16.8													
			T	69,700	86,800		17.4													

Manufactured to fully killed fine grain practice by Electric Arc Furnace. Welding or weld repair was not performed on this material. Mercury has not been used in the direct manufacturing of this material. Produced as continuous cast discrete plate as-rolled, unless otherwise noted in Specification. For Mexico shipments: nhc-SalesMX@Nucor.com
 Yield by 0.5EUL method unless otherwise specified. Ceq = C+(Mn/6)+((Cr+Mo+V)/5)+((Cu+Ni)/15)
 Pcm = C+(Si/30)+(Mn/20)+(Cu/20)+(Ni/60)+(Cr/20)+(Mo/15)+(V/10)+5B
 Melted and Manufactured in the USA. ISO 9001:2008 certified (#010940) by SRI Quality System Registrar (#0985-09). PED 97/23/EC 7/2 Annex 1, Para. 4.3 Compliant.
 DIN 50049 3.1.B/EN 10204 3.1B(2004), DIN EN 10204 3.1(2005) compliant. For ABS grades only, Quality Assurance certificate 14-MMPQA-723

We hereby certify that the contents of this report are accurate and correct. All test results and operations performed by the material manufacturer are in compliance with the applicable specifications, including customer specifications.

T. A. Depretis
T. A. Depretis, Metallurgist

5/29/2015 5 41 54 PM



P.O.Box 279
Winton, NC 27986
(252) 358-3700

Mill Test Report

Page 3



Heat Number

5502672

Shipper No

629430

Customer PO#

TORRINGTON

Customer Name

D & D Welding Inc

Issuing Date : 06/15/2015 B/L No. : 418277 Load No. : 421078 Our Order No. : 127920/14 Cust. Order No. : AC2169
 Vehicle No: 10706 Sold To: KLEIN STEEL SERVICE INC Ship To: KLEIN STEEL SERVICE INC
 Specification: 1.2500" x 96.000" x 240.000" 105 VANGUARD PKWY 105 VANGUARD PARKWAY
 ASTM A572 Grade 65-15 ROCHESTER, NY 14606 ANNE COMELLA (585) 328-4000
 Marking : P114A57265 ROCHESTER, NY 14606

Heat No	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al(tot)	V	Nb	Ti	N	Ca	B	Sn	Ceq	Pcm
5502672	0.14	1.42	0.016	0.001	0.04	0.19	0.07	0.11	0.01	0.042	0.058	0.042	0.002	0.0149	0.0015	0.0002	0.007	0.43	0.24

Plate Serial No	Pieces	Tons	Tensile Test				Charpy Impacts													
			Dir.	(psi) Yield	(psi) Tensile	Elongation % in 2"	Dir.	1	(%) shear	2	(%) shear	3	(%) shear	Ave.	(%) shear	Size	Temp	Min Ave.		
5502672-02	1	4.08	T	67,100	86,600	18.8														
			T	69,700	86,800															

Manufactured to fully killed fine grain practice by Electric Arc Furnace. Welding or weld repair was not performed on this material. Mercury has not been used in the direct manufacturing of this material. Produced as continuous cast discrete plate as-rolled, unless otherwise noted in Specification. For Mexico shipments: nbc-SalesMX@NuCor.com
 Yield by 0.5EUL method unless otherwise specified. Ceq = C+(Mn/6)+((Cr+Mo+V)/5)+((Cu+Ni)/15)
 Pcm = C+(Si/30)+(Mn/20)+(Cu/20)+(Ni/60)+(Cr/20)+(Mo/15)+(V/10)+5B
 Melted and Manufactured in the USA. ISO 9001:2008 certified (#010940) by SRI Quality System Registrar (#0985-09). PED 97/23/EC 7/2 Annex 1, Para. 4.3 Compliant.
 DIN 50049 3.1.B/EN 10204 3.1B(2004), DIN EN 10204 3.1(2005) compliant. For ABS grades only. Quality Assurance certificate 14-MMPQA-723

We hereby certify that the contents of this report are accurate and correct. All test results and operations performed by the material manufacturer are in compliance with the applicable specifications, including customer specifications.

T. A. Deprebe
T. A. Deprebe, Metallurgist

6/15/2015 3:52:26 PM

DATE: 08/05/15

PAGE: 1

CUSTOMER

USA

Lab Test Code 453897

Ajax Part No.

OSB20.95B

M20 X 95 ONESIDE BOLT LPS

QARN: N0007214/25

Test / Method	Specifications			Test Results			Test Date
	Min	Max	Units	Sample A	Sample Z	Units	
Wedge Tensile Test AS/NZS4291.1	203	0	KN	236	236	KN	08/05/15
Core Hardness AS1815.1	23	34	HRC	31	32	HRC	08/05/15

Ajax Ref: 463736

LPS Lot 10 N000 7540



This test certificate relates only to samples tested of the manufacturing batch NATA Accredited Laboratory No: 1202 Accredited for compliance with ISO/IEC 17025. The results of the tests, calibration and/or measurements included in this document are traceable to Australian/National standards. This document shall not be reproduced.

Authorised Ajax Representative

Title

ORDER

*** RELEASE ***

Entered By: JOHN

June 26, 2015 9:00 AM

Order #	00012883-0000
Order Date	06/26/2015
Page	1 of 2
Req Ship Date	06/26/2015

PJS

499821

BILL D&D
TO: D&D WELDING
4710 ROUTE 104

SHIP TO: D&D WELDING
4710 ROUTE 104

WILLIAMSON, NY 14589

WILLIAMSON, NY 14589

Ordered By:

PrePaid Collect 3rd Party

TERMS	Customer PO #	Freight	FOB	Ship Via
NET 30 DAYS B/L	VERBAL MATT	PREPAID ADD CLASS 50	PJS/CHI	DAYTON

Order Qty	Ship Qty	B/O Qty	Item #/ Description	Customer Part#	U/M	Carton Qty	# of Cartons
320	320	0	* 463752 M20 X 95 ONESIDE ASSEMBLY W/SERRATED HEAD Ajax bolts		EA	32	10
				Unit Weight:		1	Ext Weight: 368
168	168	0	453889 M20 X-135 ONESIDE ASSEMBLY W/SERRATED HEAD		EA	24	7
				Unit Weight:		1	Ext Weight: 220
20	20	0	* 458720 HDG ONESIDE 3' M20 HIGH TENSILE SLEEVE		EA	1	20
				Unit Weight:		5	Ext Weight: 107
448	448	0	* 155100 M20 SQUIRTER DTI WASHER		EA	32	14
				Unit Weight:		0	Ext Weight: 27
2	2	0	155100-PARTIAL M20 SQUIRTER DTI WASHERS		EA	0	Infinity
				Unit Weight:		0	Ext Weight: 0

ORDER

*** RELEASE ***

Entered By: JOHN

June 26, 2015 9:00 AM

Order#	00012883-0000
Order Date	06/26/2015
Page	2 of 2
Req Ship Date	06/26/2015

BILL TO: D&D
D&D WELDING
4710 ROUTE 104

SHIP TO: D&D WELDING
4710 ROUTE 104

WILLIAMSON, NY 14589

WILLIAMSON, NY 14589

Ordered By:

PrePaid Collect 3rd Party

TERMS	Customer PO#	Freight	FOB	Ship Via
NET 30 DAYS B/L	VERBAL MATT	PREPAID ADD CLASS 50	PJS/CHI	DAYTON

Order Qty	Ship Qty	B/O Qty	Item # / Description	Customer Part#	U/M	Carton Qty	# of Cartons
400	400	0	* 155420 M20 ONESIDE RUBBER SPACER		EA	100	4

Unit Weight: 0 Ext Weight: 0

50	50	0	155420-PARTIAL M20 SPACERS		EA	0	Infinity
----	----	---	-------------------------------	--	----	---	----------

Unit Weight: 0 Ext Weight: 0

PLS SHIP DAYTON
 PLS PROVIDE AJAX REF #S FOR ALL 10 CARTONS AJAX # 463752
 PLS PROVIDE AJAX REF #S FOR ALL 7 CARTONS AJAX # 453889
 PLS PACK IN HD EXTERNAL BOXES AND STRAP TO PALLET
 PLS PUT THREE (3) "ISA" LABELS ON EACH HD BOX
 PLS PUT FOUR (4) "DO NOT STACK" LABELS ON EACH HD-BOX
 PLS PUT CONTACT ON BOL: MATT DAVID 585-259-4095
 PPA = 159.52

Total Order Weight:

722

Moran Distribution Centers

PEOPLE

SDN No.: 499821
Pick Slip: 499821

Shipper
PJS CHICAGO
C/O IRA SVENDGAARD & ASSOC
P.O. BOX 1637
PLACERVILLE, CA
95667

Ship To
D & D WELDING C/O TWR
4710 ROUTE 104
WILLIAMSON NY
14589

Seller's No.: 12883
Via: DAYTON FREIGHT

Purchase Order: VERBAL MATT
Control Method: TP

Order Date		Time	Ship Date	COD Amount	Page
06.26.15		11:33AM	06.26.15		1
Line	Quantity	Lot Code	Item Description	Location	Weight
!	!	!	PJS/ISA	!	!
!	!	!	EMPTY CARTONS	!	!
!	!	!	*	!	!
!001	!	!HD CARTONS			
				2CTN!01/11-306	6!
!	2	! CTN		!	!
!	!	!CONVEY 89592	Qty:	2!	!
!	!	!		!	!
!	!	!	155100	!	!
!	!	!	M20 SQUIRTER DTI WASHERS	!	!
!	!	!	25/CTN	!	!
!006	!	!PARTIAL 11/CTN			
				1CTN!01/32-110	2!
!	1	! CTN		!	!
!	!	!CONVEY 113432	Qty:	1!	!
!	!	!		!	!
!	!	!	155420	!	!
!	!	!	M20 SPACERS	!	!
!010	!	!100 PCS PER CTN			
				1CTN!01/32-112	1!
!	1	! CTN		!	!
!	!	!CONVEY 112009	Qty:	1!	!
!	!	!		!	!
!009	!	!PARTIAL 30/CTN			
				1CTN!01/32-113	1!
!	1	! CTN		!	!
!	!	!CONVEY 112010	Qty:	1!	!
!	!	!		!	!
!	!	!	155100	!	!
!	!	!	M20 SQUIRTER DTI WASHERS	!	!
!	!	!	25/CTN	!	!
!005	!	!32 PER CTN			
				14CTN!01/32-115	21!
!	14	! CTN		!	!
!	!	!CONVEY 111941	Qty:	14!	!

Continued on Page 2

Moran Distribution Centers

SDN No.: 499821
Pick Slip: 499821

Shipper
PJS CHICAGO
C/O IRA SVENDGAARD & ASSOC
P.O. BOX 1637
PLACERVILLE, CA
95667

Ship To
D & D WELDING C/O TWR
4710 ROUTE 104
WILLIAMSON NY
14589

Seller's No.: 12883
Via: DAYTON FREIGHT

Purchase Order: VERBAL MATT
Control Method: TP

Order Date	Time	Ship Date	COD Amount	Page
06.26.15	11:33AM	06.26.15		2

Line	Quantity	Lot Code	Item Description	Location	Weight
!007!	!100!	!PCS PER CTN!	!155420! !M20 SPACERS!	!4CTN!01/33-101!	!2!
!	4!	!CTN!	!CONVEY 111620!	Qty: 4!	!
!008!	!	!PARTIAL 15/CTN!	!	!1CTN!01/33-102!	!1!
!	1!	!CTN!	!CONVEY 112002!	Qty: 1!	!
!	!	!	!458720! !ONESIDE 3"M20 TENSILE! !SLEEVE (GALVANIZED)!	!	!
!004!	!	!*!	!	!20CTN!01/33-108!	!111!
!	20!	!CTN!	!CONVEY 116415!	Qty: 20!	!
!	!	!	!453889! !M20 X 135 ONESIDE ASSEMBLY!	!	!
!003!	!	!N0007424!	!	!7CTN!01/33-113!	!210!
!	7!	!CTN!	!CONVEY 113434!	Qty: 7!	!
!	!	!	!463752! !M20 X 95 ONESIDE ASSEMBLY! !WITH SERRATED HEAD!	!	!
!002!	!	!N0007450!	!	!10CTN!01/33-118!	!340!
!	10!	!CTN!	!CONVEY 113436!	Qty: 10!	!

Continued on Page 3

Shipper No. 629430

Bill To D & D Welding Inc
4710 Rt 104
Williamson, NY 14589

Ship To D & D Welding
4710 Rt 104
Williamson, NY 14589

Attn: Matt David 259-4095 315-589-4700

Terms: .5% 10 Net 30

Contract:

Customer P.O. Number: TORRINGTON

F.O.B.: Delivered

Ship Via: Klein

Sales 1: Ron Pritchard

Sales 2: Robert Corsaro

Order No: 629430

Due Date: 8/11/15

Ship Qty	Order Qty	UM	Description	Width	Length	Weight
3	3	P	1-1/4" A572 GR65 PLATE	8"	240"	2,042.00

SPEC: A572 GR 65

+

TOL: CKS WIDTH X STOCK LENGTH

+

STRAIGHT AS POSSIBLE

Heat Numbers: 5502672(3)

3	3					Total Weight	2,042.00
---	---	--	--	--	--	---------------------	-----------------

Shipping Instructions:

Receiving Hours:

Max Bundle Weight: 0

Spacers:

Test Certificates Required

Messages:

6000# MAX LIFT

ddwelding@verizon.net

MAX BUNDLE WEIGHT #6000

Date 8/11

Driver Sig 

Print Name _____

Consignee Sig _____

Print Name _____



Subcontractor Due Diligence Form

Form Number: SDD-01

Site Name:	Torrington
Site ID:	CT01499-S-00
Proposed Carrier:	AT&T
Tower Type:	153' Monopole
Site Address:	1925-1931 East Main Street Torrington, CT 06790

FDH No.:	15BHCA1700
Str. Analysis Date:	1/13/15
Drawing Date:	3/10/15
Drawing Issue:	Construction
Coordinates:	41.823 -73.0772

Safety Agreement

It is the responsibility of the Subcontractor's foreman on-site to plan for the safety of all personnel and property. It is required that all crews on-site follow all OSHA (Parts 1910 and 1926), TIA Standard 1019-A, and SBA safety standards. Should the Subcontractor violate any mandated safety standards, the Subcontractor is in breach of contract, and Subcontractor, along with all other lower tier subcontractors associated with project, will be pulled from the job site immediately. The Subcontractor is responsible for the actions of all subcontractors with whom they are contracted.

I have read the above statement and understand.

Subcontractor's Initials MA

Permit Release

In accordance to paragraph 4.2 on page 3 of the master subcontractor agreement the contractor will obtain all permits and inspections necessary for the proper execution and completion of the project. Subcontractor is also responsible for all cost associated with obtaining permits. If the state or jurisdiction does not require any permits for the modification as detailed, subcontractor must submit a form of verification to the FDH construction manager prior to beginning any construction.

Is permit required. Yes No

Subcontractor's Initials MA

Permit Number PMT15-001353

Utility Due Diligence

Subcontractor is responsible of obtaining utility locates for entire tower compound (a minimum of 500' radius around compound) 72 hours prior to start of construction. Any repairs resulting from the damage of said utilities shall be the sole responsibility of the contractor.

I have read the above statement and understand.

Subcontractor's Initials MA

Pre-Construction Site Walk

A. Subcontractor has performed site visit to verify all dimensions and existing conditions prior to fabrication.

Yes No

Subcontractor's Initials MA

B. There are no deviations from specifications and drawings. Work can proceed as specified by FDH Engineering.

Yes No

Subcontractor's Initials MA

Scope and Design Deviation Notification

A. No deviation from the scope of work or operating standards in the Master Service Agreement will allowed. Any deviation will result will be corrected at the expense of the subcontractor and/or termination of the subcontractor from the work site.

I have read the above statement and understand.

Subcontractor's Initials MA

B. If modifications are made to the original design during construction, red-line drawings will be provided by the subcontractor. Subcontractor must make FDH aware of their intended changes before said changes take place. If changes are made without consent of FDH in writing; the subcontractor will be responsible for all cost associated with corrected measures.

I have read the above statement and understand.

Subcontractor's Initials MA

Steel and Concrete Certifications

A. Subcontractor must submit all documentation required for verification of proposed steel members and their grade of steel, this may include steel certification from steel mill. Subcontractor must submit a form of verification to FDH prior to beginning any construction.

I have read the above statement and understand.

Subcontractor's Initials MA

B. Subcontractor must submit all batch reports for all concrete poured. If more than 8 yards of concrete are poured then a minimum of 3 cylinders will be made per truck of concrete.

I have read the above statement and understand.

Subcontractor's Initials MA

Weather and Fabrication Delays

All delays caused by fabrication and weather must be brought to the attention of FDH in writing. Delays at the result of weather shall be sent to FDH immediately. Should there be any delays subcontractor must submit a written response detailing the delay within 24 hrs of the occurrence. Each occurrence will be evaluated on a case by case basis.

I have read the above statement and understand.

Subcontractor's Initials MA

Subcontractor Notification

Contractor will list all subcontractors that will be utilized below. All subcontractors must have all required local and federal certifications. It is the responsibility of the general contractor to handle all liens and payments of contracted subcontractors.

Subcontractor: _____	Contact: _____	Telephone: _____
Subcontractor: _____	Contact: _____	Telephone: _____
Subcontractor: _____	Contact: _____	Telephone: _____

Subcontractor has read and understands all aforementioned terms and conditions listed in this document and any preceding bid documents. Subcontractor also agrees to abide by these terms and conditions for the duration of this project.

Company's Name: Patriot Towers, Inc

Contact(Print Name) Douglas Harradine

Signature: [Signature]

Date: 08-24-15



SBA
5900 Broken Sound Parkway, NW
Boca Raton, FL 33487

DATE: September 1, 2015

RE: Construction Inspections Letter for Torrington CT01499-S-00

To Whom It May Concern:

Patriot Towers Inc. completed all work at Torrington CT01499-S-00 on August 31, 2015 and that all work was performed in accordance with industry standards and contract documents including modification drawings and specifications, state and local regulation, OSHA, and Engineering standards.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Douglas Harradine', is written over a light blue horizontal line.

Douglas Harradine, Vice President

Patriot Towers, Inc.
870 Scottsville-Chili Road
Scottsville, NY 14546
O- 585-889-3391



SBA

TOWERS

CT 01499

1218025

487-SITE (7483)

950-SITE (7483)

SITE.COM

MATCHES HOT-DIP GALVANIZING
Z.R.C.
GALVILITE[®]
GALVANIZING COMPOUND
NET 6 LBS.
(2.7 kg)

MODIFICATION INSPECTION NOTES:

GENERAL

1. THE POST CONSTRUCTION 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).
2. 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 EOR AT ALL TIMES.
3. ALL MI'S SHALL BE CONDUCTED BY A MI INSPECTOR THAT IS APPROVED TO PERFORM ELEVATED WORK FOR FDH ENGINEERING, INC.
4. 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 PO IS RECEIVED. IT IS EXPECTED THAT EACH PARTY WILL BE PROACTIVE IN REACHING OUT TO THE OTHER PARTY. IF CONTACT INFORMATION IS NOT KNOWN, CONTACT YOUR FDH POINT OF CONTACT (POC).
5. REFER TO CCR-01 : CONTRACTOR CLOSEOUT REQUIREMENTS FOR FURTHER DETAILS AND REQUIREMENTS.

MI INSPECTOR

1. 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
2. THE MI INSPECTOR IS RESPONSIBLE FOR COLLECTING ALL GENERAL CONTRACTOR (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 FDH.

CORRECTION OF FAILING MI'S

1. IF THE MODIFICATION INSTALLATION WOULD FAIL THE MI ('FAILED MI'), THE GC SHALL WORK WITH FDH TO COORDINATE A REMEDIATION PLAN IN ONE OF TWO WAYS:
 - CORRECT FAILING ISSUES TO COMPLY WITH THE SPECIFICATIONS CONTAINED IN THE ORIGINAL CONTRACT DOCUMENTS AND COORDINATE A SUPPLEMENT MI.
 - OR, WITH FDH'S APPROVAL, THE GC MAY WORK WITH THE EOR TO RE-ANALYZE THE MODIFICATION/REINFORCEMENT USING THE AS-BUILT CONDITION.

REQUIRED PHOTOS

1. 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
 - RAW MATERIALS
 - PHOTOS OF ALL CRITICAL DETAILS
 - FOUNDATION MODIFICATIONS
 - WELD PREPARATION
 - BOLT INSTALLATION AND TORQUE
 - FINAL INSTALLED CONDITION
 - SURFACE COATING REPAIR
 - POST CONSTRUCTION PHOTOGRAPHS
 - FINAL INFIELD CONDITION
2. PHOTOS OF ELEVATED MODIFICATIONS TAKEN FROM THE GROUND SHALL BE CONSIDERED INADEQUATE.

Patriot Towers Inc.
As Built
Date: 9-1-15
Signature: [Signature]

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

NOTE: X DENOTES A DOCUMENT NEEDED FOR THE MI REPORT
N/A DENOTES A DOCUMENT THAT IS NOT REQUIRED FOR THE MI REPORT

PREPARED BY:

6521 MERIDIAN DRIVE
RALEIGH, NC 27616
PHONE: 919-755-1012
FAX: 919-755-1031

ENGINEERING INNOVATION

PREPARED FOR:

5900 BROKEN SOUND PARKWAY, NW
BOCA RATON, FL 33487
(800) 487-SITE

STATE OF CONNECTICUT

DENNIS D. ABEL

No. 23247

LICENSED PROFESSIONAL ENGINEER

03/10/15

DENNIS D. ABEL, P.E.
CONNECTICUT LIC. NO. 23247

DRAWN BY: JK

CHECKED BY: MSG

ENG APP'VD: DDA

PROJECT NO: 15BFJD1400

SUBMITTALS		
DATE	DESCRIPTION	REV
03/10/15	CONSTRUCTION	0

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SITE NAME:
TORRINGTON

SITE NUMBER:
CT01499-S-00

SITE ADDRESS:
1925-1931 EAST MAIN STREET
TORRINGTON, CT 06790

SHEET TITLE
**MODIFICATION
INSPECTION NOTES**

SHEET NUMBER
N-1

GENERAL NOTES:

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES AND ORDINANCES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ALL PERMITS NECESSARY TO COMPLETE THE PROJECT AND ABIDE BY ALL CONDITIONS AND REQUIREMENTS OF THE PERMITS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL DIMENSIONS, ELEVATIONS AND EXISTING CONDITIONS AT THE SITE BEFORE ORDERING ANY MATERIALS OR DOING ANY WORK. NO EXTRA CHARGE OR COMPENSATION SHALL BE ALLOWED DUE TO DIFFERENCE BETWEEN ACTUAL DIMENSIONS AND DIMENSIONS INDICATED ON THE CONSTRUCTION DRAWINGS. ANY SUCH DISCREPANCY IN DIMENSION WHICH MAY BE FOUND SHALL BE SUBMITTED TO FDH ENGINEERING FOR CONSIDERATION BEFORE THE CONTRACTOR PROCEEDS WITH THE WORK IN THE AFFECTED AREAS.
3. INCORRECTLY FABRICATED, DAMAGED, OTHERWISE MISFITTING, OR NON-CONFORMING MATERIALS AND CONDITIONS SHALL BE REPORTED TO FDH ENGINEERING PRIOR TO ANY REMEDIAL OR CORRECTIVE ACTION. ALL ACTIONS SHALL REQUIRE FDH ENGINEERING APPROVAL.
4. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURE AND SEQUENCE TO ENSURE THE SAFETY OF THE STRUCTURE AND ITS COMPONENT PARTS DURING ERECTION AND/OR FIELD MODIFICATIONS. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF TEMPORARY BRACING, GUYS OR TIE DOWNS THAT MAY BE NECESSARY. SUCH MATERIAL SHALL BE REMOVED AFTER THE COMPLETION OF THE PROJECT.
5. CONTRACTOR SHALL PROMPTLY REMOVE ANY & ALL DEBRIS FROM SITE AND RESTORE AS BEST AS POSSIBLE TO PRECONSTRUCTION CONDITION.
6. THE CLIMBING FACILITIES, SAFETY CLIMB AND ALL PARTS THEREOF SHALL NOT BE IMPEDED, MODIFIED OR ALTERED WITHOUT THE EXPRESS APPROVAL OF THE CROWN ENGINEERING GROUP (OR ENGINEER OF RECORD)

CONTRACTOR QUALIFICATION NOTES:

1. ALL REPAIRS SHALL BE PERFORMED BY A TOWER CONTRACTOR WITH A MINIMUM 5 YEARS EXPERIENCE IN TOWER ERECTION AND RETROFIT AND WITH WORKING KNOWLEDGE OF THE TIA/EIA 222-F "STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND ANTENNA SUPPORTING STRUCTURES".
2. CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION MEANS AND METHODS. SHOULD THE CONTRACTOR REQUIRE DIRECT CONSULTATION, FDH ENGINEERING, INC. IS WILLING TO OFFER SERVICES BASED UPON AN AGREED FEE FOR THE WORK REQUIRED.
3. ALL SUBMITTAL INFORMATION MUST BE SENT TO FDH ENGINEERING, INC. 6521 MERIDIEN DRIVE, RALEIGH NC, 27616, TEL. (919) 755-1012, FAX. (919) 755-1031, E-MAIL INFO@FDH-INC.COM. ANY VARIATION OF THESE SPECIFICATIONS OR DRAWINGS WITHOUT CONSENT FROM FDH ENGINEERING, INC. WILL VOID ANY RESPONSIBILITY OR LIABILITY FOR DAMAGE (MATERIAL OR PHYSICAL) TOWARDS FDH ENGINEERING, INC.
4. ALL CONSTRUCTION TO BE IN ACCORDANCE WITH THE TIA-1019-A STANDARD.

JOB SITE SAFETY & NOTES:

1. NEITHER THE PROFESSIONAL ACTIVITIES OF FDH ENGINEERING, INC. NOR THE PRESENCE OF FDH ENGINEERING, INC. OR EMPLOYEES AND SUB-CONSULTANTS AT THE CONSTRUCTION SITE, SHALL RELIEVE THE GENERAL CONTRACTOR AND OR SUBCONTRACTORS AND ANY OTHER ENTITY OF THEIR OBLIGATIONS, DUTIES AND RESPONSIBILITIES INCLUDING, BUT NOT LIMITED TO, CONSTRUCTION MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING, SUPERINTENDING OR COORDINATING ALL PORTIONS OF THE WORK OF CONSTRUCTION IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND ANY HEALTH OR SAFETY PRECAUTIONS REQUIRED BY ANY REGULATORY AGENCIES. THE GENERAL CONTRACTOR AND OR SUBCONTRACTOR IS SOLELY RESPONSIBLE FOR JOB SAFETY, AND WARRANTS THAT THIS INTENT IS EVIDENT BY ACCEPTING THIS WORK.

STEEL:

1. ALL STRUCTURAL STEEL SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST AISC CODE AND ASTM SPECIFICATIONS.
*ALL STEEL PLATES SHALL BE ASTM A572-65 (Fy=65KSI) UNLESS OTHERWISE SPECIFIED.
2. ALL CONNECTIONS OF STRUCTURAL STEEL MEMBERS SHALL BE MADE USING SPECIFIED WELDS WITH WELDING ELECTRODES E-80XX OR SPECIFIED HIGH STRENGTH BOLTS TO BE ASTM A325N, THREAD INCLUDED WITH SHEAR PLANE (UNLESS OTHERWISE NOTED).
3. ALL BOLTED CONNECTIONS TO BE INSTALLED TO A SNUG-TIGHTENED CONDITION IN ACCORDANCE WITH AISC 13 PART 16.2. "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS", SECTION 8.1, UNLESS OTHERWISE SPECIFIED. WHEN "X" TYPE BOLTS ARE USED, CONTRACTOR MAY BE REQUIRED TO STACK ADDITIONAL WASHERS TO OBTAIN PROPER SNUG TIGHT INSTALLATION. ALL NUTS SHALL BE HEAVY HEX UNLESS OTHERWISE NOTED.
4. ALL STEEL, AFTER FABRICATION, SHALL BE HOT DIPPED GALVANIZED PER ASTM A-123. ALL DAMAGED SURFACES, WELDED AREAS AND AUTHORIZED NON-GALVANIZED MEMBERS OR PARTS (EXISTING OR NEW) SHALL BE PAINTED WITH MULTIPLE COATS OF ZRC COLD GALVANIZING COMPOUND ACHIEVING A MINIMUM OF 4 MILS DRY FILM PER ASTM A 780.
5. ALL SHOP AND FIELD WELDING SHALL BE DONE BY WELDERS QUALIFIED AS DESCRIBED IN THE "AMERICAN WELDING SOCIETY'S STANDARD QUALIFICATION PROCEDURE" TO PERFORM THE TYPE OF WORK REQUIRED. CONTRACTOR IS REQUIRED TO PROVIDE FDH ENGINEERING, INC. WITH A PASSING CERTIFIED WELDING INSPECTION FOR ALL WELDS.
6. STRUCTURAL STEEL MAY NOT BE TORCH CUT FOR FABRICATION. ALL STEEL FABRICATION MUST FOLLOW AISC STANDARDS.

MISC. NOTES:

1. ALL MODIFICATIONS ARE ASSUMED TO BE MADE ON AN EMPTY TOWER. CONTRACTOR IS RESPONSIBLE TO MAKE PROVISIONS TO SUPPORT OR WORK AROUND EXISTING ANTENNAS AND TRANSMISSION LINES. MODIFICATIONS MUST BE CONTINUOUS THROUGH ALL AREAS SHOWN.
2. CONTRACTOR FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.

FABRICATION NOTES:

1. ALL DIMENSIONS ARE PRELIMINARY UNTIL FIELD VERIFIED BY CONTRACTOR. ANY CHANGES MUST BE APPROVED BY ENGINEER OF RECORD IN WRITING PRIOR TO FABRICATION AND INSTALLATION.
2. NEW STEEL MEMBERS MUST HAVE SINGLE DRILLED HOLES. SLOTTED AND DOUBLE DRILLED HOLES ARE NOT ACCEPTABLE MEANS OF FABRICATION.

SUBSTITUTES AND/OR EQUALS:

1. IF CONTRACTOR WISHES TO FURNISH OR USE A SUBSTITUTE ITEM OF MATERIAL OR EQUIPMENT, CONTRACTOR SHALL FIRST MAKE WRITTEN APPLICATION TO ENGINEER OF RECORD FOR ACCEPTANCE THEREOF, CERTIFYING THAT THE PROPOSED SUBSTITUTE WILL PERFORM ADEQUATELY THE FUNCTIONS AND ACHIEVE THE RESULTS CALLED FOR BY THE GENERAL DESIGN, BE SIMILAR IN SUBSTANCE TO THAT SPECIFIED AND SUITED TO THE SAME USE AS THAT SPECIFIED. ALL VARIATIONS OF THE PROPOSED SUBSTITUTE FROM THAT SPECIFIED WILL BE IDENTIFIED IN THE APPLICATION AND AVAILABLE MAINTENANCE, REPAIR AND REPLACEMENT SERVICE WILL BE INDICATED. THE APPLICATION WILL ALSO CONTAIN AN ITEMIZED ESTIMATE OF ALL COSTS OR CREDITS THAT WILL RESULT DIRECTLY OR INDIRECTLY FROM ACCEPTANCE OF SUCH SUBSTITUTE INCLUDING COSTS OF REDESIGN AND CLAIMS OF OTHER CONTRACTORS AFFECTED BY THE RESULTING CHANGE, ALL OF WHICH WILL BE CONSIDERED BY ENGINEER OF RECORD IN EVALUATION OF THE PROPOSED SUBSTITUTE. ENGINEER OF RECORD MAY REQUIRE CONTRACTOR TO FURNISH ADDITIONAL DATA ABOUT THE PROPOSED SUBSTITUTE.

NEW FLAT PLATE REINFORCEMENT NOTES:

1. CONTRACTOR TO FIELD VERIFY PROPOSED LOCATION OF FLAT PLATE TO ENSURE THAT PROPER SPACING CAN BE MET.
2. CONTRACTOR TO REPLACE AND/OR RELOCATE ANY CLIMBING PEGS THAT INTERFERE WITH THE INSTALLATION OF FLAT PLATE.
3. ALL AJAX CONNECTIONS TO USE HIGH TENSILE SLEEVE PROVIDED BY MANUFACTURER. AJAX BOLT ASSEMBLY TO BE INSTALLED PER MANUFACTURER SPECIFICATIONS. SEE AJAX BOLT ASSEMBLY DETAIL.
4. ALL SHEAR SLEEVES TO BE HOT DIPPED GALVANIZED PRIOR TO INSTALLATION.
5. PRIOR TO FLAT PLATE INSTALLATION, SLIP JOINTS MUST BE TIGHTENED WITH A MINIMUM JACKING FORCE OF 6000 LBS.
6. NEW FLAT PLATES TO BE INSTALLED ON THE CENTER OF PROPOSED SIDE UNLESS OTHERWISE NOTED.
7. EXISTING COAX BANDS TO BE REPLACED AFTER FLAT PLATE INSTALLATION. NEW FLAT PLATE TO BE INSTALLED BENEATH EXISTING COAX BANDS.

CONSTRUCTION NOTES:

1. CONTRACTOR TO FIELD VERIFY PROPOSED FLAT PLATE LAYOUT PRIOR TO CONSTRUCTION. IF ISSUES ARE PRESENT IN THE FIT OF THE FLAT PLATE, CONTRACTOR TO CONTACT ENGINEER OF RECORD OR FDH ENGINEERING PROJECT MANAGER PRIOR TO PROCEEDING WITH PROPOSED MODIFICATION OR FABRICATION.

PRETENSION BOLTS:

1. ALL DIRECT TENSION INDICATOR (DTI) WASHERS SHALL BE THE "SQUIRTER@STYLE" AS MANUFACTURED BY:

APPLIED BOLTING TECHNOLOGY PRODUCTS, INC.
1413 ROCKINGHAM ROAD
BELLOWS FALLS, VERMONT 05101, USA
PHONE: 1-800-552-1999
WEBSITE: WWW.APPLIEDBOLTING.COM

2. USE DIRECT TENSION INDICATOR (DTI) WASHERS COMPATIBLE WITH 3/4" NOMINAL A325 BOLTS FOR THE AJAX M20 BOLTS. DTI'S SHALL NOT BE HOT-DIP GALVANIZED. DTI'S SHALL BE MECHANICALLY GALVANIZED (MG) BY THE COLD MECHANICAL PROCESS ONLY AS PROVIDED BY THE DTI MANUFACTURER.
3. USE HARDENED WASHER FOR A 3/4" NOMINAL BOLT BETWEEN THE TOP OF DIRECT TENSION INDICATOR (DTI) WASHER AND THE NUT OF THE AJAX M20 BOLT. HARDENED WASHERS SHALL CONFORM TO ASTM F436 AND HAVE A MINIMUM HARDNESS OF RE 38 OR HIGHER. THE HARDENED WASHERS SHALL BE MECHANICALLY GALVANIZED BY COLD MECHANICAL PROCESS. ALTERNATIVELY, CORRECTLY MADE HOT DIP GALVANIZED HARDENED FLAT WASHERS HAVING A MINIMUM HARDNESS OF RC 38 CAN BE USED; CONTRACTOR SHALL PROVIDE DOCUMENTATION OF WASHER SPECIFICATION AND HARDNESS.
4. CONTRACTOR SHALL FOLLOW DTI MANUFACTURER'S INSTRUCTION FOR INSTALLATION, LUBRICATION, TIGHTENING AND INSPECTION.

INSPECTION REQUIRED: ALL AJAX BOLTS SHALL BE INSPECTED ACCORDING TO THE REQUIREMENTS OF THE AISC "SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS", DEC. 31, 2009, BY A QUALIFIED BOLT INSPECTOR. DURING INSTALLATION, THE BOLT INSPECTOR SHALL VERIFY AND DOCUMENT THE SHOP-DRILL AND FIELD-DRILLED HOLE SIZES; THE INSTALLATION OF THE AJAX BOLT ASSEMBLY, INCLUDING THE SHEAR SLEEVE PLACEMENT AND NUT LUBRICATION AND CONTRACTOR'S TENSIONING PROCEDURE. IN ADDITION, ALL AJAX BOLTS AND DTI'S SHALL BE VISUALLY INSPECTED ACCORDING TO THE DTI MANUFACTURER'S INSTRUCTIONS. THE BOLT INSPECTOR SHALL PROVIDE PHOTO DOCUMENT OF ALL BOLTS AFTER TIGHTENING CLEARLY SHOWING THE CONDITION OF THE DTI'S.

COLD GALVANIZATION/SURFACE PREPARATION NOTES:

1. CONTRACTOR TO USE ZINGA OR ZRC COLD GALVANIZATION COMPOUNDS OR APPROVED EQUIVALENT.
2. PREPARE RUSTED/CORRODED SURFACE FOR TREATMENT ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
3. CONTRACTOR TO APPLY (2) COATS OF COLD GALVANIZATION COMPOUND PER MANUFACTURER'S RECOMMENDATION. DRYING AND CURING TIMES MUST BE UTILIZED PER MANUFACTURER'S RECOMMENDATION.
4. APPLY ALL COATINGS BY BRUSH IN CALM WIND CONDITIONS. THE USE OF AEROSOL IS NOT PERMITTED.
5. IF THE TOWER IS PAINTED, BRUSH PAINT ALL TREATED AREAS TO MATCH TOWER AFTER COLD GALVANIZATION COMPOUND IS ALLOWED TO CURE.

Patriot Towers, Inc.

As Built

Date: 9-1-15

Signature: [Signature]

PREPARED BY:
FDH
ENGINEERING INNOVATION
6521 MERIDIEN DRIVE
RALEIGH, NC 27616
PHONE: 919-755-1012
FAX: 919-755-1031

PREPARED FOR:
SBA
5800 BROKEN SOUND PARKWAY, NW
BOCA RATON, FL 33487
(800) 487-5ITE

STATE OF CONNECTICUT
DENNIS D. ABEL
No. 23247
PROFESSIONAL ENGINEER
03/10/15

DENNIS D. ABEL, P.E.
CONNECTICUT LIC. NO. 23247

DRAWN BY: JJK
CHECKED BY: MSG
ENG APPVD: DDA
PROJECT NO: 15BFJ01400

SUBMITTALS		
DATE	DESCRIPTION	REV
03/10/15	CONSTRUCTION	0

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SITE NAME:
TORRINGTON

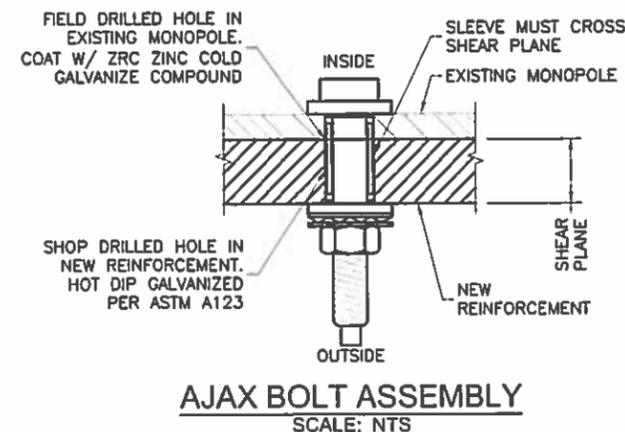
SITE NUMBER:
CT01499-S-00

SITE ADDRESS:
**1925-1931 EAST MAIN STREET
TORRINGTON, CT 06790**

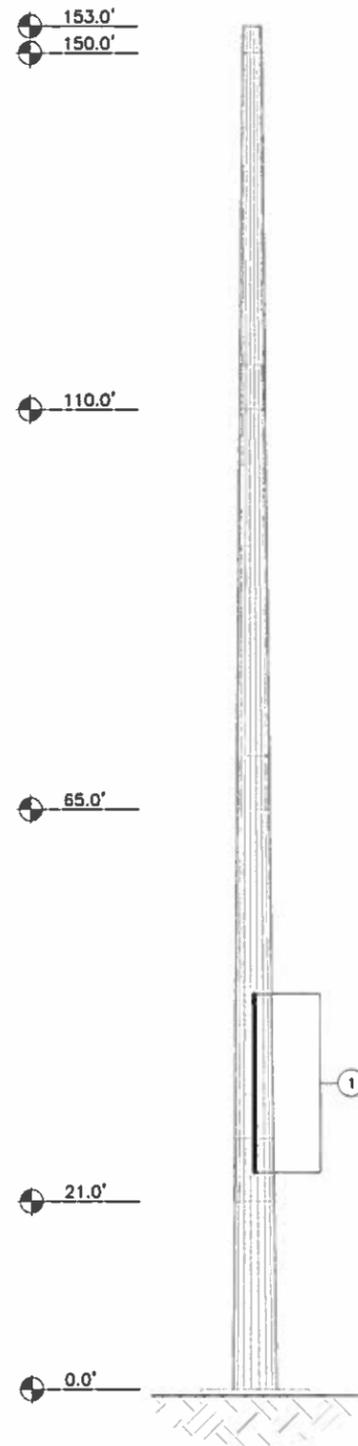
SHEET TITLE
GENERAL NOTES

SHEET NUMBER

N-2



LENGTH (FT)	28.00	50.00	50.00	40.00
# OF SIDES		18		
THICKNESS (IN)	0.3750	0.3125	0.3125	0.2500
SOCKET LENGTH (FT)	N/A	7.00	6.00	5.00
TOP DIAMETER (IN)	52.9791	43.3400	33.6250	26.2500
BOT. DIAMETER (IN)	60.0000	55.2750	45.3750	35.2500



TOWER ELEVATION
SCALE: NTS

MEMBER KEY SIZE	
MARK	SIZE
A	3.00
B	0.2500
C	N/A
D	24.0000
E	26.2500

- APPURTENANCES MAY INTERFERE WITH PROPOSED MODIFICATIONS.
- ALL MODIFICATIONS TO BE INSTALLED CONTINUOUSLY THROUGH EXISTING EQUIPMENT (UNLESS NOTED OTHERWISE). ALL EXISTING EQUIPMENT NOT TO BE DAMAGED OR TAKEN OFF AIR DURING INSTALLATION.
- ANTENNA GRAPHICS NOT SHOWN FOR CLARITY. SEE STRUCTURAL ANALYSIS REPORT FOR EXISTING ANTENNA LOADING.
- COAX GRAPHICS NOT SHOWN FOR CLARITY. SEE STRUCTURAL ANALYSIS REPORT FOR EXISTING COAX CONFIGURATION.

TOWER MODIFICATION SCHEDULE			
NO.	TYPE OF MODIFICATION	BOTTOM ELEV. (FT)	TOP ELEV. (FT)
1	INSTALLATION OF NEW FLAT PLATE REINFORCEMENT. SEE SHEET S-2 FOR DETAILS.	24.3±	44.3±
TOWER FINISH: GALVANIZED			

Patriot Towers, Inc.
As Built
Date: 9-1-15
Signature:

PREPARED BY:
FDH ENGINEERING INNOVATION
6521 MERIDIEN DRIVE
RALEIGH, NC 27616
PHONE: 919-755-1012
FAX: 919-755-1031

PREPARED FOR:
SBA
3900 BROKEN SOUND PARKWAY, NW
BOCA RATON, FL 33487
(800) 487-SITE

STATE OF CONNECTICUT
DENNIS D. ABEL
No. 23247
LICENSED PROFESSIONAL ENGINEER
03/10/15
DENNIS D. ABEL, P.E.
CONNECTICUT LIC. NO. 23247

DRAWN BY: JK
CHECKED BY: MSG
ENG APPVD: DDA
PROJECT NO: 15BFJD1400

SUBMITTALS		
DATE	DESCRIPTION	REV
03/10/15	CONSTRUCTION	0

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SITE NAME:
TORRINGTON

SITE NUMBER:
CT01499-S-00

SITE ADDRESS:
1925-1931 EAST MAIN STREET
TORRINGTON, CT 06790

SHEET TITLE
MODIFICATION SCHEDULE

SHEET NUMBER

S-1

FLAT PLATE INSTALLATION SCHEDULE				
PART #	QTY.	DESCRIPTION	ELEVATION	FLATS
MK-1	3	FLAT PLATE REINFORCEMENT	24'-3"± TO 44'-3"±	1 - 7 - 13
-	108	20MM AJAX BOLTS	VARIES	-

PREPARED BY:

FDH
 ENGINEERING INNOVATION
 6521 MERIDIEN DRIVE
 RALEIGH, NC 27816
 PHONE: 919-755-1012
 FAX: 919-755-1031

PREPARED FOR:

SBA
 5900 BROKEN SOUND PARKWAY, NW
 BOCA RATON, FL 33487
 (800) 487-SITE

STATE OF CONNECTICUT
 DENNIS D. ABEL
 No. 23247
 LICENSED PROFESSIONAL ENGINEER
 03/10/15
 DENNIS D. ABEL, P.E.
 CONNECTICUT LIC. NO. 23247

DRAWN BY: JK
 CHECKED BY: MSG
 ENG APPVD: DDA
 PROJECT NO: 15BFJD1400

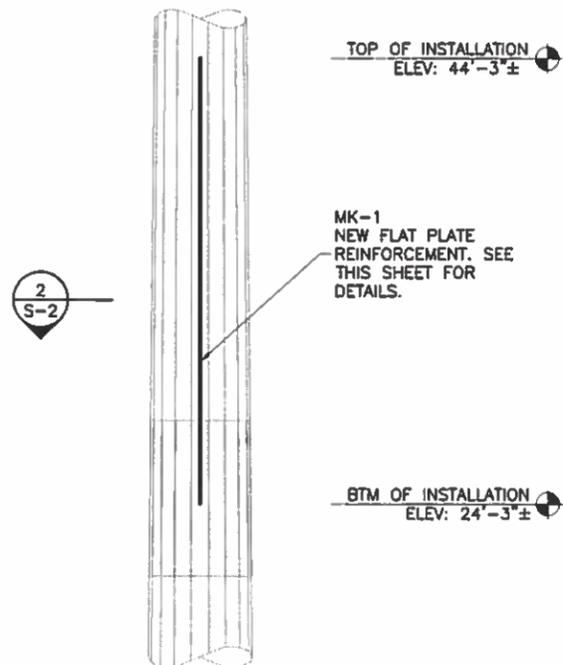
SUBMITTALS		
DATE	DESCRIPTION	REV
03/10/15	CONSTRUCTION	0

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SITE NAME:
TORRINGTON
 SITE NUMBER:
CT01499-S-00
 SITE ADDRESS:
 1925-1931 EAST MAIN STREET
 TORRINGTON, CT 06790

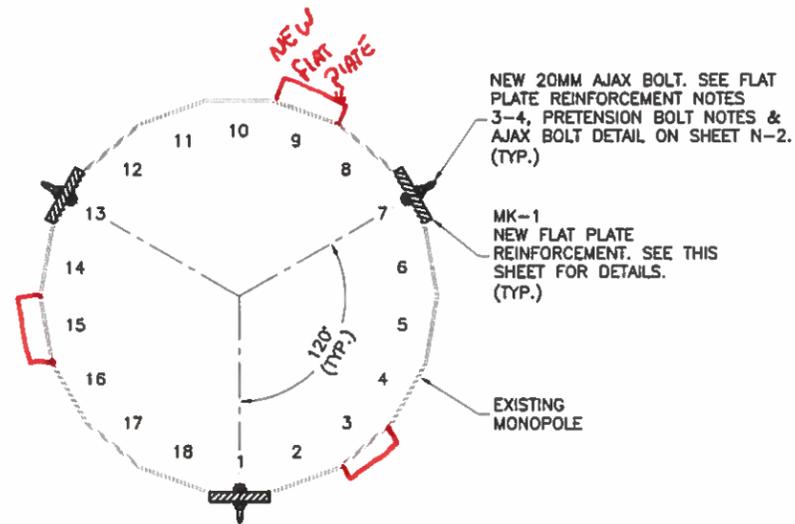
SHEET TITLE
 FLAT PLATE INSTALLATION
 DETAILS

SHEET NUMBER
S-2



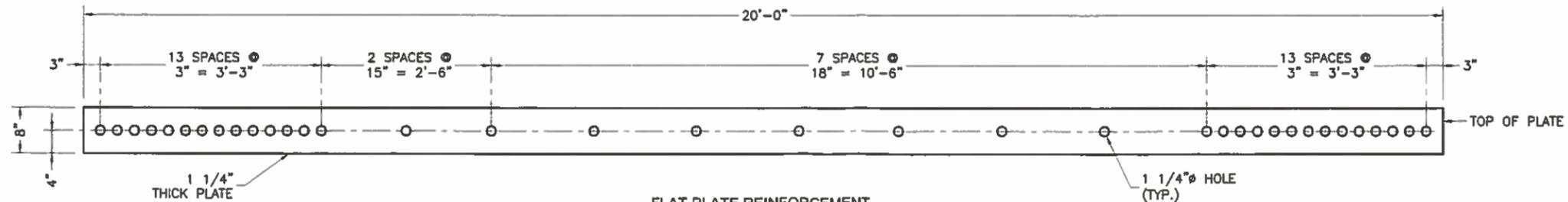
FLAT PLATE REINFORCEMENT LAYOUT
 ELEVATION VIEW

1 ELEVATION
 S-2 SCALE: NTS



FLAT PLATE REINFORCEMENT LAYOUT
 PLAN VIEW

2 SECTION
 S-2 SCALE: NTS



FLAT PLATE REINFORCEMENT
 FRONT VIEW

MK-1 DETAIL
 S-2 SCALE: 1/2" = 1'-0"

Drew Alexander

From: Joshua Carden
Sent: Monday, August 31, 2015 9:03 AM
To: Mark Girgis; Jeffrey Johnson
Cc: Steven Strickland
Subject: RE: Torrington CT01499-S-00 - Orientation of Flat Plate
Attachments: IMG_8571.JPG

Jeff,

Looking at the attached photo, it appears the safety is located on a corner with step pegs located on the two adjacent flats. Assuming flat 1 is to the left of the safety, I would recommend they move their orientation to 3,9,15 or 4,10,16 depending on the step peg configuration at the elevation they are installing. As long as they maintain a 120 degree separation, the installation will be acceptable.

Josh Carden, EI
Project Engineer III

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From: Mark Girgis
Sent: Monday, August 31, 2015 8:50 AM
To: Jeffrey Johnson
Cc: Steven Strickland; Joshua Carden
Subject: RE: Torrington CT01499-S-00 - Orientation of Flat Plate

Jeff,

Typically, we designate flat 1 on the same flat as the safety climb and continue counter clockwise. I'd prefer that the contractor sticks to the orientation in our drawings if they can.

Please let me know if you have any more questions.

Thanks,

Mark S. Girgis, EI

Project Engineer

FDH Velocitel

6521 Meridien Drive
Raleigh, NC 27616
Office: (919) 755-1012
Email: Mark.Girgis@FDHVelocitel.com
Website: <http://www.FDHVelocitel.com>



From: Jeffrey Johnson
Sent: Monday, August 31, 2015 8:46 AM
To: Mark Girgis
Cc: Steven Strickland; Joshua Carden
Subject: Torrington CT01499-S-00 - Orientation of Flat Plate

Mark:

Good morning!

My subcontractor just arrived on-site to complete construction of this MOD. The Contract Drawings call for flat plate to be installed on Flats 1, 7, and 13 from Elev 24.3 – 44.3' +/- . Although, the Contractor has no way of knowing the orientation where Flats 1, 7, and 13 are located on the existing monopole. Is there a Pre-Existing document that may have this info or can we install the flat plate on any flats as long as we maintain 120 degrees of separation?

Please provide info and advise ASAP.

Thanks,
Jeffrey D. Johnson, P.E.
Senior Project Manager – Construction

FDH Velocitel

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