



**BOARD OF SUPERVISORS AGENDA ITEM REPORT
CONTRACTS / AWARDS / GRANTS**

Award Contract Grant

Requested Board Meeting Date: January 02, 2018

* = *Mandatory, information must be provided*

or Procurement Director Award

***Contractor/Vendor Name/Grantor (DBA):**

Sprint Spectrum Realty Company, LLC, a Delaware Limited Liability Company ("Sprint").

***Project Title/Description:**

First Amendment to Tower License for Wireless Communications Facilities at 7300 N. Shannon Road ("First Amendment"); LCP-0133; Supervisor District 1.

***Purpose:**

Licensee will replace and update communications equipment on the County owned tower as shown on Exhibit A-1 attached to the First Amendment.

***Procurement Method:**

Exempt per Pima County Code Section 11.04.020

***Program Goals/Predicted Outcomes:**

To stipulate terms and conditions under which Sprint may replace and install certain new equipment at the site leased to Sprint at the County-owned Nanini Governmental Center.

***Public Benefit:**

Operation and maintenance of Sprint's wireless communications facilities for the benefit of its cell phone customers in unincorporated Pima County.

***Metrics Available to Measure Performance:**

Sprint is required to obtain all necessary permits to proceed with construction at the site and will be required to provide a satisfactory structural analysis before installation of any of the replacement equipment.

***Retroactive:**

No.

*To: COB-12-19-17
PJS-11
(2)*

Contract / Award Information

Document Type: _____ Department Code: _____ Contract Number (i.e.,15-123): _____

Effective Date: _____ Termination Date: _____ Prior Contract Number (Synergen/CMS): _____

Expense Amount: \$* _____ Revenue Amount: \$ _____

***Funding Source(s) required:**

Funding from General Fund? Yes No If Yes \$ _____ % _____

Contract is fully or partially funded with Federal Funds? Yes No

***Is the Contract to a vendor or subrecipient?**

Were insurance or indemnity clauses modified? Yes No

If Yes, attach Risk's approval

Vendor is using a Social Security Number? Yes No

If Yes, attach the required form per Administrative Procedure 22-73.

Amendment / Revised Award Information

Document Type: CTN Department Code: PW Contract Number (i.e.,15-123): 17-195

Amendment No.: One (1) AMS Version No.: Two (2)

Effective Date: 01/02/2018 New Termination Date: _____

Prior Contract No. (Synergen/CMS): _____

Expense or Revenue Increase Decrease Amount This Amendment: \$ -0-

Is there revenue included? Yes No If Yes \$ _____

***Funding Source(s) required:** Sprint

Funding from General Fund? Yes No If Yes \$ _____ % _____

Grant/Amendment Information (for grants acceptance and awards) Award Amendment

Document Type: _____ Department Code: _____ Grant Number (i.e.,15-123): _____

Effective Date: _____ Termination Date: _____ Amendment Number: _____

Match Amount: \$ _____ Revenue Amount: \$ _____

***All Funding Source(s) required:**

*Match funding from General Fund? Yes No If Yes \$ _____ % _____

*Match funding from other sources? Yes No If Yes \$ _____ % _____

*Funding Source: _____

***If Federal funds are received, is funding coming directly from the Federal government or passed through other organization(s)?** _____

Contact: Michael D. Stofko

Department: Real Property Services Telephone: 520-724-6667

Department Director Signature/Date:  12/11/2017

Deputy County Administrator Signature/Date:  12/14/17

County Administrator Signature/Date:  12/15/17

(Required for Board Agenda/Addendum Items)

PIMA COUNTY DEPARTMENT OF:
INFORMATION TECHNOLOGY

PROJECT: TOWER LICENSE AGREEMENT

LICENSEE: Sprint Spectrum Realty Company,
LLC

CONTRACT NO.: CTN-PW-17-195

CONTRACT AMENDMENT NO.: One (1)

CONTRACT
NO. <u>CTN-PW-17-195</u>
AMENDMENT NO. <u>01</u>
This number must appear on all invoices, correspondence and documents pertaining to this contract.

**FIRST AMENDMENT TO TOWER LICENSE
FOR WIRELESS COMMUNICATIONS FACILITIES
(Nanini Governmental Center, 7300 N. Shannon Road)**

This First Amendment to Tower License (the "First Amendment") is entered into by and between Pima County, a political subdivision of the State of Arizona ("County"), and Sprint Spectrum Realty Company, LLC, a Delaware Limited Liability Company ("Licensee"), and is effective upon execution by the Pima County Board of Supervisors.

RECITALS

County and Licensee entered into a Tower License for Wireless Communications Facilities (the "License") at the County-owned Nanini Governmental Center, 7300 N. Shannon Road ("Nanini"), effective as of April 15, 2017, with a termination date of April 14, 2027. The License grants non-exclusive permission to Licensee to install, maintain, operate and remove certain communications equipment (the "Equipment") on the County-owned tower at Nanini, as well as the use of approximately four-hundred (400) square feet of ground space as described on **Exhibit A** attached to the License. The permitted equipment consisted only of the equipment described in **Exhibit A** to the License, and any additions or changes to the Equipment as described therein, or any changes to **Exhibit A** itself, are permitted only by a modification of the License pursuant to Section 26 thereof.

With this First Amendment, Licensee desires to add but is not limited to six (6) new Panel Antennas; (9) new Remote Radio Heads; associated cabling; and replace ground equipment as set out on the Site and Elevation Plans, for a Final Antenna Plan of 9 Panel Antennas, 12 Remote Radio Heads and associated cabling attached hereto as **Exhibit A-1**. Licensee has provided a satisfactory structural analysis in accordance with the Final Antenna Plan and shall obtain a building permit before installation of any of the aforementioned equipment.

AGREEMENT


WHEREFORE, the parties to this First Amendment agree as follows:

1. **Exhibit A** to the License shall be and hereby is replaced and superseded by **Exhibit A-1** attached to this First Amendment.
2. All other provisions of the License not expressly amended herein remain in effect and continue to be binding upon the parties thereto.

IN WITNESS WHEREOF, the parties have affixed their signatures to this First Amendment to Tower License on the dates written below.

LICENSEE:


SPRINT SPECTRUM REALTY
COMPANY, LLC, a Delaware Limited
Liability Company

By: 
Perry Myers
Its: Market Manager AZ/NM

Date: 11/27/2017


LICENSOR:

PIMA COUNTY


Sharon Bronson, Chair
Pima County Board of Supervisors

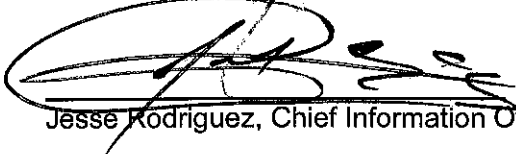
Date: JAN 02 2018

Attest:


Julie Castaneda, Clerk of the Board

Date: JAN 02 2018

APPROVED AS TO CONTENT


Jesse Rodriguez, Chief Information Officer

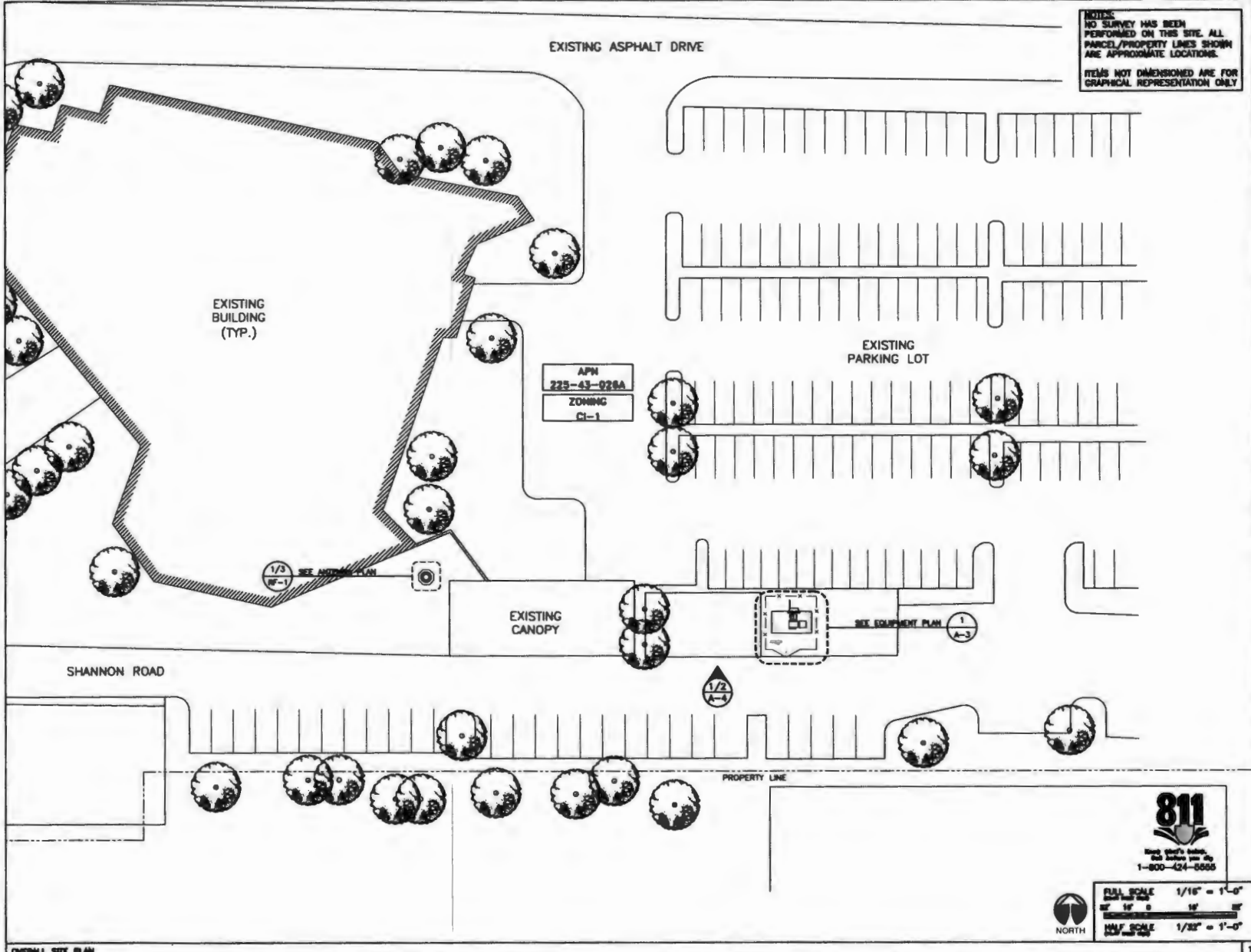
Date: 12/8/17

APPROVED AS TO FORM:


Tobin Rosen, Deputy County Attorney

Date: 12/7/17

EXHIBIT "A-1"



NOTICE:
NO SURVEY HAS BEEN
PERFORMED ON THIS SITE. ALL
PARCEL/PROPERTY LINES SHOWN
ARE APPROXIMATE LOCATIONS.
ITEMS NOT DIMENSIONED ARE FOR
GRAPHICAL REPRESENTATION ONLY

PLANS PREPARED FOR

Sprint
Together with Humal

CONSULTANT

smartlink
8502 E VA DE VENTURA, SUITE 230
SCOTTSDALE, AZ 85258

ENGINEER OF RECORD

WYCO
FIELD SERVICES
Where quality still counts.
2227 W PECOS RD, SUITE 4
CHANDLER, AZ 85224

PRELIMINARY NOT FOR CONSTRUCTION OR RECORDATION

NO.	DATE	DESCRIPTION	BY
A	09/13/17	BOOK CD'S	JB
B	10/23/17	CLIENT COMMENTS	APR
C	11/13/17	CLIENT COMMENTS	CB

PROJECT INFORMATION

TUC NORWEST
PH04XC034-E

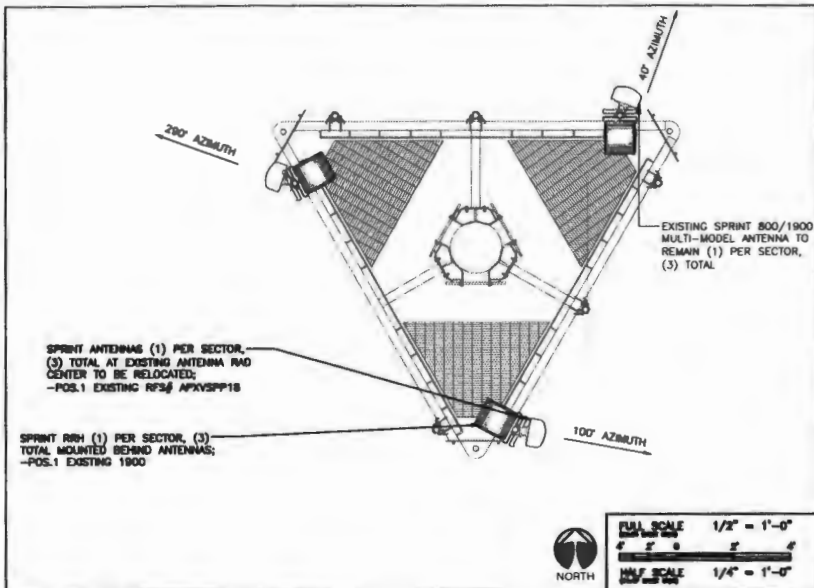
7200 N. SHANNON RD
TUCSON, AZ 85741

SHEET TITLE

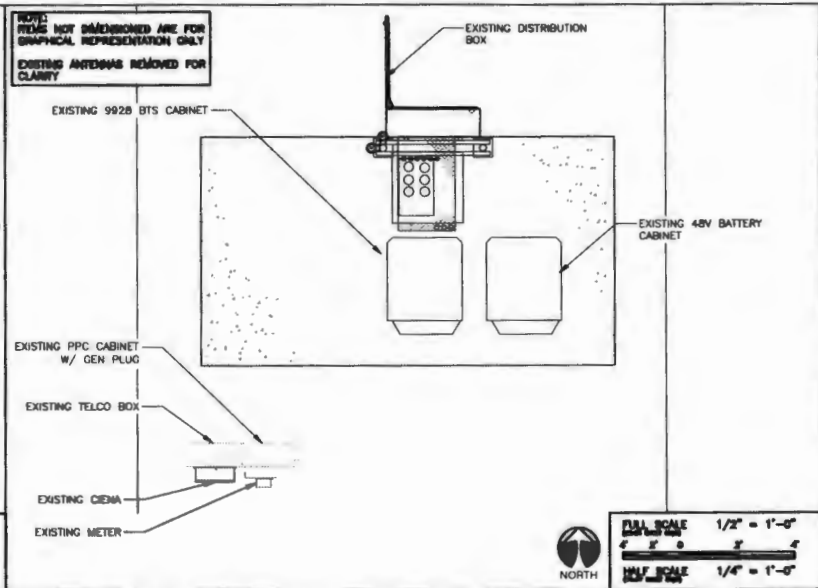
OVERALL SITE PLAN

SHEET NUMBER

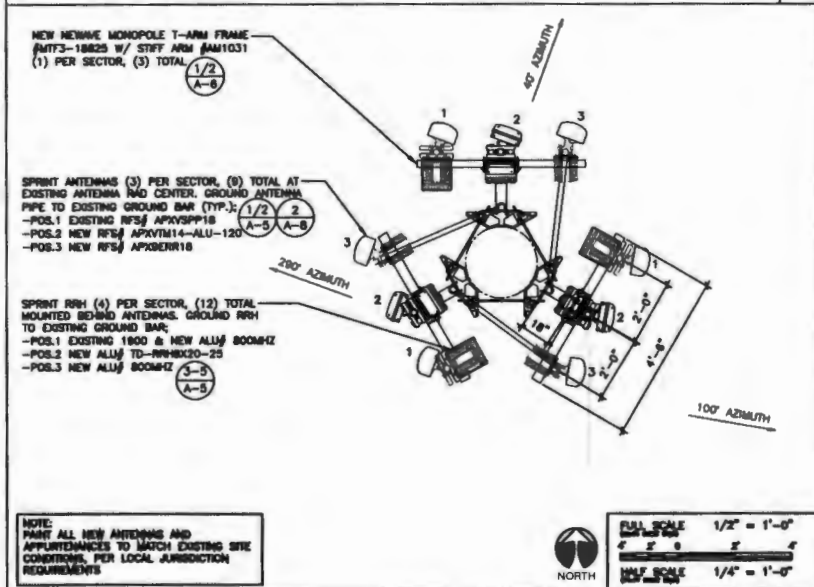
A-1



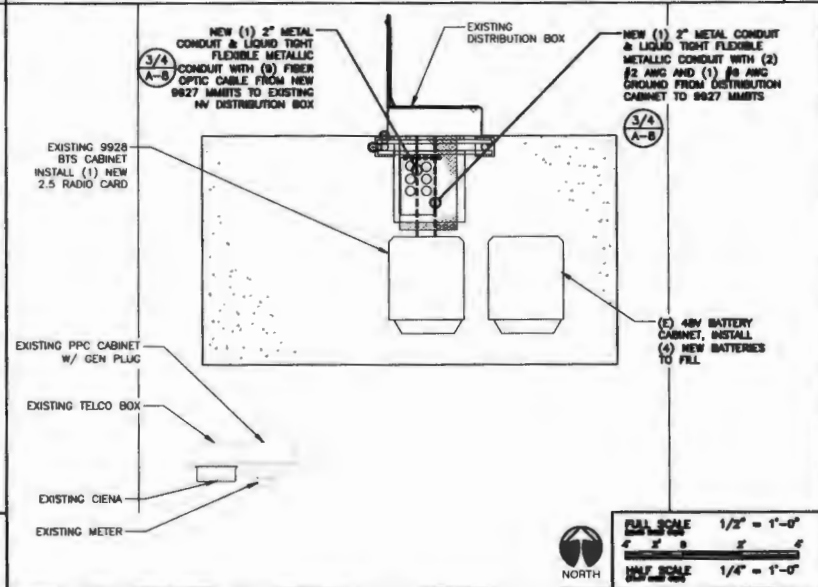
EXISTING ANTENNA PLAN 3



EXISTING EQUIPMENT PLAN 1



FINAL ANTENNA PLAN 4



FINAL EQUIPMENT PLAN 2

PLANS PREPARED FOR

Sprint
Together with Nextel.

CONSULTANT

smartlink
8502 E VA DE VENTURA, SUITE 280
SCOTTSDALE, AZ 85258

ENGINEER OF RECORD

WYCO
FIELD SERVICES
Where quality still counts.
2227 W PEDOS RD, SUITE 4
CHANDLER, AZ 85224

PRELIMINARY NOT FOR CONSTRUCTION OR RECORDATION

NO.	DATE	DESCRIPTION	BY
A	08/15/17	BOX CD'S	JD
B	10/23/17	CLIENT COMMENTS	APR
C	11/13/17	CLIENT COMMENTS	CB

PROJECT INFORMATION

**TUC NORWEST
PH04XC034-E**

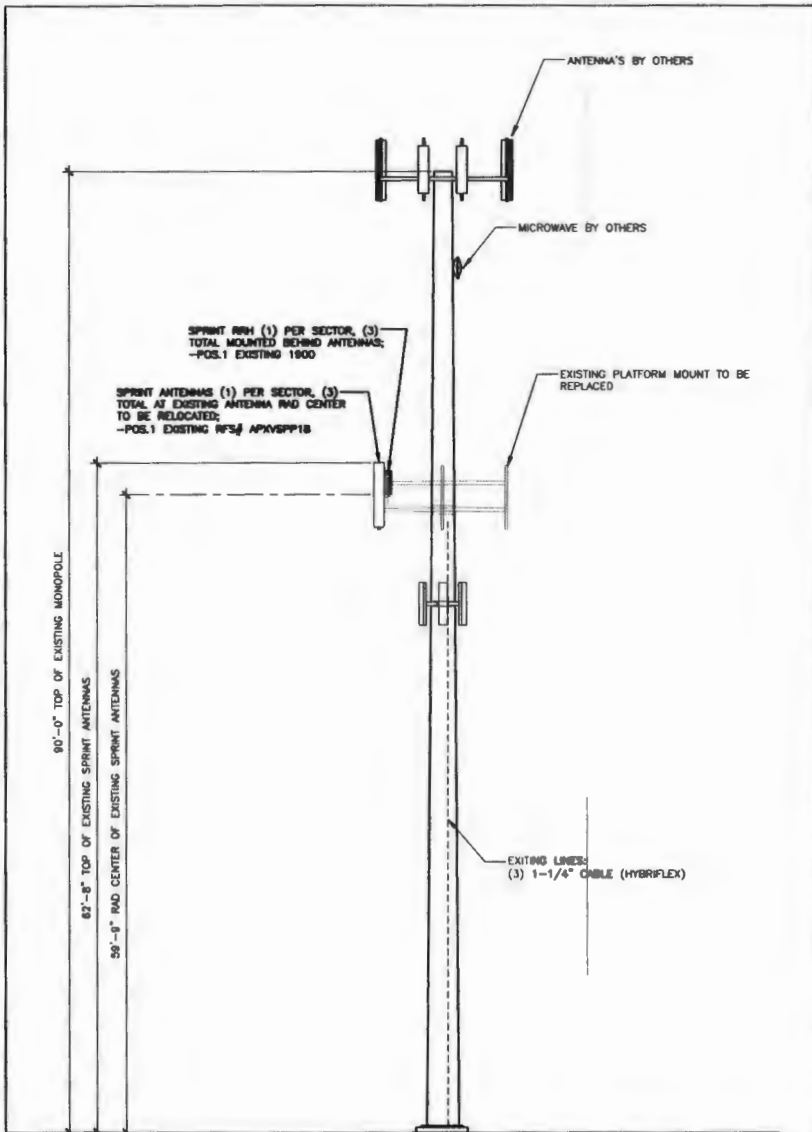
7300 N. SHANNON RD
TUCSON, AZ 85741

SHEET TITLE

**EXISTING/FINAL
EQUIPMENT AND
ANTENNA PLAN**

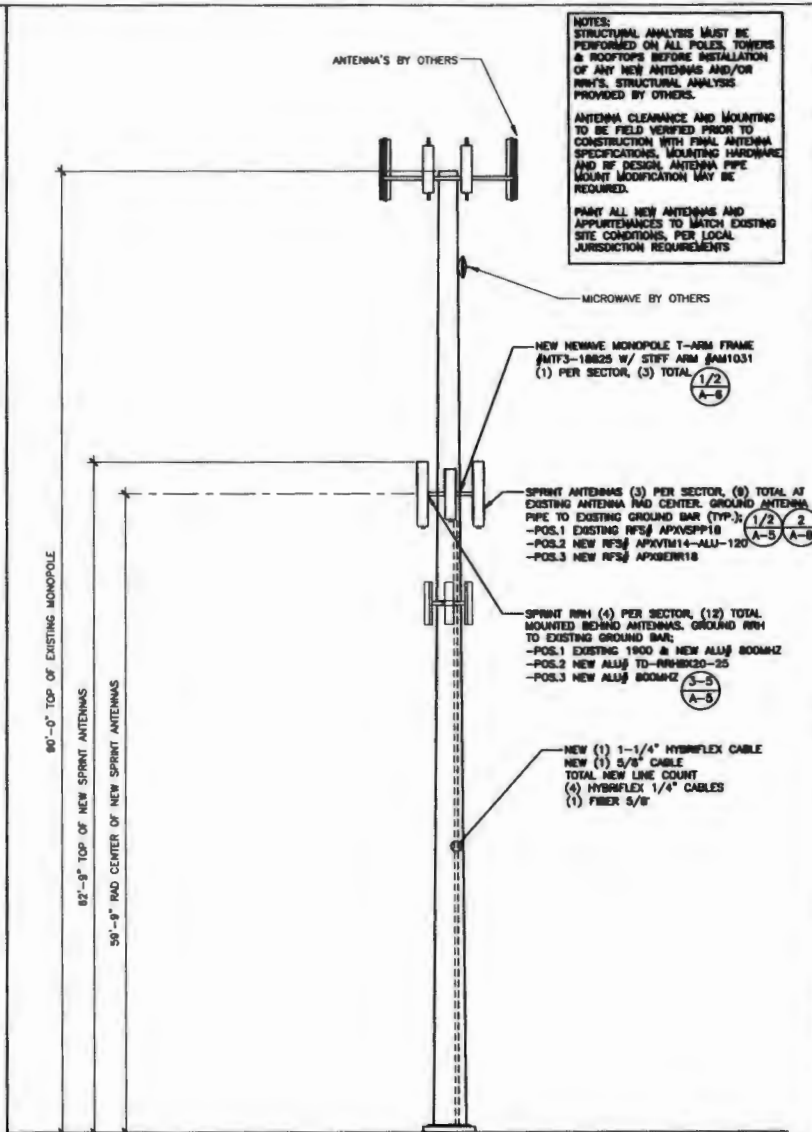
SHEET NUMBER

A-3



FULL SCALE 3/16" = 1'-0"
 HALF SCALE 3/32" = 1'-0"

EXISTING NORTH ELEVATION



NOTES:
 STRUCTURAL ANALYSIS MUST BE PERFORMED ON ALL POLES, TOWERS & ROOFTOPS BEFORE INSTALLATION OF ANY NEW ANTENNAS AND/OR RRH'S. STRUCTURAL ANALYSIS PROVIDED BY OTHERS.
 ANTENNA CLEARANCE AND MOUNTING TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION WITH FINAL ANTENNA SPECIFICATIONS, MOUNTING HARDWARE AND RF DESIGN. ANTENNA PIPE MOUNT MODIFICATION MAY BE REQUIRED.
 PAINT ALL NEW ANTENNAS AND APPURTENANCES TO MATCH EXISTING SITE CONDITIONS, PER LOCAL JURISDICTION REQUIREMENTS

FULL SCALE 3/16" = 1'-0"
 HALF SCALE 3/32" = 1'-0"

FINAL NORTH ELEVATION

PLANS PREPARED FOR

CONTRACTOR

8002 E VA DE VENTURA, SUITE 220
SCOTTSDALE, AZ 85256

ENGINEER OF RECORD

2227 W PEDOS RD, SUITE 4
CHANDLER, AZ 85224

PRELIMINARY NOT FOR CONSTRUCTION OR RECORDATION

NO.	DATE	DESCRIPTION	BY
A	08/15/17	BOX C/P'S	JD
B	10/23/17	CLIENT COMMENTS	APR
C	11/13/17	CLIENT COMMENTS	CR

PROJECT INFORMATION

TUC NORWEST
PH04XC034-E

7300 N. SHANNON RD
TUCSON, AZ 85741

SHEET TITLE

EXISTING/FINAL
ELEVATION

SHEET NUMBER

A-4

STRUCTURAL MODIFICATION DRAWINGS

SITE NAME

SPRINT PH04XC034E TUC NORWEST

PROJECT SITE ADDRESS

7300 N. SHANNON RD.
TUCSON, AZ 85741
(PIMA COUNTY)



ISE JOB # 12657

SPRINT PH04XC034E TUC NORWEST
90' MONOPOLE COMMUNICATIONS STRUCTURE
POLE MODIFICATION

MODIFICATION PROVISIONS

THE MODIFICATIONS DEPICTED ON THESE DRAWINGS ARE BASED ON THE RECOMMENDATIONS OUTLINED IN THE STRUCTURAL MODIFICATIONS ANALYSIS REPORT COMPLETED BY ISE INC. JOB #12657 DATED: NOVEMBER 30, 2017. (REV 0). THIS REPORT IS BASED ON THE SPECIFIC ANTENNA LOADING AND COAX CONFIGURATION. SEE REPORT FOR THE ANTENNA AND COAX LOADING INFORMATION. ANY OTHER ANTENNA OR COAX CONFIGURATION REQUIRES REVIEW BY ISE INC. SATISFACTORY COMPLETION OF THE MODIFICATIONS INDICATED ON THESE DRAWINGS WILL RESULT IN THE STRUCTURE MEETING THE REQUIREMENTS OF THE SPECIFICATIONS UNDER WHICH THE STRUCTURAL WAS COMPLETED.

INDEX OF SHEETS

NUMBER	TITLE	REV
T1	TITLE SHEET	0
N1	MODIFICATION INSPECTION CHECK LIST AND NOTES	0
N2	PROJECT NOTES	0
S1	POLE MODIFICATION DETAILS	0

PROJECT TEAM

PROJECT CONTACT:

NAME: SMARTLINK LLC.
ADDRESS: 8502 E. VIA DE VENTURA, SUITE 220
CITY, STATE, ZIP: SCOTTSDALE, AZ 85258
PHONE: 480-206-0800

TOWER MANUFACTURER:

NAME: PROO
ADDRESS: N/A
CITY, STATE, ZIP: PLYMOUTH, IN
PHONE: 877-807-4783

STRUCTURAL ENGINEER:

NAME: ISE INCORPORATED
ADDRESS: PO BOX 93039
CITY, STATE, ZIP: PHOENIX, AZ 85076
PHONE: 602-403-8614

GEOTECHNICAL ENGINEER:

NAME: WESTERN TECHNOLOGIES, INC.
ADDRESS: N/A
CITY, STATE, ZIP: N/A
PHONE: N/A

REFERENCED DOCUMENTS

DOCUMENT	REMARKS	DATE
Wyo	Sprint DO Macro ODA	October 23, 2017
DES TEK	Structural Analysis Job No. 010120131	July 11, 2013
Prod	Pole & Foundation Drawings	October 7, 1992

CONTRACTOR SHALL FIELD VERIFY ALL: DRAWINGS, QUANTITIES, PART NUMBERS AND COAX / ANTENNA PLACEMENTS PRIOR TO: BIDDING, ORDERING MATERIALS, AND CONSTRUCTION.

7300 N. Shannon Rd
Tucson, AZ 85741



PROJECT NUMBER	PROJECT NAME

SHEET NUMBER	TOTAL SHEETS
T1	0

DRAWING DATE
November 30, 2017

MODIFICATION INSPECTION NOTES:

MODIFICATION CHECKLIST	
CONSTRUCTION/INSTALLATION INSPECTIONS AND TESTING REQUIRED (COMPLETED BY GC)	REPORT ITEM
PRE-CONSTRUCTION	
X	MODIFICATION INSPECTION CHECKLIST DRAWING
	ENGINEER OF RECORD APPROVED SHOP DRAWINGS
	FABRICATOR INSPECTION
	FABRICATOR CERTIFIED WELD INSPECTION
	MATERIAL REPORT
	FABRICATOR NDE INSPECTION
X	NDE REPORT OF MONOPOLE PLATE (AS REQUIRED)
N/A	PACKING SLIPS
CONSTRUCTION	
X	CONSTRUCTION INSPECTIONS
	FOUNDATION INSPECTIONS
	CONCRETE COMP. STRENGTH AND SLUMP TESTS
	POST-INSTALLED ANCHOR ROD VERIFICATION - EPOXY OR GROUT
X	BASE PLATE GROUT VERIFICATION
X	CONTRACTORS CERTIFIED WELD INSPECTION
	EARTH WORK: LIFT AND DENSITY
	ON-SITE COLD GALVANIZING VERIFICATION
	GUY TENSION REPORT
	G.C. AS-BUILT DOCUMENTS
POST-CONSTRUCTION	
X	AS-BUILT RECORD DOCUMENTS (STAMPED)
	POST-INSTALLED ANCHOR ROD / BOLT PULL-OUT TESTING
X	PHOTOGRAPHS: COMPLETED PROJECT
X	POST-MODIFICATION REPORT

NOTE: (X) DENOTES A DOCUMENT NEEDED
(N/A) DENOTES A DOCUMENT THAT IS NOT NEEDED

GENERAL

THE MODIFICATION INSPECTIONS (MI) IS A VISUAL INSPECTION OF TOWER MODIFICATIONS AND 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 REMAINS WITH THE EOR AT ALL TIMES.

ALL MIs SHALL BE CONDUCTED BY AN OWNER APPROVED ENGINEERING VENDOR THAT IS APPROVED TO PERFORM ELEVATED WORK FOR THE OWNER.

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 PROJECT CONTACT LISTED ON SHEET 11.

MI INSPECTOR

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

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

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 THE OWNER.

GENERAL CONTRACTOR

THE GC IS REQUIRED TO CONTACT THE MI INSPECTOR AS SOON AS RECEIVING A PO FOR THE MODIFICATION INSTALLATION OR TOWER 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 INSPECTIONS 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 OF DELIVERING A MI REPORT:

- IT IS SUGGESTED THAT THE GC PROVIDE A MINIMUM OF 5 BUSINESS DAYS NOTICE, PREFFERABLY 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 AN GUY WIRE TENSIONING OR RE-TENSIONING OPERATIONS
- IT MAY BE BENEFICIAL TO INSTALL ALL TOWER MODIFICATIONS PRIOR TO CONDUCTING THE FOUNDATION INSPECTIONS TO ALLOW FOUNDATION AND MI INSPECTIONS 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 WITH THE MI INSPECTIONS ON-SITE

CANCELLATION OR DELAYS IN SCHEDULED MI

IF THE GC AND MI INSPECTOR AGREE TO A DATE ON WHICH THE MI WILL BE CONDUCTED, AND EITHER PARTY CANCELS OR DELAYS, THE OWNER SHALL NOT BE RESPONSIBLE FOR ANY COSTS, FEES, LOSS OF DEPOSITS AND/OR OTHER PENALTIES RELATED TO THE CANCELLATION OR DELAY INCURRED BY EITHER PARTY FOR ANY TIME (E.G. TRAVEL AND LODGING, COSTS OF KEEPING EQUIPMENT ON-SITE, ETC.) IF THE OWNER CONTACTS DIRECTLY FROM A THIRD PARTY. EXCEPTIONS MAY BE MADE IN THE EVENT THAT THE DELAY/CANCELLATION IS CAUSED BY WEATHER OR OTHER CONDITIONS THAT MAY COMPROMISE THE SAFETY OF THE PARTIES INVOLVED.

CORRECTION OF FAILING MIs

IF THE MODIFICATION INSTALLATION WOULD FAIL THE MI (FAILED MI), THE GC SHALL WORK WITH THE OWNER 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 THE OWNER'S APPROVAL, THE GC MAY WORK WITH THE EOR TO RE-EVALUATE THE MODIFICATION / REINFORCEMENT USING THE AS-BUILT CONDITION.

MI VERIFICATION INSPECTIONS

THE OWNER RESERVES THE RIGHT TO CONDUCT A MI VERIFICATION INSPECTION TO VERIFY THE ACCURACY AND COMPLETENESS OF PREVIOUSLY COMPLETED MI INSPECTIONS.

ALL VERIFICATION INSPECTIONS SHALL BE HELD TO THE SAME SPECIFICATIONS AND REQUIREMENTS IN THE CONTRACT DOCUMENTS.

VERIFICATION INSPECTION MAY BE CONDUCTED BY AN INDEPENDENT INSPECTION FIRM AFTER A MODIFICATION PROJECT IS COMPLETED, AS MARKED BY THE DATE OF AN ACCEPTED "PASSING MI" OR "PASS AS NOTED MI" REPORT FOR THE ORIGINAL PROJECT.

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:
 - 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 IN-FIELD CONDITION

PHOTO OF ELEVATED MODIFICATIONS TAKEN FROM THE GROUND SHALL BE CONSIDERED INADEQUATE



ISE JOB # 12017

SPRINT PH04XC034E TUC NORWEST
 90' MONOPOLE COMMUNICATIONS STRUCTURE
 POLE MODIFICATION

SITE ADDRESS: 7306 N. Shannon Rd
Tucson, AZ 85741



PROJECT NUMBER	
012017	0001
SHEET NUMBER	PROJECT ID
N1	0
DRAWING DATE	
November 30, 2017	

GENERAL NOTES

- ALL REFERENCE TO THE OWNER IN THESE DOCUMENTS SHALL BE CONSIDERED SPRINT OR ITS DESIGNATED REPRESENTATIVE.
- ALL WORK PRESENTED ON THESE DRAWINGS MUST BE COMPLETED BY THE CONTRACTOR UNLESS NOTED OTHERWISE. THE CONTRACTOR MUST HAVE CONSIDERABLE EXPERIENCE IN PERFORMANCE OF WORK SIMILAR TO THAT DESCRIBED HEREIN. BY ACCEPTANCE OF THIS ASSIGNMENT, THE CONTRACTOR IS ATTESTING THAT HE DOES HAVE SUFFICIENT EXPERIENCE AND ABILITY, THAT HE IS KNOWLEDGEABLE OF THE WORK TO BE PERFORMED AND THAT HE IS PROPERLY LICENSED AND REGISTERED TO DO THIS WORK IN THE APPLICABLE JURISDICTION.
- WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE, 2012 EDITION.
- UNLESS SHOWN OR NOTED OTHERWISE ON THE CONTRACT DRAWINGS, OR IN THE SPECIFICATIONS, THE FOLLOWING NOTES SHALL APPLY TO THE MATERIALS LISTED HEREIN, AND TO THE PROCEDURES TO BE USED ON THIS PROJECT.
- ALL HARDWARE ASSEMBLY MANUFACTURER'S INSTRUCTIONS SHALL BE FOLLOWED EXACTLY AND SHALL SUPERSEDE ANY CONFLICTING NOTES ENCLOSED HEREIN.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ERECTION PROCEDURE AND SEQUENCE TO INSURE 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 AND SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER THE COMPLETION OF THE PROJECT.
- ALL DIMENSIONS, ELEVATIONS, AND EXISTING CONDITIONS SHOWN ON THE DRAWINGS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO BEGINNING ANY MATERIALS ORDERING, FABRICATION OR CONSTRUCTION WORK ON THIS PROJECT. CONTRACTOR SHALL NOT SCALE CONTRACT DRAWINGS IN LIEU OF FIELD VERIFICATIONS. ANY DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND THE OWNER'S ENGINEER. THE DISCREPANCIES MUST BE RESOLVED BEFORE THE CONTRACTOR IS TO PROCEED WITH THE WORK. THE CONTRACTOR DOCUMENTS DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES. OBSERVATION VISITS TO THE SITE BY THE OWNER AND / OR ENGINEER SHALL NOT INCLUDE INSPECTION OF THE PROTECTIVE MEASURES OR PROCEDURES.
- ALL MATERIALS AND EQUIPMENT FURNISHED SHALL BE NEW AND OF GOOD QUALITY, FREE FROM FLAWS AND DEFECTS AND IN CONFORMANCE WITH THE CONTRACT DOCUMENTS. ANY AND ALL SUBSTITUTIONS MUST BE PROPERLY APPROVED AND AUTHORIZED IN WRITING BY THE OWNER AND ENGINEER PRIOR TO INSTALLATION. THE CONTRACTOR SHALL FURNISH SATISFACTORY EVIDENCE AS TO THE KIND AND QUALITY OF THE MATERIALS AND EQUIPMENT BEING SUBMITTED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT THIS PROJECT AND RELATED WORK COMPLIES WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL SAFETY CODES AND REGULATIONS GOVERNING THIS WORK.
- ACCESS TO THE PROPOSED WORK SITE MAY BE RESTRICTED. THE CONTRACTOR SHALL COORDINATE WITH THE CONSTRUCTION ACTIVITY, INCLUDING WORK SCHEDULE AND MATERIAL ACCESS, WITH THE RESIDENT LEASING AGENT FOR APPROVAL.
- ALL PERMITS THAT MUST BE OBTAINED ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR WILL BE RESPONSIBLE FOR ASKING BY ALL CONDITIONS AND REQUIREMENTS OF THE PERMITS.
- IF APPLICABLE, ALL CONCRETE WORK SHALL COMPLY TO LOCAL CODES AND THE ACI 318, "BUILDING REQUIREMENTS FOR STRUCTURAL CONCRETE".
- 24 HOURS PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, THE CONTRACTOR MUST NOTIFY THE APPLICABLE JURISDICTIONAL (STATE, COUNTY OR CITY) ENGINEER.
- ALL TOWER DIMENSIONS SHALL BE VERIFIED WITH THE PLANS (LATEST REVISION) PRIOR TO COMMENCING CONSTRUCTION. NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES ARE DISCOVERED. THE OWNER SHALL HAVE A SET OF APPROVED PLANS AVAILABLE AT THE SITE AT ALL TIMES WHILE WORK IS BEING PERFORMED. A DESIGNATED RESPONSIBLE EMPLOYEE SHALL BE AVAILABLE FOR CONTACT BY GOVERNING AGENCY INSPECTORS.

WELDING NOTES

- CONTRACTOR IS RESPONSIBLE FOR COMMISSIONING A CERTIFIED WELDING PROCEDURE (CWP) THROUGHOUT THE ENTIRETY OF THE PROJECT. A PASSING CWP REPORT SHALL BE PROVIDED TO THE ENGINEER UPON COMPLETION OF THE PROJECT.
- WELDING CERTIFICATES MUST BE PROVIDED TO OWNER PRIOR TO WELDING. CONTRACTOR OF CANNING WORK ON SITE CERTIFICATE WILL BE ASKED FOR AS PART OF INSPECTION PROCEDURES. ALL WELDING SHOULD BE PERFORMED BY AN AWS QUALIFIED WELDER WHO HAS EXPERIENCE WITH GALVANIZED SURFACES AND IN ACCORDANCE WITH AWS D1.1 NO AWS / 48.1 OR LATEST EDITIONS.
- COX FUEL GAS WELDING OR BRAZING IS STRICTLY PROHIBITED. SPECIFICALLY, NO TOUCH CUTTING IS PERMITTED ON SITE. ALL HOLES SHALL BE CUT WITH A GRINDER.
- INSTALL 3000 (NFPA 701) FIRE BRANKE AROUND ALL COAX.
- MORE SPLATTER AND SPARKS SHALL BE ANTICIPATED ON THE PREVIOUSLY GALVANIZED SURFACE.
- COAX IS FLAMMABLE AND CAN CATCH FIRE IF PROPER PRECAUTIONS ARE NOT MADE. TO SHIELD COAX FROM ALL WELDING PROCEDURES, ALL COAX SHALL BE SHIELDED AT AND BELOW EACH WELDING PROCEDURE AND ELEVATION. IN ADDITION, COAX SHALL BE PUSHED AWAY FROM TOWER FACE WHERE WELDING IS BEING PERFORMED.
- CONTRACTOR SHALL EXERCISE CAUTION WHEN WELDING ON A GALVANIZED SURFACE. IF THE WELD MATERIAL IS CONTAMINATED WITH ZINC IT DOES NOT PROVIDE A STRUCTURAL WELD.
- FLAME CREATED FROM WELDING ON A PREVIOUSLY GALVANIZED SURFACE CAN BE HAZARDOUS.
- PRIOR TO WELDING, ALL SURFACES SHALL BE PROPERLY GROUND TO REMOVE GALVANIZING.
- ALL FIELD WELDS SHALL BE TOUCHED UP WITH A GALVANIZING PAINT REPAIR (ZIC OR APPROVED EQUIVALENT).
- WATER SHALL BE ON SITE OF ADEQUATE AMOUNT, AND AVAILABLE AT ALL TIMES DURING WELDING ACTIVITY. A MINIMUM OF 500 GAL. OF WATER SHALL BE PROVIDED. WATER SHALL BE CAPABLE OF REACHING HEIGHTS WHERE WELDING IS BEING PERFORMED. IN ADDITION, A MINIMUM OF 50 (5) 10 LB. CLASS ABC MULTIPURPOSE FIRE EXTINGUISHERS FULLY CHARGED AND CAPABLE OF DISCHARGE WITHIN 30 SECONDS OF DETECTING A FIRE SHALL BE PROVIDED. THE EXTINGUISHERS SHALL BE STRATEGICALLY LOCATED AROUND COMPOUND AND IN THE AREA OF THE TOWER WHERE WELDING IS BEING PERFORMED.
- CLEAN OUT ALL DEBRIS THROUGHOUT MONOPOLE AND MONOPOLE BASE PRIOR TO WELDING.

BOLT TIGHTENING PROCEDURE

- TIGHTEN CONNECTION BOLTS BY AWS - "TURN OF THE NUT" METHOD, USING THE CHART BELOW

BOLT LENGTH UP TO AND INCLUDING FOUR DIA.

3/8"	BOLTS UP TO AND INCLUDING 2.0 INCH LENGTH	+ 1/3 TURN BEYOND SMOG TIGHT
1/2"	BOLTS UP TO AND INCLUDING 2.5 INCH LENGTH	+ 1/3 TURN BEYOND SMOG TIGHT
5/8"	BOLTS UP TO AND INCLUDING 3.0 INCH LENGTH	+ 1/3 TURN BEYOND SMOG TIGHT
3/4"	BOLTS UP TO AND INCLUDING 3.5 INCH LENGTH	+ 1/3 TURN BEYOND SMOG TIGHT
1"	BOLTS UP TO AND INCLUDING 4.0 INCH LENGTH	+ 1/3 TURN BEYOND SMOG TIGHT

BOLT LENGTH OVER FOUR DIA. BUT NOT EXCEEDING EIGHT DIA.

3/8"	BOLTS 2.25 TO 4.0 INCH LENGTH	+ 1/2 TURN BEYOND SMOG TIGHT
1/2"	BOLTS 2.75 TO 5.0 INCH LENGTH	+ 1/2 TURN BEYOND SMOG TIGHT
5/8"	BOLTS 3.25 TO 6.0 INCH LENGTH	+ 1/2 TURN BEYOND SMOG TIGHT
3/4"	BOLTS 3.75 TO 7.0 INCH LENGTH	+ 1/2 TURN BEYOND SMOG TIGHT
1"	BOLTS 4.25 TO 8.0 INCH LENGTH	+ 1/2 TURN BEYOND SMOG TIGHT

- CONNECTION BOLTS SUBJECT TO DIRECT TENSION SHALL BE INSTALLED AND TIGHTENED AS PER SECTION 8.2.1 OF THE AWS SPECIFICATION FOR STRUCTURAL JOINTS USING A325 OR A490 BOLTS, LOCATED IN THE AWS MANUAL OF STEEL CONSTRUCTION. THE INSTALLATION PROCEDURE IS PARAPHRASED AS FOLLOWS:

- FASTENERS SHALL BE INSTALLED IN PROPERLY ALIGNED HOLES AND TIGHTENED BY ONE OF THE METHODS DESCRIBED IN SUBSECTION 8.2.1 THROUGH 8.2.4

8.2.1 TURN-OF-THE-NUT TIGHTENING

BOLTS SHALL BE INSTALLED IN ALL HOLES OF THE CONNECTION AND BROUGHT TO A SMOG TIGHT CONDITION AS DEFINED IN SECTION 8.1. UNTIL ALL THE BOLTS ARE SMOG TIGHTLY SMOG TIGHT AND THE CONNECTION IS FULLY COMPACTED FOLLOWING THIS INITIAL OPERATION ALL BOLTS IN THE CONNECTION SHALL BE TIGHTENED FURTHER BY THE APPLICABLE AMOUNT OF ROTATION SPECIFIED ABOVE. DURING THE TIGHTENING OPERATION THERE SHALL BE NO ROTATION OF THE PART NOT TURNED BY THE WRENCH. TIGHTENING SHALL PROGRESS SYSTEMATICALLY FROM THE MOST HEAVY PART OF THE JOINT IN A MANNER THAT WILL MINIMIZE RELAXATION OF PREVIOUSLY TIGHTENED BOLTS.

- ALL OTHER BOLTED CONNECTIONS SHALL BE BROUGHT TO A SMOG TIGHT CONDITION AS DEFINED IN SECTION 8.1 OF THE SPECIFICATION.

STRUCTURAL STEEL NOTES

- THE FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE AWS SPECIFICATION FOR MANUAL OF STEEL CONSTRUCTION, 13th EDITION.

- UNLESS OTHERWISE NOTED, ALL STRUCTURAL ELEMENTS SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

STRUCTURAL STEEL:

- ANGLE: ASTM A36
- PIPE/TUBE: API 5LX 48 (T) = 48 XSI MM)
- PLATE: ASTM A36 (GR50E PLATES)
- PLATE: ASTM A572-65 (MONOPOLE)
- BOLTS:
 - A. BOLTS, ASTM A325 TYPE 1 GALVANIZED HIGH STRENGTH BOLTS W/OS
 - B. ALL ANCHOR BOLTS ASTM F1554-55
 - C. ALL U-BOLTS, ASTM A193 GRADE B7
 - D. ALL NUTS, ASTM A563 CARBON AND ALLOY STEEL NUTS.
 - E. ALL WASHERS, ASTM F436 HARDENED STEEL WASHERS.

- THICKS SHALL NOT BE FLAME CUT THRU STEEL UNLESS APPROVED BY THE ENGINEER.
- HOT-DIP GALVANIZE ALL ITEMS UNLESS OTHERWISE NOTED, AFTER FABRICATION WHERE PRACTICABLE. GALVANIZING: ASTM A123, ASTM A153/A153M OR ASTM A653, G90, AS APPLICABLE.
- REPAIR DAMAGED SURFACES WITH GALVANIZING METHOD AND PAINT CONFORMING TO ASTM A780 OR BY APPLICATION OF STICK OR THICK PASTED MATERIAL SPECIFICALLY DESIGNED FOR REPAIR OF GALVANIZING. CLEAN AREAS TO BE REPAIRED AND REMOVE SIGNS FROM WELDS. HEAT SURFACES TO WHICH STICK OR PASTE MATERIAL APPLIED, WITH A TORCH TO A TEMPERATURE SUFFICIENT TO MELT THE METALLIC IN STICK OR PASTED; SPREAD MOLTEN MATERIAL UNIFORMLY OVER SURFACES TO BE COATED AND WIPE OFF EXCESS MATERIAL.
- ALL PROPOSED AND / OR REPLACED BOLTS SHALL BE OF SUFFICIENT LENGTH SUCH THAT THE END OF THE BOLT BE 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.

FABRICATION:

ALL NEW MATERIAL INCLUDING STRUCTURAL STEEL AND FASTENERS SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123 AND A153. WELDING SHALL MEET AWS/D1.1 STRUCTURAL WELDING CODE (LATEST REVISION). TECHNICIANS SHALL BE AWS CERTIFIED FOR TYPE AND POSITION. ELECTRODES SHALL BE E70XX.

MODIFICATIONS:

CONTRACTOR SHALL VISIT SITE TO CHECK CRITICAL DIMENSIONS AND IDENTIFY ANY UNKNOWN AND/OR UNIDENTIFIED CONDITIONS PRIOR TO STEEL FABRICATION.

INSTALL NEW CABLE/EQUIPMENT ONLY AFTER ALL WORK AND INSPECTIONS ARE COMPLETED.

PROVIDE SPECIAL INSPECTIONS FOR THE FOLLOWING PER AWS 2012 SECTION 1704:

STEEL CONSTRUCTION
WELDING
POST INSTALLED ANCHOR RODS

SPECIAL INSPECTION IS TO BE PROVIDED IN ADDITION TO THE INSPECTIONS CONDUCTED BY THE JURISDICTION BUILDING SAFETY DEPARTMENT AND SHALL NOT RELIEVE THE OWNER OR THEIR AUTHORIZED AGENT FROM REQUESTING THE PERIODIC AND CALLED INSPECTIONS REQUIRED BY LOCAL ORDINANCES OR CODE.

PLANT TESTING - PULL TEST (4) NEW EPOXY SET BOLTS TO 120 KIPS, HOLD 30 SECONDS, RECORD DEFLECTIONS @ 20 KIP INCREMENTS



ISE JOB # 1007

**SPRINT PH04XC034E TUC NORWEST
90' MONOPOLE COMMUNICATIONS STRUCTURE
POLE MODIFICATION**

3000 N. Shannon Rd
Tucson, AZ 85741



PROJECT NO.:
 SHEET NO.:
 DRAWING DATE:
N2 **0**
November 30, 2017

