



STAFF APPROVAL LETTER

300-SA-2014

Sprint WCF Ph03xc252 - Drinkwater

STEP 1

STAFF APPROVAL NOTIFICATION

This letter is notification that your request has been conceptually approved by Current Planning Services staff.

Additional review and permits may be required. Refer to Final Plan Review Submittal Requirements below.

This approval expires two (2) years from date of approval if a permit has not been issued, or if no permit is required, work for which approval has been granted has not been completed.

PROJECT INFORMATION

LOCATION: 8711 E Pinnacle Peak Rd
PARCEL: 212-01-597
Q.S.: 44-48
CODE VIOLATION #:

APPLICANT: Declan Murphy
COMPANY: Coal Creek LLC
ADDRESS: 1525 N Hayden Rd Ste 100 Scottsdale, AZ 85257
PHONE: 602-326-0111

Request: Add 3 antennas to side of ornamental tower (for a total of 6 antennas) and add 3 Remote radio Heads (RRH's) on inside of tower which will not be visible.

STIPULATIONS

1. Proposed wireless communication facility shall be in conformance with the plans submitted by Sprint and Coal Creek Consulting with a date of 6/6/2014, and an approval date by City Staff of 8/13/2014.
2. Antennas and mounting hardware shall be painted to match the building it is mounted to.
3. Utilize coaxial cable shrouds to screen bottom fed antennas from public view. Shroud shall be textured and painted to match building.
4. RRU's shall be mounted inside the tower feature and not be visible.
5. Obtain permits as required by the One Stop Shop.
6. Schedule a pre-construction meeting by contacting Inspection Services by calling 480-312-5750.

Related Cases: 300-SA-2014, 243-SA-2013, 221-DR-1996

SIGNATURE:

Keith Niederer

DATE APPROVED: August 13, 2014

STEP 2

FINAL PLAN REVIEW SUBMITTAL REQUIREMENTS

Submit one copy of this approval letter, and a completed Owner/Builder form if applicable, along with the following plan set(s) to the One-Stop-Shop for plan review:

ARCHITECTURAL: 4 sets of architectural plans and 2 additional site plans, detail sheets and elevations.



Type 1 or 2 WCF Development Review (Minor)
(Administrative Staff Approval)
Development Application Checklist

Official Use: _____
 City Staff Contact: Keith Niederer Email: KNiederer@Scottsdaleaz.gov
 Phone: 480-312-2953

Project Name: Sprint PH03XC252
 Property's Address: 8711 E Pinnacle Peak Road, Scottsdale AZ A.P.N.: 212-01-597
 Property's Zoning District Designation: C-2
 Application Request: Add one (1) antenna per sector flush mounted for a total of three (3) antennas + 3 RRH's
 Owner: Bullhead Holdings LLC Applicant: Declan Murphy
 Company: Bullhead Holdings LLC Company: Coal Creek Consulting for Sprint
 Address: 8711 E Pinnacle Peak Road, Scottsdale AZ Address: 1525 N Hayden Road, #100 Scottsdale AZ
 Phone: _____ Fax: _____ Phone: 602 326 0111 Fax: _____
 E-mail: _____ E-mail: dmurphy@coal-creek.com

Submittal Requirements: Please submit materials requested below. All plans must be folded:

- | | |
|---|---|
| <input checked="" type="checkbox"/> Completed Application (this form) and Application Fee – \$ 460.00 (fee subject to change every July) | <input type="checkbox"/> Landscape Plan (2) 24" x 36" folded. Indicate location of existing and new plants, location and dimension of paving, a plant palette with names, symbols, sizes, spacing & quantities, and open space/landscaping calculations. |
| <input checked="" type="checkbox"/> Affidavit of Authority to Act for Property Owner, letter of authorization, or signature below | <input type="checkbox"/> Material Samples – color chips, glazing, etc. |
| <input type="checkbox"/> Property Owners Association Input | <input checked="" type="checkbox"/> Site plan (2) 24" x 36" folded. Indicate the extent and location of antenna additions, buildings and other structures, including all equipment cabinets. Site plan shall indicate dimensions of existing and proposed structures, dimensions of existing and proposed ROW, setbacks and sight distance visibility triangles. |
| <input checked="" type="checkbox"/> Request for Site Visits and/or Inspections form | <input checked="" type="checkbox"/> Map showing other existing or planned WCF's that will be used by Provider making the application. (describe height, mounting style & number of antennas on WCF) |
| <input checked="" type="checkbox"/> Narrative – the WCF request. This shall include efforts made to minimize the visual impact of the antennas and equipment cabinets. | <input checked="" type="checkbox"/> Map of service area for proposed WCF |
| <input checked="" type="checkbox"/> Color photographs of site – include area of request | <input checked="" type="checkbox"/> Schedule a meeting with Keith Niederer 480-312-2953 when ready to submit this application. |
| <input checked="" type="checkbox"/> Photo simulations of proposed WCF. In ESL areas, include photosim from nearest single family lots. | <input checked="" type="checkbox"/> Other: <u>EME /RF Report</u> |
| <input checked="" type="checkbox"/> Community Notification Documentation. Notify all property owners within 750 feet of site. Submit names and addresses of all properties that were notified, submit a copy of the letter that was sent and the date that letter was mailed. Letters shall be mailed at least 15 days prior to submittal. | |
| <input checked="" type="checkbox"/> Elevation Drawings or Color Photo simulations (2) 24" x 36" folded. – of new additions, buildings, screening, poles or other changes with materials and colors noted and keyed | |

Please indicate in the checkbox below the requested review methodology (please see the descriptions on page 2):

- Enhanced Application Review:** I hereby authorize the City of Scottsdale to review this application utilizing the Enhanced Application Review methodology.
- Standard Application Review:** I hereby authorize the City of Scottsdale to review this application utilizing the Standard Application Review methodology.

See Attached LOA
 Owner Signature _____ Agent/Applicant Signature Declan Murphy



Existing Sprint WCF PH03XC252
8711 E Pinnacle Peak Road, Scottsdale AZ
APN: 212-01-597

Purpose of Request

Sprint is committed to improving coverage areas and expanding network capacity to meet customer demand in the City of Scottsdale. The Existing WCF located at 8711 E Pinnacle Peak Road, provides residents, visitors and businesses with improved high quality reliable wireless service for both personal & business, in addition to enhancing emergency services. This application is a request to allow improvements to the existing WCF in an effort to eliminate any GAP or deficiency in Sprint's service.

Details of Request

Existing Antenna Sector One currently has One (1) Antenna, Sprint is proposing to add One (1) New Antenna to be mounted on existing pipe mount + One (1) New RRU.

Existing Antenna Sector Two currently has One (1) Antenna, Sprint is proposing to add One (1) New Antenna to be mounted on existing pipe mount + One (1) New RRU.

Existing Antenna Sector Three currently has One (1) Antenna, Sprint is proposing to add One (1) New Antenna to be mounted on existing pipe mount + One (1) New RRU, as depicted in the attached A-3 Sheet. All equipment will be painted to match existing. All coax/fiber cables from ground equipment to antennas will be concealed out of sight

Proposed New Antenna Dimensions (H56.3"x W12.6"x D6.3")

Proposed New RRU Dimensions (H25.39"x W17.52"x D5.7")

The proposed Sprint installation will not negatively impact the aesthetics of the existing building.

One vehicle may access the wireless communication facility approximately once or twice a month, or in the event of a technical breakdown. This vehicle will use the existing access and parking at the site.

Please do not hesitate to contact me for any additional information or clarification

Sincerely,

A handwritten signature in black ink that reads "Declan Murphy".

Declan Murphy (Sprint Project)
1525 North Hayden Road, Suite 100
Scottsdale, AZ 85257
Tel: (602) 326-0111
Email: dmurphy@coal-creek.com



Existing Sprint WCF PH03XC252
8711 E Pinnacle Peak Road, Scottsdale AZ
APN: 212-01-597



COAL CREEK

CONSULTING

1525 North Hayden Road, Suite #100
 Scottsdale, AZ 85257

6/6/2014

RE: Drinkwater PH03XC252 – 8711 E. Pinnacle Peak Rd., Scottsdale, AZ 85255

To Whom It May Concern:

In conjunction with the above referenced Sprint wireless communications facility located at 8711 E. Pinnacle Peak Rd., Scottsdale, AZ 85255 and the Sprint 2.5 Ghz upgrade project, it has been determined that according to the occupancy lease or license (“Agreement”) signed December 3, 1996 between Sprint and Village at Pinnacle Peak, LLC, an Arizona limited partnership that this Site requires only notification to Landlord. This letter constitutes such notification. The determination set forth herein is based upon Section 7 Improvements of said Agreement. In addition, per the Agreement, Landlord’s signature on drawings is not a requirement.

Respectfully,

Jacob Rynes
jrynes@coal-creek.com
 (480)204-8226

VERY IMPORTANT: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<p>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</p> <p><input checked="" type="checkbox"/> Print your name and address on the reverse so that we can return the card to you.</p> <p><input checked="" type="checkbox"/> Attach this card to the back of the mailpiece, or on the front if space permits.</p>	<p>A. Signature <input checked="" type="checkbox"/> <i>Jacob Rynes</i> <input type="checkbox"/> Agent <input type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name): <i>Michelle L. Williams</i></p> <p>C. Date of Delivery</p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No</p>
<p>1. Article Addressed to:</p> <p><i>Village at Pinnacle Peak LLC</i> <i>Attn: Sharrice Sanders</i> <i>8711 E. Pinnacle Peak Rd. Ste. C 201</i> <i>Scottsdale, AZ 85255</i> <i>(PH03XC252)</i></p>	<p>3. Service Type:</p> <p><input checked="" type="checkbox"/> Certified Mail® <input type="checkbox"/> Priority Mail Express™</p> <p><input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise</p> <p><input type="checkbox"/> Insured Mail <input type="checkbox"/> Collect on Delivery</p> <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>
<p>2. Article Number (Transfer from service label)</p>	<p align="center">7014 0510 0000 9663 0345</p>



PH03XC252
8711 E. Pinnacle Peak Rd.
Scottsdale, AZ 85255

Note: Simulations are an artistic illustration created to represent how the proposed project may look once constructed. Simulations are created to match the current design as accurately as possible, but are not guaranteed to match the final build.

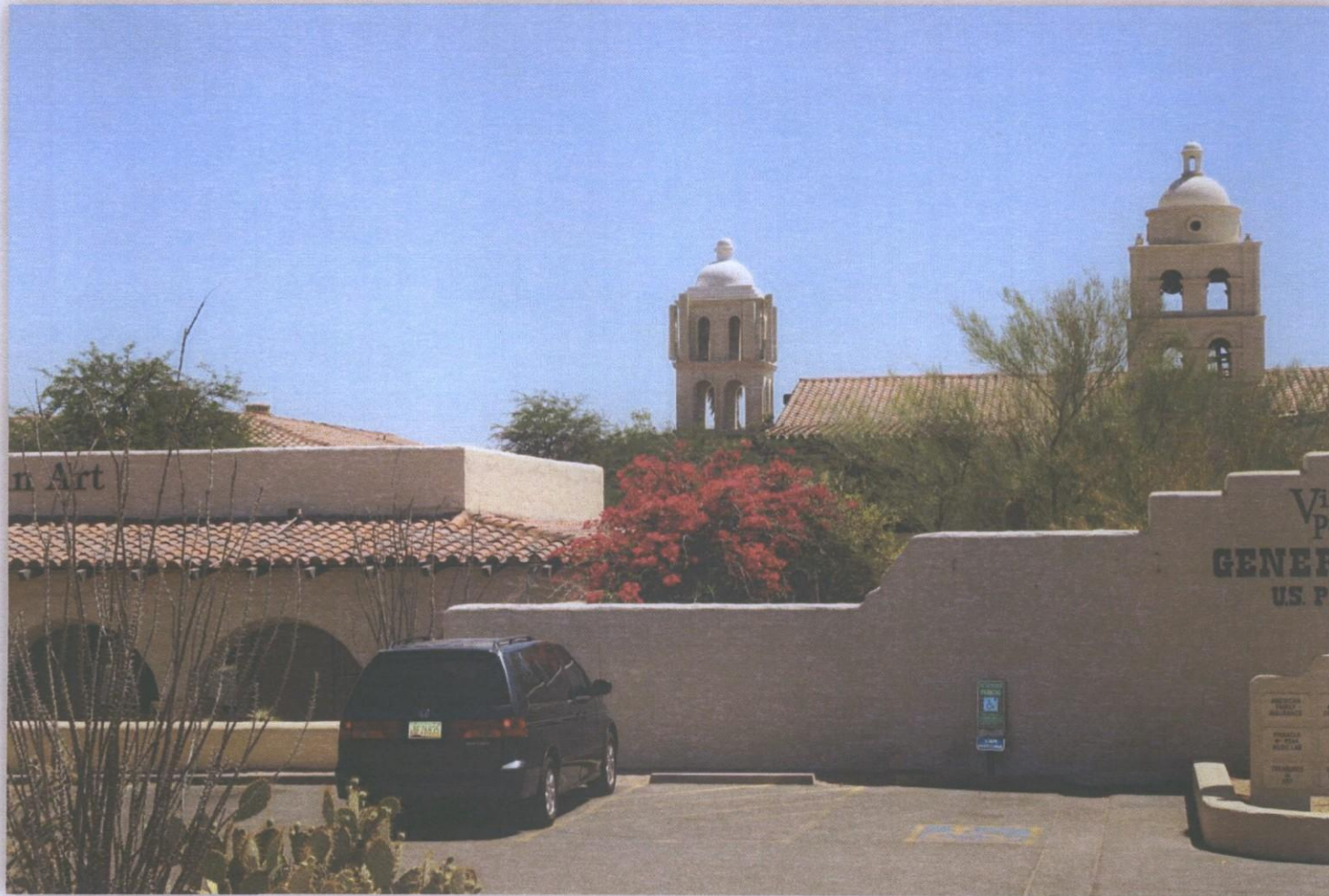


COAL CREEK

CONSULTING

PH03XC252
8711 E. Pinnacle Peak Rd.
Scottsdale, AZ 85255

View. Looking South to Site
Simulation Completed. 6/14/14
Completed By. Christopher Bridges

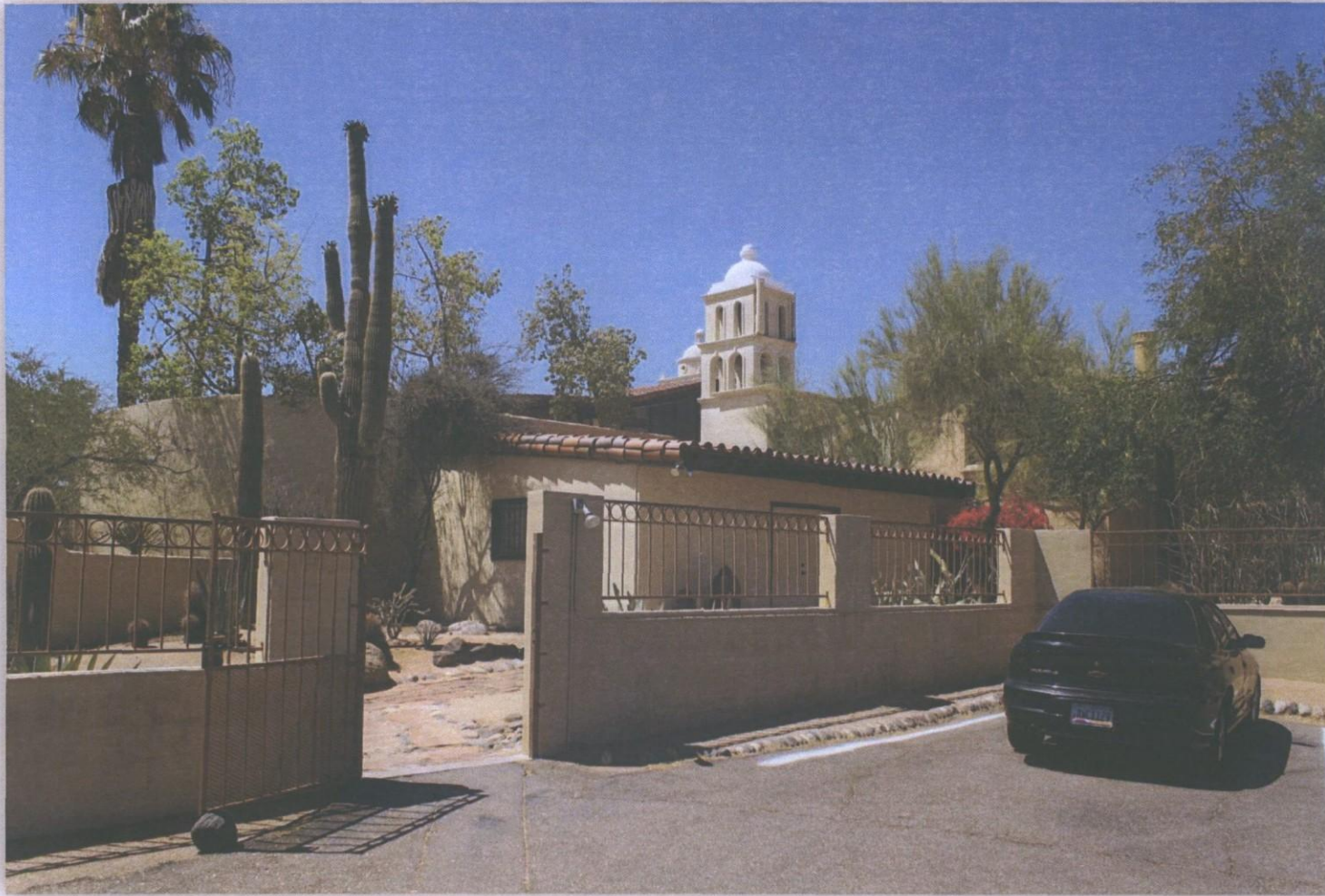


COAL CREEK

CONSULTING

PH03XC252
8711 E. Pinnacle Peak Rd.
Scottsdale, AZ 85255

View. Looking South to Site
Simulation Completed. 9/14/14
Completed By. Christopher Bridges

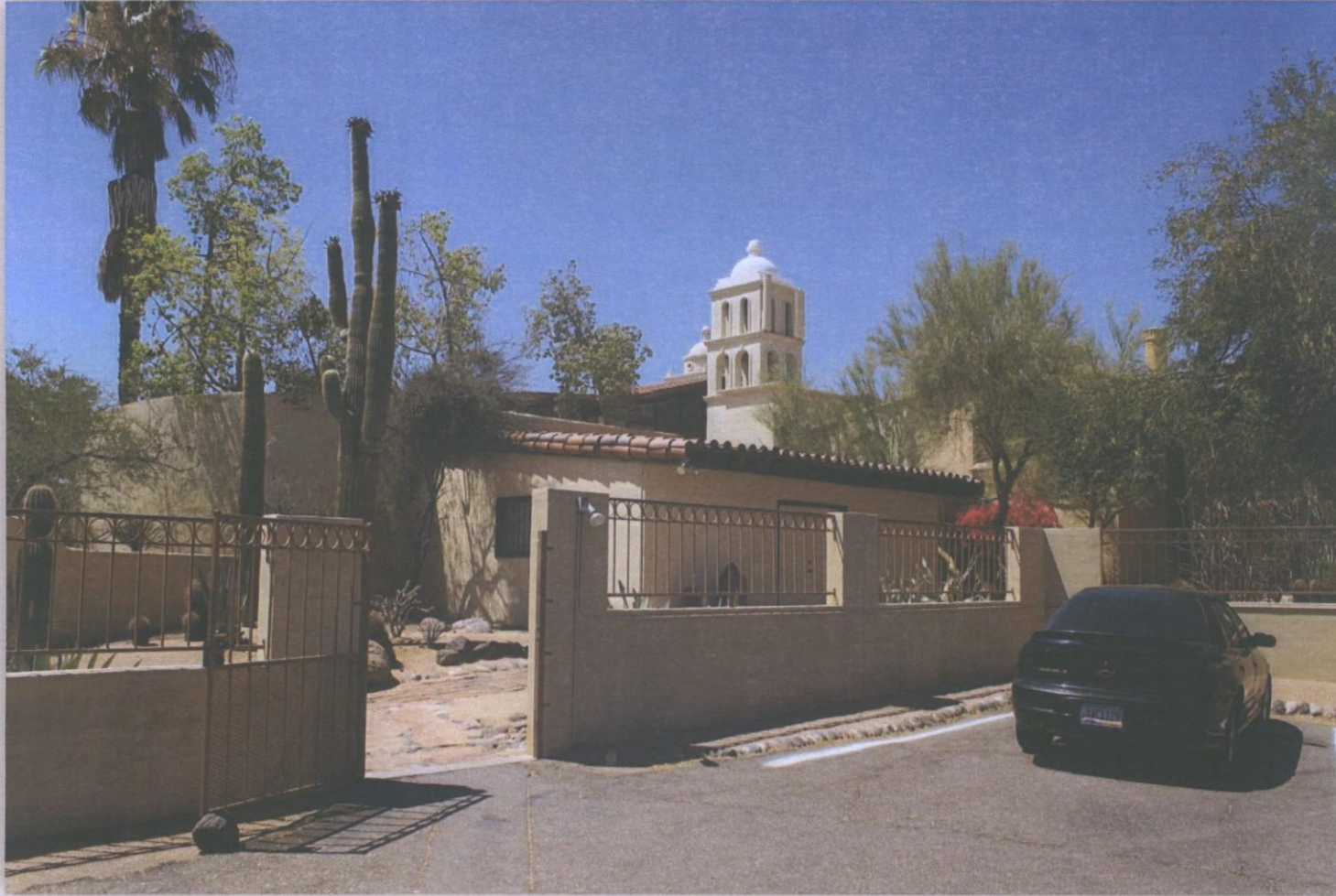


COAL CREEK

CONSULTING

PH03XC252
8711 E. Pinnacle Peak Rd.
Scottsdale, AZ 85255

View. Looking Northwest to Site
Simulation Completed. 6/14/14
Completed By. Christopher Bridges



PH03XC252
8711 E. Pinnacle Peak Rd.
Scottsdale, AZ 85255

View. Looking Northwest to Site
Simulation Completed. 6/14/14
Completed By. Christopher Bridges



Sprint



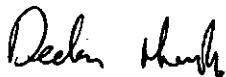
Neighborhood Notification

Existing Sprint WCF PH03XC252
8711 E Pinnacle Peak Road, Scottsdale AZ
APN: 212-01-597

The attached notification material was mailed to all Property Owners & HOA's within 750' of the existing T-Mobile WCF, located at 8711 E Pinnacle Peak Road

To date, I received just one call from a Neighbor Paul Messenger, who had questions about Frequency's and the potential effects on his WiFi

Sincerely,



Declan Murphy (Sprint Project)
1525 North Hayden Road, Suite 100
Scottsdale, AZ 85257
(602) 326 0111
dmurphy@coal-creek.com

WEINGARTEN NOSTAT INC
2600 CITADEL PLAZA DR STE 300
HOUSTON, TX 77008

FOUNDERS BANK OF ARIZONA
PO BOX 10566
BIRMINGHAM, AL 35296

HCA/KB LMS/GCCI/MPJ/SPI/KB LMS II LLC
1825 S GRANT ST STE 700
SAN MATEO, CA 94402

SCHAEFER JOEN M TR
3200 W CALHOUN PKWY NO 103
MINNEAPOLIS, MN 55416

JONES DANIEL L/JANE E TR
1317 ROYAL SAINT GEORGE DR
NAPERVILLE, IL 60563

FAUBLE RYAN/VEENA
8601 E CAMINO VIVAZ
SCOTTSDALE, AZ 85255

CHANDRAN VIMALA TR
3705 HIDDEN CREEK
WEST DES MOINES, IA 50265

GOODRICH EDWARD CYRUS/PATRICIA A
8654 E CAMINO VIVAZ
SCOTTSDALE, AZ 85255

DOCTOR-AFCHAR SASSAN
1215 DE LA VINA STE G
SANTA BARBARA, CA 93101

FUNK KURT
8625 E CAMINO VIVAS
SCOTTSDALE, AZ 85255

QWEST CORPORATION
1600 7TH AVE ROOM 2302
SEATTLE, WA 98191

IONA PARTNERS LLC
21114 N 37TH RUN
PHOENIX, AZ 85050

SCHLEETER KEITH M
11444 ENTREVAUX DR
EDEN PRAIRIE, MN 55347

LEVEY KENNETH M/LISA L
8727 E CAMINO VIVAZ
SCOTTSDALE, AZ 85255

MOUNTAIN STATES TELEPHONE &
TELEGRAPH CO
1801 CALIFORNIA ST
DENVER, CO 80202

PINNACLE PEAK LAND CO
8711 N PINNACLE PEAK RD
SCOTTSDALE, AZ 85255

PINNACLE PARADISE HOMEOWNERS ASSN
23400 N 84TH PLACE
SCOTTSDALE, AZ 85255

WHITESTONE REIT OPERATING
PARTNERSHIP LP
2600 S GESSNER RD STE 500
HOUSTON, TX 77063

PINNACLE CITADEL LLC
17550 N PERIMETER DR STE 180
SCOTTSDALE, AZ 85255

VALLEY NATIONAL BANK OF AZ
P O BOX 1919
WICHITA FALLS, TX 76307

WHITE MICHAEL B/CONNIE S
7330 N 2200 EAST RD
FAIRWAY, IL 61739

WELLS ROLAND
8637 E PARAISO DR
SCOTTSDALE, AZ 85255

OROURKE DENNIS
7331 18TH ST
EDMONTON, AB T6P1P9

LONDO ROBERT K/RUTH L/TIMOTHY L
4705 YUMA LN N
PLYMOUTH, MN 55446

FABREGAS ROBERTO PASTRANA/AGUIRRE
SILVIA VILC
23009 N 87TH PL
SCOTTSDALE, AZ 85255

NILSEN MARK/JENNIFER
23013 N 87TH PL
SCOTTSDALE, AZ 85255

HAVIGHURST DOROTHEA
23017 N 87TH PL
SCOTTSDALE, AZ 85255

BOWER MARVIN D/CAROLYN P TR
8534 E VISTA BONITA DR
SCOTTSDALE, AZ 85255

KAUFMAN SETH M
8526 E VISTA BONITA DR
SCOTTSDALE, AZ 85255

JACK ROYSTON IRREVOCABLE TRUST
5080 N 40TH ST STE 275
PHOENIX, AZ 85018

SPRATT JAMES H/PHYLLIS J
1625 THORNWOOD RD
WEST DES MOINES, IA 50265

STULTZ MICHAEL D/ROBERTA J
8502 E VISTA BONITA DR
SCOTTSDALE, AZ 85255

ROBILLARD CHERYL TR/FINLEY PEGGY TR
23309 N 85TH ST
SCOTTSDALE, AZ 85255

LEE THOMAS J TR/LEE MARY GERALINE TR
163 STONEBRIDGE RD
LILYDALE, MN 55118

IMKE FAMILY TRUST
PO BOX 20360
OKLAHOMA CITY, OK 73156

LARRISON PATRICK L/STEPHANIE A
23351 N 85TH ST
SCOTTSDALE, AZ 85255

BOXBERGER FRANKLIN DALE JR/DAWN
ELIZABETH TR
10703 E PINNACLE PEAK RD
SCOTTSDALE, AZ 85255

FRANKLIN & DAWN BOXBERGER
IRREVOCABLE TRUST
10703 E PINNACLE PEAK RD
SCOTTSDALE, AZ 85255

VISTA BONITA OFFICE PARK L L C
PO BOX 25428
SCOTTSDALE, AZ 852550107

MCSIS LLC
8845 E CALLE DEL PALO VERDE
SCOTTSDALE, AZ 85225

FRAZCO LLC
11943 E CHRISTOPHER LN
SCOTTSDALE, AZ 85255

WHK LIT LLC
PO BOX 25771
SCOTTSDALE, AZ 85255

PINNACLE PEAK COUNTRY CLUB INC
8701 E PINNACLE PEAK RD
SCOTTSDALE, AZ 85255

TMSC INVESTMENTS LLC
12005 E 45TH AVE
DENVER, CO 80239

ROBERTSON KIRK J/LOO-ROBERTSON
PAULINE
23025 N 87TH PL
SCOTTSDALE, AZ 85255

SEERY FLORENCE R TR
23026 N 87TH PL
SCOTTSDALE, AZ 85255

3-B COMPANY
1026 S 6TH ST
COUNCIL BLUFFS, IA 51502

RÜTHVEN FAMILY TRUST
23018 N 87TH PL
SCOTTSDALE, AZ 85255

PREVATT REBECCA R/WILLIAM J
PO BOX 2643
FARGO, ND 58108

LEWIS RANDALL A
8724 E PARAISO DR
SCOTTSDALE, AZ 85255

CONKEL SCOTT/LYNDA
8718 E PARAISO DR
SCOTTSDALE, AZ 85255

CAPSTONE PROPERTIES LLC
4211 E CLAREMONT
PARADISE VALLEY, AZ 85253

ERRION CONSTANCE L/BANK OF AMERICA
ARIZONA TR
P O BOX 2511
#4422
PHOENIX, AZ 85002

OLIVE CLARK LLC
1450 RALEIGH RD 300
CHAPEL HILL, NC 27517

DEMARIA MICHAEL/SUSIE
23017 N 87TH ST
SCOTTSDALE, AZ 85255

BURNS SHARON
23021 N 87TH ST
SCOTTSDALE, AZ 85255

RBR HOLDINGS IV LLC
30600 N PIMA RD NO 75
SCOTTSDALE, AZ 85266

SKIPTON HOLDINGS LLC
8710 E VISTA BONITA DR
SCOTTSDALE, AZ 85255

PL & FD LLC
P O BOX 5614
CAREFREE, AZ 85377

TIAGY LLC
8714 E VISTA BONITA
SCOTTSDALE, AZ 85261

BULLHEAD HOLDINGS LLC
503 BATH ST FL 3
SANTA BARBARA, CA 931013403

BULLHEAD 125 HOLDINGS LP
503 BATH ST FLOOR 3
SANTA BARBARA, CA 931013403

EAST VERDE LAND LLC
PO BOX 25070
SCOTTSDALE, AZ 85251

BOLAND DAVID K/SHARON LEE
23026 N 87TH ST
SCOTTSDALE, AZ 85255

BOGIE WILLIAM F/BEVERLY J
23022 N 87TH ST
SCOTTSDALE, AZ 85255

BUSTAMANTE BYRNE FAMILY TRUST
1603 E 27TH ST
YUMA, AZ 85365

BEEDE DONALD BRIAN/ANITA L TR
8646 E PARAISO DR
SCOTTSDALE, AZ 852550000

MARR DONALD C JR/SUSAN C
8642 E PARAISO DR
SCOTTSDALE, AZ 852550000

HENDERSON MITCHELL/SCHMITZ SHARON
8638 E PARAISO DR
SCOTTSDALE, AZ 85255

LA VIDA HOMEOWNERS ASSN INC
4645 E COTTON GIN LOOP
PHOENIX, AZ 85040

LA VIDA HOMEOWNERS ASSN INC
9362 RAINTREE
SCOTTSDALE, AZ 85260

BULLHEAD-125 HOLDINGS PARTNERPSHIP
503 BATH ST
SANTA BARBARA, CA 931013403

BRENTWOOD SCOTTSDALE LLC
14350 CIVIC DR STE 290
VICTORVILLE, CA 92392

PINNACLE HOMEOWNERS ASSOC THE
9000 E PIMA CENTER PKWY STE 300
SCOTTSDALE, AZ 85258

MIEDEMA JEFFERY/SUZANNE
8622 E VISTA DEL LAGO
SCOTTSDALE, AZ 85255

COE LYNDA
8618 E VISTA DEL LAGO
SCOTTSDALE, AZ 85255

KUHR MARY M
8614 E VISTA DEL LAGO
SCOTTSDALE, AZ 85255

JORDAN STEPHEN M/RUTH KINNIE TR
2250 EAGLES NEST DR
LAFAYETTE, CO 80026

DAVID KIMBERLY BLUE
8606 E VISTA DEL LAGO
SCOTTSDALE, AZ 85225

KNOUSE PAUL G/KAREN M
8602 E VISTA DEL LAGO ST
SCOTTSDALE, AZ 85255

LIKERMAN CHARLES/MAVOIDES ALICE
8534 E VISTA DEL LAGO
SCOTTSDALE, AZ 85255

K2H PINNACLE PEAK PLACE LLC
348-1917 W 4TH AVE
VANCOUVER, BC V6J 1M7

ROCKING B REVOCABLE TRUST
PO BOX 16529
FT WORTH, TX 76162

MILLER DAVID F & LAVERNE M
217 HEATHER RD
EAU CLAIRE, WI 54701

ROBERT E NOBLE TRUST
8557 E VISTA DEL LAGO
SCOTTSDALE, AZ 85255

WHITE CHRIS/JILL
662 SASKATOON CRESCENT EAST
SASKATOON, SK S7N 0L1

LINDA ANN RYAN TRUST
8530 E VISTA DEL LAGO
SCOTTSDALE, AZ 85255

MASSEY ANN M TR
625 S SKINKER
ST LOUIS, MO 631050000

CALLAHAN JUDITH ANN TR
23014 N 86TH ST
SCOTTSDALE, AZ 85255

ZUPANCIC LAWRENCE/SUSAN
23010 N 86TH ST
SCOTTSDALE, AZ 85255

WHITE FISH TRUST
6429 E ASHLER HILLS DR
CAVE CREEK, AZ 85331

FLYNN JOSEPH P/BARBARA A
8525 E PARAISO
SCOTTSDALE, AZ 85255

COMMAND ENERGY SERVICES USA LTD
1804-5TH ST
NISKU, AB T9E 7V5

M AND D JOHNSON PROPERTIES LLC
W12488 851 AVENUE
RIVER FALLS, WI 540224724

POPE MARTIN/MAUREEN
3580 LAKESHORE RD
KELOWNA, BC V1W 3L5

566597 ONTARIO LIMITED
8609 E PARAISO DR
SCOTTSDALE, AZ 85255

ZENN ARIZONA INC
20750 N 87TH ST 2059
SCOTTSDALE, AZ 85255

SHULER MICHAEL HOWARD/ARDITH ANN
TR
8617 E PARAISO DR
SCOTTSDALE, AZ 85255

WHISSELL RITA MARIE/BRIAN L
56 WILLOW PARK GREEN SE
CALGARY, AB T2J3L1

CAROL DUANE/LEONA M
PO BOX 1122
NISKU, AB T9E8A8

PETERSON JOHN R/JILL M
14705 CRESTWOOD CT
ELM GROVE, WI 53122

MESSINGER PINNACLE PEAK MORTUARY
INC
7601 E INDIAN SCHOOL RD
SCOTTSDALE, AZ 85251

BALFOUR HOLDINGS INC
4414 N CIVIC CENTER PLAZA STE 100
SCOTTSDALE, AZ 85251

MIRACLE ON PIMA RD LLC
23030 N PIMA RD STE D
SCOTTSDALE, AZ 85255

ANTHEA MARY DYER REVOCABLE FAMILY
TRUST
10003 E GARY RD
SCOTTSDALE, AZ 85250

23200 NORTH PIMA LLC
10344 E SIERRA PINTA DR
SCOTTSDALE, AZ 85255

HATT BRADLEY A/MELANIE L
8573 E VISA DEL LAGO
SCOTTSDALE, AZ 85255

HJERTSTEDT GABRIEL/ANGELA M
8581 E VISTA DEL LAGO
SCOTTSDALE, AZ 85255

LE TRAN MI
8589 E VISTA DEL LAGO
SCOTTSDALE, AZ 85255

MORIARTY MICHAEL/CHERYL
7137 E RANCHO VISTA DR 4002
SCOTTSTALE, AZ 85251

THOMPSON ROBERT L TR
460 FILLMORE ST
DENVER, CO 80206

COSTELLO DOLORES M
8582 E VISTA BONITA DR
SCOTTSDALE, AZ 85255

KAUFMAN STEVEN
8574 E VISTA BONITA DR
SCOTTSDALE, AZ 85255

JOHNSON WILLIAM F
8566 E VISTA BONITA DR
SCOTTSDALE, AZ 85255

RITTER MICHAEL J/ JEAN A
8558 E VISTA BONITA
SCOTTSDALE, AZ 852554240

CARNE EDWARD
8550 E VISTA BONITA DR
SCOTTSDALE, AZ 85255

ARLEEN H NIELSEN TRUST
1810 SUNSET LANE
BANNOCKBURN, IL 600150000

VBOP 110 LLC
8701 E VISTA BONITA DR STE 110
SCOTTSDALE, AZ 85255

FRANKLIN AND DAWN BOXBERGER
IRREVOCABLE TRUST
10703 E PINNACLE PEAK RD
SCOTTSDALE, AZ 85255

FREEDOM PROPERTY MANAGEMENT LLC
8707 E VISTA BONITA DR SUITE 130
SCOTTSDALE, AZ 852553212

VISTA BONITA 200 LLC
8701 E VISTA BONITA DR STE 200
SCOTTSDALE, AZ 852550107

SLAKL LLC
8711 E PINNACLE PEAK RD STE F-211
SCOTTSDALE, AZ 85255

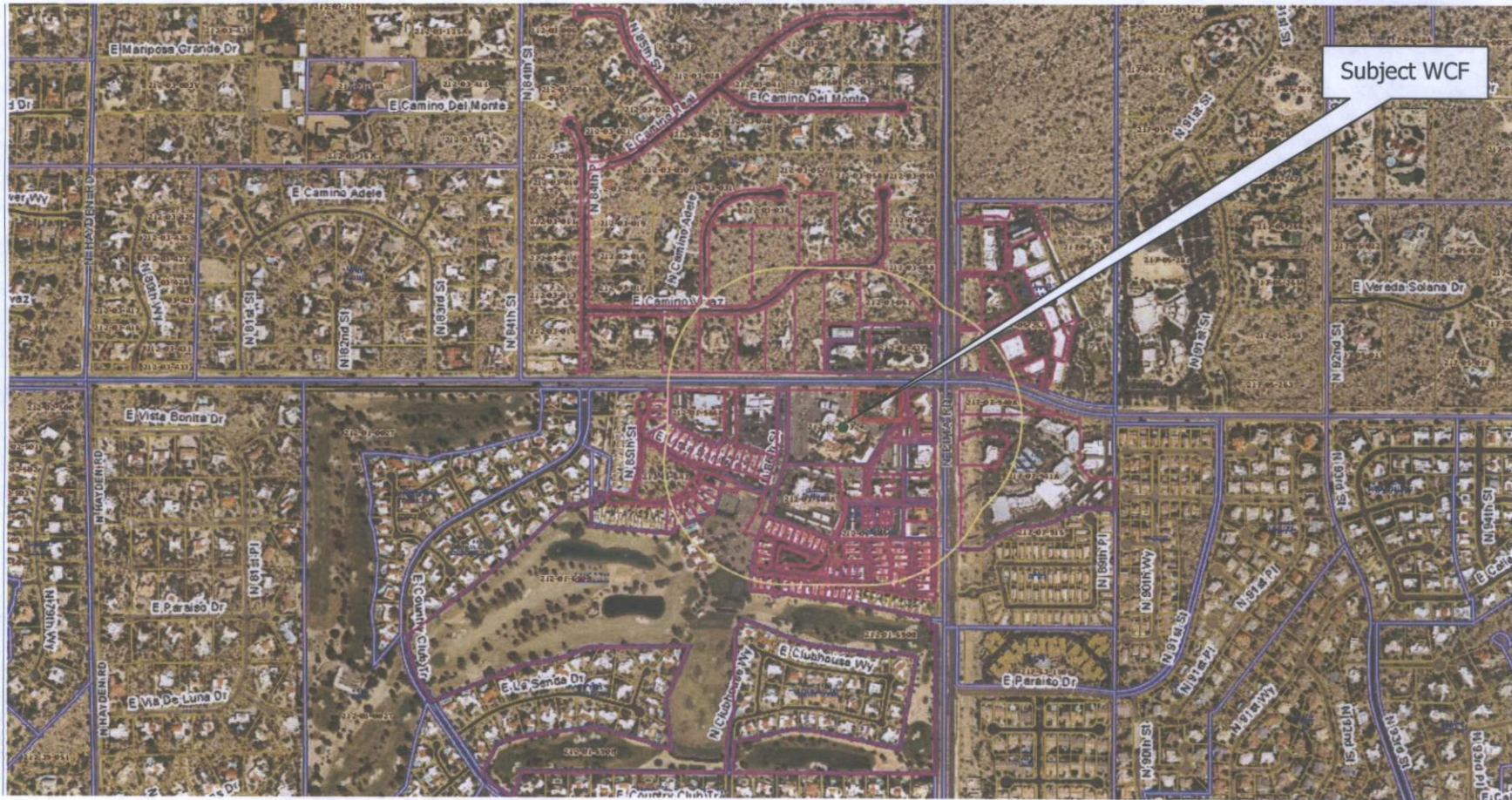
FRANKLIN AND DAWN BOXBERGER FAMILY
TRUST
8707 E VISTA BONITA DR UNIT 145
SCOTTSDALE, AZ 85255

PHOENIX CAPITAL GROUP LLC
1838 W PARKSIDE LN SUITE 100
PHOENIX, AZ 85027



Existing Sprint WCF PH03XC252
8711 E Pinnacle Peak Road, Scottsdale AZ
APN: 212-01-597

750ft Buffer Map





Community Notification



Dear Neighbor:

This letter is regarding the existing Sprint Wireless Communication Facility (WCF) located on the office building at 8711 E Pinnacle Peak Road (APN 212-01-597)

Sprint intends to submit an application to the City of Scottsdale, requesting approval to add one (1) flush mounted antenna per sector (total three (3) antennas). The current Sprint antenna configuration consists of one (1) flush mounted antenna per sector (total three (3) antennas), with the final configuration consisting of two (2) antennas per sector (total six (6) antennas). Sprint previously had six (6) antennas flush mounted on the subject building, removed three (3) last year, and not proposing to reinstall three (3) antennas with this proposed application

If you have any questions or comments regarding this process, please feel free to contact me anytime at (602) 326-0111. Alternatively, you can email me at dmurphy@coal-creek.com with any questions or concerns, or if you wish to receive any additional information regarding the proposed changes

Alternatively, please contact Keith Niederer Senior Planner City of Scottsdale (480) 312-2953 or KNiederer@Scottsdaleaz.gov

Sincerely,

Declan Murphy (Sprint Project)
1525 North Hayden Road, Suite 100
Scottsdale, AZ 85257
(602) 326 0111
dmurphy@coal-creek.com

PTO →



Existing Sprint WCF PH03XC252
8711 E Pinnacle Peak Road, Scottsdale AZ
APN: 212-01-597





FCC NEPA Compliance study for Sprint Site PH03XC252

Site number: PH03XC252

WGS 84: 33° 41' 50.65" N / 111° 53' 33.37" W

Introduction.

A substantial amount of scientific research conducted all over the world over many years demonstrates that radio signals within established safety levels emitted from mobile telephones and their base stations **present no adverse effects to human health.**

There exists national and international safety guidelines for exposure of the public to radio waves:

- *International Commission on Non- Ionizing Radiation Protection (ICNIRP): Guidelines for limiting exposure to time varying electric, magnetic and electromagnetic fields. Health Physics 1998 74(4): 494-522.*
- *Institute of Electrical and Electronics Engineers (IEEE): IEEE Standard for safety levels with respect to human exposure to radio frequency electromagnetic fields, 3 kHz to 300 GHz. IEEE C95.1-1991 (revision of ANSI C95.1-1982) New York 1992.*
- *CENELEC: Human exposure to electromagnetic fields. High frequency (10 kHz to 300 GHz). European prestandard ENV 50166-2, Brussels 1995.*

The most widely accepted standards are those developed by the International Commission on Non-Ionizing Radiation Protection (ICNIRP) and Institute of Electrical and Electronics Engineers (IEEE). Alcatel-Lucent Base Stations must be installed according to instructions specified by Alcatel-Lucent, as well as taking any country-specific regulations for Non-Ionizing radiation protection into account.

FCC Guidelines for Evaluating Exposure to RF Emissions

In 1985, the FCC first adopted guidelines to be used for evaluating human exposure to RF emissions. The FCC revised and updated these guidelines on August 1, 1996, as a result of a rule-making proceeding initiated in 1993. The new guidelines incorporate limits for Maximum Permissible Exposure (MPE) in terms of electric and magnetic field strength and power density for transmitters operating at frequencies between 300 kHz and 100 GHz. Limits are also specified



for localized ("partial body") absorption that are used primarily for evaluating exposure due to transmitting devices such as hand-held portable telephones.

Implementation of the new guidelines for mobile and portable devices became effective August 7, 1996.

The FCC's MPE limits are based on exposure limits recommended by the National Council on Radiation Protection and Measurements (NCRP) 6 and, over a wide range of frequencies, the exposure limits developed by the Institute of Electrical and Electronics Engineers, Inc., (IEEE) and adopted by the American National Standards Institute (ANSI) to replace the 1982 ANSI guidelines.⁷ Limits for localized absorption are based on recommendations of both ANSI/IEEE and NCRP.

Definitions.

General population/uncontrolled exposure limits apply to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure.

Therefore, members of the general public would always be considered under this category when exposure is not employment-related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area.

The FCC's limits, and the NCRP and ANSI/IEEE limits on which they are based, are derived from exposure criteria quantified in terms of specific absorption rate (SAR). The basis for these limits is a whole-body averaged SAR threshold level of 4 watts per kilogram (4 W/kg), as averaged over the entire mass of the body, above which expert organizations have determined that potentially hazardous exposures may occur. The new MPE limits are derived by incorporating safety factors that lead, in some cases, to limits that are more conservative than the limits originally adopted by the FCC in 1985. Where more conservative limits exist they do not arise from a fundamental change in the RF safety criteria for whole-body averaged SAR, but from a precautionary desire to protect subgroups of the general population who, potentially, may be more at risk.

Tower-mounted ("non-rooftop") antennas that are used for PCS telephone warrant a somewhat different approach for evaluation. While there is no evidence that typical installations in these services cause groundlevel exposures in excess of the MPE limits, construction of these towers has been a topic of ongoing public controversy on environmental grounds, and we believe it necessary to ensure that there is no likelihood of excessive exposures from these antennas.

Although we believe there is no need to require routine evaluation of towers where antennas are mounted high above the ground, out of an abundance of caution the FCC requires that tower-mounted installations be evaluated if antennas are mounted lower than 10 meters above ground and the total power of all channels being used is over 1000 watts effective radiated power (ERP), or 2000 W ERP for broadband PCS.

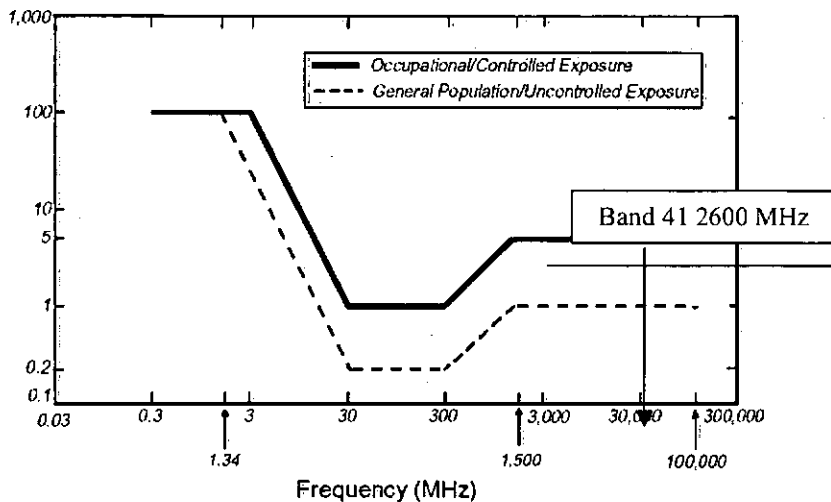
These height and power combinations were chosen as thresholds recognizing that a theoretically "worst case" site could use many channels and several thousand watts of power. At such power levels a height of 10 meters above ground is not an unreasonable distance for which an evaluation generally would be advisable.

For antennas mounted higher than 10 meters, measurement data for cellular facilities have indicated that ground-level power densities are typically hundreds to thousands of times below the new MPE limits.



General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or can not exercise control over their exposure.

Figure 1. FCC Limits for Maximum Permissible Exposure (MPE)
Plane-wave Equivalent Power Density



Limits for General Population/Uncontrolled exposure:

-0.08 W/kg as averaged over the whole-body and spatial peak SAR not exceeding 1.6 W/kg as averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube).

Exceptions are the hands, wrists, feet and ankles where the spatial peak SAR shall not exceed 4 W/kg, as averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube).

General Population/Uncontrolled limits apply when the general public may be exposed, or when persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or do not exercise control over their exposure.

(B) Limits for General Population/Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm²)	Averaging Time E ², H ² or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f²)*	30
30-300	27.5	0.073	0.2	30
300-1,500	--	--	f/1500	30
1,500-100,000	--	--	1.0	30

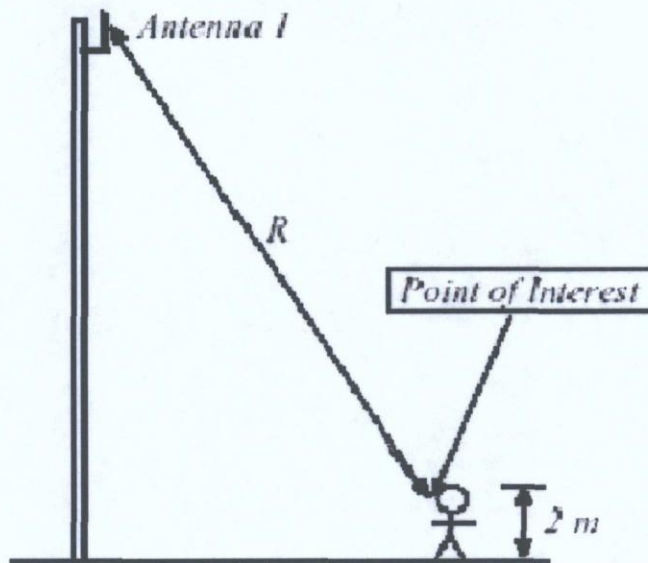
f= frequency in MHz

*Plane-wave equivalent power density

Calculation.

Compliance with SAR limits can be demonstrated by laboratory measurement techniques or by computational modeling, as appropriate. Methodologies and references for SAR evaluation are described in technical publications including "IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields - RF and Microwave," IEEE C95.3-1991, and further guidance on measurement and computational protocols is being developed by the IEEE and others.

For Sprint site PH03XC252, the field situation can be described by the Drawing #1.



Near-Field Region.

In the near-field, or Fresnel region, of the main beam, the power density can reach a maximum before it begins to decrease with distance. The extent of the near-field can be described by the following equation (1) having D and λ in same units:

$$R_{nf} = \frac{D^2}{4\lambda} \tag{1}$$

where: R_{nf} = extent of near-field
 D = maximum dimension of antenna (diameter if circular)
 λ = wavelength

Therefore,

Value	ft
$\lambda =$	0.372
$D =$	6
$R_{nf} =$	24.2

(2)



For sector-type antennas, power densities can be estimated by dividing the net input power by that portion of a cylindrical surface area corresponding to the angular beam width of the antenna. Mathematically, this can be represented by Equation (3) in which the angular beam width, θ_{BW} , can be taken as the appropriate azimuthal "power dispersion" angle for a given reflector.

$$S = \left(\frac{180}{\theta_{BW}} \right) \frac{P_{net}}{\pi R h} \quad (3)$$

where:

- S = power density
- Pnet = net power input to the antenna
- θ_{BW} = beam width of the antenna in degrees
- R = distance from the antenna
- h = aperture height of the antenna

For example, for the case of a 60-degree azimuthal beam width, the surface area should correspond to 1/6 that of a full cylinder. This would increase the power density near the antenna by a factor of three over that for a purely omni-directional antenna. For example, a conservative estimate could be obtained by using the 3 dB (half-power) azimuthal beam width for a given sectorized antenna. Equation (3) can be used for any vertical collinear antenna, even omni-directional ones.

In case of Sprint site PH03XC252, antennas will be installed at 34ft+/- above ground level or approx. 1036.32 cm. This distance is more than three times the near field space calculated in table (2). Antenna aperture (vertical dimension) is approx 5 ft or 152.4 cm. Therefore, the formula (3) returns:

Pnet =28000	mWatt	
θ_{BW} =65	3dB degree	
R =1036.32	cm	
h =152.4	cm	
MPE= 0.0794	mW/cm²	(4)
Exposure limit= 1.00	mW/cm²	

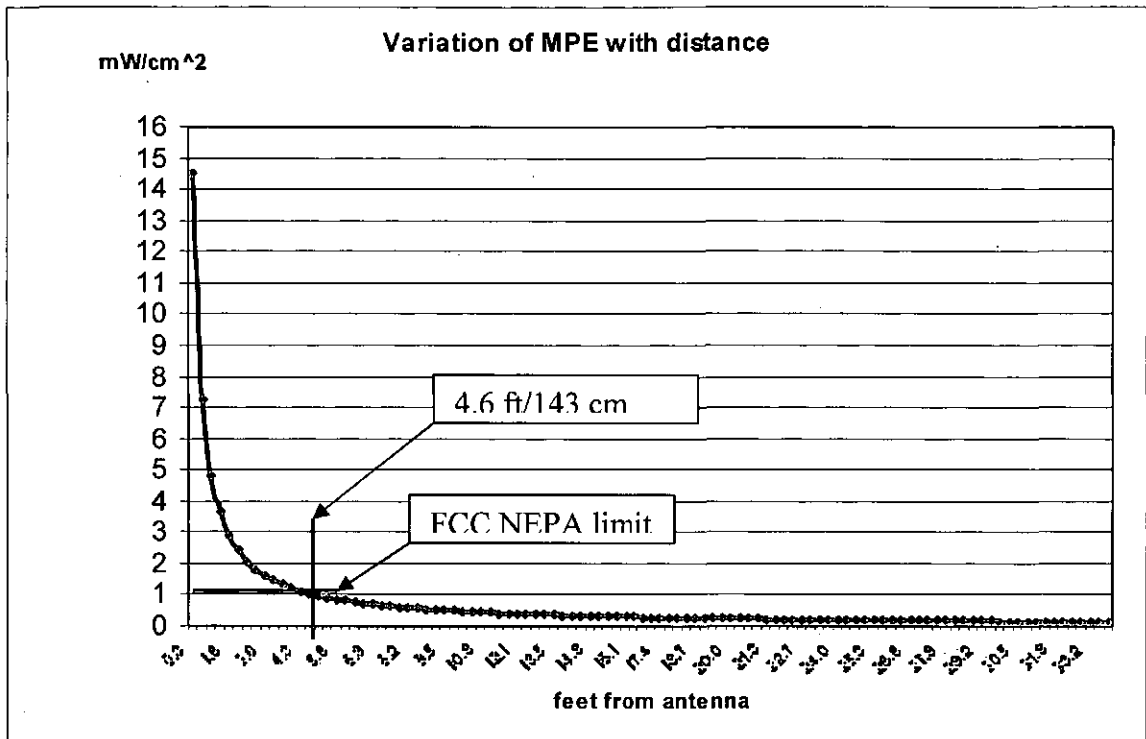
Fig.1

The results of the analysis indicate that the actual exposure received by an individual standing for 30 minutes at the base of Sprint facility will be only 7.5% of the Maximum Permissible Exposure. In order to reach the limit of maximum exposure, an individual must stay strictly at the base of Sprint tower for 6.51 continuous hours, which is very unlikely to occur.



Conclusion.

Based on equation (3) the results are plotted to the following graph (5) and will indicate how close to a Sprint one sector antenna should be one person placed for more than 30 minutes in order to receive an electromagnetic exposure greater than the MPE specified by FCC rules.



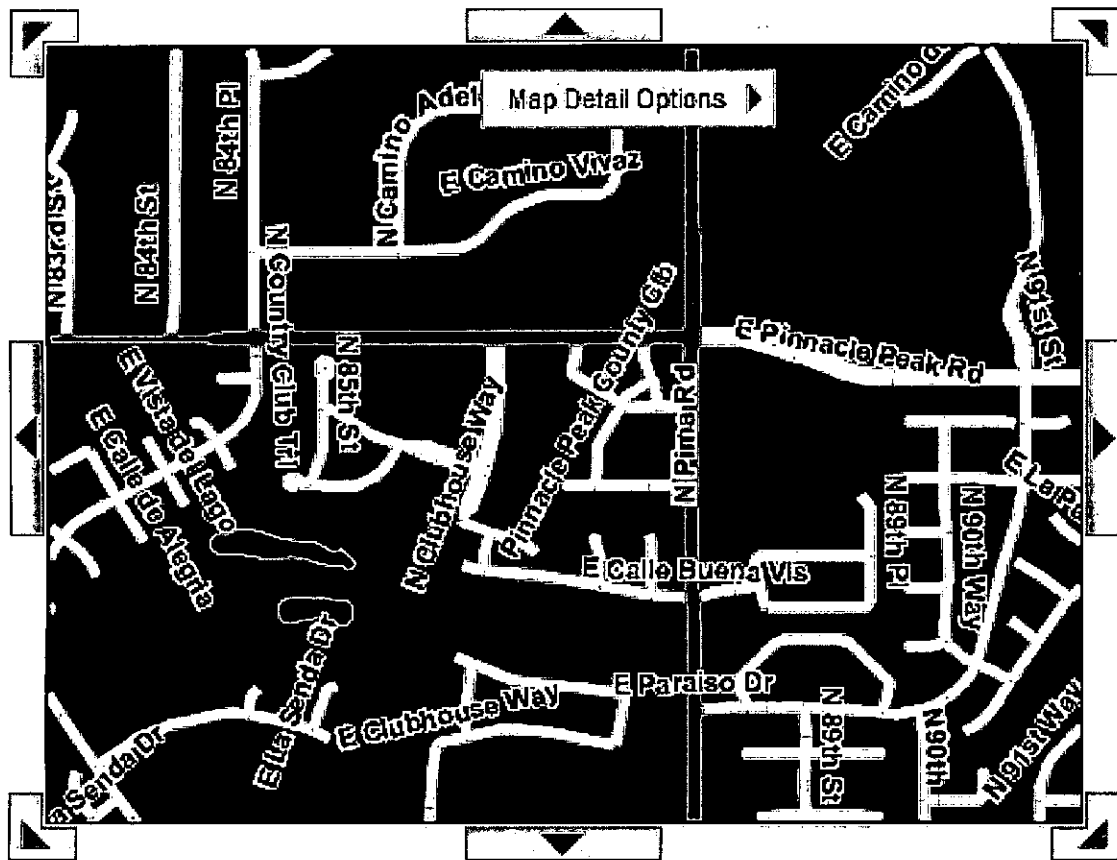
General Population/uncontrolled exposure limits are specified by FCC at a value of 1 mW/cm². In order to exceed the above limit one person should be placed closer than 4.7 ft (or 145 cm) in front of the antenna. This situation is very unlikely to occur since Sprint antennas are mounted (in case of site PH03XC252) more than 34ft above ground level.

Study performed as of today, June 30th 2014

RF Engineer: AZ Sprint RF Department

Sprint PH03XC252

Map of Sprint Service Area



Voice coverage experience



Best



Good



Fair



Sprint coverage - signal strength



Off-network roaming

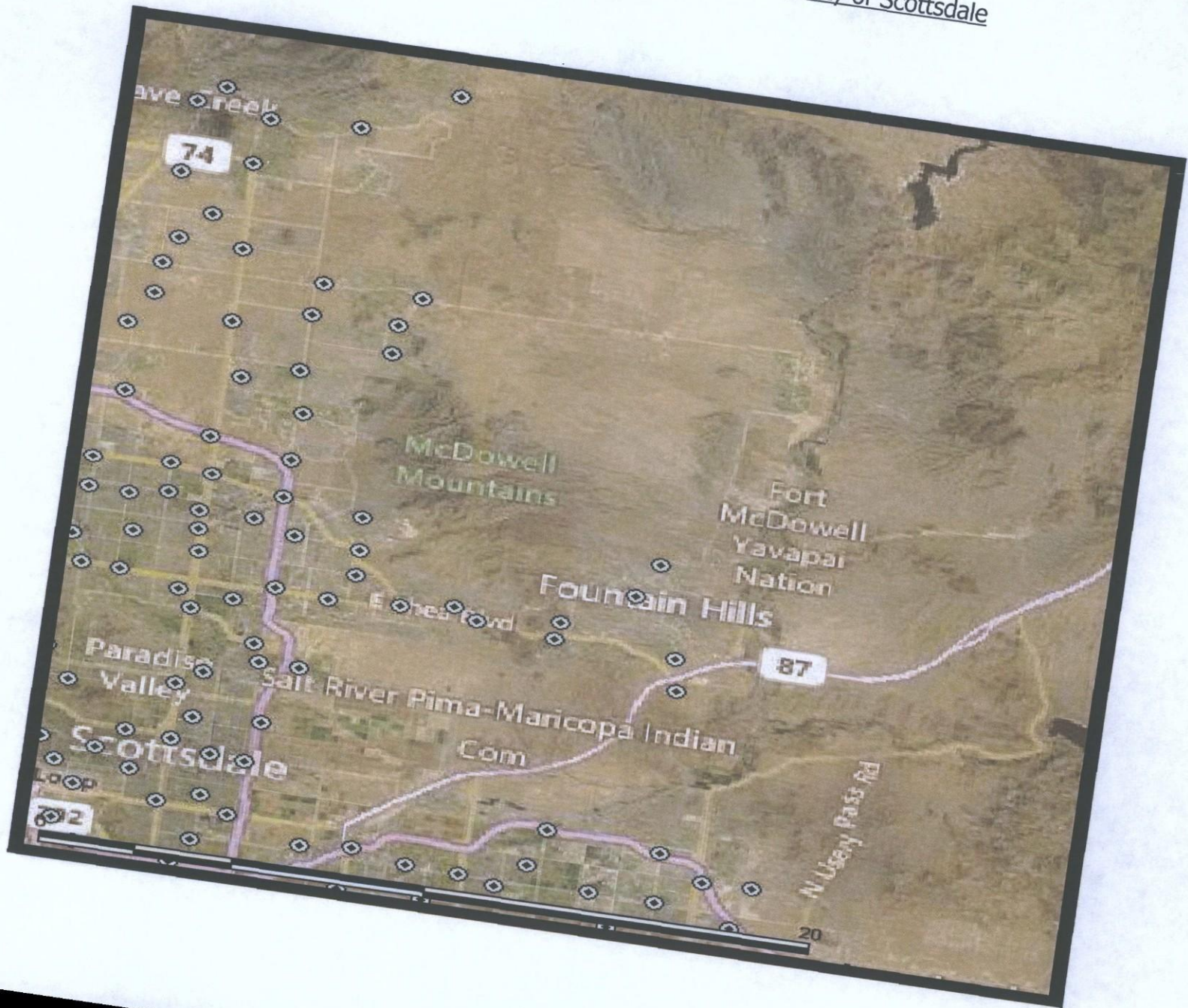


No coverage

>> Shop for this device

>> Shop for phones

Sprint PH03XC252
Map Showing Existing Sprint WCF's in City of Scottsdale



DIGALERT



Call Toll Free
1-800-782-5348
2 Working Days Before You Dig
ARIZONA BLUE STAKE, INC.

2.5 EQUIPMENT DEPLOYMENT DRINKWATER



PH03XC252

8711 E. PINNACLE PEAK RD.
SCOTTSDALE, AZ 85255
MARICOPA COUNTY
LATITUDE: 33.6975 N
LONGITUDE: -111.892778 W

PHOENIX MARKET

SHEET DESCRIPTION

T-1	TITLE SHEET
SP-1	SPRINT SPECIFICATIONS
SP-2	SPRINT SPECIFICATIONS
A-1	SITE PLAN
A-2	EXISTING ENLARGED ANTENNA EQUIPMENT & ELECTRICAL PLANS
A-3	FINAL ENLARGED ANTENNA EQUIPMENT & ELECTRICAL PLANS
A-4	EXISTING & FINAL NORTH ELEVATIONS
A-5	EQUIPMENT DETAILS
A-6	RF DATA SHEET EQUIPMENT INFORMATION
A-7	NOT USED
A-8	FIBER AND DC CONNECTION DETAILS
A-9	EQUIPMENT DETAILS
A-10	CONSTRUCTION DETAILS

SHEET INDEX

PLANS PREPARED FOR:

Sprint

Together with Nextel.

CONSULTANT:

COAL CREEK

CONSULTING

1525 N. HAYDEN ROAD, STE. 100 SCOTTSDALE, AZ 85257
OFFICE: (602) 328-9111 FAX: (602) 532-7407

PROJECT INFORMATION:

DRINKWATER
PH03XC252

8711 E. PINNACLE PEAK RD.
SCOTTSDALE, AZ 85255
MARICOPA COUNTY

CURRENT ISSUE DATE:

06/06/2014

ISSUED FOR:

SUBMITTAL

REV. DATE DESCRIPTION BY:

0	06/06/2014	ISSUED FOR SUBMITTAL	JRS

DRAWN BY: CHK: APV:

JRS MAY RCY

PLANS PREPARED BY:

ARIZONA STATE 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 CONSTRUCTED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

- 2012 INTERNATIONAL RESIDENTIAL CODE
- 2012 INTERNATIONAL BUILDING CODE
- 2012 INTERNATIONAL MECHANICAL CODE
- 2012 INTERNATIONAL PLUMBING CODE
- 2012 INTERNATIONAL FUEL GAS CODE
- 2011 NATIONAL ELECTRICAL CODE

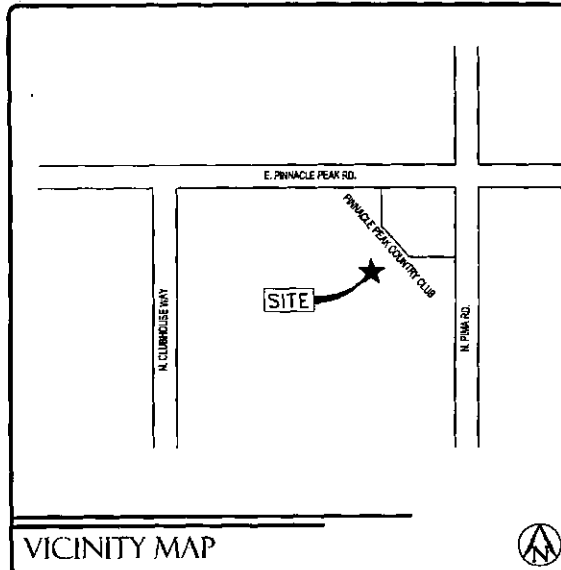
ACCESSIBILITY REQUIREMENTS:

FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS REQUIREMENTS ARE NOT REQUIRED BY ACCORDANCE WITH THE 2012 INTERNATIONAL BUILDING CODE.

CODE BLOCK

APPROVAL	SIGNATURE	DATE
SITE ACQUISITION MANAGER		
CONSTRUCTION MANAGER		
A/E MANAGER		
PLANNING CONSULTANT		
RF MANAGER		
PROPERTY OWNER		
SPRINT REPRESENTATIVE		

SIGNATURE BLOCK



VICINITY MAP

TAKE I-10 EAST AND MERGE ONTO AZ-202 LOOP E. THEN MERGE ONTO AZ-101 LOOP N. TAKE EXIT 36 TO PINNA RD., TURN RIGHT ONTO N. PINNA RD., TURN LEFT ONTO E. PINNACLE PEAK RD. THEN IMMEDIATELY TURN LEFT ONTO PINNACLE PEAK COUNTRY CLUB. SITE IS AHEAD.

DRIVING DIRECTIONS

SPRINT PROPOSES TO MODIFY AN EXISTING UNMANNED TELECOMMUNICATIONS FACILITY

- INSTALLATION OF (1) NEW ANTENNA PER SECTOR, (3) SECTORS
- INSTALLATION OF (1) NEW RRU PER SECTOR, (3) SECTORS
- INSTALLATION OF (1) NEW HYBRID CABLE PER SECTOR, (3) SECTORS

PROJECT DESCRIPTION

APPLICANT:

COAL CREEK CONSULTING
1525 N. HAYDEN ROAD, SUITE 100
SCOTTSDALE, AZ 85257
CONTACT: DECLAN MURPHY
PH: 602-328-0111

PROPERTY INFORMATION:

LESSOR: BULLHEAD HOLDINGS LLC
ADDRESS: 503 BATH ST., FLOOR 3
SANTA BARBARA, CA 93101

ZONING CLASSIFICATION: C-2
BUILDING CODE: 2012 IBC
CONSTRUCTION TYPE: 1B
OCCUPANCY: U
JURISDICTION: CITY OF SCOTTSDALE
CURRENT USE: RETAIL / UNMANNED WIRELESS TELECOMMUNICATIONS FACILITY
NEW USE: RETAIL / UNMANNED WIRELESS TELECOMMUNICATIONS FACILITY

PARCEL NUMBER(S):

71401537

PROJECT SUMMARY

ARCHITECT:

YOUNG DESIGN CORP
10245 E. VALINDA, SUITE 211
SCOTTSDALE, ARIZONA 85258
CONTACT: JOHN SULTZBACH
PH: (480) 451-9800
EMAIL: john.sultzbach@ydc.com

ELECTRICAL ENGINEER:

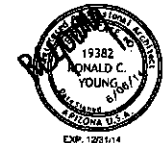
VAN BOURUM & FRANK ASSOCIATES
1414 W. BROADWAY RD, SUITE 119
TEMPE, AZ 85282
CONTACT: BRENT MONICA
PH: (480) 888-5075
EMAIL: BMonica@vbf.com

SITE A/C PROJECT MANAGER:

COAL CREEK CONSULTING
1525 N. HAYDEN ROAD, SUITE 100
SCOTTSDALE, AZ 85257
CONTACT: CLIFF MORTYME
PH: (480) 674-5803
EMAIL: cmortyme@coal-creek.com

PROJECT TEAM

LICENSURE:



THIS DOCUMENT CONTAINS AN ELECTRONIC SIGNATURE PURSUANT TO A.R.S. TITLE 21 AND TITLE 18, IT IS A VIOLATION FOR ANY PERSON, UNLESS UNDER THE DIRECT SUPERVISION OF THE REGISTRANT, TO MODIFY THIS DOCUMENT IN ANY WAY.

SHEET TITLE:

TITLE SHEET

SHEET NUMBER:

T-1

REVISION:

0

YDC-5946

THESE OUTLINE SPECIFICATIONS IN CONJUNCTION WITH THE SPRINT STANDARD CONSTRUCTION SPECIFICATIONS, INCLUDING CONTRACT DOCUMENTS AND THE CONSTRUCTION DRAWINGS DESCRIBE THE WORK TO BE PERFORMED BY THE CONTRACTOR.

SECTION 01 100 - SCOPE OF WORK

THE WORK:
SHALL COMPLY WITH APPLICABLE NATIONAL CODES AND STANDARDS, LATEST EDITION, AND PORTIONS THEREOF.

PRECEDENCE:
SHOULD CONFLICTS OCCUR BETWEEN THE STANDARD CONSTRUCTION SPECIFICATIONS FOR WIRELESS SITES INCLUDING THE STANDARD CONSTRUCTION DETAILS FOR WIRELESS SITES AND THE CONSTRUCTION DRAWINGS, INFORMATION ON THE CONSTRUCTION DRAWINGS SHALL TAKE PRECEDENCE.

SITE FAMILIARITY:
CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING HIMSELF WITH ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS PRIOR TO PROCEEDING WITH CONSTRUCTION.

ON-SITE SUPERVISION:
THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

DRAWINGS, SPECIFICATIONS AND DETAILS REQUIRED AT JOBSITE:
THE CONSTRUCTION CONTRACTOR SHALL MAINTAIN A FULL SET OF THE CONSTRUCTION DRAWINGS AT THE JOBSITE FROM MOBILIZATION THROUGH CONSTRUCTION COMPLETION.

- A. DETAILS ARE INTENDED TO SHOW DESIGN INTENT. PROVIDE ALL MATERIALS AND LABOR AS REQUIRED TO PROVIDE A COMPLETE AND FUNCTIONING SYSTEM. MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS, AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF THE WORK.
- B. CONTRACTOR SHALL NOTIFY SPRINT CONSTRUCTION MANAGER OF ANY VARIATIONS PRIOR TO PROCEEDING WITH THE WORK. DIMENSIONS SHOWN ARE TO FINISH SURFACES UNLESS NOTED OTHERWISE. MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS, AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF THE WORK.
- C. MARK THE FIELD SET OF DRAWINGS IN RED, DOCUMENTING ANY CHANGES FROM THE CONSTRUCTION DOCUMENTS.

METHODS OF PROCEDURE (MOPS) FOR CONSTRUCTION:
CONTRACTOR SHALL PERFORM WORK AS DESCRIBED IN

- A. COAX COLOR CODING SWEEPS AND FIBER TESTING TS-0200 AND EL-0568
- B. CABLE LABELING EN-2012-00
- C. APPLICABLE INSTALLATION MOPS IDENTIFIED ELSEWHERE IN THE CONTRACT DOCUMENTS

SECTION 01 200 - COMPANY FURNISHED MATERIAL AND EQUIPMENT

COMPANY FURNISHED MATERIAL AND EQUIPMENT IS IDENTIFIED ON THE RF DATA SHEET IN THE CONSTRUCTION DRAWINGS.

CONTRACTOR IS RESPONSIBLE FOR SPRINT PROVIDED MATERIAL AND EQUIPMENT TO ENSURE IT IS PROTECTED AND HANDLED PROPERLY THROUGHOUT THE CONSTRUCTION DURATION.

CONTRACTOR RESPONSIBLE FOR RECEIPT OF SPRINT FURNISHED EQUIPMENT AT CELL SITE OR CONTRACTORS LOCATION. CONTRACTOR TO COMPLETE SHIPPING AND RECEIPT DOCUMENTATION IN ACCORDANCE WITH COMPANY PRACTICE.

SECTION 01 300 - CELL SITE CONSTRUCTION

NOTICE TO PROCEED:
NO WORK SHALL COMMENCE PRIOR TO COMPANY'S WRITTEN NOTICE TO PROCEED AND THE ISSUANCE OF WORK ORDER.

SITE CLEANUP:
CONTRACTOR SHALL KEEP THE SITE FREE FROM ACCUMULATING WASTE MATERIAL, DEBRIS, AND TRASH. AT THE COMPLETION OF THE WORK, CONTRACTOR SHALL REMOVE FROM THE SITE ALL REMAINING RUBBISH, IMPLEMENTS, TEMPORARY FACILITIES, AND SURPLUS MATERIALS.

SECTION 01 400 - SUBMITTALS & TESTS

ALTERNATES:
AT THE COMPANY'S REQUEST, ANY ALTERNATIVES TO THE MATERIALS OR METHODS SPECIFIED SHALL BE SUBMITTED TO SPRINTS CONSTRUCTION MANAGER FOR APPROVAL. SPRINT WILL REVIEW AND APPROVE ONLY THOSE REQUESTS MADE IN WRITING. NO VERBAL APPROVALS WILL BE CONSIDERED.

TESTS AND INSPECTIONS:

- A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION TESTS, INSPECTIONS AND PROJECT DOCUMENTATION.
- B. CONTRACTOR SHALL ACCOMPLISH TESTING INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
 - 1. COAX SWEEPS AND FIBER TESTS PER TS-0200 REV 4 ANTENNA LINE ACCEPTANCE STANDARDS.
 - 2. AZL, AZIMUTH AND DOWNTILT PROVIDE AN AUTOMATED REPORT UPLOADED TO SITERRA USING A COMMERCIAL MADE-FOR THE PURPOSE ELECTRONIC ANTENNA ALIGNMENT TOOL (AAT). INSTALLED AZIMUTH, CENTERLINE AND DOWNTILT MUST CONFORM WITH RF CONFIGURATION DATA.

- 3. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL CORRECTIONS TO ANY WORK IDENTIFIED AS UNACCEPTABLE IN SITE INSPECTION ACTIVITIES AND/OR AS A RESULT OF TESTING.
- 4. ALL TESTING REQUIRED BY APPLICABLE INSTALLATION MOPS.
- C. REQUIRED CLOSEOUT DOCUMENTATION INCLUDES, BUT IS NOT LIMITED TO THE FOLLOWING:
 - 1. AZIMUTH, DOWNTILT, AZL FROM SUNSIGHT INSTRUMENTS - ANTENNA ALIGNMENT TOOL (AAT)
 - 2. SWEEP AND FIBER TESTS
 - 3. SCALABLE BARCODE PHOTOGRAPHS OF TOWER TOP AND INACCESSIBLE SERIALIZED EQUIPMENT
 - 4. ALL AVAILABLE JURISDICTIONAL PERMIT AND OCCUPANCY INFORMATION
 - 5. PDF SCAN OF REDLINES PRODUCED IN FIELD
 - 6. A PDF SCAN OF REDLINE MARK-UPS SUITABLE FOR USE IN ELECTRONIC AS-BUILT DRAWING PRODUCTION
 - 7. LIEN WAIVERS
 - 8. FINAL PAYMENT APPLICATION
 - 9. REQUIRED FINAL CONSTRUCTION PHOTOS
 - 10. CONSTRUCTION AND COMMISSIONING CHECKLIST COMPLETE WITH NO DEFICIENT ITEMS
 - 11. APPLICABLE POST NTP TASKS INCLUDING DOCUMENT UPLOADS COMPLETED IN SITERRA (SPRINTS DOCUMENT REPOSITORY OF RECORD).
 - 12. CLOSEOUT PHOTOGRAPHS AND CLOSEOUT CHECKLIST: SPRINT WILL PROVIDE SEPARATE GUIDANCE

SECTION 11 700 - ANTENNA ASSEMBLY, REMOTE RADIO UNITS AND CABLE INSTALLATION

SUMMARY:
THIS SECTION SPECIFIES INSTALLATION OF ANTENNAS, RRU'S, AND CABLE EQUIPMENT, INSTALLATION, AND TESTING OF COAXIAL FIBER CABLE.

ANTENNAS AND RRU'S:
THE NUMBER AND TYPE OF ANTENNAS AND RRU'S TO BE INSTALLED IS DETAILED ON THE CONSTRUCTION DRAWINGS.

HYBRID CABLE:
HYBRID CABLE WILL BE DC/FIBER AND FURNISHED FOR INSTALLATION AT EACH SITE. CABLE SHALL BE INSTALLED PER THE CONSTRUCTION DRAWINGS AND THE APPLICABLE MANUFACTURER'S REQUIREMENTS.

JUMPERS AND CONNECTORS:
FURNISH AND INSTALL 1/2" COAX JUMPER CABLES BETWEEN THE RRU'S AND ANTENNAS. JUMPERS SHALL BE TYPE LDF 4, FLC 12-5C, CR 540, OR FXL 540. SUPER-FLEX CABLES ARE NOT ACCEPTABLE. JUMPERS BETWEEN THE RRU'S AND ANTENNAS OR TOWER TOP AMPLIFIERS SHALL CONSIST OF 1/2 INCH FOAM DIELECTRIC, OUTDOOR RATED COAXIAL CABLE. MIN LENGTH FOR JUMPER SHALL BE 10'-0".

REMOTE ELECTRICAL TILT (RET) CABLES: A/E TO INSERT SPECIFICATION

MISCELLANEOUS:
INSTALL SPLITTERS, COMBINERS, FILTERS PER RF DATA SHEET, FURNISHED BY SPRINT.

ANTENNA INSTALLATION:
THE CONTRACTOR SHALL ASSEMBLE ALL ANTENNAS ONSITE IN ACCORDANCE WITH THE INSTRUCTIONS SUPPLIED BY THE MANUFACTURER. ANTENNA HEIGHT, AZIMUTH, AND FEED ORIENTATION INFORMATION SHALL BE A DESIGNATED ON THE CONSTRUCTION DRAWINGS.


- A. THE CONTRACTOR SHALL POSITION THE ANTENNA ON TOWER PIPE MOUNTS SO THAT THE BOTTOM STRUCTURE IS LEVEL. THE PIPE MOUNTS SHALL BE PLUMB TO WITHIN 1 DEGREE.
- B. ANTENNA MOUNTING REQUIREMENTS: PROVIDE ANTENNA MOUNTING HARDWARE AS INDICATED ON THE DRAWINGS.

HYBRID CABLE INSTALLATION:

- A. THE CONTRACTOR SHALL ROUTE, TEST, AND INSTALL ALL CABLES AS INDICATED ON THE CONSTRUCTION DRAWINGS AND IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- B. THE INSTALLED RADIUS OF THE CABLES SHALL NOT BE LESS THAN THE MANUFACTURER'S SPECIFICATIONS FOR BENDING RADIUS.
- C. EXTREME CARE SHALL BE TAKEN TO AVOID DAMAGE TO THE CABLES DURING HANDLING AND INSTALLATION.

- 1. FASTENING MAIN HYBRID CABLES: ALL CABLES SHALL BE INSTALLED INSIDE MONOPOLE WITH CABLE SUPPORT GRIPS AS REQUIRED BY THE MANUFACTURER.
- 2. FASTENING INDIVIDUAL FIBER AND DC CABLES ABOVE BREAKOUT ENCLOSURE (MEDUSA), WITHIN THE MMBS CABINET AND ANY INTERMEDIATE DISTRIBUTION BOXES:
 - a. FIBER: SUPPORT FIBER BUNDLES USING 1/2" VELCRO STRAPS OF THE REQUIRED LENGTH @ 18" OC. STRAPS SHALL BE UV, OIL AND WATER RESISTANT AND SUITABLE FOR INDUSTRIAL INSTALLATIONS AS MANUFACTURED BY TEXTOL OR APPROVED EQUAL.
 - b. DC: SUPPORT DC BUNDLES WITH ZIP TIES OF THE ADEQUATE LENGTH. ZIP TIES TO BE UV STABILIZED, BLACK NYLON, WITH TENSILE STRENGTH AT 12,000 PSI AS MANUFACTURED BY NELCO PRODUCTS OR EQUAL.
- 3. FASTENING JUMPERS: SECURE JUMPERS TO THE SIDE ARMS OR HEAD FRAMES USING STAINLESS STEEL TIE WRAPS OR STAINLESS STEEL BUTTERFLY CLIPS.
- 4. CABLE INSTALLATION:
 - a. INSPECT CABLE PRIOR TO USE FOR SHIPPING DAMAGE. NOTIFY THE CONSTRUCTION MANAGER.
 - b. CABLE ROUTING: CABLE INSTALLATION SHALL BE PLANNED TO ENSURE THAT THE LINES WILL BE PROPERLY ROUTED IN THE CABLE ENVELOP AS INDICATED ON THE DRAWINGS. AVOID TWISTING AND CROSSOVERS.
 - c. HOIST CABLE USING PROPER HOISTING GRIPS. DO NOT EXCEED MANUFACTURERS RECOMMENDED MAXIMUM BEND RADIUS.

PLANS PREPARED FOR:



CONSULTANT:
COAL CREEK CONSULTING
1525 N. HATCHER ROAD, STE 100 SCOTTSDALE, AZ 85257
OFFICE: (602) 326-9111 FAX: (602) 532-7407

PROJECT INFORMATION:
DRINKWATER PH03XC252
8711 E. PINNACLE PEAK RD.
SCOTTSDALE, AZ 85255
MARICOPA COUNTY

CURRENT ISSUE DATE:
06/06/2014


ISSUED FOR:
SUBMITTAL

REV.	DATE	DESCRIPTION	BY
0	06/06/2014	ISSUED FOR SUBMITTAL	JRS

DRAWN BY: **CHK** APV: **JRS MAY RCY**

PLANS PREPARED BY:

LICENSURE:



19382
RONALD C. YOUNG
6/1/01
ARIZONA P.E.
EXP. 12/31/14

THIS DOCUMENT CONTAINS AN ELECTRONIC SIGNATURE PURSUANT TO A.R.S. TITLE 18 AND TITLE 44. IT IS A VIOLATION FOR ANY PERSON, OTHER THAN THE DIRECT SUPERVISOR OF THE RECIPIENT, TO MODIFY THIS DOCUMENT IN ANY WAY.

SHEET TITLE:
SPRINT SPECIFICATIONS

SHEET NUMBER: **SP-1** REVISION: **0**

YDC-5946

CONTINUE FROM SP-1

- 5. GROUNDING OF TRANSMISSION LINES: ALL TRANSMISSION LINES SHALL BE GROUNDED AS INDICATED ON DRAWINGS.
- 6. HYBRID CABLE COLOR CODING: ALL COLOR CODING SHALL BE AS REQUIRED IN TS 0200 REV 4.
- 7. HYBRID CABLE LABELING: INDIVIDUAL HYBRID AND DC BUNDLES SHALL BE LABELED ALPHA-NUMERICALLY ACCORDING TO SPRINT CELL SITE ENGINEERING NOTICE - EN 2012-001, REV 1

WEATHERPROOFING EXTERIOR CONNECTORS AND HYBRID CABLE GROUND KITS:

- A. ALL FIBER & COAX CONNECTORS AND GROUND KITS SHALL BE WEATHERPROOFED.
- B. WEATHERPROOFED USING ONE OF THE FOLLOWING METHODS. ALL INSTALLATIONS MUST BE DONE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND INDUSTRY BEST PRACTICES.
 - 1. COLD SHRINK: ENCOMPASS CONNECTOR IN COLD SHRINK TUBING AND PROVIDE A DOUBLE WRAP OF 2" ELECTRICAL TAPE EXTENDING 2" BEYOND TUBING. PROVIDE 3M COLD SHRINK CXS SERIES OR EQUAL.
 - 2. SELF-AMALGAMATING TAPE: CLEAN SURFACES. APPLY A DOUBLE WRAP OF SELF-AMALGAMATING TAPE 2" BEYOND CONNECTOR. APPLY A SECOND WRAP OF SELF-AMALGAMATING TAPE IN OPPOSITE DIRECTION. APPLY DOUBLE WRAP OF 2" WIDE ELECTRICAL TAPE EXTENDING 2" BEYOND THE SELF-AMALGAMATING TAPE.
 - 3. 3M SLIM LOCK CLOSURE 716: SUBSTITUTIONS WILL NOT BE ALLOWED.
 - 4. OPEN FLAME ON JOB SITE IS NOT ACCEPTABLE

SECTION 11 800 - INSTALLATION OF MULTIMODAL BASE STATIONS (MMBS) AND RELATED EQUIPMENT

- A. THIS SECTION SPECIFIES MMBS CABINETS, POWER CABINETS, AND INTERNAL EQUIPMENT INCLUDING BUT NOT LIMITED TO RECTIFIERS, POWER DISTRIBUTION UNITS, BASE BAND UNITS, SURGE ARRESTORS, BATTERIES, AND SIMILAR EQUIPMENT FURNISHED BY THE COMPANY FOR INSTALLATION BY THE CONTRACTOR (OFC).
- B. CONTRACTOR SHALL PROVIDE AND INSTALL ALL MISCELLANEOUS MATERIALS AND PROVIDE ALL LABOR REQUIRED FOR INSTALLATION EQUIPMENT IN EXISTING CABINET OR NEW CABINET AS SHOWN ON DRAWINGS AND AS REQUIRED BY THE APPLICABLE INSTALLATION MOPS.
- C. COMPLY WITH MANUFACTURERS INSTALLATION AND START-UP REQUIREMENTS

DC CIRCUIT BREAKER LABELING

- A. NEW DC CIRCUIT IS REQUIRED IN MMBS CABINET SHALL BE CLEARLY IDENTIFIED AS TO RRU BEING SERVICED

SECTION 26 100 - BASIC ELECTRICAL REQUIREMENTS

SUMMARY: THIS SECTION SPECIFIES BASIC ELECTRICAL REQUIREMENTS FOR SYSTEMS AND COMPONENTS.

QUALITY ASSURANCE:

- A. ALL EQUIPMENT FURNISHED UNDER DIVISION 26 SHALL CARRY UL LABELS AND LISTINGS WHERE SUCH LABELS AND LISTINGS ARE AVAILABLE IN THE INDUSTRY.
- B. MANUFACTURERS OF EQUIPMENT SHALL HAVE A MINIMUM OF THREE YEARS EXPERIENCE WITH THEIR EQUIPMENT INSTALLED AND OPERATING IN THE FIELD IN A USE SIMILAR TO THE NEW USE FOR THIS PROJECT.
- C. MATERIALS AND EQUIPMENT: ALL MATERIALS AND EQUIPMENT SPECIFIED IN DIVISION 26 OF THE SAME TYPE SHALL BE OF THE SAME MANUFACTURER AND SHALL BE NEW, OF THE BEST QUALITY AND DESIGN, AND FREE FROM DEFECTS

SUPPORTING DEVICES:

- A. ALL EQUIPMENT FURNISHED UNDER DIVISION 26 SHALL CARRY UL LABELS AND LISTINGS WHERE SUCH LABELS AND LISTINGS ARE AVAILABLE IN THE INDUSTRY.
- B. MANUFACTURERS OF EQUIPMENT SHALL HAVE A MINIMUM OF THREE YEARS EXPERIENCE WITH THEIR EQUIPMENT INSTALLED AND OPERATING IN THE FIELD IN A USE SIMILAR TO THE NEW USE FOR THIS PROJECT.
- C. MATERIALS AND EQUIPMENT: ALL MATERIALS AND EQUIPMENT SPECIFIED IN DIVISION 26 OF THE SAME TYPE SHALL BE OF THE SAME MANUFACTURER AND SHALL BE NEW, OF THE BEST QUALITY AND DESIGN, AND FREE FROM DEFECTS

SUPPORTING DEVICES:

A. MANUFACTURED STRUCTURAL SUPPORT MATERIALS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS BY THE FOLLOWING:

- 1. ALLIED TUBE AND CONDUIT
- 2. B-LINE SYSTEM
- 3. SUNISTRUT DIVERSIFIED PRODUCTS
- 4. THOMAS & BETTS

B. FASTENERS: TYPES, MATERIALS, AND CONSTRUCTION FEATURES AS FOLLOWS:

- 1. EXPANSION ANCHORS: CARBON STEEL WEDGE OR SLEEVE TYPE.
- 2. POWER-DRIVEN THREADED STUDS: HEAT-TREATED STEEL, DESIGNED SPECIFICALLY FOR THE INTENDED SERVICE.
- 3. FASTEN BY MEANS OF WOOD SCREWS ON WOOD.
- 4. TOGGLE BOLTS ON HOLLOW MASONRY UNITS.
- 5. CONCRETE INSERTS OR EXPANSION BOLTS ON CONCRETE OR SOLID MASONRY.
- 6. MACHINE SCREWS, WELDED THREADED STUDS, OR SPRING-TENSION CLAMPS ON STEEL.
- 7. EXPLOSIVE DEVICES FOR ATTACHING HANGERS TO STRUCTURE SHALL NOT BE PERMITTED.
- 8. DO NOT WELD CONDUIT, PIPE STRAPS, OR ITEMS OTHER THAN THREADED STUDS TO STEEL STRUCTURES.
- 9. IN PARTITIONS OF LIGHT STEEL CONSTRUCTION, USE SHEET METAL SCREWS.

SUPPORTING DEVICES:

- A. INSTALL SUPPORTING DEVICES TO FASTEN ELECTRICAL COMPONENTS SECURELY AND PERMANENTLY IN ACCORDANCE WITH NEC.
- B. COORDINATE WITH THE BUILDING STRUCTURAL SYSTEM AND WITH OTHER TRADES.
- C. UNLESS OTHERWISE INDICATED ON THE DRAWINGS, FASTEN ELECTRICAL ITEMS AND THEIR SUPPORTING HARDWARE SECURELY TO THE STRUCTURE IN ACCORDANCE WITH THE FOLLOWING:
- D. ENSURE THAT THE LOAD APPLIED BY ANY FASTENER DOES NOT EXCEED 25 PERCENT OF THE PROOF TEST LOAD.
- E. USE VIBRATION AND SHOCK-RESISTANT FASTENERS FOR ATTACHMENTS TO CONCRETE SLABS.

ELECTRICAL IDENTIFICATION:

- A. UPDATE AND PROVIDE TYPED CIRCUIT BREAKER SCHEDULES IN THE MOUNTING BRACKET, INSIDE DOORS OF AC PANEL BOARDS WITH ANY CHANGES MADE TO THE AC SYSTEM.
- B. BRANCH CIRCUITS FEEDING AVIATION OBSTRUCTION LIGHTING SHALL BE CLEARLY IDENTIFIED AS SUCH AT THE BRANCH CIRCUIT PANELBOARD.

SECTION 26 200 - ELECTRICAL MATERIALS AND EQUIPMENT

CONDUIT:

- A. RIGID GALVANIZED STEEL (RGS) CONDUIT SHALL BE USED FOR EXTERIOR LOCATIONS ABOVE GROUND AND IN UNFINISHED INTERIOR LOCATIONS AND FOR ENCASED RUNS IN CONCRETE. RIGID CONDUIT AND FITTINGS SHALL BE STEEL COATED WITH ZINC EXTERIOR AND INTERIOR BY THE HOT DIP GALVANIZING PROCESS. CONDUIT SHALL BE PRODUCED TO ANSI SPECIFICATIONS C80.1, FEDERAL SPECIFICATION WW-C-581 AND SHALL BE LISTED WITH THE UNDERWRITERS' LABORATORIES. FITTINGS SHALL BE THREADED - SET SCREW OR COMPRESSION FITTINGS WILL NOT BE ACCEPTABLE. RGS CONDUITS SHALL BE MANUFACTURED BY ALLIED, REPUBLIC OR WHEATLAND.
- B. UNDERGROUND CONDUIT IN CONCRETE SHALL BE POLYVINYLCHLORIDE (PVC) SUITABLE FOR DIRECT BURIAL AS APPLICABLE. JOINTS SHALL BE BELLED, AND FLUSH SOLVENT WELDED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. CONDUIT SHALL BE CARLON ELECTRICAL PRODUCTS OR APPROVED EQUAL.
- C. TRANSITIONS BETWEEN PVC AND RIGID (RGS) SHALL BE MADE WITH PVC COATED METALLIC LONG SWEEP RADIUS ELBOWS.
- D. EMT OR RIGID GALVANIZED STEEL CONDUIT MAY BE USED IN FINISHED SPACES CONCEALED IN WALLS AND CEILINGS. EMT SHALL BE MILD STEEL ELECTRICALLY WELDED, ELECTRO-GALVANIZED OR HOT-DIPPED GALVANIZED AND PRODUCED TO ANSI SPECIFICATION C80.3, FEDERAL SPECIFICATION WW-C-563, AND SHALL BE UL LISTED. EMT SHALL BE MANUFACTURED BY ALLIED, REPUBLIC OR WHEATLAND, OR APPROVED EQUAL. FITTINGS SHALL BE METALLIC COMPRESSION, SET SCREW CONNECTIONS SHALL NOT BE ACCEPTABLE.
- E. LIQUID TIGHT FLEXIBLE METALLIC CONDUIT SHALL BE USED FOR FINAL CONNECTION TO EQUIPMENT. FITTINGS SHALL BE METALLIC GLAND TYPE COMPRESSION FITTINGS, MAINTAINING THE INTEGRITY OF CONDUIT SYSTEM. SET SCREW CONNECTIONS SHALL NOT BE ACCEPTABLE. MAXIMUM LENGTH OF FLEXIBLE CONDUIT SHALL NOT EXCEED 6- FEET. LFMC SHALL BE PROTECTED AND SUPPORTED AS REQUIRED BY NEC. MANUFACTURERS OF FLEXIBLE CONDUITS SHALL BE CAROL, ANACONDA METAL HOSE OR UNIVERSAL METAL HOSE, OR APPROVED EQUAL.
- F. MINIMUM SIZE CONDUIT SHALL BE 3/4 INCH (21MM).

HUBS AND BOXES:

- A. AT ENTRANCES TO CABINETS OR OTHER EQUIPMENT NOT HAVING INTEGRAL THREADED HUBS PROVIDE METALLIC THREADED HUBS OF THE SIZE AND CONFIGURATION REQUIRED. HUB SHALL INCLUDE LOCKNUT AND NEOPRENE O-RING SEAL. PROVIDE IMPACT RESISTANT 105 DEGREE C PLASTIC BUSHINGS TO PROTECT CABLE INSULATION.
- B. CABLE TERMINATION FITTINGS FOR CONDUIT
 - 1. CABLE TERMINATORS FOR RGS CONDUITS SHALL BE TYPE CRC BY O-Z/GEDNEY OR EQUAL BY RCX TEC.
 - 2. CABLE TERMINATORS FOR LFMC SHALL BE ETCO - CL2075; OR MADE FOR THE PURPOSE PRODUCTS BY ROXTEC.
- C. EXTERIOR PULL, BOXES AND PULL BOXES IN INTERIOR INDUSTRIAL AREAS SHALL BE PLATED CAST ALLOY, HEAVY DUTY, WEATHERPROOF, DUST PROOF, WITH GASKET, PLATED IRON ALLOY COVER AND STAINLESS STEEL COVER SCREWS, CROUSE-HINDS WAB SERIES OR EQUAL.
- D. CONDUIT OUTLET BODIES SHALL BE PLATED CAST ALLOY WITH SIMILAR GASKETED COVERS. OUTLET BODIES SHALL BE OF THE CONFIGURATION AND SIZE SUITABLE FOR THE APPLICATION. PROVIDE CROUSE-HINDS FORM B OR EQUAL.
- E. MANUFACTURER FOR BOXES AND COVERS SHALL BE HOFFMAN, SQUARE "D", CROUSE-HINDS, COOPER, ADALET, APPLETON, O-Z GEDNEY, RACO, OR APPROVED EQUAL.

SUPPLEMENTAL GROUNDING SYSTEM

- A. FURNISH AND INSTALL A SUPPLEMENTAL GROUNDING SYSTEM TO THE EXTENT INDICATED ON THE DRAWINGS. SUPPORT SYSTEM WITH NON-MAGNETIC STAINLESS STEEL CLIPS WITH RUBBER GROMMETS. GROUNDING CONNECTORS SHALL BE TINNED COPPER WIRE, SIZES AS INDICATED ON THE DRAWINGS. PROVIDE STRANDED OR SOLID BARE OR INSULATED CONDUCTORS EXCEPTED AS OTHERWISE NOTED.
- B. SUPPLEMENTAL GROUNDING SYSTEM: ALL CONNECTIONS TO BE MADE WITH CAD WELDS, EXCEPT AT EQUIPMENT USE LUGS OR OTHER AVAILABLE GROUNDING MEANS AS REQUIRED BY MANUFACTURER, AT GROUND BARS USE TWO HOLE SPADES WITH NO OX.
- C. STOLEN GROUND-BARS: IN THE EVENT OF STOLEN GROUND BARS, CONTACT SPRINT CM FOR REPLACEMENT INSTRUCTION USING THREADED ROD KITS.


EXISTING STRUCTURE:

- A. EXISTING EXPOSED WIRING AND ALL EXPOSED OUTLETS, RECEPTACLES, SWITCHES, DEVICES, BOXES, AND OTHER EQUIPMENT THAT ARE NOT TO BE UTILIZED IN THE COMPLETED PROJECT SHALL BE REMOVED OR DE-ENERGIZED AND CAPPED IN THE WALL, CEILING, OR FLOOR SO THAT THEY ARE CONCEALED AND SAFE. WALL, CEILING, OR FLOOR SHALL BE PATCHED TO MATCH THE ADJACENT CONSTRUCTION.

CONDUIT AND CONDUCTOR INSTALLATION:

- A. CONDUITS SHALL BE FASTENED SECURELY IN PLACE WITH APPROVED NON-PERFORATED STRAPS AND HANGERS. EXPLOSIVE DEVICES FOR ATTACHING HANGERS TO STRUCTURE WILL NOT BE PERMITTED. CLOSELY FOLLOW THE LINES OF THE STRUCTURE, MAINTAIN CLOSE PROXIMITY TO THE STRUCTURE AND KEEP CONDUITS IN TIGHT ENVELOPES. CHANGES IN DIRECTION TO ROUTE AROUND OBSTACLES SHALL BE MADE WITH CONDUIT OUTLET BODIES. CONDUIT SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER, PARALLEL AND PERPENDICULAR TO STRUCTURE WALL AND CEILING LINES. ALL CONDUIT SHALL BE FISHED TO CLEAR OBSTRUCTIONS. ENDS OF CONDUITS SHALL BE TEMPORARILY CAPPED TO PREVENT CONCRETE, PLASTER OR DIRT FROM ENTERING. CONDUITS SHALL BE RIGIDLY CLAMPED TO BOXES BY GALVANIZED MALLEABLE IRON BUSHING ON INSIDE AND GALVANIZED MALLEABLE IRON LOCKNUT ON OUTSIDE AND INSIDE.
- B. CONDUCTORS SHALL BE PULLED IN ACCORDANCE WITH ACCEPTED GOOD PRACTICE.

PLANS PREPARED FOR:



Together with Nextel.

CONSULTANT:

COAL CREEK CONSULTING

1525 N. HAYDEN ROAD, STE 100 SCOTTSDALE, AZ 85257
OFFICE: (602) 326-2111 FAX: (602) 532-7407

PROJECT INFORMATION:

DRINKWATER PH03XC252

8711 E. PINNACLE PEAK RD.
SCOTTSDALE, AZ 85255
MARICOPA COUNTY

CURRENT ISSUE DATE:

06/06/2014

ISSUED FOR:

SUBMITTAL


REV.	DATE	DESCRIPTION	BY
0	06/06/2014	ISSUED FOR SUBMITTAL	JRS

DRAWN BY: **CHK** APV:

JRS MAY RCY

PLANS PREPARED BY:

LICENSURE:



19382 DONALD C. YOUNG
REGISTERED PROFESSIONAL ENGINEER
STATE OF ARIZONA
EXPIRES 12/31/14

THIS DOCUMENT CONTAINS AN ELECTRONIC SIGNATURE PURSUANT TO A.S.C. TITLE 11 AND TITLE 44. IT IS A VIOLATION FOR ANY PERSON, UNLESS UNDER THE DIRECT SUPERVISION OF THE REGISTRANT, TO MODIFY THIS DOCUMENT IN ANY WAY.

SHEET TITLE:

SPRINT SPECIFICATIONS

SHEET NUMBER: **SP-2** REVISION: **0**

YDC-5946

PLANS PREPARED FOR:



Sprint
Together with Nextel.

CONSULTANT:
COAL CREEK CONSULTING

1525 N. HAYDEN ROAD, STE. 100 SCOTTSDALE, AZ 85257
OFFICE: (602) 326-0111 FAX: (602) 532-7407

PROJECT INFORMATION:

DRINKWATER
PH03XC252
8711 E. PINNACLE PEAK RD.
SCOTTSDALE, AZ 85255
MARICOPA COUNTY

CURRENT ISSUE DATE:
06/06/2014

ISSUED FOR:
SUBMITTAL

REV.	DATE	DESCRIPTION	BY
0	06/06/2014	ISSUED FOR SUBMITTAL	JRS

DRAWN BY: CHK. APV.:
JRS MAY RCY

PLANS PREPARED BY:

LICENSURE:

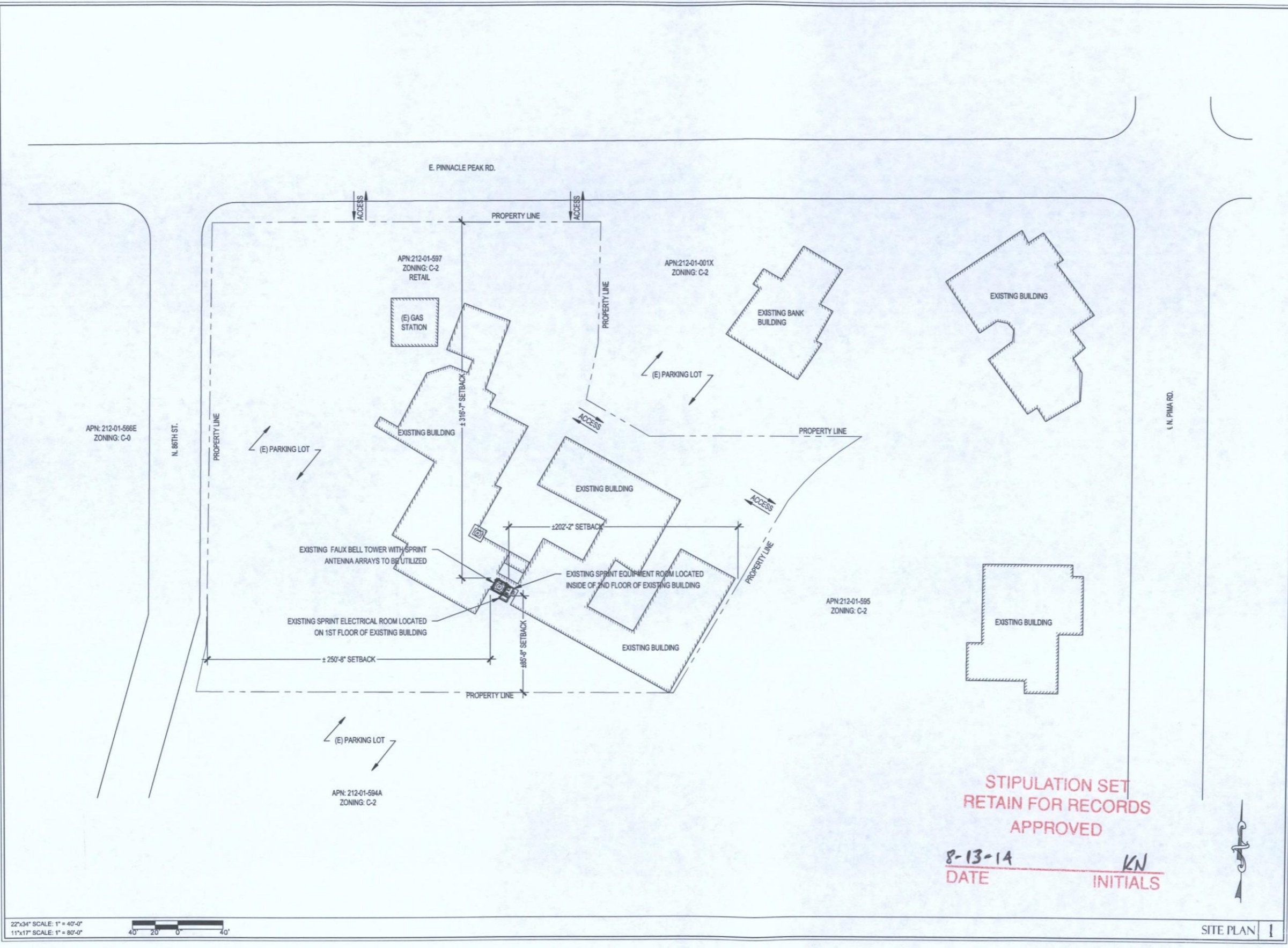


19382
RONALD C. YOUNG
ENGINEER
ARIZONA U.S.A.
EXP. 12/31/14

THIS DOCUMENT CONTAINS AN ELECTRONIC SIGNATURE PURSUANT TO A.R.S. TITLE 41 AND TITLE 44. IT IS A VIOLATION FOR ANY PERSON, UNLESS UNDER THE DIRECT SUPERVISION OF THE REGISTRANT, TO MODIFY THIS DOCUMENT IN ANY WAY.

SHEET TITLE:
SITE PLAN

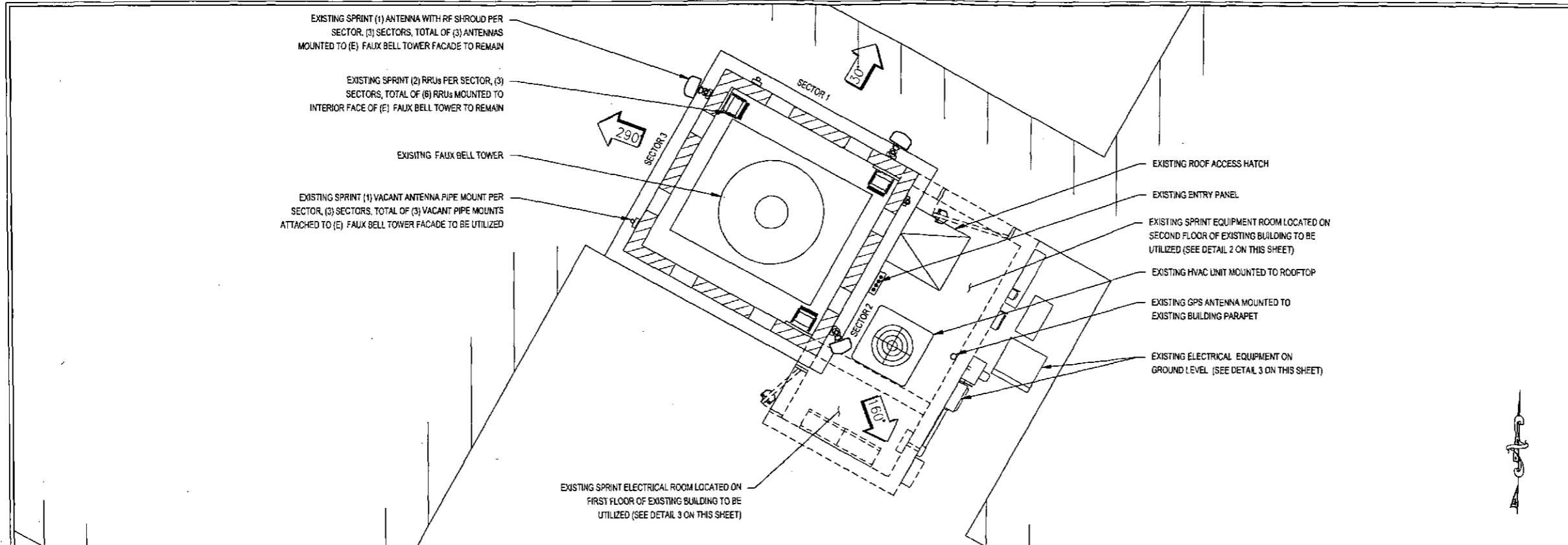
SHEET NUMBER: A-1 REVISION: 0
YDC-5946



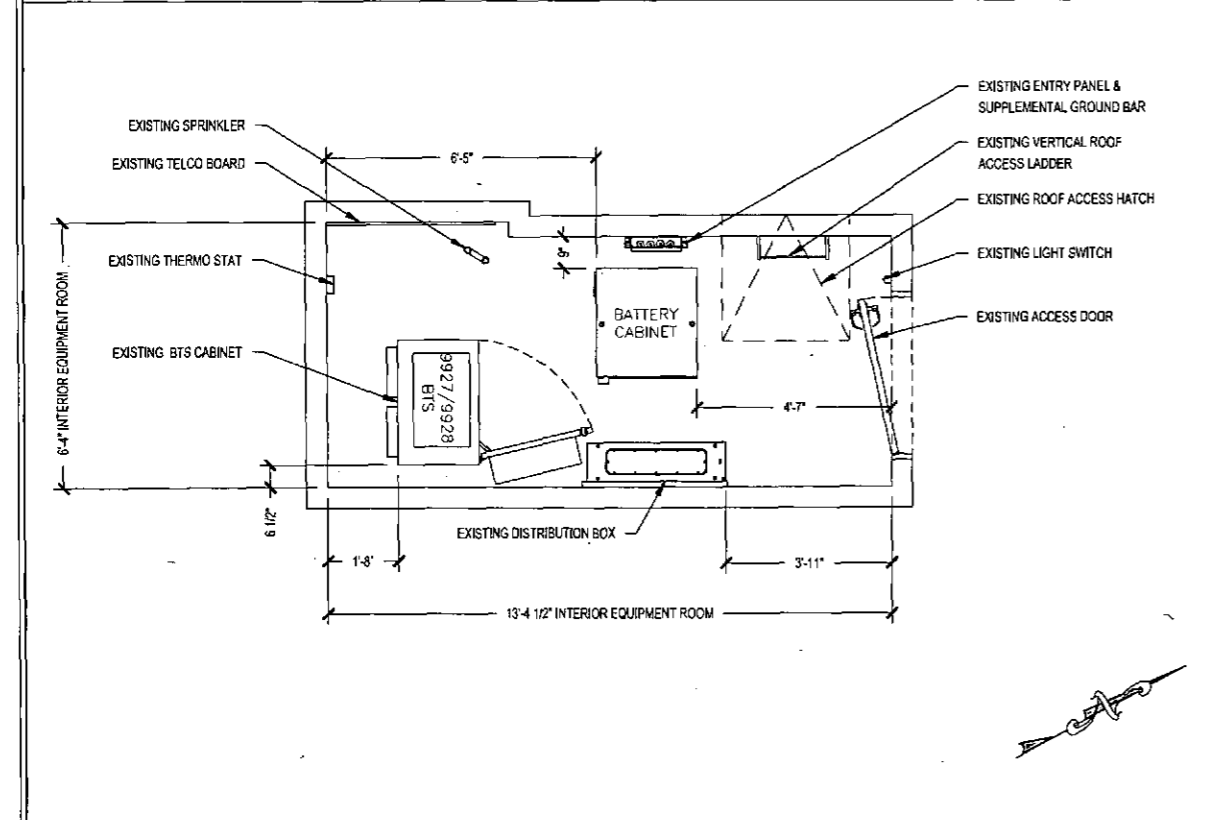
STIPULATION SET
RETAIN FOR RECORDS
APPROVED
8-13-14 DATE KN INITIALS

22"x34" SCALE: 1" = 40'-0"
11"x17" SCALE: 1" = 80'-0"
40' 20' 0' 40'

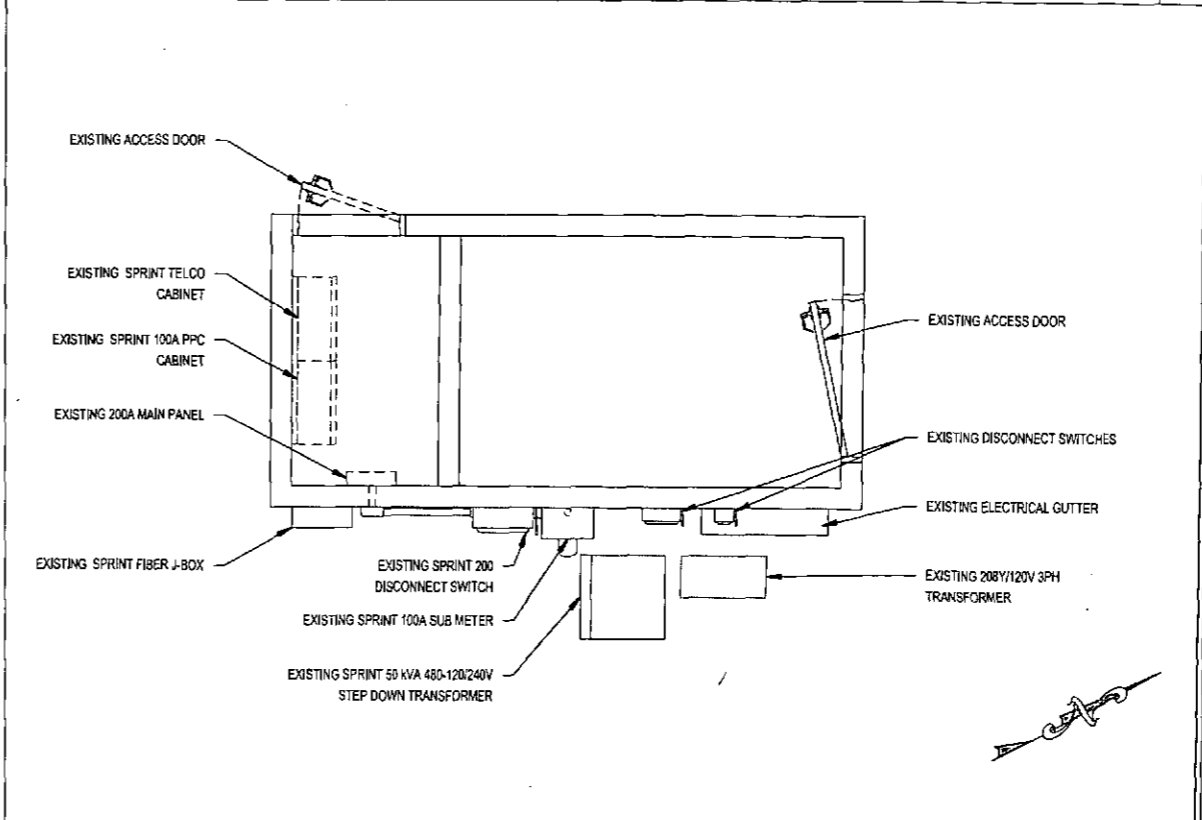
SITE PLAN I



22'x34' SCALE: 3/8" = 1'-0"
11'x17' SCALE: 3/16" = 1'-0"
EXISTING ENLARGED ANTENNA PLAN 1



22'x34' SCALE: 1/2" = 1'-0"
11'x17' SCALE: 1/4" = 1'-0"
EXISTING ENLARGED EQUIPMENT ROOM PLAN 2



22'x34' SCALE: 1/2" = 1'-0"
11'x17' SCALE: 1/4" = 1'-0"
EXISTING ENLARGED ELECTRICAL ROOM PLAN 3

PLANS PREPARED FOR:

Sprint
Together with Nextel.

CONSULTANT:
COAL CREEK CONSULTING
1525 N. HAYDEN ROAD, STE 100 SCOTTSDALE, AZ 85257
OFFICE: (602) 376-0111 FAX: (602) 532-7407

PROJECT INFORMATION:
DRINKWATER
PH03XC252
8711 E. PINNACLE PEAK RD.
SCOTTSDALE, AZ 85255
MARICOPA COUNTY


CURRENT ISSUE DATE:
06/06/2014

ISSUED FOR:
SUBMITTAL

REV.	DATE	DESCRIPTION	BY
0	06/06/2014	ISSUED FOR SUBMITTAL	JRS

DRAWN BY: JRS
CHK: MAY
APV: RCY

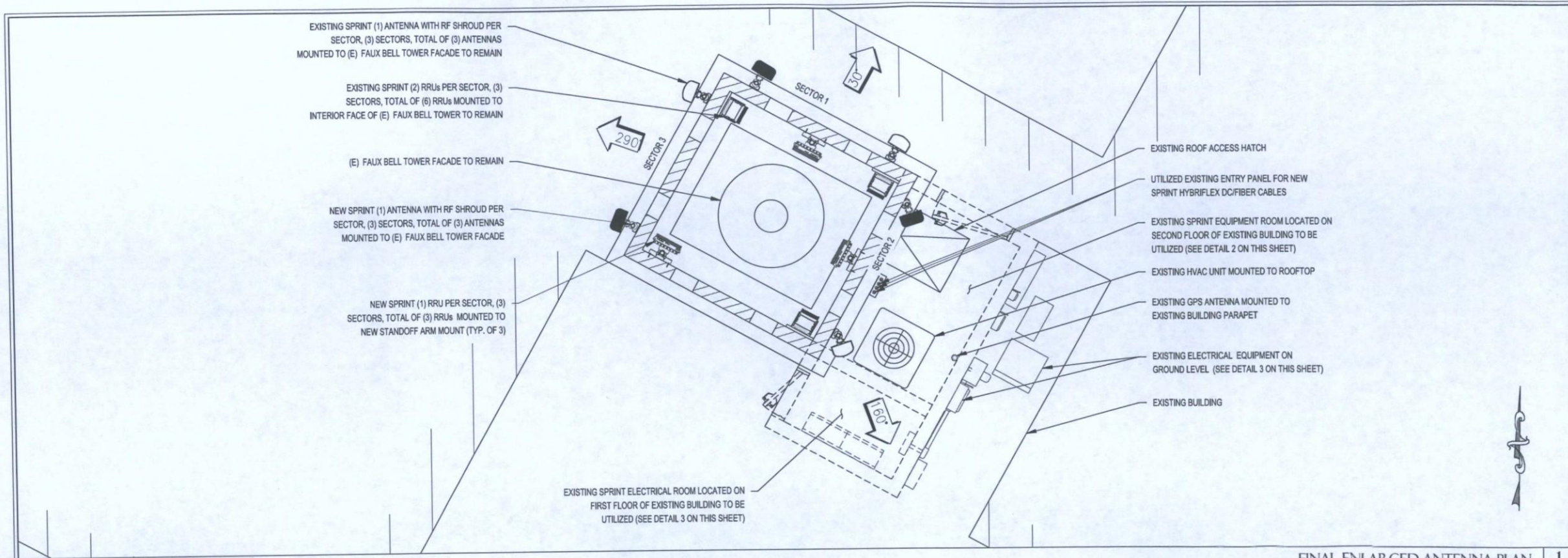
PLANS PREPARED BY:

LICENSURE:

 THIS DOCUMENT CONTAINS AN ELECTRONIC SIGNATURE PURSUANT TO A.R.S. TITLE 41 AND TITLE 44. IT IS A VIOLATION FOR ANY PERSON, UNLESS UNDER THE DIRECT SUPERVISION OF THE REGISTRANT, TO MODIFY THIS DOCUMENT IN ANY WAY.

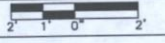
SHEET TITLE:
EXISTING ENLARGED ANTENNA EQUIPMENT & ELECTRICAL PLANS

SHEET NUMBER: A-2
REVISION: 0

YDC-5946



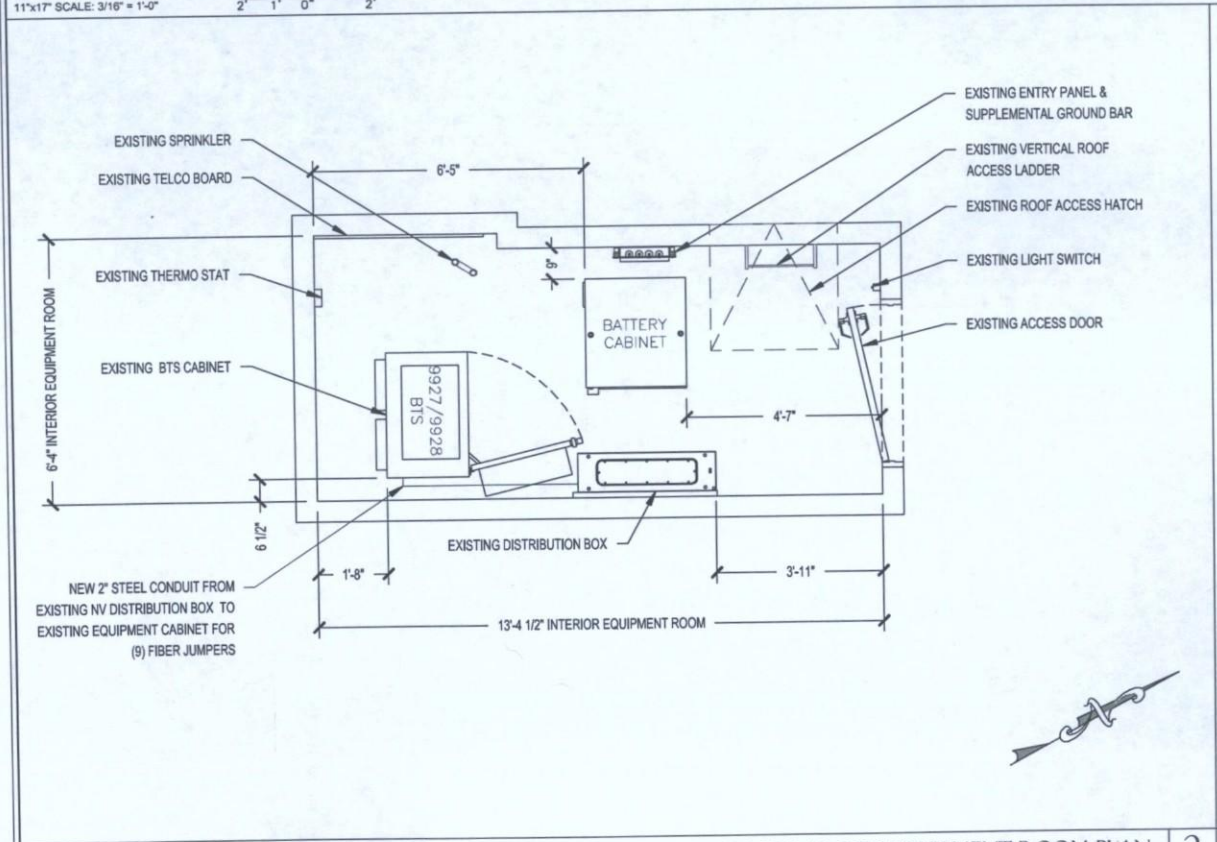
22"x34" SCALE: 3/8" = 1'-0"
11"x17" SCALE: 3/16" = 1'-0"



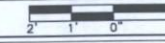
FINAL ENLARGED ANTENNA PLAN 1

STIPULATION SET
RETAIN FOR RECORDS
APPROVED

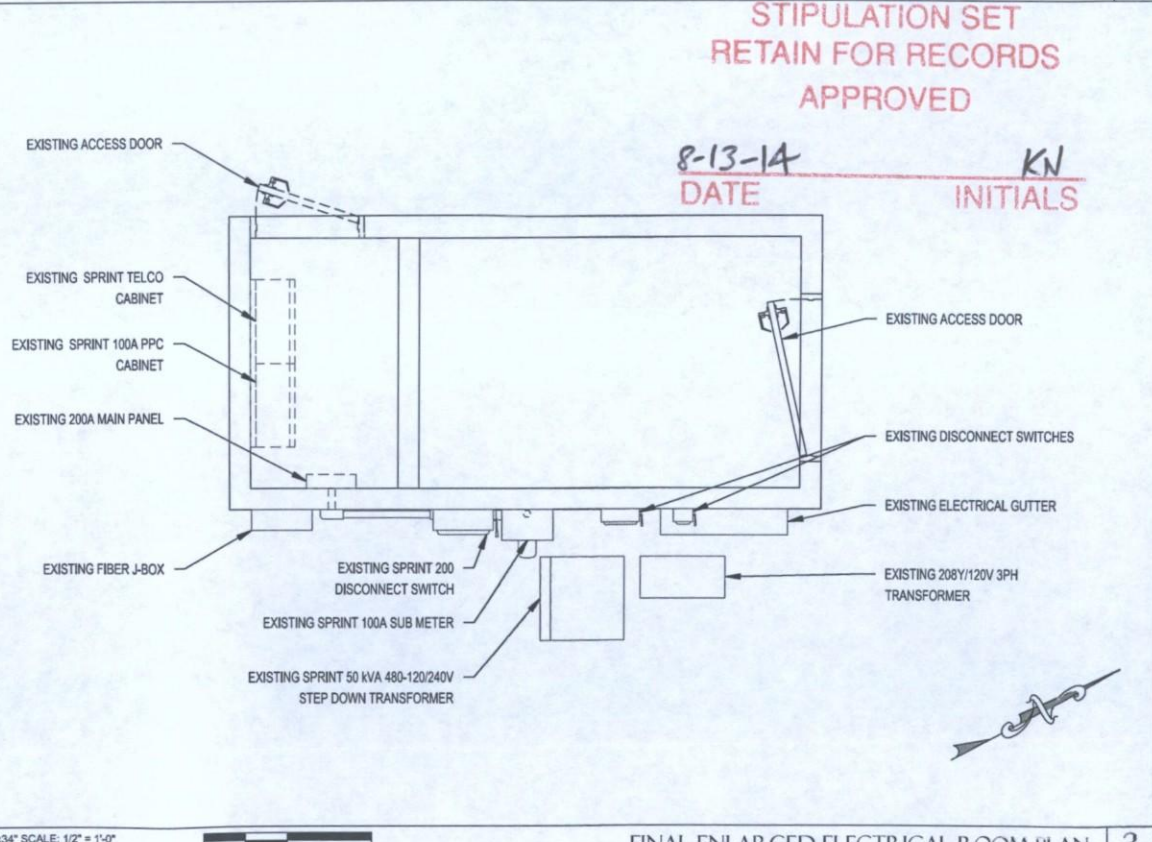
8-13-14
DATE KN
INITIALS



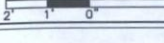
22"x34" SCALE: 1/2" = 1'-0"
11"x17" SCALE: 1/4" = 1'-0"



FINAL ENLARGED EQUIPMENT ROOM PLAN 2



22"x34" SCALE: 1/2" = 1'-0"
11"x17" SCALE: 1/4" = 1'-0"



FINAL ENLARGED ELECTRICAL ROOM PLAN 3

PLANS PREPARED FOR:
Sprint
Together with Nextel.

CONSULTANT:
COAL CREEK CONSULTING
1525 N. HAYDEN ROAD, STE 100 SCOTTSDALE, AZ 85257
OFFICE: (602) 326-0111 FAX: (602) 532-7407

PROJECT INFORMATION:
DRINKWATER PH03XC252
8711 E. PINNACLE PEAK RD.
SCOTTSDALE, AZ 85255
MARICOPA COUNTY

CURRENT ISSUE DATE:
06/06/2014

ISSUED FOR:
SUBMITTAL

REV.	DATE	DESCRIPTION	BY:
0	06/06/2014	ISSUED FOR SUBMITTAL	JRS

DRAWN BY: JRS CHK.: MAY APV.: RCY

PLANS PREPARED BY:

LICENSURE:

19382
DONALD C. YOUNG
6/26/14
ARTIST
ARIZONA U.S.A.
EXP. 12/31/14
THIS DOCUMENT CONTAINS AN ELECTRONIC SIGNATURE PURSUANT TO A.R.S. TITLE 41 AND TITLE 44. IT IS A VIOLATION FOR ANY PERSON, UNLESS UNDER THE DIRECT SUPERVISION OF THE REGISTERED, TO MODIFY THIS DOCUMENT IN ANY WAY.

SHEET TITLE:

FINAL ENLARGED ANTENNA EQUIPMENT & ELECTRICAL PLANS

SHEET NUMBER: REVISION:

A-3 **0**
YDC-5946

NOTE:
EXISTING EQUIPMENT ROOM & RRRs NOT SHOW IN THIS VIEW

NOTES:
1. EXISTING EQUIPMENT ROOM & RRRs NOT SHOW IN THIS VIEW
2. 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.
3. PAINT ALL NEW ANTENNAS AND MOUNTING HARDWARE TO MATCH EXISTING, PER LOCAL JURISDICTIONAL REQUIREMENTS.
4. DO NOT PAINT RRRs UNLESS APPROVED THRU ALU REVIEW.

PLANS PREPARED FOR:



Together with Nextel.

CONSULTANT:



CONSULTING

1525 N. HAYDEN ROAD, STE 100 SCOTTSDALE, AZ 85257
OFFICE: (602) 326-0111 FAX: (602) 532-7407

PROJECT INFORMATION:

DRINKWATER
PH03XC252
8711 E. PINNACLE PEAK RD.
SCOTTSDALE, AZ 85255
MARICOPA COUNTY

CURRENT ISSUE DATE:
06/06/2014

ISSUED FOR:
SUBMITTAL

REV.	DATE	DESCRIPTION	BY
0	06/06/2014	ISSUED FOR SUBMITTAL	JRS

DRAWN BY: JRS CHK: MAY APV: RCY

PLANS PREPARED BY:

LICENSE:

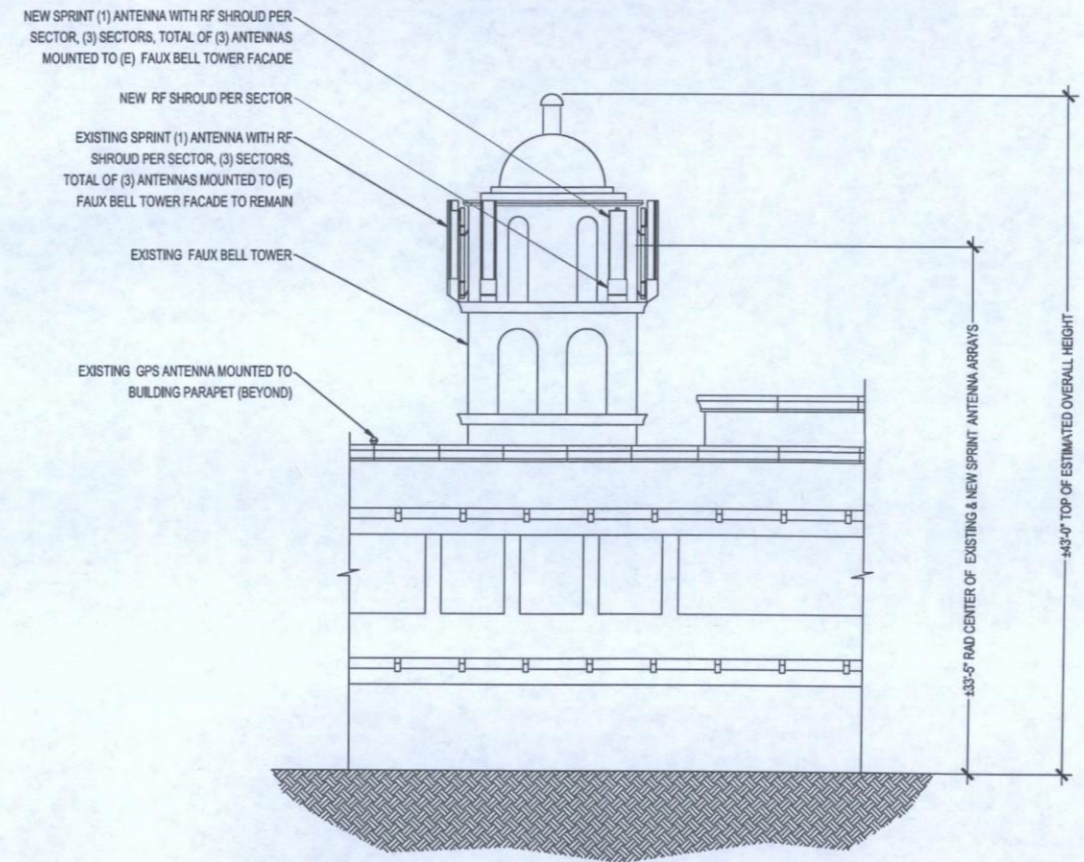
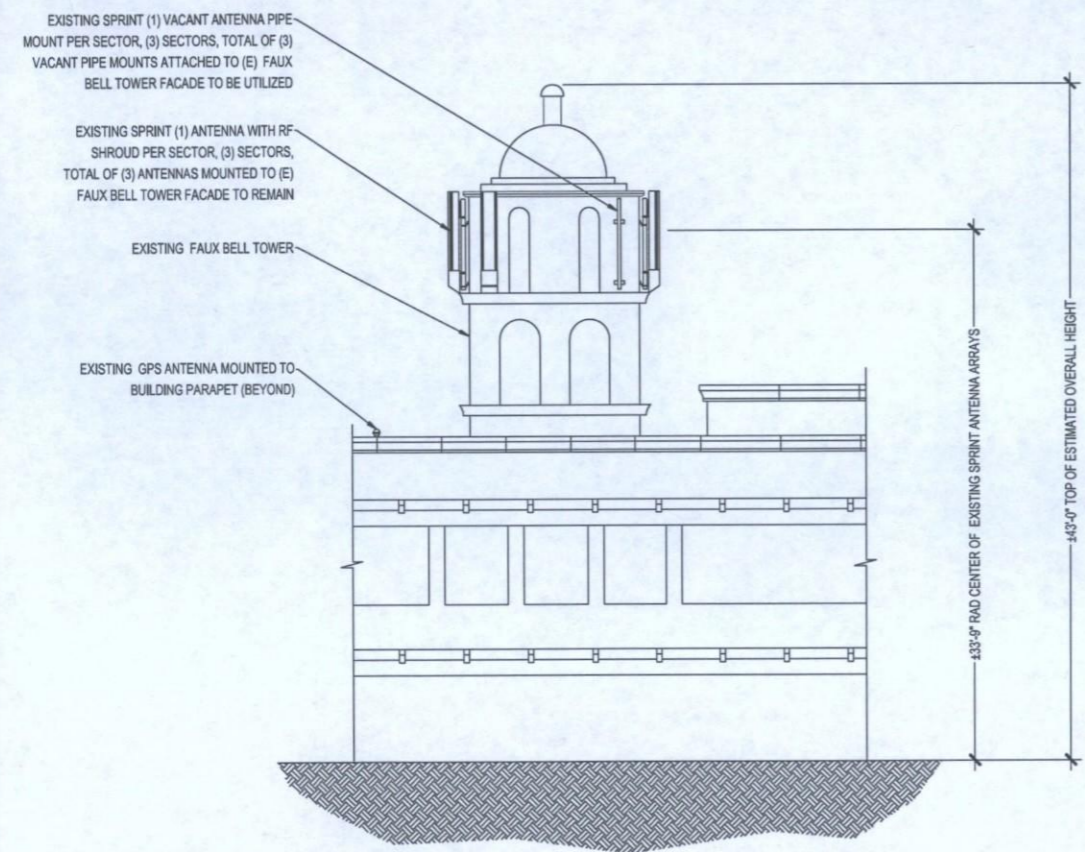


19382
DONALD C. YOUNG
6/06/14
ARIZONA U.S.A.
EXP: 12/31/14

THIS DOCUMENT CONTAINS AN ELECTRONIC SIGNATURE PURSUANT TO A.R.S. TITLE 41 AND TITLE 44. IT IS A VIOLATION FOR ANY PERSON, UNLESS UNDER THE DIRECT SUPERVISION OF THE REGISTRANT, TO MODIFY THIS DOCUMENT IN ANY WAY.

SHEET TITLE:
EXISTING & FINAL EAST ELEVATIONS

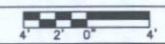
SHEET NUMBER: A-4 REVISION: 0
YDC-5946



STIPULATION SET
RETAIN FOR RECORDS
APPROVED

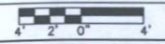
8-13-14 KN
DATE INITIALS

22"x34" SCALE: 3/16" = 1'-0"
11"x17" SCALE: 3/32" = 1'-0"



EXISTING NORTH ELEVATION 1

22"x34" SCALE: 3/16" = 1'-0"
11"x17" SCALE: 3/32" = 1'-0"



FINAL NORTH ELEVATION 2

RF Design Sheet, Version 2.01	
Basic Information	
Market	
Cascade Number	
Site Name	
Fixed Asset Location Code	
USID	
Cluster	
Vendor Civil Engineer	
Vendor Contact (phone/e-mail)	
Issue Date	
Revision #	
Revision Date	
Sprint RF Engineer	
Sprint RF Engineer (phone/e-mail)	
Sprint RF Manager	
Sprint RF Manager (phone/email)	

Location Information	
Latitude	#NAME?
Longitude	#NAME?
Address	
City, State, Zip Code	
County, E911 Phase	Phase 2

Design Information - New and Existing			
	Number of Sectors	BTS Qty	BTS Vendor/Model
LTE 850	3	1	Siemens 240XL
LTE 1900	3	1	Siemens 240XL
CDMA 850	3	1	Erikson 3206(3x1)
CDMA 1900	0	0	N/A
LTE 2500			
BTS Location/Cabinet	Indoor - Shelter		
Antenna Structure Type	Monopole		
Current Ethernet Speed	100 Mbps		
Required Ethernet Speed	250 Mbps		
Standard Design Considerations	Mounting structures (platforms, boom-gates, etc...) must be oriented to antenna azimuth(s). Color-Code all coax and jumpers to WISIL Color-Code Standard.		
Special Design Considerations			

Sector and Antenna Information - 800 MHz			
Existing Info* differs from the actual configuration at the site.			
Existing Info (Optional)	Alpha Sector	Beta Sector	Gamma Sector
Antenna Center Line (ft)			
Antenna Model			
Antenna Qty			
Antenna Mechanical Downtilt			
Antenna Electrical Downtilt 850			
Antenna Electrical Downtilt 1900			
RRH Model			
Filter			
Hybrid Model			
Hybrid Quantity			
Hybrid Spares			
Feedline Model (Diameter)			
Feedline Qty			
Duplexer			
Triplexer			
RET Controller			
Final New Info			
Antenna Center Line (ft)			
Antenna Manufacturer			
Antenna Model			
Antenna Qty			
Antenna Mechanical Downtilt			
Antenna Electrical Downtilt 850			
Antenna Electrical Downtilt 1900			
RRH / RRU Model			
RRH / RRU Qty			
Upper Diplexer Model			
Upper Diplexer Qty			
Hybrid Manufacturer			
Hybrid Model (Diameter)			
Hybrid Qty			
Hybrid Jumper Material			
Surge Arrestor			
Lower Diplexer Model			
Lower Diplexer Qty			
DC Block (Specify port)			
Duplexer Model			
Duplexer Qty			
Triplexer Model			
Triplexer Qty			
RET Cabling			
Rev			


Nokia - Equipment and Antenna Installation Parts - 2500 MHz Overlay						
Equipment Description	Part number	IMN	Quantity	Weight (lbs)	Mounting Kit (lbs)	Dimensions (HxWxD)
BBU	3BK 2500 RA-SI (3R37526AA)		26			11.8x19x3.5
BBU	3BK26961CA	10393	26			11.8x19x3.5
BBU	3R201208A		26			11.8x19x3.5
4 Port Antenna	APXVLL13N-C-A20		33			58.1 x 11.3 x 4.6
2 Port Antenna	APXVH128-C-A20		15			51.6 x 6.3 x 3.9
8 Port Antenna	APXVH14-C-120		54			58.3 x 12.6 x 7.9
External Filter	TBD		TBD			TBD
8 port RRU	TD-RRHx20-25		66			25.4in x 17.5 x 5.7 in
8 port RRU Solar Shield	TD-RRHx20-25 Solar Shield		35			26.1x 18.6 x 4.5 in
CSR			70			26.1x 18.6 x 6.7 in
Expansion cabinet						
Batteries						
Rectifier						
DC power cable						
Top Hat Cabinet						
Hybrid cable						
Fiber Jumper						

Samsung - Equipment and Antenna Installation Parts - 2500 MHz Overlay						
Equipment Description	Part number	IMN	Quantity	Weight (lbs)	Mounting Kit (lbs)	Dimensions (HxWxD)
2 Port Antenna	ET-X-WM-17-65-2P		7.5			47.63/64" x 5" x 3.15/16"
8 Port Antenna	ET-X-WM-18-65-8P		14.5			55" x 10.15/64" x 4.21/64"
8 Port Antenna	ET-X-WM-18-65-8P		18.9			69.11/16" x 12.3/64" x 4.21/64"
8 port RRU	RRH-BB		25			23.25/32" x 17.23/32" x 7.11/64"
External Filter	TBD		5.5			11.13/16" x 6.11/16" x 3.11/32"
BBU	UA0U		12			3.15/32" x 17.3/32" x 15.5/32"
Expansion cabinet						
Batteries						
Rectifier						
DC power cable						
Top Hat Cabinet						
Hybrid cable						
Fiber Jumper						

Erikson - Equipment and Antenna Installation Parts - 2500 MHz Overlay						
Equipment Description	Part number	IMN	Quantity	Weight (lbs)	Mounting Kit (lbs)	Dimensions (HxWxD)
BBU	EU561 800137624/1		6.6			13.8" x 11" x 3.2"
4 Port/4-branch Antenna	Kantron 8001073		37.4			71"x10.8"x4.1"
8 Port/4-branch Antenna	Kantron 8001083		42			71"x10.8"x4.1"
External Filter	N/A		N/A			N/A
2 Port Antenna	RFS APXV23-275516-C		15.4			55"x6.9"x4.3"
8 port RRU	RAU572 KAC 161 410/1		51			22.9"x10.9"x6.2"
CSR						
Expansion cabinet						
Batteries						
Rectifier						
DC power cable						
Top Hat Amplifier						
Hybrid cable						
Fiber Jumper						
Duplex Fiber with ODC Connector						


Description of Configuration Changes / Additions		
Sector ALPHA		
Sector BETA		
Sector GAMMA		
Revision History	Rev #	Date
		Owner / Date
		MM/YY

PLANS PREPARED FOR:



Together with Nextel.

CONSULTANT:



CONSULTING

125 N. HAYDEN ROAD, STE. 100 SCOTTSDALE, AZ 85257
OFF. TEL: (602) 326-0111 FAX: (602) 532-7407

PROJECT INFORMATION:

DRINKWATER
PH03XC252
8711 E. PINNACLE PEAK RD.
SCOTTSDALE, AZ 85255
MARICOPA COUNTY

CURRENT ISSUE DATE:

06/06/2014

ISSUED FOR:


SUBMITTAL

REV.	DATE	DESCRIPTION	BY
1	06/06/2014	ISSUED FOR SUBMITTAL	JRS

DRAWN BY: CHK APV.

JRS MAY RCY

PLANS PREPARED BY:



19382 DONALD C. YOUNG
P.E.
ARIZONA
EXP. 12/31/14

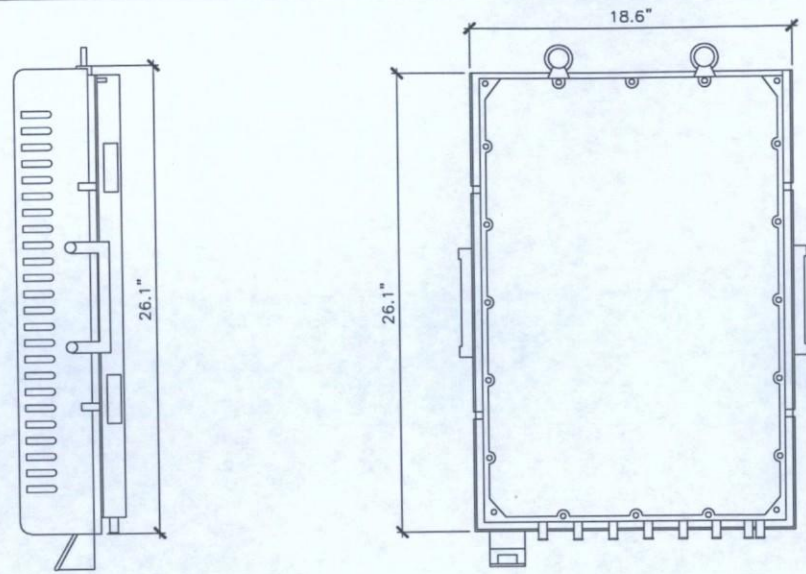
THIS DOCUMENT CONTAINS AN ELECTRONIC SIGNATURE PURSUANT TO A.R.S. TITLE 17 AND TITLE 44. IT IS A VIOLATION FOR ANY PERSON, UNLESS UNDER THE DIRECT SUPERVISION OF THE REGISTRANT, TO MODIFY THIS DOCUMENT IN ANY WAY.

SHEET TITLE:

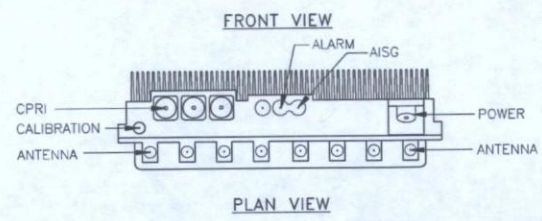
RF DATA SHEET EQUIPMENT INFORMATION

SHEET NUMBER: A-6 REVISION: 0

YDC-5946



SIDE VIEW

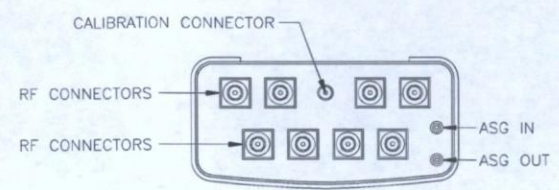


PLAN VIEW

NOTES
 COMPLY WITH MANUFACTURERS INSTRUCTIONS TO ENSURE THAT ALL RRU'S RECEIVE ELECTRICAL POWER WITHIN 24 HOURS OF BEING REMOVED FROM THE MANUFACTURER'S PACKAGING. DO NOT OPEN RRU PACKAGES IN THE RAIN

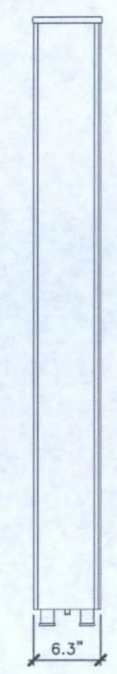
RFS APXV9TH14-ALU-120

RADOME MATERIAL: XXX
 RADOME COLOR: LIGHT GRAY
 DIMENSIONS, HxWxD.in: 56.3"x12.6"x6.3"
 WEIGHT: 55.12 lbs
 CONNECTORS: (2) XX FEMALE

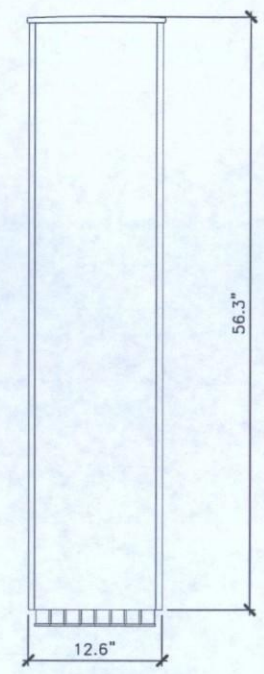


PLAN VIEW

**STIPULATION SET
 RETAIN FOR RECORDS
 APPROVED**



SIDE VIEW



FRONT VIEW

PLANS PREPARED FOR:

Together with Nextel.

CONSULTANT:
COAL CREEK CONSULTING
 1525 N. HAYDEN ROAD, STE 100 SCOTTSDALE, AZ 85257
 OFFICE: (602) 326-0111 FAX: (602) 532-7407

PROJECT INFORMATION:

DRINKWATER
 PH03XC252
 8711 E. PINNACLE PEAK RD.
 SCOTTSDALE, AZ 85255
 MARICOPA COUNTY

CURRENT ISSUE DATE:
 06/06/2014

ISSUED FOR:
 SUBMITTAL

REV.	DATE	DESCRIPTION	BY
1	06/06/2014	ISSUED FOR SUBMITTAL	JRS

DRAWN BY: JRS CHK.: MAY APV.: RCY

PLANS PREPARED BY:

LICENSE:

THIS DOCUMENT CONTAINS AN ELECTRONIC SIGNATURE PURSUANT TO A.R.S. TITLE 41 AND TITLE 44. IT IS A VIOLATION FOR ANY PERSON, UNLESS UNDER THE DIRECT SUPERVISION OF THE REGISTRANT, TO MODIFY THIS DOCUMENT IN ANY WAY.

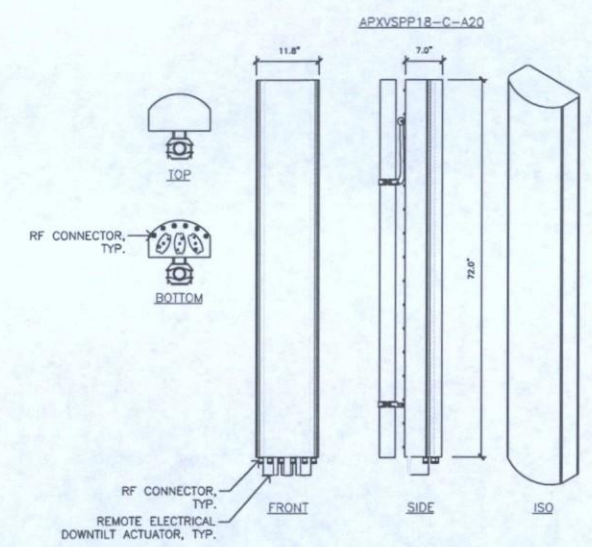
SHEET TITLE:
 EQUIPMENT DETAILS

SHEET NUMBER: A-5 REVISION: 0
 YDC-5946

SCALE: NOT TO SCALE 25 RRUS 4

SCALE: NOT TO SCALE 8-13-14 *KW* NEW 25 ANTENNA 2

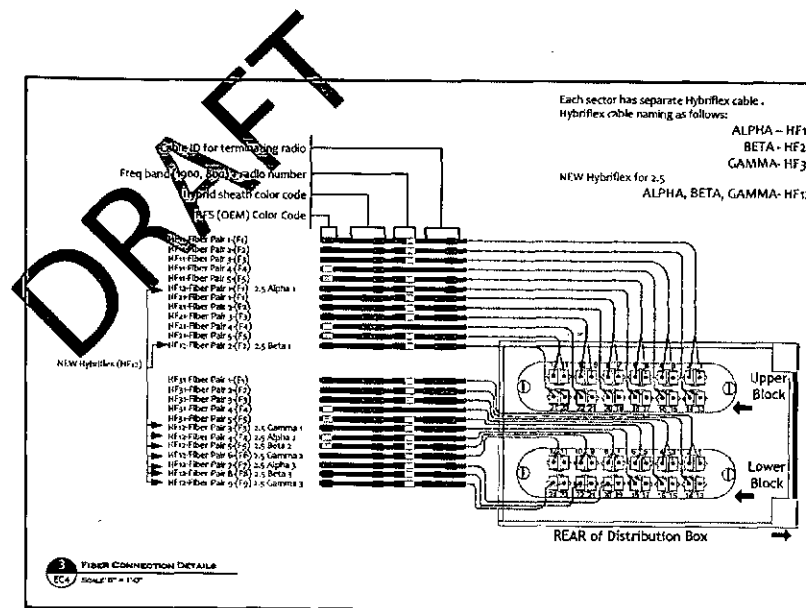
DATE INITIALS



SCALE: NOT TO SCALE NOT USED 3

SCALE: NOT TO SCALE EXISTING ANTENNA 1

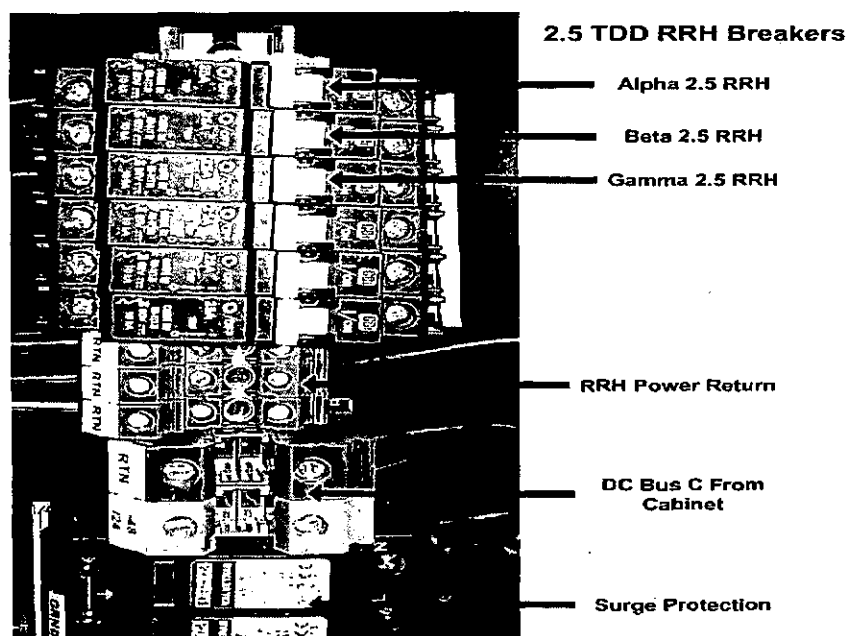
Sector	CPRI Fiber Technology	Dist. Box Coupler Panel	Recommended Fiber Label (Location + Port)	Cabinet Termination Port
Alpha	Alpha 2.5 CPRI 1	Upper 17	TDD_2.5_1_1	2.5 TDD BBU-Optic 1
	Alpha 2.5 CPRI 1	Upper 18	TDD_2.5_1_1	2.5 TDD BBU-Optic 1
	Alpha 2.5 CPRI 2	Lower 7	TDD_2.5_1_2	2.5 TDD BBU-Optic 4
	Alpha 2.5 CPRI 2	Lower 8	TDD_2.5_1_2	2.5 TDD BBU-Optic 4
	Alpha 2.5 CPRI 3	Lower 19	TDD_2.5_1_3	2.5 TDD BBU-Optic 7
	Alpha 2.5 CPRI 3	Lower 20	TDD_2.5_1_3	2.5 TDD BBU-Optic 7
Beta	Beta 2.5 CPRI 1	Upper 23	TDD_2.5_2_1	2.5 TDD BBU-Optic 2
	Beta 2.5 CPRI 1	Upper 24	TDD_2.5_2_1	2.5 TDD BBU-Optic 2
	Beta 2.5 CPRI 2	Lower 9	TDD_2.5_2_2	2.5 TDD BBU-Optic 5
	Beta 2.5 CPRI 2	Lower 10	TDD_2.5_2_2	2.5 TDD BBU-Optic 5
	Beta 2.5 CPRI 3	Lower 21	TDD_2.5_2_3	2.5 TDD BBU-Optic 8
	Beta 2.5 CPRI 3	Lower 22	TDD_2.5_2_3	2.5 TDD BBU-Optic 8
Gamma	Gamma 2.5 CPRI 1	Lower 17	TDD_2.5_3_1	2.5 TDD BBU-Optic 3
	Gamma 2.5 CPRI 1	Lower 18	TDD_2.5_3_1	2.5 TDD BBU-Optic 3
	Gamma 2.5 CPRI 2	Lower 11	TDD_2.5_3_2	2.5 TDD BBU-Optic 6
	Gamma 2.5 CPRI 2	Lower 12	TDD_2.5_3_2	2.5 TDD BBU-Optic 6
	Gamma 2.5 CPRI 3	Lower 23	TDD_2.5_3_3	2.5 TDD BBU-Optic 9
	Gamma 2.5 CPRI 3	Lower 24	TDD_2.5_3_3	2.5 TDD BBU-Optic 9



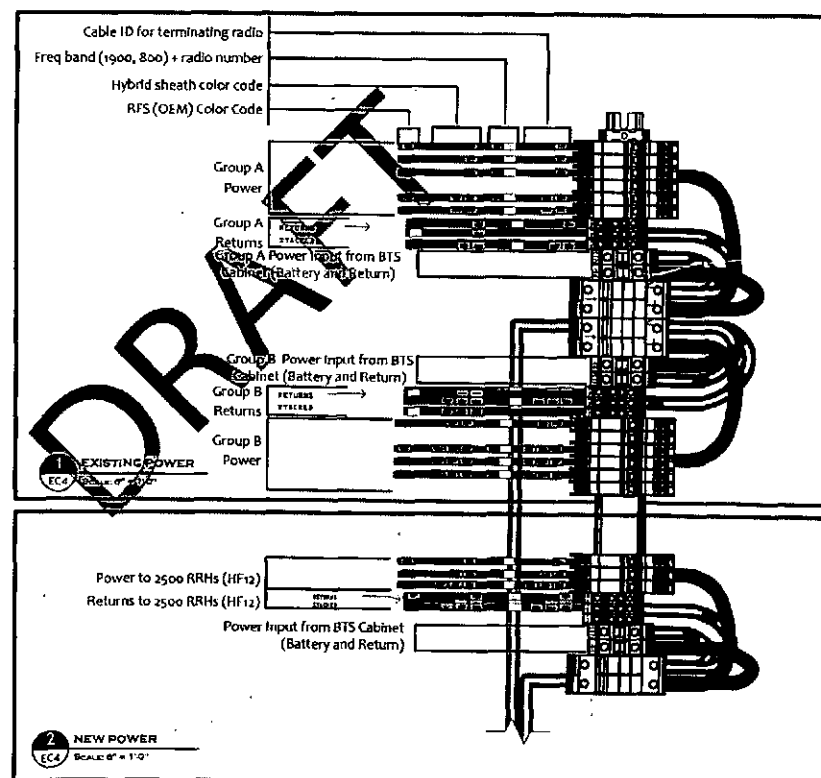
JUNCTION BOX FIBER LABELS | 1

FIBER CONNECTIONS | 2

DC Power for 2.5 TDD Is on 3rd DC Rail (Growth)



JUNCTION BOX 3RD DC RAIL | 3



POWER CONNECTIONS | 4

PLANS PREPARED FOR:

Sprint
 Together with Nextel.

CONSULTANT:
COAL CREEK CONSULTING
 1525 N. HAYDEN ROAD, STE. 100 SCOTTSDALE, AZ 85257
 OFFICE: (602) 326-0111 FAX: (602) 532-7407

PROJECT INFORMATION:
DRINKWATER PH03XC252
 8711 E. PINNACLE PEAK RD.
 SCOTTSDALE, AZ 85255
 MARICOPA COUNTY

CURRENT ISSUE DATE:
06/06/2014

ISSUED FOR:
SUBMITTAL

REV. DATE DESCRIPTION BY:

0	06/06/2014	ISSUED FOR SUBMITTAL	JRS
---	------------	----------------------	-----

DRAWN BY: JRS
 CHECKED BY: MAY
 APPROVED BY: RCY

PLANS PREPARED BY:

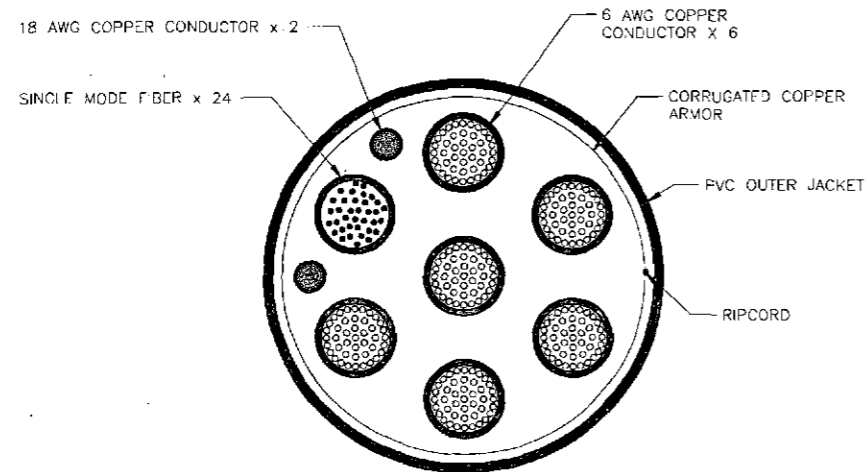
LICENSURE:

 19382 DONALD C. YOUNG
 PROFESSIONAL ENGINEER
 STATE OF ARIZONA
 EXP. 12/31/14
 THIS DOCUMENT CONTAINS AN ELECTRONIC SIGNATURE PURSUANT TO A.R.S. TITLE 41 AND TITLE 44. IT IS A VIOLATION FOR ANY PERSON, UNLESS UNDER THE DIRECT SUPERVISION OF THE REGISTRANT, TO MODIFY THIS DOCUMENT IN ANY WAY.

SHEET TITLE:
FIBER AND DC CONNECTION DETAILS

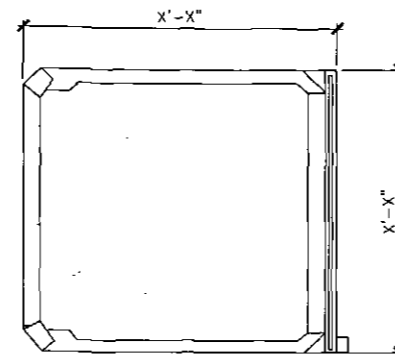
SHEET NUMBER: **A-8** REVISION: **0**

YDC-5946

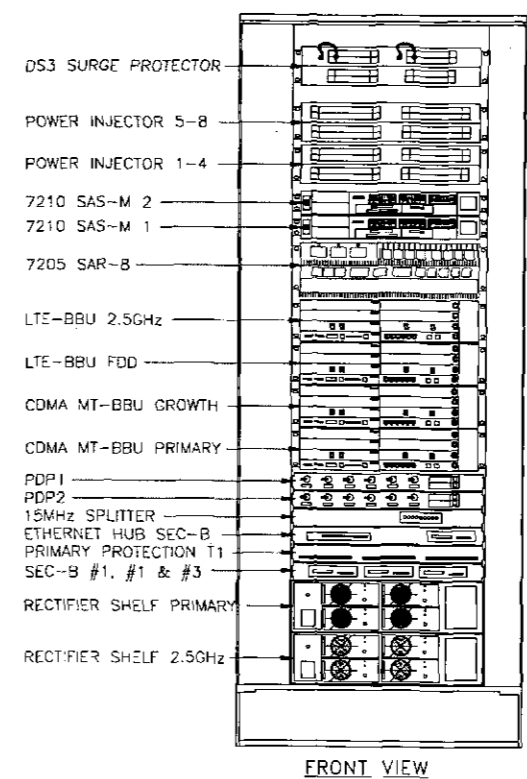


NOTE: CABLE CROSS-SECTION NOT DRAWN TO SCALE

CABLE TYPE	Number, size (awg)	B/C #6 + 2/C #18
	Voltage	600
	Outer Jacket	PVC
	Shielding	Corrugated Copper
	Max shield resistance (ohm/ft @ 20 c)	0.0035
	Drain	n/a
	Ripcord	Kevlar
	Dc conductor material	Copper
	Dc conductor size (awg)	6
	Max Dc resistance (ohm/1000ft)	0.411 @ 20 deg C
	Color Code	Black/Red
	Alarm Conductor Material	Copper
	Alarm conductor size (awg)	18
	Max Dc resistance (ohm/1000ft)	6.7
	Color Code	TBD
	Fiber Cables	SM
	Outer Diameter (in) - Nominal	1.24
	Weight (lb/ft)	1.05
	Minimum Bend Radius (in)	15
	Bend Moment (lb/ft)	TBD
	Tensile Strength (lb)	325
	Crush Resistance, FOTP-41 (N/mm)	22
	Strength Member	No
	Operating Temperature Range (low)	-40 deg C
	Operating Temperature Range (high)	+80 deg C
Fiber Type		Low Water Peak Single Mode Loose Tube
Fiber Standard Compliance		ITU-T Rec. G.652.D, G.657.A2 IEC 60793-2-50 Type B.1.3 & Type B.6 A&B
Fiber Coating Diameter (um)		242 +/- 0.007mm 0.9 +/- 0.005mm
Fiber Count		24
Number of fiber subunits		1
Fiber count each units		24
Fiber count jackets		FR Jacket
Max attenuation, 1310 nm (db/km)		Less than equo 0.5
Max attenuation, 1550 nm (db/km)		Less than equo 0.5



BOTTOM VIEW



FRONT VIEW

- DS3 SURGE PROTECTOR
- POWER INJECTOR 5-8
- POWER INJECTOR 1-4
- 7210 SAS-M 2
- 7210 SAS-M 1
- 7205 SAR-B
- LTE-BBU 2.5GHz
- LTE-BBU FDD
- CDMA MT-BBU GROWTH
- CDMA MT-BBU PRIMARY
- PDP1
- PDP2
- 15MHz SPLITTER
- ETHERNET HUB SEC-B
- PRIMARY PROTECTION T1
- SEC-B #1, #1 & #3
- RECTIFIER SHELF PRIMARY
- RECTIFIER SHELF 2.5GHz

EXISTING BBU WITH 2.5 EQUIPMENT 2

SCALE: NOT TO SCALE

SCALE: NOT TO SCALE

PLANS PREPARED FOR:

Sprint
Together with Nextel.

CONSULTANT:
COAL CREEK CONSULTING
1525 N. HAYDEN ROAD, STE 100 SCOTTSDALE, AZ 85257
OFFICE: (602) 326-0111 FAX: (602) 332-7407

PROJECT INFORMATION:
DRINKWATER
PH03XC252
8711 E. PINNACLE PEAK RD.
SCOTTSDALE, AZ 85255
MARICOPA COUNTY

CURRENT ISSUE DATE:
06/06/2014

ISSUED FOR:
SUBMITTAL

REV.	DATE	DESCRIPTION	BY
0	05/05/2014	ISSUED FOR SUBMITTAL	JRS

DRAWN BY: CHK. APV:
JRS MAY RCY

PLANS PREPARED BY:

LICENSURE:

19382 DONALD C. YOUNG, P.E. STATE OF ARIZONA, LICENSE NO. 19382, EXPIRES 12/31/14

THIS DOCUMENT CONTAINS AN ELECTRONIC SIGNATURE PURSUANT TO A.R.S. TITLE 31 AND TITLE 44. IT IS A VIOLATION FOR ANY PERSON, UNLESS UNDER THE DIRECT SUPERVISION OF THE REGISTRANT, TO MODIFY THIS DOCUMENT IN ANY WAY.

SHEET TITLE:
EQUIPMENT DETAILS

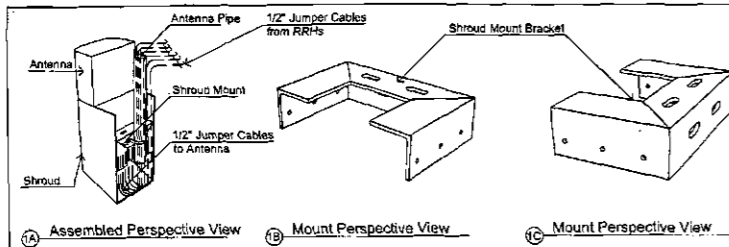
SHEET NUMBER: A-9 REVISION: 0

YDC-5946

SCALE: NOT TO SCALE

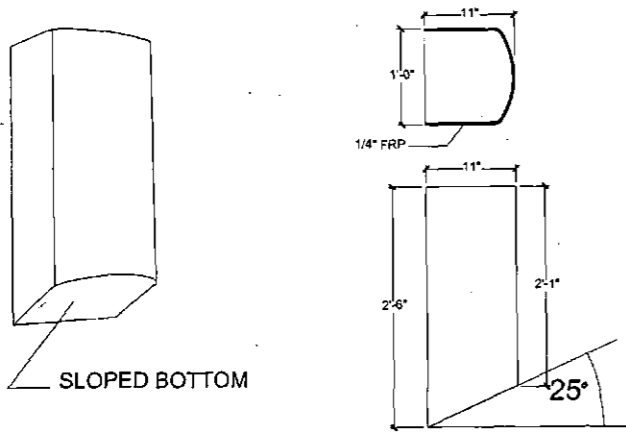
HYBRID CABLE X-SECTION AND DATA 3

2.5 POWER CABINET 1



1501 S. Euclid Avenue
Tucson, AZ. 85713
(520) 294-3900
www.larsoncamo.com

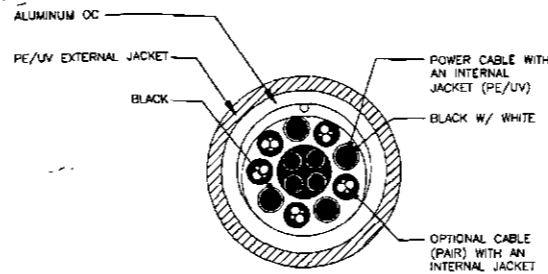
1 ASSEMBLED MOUNT



2 Larson Part Number: LAS-004

Drawing Date: May 3, 2013

MANUFACTURER: RFS
MODEL: HB114-1-08U4-M5F
WEIGHT (LB/FT): 1.30
MINIMUM BENDING RADIUS SINGLE BENDING: 8"
MINIMUM BENDING RADIUS REPEATED BENDING: 20"
RECOMMENDED/MAXIMUM CLAMP SPACING: 3.25'/4.0'

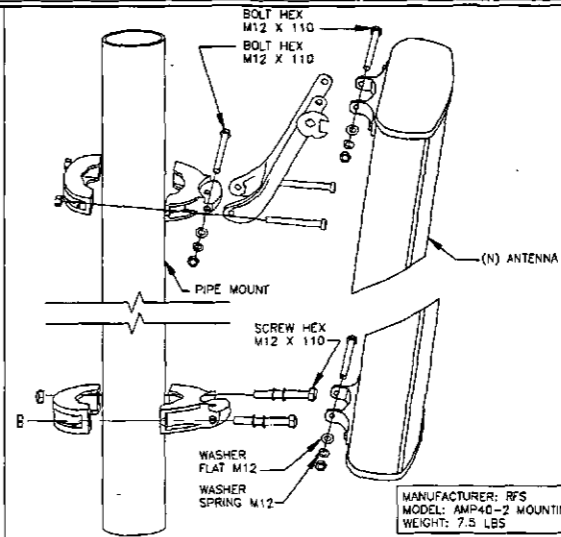


SCALE: NOT TO SCALE

FIBER OPTIC CABLE 8

SCALE: NOT TO SCALE

ANTENNA BRACKET DETAIL 7



MANUFACTURER: RFS
MODEL: AMP40-2 MOUNTING KIT
WEIGHT: 7.5 LBS

PLANS PREPARED FOR:



CONSULTANT:

COAL CREEK

CONSULTING

1525 N. HYDEN ROAD, STE. 100 SCOTTSDALE, AZ 85257
OFFICE: (602) 326-0111 FAX: (602) 532-7407

PROJECT INFORMATION:

DRINKWATER
PH03XC252

8711 E. PINNACLE PEAK RD.
SCOTTSDALE, AZ 85255
MARICOPA COUNTY

CURRENT ISSUE DATE:

06/06/2014

ISSUED FOR:

SUBMITTAL

REV. DATE DESCRIPTION BY:

REV.	DATE	DESCRIPTION	BY
1	06/06/2014	ISSUED FOR SUBMITTAL	JRS

DRAWN BY: CHK. APV.:

JRS MAY RCY

PLANS PREPARED BY:

22"x34" SCALE: 3/4" = 1'-0"
11"x17" SCALE: 3/8" = 1'-0"

SHROUD DETAIL 5

22"x34" SCALE: 3/4" = 1'-0"
11"x17" SCALE: 3/8" = 1'-0"

NOT USED 4

22"x34" SCALE: 3/4" = 1'-0"
11"x17" SCALE: 3/8" = 1'-0"

NOT USED 3

SCALE: NOT TO SCALE

NOT USED 2

SCALE: NOT TO SCALE

NOT USED 1

LICENSURE:



THIS DOCUMENT CONTAINS AN ELECTRONIC SIGNATURE PURSUANT TO A.R.S. TITLE 41 AND TITLE 44. IT IS A VIOLATION FOR ANY PERSON, UNLESS UNDER THE DIRECT SUPERVISION OF THE REGISTRANT, TO COPY THIS DOCUMENT IN ANY WAY.

SHEET TITLE:

CONSTRUCTION DETAILS

SHEET NUMBER: REVISION:

A-10

0

YDC-5946