



CITY OF PLANO COUNCIL AGENDA ITEM

CITY SECRETARY'S USE ONLY				
<input type="checkbox"/> Consent <input type="checkbox"/> Regular <input type="checkbox"/> Statutory				
Council Meeting Date:		4/27/2015		
Department:		Government Relations		
Department Head		Mark Israelson		
Agenda Coordinator (include phone #): Andrea Park X5113				
CAPTION				
A Resolution of the City of Plano, Texas, approving the terms and conditions of a First Amendment to Communications Facilities License By and Between the City of Plano, Texas, and Dallas MTA, L.P. d/b/a Verizon Wireless, authorizing its execution by the City Manager or his designee; and providing an effective date.				
FINANCIAL SUMMARY				
<input type="checkbox"/> NOT APPLICABLE <input type="checkbox"/> OPERATING EXPENSE <input checked="" type="checkbox"/> REVENUE <input type="checkbox"/> CIP				
FISCAL YEAR: 2014-15	Prior Year (CIP Only)	Current Year	Future Years	TOTALS
Budget	0	21,282	0	21,282
Encumbered/Expended Amount		0	0	0
This Item	0	19,800	0	19,800
BALANCE	0	41,082	0	41,082
FUND(s): WATER & SEWER FUND				
COMMENTS: Approval of this item will provide additional revenue of \$19,800 per year beginning FY 2014-15 and includes an annual lease fee escalator of 3% for additional communication equipment on the Tennyson Center Water Tower.				
STRATEGIC PLAN GOAL: Resolutions to approve and amend terms and conditions of communication licenses relate to the City's Goals of Financially Strong City with Service Excellence and Partnering for Community Benefit.				
SUMMARY OF ITEM				
This Resolution amends an existing Communications Facilities License originally approved by City Council on November 29, 2005.				
List of Supporting Documents: Resolution, Amendment, Appendix "A"			Other Departments, Boards, Commissions or Agencies	

A Resolution of the City of Plano, Texas, approving the terms and conditions of a First Amendment to Communications Facilities License By and Between the City of Plano, Texas, and Dallas MTA, L.P. d/b/a Verizon Wireless, authorizing its execution by the City Manager or his designee; and providing an effective date.

WHEREAS, the City Council has been presented a proposed First Amendment to Communications Facilities License between the City of Plano, Texas and Dallas MTA, L.P. d/b/a Verizon Wireless, a substantial copy of which is attached hereto as Exhibit "A" and incorporated herein by reference (hereinafter called "First Amendment"); and,

WHEREAS, the City of Plano and Dallas MTA, L.P. d/b/a Verizon Wireless, entered into a Communications Facilities License on November 29, 2005; and

WHEREAS, the City of Plano and Dallas MTA, L.P. d/b/a Verizon Wireless, desire to amend said communications facilities license to upgrade communications equipment; and

WHEREAS, upon full review and consideration of the First Amendment, and all matters attendant and related thereto, the City Council is of the opinion that the terms and conditions thereof should be approved, and that the City Manager or his designee shall be authorized to execute it on behalf of the City of Plano.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF PLANO, TEXAS, THAT:

Section I. The terms and conditions of the First Amendment, having been reviewed by the City Council of the City of Plano and found to be acceptable and in the best interests of the City of Plano and its citizens, are hereby in all things approved.

Section II. The City Manager, or his designee, is hereby authorized to execute the First Amendment and all other documents in connection therewith on behalf of the City of Plano.

Section III. This Resolution shall become effective immediately upon its passage.

DULY PASSED AND APPROVED this the 27th day of April, 2015.

Harry LaRosiliere, MAYOR

ATTEST:

Lisa C. Henderson, CITY SECRETARY

APPROVED AS TO FORM:

Paige Mims, CITY ATTORNEY

Site Name: **Tennyson Center Water Tower**
Site Number: **165357**

**FIRST AMENDMENT TO
COMMUNICATIONS FACILITIES LICENSE**

THIS AMENDMENT TO COMMUNICATIONS FACILITIES LICENSE, (“Amendment”) is made effective as of the ___ day of _____, 2015 (“Effective Date”), by and between The City of Plano, a home-rule municipal corporation (“City”) and DALLAS MTA, L.P. d/b/a VERIZON WIRELESS (hereinafter referred to as “Licensee”).

BACKGROUND

Pursuant to a Communications Facilities License dated November 29, 2005 (“Agreement”), City provided to Licensee a license to use the premises located at City’s elevated water tank at 6825 Communications Parkway, Plano, Collin County, TX 75086.

City and Licensee desire to amend the Agreement as set forth herein. In case of any inconsistencies between the terms and conditions contained in the Agreement and the terms and conditions contained herein, the terms and conditions herein shall control. Except as set forth below, all provisions of the Agreement remain unchanged and in full force and effect.

NOW THEREFORE, in consideration of the mutual covenants contained herein and for other good and valuable considerations, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

1.1 To replace in its entirety the original site plan with Appendix “A” (Site Plan) dated December 11, 2014, attached hereto and made a part hereof.

5.1. **Rent Payment** is hereby modified to read:

In consideration for providing the PREMISES for use by LICENSEE, the LICENSEE shall pay rent to CITY annually, with the first payment being due within thirty (30) days following the Effective Date of this Agreement. Thereafter payment shall be due annually on the anniversary of the Effective Date throughout the initial term and all renewal terms hereof and prorated for any partial term. LICENSEE shall pay rent to CITY annually in advance, without prior notice or demand, without any abatement, setoff, reduction, deduction, counterclaim or recoupment whatsoever, in the amount of Forty-One Thousand, Eighty-One and 74/100 Dollars (\$41,081.74). Such increase represents the compensation for the addition of six (6) RRH’s, three (3) Sector Boxes, and one (1) OVP Box and is subject to future adjustments as provided in the Agreement. Interest on late payments shall accrue at then prime interest rate. If this Agreement is terminated at a time other than the last day of the calendar

year of the term for any reason other than a default by LICENSEE, all Rent Payments shall be prorated as of the date of termination and all prepaid Rent Payments shall be refunded to LICENSEE.

IN WITNESS WHEREOF, the parties have caused this Amendment to be executed on the _____ day of _____, 2015.

City: City of Plano

Licensee: Dallas MTA, L.P. d/b/a Verizon Wireless
By Verizon Wireless Texas, LLC, its general partner.

By: _____
Bruce D. Glasscock
City Manager

By: _____
Aparna Khurjekar
Area Vice President – Network

Date: _____

Date: _____ 3/19/15



OTHER UTILITIES NOT INCLUDED IN DIGGERS HOTLINE AND LOCAL UTILITY DISTRICTS AND COMPANIES SHALL ALSO BE NOTIFIED PRIOR TO EXCAVATION

BUILDING CODES:
INTERNATIONAL BUILDING CODE - 2012
NATIONAL ELECTRICAL CODE - 2014

CD REVIEW NOTE:
NOTE TO REVIEWER:
ANY PLAN SIZE LESS THAN 11X17 IS REDUCED IN SIZE AND SHOULD NOT BE SCALED

SCOPE OF WORK:
NET TOTAL: (5) TRI-BAND ANTENNAS, AWS/700 WILL SHARE 1 TRIBAND PER SECTOR. (5) 1-5/8" COAX, (1) MAIN OVP DISTRIBUTION BOX IN SHELTER OR NEAR BBU, (1) RUN OF 1-1/4" HYBRIFLEX LINE. (6X12), (1) MAIN OVP DISTRIBUTION BOX ON TOWER, (3) SECTOR BOXES, (3) 2X4 HYBRID FEEDERS FROM OVP TO SECTOR BOXES, (3) 5/8" HYBRIFLEX JUMPERS FROM SECTOR BOXES TO RRU'S (1X1), (3) ALU 40W 700 RRH, (3) ALU AWS 60W RRH, (12) 1/2" COAX JUMPERS FROM RRU TO ANTENNA. THE PCS TMA'S WILL BE LEFT ALONE. (5) DIPLEXERS WILL BE REMOVED, (5) EXISTING COAX WILL GO TO PCS ONLY. (5) EXISTING ANTENNAS WILL BE REMOVED TO BE REPLACED WITH THE TRIBANDS. THE 1-1/4" WILL SHARE A CONDUIT WITH ONE OF THE 1-5/8" RUNS. PLEASE ORDER AISG 2.0 COMPATIBLE RET. PLEASE PLAN FOR RET KIT AISG 2.0 AND SCU- REMOTE IP ADDRESSABLE. CALL YUSUF DANAWALA @ 817-961-2989 FOR ANY QUESTIONS.

STRUCTURAL REVIEW NOTE:
A STRUCTURAL EVALUATION OF THE SITE WAS PERFORMED BY: MALOUF ENGINEERING INTL., WITH MEI PROJECT ID: TX03726N-14V2 DATED 05/09/2014. INFORMATION INDICATED IN THE STRUCTURAL ANALYSIS REGARDING STRUCTURE, APPURTENANCE MOUNTINGS, EQUIPMENT, AND COAX ARRANGEMENTS SUPERCEDES THESE DRAWINGS.

PROJECT SIGNOFF:
REAL ESTATE: _____
RFD: _____
CONSTRUCTION: _____
OPERATIONS: _____

Appendix "A" (Site Plan)
Page 1 of 14



TENNYSON CENTER WT

6825 COMMUNICATIONS PKWY
PLANO, TX 75024

SITE ID # 165357

AWS ANTENNA ADDITION PROJECT AT EXISTING
TELECOMMUNICATION SITE

VERIZON WIRELESS
7 VILLAGE CIRCLE SUITE #400.
WESTLAKE, TEXAS 76262
PHONE: 817-961-2572

DRAWING INDEX

SHEET NO.	DESCRIPTION	
T-1	TITLE SHEET	
C-1	OVERALL SITE PLAN/ TOWER ELEVATION	
C-2	EQUIPMENT PLAN BEFORE / AFTER	
C-3	TOWER ELEVATION BEFORE	
C-4	TOWER ELEVATION AFTER	
A-1	ANTENNA ORIENTATION PLAN	
A-2	ANTENNA AND COAX MOUNTING DETAILS	
A-3	NEW SECTOR DETAILS	
A-4	PENETRATION DETAILS	
A-5	ICE BRIDGE DETAILS	
A-6	ANTENNA DIAGRAM	
A-7	TECH REVIEW	
A-8	DETAILS	
A-9	NOTES	
S01	TYPICAL NEW SECTOR LAYOUT (AS PER SA BY MALOUF ENGINEERING INTL., WITH MEI PROJECT ID: TX03726N-14V2 DATED 06/09/2014)	
S02	REWORKED ANTENNA WALL MOUNT (AS PER SA BY MALOUF ENGINEERING INTL., WITH MEI PROJECT ID: TX03726N-14V2 DATED 06/09/2014)	
4	12/11/14 CITY COMMENTS	
3	09/03/14 CITY COMMENTS	
2	08/04/14 CITY COMMENTS	
1	07/07/14 CITY COMMENTS	
0	07/02/14 FINAL CD	
F	06/18/14 ISSUED FOR REVIEW	
E	05/05/14 ISSUED FOR REVIEW	
D	04/25/14 ISSUED FOR REVIEW	
C	04/22/14 ISSUED FOR REVIEW	
B	04/21/14 ISSUED FOR REVIEW	
A	04/15/14 ISSUED FOR REVIEW	
NO.	DATE	REVISION

DATA:
LATITUDE: 33° 04' 10.16"N
LONGITUDE: -96° 49' 47.96"W
ELEVATION: 698' AMSL
(TECH REVIEW DATED 05/29/2014)

POWER COMPANY
UNKNOWN

TELEPHONE COMPANY
UNKNOWN

SITE INFORMATION
COUNTY: COLLIN
CITY: PLANO
OCCUPANCY: U-UTILITY
CONSTRUCTION TYPE: EXISTING

STRUCTURE OWNER
CITY OF PLANO
1520 AVENUE K
PLANO, TX 75074
(972)941-7000

SITE REP
PROJECT MANAGER
C.A.BASS LLC
RUSTIN FOWLER
(903) 596-8464

CONSTRUCTION CONTACT
LARRY FOWLER
(214) 475-1475

PROFESSIONAL ENGINEER
ALLPRO CONSULTING GROUP, INC.
9221 LYNDON B JOHNSON
FREEWAY
SITE 204, DALLAS, TX 75243
PHONE: (972) 231-8893

STRUCTURAL ENGINEER
MALOUF ENGINEERING INTL., INC
17950 PRESTON ROAD
SUITE 720, DALLAS, TX 75252
(972)783-2578

APPLICANT
VERIZON WIRELESS
7 VILLAGE CIRCLE,
SUITE #400
WESTLAKE, TEXAS 76262
PHONE: (817) 961-2572



9221 LYNDON B JOHNSON
FREEWAY
SUITE 204, DALLAS, TX 75243
PHONE: 972-231-8893
FAX: 866-364-8375
WWW.ALLPROCGI.COM
FIRM REGISTRATION # 8242
ACGI# 14-2830



12/11/14

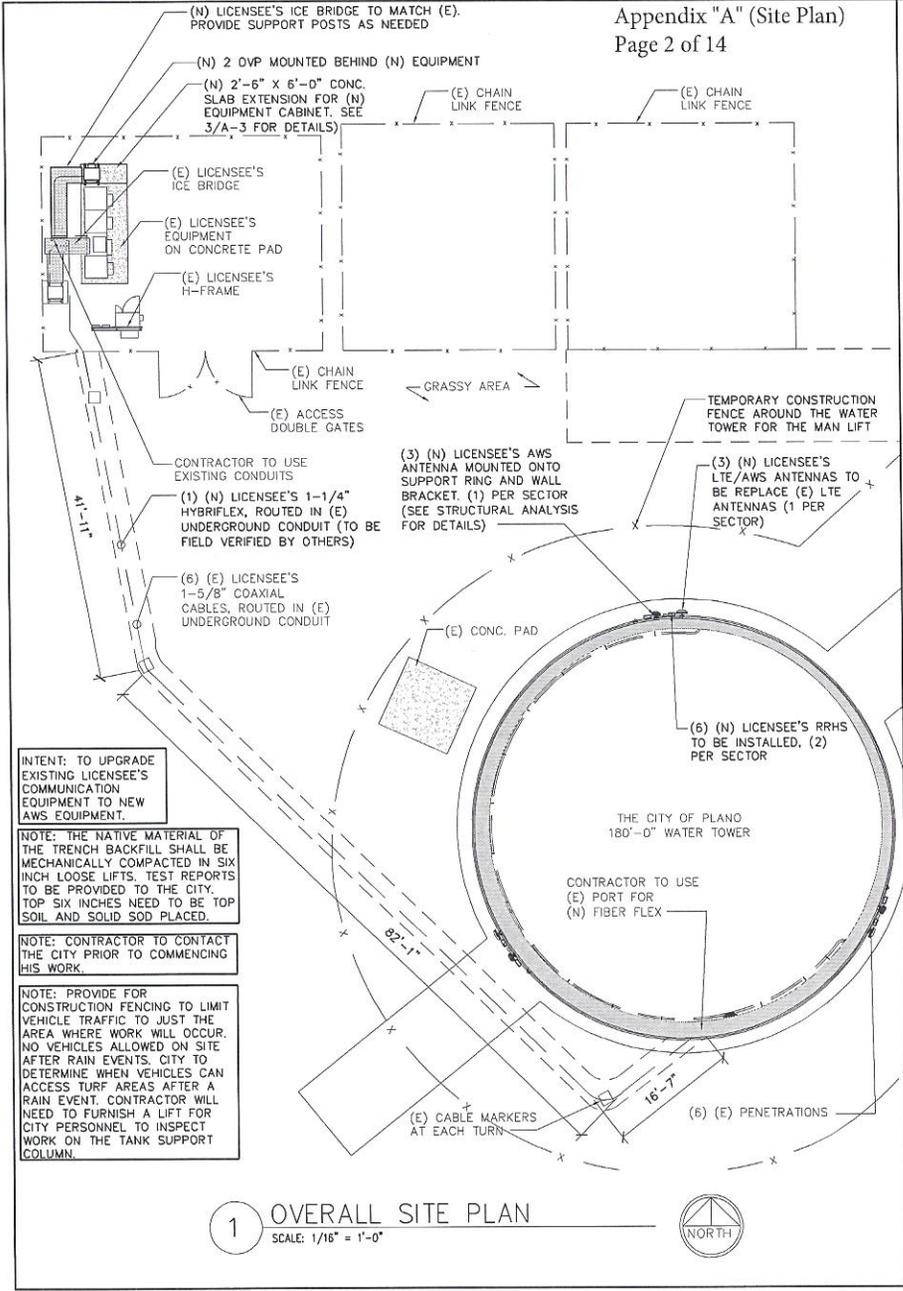
TENNYSON CENTER WT

DATE DRAWN: 04/15/14 DRAWN BY: BK
APPROVED BY: JG ACQ# NO. 14-2830

SITE ID # 165357

SHEET: **T-1**

Appendix "A" (Site Plan)
Page 2 of 14



1 OVERALL SITE PLAN
SCALE: 1/16" = 1'-0"



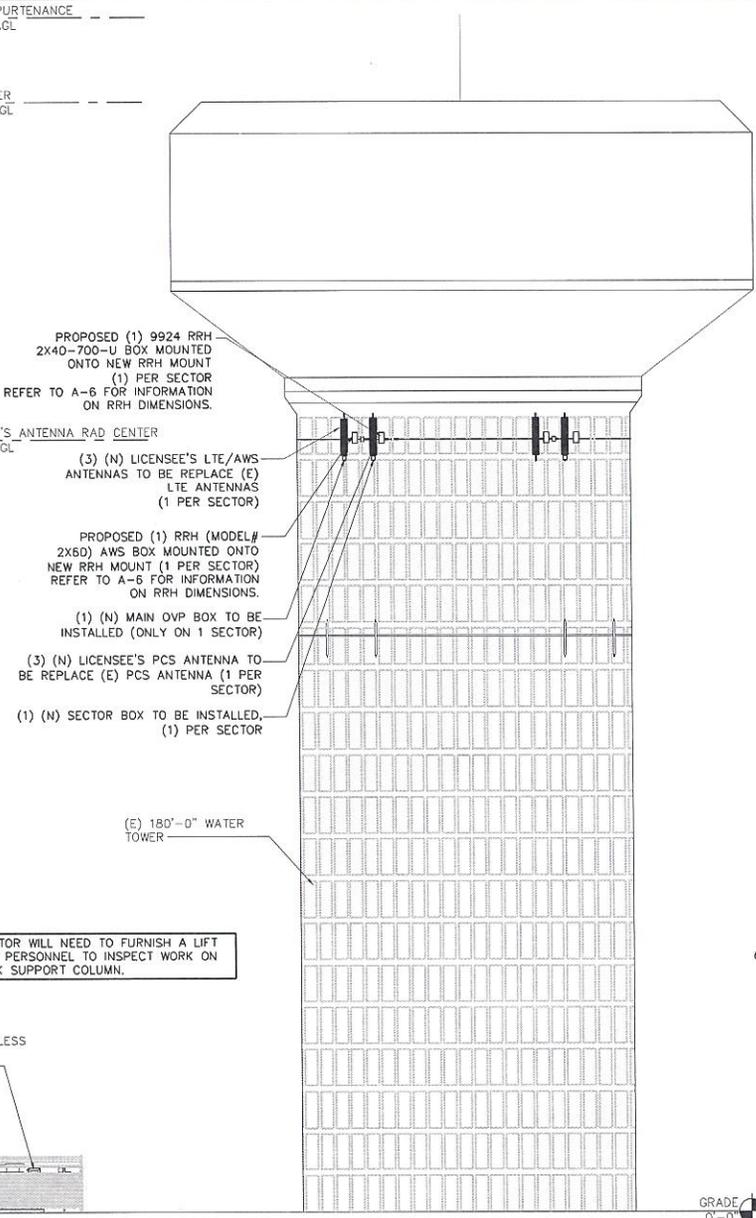
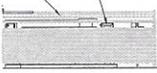
HIGHEST APPURTENANCE
ELEV. 193' AGL

TOP OF TOWER
ELEV. 180' AGL

(E) LICENSEE'S ANTENNA RAD CENTER
ELEV. 125' AGL

(E) LICENSEE'S WIRELESS
EQUIPMENT ON
CONCRETE PAD

(E) CHAIN LINK
FENCE



2 TOWER ELEVATION
SCALE: 1" = 20'-0"

GRADE
0'-0"

NO.	DATE	REVISION
1	12/11/14	ISSUED FOR REVIEW
2	09/24/14	ISSUED FOR REVIEW
3	09/24/14	ISSUED FOR REVIEW
4	07/07/14	ISSUED FOR REVIEW
5	07/07/14	ISSUED FOR REVIEW
6	07/07/14	ISSUED FOR REVIEW
7	07/07/14	ISSUED FOR REVIEW
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13	07/07/14	ISSUED FOR REVIEW
14	07/07/14	ISSUED FOR REVIEW
15	07/07/14	ISSUED FOR REVIEW
16	07/07/14	ISSUED FOR REVIEW
17	07/07/14	ISSUED FOR REVIEW
18	07/07/14	ISSUED FOR REVIEW
19	07/07/14	ISSUED FOR REVIEW
20	07/07/14	ISSUED FOR REVIEW

verizon wireless
7 WILAGE CIRCLE SUITE #100
WILLAGAR, TEXAS 75626

DATE DRAWN: 04/15/14
DRAWN BY: BK
APPROVED BY: JG

**AWS UPGRADE
TENNYSON
CENTER WT
SITE ID # 165357**

6825 COMMUNICATIONS PKWY
PLANO, TX

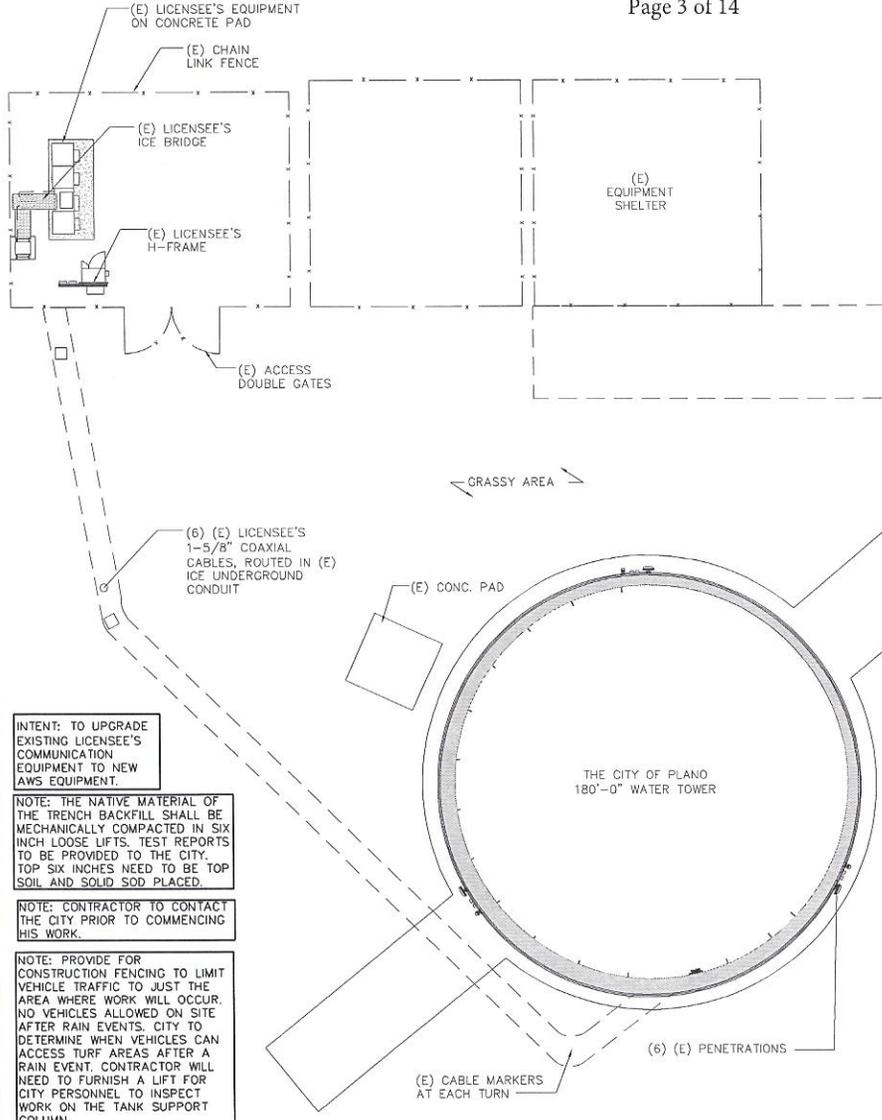
ALLPRO
CONSULTING GROUP, INC.
9221 Lyndon B Johnson Fwy
Suite 204, Dallas, TX 75245
Phone: 972-231-8895
Fax: 856-354-8375
www.allprocg.com
registration no. 8242

STATE OF TEXAS
JOU MOTTACKAL GEORGE
91793
LICENSED
PROFESSIONAL ENGINEER

12/11/14
ACGI NO: 14-2830
SHEET NAME
OVERALL SITE
PLAN/ TOWER
ELEVATION
SHEET NUMBER

C-1

Appendix "A" (Site Plan)
Page 3 of 14



1 EQUIPMENT PLAN - BEFORE
SCALE: 1/16" = 1'-0"

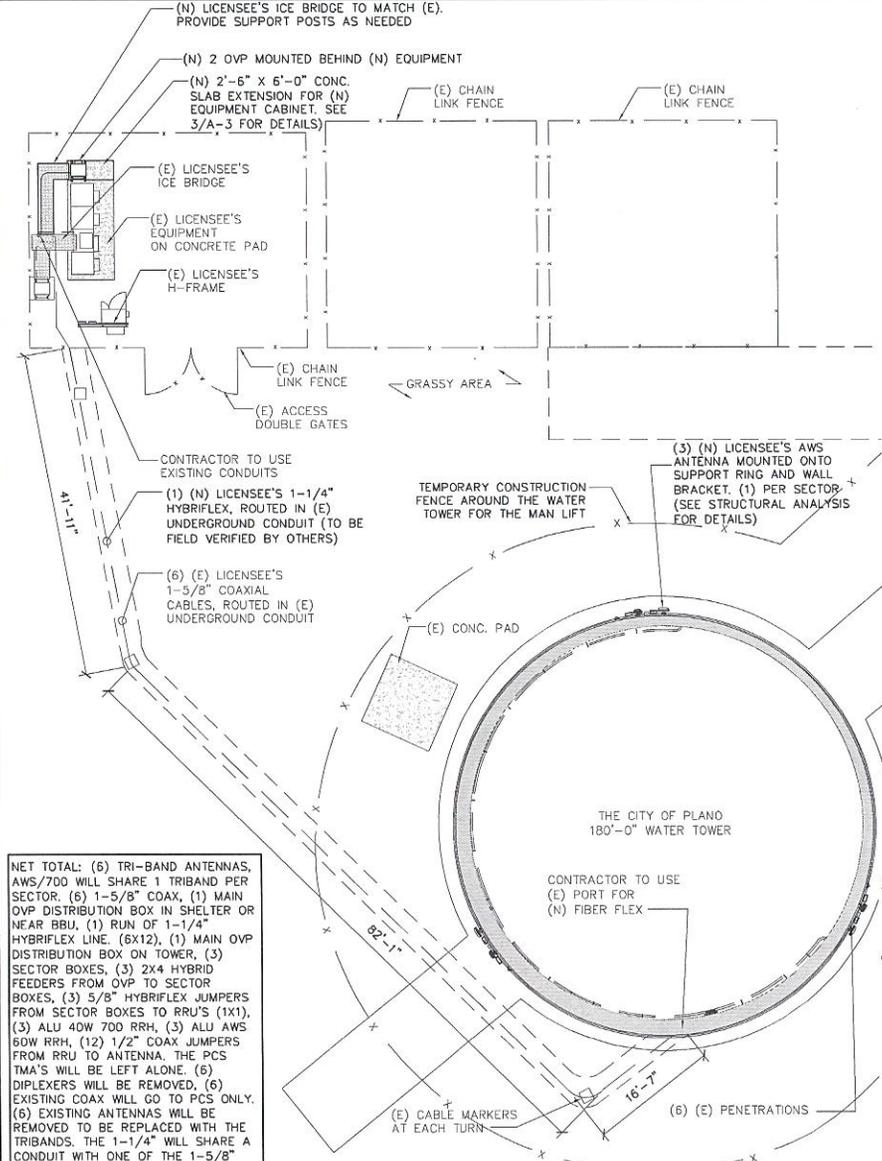


INTENT: TO UPGRADE EXISTING LICENSEE'S COMMUNICATION EQUIPMENT TO NEW AWS EQUIPMENT.

NOTE: THE NATIVE MATERIAL OF THE TRENCH BACKFILL SHALL BE MECHANICALLY COMPACTED IN SIX INCH LOOSE LIFTS. TEST REPORTS TO BE PROVIDED TO THE CITY. TOP SIX INCHES NEED TO BE TOP SOIL AND SOLID SOD PLACED.

NOTE: CONTRACTOR TO CONTACT THE CITY PRIOR TO COMMENCING HIS WORK.

NOTE: PROVIDE FOR CONSTRUCTION FENCING TO LIMIT VEHICLE TRAFFIC TO JUST THE AREA WHERE WORK WILL OCCUR. NO VEHICLES ALLOWED ON SITE AFTER RAIN EVENTS. CITY TO DETERMINE WHEN VEHICLES CAN ACCESS TURF AREAS AFTER A RAIN EVENT. CONTRACTOR WILL NEED TO FURNISH A LIFT FOR CITY PERSONNEL TO INSPECT WORK ON THE TANK SUPPORT COLUMN.



2 EQUIPMENT PLAN - AFTER
SCALE: 1/16" = 1'-0"



NET TOTAL: (6) TRI-BAND ANTENNAS, AWS/700 WILL SHARE 1 TRIBAND PER SECTOR. (6) 1-5/8" COAX, (1) MAIN OVP DISTRIBUTION BOX IN SHELTER OR NEAR BBU, (1) RUN OF 1-1/4" HYBRIFLEX LINE. (6X12), (1) MAIN OVP DISTRIBUTION BOX ON TOWER, (3) SECTOR BOXES, (3) 2X4 HYBRID FEEDERS FROM OVP TO SECTOR BOXES, (3) 5/8" HYBRIFLEX JUMPERS FROM SECTOR BOXES TO RRU'S (1X1), (3) ALU 40W 700 RRH, (3) ALU AWS 60W RRH, (12) 1/2" COAX JUMPERS FROM RRU TO ANTENNA, THE PCS TMA'S WILL BE LEFT ALONE. (6) DIPLEXERS WILL BE REMOVED, (6) EXISTING COAX WILL GO TO PCS ONLY. (6) EXISTING ANTENNAS WILL BE REMOVED TO BE REPLACED WITH THE TRIBANDS. THE 1-1/4" WILL SHARE A CONDUIT WITH ONE OF THE 1-5/8" RUNS. PLEASE ORDER AISG 2.0 COMPATIBLE RET. PLEASE PLAN FOR RET KIT AISG 2.0 AND SCU - REMOTE IP ADDRESSABLE. CALL YUSUF DANAWALA @ 817-961-2889 FOR ANY QUESTIONS.

NO	DATE	REVISION
1	12/11/14	
2	08/04/14	
3	08/04/14	
4	07/02/14	
5	06/16/14	
6	06/16/14	
7	07/22/14	
8	07/22/14	
9	08/15/14	
10	08/15/14	

verizon wireless
7 WILAGE CIRCLE SUITE #400
WESTLAKE, TEXAS 75162

DATE DRAWN: 04/15/14
DRAWN BY: BK
APPROVED BY: JG

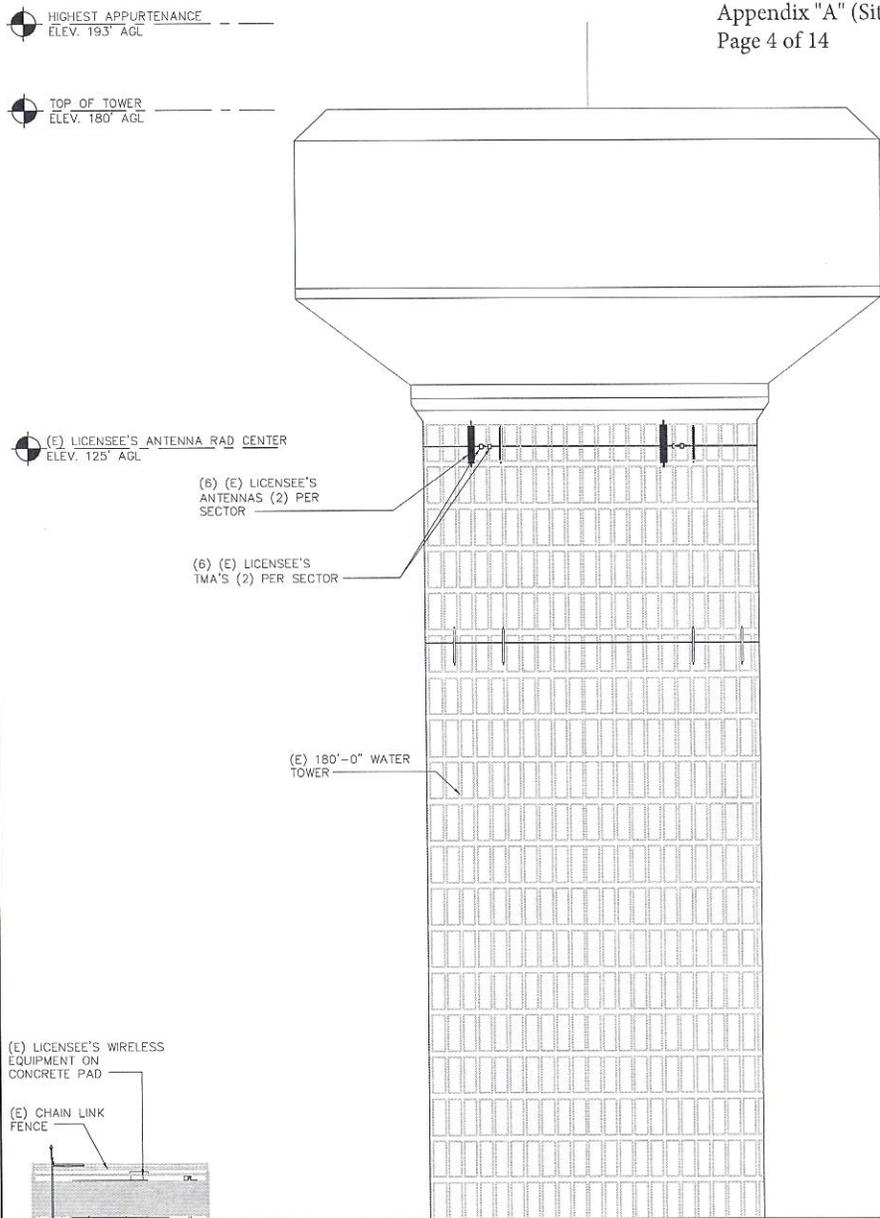
**AWS UPGRADE
TENNYSOON
CENTER WT
SITE ID # 165357**
6825 COMMUNICATIONS PKWY
PLANO, TX 75024

ALLPRO
CONSULTING GROUP, INC.
9221 Lyndon B Johnson Fwy
Suite 204, Dallas, TX 75245
Phone: 972-231-8893
Fax: 866-364-8375
www.allproci.com
registration no. 8242



ACGI NO: 14-2830
SHEET NAME
EQUIPMENT PLAN
BEFORE /
AFTER
SHEET NUMBER
C-2

Appendix "A" (Site Plan)
Page 4 of 14



TECH REVIEW NOTE:

INDICATED INFORMATION IS BASED ON VERIZON TECH REVIEW DATED 05/29/14. CONTRACTOR TO VERIFY THIS INFORMATION WITH THE MOST CURRENT EDITION OF THE VERIZON WIRELESS TECH REVIEW IN COORDINATION WITH CLIENT REPRESENTATIVE FOR APPURTENANCE/EQUIPMENT/ COAX LOCATION, NUMBER, MAKE, MODEL, MOUNTING DETAILS, AZIMUTH, ETC PRIOR TO INSTALLATIONS.

STRUCTURAL ANALYSIS NOTE:

A STRUCTURAL EVALUATION OF THE SITE WAS PERFORMED BY: MALOUF ENGINEERING INTL., WITH MEI PROJECT ID: TX03726N-14V2 DATED 06/09/2014. INFORMATION INDICATED IN THE STRUCTURAL ANALYSIS REGARDING STRUCTURE, APPURTENANCE MOUNTINGS, EQUIPMENT, AND COAX ARRANGEMENTS SUPERCEDES THESE DRAWINGS.

CONTRACTOR WILL NEED TO FURNISH A LIFT FOR CITY PERSONNEL TO INSPECT WORK ON THE TANK SUPPORT COLUMN.

INTENT: TO UPGRADE EXISTING LICENSEE'S COMMUNICATION EQUIPMENT TO NEW AWS EQUIPMENT.

NET TOTAL: (6) TRI-BAND ANTENNAS, AWS/700 WILL SHARE 1 TRIBAND PER SECTOR. (6) 1-5/8" COAX, (1) MAIN OVP DISTRIBUTION BOX IN SHELTER OR NEAR BBU, (1) RUN OF 1-1/4" HYBRIFLEX LINE. (6X12), (1) MAIN OVP DISTRIBUTION BOX ON TOWER, (3) SECTOR BOXES, (3) 2X4 HYBRID FEEDERS FROM OVP TO SECTOR BOXES, (3) 5/8" HYBRIFLEX JUMPERS FROM SECTOR BOXES TO RRU'S (1X1), (3) ALU 40W 700 RRH, (3) ALU AWS 60W RRH, (12) 1/2" COAX JUMPERS FROM RRU TO ANTENNA. THE PCS TMA'S WILL BE LEFT ALONE. (6) DIPLEXERS WILL BE REMOVED. (6) EXISTING COAX WILL GO TO PCS ONLY. (6) EXISTING ANTENNAS WILL BE REMOVED TO BE REPLACED WITH THE TRIBANDS. THE 1-1/4" WILL SHARE A CONDUIT WITH ONE OF THE 1-5/8" RUNS. PLEASE ORDER AISG 2.0 COMPATIBLE RET. PLEASE PLAN FOR RET KIT AISG 2.0 AND SCU- REMOTE IP ADDRESSABLE. CALL YUSUF DANAWALA @ 817-951-2989 FOR ANY QUESTIONS.

NO.	DATE	ISSUED FOR REVIEW	REVISION				
1	12/11/14						
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6	07/18/14						
7	06/05/14						
8	06/22/14						
9	06/19/14						
10	06/19/14						

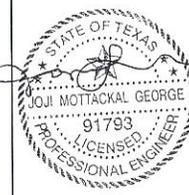


DATE DRAWN:	04/15/14
DRAWN BY:	BK
APPROVED BY:	JG

AWS UPGRADE
TENNYSON
CENTER WT
SITE ID # 165357

6825 COMMUNICATIONS PKWY
PLANO, TX 75024

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ACGI NO:	14-2830
SHEET NAME	TOWER ELEVATION BEFORE
SHEET NUMBER	C-3

1 TOWER ELEVATION-BEFORE
SCALE: 1" = 20'-0"



Appendix "A" (Site Plan)
Page 5 of 14

HIGHEST APPURTENANCE
ELEV. 193' AGL

TOP OF TOWER
ELEV. 180' AGL

(E) LICENSEE'S ANTENNA RAD CENTER
ELEV. 125' AGL

PROPOSED (1) 9924 RRH
2X40-700-U BOX MOUNTED
ONTO NEW RRH MOUNT
(1) PER SECTOR
REFER TO A-6 FOR INFORMATION
ON RRH DIMENSIONS.

(3) (N) LICENSEE'S LTE/AWS
ANTENNAS TO BE REPLACE (E)
LTE ANTENNAS
(1 PER SECTOR)

PROPOSED (1) RRH (MODEL#
2X60) AWS BOX MOUNTED ONTO
NEW RRH MOUNT (1 PER SECTOR)
REFER TO A-6 FOR INFORMATION
ON RRH DIMENSIONS.

(1) (N) MAIN OVP BOX TO BE
INSTALLED (ONLY ON 1 SECTOR)

(3) (N) LICENSEE'S PCS ANTENNA TO
BE REPLACE (E) PCS ANTENNA (1 PER
SECTOR)

(1) (N) SECTOR BOX TO BE INSTALLED,
(1) PER SECTOR

(E) 180'-0" WATER
TOWER

(E) LICENSEE'S WIRELESS
EQUIPMENT ON
CONCRETE PAD

(E) CHAIN LINK
FENCE

GRADE
0'-0"

TECH REVIEW NOTE:

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VERIZON TECH REVIEW DATED 05/29/14.
CONTRACTOR TO VERIFY THIS INFORMATION
WITH THE MOST CURRENT EDITION OF THE
VERIZON WIRELESS TECH REVIEW IN
COORDINATION WITH CLIENT REPRESENTATIVE
FOR APPURTENANCE/EQUIPMENT/ COAX
LOCATION, NUMBER, MAKE, MODEL, MOUNTING
DETAILS, AZIMUTH, ETC PRIOR TO
INSTALLATIONS.

STRUCTURAL ANALYSIS NOTE:

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WAS PERFORMED BY: MALDUP
ENGINEERING INTL. WITH MEI PROJECT
ID: TX03726N-14V2 DATED 06/09/2014.
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FROM SECTOR BOXES TO RRU'S (1X1), (3) ALU 4DW 700 RRH, (3) ALU AWS 60W RRH, (12)
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PLEASE PLAN FOR RET KIT AISG 2.0 AND SCU- REMOTE IP ADDRESSABLE. CALL YUSUF
DANAWALA @ 817-961-2989 FOR ANY QUESTIONS.

(3) (E) LICENSEE'S PCS
TMA'S (1) PER SECTOR

1 TOWER ELEVATION-AFTER
SCALE: 1" = 20'-0"

NO.	DATE	REVISION
4	12/11/14	CITY COMMENTS
3	09/03/14	CITY COMMENTS
2	08/04/14	CITY COMMENTS
1	07/07/14	CITY COMMENTS
0	07/02/14	FINAL CD
F	06/16/14	ISSUED FOR REVIEW
E	05/29/14	ISSUED FOR REVIEW
D	04/22/14	ISSUED FOR REVIEW
C	04/17/14	ISSUED FOR REVIEW
A	04/15/14	ISSUED FOR REVIEW



DATE DRAWN:	04/15/14
DRAWN BY:	BK
APPROVED BY:	JG

AWS UPGRADE
TENNYSON
CENTER WT
SITE ID # 165357

6825 COMMUNICATIONS PKWY
PLANO, TX 75024

ALLPRO
CONSULTING GROUP, INC.
9221 Lyndon B Johnson Fwy
Suite 204, Dallas, TX 75243
Phone: 972-231-8893
Fax: 866-564-8375
www.allprocg.com
registration no. 8242



ACGI NO:	14-2830
SHEET NAME	TOWER ELEVATION AFTER
SHEET NUMBER	C-4

STRUCTURAL ANALYSIS NOTE:

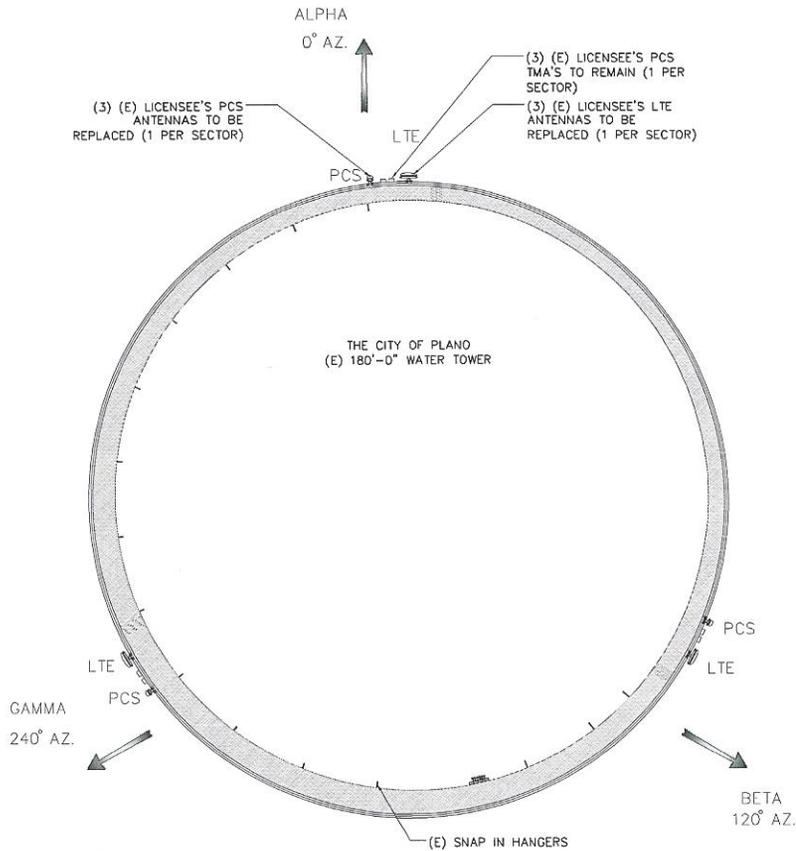
A STRUCTURAL EVALUATION OF THE SITE WAS PERFORMED BY: MALDUF ENGINEERING INTL., WITH MEI PROJECT ID: TX03726N-14V2 DATED 05/09/2014. INFORMATION INDICATED IN THE STRUCTURAL ANALYSIS REGARDING STRUCTURE, APPURTENANCE MOUNTINGS, EQUIPMENT, AND COAX ARRANGEMENTS SUPERCEDES THESE DRAWINGS.

TECH REVIEW NOTE:

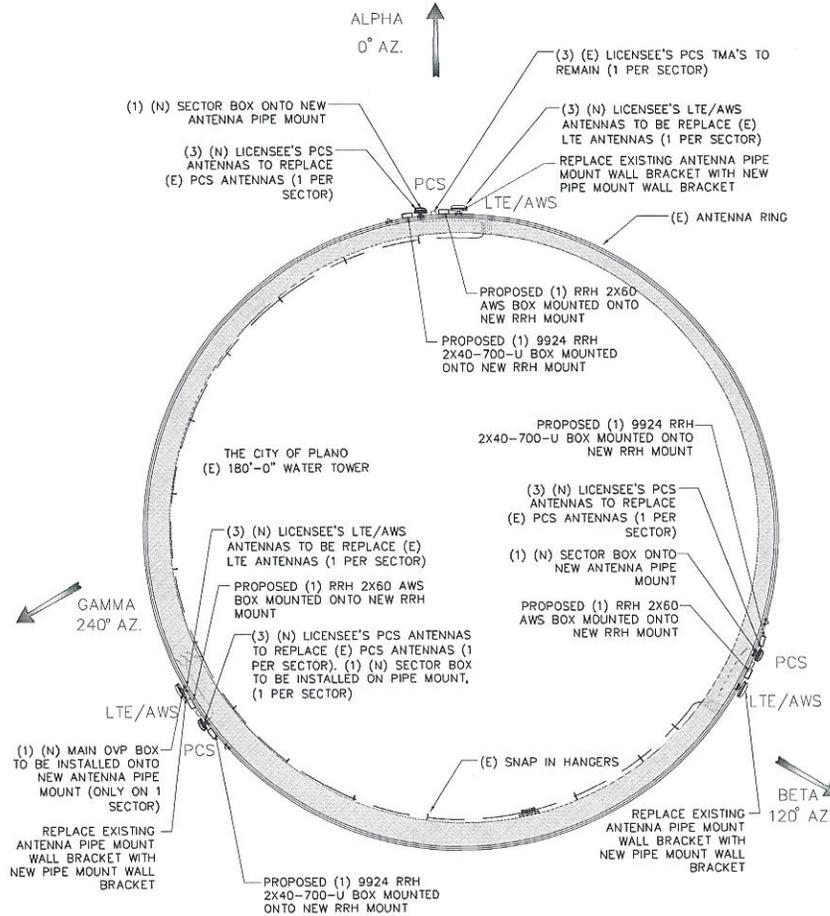
INDICATED INFORMATION IS BASED ON VERIZON TECH REVIEW DATED 05/29/14. CONTRACTOR TO VERIFY THIS INFORMATION WITH THE MOST CURRENT EDITION OF THE VERIZON WIRELESS TECH REVIEW IN COORDINATION WITH CLIENT REPRESENTATIVE FOR APPURTENANCE/EQUIPMENT/ COAX LOCATION, NUMBER, MAKE, MODEL, MOUNTING DETAILS, AZIMUTH, ETC PRIOR TO INSTALLATIONS.

NET TOTAL: (6) TRI-BAND ANTENNAS, AWS/700 WILL SHARE 1 TRIBAND PER SECTOR. (6) 1-5/8" COAX, (1) MAIN OVP DISTRIBUTION BOX IN SHELTER OR NEAR BBU, (1) RUN OF 1-1/4" HYBRIFLEX LINE, (6X12), (1) MAIN OVP DISTRIBUTION BOX ON TOWER, (3) SECTOR BOXES, (3) 2X4 HYBRID FEEDERS FROM OVP TO SECTOR BOXES, (3) 5/8" HYBRIFLEX JUMPERS FROM SECTOR BOXES TO RRU'S (1X1), (3) ALU 40W 700 RRH, (3) ALU AWS 60W RRH, (12) 1/2" COAX JUMPERS FROM RRU TO ANTENNA. THE PCS TMA'S WILL BE LEFT ALONE. (6) DIPLEXERS WILL BE REMOVED. (6) EXISTING COAX WILL GO TO PCS ONLY. (6) EXISTING ANTENNAS WILL BE REMOVED TO BE REPLACED WITH THE TRIBANDS. THE 1-1/4" WILL SHARE A CONDUIT WITH ONE OF THE 1-5/8" RUNS. PLEASE ORDER AISG 2.0 COMPATIBLE RET. PLEASE PLAN FOR RET KIT AISG 2.0 AND SCU- REMOTE IP ADDRESSABLE. CALL YUSUF DANAWALA @ 817-961-2989 FOR ANY QUESTIONS.

INTENT: TO UPGRADE EXISTING LICENSEE'S COMMUNICATION EQUIPMENT TO NEW AWS EQUIPMENT.



1 EXISTING ANTENNA ORIENTATION PLAN
SCALE: 3/32" = 1'-0"



2 PROPOSED ANTENNA ORIENTATION PLAN
SCALE: 3/32" = 1'-0"



NO.	DATE	REVISION
1	12/11/14	
2	09/24/14	CITY COMMENTS
3	08/04/14	CITY COMMENTS
4	07/07/14	CITY COMMENTS
5	07/07/14	FINAL CD
6	07/07/14	ISSUED FOR REVIEW
7	06/26/14	ISSUED FOR REVIEW
8	06/26/14	ISSUED FOR REVIEW
9	04/22/14	ISSUED FOR REVIEW
10	04/22/14	ISSUED FOR REVIEW
11	04/15/14	ISSUED FOR REVIEW



DATE DRAWN:	04/15/14
DRAWN BY:	BK
APPROVED BY:	JG

AWS UPGRADE
TENNYSON
CENTER WT
SITE ID # 165357

6825 COMMUNICATIONS PKWY
PLANO, TX 75024

LLPRO
CONSULTING GROUP, INC.
9221 Lyndon B Johnson Fwy
Suite 204, Dallas, TX 75245
Phone: 972-231-8893
Fax: 866-364-8375
www.llprocg.com
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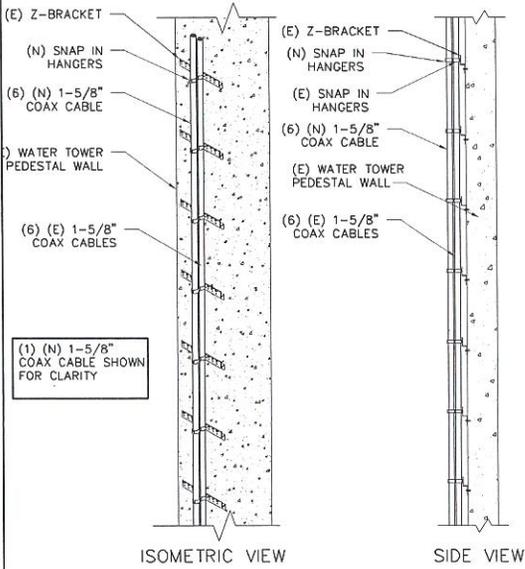
12/11/14
ACGI NO: 14-2830

SHEET NAME
ANTENNA
ORIENTATION
PLAN

SHEET NUMBER
A-1

NOTES

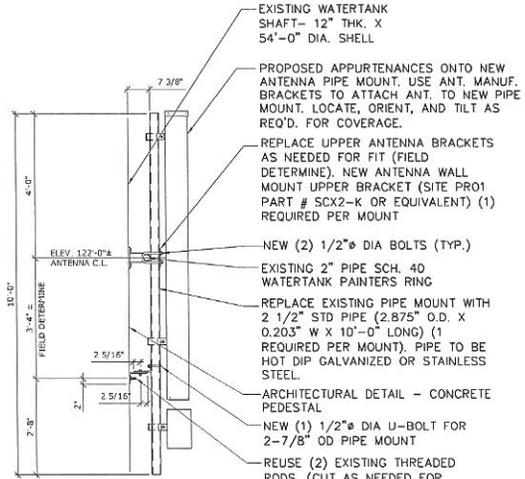
1. VERIFY EACH COAXIAL CABLE LENGTH, DIAMETER, ROUTING, AND ALL MOUNTING APPURTENANCES WITH OWNER PRIOR TO ORDER.
2. THE MAXIMUM COAXIAL CABLE LENGTH HAS BEEN ESTIMATED WITH A CORRESPONDING CABLE DIAMETER. THIS CABLE LENGTH IS APPROXIMATE, AND IS NOT TO BE USED FOR CONSTRUCTION. ACTUAL ANTENNA CABLE LENGTHS MAY VARY FROM ESTIMATED MAXIMUM LENGTH AND MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO ORDERING.
3. TAG ALL COAX CABLES AT FOLLOWING LOCATIONS:
 - A. TOP OF TOWER AT ANTENNAS
 - B. INSIDE EQUIPMENT SHELTER NEAR THE WAVEGUIDE ENTRY PORT
 - C. OUTSIDE EQUIPMENT SHELTER NEAR THE WAVEGUIDE ENTRY PORT
4. COAXIAL CABLES TO BE SUPPORTED EVERY 3'-0" ON ICE BRIDGE WITH STAINLESS STEEL HANGERS, (TYPICAL FOR HORIZONTAL RUN).
5. JUMPERS TO BE SUPPORTED EVERY 18" WITH STAINLESS STEEL HANGERS. (VERTICAL RUNS AND WHERE APPLICABLE)
6. ANTENNA CONTRACTOR RESPONSIBLE FOR FABRICATING ENCLOSURE JUMPERS.
7. CONTRACTOR SHALL VERIFY ANTENNA TYPE AND AZIMUTH WITH CONSTRUCTION MANAGER PRIOR TO CONSTRUCTION.
8. CONTRACTOR TO VERIFY VERIZON WIRELESS MARKET STANDARD & LENGTHS PRIOR TO ORDERING COAX.



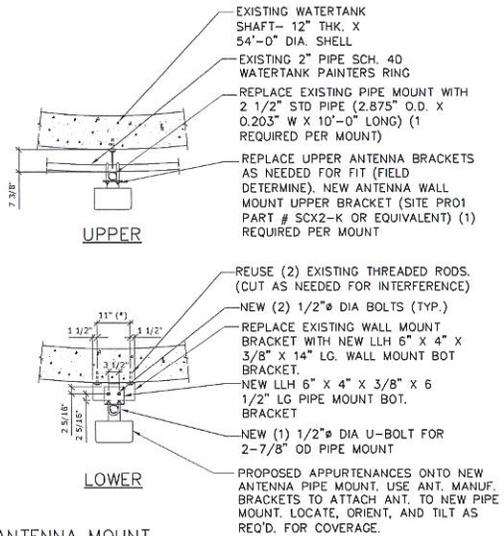
CABLE MOUNTING TO

1 EXISTING CABLE
SCALE: N.T.S

Appendix "A" (Site Plan)
Page 7 of 14



ANTENNA MOUNT



2 ANTENNA MOUNT BRACKETS
SCALE: N.T.S

REPAIR TO CUT IS REQUIRED TO SEAL THE CUT. REPAIR TO CUT IS REQUIRED TO PREVENT RUST STAINING ON CONCRETE COLUMN.

ALL STEEL MATERIAL SHALL BE HOT DIPPED GALVANIZED PER ASTM A153 AND ALL STEEL HARDWARE SHALL BE EITHER STAINLESS STEEL OR HOT DIPPED GALVANIZED PER ASTM A153 SPECIFICATIONS AFTER FABRICATION.

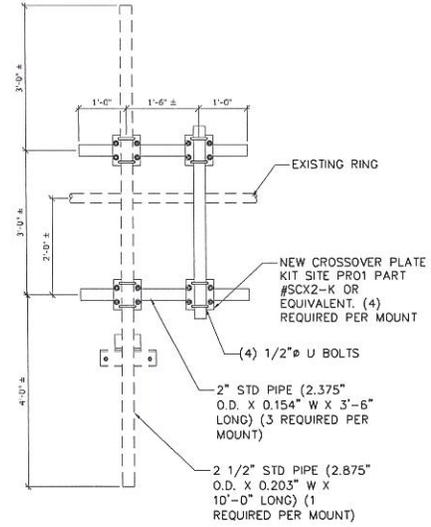
NET TOTAL: (6) TRI-BAND ANTENNAS, AWS/700 WILL SHARE 1 TRIBAND PER SECTOR. (6) 1-5/8" COAX, (1) MAIN OVP DISTRIBUTION BOX IN SHELTER OR NEAR BBU, (1) RUN OF 1-1/4" HYBRIFLEX LINE. (6X12), (1) MAIN OVP DISTRIBUTION BOX ON TOWER, (3) SECTOR BOXES, (3) 2X4 HYBRID FEEDERS FROM OVP TO SECTOR BOXES, (3) 5/8" HYBRIFLEX JUMPERS FROM SECTOR BOXES TO RRU'S (1X1), (3) ALU 40W 700 RRH, (3) ALU AWS 60W RRH, (12) 1/2" COAX JUMPERS FROM RRU TO ANTENNA. THE PCS TMA'S WILL BE LEFT ALONE. (6) DIPLXERS WILL BE REMOVED. (6) EXISTING COAX WILL GO TO PCS ONLY. (6) EXISTING ANTENNAS WILL BE REMOVED TO BE REPLACED WITH THE TRIBANDS. THE 1-1/4" WILL SHARE A CONDUIT WITH ONE OF THE 1-5/8" RUNS. PLEASE ORDER AISC 2.0 COMPATIBLE RET. PLEASE PLAN FOR RET KIT AISC 2.0 AND SCU- REMOVE IP ADDRESSABLE. CALL YUSUF DANAWALA @ 817-961-2989 FOR ANY QUESTIONS.

STRUCTURAL ANALYSIS NOTE:

A STRUCTURAL EVALUATION OF THE SITE WAS PERFORMED BY: MALOUF ENGINEERING INT'L. WITH MEI PROJECT ID: TX03726N-14V2 DATED 06/09/2014. INFORMATION INDICATED IN THE STRUCTURAL ANALYSIS REGARDING STRUCTURE, APPURTENANCE MOUNTINGS, EQUIPMENT, AND COAX ARRANGEMENTS SUPERCEDES THESE DRAWINGS.

ANTENNAS NOT SHOWN FOR CLARITY

INTENT: TO UPGRADE EXISTING LICENSEE'S COMMUNICATION EQUIPMENT TO NEW AWS EQUIPMENT.



RRH MOUNT

2 ANTENNA MOUNT
SCALE: N.T.S

NO.	DATE	REVISION
1	12/11/14	
2	06/09/14	
3	06/09/14	
4	07/07/14	
5	07/07/14	
6	07/07/14	
7	07/07/14	
8	07/07/14	
9	07/07/14	
10	07/07/14	

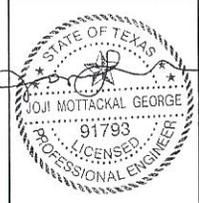


DATE DRAWN:	04/15/14
DRAWN BY:	BK
APPROVED BY:	JG

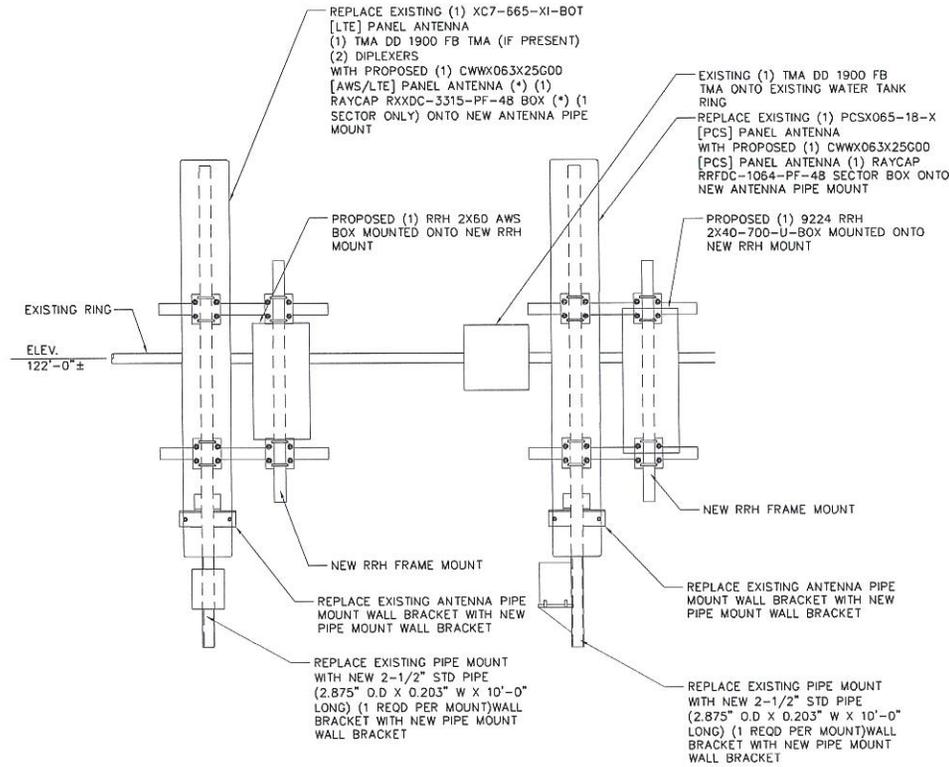
AWS UPGRADE
TENNYSON CENTER WT
SITE ID # 165357

6825 COMMUNICATIONS PKWY
PLANO, TX 75024

ALLPRO
CONSULTING GROUP, INC.
9221 Lyndon B Johnson Fwy
Suite 204, Dallas, TX 75245
Phone: 972-231-8895
Fax: 866-364-8375
www.allproci.com
registration no. 8242



ACGI NO:	14-2830
SHEET NAME	ANTENNA AND COAX MOUNTING DETAILS
SHEET NUMBER	A-2



AWS/LTE ANTENNA
NEW ANTENNA PIPE MOUNT
NEW WALL MOUNT BRACKETS

PCS ANTENNA
NEW ANTENNA PIPE MOUNT
NEW WALL MOUNT BRACKETS

(NOTE: REUSE EXISTING ANCHORS- NO NEW HOLES)

1 ELEVATION: TYPICAL NEW SECTOR LAYOUT
SCALE: N.T.S

STRUCTURAL ANALYSIS NOTE:

A STRUCTURAL EVALUATION OF THE SITE WAS PERFORMED BY: MALOUF ENGINEERING INT'L., WITH MEI PROJECT ID: TK0372561-14V2 DATED 06/09/2014. INFORMATION INDICATED IN THE STRUCTURAL ANALYSIS REGARDING STRUCTURE, APPURTENANCE MOUNTINGS, EQUIPMENT, AND COAX ARRANGEMENTS SUPERCEDES THESE DRAWINGS.

ALL STEEL MATERIAL SHALL BE HOT DIPPED GALVANIZED PER ASTM A153 AND ALL STEEL HARDWARE SHALL BE EITHER STAINLESS STEEL OR HOT DIPPED GALVANIZED PER ASTM A153 SPECIFICATIONS AFTER FABRICATION.

REPAIR TO CUT IS REQUIRED TO SEAL THE CUT. REPAIR TO CUT IS REQUIRED TO PREVENT RUST STAINING ON CONCRETE COLUMN.

INTENT: TO UPGRADE EXISTING LICENSEE'S COMMUNICATION EQUIPMENT TO NEW AWS EQUIPMENT.

NET TOTAL: (6) TRI-BAND ANTENNAS, AWS/700 WILL SHARE 1 TRIBAND PER SECTOR. (6) 1-5/8" COAX, (1) MAIN OVP DISTRIBUTION BOX IN SHELTER OR NEAR EBU, (1) RUN OF 1-1/4" HYBRIFLEX LINE. (6X12), (1) MAIN OVP DISTRIBUTION BOX ON TOWER, (3) SECTOR BOXES, (3) 2X4 HYBRID FEEDERS FROM OVP TO SECTOR BOXES, (3) 5/8" HYBRIFLEX JUMPERS FROM SECTOR BOXES TO RRU'S (1X1), (3) ALU 40W 700 RRH, (3) ALU AWS 60W RRH, (12) 1/2" COAX JUMPERS FROM RRU TO ANTENNA. THE PCS TMA'S WILL BE LEFT ALONE. (6) DIPLEXERS WILL GO TO PCS ONLY. (6) EXISTING ANTENNAS WILL BE REMOVED TO BE REPLACED WITH THE TRIBANDS. THE 1-1/4" WILL SHARE A CONDUIT WITH ONE OF THE 1-5/8" RUNS. PLEASE ORDER AISG 2.0 COMPATIBLE RET. PLEASE PLAN FOR RET KIT AISG 2.0 AND SCU- REMOVE IP ADDRESSABLE. CALL YUSUF DANAWALA @ 817-961-2989 FOR ANY QUESTIONS.

NO NEW HOLES TO BE DRILLED. ONLY EXISTING ANCHORS TO BE REUSED. TYPICAL MOUNTING DETAIL PROVIDED BY MALOUF ENGINEERING INTERNATIONAL, INC.

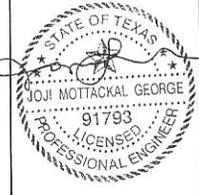
NO.	DATE	ISSUED FOR REVIEW	REVISION
4	12/11/14		
3	06/03/14		
2	06/04/14		
1	07/07/14		
0	07/02/14	FINAL CD	
F	09/18/14	ISSUED FOR REVIEW	
D	05/29/14	ISSUED FOR REVIEW	
C	04/23/14	ISSUED FOR REVIEW	
B	04/07/14	ISSUED FOR REVIEW	
A	04/01/14	ISSUED FOR REVIEW	



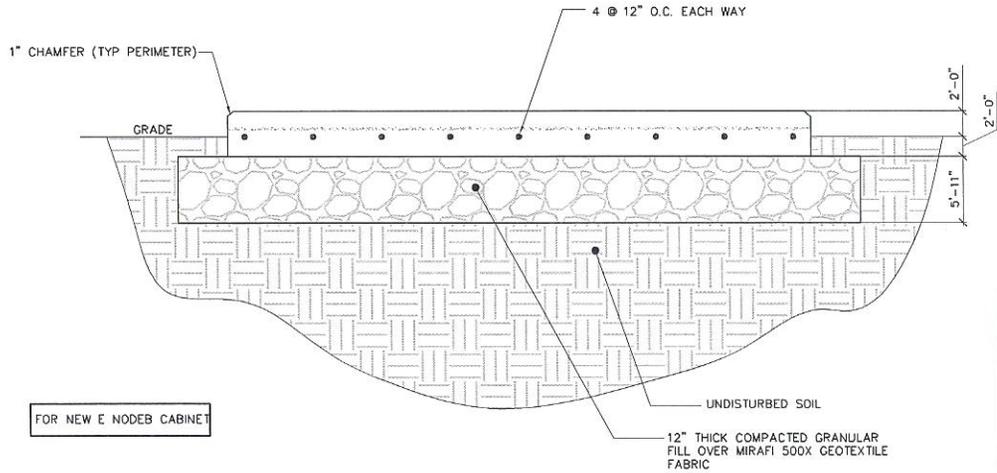
DATE DRAWN: 04/15/14
DRAWN BY: BK
APPROVED BY: JG

AWS UPGRADE
TENNYN SON
CENTER WT
SITE ID # 165357
6825 COMMUNICATIONS PKWY
PLANO, TX 75024

ALLPRO
CONSULTING GROUP, INC.
9221 Lyndon B Johnson Fwy
Suite 204, Dallas, TX 75243
Phone: 972-231-8893
Fax: 856-354-8375
www.allproci.com
registration no. 8242



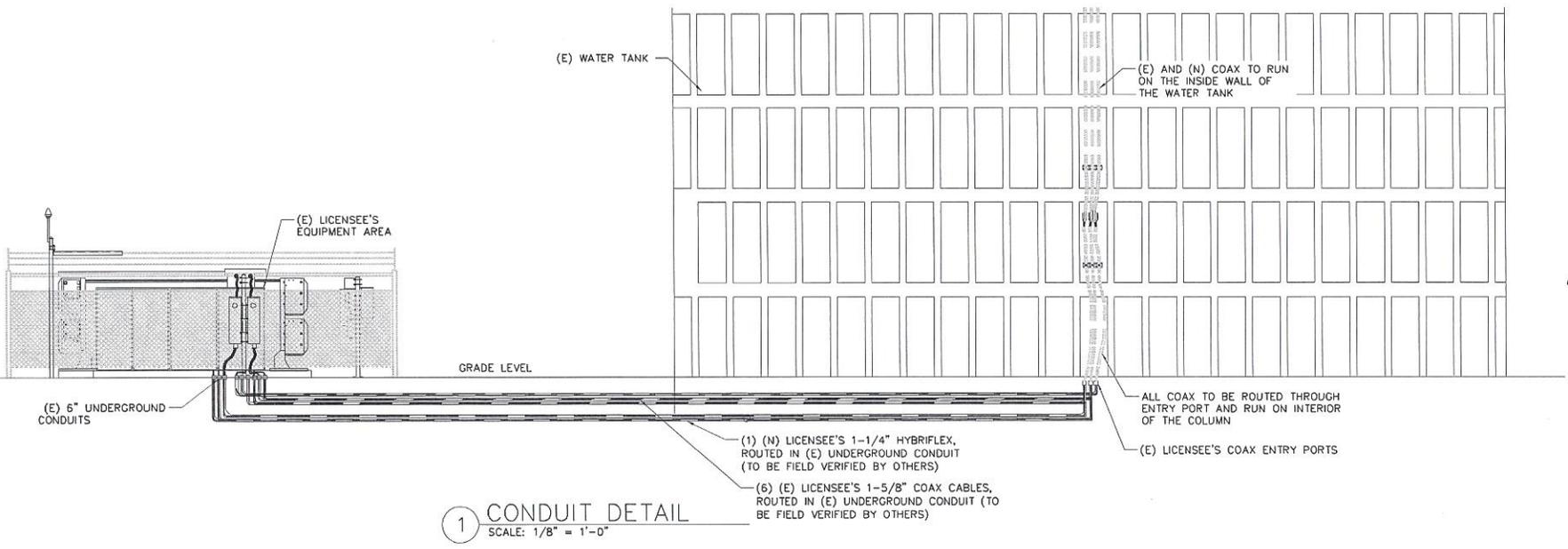
ACGI NO: 14-2630
SHEET NAME: NEW SECTOR DETAIL
SHEET NUMBER: A-3



INTENT: TO UPGRADE EXISTING LICENSEE'S COMMUNICATION EQUIPMENT TO NEW AWS EQUIPMENT.

NET TOTAL: (6) TRI-BAND ANTENNAS, AWS/700 WILL SHARE 1 TRIBAND PER SECTOR. (6) 1-5/8" COAX, (1) MAIN OVP DISTRIBUTION BOX IN SHELTER OR NEAR BBU, (1) RUN OF 1-1/4" HYBRIFLEX LINE. (6X12), (1) MAIN OVP DISTRIBUTION BOX ON TOWER, (3) SECTOR BOXES, (3) 2X4 HYBRID FEEDERS FROM OVP TO SECTOR BOXES, (3) 5/8" HYBRIFLEX JUMPERS FROM SECTOR BOXES TO RRU'S (1X1), (3) ALU 40W 700 RRH, (3) ALU AWS 60W RRH, (12) 1/2" COAX JUMPERS FROM RRU TO ANTENNA. THE PCS TMA'S WILL BE LEFT ALONE. (6) DIPLEXERS WILL BE REMOVED, (6) EXISTING COAX WILL GO TO PCS ONLY. (6) EXISTING ANTENNAS WILL BE REMOVED TO BE REPLACED WITH THE TRIBANDS. THE 1-1/4" WILL SHARE A CONDUIT WITH ONE OF THE 1-5/8" RUNS. PLEASE ORDER AISG 2.0 COMPATIBLE RET. PLEASE PLAN FOR RET KIT AISG 2.0 AND SCU- REMOTE IP ADDRESSABLE. CALL YUSUF DANAWALA @ 817-961-2989 FOR ANY QUESTIONS.

2 CONCRETE DETAIL
SCALE: NONE



1 CONDUIT DETAIL
SCALE: 1/8" = 1'-0"

NO.	DATE	REVISION
1	12/11/14	
2	08/25/14	
3	08/25/14	
4	07/02/14	
5	06/18/14	
6	05/22/14	
7	04/15/14	

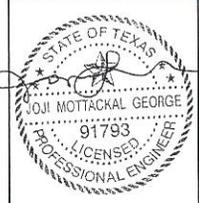


DATE DRAWN:	04/15/14
DRAWN BY:	BK
APPROVED BY:	JG

AWS UPGRADE
TENNYSON
CENTER WT
SITE ID # 165357

6825 COMMUNICATIONS PKWY
PLANO, TX 75024

ALLPRO
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9221 Lyndon B Johnson Fwy
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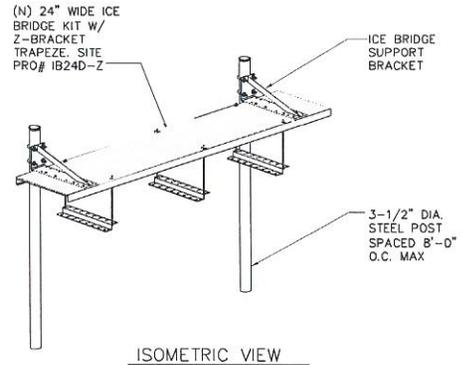


ACGI NO:	14-2830
SHEET NAME	PENETRATION DETAILS

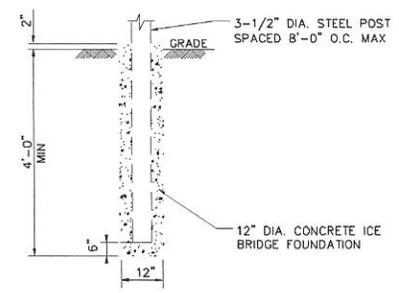
SHEET NUMBER
A-4

NOTE:
ALL MOUNTING HARDWARE IS
INCLUDED IN ICE BRIDGE KIT.
CONTRACTOR TO VERIFY

INTENT: TO UPGRADE
EXISTING LICENSEE'S
COMMUNICATION
EQUIPMENT TO NEW
AWS EQUIPMENT.

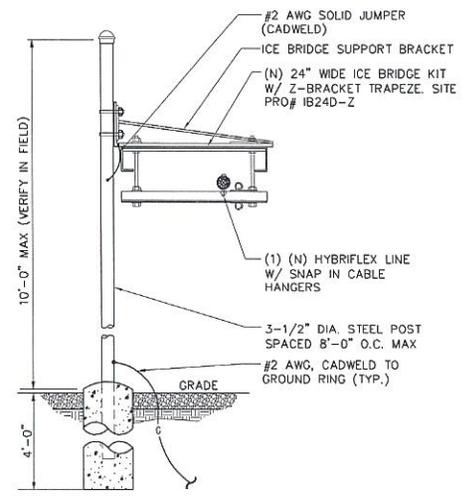


ISOMETRIC VIEW



SECTION DETAIL

- NOTES:
1. WHEN USING COMPONENTS AS SHOWN IN STANDARD DETAIL, MAXIMUM ALLOWABLE SPAN BETWEEN SUPPORTS ON A CONTINUOUS SINGLE SECTION OF BRIDGE CHANNEL SHALL BE 8'-0"
 2. WHEN USING COMPONENTS FOR SPLICING BRIDGE CHANNEL SECTIONS, THE SPLICE SHOULD BE PROVIDED AT THE SUPPORT, IF POSSIBLE, OR AT A MAXIMUM OF 2 FEET FROM THE SUPPORT.
 3. WHEN USING COMPONENTS, SUPPORT SHOULD BE PROVIDED AS CLOSE AS POSSIBLE TO THE END OF THE ICE BRIDGE, WITH A MAXIMUM CANTILEVER OF 2' FROM THE SUPPORT AT THE END.



FRONT VIEW

NET TOTAL: (6) TRI-BAND ANTENNAS, AWS/700 WILL SHARE 1 TRIBAND PER SECTOR, (5) 1-5/8" COAX, (1) MAIN OVP DISTRIBUTION BOX IN SHELTER OR NEAR BBU, (1) RUN OF 1-1/4" HYBRIFLEX LINE, (6X12), (1) MAIN OVP DISTRIBUTION BOX ON TOWER, (3) SECTOR BOXES, (3) 2X4 HYBRID FEEDERS FROM OVP TO SECTOR BOXES, (3) 5/8" HYBRIFLEX JUMPERS FROM SECTOR BOXES TO RRU'S (1X1), (3) ALU 40W 700 RRH, (3) ALU AWS 60W RRH, (12) 1/2" COAX JUMPERS FROM RRU TO ANTENNA. THE PCS TMA'S WILL BE LEFT ALONE, (6) DIPLEXERS WILL BE REMOVED, (6) EXISTING COAX WILL GO TO PCS ONLY, (6) EXISTING ANTENNAS WILL BE REMOVED TO BE REPLACED WITH THE TRIBANDS. THE 1-1/4" WILL SHARE A CONDUIT WITH ONE OF THE 1-5/8" RUNS. PLEASE ORDER AISG 2.0 COMPATIBLE RET. PLEASE PLAN FOR RET KIT AISG 2.0 AND SCU- REMOTE IP ADDRESSABLE, CALL YUSUF DANAWALA @ 617-961-2969 FOR ANY QUESTIONS.

1 ICE BRIDGE DETAIL
SCALE: NONE

NO.	DATE	REVISION
1	12/01/14	
2	08/03/14	
3	08/03/14	
4	07/07/14	
5	07/07/14	
6	07/07/14	
7	07/07/14	
8	07/07/14	
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15	07/07/14	
16	07/07/14	
17	07/07/14	
18	07/07/14	
19	07/07/14	
20	07/07/14	



DATE DRAWN: 08/15/14	DRAWN BY: BK	APPROVED BY: JG
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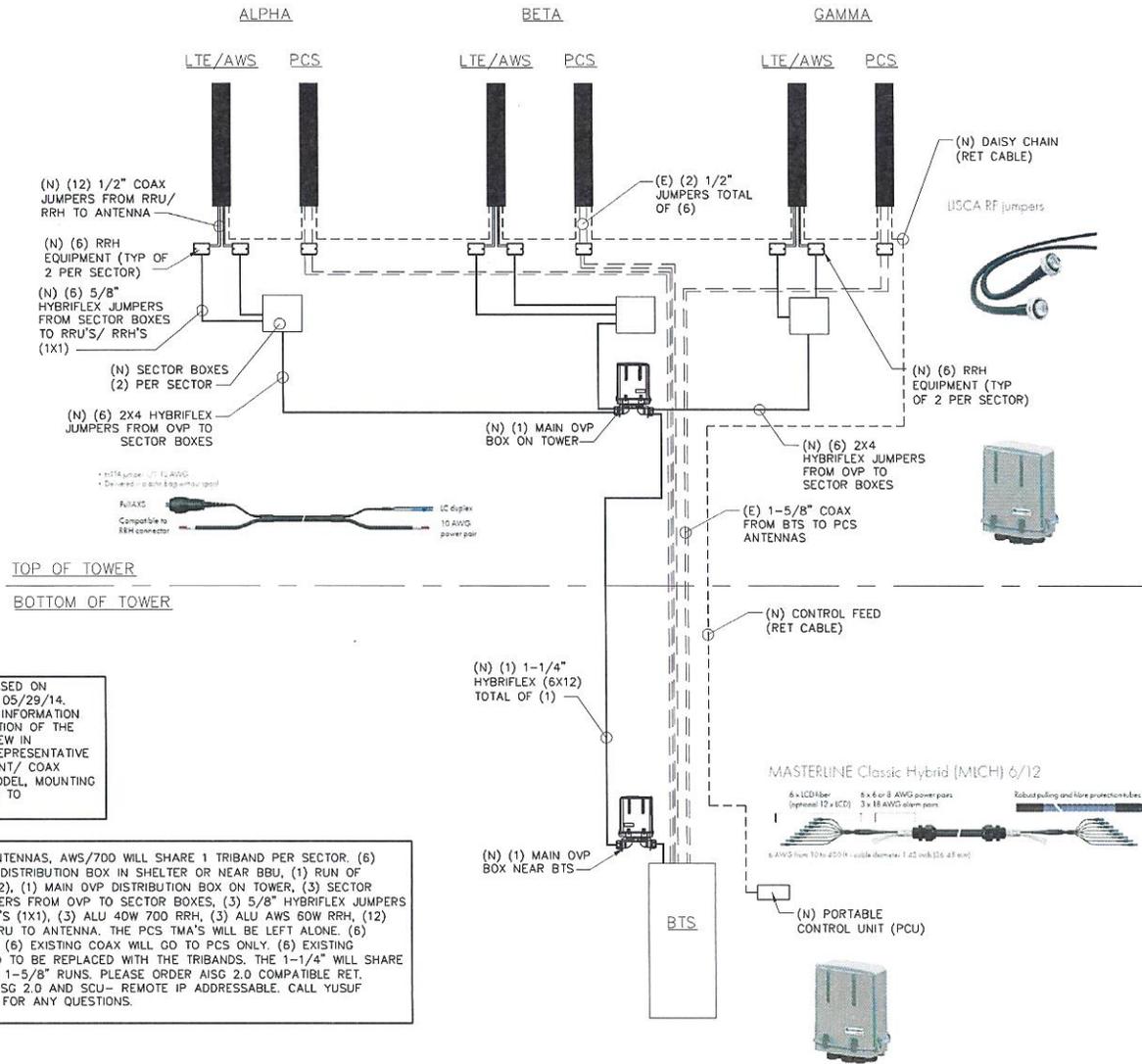
**AWS UPGRADE
TENNYSON
CENTER WT
SITE ID # 165357**

6825 COMMUNICATIONS PKWY
PLANO, TX 75024

ALLPRO
CONSULTING GROUP, INC.
9221 Lyndon B Johnson Fwy
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Phone: 972-231-8893
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www.allproct.com
registration no. 8242



ACGI NO:	14-2830
SHEET NAME	ICE BRIDGE DETAILS
SHEET NUMBER	A-5



TOP OF TOWER
BOTTOM OF TOWER

TECH REVIEW NOTE:

INDICATED INFORMATION IS BASED ON VERIZON TECH REVIEW DATED 05/29/14. CONTRACTOR TO VERIFY THIS INFORMATION WITH THE MOST CURRENT EDITION OF THE VERIZON WIRELESS TECH REVIEW IN COORDINATION WITH CLIENT REPRESENTATIVE FOR APPURTENANCE/EQUIPMENT/ COAX LOCATION, NUMBER, MAKE, MODEL, MOUNTING DETAILS, AZIMUTH, ETC PRIOR TO INSTALLATIONS.

NET TOTAL: (6) TRI-BAND ANTENNAS, AWS/700 WILL SHARE 1 TRIBAND PER SECTOR. (6) 1-5/8" COAX, (1) MAIN OVP DISTRIBUTION BOX IN SHELTER OR NEAR BBU, (1) RUN OF 1-1/4" HYBRIFLEX LINE. (6X12), (1) MAIN OVP DISTRIBUTION BOX ON TOWER, (3) SECTOR BOXES, (3) 2X4 HYBRID FEEDERS FROM OVP TO SECTOR BOXES, (3) 5/8" HYBRIFLEX JUMPERS FROM SECTOR BOXES TO RRU'S (1X1), (3) ALU 40W 700 RRH, (3) ALU AWS 60W RRH, (12) 1/2" COAX JUMPERS FROM RRU TO ANTENNA. THE PCS TMA'S WILL BE LEFT ALONE. (6) DIPLEXERS WILL BE REMOVED, (6) EXISTING COAX WILL GO TO PCS ONLY. (6) EXISTING ANTENNAS WILL BE REMOVED TO BE REPLACED WITH THE TRIBANDS. THE 1-1/4" WILL SHARE A CONDUIT WITH ONE OF THE 1-5/8" RUNS. PLEASE ORDER AISG 2.0 COMPATIBLE RET. PLEASE PLAN FOR RET KIT AISG 2.0 AND SCU- REMOTE IP ADDRESSABLE. CALL YUSUF DANAWALA @ 817-961-2989 FOR ANY QUESTIONS.

INTENT: TO UPGRADE EXISTING LICENSEE'S COMMUNICATION EQUIPMENT TO NEW AWS EQUIPMENT.

1 ANTENNA DIAGRAM
SCALE: N.T.S.

NO.	DATE	REVISION
1	12/11/14	
2	08/05/14	
3	08/05/14	
4	07/07/14	
5	07/07/14	
6	07/07/14	
7	07/07/14	
8	07/07/14	
9	07/07/14	
10	07/07/14	

DATE DRAWN: 04/15/14	DRAWN BY: BK	APPROVED BY: JG
-------------------------	-----------------	--------------------

AWS UPGRADE
TENNYSON CENTER WT
SITE ID # 165357

6825 COMMUNICATIONS PKWY
PLANO, TX 75024

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CONSULTING GROUP, INC.
9221 Lyndon B Johnson Fwy
Suite 204, Dallas, TX 75243
Phone: 972-231-8893
Fax: 886-364-8375
www.allprocg.com
registration no. 8242

STATE OF TEXAS
JULI MOTTACKAL GEORGE
91793
LICENSED PROFESSIONAL ENGINEER

12/11/14

ACGI NO:	14-2830
SHEET NAME	ANTENNA DIAGRAM
SHEET NUMBER	A-6



Project Name : TENNYSON_CENTER_WT - AWS Carrier Add 10/11/2012	Task Submitted On : 05/29/2014
Task Submitted By : Mohamed Danawala	

Site Modification Change Order

Mod Type : LTE Modification

Project Title : TENNYSON_CENTER_WT - AWS Carrier Add 10/11/2012	GeoPlan Market : Dallas
Requestor Name : Ralph Coupot	Current Configuration : 7-0258-0000 TENNYSON_CENTER_WT
Requestor Phone : 682-831-3217	Proposed Configuration : 7-0258-AWS3 TENNYSON_CENTER_WT
RF Engineer : Sarah Parks	Switch Identifier : 4119-7 Eulless
Expected Completed Date : 04/29/2013	Cluster # :
BTA Name : Dallas-Fort Worth TX	
BTA Number : 101	

Site Information

Coordinates (NAD83) : Latitude : 33-04-10.16 N	Address : 6825 Communications Parkway Plano TX 75024
Longitude : 96-49-47.96 W	City, State, Zip :
Ground Elevation (ft AMSL) : 698.0	County : Collin
	LTE Phase : N/A

LTE Phase Type :

Site Type : Colocation VZW Owned Tower Rooftop

Antennas :

Service Type: 700 Upper CURRENT			Service Type: 700 Upper PROPOSED		
Sector	Antenna Quantity (Tx + Rx)	Manufacturer	Sector	Antenna Quantity (Tx + Rx)	Manufacturer
0258-Alpha	1	GSS ANTENNA, INC	0258-Alpha	1	AMPHENOL
0258-Beta	1	GSS ANTENNA, INC	0258-Beta	1	AMPHENOL
0258-Gamma	1	GSS ANTENNA, INC	0258-Gamma	1	AMPHENOL
Model Number	X7C-665-6	X7C-665-6	Model Number	CWWX063X25G0 0-702-750-(+45)	CWWX063X25G0 0-702-750-(+45)
Antenna gain (dBd)	13.6	13.6	Antenna gain (dBd)	14.2	14.2
Antenna Beamwidth (deg)	64	64	Antenna Beamwidth (deg)	71	71
Sector Azimuth (deg TR)	0	120	Sector Azimuth (deg TR)	0	120
Antenna Tip Height (for EME) (ft AGL)	127.90	127.90	Antenna Tip Height (for EME) (ft AGL)	129.01	129.01
Mechanical DownRt (deg)	2	0	Mechanical DownRt (deg)	0	0
Adjustable Electrical DownRt (deg)	6	6	Adjustable Electrical DownRt (deg)	2	2
Feedline Length (ft)			Feedline Length (ft)		
Number of Lines per Antenna	2	2	Number of Lines per Antenna		
Feedline Model Number	1-5/8"quod	1-5/8"quod	Feedline Model Number	hybriflex 1-1/4"quod	hybriflex 1-1/4"quod
RAD Center (ft AGL)	124.90	124.90	RAD Center (ft AGL)	124.90	124.90

Service Type: PCS A CURRENT			Service Type: PCS A PROPOSED		
Sector	Antenna Quantity (Tx + Rx)	Manufacturer	Sector	Antenna Quantity (Tx + Rx)	Manufacturer
0258-Alpha	1	GSS ANTENNA, INC	0258-Alpha	1	AMPHENOL
0258-Beta	1	GSS ANTENNA, INC	0258-Beta	1	AMPHENOL
0258-Gamma	1	GSS ANTENNA, INC	0258-Gamma	1	AMPHENOL
Model Number	X7C-665-6	X7C-665-6	Model Number	CWWX063X25G0 0-702-750-(+45)	CWWX063X25G0 0-702-750-(+45)
Antenna gain (dBd)	13.6	13.6	Antenna gain (dBd)	14.2	14.2
Antenna Beamwidth (deg)	64	64	Antenna Beamwidth (deg)	71	71
Sector Azimuth (deg TR)	0	120	Sector Azimuth (deg TR)	0	120
Antenna Tip Height (for EME) (ft AGL)	127.90	127.90	Antenna Tip Height (for EME) (ft AGL)	129.01	129.01
Mechanical DownRt (deg)	2	0	Mechanical DownRt (deg)	0	0
Adjustable Electrical DownRt (deg)	6	6	Adjustable Electrical DownRt (deg)	2	2
Feedline Length (ft)			Feedline Length (ft)		
Number of Lines per Antenna	2	2	Number of Lines per Antenna		
Feedline Model Number	1-5/8"quod	1-5/8"quod	Feedline Model Number	hybriflex 1-1/4"quod	hybriflex 1-1/4"quod
RAD Center (ft AGL)	124.90	124.90	RAD Center (ft AGL)	124.90	124.90

1 TECH REVIEW
SCALE: NONE

NET TOTAL: (6) TRI-BAND ANTENNAS, AWS/700 WILL SHARE 1 TRIBAND PER SECTOR, (6) 1-5/8" COAX, (1) MAIN OVP DISTRIBUTION BOX IN SHELTER OR NEAR BBU, (1) RUN OF 1-1/4" HYBRIFLEX LINE, (6X12), (1) MAIN OVP DISTRIBUTION BOX ON TOWER, (3) SECTOR BOXES, (3) 2X4 HYBRID FEEDERS FROM OVP TO SECTOR BOXES, (3) 5/8" HYBRIFLEX JUMPERS FROM SECTOR BOXES TO RRU'S (1X1), (3) ALU 40W 700 RRH, (3) ALU AWS 60W RRH, (12) 1/2" COAX JUMPERS FROM RRU TO ANTENNA. THE PCS TMA'S WILL BE LEFT ALONE, (6) DUPLEXERS WILL BE REMOVED, (6) EXISTING COAX WILL GO TO PCS ONLY, (6) EXISTING ANTENNAS WILL BE REMOVED TO BE REPLACED WITH THE TRIBANDS. THE 1-1/4" WILL SHARE A CONDUIT WITH ONE OF THE 1-5/8" RUNS. PLEASE ORDER AISG 2.0 COMPATIBLE RET. PLEASE PLAN FOR RET KIT AISG 2.0 AND SCU - REMOTE IP ADDRESSABLE. CALL YUSUF DANAWALA @ 817-961-2989 FOR ANY QUESTIONS.

INTENT: TO UPGRADE EXISTING LICENSEE'S COMMUNICATION EQUIPMENT TO NEW AWS EQUIPMENT.

Antenna Quantity (Tx + Rx)	1	1	1
Manufacturer	JAYBEAM WIRELESS	JAYBEAM WIRELESS	JAYBEAM WIRELESS
Model Number	PC3X065-16-3	PC3X065-16-2	PC3X065-16-2
Antenna gain (dB)	18.6	18.6	18.6
Antenna Beamwidth (deg)	62	62	62
Sector Azimuth (deg TR)	0	120	240
Antenna Tip Height (for EME) (ft AGL)	127.90	127.90	127.90
Mechanical DownRt (deg)	0	0	0
Adjustable Electrical DownRt (deg)	2	2	2
Feedline Length (ft)			
Number of Lines per Antenna	2	2	2
Feedline Model Number	1-5/8"quod	1-5/8"quod	1-5/8"quod
RAD Center (ft AGL)	124.90	124.90	124.90

Service Type: AWS B CURRENT

Sector	Antenna Quantity (Tx + Rx)	Manufacturer	Model Number	Antenna gain (dBd)	Antenna Beamwidth (deg)	Sector Azimuth (deg TR)	Antenna Tip Height (for EME) (ft AGL)	Mechanical DownRt (deg)	Adjustable Electrical DownRt (deg)	Feedline Length (ft)	Number of Lines per Antenna	Feedline Model Number	RAD Center (ft AGL)
0258-Alpha	1	AMPHENOL	CWWX063X25G0 0-702-2100-(+45)-LEFT	15.2	63	0	129.01	0	2		2	hybriflex 1-1/4"quod	124.90
0258-Beta	1	AMPHENOL	CWWX063X25G0 0-702-2100-(+45)-LEFT	15.2	63	120	129.01	0	2		2	hybriflex 1-1/4"quod	124.90
0258-Gamma	1	AMPHENOL	CWWX063X25G0 0-702-2100-(+45)-LEFT	15.2	63	240	129.01	0	2		2	hybriflex 1-1/4"quod	124.90

Service Type: AWS C CURRENT

Sector	Antenna Quantity (Tx + Rx)	Manufacturer	Model Number	Antenna gain (dBd)	Antenna Beamwidth (deg)	Sector Azimuth (deg TR)	Antenna Tip Height (for EME) (ft AGL)	Mechanical DownRt (deg)	Adjustable Electrical DownRt (deg)	Feedline Length (ft)	Number of Lines per Antenna	Feedline Model Number	RAD Center (ft AGL)
0258-Alpha	0	AMPHENOL	CWWX063X25G0 0-702-2100-(+45)-LEFT	15.2	63	0	129.01	0	2		2	hybriflex 1-1/4"quod	124.90
0258-Beta	0	AMPHENOL	CWWX063X25G0 0-702-2100-(+45)-LEFT	15.2	63	120	129.01	0	2		2	hybriflex 1-1/4"quod	124.90
0258-Gamma	0	AMPHENOL	CWWX063X25G0 0-702-2100-(+45)-LEFT	15.2	63	240	129.01	0	2		2	hybriflex 1-1/4"quod	124.90

Antenna Quantity (Tx + Rx)	1	1	1
Manufacturer	AMPHENOL	AMPHENOL	AMPHENOL
Model Number	CWWX063X25G0 0-702-1900-(+45)-LEFT	CWWX063X25G0 0-702-1900-(+45)-LEFT	CWWX063X25G0 0-702-1900-(+45)-LEFT
Antenna gain (dB)	17.7	17.0	17.0
Antenna Beamwidth (deg)	70	70	70
Sector Azimuth (deg TR)	0	120	240
Antenna Tip Height (for EME) (ft AGL)	129.01	129.01	129.01
Mechanical DownRt (deg)	0	0	0
Adjustable Electrical DownRt (deg)	2	2	2
Feedline Length (ft)			
Number of Lines per Antenna	1-5/8"quod	1-5/8"quod	1-5/8"quod
Feedline Model Number	1-5/8"quod	1-5/8"quod	1-5/8"quod
RAD Center (ft AGL)	124.90	124.90	124.90

Service Type: AWS B PROPOSED

Sector	Antenna Quantity (Tx + Rx)	Manufacturer	Model Number	Antenna gain (dBd)	Antenna Beamwidth (deg)	Sector Azimuth (deg TR)	Antenna Tip Height (for EME) (ft AGL)	Mechanical DownRt (deg)	Adjustable Electrical DownRt (deg)	Feedline Length (ft)	Number of Lines per Antenna	Feedline Model Number	RAD Center (ft AGL)
0258-Alpha	0	AMPHENOL	CWWX063X25G0 0-702-2100-(+45)-LEFT	15.2	63	0	129.01	0	2		2	hybriflex 1-1/4"quod	124.90
0258-Beta	0	AMPHENOL	CWWX063X25G0 0-702-2100-(+45)-LEFT	15.2	63	120	129.01	0	2		2	hybriflex 1-1/4"quod	124.90
0258-Gamma	0	AMPHENOL	CWWX063X25G0 0-702-2100-(+45)-LEFT	15.2	63	240	129.01	0	2		2	hybriflex 1-1/4"quod	124.90

Service Type: AWS C PROPOSED

Sector	Antenna Quantity (Tx + Rx)	Manufacturer	Model Number	Antenna gain (dBd)	Antenna Beamwidth (deg)	Sector Azimuth (deg TR)	Antenna Tip Height (for EME) (ft AGL)	Mechanical DownRt (deg)	Adjustable Electrical DownRt (deg)	Feedline Length (ft)	Number of Lines per Antenna	Feedline Model Number	RAD Center (ft AGL)
0258-Alpha	0	AMPHENOL	CWWX063X25G0 0-702-2100-(+45)-LEFT	15.2	63	0	129.01	0	2		2	hybriflex 1-1/4"quod	124.90
0258-Beta	0	AMPHENOL	CWWX063X25G0 0-702-2100-(+45)-LEFT	15.2	63	120	129.01	0	2		2	hybriflex 1-1/4"quod	124.90
0258-Gamma	0	AMPHENOL	CWWX063X25G0 0-702-2100-(+45)-LEFT	15.2	63	240	129.01	0	2		2	hybriflex 1-1/4"quod	124.90

Following are Dual Band Antennas in the proposed configuration:

- AMPHENOL / CWWX063X25G00-T02-2100-(+45)-LEFT

Comments :

Net Total: (6) tri-band Antennas, AWS/700 will share 1 tri-band per sector, (6) 1-5/8" coax, (1) Main OVP Distribution box in Shelter or Near BBU, (1) run of 1-1/4" Hybriflex line, (6x12), (1) Main OVP Distribution box on tower, (3) sector boxes, (3) 2x4 hybrid feeders from OVP to sector boxes, (3) 5/8" Hybriflex jumpers from Sector boxes to RRU's (1x1), (3) ALU 40W 700 RRH, (3) ALU AWS 60W RRH, (12) 1/2" Coax Jumpers from RRU to Antenna. The PCS TMA's will be left alone, (6) Duplexers will be removed, (6) existing coax will go to PCS only, (6) Existing antennas will be removed to be replaced with the tribands. The 1-1/4" will share a conduit with one of the 1-5/8" runs. Please order AISG 2.0 compatible RET. Please plan for RET kit AISG 2.0 and SCU - remote IP addressable. Call Yusuf Danawala @ 817-961-2989 for any questions.

12/11/14	CITY COMMENTS	
09/29/14	CITY COMMENTS	
08/04/14	CITY COMMENTS	
07/02/14	CITY COMMENTS	
07/02/14	ISSUED FOR REVIEW	
06/18/14	ISSUED FOR REVIEW	
06/09/14	ISSUED FOR REVIEW	
04/27/14	ISSUED FOR REVIEW	
04/15/14	ISSUED FOR REVIEW	
NO.	DATE	REASON

verizon wireless
7 WILLAG CIRCLE SUITE #400
WESTLAC, TEXAS 76162

DATE DRAWN:	04/15/14
DRAWN BY:	BK
APPROVED BY:	JG

**AWS UPGRADE
TENNYSON
CENTER WT
SITE ID # 165357**

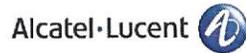
6825 COMMUNICATIONS PKWY
PLANO, TX 75024

ALLPRO
CONSULTING GROUP, INC.
9221 Lyndon B Johnson Fwy
Suite 204, Dallas, TX 75243
Phone: 972-231-8893
Fax: 855-354-8375
www.allproci.com
registration no. 8242

STATE OF TEXAS
YUSUF MOTTACKAL GEORGE
91793
LICENSED PROFESSIONAL ENGINEER

12/11/14

ACGI NO:	14-2830
SHEET NAME	TECH REVIEW
SHEET NUMBER	A-7



Alcatel-Lucent RRH2x40-AWS REMOTE RADIO HEAD

Technical specifications

Physical dimensions

- Height: 629 mm (24.4 in.)
- Width: 270 mm (10.63 in.)
- Depth: 170mm (6.7 in.)
- Weight (without mounting kit): less than 20 kg (44 lb)

Power

- Power supply: -48VDC

Operating environment

- Outdoor temperature range:
 - With solar load: -40°C to +50°C (-40°F to +122°F)
 - Without solar load: -40°C to +55°C (-40°F to +131°F)

Passive convection cooling (no fans)

- Enclosure protection
 - IP65 (International Protection rating)

RF characteristics

- Frequency band: 1700/2100 MHz (AWS), 3GPP Band 4
- Bandwidth: up to 20 MHz
- RF output power at antenna port: 40 W nominal RF power for each Tx port
- Rx diversity: 2-way or 4-way with optional Rx Diversity module
- Noise figure: below 2.0 dB typical
- Antenna Line Device features
 - TMA and Remote electrical tilt (RET) support via AISG V2.0

Optical characteristics

Type/number of fibers

- Single-mode variant
 - One Single Mode Single Fiber per RRH2x, carrying UL and DL using CWDM
 - Single mode dual fiber (SM/DF)
- Multi-mode variant
 - Two Multi-mode fibers per RRH2x: one carrying UL, the other carrying DL

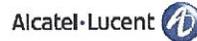
Optical fiber length

- Up to 500 m (0.31 mi), using NM fiber
- Up to 20 km (12.43 mi), using SM fiber

Digital Ports and Alarms

- Two optical ports to support daisy-chaining
- Six external alarms

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1 2X40W RRH DETAIL
SCALE: NONE

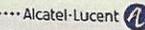
New AWS RF Modules for VzW RRHx60 – HW Characteristics

LR14.1

	RRH2x60
RF Output Power	2x60W
Instantaneous Bandwidth	45MHz
Target Reliability (Annual Return Rate)	<2%
Receiver	4 Branch Rx
Features	AISG 2.0 for RET/TMA
Power	-48VDC Internal Smart Bias-T
CPRI Ports	2 CPRI Rate 5 Ports
External Alarms	4 External User Alarms
Monitor Ports	TX, RX
Environmental	GR487 Compliance
RF Connectors	7/16 DIN (rear – facing downward)
Size	11"x37"x5"
Weight	60lb



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2 2X60W RRH DETAIL
SCALE: NONE

NET TOTAL: (6) TRI-BAND ANTENNAS, AWS/700 WILL SHARE 1 TRIBAND PER SECTOR. (6) 1-5/8" COAX, (1) MAIN OVP DISTRIBUTION BOX IN SHELTER OR NEAR BBU, (1) RUN OF 1-1/4" HYBRIFLEX LINE. (6X12), (1) MAIN OVP DISTRIBUTION BOX ON TOWER, (3) SECTOR BOXES, (3) 2X4 HYBRID FEEDERS FROM OVP TO SECTOR BOXES, (3) 5/8" HYBRIFLEX JUMPERS FROM SECTOR BOXES TO RRH'S (1X1), (3) ALU 4DW 700 RRH, (3) ALU AWS 60W RRH, (12) 1/2" COAX JUMPERS FROM RRU TO ANTENNA. THE PCS TMA'S WILL BE LEFT ALONE. (6) DIPLEXERS WILL BE REMOVED, (6) EXISTING COAX WILL GO TO PCS ONLY. (6) EXISTING ANTENNAS WILL BE REMOVED TO BE REPLACED WITH THE TRIBANDS. THE 1-1/4" WILL SHARE A CONDUIT WITH ONE OF THE 1-5/8" RUNS. PLEASE ORDER AISG 2.0 COMPATIBLE RET. PLEASE PLAN FOR RET KIT AISG 2.0 AND SCU- REMOTE IP ADDRESSABLE. CALL YUSUF DANAWALA @ 817-961-2989 FOR ANY QUESTIONS.

INTENT: TO UPGRADE EXISTING LICENSEE'S COMMUNICATION EQUIPMENT TO NEW AWS EQUIPMENT.

NO.	DATE	ISSUED FOR REVIEW	BY	REASON
4	12/11/14	CITY COMMENTS		
3	09/03/14	CITY COMMENTS		
2	06/04/14	CITY COMMENTS		
1	07/07/14	CITY COMMENTS		
0	07/02/14	FINAL CD		
F	06/18/14	ISSUED FOR REVIEW		
E	05/05/14	ISSUED FOR REVIEW		
D	04/25/14	ISSUED FOR REVIEW		
C	04/17/14	ISSUED FOR REVIEW		
B	04/15/14	ISSUED FOR REVIEW		
A	04/15/14	ISSUED FOR REVIEW		

7 WILLAGUE CIRCLE SUITE #400
WESTLAC, TEXAS 76062

DATE DRAWN:	04/15/14
DRAWN BY:	BK
APPROVED BY:	JG

**AWS UPGRADE
TENNYSOON
CENTER WT
SITE ID # 163557**

6825 COMMUNICATIONS PKWY
PLANO, TX 75024

ALLPRO
CONSULTING GROUP, INC.
9221 Lyndon B Johnson Fwy
Suite 204, Dallas, TX 75245
Phone: 972-231-8933
Fax: 856-354-8375
www.allprocgi.com
registration no. 8242

STATE OF TEXAS

JOJI MOTTACKAL GEORGE

91793

LICENSED PROFESSIONAL ENGINEER

12/11/14

ACGI NO:	14-2830
SHEET NAME	DETAILS
SHEET NUMBER	A-8

CITY OF PLANO REQUIREMENTS

- A. ALL BOLTS AND CONNECTION HARDWARE SHALL BE HOT DIPPED GALVANIZED OR STAINLESS STEEL.
- B. ALL SPRINKLER HEADS NEED TO BE MARKED OR FLAGGED PRIOR TO START OF CONSTRUCTION. IF SPRINKLER LINES ARE DAMAGED DURING CONSTRUCTION, ALL REPAIRS ARE TO BE MADE BY A STATE OF TEXAS LICENSED IRRIGATOR.
- C. ALL TRENCHES TO BE HAND DUG AND TO MECHANICALLY COMPACTED 95% STD. PROCTOR COMPACTED WHEN BACKFILLED. DO NO BACKFILL TRENCHES UNTIL INSPECTED AND APPROVED BY PUMPING FACILITIES SUPERINTENDENT. (972)727-1623. MIN DEPTH TO TOP OF CONDUIT 3'.
- D. NO ONSITE WORK IS TO BEGIN UNTIL APPROVED BY PUMPING STATION FACILITIES SUPERINTENDENT. (972) 727-1623. A 24 HR NOTICE SHALL BE GIVEN TO THE CITY BEFORE ANY WORK.
- E. NO CONCRETE TO BE POURED UNTIL BACKFILLED, REBAR, ETC. APPROVED BY SUPERINTENDENT (972) 727-1623.
- F. GATE SHALL BE LOCKED AT ALL TIME.
- G. NO WORK ALLOWED ON THE STEEL PORTION OF THE TANK.

SITE PRESERVATION AND RESTORATION

ANY DAMAGE OCCURRING TO THE GROUNDS (SOD, IRRIGATION SYSTEM, ETC...) DURING CONSTRUCTION SHALL BE REPAIRED TO EXISTING CONDITIONS OR BETTER TO THE CITY MANAGERS SATISFACTION OR HIS DESIGNEE, FOR ACCEPTANCE OF THE SITE RESTORATION.

NET TOTAL: (6) TRI-BAND ANTENNAS, AWS/700 WILL SHARE 1 TRIBAND PER SECTOR. (6) 1-5/8" COAX. (1) MAIN OVP DISTRIBUTION BOX IN SHELTER OR NEAR BBU, (1) RUN OF 1-1/4" HYBRIFLEX LINE. (6X12). (1) MAIN OVP DISTRIBUTION BOX ON TOWER. (3) SECTOR BOXES, (3) 2X4 HYBRID FEEDERS FROM OVP TO SECTOR BOXES, (3) 5/8" HYBRIFLEX JUMPERS FROM SECTOR BOXES TO RRU'S (1X1), (3) ALU 40W 700 RRH, (3) ALU AWS 60W RRH, (12) 1/2" COAX JUMPERS FROM RRU TO ANTENNA. THE PCS TMA'S WILL BE LEFT ALONE. (6) DIPLEXERS WILL BE REMOVED, (6) EXISTING COAX WILL GO TO PCS ONLY. (6) EXISTING ANTENNAS WILL BE REMOVED TO BE REPLACED WITH THE TRIBANDS. THE 1-1/4" WILL SHARE A CONDUIT WITH ONE OF THE 1-5/8" RUNS. PLEASE ORDER AISG 2.0 COMPATIBLE RET. PLEASE PLAN FOR RET KIT AISG 2.0 AND SCU- REMOTE IP ADDRESSABLE. CALL YUSUF DANAWALA @ 817-961-2989 FOR ANY QUESTIONS.

INTENT: TO UPGRADE EXISTING LICENSEE'S COMMUNICATION EQUIPMENT TO NEW AWS EQUIPMENT.

4	12/11/14	CITY COMMENTS							
3	06/02/14	CITY COMMENTS							
2	08/04/14	CITY COMMENTS							
1	07/07/14	CITY COMMENTS							
0	07/02/14	FINAL CD							
F	05/19/14	ISSUED FOR REVIEW							
E	02/25/14	ISSUED FOR REVIEW							
D	01/23/14	ISSUED FOR REVIEW							
C	01/21/14	ISSUED FOR REVIEW							
B	01/15/14	ISSUED FOR REVIEW							
A	01/15/14	ISSUED FOR REVIEW							
NO	DATE	NO.	DATE	NO.	DATE	NO.	DATE	NO.	DATE



7 WILAGE CIRCLE SUITE #100
RESTON, VA 20190

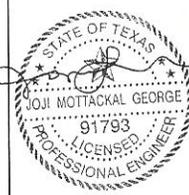
DATE DRAWN: 04/15/14	DRAWN BY: BK	APPROVED BY: JG
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AWS UPGRADE
TENNYSON
CENTER WT
SITE ID # 165357

6825 COMMUNICATIONS PKWY
PLANO, TX 75024



9221 Lyndon B Johnson Fwy
Suite 204, Dallas, TX 75245
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STATE OF TEXAS
J. MOTTACKAL GEORGE
91793
LICENSED
PROFESSIONAL ENGINEER

12/11/14

ACGI NO:	14-2830
SHEET NAME	
NOTES	
SHEET NUMBER	
A-9	