

Measurements for KQEI-FM Antenna Installation
7751 Sorento Road, Elverta, Ca

2011-028
JTS
4-8-2011

JTS ENGINEERING CONSULTANTS, INC.

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"ENGINEERING FOR PUBLIC WORKS & INDUSTRY"

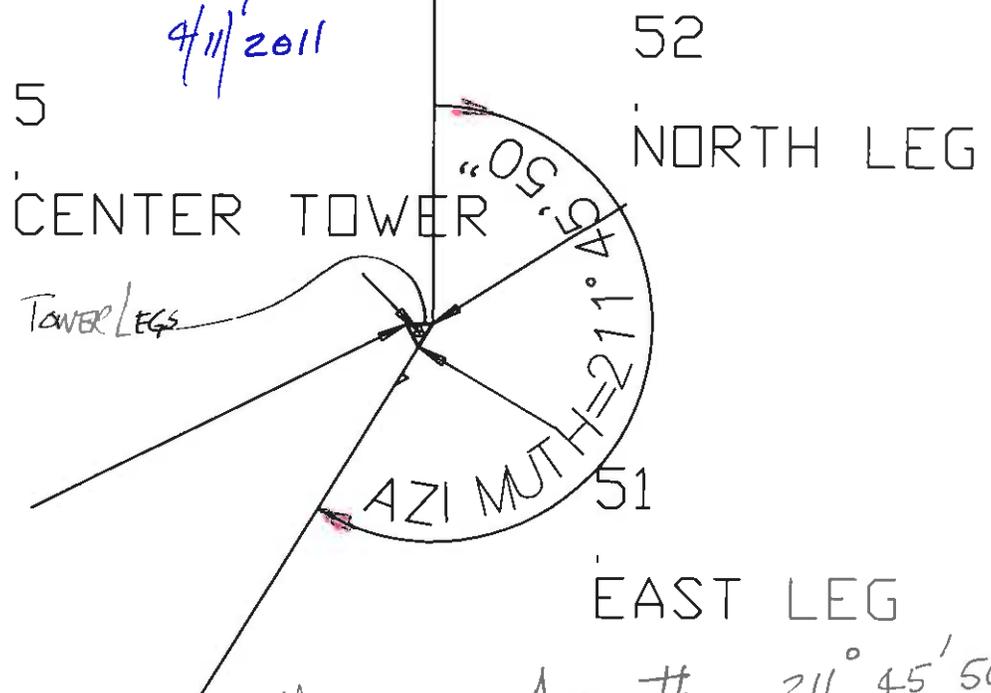
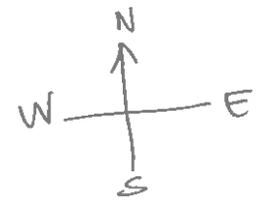
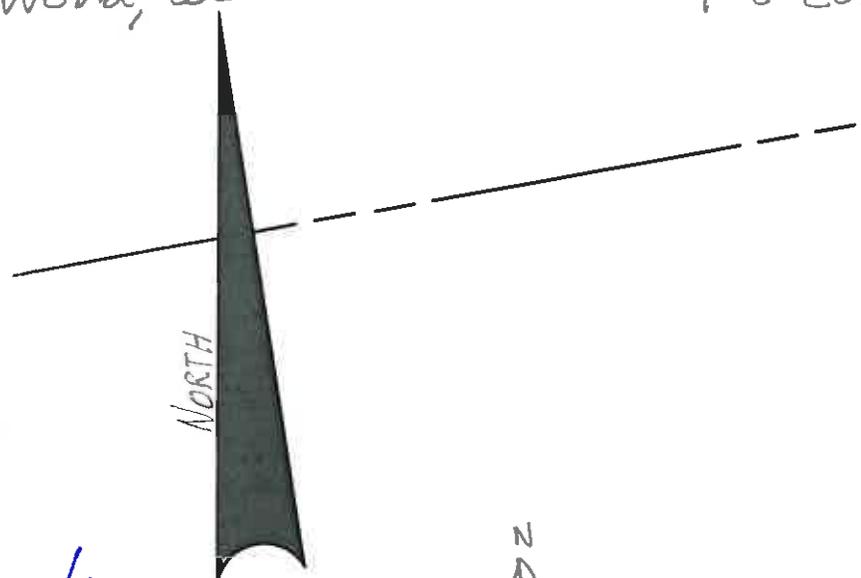
JAVED T. SIDDIQUI, P.E.

ENGINEERING, PLANNING, COMPUTER APPLICATIONS
FEASIBILITY STUDIES, RESEARCH STUDIES, HYDROLOGY STUDIES

S:\00\2011-028\dwg\Tower.dwg, 4/8/2011 4:55:37 PM, JTS Engineering Consultants Inc

I certify that measured direction of antenna is correctly noted on this exhibit.

Prepared by JTS Engineering Consultants Inc
by Javed T Siddiqui
4/11/2011

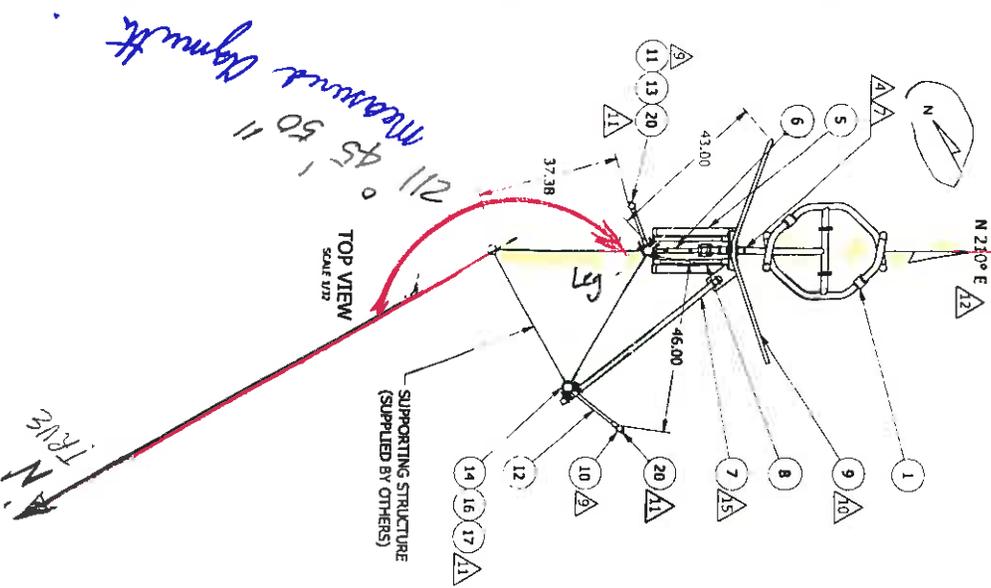


Measured Azimuth = $211^{\circ} 45' 50''$

DIRECTION OF ANTENNA



Field measurements of installed centerline measured 4/7/11



C:\Workspace\Designs\27675\INZ7675-1.MWC.S.L.3.2\2011

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THIRD ANGLE PROJECTION

NOTES:

1. ALL RED BANDS DESIGNATE SIDE TO BE MOUNTED DOWNWARD.

2. ASSEMBLE ANTENNA SYSTEM BY MATING CORRESPONDING NUMBERS.

3. OVERALL LENGTH OF ANTENNA SYSTEM IS 30'-11" APPROXIMATE. THE LENGTH IS FROM THE TOP OF THE TOP HORIZONTAL DIRECTOR TO THE ANTENNA INPUT.

4. ENSURE TO PLUMB ANTENNA VERTICALLY BY LOOSENING HOSE CLAMPS ON PRE-CLAMPED SUPPORT SADDLES AND ADJUSTABLE LINE BRACKETS.

5. FINAL ORIENTATION TO BE DETERMINED BY LICENSED SURVEYOR.

6. HOSE CLAMPS USED TO SECURE LINE BRACKETS TO INTERBAY LINE.

7. HOSE CLAMPS USED TO SECURE ELEMENTS TO SUPPORT SADDLE.

8. APPLY 1/2 GREASE PACKET TO EACH O-RING.

9. VERTICAL DIRECTORS ARE MOUNTED AT BAY LEVEL.

10. HORIZONTAL DIRECTORS ARE MOUNTED 1/4" WAVE ABOVE AND BELOW BAY LEVEL.

11. HARDWARE IS CONSISTENT THROUGHOUT ANTENNA ARRAY.

12. ANTENNA IS MOUNTED ON THE N 180° E TOWER LEG.

13. THE ANTENNA HAS INVERTED BAYS (INSULATORS UP).

14. THE C.O.R. FOR THIS ANTENNA IS 364'-0" H.A.G.

15. THE ANTI-ROTATION BRACKET IS MOUNTED ON THE N 300° E TOWER LEG. THE ANTI-ROTATION BRACKET IS ADJUSTABLE AT U-BOLT.

16. UNLESS OTHERWISE NOTED, ALL BOLTED CONNECTIONS SHALL INITIALLY BE BROUGHT TO A SNUG-TIGHT CONDITION WHERE JOINT TIGHTNESS IS ATTAINED WITH A FEW IMPACTS OF AN IMPACT WRENCH ON THE FULL EFFORT OF AN IRONWORKER USING AN ORDINARY SIZED WRENCH TO BRING THE PILES INTO FIRM CONTACT. A SYSTEMATIC APPROACH SHALL BE USED TO BRING THE JOINT INTO A SNUG-TIGHT CONDITION STARTING WITH THE MOST RIGID PART OF THE JOINT AND PROCEEDING TOWARD THE FREE EDGES.

17. APPLY AN ADDITIONAL 1/3 TURN TO ALL BOLTED CONNECTIONS FOR FINAL TIGHTENING. UNLESS OTHERWISE NOTED, FINAL TIGHTENING OF ALL BOLTS SHOULD BE COMPLETED AFTER FINAL CONSTRUCTION OF THE STRUCTURE/ASSEMBLY. PLEASE NOTE, SPECIAL ATTENTION SHALL BE GIVEN TO TIGHTENING OF 1/2" DIAMETER A-25 BOLTS, U-BOLTS, AND OVER-TIGHTENING.

PROJECT NO.	DATE	BY	CHKD.
27675/1	3/28/11		
DRWN BY	CEL	3/28/11	
CHECKED BY	L.S.	3/28/11	
DESIGN NO.	C.S.	3/28/11	

ITEM	QTY	DESCRIPTION
21	3	HWK0006
20	33	HQ0028
19	1	BLA100-21
18	3	HWK1102
17	97	HU00616
16	97	WL0655
15	13	SC0616H0125
14	42	UR0616-0300
13	6	BT27675-9
12	6	BT27675-8
11	3	BT27675-7
10	3	BT27675-6
9	6	BT27675-5
8	6	BT27675-4
7	3	BT27675-3
6	3	BT27675-2
5	3	BT27675-1
4	1	CL1032
3	1	CL1063B-11-42
2	2	CL1061B-12B-69
1	3	AE-U-1C00

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CHECKED BY	L.S.	3/28/11	
DESIGN NO.	C.S.	3/28/11	

BILL OF MATERIAL

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LP-3E-DA INSTALLATION DRAWING
KOEI-NORTH HIGHLAND, CA - 89.3 MHz.

DATE: 3/28/11
SCALE: AS NOTED
SHEET: 1 OF 2

STEVE
415-553-2377

April 8, 2011

As noted in the attached surveyor's report from Javed Siddiqui, P.E., there is a slight discrepancy (less than 2°) in the measured orientation of the KQEI-FM antenna relative to the design specifications. Due to unforeseen delays in receiving critical antenna components that disrupted our planned installation schedule, we are not able to correct this discrepancy prior to the expiration of the construction permit. The antenna orientation will be corrected in the coming days and a revised certification will be provided as an addendum to this application.

Daniel Mansergh

A handwritten signature in black ink, appearing to read "Dan Mansergh", with a long horizontal flourish extending to the right.

Director of Engineering
KQEI-FM