

Approved by CC:

APR 14 2014

REQUEST FOR AGENDA PLACEMENT FORM

Submission Deadline - Tuesday, 12:00 PM before Court Dates

SUBMITTED BY: Jamie Moore
TODAY'S DATE: 04/10/2014

DEPARTMENT: Emergency Management

SIGNATURE OF DEPARTMENT HEAD:



REQUESTED AGENDA DATE: 04/14/2014

SPECIFIC AGENDA WORDING: Consideration of additional financial contribution to CASA Radar Project

PERSON(S) TO PRESENT ITEM: Jamie Moore

SUPPORT MATERIAL: Engineer Design, Foundation Quote

TIME: 5 min

ACTION ITEM: x

WORKSHOP

(Anticipated number of minutes needed to discuss item)

CONSENT:

EXECUTIVE:

STAFF NOTICE:

COUNTY ATTORNEY:

IT DEPARTMENT:

AUDITOR:

PURCHASING DEPARTMENT: x

PERSONNEL:

PUBLIC WORKS:

BUDGET COORDINATOR: x

OTHER:

*******This Section to be Completed by County Judge's Office*******

ASSIGNED AGENDA DATE: _____

REQUEST RECEIVED BY COUNTY JUDGE'S OFFICE _____

COURT MEMBER APPROVAL _____

Date _____

JCI Construction

PO Box 1719
Cleburne, TX 76033
817-556-9558
Fax 817-556-0593

Estimate

Date	Estimate #
4/7/2014	369

Name / Address
Johnson County Purchasing Radio Tower

			Project
Description	Qty	Rate	Total
JCI agrees to furnish all labor, equipment and materials necessary for the installation of the following items			
14 x 14 concrete foundation for radio tower 7 feet in the ground with (3) 3ft piers down to foundation. Includes digging and backfilling	196	71.42857	14,000.00
Total			\$14,000.00

DESIGNED APPURTENANCE LOADING

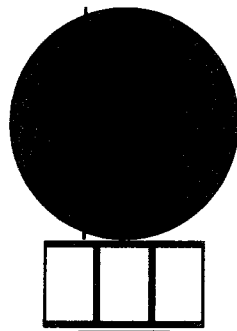
TYPE	ELEVATION	TYPE	ELEVATION
Radome w/ Radar	69	Platform	60
5/8" x 10' Lightning Rod	64		

MATERIAL STRENGTH

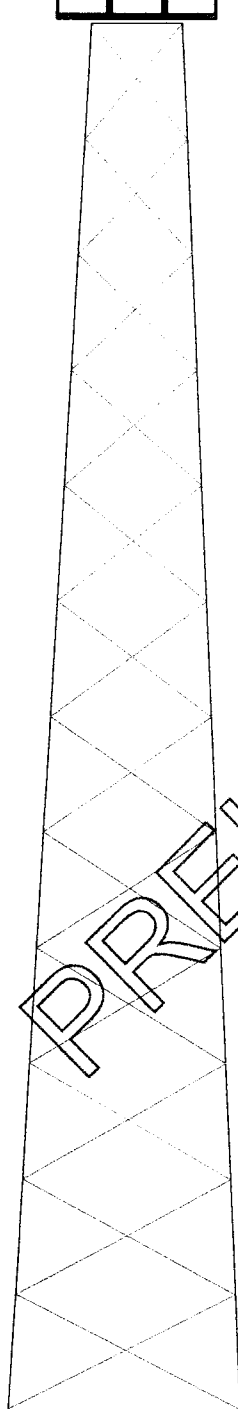
GRADE	Fy	Fu	GRADE	Fy	Fu
A572-50	50 ksi	65 ksi	A36	36 ksi	58 ksi

TOWER DESIGN NOTES

1. Tower is located in Johnson County, Texas.
2. Tower designed for Exposure C to the TIA-222-G Standard.
3. Tower designed for a 90.00 mph basic wind in accordance with the TIA-222-G Standard.
4. Tower is also designed for a 30.00 mph basic wind with 0.75 in ice. Ice is considered to increase in thickness with height.
5. Deflections are based upon a 60.00 mph wind.
6. Tower Structure Class III.
7. Topographic Category 1 with Crest Height of 0.00 ft
8. Climbing and waveguide ladders to be welded into welded sections
9. Tower to be ground in accordance with EIA/Motorola R56 standards



	T1	T2	T3	T4	T5
Legs		SF 3" solid			
Leg Grade		A572-50			
Diagonals	L 2 x 2 x 1/4	L 2.5 x 2.5 x 1/4	L 3 x 3 x 1/4		
Diagonal Grade		A36			
Top Chords	L 2 x 2 x 1/4		N.A.		
Face Width (ft)	6	6	6		
# Panels @ (ft)		12 @ 5			
Weight (lb)	2422.4	2714.5	3147.5		



PRELIMINARY

Paul J. Ford and Company		Job: 60-ft S/S Tower; Johnson County, TX	
250 E. Broad Street, Ste 600		Project: PJF #37714-0002	
Columbus, OH, 43215		Client: Rio Steel & Tower, LTD	Drawn by: Larry A. Paxton
Phone: 614.221.6679		Code: TIA-222-G	Date: 04/03/14
FAX: 614.221.2540		Scale: N	Dwg No. E
		Path: G:\TOWERS\T1_Rio Steel (CS819201437714-0002 Johnson Co., TX)\T1714-0002_Knock Down.dwg	



Paul J. Ford and Company
 250 E. Broad Street, Ste 600
 Columbus, OH, 43215
 Phone: 614.221.6679
 FAX: 614.221.2540

Job	60-ft S/S Tower; Johnson County, TX	Page	1 of 1
Project	PJF #37714-0002	Date	15:35:25 04/03/14
Client	Rio Steel & Tower, LTD	Designed by	Larry A. Paxton

Material Summary

Section No.	Elevation ft	Steel Type	Size	No.	Piece Length ft	Total Weight lb
T1	60 - 40	Angle	L 2 x 2 x 1/4	3	4.00	38
				6	6.56	126
				6	6.90	132
				6	7.25	139
				6	7.62	146
		Solid Round	3" solid	3	20.03	1446
T2	40 - 20	Angle	L 2.5 x 2.5 x 1/4	6	8.01	194
				6	8.40	204
				6	8.81	214
				6	9.22	224
				6	9.65	234
		Solid Round	3" solid	3	20.03	1446
T3	20 - 0	Angle	L 3 x 3 x 1/4	6	9.65	284
				6	10.08	296
				6	10.52	309
				6	10.96	322
				6	11.40	334
		Solid Round	3" solid	3	20.03	1446
					Total:	6966

PRELIMINARY



PAUL J. FORD AND COMPANY
STRUCTURAL ENGINEERS
Founded in 1965 · Employee owned since 1994



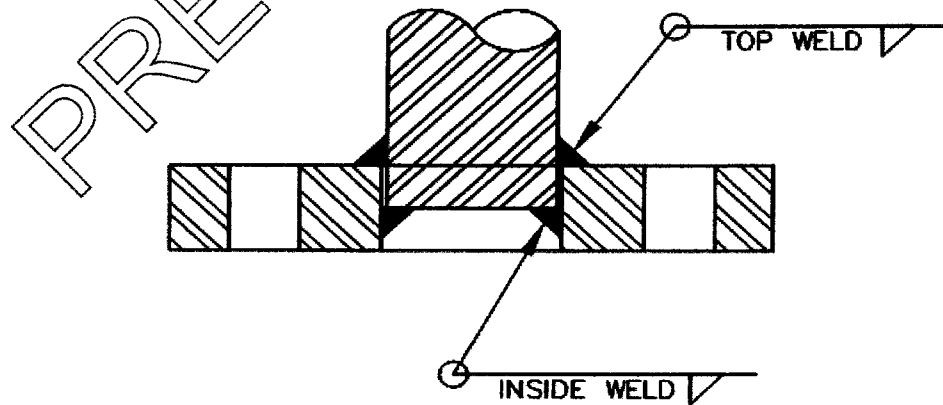
Flange Plate Summary

PJF #: 37714-0002

Project: Johnson Co. Texas

Splice Elevation (ft)	Plate Thickness (in)	Bolt Circle (in)	Bolts	Outside Weld	Inside Weld
60	1 1/4	7"	(6) 7/8"Ø	3/4	3/8
40	1 1/4	7"	(6) 7/8"Ø	5/8	3/8
20	1 1/4	7"	(6) 7/8"Ø	5/8	3/8
0	1 1/2	8.5"	(6) 1 1/4"x3'3"	5/8	3/8

- Notes:
- 1) All plates are to be ASTM A529-50
 - 2) All bolts except anchor bolts are to be ASTM A325
 - 3) Anchor bolts are to be ASTM F1554-36



Combined Footing Foundation

- Concrete strength $F'_c = 4$ (ksi)
- Rebar Strength $F_y = 60$ (ksi)
- Soil Density = **110** (pcf)
- Depth to Water Table = **99** (ft)
- minimum cover over vert rebar = **3** inches

Overturning Moment = 467.7 ft-k

Total Horizontal Load = 10.2 k

Tower Weight = 16.5 k

