ROBINSON & COL

EM-VER-029-120316

KENNETH C. BALDWIN

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March 15, 2012

Linda Roberts
Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: **Notice of Exempt Modification – Antenna Swap**
382 Colebrook River Road, Colebrook, Connecticut

Dear Ms. Roberts:

Cellco Partnership d/b/a Verizon Wireless ("Cellco") currently maintains twelve (12) wireless telecommunications antennas at the 128-foot level on the existing 150-foot tower at the above-referenced address. The tower is owned by SBA. The Council approved Cellco's use of the tower in 2006. Cellco now intends to modify its installation by replacing six (6) of its existing antennas with three (3) model BXA-171085-8BF PCS antennas and three (3) model BXA-70080-6CF LTE antennas, all at the same level on the tower. Cellco also intends to install six (6) coax cable diplexers on its antenna platform. Attached behind Tab 1 are the specifications for the replacement antennas and cable diplexers.

Please accept this letter as notification pursuant to R.C.S.A. § 16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to Thomas D. McKeon, First Selectman for the Town of Colebrook. A copy of this letter is also being sent to Leonard D. and Sandra Johnson, the owners of the property on which the tower is located.

The planned modifications to the facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2).

1. The proposed modifications will not result in an increase in the overall height of the existing tower. Cellco's replacement antennas and diplexers will be located at the 128-foot level on the existing 150-foot tower.

2. The proposed modifications will not involve any change to ground-mounted equipment and, therefore, will not require the extension of the site boundaries.

3. The proposed modifications will not increase noise levels at the facility by six decibels or more.

4. The operation of the replacement antennas will not increase radio frequency (RF) power density levels at the facility to a level at or above the Federal Communications Commission (FCC) adopted safety standard. A cumulative power density table for Cellco's modified facility is included behind Tab 2.

Also attached is a Structural Analysis confirming that the tower and foundation can support Cellco's proposed modifications. (See Tab 3).

For the foregoing reasons, Cellco respectfully submits that the proposed modifications to the above-referenced telecommunications facility constitutes an exempt modification under R.C.S.A. § 16-50j-72(b)(2).

Sincerely,

Kenneth C. Baldwin

Enclosures
Copy to:
Thomas D. McKeon, Colebrook First Selectman
Leonard D. and Sandra Johnson
Sandy M. Carter

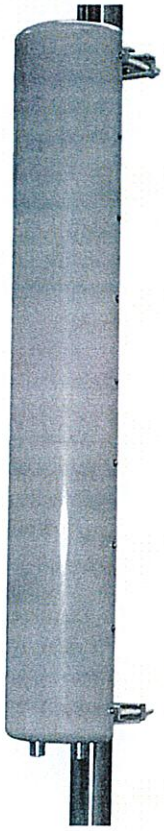
BXA-171085-8BF-EDIN-X

Replace "X" with desired electrical downtilt.

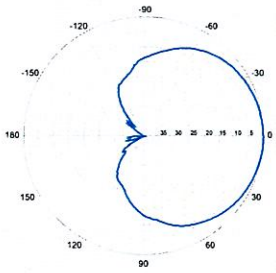
X-Pol | FET Panel | 85° | 16.4 dBi

Electrical Characteristics	1710-2170 MHz		
Frequency bands	1710-1880 MHz	1850-1990 MHz	1920-2170 MHz
Polarization	±45°	±45°	±45°
Horizontal beamwidth	88°	85°	80°
Vertical beamwidth	7°	7°	7°
Gain	13.5 dBd / 15.6 dBi	13.9 dBd / 16.0 dBi	14.3 dBd / 16.4 dBi
Electrical downtilt (X)	0, 2, 4		
Impedance	50Ω		
VSWR	≤1.5:1		
First upper sidelobe	< -17 dB		
Front-to-back isolation	> 30 dB		
In-band isolation	> 28 dB		
IM3 (20W carrier)	< -150 dBc		
Input power	300 W		
Lightning protection	Direct Ground		
Connector(s)	2 Ports / EDIN / Female / Bottom		
Operating temperature	-40° to +60° C / -40° to +140° F		
Mechanical Characteristics			
Dimensions Length x Width x Depth	1232 x 154 x 105 mm	48.5 x 6.1 x 4.1 in	
Depth with t-brackets	133 mm	5.2 in	
Weight without mounting brackets	4.8 kg	10.5 lbs	
Survival wind speed	296 km/hr	184 mph	
Wind area	Front: 0.19 m² Side: 0.14 m²	Front: 2.0 ft² Side: 1.5 ft²	
Wind load @ 161 km/hr (100 mph)	Front: 281 N Side: 223 N	Front: 63 lbf Side: 50 lbf	

Mounting Options	Part Number	Fits Pipe Diameter	Weight
2-Point Mounting Bracket Kit	26799997	50-102 mm 2.0-4.0 in	2.3 kg 5 lbs
2-Point Mounting & Downtilt Bracket Kit	26799999	50-102 mm 2.0-4.0 in	3.6 kg 8 lbs
Concealment Configurations	For concealment configurations, order BXA-171085-8BF-EDIN-X-FP		

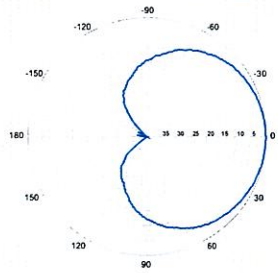


BXA-171085-8BF-EDIN-X



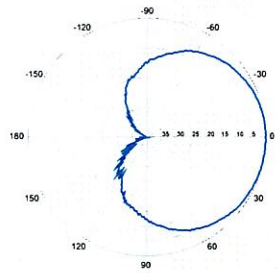
Horizontal | 1710-1880 MHz

BXA-171085-8BF-EDIN-X



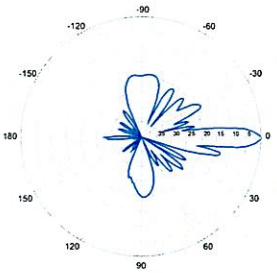
Horizontal | 1850-1990 MHz

BXA-171085-8BF-EDIN-X



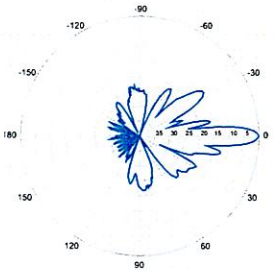
Horizontal | 1920-2170 MHz

BXA-171085-8BF-EDIN-0



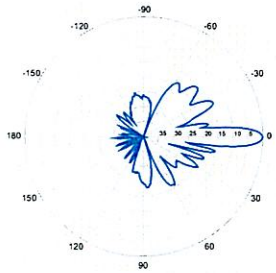
0° | Vertical | 1710-1880 MHz

BXA-171085-8BF-EDIN-0



0° | Vertical | 1850-1990 MHz

BXA-171085-8BF-EDIN-0

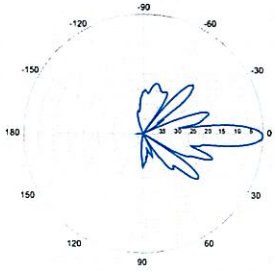


0° | Vertical | 1920-2170 MHz

BXA-171085-8BF-EDIN-X

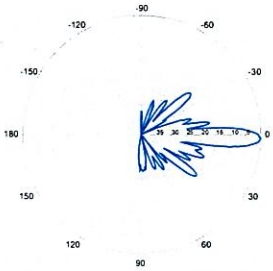
X-Pol | FET Panel | 85° | 16.4 dBi

BXA-171085-8BF-EDIN-2



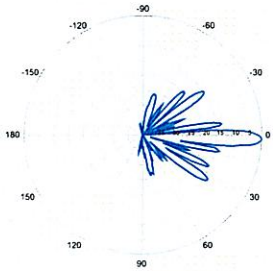
2° | Vertical | 1710-1880 MHz

BXA-171085-8BF-EDIN-2



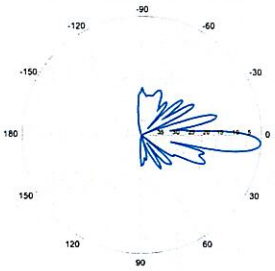
2° | Vertical | 1850-1990 MHz

BXA-171085-8BF-EDIN-2



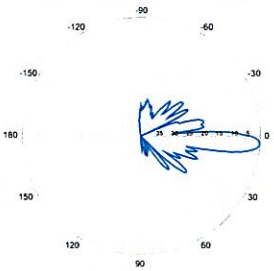
2° | Vertical | 1920-2170 MHz

BXA-171085-8BF-EDIN-4



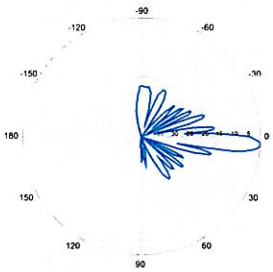
4° | Vertical | 1710-1880 MHz

BXA-171085-8BF-EDIN-4



4° | Vertical | 1850-1990 MHz

BXA-171085-8BF-EDIN-4



4° | Vertical | 1920-2170 MHz

Amphenol ANTENNA SOLUTIONS

BXA-70080-6CF-EDIN-X

X-Pol | FET Panel | 80° | 13.5 dBd

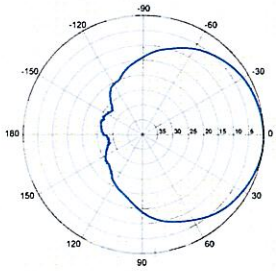
Replace "X" with desired electrical downtilt.

Antenna is also available with NE connector(s). Replace "EDIN" with "NE" in the model number when ordering.

Electrical Characteristics	696-900 MHz	
Frequency bands	696-806 MHz	806-900 MHz
Polarization	±45°	
Horizontal beamwidth	82°	80°
Vertical beamwidth	12°	10°
Gain	13.0 dBd (15.1 dBi)	13.5 dBd (15.6 dBi)
Electrical downtilt (X)	0, 2, 4, 6, 8, 10	
Impedance	50Ω	
VSWR	≤1.35:1	
Upper sidelobe suppression (0°)	-18.3 dB	-18.6 dB
Front-to-back ratio (+/-30°)	-26.9 dB	-25.6 dB
Null fill	5% (-26.02 dB)	
Isolation between ports	< -30 dB	
Input power with EDIN connectors	500 W	
Input power with NE connectors	300 W	
Lightning protection	Direct Ground	
Connector(s)	2 Ports / EDIN or NE / Female / Center (Back)	
Mechanical Characteristics		
Dimensions Length x Width x Depth	1804 x 204 x 151 mm	71.0 x 8.0 x 5.9 in
Depth with z-brackets	191 mm	7.5 in
Weight without mounting brackets	8.2 kg	18 lbs
Survival wind speed	> 201 km/hr	> 125 mph
Wind area	Front: 0.37 m^2 Side: 0.27 m^2	Front: 3.9 ft^2 Side: 2.9 ft^2
Wind load @ 161 km/hr (100 mph)	Front: 531 N Side: 475 N	Front: 119 lbf Side: 104 lbf

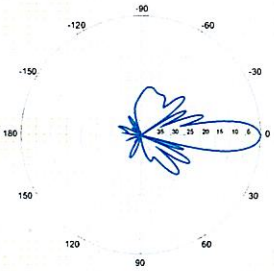
Mounting Options	Part Number	Fits Pipe Diameter	Weight
3-Point Mounting & Downtilt Bracket Kit	36210008	40-115 mm 1.57-4.5 in	6.9 kg 15.2 lbs
Concealment Configurations	For concealment configurations, order BXA-70080-6CF-EDIN-X-FP		

BXA-70080-6CF-EDIN-X



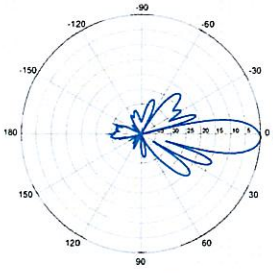
Horizontal | 750 MHz

BXA-70080-6CF-EDIN-0



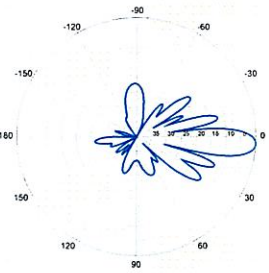
0° | Vertical | 750 MHz

BXA-70080-6CF-EDIN-2

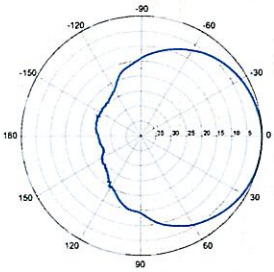


2° | Vertical | 750 MHz

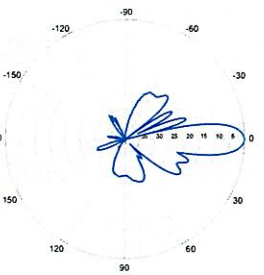
BXA-70080-6CF-EDIN-4



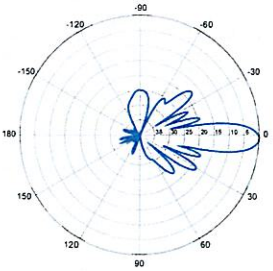
4° | Vertical | 750 MHz



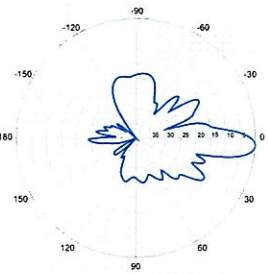
Horizontal | 850 MHz



0° | Vertical | 850 MHz



2° | Vertical | 850 MHz

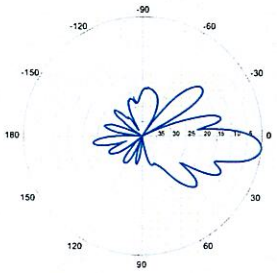


4° | Vertical | 850 MHz

BXA-70080-6CF-EDIN-X

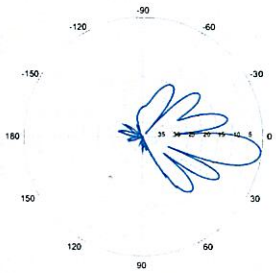
X-Pol | FET Panel | 80° | 13.5 dBd

BXA-70080-6CF-EDIN-6



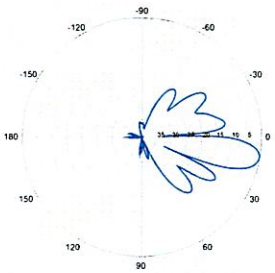
6° | Vertical | 750 MHz

BXA-70080-6CF-EDIN-8

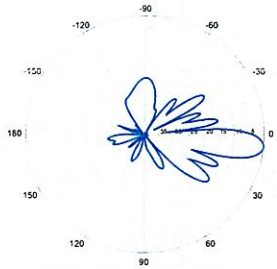


8° | Vertical | 750 MHz

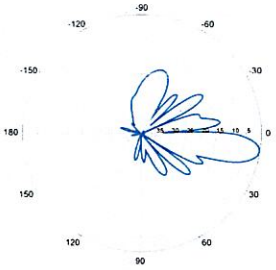
BXA-70080-6CF-EDIN-10



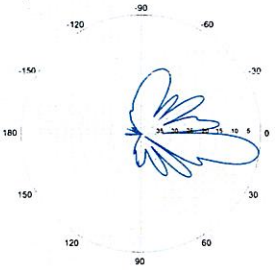
10° | Vertical | 750 MHz



6° | Vertical | 850 MHz



8° | Vertical | 850 MHz



10° | Vertical | 850 MHz

Product Data Sheet **FD9R6004/2C-3L**

ShareLite Wideband Diplexer – In-line 698-960 MHz/1710-2200 MHz, DC pass in high frequency path

Product Description

The ShareLite FD9R6004 Series of diplexers are designed to enable feeder sharing between systems in the 698-960 MHz range and in the 1710-2200 MHz range. The diplexer is equipped with in-line connector placement so it can be installed in the BTS cabinet or at the tower top. This is especially valuable in crowded sites or when the feeders are not easily accessible. Due to its wideband design, the FD9R6004 Series can accommodate many combining solutions between 698-960 MHz and 1710-2200 MHz systems such as LTE 700 MHz, Cellular 800 MHz with PCS, GSM900 with GSM1800, or GSM900 with UMTS. This diplexer features a highly selective filter. It provides a high level of isolation between ports, while keeping the insertion loss on both paths at an extremely low level. The FD9R6004 diplexers are available with various DC pass options, helpful in configurations with or without the Tower Mount Amplifiers installed.

Features/Benefits

- **LTE ready design**
- **Extremely Low Insertion Loss**
- **High level of Rejection between bands – Protection against interferences**
- **Extremely High Power Handling Capability**
- **Integrated DC block/bypass versions available**
- **Very compact & small size design – Easy installation and reduced tower load**
- **In-line long-neck connectors for easy connection & waterproofing**
- **Exceptional reliability & environmental protection (IP 67)**
- **Equipped with 1 * Breathable Vent – Prevent any humidity inside the product**
- **Mounting hardware for Wall and Pole mount provided (P/N SEM2-1A)**
- **Grounding already provided through the mounting bracket**
- **Kit available for easy dual mount**

Technical Specifications

Product Type	Diplexer/Cross Band Coupler
Frequency Range 1, MHz	698-960
Frequency Range 2, MHz	1710-2200
Application	LTE700, GSM900, UMTS, GSM1800, Cellular 800, PCS
Configuration	Sharelite Single diplexer, outdoor, DC pass in the 1710-2170MHz path, with mounting hardware SEM2-1A
Mounting	Wall Mounting: With 4 screws (maximum 6mm diameter); Pole Mounting: With included clamp set 40-110mm (1.57-4.33)
Return Loss All Ports Min/Typ, dB	19/23
Power Handling Continuous, Max, W	1250 at common port; 750 in low frequency path & 500 in high frequency path
Power Handling Peak, Max, W	15000 in low frequency path & 8000 in high frequency path
Impedance, Ohms	50
Insertion Loss, Path 1, dB	0.07 typ.
Insertion Loss, Path 2, dB	0.13 typ.
Rejection Between Bands Min/Typ, dB	58/64@698-960MHz; 60/70@1710-2200MHz
IMP Level at the COM Port, Typ, dBm	-112 @ 2x43
DC Pass in Low Frequency Path	No
DC Pass in High Frequency Path	Yes
Temperature Range, °C (°F)	-40 to +60 (-40 to +140)
Environmental	ETSI 300-019-2-4 Class 4.1E
Ingress Protection	IP 67
Lightning Protection	EN/IEC61000-4-5 Level 4
Connectors	In-line long-neck 7-16-Female
Weight, kg (lb)	1.2 (2.6)
Shipping Weight, kg (lb)	3.2 (7) for 2 * single units in 1 * box, 9.8 (21.6) for 6 * units = 3 * Boxes in 1 * overwrap
Dimensions, H x W x D, mm (in)	147 x 164 x 37 (5.8 x 6.5 x 1.5)
Shipping Dimensions, H x W x D, mm (in)	254 x 406 x 82 (10 x 16 x 3.2) for 2 * Single Units in 1 * box, 280 x 406 x 241 (11 x 16 x 9.5) for 6 * units = 3 * Boxes in 1 * overwrap
Volume, L	0.43
Housing	Aluminum

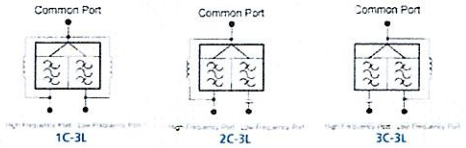
Notes

ShareLite Wideband Diplexer – In-line 698-960 MHz/1710-2200 MHz, DC pass in high frequency path

Other Documentation

FD9R6004/2C-3L Installation Instructions: Wideband_Diplexer_Installation_Rev5.pdf

Selection Guide Diplexer 698-960 / 1710-2200MHz					
	Model Number	Full DC Pass	DC Pass High Band	DC Pass Low Band	Mounting Hardware Included
Single	FD9R6004/1C-3L				X
	FD9R6004/2C-3L				X
	FD9R6004/3C-3L				X
Dual	KIT-FD9R6004/1C-DL				X
	KIT-FD9R6004/2C-DL				X
	KIT-FD9R6004/3C-DL				X



The FD9R6004 Series is upgradeable to a Dual Diplexer kit by means of 2 diplexers and mounting hardware kits SEM2-1A and SEM2-3

Mounting Hardware and Ground Cable Ordering Information		
Model Number	**Description**	
SEM2-1A	Mounting Hardware, Pole mount ø40-110mm (Included with the Single and Dual Diplexer) Wall Screws M6 (Not included with the product)	
SEM2-3	Assembly kit for 2 pcs of FD9R6004/xC-3L (Can be ordered separately but included with the Dual Diplexer Kit)	
CA020-2	Ground Cable, 2m, includes lugs (Optional)	
CA030-2	Ground Cable, 2m, includes lugs (Optional)	
SEM6	Mounting Hardware for 6 Diplexers, Tower Base (Optional)	

	General	Power	Density					
Site Name: Colebrook								
Tower Height: Verizon @ 128ft								
CARRIER	# OF CHAN.	WATTS ERP	HEIGHT	CALC. POWER DENS	FREQ.	MAX. PERMISS. EXP.	FRACTION MPE	Total
*Nextel	12	100	147.5	0.0198	851	0.5673	3.50%	
*Cingular	6	296	137.5	0.0338	880	0.5867	5.76%	
*Cingular	3	427	137.5	0.0244	1930	1.0000	2.44%	
Verizon PCS	**7**	**237**	**128**	**0.0364**	**1970**	**1.0000**	**3.64%**	
Verizon Cellular	**9**	**356**	**128**	**0.0703**	**869**	**0.5793**	**12.14%**	
Verizon AWS	**1**	**670**	**128**	**0.0147**	**2145**	**1.0000**	**1.47%**	
Verizon 700	**1**	**586**	**128**	**0.0129**	**698**	**0.4653**	**2.76%**	
								31.70%
* Source: Siting Council								

FDH Engineering, Inc., 2730 Rowland Rd. Raleigh, NC 27615, Ph. 919.755.1012, Fax 919.755.1031

Structural Analysis for SBA Network Services, Inc.

150' Monopole Tower

SBA Site Name: Johnson
SBA Site ID: CT13613-A
Verizon Site Name: Colebrook

FDH Project Number 11-12295E S1 (R2)

Analysis Results

Tower Components	51.9%	Sufficient
Foundation	51.4%	Sufficient

Prepared By:

Stephanie Amortnont, PE
Project Engineer

Reviewed By:

Christopher M Murphy, PE
President
CT PE License No. 25842

FDH Engineering, Inc.
2730 Rowland Rd.
Raleigh, NC 27615
(919) 755-1012
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March 12, 2012

Prepared pursuant to TIA/EIA-222-F Structural Standards for Steel Antenna Towers and Antenna Supporting Structures and 2005 Connecticut State Building Code

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EXECUTIVE SUMMARY

At the request of SBA Network Services, Inc., FDH Engineering, Inc. performed a structural analysis of the monopole located in Colebrook, CT to determine whether the tower is structurally adequate to support both the existing and proposed loads pursuant to the *Structural Standards for Steel Antenna Towers and Antenna Supporting Structures, TIA/EIA-222-F* and the *2005 Connecticut State Building Code.* Information pertaining to the existing/proposed antenna loading, current tower geometry, geotechnical data, and member sizes was obtained from:

- Paul J. Ford and Company (Job No. 29205-0113) original design drawings dated May 24, 2005
- JGI Eastern, Inc. (Project No. 05268G) Geotechnical Evaluation dated May 16, 2005
- FDH, Inc. (Job No. 08-07610T) TIA Inspection Report dated November 29, 2008
- SBA Network Services, Inc.

The *basic design wind speed* per the *TIA/EIA-222-F* standards and the *2005 CSBC* is 80 mph without ice and 28 mph with 1" radial ice. Ice is considered to increase in thickness with height.

Conclusions

With the existing and proposed antennas from Verizon in place at 128.4 ft, the tower meets the requirements of the *TIA/EIA-222-F* standards and the *2005 CSBC* provided the **Recommendations** listed below are satisfied. Furthermore, provided the foundation was designed and constructed to support the original design reactions (see PJF Job No. 29205-0113), the foundation should have the necessary capacity to support both the proposed and existing loading. For a more detailed description of the analysis of the tower, see the **Results** section of this report.

Our structural analysis has been performed assuming all information provided to FDH Engineering, Inc. is accurate (i.e., the steel data, tower layout, existing antenna loading, and proposed antenna loading) and that the tower has been properly erected and maintained per the original design drawings.

Recommendations

To ensure the requirements of the *TIA/EIA-222-F* standards and the *2005 CSBC* are met with the existing and proposed loading in place, we have the following recommendations:

1. The proposed antennas will utilize the existing coax currently installed inside the pole.
2. The proposed diplexers should be installed directly behind the existing and proposed panel antennas.

APPURTENANCE LISTING

The proposed and existing antennas with their corresponding cables/coax lines are shown in **Table 1**. *If the actual layout determined in the field deviates from the layout, FDH Engineering, Inc. should be contacted to perform a revised analysis.*

Table 1 - Appurtenance Loading

Existing Loading:

Antenna Elevation (ft)	Description	Coax and Lines	Carrier	Mount Elevation (ft)	Mount Type
148.8	(12) Andrew DB846G90A-XY	(12) 1-5/8"	Nextel	148.8	(1) 12.5 Low Profile Platform
139	(6) Powerwave 7770.00 (6) Powerwave LGP21401 TMAs (6) Powerwave LGP13519 TMAs	(12) 1-5/8"	New Cingular	139	(1) 13.5 Low Profile Platform
128.4	(6) Antel LPA-80080/6CF (6) Antel LPA-185080/12CF (6) Andrew 52539698 TMAs	(12) 1-5/8"	Verizon	128.4	(1) 13.5 Low Profile Platform

Proposed Loading:

Antenna Elevation (ft)	Description	Coax and Lines	Carrier	Mount Elevation (ft)	Mount Type
128.4	(6) Antel LPA-80080/6CF (3) Antel BXA-70080/6CF-EDIN (3) Antel BXA-171085/8BF-EDIN (6) RFS FD9R6004/2C-3L Diplexers	(12) 1-5/8"	Verizon	128.4	(1) 13.5 Low Profile Platform

RESULTS

The following yield strength of steel for individual members was used for analysis:

Table 2 - Material Strength

Member Type	Yield Strength
Tower Shaft Sections	65 ksi
Base Plate	50 ksi
Anchor Bolts	100 ksi

Table 3 displays the summary of the ratio (as a percentage) of force in the member to their capacities. Values greater than 100% indicate locations where the maximum force in the member exceeds its capacity. *Note: Capacities up to 100% are considered acceptable.* **Table 4** displays the maximum foundation reactions.

If the assumptions outlined in this report differ from actual field conditions, FDH Engineering, Inc. should be contacted to perform a revised analysis. Furthermore, as no information pertaining to the allowable twist and sway requirements for the existing or proposed appurtenances was provided, deflection and rotation were not taken into consideration when performing this analysis.

See the **Appendix** for detailed modeling information

Table 3 - Summary of Working Percentage of Structural Components

Section No.	Elevation ft	Component Type	Size	% Capacity	Pass Fail
L1	150 - 126	Pole	TP28.7x22.5x0.1875	22.6	Pass
L2	126 - 84.75	Pole	TP39.09x27.3563x0.25	51.0	Pass
L3	84.75 - 44.75	Pole	TP48.99x37.2863x0.3125	51.9	Pass
L4	44.75 - 0	Pole	TP60x46.7395x0.4375	41.8	Pass
		Anchor Bolts	(20) 2.25" Ø Bolts w/ BC = 67"	38.8	Pass
		Base Plate	65" Square PL x 2.75" thk	46.8	Pass

Table 4 - Maximum Base Reactions

Base Reactions	Current Analysis *(TIA/EIA-222-F)*	Original Design *(TIA/EIA-222-F)*
Axial	35 k	36 k
Shear	21 k	39 k
Moment	2,158 k-ft	4,200 k-ft

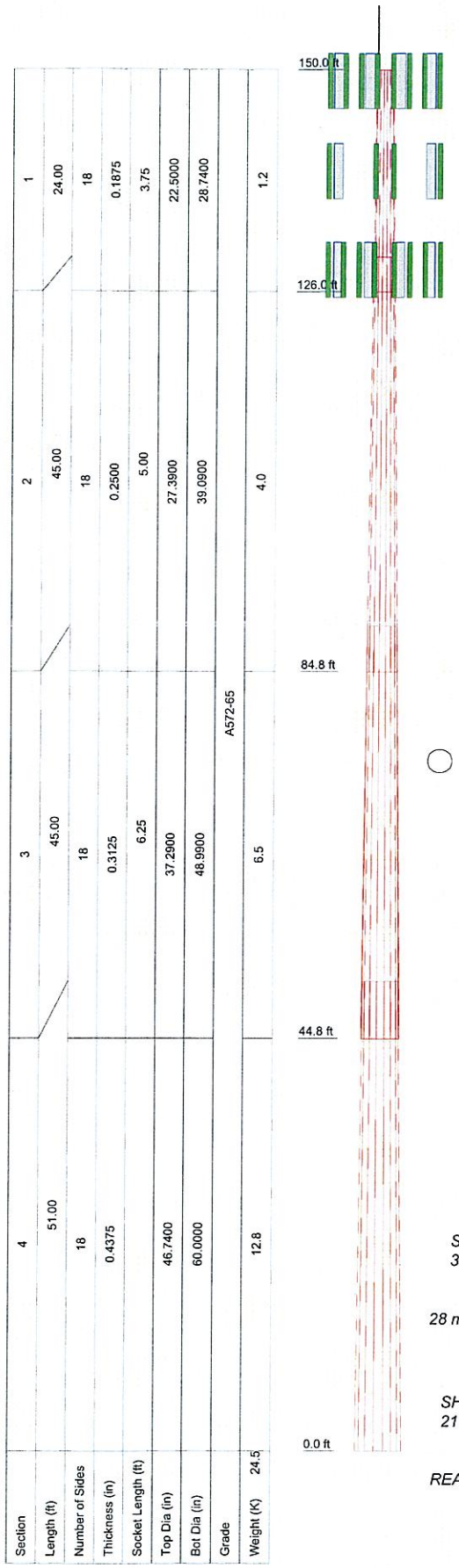
GENERAL COMMENTS

This engineering analysis is based upon the theoretical capacity of the structure. It is not a condition assessment of the tower and its foundation. It is the responsibility of SBA Network Services, Inc. to verify that the tower modeled and analyzed is the correct structure (with accurate antenna loading information) modeled. If there are substantial modifications to be made or the assumptions made in this analysis are not accurate, FDH Engineering, Inc. should be notified immediately to perform a revised analysis.

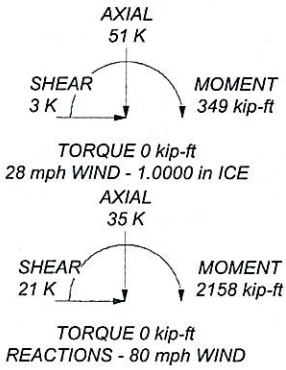
LIMITATIONS

All opinions and conclusions are considered accurate to a reasonable degree of engineering certainty based upon the evidence available at the time of this report. All opinions and conclusions are subject to revision based upon receipt of new or additional/updated information. All services are provided exercising a level of care and diligence equivalent to the standard and care of our profession. No other warranty or guarantee, expressed or implied, is offered. Our services are confidential in nature and we will not release this report to any other party without the client's consent. The use of this engineering work is limited to the express purpose for which it was commissioned and it may not be reused, copied, or distributed for any other purpose without the written consent of FDH Engineering, Inc.

APPENDIX



Section	1	2	3	4
Length (ft)	24.00	45.00	45.00	51.00
Number of Sides	18	18	18	18
Thickness (in)	0.1875	0.2500	0.3125	0.4375
Socket Length (ft)	3.75	5.00	6.25	
Top Dia (in)	22.5000	27.3900	37.2900	46.7400
Bot Dia (in)	28.7400	39.0900	48.9900	60.0000
Grade				
Weight (K)	1.2	4.0	6.5	12.8



DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
Lightning Rod	150	(2) LGP13519 TMA	138.97
(4) DB846G90A-XY w/Mount Pipe	148.75	(1) 13.5 Low Profile Platform	138.97
(4) DB846G90A-XY w/Mount Pipe	148.75	(2) LPA-80080/6CF W/Mount Pipe	128.35
(4) DB846G90A-XY w/Mount Pipe	148.75	(2) LPA-80080/6CF W/Mount Pipe	128.35
(1) 12.5 Low Profile Platform	148.75	(2) LPA-80080/6CF W/Mount Pipe	128.35
(2) 7770.00 w/Mount Pipe	138.97	BXA-70080/6CF w/ Mount Pipe	128.35
(2) 7770.00 w/Mount Pipe	138.97	BXA-70080/6CF w/ Mount Pipe	128.35
(2) 7770.00 w/Mount Pipe	138.97	BXA-70080/6CF w/ Mount Pipe	128.35
(2) Empty Mount Pipe	138.97	BXA-171085-8BF	128.35
(2) Empty Mount Pipe	138.97	BXA-171085-8BF	128.35
(2) Empty Mount Pipe	138.97	BXA-171085-8BF	128.35
(2) LGP21401 TMA	138.97	(2) FD9R6004/2C-3L Diplexer	128.35
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(2) LGP21401 TMA	138.97	(2) FD9R6004/2C-3L Diplexer	128.35
(2) LGP13519 TMA	138.97	(1) 13.5 Low Profile Platform	128.35
(2) LGP13519 TMA	138.97		

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-65	65 ksi	80 ksi			

TOWER DESIGN NOTES

1. Tower is located in Litchfield County, Connecticut.
2. Tower designed for a 80 mph basic wind in accordance with the TIA/EIA-222-F Standard.
3. Tower is also designed for a 28 mph basic wind with 1.00 in ice. Ice is considered to increase in thickness with height.
4. Deflections are based upon a 50 mph wind.
5. TOWER RATING: 51.9%

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Project: *11-12295E S1*			
Client: SBA Network Services, Inc.	Drawn by: Stephanie Amortnont	App'd:	
Code: TIA/EIA-222-F	Date: 03/12/12	Scale: NTS	
Path: \\FDH-SERVER\Projects\2011 Projects\12 - December\11-12295E\Version_CT151 - SA_Version\Analysis\Version_CT13613-A.eri		Dwg No. E-1	