CityScape
Consultants, Inc.

7050 W. Palmetto Park Road #15-652
Boca Raton, FL 33433-3483
Phone: 877-438-2851 • Fax: 877-220-4593

January 6, 2014

Mr. W. Scott Stoudenmire
City of Coconut Creek
Planning and Zoning Manager
4800 West Copans Road
Coconut Creek, Florida 33063

RE: ATC-SpectraSite-Coppola

Dear Scott,

Enclosed please find five (5) copies of the above referenced review. Please call should you have any questions or comments regarding CityScape's analysis 1-877-438-2851.

Sincerely,

Elizabeth Herington-Smith
Enclosures

State of Florida
Telecommunications Site Review
Collocation Version

CityScape
Consultants, Inc.
7050 West Palmetto Park Road, #15-652
Boca Raton, FL 33433
Tel: 877-438-2851 Fax: 877.220-4593

January 4, 2014

Mr. W. Scott Stoudenmire
City of Coconut Creek
Planning and Zoning Manager
4800 West Copans Road
Coconut Creek, Florida 33063

RE : **SprintPCS Wireless Upgrade**
ATC-SpectraSite-Copola

Dear Mr. Stoudenmire,

At your request on behalf of the City of Coconut Creek, Florida, CityScape Consultants, in its capacity as telecommunications consultant for the City, has considered the merits of an application provided by Anova Technologies to add new equipment to the tower and ground compound on an existing one hundred fifty (150) foot monopole communications tower facility, see *figure 1*. Anova is the parent company for AOptix Technologies and proposes to add new antennas at the one hundred thirty-two (132) foot level of the tower. The site is owned by ATC-SpectraSite and is located at 6933 NW 39th Avenue in Coconut Creek, Florida 33073, see *figure 2*.

The submittals included an analysis from VComm Telecommunications Engineering who further states they were contracted by Anova Technologies to ensure that the proposed radio facility complies with the Federal Communications Commissions (FCC) regulations. CityScape finds that sufficient as meeting compliance issues, see *figure 3*. The purpose of this installation is not stated, but it is not a personal communications facility and therefore there is no such requirement. Anova d/b/a AOptix Technologies plans to add a single optical device coupled to a one inch conduit which will contain the control cables. The final ground installation will be a new weatherproof cabinet connected to the existing electrical riser; all equipment will be installed within the existing ground compound, see *figure 4*.

Specifically, the undersigned has evaluated SprintPCS along with Nextel's proposal based on the federal standards, the State of Florida and Coconut Creek codes. The changes will conform to the guidelines of the federal government, state of Florida and the Coconut Creek ordinance. All designs and plans for the proposed new facilities were developed according to accepted practices of RF propagation engineering and the persons completing all work are sufficiently qualified within their disciplines.

Figure 5 is an engineering statement confirming the tower is sufficiently designed and constructed to support all existing equipment and the proposed changes. The tower loading capacity was not listed but the previous structural analysis tower rating was 46%, out of a maximum of 105%. This addition will not be excessive. Adding future antennas will likely not require any tower upgrades. The structural analysis was computed using the EIA/TIA-222-G standard.

CityScape has determined all necessary requirements are met and the proposed facility will be in compliance with applicable requirements, and this application would further comply with the desires of Coconut Creek by reducing the total number or future support structures.

CityScape recommends this application be approved with the following conditions:

1. The Applicant shall secure an electrical permit; and,

2. All feed lines and conduit shall be installed inside the monopole structure; and,

3. All antenna and feedline ports are to be secured in a manner to prevent access by birds and other wildlife; and,

4. The facility shall not be accessible by any unauthorized persons.

Under State of Florida statutes this application is considered a collocation and is afforded staff level disposition.

Respectfully submitted,

Richard L. Edwards
FCC Licensed
PCIA Certified
CityScape Consultants, Inc.

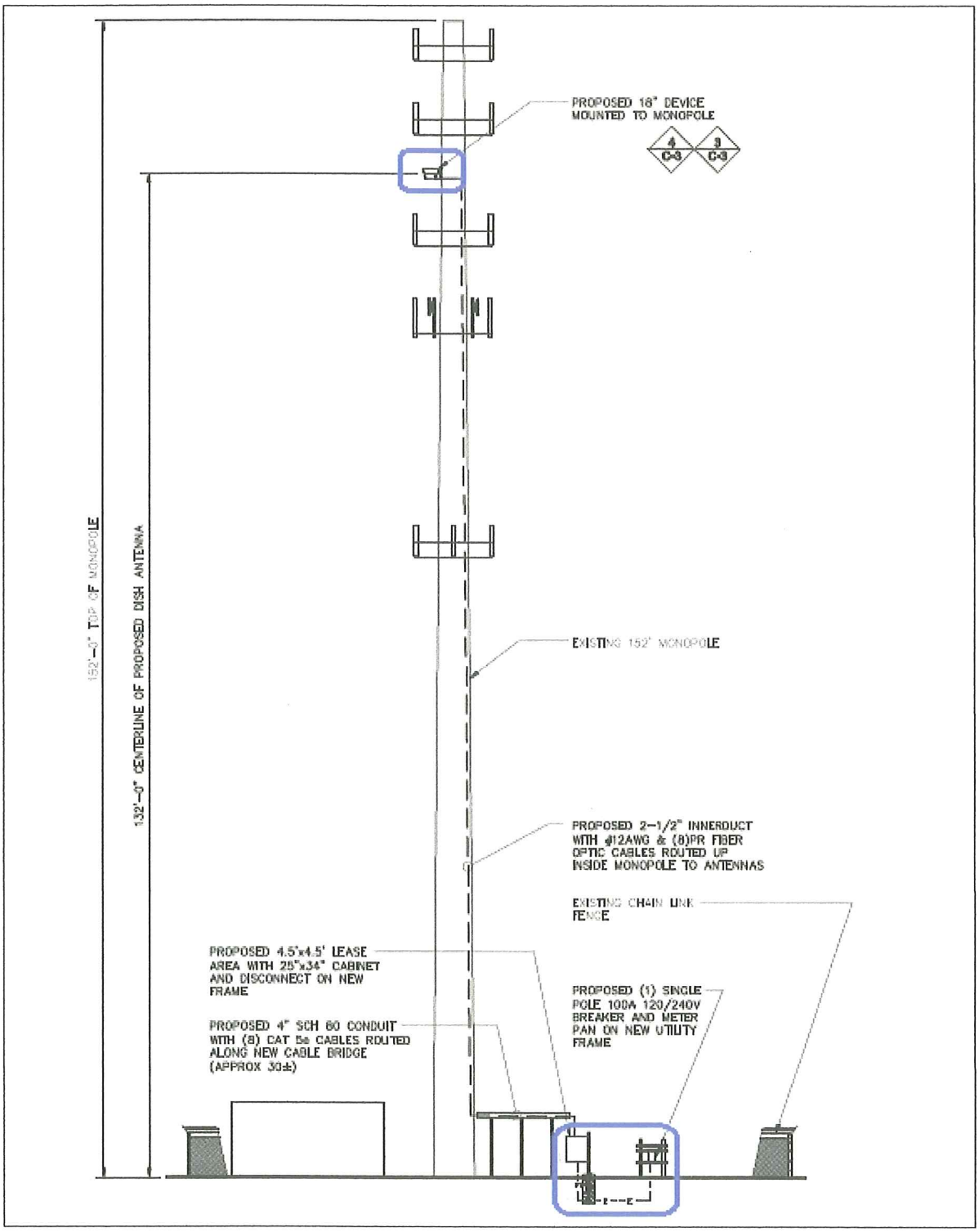

Figure 1. Tower Elevation

CityScape Consultants, Inc.

Telecommunications Site Review
Florida Collocation

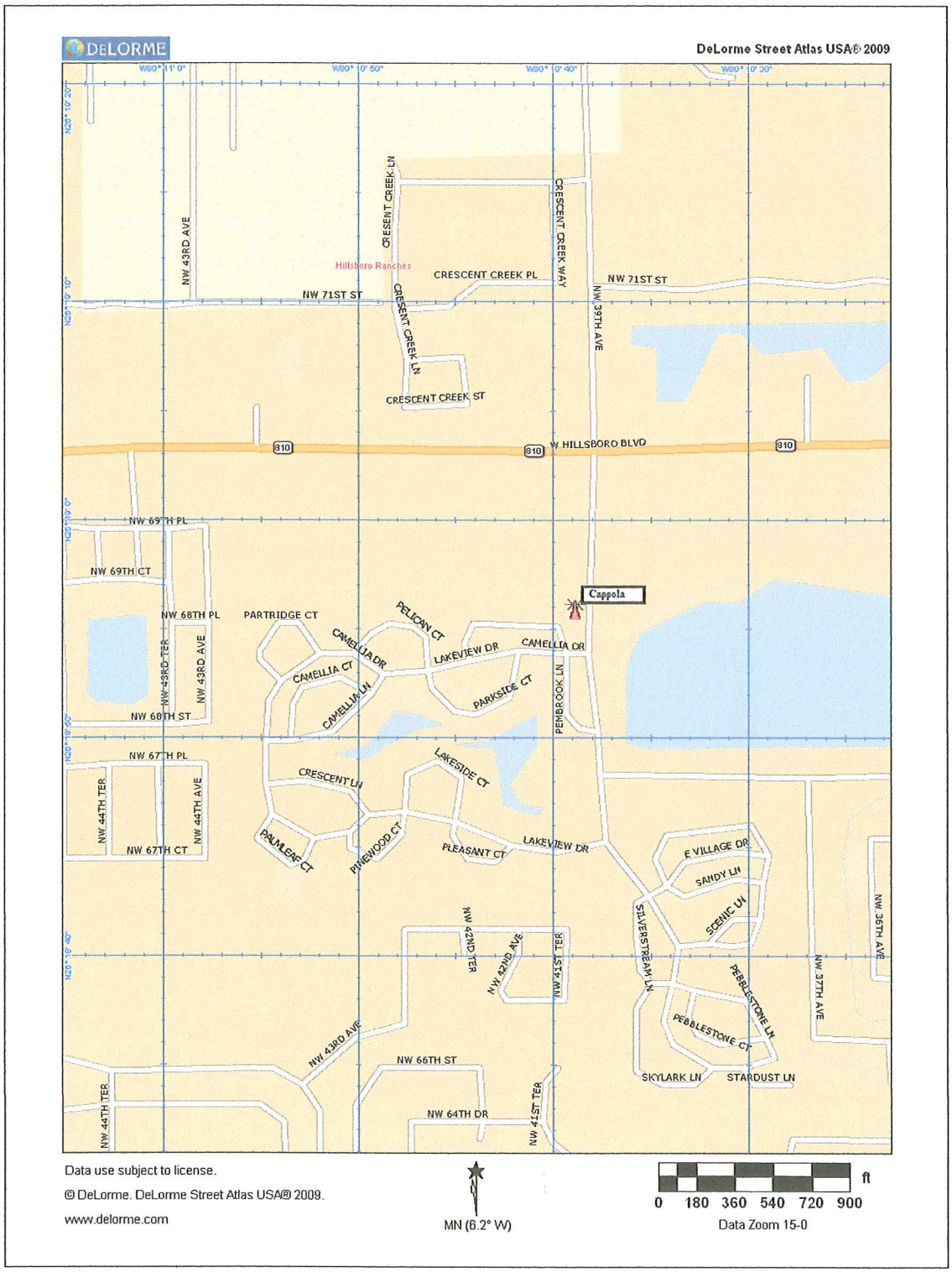

Figure 2. Site Location

RF Emission Study
6933 NW 39 Ave
Pompano Beach ,FL
December 19, 2013

Introduction

V-COMM, L.L.C. has been commissioned by Anova Technologies dba, AOPTIX Technologies, to ensure that the proposed radio facility complies with Federal Communications Commission (FCC) regulations as required by the Telecommunications Act of 1996. This report will show, through the use of FCC suggested prediction methods, which the radio facility in question will be in compliance with all appropriate Federal regulations in regards to Radio Frequency (RF) Emissions. The final results of the analysis are summarized below. The percentages are of the maximum value of 100 % of the emission levels to be compliant with the FCC's regulations. The results are cumulative, showing all contributors, including AOPTIX Technologies.

OET-65 STANDARD	Controlled Environment	Uncontrolled Environment
Calculated Percentage of Maximum Emissions	0.064208%	0.321042%

Case Summary

The proposed radio facility will be located on an existing 152 foot monopole at 6933 Northwest 39 Avenue, Pompano Beach, FL 33073-2107. AOPTIX Technologies will a single panel antenna from the monopole utilizing millimeter wave technology. The AOPTIX Technologies antenna will be mounted at a centerline of 132 ft. Above Ground Level (AGL) on the monopole. There are 4 existing carriers on the monopole (1a-1i). Technical data considered for AOPTIX Technologies is listed in the table 1j below.

Table 1a, 1b – Technical Data for Verizon Wireless

VERIZON WIRELESS	Sector 1	Sector 2	Sector 3
Antenna	CSS X7-655-4	CSS X7-655-4	CSS X7-655-4
Antenna Centerline (feet)	146	146	146
ERP (Watts)	1000	1000	1000
Frequency (MHz)	698-896	698-896	698-896

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Figure 3. Compliance with FCC rules

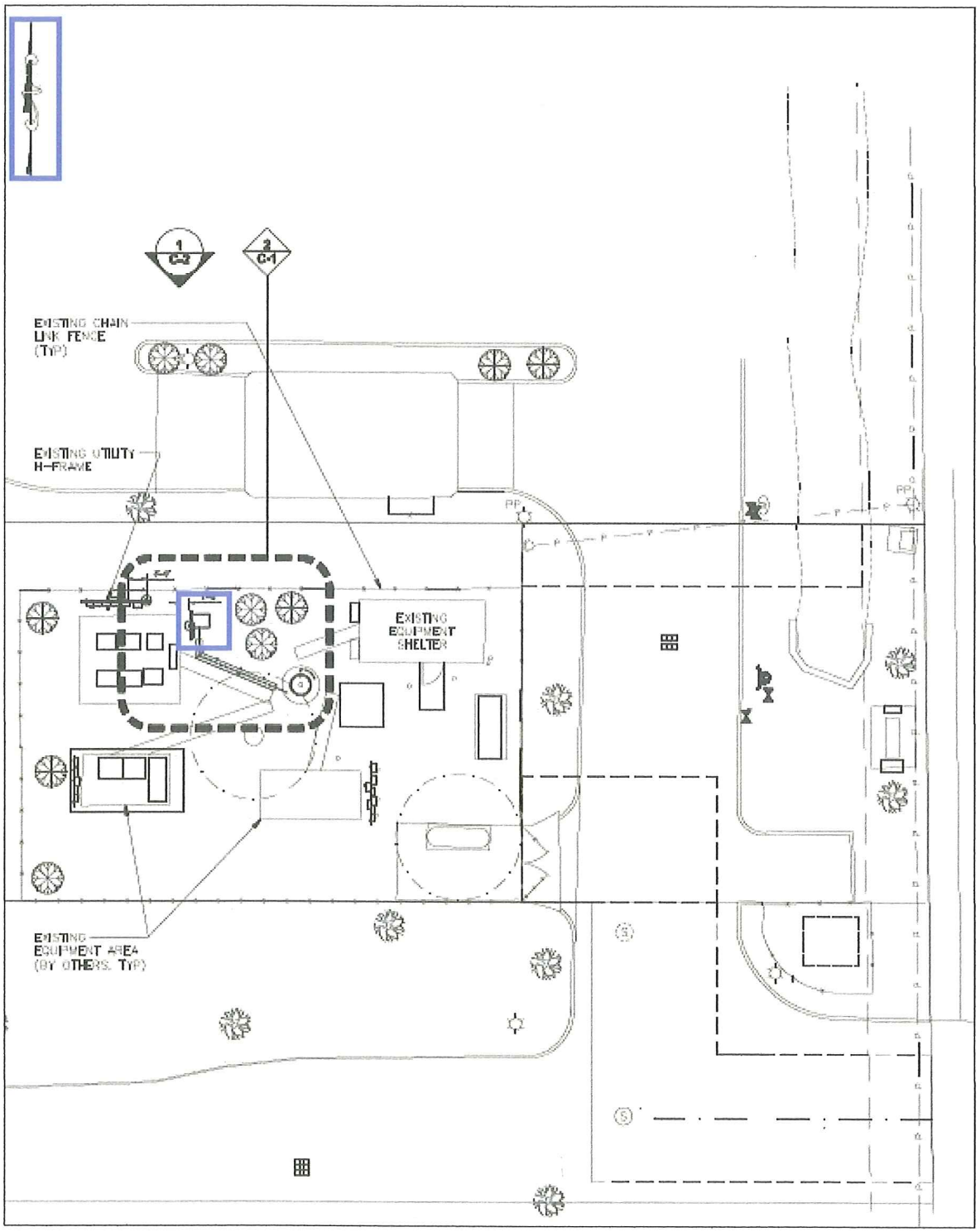

Figure 4. Ground Compound

AMERICAN TOWER® CORPORATION

Eng. Number 50426811
September 13, 2012
Page 1 of 1

Structural Evaluation	
ATC Site Number & Name	**302653, Coppola, FL**
Carrier Site Number & Name	**N/A, Coppola (Coconut Creek)**
Site Location	6933 Northwest 39 Avenue Pompano Beach, FL 33073-2107, Broward County 26.316758 N / -80.177647 W
Tower Description	**152 ft EEI Monopole**
Basic Wind Speed Code	132 mph (3-Second Gust, V_{asd}) / 170 mph (3-Second Gust, V_{ult}) ANSI/TIA-222-G / 2009 IBC / 2010 Florida Building Code

Existing and Reserved Equipment

Mount Elev.[1] (ft)	Qty.	Antenna	Mount Type	Coax (in)	Carrier
146.0	3	CSS X7-665-4	Low Profile Platform	(12) 1 5/8	Verizon Wireless
	6	Scala AP17-1900/090D/DT6			
140.0	6	Andrew SBH-3DA	T-Arm	(12) 1 5/8	Metro PCS
125.0	6	RFS IBC1900HG-1	Stand-Off	(3) 1 1/4 Hybriflex (3) 1 5/8	Sprint Nextel
	3	Ericsson 800MHz SMR Filter			
	3	RFS APXVERR18-C			
	2	EMS RR65-18-00VDPL2/-R			
	1	EMS RR90-17-00DP			
	9	RFS ACU-A20-N			
	3	Ericsson RRUS A2 Module			
	9	Ericsson RRUS-11 1900 MHz			
	3	Ericsson RRUS-11 800 MHz			
118.0	3	Motorola Vx DAP I/V	Stand-Off	(6) 5/16 (2) 1/2	Clearwire
	3	Powerwave P65-18-XXW2-R			
	2	DragonWave Horizon Compact			
	2	Andrew VHLP2-18-1WH			
80.0	3	72" x 12" Panel	Platform w/ Handrails	(12) 1 5/8	Sprint Nextel
	9	48" x 12" Panel			

Proposed Equipment

Elevation[1] (ft)		Qty.	Antenna	Mount Type	Coax (in)	Carrier
Mount	RAD					
132.0	132.0	1	36" x 16" Panel	Stand-Off	(1) 1" conduit	Aoptix Technologies
		1	Transtector -48VDC-OD			
		1	Belfort Instrument 6500			
		1	Vivotek IP8331			
		1	Gill R2-50			
		1	Hoffman A1212CHFL			

[1] Mount elevation is defined as height above bottom of steel structure to bottom of mount, RAD elevation is defined as center of antenna above grade level (AGL).

Install proposed coax inside of monopole.

The existing and proposed loads listed in the tables above are compared to the tower's current design capacity or previous structural analysis. The tower should be re-evaluated as future loads are added or if actual loads are found different from those listed in the tables. The subject tower and foundation ***are adequate*** to support the above stated loads in conformance with specified requirements.

ABL/NDS

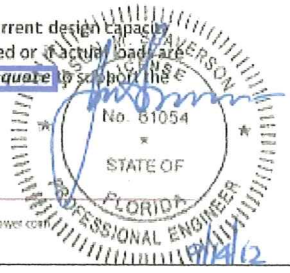

Figure 5. Structural Analysis Statement