#### State of Florida

# **Telecommunications Site Review Equipment Upgrade Version**



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April 15, 2014

Mr. W. Scott Stoudenmire City of Coconut Creek Deputy Director Department of Sustainable Development 4800 West Copans Road Coconut Creek, Florida 33063

> RE : SprintPCS Wireless Upgrade, MI1XC137-C American Tower Company, SpectraSite-Coppola

Dear Mr. Stoudenmire,

At your request, on behalf of the City of Coconut Creek, Florida (City), CityScape Consultants, Inc. (CityScape), in its capacity as telecommunications consultant for the City, has considered the merits of an application submitted by SprintPCS (SprintPCS or Applicant), to make certain modifications to their existing wireless system on a one hundred fifty-two (152) foot communications tower facility, see *figure 1*. The Applicant is the second carrier requesting proposed upgrades at the referenced tower facility. MetroPCS began planning modifications and upgrades prior to SprintPCS, and it is important to keep these applications in order due to the structural analysis report. The referenced site is owned by American Tower Company and is located at 6933 NW 39 Avenue in Coconut Creek, Florida, see *figure 2*.

The Applicant, like all carriers, is in the process of modifying their existing facilities throughout the United States. Although many carriers are adding sites, SprintPCS has announced that it will be eliminating more than 1800 sites this year. However, this application will continue the expansion process and upgrades for advances services in the City of Coconut Creek. The proposed improvements will gain no substantial increase in its cellular services, however it will make it possible for SprintPCS to introduce their version of advanced wireless services (AWS) into the area. The Applicant will rotate the antenna mounting platform approximately 50 degrees, relocating the existing three (3) antennas, plus adding three (3) additional antennas; relocating three (3) existing remote radio units (RRU's), and adding three (3) additional RRU's. The final number of SprintPCS fixtures on the tower will be six (6) antennas and six (6) RRU's, see *figure 3*. All antenna and RRU work will be at the one hundred twenty-five (125) foot level of the monopole.

Specifically, the undersigned has evaluated the Applicant's proposal and found that the proposed modifications will confirm to the federal guidelines, State of Florida and City of Coconut Creek Ordinance. All designs and plans for the proposed facility upgrade were developed according to accepted practices of radio frequency (RF) propagation engineering and the persons completing all work are sufficiently qualified within their disciplines.



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The Applicant supplied a letter of compliance with all Federal Communications Commission (FCC) standards regarding human exposure to RF energy and concerns regarding RF interference with other radio services, see *figure 4*.

The structural analysis, dated December 9, 2013, was computed using the EIA/TIA-222-G standard and reflects that the tower is sufficiently designed and constructed to support current equipment loading and all proposed equipment modifications, see *figure 5*. Tower loading capacity, including the previously proposed MetroPCS equipment upgrades and the SprintPCS upgrades proposed herein, will be 62% out of a maximum 105% allowable. The addition of future antennas will likely not require any tower upgrades.

The proposed application, under the Middle Class Tax Relief and Job Creation Act of 2012, qualifies for streamlined process. To qualify, there can be no increase in size of the ground compound and no tower structural changes increasing the height or girth by ten percent (10%) or twenty (20) feet whichever is greater. All necessary requirements will be accommodated within the Applicant's existing ground compound, see *figure 6*. The proposed facility will be in compliance with applicable requirements, and this application further complies with the desires of the City through collocation and maximizing the use of existing facility infrastructures within the City.

Therefore, CityScape recommends this application be approved with the following conditions:

- 1. All of SprintPCS feed lines shall be installed inside the monopole structure; and,
- 2. All antenna and feed line ports are to be secured in a manner to prevent access by birds and other wildlife; and,
- 3. The facility shall not be accessible by any unauthorized persons.

Under federal and state statutes this application is considered an upgrade and is afforded staff level disposition.

Respectfully submitted,

Richard L. Edwards

FCC Licensed PCIA Certified

CityScape Consultants, Inc.



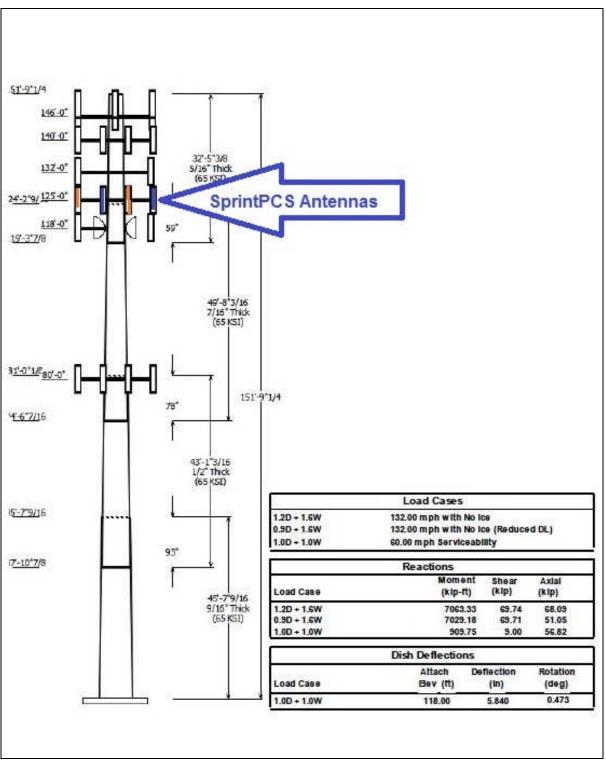


Figure 1. Tower Elevation



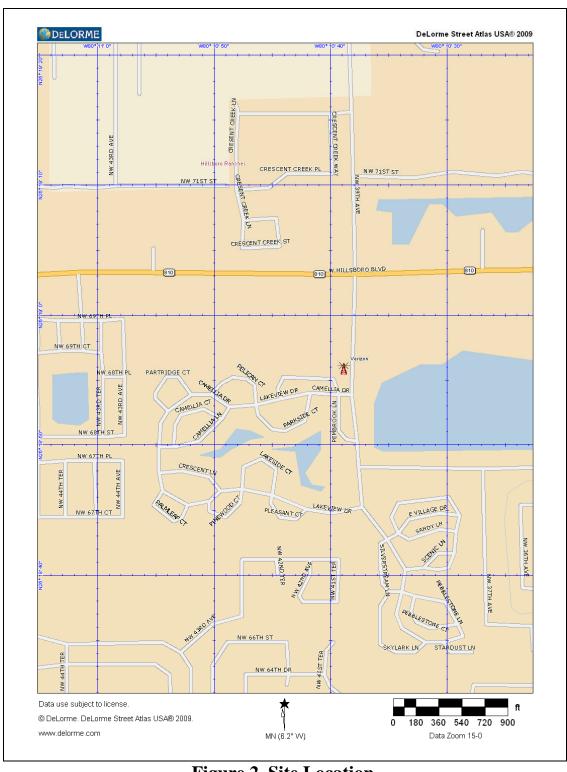


Figure 2. Site Location



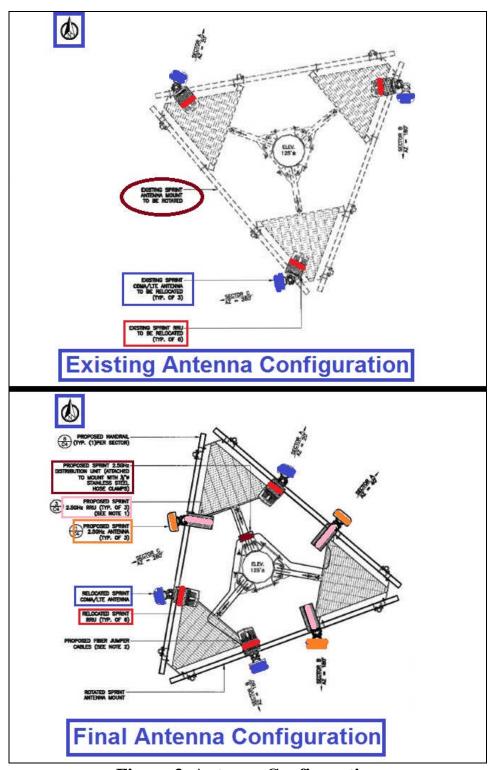


Figure 3. Antenna Configuration



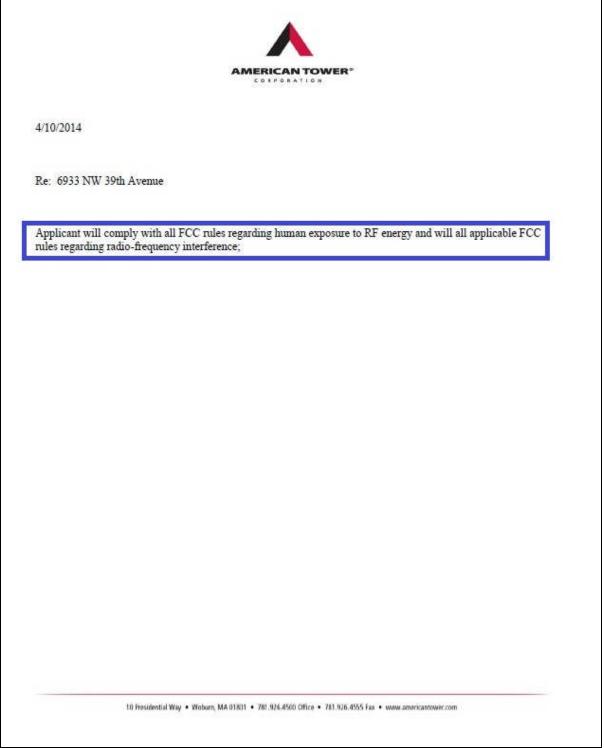


Figure 4. Compliance with FCC rules



#### **Telecommunications Site Review** Florida Equipment Upgrade



Matt Wilson, E.I.

Structure

**ATC Site Name** 

Site Location

County

Max Usage

Date

Result

Mot No



Dec 9 2013 4:44 PM

ATC Tower Services, Inc. - 3500 Regency Parkway, Suite 100 - Cary, NC 27518 - 919-468-0112 Office - 919-466-5414 Fax - www.americantower.com

Figure 5. Structural Analysis Statement

: 62%

: Pass



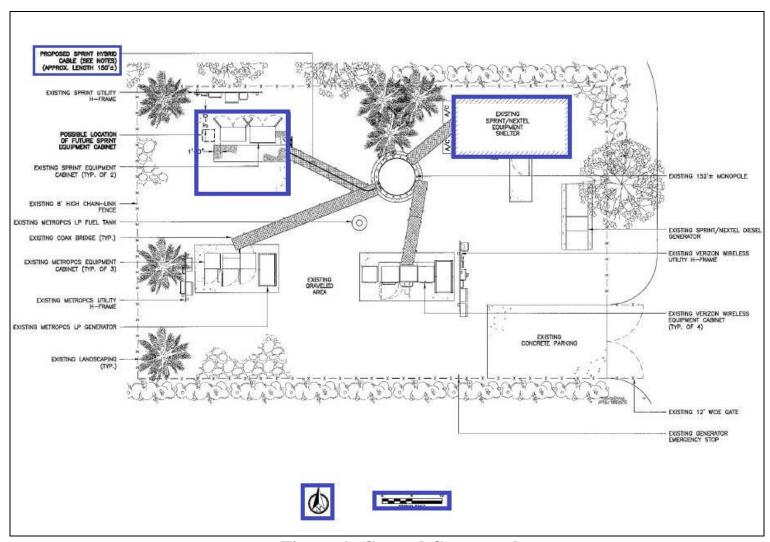


Figure 6. Ground Compound