#### State of Florida

# Telecommunications Site Review Equipment Upgrade Version



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April 14, 2014

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

> RE: MetroPCS Wireless Upgrade SFL681-4 American Tower Corporation, 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 MetroPCS (MetroPCS or Applicant), to make certain modifications to their wireless system on an existing one hundred fifty-two (152) foot communications tower facility, see *figure 1*. The Applicant is the first of two carriers proposing to upgrade equipment at the above referenced tower. The 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 undergoing the same transitions and upgrade of services across the nation. MetroPCS recently merged with T-Mobile Wireless and both continue to advance their network footprint. This application will continue the process for MetroPCS expansion and upgrades into the City of Coconut Creek. The proposed improvements will gain no substantial increase in cellular services for MetroPCS; however it will make it possible for MetroPCS to introduce advances services for long term evolution (LTE) into the area. The Applicant will rotate the existing antenna mounting platform approximately 90 degrees and will change the signal concentration; reducing signal to the north, increasing signal to the south and directing signal east and west. The Applicant's existing six (6) antennas will be removed and replaced with nine (9) new panel antennas and adding five (5) remote radio units (RRU), see *figure 3*. All antenna and RRU work will be at one hundred forty (140) feet of the monopole.

Specifically, the undersigned has evaluated the Applicant's proposal and found that the proposed tower modifications will conform to the applicable federal and State of Florida guidelines and City of Coconut Creek Ordinance. All designs and plans for the 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 respective disciplines.

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*.



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The structural analysis, dated October 10, 2013, was computed using the EIA/TIA-222-G standard and confirms that the tower is sufficiently designed and constructed to support all existing equipment and proposed equipment upgrades, see figure 5. Tower loading capacity, including MetroPCS and T-Mobile will be 57% out of a maximum of 105% allowable.

Under the Middle Class Tax Relief and Job Creation Act of 2012, certain applications, if qualified, are afforded streamlined processing, which means public hearing for approval is not permissible. To qualify there can be no increase in size of the ground compound, or tower structural changes increasing the height or girth by ten percent (10%) or twenty (20) feet, whichever is greater, and this application qualifies for streamlined processing.

CityScape has determined that all necessary requirements for the proposed modifications can be accommodated within the existing ground compound, see *figure 6*. The proposed facility will be in compliance with applicable requirements, and further complies with the desires of the City through collocation and maximizing the use of existing facility infrastructures in the City.

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

- 1. All MetroPCS 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.

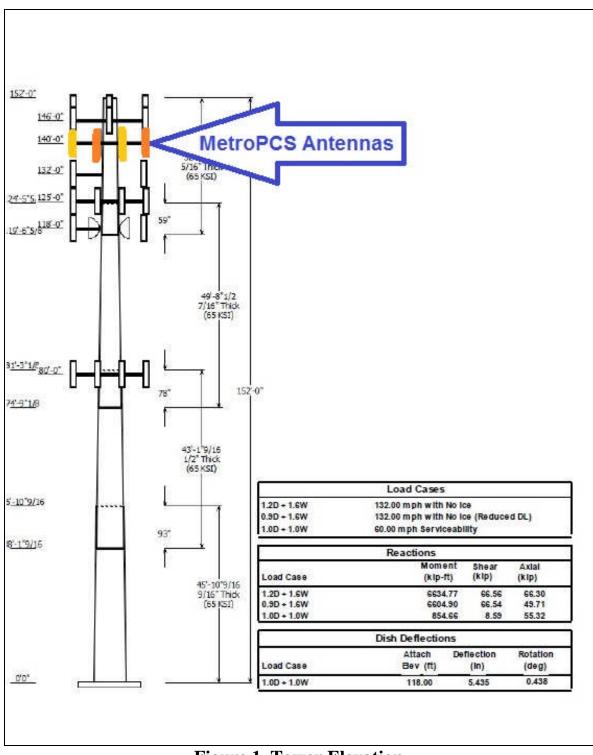
Respectfully submitted,

Richard L. Edwards

FCC Licensed PCIA Certified

CityScape Consultants, Inc.





**Figure 1. Tower Elevation** 



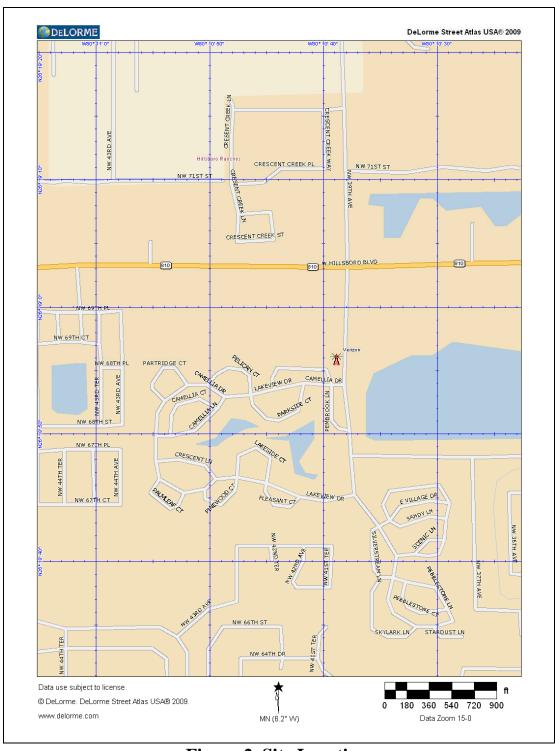


Figure 2. Site Location



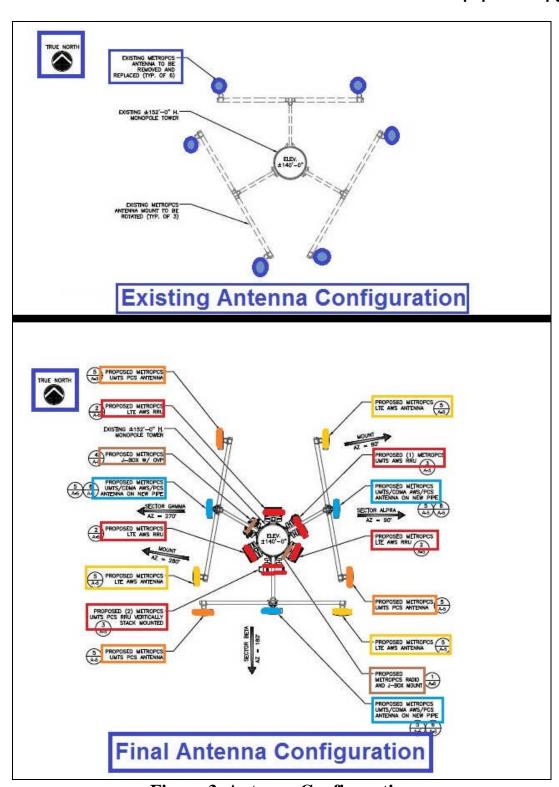


Figure 3. Antenna Configuration



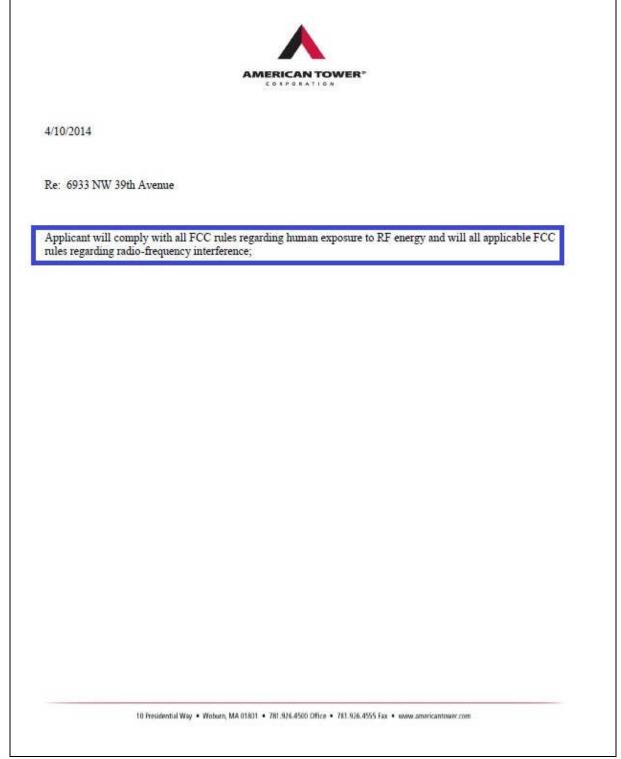


Figure 4. Compliance with FCC rules



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#### Structural Analysis Report

Structure : 152 ft Monopole

ATC Site Name : Coppola, FL

ATC Site Number : 302653

Engineering Number : 54524321
Proposed Carrier : Metro PCS

Carrier Site Name : Spectrasite Coconut Creek

Carrier Site Number : SFL681 – 6FB1426M

Site Location : 6933 NW 39 Ave

Pompano Beach, FL 33073-2107

26.316758,-80.177647

County : Broward

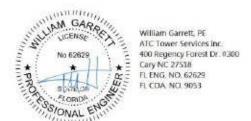
Date : October 10, 2013

Max Usage : 57%

Result : Pass

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Sugar H. Gibra 1990



Oct 14 2013 8:38 AM

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

Figure 5. Structural Analysis Statement



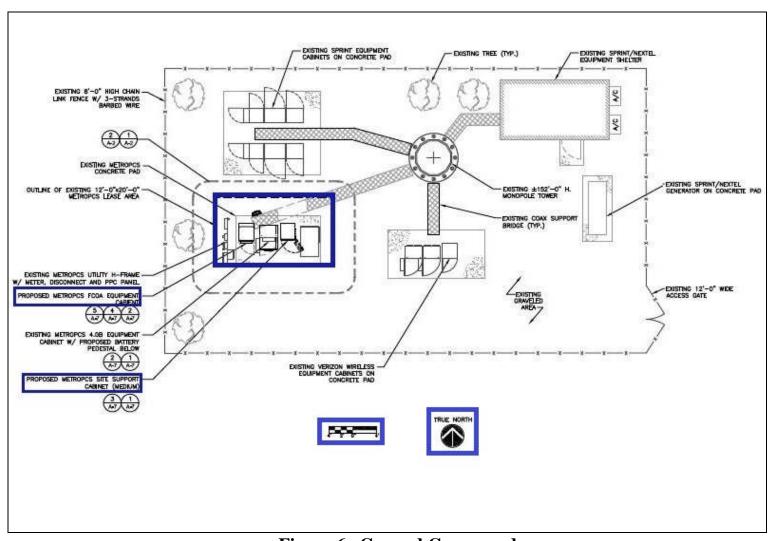


Figure 6. Ground Compound