

**State of Florida
Telecommunications Site Review
Collocation Version**



Consultants, Inc.

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October 15, 2014

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

**RE: T-Mobile Wireless #FB2181A “Coconut Creek Government Center”
4800 West Copans Road**

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 T-Mobile Wireless (“Applicant”) to become the third collocation wireless service on an existing one hundred twenty-five (125) foot monopole-type support structure, see *figure 1* and *Exhibit A*. The site is owned by the City of Coconut Creek and located at 4800 West Copans Road in Coconut Creek, Florida; see *figure 2*.

The Applicant is one of three proposed modifications to occur on the subject tower. Sprint Wireless has submitted an application for upgrades and changes which is currently being considered simultaneous with this application for collocation from T-Mobile (pending completion of lease and approval through City Commission). Verizon Wireless most recently requested approval for modifications and upgrades, which have been approved and are currently in process. The Applicant’s proposed antenna installation will allow T-Mobile to continue to develop its wireless network and provide fourth generation (4G) advanced technologies within the subject area.

The Applicant proposes to add new tower mounted equipment, consisting of six (6) antennas; ten (10) RRU’s (remote radio units) and two (2) surge protector/filters, along with two (2) 1.584 inch hybrid feed lines, see *figure 3*. Additionally, the Applicant proposes to add new weatherproof cabinets within the existing ground compound adjacent to the existing ground equipment for Sprint Wireless; see *figure 4*.

The Applicant has previously submitted a statement of compliance with all Federal Communications Commission (FCC) standards regarding human exposure to RF energy and rules regarding interference with other telecommunications services within the City; see *figure 5*.

The Applicant submitted a new Rigorous Structural Analysis Report (Revised) and dated October 14, 2014, which is an accurate representation of the current tower loading and confirms the tower and foundation will adequately support the existing equipment, including the proposed T-Mobile collocation and the previously submitted upgrades for Sprint Wireless. After all modifications, the new tower stress rating will be 98.9% out of a maximum allowed of 105%; see *figure 6*. AT&T has previously provided interest in becoming the fourth personal wireless provider to locate at the facility and thus any proposed future modifications or additions will require a new analysis and likely modifications and upgrades to the tower.

CityScape has visited the site on numerous occasions and has confirmed all necessary requirements for the proposed modifications can be accommodated within the existing property limits. The site has been designed and constructed by professionals with expertise in telecommunications site design and the construction drawings submitted on behalf of the Applicant confirms a continuation of that practice of the expertise in the discipline of maximizing the use of telecommunications facilities. This practice corresponds with the desires of the City of Coconut Creek.

CityScape confirms the application is qualified under the federal Middle Class Tax Relief and Job Creation Act of 2012 and furthermore recommends the application be approved with the following conditions:

1. All feed lines shall be installed inside the monopole shaft; and,
2. All feed line access ports shall be sealed in a manner to prevent access by birds and other wildlife.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read "R. Edwards", with a long horizontal flourish extending to the right.

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

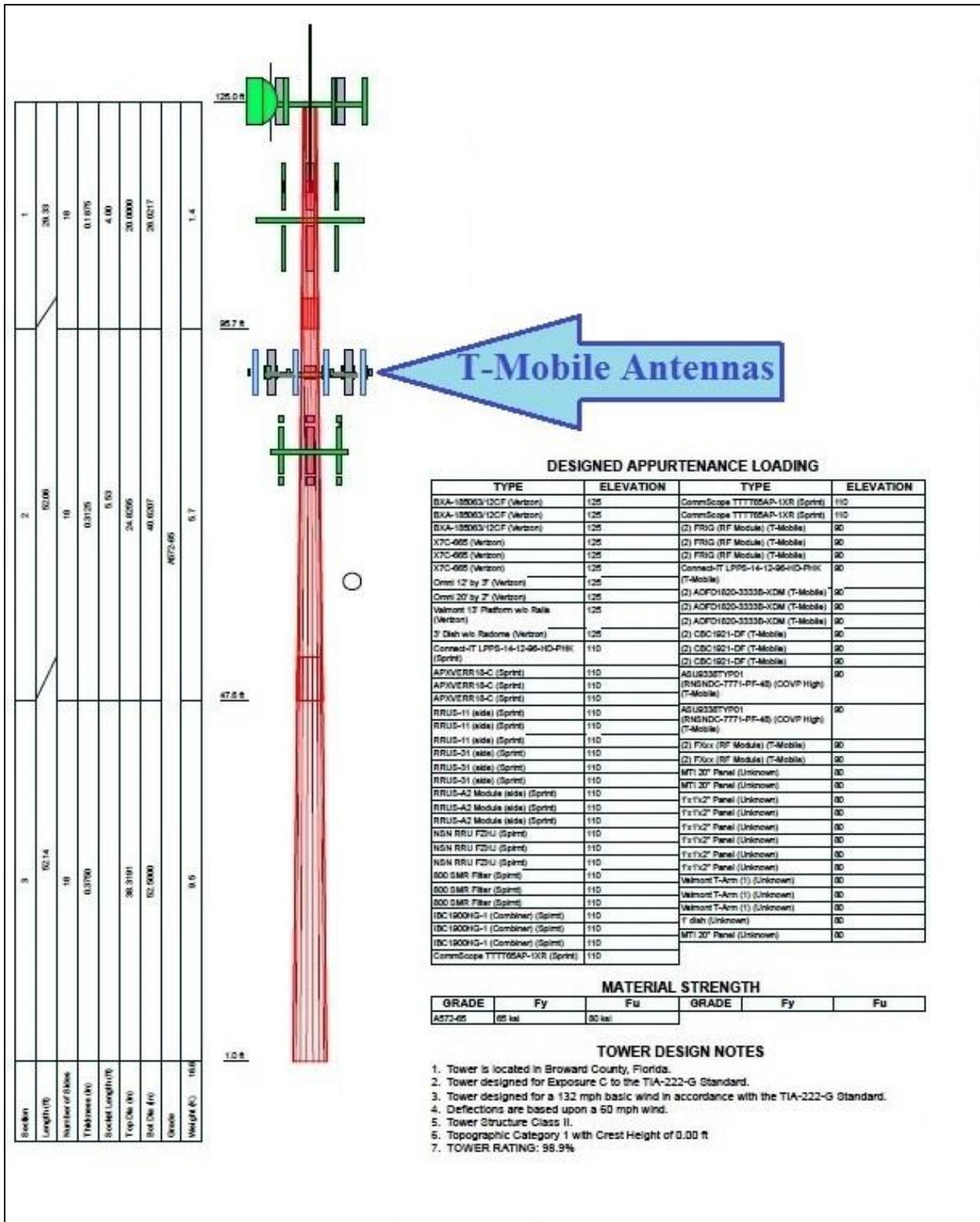
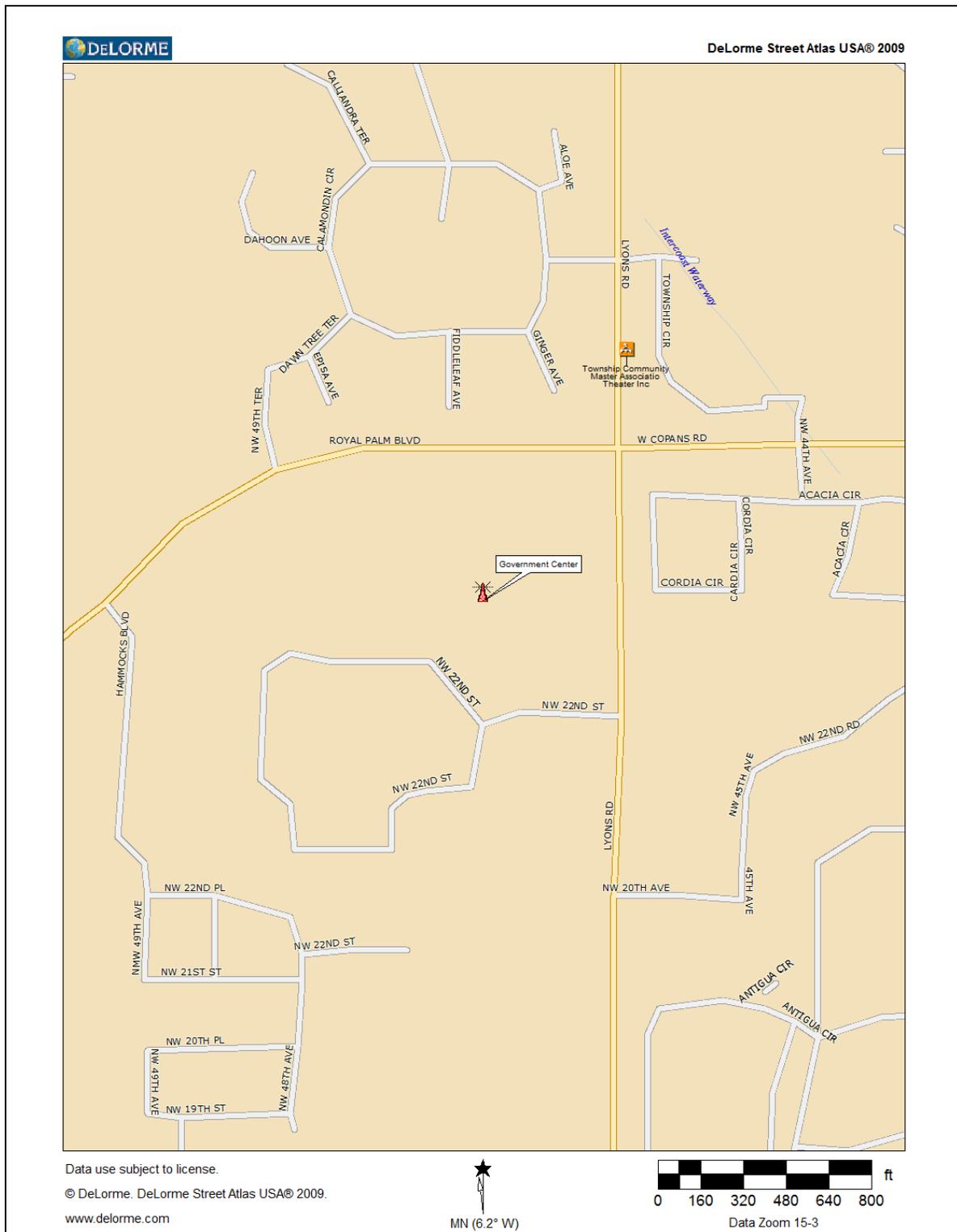


Figure 1. Proposed Tower Elevation



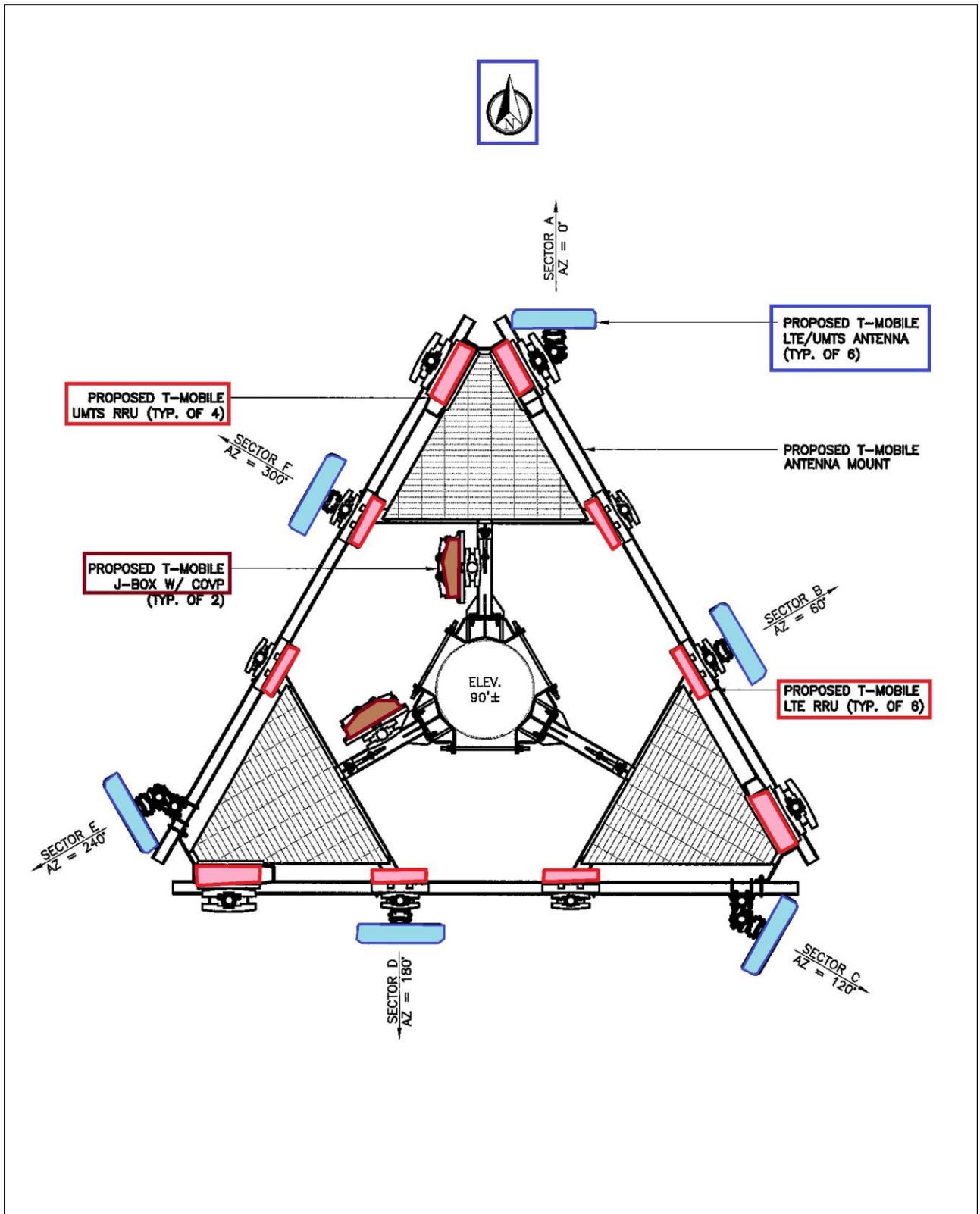


Figure 3. Proposed Antenna Configuration

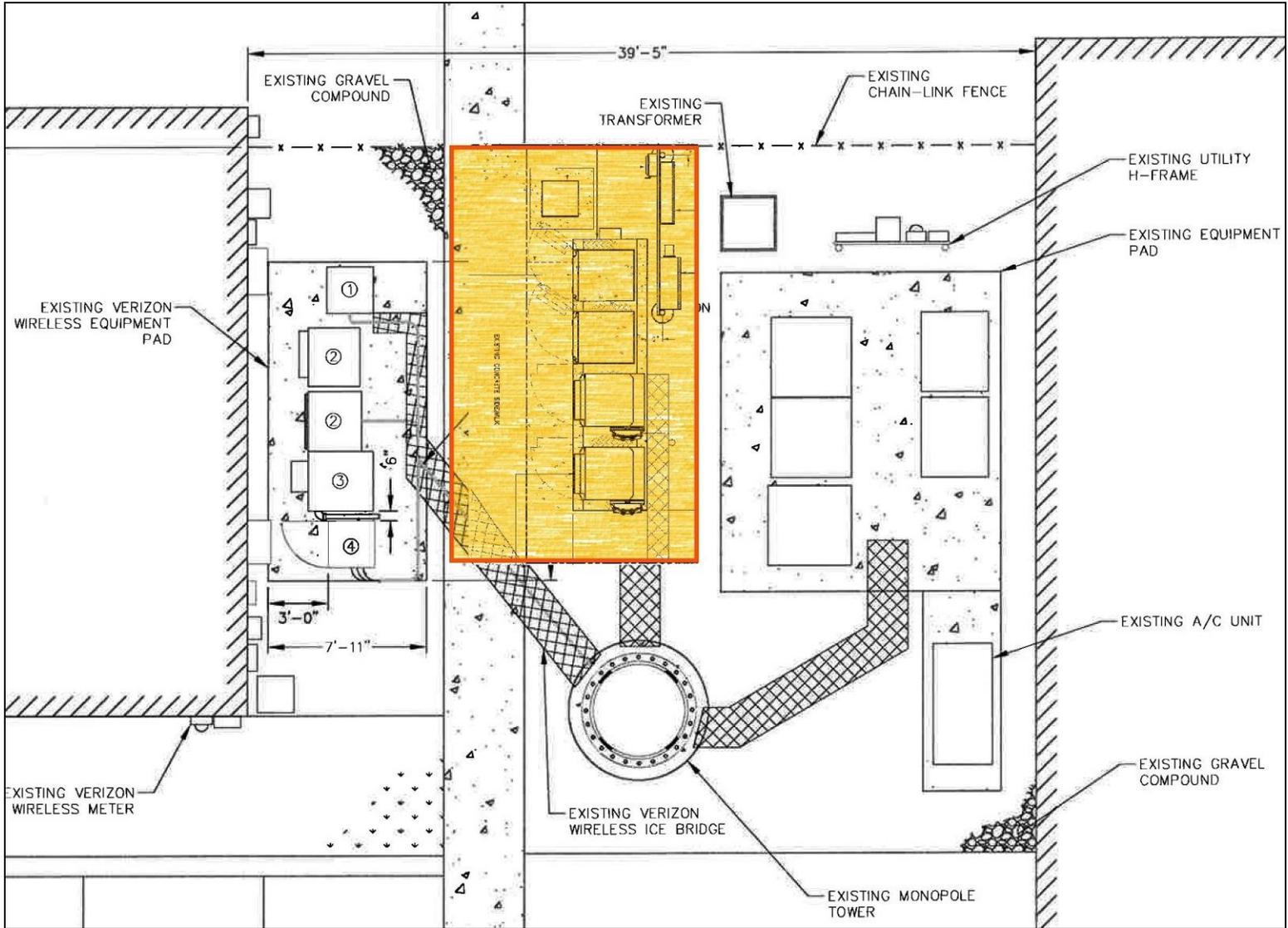


Figure 4. Proposed Ground Compound

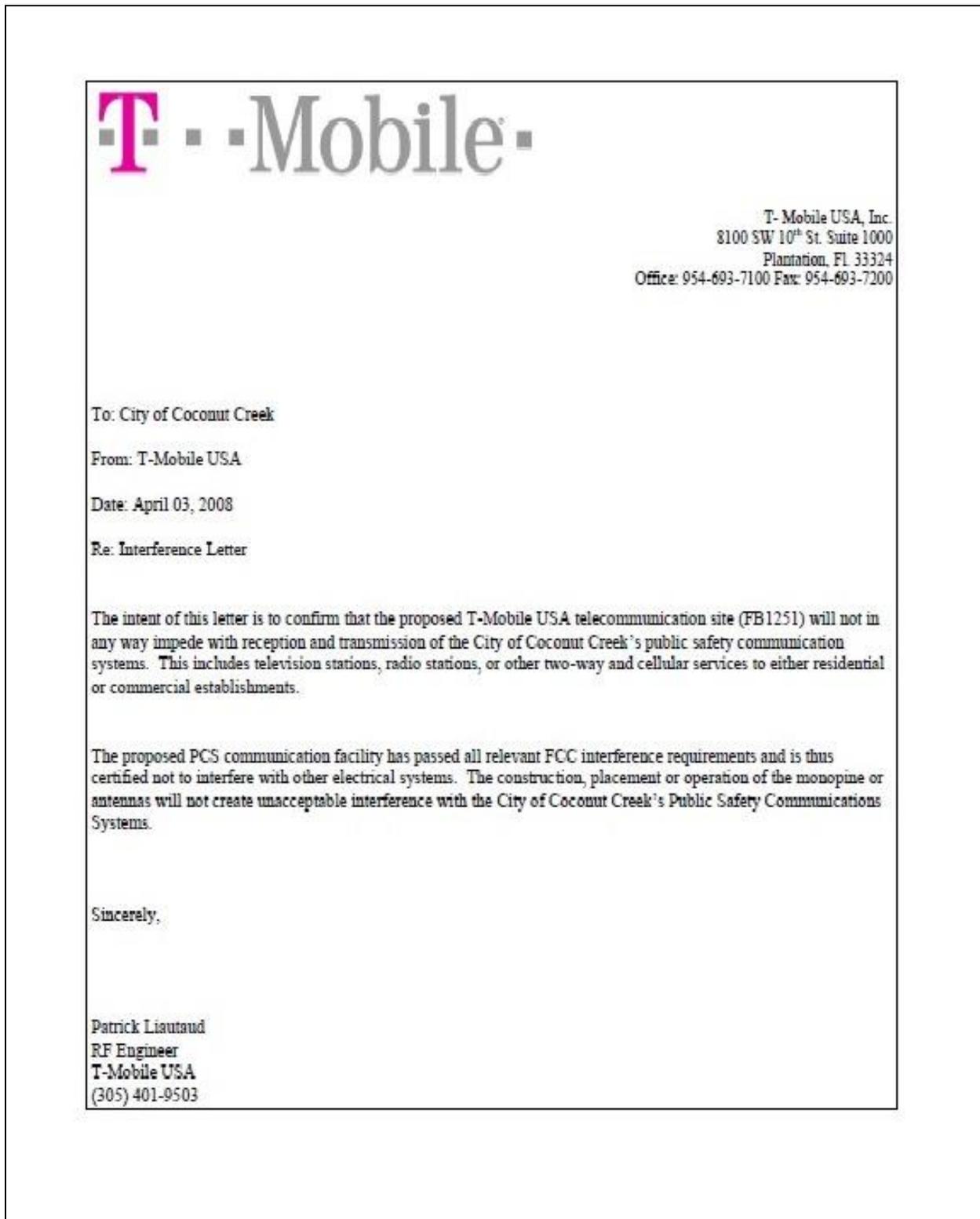


Figure 5. Compliance with FCC rules

The image shows a formal letter on CALTROP Telecom letterhead. The letter is dated October 14, 2014, and is addressed to Mike Nisenbaum at T-Mobile USA. The subject is a 'Rigorous Structural Analysis Report (Revised)' for a T-Mobile site at Coconut Creek City Hall. The report details the structural evaluation of a 125-foot monopole tower. A key finding is highlighted in a blue box: 'Tower: Pass at 98.9%, Foundation: Pass at 98.9%'. The letter is signed by Dully M. Amaya, E.I., Staff Engineer, and includes a professional seal for Michael A. Phillips, P.E., Principal Engineer, dated October 13, 2014. Contact information for CALTROP Corporation is provided at the bottom.

T-Mobile

October 14, 2014

Mike Nisenbaum
T-Mobile USA
1300 Concord Terrace, Suite 200
Sunrise, FL 33323

**CALTRON
Telecom**

CALTRON Corporation
3400 Lakeside Drive, Suite 525
Miramar, FL 33027
(954) 874-7870

Subject: Rigorous Structural Analysis Report (Revised)
Carrier Designation: T-Mobile: FB2181A (Coconut Creek City Hall)
CALTRON Project Number: 140-770.27
**Site Information: 4800 W Copans Road
Coconut Creek, Broward County, FL 33063
Latitude 26.258169°N, Longitude 80.187400°W
125' Monopole Tower**

Dear Mr. Nisenbaum:

CALTRON Corporation (CALTRON) is pleased to submit this revised Rigorous Structural Analysis Report to determine if the subject tower is able to support certain proposed additional loads.

It is our understanding that T-Mobile USA (T-Mobile) desires to install new telecommunication equipment on the subject tower. This analysis was based on the supporting information listed in Table 3.0. Our services were performed in accordance with the terms and conditions of the existing field services agreement between CALTRON and T-Mobile. This report summarizes the results of our findings.

The purpose of this analysis is to determine the suitability of the aforementioned tower to support the loading indicated in Table 2.2. This analysis has been performed in accordance with the TIA-222-G standard, based upon a nominal 3-second gust reference wind speed of 132 mph with no ice. Based on our analysis, subject to the assumptions noted, it is our opinion that the tower superstructure and foundation system **can adequately resist** the proposed Sprint equipment deployment without modification

Tower: Pass at 98.9%, Foundation: Pass at 98.9%

This report has been prepared for the purpose of providing a structural evaluation of the subject telecommunication tower for the loading conditions indicated. It is intended for the exclusive use of T-Mobile. The information, assumptions, and recommendations contained in this report should not be used by others for any purpose without express written authorization from CALTRON. We appreciate the opportunity to provide our professional services to you and look forward to continuing our relationship. If we can be of any further assistance, please do not hesitate to call.

Sincerely,

CALTRON CORPORATION

Dully M. Amaya
Dully M. Amaya, E.I.
Staff Engineer
Registered, Florida 100800943

Michael A. Phillips
Michael A. Phillips, P.E.
Principal Engineer
Registered, Florida 68372

October 13, 2014

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Figure 6. Structural Statement



Exhibit A. Subject Facility
