

City of Coconut Creek
Telecommunications Site Review
Equipment Upgrade Application

CityScape

C O N S U L T A N T S , I N C .

2423 S Orange Ave #317
Orlando, FL 32806
Tel: 877.438.2851 Fax: 877.220.4593

March 25, 2020

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

RE: Coconut Creek
AT&T Mobility / FL01

Dear Mr. Stoudenmire,

At your request, on behalf of the City of Coconut Creek (“City”), CityScape Consultants, Inc. (“CityScape”) in its capacity as telecommunications consultant for the City, has considered the merits of the above referenced application submitted by Smartlink LLC on behalf of AT&T Mobility (“Applicant”) to modify equipment on the existing one hundred ninety-two foot, four-inch (192’4”) *lattice* tower. The tower is owned by Crown Castle International and is located at 3601 Vinkemulder Road, Coconut Creek, Florida, *see Figure 1*.

Support Structure & Equipment

The Applicant proposes to make non-described changes on the subject tower at their existing mounted level of one hundred feet, *see Appendix, Exhibit A*. The applicant did not provide a complete list of the existing equipment, and therefore the review is based on the final installation according to the structural analysis, which is the controlling document. The Applicant will be utilizing different antenna arrangements in one of the three sectors. The total equipment count will consist of nine (9) antennas, twelve (12) RRU’s, three (3) Raycap surge protectors and a total of twenty-four (24) feedlines, *see Appendix, Exhibit B*.

FCC Compliance

The Applicant submitted an updated compliance with all Federal Communications Commission (FCC) guidelines regarding Radio Frequency (RF) energy and exposure limits and RF interference with other radio services in a letter from AT&T dated February 24, 2020, *see Exhibit C*.

Structural Analysis

The Applicant submitted a structural analysis prepared by B+T Group, dated August 8, 2019, based on ANSI/EIA/TIA-222-H, Risk Category II and Exposure Category “C” standards. Note that the TIA standard 222-H (Amendment H) is used in this report instead of the recently used 222-G standard. The “H” standard became effective on January 19, 2018 and has been amended in the 2018 International Building Code (IBC-2018). The IBC is the controlling entity for this particular standard and every IBC amended code has been adopted. During a transition period past practices allows the most recent and the new standards to be interchanged. The report indicates that the tower stress rating following the proposed changes will be 99.9% out of 105% allowed and the new foundation stress rating will be 91.5% out of 110% allowed, *see Appendix, Exhibit D.*

Under the Middle Class Tax Relief and Job Creation Act of 2012 (“The Act”) any personal wireless facility collocation, modification or upgrade may qualify for streamlined processing. Furthermore, under Section 6409(a) it can qualify for administrative approval if the request meets six criteria, most notably (1) it does not increase the structure height by 10% or 20 feet, whichever is greater, (2) it does not increase the structure width by 20 feet and (3) it does not require any excavation outside the existing ground compound. Section 6409(a) further states that if an application meets the criteria, the application should be approved and not denied. CityScape has determined this application is an Eligible Facility request and complies with the Act and the Coconut Creek Ordinance and should be approved.

I certify that to the best of my knowledge all the information included herein is accurate at the time of this report. CityScape only consults for public entities and has unbiased opinions and all reviews are based on technical merits without prejudice per prevailing laws and codes.

Respectfully submitted,



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

Appendix

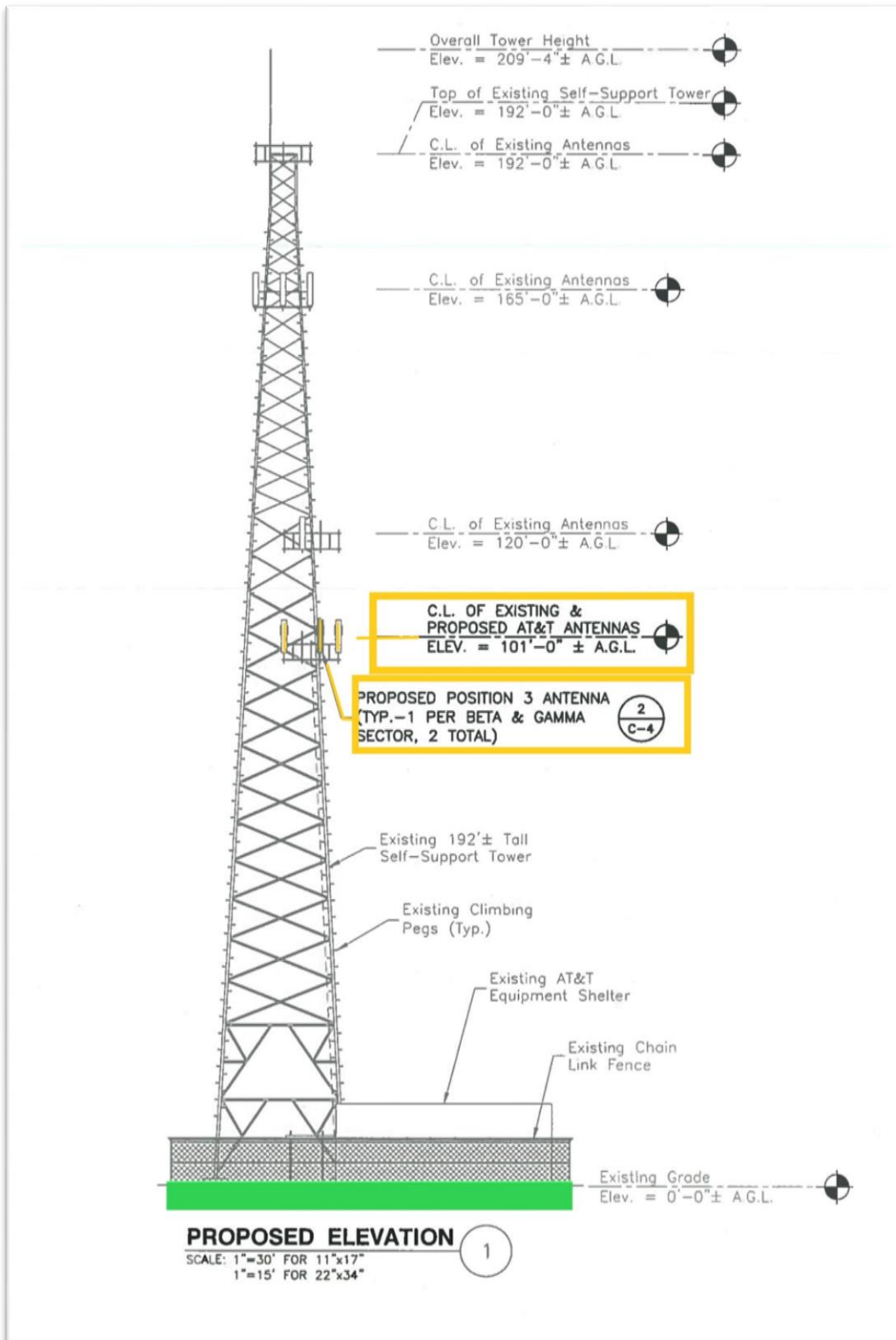


Exhibit A - Support Structure

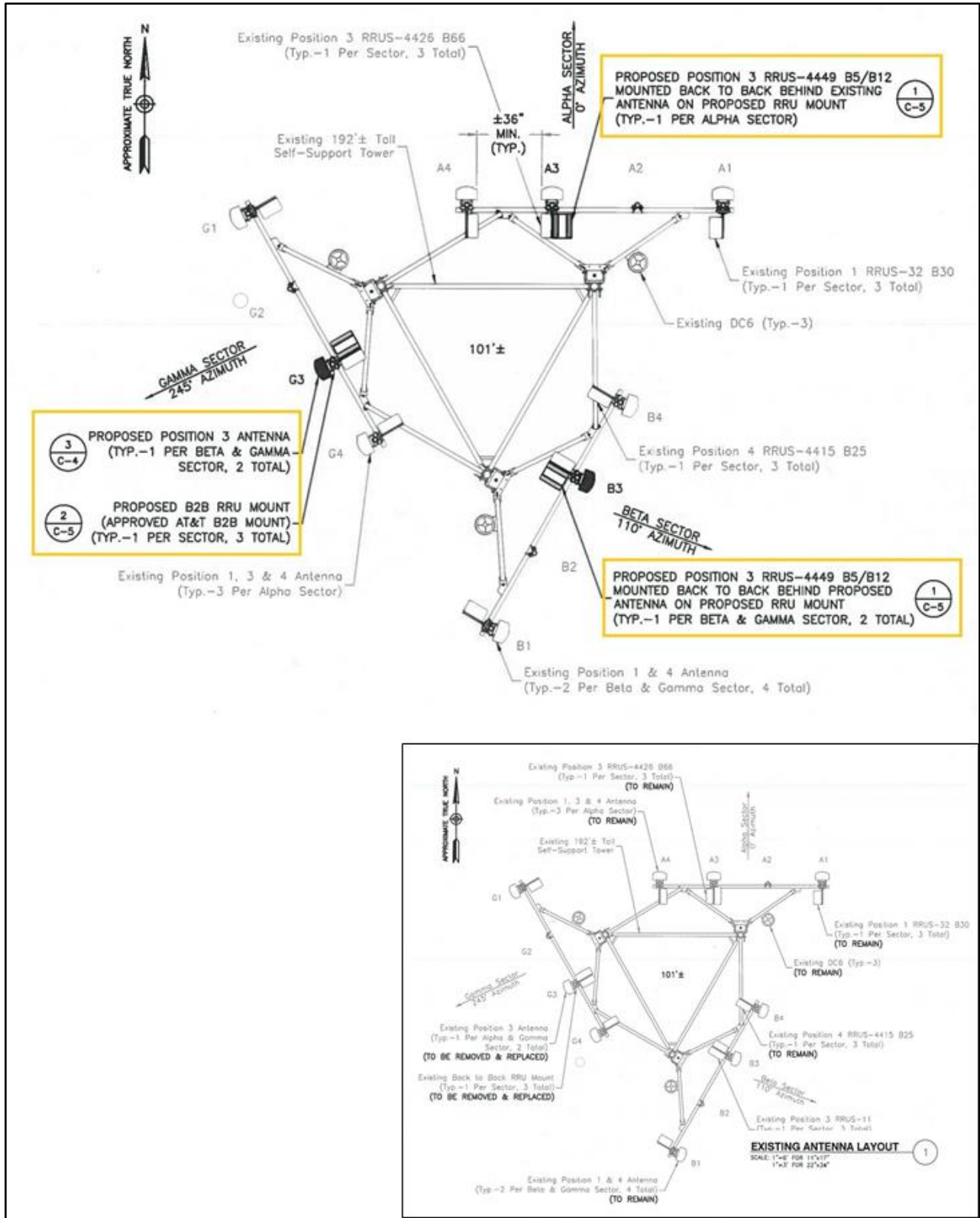


Exhibit B. Overhead View Sketch of Proposed Antenna Configuration



AT&TMobility
2001 NW 64th Street
Fort Lauderdale, FL 33309

February 24, 2020

City of Coconut Creek
Building Department
4800 W Copans Rd,
Coconut Creek, FL 33063

Re: AT&T's FCC Compliance Statement for Cell Site: **FL01 / 10070109**
Located at: 3601 VINKEMULDER ROAD, COCONUT CREEK FL 33073

To whom it may concern:

This letter is provided as an AT&T Mobility statement about RF emissions risks associated with its cellular radio site located at 3601 VINKEMULDER ROAD, COCONUT CREEK FL 33073 and its potential to interfere with communication facilities located nearby, as well operation within Federal Communications Commission (FCC) rules governing human exposure to radio frequency energy (OET65 guidelines).

AT&T Mobility's commercial radio signals transmitted at this location are on FCC radio channels within the 700 MHz, 800 MHz, 1900 MHz, 2100 MHz, and 2300 MHz frequency bands. The Federal Communications Commission (FCC) allocates frequencies to operators in these bands on an exclusive use basis, as licensed channels.


Radio transmitters operating on these bands must be type-accepted by the FCC to ensure compliance with technical standards that limit the frequency bandwidth, output power, emissions mask, spurious emissions, and other technical parameters to prevent interference with adjacent channel operators. These Rules & Regulations are intended to prevent interference to and from these channels by all radio operators, and to limit human RF exposure. In addition, the placement and marking of antennas is regulated via FCC guidelines to further limit human exposure. In the event of an interference complaint associated with a radio transmission facility/radio site, the FCC has a resolution process to determine the source of interference and to determine its compliance status with respect to FCC Rules & Regulations.

In summary, AT&T Mobility complies with all FCC Rules & Regulations regarding radio emission and associated potential interference to other radio services and with guidelines regarding limitation of human exposure to radio frequency energy. AT&T Mobility maintains a compliance program to insure compliance with these FCC Rules & Regulations and Guidelines.

Sincerely,

George Brosseau
Principal RF Engineer
AT&T Mobility- South Florida

Exhibit C – FCC Compliance



B+T GRP

B+T Group
 1717 S. Boulder, Suite 300
 Tulsa, OK 74119
 (918) 587-4630

Date: **August 08, 2019**

Ryan Shaffer
 Crown Castle
 8000 Avalon Blvd
 Alpharetta, GA 30009

Subject: Structural Analysis Report

Carrier Designation: **AT&T Mobility Co-Locate**

Carrier Site Number: 10070109
 Carrier Site Name: FL01

Crown Castle Designation:

Crown Castle BU Number: 842800
 Crown Castle Site Name: FL01
 Crown Castle JDE Job Number: 582647
 Crown Castle Work Order Number: 1777325
 Crown Castle Order Number: 499229 Rev. 0

Engineering Firm Designation: **B+T Group Project Number:** 127319.005.01

Site Data: 3601 Vinkemulder Road, Coconut Creek, Broward County, FL
 Latitude 26° 17' 7.11", Longitude -80° 10' 22.04"
 190 Foot - Self Support Tower

Dear Ryan Shaffer,

B+T Group is pleased to submit this "Structural Analysis Report" to determine the structural integrity of the above mentioned tower.


The purpose of the analysis is to determine acceptability of the tower stress level. Based on our analysis we have determined the tower stress level for the structure and foundation, under the following load case, to be:

	Tower	Foundation	
LC 5: Proposed Equipment Configuration	99.9%	91.5%	sufficient Capacity

This analysis has been performed in accordance with the 2017 Florida Building Code, 6th Edition, based on an ultimate 3-second gust wind speed of 170 mph per Section 1620.2, as required by the Exception of Section 1601.1. Exposure Category C and Risk Category II were used in this analysis.

Structural analysis prepared by: Mounika Kolli

Respectfully submitted by: B+T Engineering, Inc.
 COA: 27496; Expires: 02/28/2021



JOHN W. KELLY III, P.E.
 PROFESSIONAL ENGINEER LICENSE: 66194
 B&T ENGINEERING, INC.
 CERTIFICATE OF AUTHORIZATION: 27496

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY JOHN W. KELLY III, P.E. USING A DIGITAL SIGNATURE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

John W. Kelly, P.E., S.E.
 tnxTower Report - version 8.0.5.0

Exhibit D – Structural Analysis