

From: Scala, Mary Joy
Sent: Tuesday, April 28, 2015 3:36 PM
To: Carl Taskes (carl.taskes@greenlanddev.com)
Cc: Doug Brooks (doug@realpropertyinc.com); 'Tony Rocklein'
Subject: BAR Actions - 500 Court Square - April 2015

April 28, 2013

Thomas Michie – TR – 1st Mont LD TR
500 Court Square
Charlottesville, VA 22902

USCOC of Virginia RSA #3 Inc
3806 Thirlane Road
Roanoke, VA 24014

Certificate of Appropriateness Application

BAR 15-04-06
500 Court Square
Tax Parcel 530096000
Thomas Michie, TR -1st Mont LD TR, Owner/ USCOC of Virginia RSA#3, Inc, Applicant
Replace 6 antennas and add one new cabinet on roof

Dear Applicant,

The above referenced project was discussed before a meeting of the City of Charlottesville Board of Architectural Review (BAR) on April 21, 2015. The following action was taken:

The BAR approved (8-0) the application as submitted.

In accordance with Charlottesville City Code 34-285(b), this decision may be appealed to the City Council in writing within ten working days of the date of the decision. Written appeals, including the grounds for an appeal, the procedure(s) or standard(s) alleged to have been violated or misapplied by the BAR, and/or any additional information, factors or opinions the applicant deems relevant to the application, should be directed to Paige Barfield, Clerk of the City Council, PO Box 911, Charlottesville, VA 22902.

This certificate of appropriateness shall expire in 18 months (October 21, 2016), unless within that time period you have either: been issued a building permit for construction of the improvements if one is required, or if no building permit is required, commenced construction. The expiration date may differ if the COA is associated with a valid site plan. You may request an extension of the certificate of appropriateness *before this approval expires* for one additional year for reasonable cause.

Upon completion of construction, please contact me for an inspection of the improvements included in this application. If you have any questions, please contact me at 434-970-3130 or scala@charlottesville.org.

Sincerely yours,

Mary Joy Scala, AICP
Preservation and Design Planner

Mary Joy Scala, AICP
Preservation and Design Planner
City of Charlottesville
Department of Neighborhood Development Services
City Hall – 610 East Market Street
P.O. Box 911
Charlottesville, VA 22902
Ph 434.970.3130 FAX 434.970.3359
scala@charlottesville.org

**CITY OF CHARLOTTESVILLE
BOARD OF ARCHITECTURAL REVIEW
STAFF REPORT
April 21, 2015**



Certificate of Appropriateness Application

BAR 15-04-06

500 Court Square

Tax Parcel 530096000

Thomas Michie, TR -1st Mont LD TR, Owner/ USCOC of Virginia RSA#3, Inc, Applicant

Replace 6 antennas and add one new cabinet on roof

Background

This property is a contributing structure in the North Downtown ADC district and the Charlottesville Albemarle County Courthouse National Register District. The 1980 National Register nomination describes the building as a 9 story brick (Flemish bond) building with a flat roof designed in the Colonial Revival by architect Stanhope Johnson of Lynchburg. The building was constructed between 1924-26 and originally called the Monticello Hotel. It is currently a condominium building.

February 28, 1989 - New windows in south wall façade and 2-3 outdoor mechanical units on fire stair

June 27, 1989 - Install new railings on towers and two sets of stairs on roof

January 23, 1990 - Install six new rear windows; close two fire door entrances; install vent; add two heat pump units on fire stairs

April 24, 1990 - Screening for rear heat pumps

June 21, 1994 - Replace new sliding doors

February 2001 - Administrative approval: Co-locate antenna on roof (Nextel/Crown)

April 2001 - Administrative approval: (Ntelos) Replace 2 cabinets and upgrade equipment.

July 2001 - Administrative approval :Locate up to 6 to 9 antennas (General Dynamics) with accessory telecommunication cabinets

October 2001 - Administrative approval: Remove 3 antennas and replace 6 (US Cellular)

June 17, 2003 - Add two new rectangular windows in south elevation.

September 21, 2004 - Install revolving door

June 21, 2011 - The BAR approved on the consent agenda to replace the balustrade with a painted terne-coated stainless steel replica.

July 19, 2011 - The BAR approved the replacement of nine existing wood windows in a 6th floor unit facing Market Street with aluminum clad wood window sash kits with exterior applied 7/8" putty profile muntins. This is the only approved window replacement at this time for the entire structure.

March 19, 2013 - Approved (9-0) as submitted re-roofing and replacement of painted galvanized steel balustrade with painted copper balustrade.

March 18, 2014 - The BAR approved (5-0) the change in baluster material from painted copper to fiberglass as submitted.

August 19, 2014 - Administrative approval to AT&T to replace three antennas with three similar sized antennas.

Application

The applicant is working with the property owner and the City to help improve the aesthetics of this antenna site in a two-step process. In this phase six antennas will be moved down from where they are currently located on the penthouse. In step two the antennas will be moved to the roof surface, where they can be fully screened, by June 2016.

- (1) The applicant is requesting approval to remove 6 existing antennas that are mounted on the side walls of the elevator penthouse, and currently stick up above the penthouse roofline. The mounts would be moved down to a new location, so that the 6 new replacement antennas would not extend above the top of the penthouse. They will be painted to match the color of the penthouse.

The dimensions of existing and proposed antennas are:

- (6) current antennas to be removed: 101"x10"x4" – panel type antennas
 - (3) proposed antennas to be installed: 96"x11.8"x6"
 - (3) proposed antennas to be installed: 94.7"x11.2"x5.2"
- (2) Three remote electrical tilt (RET) controllers will be installed behind three of the new antennas.
 - (3) A new radio cabinet, 3' x3'x7' will be installed on an existing platform on the roof. It is proposed to be screened by the existing parapet.

Criteria, Standards and Guidelines

Review Criteria Generally

Sec. 34-284(b) of the City Code states that,

In considering a particular application the BAR shall approve the application unless it finds:

- (1) That the proposal does not meet specific standards set forth within this division or applicable provisions of the Design Guidelines established by the board pursuant to Sec.34-288(6); and*
- (2) The proposal is incompatible with the historic, cultural or architectural character of the district in which the property is located or the protected property that is the subject of the application.*

Pertinent Standards for Review of Construction and Alterations include:

- (1) Whether the material, texture, color, height, scale, mass and placement of the proposed addition, modification or construction are visually and architecturally compatible with the site and the applicable design control district;*
- (2) The harmony of the proposed change in terms of overall proportion and the size and placement of entrances, windows, awnings, exterior stairs and signs;*
- (3) The Secretary of the Interior Standards for Rehabilitation set forth within the Code of Federal Regulations (36 C.F.R. §67.7(b)), as may be relevant;*
- (4) The effect of the proposed change on the historic district neighborhood;*
- (5) The impact of the proposed change on other protected features on the property, such as gardens, landscaping, fences, walls and walks;*
- (6) Whether the proposed method of construction, renovation or restoration could have an adverse impact on the structure or site, or adjacent buildings or structures;*
- (7) When reviewing any proposed sign as part of an application under consideration, the*

standards set forth within Article IX, Sections 34-1020, et seq. shall be applied; and (8) Any applicable provisions of the city's Design Guidelines (see Sec. 34-288(6)).

Pertinent Design Review Guidelines for Site Design and Elements

H. UTILITIES & OTHER SITE APPURTENANCES

Site appurtenances, such as overhead utilities, fuel tanks, utility poles and meters, antennae, exterior mechanical units, and trash containers, are a necessary part of contemporary life. However, their placement may detract from the character of the site and building.

- 1. Plan the location of overhead wires, utility poles and meters, electrical panels, antennae, trash containers, and exterior mechanical units where they are least likely to detract from the character of the site.*
- 2. Screen utilities and other site elements with fences, walls, or plantings.*
- 3. Encourage the installation of utility services underground.*
- 4. Antennae and communication dishes should be placed in inconspicuous rooftop locations, not in a front yard.*
- 5. Screen all rooftop mechanical equipment with a wall of material harmonious with the building or structure.*

Discussion and Recommendations

The pertinent Telecommunication Facilities section of the zoning ordinance that was adopted in 2003 states:

Sec. 34-1073. Facilities by district.

(a) *Within the city's historic and entrance corridor overlay districts:*

- (1) The following shall be permitted uses: antennae or microcells mounted on existing communications towers established prior to February 20, 2001; attached communications facilities utilizing utility poles or other electric transmission facilities as the attachment structure; and other attached communications facilities if such other attached communications facilities are not visible from any adjacent street or property.*
- (2) The following shall be prohibited uses: attached communications facilities where such facilities are visible from any adjacent street or property, and communications facilities utilizing alternative tower, monopole tower, guyed tower, lattice tower and self-supporting tower support structures.*

Because the antennas are existing and not screened, they are considered non-conforming. This proposal will make them less non-conforming. Staff commends the property owner and the utility for working together to improve the City's most important historic district.

Suggested Motion

Having considered the standards set forth within the City Code, including City Design Guidelines for Site Design & Elements, I move to find that the proposed replacement antennas and cabinet satisfy the BAR's criteria and are compatible with this property and other properties in the North Downtown ADC district, and that the BAR approves the application as submitted.





Board of Architectural Review (BAR) Certificate of Appropriateness

RECEIVED

MAR 31 2015

Please Return To: City of Charlottesville
Department of Neighborhood Development Services
P.O. Box 911, City Hall
Charlottesville, Virginia 22902
Telephone (434) 970-3130 Fax (434) 970-3359

Please submit ten (10) copies of application form and all attachments.
For a new construction project, please include \$375 application fee. For all other projects requiring BAR approval, please include \$125 application fee. For projects that require only administrative approval, please include \$100 administrative fee. Make checks payable to the City of Charlottesville.
The BAR meets the third Tuesday of the month.
Deadline for submittals is Tuesday 3 weeks prior to next BAR meeting by 3:30 p.m.

Owner Name - Thomas Michie - TR, - 1st Mont LD TR Applicant Name - USCOC of Virginia RSA #3, Inc
Project Name/Description - 500 Court Square LTE Upgrade Parcel Number - ~~530096201~~ 530096000
Property Address - 500 Court Square, Charlottesville, Virginia 22902

Applicant Information

Address: 3806 Thirlane Road,
Roanoke, VA 24014

Email: carl.taskes@greenlanddev.com
Phone: (W) 480-440-0603
FAX: 302-861-3900

Property Owner Information (if not applicant)

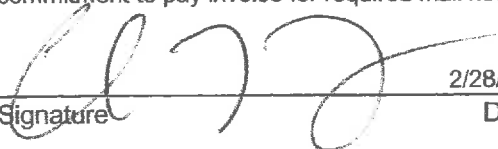
Address: PO Box 298, Charlottesville, VA 22902

Email: tony.rocklein@embargo.com
Phone: (W) 434-962-2911
FAX: NA

Do you intend to apply for Federal or State Tax Credits for this project? NO

Signature of Applicant


I hereby attest that the information I have provided is, to the best of my knowledge, correct. (Signature also denotes commitment to pay invoice for required mail notices.)


Signature _____ Date 2/28/15

Carl M. Taskes
Print Name _____ Date 3/28/2015

Property Owner Permission (if not applicant)

I have read this application and hereby give my consent to its submission.


Signature _____ Date 3/31/15

Tony Rocklein
Print Name _____ Date 3/31/15

Description of Proposed Work (attach separate narrative if necessary): Applicant proposes to replace the six (6) existing antennas with six (6) new antennas along with the corresponding coax cables. Applicant also proposed to lower the existing antenna mounts so the new antennas will not exceed the elevator penthouse. Application will install three (3) RET (remote electrical tilt) controllers behind three (3) of the new antennas. Finally, applicant is proposing to install a new, approx. 3'x3'x7' radio cabinet on an existing platform. A set of construction drawings are included in this application.

List All Attachments (see reverse side for submittal requirements):

Application - Project Report - Construction Drawings - Photos (Before - After)

For Office Use Only
Received by: Lisa A. Barnore
Fee paid: \$125.00 Cash/Ck. # 1571
Date Received: 3/31/2015
P15-0055
Approved/Disapproved by: _____
Date: _____
Conditions of approval: _____

HISTORIC DISTRICT ORDINANCE: For more information, please refer to *Section 34- 271 Historical Preservation and Architectural Design Control Overlay Districts* in the City of Charlottesville Zoning Ordinance online at www.charlottesville.org

- **See Enclosed Project Report**

DESIGN REVIEW GUIDELINES: You may obtain a copy of the current *Design Review Guidelines* at the Department of Neighborhood Development Services in City Hall.

- **See Enclosed Project Report**

SUBMITTAL REQUIREMENTS: The following information and exhibits shall be submitted along with each application for Certificate of Appropriateness, per *Sec. 34-282 (d)* in the City of Charlottesville Zoning Ordinance:

(1) Detailed and clear depictions of any proposed changes in the exterior features of the subject property;

- **See Attached Construction Drawings**

(2) Photographs of the subject property and photographs of the buildings on contiguous properties;

- **Photographs of current conditions of the site along with photographs of the site after US Cellular completes the installation with the lower mounts.**

(3) Samples to show the nature, texture and color of materials proposed;

- **The replacement antennas will be made of fiber glass and will be painted with an RF transparent paint to match the color of the elevator penthouse façade.**

(4) The history of an existing building or structure, if requested;

- **This has not been requested.**

(5) For new construction and projects proposing expansion of the footprint of an existing building: a three-dimensional model (in physical or digital form);

- **This is not a new construction.**

(6) In the case of a demolition request where structural integrity is at issue, the applicant shall provide a structural evaluation and cost estimates for rehabilitation, prepared by a professional engineer, unless waived by the BAR.

- **This is not a demolition**



Site Name: 768316 – 500 Court Square

Project Report for LTE Upgrade Project

Prepared for

The City of Charlottesville Board of Architectural Review

**500 Court Square
Charlottesville, Virginia 22902**

**Submitted by
USCOC of Virginia RSA #3, Inc
3806 Thirlane Road
Roanoke, Virginia 24019**

**Submitted to:
Mary Joy Scala, AICP, Preservation and Design Planner
City of Charlottesville
Department of Neighborhood Development Services
City Hall – 610 East Market Street
PO Box 911
Charlottesville, Virginia 22902**

**Prepared By:
Greenland Development Group, LLC
on behalf of USCOC of Virginia RSA #3, Inc.
Carl M. Taskes
3735 Franklin Road, SW Suite 242
Roanoke, Virginia 24014**

Table of Contents

NARRATIVE

SECTION 1: General Information	Page 3
SECTION 2: Background	Page 4
SECTION 3: Project Description	Page 4
SECTION 4: Review of Historic District Ordinance	Page 5
SECTION 5: Review of Design Review Guidelines	Page 8
SECTION 6: Conclusion	Page 9

REQUIRED ATTACHEMENTS

EXHIBIT A:	Construction Drawings
EXHIBIT B:	Existing Antenna Specifications
EXHIBIT C:	New Antenna Specifications
EXHIBIT D:	Photo Simulations
EXHIBIT E:	Proposed Timeline of Overall Plan

SECTION 1 General Information

APPLYING FOR: Approval of antenna and cable modifications; addition of antenna controllers and a new equipment cabinet along with lowering the antenna mounts.

APPLICANT: USCOC of Virginia RSA #3, Inc.
3806 Thirlane Road
Roanoke, Virginia 24019
Contact: Jon Scarborough
Phone: (540) 864-8387

AGENT: Greenland Development Group, LLC
3735 Franklin Road, SW
Suite 242
Roanoke, Virginia 24014
Contact: Carl M. Taskes
Phone: (480) 440-0603

BUILDING OWNER: Thomas Michie TR – 1st Mont LD TR
PO Box 298
Charlottesville, Virginia 22902
Manager - Tony Rocklein
Phone: (540) 864-6418

ROOFTOP EQUIPMENT MANAGER: Broadcast Services, Inc.
4801 Industrial Parkway
Indianapolis, Indiana 46226
Contact: Dennis Warner
Phone: (317) 895-9050 ex 204

PARCEL LOCATION: 530096201
500 Court Square
Charlottesville, Virginia 22902

EXISTING USE: Office Building

SECTION 2 Background

USCOC of Virginia RSA #3, Inc. (USCC) is currently working to enhance the existing wireless network in Albemarle County and the City of Charlottesville by modifying some of its current sites. This modification will allow these sites to receive and transmit through the additional FCC licensed frequencies it owns in order to provide new high-speed data capabilities to its customers.

In order to deploy LTE / 4G technology at this site, USCC needs to upgrade its antennas, coax, radio equipment and other ancillary items. In a typical upgrade this would mean adding additional antennas that are "LTE-capable" to the existing configuration in addition to new radio equipment. This allows USCC to maximize its capacity and coverage levels by keeping its current technologies operating as is and adding the new LTE equipment as a completely new set of equipment. In this case, USCC has been asked by the City of Charlottesville and the owners of the building to help improve the aesthetics of the rooftop by moving all of its existing antennas and the new proposed antennas down to the roof level and install additional screening to keep the antennas and equipment completely hidden.

SECTION 3 Project Description

USCC does not have the budget or timing to meet this request during this current antenna modification project. However, USCC has developed a long term plan that it hopes will show the City of Charlottesville and specifically the Board of Architectural Review (BAR) Members that it understands the aesthetic concerns and that it will work to complete the request in a two-step plan.

The application before you is the first step in this plan. This would entail removing the six (6) existing antennas that are mounted on the side walls of the elevator penthouse. The antennas are current mounted in a manner that has them sticking up above the elevator penthouse roofline. USCC would move the existing mounts down to a new location that would allow the replacement antenna tips to remain below the top of the elevator penthouse. USCC will also proposed to paint the antennas and mounts the same paint color as the elevator penthouse to help them blend in with the elevator penthouse.

The current antennas that are installed all measure 101"x10"x4" and are panel type antennas. Each of these antennas is connected to the radio equipment inside the elevator penthouse by a coaxial cable providing for a total of six (6) coaxial cables. These existing antennas are mounted at the top of the penthouse which is approximately 127.25'. With the mounting method currently being used, the top of the antenna extends from that mount up to an overall height of approximately 135.46" (which gives an approximate centerline or rad center of 131.75'). The replacement antennas will be 96"x11.8"x6" and 94.7"x11.2"x5.2". There will be one of each these antennas mounted in each sector for a total of three (3) of each size for a final total of six (6) antennas re-installed. These replacement antennas are shorter which will also help reduce the impact of them mounted on the elevator penthouse. The replacement antennas will require two coax lines per antennas since they are dual-pole antennas which means they have two connecting ports for coax instead of one like the existing antennas. This will mean a total of

twelve (12) runs of coax will connect these antennas with the equipment. The final piece to this initial installation will be a new radio equipment cabinet mounted on a new steel platform that will go adjacent to the proposed nTelos steel platform that they are installing as part of their project. This is the area that was occupied by the old Nextel Partners equipment shelter and was recently removed as part of the nTelos plan. In working together, USCC will be able to utilize a portion of that space. USCC will leave the two equipment cabinets it has installed in the elevator penthouse during this phase. Once step one is completed, the building aesthetics will be slightly improved with lowering of the USCC antennas from above the roof. We understand that nTelos has either already removed or will be removing their antennas which reached above the roofline as well. This will result in a new clean roofline and also lay the ground work for USCC to move their antennas down to the roof as part of step two. USCC will be submitting this first step to SHPO for review at the same time this application is submitted.

The plan for step two will be to relocate the USCC antennas from the façade of the elevator penthouse down to the roof with the other carriers. USCC will also propose a stealth screen to also cover its antennas. Because of the costs of the new mounts, unknown structural status of the roof and the new stealth paneling USCC cannot do this until 2016 as there is no current funding to do this and the existing budget for the LTE upgrade is not enough. USCC does want to work with the City of Charlottesville and the building owner to achieve its goals and would like to propose a timeline that will allow the additional antenna work to be completed by June 2017. USCC is working on a proposed layout for these new antenna locations. My hope is that I can show this preliminary layout at the April 21st hearing. We will take any feedback from the Board and work to finalize a design with a plan to formally submit the long term design in July or August. We would continue to work toward a goal of having all the required City of Charlottesville permits and approvals, along with SHPO concurrence by the end of the year 2015. We would then be able to order all of the needed materials in January of 2016 with a plan to complete the move once the weather breaks in the spring and have everything completed by the end of June 2016. The final piece of step two will be for USCC to coordinate moving the equipment cabinets it has located inside the elevator penthouse out to the platform with the currently proposed LTE cabinet at some point in 2017. The timing of this in 2017 is needed as it will coincide with an expected equipment upgrade at that site which could minimize a lot of extra work if done before then.

SECTION 4 Review of Historic District Ordinance

Division 2 of the City of Charlottesville Ordinance titled – Historical Preservation and Architectural Design Control Overlay Districts - was developed “to protect community health and safety, to promote the education, prosperity and general welfare of the public through the identification, preservation and enhancement of buildings, structures, landscapes, settings, neighborhoods, places and features with special historical, cultural and architectural significance”. As the base to build from to achieve these goals, several historic districts were established. The building located at 500 Court Square on this the existing USCC site is located is within one of those districts; the North Downtown ADC District (District B). While this building is not an individually protected property, it is a very prominent structure within the downtown area and its rooftop can be seen throughout the downtown area.

In an effort to improve the aesthetics of this rooftop which currently provides equipment and antenna space to USCC, T-Mobile, nTelos and AT&T, the building owner has asked USCC to consider relocating its antennas to the main roof deck as part of its antenna modification project planned for this summer. USCC certainly understands and appreciates what the owner and the City want to achieve and they are willing to work with the owner and the City over the next year to do its part in helping to approve the rooftop appearance.

As outlined in the section 34-275 of Division 2, USCC needs to obtain a certificate of appropriateness from the BAR for its proposed antenna modification at this site. This application outlines the proposed project and identifies the design features which have been tailored to the initiative of the owner and BAR to try to improve upon the visual effects the current layout has on the immediate and surrounding areas.

Section 34-276 outlines the standards that are used by the BAR in its review of proposed construction activities within the various historical districts. The following is a discussion of those standards and how the USCC modification has taken them into account;

- (1) Whether the material, texture, color, height, scale, mass and placement of the proposed addition, modification or construction are visually and architecturally compatible with the site and the applicable design control district;
 - USCC is proposing to replace six (6) of its existing antennas which are currently mounted on the side of the elevator penthouse. The mounts are located so that all six (6) of the antennas protrude up above the elevator penthouse roofline. While the antennas are 101"x10"x4" which is quite small in terms of the overall mass of the building and the elevator penthouse they are mounted in a manner that "skylines" them from most views of the building. This creates a very negative aesthetic and causes a seemingly small feature to become a very dominate part of the building. The proposed project will cause the removal of all six (6) of these antennas and allow USCC to move the mounting system down on the elevator penthouse walls so that when the replacement antennas are installed, they will remain below the elevator penthouse roof. This will eliminate the "skyline" effect and thereby reduce a majority of negative aesthetics that these antennas bring to the rooftop. As an additional mitigation step, USCC will paint the antennas and mounts the same color as the elevator penthouse façade. This will help the antennas further blend into the walls and possibly eliminate their effect on the view of the building from further views or to a casual observer.
 - This modification is proposed as a temporary installation to help slowly bring the entire USCC facility down to the roof deck and eventually behind screening panels. This first step will help bring the USCC facility closer to an acceptable design for this district by improving on its affect through the use of a revised height placement and color (currently the antennas are white). These two features ultimately help to reduce the perceived mass of the antennas by making them a less dominate feature.
- (2) The harmony of the proposed change in terms of overall proportion and the size and placement of entrances, windows, awnings, exterior stairs and signs;
 - This proposed modification has no effect on the placement or size of the existing entrance, windows, awnings, exterior stairs or signs. It will specifically help improve the perceived proportion of the elevator penthouse. Currently the existing antennas are approximately 8 and ½ feet above the elevator penthouse roofline. With six (6) antennas spaced around the

four (4) sides combined with the six (6) nTelos; the elevator penthouse appears to be much larger and is a very dominate feature on the building. Once all of these antennas are relocated; nTelos to the roof and USCC to a lower spot on the wall and then to the roof deck, the elevator penthouse will become a less dominate feature allowing the building to regain some of its balance.

- (3) The Secretary of the Interior Standards for Rehabilitation set forth within the Code of Federal Regulations (36 C.F.R. §67.7(b)), as may be relevant;
 - This proposed modification will not have any features which would need to comply with 36 C.F.R. §67.7(b).
- (4) The effect of the proposed change on the historic district neighborhood;
 - This proposed modification will be a first step in an overall improvement project for the rooftop of this building. By moving the antennas to a lower height on the elevator penthouse wall the USCC facility will start to become harder to spot on the roof. While the initial step only provides to lower the antenna heights and paint the antennas, it will be an improvement over the current installation. As stated earlier, this will be a temporary installation to allow USCC to deploy its LTE upgrade in time for its summer due date. It also provides a slightly better view of the rooftop. This will certainly be an improvement for the view shed of this rooftop from the surrounding neighborhood.
- (5) The impact of the proposed change on other protected features on the property, such as gardens, landscaping, fences, walls and walks;
 - This proposed modification will only have an effect on the elevator penthouse walls. The walls will be more crowded than they are now as they only hold a portion of the mounting hardware for the antennas. Once the mounts are relocated, the antennas themselves will occupy approximately 46 square feet of surface space on the elevator penthouse walls or approximately 15.4 square feet of surface space on the western, northern and eastern sides. There are no antennas proposed on the southern side. The total square footage of surface space of all four (4) sides of the elevator penthouse is estimated at 1575 square feet which means the new antenna locations will take up about 3%.
- (6) Whether the proposed method of construction, renovation or restoration could have an adverse impact on the structure or site, or adjacent buildings or structures;
 - This modification will improve the view of the rooftop and the equipment on the rooftop. This is the first step in a long term plan by USCC which will achieve a final result of the antennas being located on the roof deck behind stealth screen panels. This temporary relocation will lower the antennas and paint them to help lessen their visibility and therefore be an improvement,.
- (7) When reviewing any proposed sign as part of an application under consideration, the standards set forth within Article IX, sections 34-1020, et seq. shall be applied; and
 - There is no signage proposed for this modification project.

(8) Any applicable provisions of the city's design guidelines (see section 34-288(6)).

- USCC will work with the BAR and building owner to improve the view its facility located on the rooftop; specifically the antennas. Any additional requests or requirements that are made during the review process will certainly be taken under consideration.

SECTION 5 Review of Design Review Guidelines

The Charlottesville Architectural Design Control Districts Design Guidelines as approved by City Council September 17, 2012 outline all of the processes, requirements, standards and overall criteria for each of the designated and defined historic districts and eligible properties. As outlined in Chapter I. (D) Ordinance Criteria & Standards, the BAR shall consider each application for approval unless it finds that the project;

- a) Does not meet the specific standards set forth within this division or applicable provisions of the Design Guidelines established by the Board; and
- b) Is incompatible with the historic, cultural, or architectural character of the district in which the property is located or the protected property that is the subject of the application.

In addition to these criteria, the following are the eight (8) standards that each project must meet;

- a) Whether the material, texture, color, height, scale, mass and placement of a proposed change are visually and architecturally compatible with the site and district.
- b) The harmony of the proposed change in terms of overall proportion and the size and placement of entrances, windows, awnings, exterior stairs and signs.
- c) The Secretary of the Interior's Standards for Rehabilitation, as may be relevant.
- d) The effect of the proposed change on the historic district neighborhood.
- e) The impact of the proposed change on other features of a property, such as gardens, landscaping, fences, walls, or walks.
- f) Whether the proposed method of construction, renovation or restoration could have an adverse impact on the structure or site, or adjacent buildings or structures.
- g) Whether, when reviewing a proposed sign as part of an application, the proposal meets the city's standards for signage.
- h) The City's Design Review Guidelines, as applicable.

This proposed antenna modification makes a positive first step in trying to improve the views of this building's rooftop. As a contributing building located in the North Downtown ADC District it is important that USCC try to take as many of the additional steps requested by the building owner and the City of Charlottesville as it can. USCC understands that this is very important to the long term goals of both parties and is willing to work with them on this. The initial modification design which was to add three (3) new antennas to the rooftop has been modified to meet the requirements of the Design Guidelines. USCC is also willing to lower these new antennas to help lessen the impact they would have if kept above the roofline as well as paint them. This will ensure that the proposed modification meets the specific standards and is compatible with the North Downtown ADC District.

Chapter II (H) Utilities and Other Site Appurtenances provides a list of requirements and guidelines which discuss some of the elements included in the existing USCC facility. Specifically items 4 and 5 discuss the placement of antennas and mechanical equipment.

Item 4. Antennae and communication dishes should be placed in inconspicuous rooftop locations, not in a front yard.

- The current placement of the antennas that are part of the USCC facility are not in an ideal location on the top of the elevator penthouse which is a very prominent spot on the rooftop. As currently designed this placement detracts from aesthetics of the building. USCC is proposing to relocate its antennas to a lower spot on the elevator penthouse façade and additionally paint them the same color as the façade. This will improve the look of the elevator penthouse and the overall roof. As stated previously, this is a temporary move that will further develop into relocating the antennas to the roof deck and add stealth screening. Because of timing and costs, USCC cannot move the antennas to the roof deck in 2015 but it has begun the development process to do this and will work to achieve the move by June 2016.

Item 5. Screen all rooftop mechanical equipment with a wall of material harmonious with the building or structure.

- The new radio cabinet that is required to operate the LTE frequencies that the new replacement antennas can transmit and receive will be located on a new steel platform that will be adjacent to the one nTelos is installing as part of their upgrades. This is in the space previously occupied by a very large equipment shelter which was removed. This platform is centrally located on the roof to make its view impossible from ground level.

Chapter III (G) 3. Rooftop Screening provides these additional requirements;

- a. If roof-mounted mechanical equipment is used, it should be screened from public view on all sides.
 - The new proposed radio cabinet will be located in a central location on the roof and will not be seen from ground level.
- b. The screening material and design should be consistent with the design, textures, materials, and colors of the building.
 - USCC will work with the BAR and the City to incorporate any screening that may be suggested for the cabinet location. We understand that nTelos has been working with a company to design stealth screening for its antennas but we do not see anything proposed for the equipment cabinet area. We would like to ask for timing relief on the installation of any proposed screening of the LTE cabinet until we submit our application in July or August for the final antenna relocation plan. In addition to not knowing if the BAR will require screening for this cabinet since it cannot be seen from ground level, there is also still a question of where the antennas will need to go as part of the final move. It is possible that an acceptable location would be on the cabinet platform. Should that happened we could incorporate a screening design that could cover all of the features rather than just the cabinet.
- c. The screening should not appear as an afterthought or addition the building.
 - USCC will work closely with the owner and BAR to ensure that any proposed screening needed for the USCC facility will work with not only the building, its colors and features, but also with the other screening that each of the other wireless providers will be installing.

- The provisions of Chapter III (M) Materials and Textures as well as Chapter III (N) Paint will also play key roles in providing a stealth screen that works well within this rooftop environment.

SECTION 6 Conclusions

This proposed antenna and site modification will help USCC deploy its LTE high-speed data services at this site. The modification will also help clean up the rooftop clutter at this site by lowering the USCC antennas down so that they are no longer a prominent feature sticking up above the elevator penthouse roofline. Because this project was funded as a simple modification USCC does not have the necessary funding to relocate all of the antenna down to the roof deck and install stealth screening around the relocated antennas. Doing a complete antenna relocation is also not feasible given the timeline set forth to deploy LTE which has a deadline of this summer. In the hopes of showing the building owner and the City, USCC is proposing a two-step plan that would be completed by June 2016. The first step is presented in this application and will allow USCC to deploy LTE in the required timeline it has while starting to meet the owner and City request to lower the antennas. Upon approval of this first step, USCC will then complete the design for moving the antennas to the roof deck and look to submit that plan for formal BAR review in the July / August time frame. This would put USCC on a path to finish up all the permitting it needs in 2015 for the antenna relocation. We hope that our proposed plan will meet your wishes and we respectfully request your approval of this proposed antenna modification.

EXHIBIT A

Construction Drawings

SEE ATTACHED

EXHIBIT B

Existing Antenna Specifications



AP16-850/065
65° Panel Antenna

Kathrein-Scala 65° panels are designed for conventional space diversity systems.

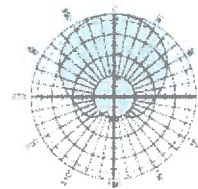
- High strength UV-resistant radome.
- Alodined rigid aluminum reflector/back plane.
- DC Grounded metallic parts for impulse suppression.
- Fixed downtilt options.

Specifications:

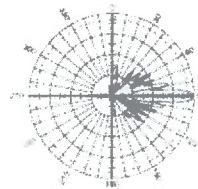
Frequency range	806-894 MHz
Gain	16 dBd
Impedance	50 ohms
VSWR	< 1.3:1
Intermodulation (2x20w)	IM3: -150dBc0
Polarization	Vertical
Front-to-back ratio	>25 dB
Maximum input power	500 watts (at 50° C)
H-plane beamwidth	65 degrees (half-power)
E-plane beamwidth	7 degrees (half-power)
Electrical downtilt	0, 3, 6, or 12 degrees
Connector	N or 7/16 DIN female
Weight	26.8 lb (12.2 kg)
Dimensions	101.5 x 10 x 4 inches (2578 x 254 x 102 mm)
Equivalent flat plate area	9.24 ft ² (0.858 m ²)
Wind survival rating*	120 mph (200 kph)
Shipping dimensions	114.5 x 11 x 6 inches (2908 x 279 x 153 mm)
Shipping weight	42 lb (19.1 kg)
Mounting	Fixed and tilt-mount options are available for 2 to 4.6 inch (50 to 115 mm) OD masts.

See reverse for order information.

* Mechanical design is based on environmental conditions as stipulated in EIA-222-F (June 1996) and/or ETS 300 019-1-4 which include the static mechanical load imposed on an antenna by wind at maximum velocity. See the Engineering Section of the catalog for further details.



H-plane
Horizontal pattern
V-polarization



E-plane
Vertical pattern
V-polarization



EXHIBIT C

New Antenna Specifications

Simply
Intelligent

K&W Communications
Base Station Antennas
For Mobile Communications

AM-X-CW-18-65-00T-RET(8' 65° 700MHz Band Antenna)

Single Band Electrical DownTilt Antenna

698 ~ 894MHz, X-pol., H65 / V8.0

Electrical Specification

Frequency Range	698-806MHz	806-894MHz
Impedance	50Ω	
Polarization	Dual, Slant ±45°	
Gain	16.8 dBi / 14.55dBd	17.5 dBi / 15.35dBd
Beamwidth	Horizontal	66°
	Vertical	10.0°
Tracking-Horizontal Plane	2dB@±60°	
Vertical Beam Squint Across DownTilt Range	±1.25°	
VSWR	≤1.4:1	
Front-to-Back Ratio	≥27 dB	
Electrical DownTilt Range	0° ~ 12°	
Isolation Between Ports	≥30 dB@ 0° ~ 10°	
	≥28 dB@ 11° ~ 12°	
Cross Pole Discrimination	10.0 dB @ ±60°	
	15.0 dB @ 0°	
First Upper Side Lobe Suppression	16dB	
Side Lobe Suppression	> 16dB @ 0-6° Tilt	
	> 18dB @ 7-12° Tilt(Up to 10° from Boresight)	
Passive Intermodulation	≤ -150 dBc @ 2x20W	
Input Maximum CW Power	500 W	
Environmental Compliance	IP65 for Radome	
	IP67 for Connectors	
RET Motor Configuration	Field Replaceable RET Electronic Control Module / RET Motor is internal to antenna & not field replaceable	
Compliant with AISG 1.1 and 2.0	AISG 1.1 and 2.0	

Mechanical Specification

Dimension (W×D×H)	11.8×6.0×96 inches
Weight (Without clamp)	24.0 kg (52.9 lbs)
Connector	2 x 7/16 DIN(F), Long Neck
Max Wind Speed	150mph
Wind Load (@150 mph)	2521 N

696-900 MHz



BXA-70063-8CF-EDIN-X

X-Pol | FET Panel | 63° | 16.0 dBd

Replace "X" with desired electrical downtilt.

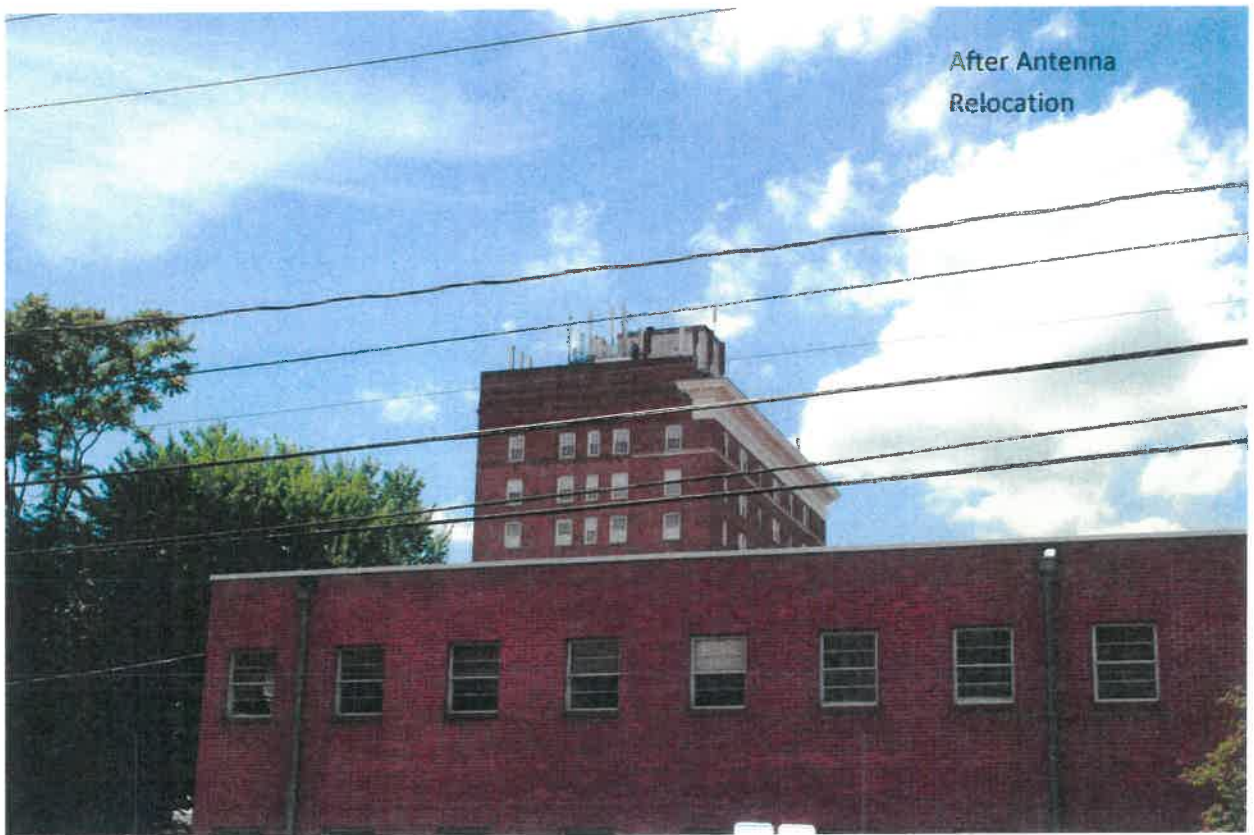
Antenna is also available with NE connectors.
Replace "EDIN" with "NE" in the model number when ordering.

Electrical Characteristics	696-900 MHz				
Frequency bands	696-806 MHz		806-900 MHz		
Polarization	±45°				
Horizontal beamwidth	65°		63°		
Vertical beamwidth	9°		7°		
Gain	15.5 dBd (17.6 dBi)		16.0 dBd (18.1 dBi)		
Electrical downtilt (X)	0, 2, 3, 4, 5, 6, 7, 8, 10				
Impedance	50Ω				
VSWR	≤1.35:1				
Upper sidelobe suppression (0°)	-16.2 dB		-19.0 dB		
Front-to-back ratio (+/-30°)	-32.9 dB		-31.3 dB		
Null fill	5% (-26.02 dB)				
Isolation between ports	< -30 dB				
Input power with EDIN connectors	500 W				
Input power with NE connectors	300 W				
Lightning protection	Direct Ground				
Connector(s)	2 Ports / EDIN or NE / Female / Center (Back)				
Mechanical Characteristics					
Dimensions Length x Width x Depth	2485 x 285 x 132 mm		94.7 x 11.2 x 5.2 in		
Depth with z-brackets	170 mm		6.7 in		
Weight without mounting brackets	10.9 kg		24 lbs		
Survival wind speed	> 201 km/hr		> 125 mph		
Wind area	Front: 0.59 m ²	Side: 0.31 m ²	Front: 7.4 ft ²	Side: 3.4 ft ²	
Wind load @ 161 km/hr (100 mph)	Front: 1031 N	Side: 561 N	Front: 232 lbf	Side: 129 lbf	
Mounting Options	Part Number	Fits Pipe Diameter		Weight	
3-Point Mounting Bracket Kit	36210003	50-160 mm	2.0-6.3 in	6.3 kg	14 lbs
3-Point Downtilt Bracket Kit (U-14°)	36210004	50-160 mm	2.0-6.3 in	7.3 kg	16 lbs
Downtilt Mounting Applications	A mounting bracket and downtilt bracket kit must be ordered for downtilt applications.				
Concealment Configurations	For concealment configurations, order BXA-70063-8CF-EDIN-X-FP.				



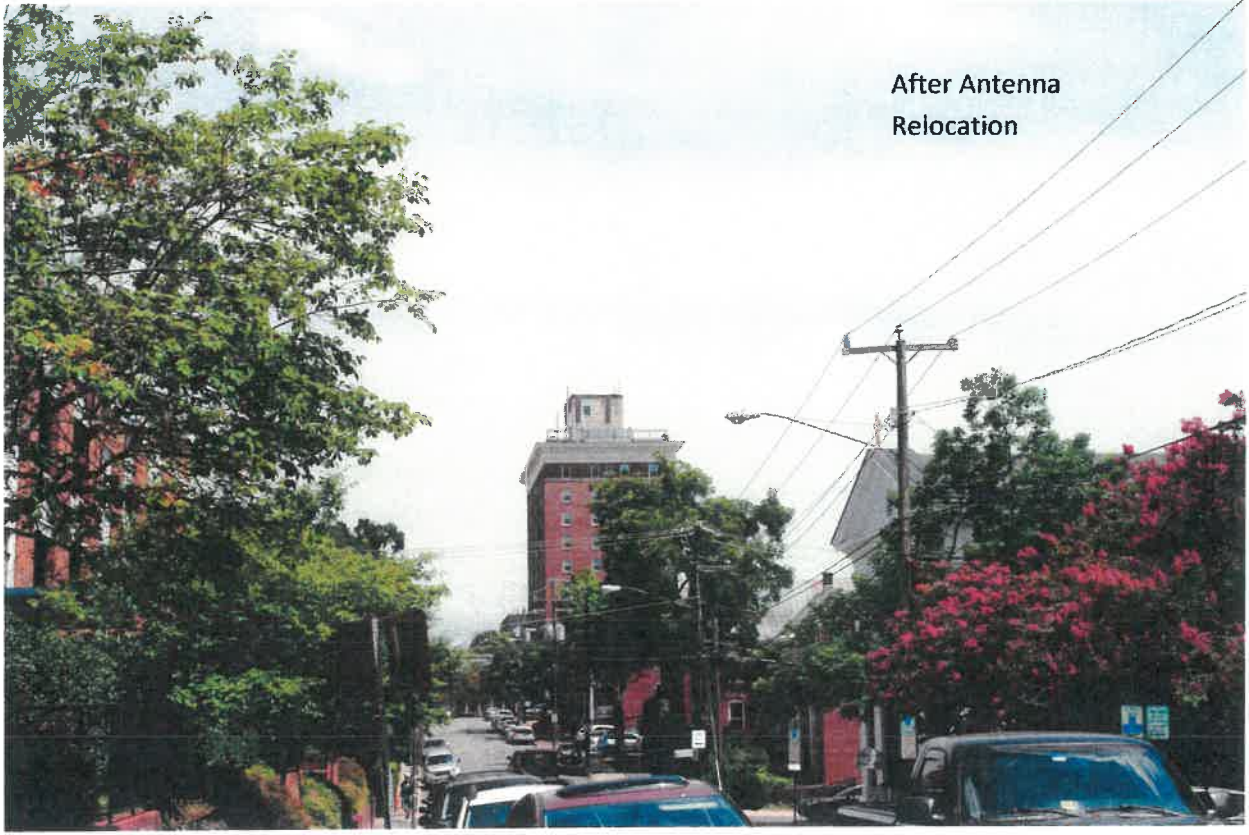
EXHIBIT D

Photo Simulations





Existing Site
Conditions



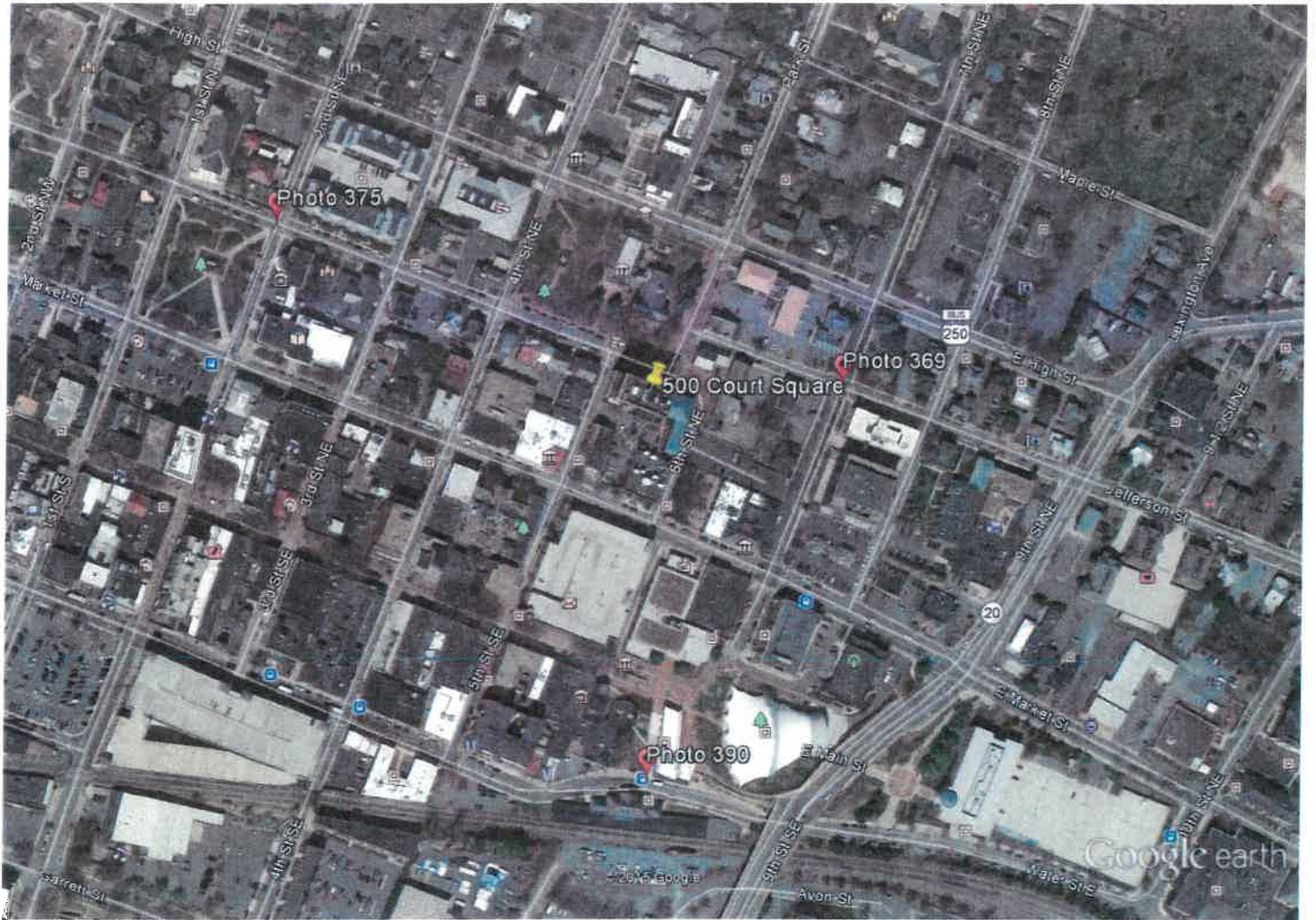
After Antenna
Relocation

Existing Site
Conditions



After Antenna
Relocation





Google earth



EXHIBIT E

Proposed Timeline of Overall Plan

Step One – LTE Installation

March 31st, 2015 – Submittal of Application to BAR

April 21st, 2015 – BAR Hearing

May 2015 – Installation of new cabinet so that fiber can be installed and tested. This assumes approval by the BAR in April.

June 2015 – Removal of existing antennas, lower antennas mounts, install new replacement antennas, connect them to the new cabinet, install new radios equipment in cabinet and have the site tested and ready for turn up by end of the month. This also assumes approval by the BAR in April.

Step Two – Complete Antenna and Equipment Relocation

March 31st, 2015 – begin design of the final layout. RF to provide acceptable locations for the new roof-mounted antennas.

April 7th, 2015 – preliminary layout for USCC and building owner review and comment

April 21st 2015 – BAR Hearing for the LTE installation and hopeful discussion of the long term plan as well so that the BAR and provide input

May 2015 – consultation with a stealth panel manufacturer to begin design phase. Work with USCC RF and building owner to finalize a design. Consult with a 3rd party MPE consultant to ensure that USCC's design is compliant with the FCCs requirements.

June 2015 – continue to work on the items needed to ensure the antenna relocation can work including structurals.

July – August 2015 – submit a formal application to the BAR for the final design

August – September 2015 – attend BAR hearing

October – December 2015 – complete all remaining permitting items

January 2016 – Order materials for antenna relocation

May – June 2016 – Complete antenna relocation including removal of the elevator penthouse antennas and mounts

January 2017 – December 2017 – relocate the radio cabinets from the elevator penthouse room to the platform next to the cabinet placed in May 2015

GENERAL NOTES:

- ALL REFERENCES TO OWNER IN THESE DOCUMENTS SHALL BE CONSIDERED U.S. CELLULAR OR IT'S DESIGNATED REPRESENTATIVE.
- ALL WORK PRESENTED ON THESE DRAWINGS MUST BE COMPLETED BY THE CONTRACTOR UNLESS NOTED OTHERWISE. THE CONTRACTOR MUST HAVE CONSIDERABLE EXPERIENCE IN PERFORMANCE OF WORK SIMILAR TO THAT DESCRIBED HEREIN. BY ACCEPTANCE OF THIS ASSIGNMENT, THE CONTRACTOR IS ATTESTING THAT HE DOES HAVE SUFFICIENT EXPERIENCE AND ABILITY, THAT HE IS KNOWLEDGEABLE OF THE WORK TO BE PERFORMED AND THAT HE IS PROPERLY LICENSED AND PROPERLY REGISTERED TO DO THIS WORK IN THE STATE OF VIRGINIA.
- STRUCTURE IS DESIGNED IN ACCORDANCE WITH ANSI/TIA-222-G-2, 2005 AND THE REQUIREMENTS OF THE VIRGINIA BUILDING CODE, 2014 EDITION.
- WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE VIRGINIA BUILDING CODE, 2014 EDITION.
- UNLESS SHOWN OR NOTED OTHERWISE ON THE CONTRACT DRAWINGS, OR IN THE SPECIFICATIONS, THE FOLLOWING NOTES SHALL APPLY TO THE MATERIALS LISTED HEREIN, AND TO THE PROCEDURES TO BE USED ON THIS PROJECT.
- ALL HARDWARE ASSEMBLY MANUFACTURER'S INSTRUCTIONS SHALL BE FOLLOWED EXACTLY AND SHALL SUPERCEDE ANY CONFLICTING NOTES ENCLOSED HEREIN.
- IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURE AND SEQUENCE TO INSURE THE SAFETY OF THE STRUCTURE AND IT'S COMPONENT PARTS DURING ERECTION AND/OR FIELD MODIFICATIONS. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF TEMPORARY BRACING, GUYS OR TIE DOWNS THAT MAY BE NECESSARY. SUCH MATERIAL SHALL BE REMOVED AND SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER THE COMPLETION OF THE PROJECT.
- ALL DIMENSIONS, ELEVATIONS, AND EXISTING CONDITIONS SHOWN ON THE DRAWINGS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO BEGINNING ANY MATERIALS ORDERING, FABRICATION OR CONSTRUCTION WORK ON THIS PROJECT. CONTRACTOR SHALL NOT SCALE CONTRACT DRAWINGS IN LIEU OF FIELD VERIFICATIONS. ANY DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND THE OWNER'S ENGINEER. THE DISCREPANCIES MUST BE RESOLVED BEFORE THE CONTRACTOR IS TO PROCEED WITH THE WORK. THE OWNER SHALL HAVE A SET OF APPROVED PLANS AVAILABLE AT THE SITE AT ALL TIMES WHILE WORK IS BEING PERFORMED. A DESIGNATED RESPONSIBLE EMPLOYEE SHALL BE AVAILABLE FOR CONTACT BY GOVERNING AGENCY INSPECTORS. THE CONTRACT DOCUMENTS DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES. OBSERVATION VISITS TO THE SITE BY THE OWNER AND/OR THE ENGINEER SHALL NOT INCLUDE INSPECTION OF THE PROTECTIVE MEASURES OR THE PROCEDURES.
- ALL MATERIALS AND EQUIPMENT FURNISHED SHALL BE NEW AND OF GOOD QUALITY, FREE FROM FAULTS AND DEFECTS AND IN CONFORMANCE WITH THE CONTRACT DOCUMENTS. ANY AND ALL SUBSTITUTIONS MUST BE PROPERLY APPROVED AND AUTHORIZED IN WRITING BY THE OWNER AND ENGINEER PRIOR TO INSTALLATION. THE CONTRACTOR SHALL FURNISH SATISFACTORY EVIDENCE AS TO THE KIND AND QUALITY OF THE MATERIALS AND EQUIPMENT BEING SUBSTITUTED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THE CONTRACTOR IS RESPONSIBLE FOR INSURING THAT THIS PROJECT AND RELATED WORK COMPLIES WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL SAFETY CODES AND REGULATIONS GOVERNING THIS WORK.
- ACCESS TO THE PROPOSED WORK SITE MAY BE RESTRICTED. THE CONTRACTOR SHALL COORDINATE INTENDED CONSTRUCTION ACTIVITY, INCLUDING WORK SCHEDULE AND MATERIALS ACCESS, WITH THE RESIDENT LEASING AGENT FOR APPROVAL.
- BILL OF MATERIALS AND PART NUMBERS LISTED ON CONSTRUCTION DRAWINGS ARE INTENDED TO AID CONTRACTOR. CONTRACTOR SHALL VERIFY PARTS AND QUANTITIES WITH MANUFACTURER PRIOR TO BIDDING AND/OR ORDERING MATERIALS.
- ALL PERMITS THAT MUST BE OBTAINED ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR WILL BE RESPONSIBLE FOR ABIDING BY ALL CONDITIONS AND REQUIREMENTS OF THE PERMITS.
- 24 HOURS PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, THE CONTRACTOR MUST NOTIFY THE APPLICABLE JURISDICTIONAL (STATE, COUNTY OR CITY) ENGINEER.
- THE CONTRACTOR SHALL REWORK (DRY, SCARIFY, ETC.) ALL MATERIAL NOT SUITABLE FOR SUBGRADE IN IT PRESENT STATE. AFTER REWORKING, IF THE MATERIAL REMAINS UNSUITABLE, THE CONTRACTOR SHALL UNDERCUT THIS MATERIAL AND REPLACE WITH APPROVED MATERIAL. ALL SUBGRADES SHALL BE PROOFROLLED WITH A FULLY LOADED TANDEM AXLE DUMP TRUCK PRIOR TO PAVING. ANY SOFTER MATERIAL SHALL BE REWORKED OR REPLACED.
- ALL MATERIALS AND WORKMANSHIP SHALL BE WARRANTED FOR ONE YEAR FROM ACCEPTANCE DATE.

STRUCTURAL STEEL NOTES:

- THE FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE AISC SPECIFICATIONS AND MANUAL OF STEEL CONSTRUCTION, 13TH EDITION.
- UNLESS OTHERWISE NOTED, ALL STRUCTURAL ELEMENTS SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
 - STRUCTURAL STEEL, ASTM DESIGNATION A36, A92 OR GR50.
 - ALL BOLTS, ASTM A325 TYPE 1 GALVANIZED HIGH STRENGTH BOLTS.
 - ALL NUTS, ASTM A563 CARBON AND ALLOY STEEL NUTS.
 - ALL WASHERS, ASTM F436 HARDENED STEEL WASHERS.
- ALL CONNECTIONS NOT FULLY DETAILED ON THESE PLANS SHALL BE DETAILED BY THE STEEL FABRICATOR IN ACCORDANCE WITH AISC SPECIFICATIONS AND MANUAL OF STEEL CONSTRUCTION, 13TH EDITION.
- HOLES SHALL NOT BE FLAME CUT THRU STEEL UNLESS APPROVED BY THE ENGINEER.
- HOT-DIP GALVANIZE ALL ITEMS UNLESS OTHERWISE NOTED, AFTER FABRICATION WHERE PRACTICABLE. GALVANIZING: ASTM A123, ASTM, A153/A153M OR ASTM A653/A653M, G90, AS APPLICABLE.
- REPAIR DAMAGED SURFACES WITH GALVANIZING REPAIR METHOD AND PAINT CONFORMING TO ASTM A780 OR BY APPLICATION OF STICK OR THICK PASTED MATERIAL SPECIFICALLY DESIGNED FOR REPAIR OF GALVANIZING. CLEAN AREAS TO BE REPAIRED AND REMOVE SLAG FROM WELDS. HEAT SURFACES TO WHICH STICK OR PASTE MATERIAL IS APPLIED, WITH A TORCH TO A TEMPERATURE SUFFICIENT TO MELT THE METALLICS IN STICK OR PASTED; SPREAD MOLTEN MATERIAL UNIFORMLY OVER SURFACES TO BE COATED AND WIPE OFF EXCESS MATERIAL.
- A NUT LOCKING DEVICE SHALL BE INSTALLED ON ALL PROPOSED AND/OR REPLACED BOLTS.
- ALL PROPOSED AN/OR REPLACED BOLTS SHALL BE OF SUFFICIENT LENGTH TO EXCLUDE THE THREADS FROM THE SHEAR PLANE.
- ALL PROPOSED AND/OR REPLACED BOLTS SHALL BE OF SUFFICIENT LENGTH SUCH THAT THE END OF THE BOLT BE AT LEAST FLUSH WITH THE FACE OF THE NUT. IT IS NOT PERMITTED FOR THE BOLT END TO BE BELOW THE FACE OF THE NUT AFTER TIGHTENING IS COMPLETED.
- ALL ASSEMBLY AND ANCHOR BOLTS ARE TO BE TIGHTENED TO A "SNUG TIGHT" CONDITION AS DEFINED IN SECTION 8.1 OF THE AISC, "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS", DATED JUNE 30, 2004.
- FLAT WASHERS ARE TO BE INSTALLED WITH BOLTS OVER SLOTTED HOLES.
- DO NOT OVER TORQUE ASSEMBLY BOLTS. GALVANIZING ON BOLTS, NUTS, AND STEEL PARTS ;MAY ACT AS A LUBRICANT, THUS OVER TIGHTENING MAY OCCUR AND MAY CAUSE BOLTS TO CRACK AND SNAP OFF.
- PAL NUTS ARE TO BE INSTALLED AFTER NUTS ARE TIGHT AND WITH EDGE LIP OUT. PAL NUTS ARE NOT REQUIRED WHEN SELF-LOCKING NUTS ARE PROVIDED.
- GALVANIZED ASTM A325 BOLTS SHALL NOT BE REUSED.
- ALL WELDING SHALL BE IN ACCORDANCE WITH THE AWS D1.1:2010, STRUCTURAL WELDING CODE-REINFORCING STEEL. ALL WELDERS SHALL DISPLAY PROPER CERTIFICATION OF QUALIFICATION.

PLANS PREPARED FOR:



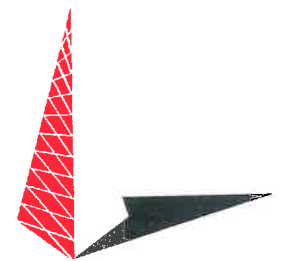
3806 THIRLANE ROAD NW
ROANOKE, VA 24019
OFFICE: (540) 598-5285

PROJECT INFORMATION:

768316
500 COURT SQUARE

500 COURT SQUARE
CHARLOTTEVILLE, VA 37331
(ALBEMARLE COUNTY)

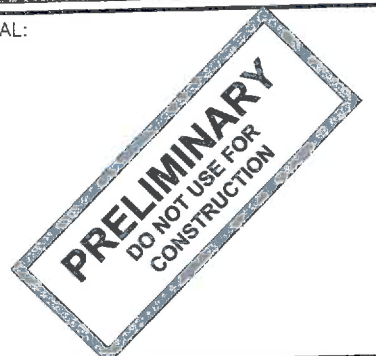
PLANS PREPARED BY:



TOWER ENGINEERING PROFESSIONALS

326 TRYON ROAD
RALEIGH, NC 27603-3530
OFFICE: (919) 661-6351
www.tepgroup.net

SEAL:



6	03-30-15	ZONING
5	03-30-15	PRELIMINARY
4	03-12-15	PRELIMINARY
3	02-19-15	PRELIMINARY
REV	DATE	ISSUED FOR:

DRAWN BY: LMM CHECKED BY: GMA

SHEET TITLE:

PROJECT NOTES

SHEET NUMBER: **N-1** REVISION: **6**
TEP #: 52621-15473

- 131'-9"± (USCC)
☉ ANT. 7-12
- 127'-3"±
T/PENTHOUSE
- 119'-9"±
T/LOWER PENTHOUSE
- 107'-0"±
T/ROOF
- 99'-5"±
ROOF DECK

PROPOSED USCC CDMA ANTENNA (TYP OF 3). SEE SHEET C-5 FOR DETAILS.

PROPOSED USCC LTE ANTENNA (TYP OF 3). SEE SHEET C-5 FOR DETAILS.

EXISTING USCC CDMA ANTENNAS TO BE REMOVED (TYP OF 6).

- ☉ (NTELOS) 131'-9"±
☉ ANT. 4-6
- ☉ (USCC) 123'-0"±
☉ ANT. 13-18
- ☉ (UNKNOWN) 122'-9"±
☉ ANT. 1-3

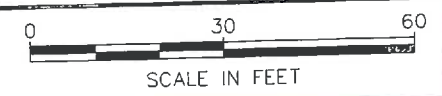
EXISTING BUILDING.

NOTE:
ANTENNAS SHALL BE PAINTED "COLOR OF THE PENTHOUSE". GC TO VERIFY COLOR WITH BUILDING MANAGER.

0'-0" (REFERENCE)
GRADE

BUILDING ELEVATION

SCALE: 1" = 30'



EXISTING BUILDING ELEVATION

EXISTING USCC ANTENNA TABLE

ANT#	ELEV.	MANUFACTURER MODEL#	COAX	AZIMUTH
7*	131'-9"	KATHREIN AP16-850/065D/DT3	(1) FH 7/8"	51°
8*	131'-9"	KATHREIN AP16-850/065D/DT3	(1) FH 7/8"	51°
9*	131'-9"	KATHREIN AP16-850/065D/DT3	(1) FH 7/8"	151°
10*	131'-9"	KATHREIN AP16-850/065D/DT3	(1) FH 7/8"	151°
11*	131'-9"	KATHREIN AP16-850/065D/DT3	(1) FH 7/8"	292°
12*	131'-9"	KATHREIN AP16-850/065D/DT3	(1) FH 7/8"	292°
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-

*ALL EXISTING ANTENNAS TO BE REMOVED; COAX TO BE REUSED

PROPOSED USCC ANTENNA TABLE

ANT#	ELEV.	MANUFACTURER MODEL#	COAX	AZIMUTH
13	123'-0"	KMW AM-X-CW-18-65-00T-RET	(2) FH 1 1/8"	40°
14	123'-0"	KMW AM-X-CW-18-65-00T-RET	(2) FH 1 1/8"	160°
15	123'-0"	KMW AM-X-CW-18-65-00T-RET	(2) FH 1 1/8"	280°
16	123'-0"	ANTEL BXA-70063-8CF	-*	51°
17	123'-0"	ANTEL BXA-70063-8CF	-*	151°
18	123'-0"	ANTEL BXA-70063-8CF	-*	292°
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-

*EXISTING (2) FH 7/8" COAX TO BE REUSED FOR PROPOSED ANTENNA

PLANS PREPARED FOR:

 3806 THIRLANE ROAD NW
 ROANOKE, VA 24019
 OFFICE: (540) 598-5285

PROJECT INFORMATION:
768316
500 COURT SQUARE
 500 COURT SQUARE
 CHARLOTTEVILLE, VA 37331
 (ALBEMARLE COUNTY)

PLANS PREPARED BY:

TOWER ENGINEERING PROFESSIONALS
 326 TRYON ROAD
 RALEIGH, NC 27603-3530
 OFFICE: (919) 661-6351
 www.tepgroup.net

SEAL:

6	03-30-15	ZONING
5	03-30-15	PRELIMINARY
4	03-12-15	PRELIMINARY
3	02-19-15	PRELIMINARY
REV	DATE	ISSUED FOR:
DRAWN BY: LMM		CHECKED BY: GMA

SHEET TITLE:
BUILDING ELEVATION

SHEET NUMBER:
C-1
 REVISION:
6
 TEP #: 52821-15473



ROOFTOP



ROOFTOP



ROOFTOP

NOTES:

1. TEP DID NOT ANALYZE THE PROPOSED NTELOS OR USCC PLATFORMS. INFORMATION PROVIDED BY USCC. CONTRACTOR TO VERIFY ALL EXISTING INFORMATION.
2. TOTAL ESTIMATED SPACE REQUIRED FOR PROPOSED LTE EQUIPMENT AND PLATFORM IS APPROXIMATELY 133 SQ. FT.

EXISTING AT&T ANTENNAS

NEW NTELOS LEASE SPACE

NEW PROPOSED USCC LEASE AREA

NEW NTELOS ANTENNAS (TYP OF 2)

EXISTING USCC EQUIPMENT TO BE RELOCATED IN 2017 (TYP OF 2)

EXISTING 19" SQUARE VENT.

PROPOSED CABLE TRAY. SEE C-4 FOR DETAILS.

NEW NTELOS ANTENNAS (TYP OF 2)

PROPOSED USCC LTE ANTENNA. SEE SHEET C-6 FOR DETAILS.

OLD NTELOS ANTENNAS (TYP OF 6)

PROPOSED USCC LTE ANTENNA. SEE SHEET C-6 FOR DETAILS.

EXISTING EQUIPMENT BY NTELOS TO BE REMOVED

PROPOSED PLATFORM AND EQUIPMENT BY NTELOS.

PROPOSED USCC EQUIPMENT TO BE PLACED ON PROPOSED NTELOS PLATFORM. SEE SHEET C-3B FOR DETAILS.

EXISTING ROOFTOP.

PROPOSED USCC CDMA ANTENNA. SEE SHEET C-6 FOR DETAILS.

PROPOSED USCC LTE ANTENNA. SEE SHEET C-6 FOR DETAILS.

POSSIBLE NEW USCC STEALTH MOUNT

EXISTING PENTHOUSE. EXISTING AND PROPOSED USCC EQUIPMENT INSIDE. SEE SHEET C-3A & C-3B FOR DETAILS.

PROPOSED USCC CDMA ANTENNA. SEE SHEET C-6 FOR DETAILS.

EXISTING AT&T ANTENNAS (TYP OF 3)

NEW NTELOS ANTENNAS (TYP OF 2)

EXISTING AT&T EQUIPMENT AND PLATFORM

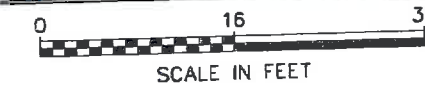
EXISTING AT&T ANTENNAS (TYP OF 3)

EXISTING ANTENNAS (TYP OF 6) AND EQUIPMENT BY T-MOBILE

POSSIBLE NEW USCC STEALTH MOUNT

ROOF PLAN

SCALE: 1/8" = 1'-0"



PLANS PREPARED FOR:



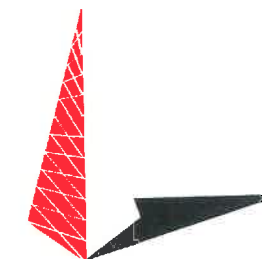
3806 THIRLANE ROAD NW
ROANOKE, VA 24019
OFFICE: (540) 598-5285

PROJECT INFORMATION:

768316
500 COURT SQUARE

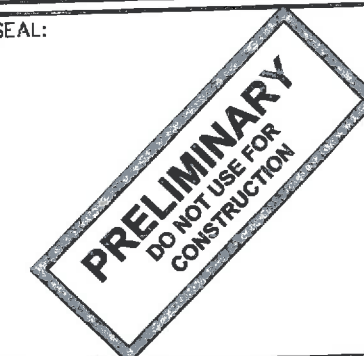
500 COURT SQUARE
CHARLOTTESVILLE, VA 37331
(ALBEMARLE COUNTY)

PLANS PREPARED BY:



TOWER ENGINEERING PROFESSIONALS
326 TRYON ROAD
RALEIGH, NC 27603-3530
OFFICE: (919) 661-6351
www.tepgroup.net

SEAL:



6	03-30-15	ZONING
5	03-30-15	PRELIMINARY
4	03-12-15	PRELIMINARY
3	02-19-15	PRELIMINARY
REV	DATE	ISSUED FOR:

DRAWN BY: LMM CHECKED BY: GMA

SHEET TITLE:

**ROOF PLAN
DETAILS**

SHEET NUMBER:	REVISION:
C-2	6
	TEP #: 52821-15473



EQUIPMENT ROOM



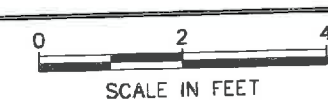
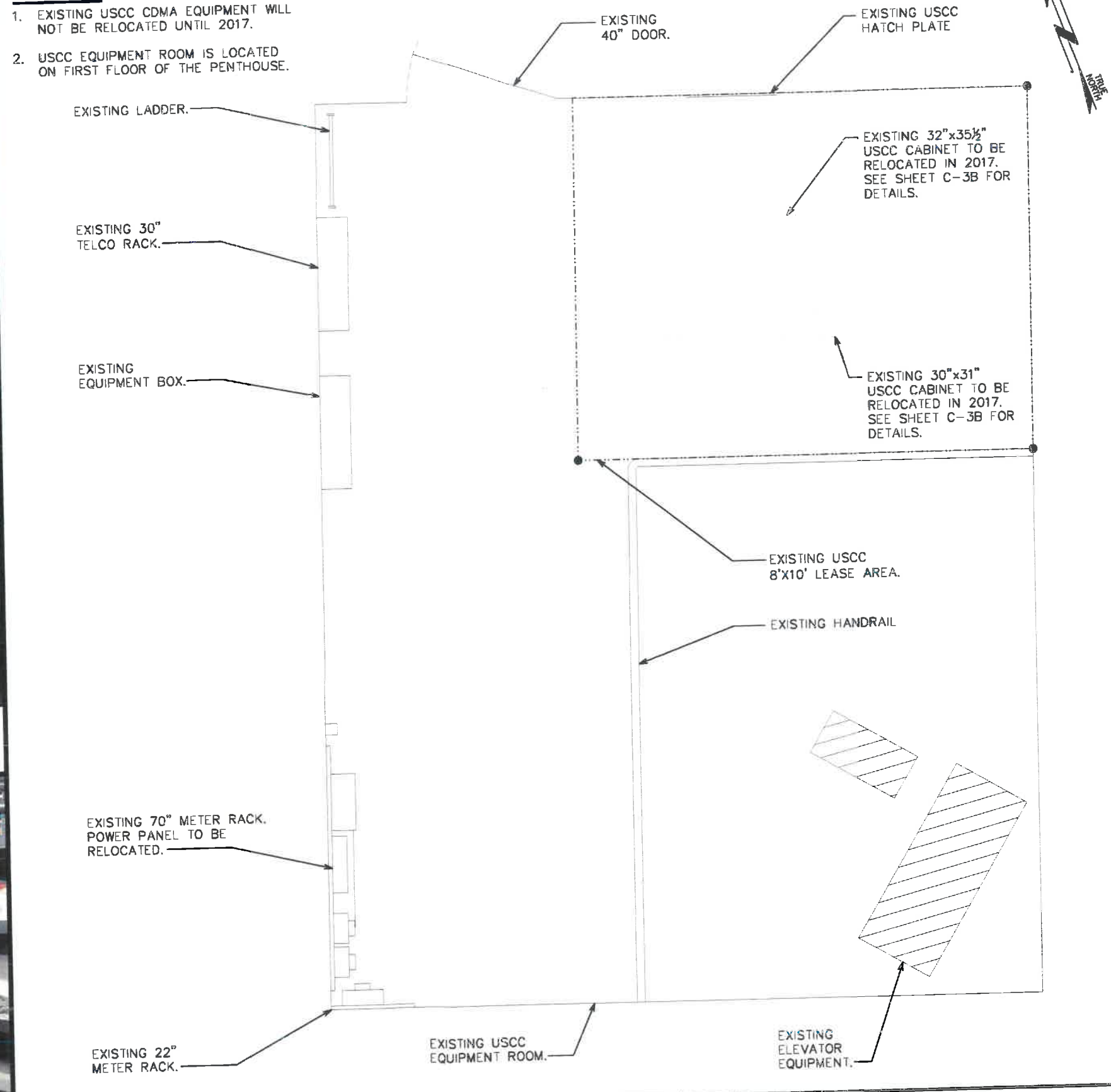
EQUIPMENT ROOM




EQUIPMENT ROOM

NOTES:

1. EXISTING USCC CDMA EQUIPMENT WILL NOT BE RELOCATED UNTIL 2017.
2. USCC EQUIPMENT ROOM IS LOCATED ON FIRST FLOOR OF THE PENTHOUSE.



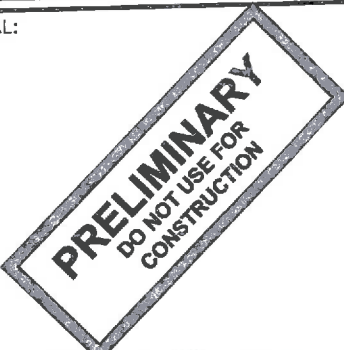
EQUIPMENT ROOM PLAN
SCALE: 3/8" = 1'-0"

PLANS PREPARED FOR:

 3806 THIRLANE ROAD NW
 ROANOKE, VA 24019
 OFFICE: (540) 598-5285

PROJECT INFORMATION:
768316
500 COURT SQUARE
 500 COURT SQUARE
 CHARLOTTEVILLE, VA 37331
 (ALBEMARLE COUNTY)

PLANS PREPARED BY:

TOWER ENGINEERING PROFESSIONALS
 326 TRYON ROAD
 RALEIGH, NC 27603-3530
 OFFICE: (919) 661-6351
 www.tepgroup.net


SEAL:


6	03-30-15	ZONING
5	03-30-15	PRELIMINARY
4	03-12-15	PRELIMINARY
3	02-19-15	PRELIMINARY
REV	DATE	ISSUED FOR:

DRAWN BY: LMM CHECKED BY: GMA

SHEET TITLE:
EXISTING EQUIPMENT ROOM DETAILS


SHEET NUMBER: **C-3A** REVISION: **6**
 TEP #52821-15473

PLANS PREPARED FOR:

 3806 THIRLANE ROAD NW
 ROANOKE, VA 24019
 OFFICE: (540) 598-5285

PROJECT INFORMATION:
768316
500 COURT SQUARE
 500 COURT SQUARE
 CHARLOTTESVILLE, VA 37331
 (ALBEMARLE COUNTY)

PLANS PREPARED BY:

TOWER ENGINEERING PROFESSIONALS
 326 TRYON ROAD
 RALEIGH, NC 27603-3530
 OFFICE: (919) 661-6351
 www.tepgroup.net

SEAL:


6	03-30-15	ZONING
5	03-30-15	PRELIMINARY
4	03-12-15	PRELIMINARY
3	02-19-15	PRELIMINARY
REV	DATE	ISSUED FOR:

DRAWN BY: LMM CHECKED BY: GMA

SHEET TITLE:
PROPOSED EQUIPMENT DETAILS

SHEET NUMBER: **C-3B** REVISION: **6**
 TEP #: 52821-15473

EXISTING AT&T ANTENNA

PROPOSED PLATFORM AND EQUIPMENT BY NTELOS.

EXISTING USCC CDMA EQUIPMENT TO BE RELOCATED IN 2017.

PROPOSED USCC LTE EQUIPMENT CABINET TO BE INSTALLED APRIL/MAY 2015. SEE SHEET C-8 FOR DETAILS.

PROPOSED POWER PANEL

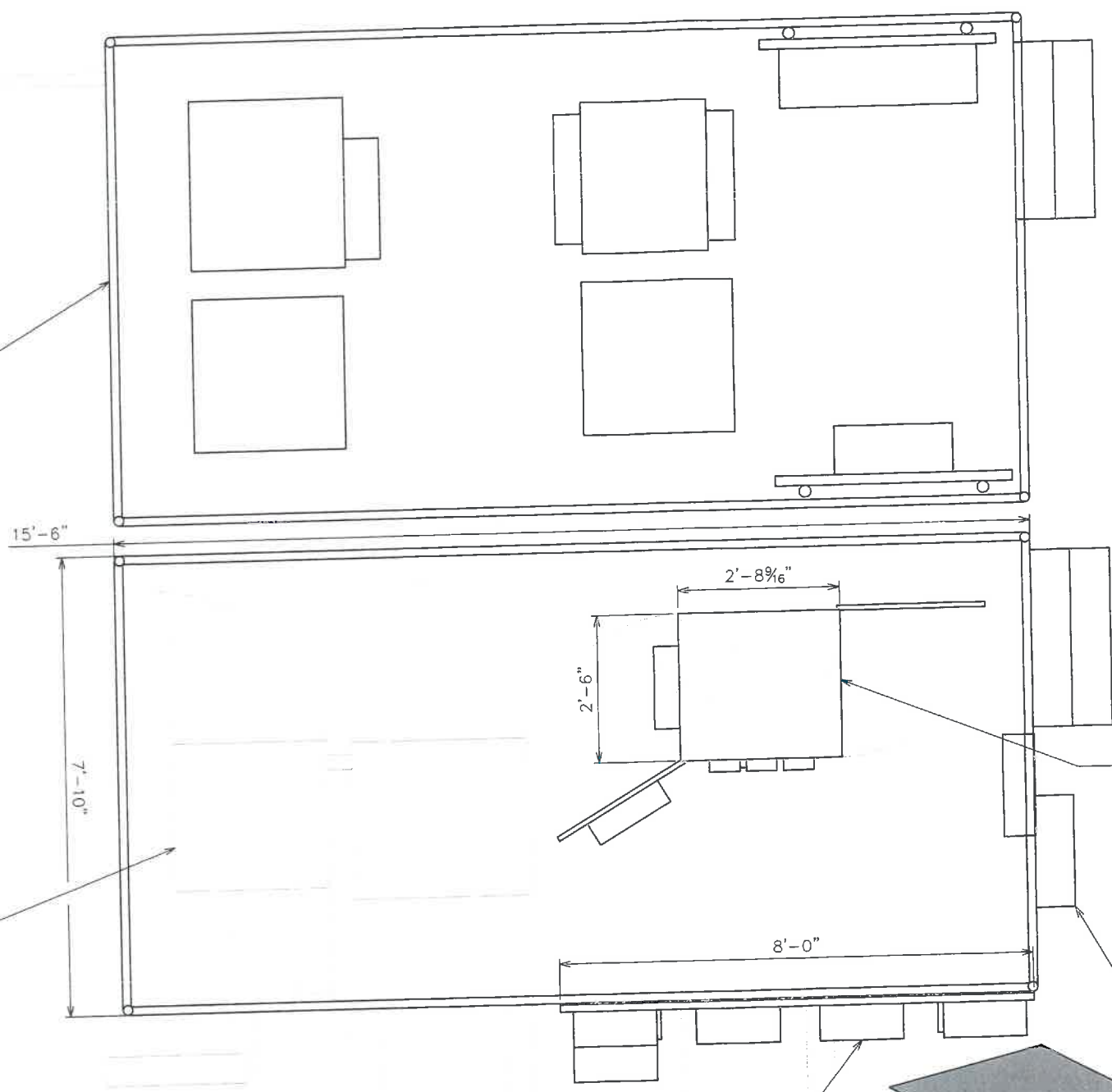
PROPOSED RRH RACK AND (5) RRH BY USCC. SEE SHEET C-3C FOR ELEVATION.

PROPOSED USCC CABLE TRAY. SEE SHEET C-4 FOR DETAILS.

NOTE:
 TEP DID NOT ANALYZE THIS PLATFORM. INFORMATION PROVIDED BY USCC. CONTRACTOR TO VERIFY ALL EXISTING INFORMATION.

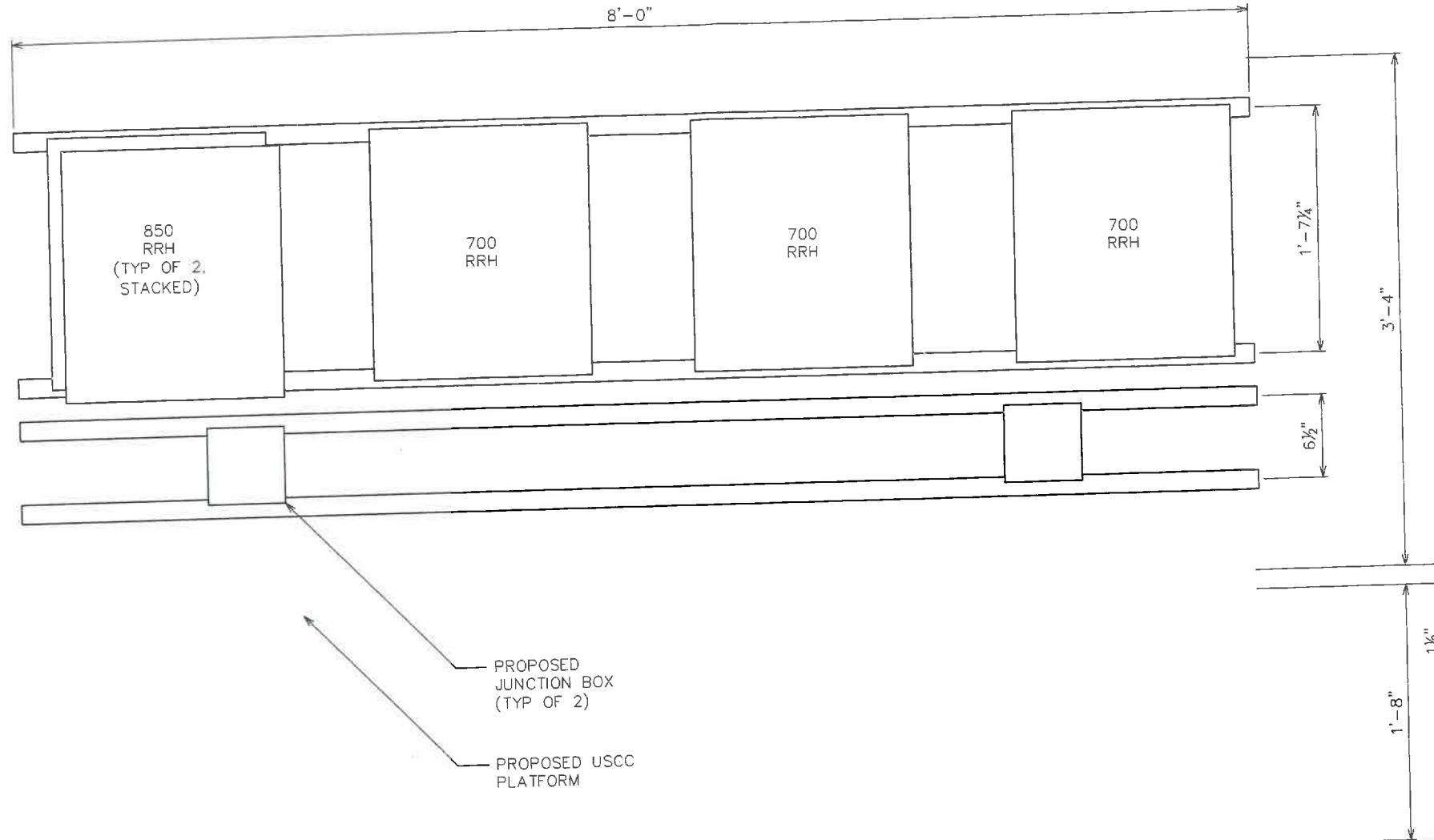
EQUIPMENT PLAN


SCALE: 3/8" = 1'-0"



NOTE:

PROPOSED PLATFORM INFORMATION
PROVIDED BY USCC.

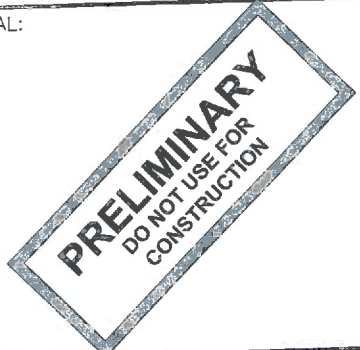


PLANS PREPARED FOR:

 3806 THIRLANE ROAD NW
 ROANOKE, VA 24019
 OFFICE: (540) 598-5285

PROJECT INFORMATION:
768316
500 COURT SQUARE
 500 COURT SQUARE
 CHARLOTTEVILLE, VA 37331
 (ALBEMARLE COUNTY)

PLANS PREPARED BY:

TOWER ENGINEERING PROFESSIONALS
 326 TRYON ROAD
 RALEIGH, NC 27603-3530
 OFFICE: (919) 661-6351
 www.tepgroup.net

SEAL:


6	03-30-15	ZONING
5	03-30-15	PRELIMINARY
4	03-12-15	PRELIMINARY
3	02-19-15	PRELIMINARY
REV	DATE	ISSUED FOR:

DRAWN BY: LMM CHECKED BY: GMA

SHEET TITLE:
RRH RACK ELEVATION

SHEET NUMBER: **C-3C** REVISION: **6**
 TEP #: 52821-15473

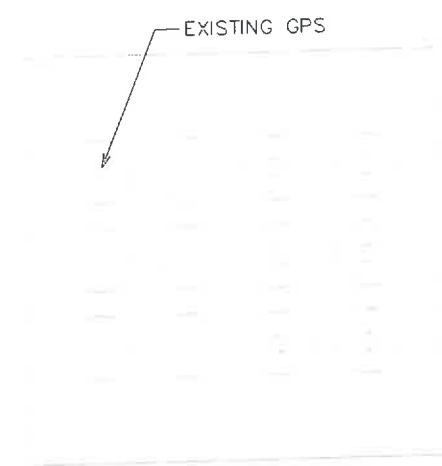
RRH RACK ELEVATION
 SCALE: N.T.S.

NOTES:

- 1. ALL VIEWS ARE LOOKING FROM THE TOWER TOWARDS THE SHELTER.
- 2. ANALOG COAX (IF APPLICABLE) TO BE REMOVED IS LABELED WITH GREEN TAPE.

LEGEND

EMPTY PORT	E
EXISTING COAX TO REMAIN	●
EXISTING COAX TO BE REMOVED	○
PROPOSED COAX	●
EXISTING EWG	○
PROPOSED EWG	○

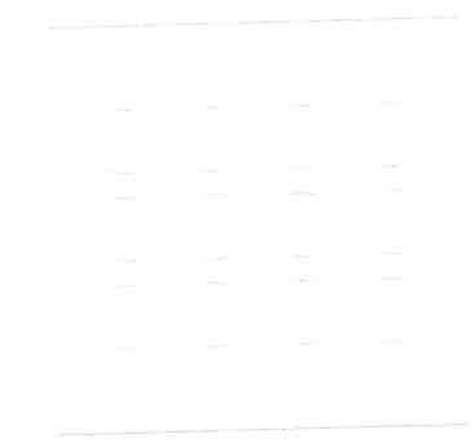


EXISTING HATCH PLATE LAYOUT

SCALE: N.T.S.

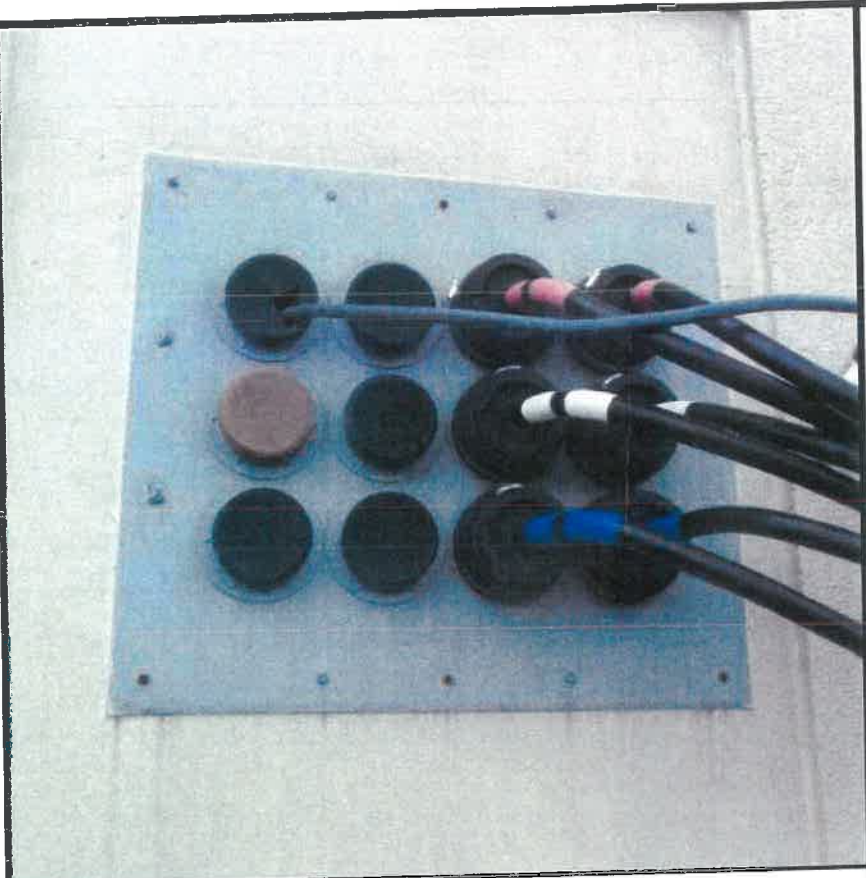
NOTE:

COAX LOCATIONS ARE SHOWN FOR REFERENCE ONLY AND ARE SUBJECT TO CHANGE BASED ON FIELD CONDITIONS.

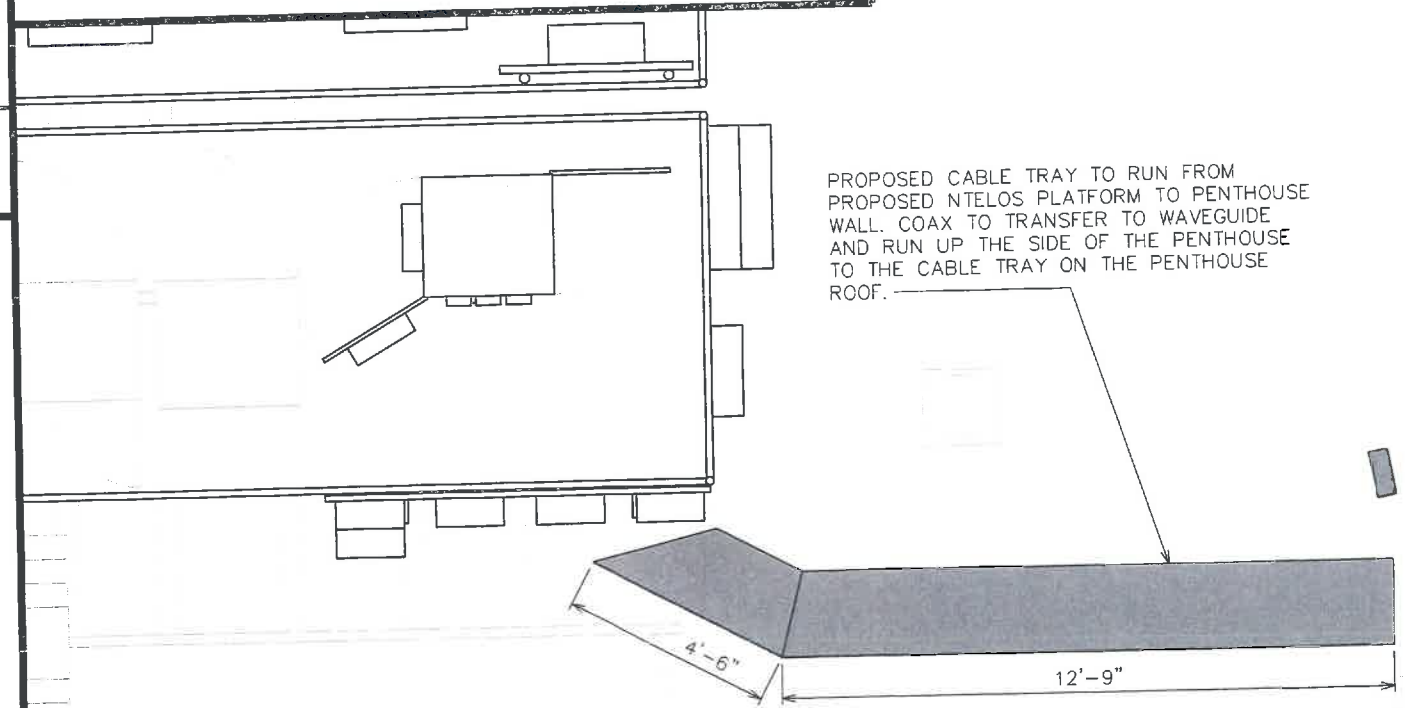


PROPOSED HATCH PLATE LAYOUT

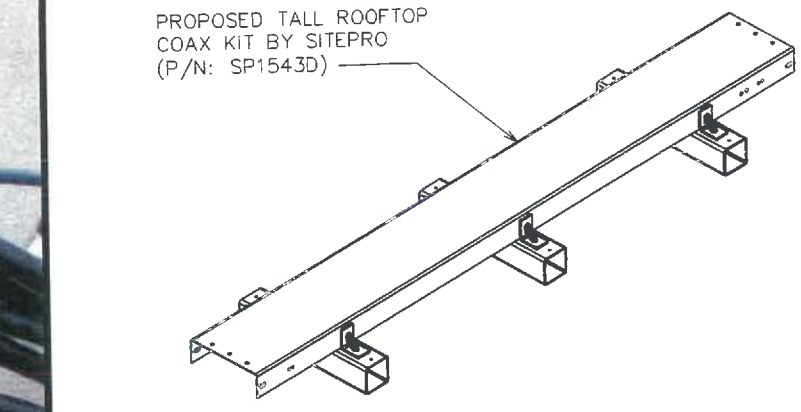
SCALE: N.T.S.



EXISTING HATCH PLATE



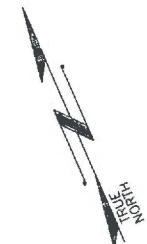
PROPOSED CABLE TRAY ROUTING



CABLE RUNWAY DETAIL

SCALE: N.T.S.

PROPOSED CABLE TRAY TO RUN FROM PROPOSED NTELOS PLATFORM TO PENTHOUSE WALL. COAX TO TRANSFER TO WAVEGUIDE AND RUN UP THE SIDE OF THE PENTHOUSE TO THE CABLE TRAY ON THE PENTHOUSE ROOF.



PLANS PREPARED FOR:

3806 THIRLANE ROAD NW
ROANOKE, VA 24019
OFFICE: (540) 598-5285

PROJECT INFORMATION:

768316
500 COURT SQUARE

500 COURT SQUARE
CHARLOTTEVILLE, VA 37331
(ALBEMARLE COUNTY)

PLANS PREPARED BY:

TOWER ENGINEERING PROFESSIONALS
326 TRYON ROAD
RALEIGH, NC 27603-3530
OFFICE: (919) 661-6351
www.tepgroup.net

SEAL:

PRELIMINARY
DO NOT USE FOR
CONSTRUCTION

6	03-30-15	ZONING
5	03-30-15	PRELIMINARY
4	03-12-15	PRELIMINARY
3	02-19-15	PRELIMINARY
REV	DATE	ISSUED FOR:


DRAWN BY: LMM CHECKED BY: GMA

SHEET TITLE:

HATCH PLATE & CABLE RUNWAY DETAILS

SHEET NUMBER: **C-4** REVISION: **6**

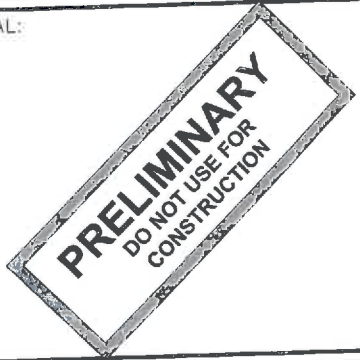
TEP #: 52821-15473

PLANS PREPARED FOR:

 3806 THIRLANE ROAD NW
 ROANOKE, VA 24019
 OFFICE: (540) 598-5285

PROJECT INFORMATION:
768316
500 COURT SQUARE
 500 COURT SQUARE
 CHARLOTTESVILLE, VA 37331
 (ALBEMARLE COUNTY)

PLANS PREPARED BY:

TOWER ENGINEERING PROFESSIONALS
 326 TRYON ROAD
 RALEIGH, NC 27603-3530
 OFFICE: (919) 661-6351
 www.tepgroup.net

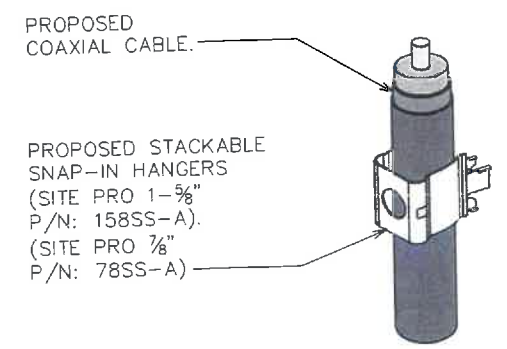
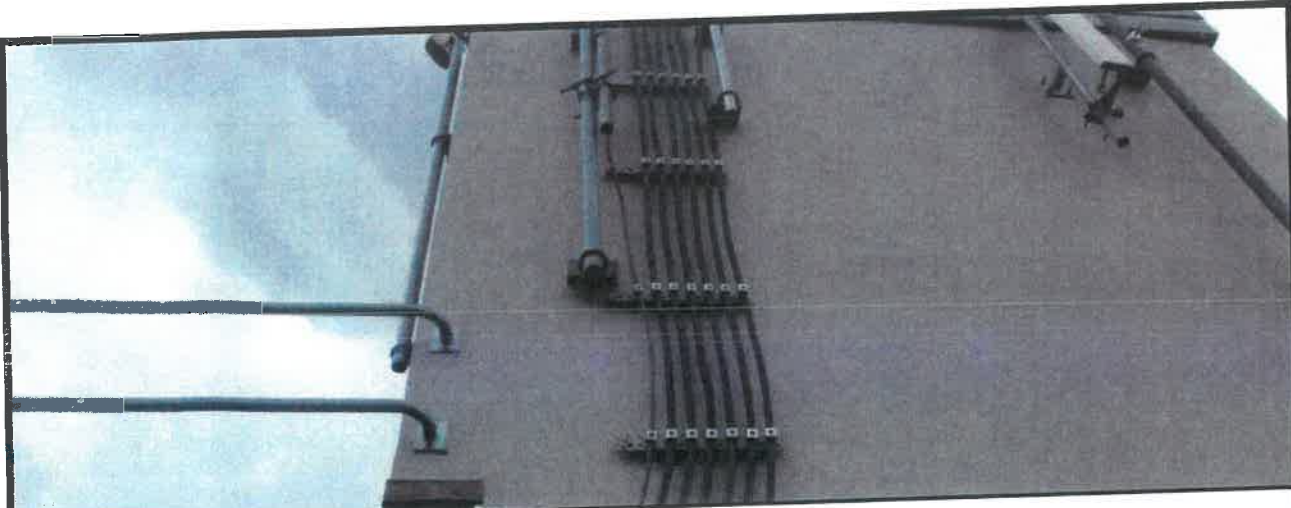
SEAL:

PRELIMINARY
 DO NOT USE FOR
 CONSTRUCTION

6	03-30-15	ZONING
5	03-30-15	PRELIMINARY
4	03-12-15	PRELIMINARY
3	02-19-15	PRELIMINARY
REV	DATE	ISSUED FOR:

DRAWN BY: LMM CHECKED BY: GMA

SHEET TITLE:
COAX DETAILS I

SHEET NUMBER: **C-5A** REVISION: **6**
 TEP #: 52821-15473



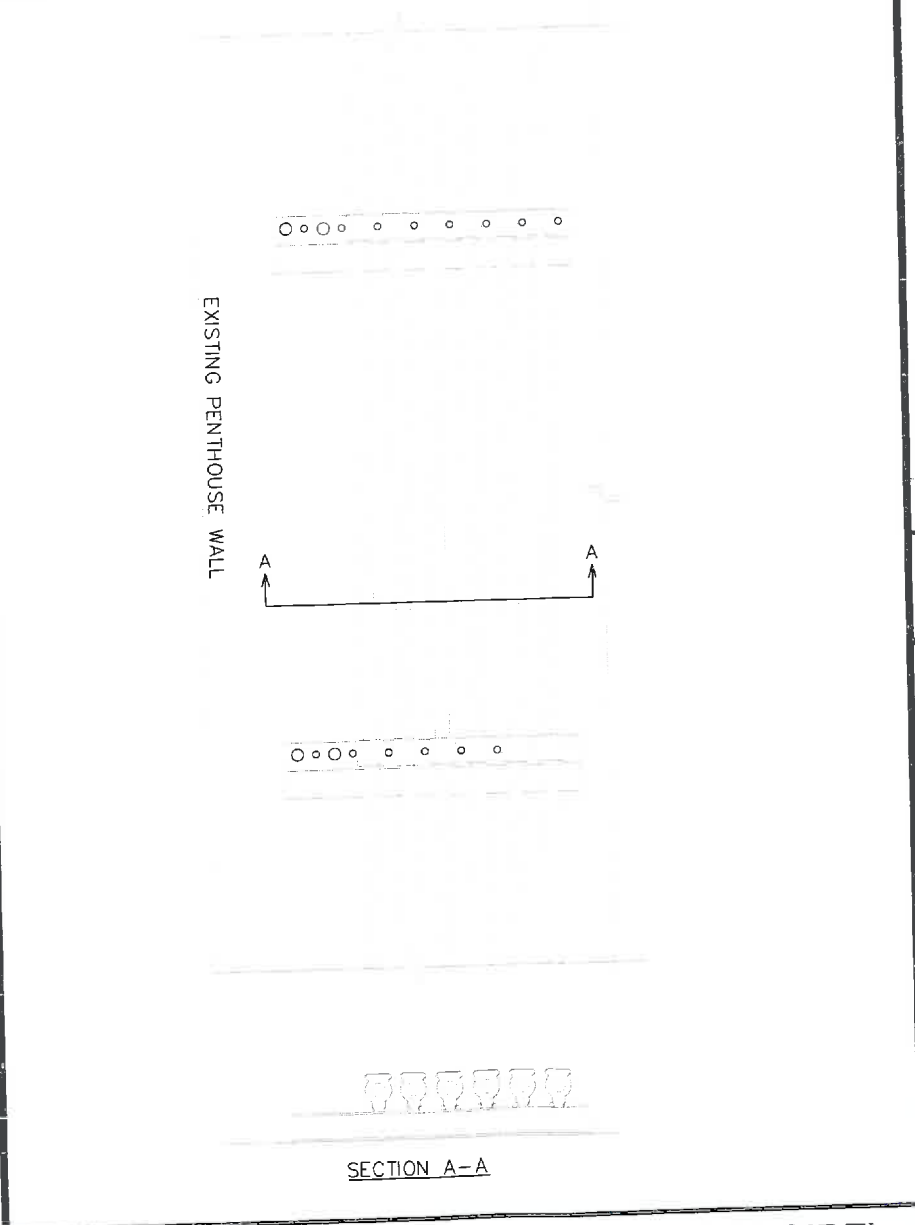
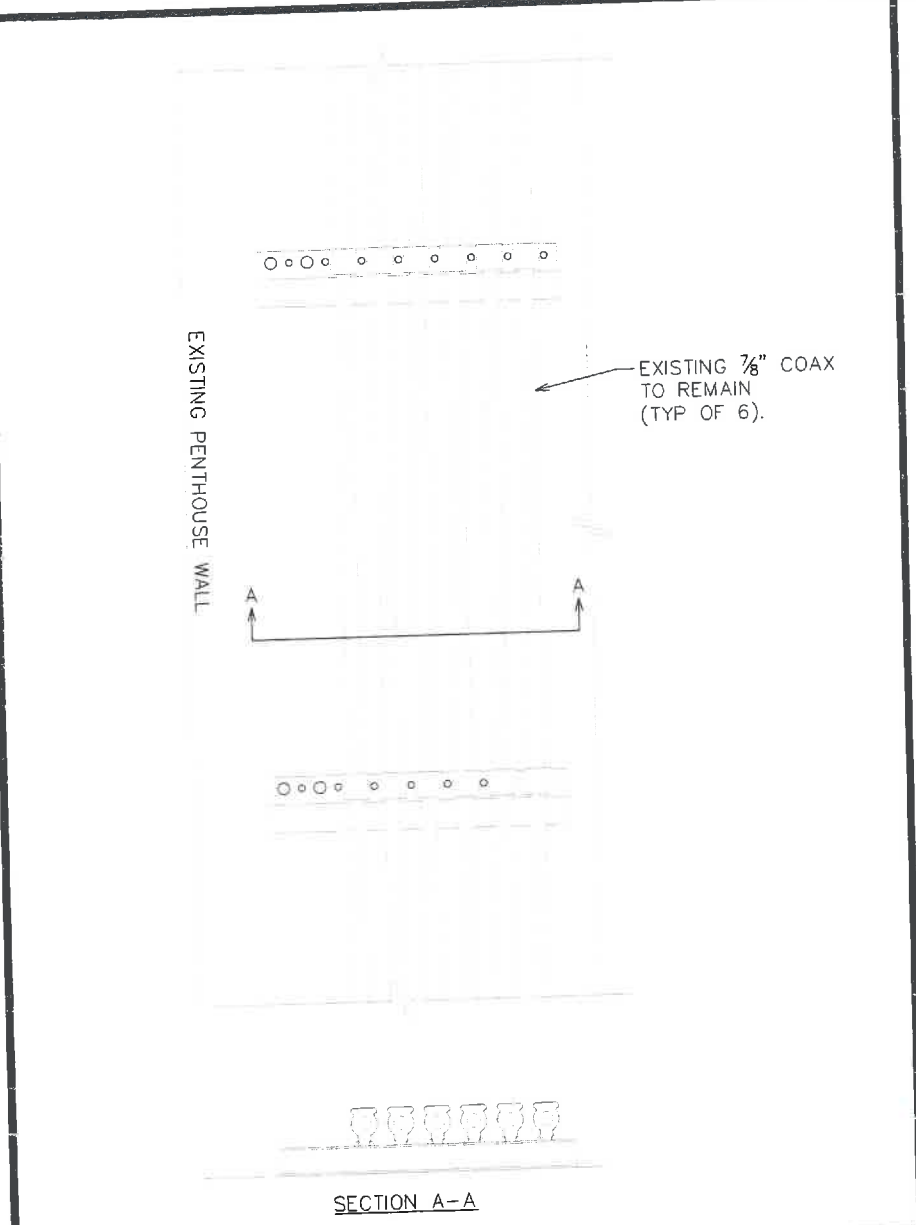
WG. ALONG PENTHOUSE WALL

SNAP-STAK HANGER
 SCALE: N.T.S.

LEGEND

EMPTY PORT	○
EXISTING COAX TO REMAIN	○
EXISTING COAX TO BE REMOVED	○
PROPOSED COAX	●
EXISTING EWG	EW
PROPOSED EWG	●

LEGEND
 SCALE: N.T.S.



EXISTING WG. ON PENTHOUSE (EAST SIDE)
 SCALE: N.T.S.

PROPOSED WG. ON PENTHOUSE (EAST SIDE)
 SCALE: N.T.S.

NOTE:
 TEP DID NOT ACCESS THE EXISTING CABLE TRAY. ACTUAL FIELD CONDITIONS MAY VARY.

EXISTING PENTHOUSE ROOFTOP

EXISTING 21-1/2"x3-1/2" CABLE TRAY ON 4"x4"x31-7/8" SLEEPERS TO BE REPLACED

EXISTING COAX TO BE RESTACKED 3-ON-3 (TYP OF 6)

EX. CABLE TRAY ON ROOFTOP
 SCALE: N.T.S.

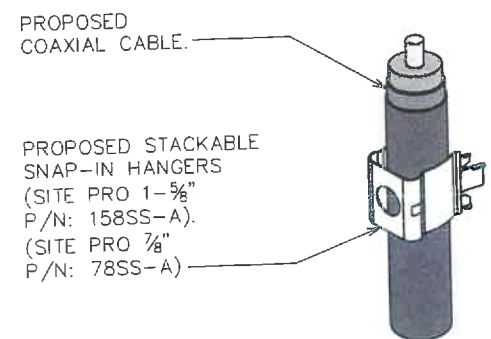
NOTE:
 TEP DID NOT ACCESS THE EXISTING CABLE TRAY. ACTUAL FIELD CONDITIONS MAY VARY. CONTRACTOR TO VERIFY COAX LOCATION WITH STRUCTURAL ANALYSIS AND BUILDING OWNER PRIOR TO INSTALLATION.

PROPOSED 21-1/2"x8-1/2" CABLE TRAY ON 4"x4"x31-7/8" SLEEPERS. SEE SHEET C-5B FOR DETAILS.

EXISTING RESTACKED USCC COAX (TYP OF 6). CONTRACTOR TO PROVIDE SNAP-STAK HANGER AS NEEDED.

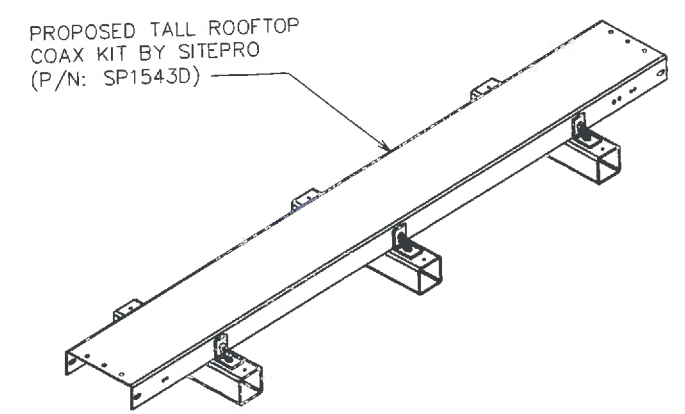
PROP. CABLE TRAY ON ROOFTOP
 SCALE: N.T.S.


LEGEND	
EMPTY PORT	○
EXISTING COAX TO REMAIN	E
EXISTING COAX TO BE REMOVED	○
PROPOSED COAX	●
EXISTING EWG	EW
PROPOSED EWG	●



NOTE:

TALLER ROOFTOP COVER KITS TO ACCEPT STACKABLE STYLE SNAP-INS. STACK UP TO TWO 1-5/8" SNAP-INS OR THREE 7/8" SNAP-INS. HEAVY DUTY 11 GAUGE GALVANIZED STEEL SELF SPLICING COVER. EACH KIT INCLUDES THREE SLEEPERS AND HARDWARE. COVER HEIGHT IS 8-1/4".



PLANS PREPARED FOR:

 3806 THIRLANE ROAD NW
 ROANOKE, VA 24019
 OFFICE: (540) 598-5285

PROJECT INFORMATION:
768316
500 COURT SQUARE
 500 COURT SQUARE
 CHARLOTTESVILLE, VA 37331
 (ALBEMARLE COUNTY)

LEGEND

SCALE: N.T.S.

SNAP-STAK HANGER

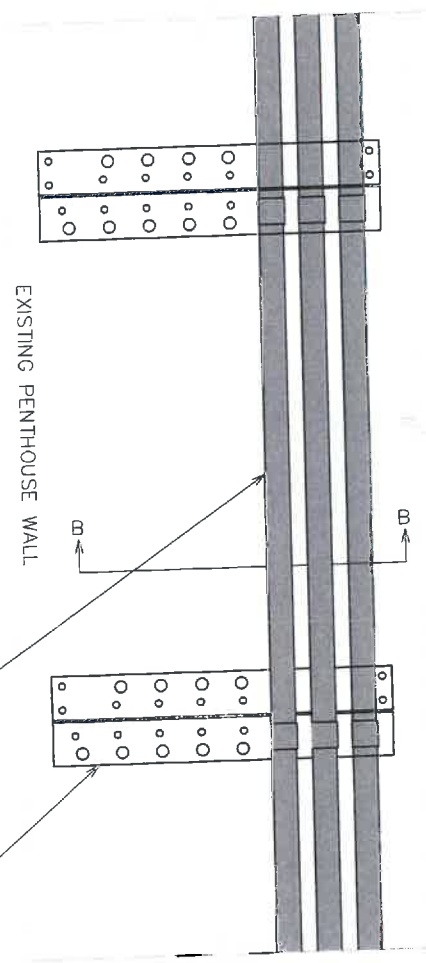
SCALE: N.T.S.

WALL MOUNT DETAIL

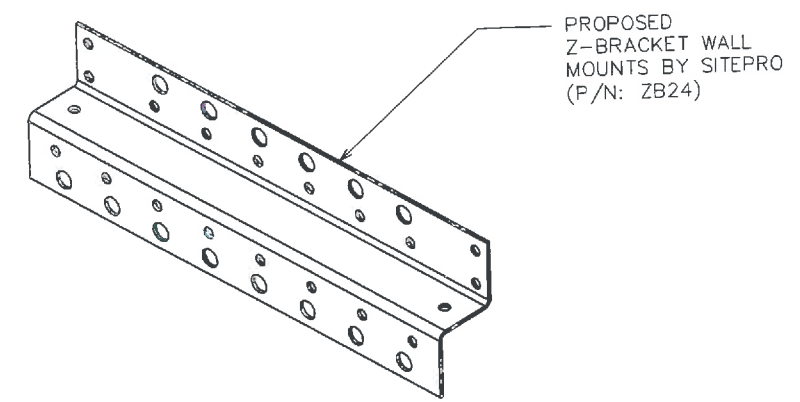
SCALE: N.T.S.

NOTE:

CONTRACTOR TO VERIFY COAX LOCATION WITH STRUCTURAL ANALYSIS AND BUILDING OWNER PRIOR TO INSTALLATION.



SECTION B-B



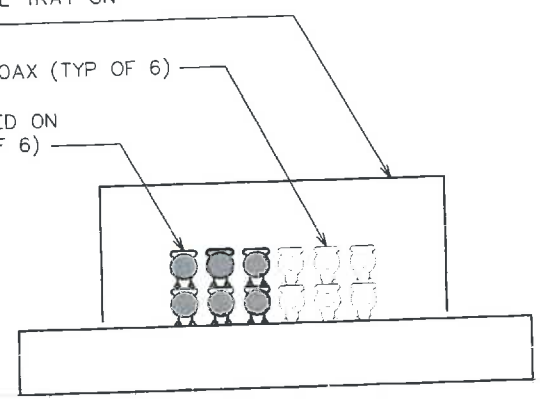
WALL MOUNT DETAIL

SCALE: N.T.S.

NOTE:

TEP DID NOT ACCESS THE EXISTING CABLE TRAY. ACTUAL FIELD CONDITIONS MAY VARY. CONTRACTOR TO VERIFY COAX LOCATION WITH STRUCTURAL ANALYSIS AND BUILDING OWNER PRIOR TO INSTALLATION.

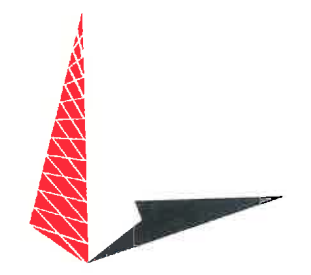
PROPOSED 21-1/2"x8-1/2" CABLE TRAY ON 4"x4"x31-7/8" SLEEPERS
 EXISTING RESTACKED USCC COAX (TYP OF 6)
 PROPOSED 1 5/8" COAX STACKED ON EXISTING WAVEGUIDE. (TYP OF 6)



PROP. CABLE TRAY ON ROOFTOP

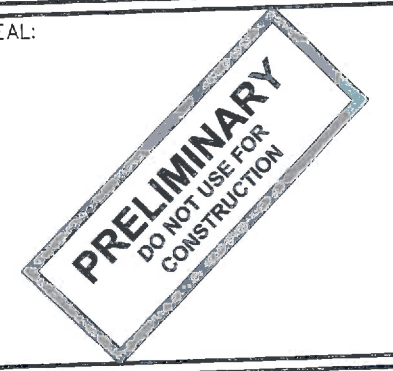
SCALE: N.T.S.

PLANS PREPARED BY:



TOWER ENGINEERING PROFESSIONALS
 326 TRYON ROAD
 RALEIGH, NC 27603-3530
 OFFICE: (919) 661-6351
 www.tepgroup.net

SEAL:



REV	DATE	ISSUED FOR:
6	03-30-15	ZONING
5	03-30-15	PRELIMINARY
4	03-12-15	PRELIMINARY
3	02-19-15	PRELIMINARY

DRAWN BY: LMM CHECKED BY: GMA

SHEET TITLE:
COAX DETAILS II

SHEET NUMBER: **C-5B** REVISION: **6**
 TEP #: 52821-15473

PROPOSED WAVEGUIDE ON PENTHOUSE (WEST SIDE)

SCALE: N.T.S.

EXISTING ANTENNA/COAX SCHEDULE

SECT.	EXISTING/ PROPOSED	MANUFACTURER (MODEL #)	MOUNTING HEIGHT	TRUE AZIMUTH	COAX SIZE	COAX LENGTH	ELEC. D-TILT	MECH. D-TILT
ANT. 7	EXISTING*	KATHREIN AP16-850/065D/DT3	℄ @ 131'-9"	51°	(1) FH 7/8"	35'-0"	0°	0°
ANT. 8	EXISTING*	KATHREIN AP16-850/065D/DT3	℄ @ 131'-9"	51°	(1) FH 7/8"	20'-0"	0°	0°
ANT. 9	EXISTING*	KATHREIN AP16-850/065D/DT3	℄ @ 131'-9"	151°	(1) FH 7/8"	20'-0"	0°	0°
ANT. 10	EXISTING*	KATHREIN AP16-850/065D/DT3	℄ @ 131'-9"	151°	(1) FH 7/8"	35'-0"	0°	2°
ANT. 11	EXISTING*	KATHREIN AP16-850/065D/DT3	℄ @ 131'-9"	292°	(1) FH 7/8"	48'-0"	0°	2°
ANT. 12	EXISTING*	KATHREIN AP16-850/065D/DT3	℄ @ 131'-9"	292°	(1) FH 7/8"	35'-0"	0°	2°

*EXISTING ANTENNA TO BE REMOVED

FINAL ANTENNA/COAX SCHEDULE

SECT.	EXISTING/ PROPOSED	MANUFACTURER (MODEL #)	MOUNTING HEIGHT	TRUE AZIMUTH	COAX SIZE	COAX LENGTH	ELEC. D-TILT	MECH. D-TILT
ANT. 13	PROPOSED****	KMW AM-X-CW-18-65-00T-RET	℄ @ 123'-0"	40°	(2) FH 1 5/8"	78'-0"***	0°	4°
ANT. 14	PROPOSED****	KMW AM-X-CW-18-65-00T-RET	℄ @ 123'-0"	160°	(2) FH 1 5/8"	78'-0"***	0°	4°
ANT. 15	PROPOSED****	KMW AM-X-CW-18-65-00T-RET	℄ @ 123'-0"	280°	(2) FH 1 5/8"	78'-0"***	1°	4°
ANT. 16	PROPOSED****	ANTEL BXA-70063-8CF	℄ @ 123'-0"	51°	---	78'-0"*	0°	5°
ANT. 17	PROPOSED****	ANTEL BXA-70063-8CF	℄ @ 123'-0"	151°	---	78'-0"*	0°	4°
ANT. 18	PROPOSED****	ANTEL BXA-70063-8CF	℄ @ 123'-0"	292°	---	78'-0"*	0°	5°

*TEP USED EXISTING LONGEST COAX LENGTH + 30' BUFFER = 78'
 **TEP USED PROPOSED CABLE TRAY + PENTHOUSE HEIGHT + 30' BUFFER = 68'
 ***PROPOSED CDMA ANTENNA TO REUSE (2) EXISTING FH 7/8" COAX
 ****ANTENNAS AND MOUNTS TO BE PAINTED TO MATCH THE FACADED THEY ARE MOUNTED TO. GC TO VERIFY PAINT COLOR WITH BUILDING MANAGER.

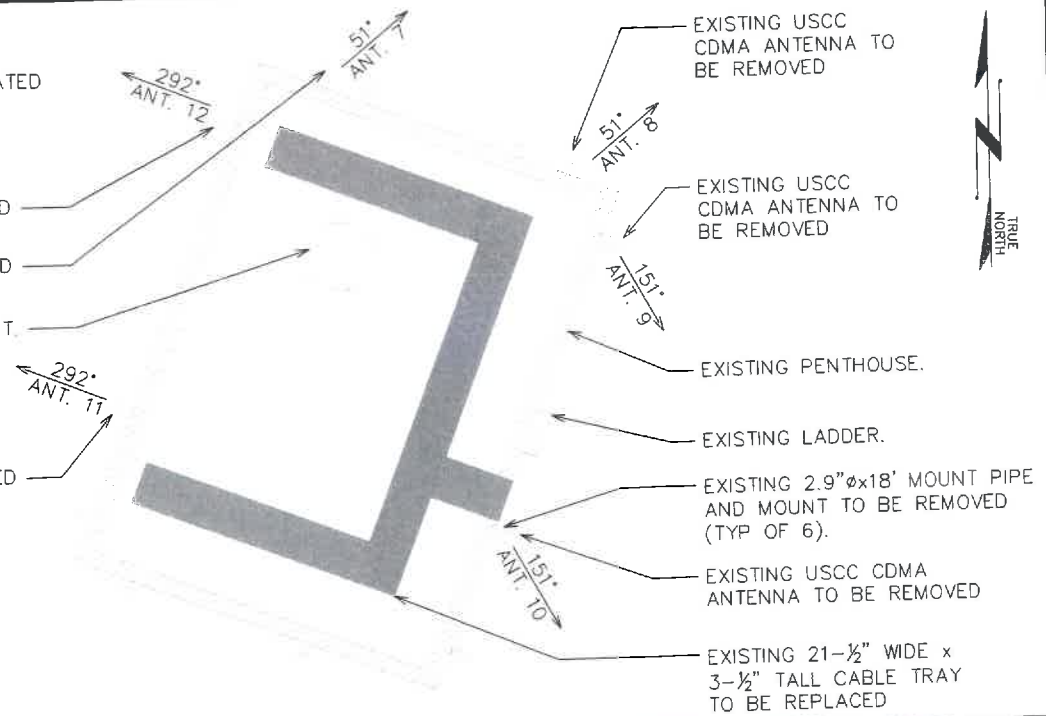
NOTE:

EXISTING ANTENNAS LOCATED ON TOP OF PENTHOUSE

EXISTING USCC CDMA ANTENNA TO BE REMOVED

EXISTING 34"Ø ROOF VENT

EXISTING USCC CDMA ANTENNA TO BE REMOVED

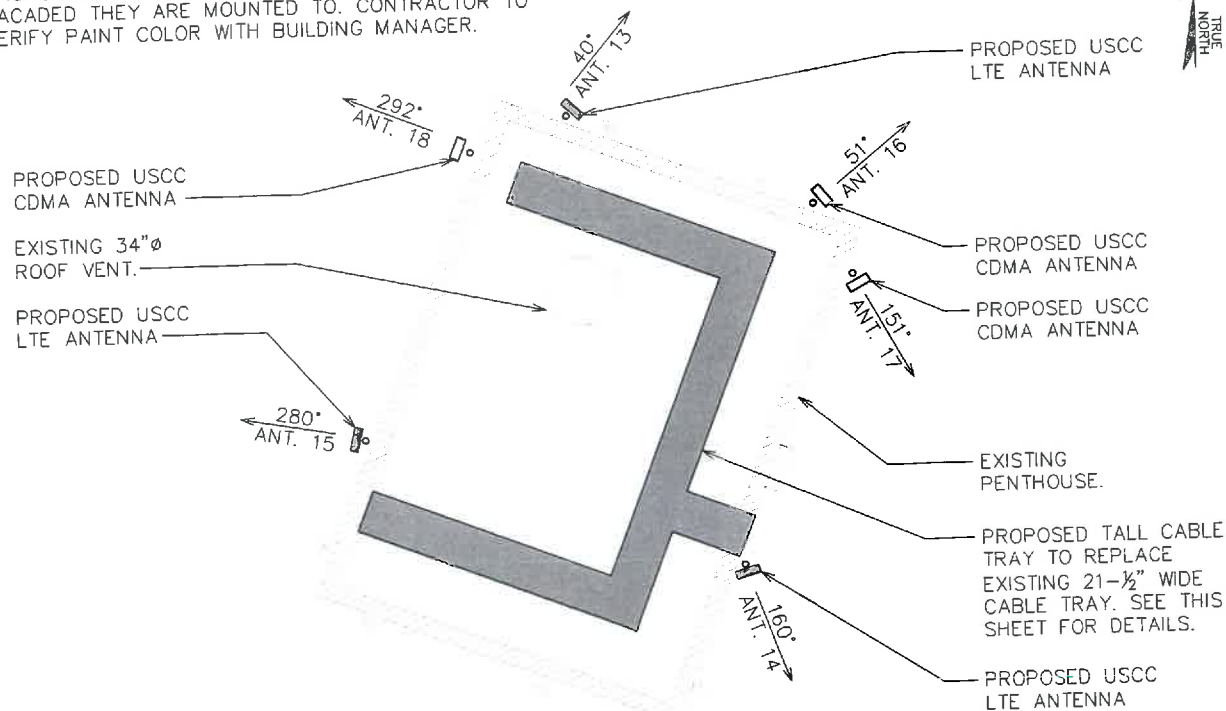


EX. ANTENNA CONFIGURATION @ 131'-9"

SCALE: 1/8" = 1'-0"

NOTES:

- TEP DID NOT ANALYZE THIS MOUNT.
- CONTRACTOR TO VERIFY PROPOSED COAX LENGTHS.
- PROPOSED ANTENNAS TO BE PAINTED TO MATCH THE FACADED THEY ARE MOUNTED TO. CONTRACTOR TO VERIFY PAINT COLOR WITH BUILDING MANAGER.



PROP. ANT. CONFIG. @ 123'-0"

SCALE: 1/8" = 1'-0"

PLANS PREPARED FOR:



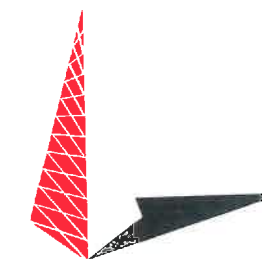
3806 THIRLANE ROAD NW
 ROANOKE, VA 24019
 OFFICE: (540) 598-5285

PROJECT INFORMATION:

768316
500 COURT SQUARE

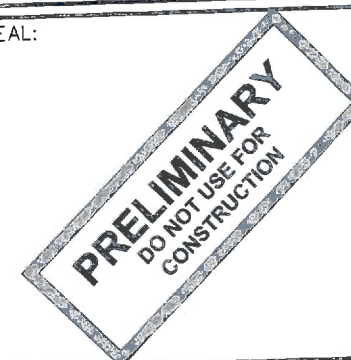
500 COURT SQUARE
 CHARLOTTEVILLE, VA 37331
 (ALBEMARLE COUNTY)

PLANS PREPARED BY:



TOWER ENGINEERING PROFESSIONALS
 326 TRYON ROAD
 RALEIGH, NC 27603-3530
 OFFICE: (919) 661-6351
 www.tepgroup.net

SEAL:



REV	DATE	ISSUED FOR:
6	03-30-15	ZONING
5	03-30-15	PRELIMINARY
4	03-12-15	PRELIMINARY
3	02-19-15	PRELIMINARY

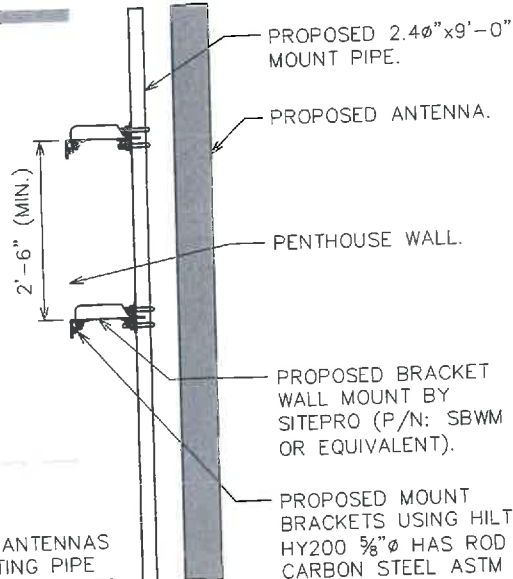
DRAWN BY: LMM CHECKED BY: GMA

SHEET TITLE:

**ANTENNA MOUNTING
 DETAILS I**

SHEET NUMBER:	REVISION:
C-6A	6

TEP #: 52821-15473



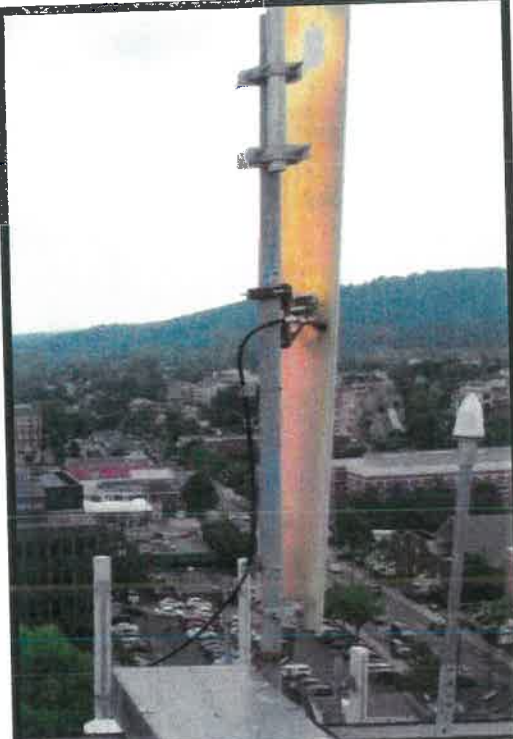
NOTES:

- PROPOSED ANTENNAS AND MOUNTING PIPE SHALL BE PAINTED TO MATCH EXISTING.
- TEP DID NOT ANALYZE EXISTING OR PROPOSED MOUNTS.

PROPOSED MOUNT BRACKETS USING HILTI HY200 3/8"Ø HAS ROD CARBON STEEL ASTM A-36 12" LONG W/10" EMBEDMENT THREADED ROD (P/N: 00385430) SCREEN TUBE (P/N: 00063931).

TALL ROOFTOP COAX KITS DETAIL

SCALE: N.T.S.



EXISTING ANTENNAS



EXISTING ANTENNAS (EAST)

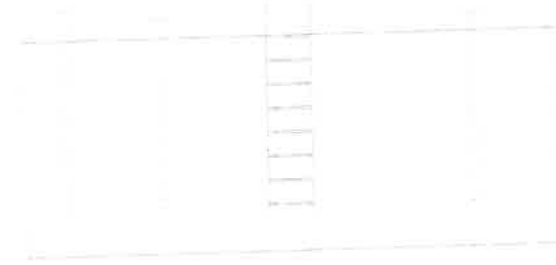


EXISTING ANTENNAS (WEST)



EXISTING ANTENNAS (NORTH)

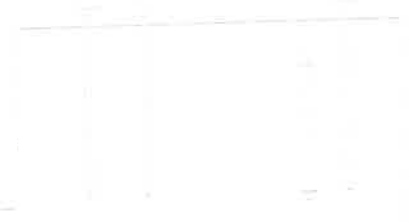
NOTE:
THESE DRAWINGS ARE
USED FOR VISUAL
REFERENCE ONLY



NOTE:
THESE DRAWINGS ARE
USED FOR VISUAL
REFERENCE ONLY



NOTE:
THESE DRAWINGS ARE
USED FOR VISUAL
REFERENCE ONLY

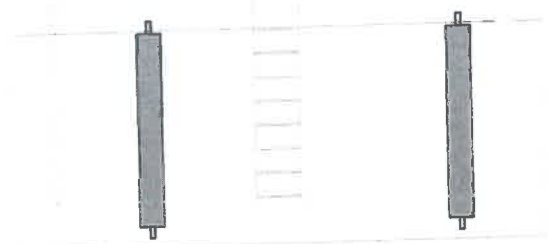


EX. ANTENNA ELEVATION (EAST)
SCALE: N.T.S.

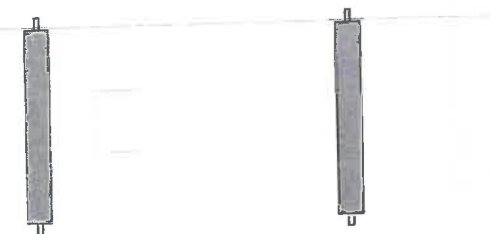
EX. ANTENNA ELEVATION (WEST)
SCALE: N.T.S.

EX. ANTENNA ELEVATION (NORTH)
SCALE: N.T.S.

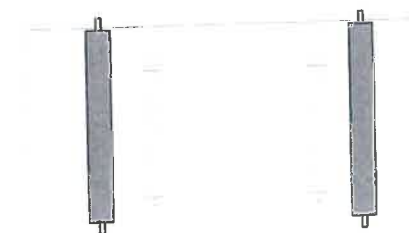
NOTE:
THESE DRAWINGS
ARE USED FOR
VISUAL REFERENCE
ONLY



NOTE:
THESE DRAWINGS ARE
USED FOR VISUAL
REFERENCE ONLY



NOTE:
THESE DRAWINGS ARE
USED FOR VISUAL
REFERENCE ONLY



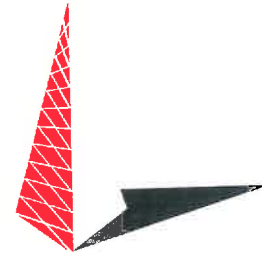
PROP. ANTENNA ELEVATION (EAST)
SCALE: N.T.S.

PROP. ANTENNA ELEVATION (WEST)
SCALE: N.T.S.

PROP. ANTENNA ELEVATION (NORTH)
SCALE: N.T.S.

PLANS PREPARED FOR:
U.S. Cellular
3806 THIRLANE ROAD NW
ROANOKE, VA 24019
OFFICE: (540) 598-5285

PROJECT INFORMATION:
768316
500 COURT SQUARE
500 COURT SQUARE
CHARLOTTEVILLE, VA 37331
(ALBEMARLE COUNTY)

PLANS PREPARED BY:

TOWER ENGINEERING PROFESSIONALS
326 TRYON ROAD
RALEIGH, NC 27603-3530
OFFICE: (919) 661-6351
www.tepgroup.net

SEAL:
PRELIMINARY
DO NOT USE FOR
CONSTRUCTION

6	03-30-15	ZONING
5	03-30-15	PRELIMINARY
4	03-12-15	PRELIMINARY
3	02-19-15	PRELIMINARY
REV	DATE	ISSUED FOR:

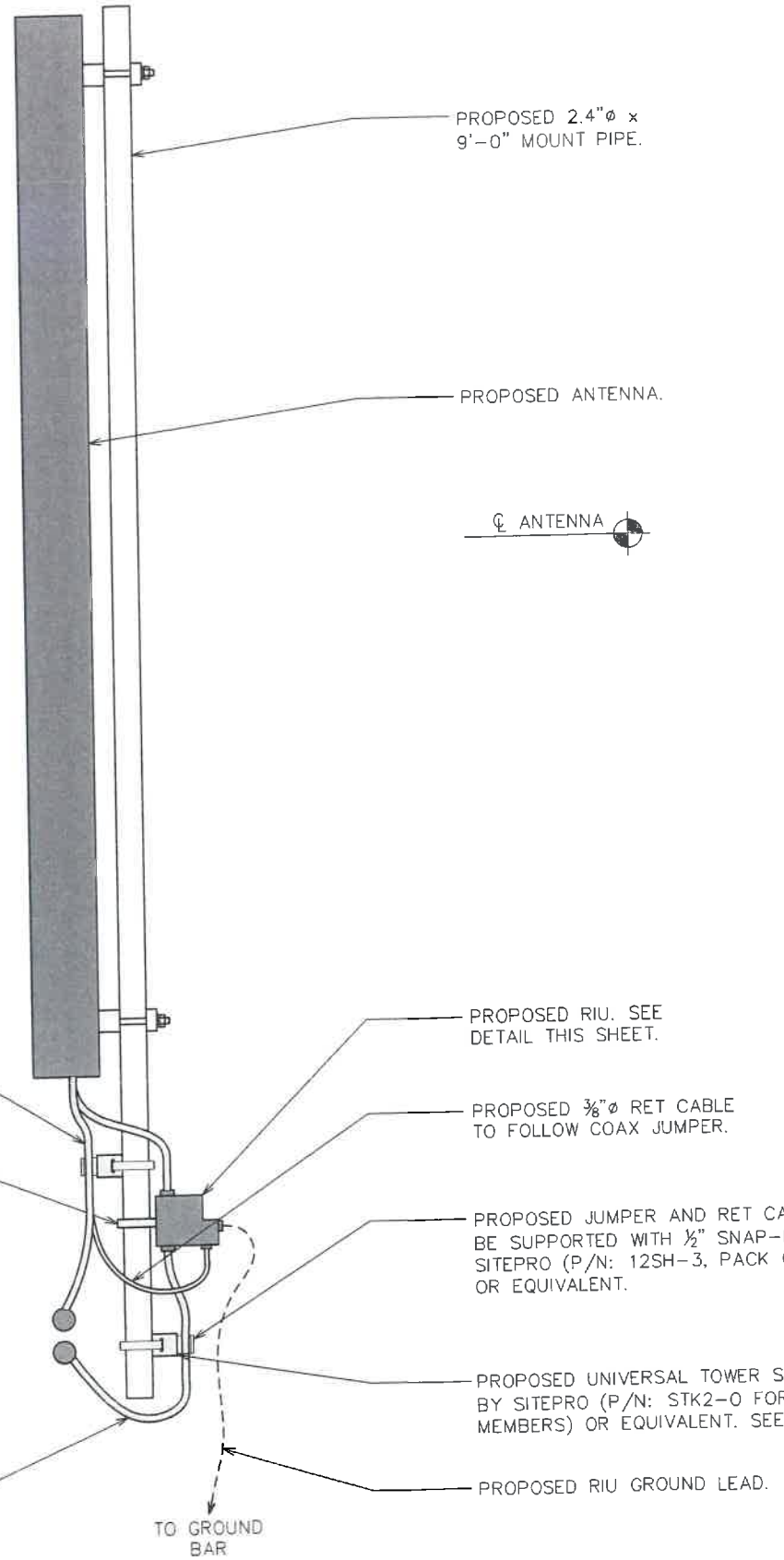
DRAWN BY: LMM CHECKED BY: GMA

SHEET TITLE:
**ANTENNA MOUNTING
DETAILS II**

SHEET NUMBER: **C-6B** REVISION: **6**
TEP #: 52821-15473

JUMPER NOTES:

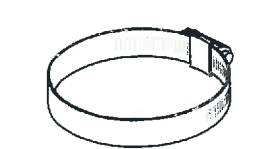
LENGTH: 10' MAX.
 BEND RADIUS: 5" MIN.
 BRACKET SPACING: 3' MAX.



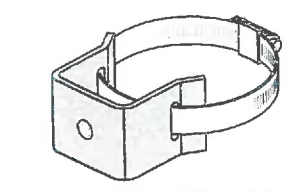
PROPOSED RIU WITH DIN-FEMALE CONNECTOR FOR BTS & ANT PORTS. INSTALL PER MANUFACTURER INSTRUCTIONS.



RIU DETAIL



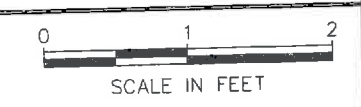
ROUND MEMBER ADAPTER DETAIL



UNIVERSAL STANDOFF DETAIL

NOTES:

- SITES USING ERICSSON EQUIPMENT SHALL REQUIRE (1) RIU INSTALLED AT THE ANTENNAS ONLY. SITES USING LUCENT EQUIPMENT SHALL REQUIRE (1) RIU INSTALLED AT THE ANTENNAS AND (1) RIU INSTALLED IN THE SHELTER.
- ALL PROPOSED JUMPERS SHALL HAVE DIN-MALE CONNECTIONS AT BOTH ENDS.



RIU DETAIL

SCALE: 3/4" = 1'-0"

PLANS PREPARED FOR:

3806 THIRLANE ROAD NW
 ROANOKE, VA 24019
 OFFICE: (540) 598-5285

PROJECT INFORMATION:

768316
500 COURT SQUARE

500 COURT SQUARE
 CHARLOTTESVILLE, VA 37331
 (ALBEMARLE COUNTY)

PLANS PREPARED BY:

TOWER ENGINEERING PROFESSIONALS
 326 TRYON ROAD
 RALEIGH, NC 27603-3530
 OFFICE: (919) 661-6351
 www.tepgroup.net

SEAL:

6	03-30-15	ZONING
5	03-30-15	PRELIMINARY
4	03-12-15	PRELIMINARY
3	02-19-15	PRELIMINARY
REV	DATE	ISSUED FOR:


DRAWN BY: LMM CHECKED BY: GMA

SHEET TITLE:

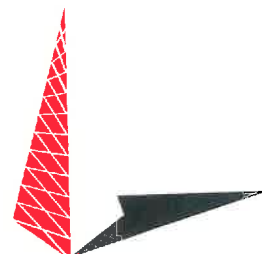
RIU DETAIL

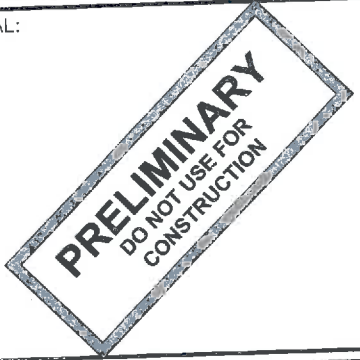
SHEET NUMBER: **C-7** REVISION: **6**

TEP #: 52821-15473

PLANS PREPARED FOR:

 3806 THIRLANE ROAD NW
 ROANOKE, VA 24019
 OFFICE: (540) 598-5285

PROJECT INFORMATION:
768316
500 COURT SQUARE
 500 COURT SQUARE
 CHARLOTTESVILLE, VA 37331
 (ALBEMARLE COUNTY)

PLANS PREPARED BY:

TOWER ENGINEERING PROFESSIONALS
 326 TRYON ROAD
 RALEIGH, NC 27603-3530
 OFFICE: (919) 661-6351
 www.tepgroup.net

SEAL:


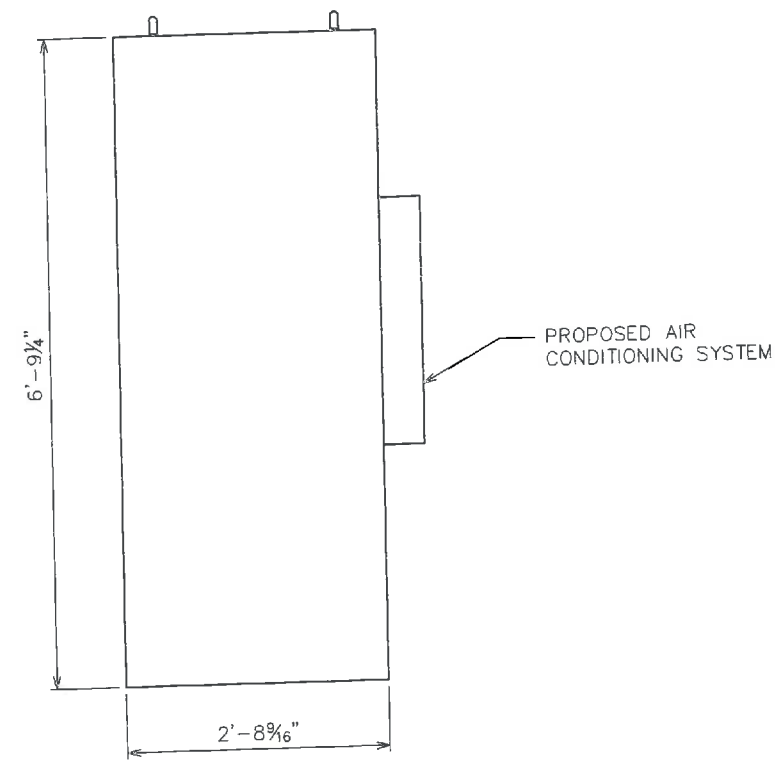
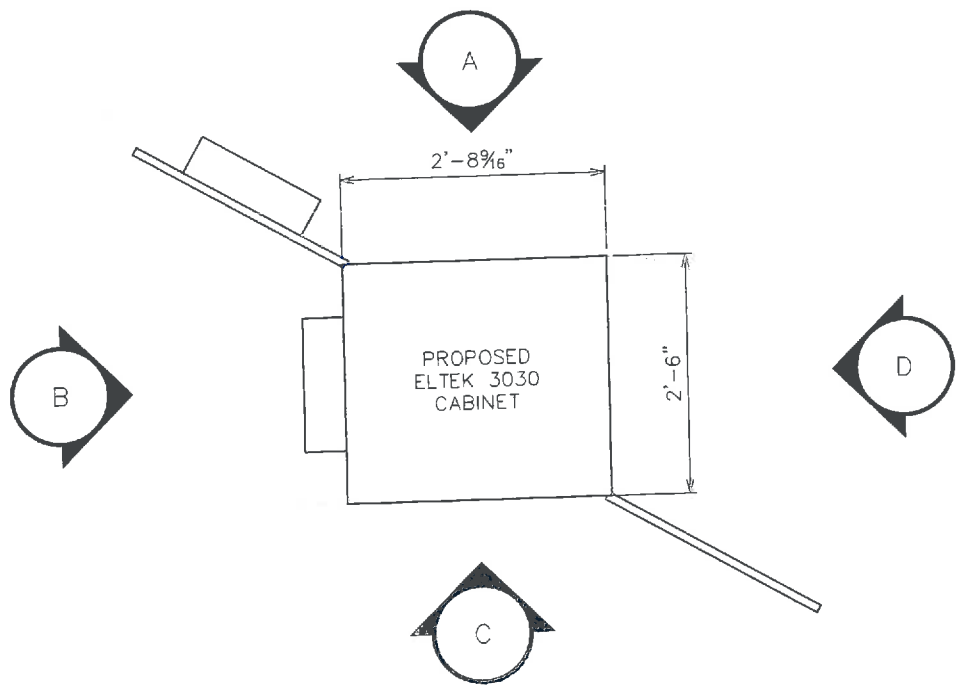
6	03-30-15	ZONING
5	03-30-15	PRELIMINARY
4	03-12-15	PRELIMINARY
3	02-19-15	PRELIMINARY
REV	DATE	ISSUED FOR:

DRAWN BY: LMM CHECKED BY: GMA

SHEET TITLE:
LTE CABINET ELEVATIONS

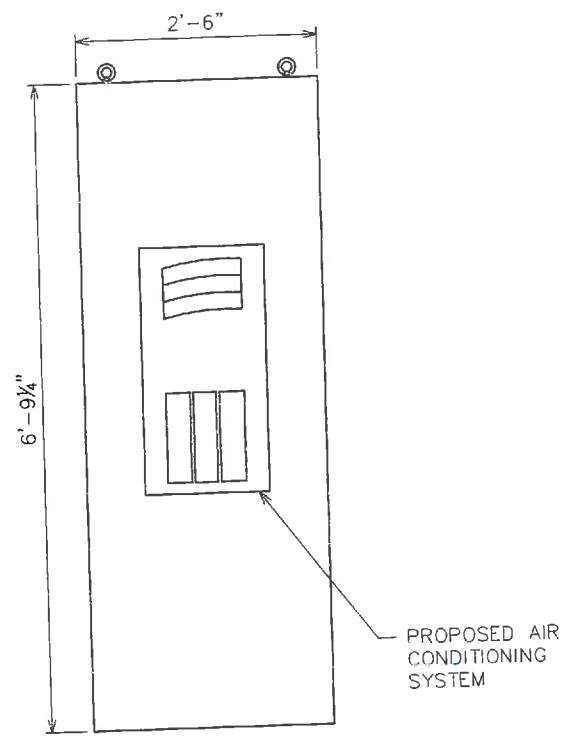
SHEET NUMBER: **C-8** REVISION: **6**
 TEP #: 52821-15473

NOTE:
 CONTRACTOR TO ENSURE
 PROPOSED LTE CABINET IS
 ANCHORED TO STEEL
 STRUCTURE PER
 MANUFACTURERS
 SPECIFICATIONS.

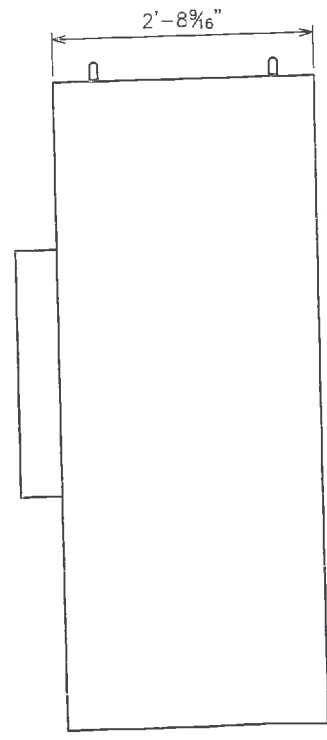


ELEVATION A
 SCALE: 1/2" = 1'-0"

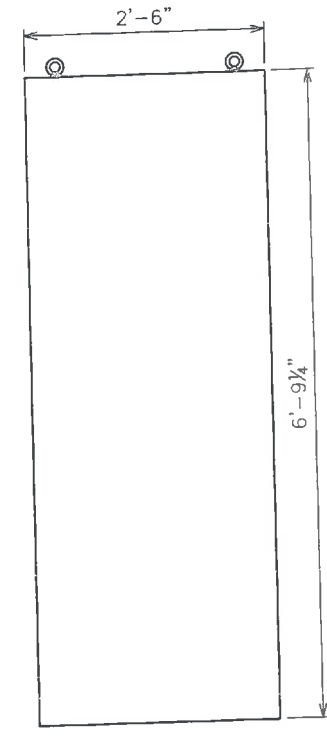
EQUIPMENT LAYOUT
 SCALE: 1/2" = 1'-0"



ELEVATION B
 SCALE: 1/2" = 1'-0"



ELEVATION C
 SCALE: 1/2" = 1'-0"



ELEVATION D
 SCALE: 1/2" = 1'-0"

Scala, Mary Joy

From: Tony Rocklein <tonyrocklein@embarqmail.com>
Sent: Friday, April 17, 2015 10:39 AM
To: Scala, Mary Joy; 'Doug Brooks'
Cc: Jack Masloff
Subject: RE: 500 Court Square balustrade

Mary Joy, The current completion date is 10/13/15. The Association signed off on the mockup of the first phase Tuesday, so that will go in to production shortly. It's also my understanding that the molds are complete and the balusters are in production. Tony

From: Scala, Mary Joy [mailto:scala@charlottesville.org]
Sent: Friday, April 17, 2015 9:23 AM
To: 'Tony Rocklein'; Doug Brooks (doug@realpropertyinc.com)
Subject: 500 Court Square balustrade

I'm sure the question will come up on Tuesday, when will the balustrade be completed ?
Can you tell me?

Mary Joy Scala, AICP
Preservation and Design Planner
City of Charlottesville
Department of Neighborhood Development Services
City Hall - 610 East Market Street
P.O. Box 911
Charlottesville, VA 22902
Ph 434.970.3130 FAX 434.970.3359
scala@charlottesville.org