

From: Scala, Mary Joy  
Sent: Wednesday, August 26, 2015 3:28 PM  
To: 'Daniel Costello'  
Cc: Shannon Kraiger  
Subject: BAR Action - August 18, 2015 - 900 W Main Street

August 26, 2015

AT&T Mobility  
570 Colonial Park Drive, Suite 307  
Roswell, GA 30075

RE: Certificate of Appropriateness Application BAR 15-07-01  
900 West Main Street  
Tax Parcel 10007800  
AT&T Mobility, Owner/ Shannon Kraiger (Velocitel), Applicant Replace existing antennas and redesign  
stealth enclosures

Dear Applicant,

The above referenced project was discussed before a meeting of the City of Charlottesville Board of Architectural Review (BAR) on August 18, 2015. The following action was taken:

The BAR accepted the applicant's request for deferral (7-0). The BAR requested: correctly scaled drawings and a photo simulation from West Main Street. The City attorney's office via Mary Joy wanted to make sure the applicant understood the fast moving federal regulations for antennas and how a deferral would affect their timeline for the project.

If you have any questions, please contact me at 434-970-3130 or [scala@charlottesville.org](mailto:scala@charlottesville.org).

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](mailto:scala@charlottesville.org)

**CITY OF CHARLOTTESVILLE  
BOARD OF ARCHITECTURAL REVIEW  
STAFF REPORT  
August 18, 2015**



**Certificate of Appropriateness Application**

BAR 15-07-01

900 West Main Street

Tax Parcel 10007800

AT&T Mobility, Owner/ Shannon Kraiger (Velocitel), Applicant

Replace existing antennas and redesign stealth enclosures

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**Background**

This property, the Hampton Inn built in 1997, is a noncontributing structure in the West Main Street ADC district.

Nov. 8, 2002 - Certificate of Appropriateness- Installation of cellular equipment of roof with concealment chimneys- Approved.

Dec. 16, 2014 - Certificate of Appropriateness- Proposal to make improvements to a rear patio- Approved (8-0).

July 21, 2015 - **The BAR accepted the applicant's request for deferral (9-0). The BAR requested: final structural drawings; plans with elevations; and photo simulations.**

**Application**

The applicant proposes to remove and replace three existing antenna concealment chimneys, which are currently 4x4x8, with three new chimneys at 6x6x13. They wish to install three new LTE antennas, three new RRUs, three new DC2s in the new chimney. Applicant wishes to reinstall six existing RRUs and three existing DC2s in new chimney. Install one new FC12 on existing platform and install new RBS 6601 and four new breakers in existing flexent cabinet. The platform will have a fourth concealment wall, designed and fabricated to match the existing walls that were originally manufactured. It will be SSV with a brick appearance. The one-sided screenwall will have an approximate panel linear footage of 9'x7' with a panel height of 10'. The screenwall support structure will be FRP and steel baseplates only, the steel finish will be galvanized.

**The applicant will submit the requested drawings and photos at the BAR meeting.**

**Criteria 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;*

*(8) Any applicable provisions of the City's Design Guidelines.*

**Pertinent Design Review Guidelines for Site Design and Elements**

*H. Utilities and 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.*

(b) Within other zoning districts of the city, the permitted communications facilities are identified within the use matrix for the applicable districts. Facilities other than those identified within the use matrix for a particular district shall be prohibited.

**Staff has nothing new to add until the requested information has been submitted.**

**Suggested Motion**

Having considered the standards set forth within the City Code, including City Design Guidelines for Site Design and Elements, I move to find that the proposed antenna and concealment chimney changes satisfy the BAR's criteria and are compatible with this property and other properties in the West Main Street ADC district, and that the BAR approves the application as submitted (or with the following modifications...)

## Scala, Mary Joy

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**From:** Daniel Costello <Daniel.Costello@FDHVelocitel.com>  
**Sent:** Wednesday, August 12, 2015 4:01 PM  
**To:** Scala, Mary Joy  
**Cc:** Susan Lankford; Paul Robnett; Shannon Kraiger  
**Subject:** RE: 900 West Main Street CV325  
**Attachments:** CV325 900 West Main Street part 1.pdf; CV325 900 West Main Street part 2.pdf

Mary Joy:

Attached is what we will be bringing to the meeting on the 18<sup>th</sup>.

**Part 1** consists of the three items that the board requested.

1. Photo Simulation
2. Building Elevation
3. Structural Analysis

**Part 2** consists of photos taken from across the street. The reason for these is to request an exception from stealthing the fourth wall of the platform on the roof. We visited the site last week to get additional information on the stealth design. We found that it will be quite expensive to complete the request because of AC panels that were part of the original installation. Enclosing this will mean a platform expansion that will need to be done to allow for the clearances required for access to these panels.

Additionally, from the photos submitted, you can see that the platform is not visible from the street. I had to go across the street and half way down the block in order to see the existing platform enclosure (last photo blow up).

Photo Descriptions are as follows:

1. Google map showing the locations that the photos were taken from
2. View of existing equipment platform
3. Equipment platform showing AC panels and access ladder
- 4-7 Photos taken from across the street looking at the building
8. Photo from middle of bank parking lot. First spot I could see the platform enclosure
9. Blow up of enclosure platform at same location as 8. Above.

Sincerely,

**Daniel K. Costello**  
Project Manager  
4144 Innslake Drive  
Glen Allen, VA 23060  
Office: 804-217-7088 x151  
Mobile: 315.717.6547



Email: [daniel.costello@FDHVelocitel.com](mailto:daniel.costello@FDHVelocitel.com)

Website: [www.fdhvelocitel.com](http://www.fdhvelocitel.com)

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Hampton Inn Suites II - A  
CV325 - AT15-00543W-17

Simulation is an approximate representation  
of our proposed concealment solution.  
Actual concealment(s) may vary.

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# Antenna System Upgrade Project



## AT&T MOBILITY ZONING DRAWINGS

SITE NUMBER: CV325

SITE NAME: HAMPTON INN - FA# 10068617

BUILDING OWNER: MIDTOWN HOSPITALITY LLC

- LTE AC/3C
- INSTALL NEW CONCEALMENT CHIMNEY
- INSTALL LTE RRHS
- IMPROVE QUALITY OF SERVICE

SHEET	DRAWING INDEX	REV	DATE	DIRECTIONS:	SITE INFORMATION																									
Y1	TITLE SHEET	1	8/10/15	<b>DIRECTIONS:</b> FROM AT&T OFFICE, HEAD SOUTHWEST ON COX RD TOWARD N PARK DR. 0.2 MI TURN RIGHT ONTO NUCKOLS RD. 0.3 MI CONTINUE STRAIGHT TO STAY ON NUCKOLS RD. 0.3 MI MERGE ONTO I-295 N VIA THE RAMP TO I-64 W/CHARLOTTESVILLE. 0.4 MI FOLLOW I-64 W TO VA-20 N IN SCOTTSVILLE. TAKE EXIT 121 FROM I-64 W 57.5 MI / 49 MIN MERGE ONTO I-295 N 1.5 MI TAKE EXIT 53A TO MERGE ONTO I-64 W TOWARD CHARLOTTESVILLE 55.8 MI TAKE EXIT 121 FOR VA-20 TOWARD CHARLOTTESVILLE/SCOTTSVILLE. 0.2 MI CONTINUE ON VA-20 N. DRIVE TO W MAIN ST IN CHARLOTTESVILLE. 2.1 MI / 6 MIN TURN RIGHT ONTO VA-20 N 1.0 MI CONTINUE ONTO MONTICELLO AVE 0.5 MI TURN RIGHT ONTO RIDGE ST 0.1 MI TURN LEFT ONTO W MAIN ST	<b>SCOPE OF WORK:</b> REMOVE AND REPLACE (3) EXISTING ANTENNA CONCEALMENT CHIMNEYS WITH NEW (DESIGN BY OTHERS). INSTALL (3) NEW LTE ANTENNAS, (3) NEW RRUs, (3) NEW DC2s IN NEW CHIMNEY. REINSTALL (6) EXISTING RRUs AND (3) EXISTING DC2s IN NEW CHIMNEY. INSTALL (1) NEW FC12 ON EXISTING PLATFORM. INSTALL (1) NEW RBS 6601 AND (4) NEW BREAKERS IN EXISTING FLEXENT CABINET.																									
C1	GENERAL NOTES	1	8/10/15		<b>SITE ADDRESS:</b> 900 WEST MAIN STREET CHARLOTTESVILLE, VA 22903																									
C2.1	SITE PLAN	1	8/10/15		<b>OWNER:</b> MIDTOWN HOSPITALITY LLC <b>CONTACT PERSON:</b> RANDY RICHARDSON (434) 923-8600																									
C2.2	EQUIPMENT PLATFORM LAYOUT	1	8/10/15		<b>APPLICANT:</b> AT&T MOBILITY 4801 COX ROAD, SUITE 300 GLEN ALLEN, VA 23060																									
C3	ELEVATION VIEW	1	8/10/15		<b>LATITUDE (NAD 83):</b> 38° 01' 53.38" (38.032050) <b>LONGITUDE (NAD 83):</b> -78° 29' 39.66" (-78.494350)																									
C3.1	RF DETAILS	1	8/10/15	<b>CURRENT USE:</b> TELECOMMUNICATIONS FACILITY <b>PROPOSED USE:</b> TELECOMMUNICATIONS FACILITY <b>JURISDICTION:</b> CITY OF CHARLOTTESVILLE																										
				<b>VICINITY MAP</b>																										
				NOT TO SCALE																										
<b>REVIEWED BY:</b> AT&T _____ DATE _____ VELOCITEL _____ DATE _____ <b>APPROVED BY:</b> OWNER _____ DATE _____ MUNICIPAL _____ DATE _____																														
<div style="border: 1px solid black; padding: 5px; display: inline-block;">             ISSUED FOR ARCHITECTURAL REVIEW BOARD           </div>																														
		4164 INNSLAKE DRIVE, SUITE B GLEN ALLEN, VA 23060 (804) 217-7088 (MAIN) (757) 401-6453 (FAX)																												
		LIBERTY PLAZA 1 4801 COX ROAD, SUITE 300 GLEN ALLEN, VA 23060		<b>ZONING DRAWINGS</b> LTE AC/3C SITE NO. CV325 HAMPTON INN FA# 10068617 900 WEST MAIN STREET CHARLOTTESVILLE, VA 22903																										
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			10068617	Y1	1																									

IT IS THE POLICY OF AT&T MOBILITY AND ITS ASSOCIATED COMPANIES TO EMPLOY ONLY QUALIFIED PERSONNEL. THE QUALIFICATION REQUIREMENTS FOR ALL POSITIONS ARE LISTED IN THE AT&T MOBILITY EMPLOYMENT MANUAL. THE EMPLOYER RESERVES THE RIGHT TO MODIFY THE QUALIFICATION REQUIREMENTS AT ANY TIME WITHOUT NOTICE.

**GENERAL NOTES:**

1. THE PROPOSED FACILITY WILL BE UNHANNED AND DOES NOT REQUIRE POTABLE WATER OR SEWER SERVICE AND IS NOT FOR HUMAN HABITAT. (NO HANDICAP ACCESS IS REQUIRED).
2. OCCUPANCY IS LIMITED TO PERIODIC MAINTENANCE AND INSPECTION, APPROXIMATELY 2 TIMES PER MONTH, BY AT&T TECHNICIANS.
3. NO NOISE, SMOKE, DUST, ODOR OR VIBRATIONS WILL RESULT FROM THIS PROPOSAL.
4. OUTDOOR STORAGE AND SOLID WASTE CONTAINERS ARE NOT PROPOSED.
5. ALL MATERIAL SHALL BE FURNISHED AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE AT&T SYSTEM GROUNDING STANDARD DATED JUNE 2011. "TECHNICAL SPECIFICATION FOR CONSTRUCTION OF GSM/GRS WIRELESS SITES, "TECHNICAL SPECIFICATION FOR FACILITY GROUNDING". IN CASE OF A CONFLICT BETWEEN THE CONSTRUCTION SPECIFICATION AND THE DRAWINGS, THE DRAWINGS SHALL GOVERN.
6. SUBCONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE CAUSED BY THE CONSTRUCTION OPERATION.
7. SUBCONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS REQUIRED FOR CONSTRUCTION.
8. SUBCONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE ON A DAILY BASIS.
9. INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM SITE VISITS AND DRAWINGS PROVIDED BY THE SITE OWNER. SUBCONTRACTOR SHALL NOTIFY AT&T OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
10. NO WHITE STROBIC LIGHTS ARE PERMITTED. LIGHTING, IF REQUIRED, WILL MEET FAA STANDARDS AND REQUIREMENTS.
11. ALL SIGNS SHALL BE FURNISHED AND INSTALLED AT ALL AT&T WIRELESS SERVICES SITES IN ACCORDANCE WITH SPECIFICATION AT&T SYSTEM GROUNDING DATED JUNE 2011.
12. NO ADDITIONAL PARKING TO BE PROPOSED. EXISTING ACCESS AND PARKING TO BE USED.
13. NO LANDSCAPING IS PROPOSED AT THIS SITE.
14.

TYPICAL MINIMUM BEND RADI		
COAX DIAMETER	ANDREW	COMSCOPE
1/2" SUPERFLEX	1.25'	1.25'
1/2"	5"	2"
7/8"	10"	5"
1 1/4"	15"	8"
1 5/8"	20"	15"
15. ALL COAXIAL CABLE INSTALLATIONS TO FOLLOW MANUFACTURER'S INSTRUCTIONS.

**GENERAL NOTES:**

1. FOR THE PURPOSE OF CONSTRUCTION DRAWINGS, THE FOLLOWING DEFINITIONS SHALL APPLY:  
CONTRACTOR - CONTRACTOR  
SUBCONTRACTOR - GENERAL CONTRACTOR (CONSTRUCTION)  
OWNER - AT&T WIRELESS
2. ALL SITE WORK SHALL BE COMPLETED AS INDICATED ON THE DRAWINGS AND PROJECT SPECIFICATIONS.
3. DRAWINGS PROVIDED HERE ARE NOT TO BE SCALED AND ARE INTENDED TO SHOW OUTLINE ONLY.
4. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. SUBCONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK.
5. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
6. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
7. THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
8. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION SPACE FOR APPROVAL BY THE CONTRACTOR AND SITE OWNER.
9. THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.
10. THE SUBCONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
11. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY ENGINEERS. EXTREME CAUTION SHOULD BE USED BY THE SUBCONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. SUBCONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION, B) CONFINED SPACE, C) ELECTRICAL SAFETY & D) TRENCHING & EXCAVATION.
12. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, AS DIRECTED BY THE RESPONSIBLE ENGINEER, AND SUBJECT TO THE APPROVAL OF THE OWNER AND/OR LOCAL UTILITIES.
13. THE AREAS OF THE OWNER'S PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION.
14. SUBCONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.
15. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.
16. THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
17. THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE BTS EQUIPMENT.
18. IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
19. THE SUBCONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH OSHA REGULATIONS.
20. SUBCONTRACTOR SHALL LEAVE PREMISES IN A CLEAN CONDITION.

**STRUCTURAL STEEL NOTES:**

1. ALL STEEL WORK SHALL BE PAINTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND IN ACCORDANCE WITH ASTM A36 UNLESS OTHERWISE NOTED.
2. ALL WELDING SHALL BE PERFORMED USING E70XX ELECTRODES AND WELDING SHALL CONFORM TO AISC AND AWS D1.1, WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "MANUAL OF STEEL CONSTRUCTION". PAINTED SURFACES SHALL BE TOUCHED UP.
3. BOLTED CONNECTIONS SHALL BE ASTM A325 BEARING TYPE (3/4") CONNECTIONS AND SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE.
4. NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE 5/8" DIA. ASTM A 307 BOLTS UNLESS NOTED OTHERWISE.
5. INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR, SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR ENGINEERING APPROVAL WHEN DRILLING HOLES IN CONCRETE. SPECIAL INSPECTIONS, REQUIRED BY GOVERNING CODES, SHALL BE PERFORMED IN ORDER TO MAINTAIN MANUFACTURER'S MAXIMUM ALLOWABLE LOADS.
6. ALL METAL WORK SHALL BE GALVANIZED IN ACCORDANCE WITH SPECIFICATION ASTM A123. ALL SHOP WELDED MEMBERS SHALL BE GALVANIZED AFTER WELDING.

ISSUED FOR  
ARCHITECTURAL  
REVIEW BOARD



4164 INNSLAKE DRIVE, SUITE B  
GLEN ALLEN, VA 23060  
(804) 217-7058 (MAIN)  
(757) 491-6453 (FAX)



at&t  
MOBILITY

LIBERTY PLAZA 1  
4801 COX ROAD, SUITE 300  
GLEN ALLEN, VA 23060

ZONING DRAWINGS

ZONING DRAWINGS  
LTE AC/3C  
SITE NO. CV325  
HAMPTON INN  
FA# 10058517  
800 WEST MAIN STREET  
CHARLOTTESVILLE, VA 22903

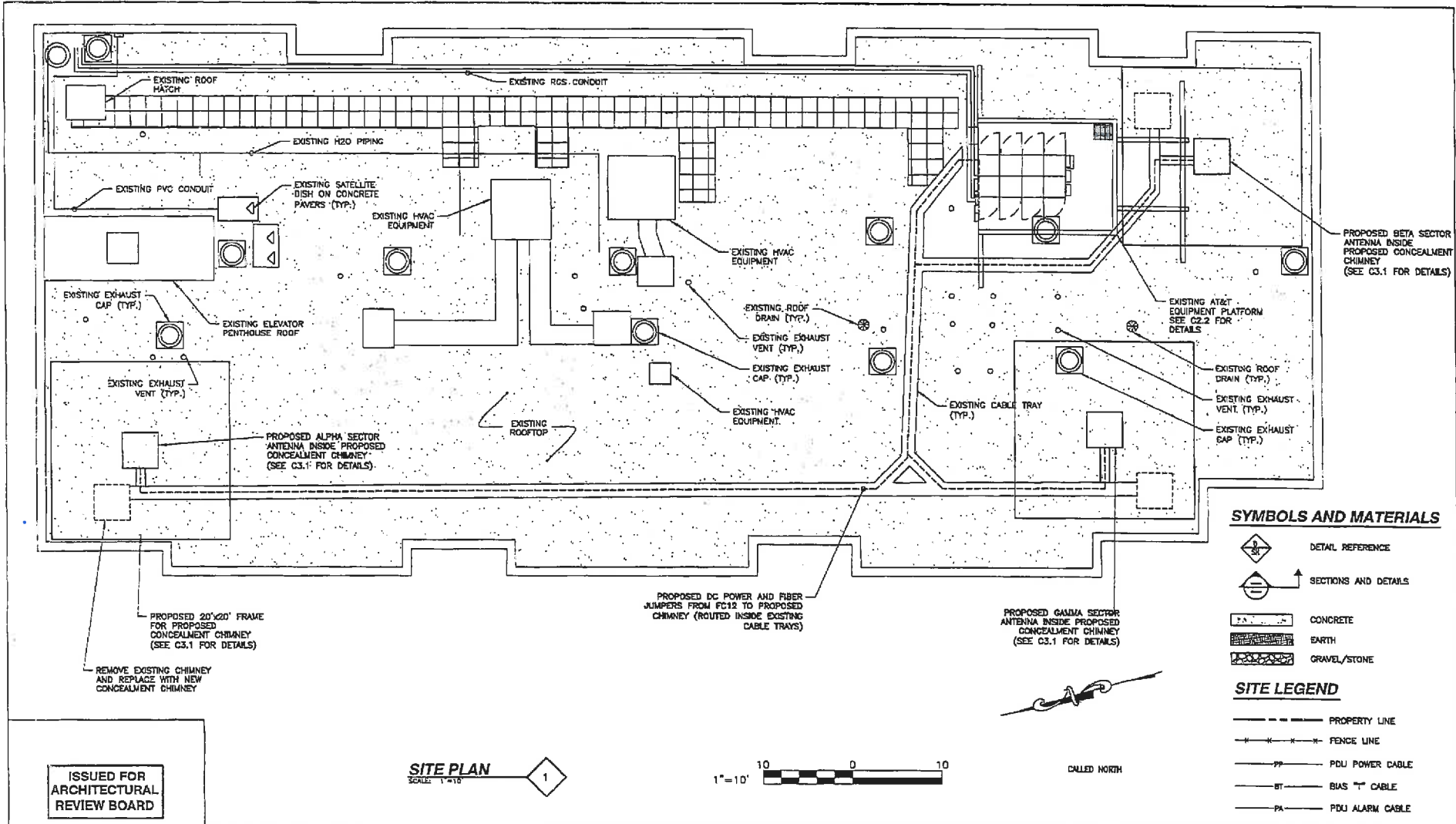
NO	DATE	REVISIONS	BY	CHK	APP'D
1	8/10/13	ISSUED FOR PERMITTING	SRN	SRN	-
0	6/2/13	ISSUED FOR PERMITTING	SRN	SRN	-
A	5/29/13	ISSUED FOR REVIEW	SRN	SRN	-
NO	DATE	REVISIONS	BY	CHK	APP'D

**GENERAL NOTES**






SCALE:	DESIGNED:	CHECKED:	JOB #	DRAWING NUMBER	REV
	SRN	SRN	10068517	CT	1

IT IS A REGULATION OF THE FEDERAL COMMUNICATIONS COMMISSION THAT ANY PERSON WHOSE TITLE INDICATES THAT HE OR SHE IS AN ENGINEER OR ARCHITECT SHALL BE LICENSED BY THE STATE OF VIRGINIA TO PRACTICE AS SUCH. ANY PERSON WHOSE TITLE INDICATES THAT HE OR SHE IS AN ENGINEER OR ARCHITECT SHALL BE LICENSED BY THE STATE OF VIRGINIA TO PRACTICE AS SUCH. ANY PERSON WHOSE TITLE INDICATES THAT HE OR SHE IS AN ENGINEER OR ARCHITECT SHALL BE LICENSED BY THE STATE OF VIRGINIA TO PRACTICE AS SUCH.










**SYMBOLS AND MATERIALS**

-  DETAIL REFERENCE
-  SECTIONS AND DETAILS
-  CONCRETE
-  EARTH
-  GRAVEL/STONE

**SITE LEGEND**

-  PROPERTY LINE
-  FENCE LINE
-  PDU POWER CABLE
-  BUS "T" CABLE
-  PDU ALARM CABLE

**SITE PLAN**  
SCALE: 1"=10'



CALL TO NORTH

ISSUED FOR ARCHITECTURAL REVIEW BOARD



4164 BINSLAKE DRIVE, SUITE B  
GLEN ALLEN, VA 23060  
(804) 217-7088 (MAIN)  
(757) 401-8453 (FAX)



LIBERTY PLAZA 1  
4801 COX ROAD, SUITE 300  
GLEN ALLEN, VA 23060

ZONING DRAWINGS  
LTE AC/3C  
SITE NO. CV325  
HAMPTON INN  
FA#: 10068617  
600 WEST MAIN STREET  
CHARLOTTESVILLE, VA 22903






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0	6/2/15	ISSUED FOR PERMITTING	SRN	SRN	-
A	3/29/15	ISSUED FOR REVIEW	SRN	SRN	-

**SITE PLAN**


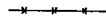
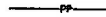
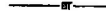

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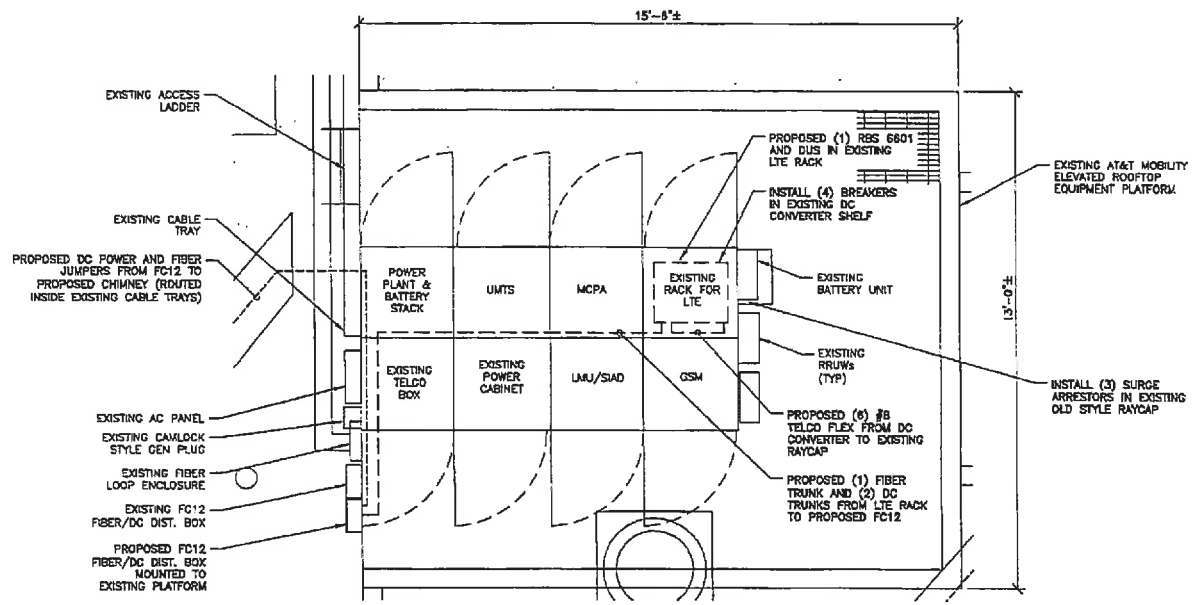
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**SYMBOLS AND MATERIALS**

-  DETAIL REFERENCE
-  SECTIONS AND DETAILS
-  CONCRETE
-  EARTH
-  GRAVEL/STONE

**SITE LEGEND**

-  PROPERTY LINE
-  FENCE LINE
-  PDU POWER CABLE
-  BIAS "T" CABLE
-  PDU ALARM CABLE



**EQUIPMENT PLATFORM LAYOUT**  
SCALE: 1"=3'



CALLED NORTH

ISSUED FOR ARCHITECTURAL REVIEW BOARD



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GLEN ALLEN, VA 23060  
(804) 217-7068 (MAIN)  
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**at&t MOBILITY**  
LIBERTY PLAZA 1  
4801 COX ROAD, SUITE 300  
GLEN ALLEN, VA 23060

ZONING DRAWINGS

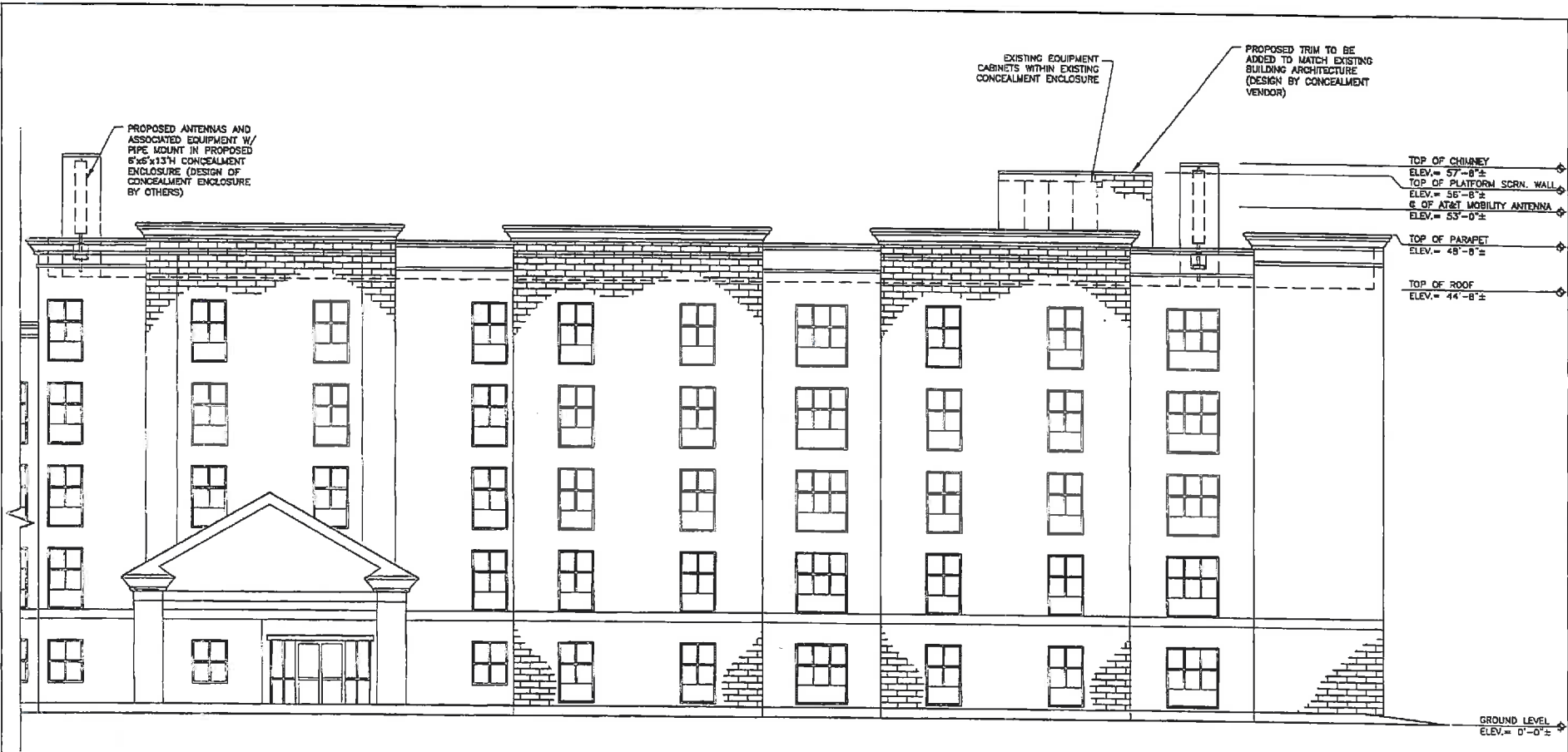
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SITE NO. CV325  
HAMPTON INN  
FA# 10058617  
900 WEST MAIN STREET  
CHARLOTTESVILLE, VA 22903

NO.	DATE	REVISIONS	BY	CHK	APP'D
1	8/10/15	ISSUED FOR PERMITTING	SRN	SRN	-
0	8/2/15	ISSUED FOR PERMITTING	SRN	SRN	-
A	5/29/15	ISSUED FOR REVIEW	SRN	SRN	-

**EQUIPMENT PLATFORM LAYOUT**

JOB #	DRAWING NUMBER	REV
1058617	C2.2	1

IT IS A THOU-HOR OR LAY-OUT PLAN WHICH SHOWS THE AREAS ACTING AS A GUIDE TO THE LOCATION OF THE EQUIPMENT AND THE LOCATION OF THE EQUIPMENT. THE ENGINEER HAS NOT CONDUCTED A VISUAL INSPECTION OF THE EQUIPMENT. THE ENGINEER HAS NOT CONDUCTED A VISUAL INSPECTION OF THE EQUIPMENT. THE ENGINEER HAS NOT CONDUCTED A VISUAL INSPECTION OF THE EQUIPMENT.



ISSUED FOR ARCHITECTURAL REVIEW BOARD

**PROPOSED BUILDING ELEVATION**  
SCALE: 1" = 10'-0"

A STRUCTURAL ANALYSIS OF THIS BUILDING/ANTENNA MOUNTS WAS NOT PERFORMED BY VELOCITEL INC. CONTRACTOR SHALL REFER TO STRUCTURAL ANALYSIS (IF APPLICABLE) AND COORDINATE LTE ANTENNA AND ASSOCIATED EQUIPMENT MOUNTING WITH THE SITE CONSTRUCTION MANAGER AND THE TOWER OWNER.

IT IS A VIOLATION OF LAW FOR ANY PERSON UNLESS THEY ARE AN ENGINEER TO EXERCISE THE FUNCTIONS OF A LICENSED PROFESSIONAL ENGINEER TO MAKE THIS STATEMENT. PLEASE CONTACT US IMMEDIATELY IF YOU ARE AN ENGINEER OR ARCHITECT AND YOU HAVE BEEN ADVISED BY US TO MAKE THIS STATEMENT. YOU WILL BE HELD RESPONSIBLE FOR ANY VIOLATIONS OF THE PROFESSIONAL ETHICS OF YOUR PROFESSION.



4164 INNSLAKE DRIVE, SUITE B  
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(804) 217-7038 (MAIN)  
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**at&t**  
MOBILITY

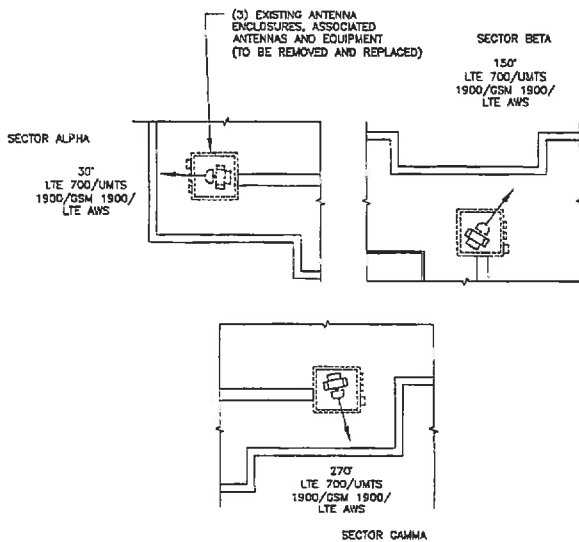
LIBERTY PLAZA 1  
4801 COX ROAD, SUITE 300  
GLEN ALLEN, VA 23060

**ZONING DRAWINGS**  
LTE AC/3C  
SITE NO. CV325  
HAMPTON INN  
PAR# 10058817  
900 WEST MAIN STREET  
CHARLOTTESVILLE, VA 22903

NO	DATE	REVISIONS	BY	CHK	APP
1	6/10/15	ISSUED FOR PERMITTING	SRN	SRN	-
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NO	DATE	REVISIONS	BY	CHK	APP
SCALE:	DESIGNED:	SRN	CHECKED:	SRN	

**ELEVATION VIEW**

JOB #	DRAWING NUMBER	REV
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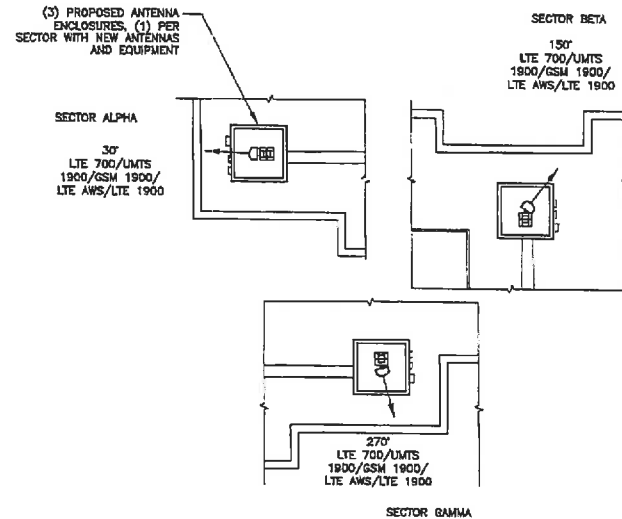
APPROXIMATE  
TRUE  
NORTH

**EXISTING ANTENNA FRAME DETAIL**

NOT TO SCALE

1

NOTE: CONTRACTOR REQUIRED TO VERIFY AND DOCUMENT EXISTING AZIMUTHS AND DOWNTILTS



APPROXIMATE  
TRUE  
NORTH

**PROPOSED ANTENNA FRAME DETAIL**

NOT TO SCALE

2

NOTE: CONTRACTOR TO REFER TO FINAL RF CONFIGURATION PRIOR TO CONSTRUCTION

ISSUED FOR  
ARCHITECTURAL  
REVIEW BOARD



4184 INNSLAKE DRIVE, SUITE B  
GLEN ALLEN, VA 23060  
(804) 217-7088 (MAIN)  
(757) 401-6453 (FAX)



LIBERTY PLAZA 1  
4801 COX ROAD, SUITE 300  
GLEN ALLEN, VA 23060

ZONING DRAWINGS

ZONING DRAWINGS  
LTE AC/3C  
SITE NO. CV325  
HAMPTON INN  
FA# 10068817  
320 WEST MAIN STREET  
CHARLOTTESVILLE, VA 22903

NO.	DATE	REVISIONS	BY	CHK	APP	JOB #	DRAWING NUMBER	REV			
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D	8/2/15	ISSUED FOR PERMITTING	SRW	SRW	-						
A	5/28/15	ISSUED FOR REVIEW	SRW	SRW	-						
SCALE:							DESIGNED: SRW	CHECKED: SRW	10068817	D3	1

RF DETAILS

IT IS A REPRESENTATION OF THE PROJECT AND DOES NOT CONSTITUTE A CONTRACT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL INFORMATION AND FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS PRIOR TO CONSTRUCTION. THE ENGINEER ASSUMES NO LIABILITY FOR ANY ERRORS OR OMISSIONS IN THIS DRAWING, UNLESS CAUSED BY NEGLIGENCE OR WILLFUL MISFEASANCE.



Project Number: U0142-731-151

July 29, 2015

STEALTH@ Concealment Solutions  
3034-A Ashley Phosphate Rd.  
North Charleston, SC 29418

ATTENTION: Caroline Watson

REFERENCE: **Hampton Inn Suites II**  
**Analysis of existing structure with loading from (3) ballasted 6' square x 12' tall chimneys**  
**900 West Main Street Charlottesville, VA**

Dear Caroline:

Per your request, we have performed an analysis of the existing roof structure that will support the proposed ballasted concealment chimneys. The purpose of our analysis was to determine if the existing eight inch hollow-core precast slab roof structure has adequate capacity to support the proposed chimneys and ballast.

**DOCUMENTATION:**

The following documentation was used for this analysis:

- Preliminary Zoning Drawings produced by Velocitel Complete Wireless Solutions dated 07/23/15.
- Partial Structural Analysis produced by URS including a partial roof framing plan and column schedule dated 08/28/2002

**DESIGN CRITERIA:**

Our analysis uses the following codes and parameters:

- Code: 2012 International Building Code
- Wind Parameters:
  - Basic Wind Speed: 115 mph (3-Second Gust)
  - Wind Exposure: B
  - Risk Category: II
- Gravity Loading Parameters:
  - Estimated Existing Roof Dead Load: 80 psf (Assumes min 2" concrete topping slab)
  - Design Ground Snow Load: 30 psf ( $P_f$ : 18.9 psf)
  - Design Roof Live Load: 20 psf

**STRUCTURE COMPOSITION:**

It is our understanding that the existing roof structure consists of 8" thick precast hollow core concrete slab panels spanning approximately 25'-3". They are supported by 8" CMU walls & lintels.

**CONCLUSIONS:**

It is our conclusion that with a large enough ballast frame the existing building would be adequate to support the additional loading created by the proposed chimneys. Prior to final design of the chimney and ballast frame the existing



U0142-731-151  
Hampton Inn Suites II  
July 29, 2015

roof will need to be verified to determine if the hollow core slab is covered with a concrete topping or alternate roofing material.

Where there is no information on the manufacturer or the reinforcing used in the precast hollow core concrete slab, the increased load can be justified per section 807.5 of the International Existing Building Code (IEBC). The ballast frame supporting the 6' square x 12' tall chimney will be required to be large enough and rigid enough to distribute the gravity load plus overturning wind load throughout the entire frame such that the increase in stress would be less than a 10% increase. Based on our preliminary analysis we determined that a 20' square ballast frame will be required to distribute the load over a large enough area. With a frame this size the stress increase caused by the proposed loading would meet the requirements of sections 807.5 of the IEBC and therefore not require the existing building to be retrofitted.

In addition current hollow core precast slab manufacturers typically have a superimposed design load of 65 psf to 100 psf for similar precast slabs. The design roof live load plus the additional superimposed loads from the proposed ballasted chimneys is less than 35 psf.

#### LIMITATIONS:

The conclusions above are provided based upon a preliminary review analysis prepared by our office and information the client provided. These conclusions are intended to describe the general structural feasibility of the proposed installation. In addition, these conclusions are in no way guaranteed to reflect the final design should the design change due to required revisions, alterations, or additions to the information contained herein due to unforeseen issues or issues beyond our control. These issues may include but are not limited to: client driven revisions, jurisdiction or third party plans check comments and revisions, discrepancies between the construction drawings and the as-built condition of the existing structure discovered by the contractor during demolition and construction, contractor error during construction, etc. Vector Structural Engineering claims no liability for design, construction, or any other fees or costs associated with such revisions.

A representative from Vector has not visited the site and thus no observations were made of the structural integrity, materials used or quality of work of any portions of the structure. The analysis and conclusions described above are also based on the assumption that the structure was constructed in accordance with the above referenced documents. Vector Structural Engineering makes no claim as to the correctness of the current condition of the structure. The structure is assumed to be in good condition, free of damage or deterioration. The contractor shall notify Vector Structural Engineering immediately should any damage, deterioration, or discrepancies between the as-built condition of the existing structure and the assumed condition described in this report be found.

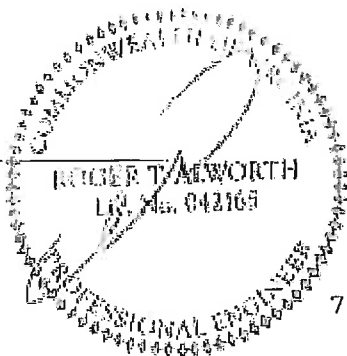
We hope this meets your needs. If you have any further questions regarding this matter, please call this office at your convenience.

Best Regards,  
VECTOR STRUCTURAL ENGINEERING

\_\_\_\_\_  
Roger T. Atworth, P.E.  
Principal

RTA/kaw

Enclosures



7-30-2015



Google earth











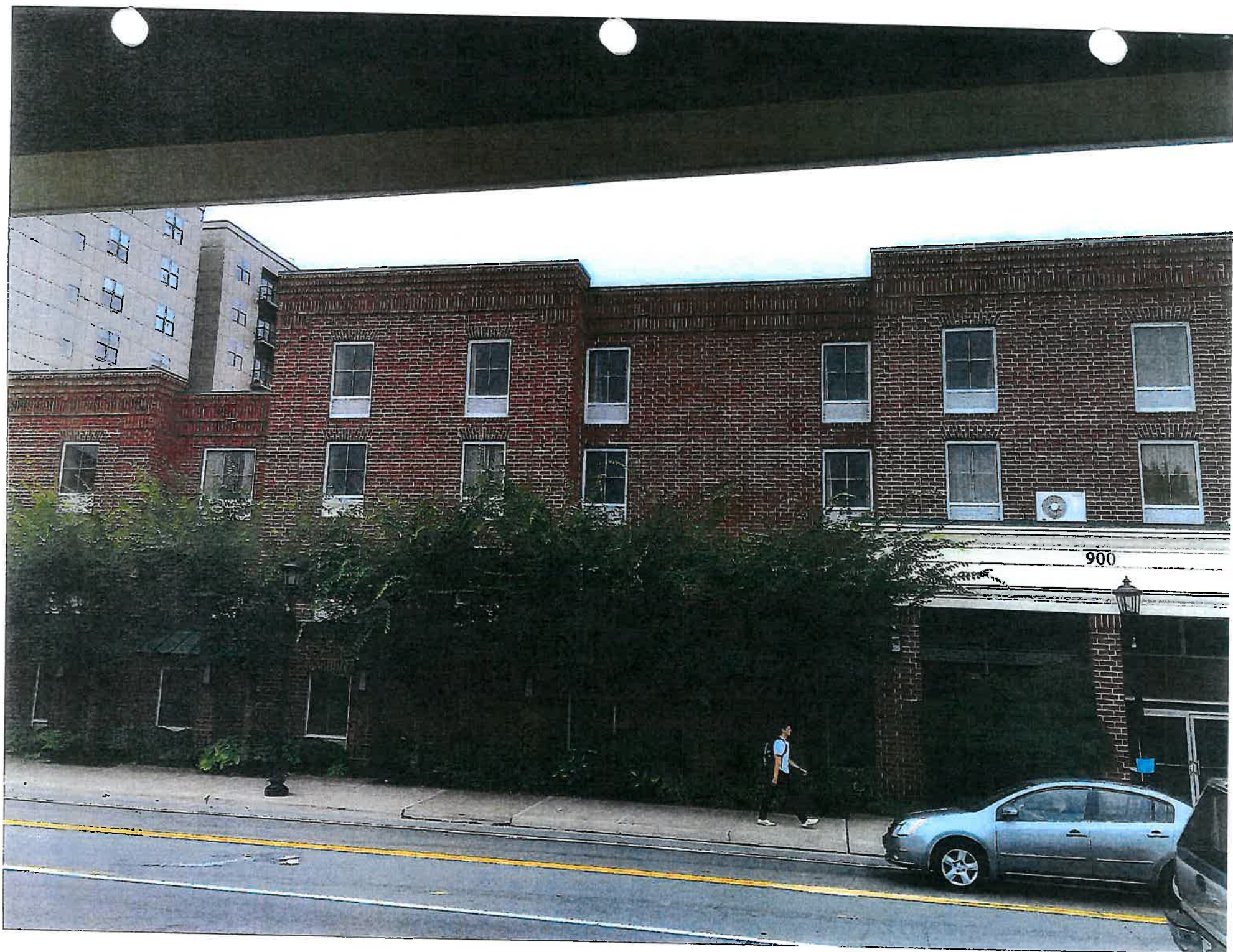












900











