

ISSUE: Certificate of Appropriateness for alterations

APPLICANT: City of Alexandria

LOCATION: Old and Historic Alexandria District
105 North Union Street

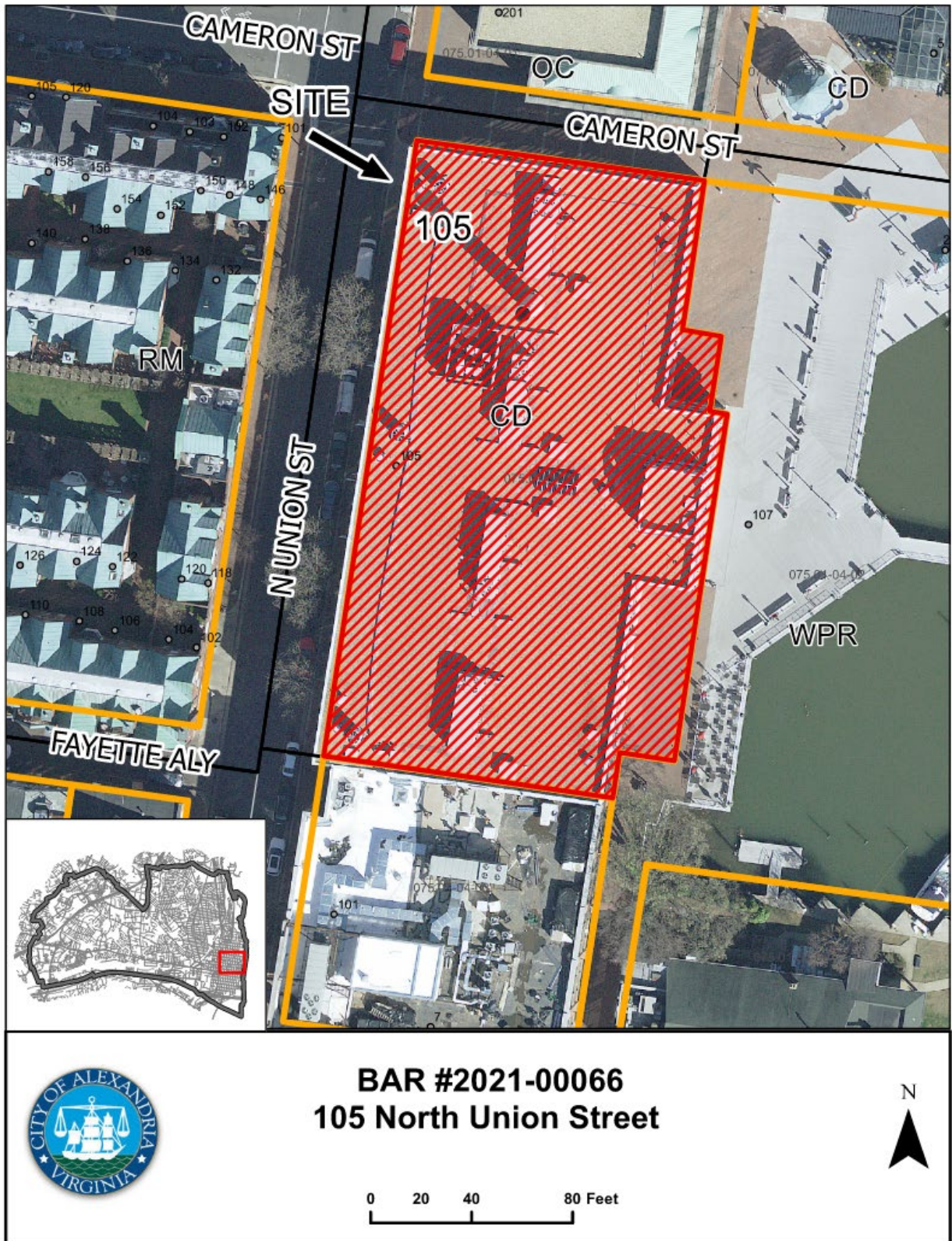
ZONE: CD/Commercial Downtown Zone

STAFF RECOMMENDATION

Staff recommends approval of the Certificate of Appropriateness for alterations as submitted.

GENERAL NOTES TO THE APPLICANT

1. **APPEAL OF DECISION:** In accordance with the Zoning Ordinance, if the Board of Architectural Review denies or approves an application in whole or in part, the applicant or opponent may appeal the Board's decision to City Council on or before 14 days after the decision of the Board.
2. **COMPLIANCE WITH BAR POLICIES:** All materials must comply with the BAR's adopted policies unless otherwise specifically approved.
3. **BUILDING PERMITS:** Most projects approved by the Board of Architectural Review require the issuance of one or more construction permits by Department of Code Administration (including signs). The applicant is responsible for obtaining all necessary construction permits after receiving Board of Architectural Review approval. Contact Code Administration, Room 4200, City Hall, 703-746-4200 for further information.
4. **ISSUANCE OF CERTIFICATES OF APPROPRIATENESS AND PERMITS TO DEMOLISH:** Applicants must obtain a copy of the Certificate of Appropriateness or Permit to Demolish PRIOR to applying for a building permit. Contact BAR Staff, Room 2100, City Hall, 703-746-3833, or preservation@alexandriava.gov for further information.
5. **EXPIRATION OF APPROVALS NOTE:** In accordance with Sections 10-106(B), 10-206(B) and 10-307 of the Zoning Ordinance, any Board of Architectural Review approval will expire 12 months from the date of issuance if the work is not commenced and diligently and substantially pursued by the end of that 12-month period.
6. **HISTORIC PROPERTY TAX CREDITS:** Applicants performing extensive, certified rehabilitations of historic properties may separately be eligible for state and/or federal tax credits. Consult with the Virginia Department of Historic Resources (VDHR) prior to initiating any work to determine whether the proposed project may qualify for such credits.



I. APPLICANT'S PROPOSAL

The applicant requests a Certificate of Appropriateness to install three antenna/equipment screening structures on the property's rooftop, at 105 North Union Street.

Certificate of Appropriateness

The project calls for the installation of three metal structures roughly 12' wide x 12' long x 9' high on the west side of the property's roof to screen new and existing AT&T antennas and equipment. The metal structures will be finished with ESSV fiberglass panels to be painted to match the building walls. The structures on the northwest and southwest corners of the building's roof will be visible from the right-of-way (Figures 1 and 2). The proposed structure on the middle, west side will not be visible from the right-of-way.

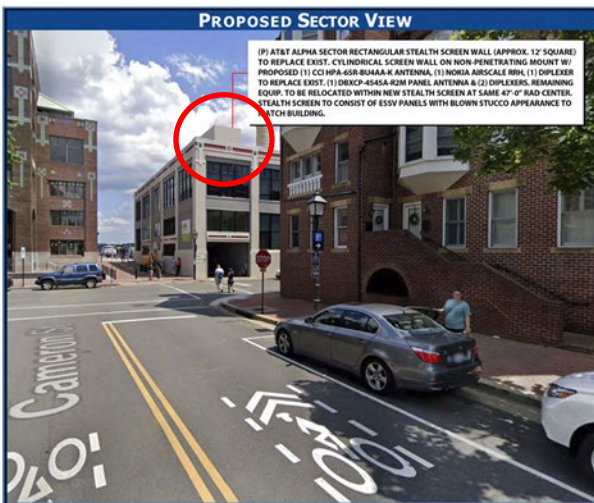


Figure 1 - Northwest corner view



Figure 2 - Southwest corner view

Site context

The subject property sits on the east side of the 100 block of North Union Street, between King and Cameron streets.

II. HISTORY

Ground broke on the U.S. Naval Torpedo Station in **1918**, the day after Armistice Day ended WWI. The building opened in 1919 and the first Mark III torpedoes rolled off the assembly line in 1920. The plant was active for five years before becoming munitions storage. In WWII, it produced Mark XIV torpedoes. By the war's end, it converted to government storage for the Nuremberg War Crimes Trial Records, Smithsonian dinosaur bones, and other large objects and archives. The City of Alexandria acquired the complex in 1969, setting the stage for the Art Center that stands today.¹

Previous BAR Approvals

The Board has approved a number of projects at the Arts Center which include the following:

¹ <https://www.alexandriava.gov/TorpedoFactory> last accessed 3/9/21

BAR Case #1998-0011, 2/18/98 - Signage for North Elevation
BAR Case #1995-0022, 3/1/95 - Rear Signage
BAR Case #2002-0089, 5/15/02 – Signage
BAR Case #2007-0280, 2/6/08 – Signage, Lighting and Awnings
BAR Case #2010-0220, 9/1/10 – Installation of cellular antennas with canister covers, equipment cabinets and cabling.
BAR Case #2015-00231, 8/3/15 - Signage
BAR Case # 2018-00340, 9/5/18 – Chimney demolition
More recently, BAR2011-00354, BAR2014-00408, and BAR2017-00256 removal and installation of antennas on the property’s rooftop

III. ANALYSIS

Certificate of Appropriateness

The *Design Guidelines* state that “Respectful additions make use of the design vocabulary of the existing historic structure;” and “An addition to a historic building should be clearly distinguishable from the original structure;” and finally, “In general, the existing form of a historic building should be retained in the expression of the addition.”

Staff finds the proposed structures on the building’s rooftop compatible with the historic building in scale, mass, and materials. Staff has no objection to the proposed screening structures as they will be minimally visible from a public way and no historic fabric will be lost. In addition, the structures can be easily removed in the future if needed without damaging the historic building. Therefore, staff recommends approval of the Certificate of Appropriateness for alterations as submitted.

STAFF

Marina Novaes, Historic Preservation Planner, Planning & Zoning
Tony LaColla, AICP, Land Use Services Division Chief, Planning & Zoning

IV. CITY DEPARTMENT COMMENTS

Legend: C- code requirement R- recommendation S- suggestion F- finding

Zoning

- F-1 Per section 6-403(B), the antennas may be erected as a part of the main building to their required height; however, per section 6-403(B)(1), they “shall be concealed by or constructed of exterior architectural materials or features of the same type of quality used on the exterior walls of the main building in question”.
- F-2 Per section 6-403(B)(2), “for buildings located within the Old and Historic Alexandria District... the board of architectural review may, after public hearing, waive or modify

the screening requirement of subsection (B)(1) of this section, if the board finds such requirement to be architecturally inappropriate.”

F-2 The proposed replacement antennas and screening comply with zoning.

Code Administration

Code Administration has no comments

Transportation and Environmental Services

R-1 The building permit must be approved and issued prior to the issuance of any permit for demolition, if a separate demolition permit is required. (T&ES)

R-2 Applicant shall be responsible for repairs to the adjacent city right-of-way if damaged during construction activity. (T&ES)

R-3 No permanent structure may be constructed over any existing private and/or public utility easements. It is the responsibility of the applicant to identify any and all existing easements on the plan. (T&ES)

F-1 Previously reviewed under BAR98-00011; BAR2002-00089; BAR2002-00176; BAR2007-00280; BAR2010-00220; BAR2011-00108; BAR2011-00354; BAR2014-00408; BAR2017-00256. (T&ES)

F-2 After review of the information provided, an approved grading plan is not required at this time. Please note that if any changes are made to the plan it is suggested that T&ES be included in the review. (T&ES)

F-3 Floodplain has no comments.

F-4 If the alley located at the rear of the parcel is to be used at any point of the construction process the following will be required:

For a Public Alley - The applicant shall contact T&ES, Construction Permitting & Inspections at (703) 746-4035 to discuss any permits and accommodation requirements that will be required.

For a Private Alley - The applicant must provide proof, in the form of an affidavit at a minimum, from owner of the alley granting permission of use. (T&ES)

C-1 The applicant shall comply with the City of Alexandria’s Solid Waste Control, Title 5, Chapter 1, which sets forth the requirements for the recycling of materials (Sec. 5-1-99). (T&ES)

C-2 The applicant shall comply with the City of Alexandria's Noise Control Code, Title 11, Chapter 5, which sets the maximum permissible noise level as measured at the property line. (T&ES)

C-3 Roof, surface and sub-surface drains be connected to the public storm sewer system, if available, by continuous underground pipe. Where storm sewer is not available applicant

must provide a design to mitigate impact of stormwater drainage onto adjacent properties and to the satisfaction of the Director of Transportation & Environmental Services. (Sec.5-6-224) (T&ES)

- C-4 All secondary utilities serving this site shall be placed underground. (Sec. 5-3-3) (T&ES)
- C-5 Any work within the right-of-way requires a separate permit from T&ES. (Sec. 5-2) (T&ES)
- C-6 All improvements to the city right-of-way such as curbing, sidewalk, driveway aprons, etc. must be city standard design. (Sec. 5-2-1) (T&ES)

Alexandria Archaeology

- F-1 Archaeological oversight will not be necessary for this undertaking.

V. ATTACHMENTS

- 1 – Application Materials*
- 2 – Supplemental Materials*

BAR Case # _____

ADDRESS OF PROJECT: 105 North Union Street

DISTRICT: ☒ Old & Historic Alexandria ☐ Parker – Gray ☐ 100 Year Old Building

TAX MAP AND PARCEL: 075.01-04-08/07 ZONING: CD

APPLICATION FOR: *(Please check all that apply)*

☒ CERTIFICATE OF APPROPRIATENESS

☐ PERMIT TO MOVE, REMOVE, ENCAPSULATE OR DEMOLISH
(Required if more than 25 square feet of a structure is to be demolished/impacted)

☐ WAIVER OF VISION CLEARANCE REQUIREMENT and/or YARD REQUIREMENTS IN A VISION
CLEARANCE AREA (Section 7-802, Alexandria 1992 Zoning Ordinance)

☐ WAIVER OF ROOFTOP HVAC SCREENING REQUIREMENT
(Section 6-403(B)(3), Alexandria 1992 Zoning Ordinance)

Applicant: ☐ Property Owner ☒ Business *(Please provide business name & contact person)*

Name: AT&T

Address: 1750 Standard Dr.

City: Hanover State: MD Zip: 21076

Phone: 443-388-6303 E-mail: kelsey.hollingshead@smartlinkgroup.com

Authorized Agent *(if applicable)*: ☐ Attorney ☐ Architect ☒ Contractor

Name: Smartlink/Kelsey Hollingshead

Phone: 443-388-6303

E-mail: kelsey.hollingshead@smartlinkgroup.com

Legal Property Owner:

Name: CITY OF ALEXANDRIA

Address: 301 King Street

City: Alexandria State: VA Zip: 22314

Phone: E-mail: Dwayne.Smith@alexandriava.gov

- ☐ Yes ☒ No Is there an historic preservation easement on this property?
☐ Yes ☐ No If yes, has the easement holder agreed to the proposed alterations?
☐ Yes ☒ No Is there a homeowner's association for this property?
☐ Yes ☐ No If yes, has the homeowner's association approved the proposed alterations?

If you answered yes to any of the above, please attach a copy of the letter approving the project.

NATURE OF PROPOSED WORK: *Please check all that apply*

- ☐ NEW CONSTRUCTION
☒ EXTERIOR ALTERATION: *Please check all that apply.*
 ☐ awning ☐ fence, gate or garden wall ☐ HVAC equipment ☐ shutters
 ☐ doors ☐ windows ☐ siding ☐ shed
 ☐ lighting ☐ pergola/trellis ☐ painting unpainted masonry
 ☒ other Antennas and concealment _____
☒ ADDITION
☐ DEMOLITION/ENCAPSULATION
☐ SIGNAGE

DESCRIPTION OF PROPOSED WORK: *Please describe the proposed work in detail (Additional pages may be attached).*

AT&T is Proposing to swap out 3 existing non penetrating mounts with 3 new concealment mounts/ stealth walls. AT&T is swapping out 3 old antennas for 3 new antennas in addition to adding 3 new RRHs located all behind the proposed concealment.

SUBMITTAL REQUIREMENTS:

Items listed below comprise the **minimum supporting materials** for BAR applications. Staff may request additional information during application review. Please refer to the relevant section of the *Design Guidelines* for further information on appropriate treatments.

Applicants must use the checklist below to ensure the application is complete. Include all information and material that are necessary to thoroughly describe the project. Incomplete applications will delay the docketing of the application for review. Pre-application meetings are required for all proposed additions. All applicants are encouraged to meet with staff prior to submission of a completed application.

Electronic copies of submission materials should be submitted whenever possible.

Demolition/Encapsulation : *All applicants requesting 25 square feet or more of demolition/encapsulation must complete this section. Check N/A if an item in this section does not apply to your project.*

- N/A
- ☐ ☐ Survey plat showing the extent of the proposed demolition/encapsulation.
☐ ☐ Existing elevation drawings clearly showing all elements proposed for demolition/encapsulation.
☐ ☐ Clear and labeled photographs of all elevations of the building if the entire structure is proposed to be demolished.
☐ ☐ Description of the reason for demolition/encapsulation.
☐ ☐ Description of the alternatives to demolition/encapsulation and why such alternatives are not considered feasible.

Additions & New Construction: *Drawings must be to scale and should not exceed 11" x 17" unless approved by staff. All plans must be folded and collated into 3 complete 8 1/2" x 11" sets. Additional copies may be requested by staff for large-scale development projects or projects fronting Washington Street. Check N/A if an item in this section does not apply to your project.*

- ☐ ☐ ^{N/A} Scaled survey plat showing dimensions of lot and location of existing building and other structures on the lot, location of proposed structure or addition, dimensions of existing structure(s), proposed addition or new construction, and all exterior, ground and roof mounted equipment.
- ☐ ☐ FAR & Open Space calculation form.
- ☐ ☐ Clear and labeled photographs of the site, surrounding properties and existing structures, if applicable.
- ☐ ☐ Existing elevations must be scaled and include dimensions.
- ☐ ☐ Proposed elevations must be scaled and include dimensions. Include the relationship to adjacent structures in plan and elevations.
- ☐ ☐ Materials and colors to be used must be specified and delineated on the drawings. Actual samples may be provided or required.
- ☐ ☐ Manufacturer's specifications for materials to include, but not limited to: roofing, siding, windows, doors, lighting, fencing, HVAC equipment and walls.
- ☐ ☐ For development site plan projects, a model showing mass relationships to adjacent properties and structures.

Signs & Awnings: *One sign per building under one square foot does not require BAR approval unless illuminated. All other signs including window signs require BAR approval. Check N/A if an item in this section does not apply to your project.*

- ☐ ☐ ^{N/A} Linear feet of building: Front: _____ Secondary front (if corner lot): _____.
- ☐ ☐ Square feet of existing signs to remain: _____.
- ☐ ☐ Photograph of building showing existing conditions.
- ☐ ☐ Dimensioned drawings of proposed sign identifying materials, color, lettering style and text.
- ☐ ☐ Location of sign (show exact location on building including the height above sidewalk).
- ☐ ☐ Means of attachment (drawing or manufacturer's cut sheet of bracket if applicable).
- ☐ ☐ Description of lighting (if applicable). Include manufacturer's cut sheet for any new lighting fixtures and information detailing how it will be attached to the building's facade.

Alterations: *Check N/A if an item in this section does not apply to your project.*

- ☐ ☒ ^{N/A} Clear and labeled photographs of the site, especially the area being impacted by the alterations, all sides of the building and any pertinent details.
- ☐ ☒ Manufacturer's specifications for materials to include, but not limited to: roofing, siding, windows, doors, lighting, fencing, HVAC equipment and walls.
- ☐ ☒ Drawings accurately representing the changes to the proposed structure, including materials and overall dimensions. Drawings must be to scale.
- ☐ ☒ ~~N/A~~ An official survey plat showing the proposed locations of HVAC units, fences, and sheds.
- ☐ ☒ Historic elevations or photographs should accompany any request to return a structure to an earlier appearance.

BAR Case # _____

ALL APPLICATIONS: *Please read and check that you have read and understand the following items:*

- ☒ I have submitted a filing fee with this application. (Checks should be made payable to the City of Alexandria. Please contact staff for assistance in determining the appropriate fee.)
- ☒ I understand the notice requirements and will return a copy of the three respective notice forms to BAR staff at least five days prior to the hearing. If I am unsure to whom I should send notice I will contact Planning and Zoning staff for assistance in identifying adjacent parcels.
- ☒ I, the applicant, or an authorized representative will be present at the public hearing.
- ☒ I understand that any revisions to this initial application submission (including applications deferred for restudy) must be accompanied by the BAR Supplemental form and 3 sets of revised materials.

The undersigned hereby attests that all of the information herein provided including the site plan, building elevations, prospective drawings of the project, and written descriptive information are true, correct and accurate. The undersigned further understands that, should such information be found incorrect, any action taken by the Board based on such information may be invalidated. The undersigned also hereby grants the City of Alexandria permission to post placard notice as required by Article XI, Division A, Section 11-301(B) of the 1992 Alexandria City Zoning Ordinance, on the property which is the subject of this application. The undersigned also hereby authorizes the City staff and members of the BAR to inspect this site as necessary in the course of research and evaluating the application. The applicant, if other than the property owner, also attests that he/she has obtained permission from the property owner to make this application.

APPLICANT OR AUTHORIZED AGENT:

Signature: Kelsey Hollingshead

Printed Name: Kelsey Hollingshead

Date: 2/12/21

OWNERSHIP AND DISCLOSURE STATEMENT

Use additional sheets if necessary

1. Applicant. State the name, address and percent of ownership of any person or entity owning an interest in the applicant, unless the entity is a corporation or partnership, in which case identify each owner of more than three percent. The term ownership interest shall include any legal or equitable interest held at the time of the application in the real property which is the subject of the application.

Name	Address	Percent of Ownership
1. City of Alexandria	301 KING ST ALEXANDRIA VA 22314	50%
2. LEASEHOLD TENANTS C/O CITY OF ALEXANDRIA	105 N UNION ST ALEXANDRIA VA 22314-3217	50%
3.		

2. Property. State the name, address and percent of ownership of any person or entity owning an interest in the property located at 105 N Union Street Alexandria VA (address), unless the entity is a corporation or partnership, in which case identify each owner of more than three percent. The term ownership interest shall include any legal or equitable interest held at the time of the application in the real property which is the subject of the application.

Name	Address	Percent of Ownership
1. City of Alexandria	301 KING ST ALEXANDRIA VA 22314	50%
2. LEASEHOLD TENANTS C/O CITY OF ALEXANDRIA	105 N UNION ST ALEXANDRIA VA 22314-3217	50%
3.		

3. Business or Financial Relationships. Each person or entity listed above (1 and 2), with an ownership interest in the applicant or in the subject property is required to disclose any business or financial relationship, as defined by Section 11-350 of the Zoning Ordinance, existing at the time of this application, or within the 12-month period prior to the submission of this application with any member of the Alexandria City Council, Planning Commission, Board of Zoning Appeals or either Boards of Architectural Review.

Name of person or entity	Relationship as defined by Section 11-350 of the Zoning Ordinance	Member of the Approving Body (i.e. City Council, Planning Commission, etc.)
1. AT&T/ Kelsey Hollingshead	N/A	N/A
2.		
3.		

NOTE: Business or financial relationships of the type described in Sec. 11-350 that arise after the filing of this application and before each public hearing must be disclosed prior to the public hearings.

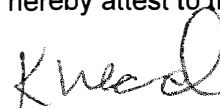
As the applicant or the applicant's authorized agent, I hereby attest to the best of my ability that the information provided above is true and correct.

2/12/21

Date

Kelsey Hollingshead

Printed Name



Signature



1362 Mellon Road, Suite 140
Hanover, MD 21076

FA # 10122498 / SITE ID # 98812
SWIFT ALLEY

105 NORTH UNION STREET, ALEXANDRIA, VA 22314

Prepared for
AT&T Mobility
7150 Standard Drive
Hanover, MD 21076



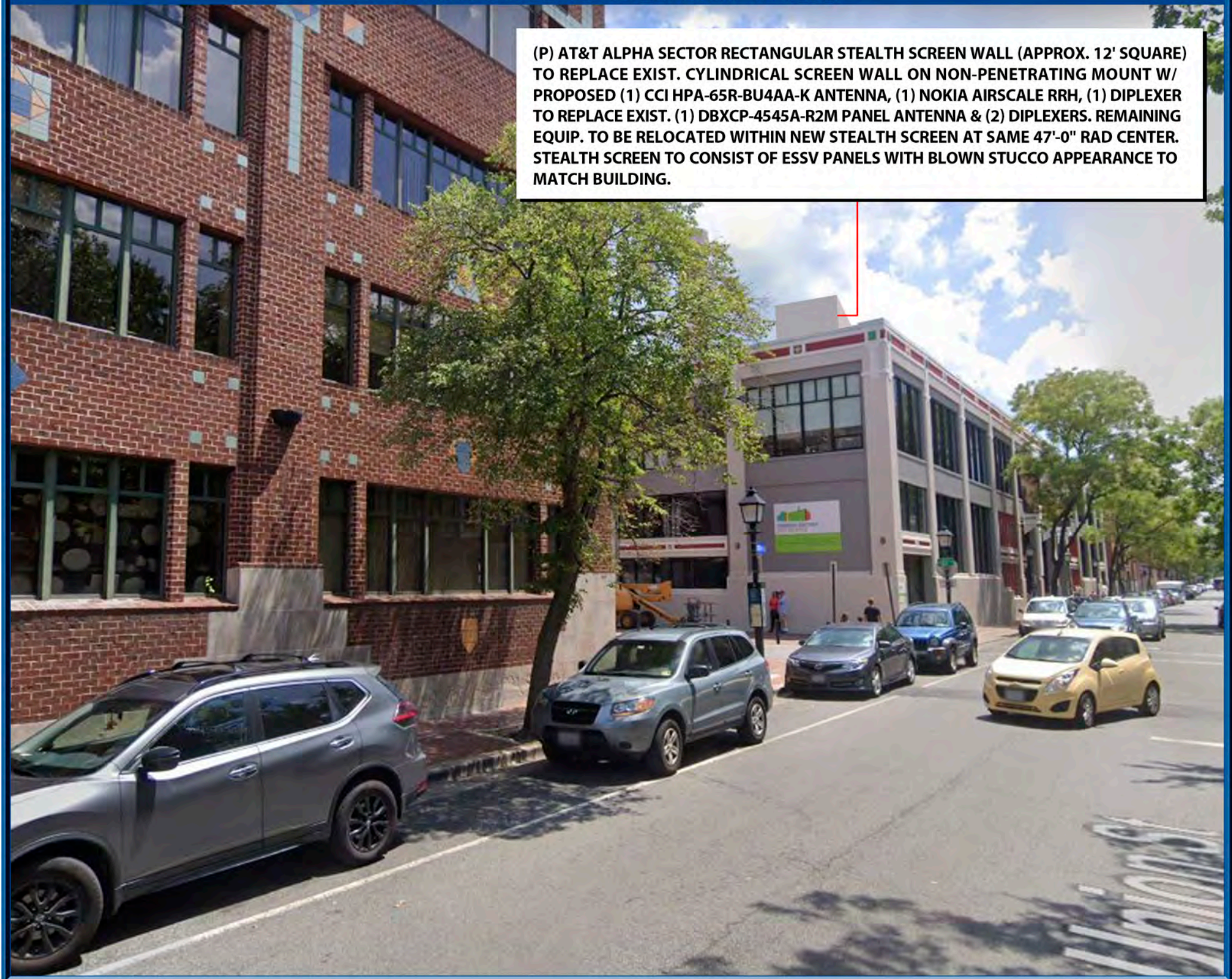
SATELLITE VIEW



EXISTING SECTOR VIEW



PROPOSED SECTOR VIEW



(P) AT&T ALPHA SECTOR RECTANGULAR STEALTH SCREEN WALL (APPROX. 12' SQUARE) TO REPLACE EXIST. CYLINDRICAL SCREEN WALL ON NON-PENETRATING MOUNT W/ PROPOSED (1) CCI HPA-65R-BU4AA-K ANTENNA, (1) NOKIA AIRSCALE RRH, (1) DIPLEXER TO REPLACE EXIST. (1) DBXCP-4545A-R2M PANEL ANTENNA & (2) DIPLEXERS. REMAINING EQUIP. TO BE RELOCATED WITHIN NEW STEALTH SCREEN AT SAME 47'-0" RAD CENTER. STEALTH SCREEN TO CONSIST OF ESSV PANELS WITH BLOWN STUCCO APPEARANCE TO MATCH BUILDING.

SATELLITE VIEW



EXISTING SECTOR VIEW



PROPOSED SECTOR VIEW





1362 Mellon Road, Suite 140
Hanover, MD 21076

FA # 10122498 / SITE ID # 98812
SWIFT ALLEY

105 NORTH UNION STREET, ALEXANDRIA, VA 22314

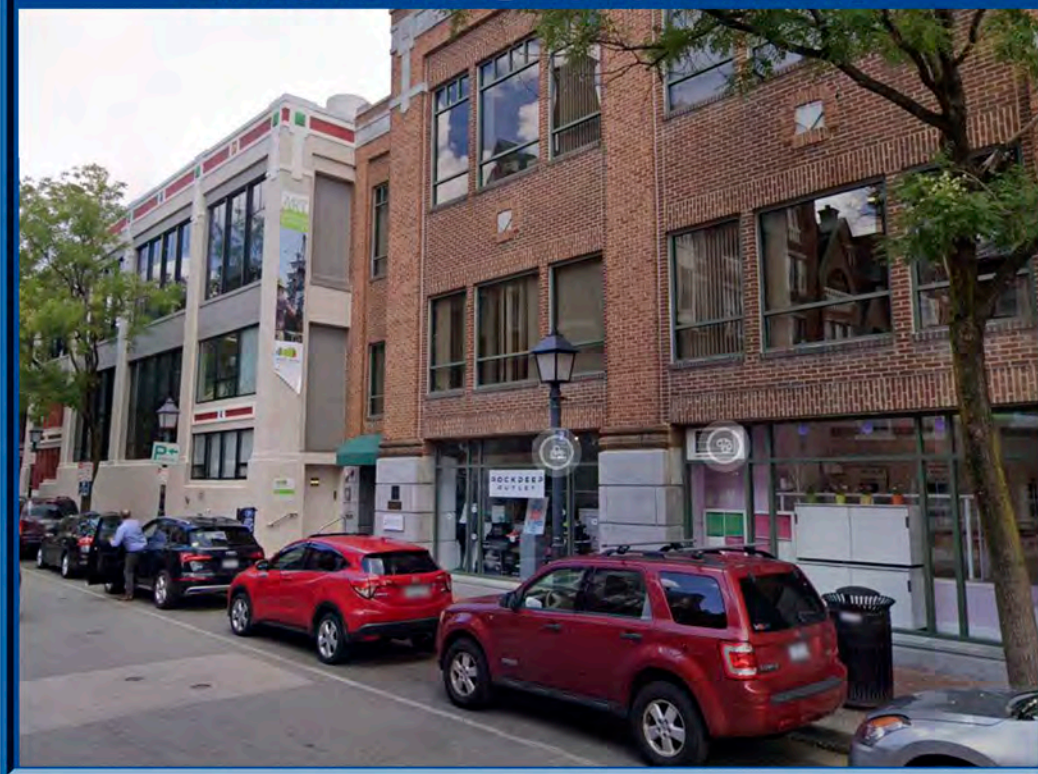
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PROPOSED SECTOR VIEW



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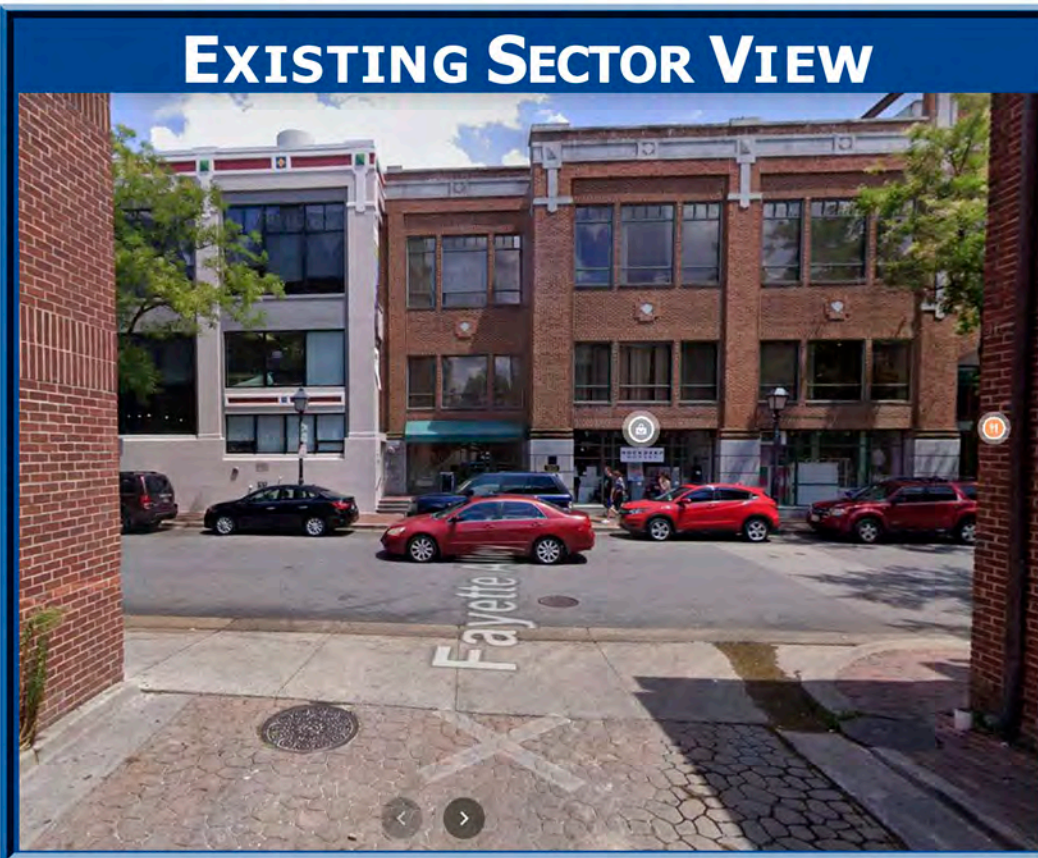
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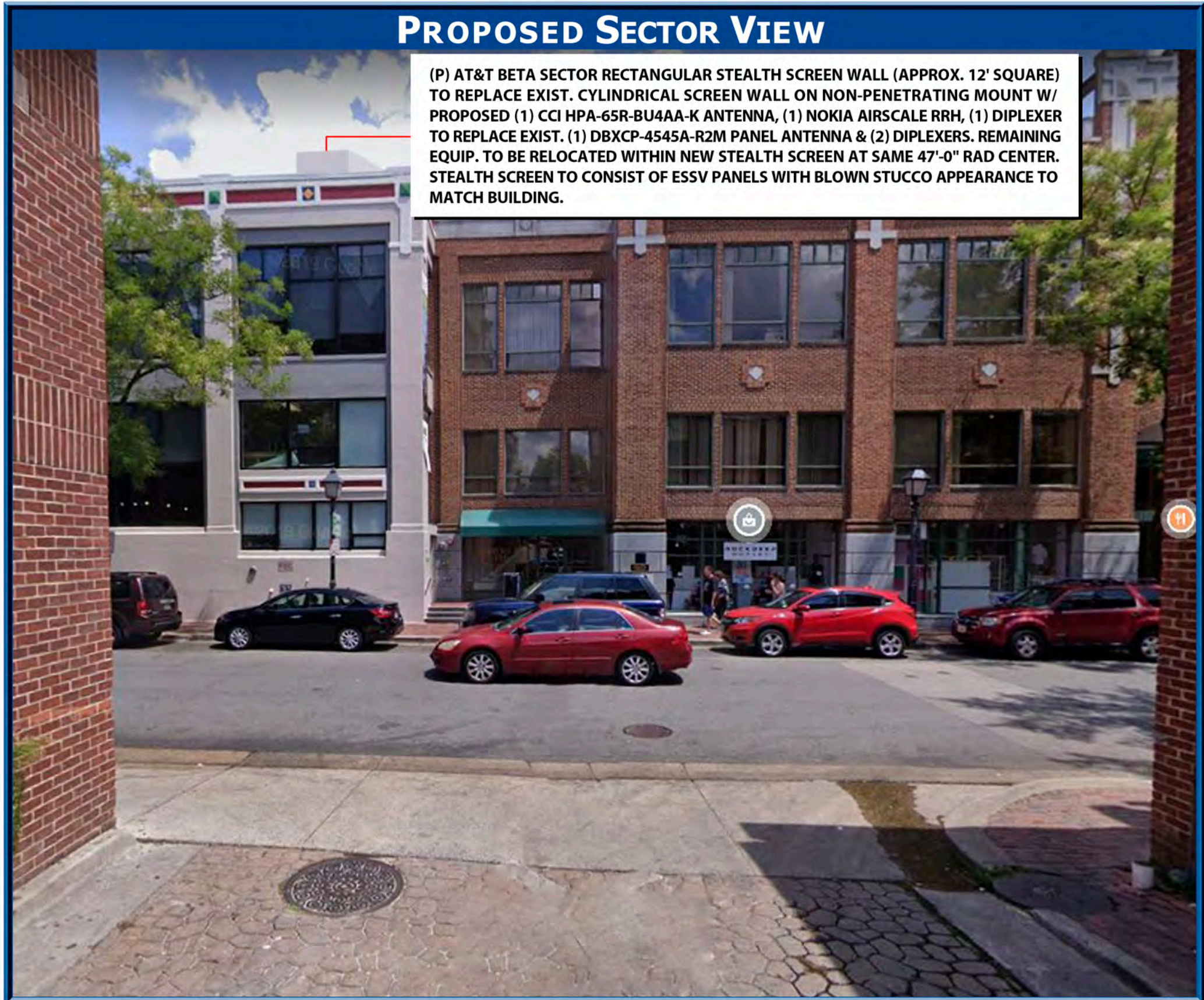
SATELLITE VIEW



EXISTING SECTOR VIEW



PROPOSED SECTOR VIEW





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Hanover, MD 21076

FA # 10122498 / SITE ID # 98812
SWIFT ALLEY

105 NORTH UNION STREET, ALEXANDRIA, VA 22314

Prepared for
AT&T Mobility
7150 Standard Drive
Hanover, MD 21076



SATELLITE VIEW



EXISTING SECTOR VIEW



PROPOSED SECTOR VIEW





AT&T

SITE NAME: SWIFT ALLEY

FA#: 10122498

USID: 98812

COUNTY: ALEXANDRIA CITY

STRUCTURE TYPE: 42'-0" ROOFTOP



1825 W. WALNUT HILL LANE, SUITE 120
IRVING, TEXAS 75038
1-855-669-5421

DRAWING SCALES ARE INTENDED FOR 11"x17" SIZE
PRINTED MEDIA ONLY.

SUBMITTALS

REV	DATE	DESCRIPTION	BY
B	04/02/20	90% CD	ANI
C	07/02/20	90% CD	RMM
D	08/01/20	90% CD	RMM
E	09/09/20	90% CD	MHF
F	09/17/20	90% CD	RMM
G	11/12/20	90% CD	RMM
O	11/17/20	100% CD	RMM



PROJECT TITLE

USID: 98812
FA#: 10122498

SWIFT ALLEY

105 NORTH UNION STREET
ALEXANDRIA, VA 22314

EXISTING 42'-0" ROOFTOP

SHEET DESCRIPTION

TITLE SHEET

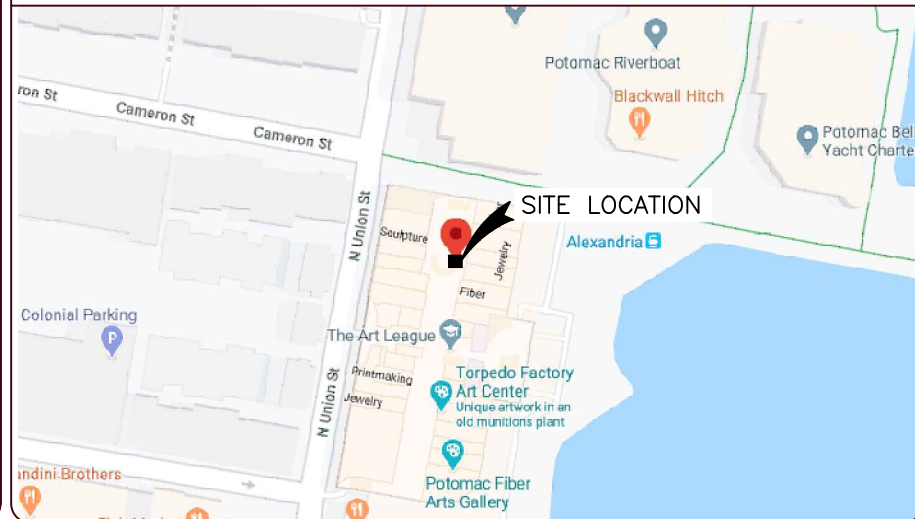
SHEET NO.

T-1

PROJECT INFORMATION

SITE ADDRESS:	105 NORTH UNION STREET ALEXANDRIA, VA 22314	APPLICANT:	AT&T MOBILITY 7150 STANDARD DRIVE HANOVER, MD 21076
LATITUDE (NAD83):	38.8050889° N	TOWER OWNER:	CITY OF ALEXANDRIA 301 KING STREET, ALEXANDRIA, VA 22314 UNKNOWN
LONGITUDE (NAD83):	-77.0397889° W	ADDRESS:	
GROUND ELEVATION:	±3.3' (AMSL)	CONTACT:	
COUNTY:	ALEXANDRIA CITY	PHONE:	
JURISDICTION:	CITY OF ALEXANDRIA	A&E FIRM:	TRYLON TSF 1825 W. WALNUT HILL LANE, STE#120 IRVING, TX 75038 KATYA SERAVALLE 1-855-669-5421 KATYA.SERAVALLE@TRYLON.COM
ELECTRIC PROVIDER:	DOMINION ENERGY 1-866-366-4357	CONTACT:	
TELCO PROVIDER:	AT&T	PHONE:	
PHONE:		EMAIL:	
OCCUPANCY TYPE:	UNMANNED		
ADA COMPLIANCE	FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION.		

AREA MAP



PROJECT DESCRIPTION

THE SCOPE OF WORK WILL BE COMPRISED OF:

- REMOVE (3) EXISTING NON-PENETRATING MOUNTS w/ CONCEALMENT MOUNTS
- REMOVE (3) EXISTING ANTENNAS
- REMOVE (6) EXISTING DIPLEXER ON TOP
- REMOVE (6) EXISTING DIPLEXER AT BOTTOM
- INSTALL (3) NEW ANTENNAS
- INSTALL (3) NEW RRHS
- INSTALL (3) NEW DIPLEXERS
- INSTALL (1) NEW RECTIFIER
- INSTALL (2) NEW CONVERTERS
- MOUNT DESIGN WAS DONE BY NB+C ENGINEERING SERVICES, LLC. DATED AT 07-23-2020.
- STRUCTURAL ANALYSIS CONNECTION WAS DONE BY TRYLON DATED AT 07/21/20.

RFDS

RFDS ID: 3546843 ISSUE DATE: 02/20/2020 REVISION: V2020_0.1

UPDATED BY: ar351y DATE/TIME UPDATED: 2/20/2020 @ 9:44:52 AM

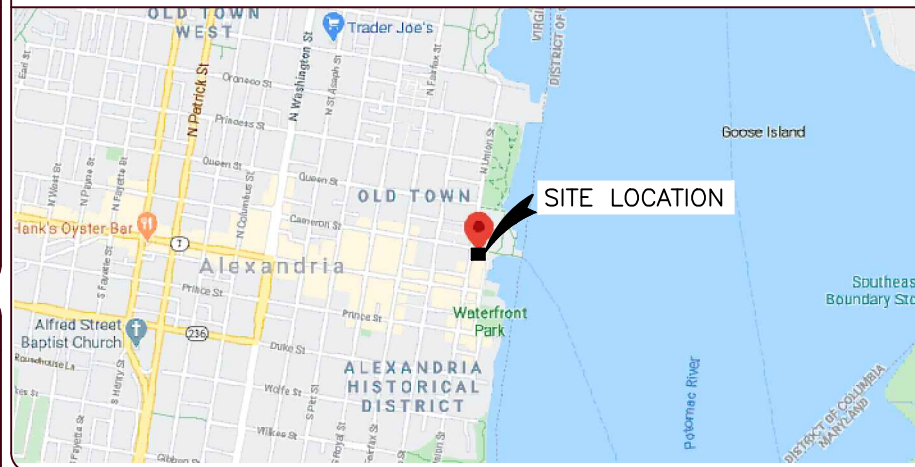
GENERAL NOTES

THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. A TECHNICIAN WILL VISIT THE SITE AS REQUIRED FOR ROUTINE MAINTENANCE. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT DISTURBANCE OR EFFECT ON DRAINAGE; NO SANITARY SEWER SERVICE, PORTABLE WATER, OR TRASH DISPOSAL IS REQUIRED, NO COMMERCIAL SIGNAGE AND NO LANDSCAPING IS PROPOSED.

DO NOT SCALE DRAWINGS

ALL DRAWINGS CONTAINED HEREIN ARE FORMATTED FOR A 11"x17" SET. CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

LOCATION MAP



DRIVING DIRECTIONS

FROM 7150 STANDARD DRIVE HANOVER, MD 21076:
GET ON MD-100 E FROM STANDARD DR, PARK CIR DR AND COCA COLA DR, FOLLOW BALTIMORE-WASHINGTON PKWY AND I-495 S/I-95 S TO US-1 N/S PATRICK ST IN ALEXANDRIA. TAKE EXIT 177B-177C FROM I-495 S/I-95 S, TAKE GEORGE WASHINGTON MEMORIAL PKWY/S WASHINGTON ST AND CAMERON ST TO N UNION ST.

APPROVALS

AT&T (CM): _____ DATE: _____
SMARTLINK (PM): _____ DATE: _____
RF ENGINEER: _____ DATE: _____
SITE ACQUISITION: _____ DATE: _____
LANDLORD: _____ DATE: _____



Know what's below.
Call before you dig.

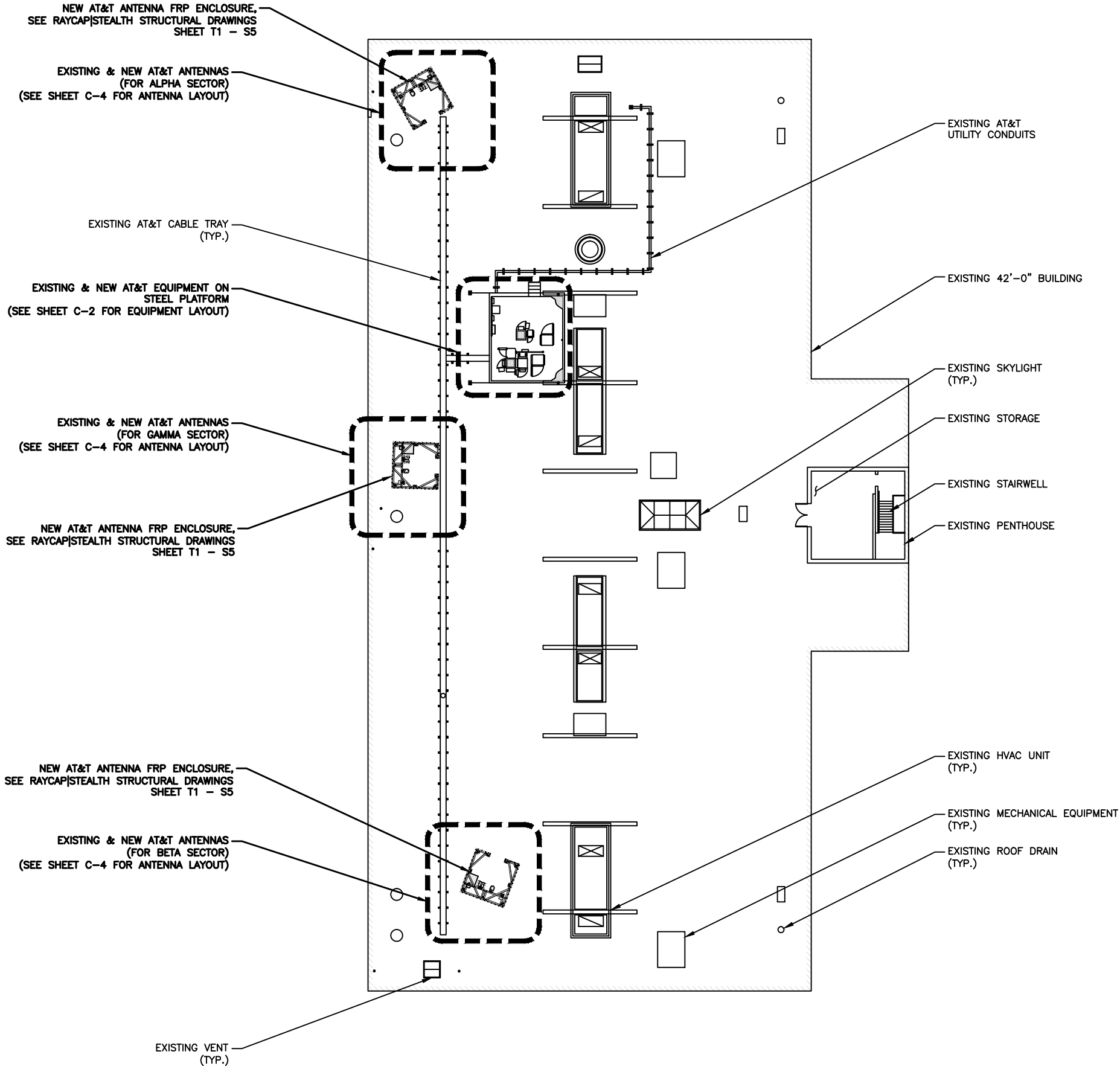
TO OBTAIN LOCATION OF PARTICIPANTS
UNDERGROUND FACILITIES BEFORE
YOU DIG IN VIRGINIA, CALL VIRGINIA 811

TOLL FREE: 1-800-552-7001 OR
www.va811.com

VIRGINIA STATUTE
REQUIRES MIN OF 2
WORKING DAYS NOTICE
BEFORE YOU EXCAVATE

GENERAL NOTES:

1. THE SUBCONTRACTOR SHALL GIVE ALL NOTICES AND REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES BEARING ON THE PERFORMANCE OF THE WORK. THE WORK PERFORMED ON THE PROJECT AND THE MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES.
2. THE ARCHITECT/ENGINEER HAVE MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONTRACT DOCUMENTS THE COMPLETE SCOPE OF WORK. THE SUBCONTRACTOR BIDDING THE JOB IS NEVERTHELESS CAUTIONED THAT MINOR OMISSIONS OR ERRORS IN THE DRAWINGS AND OR SPECIFICATIONS SHALL NOT EXCUSE SAID SUBCONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS.
3. THE SUBCONTRACTOR OR BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) THE AT&T REPRESENTATIVE OF ANY CONFLICTS, ERRORS OR OMISSIONS PRIOR TO THE SUBMISSION OF SUBCONTRACTOR'S PROPOSAL OR PERFORMANCE OF WORK. IN THE EVENT OF DISCREPANCIES, THE SUBCONTRACTOR SHALL PRICE THE MORE COSTLY OR EXTENSIVE WORK, UNLESS DIRECTED IN WRITING OTHERWISE.
4. THE SCOPE OF WORK SHALL INCLUDE FURNISHING ALL MATERIALS, EQUIPMENT, LABOR AND ALL OTHER MATERIAL AND LABOR DEEMED NECESSARY TO COMPLETE THE WORK/PROJECT AS DESCRIBED HEREIN.
5. THE SUBCONTRACTOR SHALL VISIT THE JOB SITE PRIOR TO THE SUBMISSION OF BIDS OR PERFORMING WORK TO FAMILIARIZE THEMSELVES WITH THE FIELD CONDITIONS AND TO VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
6. THE SUBCONTRACTOR SHALL OBTAIN AUTHORIZATION TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED BY THE CONSTRUCTION DRAWINGS/CONTRACT DOCUMENTS.
7. THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO THE MANUFACTURER'S/VENDOR'S SPECIFICATIONS UNLESS INFORMED OTHERWISE OR WHERE LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
8. THE SUBCONTRACTOR SHALL PROVIDE A FULL SET OF CONSTRUCTION DOCUMENTS AT THE SITE, UPDATED WITH THE LATEST REVISIONS AND ADDENDUMS OR CLARIFICATIONS, AVAILABLE FOR THE USE BY ALL PERSONNEL INVOLVED WITH THE PROJECT.
9. THE SUBCONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE SUBCONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
10. THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS WHICH MAY BE REQUIRED FOR THE WORK BY THE ARCHITECT/ENGINEERING, THE STATE, COUNTY OR LOCAL GOVERNMENT AUTHORITY.
11. THE SUBCONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, EASEMENTS, PAVEMENTS, CURBING, ETC. DURING CONSTRUCTION. UPON COMPLETION OF WORK, THE SUBCONTRACTOR SHALL REPAIR ANY DAMAGE THE MAY HAVE OCCURRED DUE TO CONSTRUCTION ON OR ABOUT THE PROPERTY.
12. THE SUBCONTRACTOR SHALL MAINTAIN THE GENERAL WORK AREA AS CLEAN AND HAZARD FREE DURING CONSTRUCTION AND DISPOSE OF ALL DIRT, DEBRIS, RUBBISH AND REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY. PREMISES SHALL BE LEFT IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST OR SMUDGES OF ANY NATURE.
13. THE SUBCONTRACTOR SHALL COMPLY WITH ALL OSHA REQUIREMENTS AS THEY APPLY TO THIS PROJECT.
14. THE SUBCONTRACTOR SHALL NOTIFY THE AT&T REPRESENTATIVE WHERE A CONFLICT OCCURS ON ANY OF THE CONTRACT DOCUMENTS. THE SUBCONTRACTOR IS NOT TO ORDER MATERIAL OR CONSTRUCT ANY PORTION OF THE WORK THAT IS IN CONFLICT UNTIL CONFLICT IS RESOLVED BY THE AT&T REPRESENTATIVE.
15. THE SUBCONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, PROPERTY LINES, ETC. ON THE JOBS.
16. CABLE ATTACHMENT TO FOLLOW AT&T CONSTRUCTION STANDARDS DOCUMENT # ATT-CEM-18006 TITLED "HOSE CLAMP & METAL SNAP-IN SUPPORTS PIM PROBLEM RESOLUTION".
17. CONTRACTOR SHALL REMOVE ALL DEBRIS AND NOT USE CITY'S DUMPSTERS.



DRAWING SCALES ARE INTENDED FOR 11"x17" SIZE PRINTED MEDIA ONLY.

SUBMITTALS			
REV	DATE	DESCRIPTION	BY
B	04/02/20	90% CD	ANI
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E	09/09/20	90% CD	MHF
F	09/17/20	90% CD	RMM
G	11/12/20	90% CD	RMM
O	11/17/20	100% CD	RMM



PROJECT TITLE

USID: 98812
FA#: 10122498

SWIFT ALLEY

105 NORTH UNION STREET
ALEXANDRIA, VA 22314

EXISTING 42'-0" ROOFTOP

SHEET DESCRIPTION

BUILDING PLAN

SHEET NO.

C-1





DRAWING SCALES ARE INTENDED FOR 11"x17" SIZE PRINTED MEDIA ONLY.

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PROJECT TITLE

USID: 98812
FA#: 10122498

SWIFT ALLEY

105 NORTH UNION STREET
ALEXANDRIA, VA 22314

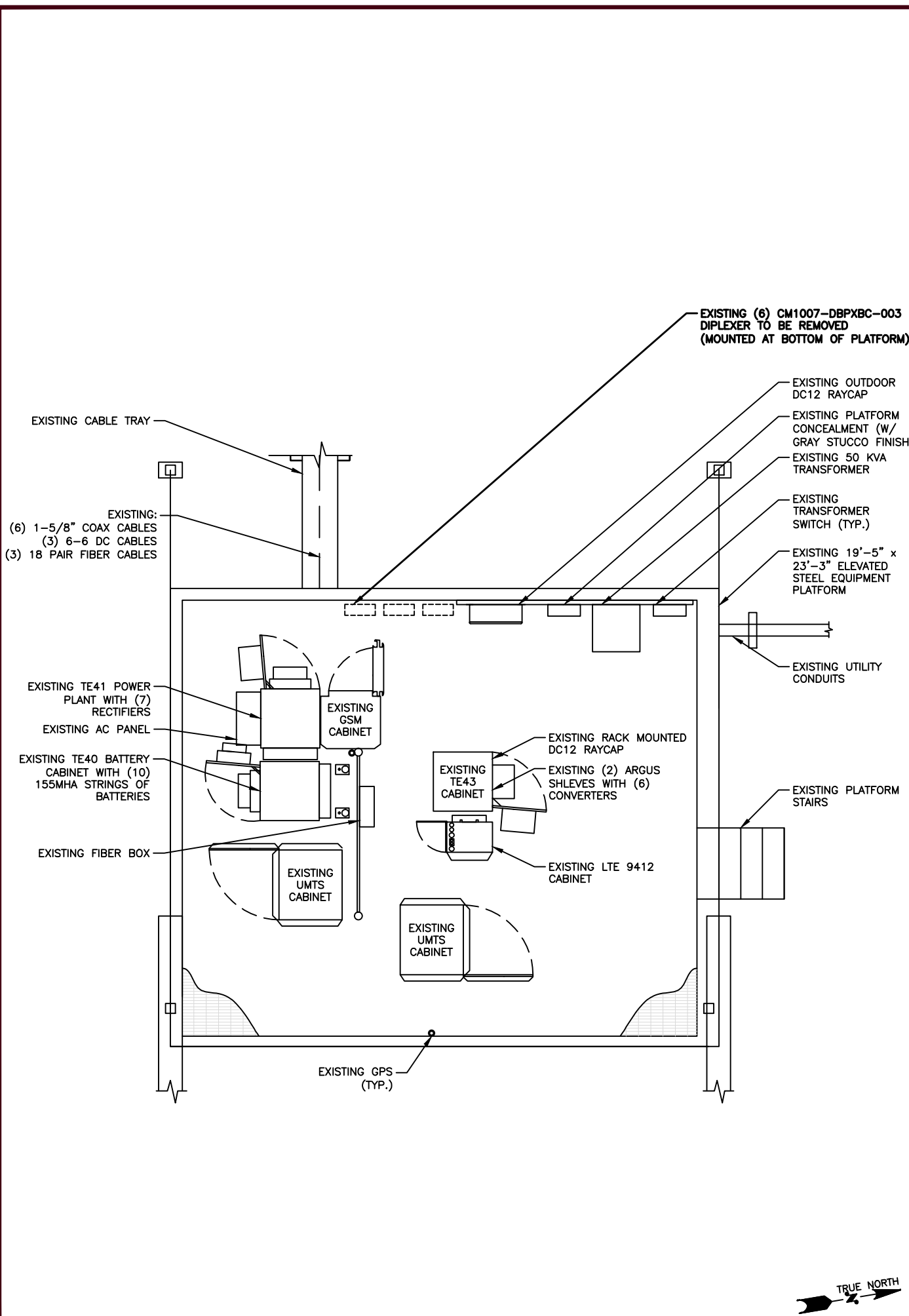
EXISTING 42'-0" ROOFTOP

SHEET DESCRIPTION

EQUIPMENT PLAN

SHEET NO.

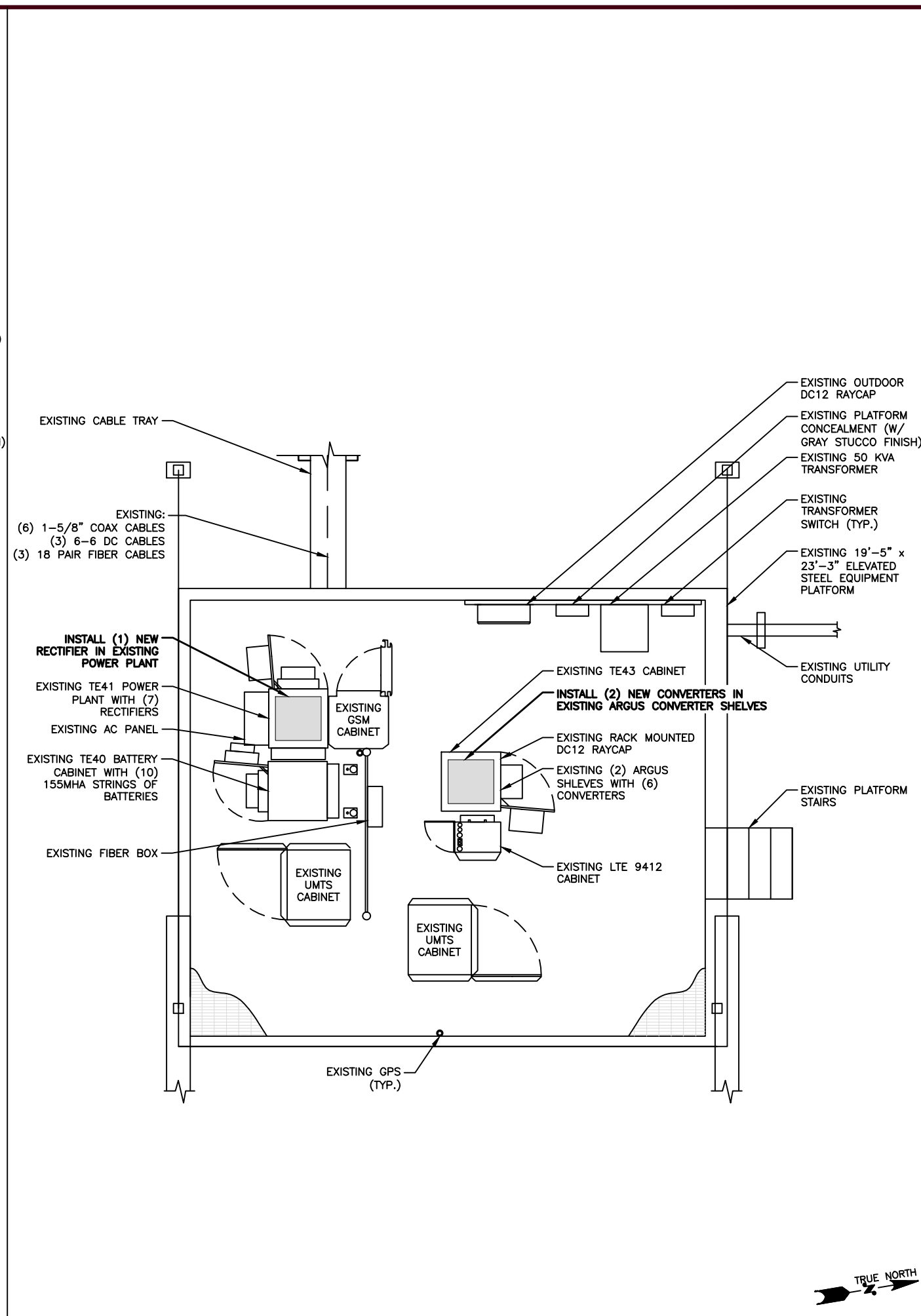
C-2



EXISTING EQUIPMENT LAYOUT

SCALE: 3/16"=1'-0" (11x17)
(OR) 3/8"=1'-0" (22x34)

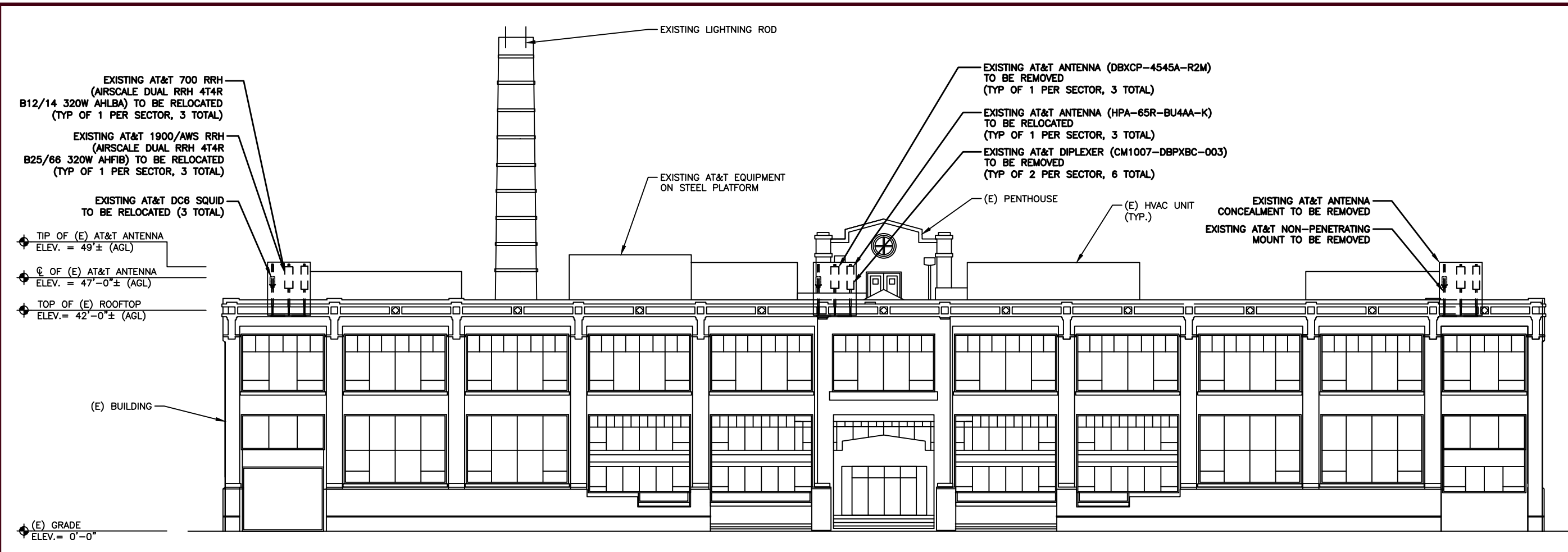
1



PROPOSED EQUIPMENT LAYOUT

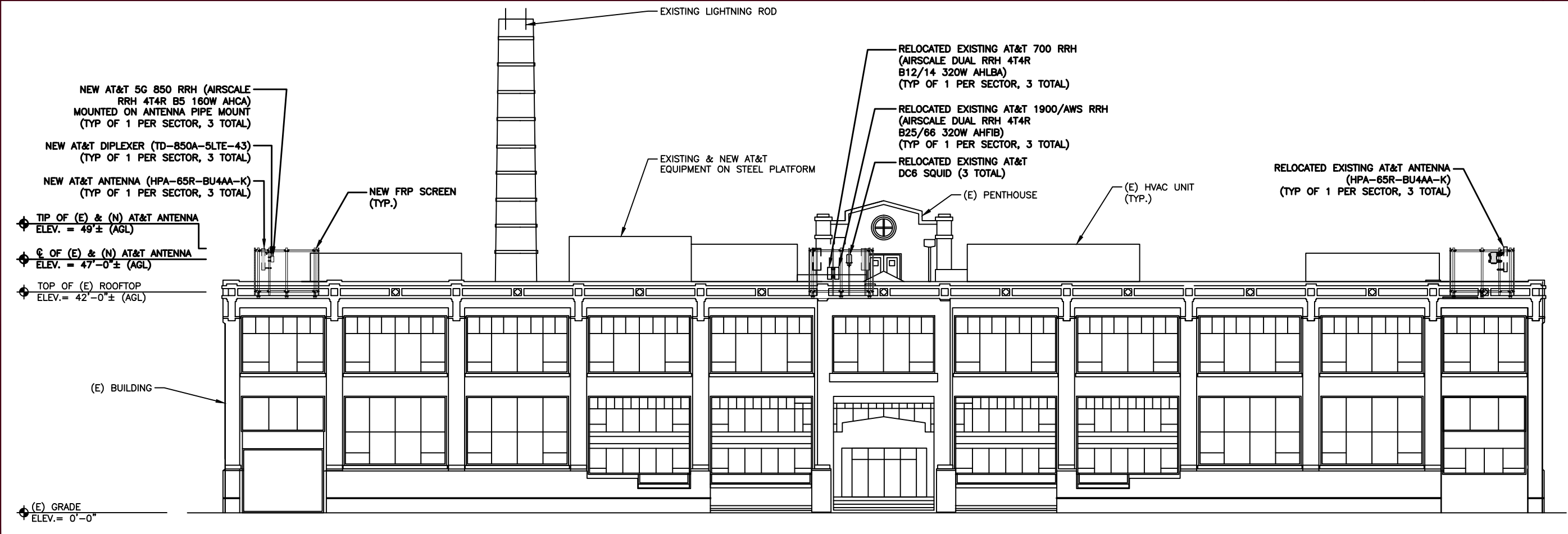
SCALE: 3/16"=1'-0" (11x17)
(OR) 3/8"=1'-0" (22x34)

2



EXISTING BUILDING ELEVATION-WEST

SCALE: 1"=20'-0" (11x17)
(OR) 2"=20'-0" (22x34)



PROPOSED BUILDING ELEVATION-WEST

SCALE: 1"=20'-0" (11x17)
(OR) 2"=20'-0" (22x34)



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PROJECT TITLE

USID: 98812
FA#: 10122498

SWIFT ALLEY

105 NORTH UNION STREET
ALEXANDRIA, VA 22314

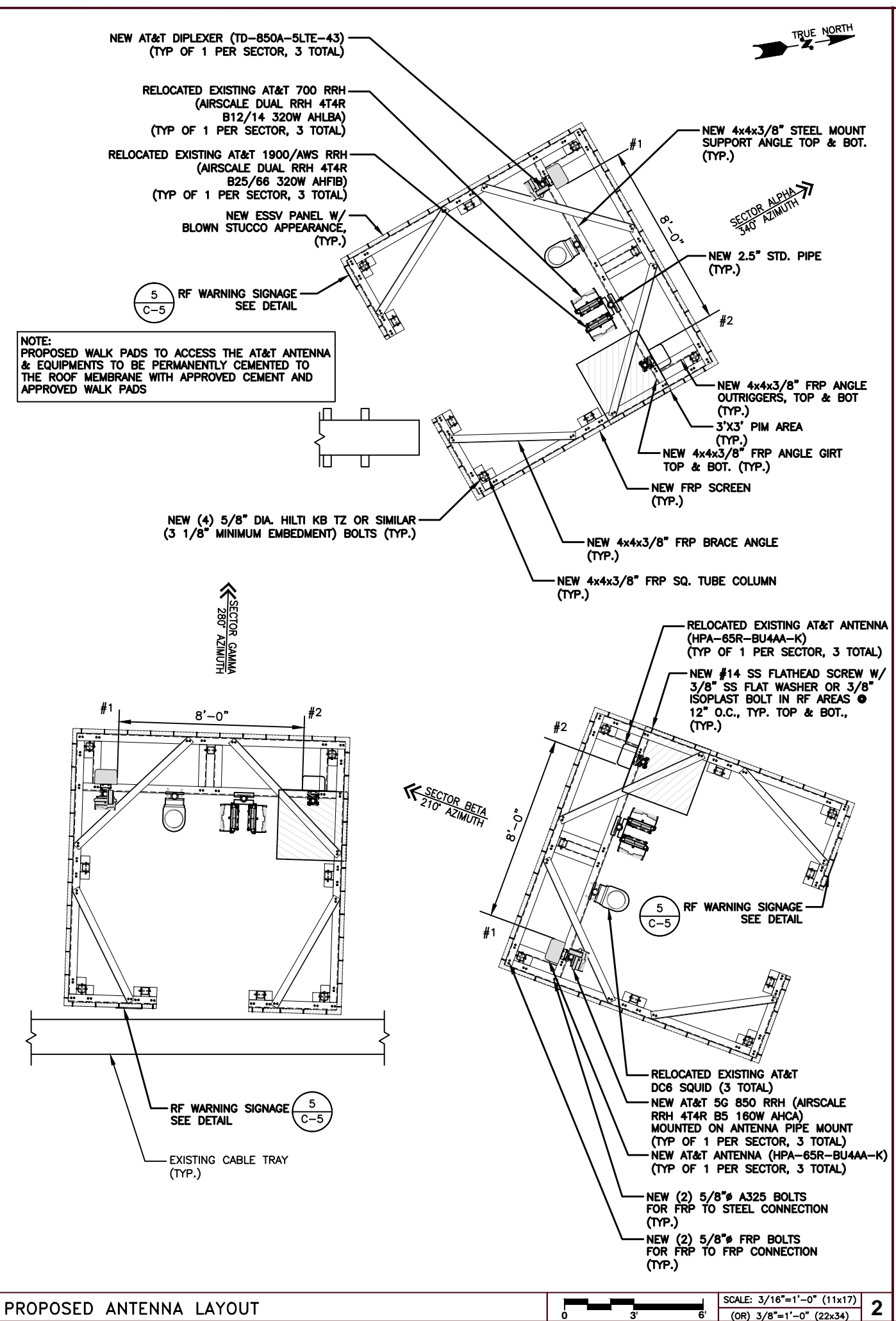
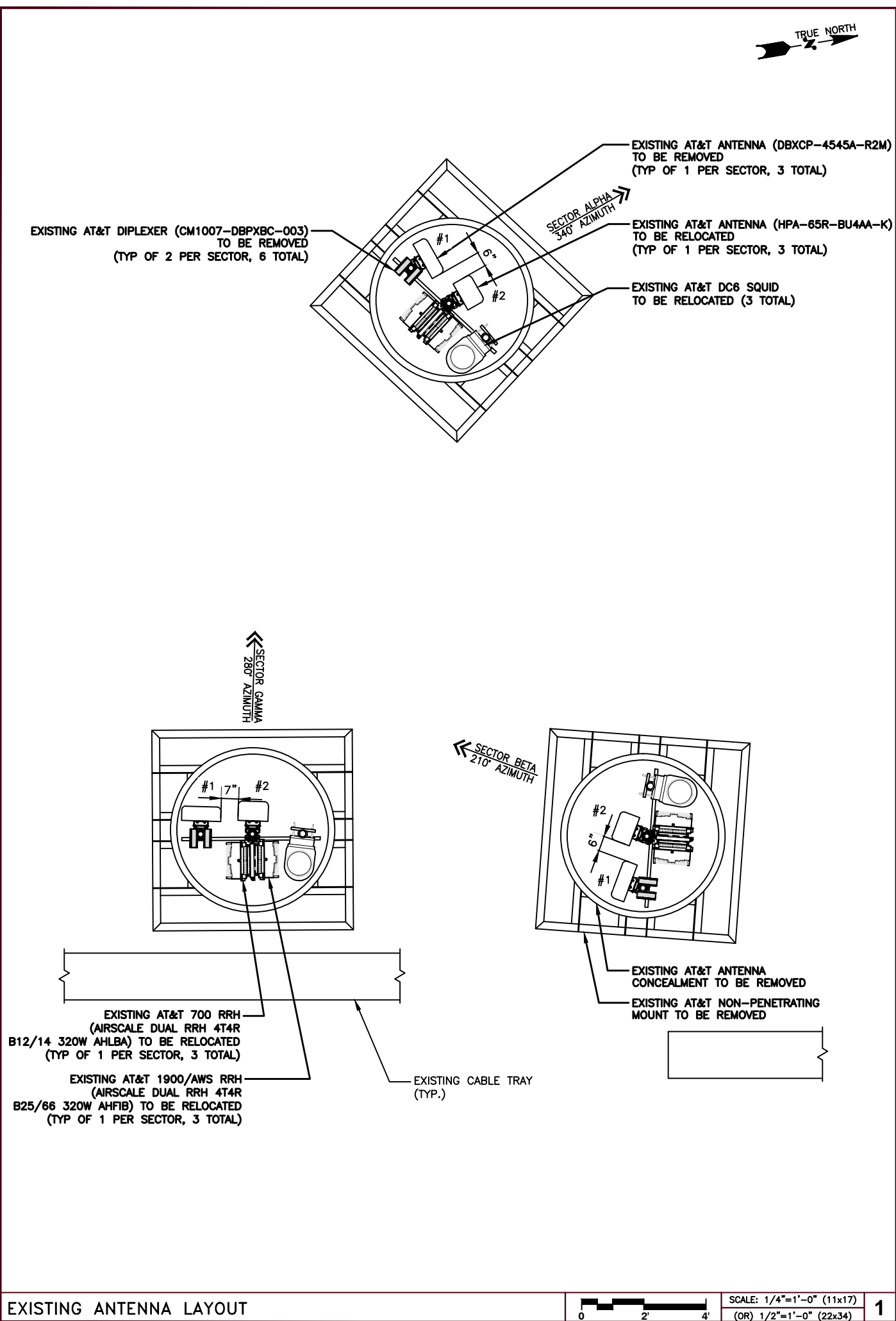
EXISTING 42'-0" ROOFTOP

SHEET DESCRIPTION

BUILDING ELEVATION

SHEET NO.

C-3



1825 W. WALNUT HILL LANE, SUITE 120
IRVING, TEXAS 75038
1-855-669-5421

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PROJECT TITLE

USID: 98812
FA#: 10122498

SWIFT ALLEY

105 NORTH UNION STREET
ALEXANDRIA, VA 22314

EXISTING 42'-0" ROOFTOP

SHEET DESCRIPTION

ANTENNA LAYOUT

SHEET NO.

C-4



1825 W. WALNUT HILL LANE, SUITE 120
IRVING, TEXAS 75038
1-855-669-5421

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O	11/17/20	100% CD	RMM



PROJECT TITLE

USID: 98812
FA#: 10122498

SWIFT ALLEY

105 NORTH UNION STREET
ALEXANDRIA, VA 22314

EXISTING 42'-0" ROOFTOP

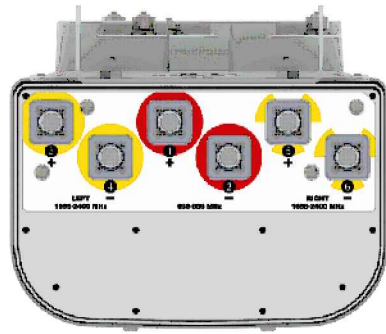
SHEET DESCRIPTION

ANTENNA SCHEDULE

SHEET NO.

C-4.1

ANTENNA SCHEDULE										
SECTOR	ANTENNA POSITION	ANTENNA MAKE/MODEL	RAD CENTER	AZIMUTH	M-TILT	E-TILT	RRH MAKE/MODEL	DIPLEXERS	FEEDLINE	FEEDLINE LENGTH
ALPHA	#1	(N) CCI HPA-65R-BU4AA-K	47'-0"	340°	0°	5°/5°	(N) AIRSCALE RRH 4T4R B5 160W AHCA	(N) (1) TD-850A-5LTE-43	(E) (2) 1-5/8" COAX	214'
	#2	(E) CCI HPA-65R-BU4AA-K	47'-0"	340°	0°	10°/10°/2°/2°/2°	(E) (1) AIRSCALE DUAL RRH 4T4R B12/14 320W AHLBA (E) (1) AIRSCALE DUAL RRH 4T4R B25/66 320W AHFIB	-	(E) (1) 6-6 DC TRUNK (E) (1) 18 PAIR FIBER TRUNK	111'
BETA	#1	(N) CCI HPA-65R-BU4AA-K	47'-0"	210°	0°	5°/5°	(N) AIRSCALE RRH 4T4R B5 160W AHCA	(N) (1) TD-850A-5LTE-43	(E) (2) 1-5/8" COAX	214'
	#2	(E) CCI HPA-65R-BU4AA-K	47'-0"	210°	0°	9°/9°/9°/9°/9°	(E) (1) AIRSCALE DUAL RRH 4T4R B12/14 320W AHLBA (E) (1) AIRSCALE DUAL RRH 4T4R B25/66 320W AHFIB	-	(E) (1) 6-6 DC TRUNK (E) (1) 18 PAIR FIBER TRUNK	111'
GAMMA	#1	(N) CCI HPA-65R-BU4AA-K	47'-0"	280°	0°	5°/5°	(N) AIRSCALE RRH 4T4R B5 160W AHCA	(N) (1) TD-850A-5LTE-43	(E) (2) 1-5/8" COAX	214'
	#2	(E) CCI HPA-65R-BU4AA-K	47'-0"	280°	0°	5°/5°/2°/2°/2°	(E) (1) AIRSCALE DUAL RRH 4T4R B12/14 320W AHLBA (E) (1) AIRSCALE DUAL RRH 4T4R B25/66 320W AHFIB	-	(E) (1) 6-6 DC TRUNK (E) (1) 18 PAIR FIBER TRUNK	111'



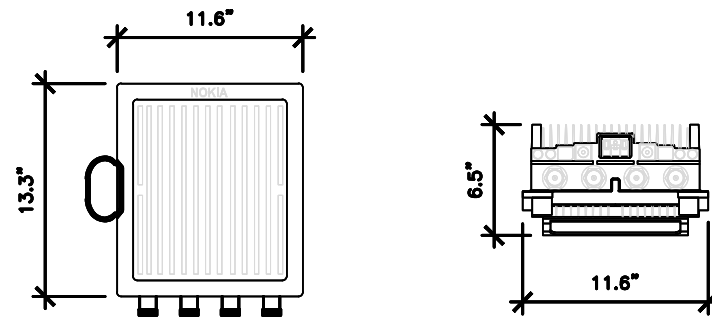
Dimensions (LxWxD)	48.0x11.7x7.7 in (1219x297x196 mm)
Survival Wind Speed	> 150 mph (> 241 kph)
Front Wind Load	127 lbs (564 N) @ 100 mph (161 kph)
Side Wind Load	90 lbs (399 N) @ 100 mph (161 kph)
Equivalent Flat Plate Area	5.0 ft ² (0.5 m ²)
Weight *	28.7 lbs (13.0 kg)
RET Weight	3.3 lbs (1.5 kg) for two RET's 5.0 lbs (2.3 kg) for three RET's
Connector	6 x 4.3-10 female
Mounting Pole	2 to 5 in (5 to 12 cm)

1 CCI HPA-65R-BU4AA-K ANTENNA DETAIL
SCALE: NTS

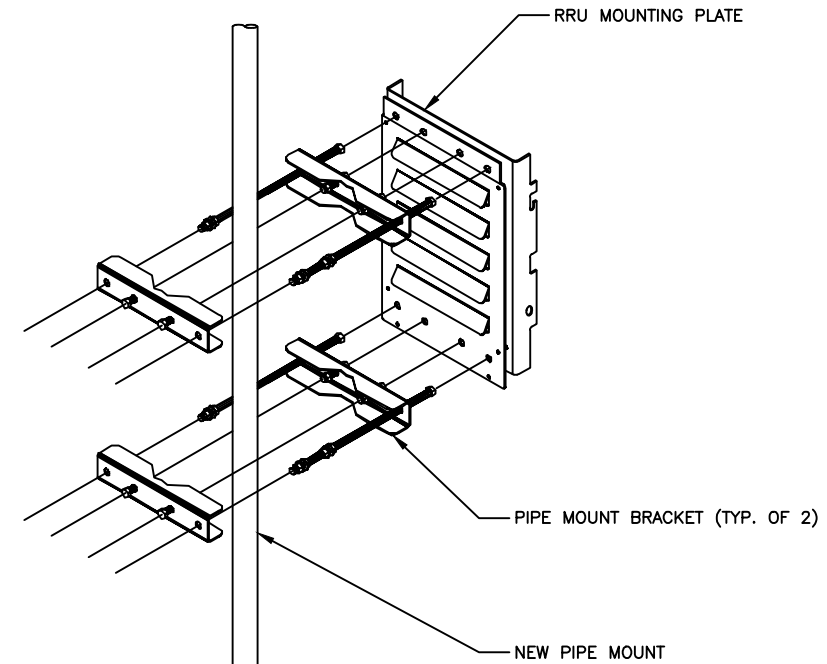
NOKIA NOKIA AIRSCALE RRH 4T4R B5 160W AHCA

DIMENSIONS, HXWxD: 337 X 295 X 165 (MM)
13.3" X 11.6" X 6.5"

WEIGHT: 16.7 (kg)
36.8 lbs

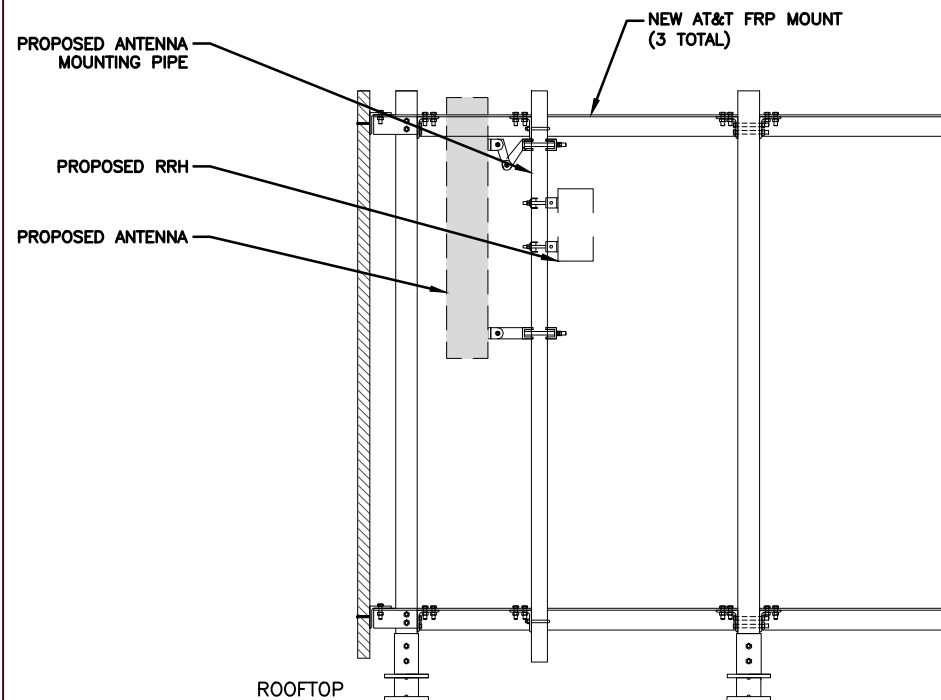


2 AIRSCALE RRH 4T4R B5 DETAIL
SCALE: NTS

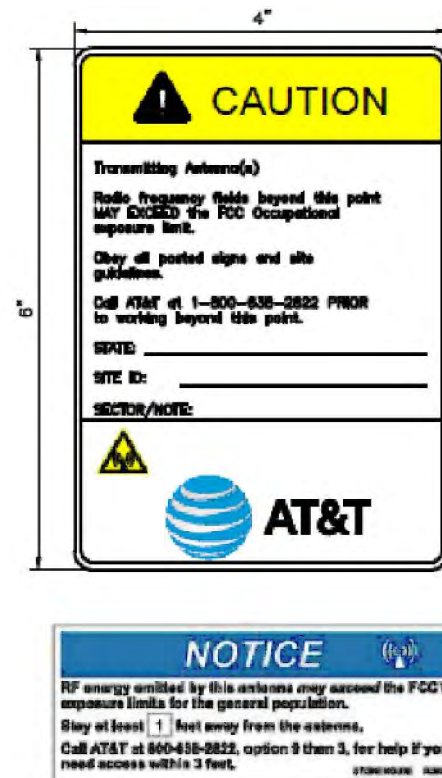


NOTE:
RADIO NOT SHOWN FOR CLARITY

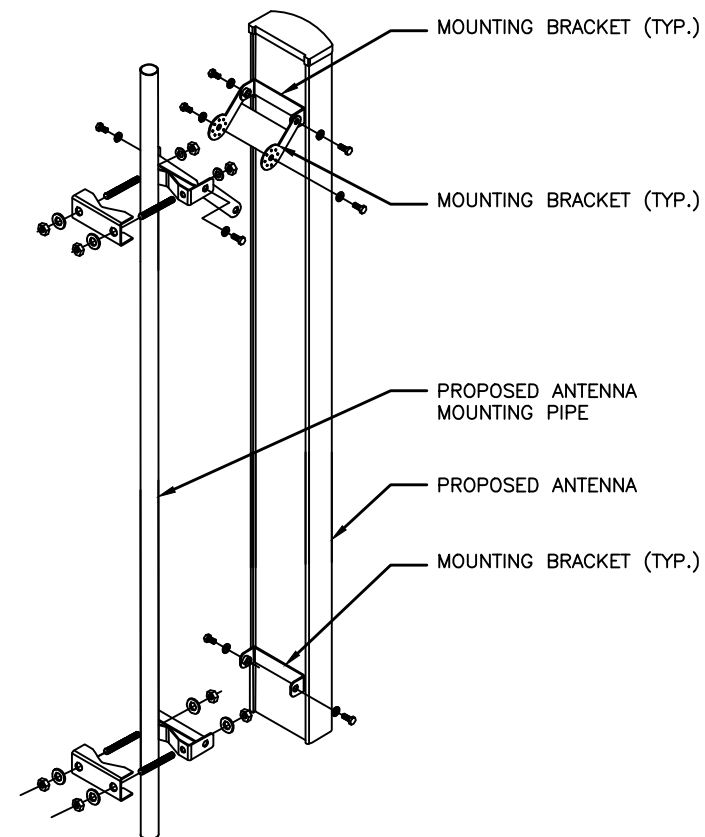
3 RRH DETAIL
SCALE: NTS



4 ANTENNA MOUNTING DETAIL
SCALE: NTS



5 AT&T RF WARNING SIGNAGE
SCALE: NTS



6 ANTENNA MOUNTING DETAIL
SCALE: NTS



1825 W. WALNUT HILL LANE, SUITE 120
IRVING, TEXAS 75038
1-855-669-5421

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SUBMITTALS			
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PROJECT TITLE

USID: 98812
FA#: 10122498

SWIFT ALLEY

105 NORTH UNION STREET
ALEXANDRIA, VA 22314

EXISTING 42'-0" ROOFTOP

SHEET DESCRIPTION

EQUIPMENT DETAILS

SHEET NO.

C-5



DRAWING SCALES ARE INTENDED FOR 11"x17" SIZE
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PROJECT TITLE

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SWIFT ALLEY

105 NORTH UNION STREET
ALEXANDRIA, VA 22314

EXISTING 42'-0" ROOFTOP

SHEET DESCRIPTION

WATER PROOF DETAIL

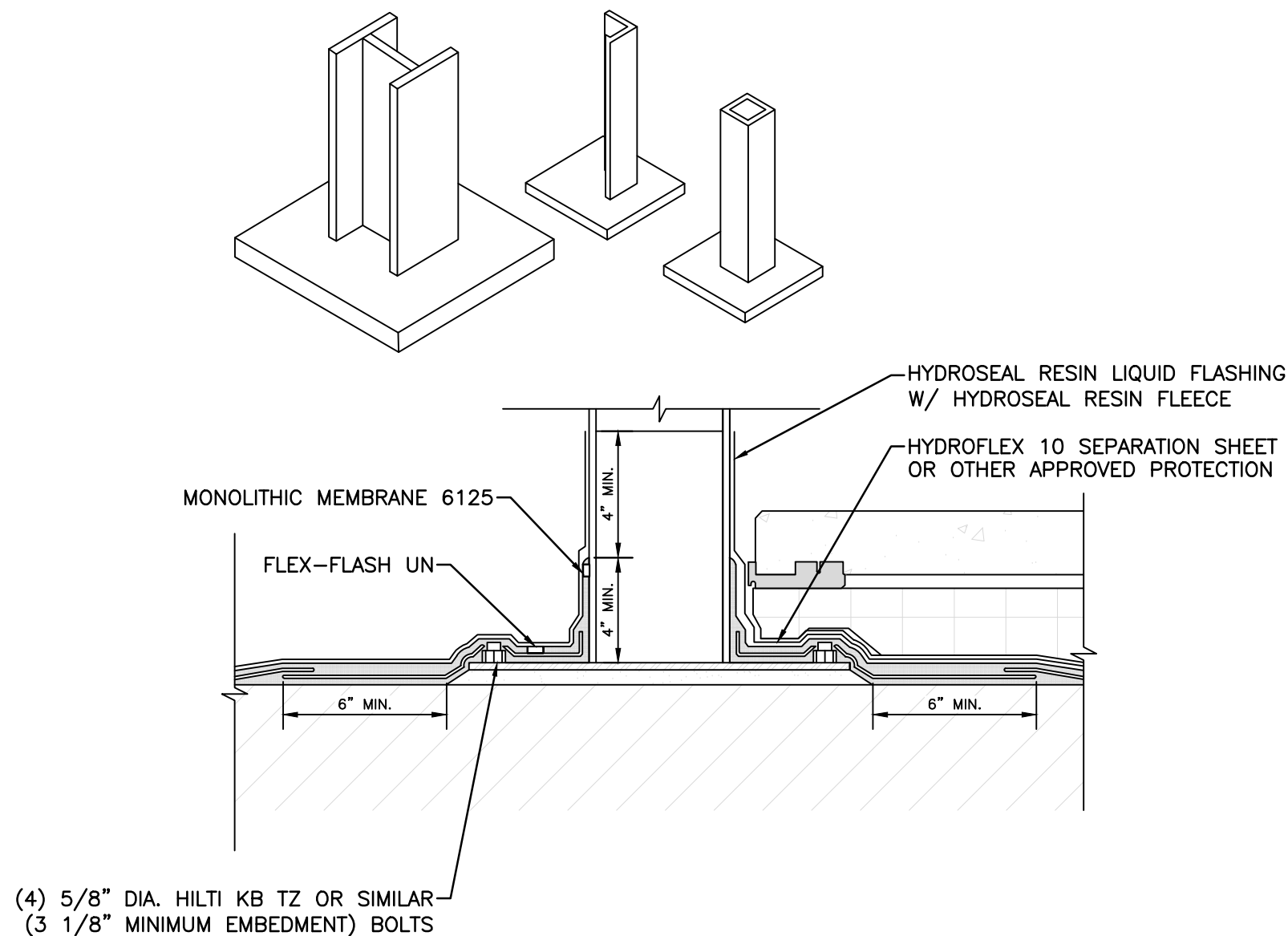
SHEET NO.

C-6

IRREGULAR SHAPED PENETRATIONS REQUIRING THE USE OF HYDROSEAL RESIN FLASHING CAN INCLUDE COLUMNS, ANGLES, UNISTRUT, DAVITS, SQUARE TUBE STEEL, ETC. LIGHTER GAUGE DUCT/PIPING SUPPORTS ARE NOT APPROPRIATE AND SHOULD BE PLACED ON BALLAST BLOCKS.

NOTES:

1. WHEN POSSIBLE, NM6125 SHOULD BE APPLIED UNDER PENETRATION BASE PLATE.
2. PENETRATION SURFACE MUST BE CLEAN AND FREE OF ALL RUST AND OTHER CONTAMINANTS. IN ADDITION TO WIPING W/ SURFACE CONDITIONER FOR PROPER ADHESION OF NM6125.
3. IN COVERED/BURIED CONDITIONS, THE FLASHING DETAIL SHOULD EXTENDED AS HIGH AS POSSIBLE, FLASHING MUST BE TERMINATED AT OR ABOVE OVERBURDEN LEVEL AND NO LESS THAN 8" ABOVE SUBSTRATE.
4. USE LARGEST SHEETS OF UNCURED NEOPRENE POSSIBLE. WHEN POSSIBLE, HOLES/SLITS SMALLER THAN THE PENETRATION SHOULD BE CUT IN THE CENTER OF THE SHEET OF NEOPRENE AND THE SHEET PULLED DOWN OVER THE PENETRATION.
5. CUT A SLIT OR "X" INTO THE NEOPRENE SHEET DIRECTLY OVER THE BOLT HEADS TO ALLOW EMBEDDING/FORMING TIGHTLY AROUND BOLT HEAD.
6. HYDROSEAL RESIN SHOULD BE APPLIED DIRECTLY OVER PRIMED NM6125.



CONNECTION TO CONCRETE SLAB

Calculation per ACI 318-14

Bolt Properties

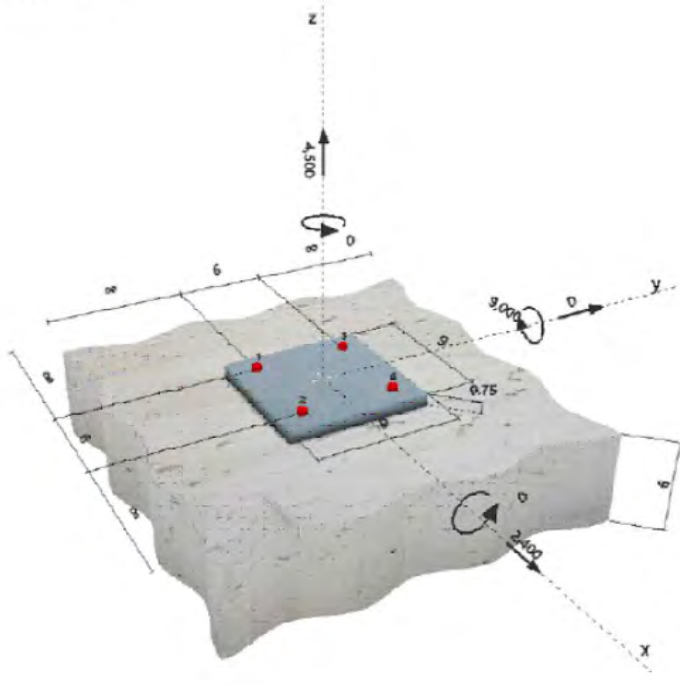
Bolt type	HILTI KB TZ or Similar
Bolt diameter	$d_b = 0.625$ in
Number of bolts	$n = 4$
Bolt area	$A_b = \pi / 4 \times d_b^2 = 0.307$ in ²
Distance between bolts	$d = 6$ in

1 Input data

Anchor type and diameter:	Kwik Bolt TZ - CS 5/8 (3 1/8)
Effective embedment depth:	$h_{ef} = 3.125$ in., $h_{nom} = 3.563$ in.
Material:	Carbon Steel
Evaluation Service Report:	ESR-1917
Issued I Valid:	5/1/2013 5/1/2015
Proof:	Design method ACI 318 / AC193
Stand-off installation:	$e_b = 0.000$ in. (no stand-off); $t = 0.750$ in.
Anchor plate:	$l_x \times l_y \times t = 9.000$ in. x 9.000 in. x 0.750 in.; (Recommended plate thickness: not calculated)
Profile:	no profile
Base material:	uncracked concrete, 3000, $f'_c = 3000$ psi; $h = 6.000$ in.
Reinforcement:	tension: condition B, shear: condition B; no supplemental splitting reinforcement present
Seismic loads (cat. C, D, E, or F)	edge reinforcement: none or < No. 4 bar no



Geometry [in.] & Loading [lb, in.lb]

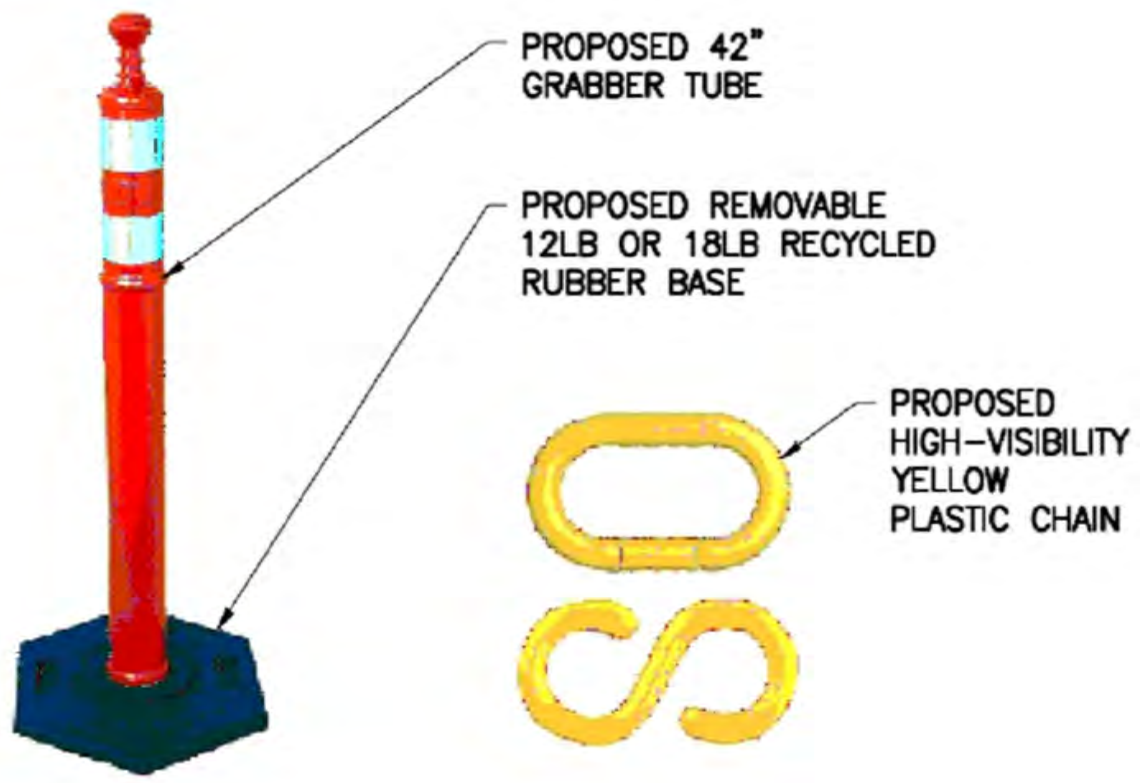


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PROJECT TITLE
USID: 98812 FA#: 10122498 SWIFT ALLEY 105 NORTH UNION STREET ALEXANDRIA, VA 22314 EXISTING 42'-0" ROOFTOP
SHEET DESCRIPTION
ANCHORAGE CALCULATION DETAIL
SHEET NO.
C-7

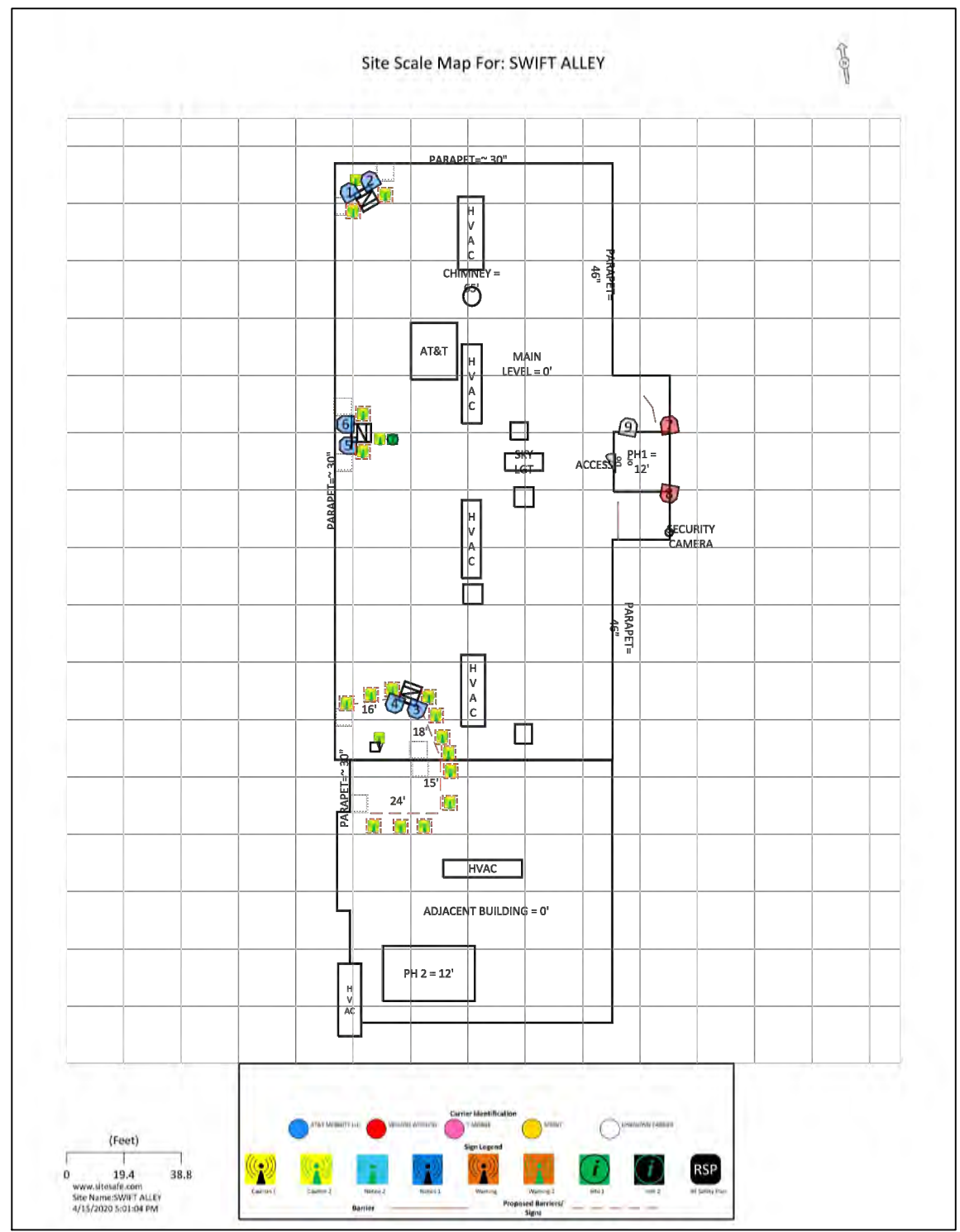


1 RF BARRIER DETAIL
SCALE: NTS



- NOTES:
- 8" X 12" ALUMINUM.
 - POSTED AT EACH ANTENNA ARRAY ON ROOFTOP SITE.
 - BUILDING OWNER MAY HAVE RESTRICTIONS ON WHERE CAN BE POSTED.
 - SEE SIGN PLACEMENT TABLE FOR ADDITIONAL INFORMATION.

2 RF SIGNAGE DETAIL
SCALE: NTS



3 RF SIGNAGE
SCALE: NTS



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O	11/17/20	100% CD	RMM



PROJECT TITLE

USID: 98812
FA#: 10122498

SWIFT ALLEY

105 NORTH UNION STREET
ALEXANDRIA, VA 22314

EXISTING 42'-0" ROOFTOP

SHEET DESCRIPTION

RF SIGNAGE

SHEET NO.

C-8

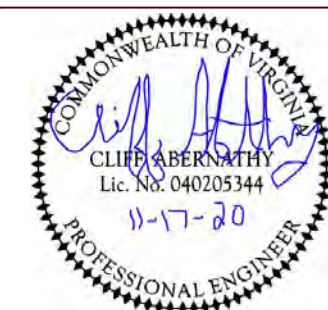


1825 W. WALNUT HILL LANE, SUITE 120
IRVING, TEXAS 75038
1-855-669-5421

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PROJECT TITLE

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SWIFT ALLEY

105 NORTH UNION STREET
ALEXANDRIA, VA 22314

EXISTING 42'-0" ROOFTOP

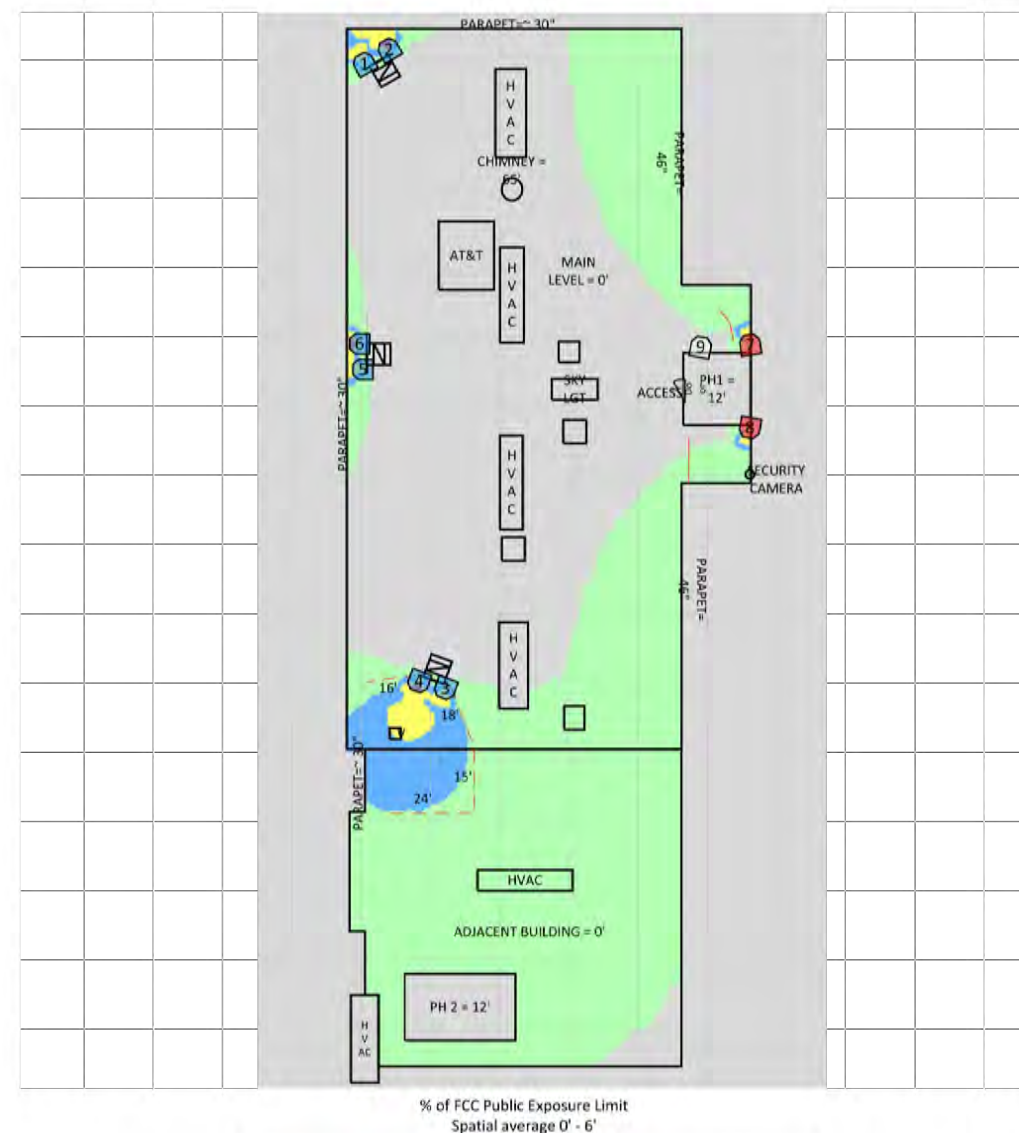
SHEET DESCRIPTION

RF SIGNAGE

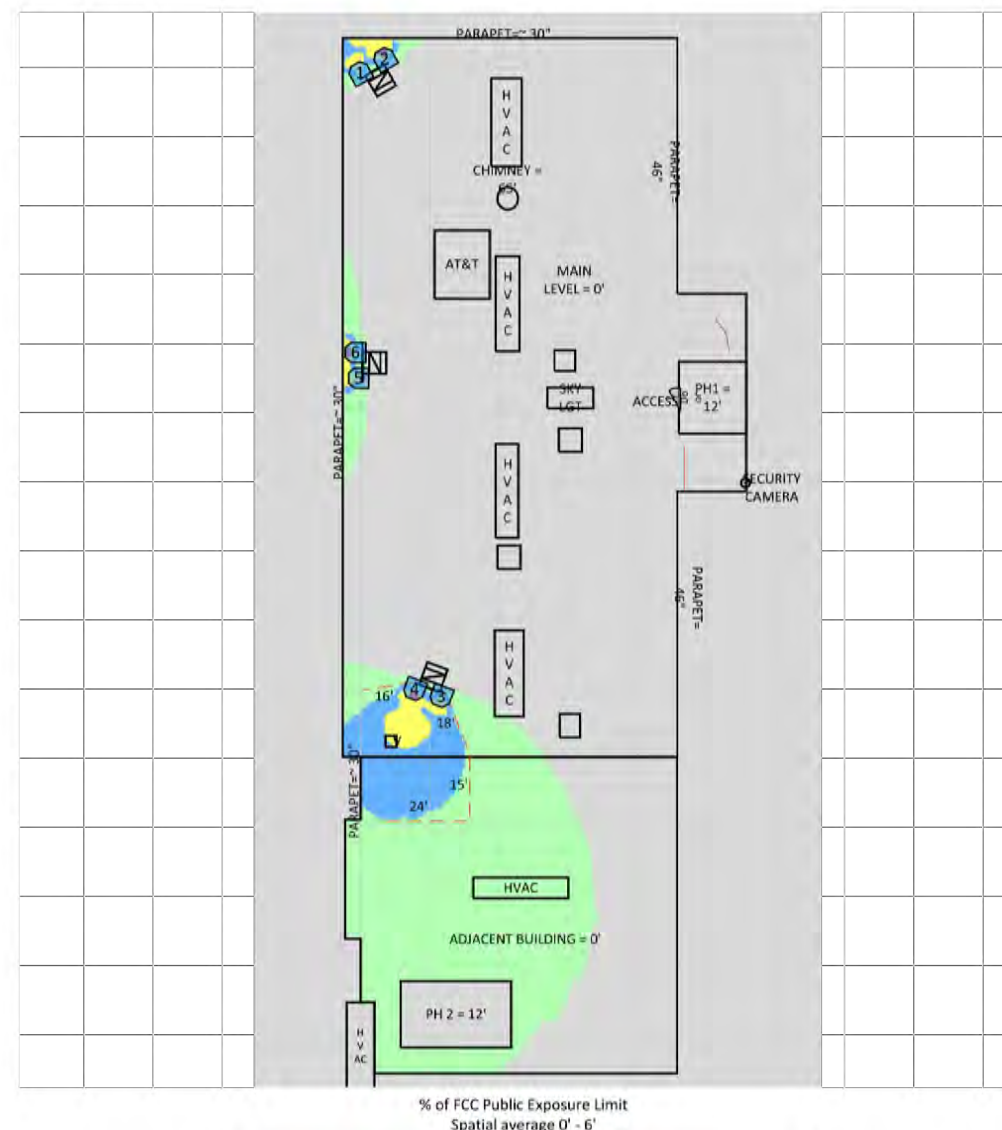
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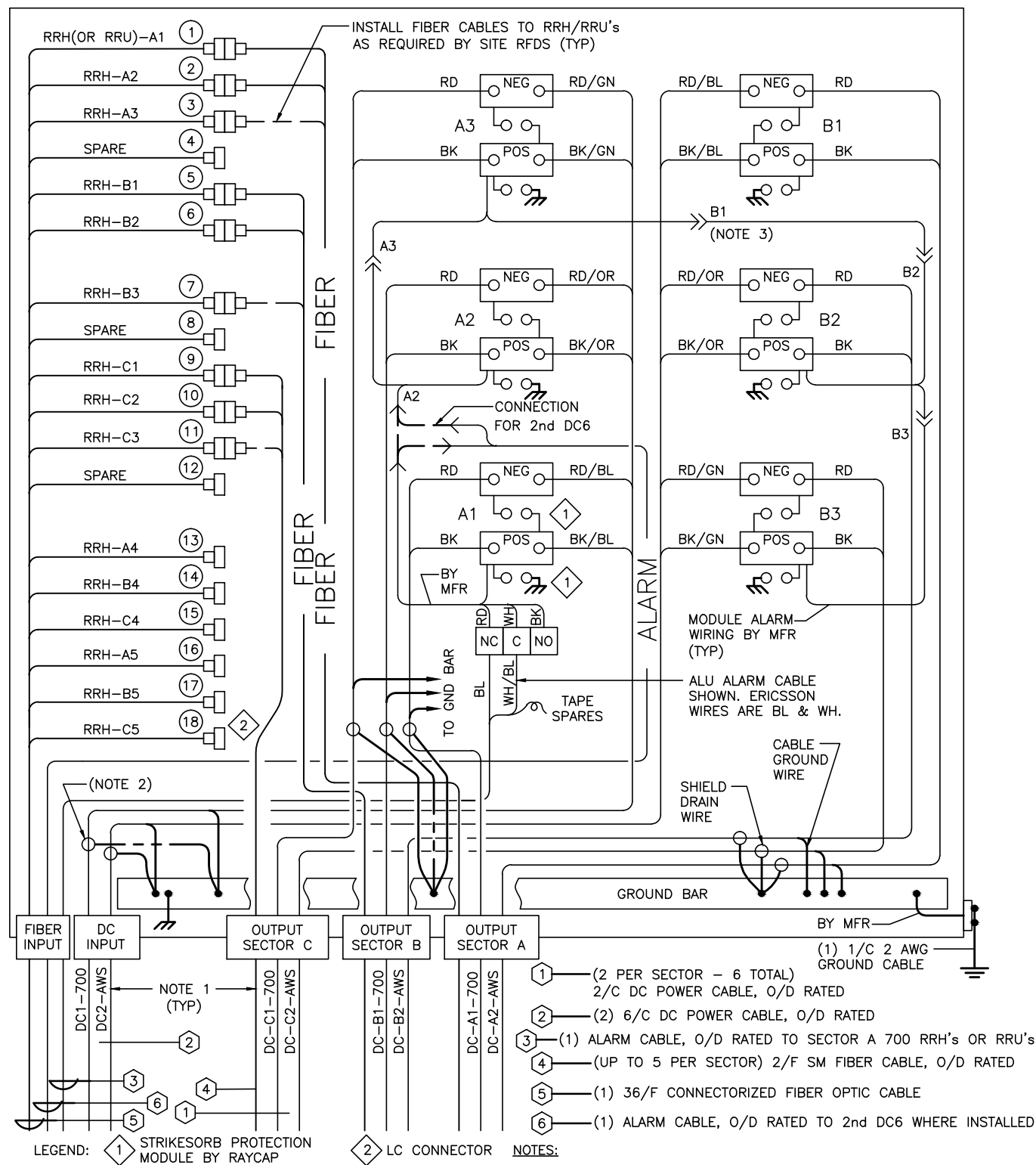
C-9

RF Exposure Simulation For: SWIFT ALLEY Composite View



RF Exposure Simulation For: SWIFT ALLEY AT&T Mobility, LLC Contributions



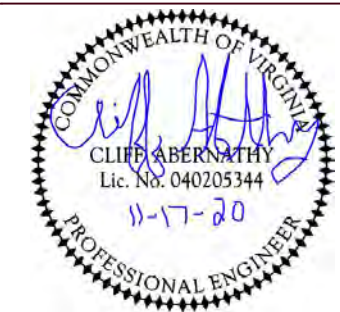


CONNECTION DIAGRAM DC SURGE SUPPRESSION
 SYSTEM DC6-48-60-18-8F



DRAWING SCALES ARE INTENDED FOR 11"x17" SIZE PRINTED MEDIA ONLY.

SUBMITTALS			
REV	DATE	DESCRIPTION	BY
B	04/02/20	90% CD	ANI
C	07/02/20	90% CD	RMM
D	08/01/20	90% CD	RMM
E	09/09/20	90% CD	MHF
F	09/17/20	90% CD	RMM
G	11/12/20	90% CD	RMM
O	11/17/20	100% CD	RMM



PROJECT TITLE

USID: 98812
 FA#: 10122498

SWIFT ALLEY

105 NORTH UNION STREET
 ALEXANDRIA, VA 22314

EXISTING 42'-0" ROOFTOP

SHEET DESCRIPTION

DC SURGE SUPPRESSION
 WIRING DIAGRAM

SHEET NO.

E-1

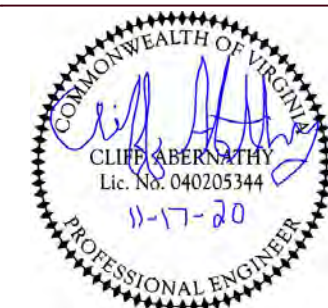


1825 W. WALNUT HILL LANE, SUITE 120
IRVING, TEXAS 75038
1-855-669-5421

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ALEXANDRIA, VA 22314

EXISTING 42'-0" ROOFTOP

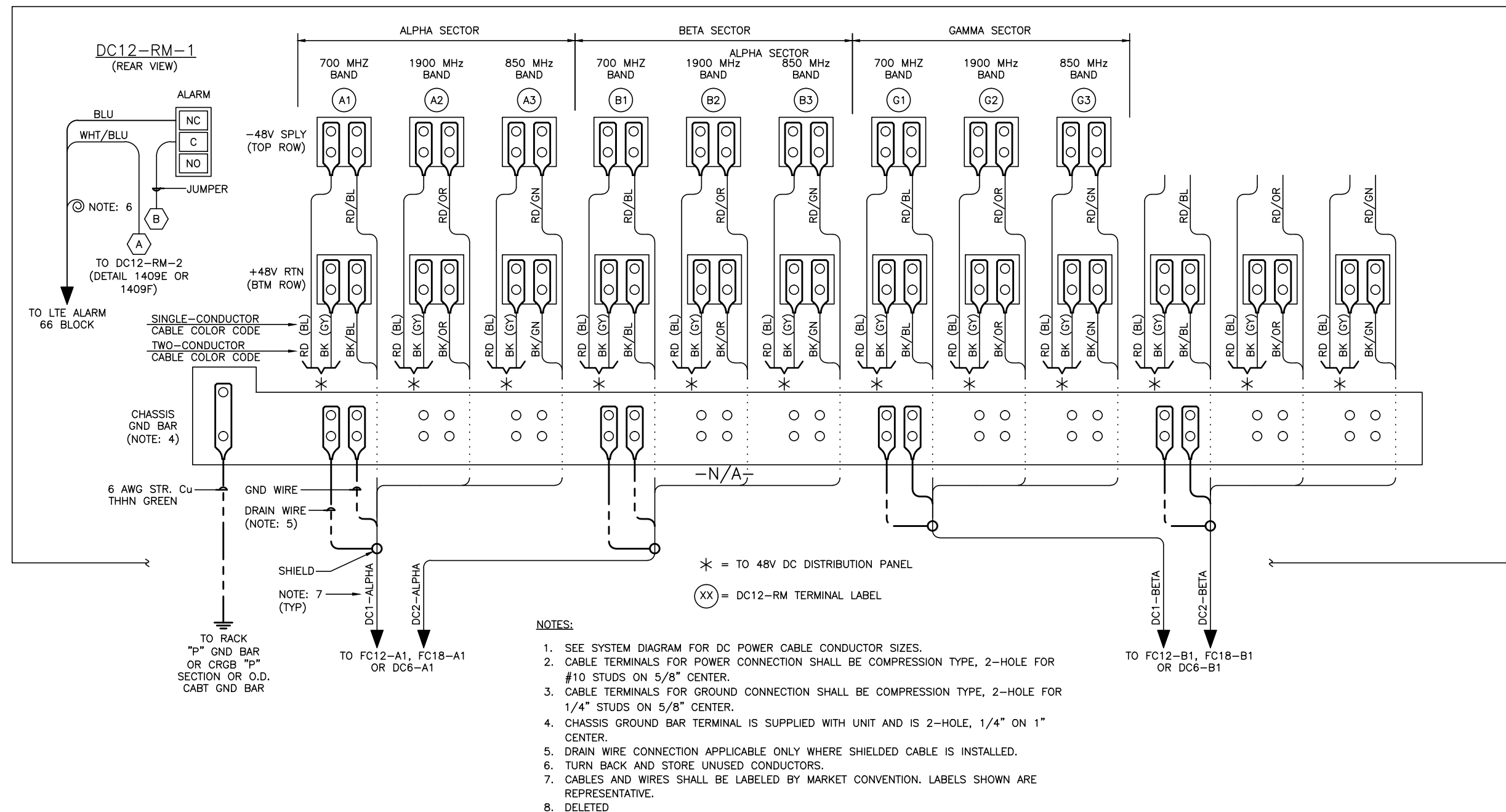
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DC SURGE SUPPRESSION
WIRING DIAGRAM

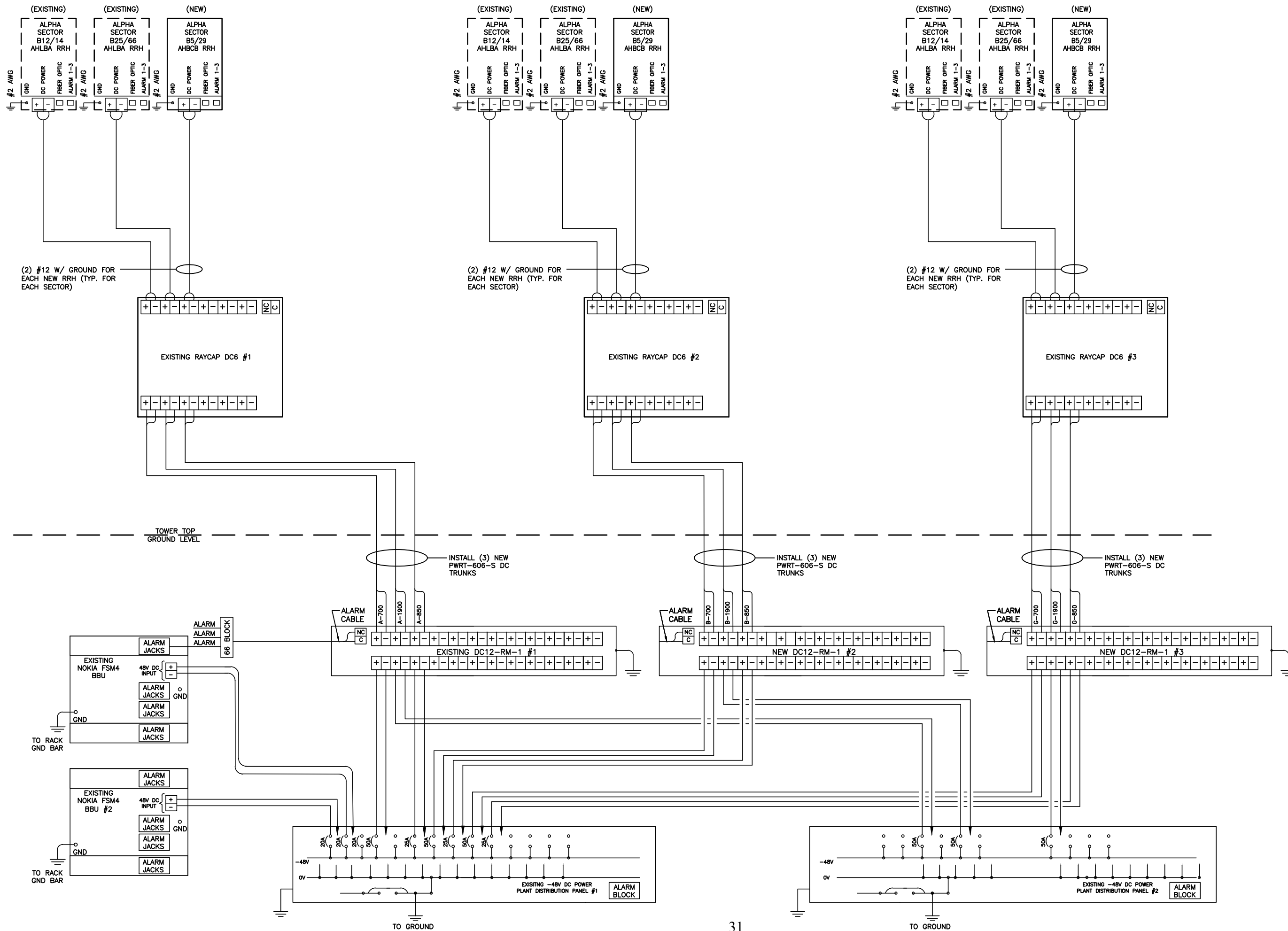
SHEET NO.

E-2

EXISTING DC12-RM



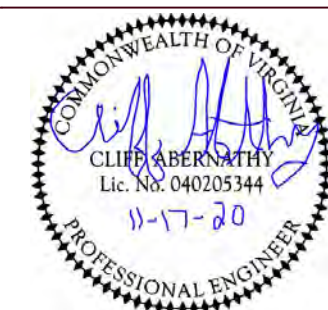
CONNECTION DIAGRAM RACK-MOUNTED
SURGE SUPPRESSION SYSTEM DC12-RM-1
FOR SECTORIZED SITE



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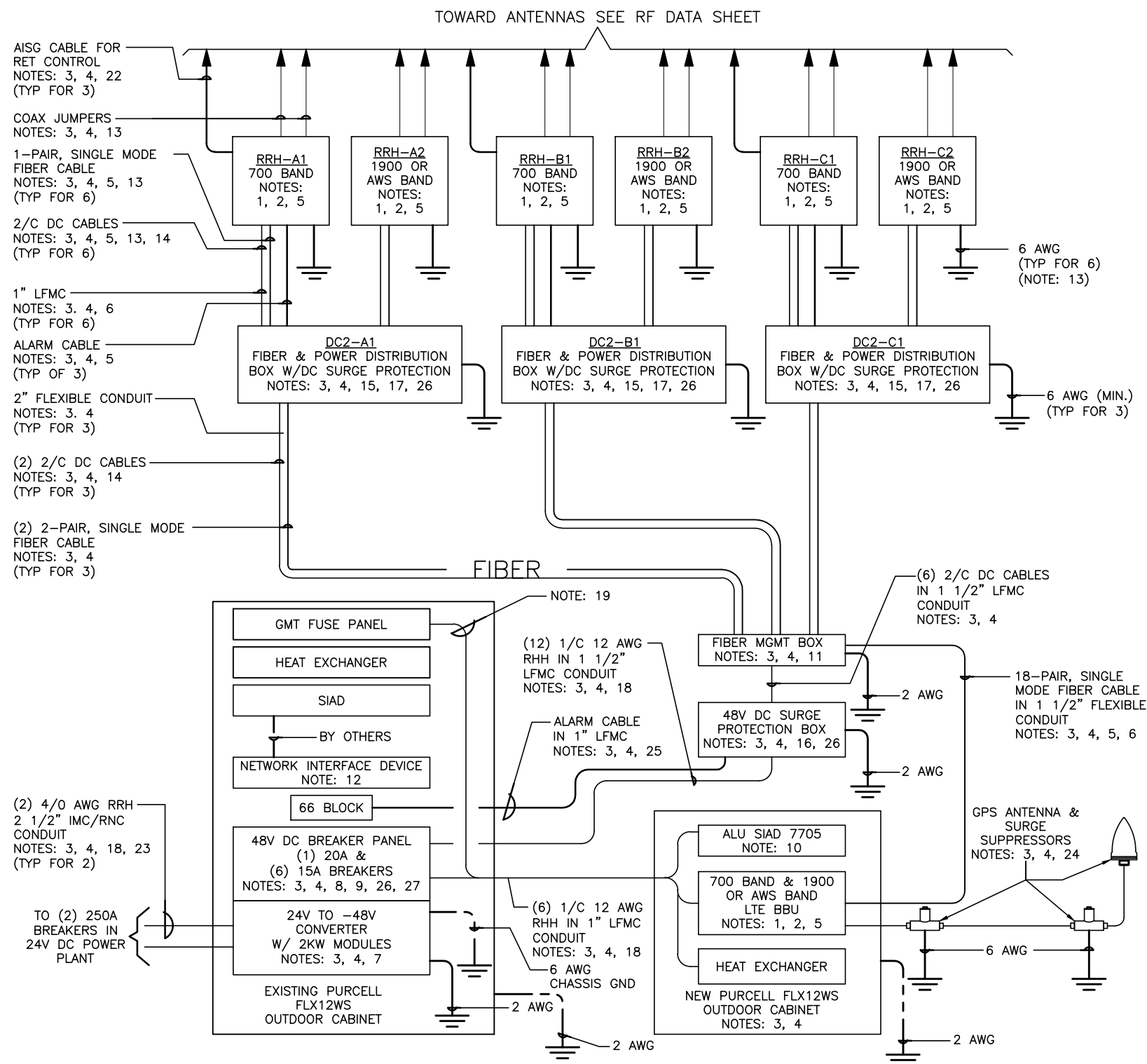
EXISTING 42'-0" ROOFTOP

SHEET DESCRIPTION

WIRING DIAGRAM

SHEET NO.

E-4



- NOTES:

1. FURNISHED BY OEM/AT&T.
2. INSTALLED BY OEM OR AS SCOPED BY MARKET.
3. (DELETED).
3. (DELETED).
4. FINAL CONNECTION BY OEM OR AS SCOPED BY MARKET.
5. OPEN END OF CONDUIT TO BE LEFT WEATHERPROOFED UNTIL TERMINATED.
6. ARGUS 053-997-20-0000 DUAL FEED DC-DC CONVERTER WITH 012-526-20-040 2KW MODULES.
7. PART OF CONVERTER WITH 18 BREAKER POSITIONS. BREAKERS SPECIFIED SEPARATELY.
8. BREAKERS TO BE TAGGED AND LOCKED OUT.
9. (DELETED).
10. FIBER MANAGEMENT BOX IS RAYCAP MODEL FB-15-BOX.
11. LEC TO FURNISH AND INSTALL NETWORK INTERFACE DEVICE.
12. LEAVE COILED AND PROTECTED UNTIL TERMINATED.
13. (DELETED).
14. FIBER AND POWER DISTRIBUTION BOX W/48V DC SURGE SHALL BE RAYCAP MODEL DC2-48-60-0-9E.
15. FIBER AND POWER DISTRIBUTION W/DC SURGE PROTECTION BOX SHALL BE RAYCAP DC6-48-60-18-01.
16. (DELETED).
17. SINGLE-CONDUCTOR DC POWER CABLES SHALL BE TELCOFLEX® OR KS24194™, COPPER, UL LISTED RHH NON-HALOGEN, LOW SMOKE WITH BRAIDED COVER, TYPE TC (1/0 AND LARGER). UNLESS OTHERWISE NOTED, STRANDING SHALL BE CLASS B (TYPE III) FOR CABLES SIZES 14, 12 & 10 AWG AND CLASS I (TYPE IV) FOR SIZES 8 AWG AND LARGER. CABLES SHALL BE COLOR CODED RED FOR +24V, BLUE FOR -48V AND GRAY FOR 24V AND 48V RETURN CONDUCTORS. MULTI-CONDUCTOR DC POWER CABLES SHALL BE COPPER, CLASS B STRANDING WITH FLAME RETARDANT PVC JACKET, TYPE TC, UL LISTED FOR 90°C DRY/ 75°C WET INSTALLATION.
18. 10A FUSE FOR HEAT EXCHANGER FURNISHED AND INSTALLED BY BECHTEL.
19. (DELETED).
20. GROUNDING WIRES SHALL BE COPPER, GREEN THHN/THWN UL LISTED FOR 90°C DRY/75°C WET INSTALLATION. MINIMUM SIZE IS 6 AWG UNLESS NOTED OTHERWISE.
21. RET CONTROL FROM THE RRH IS AN OPTIONAL METHOD OF CONNECTION. REFER TO RF DATA SHEET FOR APPLICABILITY.
22. MAXIMUM 4/0 AWG CABLE LENGTH FROM 24V DC POWER PLANT TO CONVERTER SHALL NOT EXCEED 44 FT.
23. (DELETED).
24. (DELETED).
25. NOTED EQUIPMENT MAY BE COMMON TO LTE AND UMTS SYSTEMS. REFER TO UMTS SYSTEM DIAGRAM IF APPLICABLE.
26. EXISTING 700MHz BAND BBU IF MODEL 9926 (d2uv3) MAY BE POWERED FROM A 10A BREAKER.



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E	09/09/20	90% CD	MH
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SWIFT ALLEY

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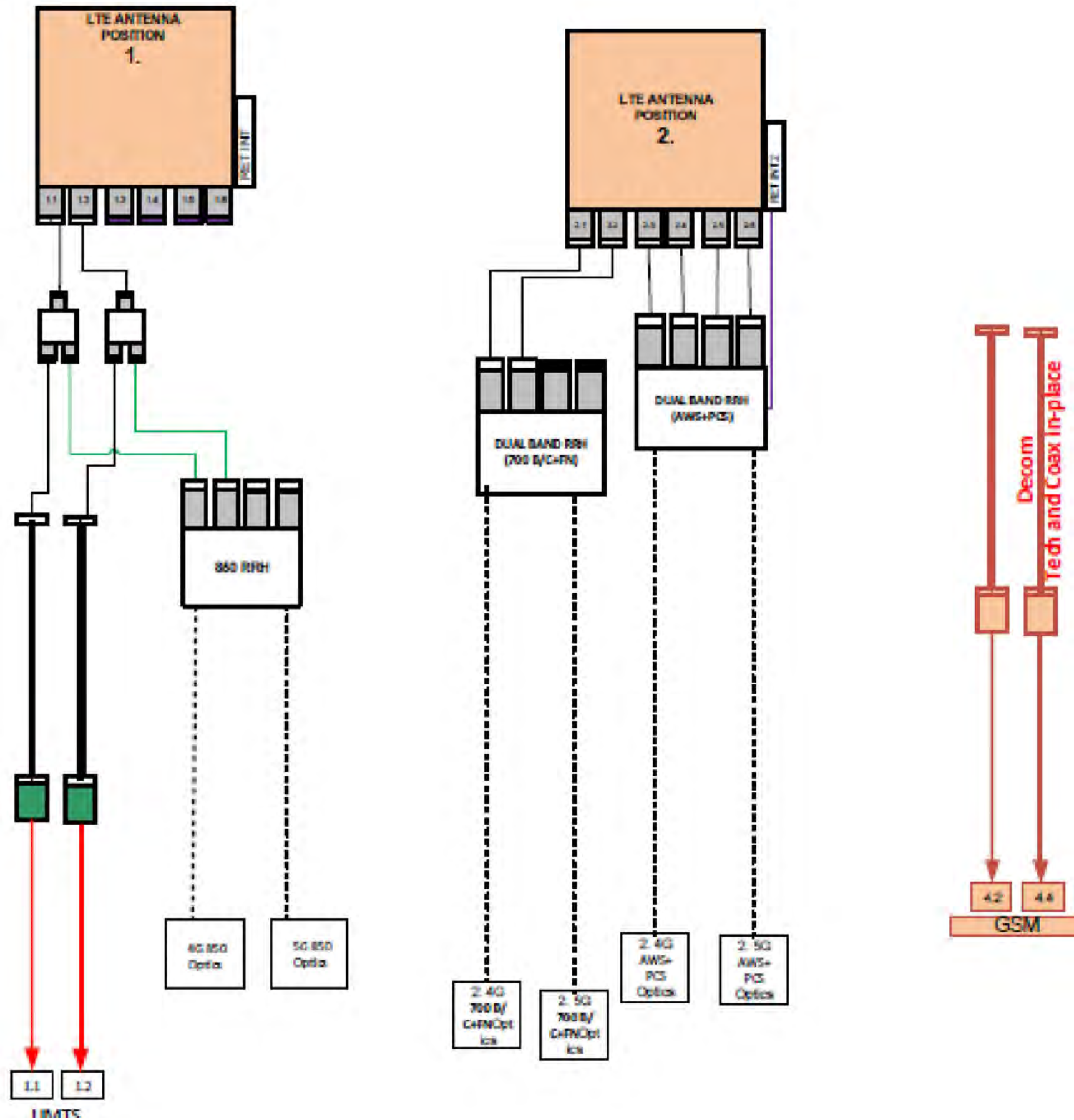
EXISTING 42'-0" ROOFTOP

SHEET DESCRIPTION

SYSTEM DIAGRAM

SHEET NO.

E-5



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SWIFT ALLEY
105 NORTH UNION STREET
ALEXANDRIA, VA 22314
EXISTING 42'-0" ROOFTOP

SHEET DESCRIPTION
RF PLUMBING DIAGRAM

SHEET NO.
RF-1



EXISTING ARGUS –48V DISTRIBUTION PANEL #1

DESCRIPTION																		
	(E) B12/14 RRH, ALPHA	(E) B12/14 RRH, BETA	(E) B12/14 RRH, GAMMA	(N) LTE 850 RRH, ALPHA	(N) LTE 850 RRH, BETA	(N) LTE 850 RRH, GAMMA											(E) NOKIA FSM4 BBU #2	(E) NOKIA FSM4 BBU #1
BRKR (A)	50	50	50	25	25	25											20	20
POSITION	CB1	CB2	CB3	CB4	CB5	CB6	CB7	CB8	CB9	CB10	CB11	CB12	CB13	CB14	CB15	CB16	CB17	CB18

INSTALL (3) NEW 25A/1P BREAKERS FOR NEW LTE 850 RRHs.

EXISTING ARGUS –48V DISTRIBUTION PANEL #2

DESCRIPTION																		
	(E) B25/66 RRH, ALPHA	(E) B25/66 RRH, BETA	(E) B25/66 RRH, GAMMA															
BRKR (A)	50	50	50															
POSITION	CB1	CB2	CB3	CB4	CB5	CB6	CB7	CB8	CB9	CB10	CB11	CB12	CB13	CB14	CB15	CB16	CB17	CB18

ARGUS –48V DISTRIBUTION PANEL IN
RACK–MOUNTED DC CONVERTER

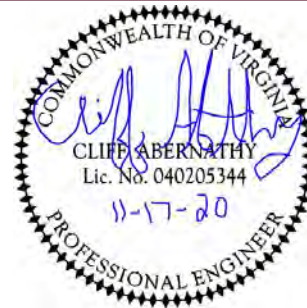
DC BREAKER SIZE	ALPHA PART "	AT&T NEQ "
1A/1P	Unavailable	Not Applicable
3A/1P	470-301-10	NEQ 10356
5A/1P	470-302-10	NEQ 10357
10A/1P	470-303-10	NEQ 10358
15A/1P	470-304-10	NEQ 10359
16A/1P	Unavailable	Not Applicable
20A/1P	470-305-10	NEQ 10360
25A/1P	470-306-10	NEQ 10361
30A/1P	470-307-10	NEQ 10362
35A/1P	Unavailable	Not Applicable
40A/1P	470-309-10	NEQ 10364
45A/1P	Unavailable	Not Applicable
50A/1P	470-311-10	NEQ 10366
60A/1P	470-312-10	NEQ 10367
70A/1P	Unavailable	Not Applicable
75A/1P	Unavailable	Not Applicable
80A/1P	470-314-10	NEQ 10369
90A/1P	Unavailable	Not Applicable
100A/1P	470-316-10	NEQ 10371
100A/2P	Unavailable	Not Applicable
125A/2P	Unavailable	Not Applicable
150A/2P	747-148-20-000	NEQ 10373
200A/3P	Unavailable	Not Applicable
225A/3P	Unavailable	Not Applicable
250A/3P	747-221-20-000	NEQ 10377

ARGUS DC CIRCUIT BREAKER PART
AND NEQ DATA



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EXISTING 42’–0” ROOFTOP

SHEET DESCRIPTION

DC PANEL SCHEDULE

SHEET NO.

RF–3

GENERAL NOTES

1. GENERAL REQUIREMENTS

- A. PURPOSE AND INTENT
1.THE DRAWING AND SPECIFICATION ARE INTENDED TO BE FULLY EXPLANATORY AND SUPPLEMENTARY, HOWEVER, SHOULD ANYTHING BE SHOWN, INDICATED, OR SPECIFIED ON ONE AND NOT THE OTHER, IT SHALL BE DONE THE SAME AS IF DISCREPANCIES BETWEEN REQUIREMENTS SHOWN IN BOTH, THE MORE STRINGENT REQUIREMENTS SHALL APPLY.
2. THE INTENTION OF THE DOCUMENT IS TO INCLUDE ALL LABOR AND MATERIALS REASONABLY NECESSARY FOR THE PROPER EXECUTION AND COMPLETION OF THE WORK AS STIPULATED IN THE CONTRACT.

- A. CONFLICTS
1. VERIFY ALL MEASUREMENTS AT THE SITE BEFORE ORDERING MATERIAL OR DOING ANY WORK, NO EXTRA CHARGE OR COMPENSATION WILL BE ALLOWED DUE TO DIFFERENCES BETWEEN ACTUAL DIMENSIONS OR DIMENSIONS SHOWN ON PLANS SUBMIT NOTICE OF ANY DISCREPANCY IN DIMENSIONS OR OTHERWISE TO AT&T FOR RESOLUTION BEFORE PROCEEDING WITH THE WORK.
2. NO PLEA OF IGNORANCE OF CONDITIONS THAT EXIST, OR OF DIFFICULTIES OR CONDITIONS THAT MAY BE ENCOUNTERED, OR OF ANY OTHER RELEVANT MATTER CONCERNING THE EXECUTION OF THE WORK WILL BE ACCEPTED AS AN EXCUSE FOR ANY FAILURE OR OMISSION ON THE PART OF THE CONTRACTOR TO FULFILL EVERY DETAIL OF ALL THE REQUIREMENTS OF THE CONSTRUCTION DOCUMENTS GOVERNING THE WORK.

- A. CLEANING
1. KEEP THE SITE FREE FROM ACCUMULATION OF WASTE AND RUBBISH CAUSED BY EMPLOYEES AT THE COMPLETION OF THE WORK, REMOVE ALL WASTE AND NON-CONSTRUCTION MATERIAL INCLUDING ALL CONTRACT TOOLS, SCAFFOLDING, AND SURPLUS MATERIAL AND LEAVE SITE CLEAN AND READY FOR USE.

- A. CODES
1.CONTRACTOR SHALL BE RESPONSIBLE FOR FOLLOWING ALL LAWS, REGULATIONS, AND RULES PROMULGATED BY FEDERAL STATE AND LOCAL AUTHORITIES WITH JURISDICTION OVER THE SALTIER. THIS RESPONSIBILITY IS IN EFFECT REGARDLESS OF WEATHER THE LAW, ORDINANCE, REGULATION OR RULE IS MENTIONED IN THESE SPECIFICATIONS.

- A. LICENSING
1. CONTRACTOR SHALL HAVE AND MAINTAIN A VALID CONTRACTOR’S LICENSE FOR THE LOCATION IN WHICH THE WORK IS TO BE PERFORMED. FOR JURISDICTIONS THAT LICENSE INDIVIDUAL TRADES, THE TRADESMAN OR SUBCONTRACTOR PERFORMING THOSE SHALL BE LICENSED, RESEARCHED AND COMPLY WITH THE LICENSING LAWS, PAY LICENSE FEES, AND SELECT AND INFORM SUBCONTRACTORS REGARDING THESE LAWS.

- A. OSHA
1. FOLLOW ALL APPLICABLE RULES AND REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATIONS AND STATE LAWS BASED IN THE FEDERAL OCCUPATION SAFETY AND HEALTH ACT. THESE REGULATIONS INCLUDE, BUT ARE NOT LIMITED TO, REGULATIONS DEALING WITH TOWER CONSTRUCTION AND SAFETY, EXCAVATION AND TRENCHING, AND WORK IN CONFINED SPACES. ENSURE THAT EMPLOYEES AND SUBCONTRACTORS WEAR HARD HATS AT ALL TIMES DURING CONSTRUCTION.

- A. PHOTOS
1. PROVIDE PHOTOGRAPHIC EVIDENCE OF ALL FOUNDATION INSTALLATIONS, GROUNDING, AND TRENCHING AFTER PLACEMENT OF UTILITIES PRIOR TO BACKFILL.

- A. BUILDING PERMITS
1. CONTRACTOR WILL SUBMIT CONSTRUCTION DOCUMENTS TO THE JURISDICTIONAL AUTHORITY FOR PLAN CHECK AND REVIEW. CONTRACTOR WILL SUBMIT LICENSING AND WORKMAN’S COMPENSATION INFORMATION TO THE JURISDICTION AS REQUIRED TO OBTAIN THE BUILDING PERMIT, CONTRACTOR SHALL COORDINATE AND SCHEDULE REQUIRED INSPECTIONS AND POST REQUIRED PERMITS AT THE JOB SITE COMPLY WITH SPECIFIC PROJECT RELATED REQUESTS AND SUGGESTIONS MADE BY BUILDING INSPECTOR, AND INFORM CONSTRUCTION MANAGER OF ANY SUCH WORK THAT MAY BE BEYOND THE SCOPE OF THE CONTRACT OR DEVIATE FROM THE CONSTRUCTION DOCUMENT. AT&T WILL REIMBURSE THE CONTRACTOR FEES FOR PLAN REVIEW, BUILDING PERMIT, CONNECTIONS, AND INSPECTIONS. (INCLUDED IN THE BASE PROPOSAL).

- A. ZONING REGULATIONS AND CONDITIONAL USE PERMITS
1. CONTRACTOR WILL SUBMIT ALL ZONING AND CONDITIONAL USE PERMITS. SOME USE PERMITS MAY HAVE SPECIFIC REQUIREMENTS FOR THE SITE RELATED TO CONSTRUCTION, SUCH AS NOISE REGULATIONS, HOURS OF WORK, ACCESS LIMITATIONS, ETC. THE CONSTRUCTION MANAGER WILL INFORM THE CONTRACTOR OF THESE REQUIREMENTS AT THE PRE-BID MEETING OR AS SHOWN IN THE CONSTRUCTION DOCUMENTS.

- A. FAA PERMIT AND TOWER LIGHTING
1. REFER TO CONSTRUCTION DOCUMENTS AND CONSTRUCTION MANAGER FOR FAA AND STATE LIGHTING REQUIREMENTS. CONTRACTOR SHALL PROVIDE TEMPORARY FM APPROVED LIGHTING UNTIL PERMANENT LIGHTING IS OPERATIONAL.

- A. TOWER SECURITY
1. IF REQUIRED, TOWER MUST BE FENCED, TEMPORARILY OR PERMANENTLY WITHIN 24 HOURS OF ERECTION. DO NOT ALLOW THE GATE ACCESSING THE TOWER AREA TO REMAIN OPEN OR UNATTENDED ANY TIME FOR ANY REASON. KEEP THE GATE CLOSED AND LOCKED WHEN NOT IN USE.

- L. SITE CONTROL
1. THE CONTRACTOR IS COMPLETELY RESPONSIBLE FOR CONTAINMENT OF SEDIMENT AND CONTROL OF EROSION AT THE SITE. ANY DAMAGE TO ADJACENT OR DOWNSTREAM PROPERTIES WILL BE CORRECTED BY THE CONTRACTOR AT NO EXPENSE TO AT&T.
2. THE CONTRACTOR IS TO MAINTAIN ADEQUATE DRAINAGE AT ALL TIMES. DO NOT ALLOW WATER TO STAND OR POND. ANY DAMAGE TO STRUCTURES OR WORK ON THE SITE CAUSED BY INADEQUATE MAINTENANCE OF DRAINAGE PROVISIONS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR AND ANY COST ASSOCIATED WITH REPAIRS FOR SUCH DAMAGE WILL BE AT THE CONTRACTOR’S EXPENSE.
3. ALL WASTE MATERIAL SHALL BE PROPERLY DISPOSED OF OFF-SITE OR AS DIRECTED BY CONSTRUCTION MANAGER AND IN ACCORDANCE WITH JURISDICTIONAL AUTHORITIES.

- M. LIVESTOCK PROTECTION
1. PROTECT AND SECURE LIVESTOCK. MAINTAIN AND SECURE EXISTING PERIMETER FENCE AND/OR GATE ENCLOSURES.

2. SITE PREPARATION
A. SCOPE OF WORK INCLUDES
1. PROTECTION OF EXISTING TREES, VEGETATION AND LANDSCAPING MATERIALS WHICH MIGHT BE DAMAGED BY CONSTRUCTION ACTIVITIES.
2. TRIMMING OF EXISTING TREES AND VEGETATION AS REQUIRED FOR PROTECTION DURING CONSTRUCTION ACTIVITIES.
3. CLEANING AND GRUBBING OF STUMPS, VEGETATION, DEBRIS, RUBBISH, DESIGNATED TREES AND SITE IMPROVEMENTS.
4. TOPSOIL STRIPPING AND STOCKPILING.
5. TEMPORARY EROSION CONTROL, SILTATION CONTROL, AND DUST CONTROL CONFORMING TO LOCAL REQUIREMENTS AS APPLICABLE.
6. TEMPORARY PROTECTION OF ADJACENT PROPERTY, STRUCTURES, BENCHMARKS, AND MONUMENTS.
7. PROTECTION AND TEMPORARY RELOCATION, STORAGE AND RE-INSTALLATION OF EXISTING FENCE AND OTHER SITE IMPROVEMENTS SCHEDULED FOR RE-USE.
8. REMOVAL AND LEGDK DISPOSAL OF CLEARED MATERIALS.

- B. PRODUCTS AND MATERIALS (AS APPROVED BY CONSTRUCTION MANAGER OR AS NOTED IN CONSTRUCTION DOCUMENTS)
1. MATERIALS USED FOR TREE PROTECTION, EROSION CONTROL, SILTATION CONTROL, AND DUST CONTROL.

3. EARTHWORK
A. SCOPE OF WORK INCLUDES
1. EXCAVATION, TRENCHING, FILLING, COMPACTION, AND GRADING FOR STRUCTURES, SITE IMPROVEMENTS AND UTILITIES.
2. MATERIALS FOR SUB-BASE, DRAINAGE, BACKFILL AND GRAVEL FOR SLABS, PAVEMENT AND IMPROVEMENTS.
3. ROCK EXCAVATION WITHOUT BLASTING.
4. SUPPLY OF ADDITIONAL MATERIALS FOR OFFSITE AS REQUIRED.
5. REMOVAL AND LEGDK DISPOSAL OF EXCAVATED MATERIAL AS REQUIRED.

- B. QUALITY ASSURANCE
1. COMPACTION
A. UNDER STRUCTURES, BUILDING SLABS, PAVEMENTS AND WALKWAYS WILL OBTAIN A 95% COMPACTION AT A MINIMUM DRY DENSITY AS DETERMINED BY ASTM 0-1557 OR WITH PLUS OR MINUS 3% OF THE MOISTURE CONTENT.
2. GRADING TOLERANCES OUTSIDE BUILDING LINES
A. LAWNS, UNPAVED AREAS AND WALKS PLUS OR MINUS 1 INCH.
B. UNDER PAVEMENTS PLUS OR MINUS ½ INCH.
3. GRADING TOLERANCES FOR FILL UNDER CONCRETE APPLICATIONS
A. PLUS OR MINUS ½ INCH MEASURED WITH 10 FOOT STRAIGHT EDGE.

- C. PRODUCTS AND MATERIALS (AS APPROVED BY CONSTRUCTION MANAGER OR AS NOTED IN CONSTRUCTION DOCUMENTS)
1. SUB-BASE MATERIAL: GRADED MIXTURE OF NATURAL OR CRUSHED GRAVEL, CRUSHED STONE OR SLAG, AND NATURAL SAND.
2. WASHED MATERIAL, EVENLY GRADED MIXTURE OF CRUSHED STONE OR GRAVEL WITH 95% PASSING A 1-1/2 INCH SIEVE.
3. GRADING MATERIAL WILL CONSIST OF SATISFACTORY NATIVE OR IMPORTED SOIL MATERIALS FREE OF CLAY, ROCK OR GRAVEL NOT LARGER THAN 2 INCHES IN ANY DIMENSION, DEBRIS, WASTE, FROZEN MATERIALS AND OTHER UNSUITABLE MATERIALS WILL NOT BE ALLOWED FOR USE. IMPORTED MATERIALS SHALL HAVE A CLAY CONTENT OF NO MORE THAN 5%.
4. GRAVEL MATERIAL: EVENLY GRADED MIXTURE OF CRUSHED STONE OR GRAVEL WITH 95% PASSING A 1-1/2 INCH SIEVE.
5. GEOTEXTILE FABRIC: AS PER CONSTRUCTION DOCUMENTS.

- D. CLEARING AND GRUBBING
1. REMOVE ALL VEGETATION AND MATERIALS AS REQUIRED. REMOVE STUMPS COMPLETELY UNDER FOUNDATIONS AND ROADWAYS. DISPOSE OF CLEARING AND GRUBBING OFF-SITE OR IN AN ON-SITE LOCATION APPROVED BY CONSTRUCTION MANAGER.

- E. STRIPPING
1. STRIP NOT LESS 3 INCHES OF SOD AND TOPSOIL FROM AREAS THAT WILL UNDERLAY GRAVEL, PAVEMENT, NEW STRUCTURES OR EMBANKMENTS. STOCKPILE STRIPPING ON-SITE FOR RE-USE AND FINAL LANDSCAPING.
G. EMBANKMENT
1. CONSTRUCT EMBANKMENT TO THE LINES AND GRADES SHOWN ON THE DRAWING.
2. CONSTRUCT EMBANKMENT FROM ON-SITE EXCAVATION MATERIAL WHEN SUITABLE. USE IMPORTED BACKFILL ONLY AFTER AVAILABLE ON-SITE EXCAVATION MATERIAL HAS BEEN USED.
3. CONSTRUCT IN LIFTS OF NOT MORE THAN 12 INCHES IN LOOSE DEPTH. THE FULL WIDTH OF THE CROSS SECTION SHALL BE BROUGHT UP UNIFORMLY.
4. MATERIAL SHALL BE PLACED IN LAYERS AND SHALL BE NEAR OPTIMUM MOISTURE CONTENT BEFORE ROLLING TO OBTAIN THE PRESCRIBED COMPACTION. WETTING OR DRYING OF THE MATERIAL AND MANIPULATION TO SECURE A UNIFORM MOISTURE CONTENT THROUGHOUT THE LAYERS MAY BE REQUIRED. SUCH OPERATIONS SHALL BE INCLUDED IN THE APPROPRIATE BID ITEM. SHOULD THE MATERIAL BE TOO WET TO PERMIT PROPER COMPACTION, IT IS THE CONTRACTOR’S RESPONSIBILITY TO UTILIZE MATERIAL WITH AN ACCEPTABLE MOISTURE CONTENT.
5. DO NOT PLACE FROZEN MATERIAL IN THE EMBANKMENT AND DO NOT PLACE EMBANKMENT MATERIAL UPON FROZEN MATERIAL.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR THE STABILITY OF EMBANKMENTS AND THE REPLACEMENT OF ANY PORTION WHICH HAS BECOME DISPLACED DUE TO CONTRACTOR’S OPERATIONS.
7. START LAYERS IN THE DEEPEST PORTION OF THE FILL AND AS PLACEMENT PROGRESSES, CONSTRUCT LAYERS APPROXIMATELY PARALLEL TO THE FINISH GRADE LINE.
8. ROUTE EQUIPMENT BOTH LOADED AND EMPTY, OVER THE FULL WIDTH OF THE EMBANKMENT TO ENSURE UNIFORMITY OF MATERIAL PLACEMENT.
9. COMPACT EMBANKMENT UNDERLYING NEW GRAVEL PAVING, FLOOR SLABS AND STRUCTURES TO BE 95% COMPACTION AT A MINIMUM DRY DENSITY AS DETERMINED BY ASTM 0-1557 OR WITHIN PLUS OR MINUS 3% OF OPTIMUM MOISTURE CONTENT. COMPACT NON-STRUCTURAL AREA EMBANKMENTS TO A MINIMUM OF 90% OF ASTM 0-1557.

- H. SITE GRADING
1. USING ON-SITE EXCAVATION MATERIAL, SHAPE, TRIM, FINISH AND COMPACT SURFACE AREAS TO CONFORM TO THE LINES. GRADES AND CROSS SECTIONS SHOWN ON THE DRAWING OR AS DESIGNATED BY THE CONSTRUCTION MANAGER.
2. GRADE SURFACES TO DRAIN AND ELIMINATE ANY PONDING OR EROSION.
3. ELIMINATE WHEEL RUTS BY REGRADING.
4. COMPACT AREAS OF UNDERLYING NEW GRAVEL, PAVING, FLOOR SLABS AND STRUCTURES TO BE AT 95% COMPACTION AT A MAXIMUM DRY DENSITY AS DETERMINED BY THE ASTM 0-1557 OR WITHIN PLUS OR MINUS 3% OF OPTIMUM MOISTURE CONTENT.
5. CONSTRUCT FINISH SURFACE OF SITE GRADING AREAS WITHIN 1 INCH FROM SPECIFIED GRADE.

- I. SUBGRADE PREPARATION
1. SHAPE TOP OF SUBGRADE TO THE LINES AND GRADES SHOWN ON THE DRAWINGS.
2. MAINTAIN TOP OF SUBGRADE IN A FREE-DRAINING CONDITION.
3. DO NOT STOCK PILE MATERIAL ON TOP OF SUBGRADE UNLESS AUTHORIZED BY CONSTRUCTION MANAGER.
4. COMPACT THE TOP 12 INCHES OF SUBGRADE TO A 95% COMPACTION AT A MAXIMUM DRY DENSITY AS DETERMINED BY ASTM 0-1557 OR WITHIN PLUS OR MINUS 3% OF THE OPTIMUM MOISTURE CONTENT.
5. CONSTRUCT TOP OF SUBGRADE WITHIN 1 INCH OF ESTABLISHED GRADE AND CROSS SECTION.

- J. GEOTEXTILE FABRIC
1. LAY GEOTEXTILE FABRIC OVER COMPACTED SUBGRADE IN THE COMPOUND AREA AND UNDER LENGTH OF ROAD (WHEN REQUIRED). LAP ALL JOINTS TO A MINIMUM OF 36 INCHES.

- K. GRAVEL SURFACING
1. CONSTRUCT GRAVEL SURFACING AREAS USING CRUSHED AGGREGATE BASE AND FINISH COURSES AS SPECIFIED BY CONSTRUCTION MANAGER. SPREAD GRAVEL AND RAKE TO OBTAIN A UNIFORM SURFACE AREA.

- L. LANDSCAPING
1. FURNISH, INSTALL AND MAINTAIN LANDSCAPE WORK AS SHOWN AND/OR REQUIRED WITHIN THE CONSTRUCTION DOCUMENTS OR AS SPECIFIED IN THE CONSTRUCTION SPECIFICATIONS.

- M. CONCRETE FORM WORK
1. FORMS: SMOOTH AND FREE OF SURFACE IRREGULARITIES. UTILIZE FORM RELEASE AGENTS.
2. CHAMFER EXPOSED EDGES OF ALL TOWER FOUNDATION SHALL RECEIVE A ¾ INCH BY ¾ INCH 45 DEGREE CHAMFER. OTHER EXPOSED EDGES SHALL RECEIVE A TOOLED RADIUS FINISH.
3. UPON COMPLETION, REMOVE ALL FORMS INCLUDING THOSE CONCEALED OR BURIED.
4. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.

4. GENERAL NOTES

1. IT IS THE CONTRACTOR’S RESPONSIBILITY TO EXAMINE ALL PLAN SHEETS AND SPECIFICATIONS AND COORDINATE HIS WORK WITH THE WORK OF ALL OTHER CONTRACTORS TO ENSURE THAT WORK PROGRESSION IS NOT INTERRUPTED.
2. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING A NEAT AND ORDERLY SITE, YARD AND GROUNDS. CONTRACTOR SHALL REMOVE AND DISPOSE OFF SITE ALL RUBBISH, WASTE MATERIAL, LITTER AND ALL FOREIGN SUBSTANCES. REMOVE PETROCHEMICAL SPILLS, STAINS AND OTHER FOREIGN DEPOSITS. RAKE GROUND TO A SMOOTH EVEN-TEXTURED SURFACE.
3. THE PLANS SHOW SOME KNOWN SUBSURFACE STRUCTURE ABOVE GROUND STRUCTURES AND/OR UTILITIES BELIEVED TO EXIST IN THE WORKING AREA, EXACT LOCATION OF WHICH MAY VARY FROM THE LOCATION INDICATED. IN PARTICULAR THE CONTRACTOR IS WARNED THAT THE EXACT OR EVEN APPROXIMATE LOCATION OF SUCH PIPELINES, SUBSURFACE STRUCTURES AND/OR UTILITIES IN THE AREA MAY BE SHOWN OR MAY NOT BE SHOWN AND IT SHALL BE HIS RESPONSIBILITY TO PROCEED WITH GREAT CARE IN 48 HOURS BEFORE YOU DIG, DRILL OR BLAST CALL LOCAL UTILITIES LOCATOR COMPANY.
4. THE OWNER OR OWNER’S REPRESENTATIVE SHALL BE NOTIFIED IN WRITING OF ANY CONDITIONS THAT VARY FROM THOSE SHOWN ON THE PLANS. THE CONTRACTOR’S WORK SHALL NOT VARY FROM THE PLANS WITHOUT THE EXPRESSED APPROVAL OF THE OWNER OR THE OWNER’S REPRESENTATIVE.
5. THE CONTRACTOR IS INSTRUCTED TO COOPERATE WITH ANY AND ALL OTHER CONTRACTORS PERFORMING WORK ON THE SITE DURING THE PERFORMANCE OF THIS CONTRACT.
6. THE CONTRACTOR SHALL RESTORE ALL DAMAGED, PUBLIC OR PRIVATE PROPERTY TO AT LEAST AS GOOD OF CONDITION AS BEFORE DISTURBED AS DETERMINED BY THE OWNER OR OWNER’S REPRESENTATIVE.
7. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIRED PERMITS.
8. THE CONTRACTOR SHALL PROTECT EXISTING PROPERTY LINE MONUMENTATION. ANY MONUMENTATION DISTURBED OR DESTROYED, AS JUDGED BY THE OWNER OR OWNER’S REPRESENTATIVE, SHALL BE REPLACED.
9 ALL TRENCH EXCAVATION AND ANY REQUIRED SHEETING AND SHORING SHALL BE DONE IN ACCORDANCE WITH OSHA REGULATIONS FOR CONSTRUCTION.
10.CONTRACTOR SHALL BE RESPONSIBLE FOR DEWATERING AND THE MAINTENANCE OF SURFACE DRAINAGE DURING THE COURSE OF WORK.
11ALL UTILITY WORK INVOLVING CONNECTIONS TO EXISTING SYSTEMS SHALL BE COORDINATED WITH THE OWNER OR OWNER’S REPRESENTATIVE BEFORE EACH AND EVERY CONNECTION TO EXISTING SYSTEMS IS MADE.
12MAINTAIN FLOW FOR ALL EXISTING UTILITIES
13ALL SITE FILL SHALL MEET SELECTED FILL STANDARDS AS DEFINED BY THE OWNER OF OWNER’S REPRESENTATIVE ON THE DRAWINGS OR GEOTECHNICAL REPORT RECOMMENDATIONS.
14CONTRACTOR TO GRADE ALL AREAS OF THE SITE TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE BUILDING OR EQUIPMENT PAD AND THE TOWER.
15IF NECESSARY, THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING AND REGRADING ROADWAY AND ANY DISTURBED AREAS FOLLOWING INSTALLATION OF UTILITIES.
16NO COMMERCIAL MESSAGES TO BE DISPLAYED ON TOWER
17WATER AND SEWER SERVICES ARE NOT REQUIRED FOR THE DEVELOPMENT
18THE CONTRACTOR SHALL FURNISH AND INSTALL ALL MATERIAL UNLESS OTHERWISE NOTED.
19ELECTRICAL DRAWINGS HAVE BEEN REVIEWED AND SEALED FOR STRUCTURAL PURPOSES ONLY.



DRAWING SCALES ARE INTENDED FOR 11"x17" SIZE PRINTED MEDIA ONLY.

SUBMITTALS			
REV	DATE	DESCRIPTION	BY
B	04/02/20	90% CD	ANI
C	07/02/20	90% CD	RMM
D	08/01/20	90% CD	RMM
E	09/09/20	90% CD	MHF
F	09/17/20	90% CD	RMM
G	11/12/20	90% CD	RMM
O	11/17/20	100% CD	RMM



PROJECT TITLE

USID: 98812
FA#: 10122498

SWIFT ALLEY

105 NORTH UNION STREET
ALEXANDRIA, VA 22314

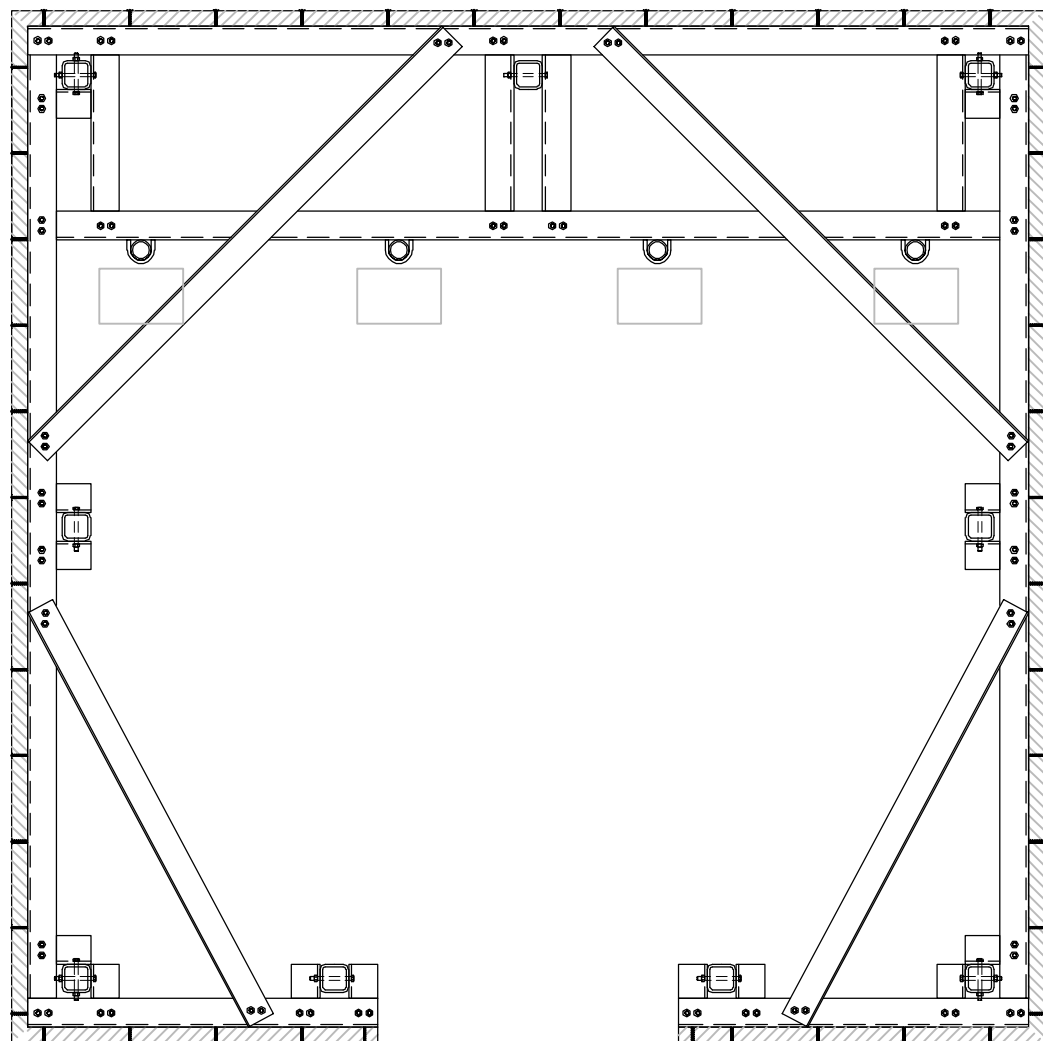
EXISTING 42’-0” ROOFTOP

SHEET DESCRIPTION

GENERAL NOTES

SHEET NO.

GN-1



7555-A PALMETTO COMMERCE PARKWAY
 NORTH CHARLESTON, SC 29420 USA
 P: (800)-755-0689 / F: (843)-207-0207
 WWW.STEALTHCONCEALMENT.COM
 PROJECT MANAGER: BRANDON NETWON ; 843-473-6111

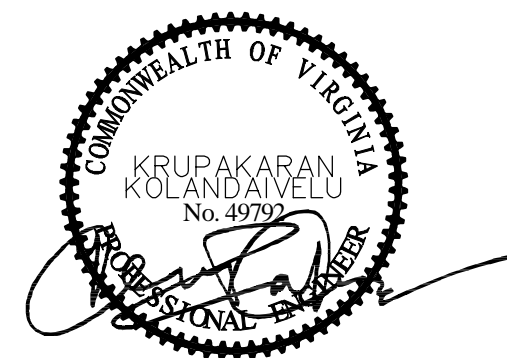
FINAL ENGINEERING

SMARTLINK, LLC
 SWIFT ALLEY
 105 NORTH UNION STREET
 ALEXANDRIA, VA 22314

RAYCAP JOB #: AT20-00570W-17R0

DRAWING INDEX

T1	TITLE SHEET
N1-N2	NOTES & SPECIFICATIONS
S1	PLAN VIEW
S2-S4	SECTION - ELEVATION
S5	BASEPLATE DETAILS



NB+C ENGINEERING SERVICES, LLC.
 6095 MARSHALLS DRIVE, SUITE 100
 ELKRIE, MD 21075
 410-712-7092

T1	REVISION
06-23-20	0

GENERAL

1. THE TYPICAL NOTES SHALL APPLY FOR ALL CASES UNLESS OTHERWISE SPECIFICALLY DETAILED WITHIN THE DRAWINGS. SOME NOTES MAY NOT BE APPLICABLE IN PART OR IN WHOLE FOR EVERY PROJECT.
2. ANY ITEMS REFERENCED AS BEING ON "HOLD" ARE TO BE INCLUDED IN THE WORK AS SHOWN. HOWEVER, CONSTRUCTION OR FABRICATION IS NOT TO BEGIN UNTIL THE "HOLD" REFERENCE IS REMOVED.
3. DIMENSIONS CONTAINED WITHIN MUST BE FIELD VERIFIED AND CUSTOMER APPROVED PRIOR TO FABRICATION OF MATERIALS.
4. THE MODIFICATIONS DEPICTED IN THESE DRAWINGS ARE INTENDED TO PROVIDE STRUCTURAL SUPPORT FOR THE ADDITION OF THE ANTENNA SCREENING SYSTEMS OUTLINED WITHIN. THE EXISTING STRUCTURE OR BUILDING SHALL BE ANALYZED AND RETROFITTED AS REQUIRED, BY OTHERS, TO WITHSTAND THE LOADS IMPOSED BY THE NEW STEALTH® ENCLOSURE SHOWN ON THE DRAWINGS.
5. ANTENNA CONCEALMENT PRODUCTS SHALL BE INSTALLED BY A CONTRACTOR EXPERIENCED IN SIMILAR WORK. CARE SHALL BE TAKEN IN THE INSTALLATION OF ANY AND ALL MEMBERS IN ACCORDANCE WITH RECOGNIZED INDUSTRY STANDARDS AND PROCEDURES. ALL APPLICABLE OSHA SAFETY GUIDELINES ARE TO BE FOLLOWED. STEALTH® IS NOT PROVIDING FIELD INSTALLATION SUPERVISION.
6. THESE DRAWINGS INDICATE THE MAJOR OPERATIONS TO BE PERFORMED, BUT DO NOT SHOW EVERY FIELD CONDITION THAT MAY BE ENCOUNTERED. THEREFORE, PRIOR TO BEGINNING OF WORK THE CONTRACTOR SHOULD SURVEY THE JOB SITE THOROUGHLY TO MINIMIZE FIELD PROBLEMS.
7. PROTECTION OF EXISTING STRUCTURES DURING THE COURSE OF THE CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
8. THE STRUCTURAL INTEGRITY OF THIS STRUCTURE IS DESIGNED TO BE ATTAINED IN ITS COMPLETED STATE. WHILE UNDER CONSTRUCTION ANY TEMPORARY BRACING OR SHORING WHICH MAY BE REQUIRED TO MAINTAIN STABILITY PRIOR TO COMPLETION SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
9. THE PLANS AND DETAILS WITHIN DO NOT INCLUDE DETAILS OR DESIGN FOR DRAINAGE FROM OR WATERPROOFING OF EXTERIOR OR INTERIOR SURFACES OF THE EXISTING BUILDING OR STRUCTURE. THESE DETAILS MUST BE COMPLETED BY OTHERS.

DESIGN NOTES:

STRUCTURAL DESIGN IS BASED ON THE 2015 IBC & THE ASCE 7-10 STANDARD

SITE LOCATION:

ALEXANDRIA, VA

DESIGN LOADS:

WIND:
ULTIMATE WIND SPEED: 115 MPH (3-SEC GUST)
RISK CATEGORY: II
EXPOSURE: D

SEISMIC:
IMPORTANCE FACTOR: 1.0
RISK CATEGORY: II
SITE CLASS: D
MAPPED SPECTRAL RESPONSE ACCELERATIONS: S_s = 0.118g S₁ = 0.0516g
SEISMIC DESIGN CATEGORY: B
SPECTRAL RESPONSE COEFFICIENTS: S_{ds} = 0.126g S_{d1} = 0.082g

DESIGN WIND PRESSURE: 32.8 PSF (0.6W)

SECTOR C REACTIONS:

SHEAR REACTION: V= 1600 LBS
AXIAL REACTION: R= 3000 LBS
MOMENT: M= 500 LBS-FT

STEALTHSKIN PANELS

1. FASTENER HOLES IN STEALTHSKIN FOAM COMPOSITE PANELS ARE NOT FACTORY DRILLED AND MUST BE DRILLED IN THE FIELD.
2. PANEL FASTENERS TO BE SPACED 12" O.C. MAX. AND LOCATED 6" MAX. HORIZONTALLY FROM EACH EDGE AT TOP AND BOTTOM OF PANEL. MAINTAIN 1 ½" MIN. EDGE DISTANCE FROM ALL EDGES. 4' WIDE PANELS REQUIRE (4) FASTENERS TOP AND BOTTOM. 5' WIDE PANELS REQUIRE (5) FASTENERS TOP AND BOTTOM.
3. WHEN FASTENER BOLT HEAD OR NUT BEARS DIRECTLY ON SURFACE OF STEALTHSKIN PANEL, TIGHTEN PANEL BOLTS ONLY ½ TURN PAST SNUG. APPLY THREAD LOCK COMPOUND TO THE THREADS OF METAL BOLTS. USE THIN BEAD OF EPOXY TO LOCK THE NUTS OF FRP BOLTS AND STEALTHJ STAINLESS STEEL PANEL BOLTS. USE WASHER OR FLANGED HEAD BOLT, OR FASTENER WITH LARGE BEARING SURFACE.
4. PANELS WILL EXPAND AND CONTRACT DUE TO TEMPERATURE. WHEN INSTALLING PANELS IN COLD TEMPERATURES, EVENLY SPACE PANELS ALONG LENGTH OF SCREEN WALL WITH EQUAL GAPS BETWEEN PANELS TO ALLOW FOR EXPANSION DURING WARM TEMPERATURES.
5. ADJACENT FLAT PANELS ARE JOINED BY A VERTICAL FOAM SPLINE THAT IS INSERTED INTO GROOVES CUT INTO THE SIDE OF EACH PANEL. DO NOT LIFT PANELS BY GROOVES. PANELS MUST BE LIFTED WITH FORCE DIRECTED ONTO PANEL SURFACE.
6. ADJACENT RADIUS PANELS ARE JOINED BY A VERTICAL H-CHANNEL. INSERT PANELS INTO EACH SIDE OF H-CHANNEL.
7. RADIUS PANELS MUST BE EVENLY SPACED ALONG RADIUS SUPPORT. CONTRACTOR TO MEASURE LENGTH OF RADIUS SUPPORT AND DIVIDE BY THE NUMBER OF RADIUS PANELS TO DETERMINE PROPER SPACING. H-CHANNEL CONNECTORS ARE USED TO COVER THE GAP BETWEEN PANELS AND TO ALLOW FOR PANEL EXPANSION AND CONTRACTION.
8. SURFACES OF PANELS SHALL BE COATED WITH SUITABLE PAINT FOR UV PROTECTION. TOP EDGE OF PANEL MUST BE COVERED TO PREVENT WATER TRAVEL BETWEEN PANELS. USE SHERWIN WILLIAMS "COROTHANE II" OR PRE APPROVED EQUIVALENT.
9. EXPOSED TOP AND SIDE FOAM EDGES OF PANELS MUST BE COVERED OR COATED FOR UV PROTECTION. STEALTHJ WILL PROVIDE PANEL EDGE CAPS TO BE FIELD APPLIED FOR THIS PURPOSE FOR MOST APPLICATIONS. PANEL EDGE CAPS TO BE SECURED WITH TEK SCREW INSTALLED @ 12" MAXIMUM SPACING ON THE INSIDE FACE OF THE PANEL.

BALLASTED CONCEALMENTS

1. ROOF MUST BE CLEAN AND FREE OF DEBRIS
2. THE BALLAST FRAME IS TO BEAR ON A NEOPRENE PAD PROVIDED BY OTHERS, PLACED BETWEEN THE NEW BALLAST FRAME AND ROOF.
3. DESIGN ASSUMES CONTRACTOR IS RESPONSIBLE FOR LEVELING THE PLATFORM ON ROOF AND PROVIDING APPROPRIATE SHIM METHOD IF ROOF IS SLOPED.
4. DESIGN ASSUMES A PITCH THAT DOES NOT EXCEED 15 DEGREES. CONTRACTOR TO VERIFY.

STRUCTURAL STEEL

1. STEEL FABRICATION AND INSTALLATION SHALL BE DONE IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION MANUAL AND SPECIFICATIONS.
2. STEEL I-SHAPE, ANGLE, CHANNEL, AND MISCELLANEOUS MEMBERS SHALL CONFORM TO ASTM A36 (36 KSI MIN. YIELD STRENGTH) STEEL SPECIFICATIONS, U.N.O.
3. STEEL PLATE MEMBERS SHALL CONFORM TO ASTM A36 (36 KSI MIN. YIELD STRENGTH) STEEL SPECIFICATIONS U.N.O.
4. STEEL PIPE AND ROUND TUBE MEMBERS SHALL CONFORM TO ASTM A500 GRADE B (42 KSI MIN. YIELD STRENGTH) STEEL SPECIFICATIONS, U.N.O.
5. STEEL RECTANGULAR AND SQUARE TUBE MEMBERS SHALL CONFORM TO ASTM A500 GRADE B (46 KSI MIN. YIELD STRENGTH) STEEL SPECIFICATIONS, U.N.O.
6. STEEL WIDEFLANGE MEMBERS SHALL CONFORM TO ASTM A992 (50 KSI MIN, YIELD STRENGTH) STEEL SPECIFICATIONS U.N.O.
7. ALL BOLTS FOR STEEL-TO-STEEL CONNECTIONS SHALL CONFORM TO ASTM F3125 GRADE A325 SPECIFICATIONS, U.N.O. A325N AND A325X ALLOWED.
8. STRUCTURAL BOLTS SHALL BE TIGHTENED USING TURN-OF-THE-NUT METHOD.
9. BOLT HOLE EDGE DISTANCES SHALL BE A MINIMUM 1", U.N.O.
10. ALL WELDING SHALL BE PERFORMED IN ACCORDANCE WITH THE SPECIFICATIONS AND PROCEDURES OF THE AMERICAN WELDING SOCIETY (AWS) BY CERTIFIED WELDERS PER AWS D1.1 FOR STEEL AND AWS D1.2 FOR ALUMINUM. STEEL WELDS SHALL BE BY E70XX, LOW HYDROGEN ELECTRODE.
11. STEEL SHALL BE HOT DIP GALVANIZED PER ASTM A123 SPECIFICATIONS AFTER FABRICATION OR PAINTED WITH RUST INHIBITIVE PRIMER.
12. STEEL HARDWARE SHALL BE HOT DIP GALVANIZED PER ASTM F2329, U.N.O.
13. AFTER ANY FIELD HOLE PUNCHING / DRILLING OR CUTTING HAS BEEN COMPLETED, OR FOR ANY DAMAGED STRUCTURAL MEMBER, TOUCH UP ALL BARE MATERIAL AND WELDED AREAS WITH TWO COATS OF GAL-CON OR SIMILAR MATERIAL TO RESTORE THE GALVANIZED PROTECTION ON THE MEMBERS.
14. ALL WELDED STEEL ASSEMBLIES AND INDIVIDUAL STEEL PARTS SHOULD HAVE THE PART NUMBER WELDED ONTO THE PART OR ASSEMBLY. THE PART NUMBERS SHOULD BE LOCATED CONSISTENTLY AND AWAY FROM ANY CONNECTION POINT TO AVOID ANY INTERFERENCE ISSUES WITH THE WELD.

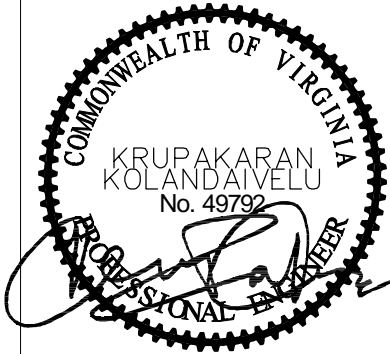
FRP STRUCTURAL MEMBERS

1. FRP STRUCTURAL SHAPES SHALL BE BEDFORD FRP SERIES 1525, MANUFACTURED USING THE PULTRUSION PROCESS.
2. IF PREFABRICATED MEMBERS DO NOT ASSEMBLE PER PLAN, CONTACT STEALTH® CONCEALMENT SOLUTIONS, INC. BEFORE CUTTING OR ALTERING FABRICATED MEMBERS.
3. FRP STRUCTURAL MEMBERS SHALL BE FABRICATED AND ASSEMBLED AS INDICATED ON THE DRAWINGS.
4. THE CONTRACTOR SHALL PROTECT THE FRP STRUCTURAL MEMBERS FROM ABUSE TO PREVENT BREAKAGE, NICKS, GOUGES, ETC. DURING FABRICATION, HANDLING, AND INSTALLATION.
5. FRP BOLTS SHOULD BE TIGHTENED ½ TURN PAST SNUG AND LOCKED WITH EPOXY.

Raycap | STEALTH®

7555-A PALMETTO COMMERCE PARKWAY
NORTH CHARLESTON, SC 29420 USA
P: (800)-755-0689 F: (843)-207-0207
WWW.STEALTHCONCEALMENT.COM

PROPRIETARY INFORMATION: THE INFORMATION CONTAINED WITHIN THIS DRAWING SET IS PROPRIETARY & CONFIDENTIAL BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO RAYCAP, INC. IS STRICTLY PROHIBITED.



DRAWING NOT TO SCALE. UNLESS SPECIFIED OTHERWISE DIMENSIONS SHOWN ARE IN INCHES

TOLERANCES	
DECIMALS	ANGULAR
X ± 1/16"	X ± 0.5°
.XXX ± 0.01"	

NOTES & SPECIFICATIONS

SMARTLINK, LLC
SWIFT ALLEY
105 NORTH UNION STREET
ALEXANDRIA, VA 22314

NB+C
TOTALLY COMMITTED.

NB+C ENGINEERING SERVICES, LLC.
6095 MARSHLEE DRIVE, SUITE 100
ELKRODGE, MD 21075
410-712-7092

JOB #: AT20-00570W-17R0

DRAWN: DSP

DESIGNED: ARS

REVISED:

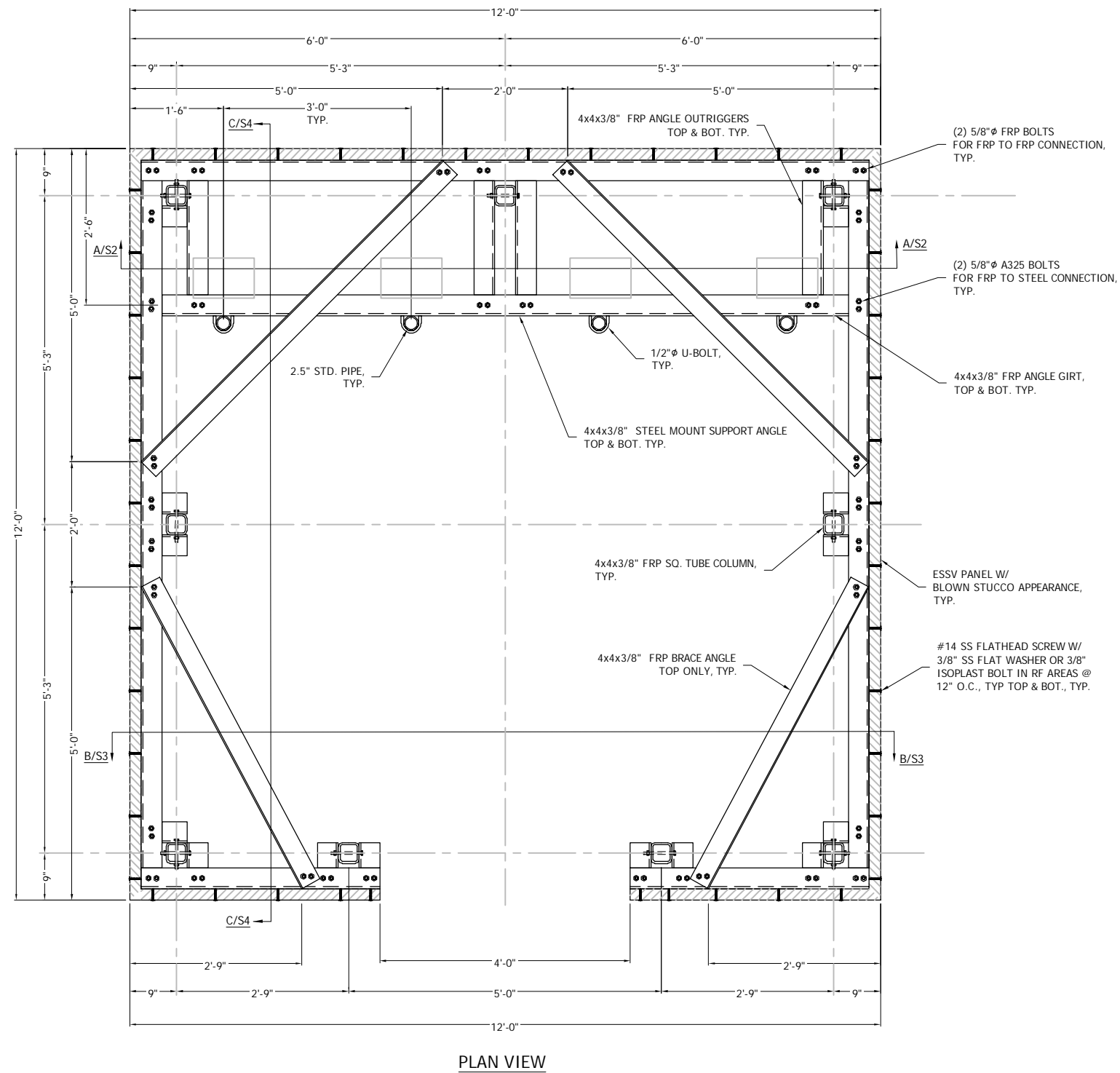
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06-23-20

REVISION

0

QTY: 3



NOTES:

- 1.) THE INTEGRITY OF THE EXISTING STRUCTURE MUST BE VERIFIED BY OTHERS.
- 2.) DIMENSIONS OF THE EXISTING STRUCTURE ARE BASED UPON DRAWINGS BY TRYLON , DATED 04-02-20 AND HAVE NOT BEEN PHYSICALLY VERIFIED BY STEALTH®. VERIFICATION OF THESE DIMENSIONS IS THE RESPONSIBILITY OF THE CUSTOMER.
- 3.) THE ATTACHMENT TO EXISTING (DESIGN AND FASTENERS) MUST BE PROVIDED BY OTHERS. STEALTH® WILL ONLY SUPPLY FASTENER SIZE AND QUANTITY REQUIRED, FOR ATTACHMENT TO EXISTING.
- 4.) THE PANELS ARE TO BE PAINTED / TEXTURED ACCORDING TO THE CUSTOMER APPROVED SAMPLE(S).
- 5.) IT IS THE RESPONSIBILITY OF THE CUSTOMER TO VERIFY ANTENNA FIT AND COAX CLEARANCE.
- 6.) IT IS STRONGLY RECOMMENDED THAT THE CUSTOMER REVIEWS THE RF CONSIDERATIONS IN THIS DESIGN.
- 7.) ALL NON-FRP MEMBERS ARE TO BE GALVANIZED.

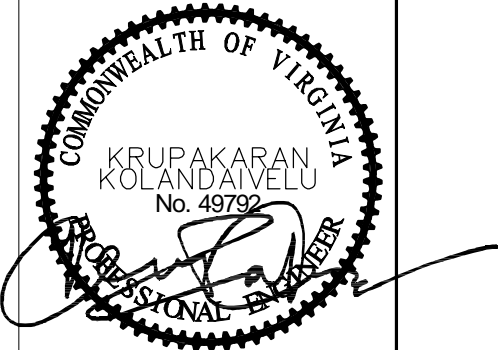
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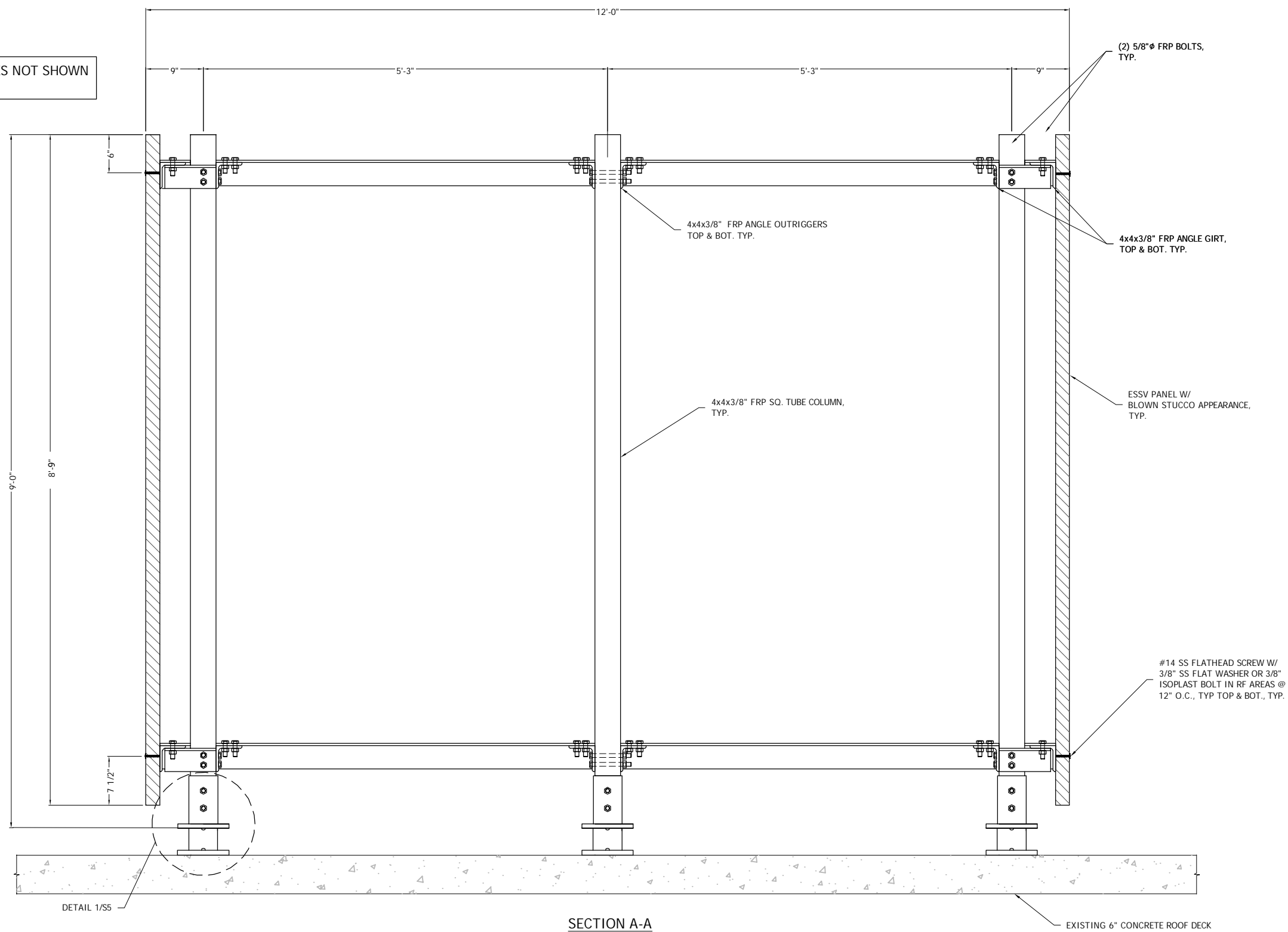
TOLERANCES	
DECIMALS	ANGULAR
X ± 1/16"	X ± 0.5°
.XXX ± 0.01"	

40 FT WALL PLAN VIEW

SMARTLINK, LLC
SWIFT ALLEY
105 NORTH UNION STREET
ALEXANDRIA, VA 22314

JOB #:	AT20-00570W-17R0
DRAWN:	DSP
DESIGNED:	ARS
REVISED:	
S1	REVISION
06-23-20	0

NOTE: CORNER BRACE ANGLES NOT SHOWN FOR CLARITY.



NOTE: SLOPE OF ROOF MUST BE VERIFIED BEFORE FABRICATION.

NOTE: CONTRACTOR TO PROVIDE WATERPROOFING TO PITCH POCKET BASE PLATE ATTACHING TO THE ROOF OF THE BUILDING.

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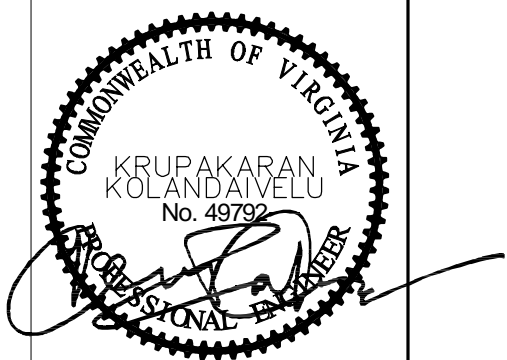
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NORTH CHARLESTON, SC 29420 USA
P: (800)-755-0689 F: (843)-207-0207
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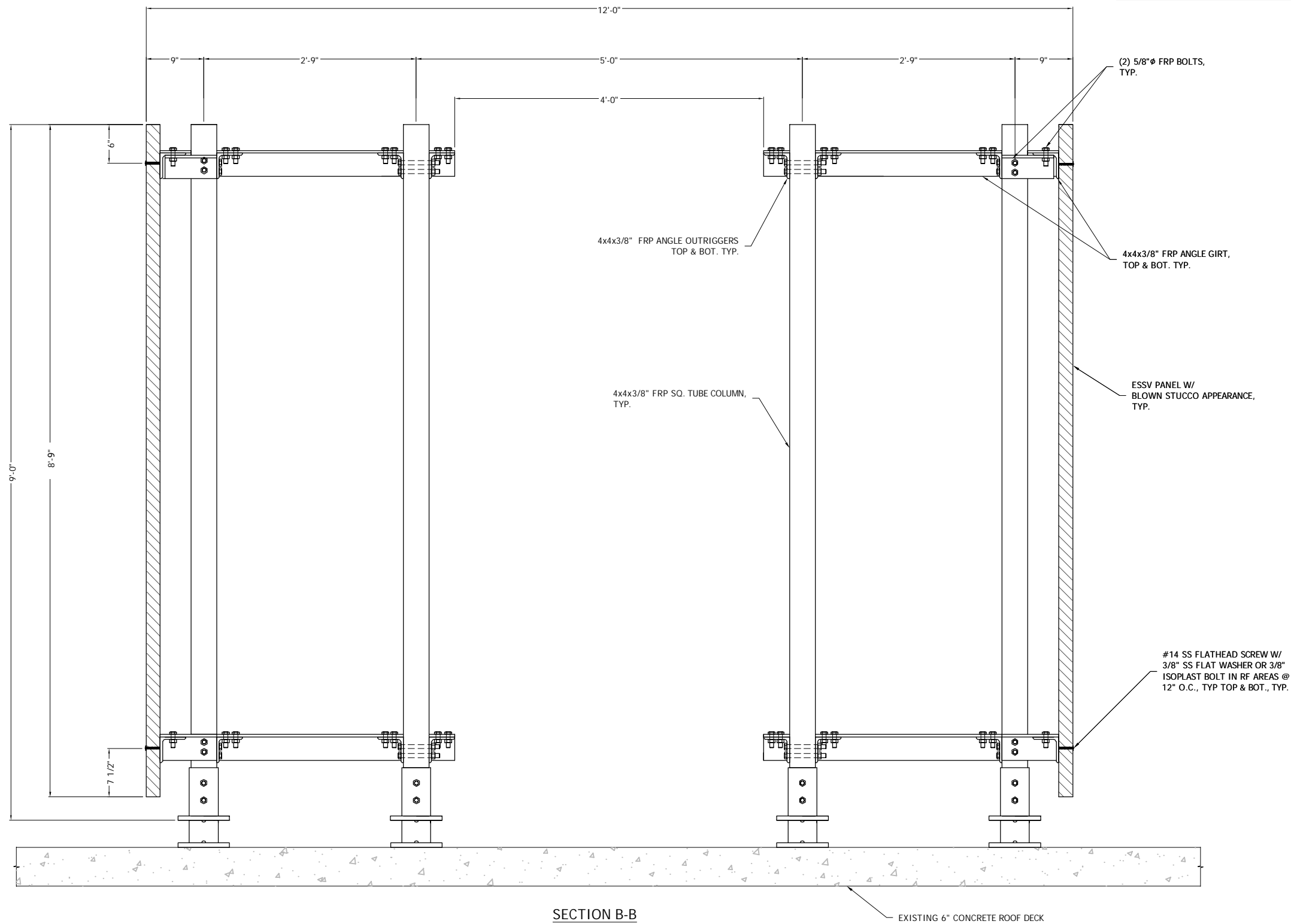
DRAWING NOT TO SCALE. UNLESS SPECIFIED OTHERWISE DIMENSIONS SHOWN ARE IN INCHES

TOLERANCES	
DECIMALS	ANGULAR
X ± 1/16"	X ± 0.5°
.XXX ± 0.01"	

SECTION - ELEVATION

SMARTLINK, LLC
SWIFT ALLEY
105 NORTH UNION STREET
ALEXANDRIA, VA 22314

JOB #:	AT20-00570W-17R0
DRAWN:	DSP
DESIGNED:	ARS
REVISED:	
S2	REVISION
06-23-20	0



NOTE: CORNER BRACE ANGLES NOT SHOWN FOR CLARITY.

4x4x3/8" FRP ANGLE OUTRIGGERS
TOP & BOT. TYP.

4x4x3/8" FRP SQ. TUBE COLUMN,
TYP.

(2) 5/8"Ø FRP BOLTS,
TYP.

4x4x3/8" FRP ANGLE GIRT,
TOP & BOT. TYP.

ESSV PANEL W/
BLOWN STUCCO APPEARANCE,
TYP.

#14 SS FLATHEAD SCREW W/
3/8" SS FLAT WASHER OR 3/8"
ISOPLAST BOLT IN RF AREAS @
12" O.C., TYP TOP & BOT., TYP.

EXISTING 6" CONCRETE ROOF DECK

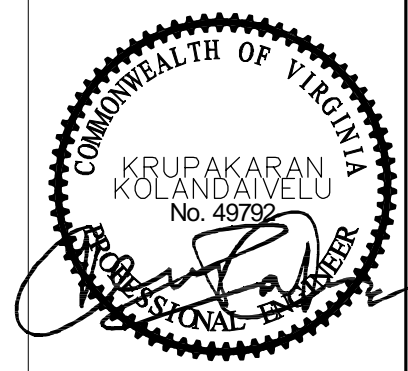
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NOTE: CONTRACTOR TO PROVIDE WATERPROOFING
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DRAWING NOT TO SCALE. UNLESS SPECIFIED
OTHERWISE DIMENSIONS SHOWN ARE IN INCHES
TOLERANCES
DECIMALS X ± 1/16" ANGULAR X ± 0.5"
.XXX ± 0.01"

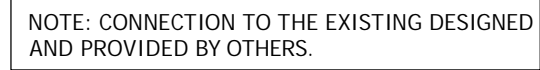
SECTION - ELEVATION

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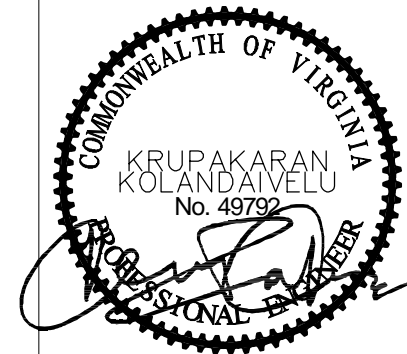
NOTE: CONNECTION TO THE EXISTING DESIGNED AND PROVIDED BY OTHERS.

DETAIL 1

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NORTH CHARLESTON, SC 29420 USA
P: (800)-755-0689 F: (843)-207-0207
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<u>TOLERANCES</u>	
<u>DECIMALS</u>	<u>ANGULAR</u>
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.XXX ± 0.01"	

BASEPLATE DETAILS

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ALEXANDRIA, VA 22314



NB+C ENGINEERING SERVICES, LLC.
6095 MARSHALEE DRIVE, SUITE 100
ELKRIDGE, MD 21075
410-712-7092

JOB #: AT20-00570W-17R0

DRAWN: DSP
DESIGNED: ARS
REVISED:

S5

06-23-20

EVISION

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