

**Town of Austerlitz  
Columbia County  
New York**

Richard Madonia, Deborah Lans, Perry Samowitz, Lee Tilden, Eric Spiegel

**Planning Board Meeting  
March 7, 2019  
7:00 p.m.**

**\*\*\*\*\*AGENDA\*\*\*\*\***

- 1) Call Regular Meeting to Order**
- 2) Approval of February minutes**
- 3) Unfinished Business**  
Airosmith Development – New Tower on West Hill Rd
- 4) New Business**  
No New Business
- 5) Public Comments**
- 6) Adjournment**

**\*\*\*\*\*Next Regular Planning Board Meeting April 4, 2019\*\*\*\*\***

**Town of Austerlitz  
Meeting of Planning Board  
February 7, 2019, 7pm**

In attendance: Town Attorney, Joseph Catalano, Deborah Lans, Richard Madonia, Perry Samowitz, Lee Tilden

**Meeting Called to Order: 7 pm**

**Minutes**

Motion to approve January Minutes made by R. Madonia, seconded by L. Tilden

**Unfinished Business**

No unfinished Business

**New Business**

**Airomsmith Development – New Cell Tower on West Hill Rd**

Airomsmith representative A. J. DiBella and Daniel Scheweigard described the intent of a new tower for the Town, noting that a full Environmental Assessment will be sent to the Board shortly. The tower will serve to provide wireless service in areas where there presently are large gaps. Emergency services will also be included.

AT&T is licensed by the FCC, the Goosetown location has the availability for additional towers. Maps were provided indicating where large, moderate and little service is presently provided.

Board members indicated needs to be filled in this application.

- a) A report of existing tower service.
- b) Drawings with one being on line of sight technology
- c) The letter of intent
- d) A discontinuation plan
- e) Public Impact

Many of these points will be addressed in the SEQRA. Request was also made for aerial photographs and full size maps. Neighbors will be notified for the required public hearing which may occur in April.

Noted was the need for the service of a Town Engineer and plans. A motion will be made at the Town Board meeting for that service.

This meeting will have helped to address the issues to be discussed and ruled on at the March meeting

### **Other Business**

Board members then discussed the future meetings on subdivision regulations. These discussions will serve as training as required for Planning Board members.

### **Public Comments**

No public comments

### **Adjournment 8:40**

Respectfully submitted:  
Constance Mondel



FROM ZERO TO INFINIGY  
the solutions are endless

1033 WATERVLIET SHAKER RD, ALBANY, NY 12205

02/28/19

Robyn Bright  
A&E Project Manager  
Airosmith Development  
32 Clinton Street, Saratoga Springs, NY 12866  
Mobile: (919) 271-9266  
Fax: (518) 306-1711  
rbright@airosmithdevelopment.com

RE: **AT&T New Site Install – HV North River FA#10141760**  
321 West Hill Road, Austerlitz NY 12165  
Proposed 300'-0" Self-Support Tower

To Ms. Bright,

This letter is written to address the proposed AT&T cell site installation located at 321 West Hill Road, Austerlitz NY 12165.

The proposed cell site structure will be ordered by AT&T to be designed to have a fall radius no greater than 100'-0", and to adhere to TIA-222-G-2005 Structural Standards for antenna supporting structures and antennas. Considering that the full proposed tower height is 300'-0" AGL, the tower is to be designed with break points at every 100'-0" AGL, as to not fall past the 100'-0" radius. The closest property line falls to the west of the site, at approximately 109'-0" away from the proposed tower. All linear measurements are based off a site survey completed by Erdman Anthony, dated 11/15/18.

In addition, the structure will adhere to the International Building Code 2015, as amended and adopted by the New York State Uniform Statewide Building Code and all other local, state and federal codes and requirements. Infinigy will confirm the order as requiring these codes to be met with final structure design and code adherence by the tower manufacturer.

If there are any additional questions and concerns, please do not hesitate to reach out to me directly or to the site's A&E project manager, as listed on the construction drawings. Thank you!

Best,

John Stevens  
NYS Professional Engineer  
CEO, Principal  
Office: (518) 690-0790



AZ CA CO FL GA IL MD NC NH NJ NY TN TX WA







## Radio Frequency Safety Survey Report Prediction (RFSSRP)

### AT&T Wireless Self Support Tower Facility

**Pace ID:** MRUNY011326

**PTN:** 2151A0G6MX

**Site ID:** 10141760

**Site Name:** HV North River

**Address:** West Hill Road,  
Austerlitz, NY 12017

**Latitude:** 42.307257

**Longitude:** -73.492724

**USID:** 219249

**FA:** 10141760

**Prepared for:**

AT&T Mobility, LLC  
c/o Airosmith Development  
32 Clinton Street  
Saratoga Springs, NY 12866

**Centerline PN:** 950016-086



### **Additional Site Information:**

CDs:10141760.HV North  
River.pCD\_RevD.NSB.01.25.19 ASD RL  
RFDS:UPSTATE-NY\_UP-STATE-  
NY\_UNL04570\_2019-New-Site\_LTE-  
5C\_ms275w\_2151A0G6MX\_10141760\_21  
9249\_12-05-2018\_Preliminary-Submitted-  
for-Approval\_v1.00

### **Report Information:**

Report Writer: Michelle Stone  
Date: March 4, 2019

Report Reviewer: Ryan McManus

### **Statement of Compliance**

AT&T will be compliant with FCC Regulations upon installation of recommended mitigation measures.

## TABLE OF CONTENTS

<b>1.0 GENERAL SUMMARY.....</b>	<b>2</b>
<b>1.1 SITE SUMMARY .....</b>	<b>2</b>
<b>2.0 SITE SCALE MAP .....</b>	<b>4</b>
<b>3.0 ANTENNA INVENTORY .....</b>	<b>5</b>
<b>3.1 ROOFVIEW® EXPORT FILE .....</b>	<b>6</b>
<b>4.0 PREDICTED EMISSION LEVELS AND DISCUSSION .....</b>	<b>7</b>
<b>5.0 STATEMENT OF COMPLIANCE .....</b>	<b>12</b>
<b>5.1 STATEMENT OF AT&amp;T MOBILITY COMPLIANCE .....</b>	<b>12</b>
<b>5.2 RECOMMENDATIONS.....</b>	<b>12</b>
<b>6.0 FALL ARREST AND PARAPET INFORMATION.....</b>	<b>12</b>
<b>APPENDIX A: RF SIGNAGE .....</b>	<b>13</b>
<b>APPENDIX B: FCC GUIDELINES AND EMISSIONS THRESHOLD LIMITS .....</b>	<b>14</b>
<b>APPENDIX C: CALCULATION METHODOLOGY .....</b>	<b>16</b>
<b>APPENDIX D: CERTIFICATIONS .....</b>	<b>17</b>
<b>APPENDIX E: PROPRIETARY STATEMENT.....</b>	<b>18</b>

## 1.0 GENERAL SUMMARY

Centerline Communications, LLC (“Centerline”) has been contracted to provide a Radio Frequency (RF) Analysis for the following AT&T Mobility wireless self support tower facility to determine whether the facility is in compliance with federal standards and regulations regarding RF emissions. This analysis includes theoretical emissions calculations, for all equipment for AT&T Mobility and any other wireless carriers on site.

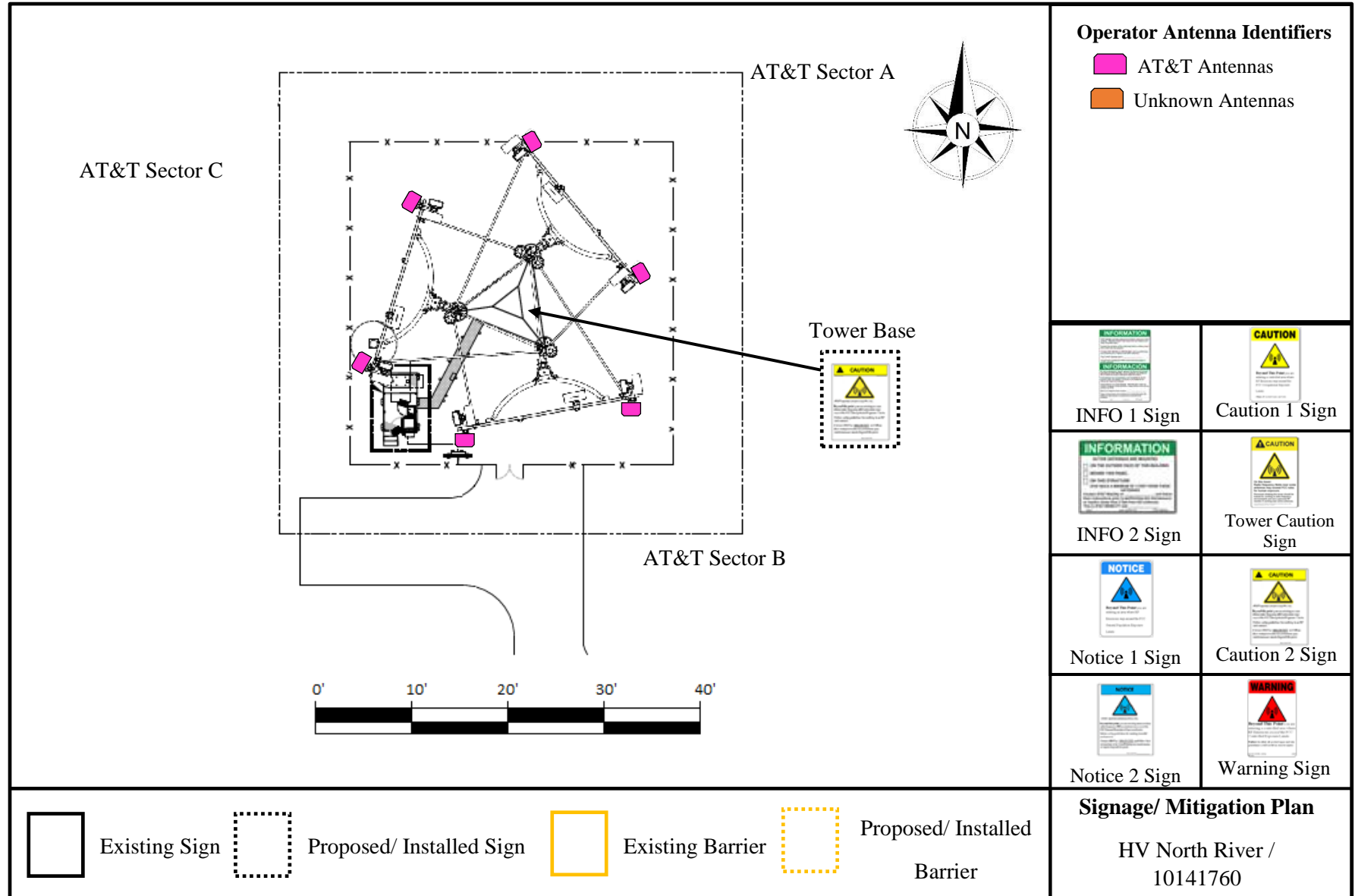
### 1.1 SITE SUMMARY

Analysis Site Data	
<b>Site ID:</b>	10141760
<b>Site USID:</b>	219249
<b>Site FA#:</b>	10141760
<b>Site Name:</b>	HV North River
<b>Site Address:</b>	West Hill Road, Austerlitz NY 12017
<b>Site Latitude:</b>	42.307257 N
<b>Site Longitude:</b>	-73.492724 W
<b>Facility Type:</b>	Self Support Tower
Compliance Summary	
<b>Compliance Status:</b>	Compliant Upon Mitigation Installation
Maximum Modeled MPE% on Walking Surface AT&T (General Public Limit):	3.00 %
Maximum Modeled MPE% at Ground Level AT&T (General Public Limit):	5.10 %
Site Survey Data	
<b>Is Access Locked or Controlled? :</b>	Controlled
<b>Lock or Control Measures if Present:</b>	N/A
<b>Parapet Height:</b>	0'

Signage and barriers are the primary means of mitigating access to accessible areas of exposure. Below is a summary of existing and recommended signage at this AT&T facility.

Existing Signage and Barriers (AT&T Sectors)		
Location	Signage	Barriers
Sector A	None	None
Sector B	None	None
Sector C	None	None
Access Point (s)	None	None
Recommended Signage and Barriers (AT&T Sectors)		
Location	Signage	Barriers
Sector A	No action required	No action required
Sector B	No action required	No action required
Sector C	No action required	No action required
Access Point (s)	Yellow Caution 2 sign required at the tower base	No action required

## 2.0 SITE SCALE MAP



### 3.0 ANTENNA INVENTORY

ANT ID	Operator	Antenna Make	Antenna Model	Type	Freq (MHz)	# of TX	Azimuth (°)	BW (°)	Gain (dBd)	ERP (Watts)	Length (ft)	x	y	Antenna Z Value (ft)**	Ant Z Value Ground (ft)
ATT A1	AT&T	Commscope	NNH4-65C-R6	Panel	LTE 737	1	60	75	13.55	1019.17	8.0	22	37.5	291.0	291.0
ATT A1	AT&T	Commscope	NNH4-65C-R6	Panel	LTE 2100	1	60	61	15.55	1675.60	8.0	22	37.5	291.0	291.0
ATT A1	AT&T	Commscope	NNH4-65C-R6	Panel	LTE 1900	1	60	59	15.35	1610.66	8.0	22	37.5	291.0	291.0
ATT A1	AT&T	Commscope	NNH4-65C-R6	Panel	LTE 850	1	60	73	13.95	594.39	8.0	22	37.5	291.0	291.0
ATT A2	AT&T	Commscope	NNH4-65C-R6	Panel	LTE 737	1	60	75	13.55	1019.17	8.0	33	24	291.0	291.0
ATT B1	AT&T	Commscope	NNH4-65C-R6	Panel	LTE 737	1	180	75	13.55	1019.17	8.0	32	10	291.0	291.0
ATT B1	AT&T	Commscope	NNH4-65C-R6	Panel	LTE 2100	1	180	61	15.55	1675.60	8.0	32	10	291.0	291.0
ATT B1	AT&T	Commscope	NNH4-65C-R6	Panel	LTE 1900	1	180	59	15.35	1610.66	8.0	32	10	291.0	291.0
ATT B1	AT&T	Commscope	NNH4-65C-R6	Panel	LTE 850	1	180	73	13.95	594.39	8.0	32	10	291.0	291.0
ATT B2	AT&T	Commscope	NNH4-65C-R6	Panel	LTE 737	1	180	75	13.55	1019.17	8.0	14	16	291.0	291.0
ATT C1	AT&T	Commscope	NNH4-65C-R6	Panel	LTE 737	1	300	75	13.55	1019.17	8.0	4	14	291.0	291.0
ATT C1	AT&T	Commscope	NNH4-65C-R6	Panel	LTE 2100	1	300	61	15.55	1675.60	8.0	4	14	291.0	291.0
ATT C1	AT&T	Commscope	NNH4-65C-R6	Panel	LTE 1900	1	300	59	15.35	1610.66	8.0	4	14	291.0	291.0
ATT C1	AT&T	Commscope	NNH4-65C-R6	Panel	LTE 850	1	300	73	13.95	594.39	8.0	4	14	291.0	291.0
ATT C2	AT&T	Commscope	NNH4-65C-R6	Panel	LTE 737	1	300	75	13.55	1019.17	8.0	19	31	291.0	291.0
UNK A1	Unknown	Unknown	Unknown	Panel	850	1	60	63	12.00	397.16	4.0	22	37.5	283.0	283.0
UNK A2	Unknown	Unknown	Unknown	Panel	850	1	60	63	12.00	397.16	4.0	33	24	283.0	283.0
UNK B1	Unknown	Unknown	Unknown	Panel	850	1	180	63	12.00	397.16	4.0	32	10	283.0	283.0
UNK B2	Unknown	Unknown	Unknown	Panel	850	1	180	63	12.00	397.16	4.0	14	16	283.0	283.0
UNK C1	Unknown	Unknown	Unknown	Panel	850	1	300	63	12.00	397.16	4.0	4	14	283.0	283.0
UNK C2	Unknown	Unknown	Unknown	Panel	850	1	300	63	12.00	397.16	4.0	19	31	283.0	283.0
UNK 2 A1	Unknown 2	Unknown	Unknown	Panel	850	1	60	63	12.00	397.16	4.0	22	37.5	273.0	273.0
UNK 2 A2	Unknown 2	Unknown	Unknown	Panel	850	1	60	63	12.00	397.16	4.0	33	24	273.0	273.0
UNK 2 B1	Unknown 2	Unknown	Unknown	Panel	850	1	180	63	12.00	397.16	4.0	32	10	273.0	273.0
UNK 2 B2	Unknown 2	Unknown	Unknown	Panel	850	1	180	63	12.00	397.16	4.0	14	16	273.0	273.0
UNK 2 C1	Unknown 2	Unknown	Unknown	Panel	850	1	300	63	12.00	397.16	4.0	4	14	273.0	273.0
UNK 2 C2	Unknown 2	Unknown	Unknown	Panel	850	1	300	63	12.00	397.16	4.0	19	31	273.0	273.0

Table 1: Total Site data table    \*\*\*(Z Value is distance from bottom of antenna to walking surface)

### 3.1 ROOFVIEW® EXPORT FILE

Ant Num	ID	Name	(MHz) Freq	Trans Power	Trans Count	Coax Len	Coax Type	Other Loss	Input Power	Calc Power	Mfg	Model	(ft) X	(ft) Y	(ft) Z	(ft) Type	dBd Aper	Gain	BWdth Pt Dir
1	ATT A1	LTE	737.00000	47.8	1	0	0.0	0.3		45.0	Commscope	NNH4-65C-R6	22.0	37.5	291.0		8.0	13.55	75;60
2	ATT A1	LTE	2100.00000	52.0	1	0	0.0	0.5		46.7	Commscope	NNH4-65C-R6	22.0	37.5	291.0		8.0	15.55	61;60
3	ATT A1	LTE	1900.00000	52.0	1	0	0.0	0.4		47.0	Commscope	NNH4-65C-R6	22.0	37.5	291.0		8.0	15.35	59;60
4	ATT A1	LTE	850.00000	52.0	1	0	0.0	3.4		23.9	Commscope	NNH4-65C-R6	22.0	37.5	291.0		8.0	13.95	73;60
5	ATT A2	LTE	737.00000	47.8	1	0	0.0	0.3		45.0	Commscope	NNH4-65C-R6	33.0	24.0	291.0		8.0	13.55	75;60
6	ATT B1	LTE	737.00000	47.8	1	0	0.0	0.3		45.0	Commscope	NNH4-65C-R6	32.0	10.0	291.0		8.0	13.55	75;180
7	ATT B1	LTE	2100.00000	52.0	1	0	0.0	0.5		46.7	Commscope	NNH4-65C-R6	32.0	10.0	291.0		8.0	15.55	61;180
8	ATT B1	LTE	1900.00000	52.0	1	0	0.0	0.4		47.0	Commscope	NNH4-65C-R6	32.0	10.0	291.0		8.0	15.35	59;180
9	ATT B1	LTE	850.00000	52.0	1	0	0.0	3.4		23.9	Commscope	NNH4-65C-R6	32.0	10.0	291.0		8.0	13.95	73;180
10	ATT B2	LTE	737.00000	47.8	1	0	0.0	0.3		45.0	Commscope	NNH4-65C-R6	14.0	16.0	291.0		8.0	13.55	75;180
11	ATT C1	LTE	737.00000	47.8	1	0	0.0	0.3		45.0	Commscope	NNH4-65C-R6	4.0	14.0	291.0		8.0	13.55	75;300
12	ATT C1	LTE	2100.00000	52.0	1	0	0.0	0.5		46.7	Commscope	NNH4-65C-R6	4.0	14.0	291.0		8.0	15.55	61;300
13	ATT C1	LTE	1900.00000	52.0	1	0	0.0	0.4		47.0	Commscope	NNH4-65C-R6	4.0	14.0	291.0		8.0	15.35	59;300
14	ATT C1	LTE	850.00000	52.0	1	0	0.0	3.4		23.9	Commscope	NNH4-65C-R6	4.0	14.0	291.0		8.0	13.95	73;300
15	ATT C2	LTE	737.00000	47.8	1	0	0.0	0.3		45.0	Commscope	NNH4-65C-R6	19.0	31.0	291.0		8.0	13.55	75;300
16	UNK A1	Unknow	850.00000	50.0	1	0	0.0	3.0		25.1	Unknown	Unknown	22.0	37.5	283.0		4.0	12	63;60
17	UNK A2	Unknow	850.00000	50.0	1	0	0.0	3.0		25.1	Unknown	Unknown	33.0	24.0	283.0		4.0	12	63;60
18	UNK B1	Unknow	850.00000	50.0	1	0	0.0	3.0		25.1	Unknown	Unknown	32.0	10.0	283.0		4.0	12	63;180
19	UNK B2	Unknow	850.00000	50.0	1	0	0.0	3.0		25.1	Unknown	Unknown	14.0	16.0	283.0		4.0	12	63;180
20	UNK C1	Unknow	850.00000	50.0	1	0	0.0	3.0		25.1	Unknown	Unknown	4.0	14.0	283.0		4.0	12	63;300
21	UNK C2	Unknow	850.00000	50.0	1	0	0.0	3.0		25.1	Unknown	Unknown	19.0	31.0	283.0		4.0	12	63;300
22	UNK 2 A1	Unknow	850.00000	50.0	1	0	0.0	3.0		25.1	Unknown	Unknown	22.0	37.5	273.0		4.0	12	63;60
23	UNK 2 A2	Unknow	850.00000	50.0	1	0	0.0	3.0		25.1	Unknown	Unknown	33.0	24.0	273.0		4.0	12	63;60
24	UNK 2 B1	Unknow	850.00000	50.0	1	0	0.0	3.0		25.1	Unknown	Unknown	32.0	10.0	273.0		4.0	12	63;180
25	UNK 2 B2	Unknow	850.00000	50.0	1	0	0.0	3.0		25.1	Unknown	Unknown	14.0	16.0	273.0		4.0	12	63;180
26	UNK 2 C1	Unknow	850.00000	50.0	1	0	0.0	3.0		25.1	Unknown	Unknown	4.0	14.0	273.0		4.0	12	63;300
27	UNK 2 C2	Unknow	850.00000	50.0	1	0	0.0	3.0		25.1	Unknown	Unknown	19.0	31.0	273.0		4.0	12	63;300

Table 2: Roofview® Export File



#### 4.0 PREDICTED EMISSION LEVELS AND DISCUSSION

All calculations performed based upon the data listed for this facility have produced results that are within allowable limits for General Population and Occupational limits for exposure to RF emissions as specified by federal standards. AT&T can ensure compliance on this facility by following the signage and barrier recommendations presented in this report

The anticipated maximum power density value (% MPE) calculated in front of any of the AT&T sectors is **3.00 %** of the FCC's allowable limit for General Population exposure to radio frequency emissions (**0.60 %** of the FCC's allowable Occupational limit). This was determined based upon worst-case theoretical modeling as described in this report for all walking surfaces in close proximity to the antenna arrays. The following is a summary for each AT&T Sector.

**Sector A:** There are no areas that exceed the **FCC's General Population or Occupational limit** for exposure to radio frequency emissions. The maximum power density value (% MPE) calculated for AT&T's Sector A antennas is **3.00 %** of the FCC's allowable limit for General Population exposure to radio frequency emissions (**0.60 %** of the FCC's allowable Occupational limit). The Sector A antennas are transmitting over the ground level.

**Sector B:** There are no areas that exceed the **FCC's General Population or Occupational limit** for exposure to radio frequency emissions. The maximum power density value (% MPE) calculated for AT&T's Sector B antennas is **3.00 %** of the FCC's allowable limit for General Population exposure to radio frequency emissions (**0.60 %** of the FCC's allowable Occupational limit). The Sector B antennas are transmitting over the ground level.

**Sector C:** There are no areas that exceed the **FCC's General Population or Occupational limit** for exposure to radio frequency emissions. The maximum power density value (% MPE) calculated for AT&T's Sector C antennas is **3.00 %** of the FCC's allowable limit for General Population exposure to radio frequency emissions (**0.60%** of the FCC's allowable Occupational limit). The Sector C antennas are transmitting over the ground level.

At the ground level the maximum power density value calculated for all carriers is **5.10 %** of the **FCC's General Population limit** for exposure to radio frequency emissions. At ground level the maximum power density value calculated for all carriers is **1.02 %** of the **FCC's Occupational limit** for exposure to radio frequency emissions.

The anticipated maximum composite power density value (% MPE) for all transmission sources on this facility is **5.1%** of the FCC's allowable limit for General Population exposure to radio frequency emissions (**1.02 %** of the FCC's allowable Occupational limit). This composite value determines the overall compliance status for facility and will identify any potential hot spots that may exceed either limit as specified in this report and will help identify any systems that may require mitigation solutions. The below table is a summary of emissions calculations for all other system operators.

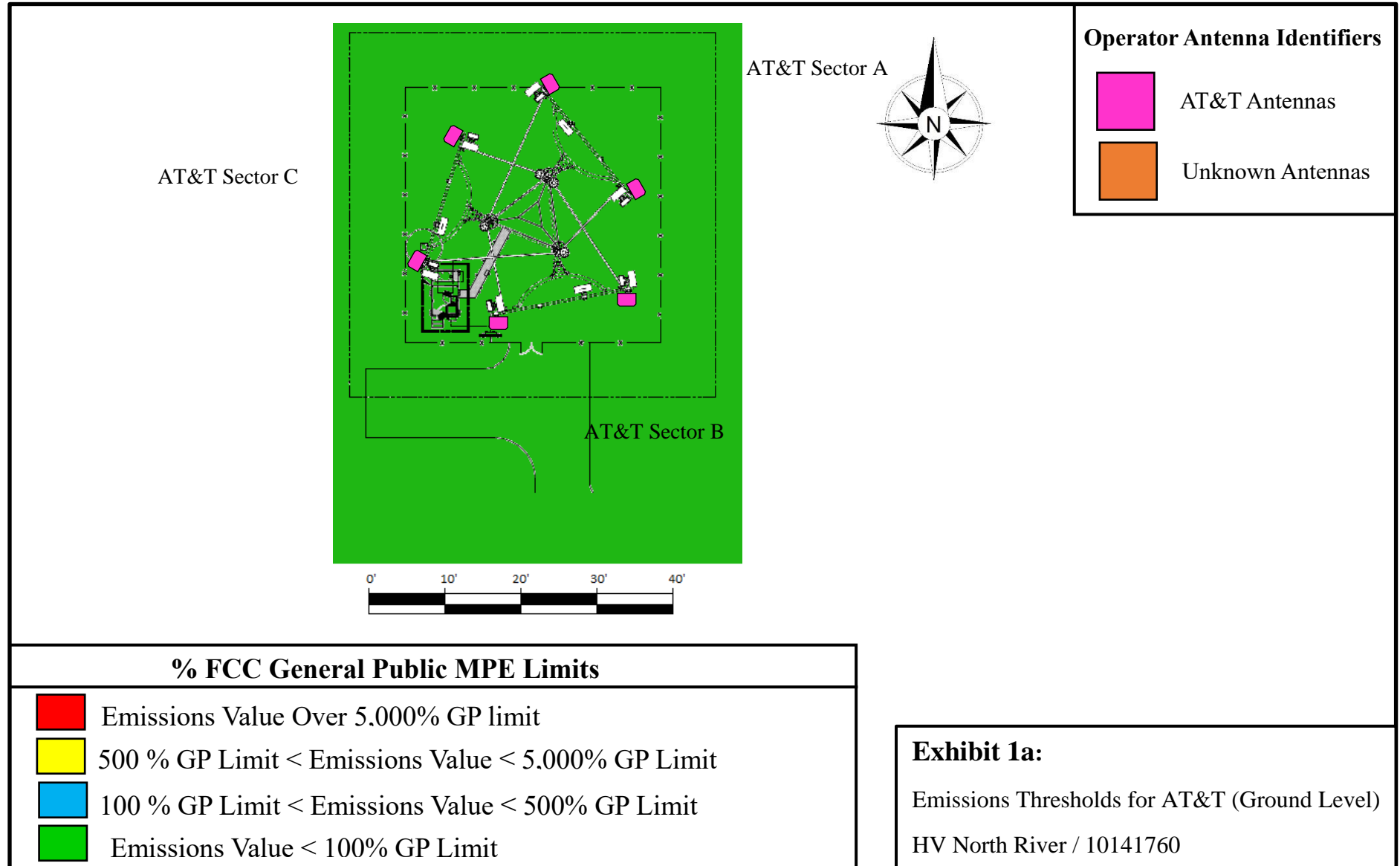


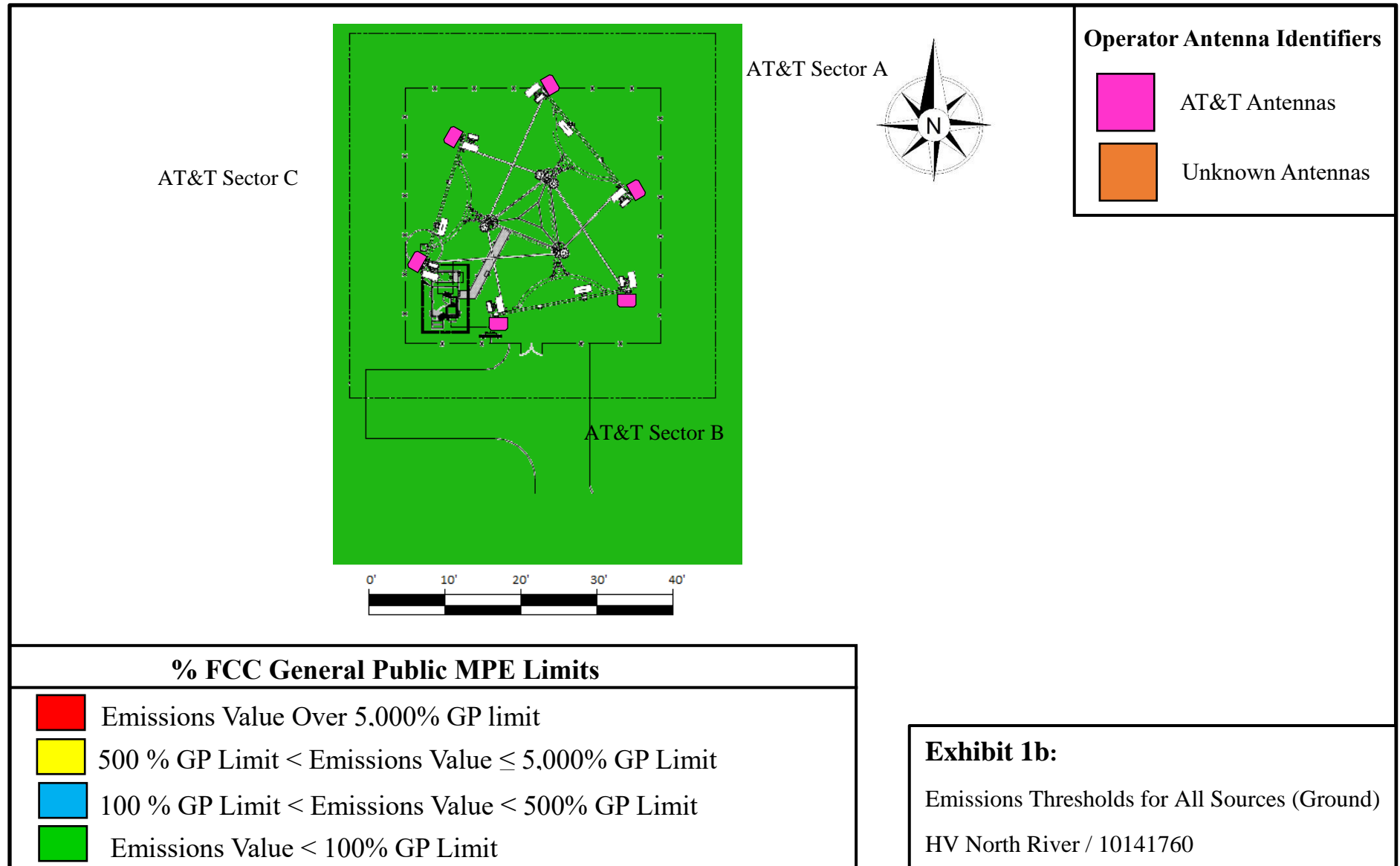
Other Carrier Emissions				
Carrier	Distance GP (feet)	Distance Occupational (feet)	% GP	% Occupational
Unknown Carrier 1	0	0	1	0.2
Unknown Carrier 2	0	0	1	0.2

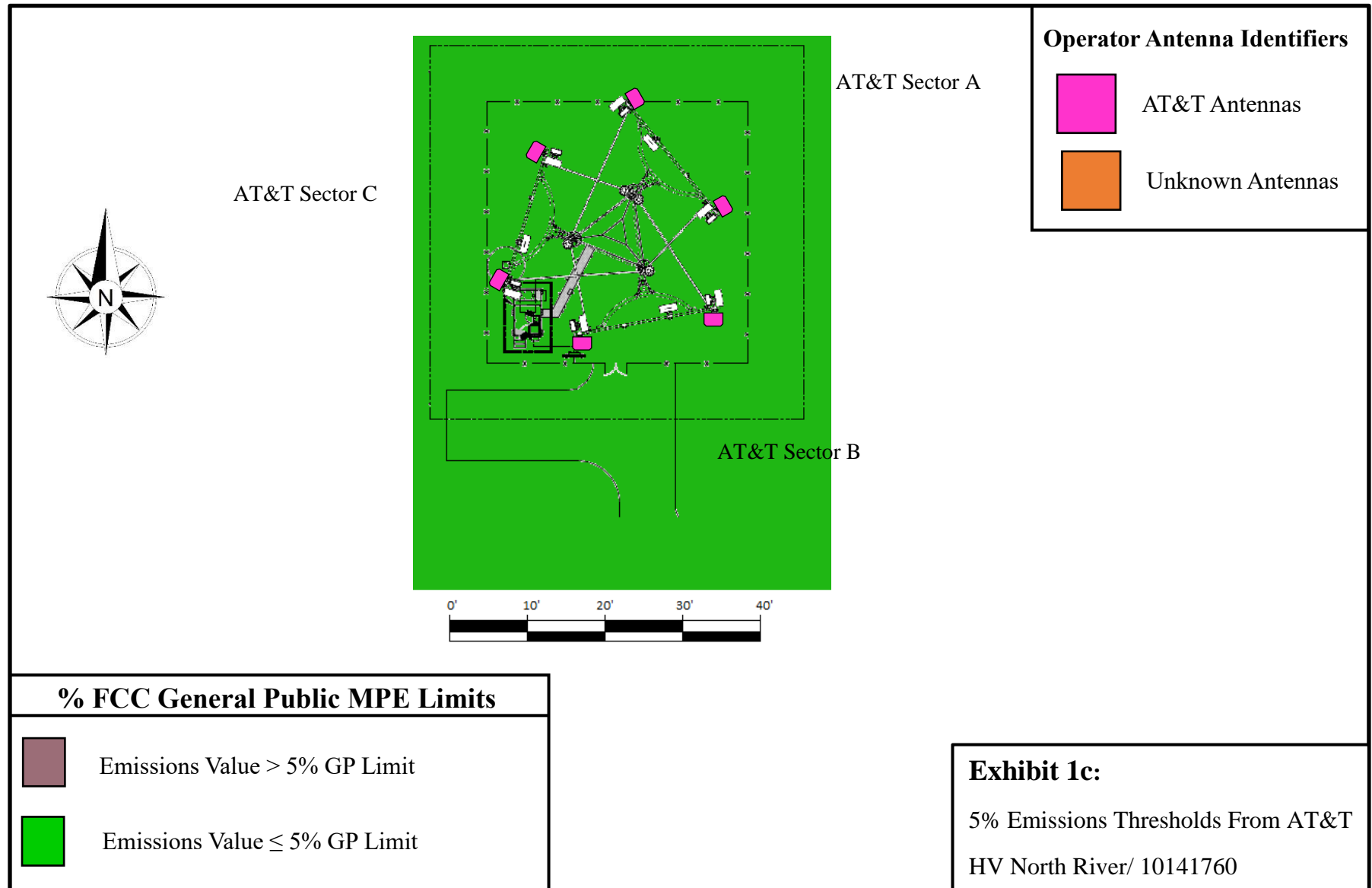
The FCC mandates that if a site is found to be out of compliance with regard to emissions that any system operator contributing 5% or more to areas exceeding the FCC's allowable limits, as outlined in this report, will be responsible for bringing the site into compliance. Exhibit 1c shows a graphical representation of all areas where AT&T contributes 5% or more to the FCC general public limit on the site.

AT&T's RF Exposure: Responsibilities, Procedures & Guidelines document states that microwave dishes are compliant if they are mounted 20 feet or greater above any accessible walking or working surface. There are no microwaves identified on site.

Emissions threshold plots which graphically show power density values is shown following in **Exhibits 1a-1c**.







## 5.0 STATEMENT OF COMPLIANCE

Centerline conducted worst case modeling to determine whether the self support tower facility located at West Hill Road in Austerlitz, New York is in compliance with FCC Regulations.

### 5.1 STATEMENT OF AT&T MOBILITY COMPLIANCE

Based on the information analyzed, AT&T will be compliant with FCC Regulations once the mitigation measures recommended in this report are implemented.









### 5.2 RECOMMENDATIONS

AT&T Mitigation Recommendations		
Location	Signage	Barriers
Sector A	No action required	No action required
Sector B	No action required	No action required
Sector C	No action required	No action required
Access Point (s)	Yellow Caution 2 sign required at the tower base	No action required

## 6.0 FALL ARREST AND PARAPET INFORMATION

As per AT&T barrier policy, rooftop edges that are protected with a 36-inch parapet wall or guardrail are safe for work activity within six (6) feet of the edge. OSHA has stated that an existing 36-inch guardrail or parapet provides sufficient protection for employees. The height of the top rail or equivalent component of guardrail systems in new construction shall be at least 42 inches above the walking or working surface. It should also be noted that the height of the parapet or guardrail may be reduced to no less than 30 inches at any point provided the sum of the depth (horizontal distance) of the top edge, and the height of the top edge (vertical distance from the work surface to the top edge of the top member, is at least 48 inches. If there is no reason for working atop the roof, then edge protection is not required. In addition, workers may use personnel lifts or temporary fall protection measures to perform work within 6 feet of the roof edge in place of permanent edge protection. Reference: 29 CFR 1910.28, 29 CFR 1910.23 (NPRM-1990); OSHA Letters of Interpretation 2/9/83 and 3/8/9

**APPENDIX A: RF SIGNAGE****AT&T RF Signage**

<b>Sign</b>	<b>Description</b>	<b>Sign</b>	<b>Description</b>
	<b>Information 1 Sign</b> Gives guidelines on how to proceed and who to contact regarding areas that may exceed either the FCC's General Population or Occupational emissions limits.		<b>Information 2 Sign</b> Gives specific information on how to proceed and who to contact regarding antennas that are façade mounted, concealed or on stand-alone structures.
	<b>Blue Notice 1 Sign</b> Used to alert individuals that they are entering an area that may exceed the FCC's General Population emissions limit. Must be positioned such that persons approaching from any angle have ample warning to avoid the marked areas.		<b>Blue Notice 2 Sign</b> Used to alert individuals that they are entering an area that may exceed either the FCC's General Population emissions limits. To be used on barriers or antenna sectors as a hybrid of the Information 1 and Blue Notice 1 signs.
	<b>Yellow Caution 1 Sign-Rooftop</b> Used to inform individuals that they are entering an area that may exceed the FCC's Occupational emissions limit. Must be positioned such that persons approaching from any angle have ample warning to avoid the marked areas.		<b>Yellow Caution 2 Sign-Rooftop</b> Used to alert individuals that they are entering an area that may exceed the FCC's Occupational emissions limit. To be used on barriers or antenna sectors as a hybrid of the Information 1 and Yellow Caution 1 signs.
	<b>Yellow Caution 1 Sign-Tower</b> Used to inform individuals that they are entering an area that may exceed the FCC's Occupational emissions limits. Must be placed at the base of the tower to warn tower climbers of potential for exposure.		<b>Red Warning Sign</b> Used to inform individuals that they are entering an area that may exceed the FCC's Occupational emissions limit by a factor of 10 or greater. Must be positioned such that persons approaching from any angle have ample warning to avoid the marked areas.

**APPENDIX B: FCC GUIDELINES AND EMISSIONS THRESHOLD LIMITS**

All power density values used in this report were analyzed as a percentage of current Maximum Permissible Exposure (% MPE) as listed in the FCC OET Bulletin 65 Edition 97-01 and ANSI/IEEE Std C95.1. The FCC regulates Maximum Permissible Exposure in units of microwatts per square centimeter ( $\mu\text{W}/\text{cm}^2$ ). The number of  $\mu\text{W}/\text{cm}^2$  calculated at each sample point is called the power density. The exposure limit for power density varies depending upon the frequencies being utilized. Wireless Carriers and Paging Services use different frequency bands each with different exposure limits, therefore it is necessary to report results and limits in terms of percent MPE rather than power density.

All results were compared to the FCC (Federal Communications Commission) radio frequency exposure rules, 47 CFR 1.1307(b)(1) – (b)(3), to determine compliance with the Maximum Permissible Exposure (MPE) limits for General Population/Uncontrolled environments as defined below.

General Population/Uncontrolled exposure limits apply to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general public would always be considered under this category when exposure is not employment related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area.

Public exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter ( $\mu\text{W}/\text{cm}^2$ ). The general population exposure limit for the 700 and 800 MHz Bands is approximately 467  $\mu\text{W}/\text{cm}^2$  and 567  $\mu\text{W}/\text{cm}^2$  respectively, and the general population exposure limit for the 1900 MHz PCS and 2100 MHz AWS bands is 1000  $\mu\text{W}/\text{cm}^2$ . Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report percent of MPE rather than power density.

Occupational/Controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure, have been properly trained in RF safety and can exercise control over their exposure. Occupational/Controlled exposure limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general population/uncontrolled limits (see below), as long as the exposed person has been made fully aware of the potential for exposure, have been trained in RF safety and can exercise control over his or her exposure by leaving the area or by some other appropriate means. The Occupational/Controlled exposure limits all utilized frequency bands is five (5) times the FCC's General Public / Uncontrolled exposure limit.

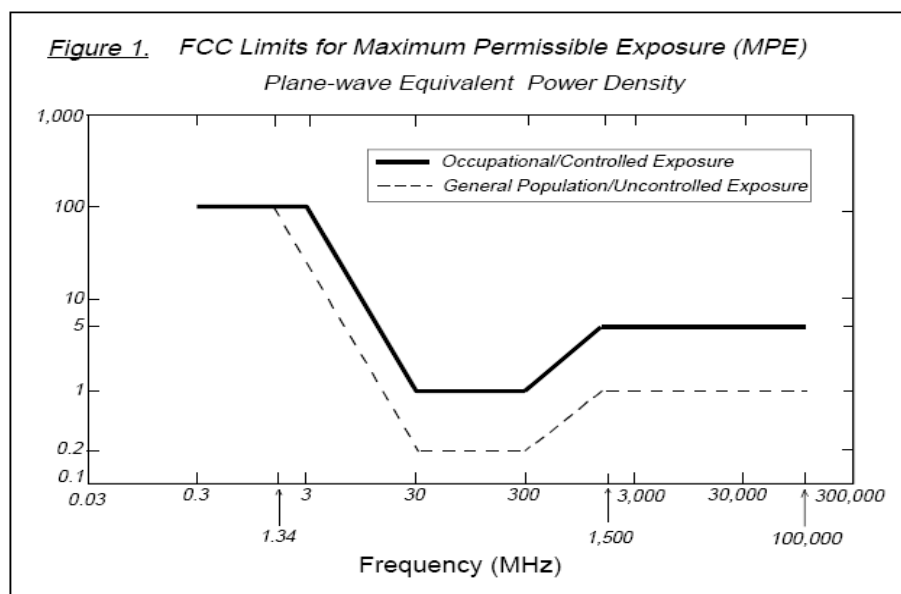
Additional details can be found in FCC OET 65.

**Table 1: Limits for Maximum Permissible Exposure (MPE)**

<b>(A) Limits for Occupational/Controlled Exposure</b>				
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time [E] <sup>2</sup> , [H] <sup>2</sup> , or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f <sup>2</sup> )*	6
30-300	61.4	0.163	1.0	6
300-1,500	--	--	f/300	6
1,500-100,000	--	--	5	6
<b>(B) Limits for General Public/Uncontrolled Exposure</b>				
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time [E] <sup>2</sup> , [H] <sup>2</sup> , or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f <sup>2</sup> )*	30
30-300	27.5	0.073	0.2	30
300-1,500	--	--	f/1,500	30
1,500-100,000	--	--	1.0	30

f = Frequency in (MHz)

\* Plane-wave equivalent power density

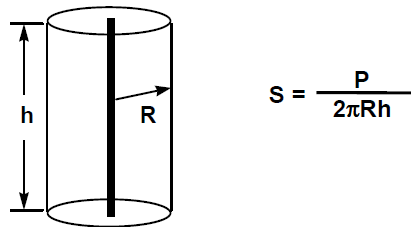




## APPENDIX C: CALCULATION METHODOLOGY

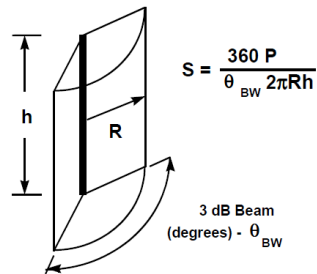
Centerline has performed theoretical calculations on all transmission equipment located on this facility. All calculations have been performed using the RoofView® software from Richard Tell Associates. This software performs calculations using a cylindrical model for very conservative power density predictions within the near-field of the antenna where the antenna pattern has not truly formed yet. Within this area power density values tend to decrease based upon an inverse distance function. At the point where it is appropriate for modeling to change from near-field calculations to far-field calculations the power decreases inversely with the square of the distance. This modeling technique is very accurate with very low antenna centerlines, such as rooftops, where persons can get very close to the antennas and pass through fields in close proximity.

The below calculation in Figure 1 shows the theoretical distribution of power over an imaginary cylinder with equal power distribution in all directions.



*Figure 1: Distribution of power over an imaginary cylinder in all directions*

This model can be modified for directional antennas to show directionality of power distribution. This formula will tend to be conservative as it assumes that all power is focused between the 3 dB power roll off points as shown in Figure 2.



*Figure 2: Distribution of power over an imaginary cylinder between the half power (3dB) roll off points (HBW) for directional antennas*

## APPENDIX D: CERTIFICATIONS

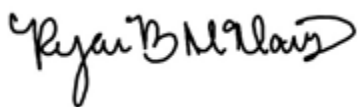
I, Michelle Stone, preparer of this report certify that I am fully trained and aware of the Rules and Regulations of both the Federal Communications Commissions (FCC) and the Occupational Safety and Health Administration (OSHA) with regard to Human Exposure to Radio Frequency Radiation. I have been trained in the procedures and requirements outlined in AT&T's RF Exposure: Responsibilities, Procedures & Guidelines document.

A handwritten signature in black ink that reads 'Michelle Stone'.

---

3/4/2019

I, Ryan McManus, reviewer and approver of this report certify that I am fully trained and aware of the Rules and Regulations of both the Federal Communications Commissions (FCC) and the Occupational Safety and Health Administration (OSHA) with regard to Human Exposure to Radio Frequency Radiation. I have been trained in the procedures and requirements outlined in AT&T's RF Exposure: Responsibilities, Procedures & Guidelines document.

A handwritten signature in black ink that reads 'Ryan McManus'.

---

3/4/2019

## **APPENDIX E: PROPRIETARY STATEMENT**

This report was prepared for the use of AT&T Mobility, LLC to meet requirements specified in AT&T's corporate RF safety guidelines. It was performed in accordance with generally accepted practices of other consultants undertaking similar studies at the same time and in the same locale under like circumstances. The conclusions provided by Centerline Communications, LLC are based solely on the information provided by AT&T Mobility and all observations in this report are valid on the date of the investigation. Any additional information that becomes available concerning the site should be provided to Centerline Communications, LLC so that our conclusions may be revised and modified, if necessary. This report has been prepared in accordance with Standard Conditions for Engagement and authorized proposal, both of which are integral parts of this report. No other warranty, expressed or implied, is made.

**Instructions for Completing Part 1**

**Part 1 is to be completed by the applicant or project sponsor.** Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either “Yes” or “No”. If the answer to the initial question is “Yes”, complete the sub-questions that follow. If the answer to the initial question is “No”, proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the applicant or project sponsor to verify that the information contained in Part 1 is accurate and complete.

**A. Project and Applicant/Sponsor Information.**

Name of Action or Project:		
Project Location (describe, and attach a general location map):		
Brief Description of Proposed Action (include purpose or need):		
Name of Applicant/Sponsor:		Telephone:
		E-Mail:
Address:		
City/PO:	State:	Zip Code:
Project Contact (if not same as sponsor; give name and title/role):		Telephone:
		E-Mail:
Address:		
City/PO:	State:	Zip Code:
Property Owner (if not same as sponsor):		Telephone:
		E-Mail:
Address:		
City/PO:	State:	Zip Code:

## B. Government Approvals

<b>B. Government Approvals, Funding, or Sponsorship.</b> (“Funding” includes grants, loans, tax relief, and any other forms of financial assistance.)		
<b>Government Entity</b>	<b>If Yes: Identify Agency and Approval(s) Required</b>	<b>Application Date (Actual or projected)</b>
a. City Counsel, Town Board, or Village Board of Trustees <input type="checkbox"/> Yes <input type="checkbox"/> No		
b. City, Town or Village Planning Board or Commission <input type="checkbox"/> Yes <input type="checkbox"/> No		
c. City, Town or Village Zoning Board of Appeals <input type="checkbox"/> Yes <input type="checkbox"/> No		
d. Other local agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
e. County agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
f. Regional agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
g. State agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
h. Federal agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
i. Coastal Resources.		
i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway?		<input type="checkbox"/> Yes <input type="checkbox"/> No
ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program?		<input type="checkbox"/> Yes <input type="checkbox"/> No
iii. Is the project site within a Coastal Erosion Hazard Area?		<input type="checkbox"/> Yes <input type="checkbox"/> No

## C. Planning and Zoning

<b>C.1. Planning and zoning actions.</b>	
Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed? <input type="checkbox"/> Yes <input type="checkbox"/> No	
<ul style="list-style-type: none"><li>• <b>If Yes</b>, complete sections C, F and G.</li><li>• <b>If No</b>, proceed to question C.2 and complete all remaining sections and questions in Part 1</li></ul>	
<b>C.2. Adopted land use plans.</b>	
a. Do any municipally- adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located? <input type="checkbox"/> Yes <input type="checkbox"/> No	
If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located? <input type="checkbox"/> Yes <input type="checkbox"/> No	
b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway; Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?) <input type="checkbox"/> Yes <input type="checkbox"/> No	
If Yes, identify the plan(s): _____ _____ _____	
c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan? <input type="checkbox"/> Yes <input type="checkbox"/> No	
If Yes, identify the plan(s): _____ _____ _____	

### C.3. Zoning

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. ☐ Yes ☐ No  
If Yes, what is the zoning classification(s) including any applicable overlay district?

\_\_\_\_\_

\_\_\_\_\_

b. Is the use permitted or allowed by a special or conditional use permit? ☐ Yes ☐ No

c. Is a zoning change requested as part of the proposed action? ☐ Yes ☐ No

If Yes,

i. What is the proposed new zoning for the site? \_\_\_\_\_

### C.4. Existing community services.

a. In what school district is the project site located? \_\_\_\_\_

b. What police or other public protection forces serve the project site?

\_\_\_\_\_

c. Which fire protection and emergency medical services serve the project site?

\_\_\_\_\_

d. What parks serve the project site?

\_\_\_\_\_

\_\_\_\_\_

### D. Project Details

#### D.1. Proposed and Potential Development

a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)?

\_\_\_\_\_

b. a. Total acreage of the site of the proposed action? \_\_\_\_\_ acres

b. Total acreage to be physically disturbed? \_\_\_\_\_ acres

c. Total acreage (project site and any contiguous properties) owned  
or controlled by the applicant or project sponsor? \_\_\_\_\_ acres

c. Is the proposed action an expansion of an existing project or use? ☐ Yes ☐ No

i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? % \_\_\_\_\_ Units: \_\_\_\_\_

d. Is the proposed action a subdivision, or does it include a subdivision? ☐ Yes ☐ No

If Yes,

i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types)

\_\_\_\_\_

ii. Is a cluster/conservation layout proposed? ☐ Yes ☐ No

iii. Number of lots proposed? \_\_\_\_\_

iv. Minimum and maximum proposed lot sizes? Minimum \_\_\_\_\_ Maximum \_\_\_\_\_

e. Will the proposed action be constructed in multiple phases? ☐ Yes ☐ No

i. If No, anticipated period of construction: \_\_\_\_\_ months

ii. If Yes:

- Total number of phases anticipated \_\_\_\_\_

- Anticipated commencement date of phase 1 (including demolition) \_\_\_\_\_ month \_\_\_\_\_ year

- Anticipated completion date of final phase \_\_\_\_\_ month \_\_\_\_\_ year

- Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

f. Does the project include new residential uses? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span> If Yes, show numbers of units proposed.				
	<u>One Family</u>	<u>Two Family</u>	<u>Three Family</u>	<u>Multiple Family (four or more)</u>
Initial Phase	_____	_____	_____	_____
At completion	_____	_____	_____	_____
of all phases	_____	_____	_____	_____

g. Does the proposed action include new non-residential construction (including expansions)? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span> If Yes,	
i. Total number of structures _____ ii. Dimensions (in feet) of largest proposed structure: _____ height; _____ width; and _____ length iii. Approximate extent of building space to be heated or cooled: _____ square feet	

h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span> If Yes,	
i. Purpose of the impoundment: _____ ii. If a water impoundment, the principal source of the water: <span style="float: right;"><input type="checkbox"/> Ground water <input type="checkbox"/> Surface water streams <input type="checkbox"/> Other specify:</span> _____ iii. If other than water, identify the type of impounded/contained liquids and their source. _____ iv. Approximate size of the proposed impoundment. Volume: _____ million gallons; surface area: _____ acres v. Dimensions of the proposed dam or impounding structure: _____ height; _____ length vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete): _____	

**D.2. Project Operations**

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span> (Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite) If Yes:	
i. What is the purpose of the excavation or dredging? _____ ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site? • Volume (specify tons or cubic yards): _____ • Over what duration of time? _____ iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them. _____ _____ iv. Will there be onsite dewatering or processing of excavated materials? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span> If yes, describe. _____ _____ v. What is the total area to be dredged or excavated? _____ acres vi. What is the maximum area to be worked at any one time? _____ acres vii. What would be the maximum depth of excavation or dredging? _____ feet viii. Will the excavation require blasting? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span> ix. Summarize site reclamation goals and plan: _____ _____ _____	

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span> If Yes:	
i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): _____ _____	

*ii.* Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

*iii.* Will the proposed action cause or result in disturbance to bottom sediments? Yes ☐ No ☐  
If Yes, describe: \_\_\_\_\_

*iv.* Will the proposed action cause or result in the destruction or removal of aquatic vegetation? ☐ Yes ☐ No ☐  
If Yes:

- acres of aquatic vegetation proposed to be removed: \_\_\_\_\_
- expected acreage of aquatic vegetation remaining after project completion: \_\_\_\_\_
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access): \_\_\_\_\_
- proposed method of plant removal: \_\_\_\_\_
- if chemical/herbicide treatment will be used, specify product(s): \_\_\_\_\_

*v.* Describe any proposed reclamation/mitigation following disturbance: \_\_\_\_\_

---

*c.* Will the proposed action use, or create a new demand for water? ☐ Yes ☐ No ☐  
If Yes:

*i.* Total anticipated water usage/demand per day: \_\_\_\_\_ gallons/day

*ii.* Will the proposed action obtain water from an existing public water supply? ☐ Yes ☐ No ☐  
If Yes:

- Name of district or service area: \_\_\_\_\_
- Does the existing public water supply have capacity to serve the proposal? ☐ Yes ☐ No ☐
- Is the project site in the existing district? ☐ Yes ☐ No ☐
- Is expansion of the district needed? ☐ Yes ☐ No ☐
- Do existing lines serve the project site? ☐ Yes ☐ No ☐

*iii.* Will line extension within an existing district be necessary to supply the project? ☐ Yes ☐ No ☐  
If Yes:

- Describe extensions or capacity expansions proposed to serve this project: \_\_\_\_\_
- Source(s) of supply for the district: \_\_\_\_\_

*iv.* Is a new water supply district or service area proposed to be formed to serve the project site? ☐ Yes ☐ No ☐  
If, Yes:

- Applicant/sponsor for new district: \_\_\_\_\_
- Date application submitted or anticipated: \_\_\_\_\_
- Proposed source(s) of supply for new district: \_\_\_\_\_

*v.* If a public water supply will not be used, describe plans to provide water supply for the project: \_\_\_\_\_

*vi.* If water supply will be from wells (public or private), what is the maximum pumping capacity: \_\_\_\_\_ gallons/minute.

---

*d.* Will the proposed action generate liquid wastes? ☐ Yes ☐ No ☐  
If Yes:

*i.* Total anticipated liquid waste generation per day: \_\_\_\_\_ gallons/day

*ii.* Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each): \_\_\_\_\_

\_\_\_\_\_

*iii.* Will the proposed action use any existing public wastewater treatment facilities? ☐ Yes ☐ No ☐  
If Yes:

- Name of wastewater treatment plant to be used: \_\_\_\_\_
- Name of district: \_\_\_\_\_
- Does the existing wastewater treatment plant have capacity to serve the project? ☐ Yes ☐ No ☐
- Is the project site in the existing district? ☐ Yes ☐ No ☐
- Is expansion of the district needed? ☐ Yes ☐ No ☐



<ul style="list-style-type: none"> <li>• Do existing sewer lines serve the project site? _____</li> <li>• Will a line extension within an existing district be necessary to serve the project? _____</li> </ul> <p>If Yes:</p> <ul style="list-style-type: none"> <li>• Describe extensions or capacity expansions proposed to serve this project: _____            _____            _____</li> </ul>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No	
<p>iv. Will a new wastewater (sewage) treatment district be formed to serve the project site? _____</p> <p>If Yes:</p> <ul style="list-style-type: none"> <li>• Applicant/sponsor for new district: _____</li> <li>• Date application submitted or anticipated: _____</li> <li>• What is the receiving water for the wastewater discharge? _____</li> </ul>	<input type="checkbox"/> Yes <input type="checkbox"/> No	
<p>v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge or describe subsurface disposal plans): _____            _____            _____</p>		
<p>vi. Describe any plans or designs to capture, recycle or reuse liquid waste: _____            _____            _____</p>		
<p>e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction? _____</p> <p>If Yes:</p> <p>i. How much impervious surface will the project create in relation to total size of project parcel?</p> <p style="padding-left: 40px;">_____ Square feet or _____ acres (impervious surface)</p> <p style="padding-left: 40px;">_____ Square feet or _____ acres (parcel size)</p> <p>ii. Describe types of new point sources. _____            _____</p> <p>iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)? _____            _____</p> <ul style="list-style-type: none"> <li>• If to surface waters, identify receiving water bodies or wetlands: _____              _____</li> <li>• Will stormwater runoff flow to adjacent properties? _____</li> </ul>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No	
<p>iv. Does the proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater? _____</p>		
<p>f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations? _____</p> <p>If Yes, identify:</p> <p>i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles) _____</p> <p>ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers) _____</p> <p>iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation) _____</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No	
<p>g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit? _____</p> <p>If Yes:</p> <p>i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year) _____</p> <p>ii. In addition to emissions as calculated in the application, the project will generate:</p> <ul style="list-style-type: none"> <li>• _____ Tons/year (short tons) of Carbon Dioxide (CO<sub>2</sub>)</li> <li>• _____ Tons/year (short tons) of Nitrous Oxide (N<sub>2</sub>O)</li> <li>• _____ Tons/year (short tons) of Perfluorocarbons (PFCs)</li> <li>• _____ Tons/year (short tons) of Sulfur Hexafluoride (SF<sub>6</sub>)</li> <li>• _____ Tons/year (short tons) of Carbon Dioxide equivalent of Hydrofluorocarbons (HFCs)</li> <li>• _____ Tons/year (short tons) of Hazardous Air Pollutants (HAPs)</li> </ul>		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No

<p>h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></p> <p>If Yes:</p> <p>i. Estimate methane generation in tons/year (metric): _____</p> <p>ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): _____</p>			
<p>i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></p> <p>If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust): _____</p>			
<p>j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></p> <p>If Yes:</p> <p>i. When is the peak traffic expected (Check all that apply): <input type="checkbox"/> Morning <input type="checkbox"/> Evening <input type="checkbox"/> Weekend  <input type="checkbox"/> Randomly between hours of _____ to _____.</p> <p>ii. For commercial activities only, projected number of truck trips/day and type (e.g., semi trailers and dump trucks): _____</p> <p>iii. Parking spaces: Existing _____ Proposed _____ Net increase/decrease _____</p> <p>iv. Does the proposed action include any shared use parking? <span style="float: right;">Yes No</span></p> <p>v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe: _____</p> <p>vi. Are public/private transportation service(s) or facilities available within ½ mile of the proposed site? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></p> <p>vii. Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></p> <p>viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></p>			
<p>k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></p> <p>If Yes:</p> <p>i. Estimate annual electricity demand during operation of the proposed action: _____</p> <p>ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other): _____</p> <p>iii. Will the proposed action require a new, or an upgrade, to an existing substation? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></p>			
<p>l. Hours of operation. Answer all items which apply.</p> <table style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <p>i. During Construction:</p> <ul style="list-style-type: none"> <li>• Monday - Friday: _____</li> <li>• Saturday: _____</li> <li>• Sunday: _____</li> <li>• Holidays: _____</li> </ul> </td> <td style="width: 50%; vertical-align: top;"> <p>ii. During Operations:</p> <ul style="list-style-type: none"> <li>• Monday - Friday: _____</li> <li>• Saturday: _____</li> <li>• Sunday: _____</li> <li>• Holidays: _____</li> </ul> </td> </tr> </table>		<p>i. During Construction:</p> <ul style="list-style-type: none"> <li>• Monday - Friday: _____</li> <li>• Saturday: _____</li> <li>• Sunday: _____</li> <li>• Holidays: _____</li> </ul>	<p>ii. During Operations:</p> <ul style="list-style-type: none"> <li>• Monday - Friday: _____</li> <li>• Saturday: _____</li> <li>• Sunday: _____</li> <li>• Holidays: _____</li> </ul>
<p>i. During Construction:</p> <ul style="list-style-type: none"> <li>• Monday - Friday: _____</li> <li>• Saturday: _____</li> <li>• Sunday: _____</li> <li>• Holidays: _____</li> </ul>	<p>ii. During Operations:</p> <ul style="list-style-type: none"> <li>• Monday - Friday: _____</li> <li>• Saturday: _____</li> <li>• Sunday: _____</li> <li>• Holidays: _____</li> </ul>		

<p>m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></p> <p>If yes:</p> <p>i. Provide details including sources, time of day and duration:</p> <p>_____</p> <p>_____</p>	
<p>ii. Will the proposed action remove existing natural barriers that could act as a noise barrier or screen? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></p> <p>Describe: _____</p> <p>_____</p>	
<p>n. Will the proposed action have outdoor lighting? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></p> <p>If yes:</p> <p>i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:</p> <p>_____</p> <p>_____</p>	
<p>ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></p> <p>Describe: _____</p> <p>_____</p>	
<p>o. Does the proposed action have the potential to produce odors for more than one hour per day? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></p> <p>If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures: _____</p> <p>_____</p> <p>_____</p>	
<p>p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></p> <p>If Yes:</p> <p>i. Product(s) to be stored _____</p> <p>ii. Volume(s) _____ per unit time _____ (e.g., month, year)</p> <p>iii. Generally, describe the proposed storage facilities: _____</p> <p>_____</p>	
<p>q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></p> <p>If Yes:</p> <p>i. Describe proposed treatment(s):</p> <p>_____</p> <p>_____</p> <p>_____</p>	
<p>ii. Will the proposed action use Integrated Pest Management Practices? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></p>	
<p>r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></p> <p>If Yes:</p> <p>i. Describe any solid waste(s) to be generated during construction or operation of the facility:</p> <ul style="list-style-type: none"> <li>• Construction: _____ tons per _____ (unit of time)</li> <li>• Operation : _____ tons per _____ (unit of time)</li> </ul> <p>ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:</p> <ul style="list-style-type: none"> <li>• Construction: _____</li> <li>_____</li> <li>• Operation: _____</li> <li>_____</li> </ul> <p>iii. Proposed disposal methods/facilities for solid waste generated on-site:</p> <ul style="list-style-type: none"> <li>• Construction: _____</li> <li>_____</li> <li>• Operation: _____</li> <li>_____</li> </ul>	

s. Does the proposed action include construction or modification of a solid waste management facility? ☐ Yes ☐ No  
 If Yes:  
 i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities): \_\_\_\_\_  
 ii. Anticipated rate of disposal/processing:  
     • \_\_\_\_\_ Tons/month, if transfer or other non-combustion/thermal treatment, or  
     • \_\_\_\_\_ Tons/hour, if combustion or thermal treatment  
 iii. If landfill, anticipated site life: \_\_\_\_\_ years

t. Will the proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste? ☐ Yes ☐ No  
 If Yes:  
 i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: \_\_\_\_\_  
 \_\_\_\_\_  
 ii. Generally describe processes or activities involving hazardous wastes or constituents: \_\_\_\_\_  
 \_\_\_\_\_  
 iii. Specify amount to be handled or generated \_\_\_\_\_ tons/month  
 iv. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: \_\_\_\_\_  
 \_\_\_\_\_  
 v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility? ☐ Yes ☐ No  
 If Yes: provide name and location of facility: \_\_\_\_\_  
 \_\_\_\_\_  
 If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility:  
 \_\_\_\_\_  
 \_\_\_\_\_

## E. Site and Setting of Proposed Action

<b>E.1. Land uses on and surrounding the project site</b>			
a. Existing land uses. i. Check all uses that occur on, adjoining and near the project site. <input type="checkbox"/> Urban <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Residential (suburban) <input type="checkbox"/> Rural (non-farm) <input type="checkbox"/> Forest <input type="checkbox"/> Agriculture <input type="checkbox"/> Aquatic <input type="checkbox"/> Other (specify): _____ ii. If mix of uses, generally describe: _____ _____			
b. Land uses and coverytypes on the project site.			
Land use or Coverytype	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
• Roads, buildings, and other paved or impervious surfaces			
• Forested			
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)			
• Agricultural (includes active orchards, field, greenhouse etc.)			
• Surface water features (lakes, ponds, streams, rivers, etc.)			
• Wetlands (freshwater or tidal)			
• Non-vegetated (bare rock, earth or fill)			
• Other Describe: _____ _____			

c. Is the project site presently used by members of the community for public recreation? i. If Yes: explain: _____	<input type="checkbox"/> Yes <input type="checkbox"/> No
d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site? If Yes, i. Identify Facilities: _____ _____	<input type="checkbox"/> Yes <input type="checkbox"/> No
e. Does the project site contain an existing dam? If Yes: i. Dimensions of the dam and impoundment: <ul style="list-style-type: none"> <li>• Dam height: _____ feet</li> <li>• Dam length: _____ feet</li> <li>• Surface area: _____ acres</li> <li>• Volume impounded: _____ gallons OR acre-feet</li> </ul> ii. Dam's existing hazard classification: _____ iii. Provide date and summarize results of last inspection: _____ _____	<input type="checkbox"/> Yes <input type="checkbox"/> No
f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility? If Yes: i. Has the facility been formally closed? <ul style="list-style-type: none"> <li>• If yes, cite sources/documentation: _____</li> </ul> ii. Describe the location of the project site relative to the boundaries of the solid waste management facility: _____ _____	<input type="checkbox"/> Yes <input type="checkbox"/> No  <input type="checkbox"/> Yes <input type="checkbox"/> No
g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? If Yes: i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred: _____ _____	<input type="checkbox"/> Yes <input type="checkbox"/> No
h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? If Yes: i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply: <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div style="width: 45%;"> <input type="checkbox"/> Yes – Spills Incidents database  <input type="checkbox"/> Yes – Environmental Site Remediation database  <input type="checkbox"/> Neither database </div> <div style="width: 50%;"> Provide DEC ID number(s): _____  Provide DEC ID number(s): _____ </div> </div> ii. If site has been subject of RCRA corrective activities, describe control measures: _____ _____	<input type="checkbox"/> Yes <input type="checkbox"/> No  <input type="checkbox"/> Yes <input type="checkbox"/> No
iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? If yes, provide DEC ID number(s): _____ iv. If yes to (i), (ii) or (iii) above, describe current status of site(s): _____ _____	<input type="checkbox"/> Yes <input type="checkbox"/> No

v. Is the project site subject to an institutional control limiting property uses? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span> <ul style="list-style-type: none"> <li>• If yes, DEC site ID number: _____</li> <li>• Describe the type of institutional control (e.g., deed restriction or easement): _____</li> <li>• Describe any use limitations: _____</li> <li>• Describe any engineering controls: _____</li> <li>• Will the project affect the institutional or engineering controls in place? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></li> <li>• Explain: _____  _____</li> </ul>	
<b>E.2. Natural Resources On or Near Project Site</b>	
a. What is the average depth to bedrock on the project site? _____ feet	
b. Are there bedrock outcroppings on the project site? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span> If Yes, what proportion of the site is comprised of bedrock outcroppings? _____ %	
c. Predominant soil type(s) present on project site: _____ % _____ % _____ %	
d. What is the average depth to the water table on the project site? Average: _____ feet	
e. Drainage status of project site soils: <input type="checkbox"/> Well Drained: _____ % of site <input type="checkbox"/> Moderately Well Drained: _____ % of site <input type="checkbox"/> Poorly Drained _____ % of site	
f. Approximate proportion of proposed action site with slopes: <input type="checkbox"/> 0-10%: _____ % of site <input type="checkbox"/> 10-15%: _____ % of site <input type="checkbox"/> 15% or greater: _____ % of site	
g. Are there any unique geologic features on the project site? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span> If Yes, describe: _____ _____	
h. Surface water features. i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span> ii. Do any wetlands or other waterbodies adjoin the project site? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span> If Yes to either <i>i</i> or <i>ii</i> , continue. If No, skip to E.2.i. iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span> iv. For each identified regulated wetland and waterbody on the project site, provide the following information: <ul style="list-style-type: none"> <li>• Streams: Name _____ Classification _____</li> <li>• Lakes or Ponds: Name _____ Classification _____</li> <li>• Wetlands: Name _____ Approximate Size _____</li> <li>• Wetland No. (if regulated by DEC) _____</li> </ul>	
v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span> If yes, name of impaired water body/bodies and basis for listing as impaired: _____ _____	
i. Is the project site in a designated Floodway? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span>	
j. Is the project site in the 100-year Floodplain? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span>	
k. Is the project site in the 500-year Floodplain? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span>	
l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span> If Yes: <ul style="list-style-type: none"> <li>i. Name of aquifer: _____</li> </ul>	

<p>m. Identify the predominant wildlife species that occupy or use the project site:</p> <p>_____</p> <p>_____</p> <p>_____</p>	
<p>n. Does the project site contain a designated significant natural community? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></p> <p>If Yes:</p> <p style="margin-left: 20px;">i. Describe the habitat/community (composition, function, and basis for designation): _____</p> <p style="margin-left: 20px;">ii. Source(s) of description or evaluation: _____</p> <p style="margin-left: 20px;">iii. Extent of community/habitat:</p> <ul style="list-style-type: none"> <li>• Currently: _____ acres</li> <li>• Following completion of project as proposed: _____ acres</li> <li>• Gain or loss (indicate + or -): _____ acres</li> </ul>	
<p>o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></p> <p>If Yes:</p> <p style="margin-left: 20px;">i. Species and listing (endangered or threatened): _____</p> <p>_____</p> <p>_____</p>	
<p>p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></p> <p>If Yes:</p> <p style="margin-left: 20px;">i. Species and listing: _____</p> <p>_____</p> <p>_____</p>	
<p>q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></p> <p>If yes, give a brief description of how the proposed action may affect that use: _____</p> <p>_____</p> <p>_____</p>	
<p><b>E.3. Designated Public Resources On or Near Project Site</b></p>	
<p>a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></p> <p>If Yes, provide county plus district name/number: _____</p>	
<p>b. Are agricultural lands consisting of highly productive soils present? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></p> <p style="margin-left: 20px;">i. If Yes: acreage(s) on project site? _____</p> <p style="margin-left: 20px;">ii. Source(s) of soil rating(s): _____</p>	
<p>c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></p> <p>If Yes:</p> <p style="margin-left: 20px;">i. Nature of the natural landmark: <span style="margin-left: 20px;"><input type="checkbox"/> Biological Community</span> <span style="margin-left: 20px;"><input type="checkbox"/> Geological Feature</span></p> <p style="margin-left: 20px;">ii. Provide brief description of landmark, including values behind designation and approximate size/extent: _____</p> <p>_____</p> <p>_____</p>	
<p>d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></p> <p>If Yes:</p> <p style="margin-left: 20px;">i. CEA name: _____</p> <p style="margin-left: 20px;">ii. Basis for designation: _____</p> <p style="margin-left: 20px;">iii. Designating agency and date: _____</p>	

e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span> If Yes: i. Nature of historic/archaeological resource: <input type="checkbox"/> Archaeological Site <input type="checkbox"/> Historic Building or District ii. Name: _____ iii. Brief description of attributes on which listing is based: _____	
f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span>	
g. Have additional archaeological or historic site(s) or resources been identified on the project site? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span> If Yes: i. Describe possible resource(s): _____ ii. Basis for identification: _____	
h. Is the project site within five miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span> If Yes: i. Identify resource: _____ ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): _____ iii. Distance between project and resource: _____ miles.	
i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span> If Yes: i. Identify the name of the river and its designation: _____ ii. Is the activity consistent with development restrictions contained in 6NYCRR Part 666? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span>	

#### F. Additional Information

Attach any additional information which may be needed to clarify your project.

If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

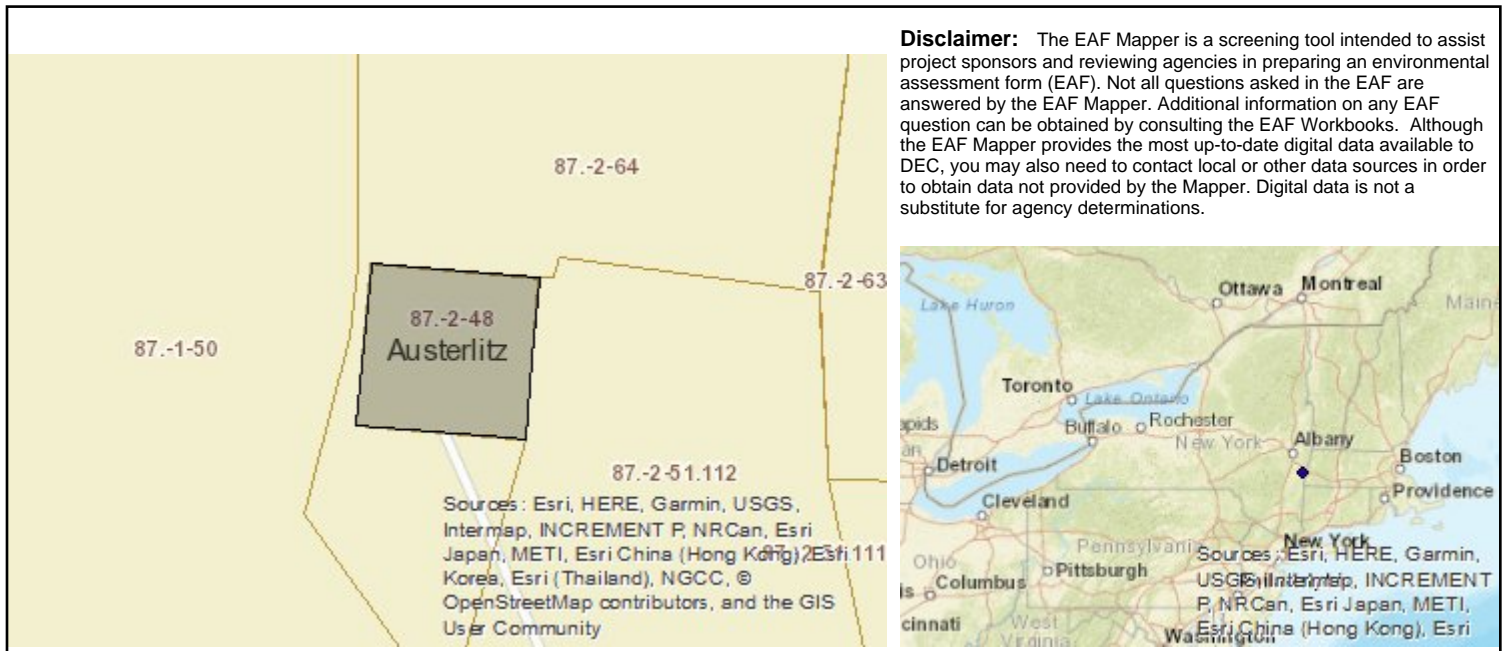
#### G. Verification

I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name \_\_\_\_\_ Date \_\_\_\_\_

Signature \_\_\_\_\_ Title \_\_\_\_\_

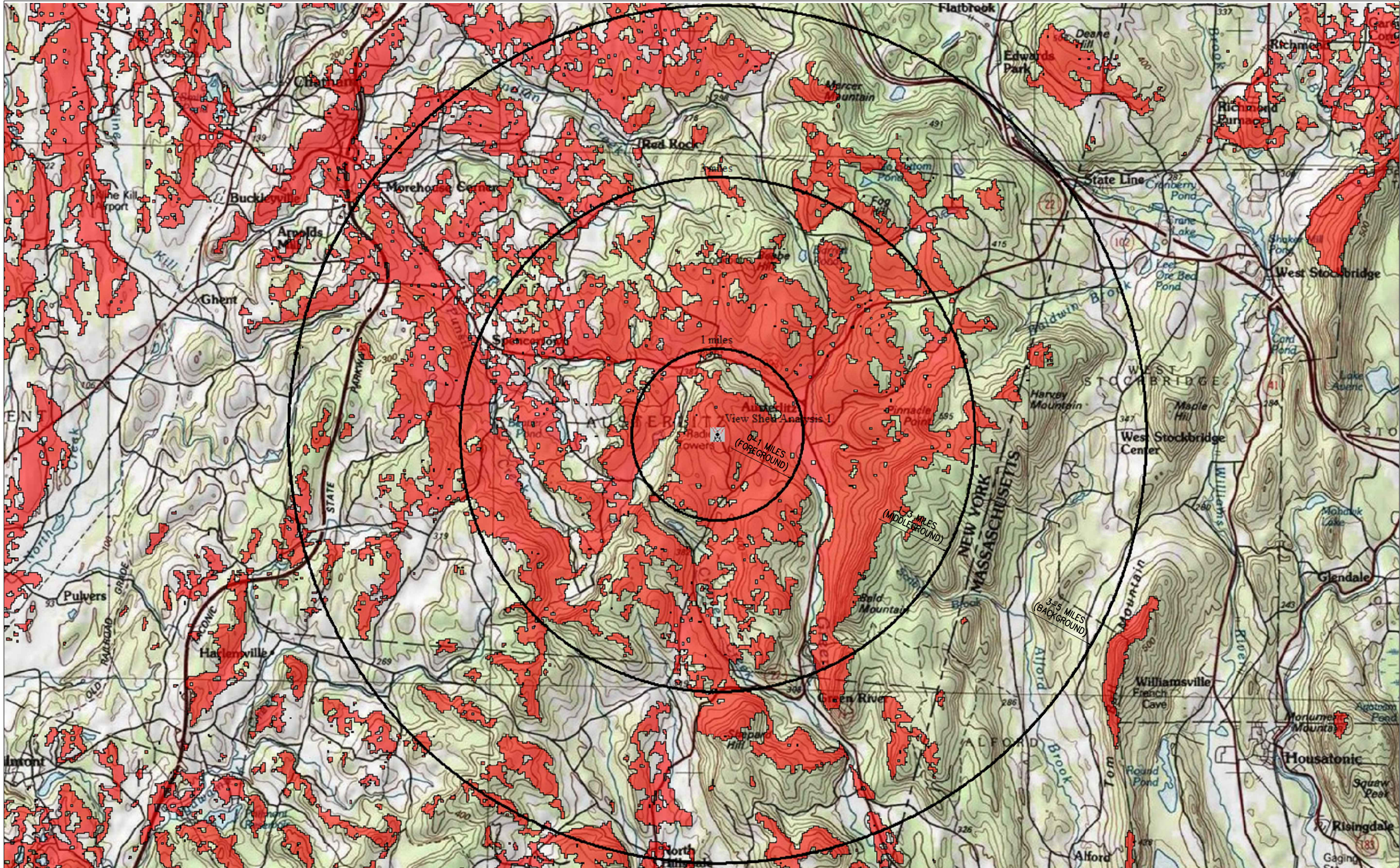




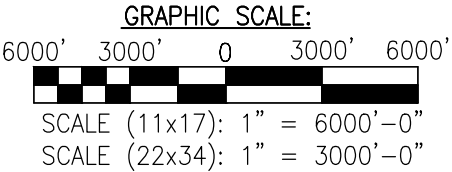
B.i.i [Coastal or Waterfront Area]	No
B.i.ii [Local Waterfront Revitalization Area]	No
C.2.b. [Special Planning District]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h [DEC Spills or Remediation Site - Potential Contamination History]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Listed]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Environmental Site Remediation Database]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.iii [Within 2,000' of DEC Remediation Site]	No
E.2.g [Unique Geologic Features]	No
E.2.h.i [Surface Water Features]	No
E.2.h.ii [Surface Water Features]	No
E.2.h.iii [Surface Water Features]	No
E.2.h.v [Impaired Water Bodies]	No
E.2.i. [Floodway]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.2.j. [100 Year Floodplain]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.2.k. [500 Year Floodplain]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.2.l. [Aquifers]	No
E.2.n. [Natural Communities]	No
E.2.o. [Endangered or Threatened Species]	No

E.2.p. [Rare Plants or Animals]	No
E.3.a. [Agricultural District]	No
E.3.c. [National Natural Landmark]	No
E.3.d [Critical Environmental Area]	No
E.3.e. [National Register of Historic Places]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.3.f. [Archeological Sites]	No
E.3.i. [Designated River Corridor]	No





1 HV - NORTH RIVER\_10141760 - 300' SELF SUPPORT TOWER VIEWSHED MAP  
SCALE: AS NOTED



UNAUTHORIZED ALTERATION OR ADDITION  
TO THIS DOCUMENT IS A VIOLATION OF  
APPLICABLE STATE AND/OR LOCAL LAWS

No.	ISSUED FOR PERMIT	BMM	02/06/19
	Submital / Revision	App'd	Date

Drawn: MAP Date: 11/29/18  
Designed: MPS Date: 11/29/18  
Checked: MPS Date: 11/29/18

Project Number  
395-000

Project Title  
  
NORTH RIVER  
FA #: 10141760

321 WEST HILL ROAD  
AUSTERLITZ, NY 12165

Prepared For

**AIROSMITH**  
DEVELOPMENT  
32 CLINTON ST.  
SARATOGA SPRINGS, NY 12866  
OFFICE# (518) 306-3740

Drawing Scale:  
AS NOTED

Date:  
02/06/19

Drawing Title

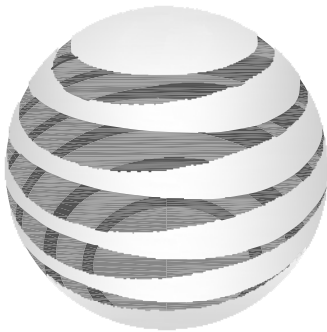
Drawing Number



SHEET INDEX			
NO.	DESCRIPTION	NO.	DESCRIPTION
T1	TITLE SHEET	C10	EQUIPMENT DETAILS
C1	GENERAL NOTES	C11	GENERATOR DETAIL
C2	GENERAL NOTES	C12	PLATFORM DETAILS
C2A	GRADING NOTES	E1	UTILITY ROUTING PLAN
C2B	UTILITY EASEMENTS AND ACCESS	E2	UTILITY ROUTING PLAN
C3	OVERALL SITE PLAN	E3	ELECTRICAL ONE-LINE DIAGRAM
C4	OVERALL COMPOUND PLAN	E4	ANTENNA EQUIPMENT SCHEMATIC
C5	EQUIPMENT SITE PLAN	G1	GROUNDING DETAILS
C6	SITE ELEVATION	G2	GROUNDING DETAILS
C7	ANTENNA ORIENTATION & RF SCHED.		
C8	EQUIPMENT DETAILS		
C9	EQUIPMENT DETAILS		

DRIVING DIRECTIONS	
DEPART FROM AT&T: 5841 BRIDGE STREET EAST SYRACUSE, NY 13057	
<ol style="list-style-type: none"><li>1. HEAD SOUTH TOWARD I-690 E</li><li>2. TAKE I-90 E TO NY-22 S IN CANAAN. TAKE EXIT B3 FROM I-90 E</li><li>3. MERGE ONTO I-690 E</li><li>4. USE THE LEFT LANE TO TAKE THE INTERSTATE 481 N EXIT TOWARD INTERSTATE 90/THRUWAY</li><li>5. MERGE ONTO I-481 N</li><li>6. TAKE EXIT 6 TO MERGE ONTO I-90 E</li><li>7. KEEP RIGHT TO CONTINUE ON GOVERNOR THOMAS E. DEWEY THRUWAY/NEW YORK STATE THRUWAY, FOLLOW SIGNS FOR I-87 S/NEW YORK/BOSTON</li><li>8. CONTINUE ONTO I-87 S/GOVERNOR THOMAS E. DEWEY THRUWAY/NEW YORK STATE THRUWAY</li><li>9. TAKE EXIT 21A TOWARD I-90 E/MASS TURNPIKE/BOSTON</li><li>10. CONTINUE ONTO NY-912M E</li><li>11. CONTINUE ONTO I-90 E</li><li>12. TAKE EXIT B3 FOR NY-22 TOWARD AUSTERLITZ/NEW LEBANON</li><li>13. CONTINUE ON NY-22 S TO YOUR DESTINATION IN AUSTERLITZ</li><li>14. TURN RIGHT ONTO NY-22 S</li><li>15. TURN RIGHT ONTO W HILL RD</li><li>16. TURN RIGHT</li><li>17. DESTINATION WILL BE ON THE LEFT</li></ol>	

VICINITY MAP	



SITE NAME

NORTH RIVER

AT&T FA NUMBER:

10141760


SITE ADDRESS

321 WEST HILL ROAD

AUSTERLITZ, NY 12165

STRUCTURE TYPE

NEW SELF SUPPORT TOWER





TO OBTAIN LOCATION OF PARTICIPANTS UNDERGROUND FACILITIES BEFORE YOU DIG IN NEW YORK (NORTH OF 5 BOROUGH), CALL DIG SAFELY NEW YORK

TOLL FREE: 1-800-962-7962 OR [www.digsafelynewyork.com](http://www.digsafelynewyork.com)


NEW YORK STATUTE REQUIRES MIN OF 2 WORKING DAYS NOTICE BEFORE YOU EXCAVATE

Know what's below.


Call before you dig.

PROJECT TEAM	
<div><div>32 CLINTON ST. SARATOGA SPRINGS, NY 12866 OFFICE# (518) 306-3740 PROJECT MANAGER</div></div>	<div><div>1033 Watervliet Shaker Rd Albany, NY 12205 OFFICE #: (518) 690-0790 FAX #: (518) 690-0793 ENGINEER</div></div>
<div>SCOPE OF WORK:</div> <ul style="list-style-type: none"><li>HANDICAP ACCESS REQUIREMENTS ARE NOT REQUIRED</li><li>FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION</li><li>FACILITY HAS NO PLUMBING OR REFRIGERANTS</li><li>THIS FACILITY SHALL MEET OR EXCEED ALL FAA AND FCC REGULATORY REQUIREMENTS</li><li>ALL NEW MATERIAL SHALL BE FURNISHED AND INSTALLED BY CONTRACTOR UNLESS NOTED OTHERWISE. CABINETS, ANTENNAS/RRU AND CABLES FURNISHED BY OWNER AND INSTALLED BY CONTRACTOR</li></ul>	<div>AT&amp;T TO INSTALL:</div> <div>TOWER SCOPE OF WORK:</div> <ul style="list-style-type: none"><li>INSTALL (6) PANEL ANTENNAS</li><li>INSTALL (15) RRU'S</li><li>INSTALL (4) RAYCAP SQUID SURGE SUPPRESSORS</li><li>INSTALL (6) DC POWER CABLES</li><li>INSTALL (2) FIBER CABLES</li></ul> <div>GROUND SCOPE OF WORK, INSTALL:</div> <ul style="list-style-type: none"><li>NEW 70'x70' FENCED COMPOUND WITH 12' ACCESS GATE</li><li>INSTALL (1) 7'-3"x12'-6" COVERED EQUIPMENT PLATFORM</li><li>INSTALL (1) POWER PLANT</li><li>INSTALL (1) EQUIPMENT CABINET</li><li>INSTALL (1) GENERATOR</li><li>INSTALL NEW ICE BRIDGE</li><li>INSTALL NEW METER BOARD</li><li>INSTALL (1) NEW UTILITY POLE WITH TRANSFORMER</li></ul>

PROJECT SUMMARY	
SITE NAME:	NORTH RIVER
AT&T FA SITE NUMBER:	10141760
SITE ADDRESS:	321 WEST HILL ROAD AUSTERLITZ, NY 12165
COUNTY:	COLUMBIA
SITE COORDINATES:	LATITUDE: 42° 18' 27.17" N (42.307547) (NAD 83) LONGITUDE: 73° 29' 33.10" W (73.492528) (NAD 83)
GROUND ELEVATION:	1722'-0" AMSL
JURISDICTION:	TOWN OF AUSTERLITZ
APPLICANT:	AT&T MOBILITY CORP. 5841 BRIDGE STREET EAST SYRACUSE, NY 13057
TOWER/PROPERTY OWNER:	GOOSETOWN NETWORK LLC 61C ALNA AVENUE EAST HARTFORD, CT 06108
SITE ACQUISITION SPECIALIST:	AIROSMITH DEVELOPMENT, INC. 32 CLINTON ST. SARATOGA SPRINGS, NY 12866
BUILDING CODE:	NY BUILDING CODE UNIFORM BUILDING CODE BUILDING OFFICIALS & CODE ADMINISTRATORS UNIFORM MECHANICAL CODE UNIFORM PLUMBING CODE LOCAL BUILDING CODE CITY/COUNTY ORDINANCES
ELECTRICAL CODE:	NATIONAL ELECTRICAL CODE
CERTIFICATION STATEMENT:	
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF NEW YORK.	
LICENSED ENGINEER – STATE OF NEW YORK	
APPROVALS	
CONST.	DATE
RF	DATE
LEASING/SITE ACQ.	DATE
IN-MARKET CONSTRUCTION LEAD	DATE
SITE OWNER	NAME/COMPANY: DATE TITLE:



INFINIGY ENGINEERING, PLLC  
1033 Watervliet Shaker Rd  
Albany, NY 12205  
Office # (518) 690-0790  
Fax # (518) 690-0793



STATE OF NEW YORK  
JOHN S. STEVENS  
03/01/2019  
071096  
LICENSED PROFESSIONAL ENGINEER

Project Number	395-000
Project Title	NORTH RIVER FA #: 10141760 321 WEST HILL ROAD AUSTERLITZ, NY 12165
Prepared For	AIROSMITH DEVELOPMENT 32 CLINTON ST. SARATOGA SPRINGS, NY 12866 OFFICE# (518) 306-3740
Drawing Scale:	AS NOTED
Date:	03/01/19
Drawing Title	TITLE SHEET
Drawing Number	T1



GENERAL CONSTRUCTION NOTES:

1. FOR THE PURPOSE OF CONSTRUCTION DRAWINGS, THE FOLLOWING DEFINITIONS SHALL APPLY:  
GENERAL CONTRACTOR  
SUBCONTRACTOR – CONTRACTOR (CONSTRUCTION)  
OWNER – AT&T
2. ALL SITE WORK SHALL BE COMPLETED AS INDICATED ON THE DRAWINGS AND AT&T PROJECT SPECIFICATIONS.
3. GENERAL CONTRACTOR AND SUBCONTRACTOR SHALL VISIT THE SITE AND SHALL FAMILIARIZE HIMSELF WITH ALL CONDITIONS AFFECTING THE PROPOSED WORK AND SHALL MAKE PROVISIONS. GENERAL CONTRACTOR AND SUBCONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING THEMSELVES WITH ALL CONTRACT DOCUMENTS, FIELD CONDITIONS, DIMENSIONS, AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.
4. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. GENERAL CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF WORKS.
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. PLANS ARE NOT TO BE SCALED. THESE PLANS ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY UNLESS OTHERWISE NOTED. DIMENSIONS SHOWN ARE TO FINISH SURFACES UNLESS OTHERWISE NOTED. SPACING BETWEEN EQUIPMENT IS THE MINIMUM REQUIRED CLEARANCE. THEREFORE, IT IS CRITICAL TO FIELD VERIFY DIMENSIONS, SHOULD THERE BE ANY QUESTIONS REGARDING THE CONTRACT DOCUMENTS, THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A CLARIFICATION FROM THE ARCHITECT/ENGINEER PRIOR TO PROCEEDING WITH THE WORK. DETAILS ARE INTENDED TO SHOW DESIGN INTENT. MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF WORK AND PREPARED BY THE ARCHITECT/ENGINEER PRIOR TO PROCEEDING WITH WORK.
8. THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
9. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE SPACE FOR APPROVAL BY THE ARCHITECT/ENGINEER PRIOR TO PROCEEDING.
10. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF WORK AREA, ADJACENT AREAS AND BUILDING OCCUPANTS THAT ARE LIKELY TO BE AFFECTED BY THE WORK UNDER THIS CONTRACT. WORK SHALL CONFORM TO ALL OSHA REQUIREMENTS AND THE LOCAL JURISDICTION.
11. GENERAL CONTRACTOR SHALL COORDINATE WORK AND SCHEDULE WORK ACTIVITIES WITH OTHER DISCIPLINE.
12. ERECTION SHALL BE DONE IN A WORKMANLIKE MANNER BY COMPETENT EXPERIENCED WORKMEN IN ACCORDANCE WITH APPLICABLE CODES AND THE BEST ACCEPTED PRACTICE. ALL MEMBERS SHALL BE LAID PLUMB AND TRUE AS INDICATED ON THE DRAWINGS.
13. SEAL PENETRATIONS THROUGH FIRE RATED AREAS WITH UL LISTED MATERIALS APPROVED BY LOCAL JURISDICTION. SUBCONTRACTOR SHALL KEEP AREA CLEAN, HAZARD FREE, AND DISPOSE OF ALL DEBRIS.
14. WORK PREVIOUSLY COMPLETED IS REPRESENTED BY LIGHT SHADED LINES AND NOTES. THE SCOPE OF WORK FOR THIS PROJECT IS REPRESENTED BY DARK SHADED LINES AND NOTES. SUBCONTRACTOR SHALL NOTIFY THE GENERAL CONTRACTOR OF ANY EXISTING CONDITIONS THAT DEViate FROM THE DRAWINGS PRIOR TO BEGINNING CONSTRUCTION.
15. SUBCONTRACTOR SHALL PROVIDE WRITTEN NOTICE TO THE CONSTRUCTION MANAGER 48 HOURS PRIOR TO COMMENCEMENT OF WORK.
16. 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 THE OWNER.
17. THE SUBCONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
18. GENERAL CONTRACTOR SHALL COORDINATE AND MAINTAIN ACCESS FOR ALL TRADES AND SUBCONTRACTORS TO THE SITE AND/OR BUILDING.
19. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR SECURITY OF THE SITE FOR THE DURATION OF CONSTRUCTION UNTIL JOB COMPLETION.
20. THE GENERAL CONTRACTOR SHALL MAINTAIN IN GOOD CONDITION ONE COMPLETE SET OF PLANS WITH ALL REVISIONS, ADDENDA, AND CHANGE ORDERS ON THE PREMISES AT ALL TIMES.
- 21.

21. THE GENERAL CONTRACTOR AND SUBCONTRACTOR SHALL PROVIDE PORTABLE FIRE EXTINGUISHERS WITH A RATING OF NOT LESS THAN 2-A OT 2-A:10-B:C AND SHALL BE WITHIN 25 FEET OF TRAVEL DISTANCE TO ALL PORTIONS OF WHERE THE WORK IS BEING COMPLETED DURING CONSTRUCTION.
22. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY THE ARCHITECT/ENGINEER. 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 SHALL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION, B) CONFINED SPACE, C) ELECTRICAL SAFETY, D) TRENCHING & EXCAVATION.
23. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED, CAPPED, PLUGGED OR OTHERWISE DISCONNECTED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, AS DIRECTED BY THE RESPONSIBLE ARCHITECT/ENGINEER, AND SUBJECT TO THE APPROVAL OF THE OWNER AND/OR LOCAL UTILITIES.
24. 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.
25. SUBCONTRACTOR SHALL MINIMIZE DISTURBANCE TO THE EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE FEDERAL AND LOCAL JURISDICTION FOR EROSION AND SEDIMENT CONTROL.
26. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUNDING. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.
27. THE SUBGRADE SHALL BE BROUGHT TO A SMOOTH UNIFORM GRADE AND COMPACTED TO 95 PERCENT STANDARD PROCTOR DENSITY UNDER PAVEMENT AND STRUCTURES AND 80 PERCENT STANDARD PROCTOR DENSITY IN OPEN SPACE. ALL TRENCHES IN PUBLIC RIGHT OF WAY SHALL BE BACKFILLED WITH FLOWABLE FILL OR OTHER MATERIAL PRE-APPROVED BY THE LOCAL JURISDICTION.
28. ALL NECESSARY RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A LAWFUL MANNER.
29. ALL BROCHURES, OPERATING AND MAINTENANCE MANUALS, CATALOGS, SHOP DRAWINGS, AND OTHER DOCUMENTS SHALL BE TURNED OVER TO THE GENERAL CONTRACTOR AT COMPLETION OF CONSTRUCTION AND PRIOR TO PAYMENT.
30. SUBCONTRACTOR SHALL SUBMIT A COMPLETE SET OF AS-BUILT REDLINES TO THE GENERAL CONTRACTOR UPON COMPLETION OF PROJECT AND PRIOR TO FINAL PAYMENT.
31. SUBCONTRACTOR SHALL LEAVE PREMISES IN A CLEAN CONDITION.
32. THE PROPOSED FACILITY WILL BE UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SEWER SERVICE, AND IS NOT FOR HUMAN HABITAT (NO HANDICAP ACCESS REQUIRED).
33. OCCUPANCY IS LIMITED TO PERIODIC MAINTENANCE AND INSPECTION, APPROXIMATELY 2 TIMES PER MONTH, BY AT&T TECHNICIANS.
34. NO OUTDOOR STORAGE OR SOLID WASTE CONTAINERS ARE PROPOSED.
35. ALL MATERIAL SHALL BE FURNISHED AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST REVISION OF AT&T MOBILITY GROUNDING STANDARD "TECHNICAL SPECIFICATION FOR CONSTRUCTION OF GSM/GPRS WIRELESS SITES" AND "TECHNICAL SPECIFICATION FOR FACILITY GROUNDING." IN CASE OF A CONFLICT BETWEEN THE CONSTRUCTION SPECIFICATION AND THE DRAWINGS, THE DRAWINGS SHALL GOVERN.
35. SUBCONTRACTORS SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS REQUIRED FOR CONSTRUCTION. IF SUBCONTRACTOR CANNOT OBTAIN A PERMIT, THEY MUST NOTIFY THE GENERAL CONTRACTOR IMMEDIATELY.
36. SUBCONTRACTOR SHALL REMOVED ALL TRASH AND DEBRIS FROM THE SITE ON A DAILY BASIS.
37. INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM SITE VISITS AND/OR DRAWINGS PROVIDED BY THE SITE OWNER. CONTRACTORS SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
38. NO WHITE STROBE LIGHTS ARE PERMITTED. ANY REQUIRED LIGHTING MUST MEET FAA STANDARDS AND REQUIREMENTS.
39. ALL COAXIAL CABLE INSTALLATIONS TO FOLLOW MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS.
40. NO SIGNIFICANT NOISE, SMOKE, DUST OR VIBRATIONS WILL RESULT FROM THIS FACILITY. (DISREGARD THIS NOTE IF THIS SITE HAS A GENERATOR)
41. NO ADDITIONAL PARKING TO BE PROPOSED. EXISTING ACCESS AND PARKING TO REMAIN, UNLESS NOTED OTHERWISE.
42. NO LANDSCAPING IS PROPOSED AT THIS SITE, UNLESS NOTED OTHERWISE.

ELECTRICAL NOTES:

1. ELECTRICAL CONTRACTOR SHALL SUPPLY AND INSTALL ANY/ALL ELECTRICAL WORK INDICATED. ANY/ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH DRAWINGS AND ANY/ALL APPLICABLE SPECIFICATIONS. IF ANY PROBLEMS ARE ENCOUNTERED BY COMPLYING WITH THESE REQUIREMENTS, CONTRACTOR SHALL NOTIFY 'CONSTRUCTION MANAGER' AS SOON AS POSSIBLE, AFTER THE DISCOVERY OF THE PROBLEMS, AND SHALL NOT PROCEED WITH THAT PORTION OF WORK, UNTIL THE 'CONSTRUCTION MANAGER' HAS DIRECTED THE CORRECTIVE ACTIONS TO BE TAKEN.
2. ELECTRICAL CONTRACTOR SHALL VISIT THE JOB SITE AND FAMILIARIZE HIMSELF WITH ANY/ALL CONDITIONS AFFECTING ELECTRICAL AND COMMUNICATION INSTALLATION AND MAKE PROVISIONS AS TO THE COST THEREOF. ALL EXISTING CONDITIONS OF ELECTRICAL EQUIP., LIGHT FIXTURES, ETC., THAT ARE PART OF THE FINAL SYSTEM, SHALL BE VERIFIED BY THE CONTRACTOR, PRIOR TO THE SUBMITTING OF HIS BID. FAILURE TO COMPLY WITH THIS PARAGRAPH WILL IN NO WAY RELIEVE CONTRACTOR OF PERFORMING ALL WORK NECESSARY FOR A COMPLETE AND WORKING SYSTEM.

3. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE NEC AND ALL CODES AND LOCAL ORDINANCES OF THE LOCAL POWER & TELEPHONE COMPANIES HAVING JURISDICTION AND SHALL INCLUDE BUT NOT BE LIMITED TO:
- C – NATIONAL FIRE CODES
- A. UL – UNDERWRITERS LABORATORIES
- B. NEC – NATIONAL ELECTRICAL CODE
- C. NEMA – NATIONAL ELECTRICAL MANUFACTURERS ASSOC.
- D. OSHA – OCCUPATIONAL SAFETY AND HEALTH ACT
- E. SBC – STANDARD BUILDING CODE
4. DO NOT SCALE ELECTRICAL DRAWINGS; REFER TO SITE PLANS AND ELEVATIONS FOR EXACT LOCATIONS OF ALL EQUIPMENT, AND CONFIRM WITH 'CONSTRUCTION MANAGER' ANY SIZES AND LOCATIONS WHEN NEEDED.
5. EXISTING SERVICES: CONTRACTOR SHALL NOT INTERRUPT EXISTING SERVICES WITHOUT WRITTEN PERMISSION OF THE OWNER.
6. CONTRACTOR SHALL PAY FOR ANY/ALL PERMITS, FEES, INSPECTIONS, AND TESTING. CONTRACTOR IS TO OBTAIN PERMITS AND APPROVED SUBMITTALS PRIOR TO THE WORK BEGINNING OR ORDERING EQUIPMENT.
7. THE TERM "PROVIDE" USED IN CONSTRUCTION DOCUMENTS AND SPECIFICATIONS, INDICATES THAT THE CONTRACTOR SHALL FURNISH AND INSTALL.
8. CONTRACTOR SHALL CONFIRM WITH LOCAL UTILITY COMPANY ANY/ALL REQUIREMENTS, SUCH AS THE: LUG SIZE RESTRICTIONS, CONDUIT ENTRY, SIZE OF TRANSFORMERS, SCHEDULED DOWNTIME FOR THE OWNERS' CONFIRMATION, ETC... ANY/ALL CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE CONSTRUCTION MANAGER, PRIOR TO BEGINNING ANY WORK.
9. MINIMUM WIRE SIZE SHALL BE #12 AWG, NOT INCLUDING CONTROL WIRING, UNLESS NOTED OTHERWISE. ALL CONDUCTORS SHALL BE COPPER WITH THWN INSULATION.
10. OUTLET BOXES SHALL BE PRESSED STEEL IN DRY LOCATIONS, CAST ALLOY WITH THREADED HUBS IN WET/DAMP LOCATIONS AND SPECIAL ENCLOSURES FOR OTHER CLASSIFIED AREAS.
11. IT IS NOT THE INTENT OF THESE PLANS TO SHOW EVERY MINOR DETAIL OF THE CONSTRUCTION. CONTRACTOR IS EXPECTED TO FURNISH AND INSTALL ALL ITEMS FOR A COMPLETE ELECTRICAL SYSTEM AND PROVIDE ALL REQUIREMENTS FOR THE EQUIPMENT TO BE PLACED IN PROPER WORKING ORDER.
12. ELECTRICAL SYSTEM SHALL BE AS COMPLETELY AND EFFECTIVELY GROUNDED, AS REQUIRED BY SPECIFICATIONS, SET FORTY BY AT&T.
13. ALL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR IN A FIRST CLASS, WORKMANLIKE MANNER. THE COMPLETED SYSTEM SHALL BE FULLY OPERATIVE AND SUBJECT TO REGULATORY INSPECTION & APPROVAL BY CONSTRUCTION MANAGER.
14. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGRESS OF CONSTRUCTION.
15. CONTRACTOR SHALL GUARANTEE ANY/ALL MATERIALS AND WORK FREE FROM DEFECTS FOR A PERIOD OF NOT LESS THAN ONE YEAR FROM DATE OF ACCEPTANCE.
16. THE CORRECTION OF ANY DEFECTS SHALL BE COMPLETED WITHOUT ANY ADDITIONAL CHARGE AND SHALL INCLUDE THE REPLACEMENT OR THE REPAIR OF ANY OTHER PHASE OF THE INSTALLATION, WHICH MAY HAVE BEEN DAMAGED THEREIN.
17. ADEQUATE AND REQUIRED LIABILITY INSURANCE SHALL BE PROVIDED FOR PROTECTION AGAINST PUBLIC LOSS AND ANY/ALL PROPERTY DAMAGE FOR THE DURATION OF WORK.
18. PROVIDE AND INSTALL CONDUIT, CONDUCTORS, PULL WIRES, BOXES, COVER PLATES AND DEVICES FOR ALL OUTLETS AS INDICATED.
19. DITCHING AND BACK FILL: CONTRACTOR SHALL PROVIDE FOR ALL UNDERGROUND INSTALLED CONDUIT AND/OR CABLES INCLUDING EXCAVATION, BACKFILLING AND COMPACTION. REFER TO 'FOUNDATION, EXCAVATION, AND BACKFILLING NOTES.'
20. MATERIALS, PRODUCTS AND EQUIPMENT, INCLUDING ALL COMPONENTS THEREOF, SHALL BE NEW AND SHALL APPEAR ON THE LIST OF U.L. APPROVED ITEMS AND SHALL MEET OR EXCEED THE REQUIREMENTS OF THE NEC, NEMA, AND IECE.
21. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OR MANUFACTURERS CATALOG INFORMATION OF ANY/ALL LIGHTING FIXTURES, SWITCHES, AND ALL OTHER ELECTRICAL ITEMS FOR APPROVAL BY THE CONSTRUCTION MANAGER PRIOR TO INSTALLATION.
22. ANY CUTTING OR PATCHING DEEMED NECESSARY FOR ELECTRICAL WORK IS THE ELECTRICAL CONTRACTORS RESPONSIBILITY AND SHALL BE INCLUDED IN THE COST FOR WORK AND PERFORMED TO THE SATISFACTION OF THE 'CONSTRUCTION MANAGER' UPON FINAL ACCEPTANCE.
23. THE ELECTRICAL CONTRACTOR SHALL LABEL ALL PANELS WITH ONLY TYPEWRITTEN DIRECTORIES. ALL ELECTRICAL WIRING SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
24. DISCONNECT SWITCHES SHALL BE H.P. RATED HEAVY-DUTY, QUICK-MADE AND QUICK-BREAK ENCLOSURES, AS REQUIRED BY EXPOSURE TYPE.
25. ALL CONNECTIONS SHALL BE MADE WITH A PROTECTIVE COATING OF AN ANTI-OXIDE COMPOUND SUCH AS "NO-OXIDE A" BY DEARBORNE CHEMICAL CO. COAT ALL WIRE SURFACES BEFORE CONNECTING. EXPOSED COPPER SURFACES, INCLUDING GROUND BARS, SHALL BE TREATED – NO SUBSTITUTIONS.
26. RACEWAYS: CONDUIT SHALL BE SCHEDULE 40 PVC MEETING OR EXCEEDING NEMA TC2 – 1990. CONTRACTOR SHALL PLUG AND CAP EACH END OF SPARE AND EMPTY CONDUITS AND PROVIDE TWO SEPARATE PULL STRINGS – 200 LBS TEST POLYETHYLENE CORD. ALL CONDUIT BENDS SHALL BE A MINIMUM OF 2 FT. RADIUS. RGS CONDUITS WHEN SPECIFIED, SHALL MEET UL-6 FOR GALVANIZED STEEL. ALL FITTINGS SHALL BE SUITABLE FOR USE WITH THREADING RIGID CONDUIT. COAT ALL THREADS WITH 'BRITE ZINC' OR 'GOLD CALV.'
27. SUPPORT OF ALL ELECTRICAL WORK SHALL BE AS REQUIRED BY NEC.
28. CONDUCTORS: CONTRACTOR SHALL USE 98% CONDUCTIVITY COPPER WITH TYPE THWN INSULATION, 800 VOLT, COLOR CODED. USE SOLID CONDUCTORS FOR WIRE UP TO AND INCLUDING NO. 8 AWG. USE STRANDED CONDUCTORS FOR WIRE ABOVE NO. 8 AWG.


29. CONNECTORS FOR POWER CONDUCTORS: CONTRACTOR SHALL USE PRESSURE TYPE INSULATED TWIST-ON CONNECTORS FOR NO. 10 AWG AND SMALLER. USE SOLDERLESS MECHANICAL TERMINAL LUGS FOR NO. 8 AWG AND LARGER. SERVICES: 240/120V, SINGLE PHASE, 3 WIRE CONNECTION AVAILABLE FROM UTILITY COMPANY. OWNER OR OWNERS AGENT WILL APPLY FOR POWER.
30. TELEPHONE SERVICE: CONTRACTOR SHALL PROVIDE EMPTY CONDUITS WITH PULL STRINGS AS INDICATED ON DRAWINGS.
31. ELECTRICAL AND TELCO RACEWAYS TO BE BURIED A MINIMUM OF 2' DEPTH. CONTRACTOR SHALL PLACE TWO LENGTHS OF WARNING TAPE AT A DEPTH OF 12" BELOW GROUND AND DIRECTLY ABOVE ELECTRICAL AND TELCO SERVICE CONDUITS. CAUTION TAPE TO READ "CAUTION BURIED ELECTRIC" OR "BURIED TELECOMM."
34. ALL BOLTS SHALL BE STAINLESS STEEL

GROUNDING NOTES:


1. COMPRESSION CONNECTIONS (2), 2 AWG BARE TINNED SOLID COPPER CONDUCTORS TO GROUNDING BAR. ROUTE CONDUCTORS TO BURIED GROUNDING RING AND PROVIDE PARALLEL EXOTHERMIC WELD.
2. EC SHALL USE PERMANENT MARKER TO DRAW THE LINES BETWEEN EACH SECTION AND LABEL EACH SECTION ("P," "A," "N," "I") WITH 1" LETTERS.
3. ALL HARDWARE 18-8 STAINLESS STEEL, INCLUDING LOCK WASHERS, COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND BEFORE MATING. ALL HARDWARE SHALL BE STAINLESS STEEL 3/8 INCH DIAMETER OR LARGER.
4. FOR GROUND BOND TO STEEL ONLY: INSERT A CADMIUM FLAT WASHER BETWEEN LUG AND STEEL, COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND BEFORE MATING.
5. NUT & WASHER SHALL BE PLACED ON THE FRONT SIDE OF THE GROUNDING BAR AND BOLTED ON THE BACK SIDE.
6. NUMBER OF GROUNDING BARS MAY VARY DEPENDING ON THE TYPE OF TOWER, ANTENNA LOCATION, AND CONNECTION ORIENTATION. PROVIDE AS REQUIRED.
7. WHEN THE SCOPE OF WORK REQUIRES THE ADDITION OF A GROUNDING BAR TO AN EXISTING TOWER, THE SUBCONTRACTOR SHALL OBTAIN APPROVAL FROM THE TOWER OWNER PRIOR TO MOUNTING THE GROUNDING BAR TO THE TOWER.
8. ALL ELECTRICAL AND GROUNDING AT THE CELL SITE SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE (NEC), NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 780 (LATEST EDITION), AND MANUFACTURER.

FOUNDATION, EXCAVATION, & BACKFILL NOTES:

1. ALL FINAL GRADED SLOPES SHALL BE A MAXIMUM OF 3 HORIZONTAL TO 1 VERTICAL.
2. ALL EXCAVATIONS PREPARED FOR PLACEMENT OF CONCRETE SHALL BE OF UNDISTURBED SOILS, SUBSTANTIALLY HORIZONTAL, AND FREE FROM ANY LOOSE, UNSUITABLE MATERIAL OR FROZEN SOILS, AND WITHOUT THE PRESENCE OF POUNDING WATER. DEWATERING FOR EXCESS GROUND WATER SHALL BE PROVIDED WHEN REQUIRED. COMPACTION OF SOILS UNDER CONCRETE PAD FOUNDATIONS SHALL NOT BE LESS THAN 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY FOR THE SOIL IN ACCORDANCE WITH ASTM D1557.
3. CONCRETE FOUNDATIONS SHALL NOT BE PLACED ON ORGANIC OR UNSUITABLE MATERIAL. IF INADEQUATE BEARING CAPACITY IS REACHED AT THE DESIGNED EXCAVATION DEPTH, THE UNSATISFACTORY SOIL SHALL BE EXCAVATED TO ITS FULL DEPTH AND EITHER BE REPLACED WITH MECHANICALLY COMPACTED GRANULAR MATERIAL OR THE EXCAVATION SHALL BE FILLED WITH CONCRETE OF THE SAME TYPE SPECIFIED FOR THE FOUNDATION. CRUSHED STONE MAY BE USED TO STABILIZE THE BOTTOM OF THE EXCAVATION. ANY STONE SUB BASE MATERIAL, IF USED, SHALL NOT SUBSTITUTE FOR REQUIRED THICKNESS OF CONCRETE.
4. ALL EXCAVATIONS SHALL BE CLEAN OF UNSUITABLE MATERIAL SUCH AS VEGETATION, TRASH, DEBRIS, AND SO FORTH PRIOR TO BACK FILLING. BACK FILL SHALL CONSIST OF APPROVED MATERIALS SUCH AS EARTH, LOAM, SANDY CLAY, SAND AND GRAVEL, OR SOFT SHALE, FREE FROM CLODS OR LARGE STONES OVER 2 1/2 MAX DIMENSIONS. ALL BACK FILL SHALL BE PLACED IN COMPACTED LAYERS.
5. ALL FILL MATERIALS AND FOUNDATION BACK FILL SHALL BE PLACED IN MAXIMUM 6" THICK LIFTS BEFORE COMPACTION. EACH LIFT SHALL BE WETTED IF REQUIRED AND COMPACTED TO NOT LESS THAN 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY FOR SOIL IN ACCORDANCE WITH ASTM D1557
6. NEWLY PLACED CONCRETE FOUNDATIONS SHALL CURE A MINIMUM OF 72 HOURS PRIOR TO BACK FILLING.
7. FINISHED GRADING SHALL BE SLOPED TO PROVIDE POSITIVE DRAINAGE AND PREVENT STANDING WATER. THE FINAL (FINISH) ELEVATION OF SLAB FOUNDATIONS SHALL SLOPE AWAY IN ALL DIRECTIONS FROM THE CENTER. FINISH GRADE OF CONCRETE PADS SHALL BE A MAXIMUM OF 4 INCHES ABOVE FINAL FINISH GRADE ELEVATIONS. PROVIDE SURFACE FILL GRAVEL TO ESTABLISH SPECIFIED ELEVATIONS WHERE REQUIRED.
8. NEWLY GRADED SURFACE AREAS TO RECEIVE GRAVEL SHALL BE COVERED WITH GEOTEXTILE FABRIC TYPE: TYPAR-3401 AS MANUFACTURED BY "CONSTRUCTION MATERIAL 1-800-239-3841" OR AN APPROVED EQUIVALENT, SHOWN ON PLANS. THE GEOTEXTILE FABRIC SHALL BE BLACK IN COLOR TO CONTROL THE RECURRENCE OF VEGETATIVE GROWTH AND EXTEND TO WITHIN 1 FOOT OUTSIDE THE SITE FENCING OR ELECTRICAL GROUNDING SYSTEM PERIMETER WHICHEVER IS GREATER. ALL FABRIC SHALL BE COVERED WITH A MINIMUM OF 4" DEEP COMPACTED STONE OR GRAVEL AS SPECIFIED. I.E. FDOT TYPE NO.57 FOR FENCED COMPOUND; FDOT TYPE NO. 67 FOR ACCESS DRIVE AREA.
9. IN ALL AREAS TO RECEIVE FILL, REMOVE ALL VEGETATION, TOPSOIL, DEBRIS, WET AND UNSATISFACTORY SOIL MATERIALS, OBSTRUCTIONS, AND DELETERIOUS MATERIALS FROM GROUND SURFACE. PLOW STRIP OR BREAK UP SLOPED SURFACES STEEPER THAN 1 VERTICAL TO 4 HORIZONTAL SUCH THAT FILL MATERIAL WILL BIND WITH EXISTING/PREPARED SOIL SURFACE.



INFINIGY ENGINEERING, PLLC  
1033 Waterlily Shaker Rd  
Albany, NY 12205  
Office # (518) 690-0790  
Fax # (518) 690-0793



JOHN S. STEVENS  
03/01/2019  
071096  
UNAUTHORIZED ALTERATION OR ADDITION TO THIS DOCUMENT IS PROHIBITED  
PROFESSIONAL ENGINEER

1	REVISED PER COMMENTS	ENR	03/01/19
0	ISSUED FOR PERMIT	ENR	02/06/19
No	Submittal / Revision	App'd	Date

Drawn: MAP Date: 11/29/18  
Designed: MPS Date: 11/29/18  
Checked: MPS Date: 11/29/18

Project Number  
395-000

Project Title  
  
NORTH RIVER  
FA #: 10141760  
  
321 WEST HILL ROAD  
AUSTERLITZ, NY 12165

Prepared For  
  
AIROSMITH DEVELOPMENT  
32 CLINTON ST.  
SARATOGA SPRINGS, NY 12866  
OFFICE# (518) 306-3740

Drawing Scale:  
AS NOTED

Date:  
03/01/19

Drawing Title  
  
GENERAL  
NOTES

Drawing Number  
  
C1



10. WHEN SUBGRADE OR PREPARED GROUND SURFACE HAS A DENSITY LESS THAN THAT REQUIRED FOR THE FILL MATERIAL, SCARIFY THE GROUND SURFACE TO DEPTH REQUIRED, PULVERIZE, MOISTURE-CONDITION AND/OR AERATE THE SOILS AND RE-COMPACT TO THE REQUIRED DENSITY PRIOR TO PLACEMENT OR FILLS.
11. IN AREAS WHICH EXISTING GRAVEL SURFACING IS REMOVED OR DISTURBED DURING CONSTRUCTION OPERATIONS, REPLACE GRAVEL SURFACING TO MATCH ADJACENT GRAVEL SURFACING AND RESTORED TO THE SAME THICKNESS AND COMPACTION AS SPECIFIED. ALL RESTORED GRAVEL SURFACING SHALL BE FREE FROM CORRUGATIONS AND WAVES.
12. EXISTING GRAVEL SURFACING MAY BE EXCAVATED SEPARATELY AND REUSED WITH THE CONDITION THAT ANY UNFAVORABLE AMOUNTS OF ORGANIC MATTER, OR OTHER DELETERIOUS MATERIALS ARE REMOVED PRIOR TO REUSE. FURNISH ANY ADDITIONAL GRAVEL RESURFACING MATERIAL AS NEEDED TO PROVIDE A FULL DEPTH COMPACTED SURFACE THROUGHOUT SITE.
13. GRAVEL SUB SURFACE SHALL BE PREPARED TO REQUIRED COMPACTION AND SUBGRADE ELEVATIONS BEFORE GRAVEL SURFACING IS PLACED AND/OR RESTORED. ANY LOOSE OR DISTURBED MATERIALS SHALL BE THOROUGHLY COMPACTED AND ANY DEPRESSIONS IN THE SUBGRADE SHALL BE FILLED AND COMPACTED WITH APPROVED SELECTED MATERIAL. GRAVEL SURFACING MATERIAL SHALL NOT BE USED FOR FILLING DEPRESSIONS IN THE SUBGRADE.
14. PROTECT EXISTING GRAVEL SURFACING AND SUBGRADE IN AREAS WHERE EQUIPMENT LOADS WILL OPERATE. USE PLANKING 'MATTS' OR OTHER SUITABLE PROTECTION DESIGNED TO SPREAD EQUIPMENT LOADS AS MAY BE NECESSARY. REPAIR ANY DAMAGE TO EXISTING GRAVEL SURFACING OR SUB GRADE WHERE SUCH DAMAGE IS DUE TO THE CONTRACTORS OPERATIONS.
15. DAMAGE TO EXISTING STRUCTURES AND/OR UTILITIES RESULTING FROM CONTRACTORS NEGLIGENCE SHALL BE REPAIRED AND/OR REPLACED TO THE OWNERS SATISFACTION AT NO ADDITIONAL COST TO THE CONTRACT.
16. ALL SUITABLE BORROW MATERIAL FOR BACK FILL OF THE SITE SHALL BE INCLUDED IN THE BID. EXCESS TOPSOIL AND UNSUITABLE MATERIAL SHALL BE DISPOSED OF OFF SITE AT LOCATIONS APPROVED BY GOVERNING AGENCIES AT NO ADDITIONAL COST TO THE CONTRACT.

ENVIRONMENTAL NOTES:

1. ALL WORK PERFORMED SHALL BE DONE IN ACCORDANCE WITH ISSUED PERMITS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYMENT OF FINES AND PROPER CLEAN UP FOR AREAS IN VIOLATION.
2. CONTRACTOR AND/OR DEVELOPER SHALL BE RESPONSIBLE FOR CONSTRUCTION AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROLS DURING CONSTRUCTION FOR PROTECTION OF ADJACENT PROPERTIES, ROADWAYS AND WATERWAYS AND SHALL BE MAINTAINED IN PLACE THROUGH FINAL JURISDICTIONAL INSPECTION & RELEASE OF SITE.
3. CONTRACTOR SHALL INSTALL/CONSTRUCT ALL NECESSARY SEDIMENT/SILT CONTROL FENCING AND PROTECTIVE MEASURES WITHIN THE LIMITS OF SITE DISTURBANCE PRIOR TO CONSTRUCTION.
4. NO SEDIMENT SHALL BE ALLOWED TO EXIT THE PROPERTY. THE CONTRACTOR IS RESPONSIBLE FOR TAKING ADEQUATE MEASURES FOR CONTROLLING EROSION. ADDITIONAL SEDIMENT CONTROL FENCING MAY BE REQUIRED IN ANY AREAS SUBJECT TO EROSION.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR DAILY INSPECTIONS AND ANY REPAIRS OF ALL SEDIMENT CONTROL MEASURES INCLUDING SEDIMENT REMOVAL AS NECESSARY.
6. CLEARING OF VEGETATION AND TREE REMOVAL SHALL BE ONLY AS PERMITTED AND BE HELD TO A MINIMUM. ONLY TREES NECESSARY FOR CONSTRUCTION OF THE FACILITIES SHALL BE REMOVED.
7. SEEDING AND MULCHING AND/OR SODDING OF THE SITE WILL BE ACCOMPLISHED AS SOON AS POSSIBLE AFTER COMPLETION OF THE PROJECT FACILITIES AFFECTING LAND DISTURBANCE.
8. CONTRACTOR SHALL PROVIDE ALL EROSION AND SEDIMENTATION CONTROL MEASURES AS REQUIRED BY LOCAL, COUNTY AND STATE CODES AND ORDINANCES TO PROTECT EMBANKMENTS FROM SOIL LOSS AND TO PREVENT ACCUMULATION OF SOIL AND SILT IN STREAMS AND DRAINAGE PATHS LEAVING THE CONSTRUCTION AREA. THIS MAY INCLUDE SUCH MEASURES AS SILT FENCES, STRAW BALE SEDIMENT BARRIERS, AND CHECK DAMS.
9. RIP RAP OF SIZES INDICATED SHALL CONSIST OF CLEAN, HARD, SOUND, DURABLE, UNIFORM IN QUALITY STONE FREE OF ANY DETRIMENTAL QUANTITY OF SOFT, FRIABLE, THIN, ELONGATED OR LAMINATED PIECES, DISINTEGRATED MATERIAL, ORGANIC MATTER, OIL, ALKALI, OR OTHER DELETERIOUS SUBSTANCES.

CONCRETE MASONRY NOTES:

1. CONCRETE MASONRY UNITS SHALL BE MEDIUM WEIGHT UNITS CONFORMING TO ASTM C90, GRADE N-1, (F'm=1,500 PSI). MEDIUM WEIGHT (115).
2. MORTAR SHALL BE TYPE "S" (MINIMUM 1,800 PSI AT 28 DAYS).
3. GROUT SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSI AT 28 DAYS.
4. ALL CELLS CONTAINING REINFORCING STEEL OR EMBEDDED ITEMS AND ALL CELLS IN RETAINING WALLS AND WALLS BELOW GRADE SHALL BE SOLID GROUTED.
5. ALL HORIZONTAL REINFORCING STEEL SHALL BE PLACED IN BOND BEAM OR LINTEL BEAM UNITS.
6. WHEN GROUTING IS STOPPED FOR ONE HOUR OR LONGER, HORIZONTAL CONSTRUCTION JOINTS SHALL BE FORMED BY STOPPING THE GROUT POUR 1-1/2" BELOW TOP OF THE UPPERMOST UNIT.
7. ALL BOND BEAM BLOCK SHALL BE "DEEP CUT" UNITS.
8. PROVIDE INSPECTION AND CLEAN-OUT HOLES AT BASE OF VERTICAL CELLS HAVING GROUT LIFTS IN EXCESS OF 4'-0" OF HEIGHT.
9. ALL GROUT SHALL BE CONSOLIDATED WITH A MECHANICAL VIBRATOR.
10. CEMENT SHALL BE AS SPECIFIED FOR CONCRETE.
11. REINFORCING BARS - SEE NOTES UNDER "REINFORCING STEEL" FOR REQUIREMENTS.

31. PROVIDE ONE BAR DIAMETER (A MINIMUM OF 1/2") GROUT BETWEEN MAIN REINFORCING AND MASONRY UNITS.
32. LOW LIFT CONSTRUCTION, MAXIMUM GROUT POUR HEIGHT IS 4 FEET.
33. LIFT GROUTED CONSTRUCTION MAY BE USED IN CONFORMANCE WITH PROJECT SPECIFICATIONS AND SECTION 2104.6.1 OF CURRENT BUILDING CODE.
34. ALL CELLS IN CONCRETE BLOCKS SHALL BE FILLED SOLID WITH GROUT, EXCEPT AS NOTED IN THE DRAWINGS OR SPECIFICATIONS.
35. CELLS SHALL BE IN VERTICAL ALIGNMENT, DOWELS IN FOOTINGS SHALL BE SET TO ALIGN WITH CORES CONTAINING REINFORCING STEEL.
36. REFER TO ARCHITECTURAL DRAWINGS FOR SURFACE AND HEIGHT OF UNITS, LAYING PATTERN AND JOINT TYPE.
37. SAND SHALL BE CLEAN, SHARP AND WELL GRADED, FREE FROM INJURIOUS AMOUNTS OF DUST, LUMPS, SHALE, ALKAU OR ORGANIC MATERIAL.
38. BRICK SHALL CONFORM TO ASTM C-62 AND SHALL BE GRADE MW OR BETTER.

## STRUCTURAL CONCRETE NOTES:

1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI-301-10
2. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH  $f_c' = 2,500$  PSI AT 28 DAYS UNLESS NOTED OTHERWISE.
3. REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185 WELDED STEEL WIRE FABRIC UNLESS NOTED OTHERWISE.
4. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:  
  
CONCRETE CAST AGAINST EARTH 3 IN.  
CONCRETE EXPOSED TO EARTH OR WEATHER:  
    #6 AND LARGER 2 IN.  
    #5 AND SMALLER & WWF 1-1/2 IN.  
CONCRETE NOT EXPOSED TO EARTH OR WEATHER, NOR CAST AGAINST THE GROUND:  
    SLAB AND WALL 3/4 IN.  
    BEAMS AND COLUMNS 1-1/2 IN.

5. A 3/4" CHAMFER SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE U.O. IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.
6. HOLES TO RECEIVE EXPANSION/WEDGE ANCHORS SHALL BE 1/8" LARGER IN DIAMETER THAN THE ANCHOR BOLD, DOWEL OR ROD AND SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. LOCATE AND AVOID CUTTING EXISTING REBAR WHEN DRILLING HOLES IN ELEVATED CONCRETE SLABS.
7. USE AND INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR, SHALL BE PER ICBO & MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURES.

STRUCTURAL STEEL NOTES:

1. ALL STEEL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE AISC MANUAL OF STEEL CONSTRUCTION. STEEL SECTIONS SHALL BE IN ACCORDANCE WITH ASTM AS INDICATED BELOW:  
W-SHAPES: ASTM A992, 50 KSI  
ANGLES, BARS CHANNELS: ASTM A36, 36 KSI  
HSS SECTIONS: ASTM 500, 46 KSI  
PIPE SECTIONS: ASTM A53-E, 35 KSI
2. ALL EXTERIOR EXPOSED STEEL AND HARDWARE SHALL BE HOT DIPPED GALVANIZED.
3. ALL WELDING SHALL BE PERFORMED USING E70XX ELECTRODES AND WELDING SHALL CONFORM TO AISC. 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.
4. BOLTED CONNECTIONS SHALL BE ASTM A325 BEARING TYPE 3/4" Ø CONNECTIONS AND SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE.
5. NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE 5/8" Ø ASTM A307 BOLTS UNLESS NOTED OTHERWISE.
6. FIELD MODIFICATIONS ARE TO BE COATED WITH ZINC ENRICHED PAINT.

### SITE WORK & DRAINAGE:

## PART 1 – GENERAL

CLEARING, GRUBBING, STRIPPING, EROSION CONTROL, SURVEY, LAYOUT,  
SUBGRADE PREPARATION AND FINISH GRADING AS REQUIRED TO COMPLETE THE  
PROPOSED WORK SHOWN IN THESE PLANS.

### 1.1 REFERENCES:

- A. DOT (STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR WAY CONSTRUCTION – CURRENT EDITION)
- B. ASTM (AMERICAN SOCIETY FOR TESTING AND MATERIALS)
- C. OSHA (OCCUPATION SAFETY AND HEALTH ADMINISTRATION)

## 1.2 INSPECTION AND TESTING:

- B. ALL WORK SHALL BE INSPECTED AND RELEASED BY THE GENERAL CONTRACTOR WHO SHALL CARRY OUT THE GENERAL INSPECTION OF THE WORK WITH SPECIFIC CONCERN TO PROPER PERFORMANCE OF THE WORK AS SPECIFIED AND/OR CALLED FOR ON THE DRAWINGS. IT IS THE SUBCONTRACTOR'S RESPONSIBILITY TO REQUEST TIMELY INSPECTIONS PRIOR TO PROCEEDING WITH FURTHER WORK THAT WOULD MAKE PARTS OF WORK INACCESSIBLE OR DIFFICULT TO INSPECT.

- 1.3 SITE MAINTENANCE AND PROTECTION:
- A. PROVIDE ALL NECESSARY JOB SITE MAINTENANCE FROM COMMENCEMENT OF WORK UNTIL COMPLETION OF THE SUBCONTRACT.
  - B. AVOID DAMAGE TO THE SITE AND TO EXISTING FACILITIES, STRUCTURES, TREES, AND SHRUBS DESIGNATED TO REMAIN. TAKE PROTECTIVE MEASURES TO PREVENT EXISTING FACILITIES THAT ARE NOT DESIGNATED FOR REMOVAL FROM BEING DAMAGED BY THE WORK.
  - C. KEEP SITE FREE OF ALL PONDING WATER.
  - D. PROVIDE EROSION CONTROL MEASURES IN ACCORDANCE WITH STATE DOT AND EPA REQUIREMENTS.
  - E. PROVIDE AND MAINTAIN ALL TEMPORARY FENCING, BARRICADES, WARNING SIGNALS AND SIMILAR DEVICES NECESSARY TO PROTECT AGAINST THEFT FROM PROPERTY DURING THE ENTIRE PERIOD OF CONSTRUCTION. REMOVE ALL SUCH DEVICES UPON COMPLETION OF THE WORK.
  - F. EXISTING UTILITIES: DO NOT INTERRUPT EXISTING UTILITIES SERVING FACILITIES OCCUPIED BY THE OWNER OR OTHERS, EXCEPT WHEN PERMITTED IN WRITING BY THE ENGINEER, AND THEN ONLY AFTER ACCEPTABLE TEMPORARY UTILITY SERVICES HAVE BEEN PROVIDED.

PROVIDE A MINIMUM 48-HOUR NOTICE TO THE ENGINEER AND RECEIVE WRITTEN NOTICE TO PROCEED BEFORE INTERRUPTING ANY UTILITY SERVICE.

## PART 2 – PRODUCTS

- 2.1 SUITABLE BACKFILL: ASTM D2321 (CLASS I, II, III, OR IVA) FREE FROM FROZEN LUMPS, REFUSE, STONES OR ROCKS LARGER THAN 3 INCHES IN ANY DIMENSION OR OTHER MATERIAL THAT MAY MAKE THE INORGANIC MATERIAL UNSUITABLE FOR BACKFILL.
- 2.2 NON-POROUS GRANULAR EMBANKMENT AND BACKFILL: ASTM D2321 (CLASS III, IVA OR IVB) COARSE AGGREGATE. FREE FROM FROZEN LUMPS, REFUSE, STONES, OR ROCKS LARGER THAN 3 INCHES IN ANY DIMENSION OR OTHER MATERIAL THAT MAY MAKE THE INORGANIC MATERIAL UNSUITABLE FOR BACKFILL.
- 2.3 POROUS GRANULAR EMBANKMENT AND BACKFILL: ASTM D2321 (CLASS IA, IB, OR II) COARSE AGGREGATE FREE FROM FROZEN LUMPS, REFUSE, STONES, OR ROCKS LARGER THAN 3 INCHES IN ANY DIMENSION OR OTHER MATERIAL THAT MAY MAKE THE INORGANIC MATERIAL UNSUITABLE FOR BACKFILL.
- 2.4 SELECT STRUCTURAL FILL: GRANULAR FILL MATERIAL MEETING THE REQUIREMENTS OF ASTM E850-95. FOR USE AROUND AND UNDER STRUCTURES WHERE STRUCTURAL FILL MATERIAL ARE REQUIRED.
- 2.5 GRANULAR BEDDING AND TRENCH BACKFILL: WELL-GRADED SAND MEETING THE GRADATION REQUIREMENTS OF ASTM D2487 (SE OR SW-SM).
- 2.6 COARSE AGGREGATE FOR ACCESS ROAD SUB BASE COURSE SHALL CONFORM TO ASTM D2940.
- 2.7 UNSUITABLE MATERIAL: AND MODERATELY PLASTIC SILTS AND CLAYS (LL>45). MATERIAL CONTAINING REFUSE, FROZEN LUMPS, DEMOLISHED BITUMINOUS MATERIAL, VEGETATIVE MATTER, WOOD, STONES IN EXCESS OF 3 INCHES IN ANY DIMENSION, AND DEBRIS AS DETERMINED BY THE CONSTRUCTION MANAGER. TYPICAL THESE WILL BE SOILS CLASSIFIED BY ASTM AS PT, MH, CH, OH, ML, AND OL.
- 2.8 GEOTEXTILE FABRIC: MIRAFI 500X OR APPROVED EQUAL.
- 2.9 PLASTIC MARKING TAPE: SHALL BE ACID AND ALKALI RESISTANT POLYETHYLENE FILM SPECIFICALLY MANUFACTURED FOR MARKING AND LOCATING UNDERGROUND UTILITIES, 6 INCHES WIDE WITH A MINIMUM THICKNESS OF 0.004 INCH. TAPE SHALL HAVE MINIMUM STRENGTH OF 1500 PSI IN BOTH DIRECTIONS AND MANUFACTURED WITH INTEGRAL CONDUCTORS, FOIL BACKING OR OTHER MEANS TO ENABLE DETECTION BY A METAL DETECTOR WHEN BURIED UP TO 3 FEET DEEP. THE METALLIC CORE OF THE TAPE SHALL BE ENCASED IN A PROTECTIVE JACKET OR PROVIDED WITH OTHER MEANS TO PROTECT IT FROM CORROSION. TAPE COLOR SHALL BE RED FOR ELECTRIC UTILITIES AND ORANGE FOR TELECOMMUNICATION UTILITIES.

PART 2 – EXECUTION

### 3.1 GENERAL:

- A. BEFORE STARTING GENERAL SITE PREPARATION ACTIVITIES, INSTALL EROSION AND SEDIMENT CONTROL MEASURES. THE WORK AREA SHALL BE CONSTRUCTED AND MAINTAINED IN SUCH A CONDITION THAT IN THE EVENT OF RAIN THE SITE WILL BE DRAINED AT ANY TIME.
- B. BEFORE ALL SURVEY, LAYOUT, STAKING, AND MARKING, ESTABLISH AND MAINTAIN ALL LINES, GRADES, ELEVATIONS AND BENCHMARKS NEEDED FOR EXECUTION OF THE WORK.
- C. CLEAR AND GRUB THE AREA WITHIN THE LIMITS OF THE SITE. REMOVE TREES, BRUSH, STUMPS, RUBBISH AND OTHER DEBRIS AND VEGETATION RESTING ON OR PROTRUDING THROUGH THE SURFACE OF THE SITE AREA TO BE CLEARED.
  1. REMOVE THE FOLLOWING MATERIALS TO A DEPTH OF NO LESS THAN 12 INCHES BELOW THE ORIGINAL GROUND SURFACE: ROOTS, STUMPS, AND OTHER DEBRIS, BRUSH, AND REFUSE EMBEDDED IN OR PROTRUDING THROUGH THE GROUND SURFACE, RAKE, DISK OR PLOW THE AREA TO A DEPTH OF NO LESS THAN 6 INCHES, AND REMOVE TO A DEPTH OF 12 INCHES ALL ROOTS AND OTHER DEBRIS THEREBY EXPOSED.
  2. REMOVE TOPSOIL MATERIAL COMPLETELY FROM THE SURFACE UNTIL THE SOIL NO LONGER MEETS THE DEFINITION OF TOPSOIL. AVOID MIXING TOPSOIL WITH SUBSOIL OR OTHER UNDESIRABLE MATERIALS.
  3. EXCEPT WHERE EXCAVATION TO GREATER DEPTH IS INDICATED, FILL DEPRESSIONS RESULTING FROM CLEARING, GRUBBING, AND DEMOLITION WORK COMPLETELY WITH SUITABLE FILL.
  - D. REMOVE FROM THE SITE AND DISPOSE IN AN AUTHORIZED LANDFILL ALL DEBRIS RESULTING FROM CLEARING AND GRUBBING OPERATIONS. BURNING WILL NOT BE PERMITTED.

- E. PRIOR TO EXCAVATING, THOROUGHLY EXAMINE THE AREA TO BE EXCAVATED AND/OR TRENCHED TO VERIFY THE LOCATIONS OF FEATURES INDICATED ON THE DRAWINGS AND TO ASCERTAIN THE EXISTENCE AND LOCATION OF ANY STRUCTURE, UNDERGROUND STRUCTURE, OR OTHER ITEM NOT SHOWN THAT MIGHT INTERFERE WITH THE PROPOSED CONSTRUCTION. NOTIFY THE CONSTRUCTION MANAGER OF ANY OBSTRUCTIONS THAT WILL PREVENT ACCOMPLISHMENT OF THE WORK AS INDICATED ON THE DRAWINGS.
- F. SEPARATE AND STOCK PILE ALL EXCAVATED MATERIALS SUITABLE FOR BACKFILL. ALL EXCESS EXCAVATED AND UNSUITABLE MATERIALS SHALL BE DISPOSED OF OFF-SITE IN A LEGAL MANNER.

### 3.2 BACKFILL:

- A. AS SOON AS PRACTICAL, AFTER COMPLETING CONSTRUCTION OF THE RELATED STRUCTURE, INCLUDING EXPIRATION OF THE SPECIFIED MINIMUM CURING PERIOD FOR CAST-IN-PLACE CONCRETE, BACKFILL THE EXCAVATION WITH APPROVED MATERIAL TO RESTORE THE REQUIRED FINISHED GRADE.
- B. PRIOR TO PLACING BACKFILL AROUND STRUCTURES, ALL FORMS SHALL BE REMOVED AND THE EXCAVATION CLEANED OF ALL TRASH, DEBRIS, AND UNSUITABLE MATERIALS.
- C. BACKFILL BY PLACING AND COMPACTING SUITABLE BACKFILL MATERIAL OR SELECT GRANULAR BACKFILL MATERIAL WHEN REQUIRED IN UNIFORM HORIZONTAL LAYERS OF NO GREATER THAN 8-INCHES LOOSE THICKNESS AND COMPACTED. WHERE HAND OPERATED COMPACTORS ARE USED, THE FILL MATERIAL SHALL BE PLACED IN LIFTS NOT TO EXCEED 4 INCHES IN LOOSE DEPTH AND COMPACTED.
- D. WHENEVER THE DENSITY TESTING INDICATES THAT THE CONTRACTOR HAS NOT OBTAINED THE SPECIFIED DENSITY, THE SUCCEEDING LAYER SHALL NOT BE PLACED UNTIL THE SPECIFICATION REQUIREMENTS ARE MET UNLESS OTHERWISE AUTHORIZED BY THE GEOTECHNICAL ENGINEER. THE CONTRACTOR SHALL TAKE WHATEVER APPROPRIATE ACTION IS NECESSARY , SUCH AS DISKING AND DRYING, ADDING WATER, OR INCREASING THE COMPACTIVE EFFORT TO MEET THE MINIMUM COMPACTION REQUIREMENTS.
- E. THOROUGHLY COMPACT EACH LAYER OF BACKFILL TO A MINIMUM 95% OF THE MAXIMUM DRY DENSITY AS PROVIDED BY THE STANDARD PROCTOR TEST, ASTM D 698.

### 3.3 TRENCH EXCAVATION:

- A. UTILITY TRENCHES SHALL BE EXCAVATED TO THE LINES AND GRADES SHOWN ON THE DRAWINGS OR AS DIRECTED BY THE GENERAL CONTRACTOR. PROVIDE SHORING, SHEETING AND BRACING AS REQUIRED TO PREVENT CAVING OR SLOUGHING OF THE TRENCH WALLS.
- B. EXTEND THE TRENCH WIDTH A MINIMUM OF 6 INCHES BEYOND THE OUTSIDE EDGE OF THE OUTERMOST CONDUIT.
- C. WHEN SOFT YIELDING, OR OTHERWISE UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED, BACKFILL AT THE REQUIRED TRENCH TO A DEPTH OF NO LESS THAN 12 INCHES BELOW THE REQUIRED ELEVATION AND BACKFILL WITH GRANULAR BEDDING MATERIAL.

### 3.4 TRENCH BACKFILL:

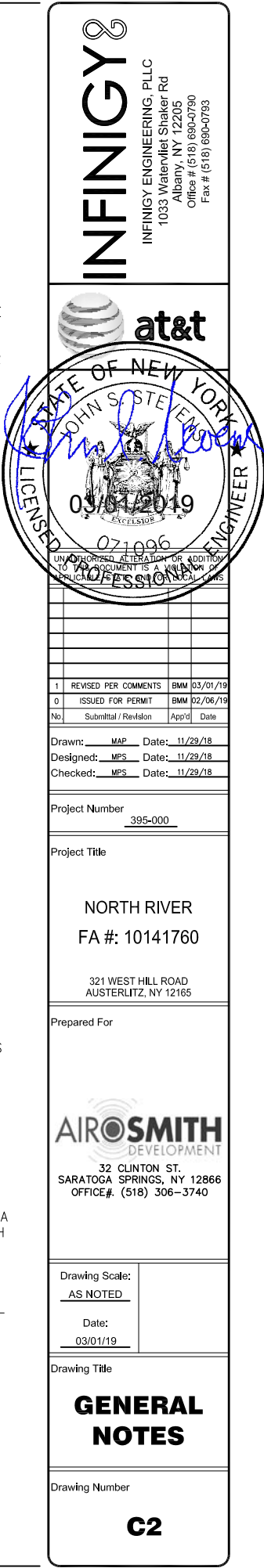
- A. PROVIDE GRANULAR BEDDING MATERIAL IN ACCORDANCE WITH THE DRAWINGS AND THE UTILITY REQUIREMENTS.
- B. NOTIFY THE GENERAL CONTRACTOR 24 HOURS IN ADVANCE OF BACKFILLING.
- C. CONDUCT UTILITY CHECK TESTS BEFORE BACKFILLING. BACKFILL AND COMPACT TRENCH BEFORE ACCEPTANCE TESTING.
- D. PLACE GRANULAR TRENCH BACKFILL UNIFORMLY ON BOTH SIDES OF THE CONDUITS IN 6-INCH UNCOMPACTED LIFTS UNTIL 12 INCHES OVER THE CONDUITS. SOLIDLY RAM AND TAMP BACKFILL INTO SPACE AROUND CONDUITS.
- E. PROTECT CONDUIT FROM LATERAL MOVEMENT, IMPACT DAMAGE, OR UNBALANCED LOADING.
- F. ABOVE THE CONDUIT EMBEDMENT ZONE, PLACE AND COMPACT SATISFACTORY BACKFILL MATERIAL IN 8-INCH MAXIMUM LOOSE THICKNESS LIFTS TO RESTORE THE REQUIRED FINISHED SURFACE GRADE.
- G. COMPACT FINAL TRENCH BACKFILL TO A DENSITY EQUAL TO OR GREATER THAN THAT OF THE EXISTING UNDISTURBED MATERIAL IMMEDIATELY ADJACENT TO THE TRENCH BUT NO LESS THAN A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY AS PROVIDED BY THE STANDARD PROCTOR TEST, ASTM D 698.

### 3.5 FINISH GRADING:

- A. PERFORM ALL GRADING TO PROVIDE POSITIVE DRAINAGE AWAY FROM STRUCTURES AND SMOOTH, EVEN SURFACE DRAINAGE OF THE ENTIRE AREA WITHIN THE LIMITS OF CONSTRUCTION. GRADING SHALL BE COMPATIBLE WITH ALL SURROUNDING TOPOGRAPHY AND STRUCTURES.
- B. UTILIZE SATISFACTORY FILL MATERIAL RESULTING FROM THE EXCAVATION WORK IN THE CONSTRUCTION OF FILLS, EMBANKMENTS AND FOR REPLACEMENT OF REMOVED UNSUITABLE MATERIALS.
- C. ACHIEVE FINISHED GRADE BY PLACING A MINIMUM OF 4 INCHES OF 1/2" - 3/4" CRUSHED STONE ON TOP SOIL STABILIZER FABRIC.
- D. REPAIR ALL ACCESS ROADS AND SURROUNDING AREAS USED DURING THE COURSE OF THIS WORK TO THEIR ORIGINAL CONDITION.

### 3.7 ASPHALT PAVING ROAD:

- A. DIVISION 600 - KDOT FLEXIBLE PAVEMENT. (UPDATE PER LOCAL DOT)  
B. SECTION 403 - MODOT ASPHALT CONCRETE PAVEMENT.





GRADING & EXCAVATING NOTES:

1.

ALL EXCAVATIONS ON WHICH CONCRETE IS TO BE PLACED SHALL BE SUBSTANTIALLY HORIZONTAL ON UNDISTURBED AND UNFROZEN SOIL AND BE FREE FROM LOOSE MATERIAL AND EXCESS GROUNDWATER. DEWATERING FOR EXCESS GROUNDWATER SHALL BE PROVIDED IF REQUIRED.
2.

CONCRETE FOUNDATIONS SHALL NOT BE PLACED ON ORGANIC MATERIAL. IF SOUND SOIL IS NOT REACHED AT THE DESIGNATED EXCAVATION DEPTH, THE UNSATISFACTORY SOIL SHALL BE EXCAVATED TO ITS FULL DEPTH AND EITHER BE REPLACED WITH MECHANICALLY COMPACTED GRANULAR MATERIAL OR THE EXCAVATION BE FILLED WITH CONCRETE OF THE SAME QUALITY SPECIFIED FOR THE FOUNDATION.
3.

ANY EXCAVATION OVER THE REQUIRED DEPTH SHALL BE FILLED WITH EITHER MECHANICALLY COMPACTED GRANULAR MATERIAL OR CONCRETE OF THE SAME QUALITY SPECIFIED FOR THE FOUNDATION. CRUSHED STONE MAY BE USED TO STABILIZE THE BOTTOM OF THE EXCAVATION. STONE, IF USED, SHALL NOT BE USED AS COMPILING CONCRETE THICKNESS.
4.

AFTER COMPLETION OF THE FOUNDATION AND OTHER CONSTRUCTION BELOW GRADE, AND BEFORE BACKFILLING, ALL EXCAVATIONS SHALL BE CLEAN OF UNSUITABLE MATERIAL SUCH AS VEGETATION, TRASH, DEBRIS, AND SO FORTH.
5.

–USE APPROVED MATERIALS CONSISTING OF EARTH, LOAM, SANDY CLAY, SAND

–BE FREE FROM CLODS OR STONES OVER 2–1/2” MAXIMUM DIMENSIONS

–BE PLACED IN 6” LAYERS AND COMPACTED TO 95% STANDARD PROCTOR EXCEPT IN GRASSED/LANDSCAPED AREAS, WHERE 90% STANDARD PROCTOR
6.

REMOVE ALL VEGETATION, TOPSOIL, DEBRIS, WET AND UNSATISFACTORY SOIL MATERIALS, OBSTRUCTIONS, AND DELETERIOUS MATERIALS FROM GROUND SURFACE PRIOR TO PLACING FILLS. PLOW, STRIP, OR BREAK UP SLOPED SURFACES STEEPER THAN THAN 1 VERTICAL TO 4 HORIZONTAL SO FILL MATERIAL WILL BOND WITH EXISTING SURFACE. WHEN SUBGRADE OR EXISTING GROUND SURFACE TO RECEIVE FILL HAS A DENSITY LESS THAN THAT REQUIRED FOR FILL, BREAK UP GROUND SURFACE TO DEPTH REQUIRED, PULVERIZE, MOISTURE–CONDITION OR AERATE SOIL AND RECOMPACT TO REQUIRED DENSITY.
7.

PROTECT EXISTING GRAVEL SURFACING AND SUBGRADE IN AREAS WHERE EQUIPMENT LOADS WILL OPERATE. USE PLANKING OR OTHER SUITABLE MATERIALS DESIGNED TO SPREAD EQUIPMENT LOADS. REPAIR DAMAGE TO EXISTING GRAVEL SURFACING OR SUBGRADE WHERE SUCH DAMAGE IS DUE TO THE CONTRACTOR’S OPERATIONS. DAMAGED GRAVEL SURFACING SHALL BE RESTORED TO MATCH THE ADJACENT UNDAMAGED GRAVEL SURFACING AND SHALL BE OF THE SAME THICKNESS.
8.

REPLACE EXISTING GRAVEL SURFACING ON AREAS FROM WHICH GRAVEL SURFACING IS REMOVED DURING CONSTRUCTION OPERATIONS. GRAVEL SURFACING SHALL BE REPLACED TO MATCH EXISTING ADJACENT GRAVEL SURFACING AND SHALL BE OF THE SAME THICKNESS. SURFACES OF GRAVEL SURFACING SHALL BE FREE FROM CORRUGATIONS AND WAVES. EXISTING GRAVEL SURFACING MAY BE EXCAVATED SEPARATELY AND REUSED IF INJURIOUS AMOUNTS OF EARTH, ORGANIC MATTER, OR OTHER DELETERIOUS MATERIALS ARE REMOVED PRIOR TO REUSE. FURNISH ALL ADDITIONAL GRAVEL RESURFACING MATERIAL AS REQUIRED. BEFORE GRAVEL SURFACING IS REPLACED, SUBGRADE SHALL BE GRADED TO CONFORM TO REQUIRED SUBGRADE ELEVATIONS, AND LOOSE OR DISTURBED MATERIALS SHALL BE THOROUGHLY COMPACTED. DEPRESSIONS IN THE SUBGRADE SHALL BE FILLED AND COMPACTED WITH APPROVED SELECTED MATERIAL. GRAVEL SURFACING MATERIAL MAY BE USED FOR FILLING DEPRESSIONS IN THE SUBGRADE, SUBJECT TO ENGINEER’S APPROVAL.
9.

DAMAGE TO EXISTING STRUCTURES AND UTILITIES RESULTING FROM CONTRACTOR’S NEGLIGENCE SHALL BE REPAIRED/REPLACED TO OWNER’S SATISFACTION AT CONTRACTOR’S EXPENSE.
10.

CONTRACTOR SHALL COORDINATE THE CONSTRUCTION SCHEDULE WITH PROPERTY OWNER SO AS TO AVOID INTERRUPTIONS TO PROPERTY OWNER’S OPERATIONS.
11.

ENSURE POSITIVE DRAINAGE DURING AND AFTER COMPLETION OF CONSTRUCTION.
12.

ALL CUT AND FILL SLOPES SHALL BE MAXIMUM 2 HORIZONTAL TO 1 VERTICAL.
13.

CONTRACTOR SHALL BE RESPONSIBLE FOR MONITORING SITE VEHICLE TRAFFIC AS TO NOT ALLOW VEHICLES LEAVING THE SITE TO TRACK MUD ONTO PUBLIC STREETS. THE CONTRACTOR IS RESPONSIBLE FOR CLEANING PUBLIC STREETS DUE TO MUDDY VEHICLES LEAVING THE SITE.

GENERAL EROSION & SEDIMENT CONTROL NOTES:

1.

THE SOIL EROSION AND SEDIMENT CONTROL MEASURES AND DETAILS AS SHOWN HEREIN AND STIPULATED WITHIN STATE STANDARDS SHALL BE FOLLOWED AND INSTALLED IN A MANNER SO AS TO MINIMIZE SEDIMENT LEAVING THE SITE.
2.

PRIOR TO COMMENCING LAND DISTURBANCE ACTIVITY, THE LIMITS OF LAND DISTURBANCE SHALL BE CLEARLY AND ACCURATELY DEMARCATED WITH STAKES, RIBBONS, OR OTHER APPROPRIATE MEANS.
3.

EROSION CONTROL DEVICES SHALL BE INSTALLED BEFORE GROUND DISTURBANCE OCCURS. THE LOCATION OF SOME OF THE EROSION CONTROL DEVICES MAY HAVE TO BE ALTERED FROM SHOWN ON THE APPROVED PLANS IF DRAINAGE PATTERNS DURING CONSTRUCTION ARE DIFFERENT FROM THE FINAL PROPOSED DRAINAGE PATTERNS. IT IS THE CONTRACTOR’S RESPONSIBILITY TO ACCOMPLISH EROSION CONTROL FOR ALL DRAINAGE PATTERNS CREATED AT VARIOUS STAGES DURING CONSTRUCTION. ANY DIFFICULTY IN CONTROLLING EROSION DURING ANY PHASE OF CONSTRUCTION SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.
4.

THE LOCATION OF SOME OF THE EROSION CONTROL DEVICES MAY HAVE TO BE ALTERED FROM THAT SHOWN ON THE PLANS IF DRAINAGE PATTERNS DURING CONSTRUCTION ARE DIFFERENT FROM THE FINAL PROPOSED DRAINAGE PATTERNS. ANY DIFFICULTY IN CONTROLLING EROSION DURING ANY PHASE OF CONSTRUCTION SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.

GENERAL EROSION & SEDIMENT CONTROL NOTES:

5.

CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES UNTIL PERMANENT VEGETATION HAS BEEN ESTABLISHED. CONTRACTOR SHALL CLEAN OUT ALL SEDIMENT PONDS WHEN REQUIRED BY THE ENGINEER OR THE LOCAL JURISDICTION INSPECTOR. CONTRACTOR SHALL INSPECT EROSION CONTROL MEASURES AT THE END OF EACH WORKING DAY TO ENSURE MEASURES ARE FUNCTIONING PROPERLY.
6.

THE CONTRACTOR SHALL REMOVE ACCUMULATED SILT WHEN THE SILT IS WITHIN 12” OF THE TOP OF THE SILT FENCE.
7.

FAILURE TO INSTALL, OPERATE OR MAINTAIN ALL EROSION CONTROL MEASURES WILL RESULT IN ALL CONSTRUCTION BEING STOPPED ON THE JOB SITE UNTIL SUCH MEASURES ARE CORRECTED.
8.

SILT BARRIERS TO BE PLACED AT DOWNSTREAM TOE OF ALL CUT AND FILL SLOPES.
9.

ALL CUT AND FILL SLOPES MUST BE SURFACED ROUGHENED AND VEGETATED WITHIN SEVEN (7) DAYS OF THEIR CONSTRUCTION.
10.

CONTRACTOR SHALL REMOVE ALL EROSION & SEDIMENT CONTROL MEASURES AFTER COMPLETION OF CONSTRUCTION AND ESTABLISHMENT OF PERMANENT GROUND COVER.
11.

THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH, LAND–DISTURBING ACTIVITIES.

SEEDING GUIDELINES:

FINAL STABILIZATION OF ALL DISTURBED AREAS, UNLESS OTHERWISE NOTED, SHALL BE LOAMED AND SEEDED. LOAM SHALL BE PLACED AT A MINIMUM COMPACTED DEPTH OF 4". RECOMMENDED SEEDING DATES FOR PERMANENT VEGETATION SHALL BE BETWEEN JUNE 15 THROUGH AUGUST 1 AND SEPTEMBER 15 THROUGH OCTOBER 15. TEMPORARY VEGETATIVE MEASURES SHALL CONSIST OF AN ANNUAL OR PERENNIAL RYE GRASS WITH RECOMMENDED SEEDING DATES BEING FROM JUNE 1 THROUGH AUGUST 15 AND SEPTEMBER 30 THROUGH NOVEMBER 30.

EVALUATE PROPOSED COVER MATERIAL

BEFORE SPREADING COVER MATERIAL OVER THE DESIGNATED AREA, OBTAIN A REPRESENTATIVE SOIL SAMPLE AND SUBMIT TO A REPUTABLE SOIL TESTING LABORATORY FOR CHEMICAL AND PHYSICAL ANALYSIS. THE PRELIMINARY TEST IS NECESSARY TO DETERMINE THE REQUIRED INORGANIC AND/OR ORGANIC AMENDMENTS THAT ARE NEEDED TO ASSIST IN ESTABLISHING THE SEED MIXTURE IN AN ENVIRONMENTALLY AND ECONOMICALLY SOUND MANNER. THE RESULTS WILL GIVE THE COVER MATERIAL CHARACTERISTICS SUCH AS pH AND FERTILIZATION NEEDS. THESE RESULTS SHALL BE KEPT ON–SITE B THE CONTRACTOR AND AVAILABLE FOR REVIEW BY THE COUNTY.

SEED BED PREPARATION

PROPOSED COVER MATERIAL SHOULD BE SPREAD EVENLY OVER THE SITE AREA IN A MINIMUM 4" LIFT VIA BULLDOZER/BUCKET LOADER. USING THE INFORMATION FROM THE SOIL ANALYSIS, CAREFULLY CALCULATE THE QUANTITIES OF LIMESTONE AND PRE–PLANT FERTILIZER NEEDED PRIOR TO APPLYING. PRE–PLANT AMENDMENTS CAN BE APPLIED WITH A BROADCAST AND/OR DROP SEEDER AND INCORPORATED WITH AN OFFSET DISK, YORK RAKE, AND/OR HAND RAKE. AFTER INCORPORATION THE PRE–PLANT SOIL AMENDMENTS, THE SEED BED SHOULD BE SMOOTH AND FIRM PRIOR TO SEEDING. THE FOLLOWING SEED MIXTURES SHALL BE USED AS NOTED:

SEED MIXTURE

SPECIES/VARIETY	LBS/ACRE
CREEPING RED FESCUE	20
KENTUCKY BLUEGRASS	20
PERENNIAL RYEGRASS	5

SEED TIME AND METHOD

THE PREFERRED TIME FOR SEEDING THE COOL SEASON MIXTURE IS LATE SUMMER. SOIL AND AIR TEMPERATURES ARE IDEAL FOR SEED GERMINATION AND SEEDING GROWTH. WEED COMPETITION IS REDUCED BECAUSE SEEDS OF MANY WEED SPECIES GERMINATE EARLIER IN THE GROWING SEASON. ADDITIONALLY, HERBICIDE USE IS GREATLY REDUCED. HOWEVER, SEEDING MAY BE DONE AT ANY OF THE ABOVE NOTED TIMES.

MULCHING

NEWLY SEEDED AREAS SHOULD BE MULCHED TO INSURE ADEQUATE MOISTURE FOR SUCCESSFUL TURF ESTABLISHMENT AND TO PROTECT AGAINST SURFACE MOVEMENT OF SEDIMENT–BOUND AGROCHEMICALS AND SOIL EROSION. IF MULCHING PROCEDURES ARE NOT SPECIFIED ON PLANS, APPLY GOOD QUALITY STRAW OR HAY AT A RATE OF 2 BALES/1000 SQ. FT. OTHER COMMERCIALY AVAILABLE MULCHES CAN BE USED.

CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

1.

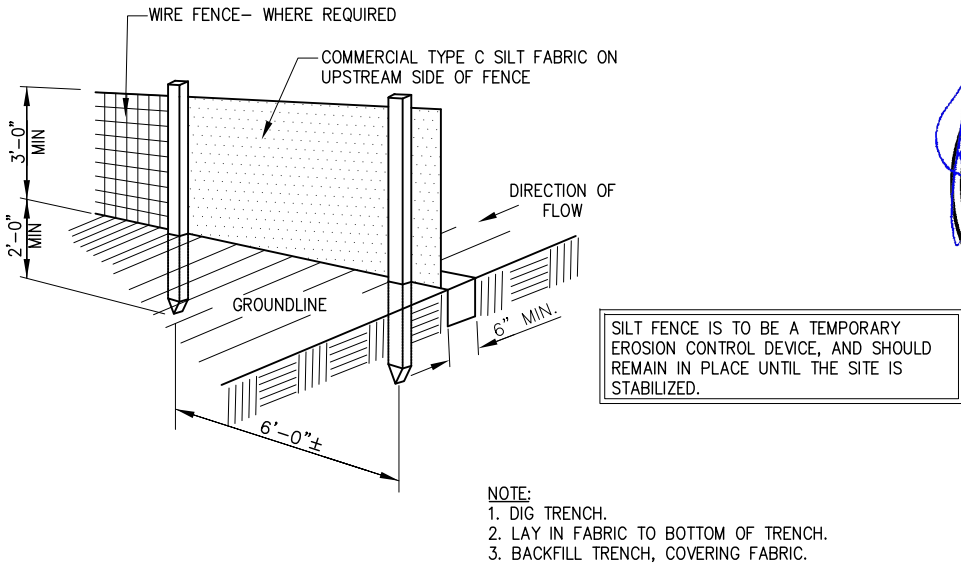
WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2.

FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24” AT TOP AND MID SECTION.
3.

WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER–LAPPED BY 6IN AND FOLDED.
4.

MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULDGES" DEVELOP IN THE SILT FENCE.
5.

ALL SILT FENCE MATERIALS MUST BE LISTED ON THE CURRENT STATES. D.O.T. QUALIFIED PRODUCTS LIST.
- POSTS: STEEL EITHER T OR U TYPE.
- FENCE: WOVEN WIRE 14 GA. 6" MAX. MESH OPENING.
- FILTER CLOTH: FILTER X, MIRAFI 100X' STABILINKA T140N OR EQUAL.
- PREFAB. UNIT: GEOFAB ENVIROFENCE OR EQUAL.



1 SILT FENCE DETAIL  
-- NOT TO SCALE

**INFINIGY**

INFINIGY ENGINEERING, PLLC  
1033 Waterlily Shaker Rd  
Albany, NY 12205  
Office # (518) 890-0790  
Fax # (518) 890-0793



1	REVISED PER COMMENTS	BM	03/01/19
0	ISSUED FOR PERMIT	BM	02/06/19
No.	Submittal / Revision	App'd	Date

Drawn:	MAP	Date:	11/29/18
Designed:	MPS	Date:	11/29/18
Checked:	MPS	Date:	11/29/18

Project Number  
395-000

Project Title

NORTH RIVER  
FA #: 10141760

321 WEST HILL ROAD  
AUSTERLITZ, NY 12165

Prepared For

**AIROSMITH**  
DEVELOPMENT

32 CLINTON ST.  
SARATOGA SPRINGS, NY 12866  
OFFICE# (518) 306–3740

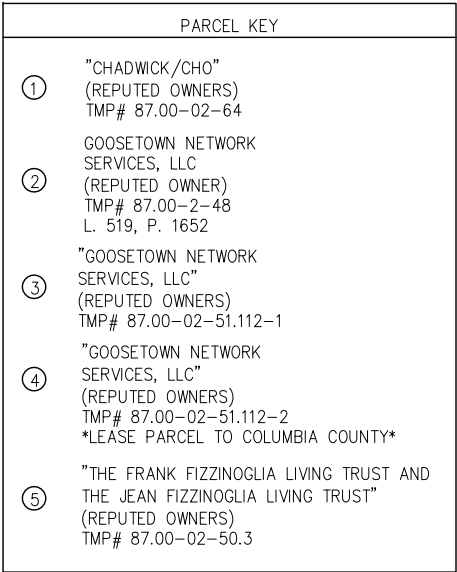
Drawing Scale:	AS NOTED
Date:	03/01/19

Drawing Title

**GRADING  
NOTES**

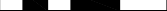
Drawing Number

**C2A**



**GRAPHIC SCALE:**

500'      250'      0      250'      500'



A horizontal graphic scale bar. The top is labeled with '500'', '250'', '0', '250'', and '500'' from left to right. The bar itself is divided into segments. The leftmost 500-foot segment is further divided into four 125-foot segments, each represented by a black and white checkerboard pattern. The remaining 500-foot segment (from 250' to 500') is a solid black bar.

SCALE (11x17): 1" = 500'-0"

SCALE (22x34): 1" = 250'-0"

1 SITE PLAN  
SCALE: AS NOTED

CALLLED NORTH



1	REVISED PER COMMENTS	BMM	03/01/19
0	ISSUED FOR PERMIT	BMM	02/06/19
No.	Submittal / Revision	App'd	Date

Drawn: MAP Date: 11/29/18  
Designed: MPS Date: 11/29/18  
Checked: MPS Date: 11/29/18

Project Number 395-000

Project Title

NORTH RIVER  
FA #: 10141760

321 WEST HILL ROAD  
AUSTERLITZ, NY 12165

Prepared For



Drawing Scale:  
AS NOTED

Date:  
03/01/19

**Drawing Title**

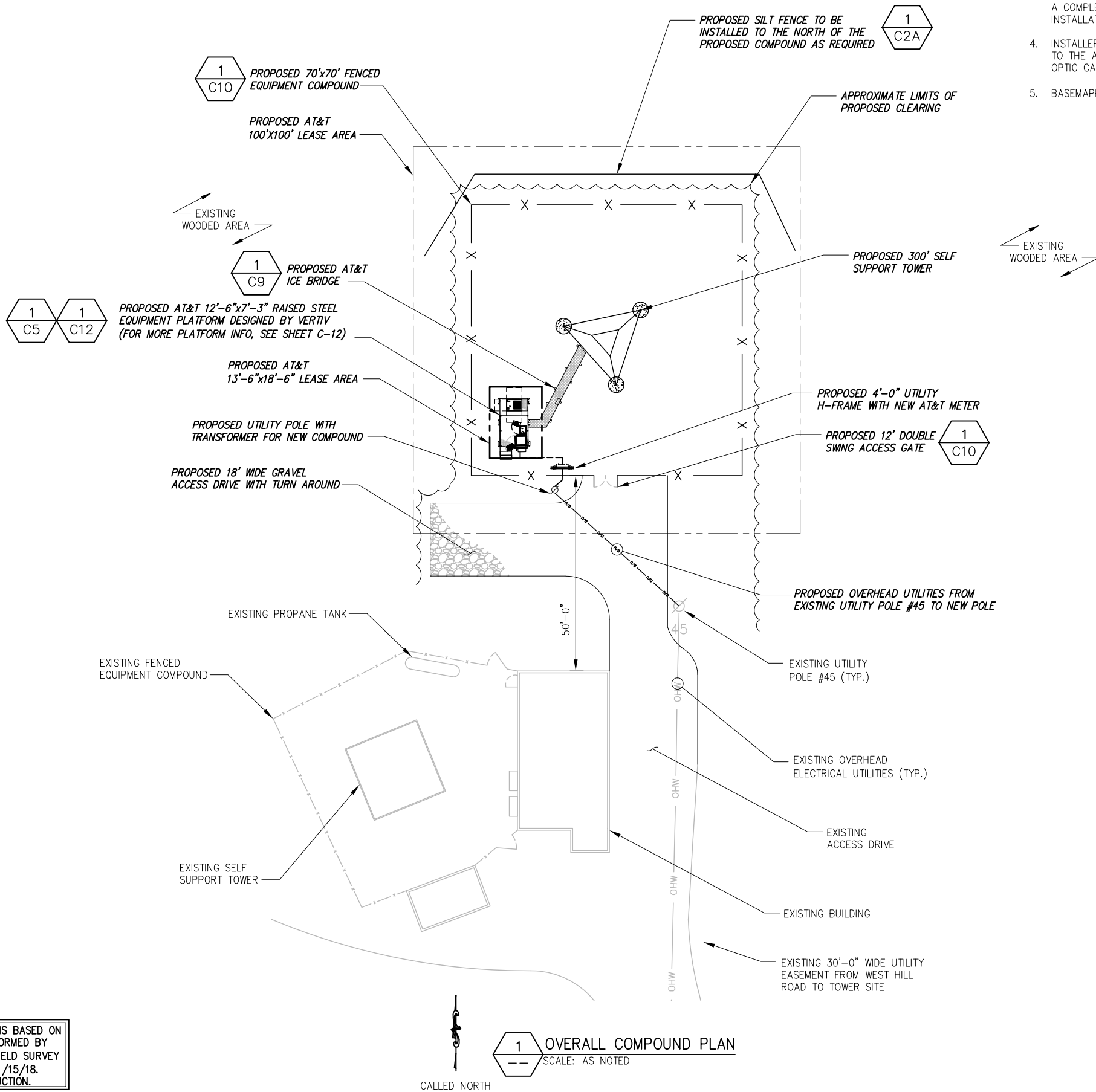
## UTILITY EASEMENTS & ACCESS

Drawing Number

**C2B**

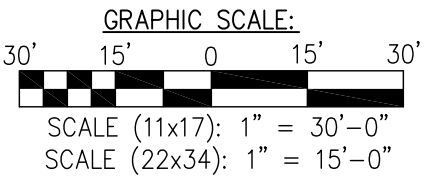






1 OVERALL COMPOUND PLAN  
SCALE: AS NOTED

- NOTES:
1. EXISTING CONDITIONS INFORMATION BASED ON INFORMATION PROVIDED TO INFINIGY.
  2. STRUCTURAL ANALYSIS HAS NOT BEEN COMPLETED AT TIME OF ISSUANCE OF THESE DRAWINGS. FINAL INSTALLATION TO COMPLY WITH RESULTS OF PASSING STRUCTURAL ANALYSIS
  3. INSTALLER SHALL PROVIDE ALL NECESSARY CONDUITS AND CIRCUITS AS REQUIRED FOR A COMPLETED INSTALLATION AND SHALL COMPLY WITH EQUIPMENT MANUFACTURER'S INSTALLATION REQUIREMENTS.
  4. INSTALLER SHALL PROVIDE ALL STRAIN RELIEF FOR ALL CABLE ASSEMBLIES ROUTING TO THE ANTENNAS. UTILIZATION OF HOISTING GRIPS ON ALL DC POWER AND FIBER OPTIC CABLES SHALL BE UTILIZED.
  5. BASEMAPPING BASED ON SURVEY COMPLETED BY ERDMAN ANTHONY, DATED 11/15/18



INFORMATION CONTAINED WITHIN DRAWINGS IS BASED ON PROVIDED INFORMATION, A SITE WALK PERFORMED BY INFINIGY SOLUTIONS ON 10/24/18 AND A FIELD SURVEY COMPLETED BY ERDMAN ANTHONY DATED 11/15/18. CONTRACTOR TO VERIFY PRIOR TO CONSTRUCTION.

INFINIGY ENGINEERING, PLLC  
1033 Watervliet Shaker Rd  
Albany, NY 12205  
Office # (518) 690-0790  
Fax # (518) 690-0793

at&t

1	REVISED PER COMMENTS	BMM	03/01/19
0	ISSUED FOR PERMIT	BMM	02/06/19
No.	Submittal / Revision	App'd	Date

Drawn: MAP Date: 11/29/18  
Designed: MPS Date: 11/29/18  
Checked: MPS Date: 11/29/18

Project Number 395-000

Project Title

NORTH RIVER  
FA #: 10141760

321 WEST HILL ROAD  
AUSTERLITZ, NY 12165

Prepared For

AIROSMITH DEVELOPMENT  
32 CLINTON ST.  
SARATOGA SPRINGS, NY 12866  
OFFICE # (518) 306-3740

Drawing Scale: AS NOTED  
Date: 03/01/19

Drawing Title

**OVERALL COMPOUND PLAN**

Drawing Number

**C4**

- NOTES:
1. EXISTING CONDITIONS INFORMATION BASED ON INFORMATION PROVIDED TO INFINIGY.
  2. STRUCTURAL ANALYSIS HAS NOT BEEN COMPLETED AT TIME OF ISSUANCE OF THESE DRAWINGS. FINAL INSTALLATION TO COMPLY WITH RESULTS OF PASSING STRUCTURAL ANALYSIS
  3. INSTALLER SHALL PROVIDE ALL NECESSARY CONDUITS AND CIRCUITS AS REQUIRED FOR A COMPLETED INSTALLATION AND SHALL COMPLY WITH EQUIPMENT MANUFACTURER'S INSTALLATION REQUIREMENTS.
  4. INSTALLER SHALL PROVIDE ALL STRAIN RELIEF FOR ALL CABLE ASSEMBLIES ROUTING TO THE ANTENNAS. UTILIZATION OF HOISTING GRIPS ON ALL DC POWER AND FIBER OPTIC CABLES SHALL BE UTILIZED.
  5. BASEMAPPING BASED ON SURVEY COMPLETED BY ERDMAN ANTHONY, DATED 11/15/18

APPROXIMATE LIMITS OF PROPOSED CLEARING

1  
C11

PROPOSED AT&T 20KW DIESEL GENERAC GENERATOR TO BE INSTALLED ON PROPOSED STEEL EQUIPMENT PLATFORM

1  
C12

PROPOSED AT&T 12'-6"x7'-3" RAISED STEEL EQUIPMENT PLATFORM (DESIGN BY VERTIV)

PROPOSED AT&T PURCELL EQUIPMENT CABINET

1  
C12

PROPOSED AT&T OVERHEAD STEEL ICE CANOPY (DESIGN BY VERTIV)

PROPOSED AT&T DC POWER CABINET

PROPOSED AT&T 13'-6"x18'-6" LEASE AREA

1  
C12

PROPOSED AT&T PLATFORM ACCESS STAIRS (DESIGN BY VERTIV)

PROPOSED 70'-0"x70'-0" FENCED EQUIPMENT COMPOUND

1  
C10

PROPOSED AT&T 3'-0" SAFE WORK CLEARANCE FOR GENERATOR

PROPOSED 300'-0" SELF SUPPORT TOWER

PROPOSED AT&T (6) DC POWER CABLES & (2) FIBER CABLES TO BE ROUTED FROM PROPOSED EQUIPMENT CABINETS TO PROPOSED PANEL ANTENNAS

1  
C9

PROPOSED AT&T ICE BRIDGE

PROPOSED AT&T FIBER MANAGEMENT BOX MOUNTED ON PROPOSED ICE BRIDGE POST

3  
C9

PROPOSED AT&T GPS ANTENNA MOUNTED ON PROPOSED ICE BRIDGE POST

2  
C9

PROPOSED AT&T 3'-0" H-FRAME

2  
C10

PROPOSED AT&T PPC CABINET

ROUTE PROPOSED 2" PVC UNDERGROUND CONDUIT (FOR ELECTRIC) FROM PROPOSED PPC CABINET TO PROPOSED METER

3  
C10

ROUTE PROPOSED 2" PVC UNDERGROUND CONDUIT (FOR ELECTRIC) FROM PROPOSED UTILITY POLE TO PROPOSED METER

3  
C10

PROPOSED 4'-0" UTILITY H-FRAME WITH PROPOSED AT&T METER

1  
EQUIPMENT PLAN  
SCALE: AS NOTED

CALL TO NORTH

GRAPHIC SCALE:  
4' 2' 0' 2' 4'  
SCALE (11x17): 1" = 4'-0"  
SCALE (22x34): 1" = 2'-0"

INFORMATION CONTAINED WITHIN DRAWINGS IS BASED ON PROVIDED INFORMATION, A SITE WALK PERFORMED BY INFINIGY SOLUTIONS ON 10/24/18 AND A FIELD SURVEY COMPLETED BY ERDMAN ANTHONY DATED 11/15/18. CONTRACTOR TO VERIFY PRIOR TO CONSTRUCTION.

INFINIGY

INFINIGY ENGINEERING, PLLC  
1033 Watervliet Shaker Rd  
Albany, NY 12205  
Office # (518) 690-0790  
Fax # (518) 690-0793

at&t



1	REVISED PER COMMENTS	BMM	03/01/19
0	ISSUED FOR PERMIT	BMM	02/06/19
No	Submittal / Revision	App'd	Date

Drawn: MAP Date: 11/29/18  
Designed: MPS Date: 11/29/18  
Checked: MPS Date: 11/29/18

Project Number  
395-000

Project Title

NORTH RIVER  
FA #: 10141760

321 WEST HILL ROAD  
AUSTERLITZ, NY 12165

Prepared For

AIROSMITH  
DEVELOPMENT  
32 CLINTON ST.  
SARATOGA SPRINGS, NY 12866  
OFFICE # (518) 306-3740

Drawing Scale:  
AS NOTED

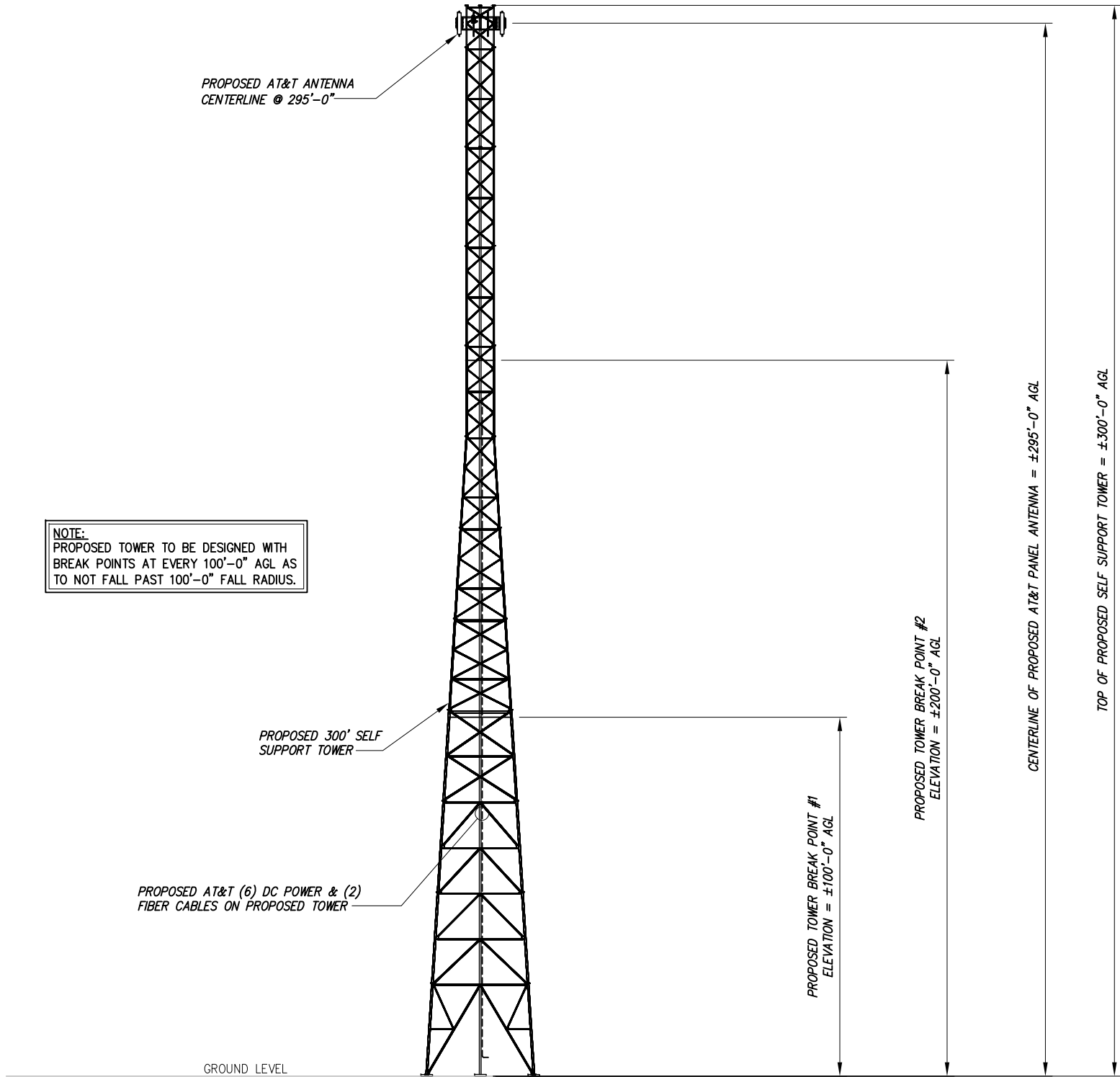
Date:  
03/01/19

Drawing Title

EQUIPMENT  
SITE PLAN

Drawing Number

C5



NOTE:  
PROPOSED TOWER TO BE DESIGNED WITH  
BREAK POINTS AT EVERY 100'-0" AGL AS  
TO NOT FALL PAST 100'-0" FALL RADIUS.

PROPOSED AT&T (6) DC POWER & (2)  
FIBER CABLES ON PROPOSED TOWER

PROPOSED 300' SELF  
SUPPORT TOWER

PROPOSED AT&T ANTENNA  
CENTERLINE @ 295'-0"

PROPOSED TOWER BREAK POINT #1  
ELEVATION = ±100'-0" AGL

PROPOSED TOWER BREAK POINT #2  
ELEVATION = ±200'-0" AGL

CENTERLINE OF PROPOSED AT&T PANEL ANTENNA = ±295'-0" AGL

TOP OF PROPOSED SELF SUPPORT TOWER = ±300'-0" AGL

GROUND LEVEL

1 SITE ELEVATION  
--- NOT TO SCALE

NOTES:

- EXISTING CONDITIONS INFORMATION BASED ON INFORMATION PROVIDED TO INFINIGY.
- STRUCTURAL ANALYSIS HAS NOT BEEN COMPLETED AT TIME OF ISSUANCE OF THESE DRAWINGS. FINAL INSTALLATION TO COMPLY WITH RESULTS OF PASSING STRUCTURAL ANALYSIS
- INSTALLER SHALL PROVIDE ALL NECESSARY CONDUITS AND CIRCUITS AS REQUIRED FOR A COMPLETED INSTALLATION AND SHALL COMPLY WITH EQUIPMENT MANUFACTURER'S INSTALLATION REQUIREMENTS.
- INSTALLER SHALL PROVIDE ALL STRAIN RELIEF FOR ALL CABLE ASSEMBLIES ROUTING TO THE ANTENNAS. UTILIZATION OF HOISTING GRIPS ON ALL DC POWER AND FIBER OPTIC CABLES SHALL BE UTILIZED.
- BASEMAPPING BASED ON SURVEY COMPLETED BY ERDMAN ANTHONY, DATED 11/15/18

INFORMATION CONTAINED WITHIN DRAWINGS IS BASED ON  
PROVIDED INFORMATION, A SITE WALK PERFORMED BY  
INFINIGY SOLUTIONS ON 10/24/18 AND A FIELD SURVEY  
COMPLETED BY ERDMAN ANTHONY DATED 11/15/18.  
CONTRACTOR TO VERIFY PRIOR TO CONSTRUCTION.



UNAUTHORIZED ALTERATION OR ADDITION  
TO THIS DOCUMENT IS A VIOLATION OF  
APPLICABLE STATE AND FEDERAL LAWS

1	REVISED PER COMMENTS	BMM	03/01/19
0	ISSUED FOR PERMIT	BMM	02/06/19
No.	Submittal / Revision	App'd	Date

Drawn: MAP Date: 11/29/18  
Designed: MPS Date: 11/29/18  
Checked: MPS Date: 11/29/18

Project Number  
395-000

Project Title

NORTH RIVER  
FA #: 10141760

321 WEST HILL ROAD  
AUSTERLITZ, NY 12165

Prepared For

**AIROSMITH**  
DEVELOPMENT  
32 CLINTON ST.  
SARATOGA SPRINGS, NY 12866  
OFFICE# (518) 306-3740

Drawing Scale:  
AS NOTED

Date:  
03/01/19

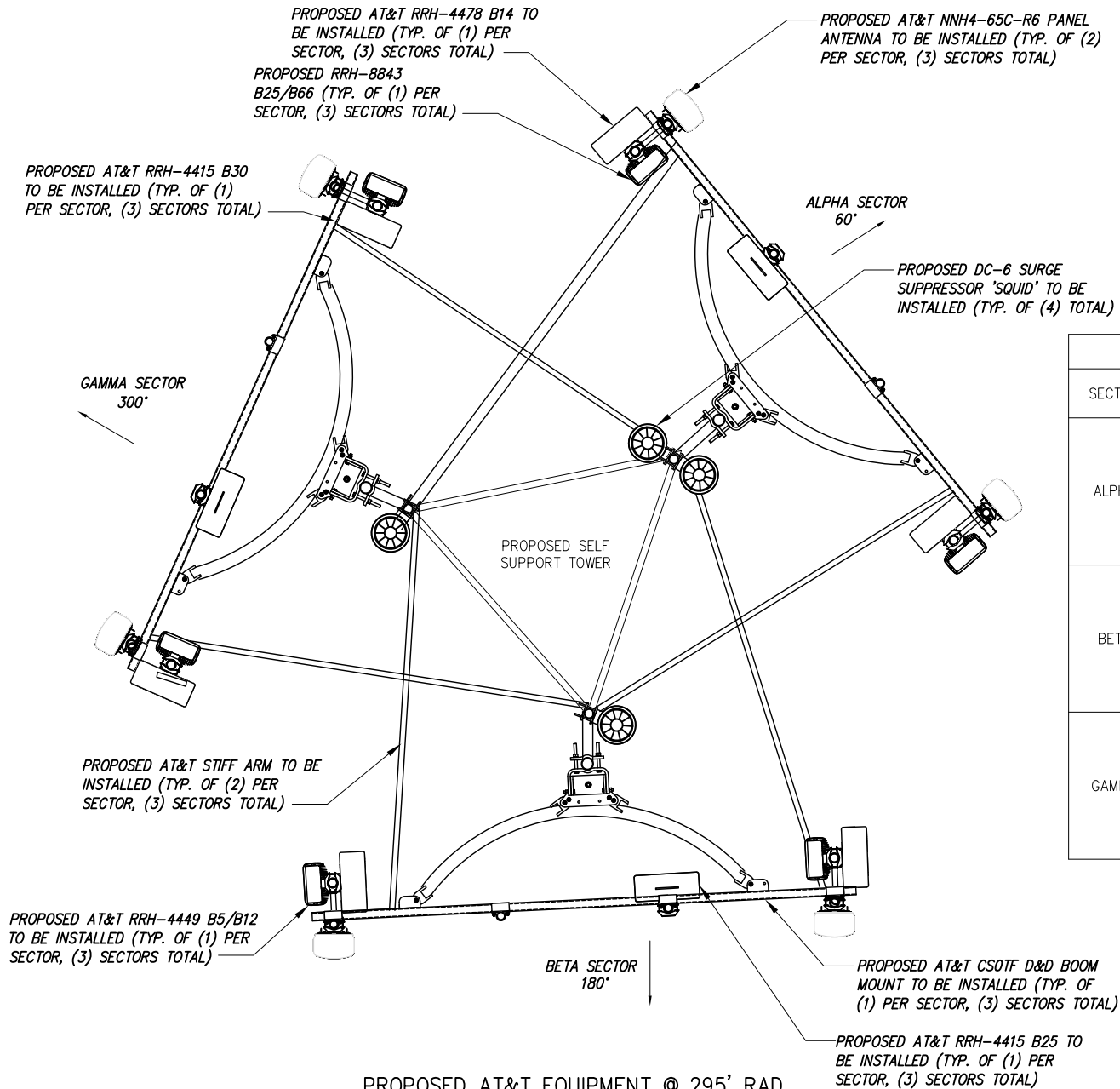
Drawing Title

**SITE  
ELEVATION**

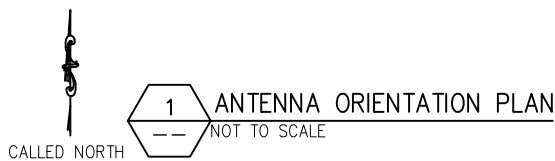
Drawing Number

**C6**





PROPOSED ANTENNA AND RADIO MODEL NUMBERS									
SECTOR	EXISTING/ PROPOSED	BAND	ANTENNA	ANTENNA CL HEIGHT	AZIMUTH	RRU	TMA/DIPLEXER	CABLE	CABLE LENGTH
ALPHA	PROPOSED	LTE	(1) COMMSCOPE NNH4-65C-R6	295'-0"	60°	(1) RRH-4478 B14 / (1) RRH-4415 B30 / (1) RRH-4415 B2	--	(2) DC POWER (1) FIBER	±380' ±380'
	--	--	--	--	--	--	--	-	-
	PROPOSED	LTE	(1) COMMSCOPE NNH4-65C-R6	295'-0"	60°	(1) RRH-4449 B5/B12/ (1) RRH-8843 B25/B66	--	SHARED	-
BETA	PROPOSED	LTE	(1) COMMSCOPE NNH4-65C-R6	295'-0"	180°	(1) RRH-4478 B14 / (1) RRH-4415 B30 / (1) RRH-4415 B2	--	(2) DC POWER (1) FIBER	±380' ±380'
	--	--	--	--	--	--	--	SHARED	-
	PROPOSED	LTE	(1) COMMSCOPE NNH4-65C-R6	295'-0"	180°	(1) RRH-4449 B5/B12/ (1) RRH-8843 B25/B66	--	SHARED	-
GAMMA	PROPOSED	LTE	(1) COMMSCOPE NNH4-65C-R6	295'-0"	300°	(1) RRH-4478 B14 / (1) RRH-4415 B30 / (1) RRH-4415 B2	--	(2) DC POWER SHARED	±380' -
	--	--	--	--	--	--	--	SHARED	-
	PROPOSED	LTE	(1) COMMSCOPE NNH4-65C-R6	295'-0"	300°	(1) RRH-4449 B5/B12/ (1) RRH-8843 B25/B66	--	SHARED	-



NOTES:

- EXISTING CONDITIONS INFORMATION BASED ON INFORMATION PROVIDED TO INFINIGY.
- STRUCTURAL ANALYSIS HAS NOT BEEN COMPLETED AT TIME OF ISSUANCE OF THESE DRAWINGS. FINAL INSTALLATION TO COMPLY WITH RESULTS OF PASSING STRUCTURAL ANALYSIS
- INSTALLER SHALL PROVIDE ALL NECESSARY CONDUITS AND CIRCUITS AS REQUIRED FOR A COMPLETED INSTALLATION AND SHALL COMPLY WITH EQUIPMENT MANUFACTURER'S INSTALLATION REQUIREMENTS.
- INSTALLER SHALL PROVIDE ALL STRAIN RELIEF FOR ALL CABLE ASSEMBLIES ROUTING TO THE ANTENNAS. UTILIZATION OF HOISTING GRIPS ON ALL DC POWER AND FIBER OPTIC CABLES SHALL BE UTILIZED.
- BASEMAPPING BASED ON SURVEY COMPLETED BY ERDMAN ANTHONY, DATED 11/15/18

INFORMATION CONTAINED WITHIN DRAWINGS IS BASED ON PROVIDED INFORMATION, A SITE WALK PERFORMED BY INFINIGY SOLUTIONS ON 10/24/18 AND A FIELD SURVEY COMPLETED BY ERDMAN ANTHONY DATED 11/15/18. CONTRACTOR TO VERIFY PRIOR TO CONSTRUCTION.

INFINIGY

INFINIGY ENGINEERING, PLLC  
1033 Watervliet Shaker Rd  
Albany, NY 12205  
Office # (518) 690-0790  
Fax # (518) 690-0793

at&t

STATE OF NEW YORK  
JOHN S. STEVENS  
03/01/2019  
071096  
PROFESSIONAL ENGINEER

1 REVISED PER COMMENTS BMM 03/01/19

0 ISSUED FOR PERMIT BMM 02/06/19

No Submittal / Revision App'd Date

Drawn: MAP Date: 11/29/18  
Designed: MPS Date: 11/29/18  
Checked: MPS Date: 11/29/18

Project Number 395-000

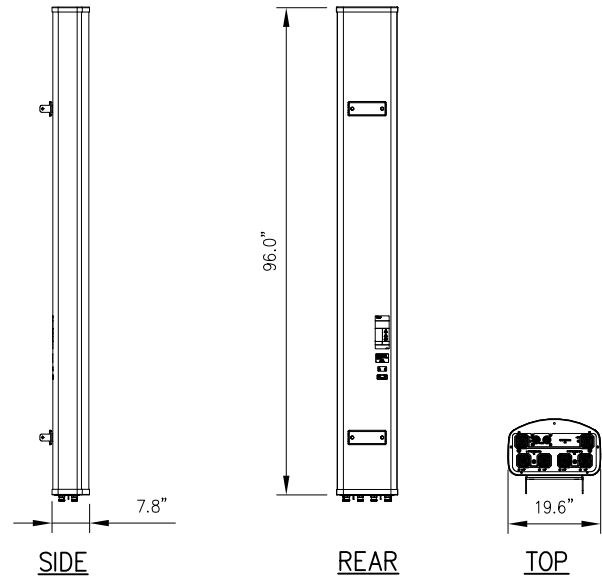
Project Title  
  
NORTH RIVER  
FA #: 10141760  
  
321 WEST HILL ROAD  
AUSTERLITZ, NY 12165

Prepared For  
  
AIROSMITH  
DEVELOPMENT  
32 CLINTON ST.  
SARATOGA SPRINGS, NY 12866  
OFFICE # (518) 306-3740

Drawing Scale: AS NOTED  
Date: 03/01/19

Drawing Title  
**ANTENNA  
ORIENTATION  
& SCHEDULE**

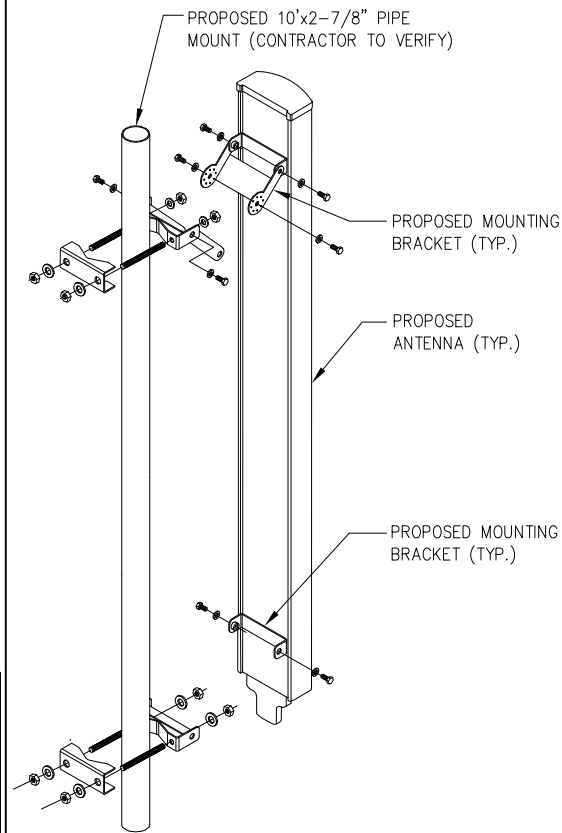
Drawing Number  
  
**C7**



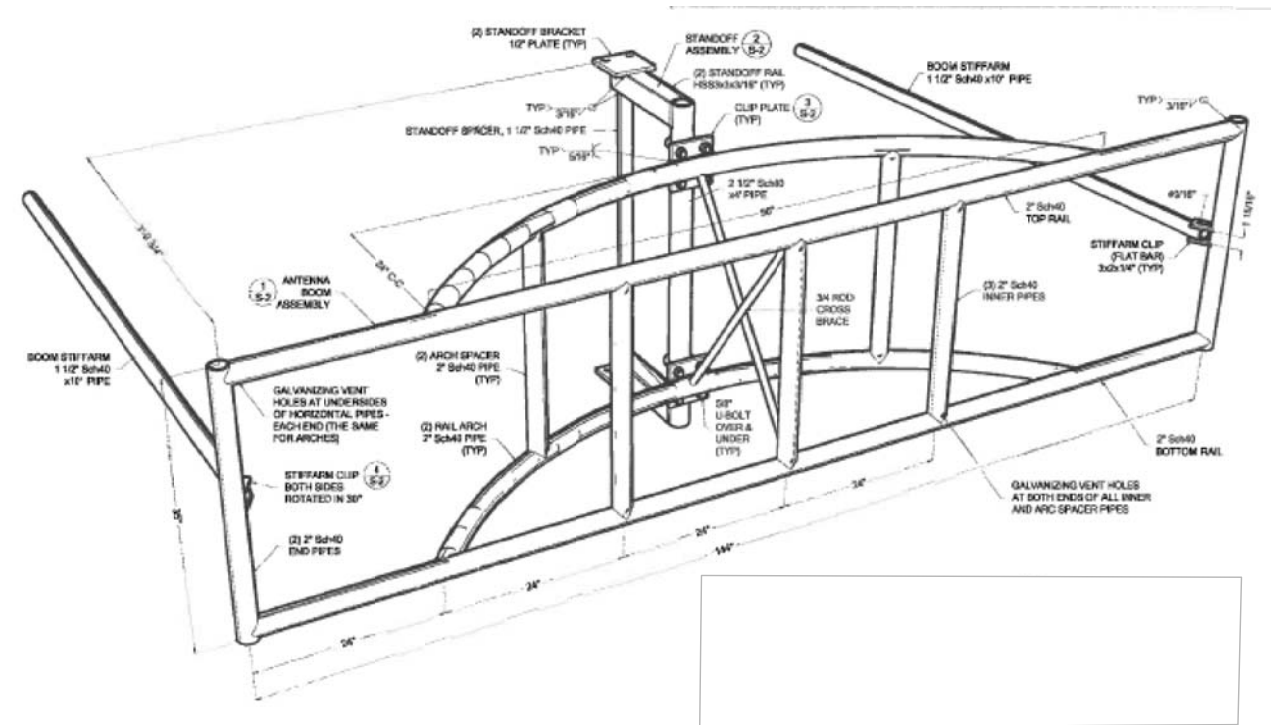
COMMSCOPE MODEL NO.: NNH4-65C-R6

RADOME MATERIAL: FIBERGLASS, UV RESISTANT  
RADOME COLOR: LIGHT GRAY  
DIMENSIONS, HxWxD: 96.0"x19.6"x7.8"  
WEIGHT, W/  
PRE-MOUNTED BRACKETS: 102.1 LBS  
CONNECTOR: 7-16 DIN FEMALE

1 ANTENNA DETAIL  
NOT TO SCALE

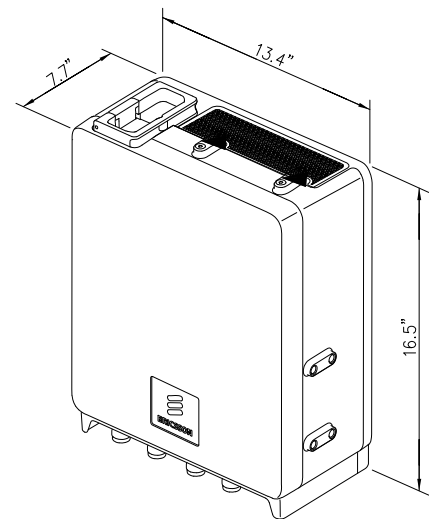


2 MOUNTING DETAIL  
NOT TO SCALE



AT&T CSOTF BOOM MOUNT

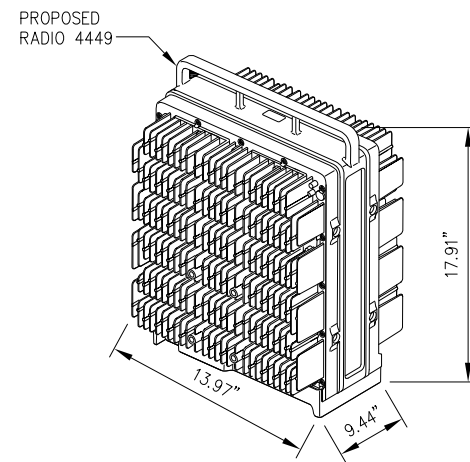
3 SECTOR MOUNT DETAIL  
NOT TO SCALE



**RADIO 4478 SPECIFICATIONS**

- HxWxD, (INCHES): 16.5"x13.4"x7.7
- WEIGHT (LBS): 60.0
- COLOR: NCS S 1002-B/NCS S 6502-B

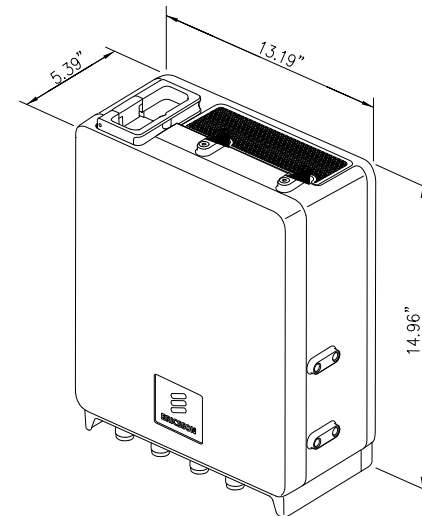
4 RRH-4478 RADIO DETAIL  
NOT TO SCALE



**RADIO 4449 SPECIFICATIONS**

- HxWxD, (INCHES): 17.91"x13.97"x9.44"
- WEIGHT (LBS): 70.54
- COLOR: GRAY

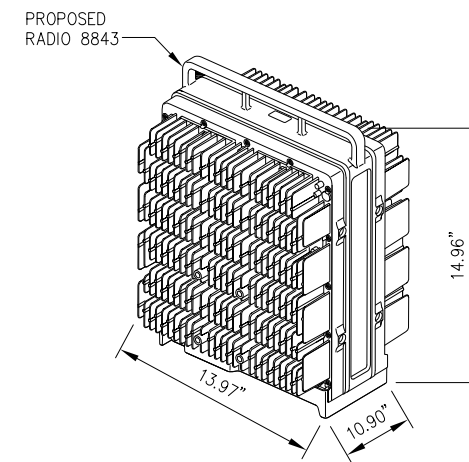
5 ERICSSON RADIO 4449 DETAIL  
NOT TO SCALE



**RADIO 4415 SPECIFICATIONS**

- HxWxD, (INCHES): 14.96"x13.19"x5.39"
- WEIGHT (LBS): 44.0
- COLOR: NCS S 1002-B/NCS S 6502-B

6 ERICSSON RADIO 4415 DETAIL  
NOT TO SCALE



**RADIO 8843 SPECIFICATIONS**

- HxWxD, (INCHES): 14.96"x13.97"x10.90"
- WEIGHT (LBS): 71.87
- COLOR: GRAY

7 ERICSSON RADIO 8843 DETAIL  
NOT TO SCALE

**INFINIGY**  
INFINIGY ENGINEERING, PLLC  
1033 Watervliet Shaker Rd  
Albany, NY 12205  
Office # (518) 690-0790  
Fax # (518) 690-0793



1	REVISED PER COMMENTS	BMM	03/01/19
0	ISSUED FOR PERMIT	BMM	02/06/19
No	Submittal / Revision	App'd	Date

Drawn: MAP Date: 11/29/18  
Designed: MPS Date: 11/29/18  
Checked: MPS Date: 11/29/18

Project Number 395-000

Project Title

NORTH RIVER  
FA #: 10141760

321 WEST HILL ROAD  
AUSTERLITZ, NY 12165

Prepared For

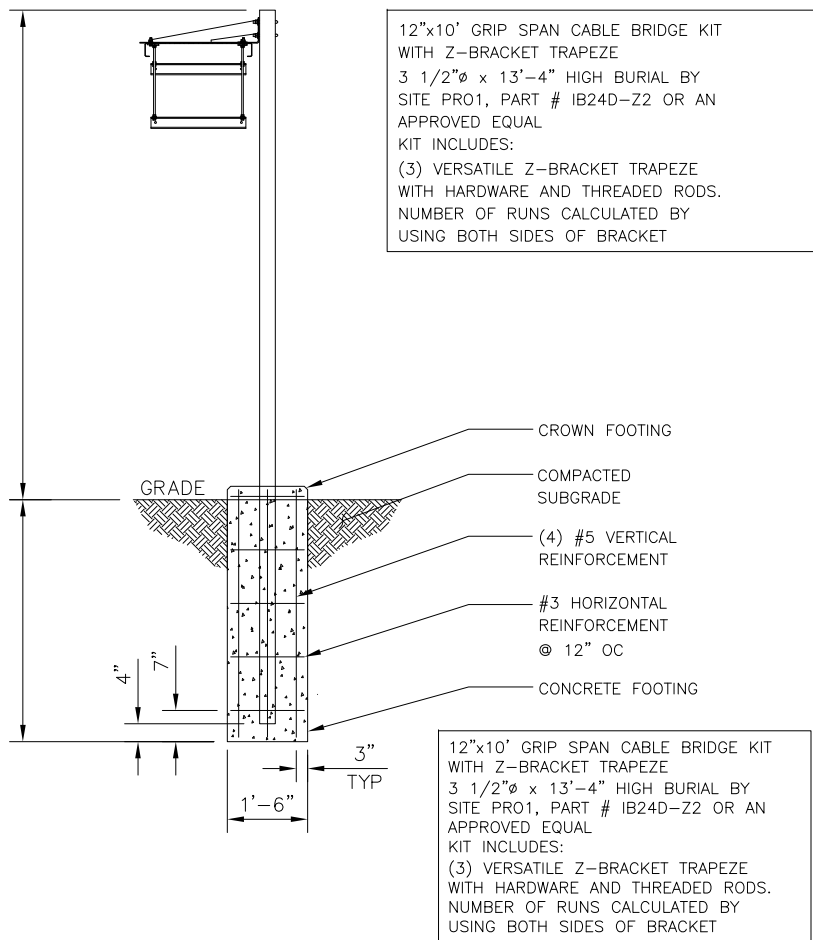
**AIROSMITH**  
DEVELOPMENT  
32 CLINTON ST.  
SARATOGA SPRINGS, NY 12866  
OFFICE # (518) 306-3740

Drawing Scale: AS NOTED  
Date: 03/01/19

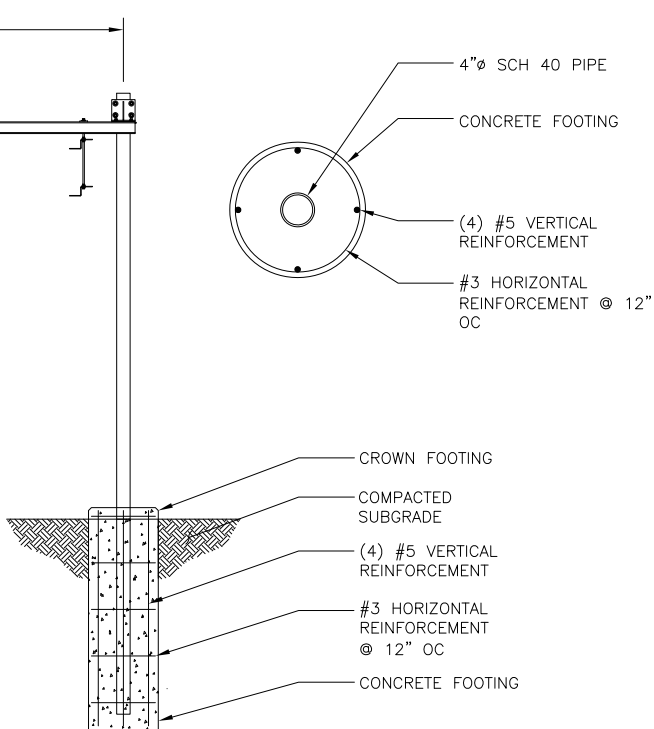
Drawing Title

**EQUIPMENT  
DETAILS**

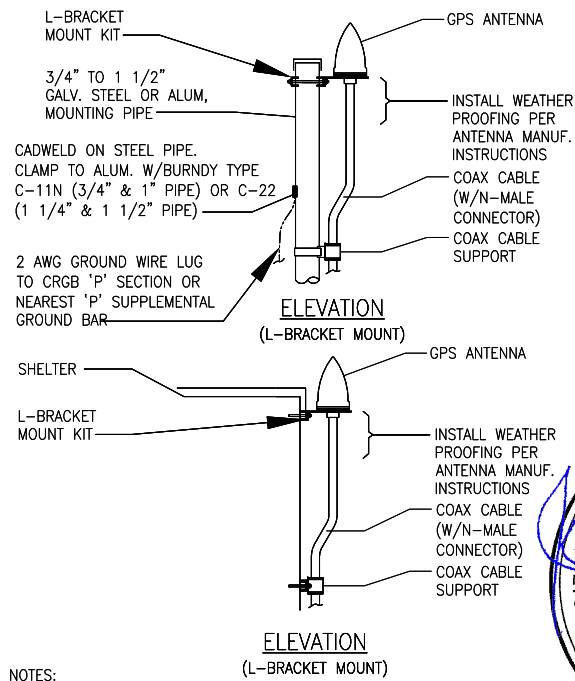
Drawing Number  
**C8**



1 ICE BRIDGE DETAILS  
-- NOT TO SCALE



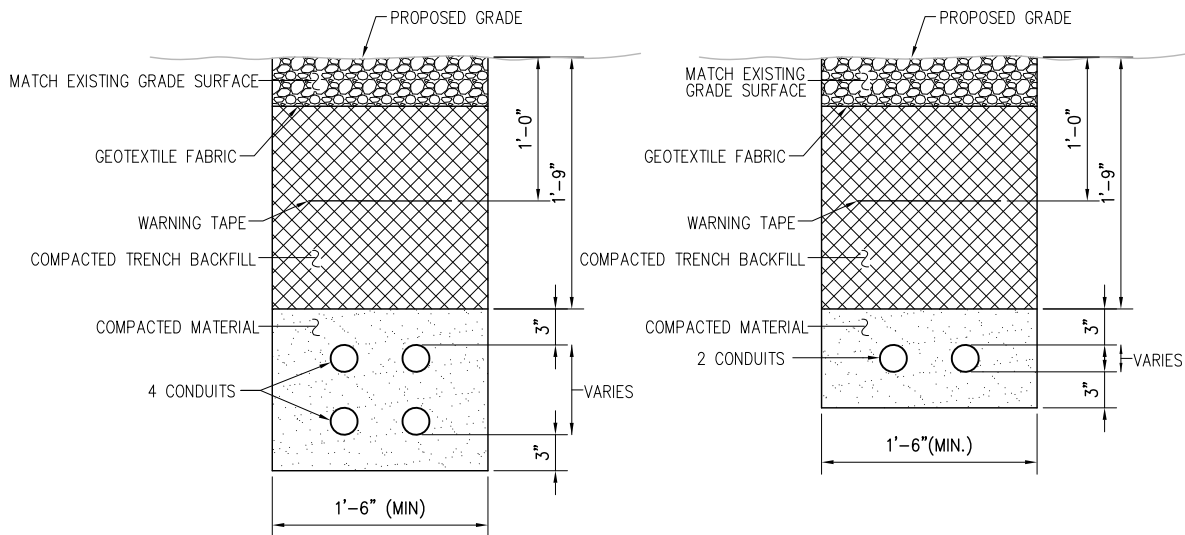
2 GPS DETAIL  
-- NOT TO SCALE



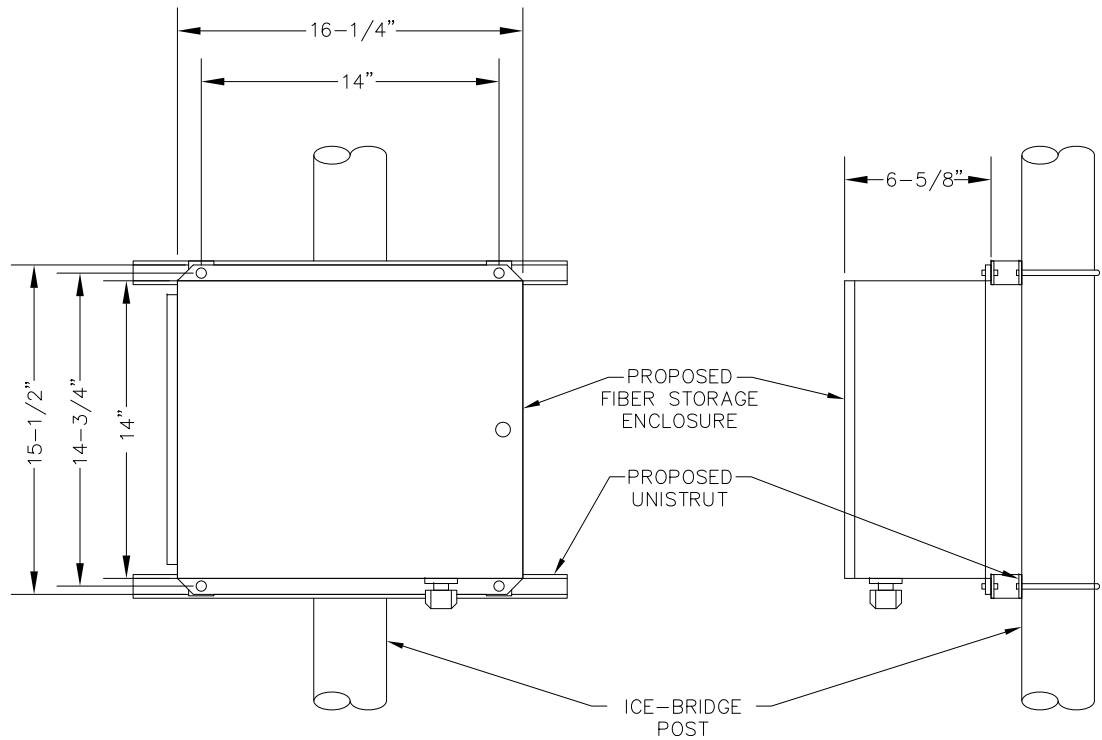
NOTES:

1. LOCATION OF ANTENNA MUST HAVE CLEAR VIEW OF SOUTHERN SKY AND CANNOT HAVE ANY BLOCKAGES EXCEEDING 25% OF THE SURFACE AREA OF A HEMISPHERE AROUND THE GPS ANTENNA.
2. ALL GPS ANTENNA LOCATIONS MUST BE ABLE TO RECEIVE CLEAR SIGNALS FROM A MINIMUM OF FOUR (4) SATELLITES. VERIFY WITH HANDHELD GPS BEFORE FINAL LOCATION OF GPS ANTENNA.
3. CADWELDING SHALL NOT BE PERFORMED ON ROOFTOPS.
4. LTE-GPS ANTENNA SHALL BE LOCATED 10' FROM ALL ANTENNAS.

3 FIBER MANAGEMENT BOX DETAIL  
-- NOT TO SCALE



4 COMMUNICATION TRENCH DETAIL  
-- NOT TO SCALE



3 FIBER MANAGEMENT BOX DETAIL  
-- NOT TO SCALE

**INFINIGY**  
INFINIGY ENGINEERING, PLLC  
1033 Waterlily Shaker Rd  
Albany, NY 12205  
Office # (518) 680-0790  
Fax # (518) 680-0793

**at&t**

**STATE OF NEW YORK**  
JOHN S. STEVENSON  
LICENSED PROFESSIONAL ENGINEER  
03/01/2019  
071096

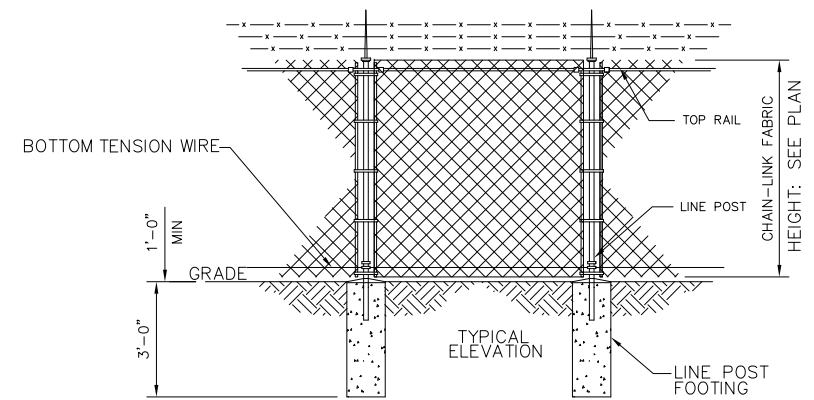
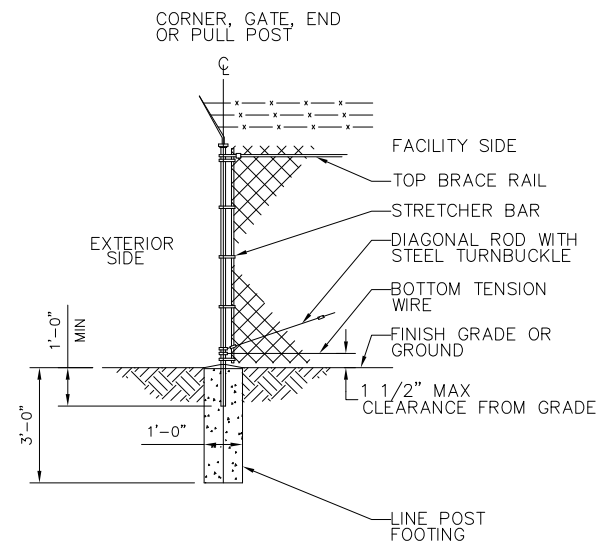
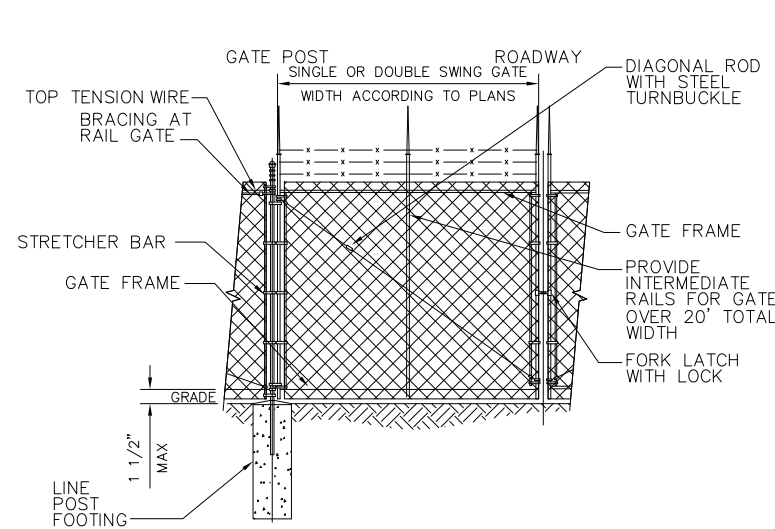
1 REVISED PER COMMENTS BMM 03/01/19  
0 ISSUED FOR PERMIT BMM 02/06/19  
No Submittal / Revision Appl'd Date

Drawn: MAP Date: 11/29/18  
Designed: MPS Date: 11/29/18  
Checked: MPS Date: 11/29/18

Project Number 395-000  
Project Title  
NORTH RIVER  
FA #: 10141760  
321 WEST HILL ROAD  
AUSTERLITZ, NY 12165  
Prepared For  
**AIROSMITH DEVELOPMENT**  
32 CLINTON ST.  
SARATOGA SPRINGS, NY 12866  
OFFICE # (518) 306-3740

Drawing Scale: AS NOTED  
Date: 03/01/19  
Drawing Title  
**EQUIPMENT DETAILS**  
Drawing Number  
**C9**





NOTE:

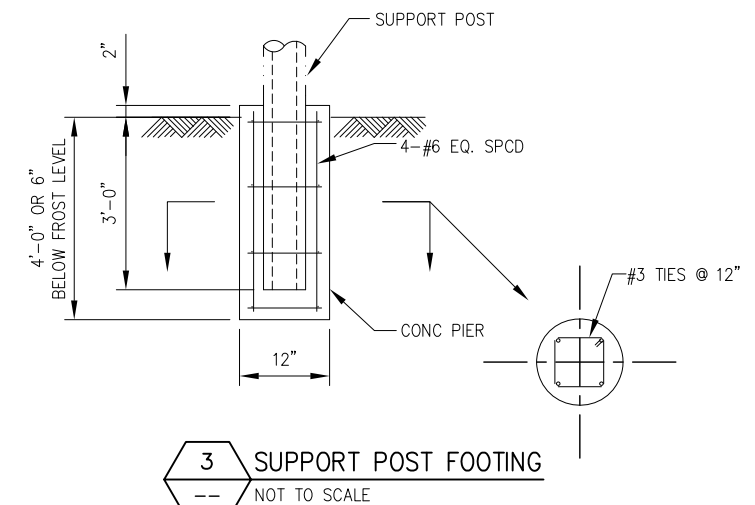
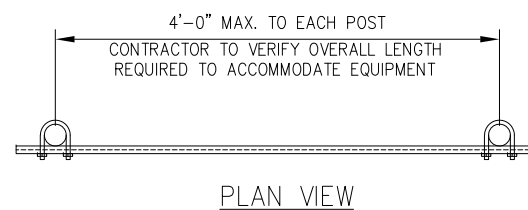
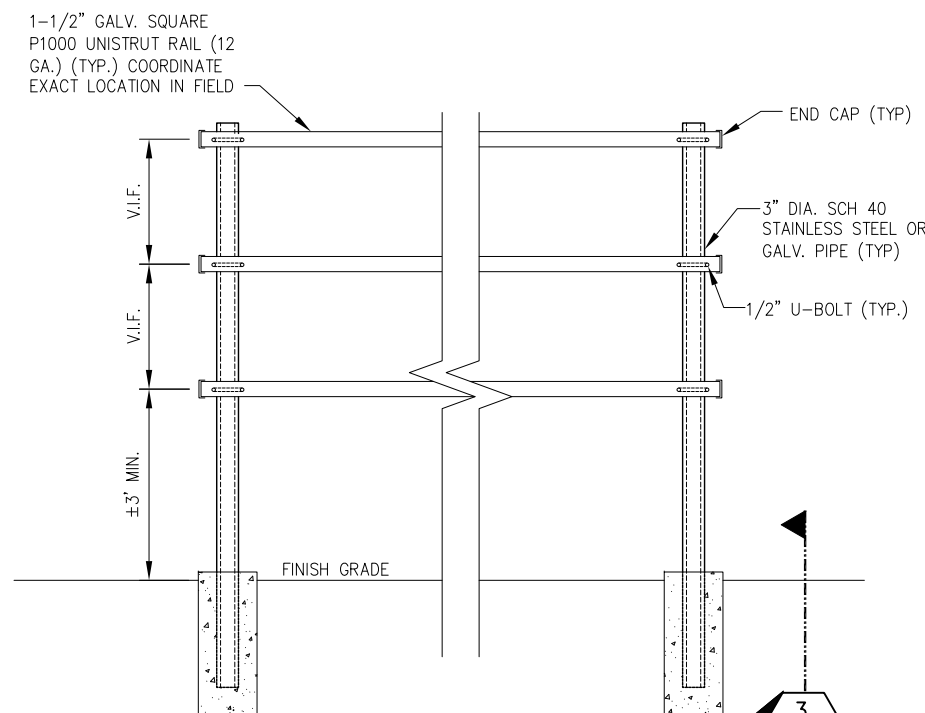
1. ALTERNATE FOOTINGS FOR ALL FENCE POSTS IN ROCK: IF ROCK IS ENCOUNTERED AT GRADE, OR AT A DEPTH SHALLOWER THAN 3'-6", CORE DRILL AN 8" DIA HOLE 18" INTO THE ROCK. CENTER POST IN THE HOLE AND FILL WITH CONCRETE OR GROUT. IF ROCK IS BELOW FINISH GRADE, COAT BACKFILLED SECTION OF POST WITH COAL TAR, AND BACKFILL WITH WELL-DRAINING GRAVEL.
2. ATTACH EACH GATE WITH 3 NON-LIFT-OFF TYPE, MALLEABLE IRON OR FORGING, PIN-TYPE HINGES. ASSEMBLIES SHALL ALLOW FOR 180° OF GATE TRAVEL. (THREE POINT HINGE)

## 1 FENCE & ACCESS GATE DETAILS

SCALE: N.T.S.

### CHAIN LINK FENCING NOTES:

1. INSTALL FENCING PER ASTM F-567, SWING GATES PER ASTM F-900. GATE POST, CORNER, TERMINAL, OR PULL POST 2-1/2" SCHEDULE 40 FOR GATE WIDTH UP THROUGH 6' OR 12' FOR DOUBLE-SWING GATES PER ASTM-F1083.
2. LINE POST: 2" SCHEDULE 40 PIPE PER ASTM-F1083.
3. GATE FRAME: 1-1/2" SCHEDULE 40 PIPE PER ASTM-F1083.
4. TOP AND BRACE RAILS: 1-1/2" SCHEDULE 40 PIPE PER ASTM-F1083.
5. FABRIC: 12 GAGE CORE WIRE SIZE 2" MESH, CONFORMING TO ASTM-A392.
6. TIE WIRE: MINIMUM 11 GAGE GALVANIZED STEEL AT POSTS AND RAILS BY A SINGLE WRAP OF FABRIC TIE AND AT TENSIONWIRE BY HOG RINGS SPACED AT 24" INTERVALS MAXIMUM.
7. TENSION WIRE: 7 GAGE GALVANIZED STEEL.
8. GATE LATCH: DROP DOWN LOCKABLE FORKLATCH AND LOCK.
9. SEE SITE PLAN AND FENCE DETAILS FOR FENCE HEIGHT DIMENSION.



## 2 H-FRAME FABRICATION DETAIL

NOT TO SCALE

## 3 SUPPORT POST FOOTING

NOT TO SCALE

**INFINIGY**  
INFINIGY ENGINEERING, PLLC  
1033 Watervliet Shaker Rd  
Albany, NY 12205  
Office # (518) 680-0790  
Fax # (518) 680-0793



1	REVISED PER COMMENTS	BMM	03/01/19
0	ISSUED FOR PERMIT	BMM	02/06/19
No	Submittal / Revision	App'd	Date

Drawn: MAP Date: 11/29/18  
Designed: MPS Date: 11/29/18  
Checked: MPS Date: 11/29/18

Project Number 395-000

Project Title

NORTH RIVER  
FA #: 10141760

321 WEST HILL ROAD  
AUSTERLITZ, NY 12165

Prepared For

**AIROSMITH**  
DEVELOPMENT  
32 CLINTON ST.  
SARATOGA SPRINGS, NY 12866  
OFFICE # (518) 306-3740

Drawing Scale: AS NOTED

Date: 03/01/19

Drawing Title

**EQUIPMENT  
DETAILS**

Drawing Number

**C10**



GENERATOR  
DIESEL GENERATOR  
FINAL MAKE AND MODEL TO BE  
DETERMINED WITH AT&T

1  
--  
NOT TO SCALE

GENERATOR DETAIL

INFINIGY  
INFINIGY ENGINEERING, PLLC  
1033 Watervliet Shaker Rd  
Albany, NY 12205  
Office # (518) 690-0790  
Fax # (518) 690-0793



1	REVISED PER COMMENTS	BMM	03/01/19
0	ISSUED FOR PERMIT	BMM	02/06/19
No.	Submittal / Revision	App'd	Date

Drawn: MAP Date: 11/29/18  
Designed: MPS Date: 11/29/18  
Checked: MPS Date: 11/29/18

Project Number 395-000

Project Title

NORTH RIVER  
FA #: 10141760

321 WEST HILL ROAD  
AUSTERLITZ, NY 12165

Prepared For

AIROSMITH  
DEVELOPMENT  
32 CLINTON ST.  
SARATOGA SPRINGS, NY 12866  
OFFICE # (518) 306-3740

Drawing Scale:  
AS NOTED  
Date:  
03/01/19

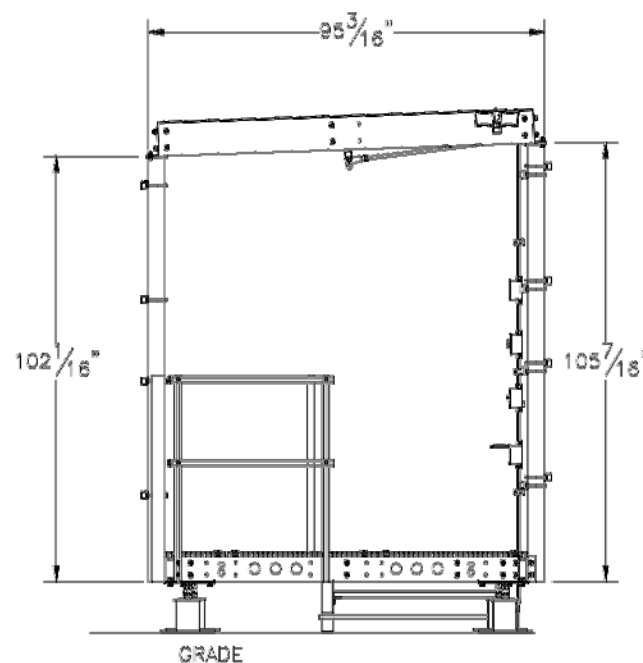
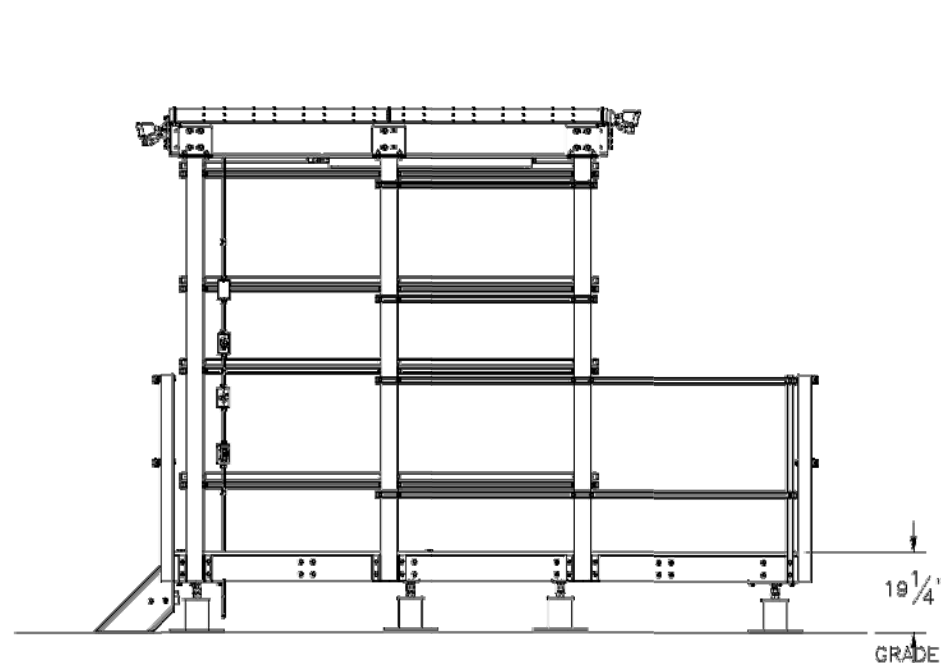
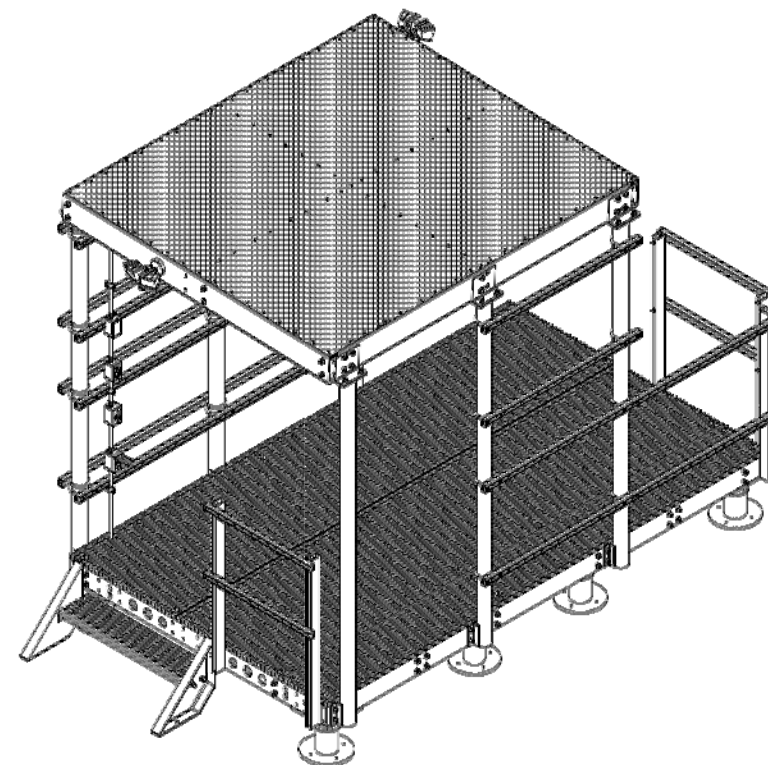
Drawing Title



GENERATOR  
DETAILS

Drawing Number

C11

Top view diagram of the generator unit. The overall dimensions are 150" in width and 87<sup>3</sup>/<sub>16</sub>" in height. A side extension is 19" wide. The unit features a generator labeled "GENERATOR 18450 LBS. W/ FUEL" and three power cabinets labeled "POWER CABINETS 2300 LBS.", "POWER CABINETS 210 LBS.", and "POWER CABINETS 210 LBS.". A fuel tank is labeled "FUEL TANK 100 LBS.". The text "CANOPY REMOVED" is at the bottom.



SURFACE FINISH <input checked="" type="checkbox"/> UNLESS OTHERWISE SPECIFIED		NUMBER OF-PIECES SUGGESTED (INCLUDES 1/2" WASTES)		APPROVALS		DATE		 ELECTRO METAL INDUSTRIES, INC. HOUSTON, TEXAS 77063 1-800-443-0066	
MATERIAL		TOLERANCES		DRAWN J. CRYSLI		11.21.18		MTL: 87"X150" BOLT TOGETHER PLATFORM GROUNDED MOUNT W EXPANDED METAL CANOPY	
SEE PARTS LIST		$\pm .005$ $\pm .015$ $\pm .010$		CHECKED					
THIRD ANGLE PROJECTION 		FRACTIONS $\pm \frac{1}{16}$		ENGINEER/DESIGNER					
		ANGLES $\pm .25^\circ$		PRODUCTION					
		HOLES:							
NEXT ASBY		DRILLED OR PUNCHED						1000-0010-0131-18	
APPLICATIONS		BURNED						SCALE: 1/40 WEIGHT: 3092.8 lbs. SHEET 1 OF 1	

**INFINIGY**  
INFINIGY ENGINEERING, PLLC  
1033 Watervliet Shaker Rd  
Albany, NY 12205  
Office # (518) 690-0790  
Fax # (518) 690-0793



1	REVISED PER COMMENTS	BMM	03/01/19
0	ISSUED FOR PERMIT	BMM	02/06/19
No	Submitted / Revision	App'd	Date

Drawn: MAP Date: 11/29/18  
Designed: MPS Date: 11/29/18  
Checked: MPS Date: 11/29/18

Project Number	395-000
----------------	---------

Project Title

NORTH RIVER  
FA #: 10141760

321 WEST HILL ROAD  
AUSTERLITZ, NY 12165

Prepared For



32 CLINTON ST.  
SARATOGA SPRINGS, NY 12866  
OFFICE#. (518) 306-3740

Drawing Scale:  
AS NOTED

Date: 03/01/19

Drawing Title

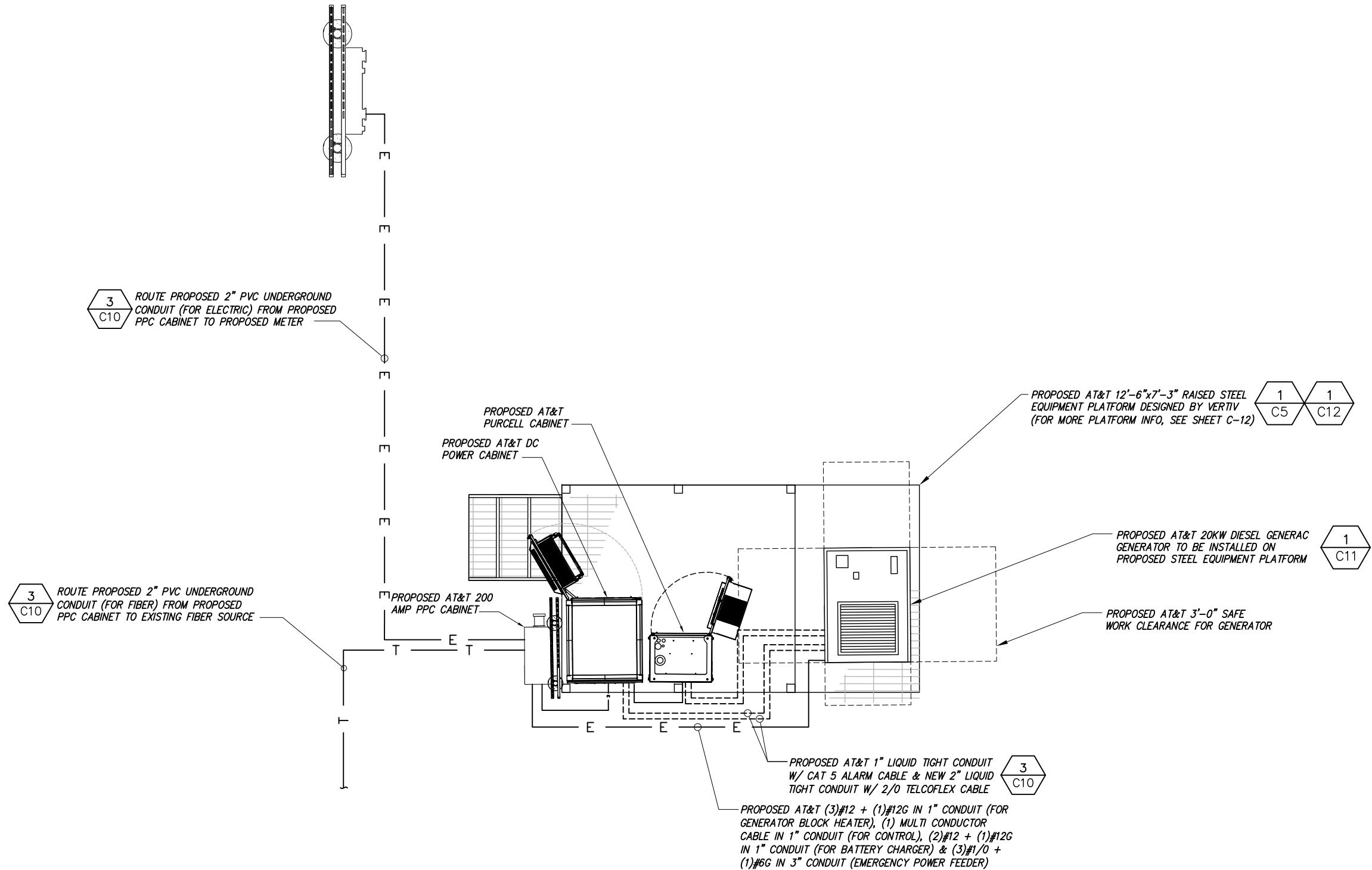
## PLATFORM DETAILS

Drawing Number

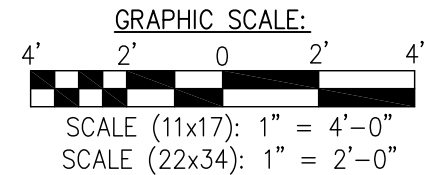
**C12**

1 PLATFORM DETAILS  
-- NOT TO SCALE

INFORMATION CONTAINED WITHIN DRAWINGS IS BASED ON PROVIDED INFORMATION, A SITE WALK PERFORMED BY INFINIGY SOLUTIONS ON 10/24/18 AND A FIELD SURVEY COMPLETED BY ERDMAN ANTHONY DATED 11/15/18. CONTRACTOR TO VERIFY PRIOR TO CONSTRUCTION.



1 UTILITY ROUTING PLAN  
SCALE: NOT TO SCALE



**INFINIGY**  
INFINIGY ENGINEERING, PLLC  
1033 Watervliet Shaker Rd  
Albany, NY 12205  
Office # (518) 690-0790  
Fax # (518) 690-0793



1	REVISED PER COMMENTS	BMM	03/01/19
0	ISSUED FOR PERMIT	BMM	02/06/19
No	Submittal / Revision	App'd	Date

Project Number  
395-000

Project Title  
  
NORTH RIVER  
FA #: 10141760

321 WEST HILL ROAD  
AUSTERLITZ, NY 12165

Prepared For

**AIROSMITH**  
DEVELOPMENT  
32 CLINTON ST.  
SARATOGA SPRINGS, NY 12866  
OFFICE # (518) 306-3740

Drawing Scale:  
AS NOTED  
Date:  
03/01/19

Drawing Title  
**UTILITY  
ROUTING  
PLAN**

Drawing Number  
**E1**



1	REVISED PER COMMENTS	BMM	03/01/19
0	ISSUED FOR PERMIT	BMM	02/06/19
No.	Submittal / Revision	App'd	Date

Drawn: MAP Date: 11/29/18  
Designed: MPS Date: 11/29/18  
Checked: MPS Date: 11/29/18

Project Number 395-000

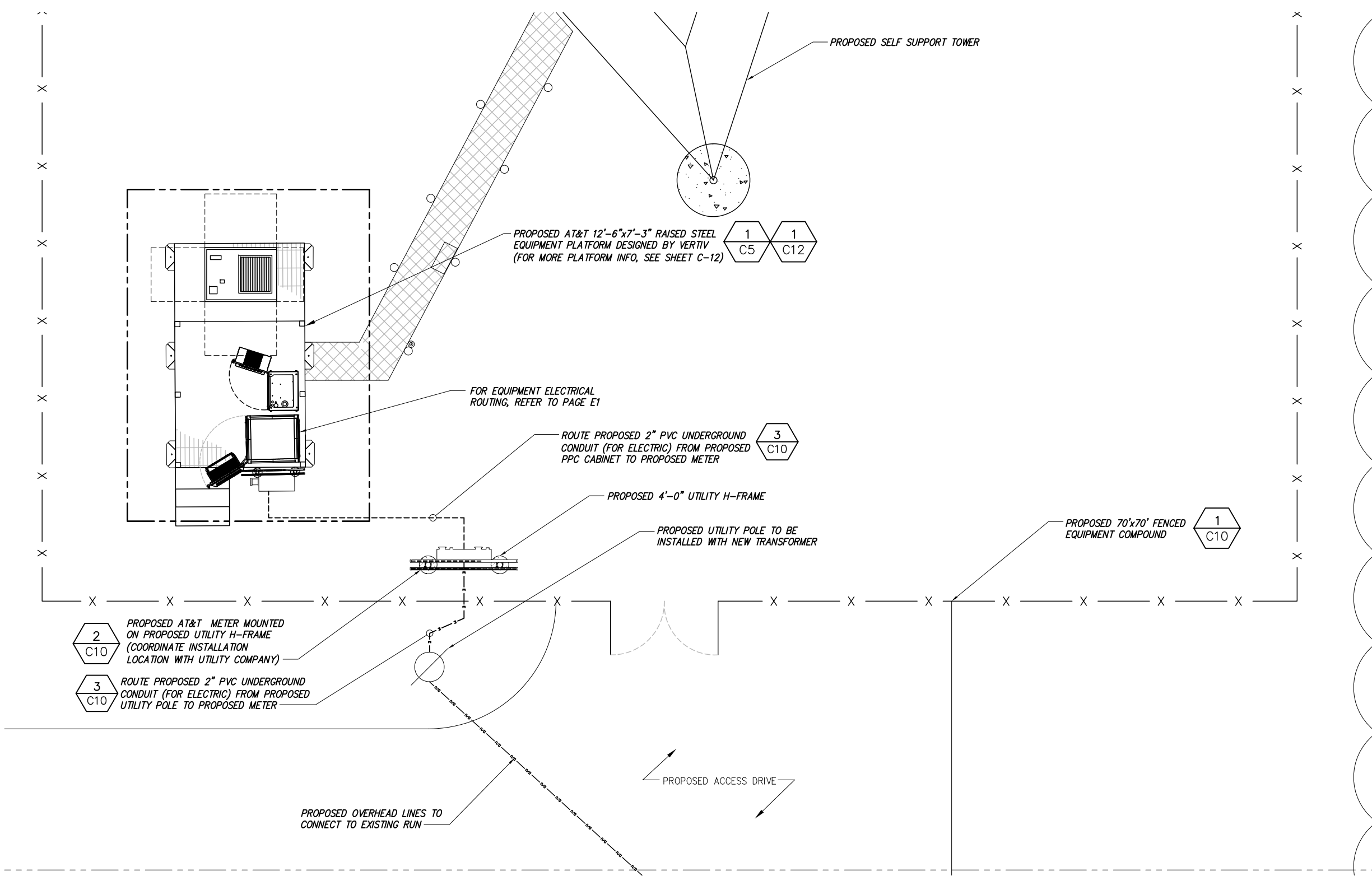
Project Title  
  
**NORTH RIVER**  
FA #: 10141760  
  
321 WEST HILL ROAD  
AUSTERLITZ, NY 12165

Prepared For  
  
**AIROSMITH**  
DEVELOPMENT  
32 CLINTON ST.  
SARATOGA SPRINGS, NY 12866  
OFFICE # (518) 306-3740

Drawing Scale:  
AS NOTED  
Date:  
03/01/19

Drawing Title  
**UTILITY ROUTING PLAN**

Drawing Number  
**E2**



INFORMATION CONTAINED WITHIN DRAWINGS IS BASED ON PROVIDED INFORMATION, A SITE WALK PERFORMED BY INFINIGY SOLUTIONS ON 10/24/18 AND A FIELD SURVEY COMPLETED BY ERDMAN ANTHONY DATED 11/15/18. CONTRACTOR TO VERIFY PRIOR TO CONSTRUCTION.

**1** UTILITY ROUTING PLAN  
SCALE: NOT TO SCALE

GRAPHIC SCALE:  
30' 15' 0 15' 30'  
SCALE (11x17): 1" = 30'-0"  
SCALE (22x34): 1" = 15'-0"

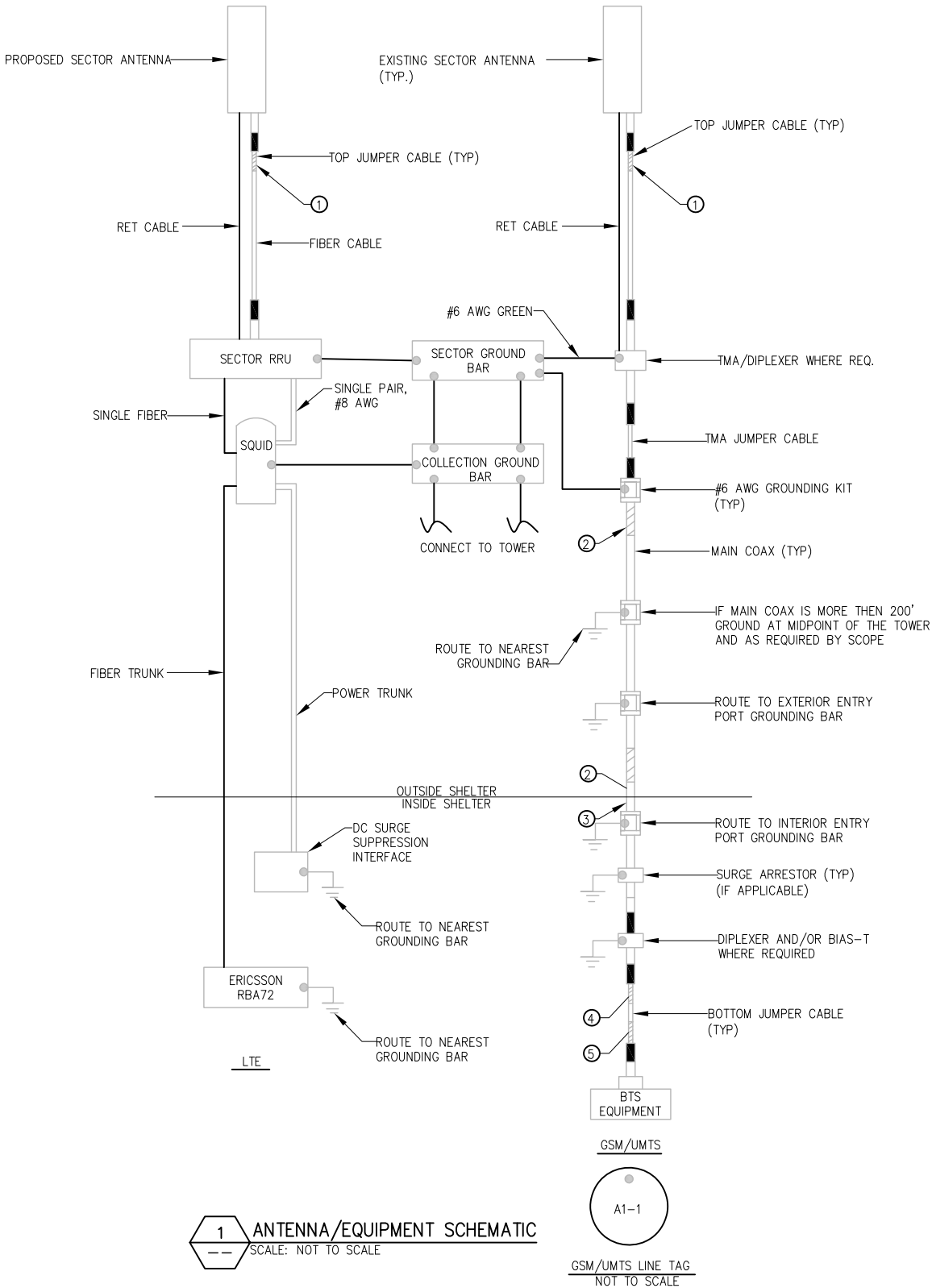




CABLE MARKING LOCATIONS TABLE	
NO.	LOCATIONS
①	EACH TOP JUMPER SHALL BE COLOR CODED WITH ONE (1) SET OF 3" WIDE BANDS
②	EACH MAIN COAX SHALL BE COLOR CODED WITH (1) SET OF 3" WIDE BANDS NEAR THE TOP OF THE JUMPER CONNECTION AND WITH (1) SET OF 3/4" WIDE COLOR BANDS JUST PRIOR TO ENTERING THE BTS OR TRANSMITTER BUILDING
③	CABLE ENTRY PORT ON THE INTERIOR OF THE SHELTER
④	ALL BOTTOM JUMPERS SHALL BE COLOR CODED WITH (1) SET OF 3/4" WIDE BANDS ON EACH END OF THE BOTTOM JUMPER
⑤	ALL BOTTOM JUMPERS SHALL BE COLOR CODED WITH (1) SET OF 3/4" WIDE BANDS ON EACH END OF THE BOTTOM JUMPER

CABLE MARKING TAGS:

WHEN USING THE ALTERNATIVE LABELING METHOD, EACH RF CABLE SHALL BE IDENTIFIED WITH A METAL ID TAG MADE OF STAINLESS STEEL OR BRASS. THE TAG SHALL BE 1- 1 1/2" IN DIAMETER WITH 1/4" STAMPED LETTERS AND NUMBERS INDICATING THE SECTOR, ANTENNA POSITION, AND CABLE NUMBER. THE ID MARKING LOCATIONS SHOULD BE AS PER "CABLE MARKING LOCATIONS TABLE". THE TAG SHOULD BE ATTACHED WITH CORROSION PROOF WIRE AROUND THE CABLE AT THE SAME LOCATIONS AS DEFINED ABOVE. THE TAG SHOULD BE LABELED AS SHOWN ON THE "GSM AND UMTS LINE TAG" DETAIL.



COAX COLOR CODING & IDENTIFICATION NOTES:

1. SECTOR ORIENTATION/ AZIMUTH WILL VARY FROM REGION AND IS SITE SPECIFIC. REFER TO RF REPORT FOR EACH SITE TO DETERMINE THE ANTENNA LOCATION AND FUNCTION OF EACH TOWER SECTOR FACE.
2. THE ANTENNA SYSTEM COAX SHALL BE LABELED WITH VINYL TAPE EXCEPT IN LOCATIONS WHERE ENVIRONMENTAL CONDITIONS CAUSE PHYSICAL DAMAGE, THEN PHYSICAL TAGS ARE PREFERRED.
3. THE STANDARD IS BASED ON EIGHT COLORED TAPES- RED, BLUE, GREEN, YELLOW, ORANGE, BROWN, WHITE AND VIOLET. THESE TAPES MUST BE 3/4" WIDE AND UV RESISTANT SUCH AS SCOTCH 35 VINYL ELECTRICAL COLOR CODING TAPE AND SHOULD BE READILY AVAILABLE TO THE ELECTRICIAN OR SUBCONTRACTOR ON SITE.
4. USING COLOR BANDS ON THE CABLES MARK ALL RF CABLE BY SECTOR AND NUMBER AS SHOWN ON "CABLE MARKING COLOR CONVENTION TABLE".
5. WHEN AN EXISTING COAXIAL LINE THAT IS INTENDED TO BE A SHARED LINE BETWEEN GSM/3G TDMA IS ENCOUNTERED, THE SUBCONTRACTOR SHALL REMOVE THE COLOR CODING SCHEME AND REPLACE IT WITH THE COLOR CODING AND TAGGING STANDARD THAT IS OUTLINED IN THE CURRENT VERSION OF THE STANDARD. IN THE ABSENCE OF AN EXISTING COLOR CODING AND TAGGING SCHEME, OR WHEN INSTALLING PROPOSED COAXIAL CABLES, THIS GUIDELINE SHALL BE IMPLEMENTED AT THAT SITE REGARDLESS OF TECHNOLOGY.
6. ALL COLOR CODE TAPE SHALL BE 3M-35 AND SHALL BE A MINIMUM OF (3) THREE WRAPS OF TAPE AND SHALL BE NEATLY TRIMMED AND SMOOTHED OUT SO AS TO AVOID ANY UNRAVELING.
7. ALL COLOR BANDS INSTALLED AT THE TOP OF THE TOWER SHALL BE A MINIMUM IF 3" WIDE, AND SHALL HAVE A MINIMUM OF 3/4" OF SPACE IN BETWEEN EACH COLOR.
8. ALL COLOR CODES SHALL BE INSTALLED AS TO ALIGN NEATLY WITH ONE ANOTHER FROM SIDE TO SIDE.
9. IF EXISTING CABLES AT THE SITE ALREADY HAVE A COLOR CODING SCHEME AND THEY ARE NOT INTENDED TO BE REUSED OR SHARED WITH THE GSM TECHNOLOGY, THE EXISTING COLOR CODING SCHEME SHALL REMAIN UNTOUCHED.

**INFINIGY**  
INFINIGY ENGINEERING, PLLC  
1033 Watervliet Shaker Rd  
Albany, NY 12205  
Office # (518) 690-0790  
Fax # (518) 690-0793



UNAUTHORIZED REPRODUCTION OR MODIFICATION  
TO THIS DOCUMENT IS VIOLATION OF  
APPLICABLE STATE AND/OR LOCAL LAWS

1	REVISED PER COMMENTS	BMM	03/01/19
0	ISSUED FOR PERMIT	BMM	02/06/19
No.	Submittal / Revision	App'd	Date

Drawn: MAP Date: 11/29/18  
Designed: MPS Date: 11/29/18  
Checked: MPS Date: 11/29/18

Project Number  
395-000

Project Title

**NORTH RIVER**  
**FA #: 10141760**

321 WEST HILL ROAD  
AUSTERLITZ, NY 12165

Prepared For

**AIROSMITH**  
DEVELOPMENT  
32 CLINTON ST.  
SARATOGA SPRINGS, NY 12866  
OFFICE# (518) 306-3740

Drawing Scale:  
AS NOTED

Date:  
03/01/19

Drawing Title

**ANTENNA/  
EQUIPMENT  
SCHEMATIC**

Drawing Number

**E4**

CODED DRAWING NOTES

- 1

PROPOSED AT&T EQUIPMENT CABINETS TO BE GROUNDED PER MANUFACTURER'S SPECIFICATIONS. (TYP.)
- 2

PROPOSED MAIN GROUND BAR, NEAR PROPOSED EQUIPMENT.
- 3

PROPOSED #4 SOLID TINNED BCW BURIED GROUND RING
- 4

PROPOSED SECONDARY GROUND BAR, AT BASE OF TOWER. (TYP.)
- 5

BOND PROPOSED SECONDARY GROUND BAR TO MAIN GROUND BAR
- 6

BOND PROPOSED SECONDARY GROUND BAR TO TOWER GROUND RING WITH PROPOSED #2/0 SOLID TINNED BCW (TYP. OF (2) PLACES).
- 7

BOND PROPOSED EQUIPMENT PLATFORM TO PROPOSED GROUND RING WITH #2/0 SOLID TINNED BCW (TYP.).
- 8

BOND PROPOSED MAIN GROUND BAR TO PROPOSED GROUND RING WITH #2/0 SOLID TINNED BCW (TYP. OF (2) PLACES).
- 9

BOND PROPOSED GROUND RING TO COMPOUND GROUND SYSTEM WITH #2/0 SOLID TINNED BCW (TYP. OF (2) PLACES).
- 10

BOND PROPOSED ICE BRIDGE TO PROPOSED GROUND RING WITH #2/0 SOLID TINNED BCW AS REQUIRED.
- 11

BOND PROPOSED GENERATOR TO PROPOSED GROUND RING WITH #2/0 SOLID TINNED BCW AS REQUIRED.
- 12

BOND PROPOSED PPC CABINET PER MANU. SPECS
- 13

BOND PROPOSED H-FRAME TO PROPOSED SITE GROUND RING.
- 14

BOND PROPOSED ICE CANOPY TO PROPOSED SITE GROUND RING.
- 15

BOND PROPOSED PLATFORM STAIRS TO PROPOSED SITE GROUND RING.
- 16

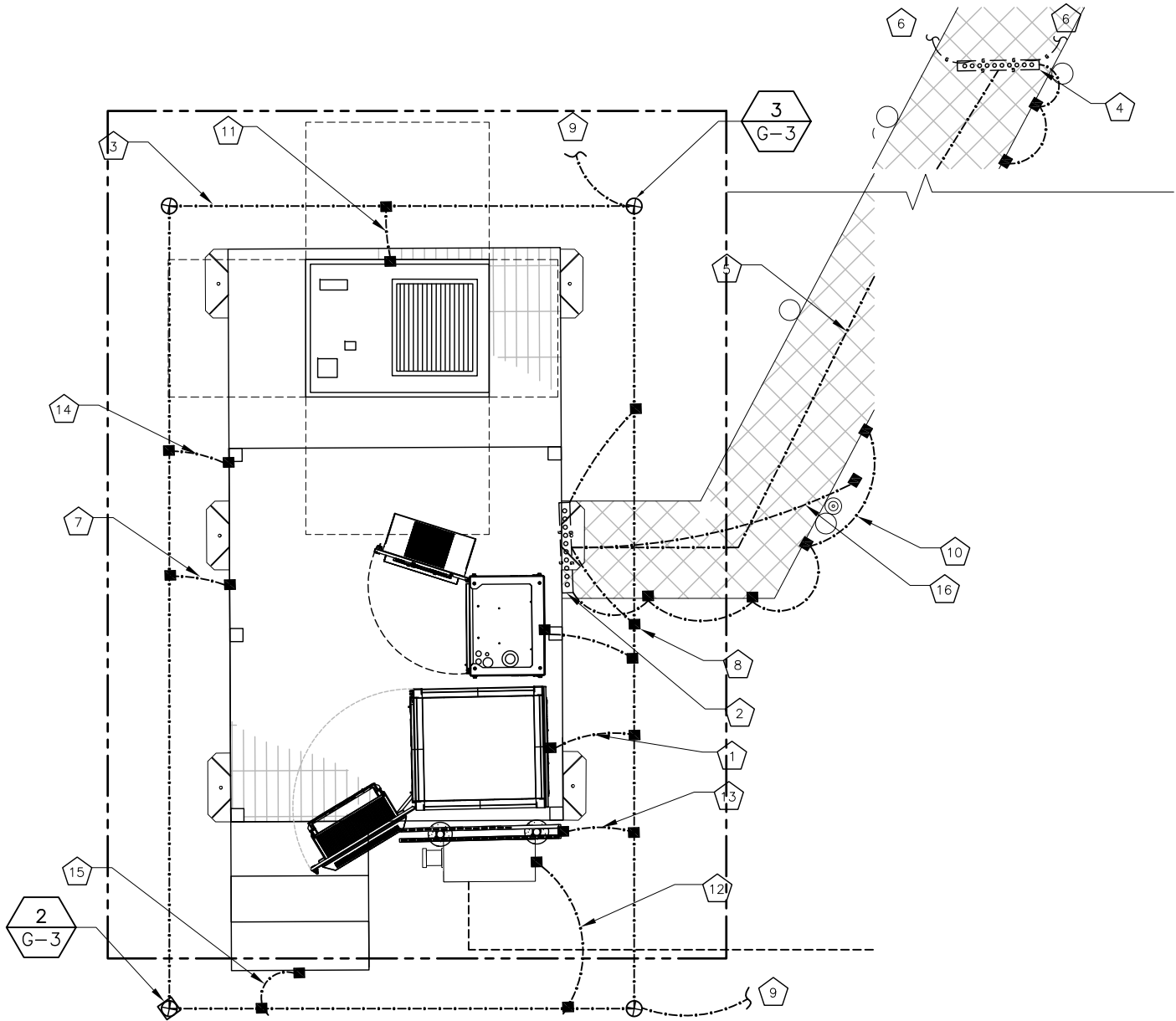
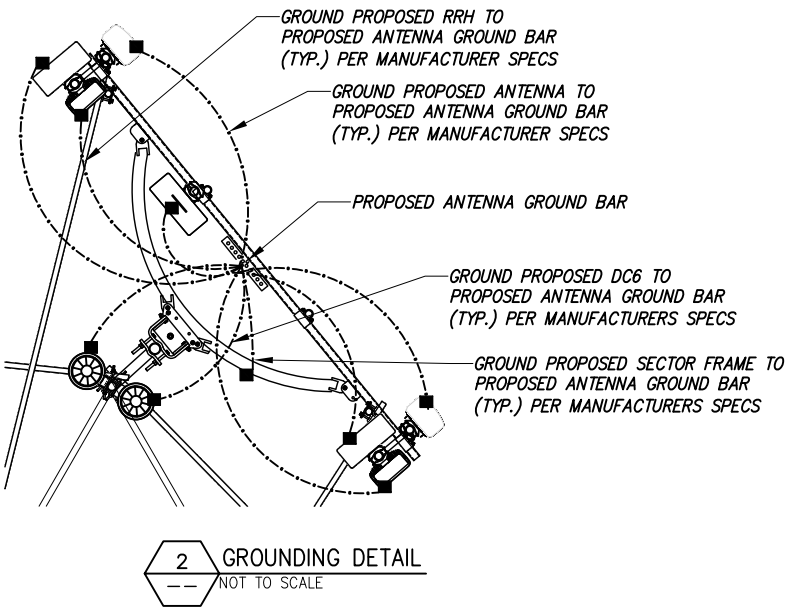
BOND PROPOSED GPS ANTENNA PER MANU. SPECS

GROUNDING SYMBOLS

- S/G

SOLID GROUND BUS BAR
- S/N

SOLID NEUTRAL BUS BAR
- SUPPLEMENTAL GROUND CONDUCTOR
- 2-POLE THERMAL-MAGNETIC CIRCUIT BREAKER
- SINGLE-POLE THERMAL-MAGNETIC CIRCUIT BREAKER
- CHEMICAL GROUND ROD
- GROUND ROD
- DISCONNECT SWITCH
- METER
- CADWELD TYPE CONNECTION
- COMPRESSION TYPE CONNECTION
- GROUNDING WIRE



1 GROUNDING PLAN

G1

SCALE: NTS

GROUNDING NOTES:

- ALL DOWN CONDUCTORS AND GROUND RING AND CONDUCTOR SHALL BE #2 AWG, SOLID, BARE, TINNED COPPER, UNO. ALL CONNECTIONS TO GROUND RING SHALL BE EXOTHERMICALLY WELDED. CONDUCTOR SHALL BE A MINIMUM DEPTH BELOW GRADE OF 30 INCHES OR TO THE LEDGE. MINIMUM BEND RADIUS SHALL BE 8 INCHES. CONDUCTOR SHALL BE AT LEAST 24 INCHES FROM ANY FOUNDATION, UNO.
- WHERE MECHANICAL CONDUCTOR CONNECTIONS ARE SPECIFIED, BOLTED, COMPRESSION-TYPE CLAMPS OR SPLIT-BOLT TYPE CONNECTORS SHALL BE USED.
- GRIND OFF GALVANIZING IN AFFECTED AREA. EXOTHERMICALLY WELD #2 CONDUCTOR AT 6 INCHES ABOVE GRADE R FOUNDATION, WHICHEVER IS HIGHER. COLD-GALY AFTER. EXOTHERMICALLY WELD OTHER END TO THE GROUND.
- GROUND CONDUCTORS ON EXTERIOR WALL OF SHELTER SHALL BE ENCASED IN 3/4" PVC CONDUIT TO GRADE. MOUNT PVC WITH GALVANIZED "C" CLAMPS. SEAL TOP ENDS.
- FOLLOWING COMPLETION OF WORK, CONDUCT GROUND TEST. SUBMIT WRITTEN TEST TO CONSTRUCTION MANAGER AND PROJECT MANAGER.
- ALL GROUNDING WORK SHALL COMPLY WITH CARRIER(S) STANDARDS.
- GROUNDING REQUIREMENTS SHOWN ON THIS PLAN ARE FOR ITEMS THAT ARE LOCATED NEAR GRADE LEVEL AND THAT NEED TO BE TIED TO THE BELOW GRADE GROUND RING.
- UNLESS NOTED OTHERWISE, ALL GROUNDING SHALL BE IN ACCORDANCE WITH AT&T'S SSEQ DOCUMENTS 3.018.02.004 "BONDING, GROUNDING AND TRANSIENT PROTECTION FOR CELL SITES", AND 3.018.10.002 "SITE RESISTANCE TO EARTH TESTING". ALL GROUNDING SHALL ALSO COMPLY WITH ALL STATE AND LOCAL CODES, AND THE NATIONAL ELECTRICAL CODE (NEC).
- UNLESS NOTED OTHERWISE, ALL GROUNDING CONNECTIONS SHALL BE MADE BY AN EXOTHERMIC WELD.
- RESISTANCE TO EARTH TESTING IS REQUIRED PER AT&T STANDARDS ON ALL NEW SITES.

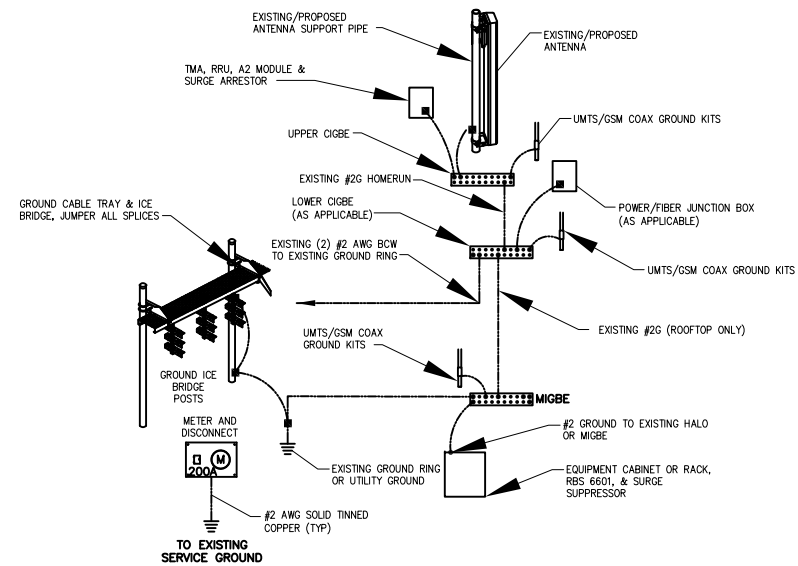
INFINIGY

INFINIGY ENGINEERING, PLLC  
1033 Watervliet Shaker Rd  
Albany, NY 12205  
Office # (518) 690-0790  
Fax # (518) 690-0793

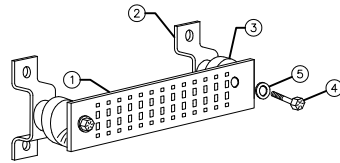
at&t

STATE OF NEW YORK  
JOHN S. STEVENS  
03/01/2019  
071096  
LICENSED PROFESSIONAL ENGINEER

1	REVISED PER COMMENTS	BMM	03/01/19
0	ISSUED FOR PERMIT	BMM	02/06/19
No.	Submittal / Revision	App'd	Date
Drawn:	MAP	Date:	11/29/18
Designed:	MPS	Date:	11/29/18
Checked:	MPS	Date:	11/29/18
Project Number	395-000		
Project Title	NORTH RIVER FA #: 10141760		
Prepared For	321 WEST HILL ROAD AUSTERLITZ, NY 12165		
Drawing Scale:	AS NOTED		
Date:	03/01/19		
Drawing Title	GROUNDING DETAILS		
Drawing Number	G1		



1 GROUNDING RISER DIAGRAM  
--- NOT TO SCALE



2 GROUND BAR DETAIL  
--- NOT TO SCALE

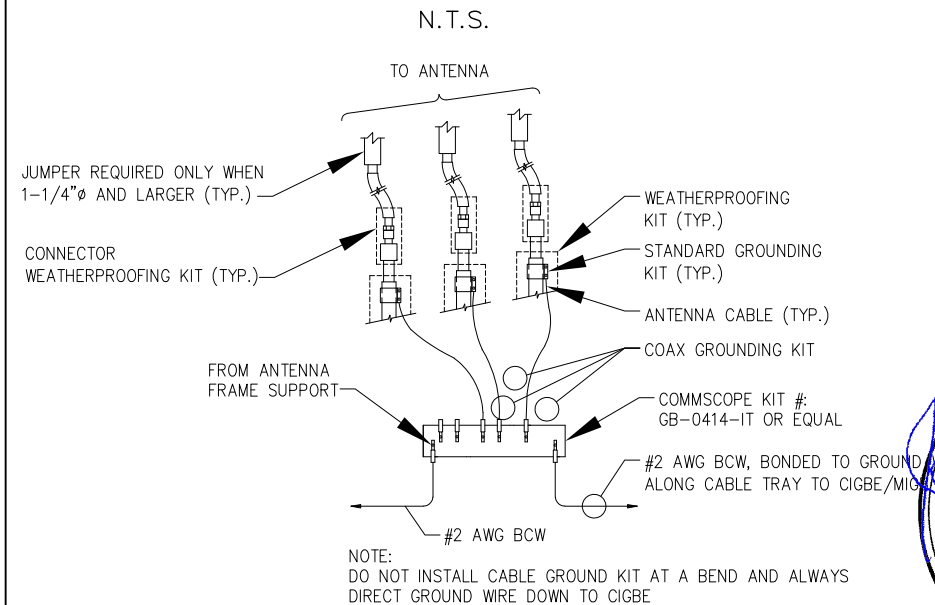
EACH GROUND CONDUCTOR TERMINATING ON ANY GROUND BAR SHALL HAVE AN IDENTIFICATION TAG ATTACHED AT EACH END THAT WILL IDENTIFY ITS ORIGIN AND DESTINATION.

SECTION "P" - SURGE PRODUCERS

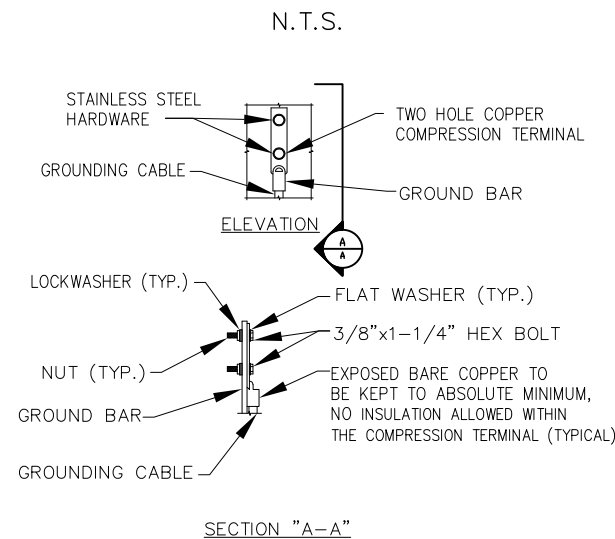
CABLE ENTRY PORTS (HATCH PLATES) (#2)  
GENERATOR FRAMEWORK (IF AVAILABLE) (#2)  
TELCO GROUND BAR  
COMMERCIAL POWER COMMON NEUTRAL/GROUND BOND (#2)  
+24V POWER SUPPLY RETURN BAR (#2)  
-48V POWER SUPPLY RETURN BAR (#2)  
RECTIFIER FRAMES.

SECTION "A" - SURGE ABSORBERS

INTERIOR GROUND RING (#2)  
EXTERNAL EARTH GROUND FIELD (BURIED GROUND RING) (#2)  
METALLIC COLD WATER PIPE (IF AVAILABLE) (#2)  
BUILDING STEEL (IF AVAILABLE) (#2)

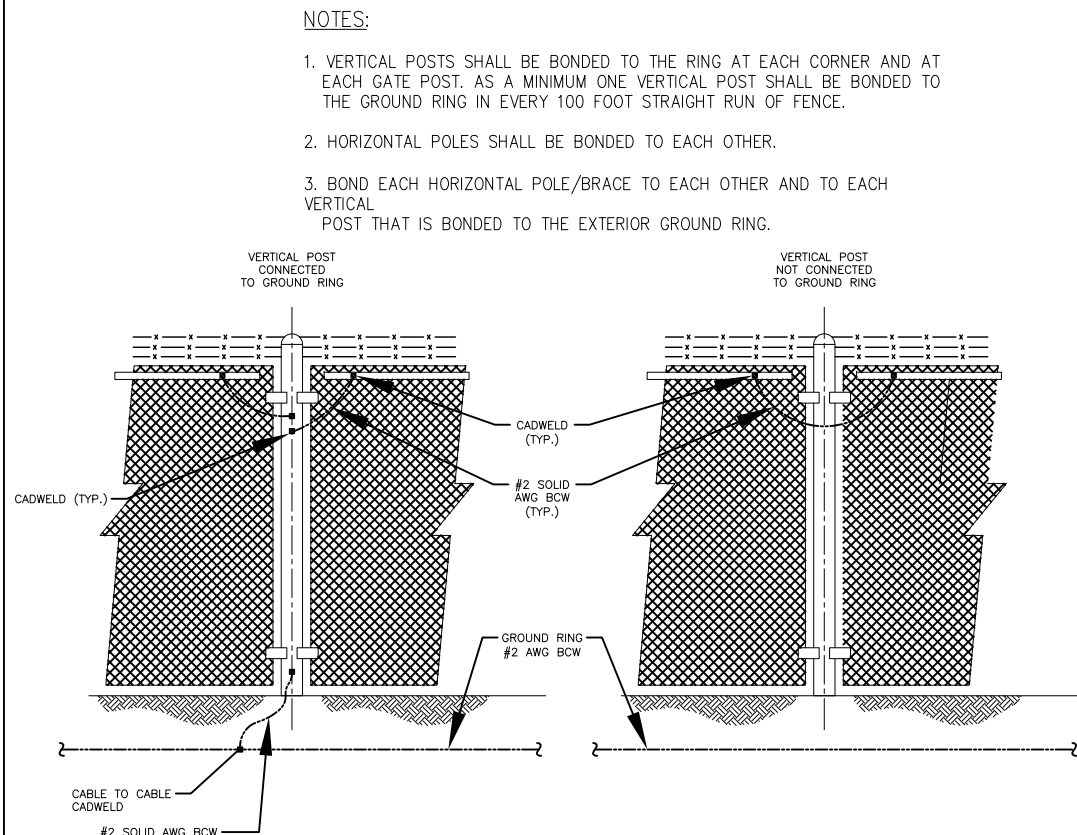


3 GROUND WIRE TO GROUND BAR CONNECTION DETAIL  
--- NOT TO SCALE

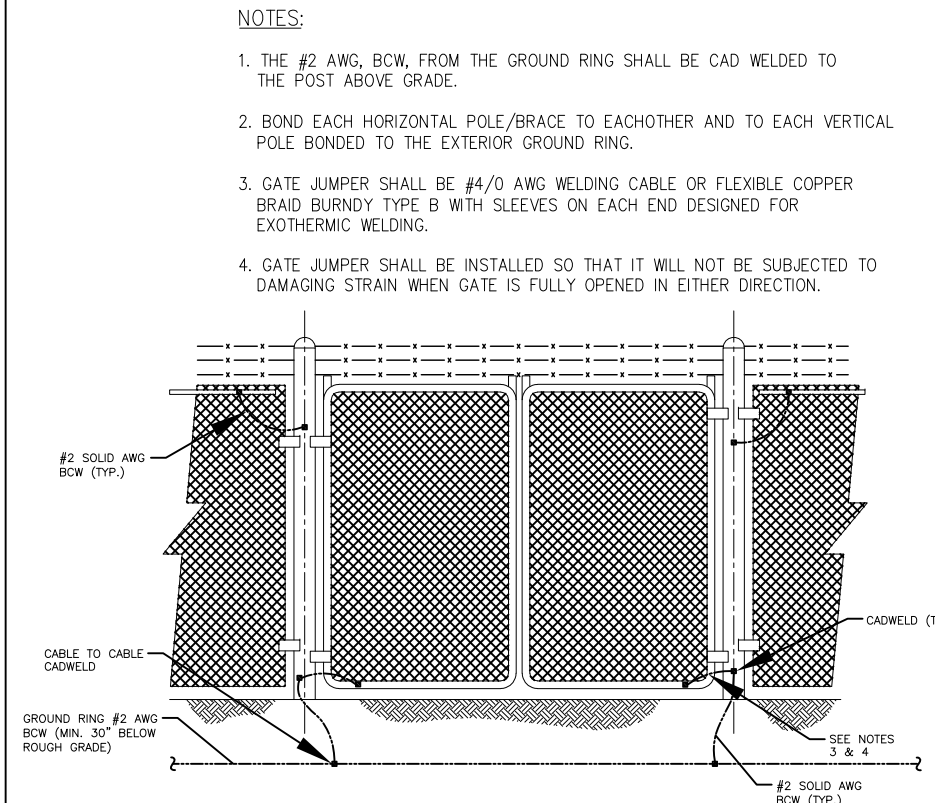


NOTE:  
1. "DOUBLING UP" OR "STACKING" OF CONNECTION IS NOT PERMITTED  
2. OXIDE INHIBITING COMPOUND TO BE USED AT ALL LOCATIONS  
3. CADWELD DOWNLEADS FROM UPPER EGB, LOWER EGB & MGB

4 GROUND BAR CONNECTION DETAIL  
--- NOT TO SCALE



5 FENCE GROUNDING DETAIL  
--- NOT TO SCALE



6 FENCE GATE GROUNDING DETAIL  
--- NOT TO SCALE

INFINIGY

INFINIGY ENGINEERING, PLLC  
1033 Watervliet Shaker Rd  
Albany, NY 12205  
Office # (518) 690-0790  
Fax # (518) 690-0793

at&t

JOHN P. STEVENS  
03/01/2019  
071096  
LICENSED PROFESSIONAL ENGINEER

1	REVISED PER COMMENTS	BMM	03/01/19
0	ISSUED FOR PERMIT	BMM	02/06/19
No	Submittal / Revision	App'd	Date

Drawn: MAP Date: 11/29/18  
Designed: MPS Date: 11/29/18  
Checked: MPS Date: 11/29/18

Project Number  
395-000

Project Title  
NORTH RIVER  
FA #: 10141760  
321 WEST HILL ROAD  
AUSTERLITZ, NY 12165

Prepared For  
AIROSMITH DEVELOPMENT  
32 CLINTON ST.  
SARATOGA SPRINGS, NY 12866  
OFFICE # (518) 306-3740

Drawing Scale:  
AS NOTED  
Date:  
03/01/19

Drawing Title  
GROUNDING DETAILS

Drawing Number  
G2





AT&T Mobility  
2875 Union Road, Ste. 356  
Cheektowaga, NY 14227

March 4, 2019

Town of Austerlitz  
Planning Board  
812 Rte. 203  
Spencertown, NY 12165

***RE: Tower Usage Plan for New Cingular Wireless PCS, LLC ("AT&T") Application for Special Use Permit and Site Plan Approval for construction of a new Telecommunications Tower located off West Hill Road (Parcel No.: 87.-2-48) in the Town of Austerlitz, on land owned by Goosetown Network, LLC. ATT Site Name: HV North River, FA# 10141760***

Dear Members of the Planning Board:

§ 195-21(C)(2) of the Code of the Town of Austerlitz requests a "tower usage plan which identifies the type of use, level of use and any characteristics of the tower which may affect the surrounding area. The tower usage plan shall also outline construction and removal plans in the event the tower usage is discontinued. Please see the Tower Usage Plan below.

Type of Tower:  
Self-Support Tower

Proposed Use by AT&T:  
Antennas & Radios. Timeframe – 30-year total lease agreement

Capacity for Future Users, Intent for Shared Use:  
Towers this size are designed for at least 3 carriers

Design Criteria:  
Should include capacity for at least (2) additional users, with equivalent loading to AT&T.

Construction Methods:  
Pad and Pier foundation, steel tower sections, crane set – per CD's.

Removal Plan:  
All portions of the Communication Facility brought onto the Property by Tenant will be and remain Tenant's personal property and, at Tenant's option, may be removed by Tenant at any time during or after the Term. Landlord covenants and agrees that no part of the Communication Facility constructed, erected or placed on the Premises by Tenant will become, or be considered as being affixed to or a part of, the Property, it being the specific intention of Landlord that all improvements of every kind and nature constructed, erected or placed by Tenant on the Premises will be and remain the property of Tenant and may be removed by Tenant at any time during or after the Term. Tenant will repair any damage to the Property resulting from Tenant's removal activities. Any portions of the Communication Facility that Tenant does not remove within one hundred twenty (120) days after the later of the end of the Term and cessation of Tenant's operations at the Premises shall be deemed abandoned and owned by Landlord.



AT&T Mobility  
2875 Union Road, Ste. 356  
Cheektowaga, NY 14227

Notwithstanding the foregoing, Tenant will not be responsible for the replacement of any trees, shrubs or other vegetation.

Sincerely,

*Robert Minnick*

Robert Minnick  
Construction & Engineering  
AT&T Mobility UNY  
Project Manager LTE

**New Cingular Wireless PCS, LLC ("AT&T")  
Proposed Telecommunications Tower at  
321 West Hill Road  
Austerlitz, NY**

The Code of the Town of Austerlitz, Section 195-21(G), states "Site requirements. Telecommunications towers and accessory facilities shall be located so as to minimize potential adverse impacts as follows". We provide the following responses to the criteria set forth in Section 195-21(G) concerning the site requirements:

1. Safety. Telecommunications towers and accessory facilities shall be located a sufficient distance from adjoining property lines and adjoining structures so as to safeguard against damages from icefall or debris from structural damage.

*Response: The Project so complies per the Professional Engineer stamped Tower Fall Letter and Site Plan showing the 100' Fall Zone.*

2. Visual/aesthetic. Towers shall, when possible, be sited where their visual impact is least detrimental to highly rated scenic and historic areas, including ridgelines, properties listed in the State and Federal Register of Historic Places, and scenic roadways.

*Response: AT&T's proposed Telecommunications Tower is compatible with the existing visual/aesthetics as there is an existing Telecommunications Tower at the subject parcel and the abutting parcel contains existing Telecommunication Towers with similar size requirements as the proposed Telecommunications Tower.*

3. Environmental degradation. Towers shall, when possible, be sited to avoid affecting rare or endangered flora or fauna. They should also be sited, when possible, away from wetland areas.

*Response: The Project so complies. Please refer to the site plan and supporting documents submitted as part of this special use permit and site plan approval package to the Planning Board.*

4. Existing vegetation. Existing on-site vegetation shall be preserved to the maximum extent possible.

*Response: The Project so complies. Please refer to the site plan and supporting documents submitted as part of this special use permit and site plan approval package to the Planning Board.*

5. Screening. Where a site abuts a residential or public property, including streets or roads, screening shall be required. Deciduous or evergreen tree plantings shall be required to screen portions of the tower and accessory structures from nearby residential property, as well as from public sites which include important views or vistas.

*Response: The Project so complies. AT&T's proposed Telecommunications Tower is compatible with the adjoining properties as the existing and abutting parcel contain existing Telecommunication Towers of similar design.*

6. Roads/access. For all tower sites, the roads or other means of access leading to and from same shall be inspected and approved by the Town Highway Superintendent before any building permit is issued for the construction of the tower. All roads leading to the tower shall be adequate for access for emergency and service vehicles on a year-round basis. Maximum use of existing roads, public or private, shall be made. Road construction shall be consistent with standards for private roads as required by the Town. The road grade shall closely follow the natural contour so as to assure minimal visual disturbance and reduce soil erosion potential.

*Response: As there is an existing Telecommunications Tower at the subject parcel, the existing access road, turnaround and parking area will be utilized.*

7. Parking. Parking that assures adequate spaces for emergency and service vehicles shall be provided. The Planning Board shall determine the number of required spaces based upon a recommendation from the applicant.

*Response: As there is an existing Telecommunications Tower at the subject parcel, the existing access road, turnaround and parking area will be utilized.*

8. Fencing. The tower and any accessory structure shall be adequately enclosed by a gated fence, the design of which shall be approved by the Planning Board.

*Response: The Project so complies. Please refer to the site plan submitted as part of this special use permit and site plan approval package to the Planning Board.*