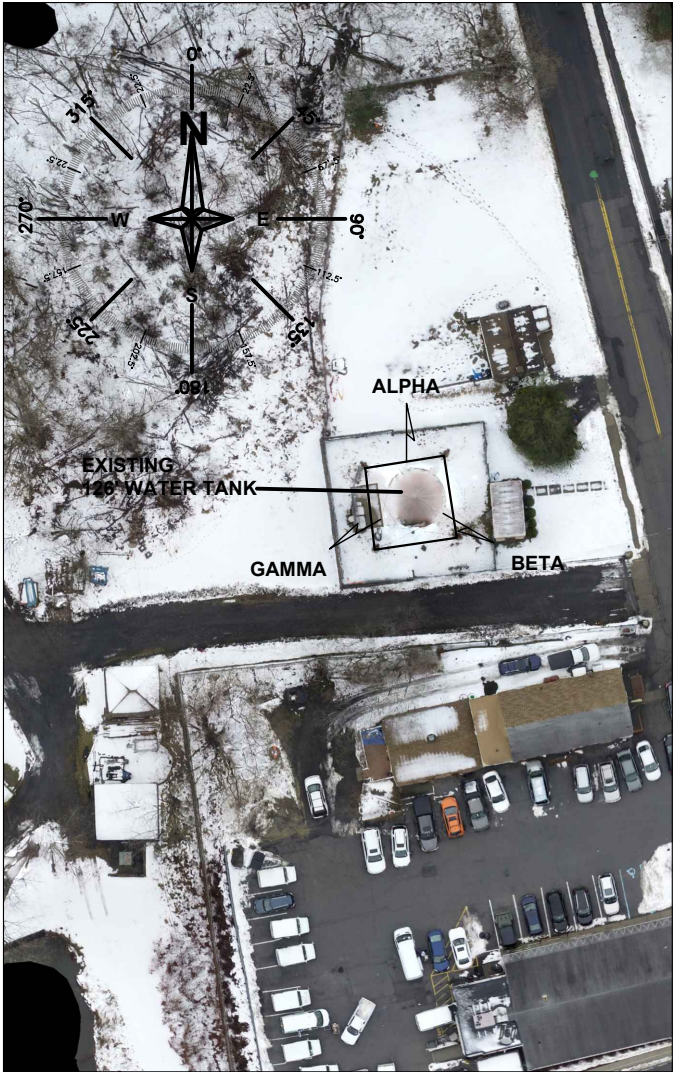


MAINTENANCE AND CONDITION ASSESMENT

SITE ADDRESS:
CELL SITE ID: 10126045
FAA SITE NUMBER; NA
ASSESMENT OF WATER TANK STRUCTURE FOR INFINIGY

ON DECEMBER 12TH 2019 FIREFLY TECHNICAL SERVICES LLC PERFORMED A VISUAL INSPECTION AND MAPPING OF SUBJECT SITE FOR TIA STANDARDS AND GENERAL CONDITIONS ASSESMENT.



AERIAL MAPPING / SITE PLAN

INDEX

- 1 TITLE SHEET & PROJECT INFORMATION
- 2 ELEVATION VIEW
- 3 APPURTENANCE CONFIGURATION
- 4 ASSESMENT MATRIX
- 5 PHOTOS
- 6 PHOTOS
- 7 PHOTOS
- 8 PHOTOS

GENERAL ASSESMENT

WATER TANK FOUNDATION INSPECTION INDICATED VISIBLE CRACKS AND FAILURES IN NON CRITICAL AREAS OF FOUNDATION.

LATERAL SUPPORT LEGS OF WATER TANK HAVE BEEN RETROFITTED WITH STIFFENERS.

LIGHTNING PROTECTION IS NOT THE HIGHEST APPURTENANCE.

CLIMB LADDER DOES NOT HAVE A SAFETY CLIMB CABLE.



OVERALL WATER TANK

GENERAL NOTES

LAYOUT, CONDITIONS, DIMENSIONS ARE FROM FIELD MEASUREMENTS AND REPRESENT ACTUAL CONDITIONS.

MAPPING WAS CONDUCTED USING SURVEYED CONTROL POINTS AS INDICATED AND ORTHO IMAGERY.

ATTACHED PHOTO DOCUMENTS AND IN ACCORDANCE WITH ENG-SOW-10007.

DOCUMENTS FOR FOR THE ORIGINAL PROJECT WERE NOT PROVIDED AND NOT USED.

TARGET DATUM AGL HEIGHTS ARE FROM FINISHED CONCRETE THE TOP OF STRUCTURAL ELEMENT.

AZIMUTH SHOWN CALCULATED FROM WGS84 COORDINATES BY OBSERVED GPS POSITIONING
AZMUTH BASED ON GPS FIELD OBSERVATIONS
OF L1, L2, AND GNSS POSITIONING SIGNALS WITH POST PROCESS CORRECTIONS OF 75 OBSERVATIONS.

- ADDITIONAL DATA FILES AVAILABLE
- 1. ORTHOMOSIAC GEO TIF IN WGS84 COORDINATES
 - 2. CAD FILES
 - 3. PHOTO FILES AND GPS OBSERVATIONS



Antonio Auciello
Office VoIP +1 954 282 8281
Trinidad Office: +1 868 228 9270
Mobile Canada +1 905 339 6524
Mobile Trinidad +1 868 773 5550
E-mail: antonio@apulasolutions.com
Skype: Moussolini100

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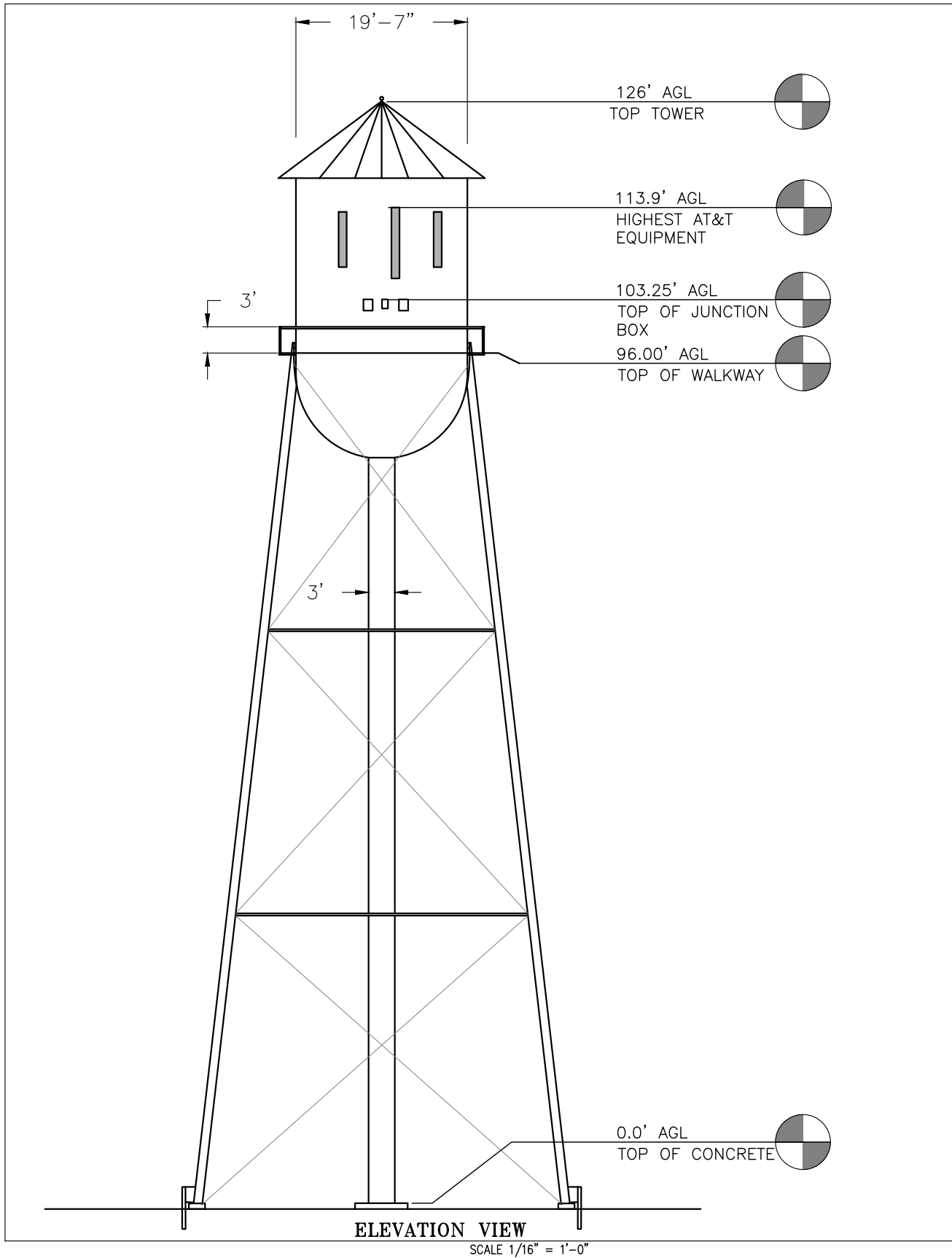
PROJECT INFORMATION

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MAINTENANCE AND CONDITION ASSESMENT



Antonio Auciello
Office VoIP: +1 954 282 8281
Trinidad Office: +1 868 228 9270
Mobile Canada: +1 905 339 6524
Mobile Trinidad: +1 868 773 5550
E-mail: antonio@apuliasolutions.com
Skype: Mouscolini100

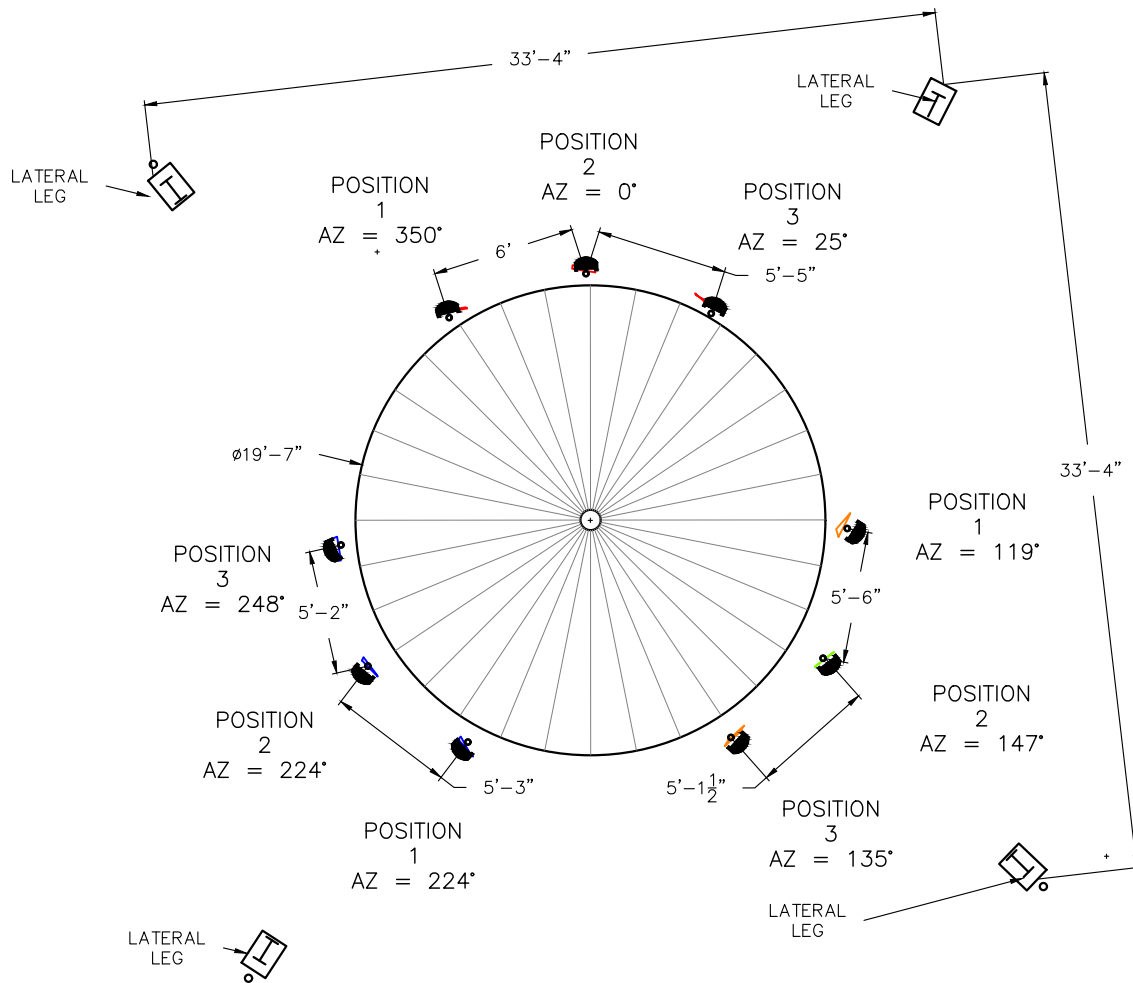
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APPURTENANCE AGL ELEVATION VIEW

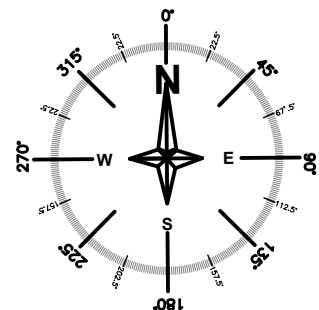
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APPURTENANCE CONFIG.
SCALE 1/8" = 1'-0"



APPURTENANCE CONFIG.

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Antonio Auciello
Office: VoIP +1 954 282 8281
Trinidad Office: +1 868 228 9270
Mobile Canada: +1 905 339 6524
Mobile Trinidad: +1 868 773 5550
E-mail: antonio@apulasolutions.com
Skype: Moussolini100

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MAINTENANCE AND CONDITION ASSESMENT

Item #	Assessment Item	RATING	1	MODERATE	10	CRITICAL	Rating	Category	Photo	Comments
Structure										
1.1	Damage members (bent, cracked, distorted, loose, missing)						0			
1.2	Bolts (missing)						0			
1.3	Climbing Facility						0			
1.4	Platforms, catwalks, sector frames						0			
1.5	Welded Connections						0			
FAA Marking and Lighting										
2.1	Fixtures, wiring, junction boxes (secured)									NO FAA MARKING
2.2	Top Beacon Operation/Nesting									
2.3	Galvanizing/Paint condition (rusted or chipped)									
2.4	Structure Height									
Foundation										
3.1	Concrete and grout (physical condition, cracks, spalling)						4			SCALDING
3.2	Ground condition (settlement, erosion, standing water)									
3.3	Anchor bolts (entered on pier)									
3.4	Height of concrete to bottom of leveling nut (within TIA 222 tolerance)									NOT MEASURED
Structure Grounding										
4.1	Tower base connection to ground ring (X3 - 120 dgr apart)									NOT MEASURED
4.2	Minimum #2 tinned solid wire size									NOT MEASURED
4.3	Exothermic welds or UL clamp									NOT MEASURED
4.4	Lighting rod (highest point)						5			NO ROD
4.5	Clamp on ground resistance test									NA
Safety Climb Wire Rope Inspection										
5.1	Components free of physical damage (cracks, wear, corrosion)						10			NO SAFTEY CABLE
5.2	Wire rope free of cuts, fraying, kinks, broken strands									
5.3	Wire rope is not contacting metal tower components									
5.4	Wire rope guide installed at proper intervals									
5.5	Wire rope extends the entire length of climbing facility									
5.6	Top anchorage connection properly terminated									
5.7	Bottom anchorage connection properly terminated									
5.8	System markings present and legible (size and cable type)									
5.9	Cable path unobstructed									
Appurtenances										
6.1	Booms and platforms (bent, fractured, distorted, loose)						0			
6.2	Strut (stiff arm) installed properly (proper angle, securement)						0			
6.3	Ice shields (bent, fractured, distorted)						0			
Line and Antennas										
7.1	Antenna/microwave (holes, dents, damage)						0			
7.2	Mounting hardware (present/condition)						5			COAX CLAMPS
7.3	Antenna pipes centered on mount						0			
7.4	Antenna mount bolts						0			
7.5	Grounding lugs/hardware									NA
7.6	Ground kits						0			
7.7	Ancillary equipment (feed horn, TMA, RRU, raycap, diplexer)						0			
7.8	Lines (bend radius, jumper support, weatherproofing, jacket)						5			BROKEN SUPPORT
7.9	Transmission lines are coded at antenna and ground connection						0			



Antonio Auciello
 Office: VoIP +1 954 282 8281
 Trinidad Office: +1 868 228 9270
 Mobile Canada: +1 905 339 6524
 Mobile Trinidad: +1 868 773 5550
 E-mail: antonio@apuliasolutions.com
 Skype: Mousolini100

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ASSESSMENT MATRIX

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MAINTENANCE AND CONDITION ASSESMENT



CLIMB LADDER



CLIMB LADDER

SAFETY CABLE & LADDER

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Antonio Auciello

Office VoIP: +1 954 282 8281
Trinidad Office: +1 868 228 9270
Mobile Canada: +1 905 339 6524
Mobile Trinidad: +1 868 773 5550
E-mail: antonio@apuliasolutions.com
Skype: Moussolini100

225A Tangerine Drive, Haleland Park- Maraval, Trinidad, & Tobago W.I.

MAINTENANCE AND CONDITION ASSESMENT



ALPHA SECTOR



BETA SECTOR



Antonio Auciello
Office Voip: +1 954 282 8261
Trinidad Office: +1 868 228 9270
Mobile Canada: +1 905 339 6524
Mobile Trinidad: +1 868 773 5550
E-mail: antonio@apuliasolutions.com
Skype: Mouscolini100

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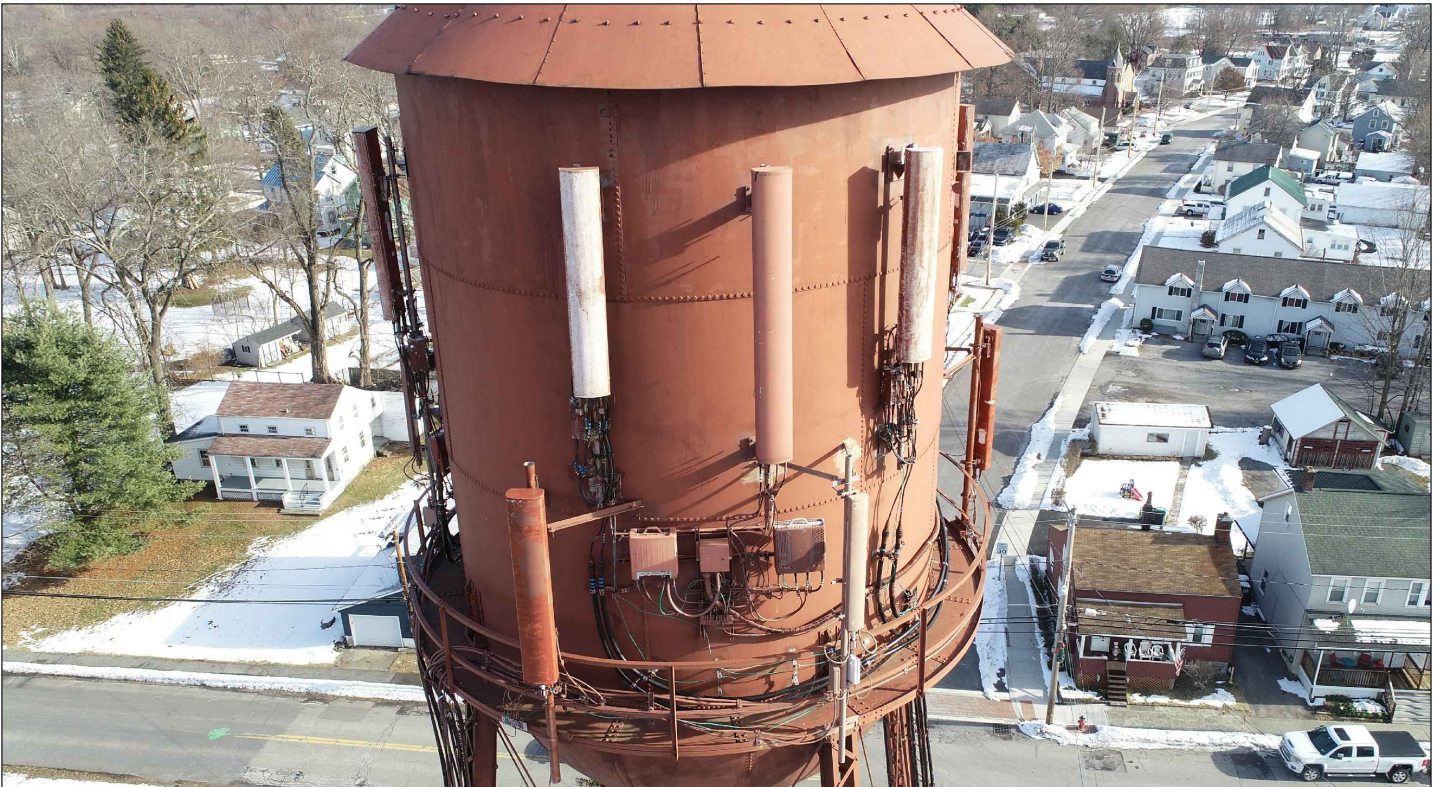
ALPHA BETA

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MAINTENANCE AND CONDITION ASSESMENT



GAMMA SECTOR



BETA / GAMMA SECTOR

BETA GAMMA

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Antonio Auciello
Office VoIP +1 954 282 8281
Trinidad Office: +1 868 228 9270
Mobile Canada +1 905 339 6524
Mobile Trinidad +1 868 773 5550
E-mail: antonio@apuliasolutions.com
Skype: Mouscolini100

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MAINTENANCE AND CONDITION ASSESMENT



FOUNDATION / SITE

FOUNDATION / SITE

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Antonio Auciello
 Office VoIP +1 954 282 8281
 Trinidad Office: +1 868 228 9270
 Mobile Canada +1 905 339 6524
 Mobile Trinidad +1 868 773 5550
 E-mail: antonio@apuliasolutions.com
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