

280 Trumbull Street
Hartford, CT 06103-3597
Main (860) 275-8200
Fax (860) 275-8299
kbaldwin@rc.com
Direct (860) 275-8345

Also admitted in Massachusetts

October 15, 2019

Melanie A. Bachman, Esq.
Executive Director/Staff Attorney
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

**Re: Petition No. 1379 – Petition of Cellco Partnership d/b/a Verizon Wireless for a
Declaratory Ruling on the Need to Obtain a Siting Council Certificate for the
Installation of a Wireless Telecommunications Facility at 1270 North High Street,
East Haven, Connecticut**

Dear Attorney Bachman:

This is in response to your request for additional information regarding discrepancies in the materials submitted for Petition No. 1379, a proposal by Cellco Partnership d/b/a Verizon Wireless (“Cellco”) to install a telecommunications tower on the roof of the existing building at 1270 North High Street in East Haven, Connecticut (“Property”).

As you know, in March of 2014, New Cingular Wireless PCS, LLC (“AT&T”) filed a Petition to install a 45-foot guyed lattice tower on the roof of the building at the Property. That Petition was approved by the Council in April of 2014. Initially, Cellco had intended to install a structure that was approximately 10 feet taller than the AT&T tower to satisfy its radio frequency (RF) objections. Subsequent to that, a decision was made to reduce the height of the Cellco roof-top tower to 40 feet above the roof-top platform (80 feet above ground level). Unfortunately, information regarding this change was not adequately communicated to the project team until after Petition No. 1379 was filed with the Council. I apologize for the confusion.

That said, the purpose of this letter is to confirm that Cellco intends to build a 40-foot monopole tower on a roof-top platform at the Property. In light of these changes, I have attached to this letter the following modified exhibits for your records.

19900723-v1

Melanie A. Bachman, Esq.

October 15, 2019

Page 2

Attachment 1 - Modified project plans from Hudson Design Group showing the correct tower height and antenna location on the roof of the building.

Attachment 2 - Revised RF emissions calculations in the form of Far Field Approximation Tables for the proposed facility. These tables demonstrate that the facility will continue to comply with the FCC standards for RF emissions.

Attachment 3 - Revised Visual Impact Assessment for the shorter roof-top tower.

Again, I apologize for the confusion created with these late project modifications. If you have any questions or need any additional information please do not hesitate to contact me.

Sincerely,



Kenneth C. Baldwin

KCB/kmd

Enclosures

Copy to:

Joseph Maturo, Jr., East Haven Mayor
Christopher Soto, East Haven Planning and Zoning Enforcement Officer
Woodview Associates

ATTACHMENT 1

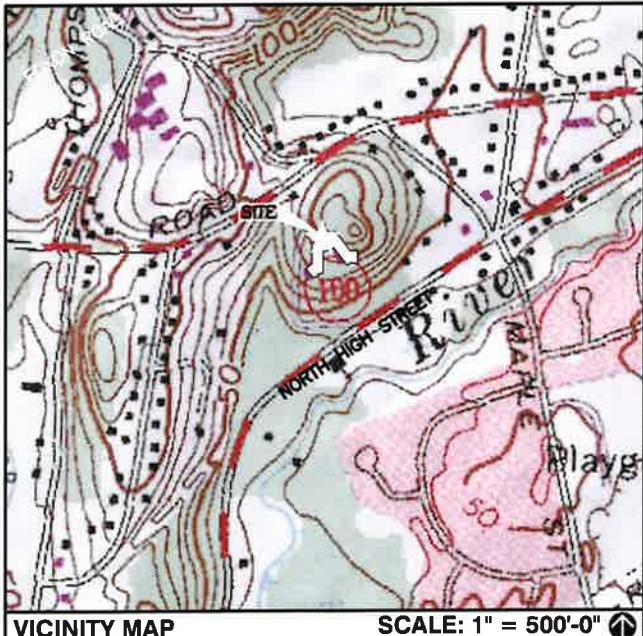
CELLCO PARTNERSHIP

verizon✓

d.b.a. verizon✓

WIRELESS COMMUNICATIONS FACILITY

EAST HAVEN N CT

1270 NORTH HIGH STREET
EAST HAVEN, CT 06512

CONSULTANT TEAM

PROJECT ENGINEER

HUDSON DESIGN GROUP, LLC
45 BEECHWOOD DRIVE
NORTH ANDOVER, MA 01845
TEL: 1-(978)-557-5553
FAX: 1-(978)-336-5586

MEP ENGINEER

HUDSON DESIGN GROUP, LLC
45 BEECHWOOD DRIVE
NORTH ANDOVER, MA 01845
TEL: 1-(978)-557-5553
FAX: 1-(978)-336-5586

PROJECT SUMMARY

SITE NAME: EAST HAVEN N CT
SITE ADDRESS: 1270 NORTH HIGH STREET
EAST HAVEN, CT 06512
APPLICANT: CELLCO PARTNERSHIP
d/b/a VERIZON WIRELESS
20 ALEXANDER DRIVE
WALLINGFORD, CT 06492
SITE ACQUISITION CONTACT: ALEKSEY TYURIN
STRUCTURE CONSULTING GROUP
(860)-933-1534
LEGAL/REGULATORY COUNSEL: KENNETH C. BALDWIN ESQ.
ROBINSON + COLE LLP
(860)275-8345
LATITUDE: N41° 19' 19.20"
LONGITUDE: W72° 50' 46.70"
GROUND ELEVATION: 102'± AMSL

SHEET INDEX

SHT. NO.	DESCRIPTION
T-1	TITLE SHEET
C-1	ABUTTERS PLAN
C-2	SITE PLAN
A-1	EQUIPMENT PLAN
A-2	ELEVATION
A-3	ELEVATION

CHECKED BY: DJR

APPROVED BY: DPH

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
4	7/31/19	REVISED PER COMMENTS	SLY
3	06/13/19	REVISED PER COMMENTS	SLY
2	05/10/19	REVISED PER COMMENTS	SLY
1	09/20/18	REVISED MOUNT	KAM
0	09/14/17	ISSUED FOR REVIEW	SF

SITE NAME:

EAST HAVEN N CT

SITE ADDRESS:
1270 NORTH HIGH STREET
EAST HAVEN, CT 06512

SHEET TITLE

TITLE SHEET

SHEET NUMBER

T-1

DIRECTIONS TO SITE:
 HEAD NORTH ON ALEXANDER DR TOWARD BARNES INDUSTRIAL ROAD S.
 TURN RIGHT ONTO BARNES INDUSTRIAL RD S
 TURN RIGHT ONTO CT-68 E
 TURN RIGHT ONTO THE INTERSTATE 91 S RAMP TO NEW HAVEN
 FOLLOW I-91 S TO CT-17 N/MIDDLETON AVE IN NEW HAVEN.
 TAKE EXIT 8 FROM I-91 S
 MERGE ONTO I-91 S
 TAKE EXIT 8 FOR CT-17/MIDDLETON AVE TOWARD CT-80/N BRANFORD
 TAKE FOXON BLVD TO N HIGH ST IN EAST HAVEN
 USE THE LEFT 2 LANES TO TURN LEFT ONTO CT-17 N/MIDDLETON AVE
 CONTINUE STRAIGHT ONTO FOXON BLVD
 TURN RIGHT ONTO HUNT LN
 TURN RIGHT ONTO N HIGH ST
 DESTINATION WILL BE ON THE RIGHT
 1270 N HIGH ST EAST HAVEN, CT 06512

SCOPE OF WORK INFO.

VERIZON WIRELESS IS PROPOSING TO INSTALL THE FOLLOWING:

- NEW PANEL ANTENNAS: (2) ANTENNAS PER SECTOR WITH (3) SECTORS, FOR A TOTAL OF (6) ANTENNAS.
- NEW RRHs: (2) RRHs PER SECTOR WITH (3) SECTORS, FOR A TOTAL OF (6) RRHs
- NEW JUNCTION BOXES: (2) JUNCTION BOX TOTAL.
- NEW QUAD DIPLEXERS: (3) QUAD DIPLEXERS IN TOTAL.

ITEMS LISTED ABOVE TO BE MOUNTED ON PROPOSED 40'± MONOPOLE ON STEEL PLATFORM ATOP ROOF.

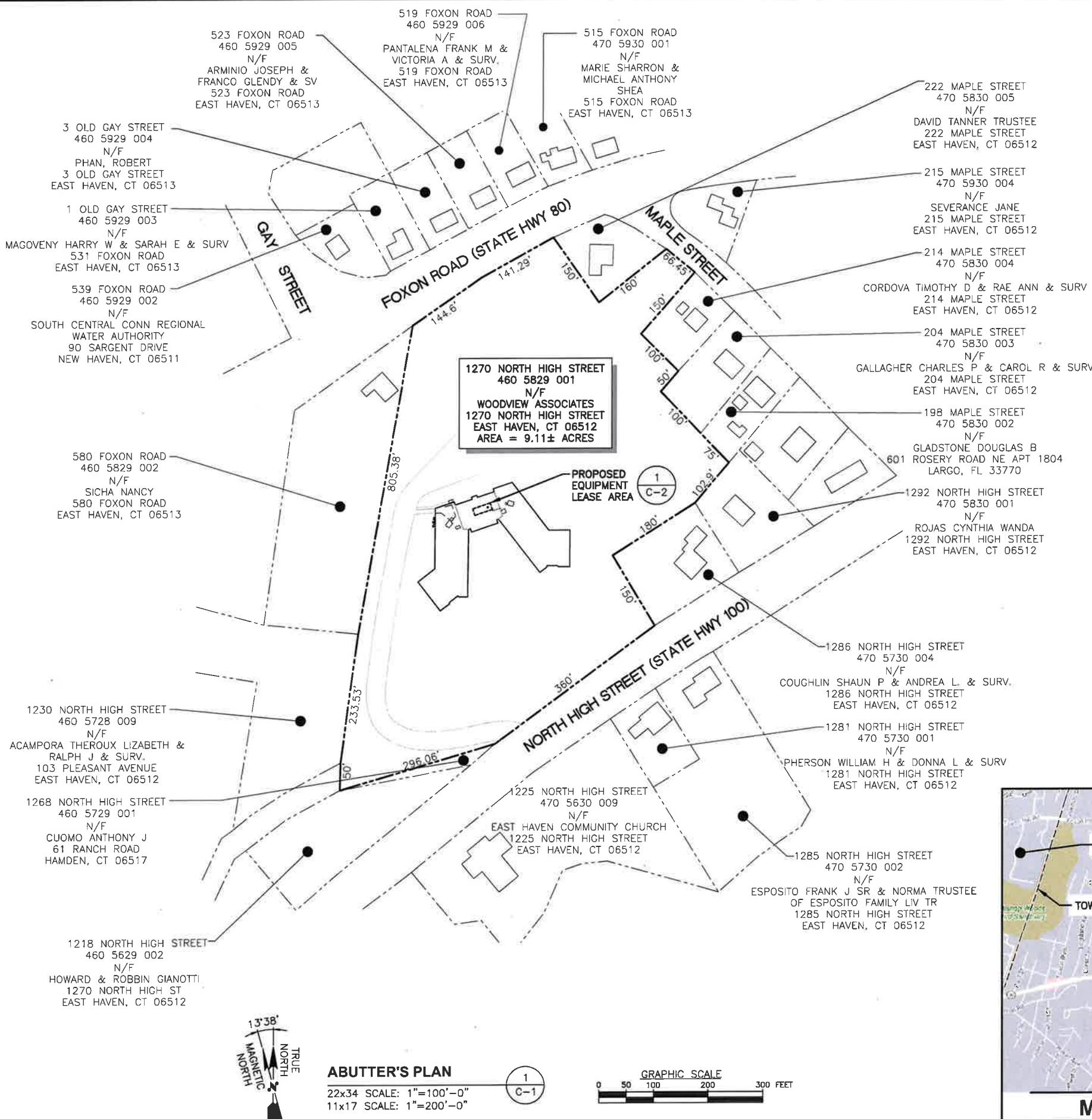
- NEW EQUIPMENT: (2) CABINETS, (1) NATURAL GAS GENERATOR, (1) HOFFMAN TELCO BOX,
(1) POWER DISTRIBUTION BOX AND (1) GPS ANTENNA

ITEMS LISTED ABOVE TO BE MOUNTED ON PROPOSED STEEL PLATFORM ATOP ROOF.

- POWER AND TELCO UTILITIES DEPICTED HEREIN ARE TENTATIVE. FINAL ROUTING TO BE DETERMINED DURING THE CONSTRUCTION DOCUMENT PHASE OF THE PROJECT.

verizon

HDG

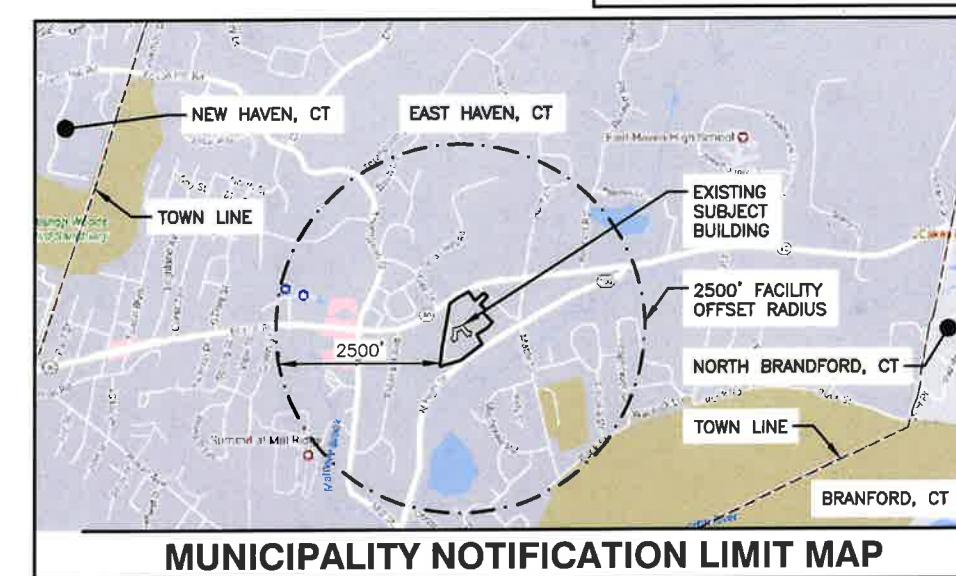
HUDSON
Design Group LLC45 BEECHWOOD DRIVE
N. ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5586**SITE SPECIFIC NOTES:**

PROPERTY LINE INFORMATION IS COMPILED FROM ASSESSORS PLAN AND RECORD DOCUMENTS AND IS NOT TO BE CONSTRUED AS HAVING BEEN OBTAINED AS THE RESULT OF A FIELD BOUNDARY SURVEY, AND IS SUBJECT TO CHANGE AS AN ACCURATE FIELD SURVEY MAY DISCLOSE.
A FULL BOUNDARY SURVEY WAS NOT PERFORMED

**SOURCE:**TOWN OF EAST HAVEN, CT GIS MAP
ACCESSED ON SEPTEMBER, 2018**LEGEND:**

- PROPERTY LINE--SUBJECT PARCEL
- PROPERTY LINE--ABUTTERS
- (E) BUILDING
- XXX-XX ASSESSORS MAP--BLOCK--LOT NO.

REV.	DATE	DESCRIPTION	BY
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SITE NAME:
EAST HAVEN N CT

SITE ADDRESS:
1270 NORTH HIGH STREET
EAST HAVEN, CT 06512

SHEET TITLE
ABUTTERS PLAN

SHEET NUMBER
C-1

verizon✓

HDG
HUDSON
Design Group LLC

45 BEECHWOOD DRIVE
 N. ANDOVER, MA 01845
 TEL: (978) 557-5553
 FAX: (978) 336-5586



Daniel P. Harmon

CHECKED BY: DJR

APPROVED BY: DPH

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
4	7/31/19	REVISED PER COMMENTS	SLY
3	08/13/19	REVISED PER COMMENTS	SLY
2	05/10/19	REVISED PER COMMENTS	SLY
1	09/20/18	REVISED MOUNT	KAM
0	09/14/17	ISSUED FOR REVIEW	SF

SITE NAME:

EAST HAVEN N CT

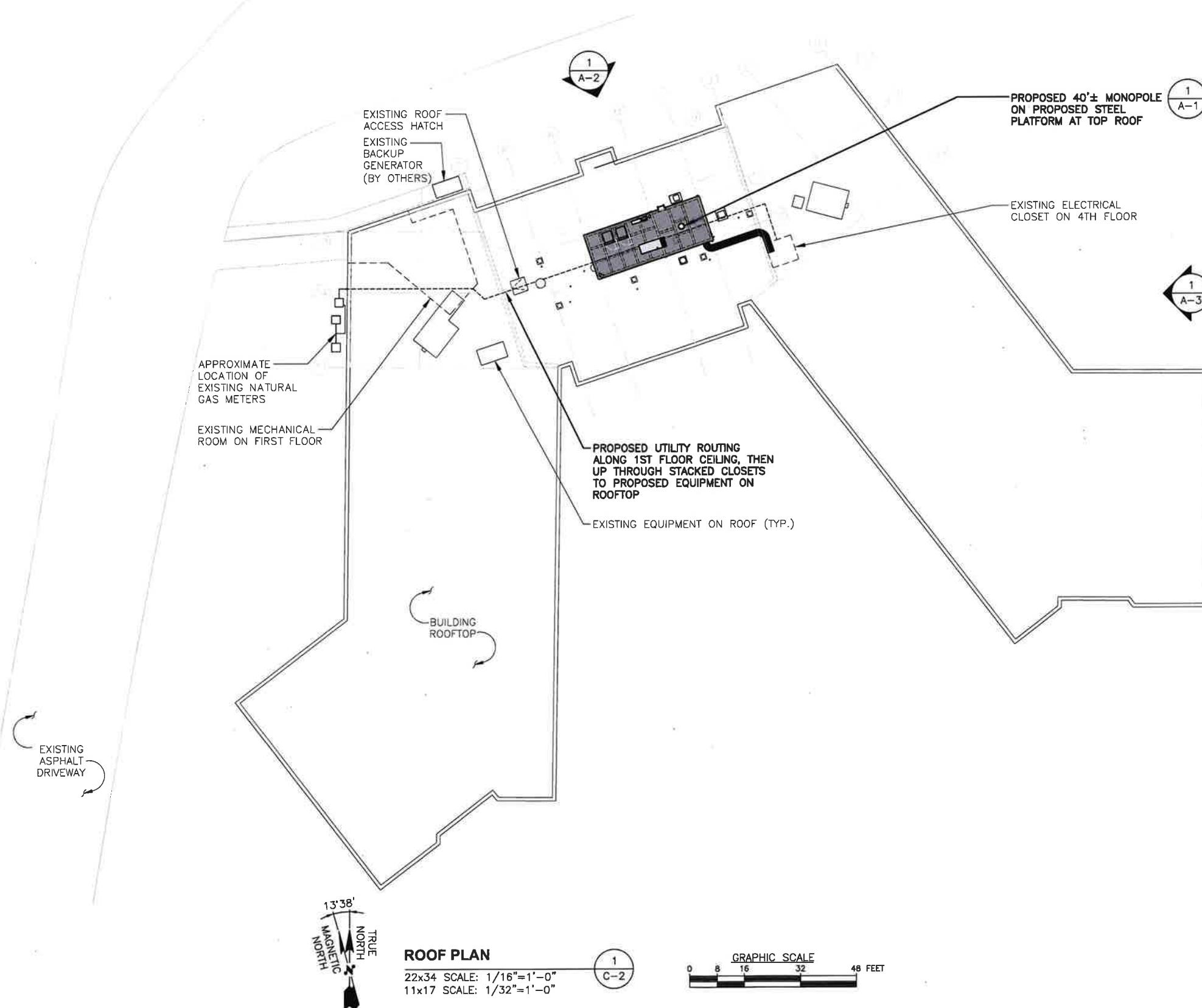
SITE ADDRESS:
 1270 NORTH HIGH STREET
 EAST HAVEN, CT 06512

SHEET TITLE

SITE PLAN

SHEET NUMBER

C-2



verizon

HDG
HUDSON
Design Group LLC

45 BEECHWOOD DRIVE
N. ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5586



Daniel P. Harran

CHECKED BY: DJR

APPROVED BY: DPH

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2	05/10/19	REVISED PER COMMENTS	SLY
1	09/20/18	REVISED MOUNT	KAW
0	09/14/17	ISSUED FOR REVIEW	SF

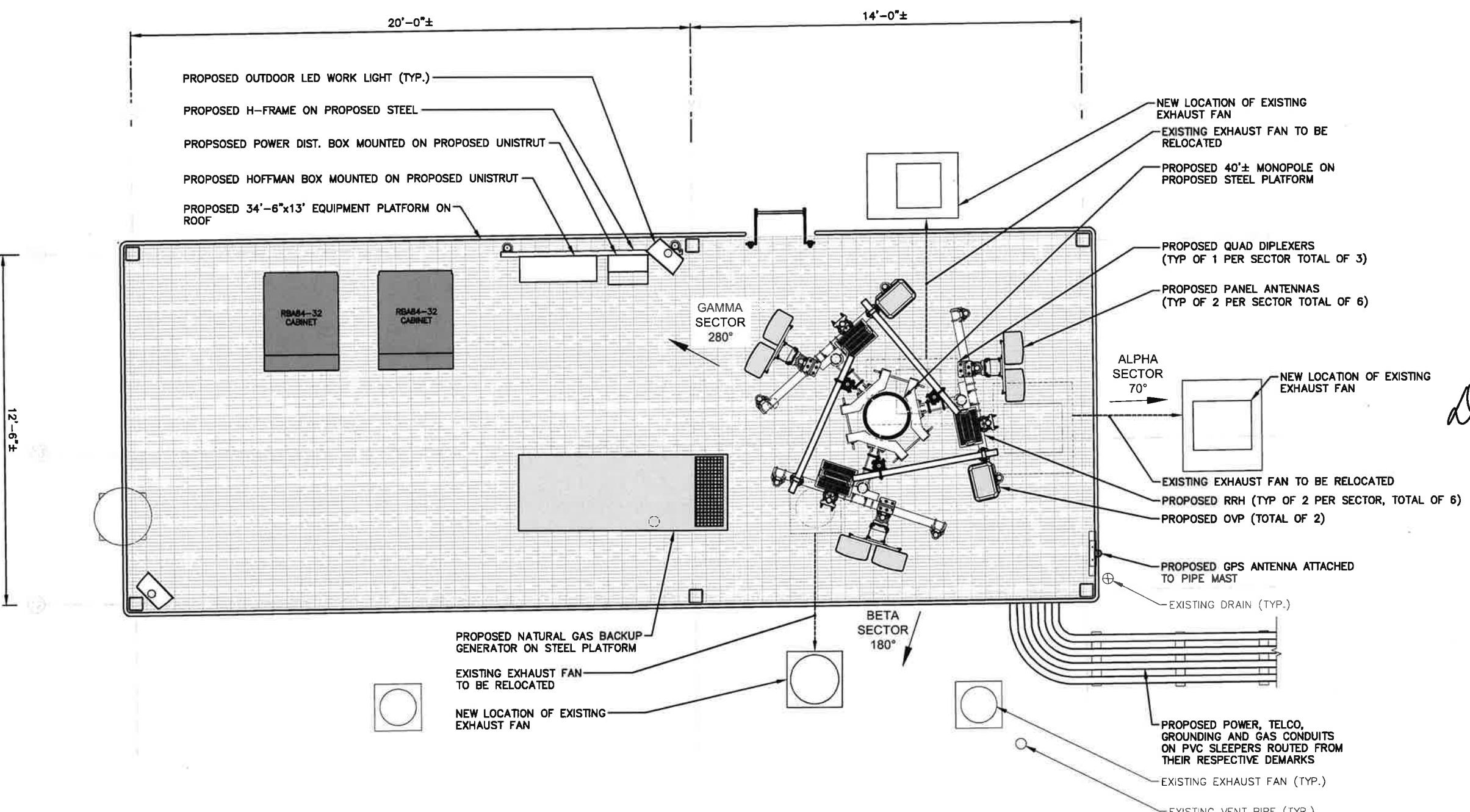
SITE NAME:

EAST HAVEN N CT

SITE ADDRESS:
1270 NORTH HIGH STREET
EAST HAVEN, CT 06512

SHEET TITLE
EQUIPMENT
PLAN

SHEET NUMBER
A-1



EQUIPMENT PLAN
22x34 SCALE: 1/2"=1'-0"
11x17 SCALE: 1/4"=1'-0"

GRAPHIC SCALE
0 1 2 4 6 FEET

NOTE:
AN ANALYSIS OF THE CAPACITY OF THE
EXISTING STRUCTURE TO SUPPORT THE
PROPOSED LOADING HAS BEEN COMPLETED
BY HUDSON DESIGN GROUP, LLC.
DATED: JULY 19, 2019 (REV.1)

verizon



HUDSON
Design Group LLC

45 BEECHWOOD DRIVE
N. ANDOVER, MA 01845
TEL: (978) 537-5553
FAX: (978) 336-5586



CHECKED BY: DJR

APPROVED BY: DPH

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
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1	09/20/18	REVISED MOUNT	KAM
0	09/14/17	ISSUED FOR REVIEW	SF

SITE NAME:

EAST HAVEN N CT

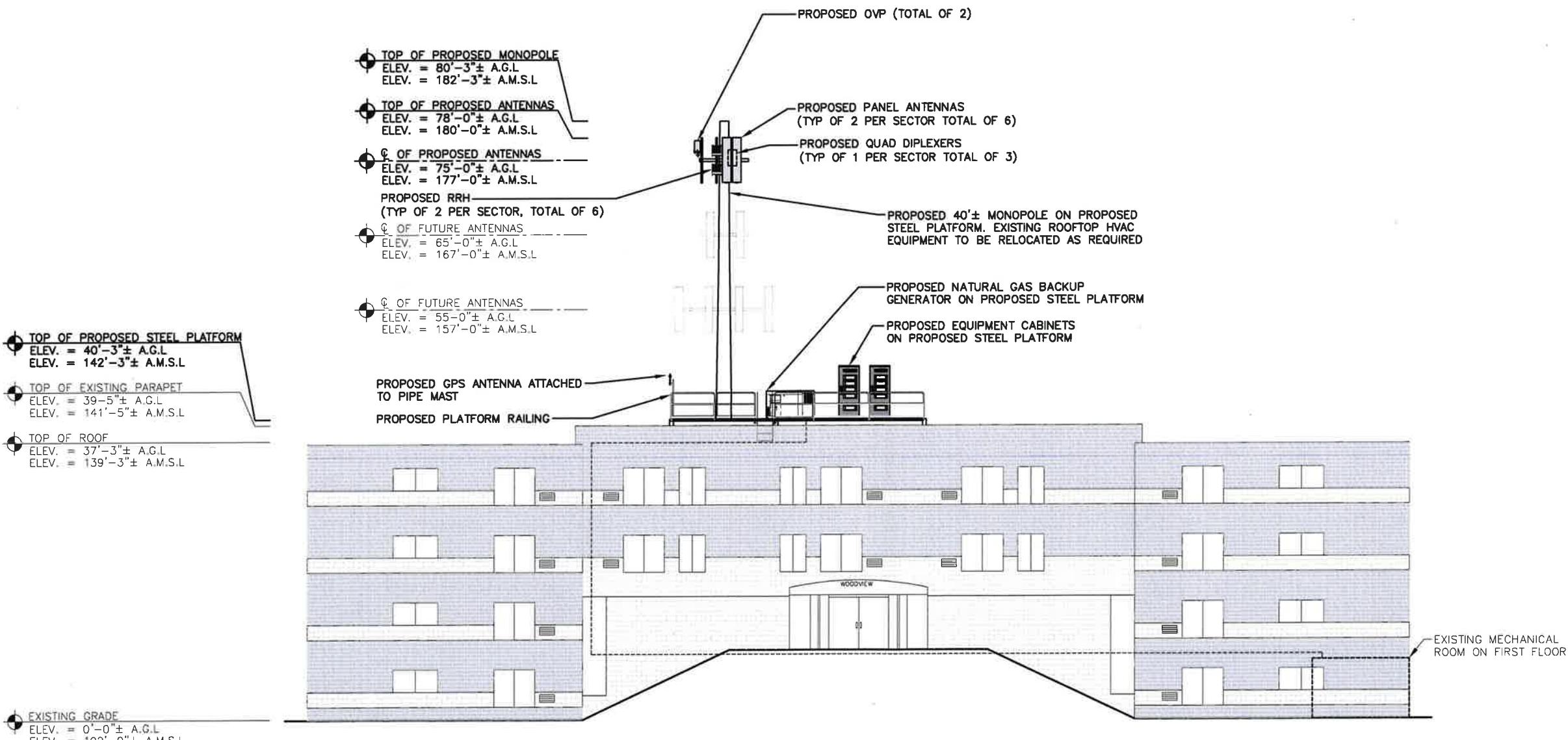
SITE ADDRESS:
1270 NORTH HIGH STREET
EAST HAVEN, CT 06512

SHEET TITLE

ELEVATION

SHEET NUMBER

A-2



NOTE:
AN ANALYSIS OF THE CAPACITY OF THE EXISTING STRUCTURE TO SUPPORT THE PROPOSED LOADING HAS BEEN COMPLETED BY HUDSON DESIGN GROUP, LLC.
DATED: JULY 19, 2019 (REV.1)

verizon



HUDSON
Design Group LLC

45 BEECHWOOD DRIVE
N. ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5986



CHECKED BY: DJR

APPROVED BY: DPH

SUBMITTALS

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1	09/20/18	REVISED MOUNT	KAM
0	09/14/17	ISSUED FOR REVIEW	SF

SITE NAME:

EAST HAVEN N CT

SITE ADDRESS:

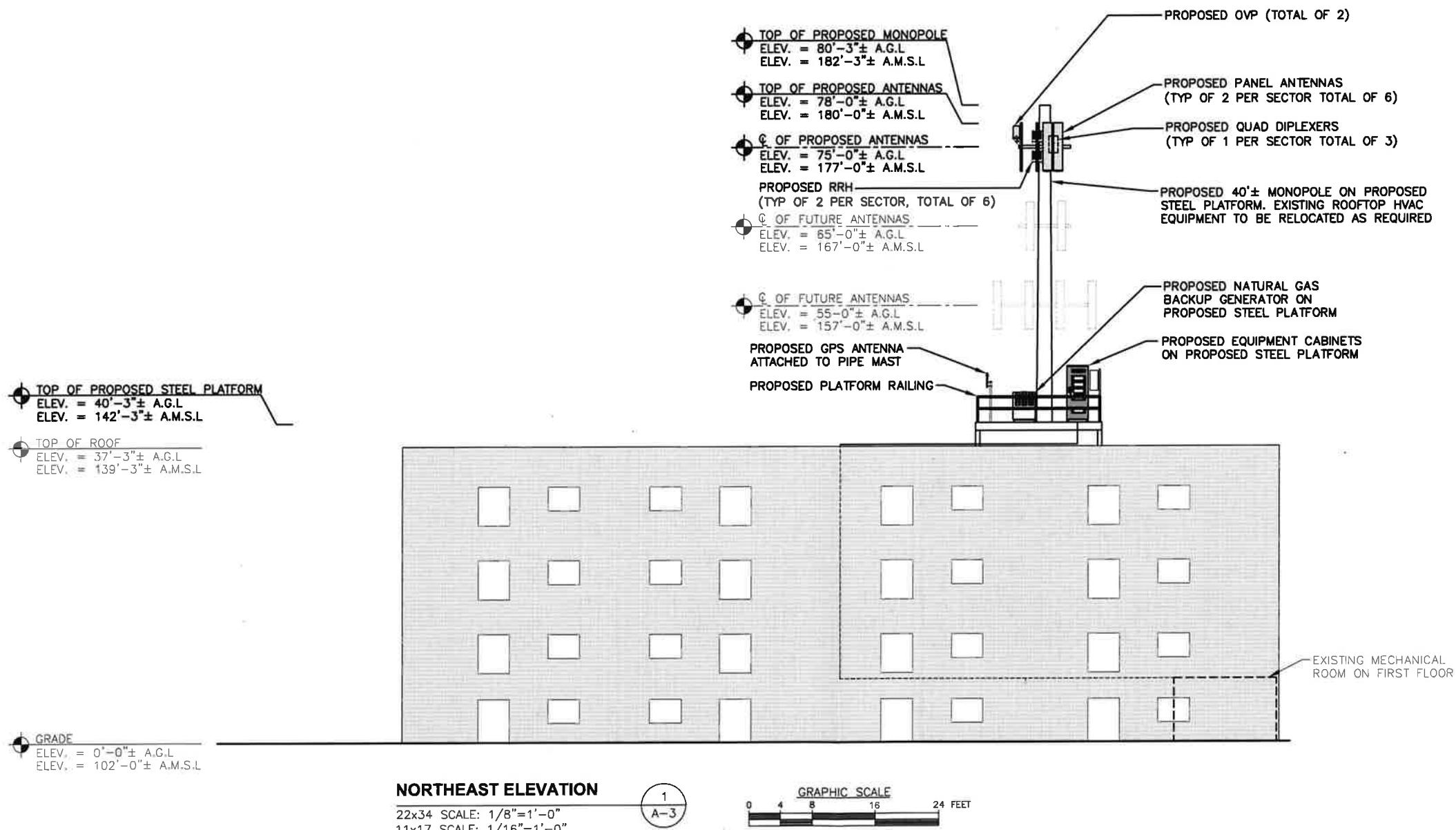
1270 NORTH HIGH STREET
EAST HAVEN, CT 06512

SHEET TITLE

ELEVATION

SHEET NUMBER

A-3

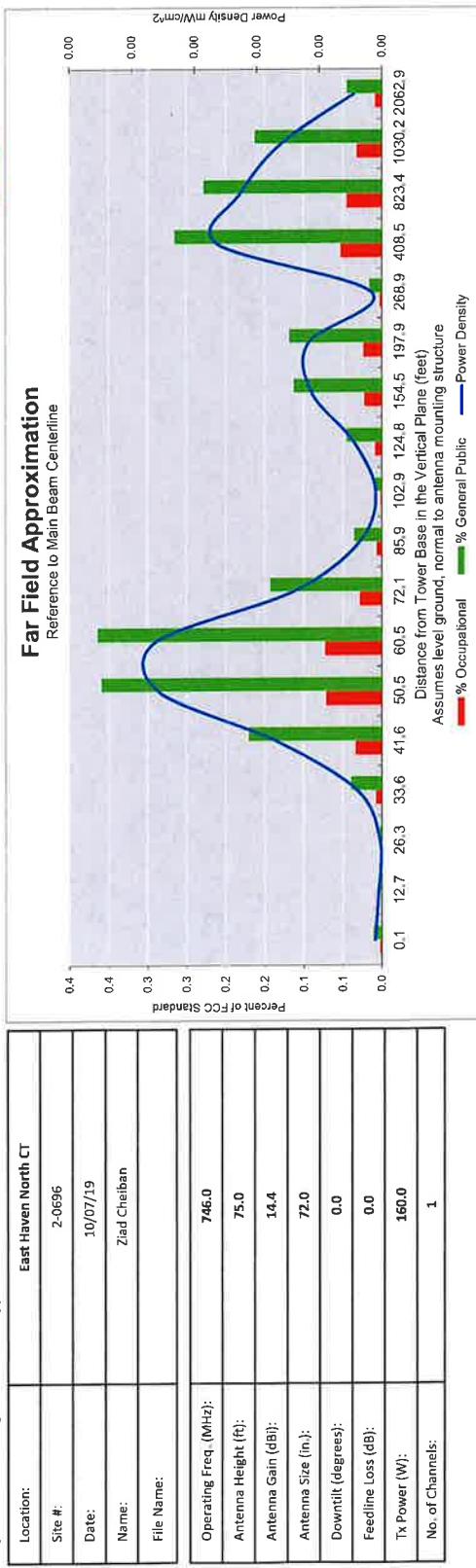


NOTE:
AN ANALYSIS OF THE CAPACITY OF THE
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PROPOSED LOADING HAS BEEN COMPLETED
BY HUDSON DESIGN GROUP, LLC.
DATED: JULY 19, 2019 (REV.1)

ATTACHMENT 2

Fair Field Approximation
with downtilt variation

Estimated Radiated Emission
Single Emitter Far Field Model
Dipole/Wire/Yagi Antenna Types



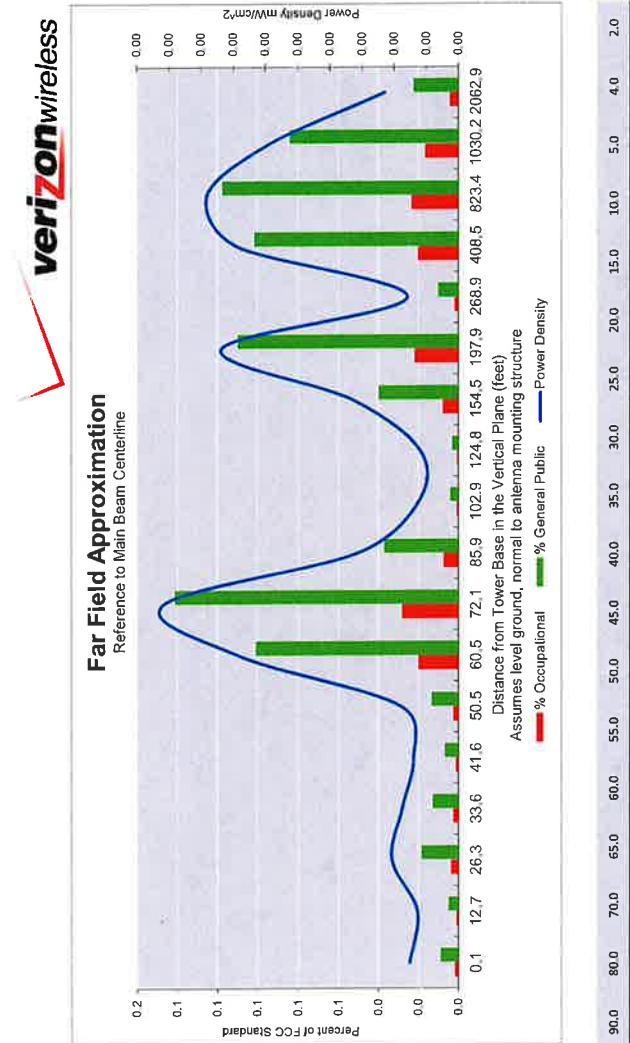
Calc Angle	90.0	80.0	70.0	65.0	60.0	55.0	50.0	45.0	40.0	35.0	30.0	25.0	20.0	15.0	10.0	5.0	4.0	2.0
Solve for r dx to antenna																		
Distance from Antenna Structure Base in Horizontal plane	72.0	73.1	76.6	79.5	83.2	87.9	94.0	101.9	112.1	125.6	144.1	170.4	210.6	278.3	414.8	826.5	1032.7	2064.1
Angle from Main Beam (reference to horizontal plane)	0.1	12.7	26.3	33.6	41.6	50.5	60.5	72.1	85.9	102.9	124.8	154.5	197.9	266.9	408.5	823.4	1030.2	2062.9
dB down from centerline (referenced to centerline)	90	80	70	65	60	55	50	45	40	35	30	25	20	15	10	5	4	2
Reflection Coefficient (1 to 4.256 typical)	35.3	38.56	40.04	28.82	22.12	18.4	17.76	21.12	26.29	30.81	23.11	17.67	15.63	21.89	6.24	0.91	0.45	0
Power Density (mW/cm²)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Percent of Occupational Standard	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Percent of General Population Standard	0.0	0.0	0.0	0.0	0.2	0.4	0.4	0.1	0.0	0.0	0.1	0.1	0.0	0.3	0.2	0.2	0.0	0.0

Antenna Type: JAHH-558-R3B
Max%: 0.36%

Far Field Approximation with down tilt variation

Estimated Radiated Emission Single Emitter Far Field Model Dipole/Wire/Yagi Antenna Types

Location:	East Haven North CT	
Site #:	2-0696	
Date:	10/07/19	
Name:	Ziad Cheibani	
File Name:		
Operating Freq. (MHz):	869.0	
Antenna Height (ft):	75.0	

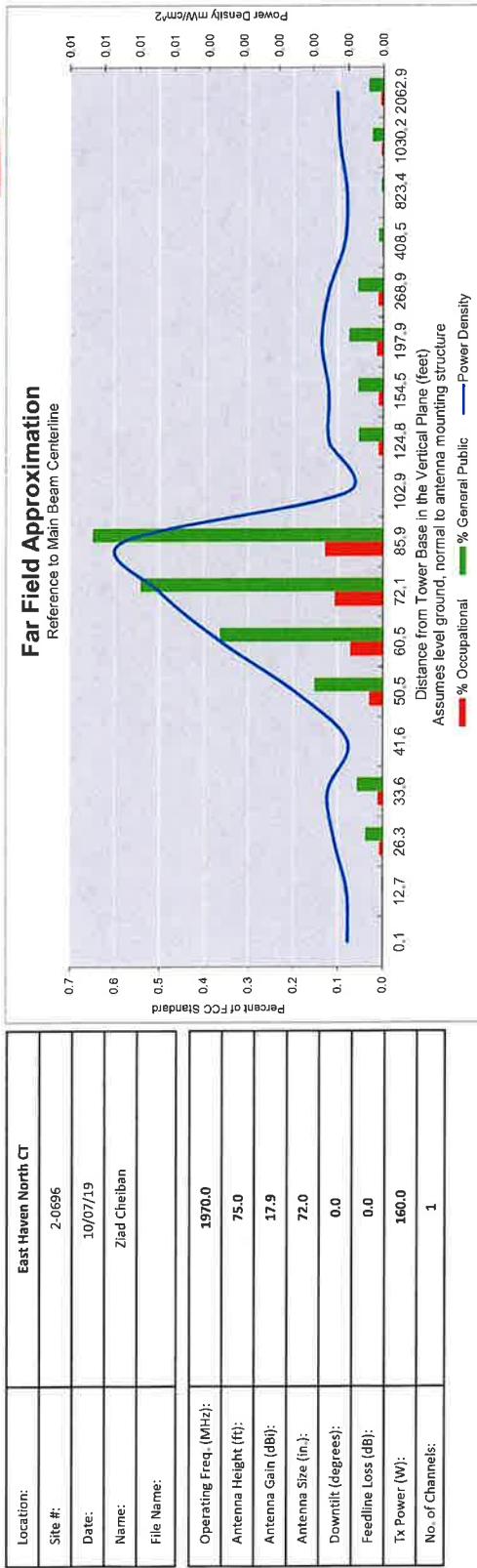


Calc Angle		90.0	80.0	70.0	65.0	60.0	55.0	50.0	45.0	40.0	35.0	30.0	25.0	20.0	15.0	10.0	5.0	4.0	2.0
Solve for r , dk to antenna		72.0	73.1	76.6	79.5	83.2	87.9	94.0	101.9	112.1	125.6	144.1	170.4	210.6	278.3	414.8	826.5	1032.7	2064.1
Distance from Antenna Structure Base in Horizontal plane		0.1	12.7	26.3	33.6	41.6	50.5	60.5	72.1	85.9	102.9	124.8	154.5	197.9	268.9	408.5	823.4	1030.2	2062.9
Angle from Main Beam (reference to horizontal plane)		90	80	70	65	60	55	50	45	40	35	30	25	20	15	10	5	4	2
dB down from centerline (referenced to centerline)		33.13	35.57	29.42	30.62	33	29.57	20.31	18.15	23.12	31.52	31.36	19.16	12.93	20.83	7.38	0.76	0.29	0
Reflection Coefficient [1 to 4, 2.56 typical]		2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56
Power Density (mW/cm ²)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Percent of Occupational Standard		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percent of General Population Standard		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.0

Antenna Type: JAHH-65B-R3B
Max%: 0.14%

Far Field Approximation
with downtilt variation

**Estimated Radiated Emission
Single Emitter Far Field Model
Dipole/Wire/Yagi Antenna Types**



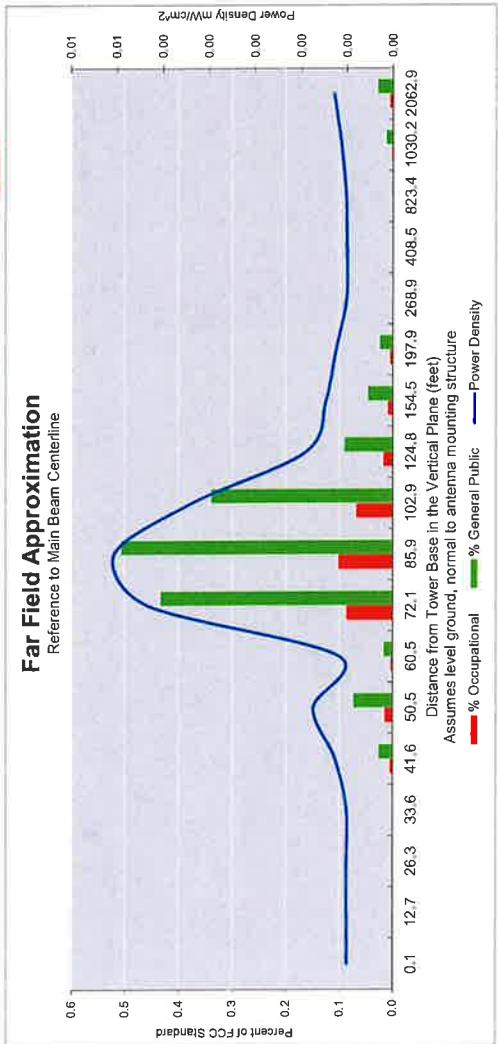
Calc Angle	90.0	80.0	70.0	65.0	60.0	55.0	50.0	45.0	40.0	35.0	30.0	25.0	20.0	15.0	10.0	5.0	4.0	2.0
Solve for r_{dx} to antenna	72.0	73.1	76.6	79.5	83.2	87.9	94.0	101.9	112.1	125.6	144.1	170.4	210.6	278.3	414.8	826.5	1032.7	2064.1
Distance from Antenna Structure Base in Horizontal Plane	0.1	12.7	26.3	33.6	41.6	50.5	60.5	72.1	85.9	102.9	124.8	154.5	197.9	268.9	408.5	823.4	1030.2	2062.9
Angle from Main Beam (reference to horizontal plane)	90	80	70	65	60	55	50	45	40	35	30	25	20	15	10	5	4	2
dB down from centerline (referenced to centerline)	57.68	40.71	29.72	27.64	44.15	22.57	18.21	15.8	14.19	40.4	22.7	21.17	17.99	16.83	20.5	18.01	8.97	1.84
Reflection Coefficient (1 to 4, 2.56 typical)	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56
Power Density (mW/cm²)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Percent of Occupational Standard	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percent of General Population Standard	0.0	0.0	0.0	0.1	0.0	0.2	0.4	0.5	0.6	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0

Antenna Type: JAHH-65B-R3B
Max%: 0.65%

Far Field Approximation
with downtilt variation

Estimated Radiated Emission
Single Emitter Far Field Model
Dipole/Wire/Yagi Antenna Types

Location:	East Haven North CT
Site #:	2-0696
Date:	10/07/19
Name:	Ziad Cheibani
File Name:	
Operating Freq. (MHz):	2145.0
Antenna Height (ft):	75.0
Antenna Gain (dB):	17.9
Antenna Size (in.):	72.0
Downtilt (degrees):	0.0
Feeding Loss (dB):	0.0
Tx Power (W):	160.0
No. of Channels:	1



Calc Angle	90.0	80.0	70.0	65.0	60.0	55.0	50.0	45.0	40.0	35.0	30.0	25.0	20.0	15.0	10.0	5.0	4.0	2.0
Solve for r , d to antenna	-72.0	73.1	76.6	79.5	83.2	87.9	94.0	101.9	112.1	125.6	144.1	170.4	210.6	278.3	414.8	826.5	1032.7	2056.1
Distance from Antenna Structure Base in Horizontal Plane	0.1	12.7	26.3	33.6	41.6	50.5	60.5	72.1	85.9	102.9	124.8	154.5	197.9	264.9	408.5	823.4	1030.2	2052.9
Angle from Main Beam (reference to horizontal plane)	90	80	70	65	60	55	50	45	40	35	30	25	20	15	10	5	4	2
dB down from centerline (referenced to centerline)	52.75	45.79	44.9	46.03	30.76	25.78	31.64	16.82	15.31	16.07	20.6	22.04	22.99	34.06	40.58	21.87	12.1	2.52
Reflection Coefficient (1 to 4, 2.56 typical)	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56
Power Density (mW/cm ²)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Percent of Occupational Standard	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Percent of General Population Standard	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0

Antenna Type: JAHH-65B-R3B
Max%: 0.51%

ATTACHMENT 3

Amended visibility Report



EAST HAVEN NORTH
1270 NORTH HIGH STREET
EAST HAVEN,
CONNECTICUT

Prepared in October 2019 by:
All-Points Technology Corporation, P.C.
3 Saddlebrook Drive
Killingworth, CT 06419

Prepared for Verizon Wireless



AMENDED VISIBILITY REPORT

In Petition 1379 before the Connecticut Siting Council, Cellco Partnership d/b/a Verizon Wireless ("Verizon") is seeking approval for the development of a new wireless communications facility ("Facility") at 1270 North High Street in East Haven, Connecticut ("Host Property" or "Site"). At the request of Verizon, All-Points Technology Corporation, P.C. ("APT") completed an initial visual assessment to evaluate the potential aesthetic effects of the proposed Facility (as presented in the Petition filing dated 9/10/19). The proposed Facility height has been reduced from ±95 feet above ground level ("AGL") to 80 feet AGL. This amended assessment report provides an evaluation of the reduced tower height and its effects on the surrounding area.

Verizon plans to collocate its new Facility on the roof of a ±37-foot-tall building occupying the central portion of the Site. The Facility would include a ±40-foot tall, steel monopole installed on a 3-foot steel platform atop the building roof, bringing the total Facility height to ±80 feet AGL. Verizon would install three (3) antenna arrays, each with two (2) antennas and appurtenances, at a centerline height of 75 feet AGL. Cabinets and associated equipment will be installed on the same 12'-6" by 34'-0" steel platform to which the monopole will be attached. The Facility is designed to accommodate additional wireless service providers.

The Host Property is located south of Foxon Road (State Route 80), north of North High Street and west of Maple Street, in a mostly residential area. Topography throughout the two-mile Study Area is characterized as rolling hills, with ground elevations ranging from approximately 5 feet to 310 feet above mean sea level. Tree cover within the Study Area occupies approximately 33% of the Study Area.

APT used the combination of a predictive computer model and in-field analysis to evaluate the visibility associated with the proposed Facility on both a quantitative and qualitative basis. The predictive model was re-run at the lower Facility height to provide a measurable assessment of visibility throughout the entire Study Area, including private properties and other areas inaccessible for direct observation. The results of the prior in-field analyses were revisited to evaluate the 15-foot reduction in overall Facility height.

As documented in the Petition filing, APT completed in-field verification activities (i.e., a balloon float) on May 29, 2019 to supplement and fine tune the results of the computer modeling efforts.¹.

Photographic simulations were originally prepared to depict scaled renderings of the proposed Facility, at a height of ±95 feet AGL. Three (3) of the original seven (7) locations where the balloon was visible during the May 2019 field reconnaissance have been reproduced herein to portray the reduced height of the Facility. The Facility would no longer be visible from the other four (4) locations for which simulations were presented in the September Petition. The revised simulations are presented in the attachment to this report.

APT also re-calculated the visibility of the proposed Facility at the reduced height of 80 feet AGL. The revised viewshed maps are provided in the attachment to this report.

¹ The balloon float consisted of raising a brightly colored, ±4-foot diameter, helium-filled balloon tethered to a string height of ±95 feet AGL, the original height proposed for the Facility; the bottom of the balloon represented the top of the proposed monopole. The balloon was flown from the ground approximately 30 feet from the proposed Facility rooftop location. The photographic simulations were generated taking this factor into account and adjusted accordingly, thereby depicting the proposed Facility in its proposed location.

The 15-foot reduction in height further reduces visibility of the proposed Facility within the Site vicinity. The views are primarily restricted to the Route 80 commercial corridor within approximately 0.75 mile west of the Site. Areas from where the Facility would be visible comprise ± 6 acres of year-round visibility and ± 24 acres of seasonal visibility. As seen on the viewshed maps, the majority of views beyond the Host Property would be seasonal in nature. Further, those views would be obscured by intervening tree canopy. The combination of the proposed Facility's reduced height and presence of mature trees in the immediate area of the Host Property serves to minimize the extent of overall visibility.

Limitations

The viewshed maps presented in the attachment to this report depict areas where the proposed Facility may potentially be visible to the human eye without the aid of magnification based on a viewer eye-height of 5 feet above the ground and intervening topography. This analysis may not account for all visible locations, as it is based on the combination of computer modeling, incorporating aerial photographs, and in-field observations from publicly-accessible locations. No access to private properties was provided to APT personnel. This analysis does not claim to depict the only areas, or all locations, where visibility may occur; it is intended to provide a representation of those areas where the Facility is likely to be seen.

The photo-simulations provide a representation of the Facility under similar settings as those encountered during the field review and reconnaissance. Views of the Facility can change throughout the seasons and the time of day, and are dependent on weather and other atmospheric conditions (e.g., haze, fog, clouds); the location, angle and intensity of the sun; and the specific viewer location. Weather conditions on the day of the field review included partly cloudy skies.

ATTACHMENTS



PHOTO LOG

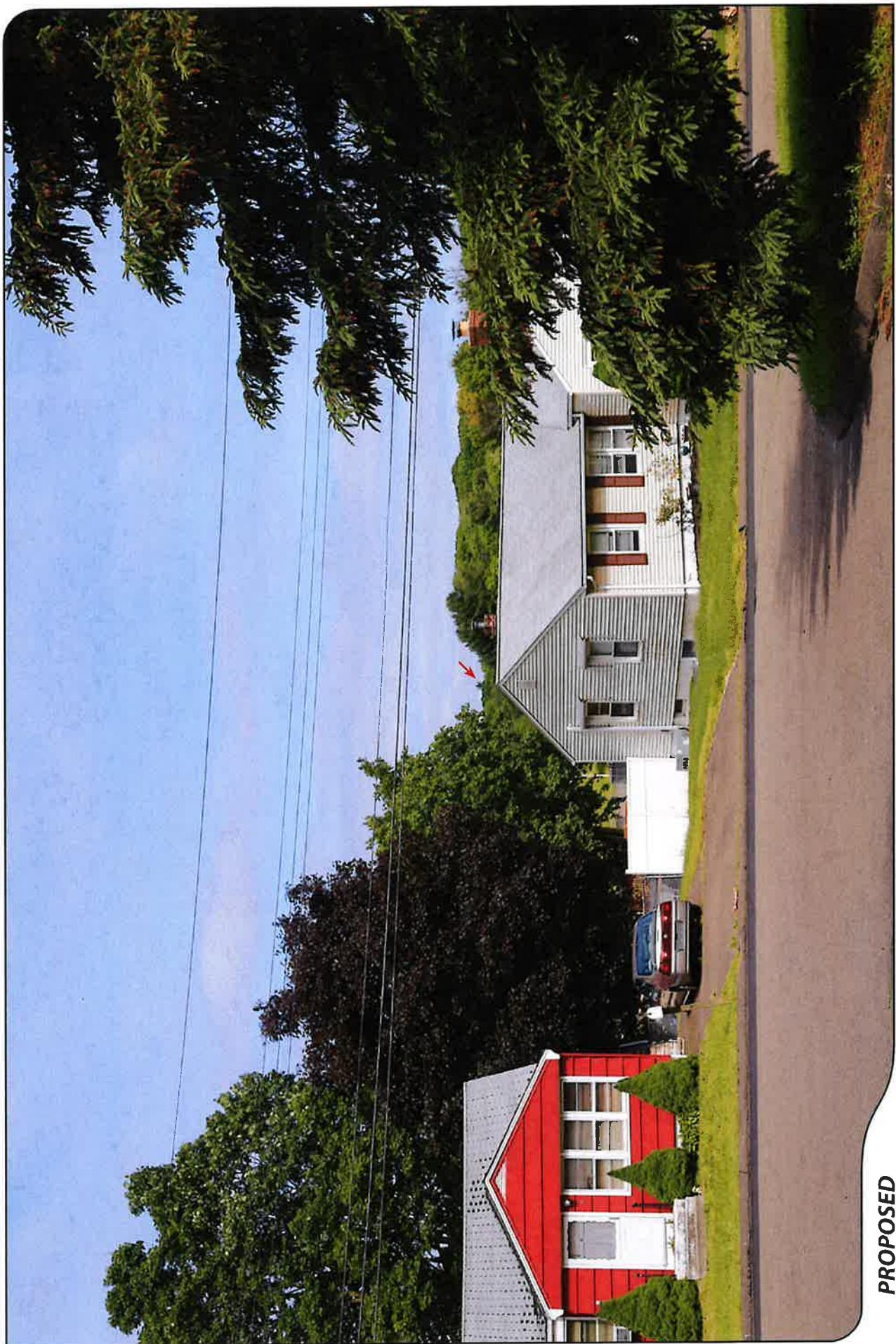
Legend
■ Site ● Visible

1 inch = 500 feet
0 500
250 500



ALL-POINTS
TECHNOLOGY CORPORATION

verizon



PROPOSED

PHOTO

20

LOCATION

ROCK STREET AT CECILIA DRIVE

ORIENTATION

NORTHWEST

DISTANCE TO SITE

+/- 0.48 MILE

VISIBILITY

VISIBLE



verizon



PROPOSED

PHOTO

23

LOCATION

KENNEDY MEMORIAL FIELD

ORIENTATION

NORTHWEST

DISTANCE TO SITE

+/- 0.43 MILE

VISIBILITY

VISIBLE



PROPOSED

PHOTO 30

HOST PROPERTY

LOCATION

ORIENTATION

DISTANCE TO SITE

VISIBILITY

SOUTH

+/- 215 FEET

VISIBLE



verizon



Viewshed Analysis Map

Proposed Wireless Telecommunications Facility
East Haven N CT
1270 North High Street
East Haven, Connecticut

Proposed facility height is 80 feet AGL.
Forest canopy height is derived from LiDAR data.
Study area encompasses a 1-mile radius and includes 8,042 acres.
Base Map Source: USGS 7.5 Minute Topographic Maps, Branford, CT (1987)
and New Haven, CT (1984)
Map Date: October 2019

Legend

- Proposed Site
- Study Area (2 Mile Radius)
- Predicted Year-Round Visibility (8 Acres)
- Areas of Potential Seasonal Visibility (24 Acres)
- Municipal Boundary
- Trail
- Scenic Highway
- DEEP Boat Launches
- Municipal and Private Open Space Property
- State Forest/Park

Data Sources:

Planning Geography Data Sources

A digital surface model (DSM) was created from the State of Connecticut 2016 LiDAR LAS data points. The DSM depicts the natural and built features on the Earth's surface.
Municipal, Open Space, State Recreational Areas, Towns, County Recreational Areas, and Town Boundary data obtained from CT DEEP.
Scenic Roads, CT DOT State Scenic Highways (2015), Municipal Scenic Roads (compiled by UFGI).

Other Open Space & Recreational Areas

Connecticut Department of Energy and Environmental Protection (DEEP), DEEP Priority, May 2007, Federal Open Space (1987), Municipal and Private Open Space (1987), DEEP Boat Launches (1994)

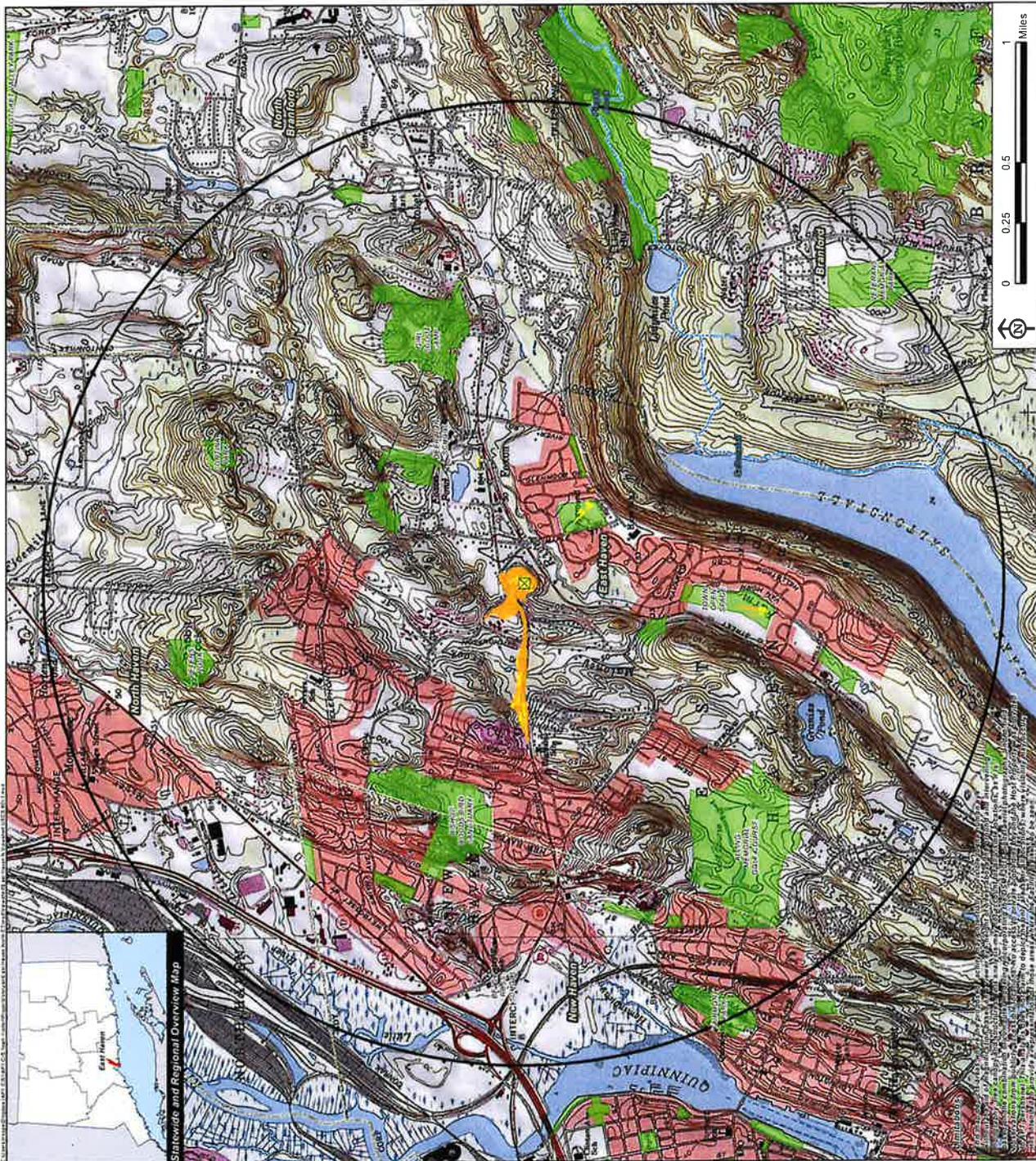
Other

CTDOI Scenic Byways (based on Department of Transportation data)

Notes:
*Not all the sources listed above appear on the Viewshed Maps. Only those features within the

area of the graphic are shown

verizon





Viewshed Analysis Map

Proposed Wireless Telecommunications Facility

East Haven N CT

1270 North High Street
East Haven, Connecticut

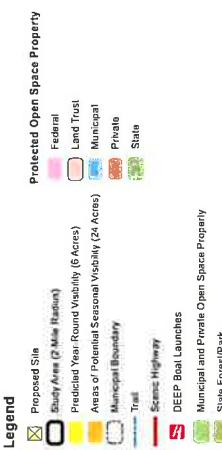
Proposed facility height is 80 feet AGL.

Forest canopy height is derived from LiDAR data.

Study area encompasses a 1-mile radius and includes 8.042 acres.

Base Map Source: 2016 Aerial Photograph (CTECC)

Map Date: October 2019



Data Sources:

Physical Geography / Infrastructure Data

A digital surface model (DSM) was created from the State of Connecticut 2016 LiDAR LAS data points. The DSM captures the natural and built features on the Earth's surface.

Municipal Open Space, State Recreational Areas, Town, County Parks, and Rivers boundary data obtained from CT DEEP.

Scenic Roads, CTDOT State Recreational Areas (2015), Municipal State Roads (2015), Municipal State Parks (as of 1/1/17)

Connecticut Open Space & Recreational Areas

Connecticut Department of Energy and Environmental Protection (DEEP), DEEP Property, 1 May 2007, Federal Open Space (1997), Municipal and Private Open Space (1997), DEEP Boat Launches (1994)

Connecticut Forest & Parks Association, Connecticut Walk Books, East & West

Other, CTDOT Scenic Spots (based on Department of Transportation data)

Notes: *Not all sources listed above apply within the Viewshed. Only those features within the scale of the graphic are shown.

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