

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

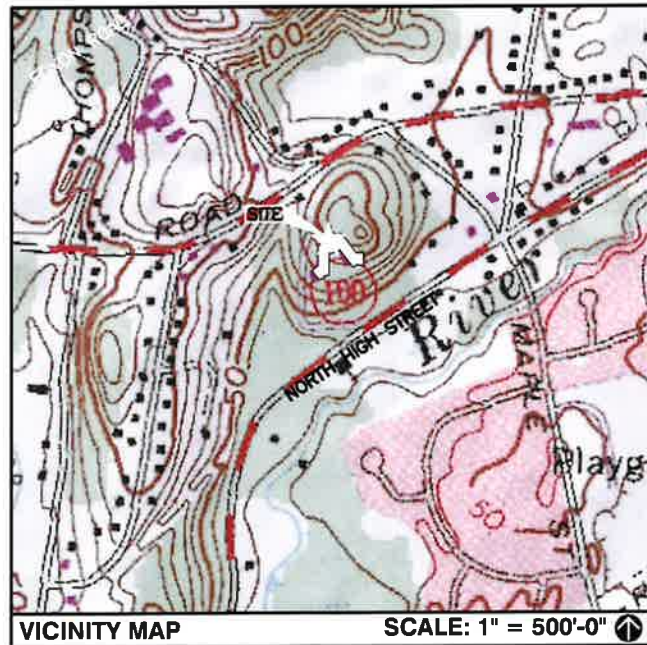
CELLCO PARTNERSHIP

d.b.a. **verizon** ✓

WIRELESS COMMUNICATIONS FACILITY

EAST HAVEN N CT

1270 NORTH HIGH STREET
EAST HAVEN, CT 06512



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/MIDDLETOWN AVE IN NEW HAVEN.
 TAKE EXIT 8 FROM I-91 S
 MERGE ONTO I-91 S
 TAKE EXIT 8 FOR CT-17/MIDDLETOWN 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/MIDDLETOWN 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

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

SCOPE OF WORK INFO.	
VERIZON WIRELESS IS PROPOSING TO INSTALL THE FOLLOWING:	
<ul style="list-style-type: none"> NEW PANEL ANTENNAS: (2) ANTENNAS PER SECTOR WITH (3) SECTORS, FOR A TOTAL OF (6) ANTENNAS. NEW RRRs: (2) RRRs PER SECTOR WITH (3) SECTORS, FOR A TOTAL OF (6) RRRs 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.	
<ul style="list-style-type: none"> 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.	
<ul style="list-style-type: none"> POWER AND TELCO UTILITIES DEPICTED HERE IN ARE TENTATIVE. FINAL ROUTING TO BE DETERMINED DURING THE CONSTRUCTION DOCUMENT PHASE OF THE PROJECT. 	

PREPARED FOR: CELLCO PARTNERSHIP D.B.A.

verizon ✓

HGD
HUDSON
Design Group LLC

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



Daniel P. Hamar

CHECKED BY: DJR

APPROVED BY: DPH

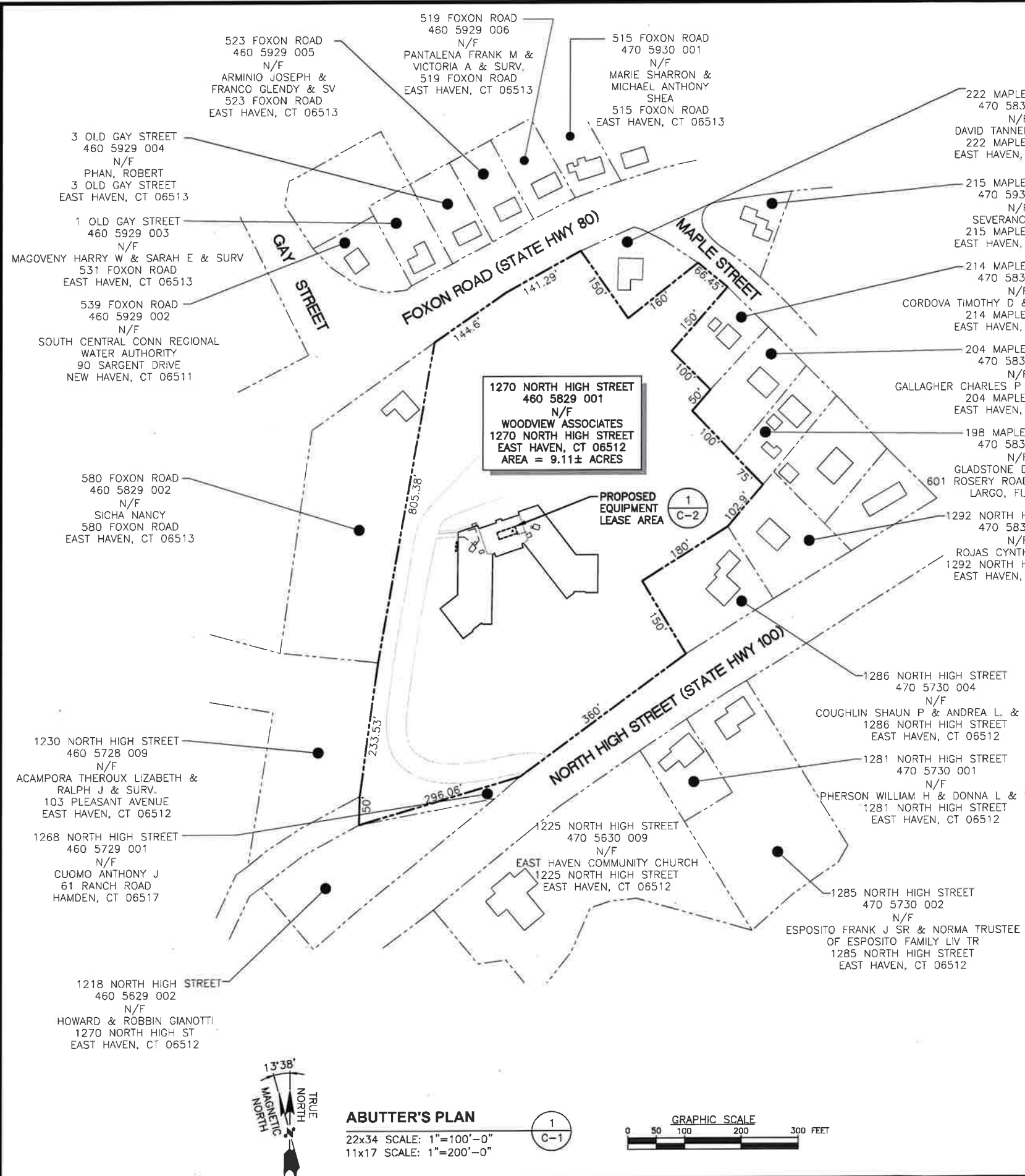
SUBMITTALS			
REV.	DATE	DESCRIPTION	BY
4	7/31/19	REVISED PER COMMENTS	SLY
3	06/13/19	REVISED PER COMMENTS	SLY
2	05/10/19	REVISED PER COMMENTS	SLY
1	09/20/18	REVISED MOUNT	KAM
0	09/14/17	ISSUED FOR REVIEW	SF

SITE NAME:
EAST HAVEN N CT

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

SHEET TITLE
TITLE SHEET

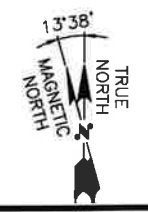
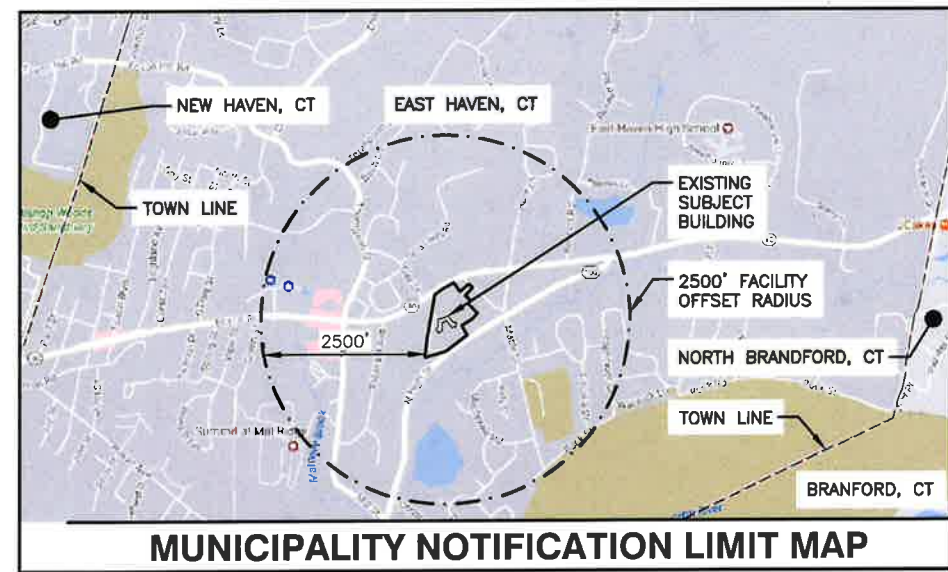
SHEET NUMBER
T-1



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
[Symbol] (E) BUILDING
XXX-XX ASSESSORS MAP-BLOCK-LOT NO.



ABUTTER'S PLAN
22x34 SCALE: 1"=100'-0"
11x17 SCALE: 1"=200'-0"



PREPARED FOR: CELCO PARTNERSHIP D.B.A.
verizon

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

Professional Engineer Seal for Daniel P. Hamar, State of Connecticut, License No. 102,417.

CHECKED BY: DJR
APPROVED BY: DPH

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
4	7/31/19	REVISED PER COMMENTS	SJY
3	06/13/19	REVISED PER COMMENTS	SJY
2	05/10/19	REVISED PER COMMENTS	SJY
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:
ABUTTERS PLAN

SHEET NUMBER:
C-1



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



Daniel P. Hamer

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:

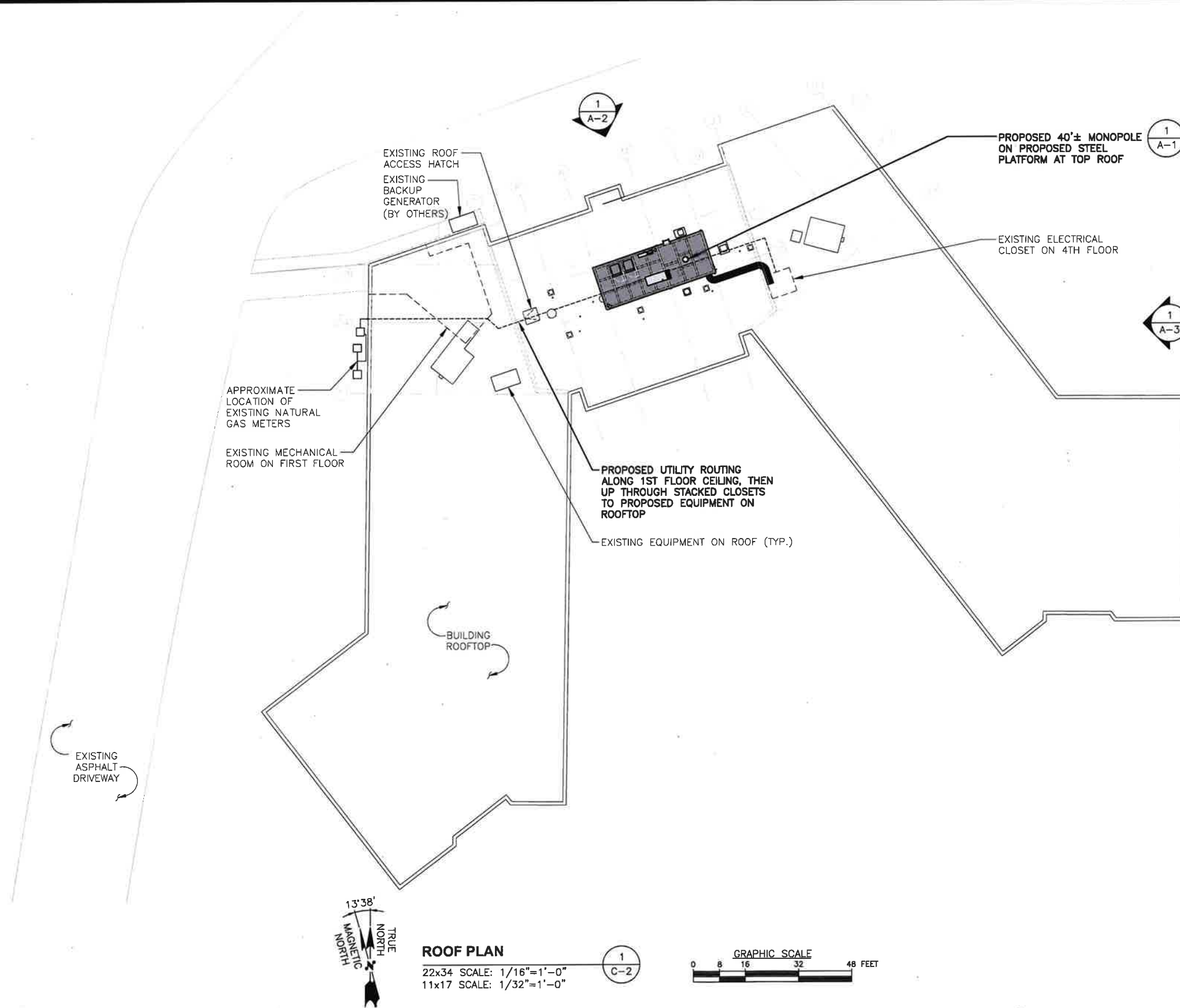
1270 NORTH HIGH STREET
EAST HAVEN, CT 06512

SHEET TITLE

SITE PLAN

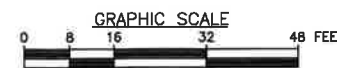
SHEET NUMBER

C-2



ROOF PLAN

22x34 SCALE: 1/16"=1'-0"
11x17 SCALE: 1/32"=1'-0"



1
C-2



Daniel P. Hamar

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	05/10/18	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

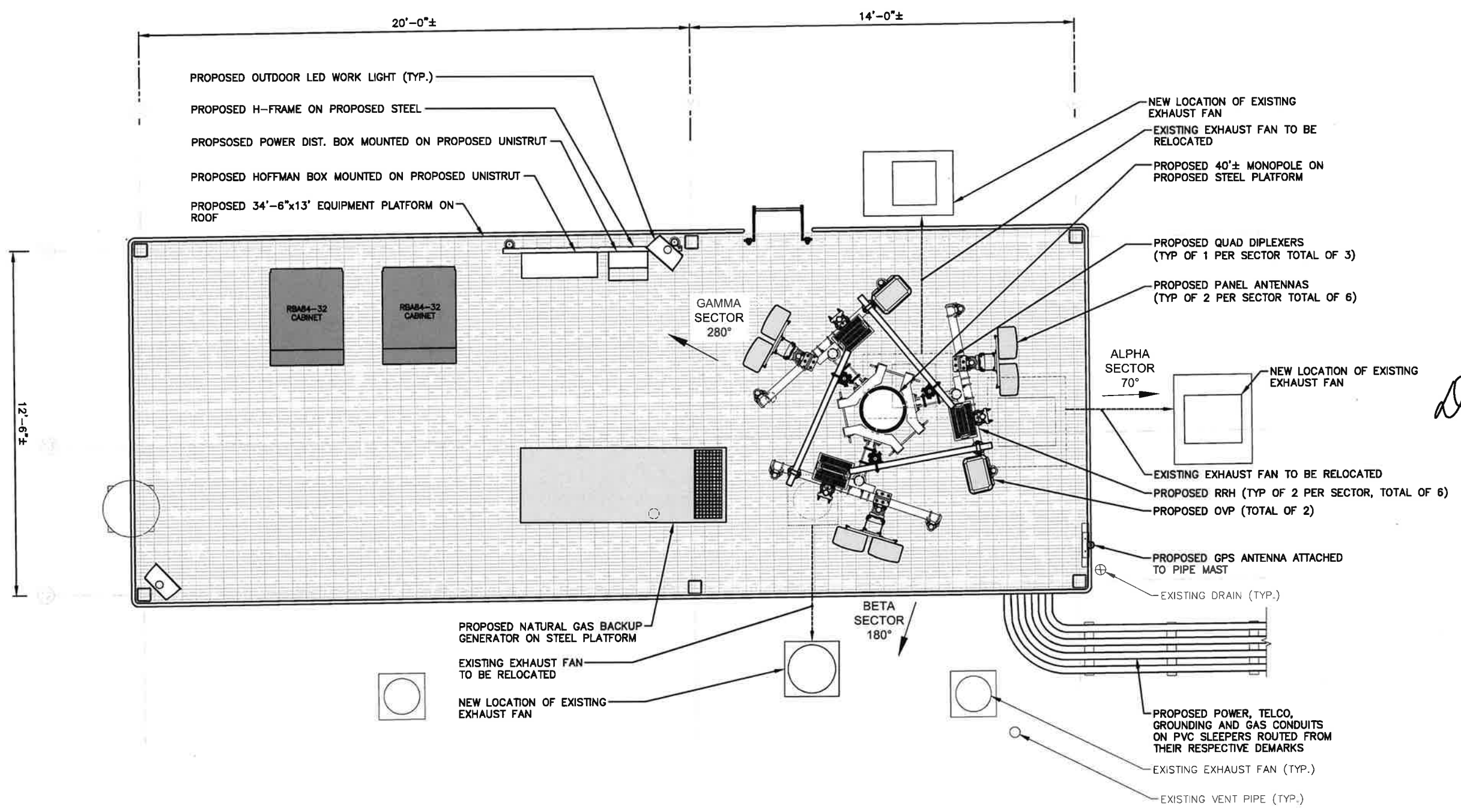
SITE ADDRESS:
1270 NORTH HIGH STREET
EAST HAVEN, CT 06512

SHEET TITLE

EQUIPMENT PLAN

SHEET NUMBER

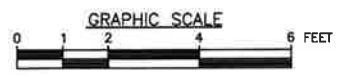
A-1



EQUIPMENT PLAN

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

1
A-1



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)



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



Daniel P. Haman

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:

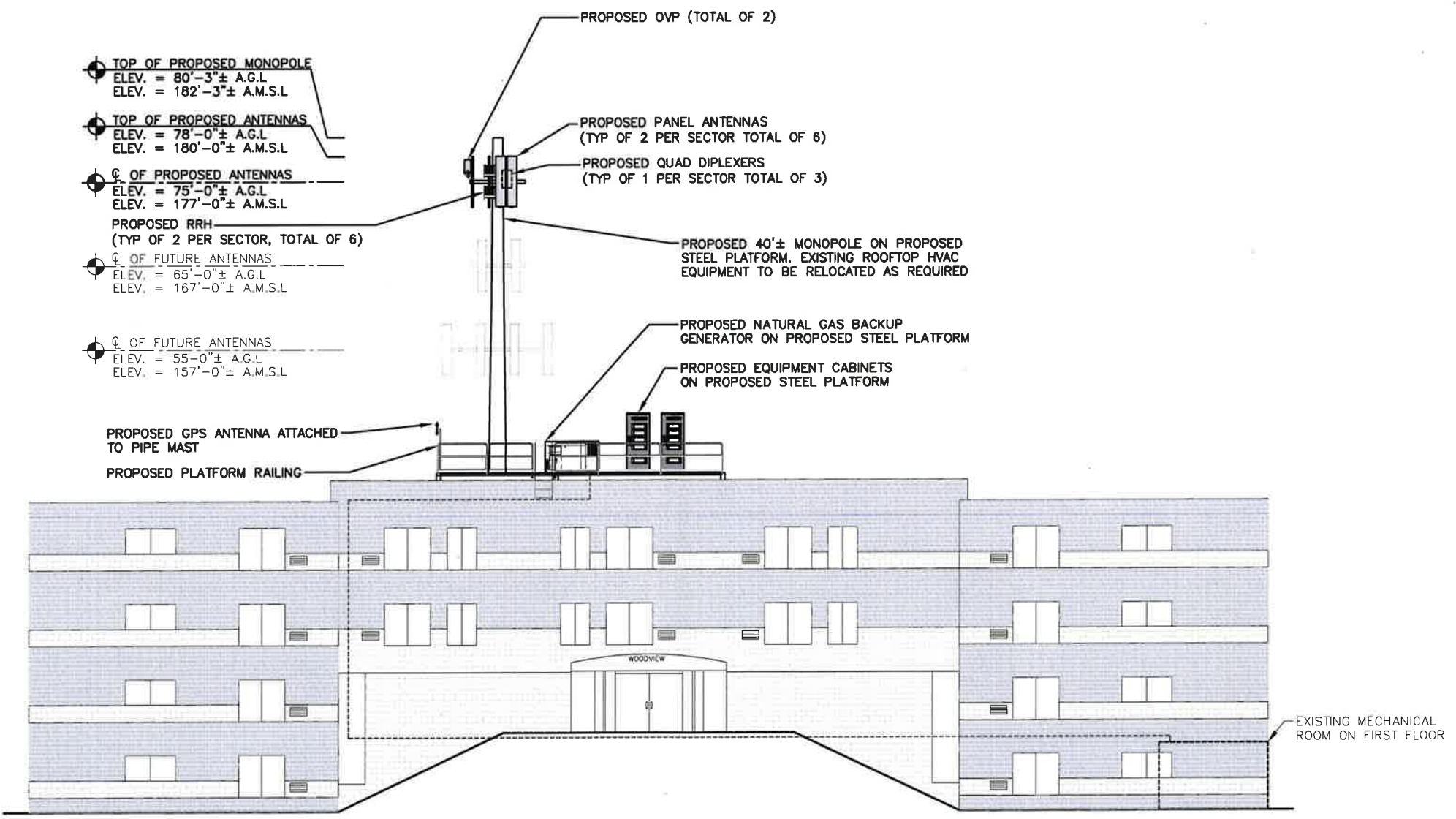
1270 NORTH HIGH STREET
EAST HAVEN, CT 06512

SHEET TITLE

ELEVATION

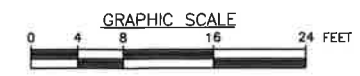
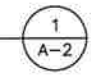
SHEET NUMBER

A-2



NORTHWEST ELEVATION

22x34 SCALE: 1/8"=1'-0"
11x17 SCALE: 1/16"=1'-0"



- TOP OF PROPOSED MONOPOLE
ELEV. = 80'-3"± A.G.L.
ELEV. = 182'-3"± A.M.S.L.
- TOP OF PROPOSED ANTENNAS
ELEV. = 78'-0"± A.G.L.
ELEV. = 180'-0"± A.M.S.L.
- C. OF PROPOSED ANTENNAS
ELEV. = 75'-0"± A.G.L.
ELEV. = 177'-0"± A.M.S.L.
- PROPOSED RRH
(TYP OF 2 PER SECTOR, TOTAL OF 6)
- C. OF FUTURE ANTENNAS
ELEV. = 65'-0"± A.G.L.
ELEV. = 167'-0"± A.M.S.L.

- TOP OF PROPOSED STEEL PLATFORM
ELEV. = 40'-3"± A.G.L.
ELEV. = 142'-3"± A.M.S.L.
- TOP OF EXISTING PARAPET
ELEV. = 39'-5"± A.G.L.
ELEV. = 141'-5"± A.M.S.L.
- TOP OF ROOF
ELEV. = 37'-3"± A.G.L.
ELEV. = 139'-3"± A.M.S.L.

- EXISTING GRADE
ELEV. = 0'-0"± A.G.L.
ELEV. = 102'-0"± A.M.S.L.

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)



Daniel P. Hamer

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:

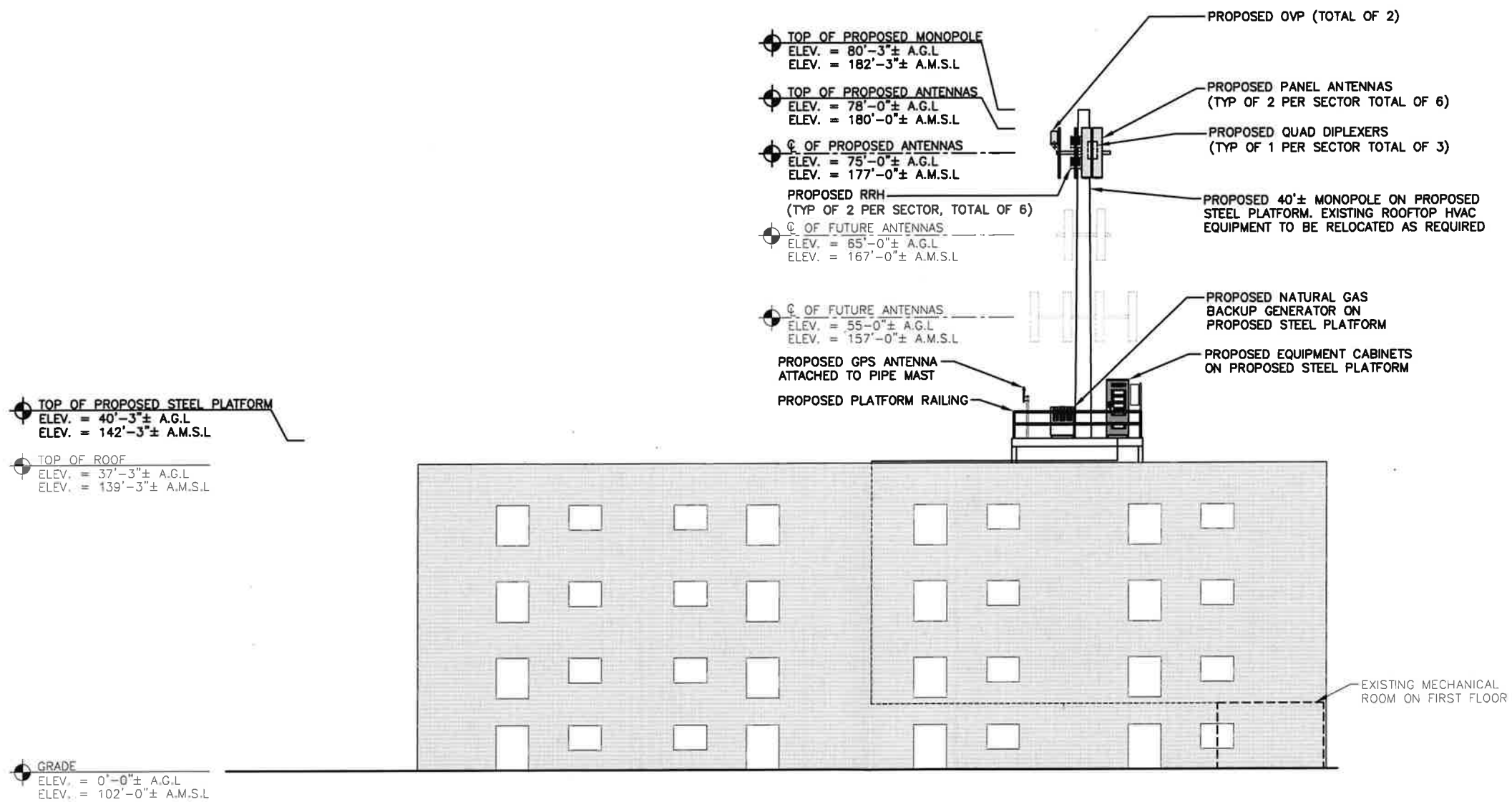
1270 NORTH HIGH STREET
EAST HAVEN, CT 06512

SHEET TITLE

ELEVATION

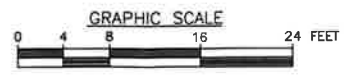
SHEET NUMBER

A-3



NORTHEAST ELEVATION
22x34 SCALE: 1/8"=1'-0"
11x17 SCALE: 1/16"=1'-0"

1
A-3



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)

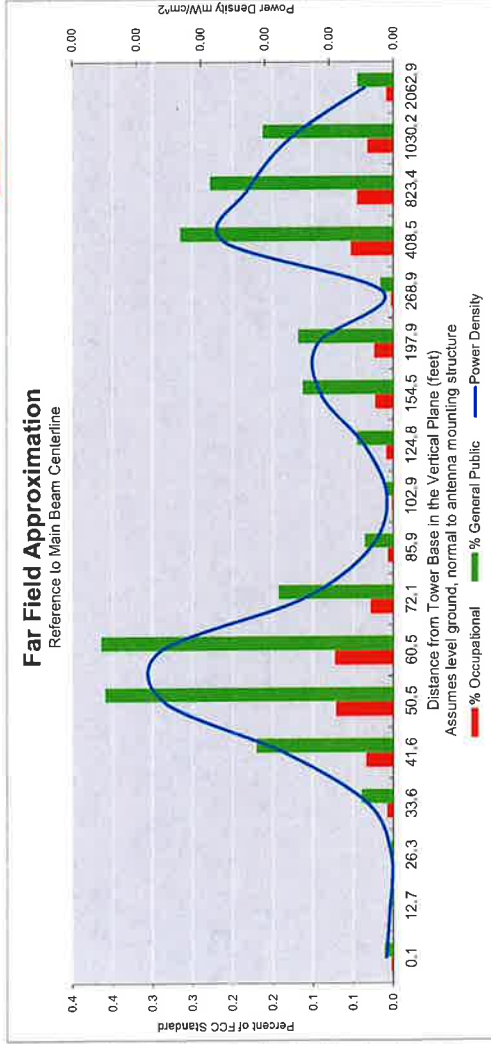
ATTACHMENT 2

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 Cheiban
File Name:	
Operating Freq. (MHz):	746.0
Antenna Height (ft):	75.0
Antenna Gain (dBi):	14.4
Antenna Size (in.):	72.0
Downtilt (degrees):	0.0
Feedline 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, 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	1092.7	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)	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
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	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	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	0.0	0.1	0.1	0.0	0.3	0.2	0.2	0.0

Antenna Type: J4HH-65B-R3B

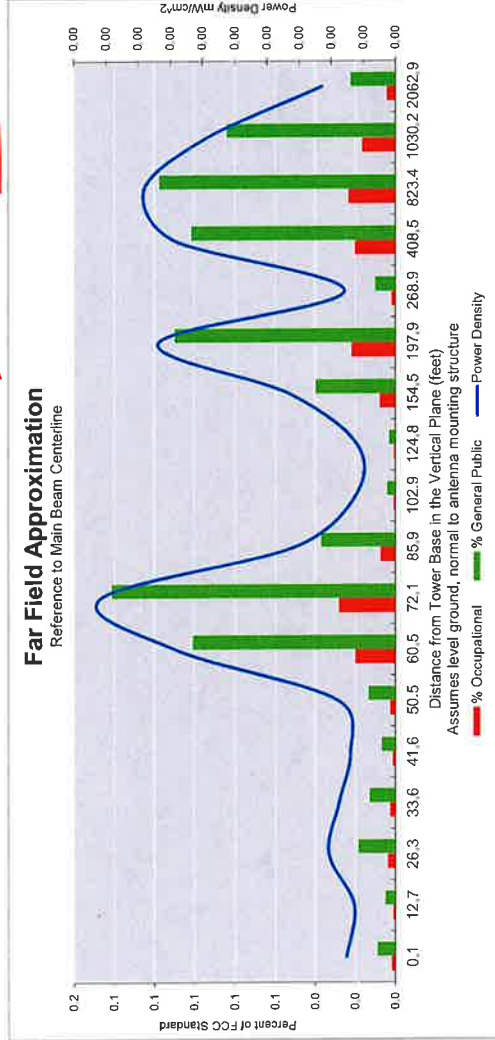
Max%: 0.36%

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):	869.0
Antenna Height (ft):	75.0
Antenna Gain (dBi):	15.0
Antenna Size (in.):	72.0
Downtilt (degrees):	0.0
Feedline Loss (dB):	0.0
Tx Power (W):	80.0
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, 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)	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/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	0.0	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	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.0

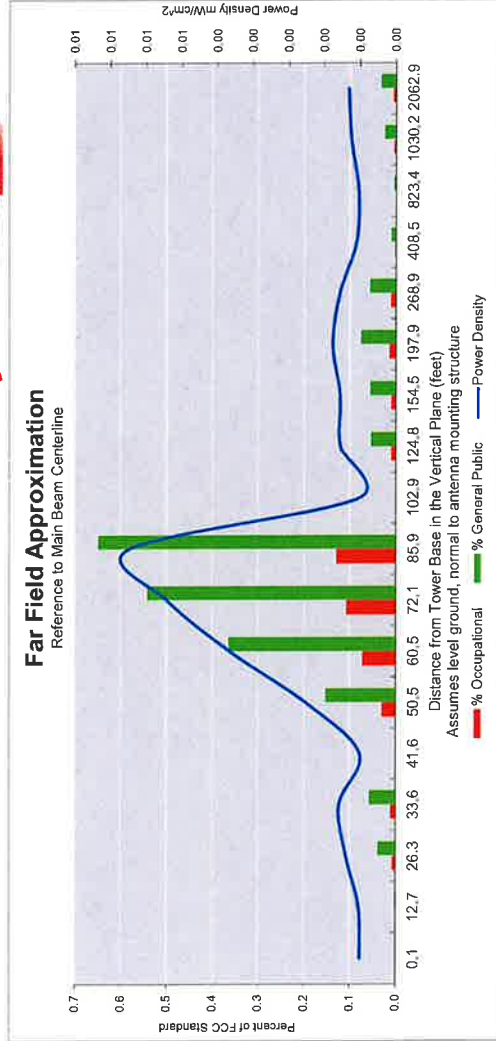
Antenna Type: JAHH-65B-R3B
Max%: 0.14%

Far Field Approximation
with downtilt variation

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



Location:	East Haven North CT
Site #:	2-0696
Date:	10/07/19
Name:	Ziad Cheibani
File Name:	
Operating Freq. (MHz):	1970.0
Antenna Height (ft):	75.0
Antenna Gain (dBi):	17.9
Antenna Size (in.):	72.0
Downtilt (degrees):	0.0
Feedline 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, 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/cm ²)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	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	0.1	0.1	0.1	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	0.1	0.0	0.2	0.4	0.5	0.6	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0

Antenna Type: JAHH-65B-R3B

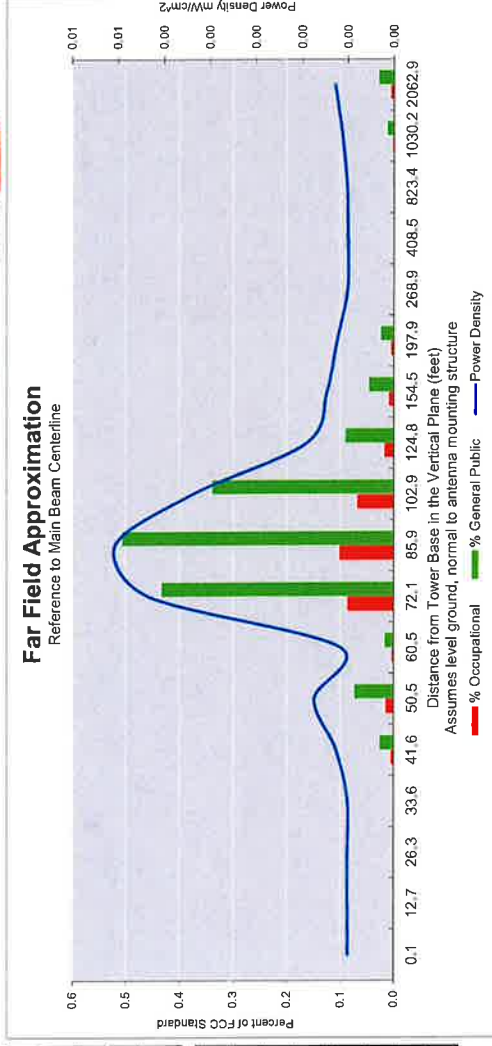
Max%: 0.65%

Far Field Approximation
with downtilt variation

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



Location:	East Haven North CT
Site #:	2-0696
Date:	10/07/19
Name:	Ziad Chelban
File Name:	
Operating Freq. (Mhz):	2145.0
Antenna Height (ft):	75.0
Antenna Gain (dbi):	17.9
Antenna Size (in.):	72.0
Downtilt (degrees):	0.0
Feedline 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, 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)	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/cm²)	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	0.1	0.1	0.1	0.1	0.1	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	0.1	0.0	0.4	0.5	0.3	0.1	0.0	0.0	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





PROPOSED

PHOTO
20

LOCATION
ROCK STREET AT CECELIA DRIVE

ORIENTATION
NORTHWEST

DISTANCE TO SITE
+/- 0.48 MILE

VISIBILITY
VISIBLE





PROPOSED

PHOTO

23

LOCATION

KENNEDY MEMORIAL FIELD

ORIENTATION

NORTHWEST

DISTANCE TO SITE

+/- 0.43 MILE

VISIBILITY

VISIBLE





PROPOSED

PHOTO

30

LOCATION

HOST PROPERTY

ORIENTATION

SOUTH

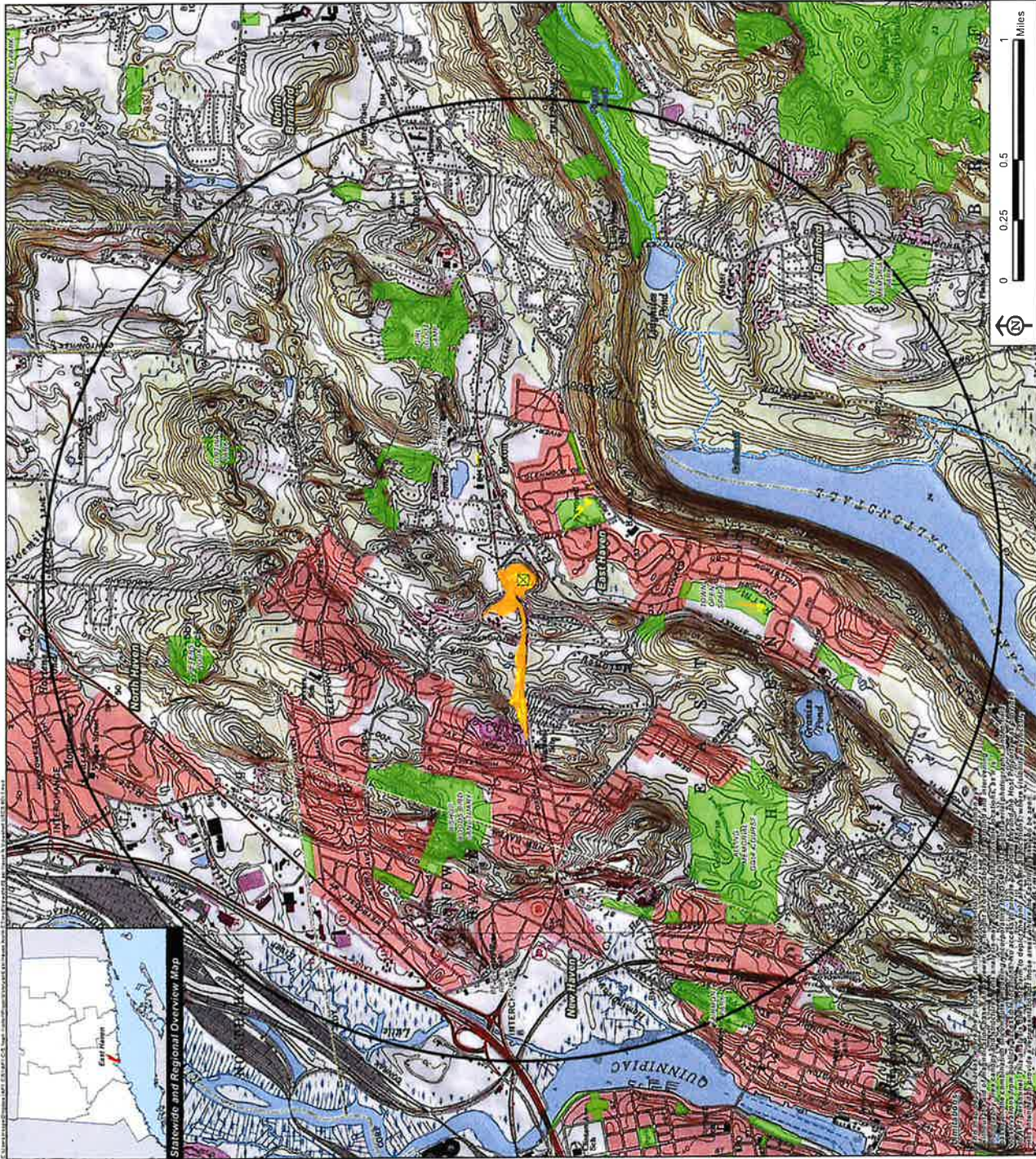
DISTANCE TO SITE

+/- 215 FEET

VISIBILITY

VISIBLE





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 two-mile radius and includes 8,042 acres.
Base Map. Source USGS 7.5 Minute Topographic Quadrangle 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 (6 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
- Protected Open Space Property**
 - Federal
 - Land Trust
 - Municipal
 - Private
 - State

Data Sources:

Physical Geographic/Management Data
A digital vector map (DSM) was acquired from the State of Connecticut 2016 LIDAR LAS data points. The DSM captures the return and built features on the Earth's surface.
Municipal Open Space, State Reservations Areas, Trails, County Reservations Areas, and Town Boundary data obtained from CT DEEP
Scenic Roads, CT DOT State Scenic Highways (2013), Municipal Scenic Roads (compiled by APT)

Qualified Open Space & Recreation Areas

Scenic (Determination on Energy and Environmental Impacts) (DEEP) DEEP Property (May 2007), Federal Open Space (1987), Municipal Open Space (1987), DEEP Boat Launches (1984), Connecticut Forest & Parks Association, Connecticut Walk Bikes Eats & Vets

Other

CTDOT Scenic Strips (based on Department of Transportation data)

Notes

*Not all the sources listed above appear on the Viewshed Map. Only those features within the scope of the graphic are shown.





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 two-mile radius and includes 8,042 acres.
Base Map Source: 2019 Aerial Photograph (CTECCO)
Map Date: October 2019

- Legend**
- Proposed Site
 - Study Area (2 Mile Radius)
 - Predicted Year-Round Visibility (6 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
 - Protected Open Space Property - Federal
 - Land Trust
 - Municipal
 - Private
 - State

Data Sources:

Physical Geography/Background Data
Aerial (color, not DSM) was sourced from the State of Connecticut 2018 LIDAR LAS data points. The DSM captures the height and built features on the Earth's surface.
National Open Spaces, State Reservations Area, Title, County Reservations Area, and Town Boundary data obtained from CT DEEP.
Scenic Roads, CT DOT State Scenic Highway (2015), Municipal Scenic Roads (compiled by ART)

Protected Open Spaces & Description Areas

Connecticut Department of Energy and Environmental Protection (DEEP), DEEP Property (May 2027), Federal Open Spaces (CTECCO), Connecticut Department of Transportation (DOT) Property (1994), Connecticut Forest & Police Association, Connecticut Walk Bows East & West

Other:
CTDOT Scenic Signs (based on Department of Transportation data)

Notes:
Viewshed analysis shown appears on the Viewshed Maps. City Photo features within the scale of the graphic are shown.

verizon

