



CITY OF BEACON, NEW YORK
ONE MUNICIPAL PLAZA
BEACON, NY 12508

Mayor Randy Casale
Councilmember Lee Kyriacou, At Large
Councilmember George Mansfield, At Large
Councilmember Terry Nelson, Ward 1
Councilmember John E. Rembert, Ward 2
Councilmember Jodi M. McCredo, Ward 3
Councilmember Amber J. Grant, Ward 4
City Administrator Anthony Ruggiero

City Council Workshop Agenda
March 11, 2019
12:00 AM

Workshop Agenda Items:

1. NYCLASS and the City of Beacon
2. Ball Field Dedication
3. 110 Howland Avenue Verizon Wireless
4. Revised Use of Dimensional Tables
5. Parking and Parking Meters
6. Main Street Pedestrian Improvements
7. Recreation Committee Application
8. Phillips Street Reconstruction
9. Sign Local Law

Executive Session:

1. Advice of Counsel
2. Real Estate
3. Personnel
4. Discussion of Sale/Purchase of Real Property

City of Beacon Workshop Agenda
3/11/2019

Title:

NYCLASS and the City of Beacon

Subject:

Background:

ATTACHMENTS:

Description	Type
NYCLASS Features and Benefits	Backup Material
NY Cooperative Liquid Assets Security System Pool Profile	Backup Material
Cooperation Resolution	Resolution

NYCLASS[®]

New York Cooperative Liquid Asset Securities System

What is NYCLASS?

New York Cooperative Liquid Assets Securities System (NYCLASS) is a short-term, highly liquid investment fund designed specifically for the public sector. NYCLASS provides the opportunity to invest funds on a cooperative basis in short-term investments that are carefully chosen to yield favorable returns while providing maximum safety and liquidity.

Who oversees and manages NYCLASS?

In accordance with New York State GML Article 3-A Section 44, the Municipal Cooperation Agreement is administrated by an elected Governing Board (the Board) of 15 members. A Board member must be either a Participant's Chief Fiscal Officer, another designated officer, or employee of the Participant who has knowledge and expertise in financial matters. The Board retains the services of Public Trust Advisors, LLC (Public Trust) located in Denver. Public Trust serves as the investment Advisor and provides administrative and marketing services for NYCLASS.

How can you participate in NYCLASS?

Enrolling in NYCLASS is simple. After reading the Municipal Cooperative Agreement and Information Statement (available at www.newyorkclass.org), follow these steps:

- 1 Pass a resolution approving the NYCLASS Municipal Cooperative Agreement
- 2 Complete the NYCLASS Trust Registration Form
- 3 Submit the above documents to NYCLASS Client Services
- 4 After we review and approve the above documents, you will receive confirmation that you have been accepted as a NYCLASS Participant.

What Features Does NYCLASS Offer?

As a NYCLASS Participant, you have access to many convenient features:

- Same-day availability of funds
12:00 p.m. EST cut-off
- Deposits by wire or ACH
- Secure online access for transactions and account statements
- Professionally managed portfolio
- Competitive daily rates
- Unlimited sub-accounts
- No minimum balance requirements
- No transaction fees*
- Audited annually by an independent auditing firm**
- Direct deposit of state and federal payments
- Dedicated client service representatives available via phone, fax, or email on any business day

*You may incur fees associated with wires and/or ACH transactions by your bank, but there will be no fees charged from NYCLASS for such transactions. **External audits may not catch all instances of accounting errors and do not provide an absolute guarantee of accuracy.



What are the objectives of NYCLASS?

Safety

Besides investing public-sector funds only in securities legally permitted under New York law, an emphasis on safety has helped NYCLASS earn S&P Global Ratings highest money market rating: 'AAAm.' The custodian for all NYCLASS cash and securities is Wells Fargo Bank, N.A. Additionally, NYCLASS has an annual audit by an independent, outside auditing firm. Only designated officials may conduct transactions, and funds may be transferred only to previously authorized bank accounts.

Liquidity

Participants may conduct transactions (deposits, withdrawals, or transfers) on any business day. All portfolio investments are carefully selected to ensure that cash is available whenever needed. There is never a penalty for withdrawals of invested funds including all accrued interest. There are no limits on the dollar amount or number of daily transactions except that total daily withdrawals may not exceed the total balance on deposit. There is no minimum balance or transaction size requirement.

Convenience

To make cash management simple and efficient, NYCLASS includes many features that make it easy to access account information and simplify record keeping. Participants may make account transactions on any business day using the NYCLASS toll-free phone number

(855) 804-9980, toll-free fax number (855) 804-9981, email (clientservices@newyorkclass.org), or via the MYACCESS online transaction portal at www.newyorkclass.org.

Flexibility

You may establish multiple NYCLASS accounts to track and parallel your own internal fund accounting structures. You will receive comprehensive monthly statements online or via e-mail that show all of your transaction activity, interest postings, and rate summaries. These statements have been specifically designed to facilitate public-sector fund accounting and to establish a clear accounting and audit trail for your investment records.

Competitive Returns

NYCLASS Participants can benefit from the professional investment expertise provided by Public Trust. Participants in the NYCLASS fund can take advantage of economies of scale relative to purchasing power, transaction, and clearance costs as well as custody arrangements. Overall portfolio performance is enhanced by the different cash flow cycles of the various Participants.

Legality

NYCLASS invests in only in investments legally permitted under New York State Law.

Have Questions?

Contact us or visit www.newyorkclass.org for more information.

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Administrator

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(914) 301-4070

Joel Friedman

Director, Investment Advisory Services

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(646) 285-3280

Shawn Cullinane

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(917) 765-2757

Lyn Derway

Regional Director, Marketing

lyn.derway@newyorkclass.org
(917) 794-2670

New York Cooperative Liquid Assets Securities System

Principal Stability Fund Ratings Definitions

AAAm A fund rated 'AAAm' demonstrates extremely strong capacity to maintain principal stability and to limit exposure to principal losses due to credit risk. 'AAAm' is the highest principal stability fund rating assigned by S&P Global Ratings

AAm A fund rated 'AAm' demonstrates very strong capacity to maintain principal stability and to limit exposure to principal losses due to credit risk. It differs from the highest-rated funds only to a small degree.

Am A fund rated 'Am' demonstrates strong capacity to maintain principal stability and to limit exposure to principal losses due to credit risk, but is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than funds in higher-rated categories

BBBm A fund rated 'BBBm' demonstrates adequate capacity to maintain principal stability and to limit exposure to principal losses due to credit risk. However, adverse economic conditions or changing circumstances are more likely to lead to a reduced capacity to maintain principal stability.

BBm A fund rated 'BBm' demonstrates speculative characteristics and uncertain capacity to maintain principal stability. It is vulnerable to principal losses due to credit risk. While such funds will likely have some quality and protective characteristics, these may be outweighed by large uncertainties or major exposures to adverse conditions.

Dm A fund rated 'Dm' has failed to maintain principal stability resulting in a realized or unrealized loss of principal.

Plus (+) or Minus (-)
The ratings may be modified by the addition of a plus (+) or minus (-) sign to show relative standing within the rating categories.

About the Pool

Pool Rating

AAAm

Pool Type

Stable NAV Government Investment Pool

Investment Adviser

Public Trust Advisors, LLC

Portfolio Manager

Randy Palomba, CFA & Neil Waud, CFA

Pool Rated Since

March 2009

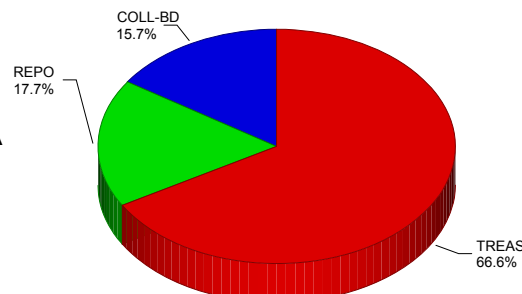
Custodian

Wells Fargo Bank N.A.

Distributor

Public Trust Advisors, LLC (Public Trust)

Portfolio Composition as of September 25, 2018



TREAS - Treasury; REPO - Repurchase Agreement; COLL-BD - Collateralized - Bank Deposits; GOV-AGCY - Agency and Government

Rationale

New York Cooperative Liquid Assets Securities System (NYCLASS) is rated 'AAAm' by S&P Global. The rating signifies our forward-looking opinion about a fixed-income fund's ability to maintain principal value (i.e., stable net asset value, or 'NAV'). This is accomplished through conservative investment practices and strict internal controls. Standard & Poor's monitors the portfolio on a weekly basis.

Overview

NYCLASS was established on September 19, 1989 as a cooperative investment program organized under a municipal cooperation agreement made pursuant to New York General Municipal Law. NYCLASS is a short-term, highly-liquid investment vehicle designed specifically for public sector funds. It enables Participants to invest on a cooperative basis in short-term investments that are selected to yield favorable returns while they provide maximum safety and liquidity. Participation is available to any municipal corporation or special purpose district as defined by New York General Municipal Law to include counties, cities, towns, villages, school districts, fire districts, and boards of cooperative educational services. The objectives of NYCLASS are to invest in only investments that are legally permissible for all Participants, provide safety for Participants' principal, ensure liquidity as required to finance Participants' operations, and maximize current income to the degree consistent with legality, safety, and liquidity.

Management

The investment advisor for NYCLASS is Public Trust Advisors, LLC (Public Trust), an SEC registered investment advisor. The administrative, marketing and operational functions of the portfolio are also performed by Public Trust. The Cooperative is subject to the general supervision of the Governing Board. The Governing Board is elected by NYCLASS Participants and is composed by members who are active Participants in the Cooperative. Wells Fargo Bank, NA serves as the custodian to the cooperative's assets.

Portfolio Assets

The cooperative is actively managed and invests exclusively in investments legally permissible for New York State school districts and municipal corporations. These permissible investments include: U.S. Treasury securities, obligations backed by the full faith and credit of the U.S. government, collateralized bank deposits, and repurchase agreements collateralized at 102% by Treasury securities and agency securities backed by the full faith and credit of the U.S. government. All counterparties to repurchase agreements are highly-rated primary dealers, and a custodial bank holds all collateral supporting the transactions in constructive possession on the cooperative's behalf. The portfolio's weighted average maturity to reset (WAM(R)) is maintained at 60 days or less, which enhances liquidity. Portfolio securities are priced to market on a daily basis.

S&P Global Ratings Analyst: Joseph Giarratano - + 1 (212) 438 8942

www.spratings.com

Participants should consider the investment objectives, risks and charges and expenses of the pool before investing. The investment guidelines which can be obtained from your broker-dealer, contain this and other information about the pool and should be read carefully before investing.

Portfolio securities are priced mark to market on a weekly basis and stress tested to a full liquidation scenario monthly.

Principal Stability Rating Approach and Criteria

A S&P Global Ratings principal stability fund rating, also known as a "money market fund rating", is a forward-looking opinion about a fixed income fund's capacity to maintain stable principal (net asset value). When assigning a principal stability rating to a fund, S&P Global Ratings analysis focuses primarily on the creditworthiness of the fund's investments and counterparties, and also its investments' maturity structure and management's ability and policies to maintain the fund's stable net asset value. Principal stability fund ratings are assigned to funds that seek to maintain a stable or an accumulating net asset value.

Generally, when faced with an unanticipated level of redemption requests during periods of high market stress, the manager of any fund may suspend redemptions for up to five business days or meet redemption requests with payments in-kind in lieu of cash. A temporary suspension of redemptions or meeting redemption requests with distributions in-kind does not constitute a failure to maintain stable net asset values. However, higher rated funds are expected to have stronger capacities to pay investor redemptions in cash during times of high market stress because they generally comprise shorter maturity and higher quality investments.

Principal stability fund ratings, or money market fund ratings, are identified by the 'm' suffix (e.g., 'AAAm') to distinguish the principal stability rating from a S&P Global Ratings traditional issue or issuer credit rating. A traditional issue or issuer credit rating reflects S&P Global Ratings view of a borrower's ability to meet its financial obligations. Principal stability fund ratings are not commentaries on yield levels.

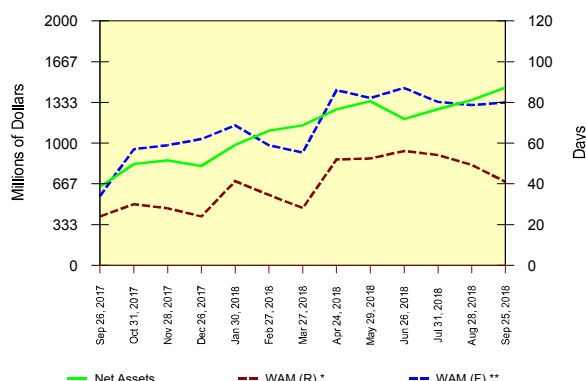
New York Cooperative Liquid Assets Securities System

AAAm

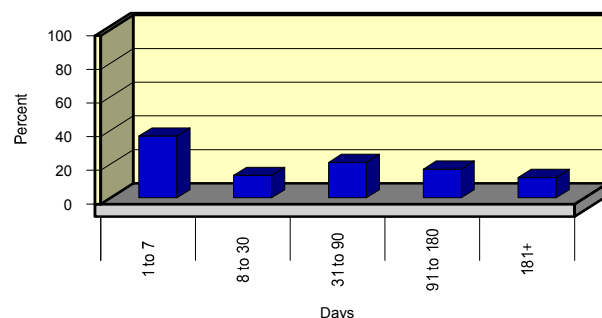
Data Bank as of September 25, 2018

Net Asset Value per Share.....	\$0.99988	Net Assets (millions).....	\$1,453.71	Inception Date.....	September 1989
WAM (R) *	41 days	WAM (F) **	80 days	7 Day Yield.....	1.91%
* Weighted Average Maturity (Reset)		** Weighted Average Maturity (Final)			

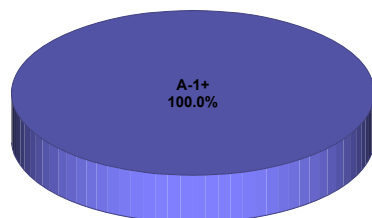
Net Assets, WAM (R) and WAM (F)



Portfolio Maturity Distribution as of September 25, 2018

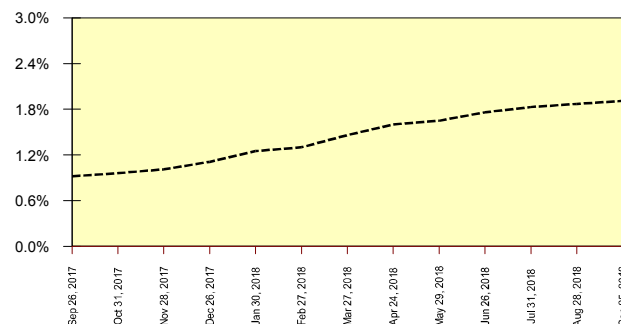


Portfolio Credit Quality as of September 25, 2018 *



*As assessed by S&P Global Ratings

Portfolio 7 Day Net-Yield



The yield quoted represents past performance. Past performance does not guarantee future results. Current yield may be lower or higher than the yield quoted.

Pool portfolios are monitored weekly for developments that could cause changes in the ratings. Rating decisions are based on periodic meetings with senior pool executives and public information.

S&P Global Ratings is neither associated nor affiliated with the fund.

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Municipal Cooperation Resolution

WHEREAS, New York General Municipal Law, Article 5-G, Section 119-o ("Section 119-o" empowers municipal corporations [defined in Article 5-G, Section 119-n to include school districts, boards of cooperative educational services, counties, cities, town and villages, and districts] to enter into, amend, cancel and terminate agreements for the performance among themselves (or one for the other) of their respective functions, powers and duties on a cooperative or contract basis;

WHEREAS, the _____ (entity name) wishes to invest portions of its available investment funds in cooperation with other corporations and/or districts pursuant to the NYCLASS Municipal Cooperation Agreement Amended and Restated as of March 14, 2014;

WHEREAS, the _____ (entity name) wishes to assure the safety and liquidity of its funds;

Now, therefore, it is hereby resolved as follows:

That _____ (key contact name) is hereby authorized to execute and deliver the Cooperative Investment Agreement in the name of and on behalf of _____ (entity name).

Signature of Key Contact

Title

Printed Name

Date

City of Beacon Workshop Agenda
3/11/2019

Title:

Ball Field Dedication

Subject:

Background:

ATTACHMENTS:

Description	Type
Ball Field Dedication Request Letter	Cover Memo/Letter

December 28, 2018

To: The city of Beacon

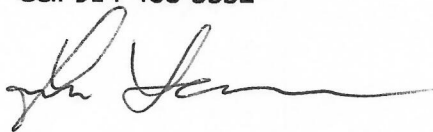
I am writing this letter in regard to dedicating the softball building at Beacon Memorial Park to Bob Palisi. Bob is a lifelong resident and owns two businesses in Beacon. In 2017, Bob received an award from the city of Beacon for his countless hours that he volunteers for the youth, as a fireman and also for many other non-profit organizations. Bob has been involved in youth softball for over 20 years, both in the Beacon Girls recreation softball program and the Beacon Xtreme Travel softball program and has helped and inspired hundreds of youth in the great community of Beacon. He has dedicated most of his life to helping young female athletes gain confidence and realize their potential. Bob has served as the recreation league president, treasurer, coach, and equipment manager. He is also the president and coach of the Beacon Xtreme travel softball organization which he built from the ground up and now has teams in the 12u, 14u, 16u, and 18u age groups. Bob has coached many of these travel teams to championships all over the Northeast and Canada. He has had many players come through the program and go on to play in college. Bob's vision was to create a travel program that was family-oriented and also affordable and to provide a great experience for all of his players. Both of my daughters played in the program and both went on to play at the college level. What I most admire about Bob is that winning is not his priority. Bob wants to teach the players the correct way to play the game and respect the game. His theory is "the process is more important than the outcome and the goal is to play good softball and the rest will take care of itself".

We are asking to dedicate the softball fieldhouse building at Beacon Memorial Park and it to be named the "Robert Palisi Softball Complex" in honor of Bob in a **surprise** ceremony on or around June 1, 2019 with a sign to be installed on the building at the expense of our Beacon Xtreme travel organization. Can you please let me know what steps we need to take to obtain approval for this. (We are hoping to make this honor a total surprise to Bob and his family if at all possible.)

Sincerely,

Fran Lawless and the entire coaching staff

Cell 914-468-5532

A handwritten signature in black ink, appearing to read 'Fran Lawless', with a long horizontal flourish extending to the right.

City of Beacon Workshop Agenda
3/11/2019

Title:

110 Howland Avenue Verizon Wireless

Subject:

Background:

ATTACHMENTS:

Description	Type
110 Howland Application	Application
110 Howland Digital Photo Simulations	Backup Material

Young / Sommer LLC

JEFFREY S. BAKER
DAVID C. BRENNAN
JOSEPH F. CASTIGLIONE
JAMES A. MUSCATO II
J. MICHAEL NAUGHTON
ROBERT A. PANASCI
ALLYSON M. PHILLIPS
DEAN S. SOMMER
KEVIN M. YOUNG

LAURA K. BOMYEA
E. HYDE CLARKE
JESSICA ANSERT KLAMI
KRISTINA M. MAGNE

COUNSELORS AT LAW

EXECUTIVE WOODS, FIVE PALISADES DRIVE, ALBANY, NY 12205
Phone: 518-438-9907 • Fax: 518-438-9914

www.youngsommer.com

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SCOTT P. OLSON
RICHARD E. OSTROV
KRISTIN LAVIOLETTE PRATT
STEPHEN C. PRUDENTE
KRISTIN CARTER ROWE
STEVEN D. WILSON

PARALEGALS

ALLYSSA T. MOODY, RP
AMY S. YOUNG

Writer's Telephone: 518.438-9907 Ext. 258
solson@youngsommer.com

March 6, 2019

Via Federal Express and Email

City of Beacon Common Council
1 Municipal Plaza
Beacon, New York 12508

RE: Application of Orange County-Poughkeepsie Limited Partnership d/b/a Verizon
Wireless -110 Howland Avenue (Howland Micro Site)

Dear Mayor Casale and Members of the City Council:

The purpose of this letter is to provide responses to the comments of the City of Beacon Telecommunications Consultant, HDR in connection with the above-referenced application, which comments were provided to us on Friday, March 1, 2019. Set forth below are the HDR comments in its entirety followed by our responses.

HDR Comment: Confirm all licensed frequencies proposed for Verizon operation for this small cell, in the immediate-term and as forecasted for 2-3 years out. The RF Emissions Report assumes 1900/2100 MHz (and demonstrates compliance at publicly-accessed areas in the vicinity of the proposed small cell), but does not appear to consider 700 LTE. If any other frequencies are proposed to operate at this facility, the Millennium Engineering Report of 11/6/2018 should be appropriately updated.

Response: Verizon Wireless' Radio Frequency Engineer has confirmed that this site has been designed to use only the 1900/2100 MHz frequencies. Any

potential future licensed use would require new RF Safety Reports to be prepared and evaluated pursuant to existing FCC license requirements.

HDR Comment: Is co-location by another wireless carrier on the proposed 52' pole considered viable by Verizon?

Response: Technically the proposed utility pole could be capable of accommodating collocation but generally, Verizon Wireless designs its small wireless facilities as a single user facility.

HDR Comment: At the 2/26/2019 meeting, the option to move the proposed small cell facility towards Mount Beacon (further back from the parking area; eastward / southeastward) was discussed. In addition to logistical constraints, the RF Engineer provided a verbal description of signal impedance that would result if the facility were located further back / into the denser tree line. A brief written narrative to this point from the RF Engineer is requested.

Response: The possibility of moving the facility back further on the property was considered by Verizon Wireless during the initial design of this site. The site's relocation was denied by construction due to the lack of access associated with relocating the facility further back on the property. Verizon Wireless policy concerning small wireless facility deployment prohibits construction of access roads as part of its small cell program. In addition to construction concerns, there are also radiofrequency concerns with relocating the facility further back on the property relative to the existing tree lines. Specifically the northern tree line which would create additional "shadowing" degrading the capability of the site to unacceptable levels. Lack of an access road but also create significant issues relative to maintenance of the facility.

HDR Comment: The Drawing set (e.g., DWG Z-1) should be updated to show all property lines for the subject site, including the back property line. HDR's site visit noted a drainage swale on the slope behind the parking area with a sign marked "Private Property". It is requested that Verizon confirm if any subgrade utilities or easements may be associated with this feature.

Response: A copy of the revised plans is enclosed.

HDR Comment: Confirm if any variances or waivers from the City's Wireless Code are being requested.

Response: Verizon Wireless is not currently seeking any variances or waivers.

HDR Comment: An alternate height coverage map / capacity statement is requested, evaluating the feasibility of an antenna centerline height of 40 ft agl (vs. the proposed 50 ft antenna centerline height). The same frequencies (2100 MHz) and RF criteria (-95 dBm) as used in the prior Engineering Necessity Case – “Howland Micro” should be used. This supplemental information is requested to justify the proposed pole height, and the differential in coverage + capacity afforded to the area.

Response: A revised Radio Frequency Justification report has been prepared and enclosed, which includes a slide showing the coverage associated with a 40’ utility pole.

HDR Comment: In the Engineering Necessity Case – “Howland Micro”, please describe the reason for differences between:

- Page 19 – The Green “proposed coverage” on the Map entitled, Proposed (Mt. Beacon Gamma Off) 2100MHz Best Server - 95dBm RSRP and Page 22 – The Yellow “proposed coverage” around the Howland site as depicted on the Map entitled, Proposed 2100 MHz Coverage.

Response: There were some mis-labeled coverage thresholds in the title of the slides in the Radio Frequency Justification. This was an oversight and has been corrected in the revised analysis enclosed herewith.

HDR Comment: Provide dimensions and ‘cut sheets’ (vender specs) of all proposed pole-mounted and ground-based equipment including the panel antennas, RRH unit, diplexers, and electric meter. These “cut sheets” will supplement the details provided on DWG Z-4. Recommendations on colors of small cell equipment and landscaping / fencing will be provided in the HDR Tech Memo.

Response: Enclosed.

HDR Comment: Provide location and description of FCC-type warning signage and Verizon Contact signage.

Response: FCC warning signs are typically confirmed after an application has been approved. We will place an order for the specific required signs and provide them in advance of the next regular meeting.


HDR Comment: Confirm no back-up power (e.g., generator) is proposed as part of the application.

Response: Back up emergency power (i.e. a generator) is not proposed.

HDR Comment: Maintenance and Inspection Plan. A 1-page document was provided in the application materials (and dated November 19, 2018). As this is a new structure to support a small cell facility, the HDR Tech Memo will provide Recommendations for specific maintenance provisions (including but not limited to fencing and any requirements that are set forth for screening or landscaping around the proposed ground-based equipment).

Response: No response required other than to note that the application includes a fence to screen the base of the facility. The fence will match the existing fence surrounding the garbage dumpster.

We trust that the above information and that which is enclosed herewith satisfies HDR's concerns and look forward to discussing this with the City Council at its next meeting.

Very truly yours,
YOUNG/SOMMER, LLC

Scott Olson

Cc: Michael Musso, M.S., MPH, PE
Nicholas Ward-Willis, Esq.
Michael R. Crosby (VZW)



PROJECT NO.: 20161509173
SITE NAME:
HOWLAND MICRO



Know what's below.
Call before you dig.

48 HOURS PRIOR TO DIGGING,
CONTRACTOR TO NOTIFY ALL
UTILITY COMPANIES TO LOCATE
ALL UNDERGROUND UTILITIES.

APPLICANT:
verizon
275 JOHN ST.
SUITE 100
WEST HENRIETTA NY 14586
PREPARED BY:
EBI ENGINEERING PC
21 B Street | Burlington, MA 01803
Tel: (781) 273-2500 | Fax: (781) 273-3311
www.ebiconsulting.com



Kelly Stuber

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SEAL OF A PROFESSIONAL ENGINEER,
UNLESS THE PERSON IS ACTING UNDER
THE DIRECTION OF A LICENSED
PROFESSIONAL ENGINEER. IF A DOCUMENT
BEARING A SEAL OF AN ENGINEER IS
ALTERED, THE ALTERING ENGINEER SHALL
AFFIX TO THE DOCUMENT THEIR SEAL AND
NOTATION "ALTERED BY" FOLLOWED BY
THEIR SIGNATURE AND THE DATE OF SUCH
ALTERATION, AND SPECIFIC DESCRIPTION OF
THE ALTERATION.

ENGINEER STAMP/SIGNATURE

THIS DOCUMENT IS THE DESIGN PROPERTY
& COPYRIGHT OF EBI CONSULTING & FOR
THE EXCLUSIVE USE BY THE TITLE CLIENT.
ANY DUPLICATION OR USE WITHOUT
EXPRESS WRITTEN CONSENT OF THE
CREATOR IS STRICTLY PROHIBITED.

SUBMITTALS

NO.	DATE	DESCRIPTION	BY
A	11/12/18	90% ISSUE	SM
B	11/21/18	REVISED PER COMMENTS	SH
C	01/14/19	REVISED PER COMMENTS	SM
D	03/05/19	REVISED SITE PLAN	KS

EBI JOB NO:
8118000249

SITE INFO:
HOWLAND MICRO
PROJECT NO.: **20161509173**
LOCATION CODE: **432846**
110 HOWLAND AVENUE
BEACON, NY 12508
DUTCHESS COUNTY

SHEET TITLE:
TITLE SHEET

DRAWN BY:
SM
CHECKED BY:
AG
DATE:
11/12/18
SHEET NO:
T-1

DRAWING INDEX

SHEET	DESCRIPTION
T-1	TITLE SHEET
Z-1	SITE PLAN
Z-2	OVERALL SITE PLAN
Z-3	POLE ELEVATION, DETAILS & NOTES
Z-4	DETAILS & NOTES

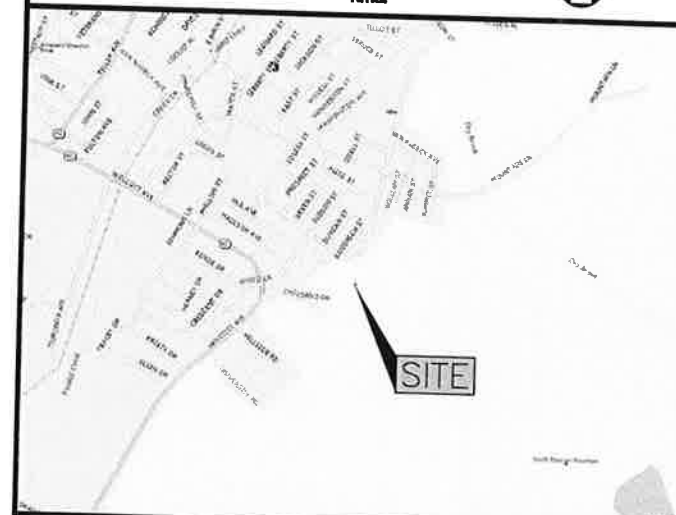
CODE COMPLIANCE

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE
CURRENT EDITIONS OF THE CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES.
NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THE
LOCAL CODES:

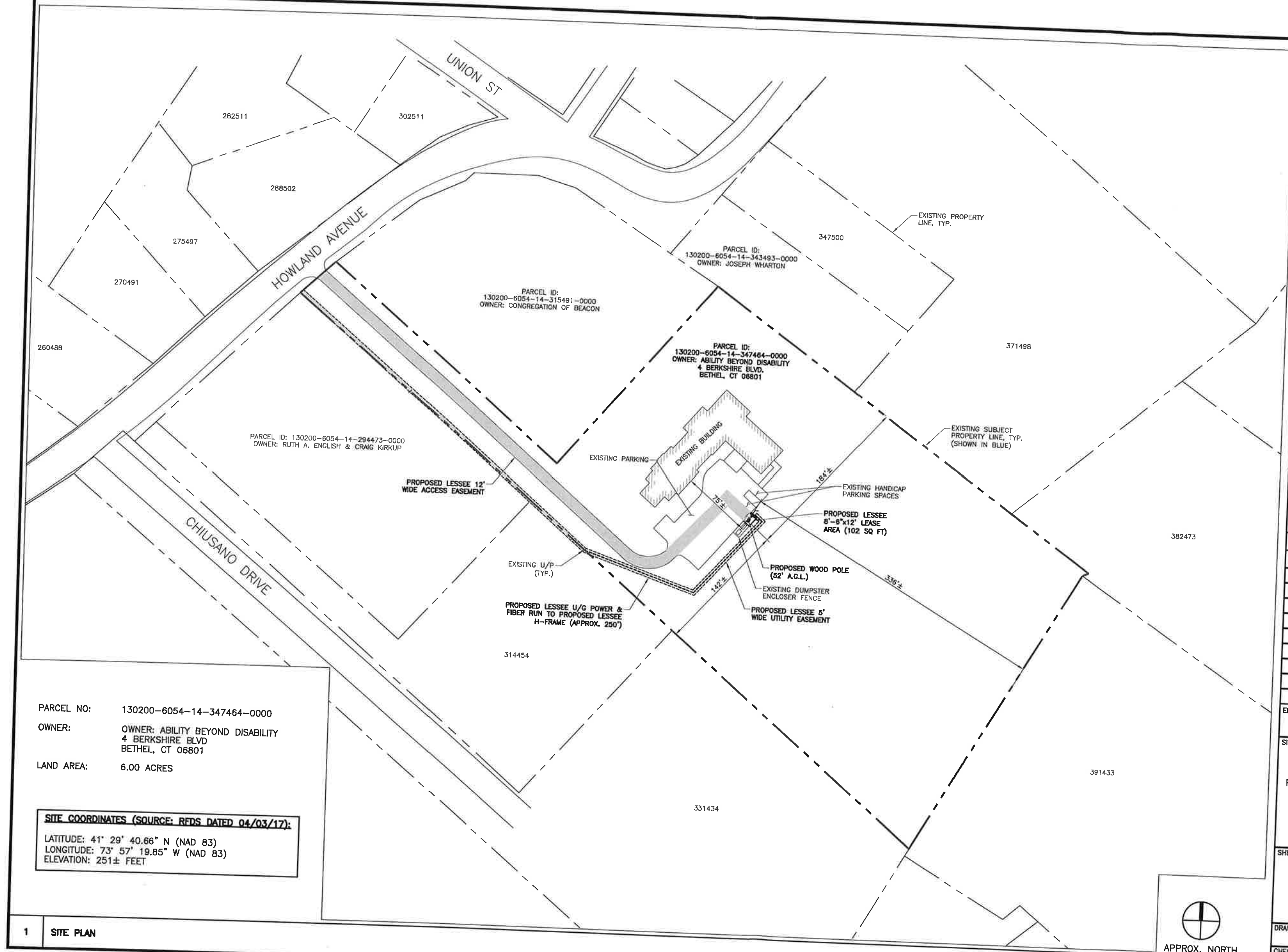
- IBC2015 WITH LATEST NEW YORK STATE AMENDMENTS
- NFPA 70-14 (NEC 2014)
- TA-222-G-05 WITH LATEST ADDENDA

VICINITY MAP

N.T.S.



START AT 1275 JOHN ST. GO STRAIGHT (NE) ON JOHN ST. IN 0.61 MI TURN RIGHT (E) ON TO
BAILEY RD. IN 1.03 MI TURN RIGHT (SSW) ON TO SR 15 (W HENRIETTA RD). IN 1.04 MI TURN
LEFT (E) ON TO LEHIGH STATION RD. IN 0.49 MI TURN RIGHT (SSW) ON TO I-390 S RAMP. IN
0.27 MI KEEP RIGHT (SW) ON TO I-90 E (NEW YORK STATE THWY) RAMP 12B. IN 0.57 MI KEEP
LEFT (E) ON I-90 E (NEW YORK STATE THWY) RAMP. IN 72.90 MI KEEP RIGHT (N) ON TO
I-690 E RAMP 39. IN 0.92 MI KEEP RIGHT (ESE) ON I-690 E RAMP. IN 8.91 MI KEEP
RIGHT (SSE) ON TO I-81 S RAMP 13. IN 76.37 MI KEEP LEFT (ESE) ON TO SR 17 RAMP 2E.
IN 113.42 MI KEEP RIGHT (ENE) ON TO I-84 E RAMP 121. IN 22.57 MI KEEP RIGHT (E) ON TO
SR 9D (NORTH RD) RAMP 11. IN 0.21 MI TURN RIGHT (SSW) ON TO SR 9D (NORTH RD). IN
0.48 MI KEEP LEFT (S) ON TO NORTH AVE. IN 0.26 MI KEEP RIGHT (SSW) ON TO SR 9D
(WOLCOTT AVE). IN 0.49 MI KEEP LEFT (SE) ON TO BEEKMAN ST 1.57 MI. IN 0.20 MI GO
STRAIGHT (ESE) ON TO SR 9D (WOLCOTT AVE). IN 1.11 MI TURN LEFT (ENE) ON TO HOWLAND
AVE. IN 0.26 MI FINISH AT 110 HOWLAND AVE, BEACON, NY. 05:22:36 302.11 MI.



PARCEL NO: 130200-6054-14-347464-0000
OWNER: OWNER: ABILITY BEYOND DISABILITY
4 BERKSHIRE BLVD
BETHEL, CT 06801
LAND AREA: 6.00 ACRES

SITE COORDINATES (SOURCE: RFDS DATED 04/03/17):
LATITUDE: 41° 29' 40.66" N (NAD 83)
LONGITUDE: 73° 57' 19.85" W (NAD 83)
ELEVATION: 251± FEET

1 SITE PLAN



SCALE: 1" = 100'

APPLICANT:
verizon
275 JOHN ST.
SUITE 100
WEST HENRIETTA NY 14586
PREPARED BY:
EBI ENGINEERING PC
21 B Street | Burlington, MA 01803
Tel: (781) 273-2500 | Fax: (781) 273-3311
www.ebiconsulting.com



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SUBMITTALS			
NO.	DATE	DESCRIPTION	BY
A	11/12/18	90% ISSUE	SM
B	11/21/18	REVISED PER COMMENTS	SH
C	01/14/19	REVISED PER COMMENTS	SM
D	03/05/19	REVISED SITE PLAN	KS

EBI JOB NO: **8118000249**
SITE INFO:
HOWLAND MICRO
PROJECT NO.: **20161509173**
LOCATION CODE: **432846**
110 HOWLAND AVENUE
BEACON, NY 12508
DUTCHESS COUNTY

SHEET TITLE:
SITE PLAN


DRAWN BY: SM
CHECKED BY: AG
DATE: 11/12/18
SHEET NO: **Z-1**



PARCEL NO: 6258-01-081999-0000

OWNER: CROSS COURT ASSOCIATES
204 NEW HACKENSACK RD
WAPPINGERS FALLS, NY 12590

LAND AREA: 6.00 ACRES



APPROX. NORTH

APPROX. NORTH

- | | |
|---|---------------|
| 2 | GENERAL NOTES |
|---|---------------|

- | | | |
|---|------------|------------|
| 3 | SITE NOTES | CH
DATE |
|---|------------|------------|

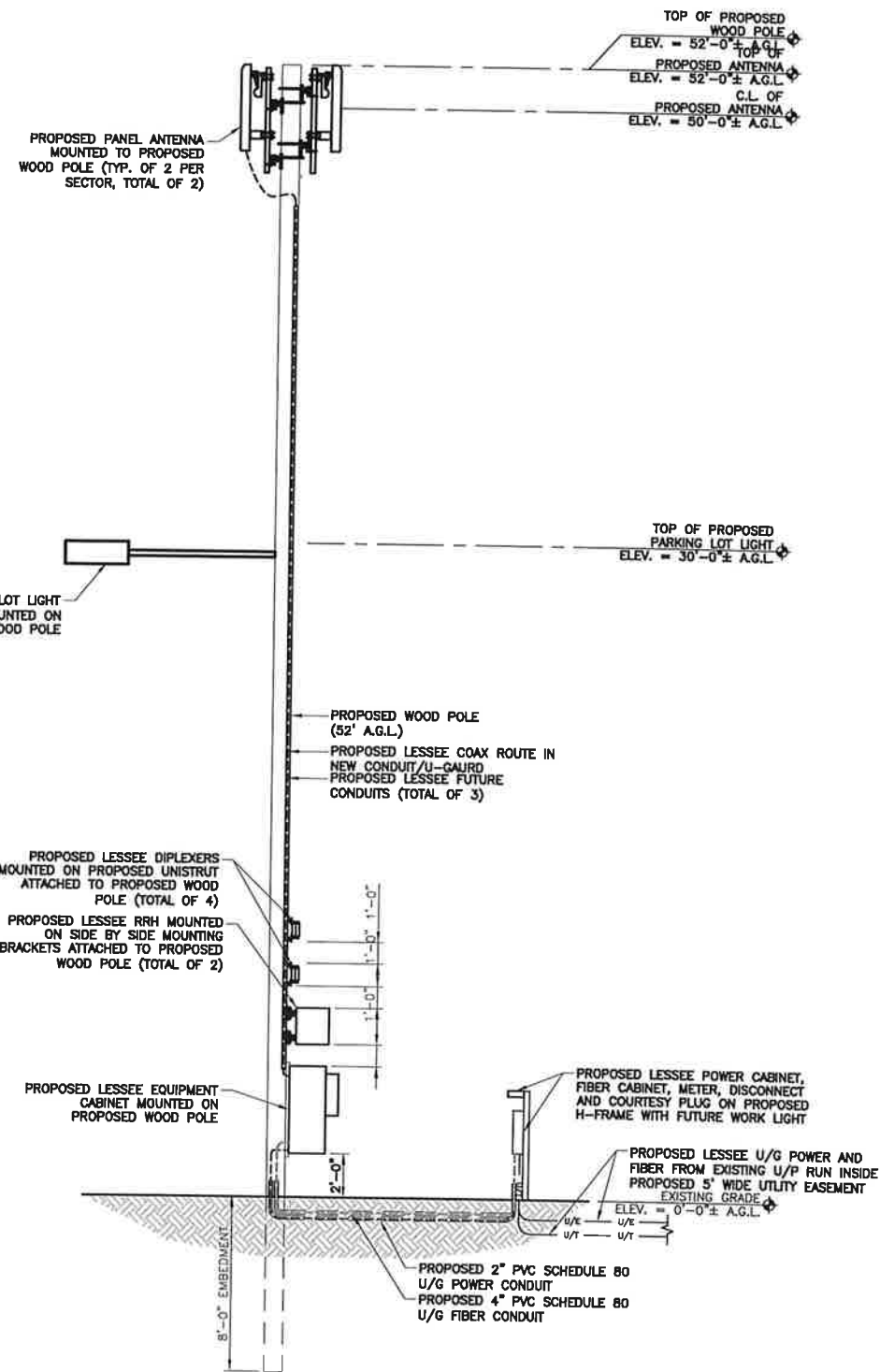
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JOB NO:
8118000249

OVERALL SITE PLAN

N BY: SM	SHEET NO: <div style="font-size: 48pt; text-align: center;">Z-2</div>
KED BY: AG	
/12/18	

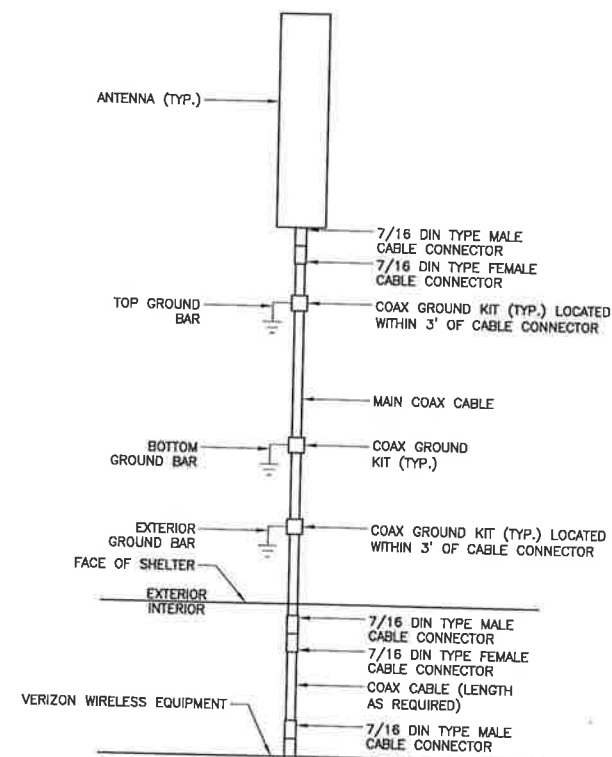


1. DESIGN AND CONSTRUCTION OF ANTENNA SUPPORTS SHALL CONFIRM TO ANSI/TIA/EIA-222-G-05 WITH LATEST ADDENDA "STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND ANTENNA SUPPORTING STRUCTURES". NOTE: SEE CODE FOR COUNTY SPECIFIC DESIGN WIND SPEEDS.
2. ALL STEEL MATERIALS SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123 "ZINC (HOT-DIP GALVANIZED) COATINGS ON IRON AND STEEL PRODUCTS", UNLESS OTHERWISE NOTED.
3. ALL BOLTS, ANCHORS AND MISCELLANEOUS HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 "ZINC-COATING (HOT DIP) ON IRON AND STEEL HARDWARE", UNLESS OTHERWISE NOTED.
4. DAMAGE GALVANIZE SURFACES SHALL BE REPAIRED BY COLD GALVANIZING IN ACCORDANCE WITH ASTM A780.
5. ALL ANTENNA MOUNTS SHALL BE INSTALLED WITH DOUBLE NUTS AND SHALL BE INSTALLED SNUG TIGHT.
6. DESIGN RESPONSIBILITY OF ANTENNA MOUNTING BRACKETS, SUPPORTS AND ALL COMPONENTS THEREOF AND ATTACHMENT THERETO SHALL BE THE RESPONSIBILITY OF THE MANUFACTURER. MFR SHALL PROVIDE THE THE OWNER DRAWINGS DETAILING ALL COMPONENTS OF THE ASSEMBLY, INCLUDING CONNECTIONS, DESIGN LOADS, AND ALL OTHER PERTINENT DATA. MFR SHALL ALSO PROVIDE THE OWNER WITH A STATEMENT OF COMPLIANCE INDICATING THAT THE ANTENNA SUPPORTS HAVE BEEN DESIGNED IN ACCORDANCE WITH TIA/EIA-222-G STANDARDS. ALL SUBMISSIONS SHALL BEAR THE STAMP AND SIGNATURE OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE THE WORK IS BEING PERFORMED.

1. VERIZON WILL COLOR CODE AND TAG THE COAX AT BOTH THE TOP OF THE TOWER AND INSIDE THE CELL SITE BUILDING AT THE CABLE ENTRY PART. THE MARKING SYSTEM WILL COMPRISE OF COLOR TAPE WITH A MINIMUM WIDTH OF 3/4 INCHES, 7 MIL. VINYL PLASTIC TAPE, SCOTCH 35 OR EQUIVALENT.
2. THE TAGGING WILL BE DONE WITH METAL "DOG" TAGS. A TAG WILL BE PLACED ON THE COAX AT THE ANTENNA AND ON THE COAX IN THE CELL SITE BUILDING. THE TAG WILL IDENTIFY THE ANTENNA NUMBER AND FUNCTION; TX, RX ETC.
3. THE ENTRY PORT ASSIGNMENT SHOULD BE FOLLOWED WHERE POSSIBLE. THIS STANDARD ASSUMES THAT THE ENTRY PORT CONSISTS OF THREE ROWS OF FOUR PORTS. WITH THE FIRST ROW BEING NUMBERED FROM 1-6 FROM LEFT TO RIGHT. THE SECOND ROW IS NUMBERED 7-12 (LEFT TO RIGHT) AND THE THIRD ROW IS 13-18 (LEFT TO RIGHT).
4. A SITE SPECIFIC COAX COLOR SHEET TO BE PROVIDED BY CELLULAR EQUIPMENT ENGINEER.

2 ANTENNA MOUNTING NOTES

3 STANDARD ANTENNA COLOR CODES



4 ANTENNA CABLE SCHEMATIC

APPLICANT:

verizon

275 JOHN ST.
SUITE 100
WEST HENRIETTA NY 14586

PREPARED BY:

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21 B Street | Burlington, MA 01803
Tel: (781) 273-2500 | Fax: (781) 273-3311
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Kelly Shuler

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EBI JOB NO:

8118000249

SITE INFO:

HOWLAND MICRO
PROJECT NO.: 20161509173
LOCATION CODE: 432846
110 HOWLAND AVENUE
BEACON, NY 12508
DUTCHESS COUNTY

SHEET TITLE:

**POLE ELEVATION,
DETAILS & NOTES**

DRAWN BY:
SM

CHECKED BY:
AG

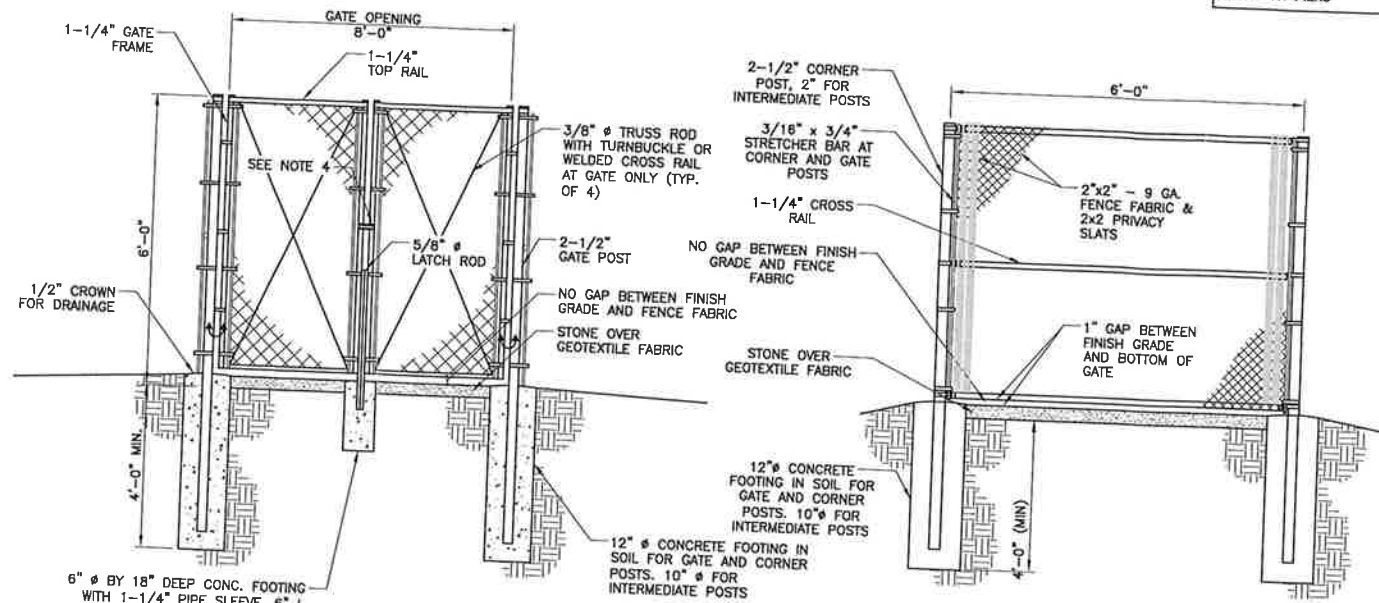
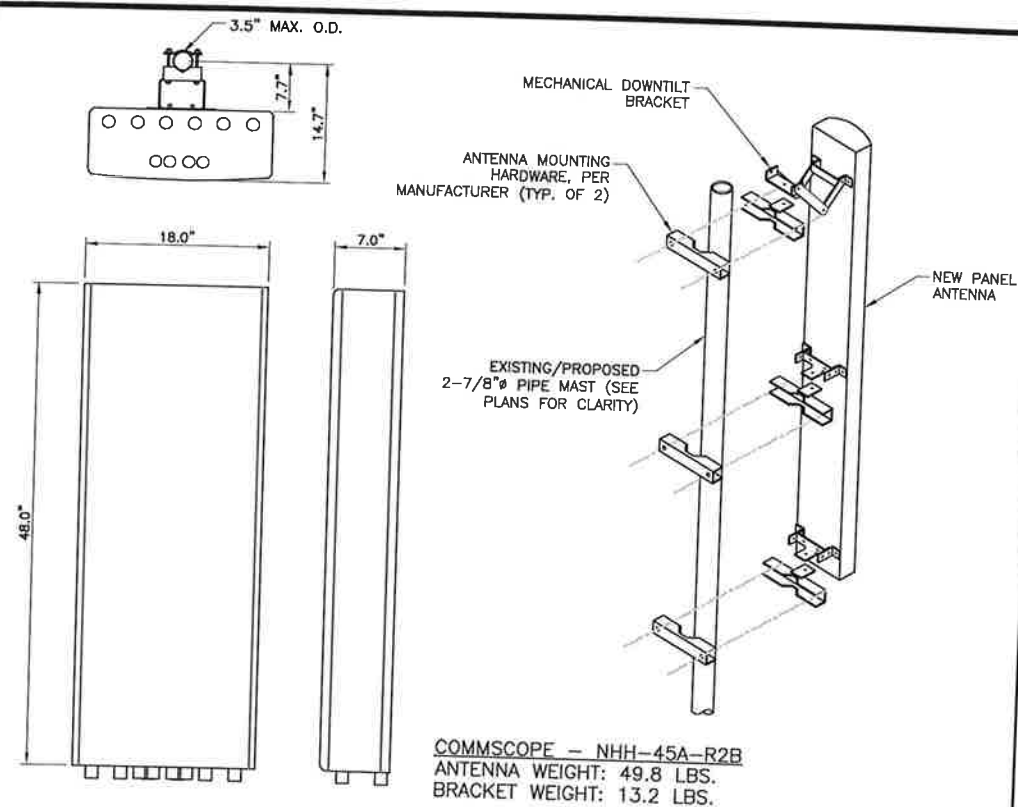
DATE:
11/12/18

SHEET NO:

Z-3

1 POLE ELEVATION

SCALE: 1/8" = 1'-0"

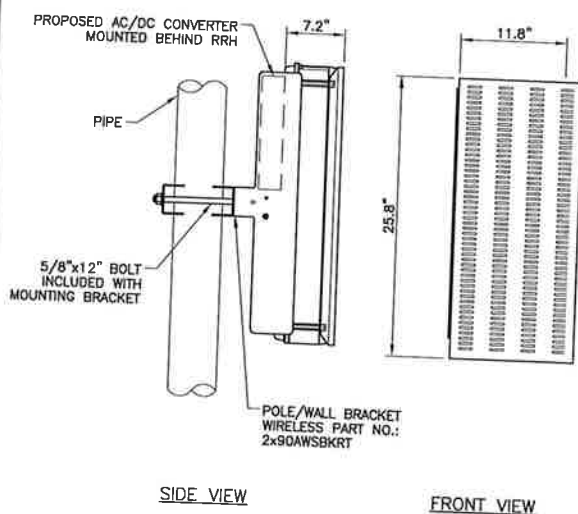


1 ANTENNA SPECIFICATION & ATTACHMENT DETAIL

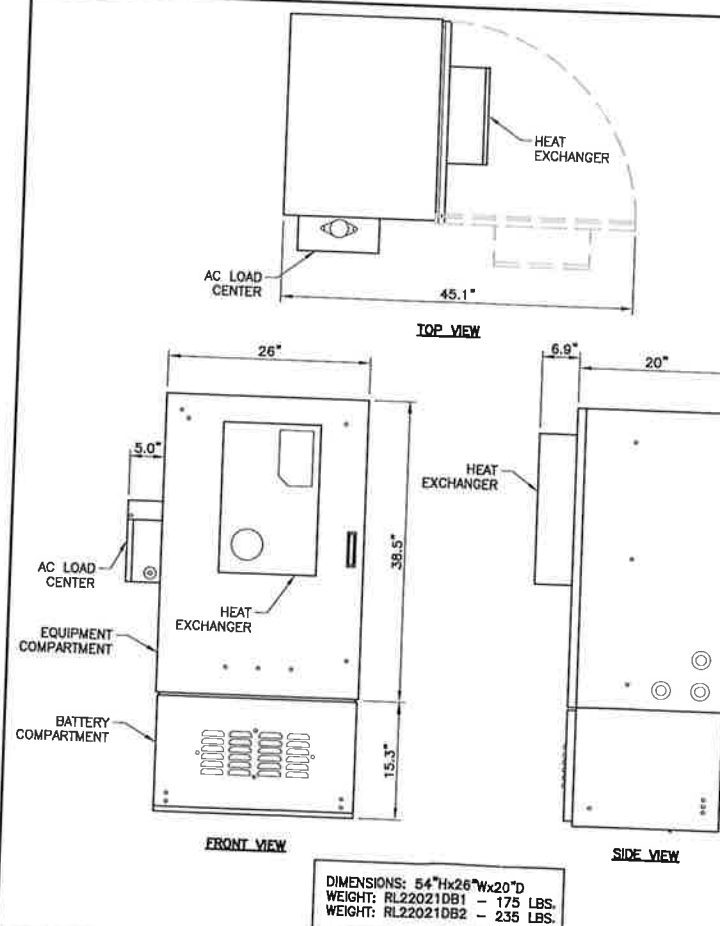
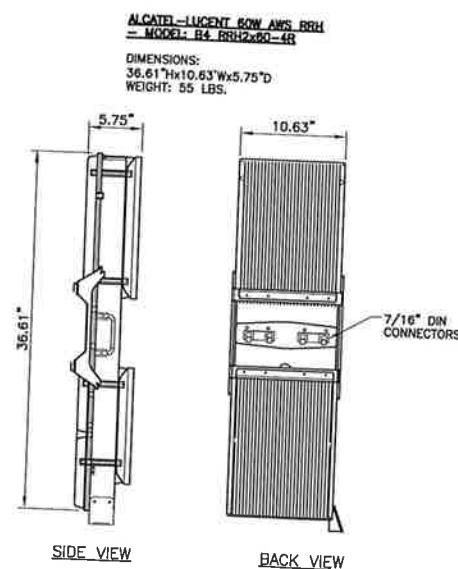
2 NON-PENETRATING BALLAST MOUNT DETAILS

GENERAL NOTES:

- ALL WORK PRESENTED ON THESE DRAWINGS MUST BE COMPLETED BY THE CONTRACTOR UNLESS NOTED OTHERWISE. THE CONTRACTOR MUST HAVE CONSIDERABLE EXPERIENCE IN PERFORMANCE OF WORK SIMILAR TO THAT DESCRIBED HEREIN. BY ACCEPTANCE OF THIS ASSIGNMENT, THE CONTRACTOR IS ATTESTING THAT HE DOES HAVE SUFFICIENT EXPERIENCE AND ABILITY, THAT HE IS KNOWLEDGEABLE OF THE WORK TO BE PERFORMED AND THAT HE IS PROPERLY LICENSED, REGISTERED AND INSURED TO DO THIS WORK IN THE STATE AND/OR COUNTY IN WHICH IT IS TO BE PERFORMED.
- ALL MATERIALS AND EQUIPMENT FURNISHED SHALL BE NEW AND OF GOOD QUALITY, FREE FROM FAULTS AND DEFECTS AND IN CONFORMANCE WITH THE CONTRACT DOCUMENTS. ANY AND ALL SUBSTITUTIONS MUST BE PROPERLY APPROVED AND AUTHORIZED IN WRITING BY VERIZON WIRELESS AND THE ENGINEER PRIOR TO INSTALLATION. THE CONTRACTOR SHALL FURNISH SATISFACTORY EVIDENCE AS TO THE KIND AND QUALITY OF THE MATERIALS AND EQUIPMENT BEING SUBSTITUTED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THE CONTRACTOR IS RESPONSIBLE FOR INSURING THAT THIS PROJECT AND RELATED WORK COMPLIES WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL SAFETY CODES AND REGULATIONS GOVERNING THIS WORK.
- ALL DIMENSIONS SHALL BE VERIFIED WITH THE PLANS (LATEST REVISION) PRIOR TO COMMENCING CONSTRUCTION. NOTIFY VERIZON WIRELESS IMMEDIATELY IF DISCREPANCIES ARE DISCOVERED.
- ALL MATERIALS AND WORKMANSHIP SHALL BE WARRANTED FOR ONE (1) YEAR FROM DATE OF ACCEPTANCE.



B66A RRH2x90-AWS
DIMENSIONS: 25.8"Hx11.8"Wx7.2"D
WEIGHT: 56.8 LBS. (WITH SOLAR SHIED)



DIMENSIONS: 54"Hx26"Wx20"D
WEIGHT: RL22021DB1 - 175 LBS.
WEIGHT: RL22021DB2 - 235 LBS.

N.T.S.

APPLICANT:
verizon
275 JOHN ST.
SUITE 100
WEST HENRIETTA NY 14586
PREPARED BY:
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8118000249
SITE INFO:
HOWLAND MICRO
PROJECT NO.: 20161509173
LOCATION CODE: 432846
110 HOWLAND AVENUE
BEACON, NY 12508
DUTCHESS COUNTY

SHEET TITLE:
DETAILS & NOTES

DRAWN BY:
SM
CHECKED BY:
AG
DATE:
11/12/18
SHEET NO:
Z-4

3 GENERAL NOTES

4 RRH SPECIFICATION & ATTACHMENT DETAIL

N.T.S.

5 RRH SPECIFICATION & ATTACHMENT DETAIL

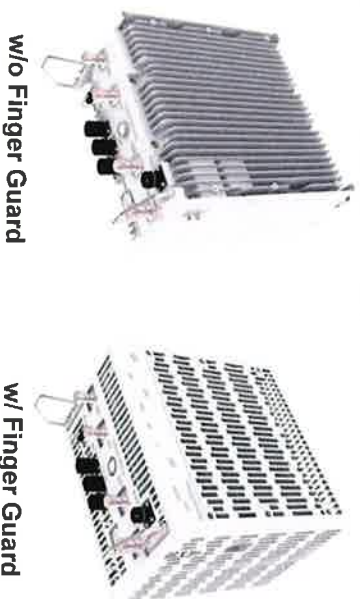
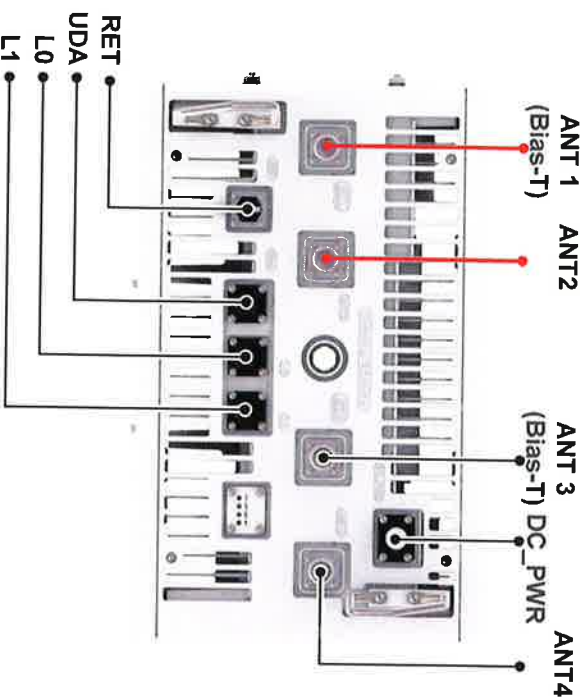
N.T.S.

6 SMALL SITE SUPPORT CABINET DETAIL

N.T.S.

700/850MHz Dual-Band RRH (B13+B5)

700/850MHz Dual-Band RRH (B13+B5)

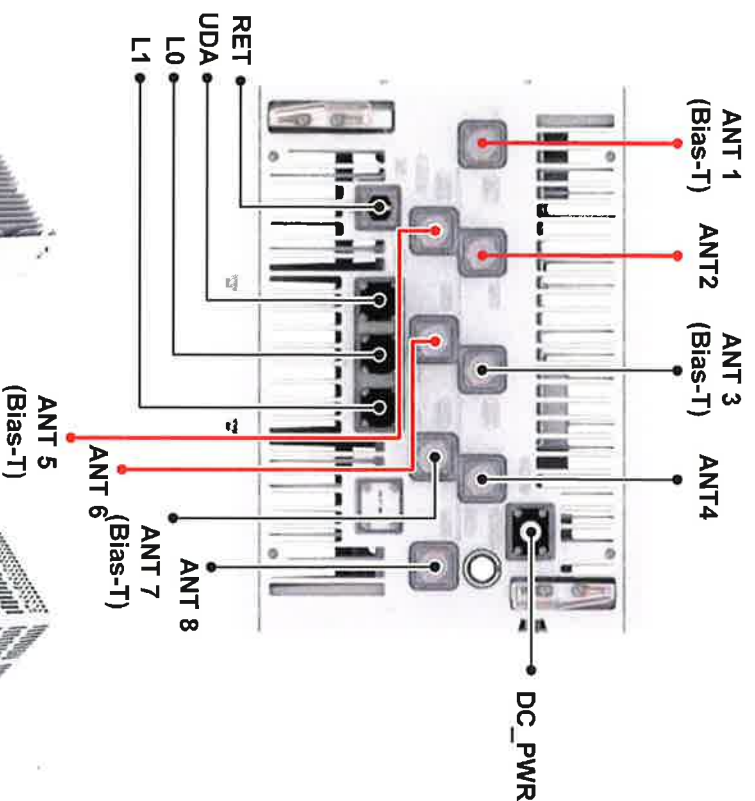


Note : 2T supported in ANT1 and ANT2

Category	Specification	
RF	Band	Band13 (700MHz) Band5 (850MHz)
	Frequency	DL : 746 ~ 756MHz DL : 869 ~ 894MHz UL : 777 ~ 787MHz UL : 824 ~ 849MHz
	IBW/OBW	10MHz/10MHz 25MHz/25MHz
	# of Carriers	1 Carriers 3 Carriers
Total # of Carriers		4 Carriers
Electrical	RF power	Total 320W 40W x 4 or 60W x 2 40W x 4 or 60W x 2
	Ant. configuration	4T4R/2T4R/2T2R, SW configurable
	Input Power	-48VDC (-38VDC to -57VDC)
	Power consumption	About 1106 Watt @ 100% RF load, typical conditions + TMA/RET
Mechanical	Size (W x H x D)	15" x 15" x 8.1" (380 x 380 x 207 mm)
	Volume	29.9L
	Weight	70.3lb (31.9kg), w/o solar shield
Environmental	Operating temperature	-40°C ~ 55°C w/o solar load
	Modulation	256 QAM support
	Spectrum Analyzer	Support for TX/RX
	PIM Cancellation	Support
Feature	NB-IoT	Support
	CPRI Cascade	Not supported
	Optic Interface	20km, 2 ports (9.8Gbps x 2), SFP, single mode, Duplex / BiDi
	RET & TMA	AISG 2.2
	Bias-T	2 ports (Max. 49W)
External Alarm		4

PCS/AWS Dual-Band RRH (B2+B66)

PCS/AWS Dual-Band RRH (B2+B66)



w/o Finger Guard

w/ Finger Guard

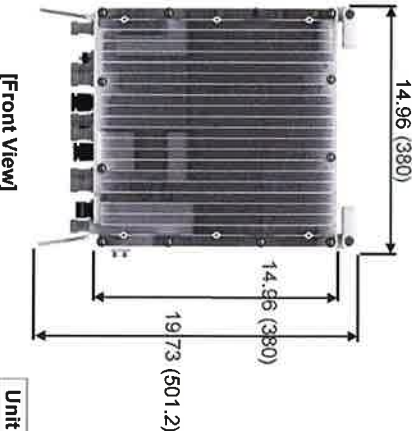
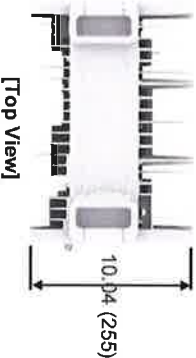
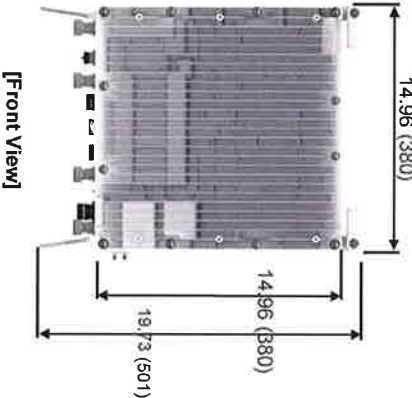
Note : 2T supported in ANT1 and ANT2 for B66

2T supported in ANT5 and ANT6 for B2

Category	Specification	
RF	Band	Band2 (PCS) Band66 (AWS)
	Frequency	DL : 1930 ~ 1990MHz DL : 2110 ~ 2180MHz UL : 1850 ~ 1910MHz UL : 1710 ~ 1780MHz
	IBW/OBW	60MHz/20MHz 70MHz/30MHz
	# of Carriers	2 Carriers 3 Carriers
	Total # of Carriers	4 Carriers
Electrical	RF power	Total 320W (for OBW 40MHz) 40W x 4 or 60W x 2 60W x 4 or 90W x 2
	Ant. configuration	4T4R/2T4R/2T2R, SW configurable
	Input Power	-48VDC (-38VDC to -57VDC)
Mechanical	Power consumption	About 1270 Watt @ 100% RF load, typical conditions (w/ BAS Filter)+ TMA/RET
	Size (W x H x D)	15" x 15" x 10" (380 x 380 x 255 mm), w/ BAS
	Volume	36.8L
Environmental	Weight	84.4lb (38kg), w/o solar shield
	Operating temperature	-40°C ~ 55°C w/o solar load
	Modulation	256 QAM support
Feature	Spectrum Analyzer	Support for TX/RX
	PIM Cancellation	Support
	NB-IoT	Support
	CPRI Cascade	Not supported
	Optic Interface	20km, 2 ports (9.8Gbps x 2), SFP, single mode, Duplex / BIDI
	RET & TMA	AISG 2.2
	Bias-T	4 ports, 2 ports per Band (Max. 49W)
	External Alarm	4

Mechanical/Electrical specifications comparison

Category		700/850 Dual-Band RRH	PCS/AWS Dual-Band RRH
Electrical	Power consumption	About 1106 Watt @ 100% RF load, typical condition ns + TMA/RET	About 1270 Watt @ 100% RF load, typical condition s (w/ BAS Filter)+ TMA/RET
	Size (W x H x D) w/o Finger Guard	15" x 15" x 8.1" (380 x 380 x 207 mm)	15" x 15" x 10" (380 x 380 x 255 mm)
Mechanical	Volume	29.9L	36.8L
	Weight (w/o solar shield)	70.3 lb (31.9 kg)	84.4lb (38kg)



Unit: in. (mm)

[700/850MHz Dual-Band RRH]

[PCS/AWS Dual-Band RRH]

NHH-45A-R2B



- 6-port sector antenna, 2x 698-896 and 4x 1695-2360 MHz, 45° HPBW, 2x RETs and 2x SBTs. Both high bands share the same electrical tilt.
- Narrow beamwidth capacity antenna for higher level of densification and enhanced data throughput
 - Internal SBT on low and high band allow remote RET control from the radio over the RF jumper cable
 - Separate RS-485 RET input/output for low and high band
 - One LB RET and one HB RET. Both high bands are controlled by one RET to ensure same tilt level for 4x Rx or 4x MIMO

Electrical Specifications

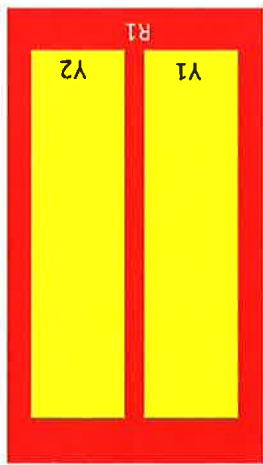
Frequency Band, MHz	Gain, dBi	Beamwidth, Horizontal, degrees	Beamwidth, Vertical, degrees	Beam Tilt, degrees	USL5 (First Lobe), dB	Front-to-Back Ratio at 180°, dB	Isolation, dB	Isolation, Inter-system, dB	VSWR Return Loss, dB	PIM, 3rd Order, 2 x 20 W, dBC	Input Power per Port, maximum, watts	Polarization	Impedance
698-806	15.5	48	18.5	2-18	16	32	25	25	1.5 14.0	-153	350	±45°	50 ohm
806-896	16.2	44	16.8	2-18	17	33	25	25	1.5 14.0	-153	350	±45°	50 ohm
1695-1880	18.3	44	7.9	1-9	17	36	25	25	1.5 14.0	-153	350	±45°	50 ohm
1850-1990	19.0	44	7.3	1-9	16	36	25	25	1.5 14.0	-153	350	±45°	50 ohm
1920-2200	19.2	43	6.8	1-9	15	36	25	25	1.5 14.0	-153	350	±45°	50 ohm
2300-2360	20.0	39	6.0	1-9	15	35	25	25	1.5 14.0	-153	350	±45°	50 ohm

Electrical Specifications, BASTA*

Frequency Band, MHz	Gain by all Beam Tilts, average, dBi	Gain by all Beam Tilts Tolerance, dB	Gain by Beam Tilt, average, dBi	Beamwidth, Horizontal Tolerance, degrees	Beamwidth, Vertical Tolerance, degrees	USL5, beampeak to 20° above beampeak, dB	Front-to-Back Total Power at 180° ± 30°, dB	CPR at Boreight, dB	CPR at Sector, dB
698-806	15.1	±0.5	2° 15.2 10° 15.1 18° 14.9	±1.8	±1	17	24	24	18
806-896	15.9	±0.4	2° 16.1 10° 16.0 18° 15.6	±3	±0.9	22	24	25	17
1695-1880	17.9	±0.6	1° 17.9 5° 17.9 9° 17.8	±1.9	±0.3	12	27	15	11
1850-1990	18.7	±0.4	1° 18.8 5° 18.8 9° 18.6	±1.3	±0.3	13	29	18	13
1920-2200	19.0	±0.3	1° 19.1 5° 19.1 9° 18.8	±2.1	±0.5	14	30	19	15
2300-2360	19.8	±0.4	1° 19.9 5° 19.9 9° 19.5	±1.6	±0.2	15	30	20	16

* Commscope® supports NGMN recommendations on Base Station Antenna Standards (BASTA). To learn more about the benefits of BASTA, [download the whitepaper Time to Raise the Bar on BSAs](#).

Array Layout



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
Y2	1695-2360	3-4	1	ANxxxxxxxxxxxxxxxxxxxx1
	1695-2360	5-6		
Y1	1695-2360	2	1	ANxxxxxxxxxxxxxxxxxxxx2
R1	698-896			

Left
Right
Bottom
(Sizes of colored boxes are not true depictions of array sizes)

General Specifications

Operating Frequency Band
Antenna Type
Band
Performance Note
Outdoor usage

Mechanical Specifications

RF Connector Quantity, total
6
RF Connector Quantity, low band
2
RF Connector Quantity, high band
4
RF Connector Interface
7-16 DIN Female
Color
Light gray
Grounding Type
RF connector body grounded to reflector and mounting bracket
Reflector Material
Aluminum | Low loss circuit board
Radome Material
Fiberglass, UV resistant
Reflector Material
Aluminum
RF Connector Location
Bottom
Wind Loading, frontal
693.0 N @ 150 km/h
155.8 lbf @ 150 km/h
Wind Loading, lateral
145.0 N @ 150 km/h
32.6 lbf @ 150 km/h
Wind Speed, maximum
241 km/h | 150 mph

NHH-45A-R2B

Dimensions

Length	1220.0 mm 48.0 in
Width	457.0 mm 18.0 in
Depth	178.0 mm 7.0 in
Net Weight, without mounting kit	22.6 kg 49.8 lb

Remote Electrical Tilt (RET) Information

Input Voltage	10–30 Vdc
Internal Bias Tee	Port 1 Port 3
Internal RET	High band (1) Low band (1)
Power Consumption, idle state, maximum	1 W
Power Consumption, normal conditions, maximum	10 W
Protocol	3GPP/AISG 2.0 (Single RET)
RET Interface	8-pin DIN Female 8-pin DIN Male
RET Interface, quantity	2 female 2 male

Packed Dimensions

Length	1342.0 mm 52.8 in
Width	567.0 mm 22.3 in
Depth	311.0 mm 12.2 in
Shipping Weight	34.3 kg 75.6 lb

Regulatory Compliance/Certifications

Agency	Rohs 2011/65/EU ISO 9001:2015 China RoHS SJ/T 11364-2014
Classification	Compliant by Exemption Designed, manufactured and/or distributed under this quality management system Above Maximum Concentration Value (MCV)



Included Products

BSAMNT-3 — Wide Profile Antenna Downtilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor top bracket set and one bottom bracket set.


* Footnotes

NHH-45A-R2B

Performance Note Severe environmental conditions may degrade optimum performance

Twin Diplexer PCS/AWS+WCS, dc Sense, 4.3-10

- BTS-to-feeder and feeder-to-antenna application
- New 4.3-10 connectors for improved PIM performance and size reduction
- Automatic dc switching with dc sense
- Convertible mounting brackets



General Specifications

Product Family	CBC1923
Modularity	2-Twin
Includes	Mounting hardware

Electrical Specifications

Sub-module	1 2
Branch	1
Port Designation	PCS
License Band	PCS 1900
	AWS 1700
	WCS 2300

Electrical Specifications, Band Pass

Frequency Range	1850-1995 MHz	1695-1780 MHz	2110-2200 MHz	2305-2360 MHz
Insertion Loss, typical	0.20 dB	0.20 dB	12 ns	22 dB
Total Group Delay, typical	13 ns	22 dB	58 dB	200 W
Return Loss, typical	58 dB	200 W	2 kW	-161 dBc
Input Power, RMS, maximum	200 W	2 kW	-161 dBc	2 x 20 W CW tones
Input Power, PEP, maximum	2 kW	-161 dBc	2 x 20 W CW tones	
3rd Order PIM, minimum	-161 dBc	2 x 20 W CW tones		
3rd Order PIM Test Method	2 x 20 W CW tones			
Higher Order PIM, minimum				
Higher Order PIM Test Method				
Product Classification				
Product Type	Diplexer			

Common Port Electrical Specifications

Composite Power, RMS 250 W

AISG Electrical Specifications

- AISG Carrier 2176 KHz ± 100 ppm
- Insertion Loss, maximum 1.00 dB
- Return Loss, minimum 15 dB

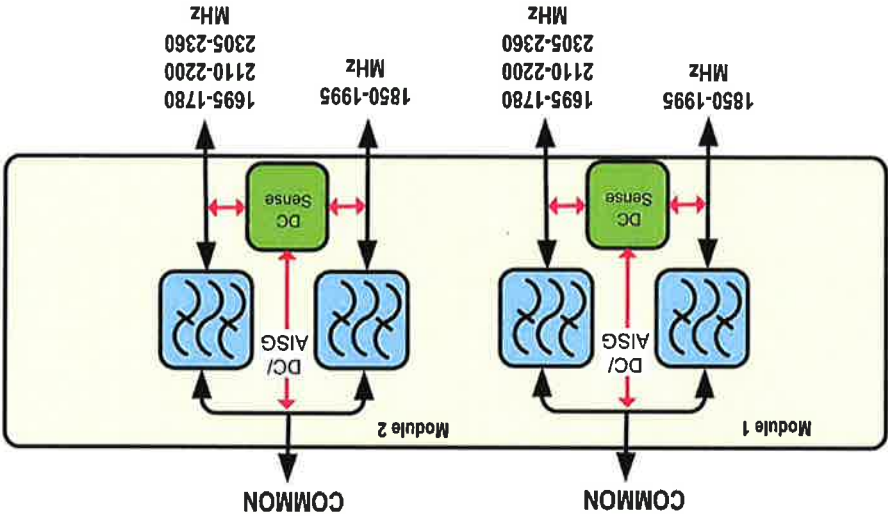
Dc Power/Alarm Electrical Specifications

- Voltage 7-30 Vdc
- dc/AISG Pass-through Method Auto sensing
- dc/AISG Pass-through Path See logic table
- Lightning Surge Current 10 kA
- Lightning Surge Current Waveform 8/20 waveform

Electrical Specifications

- Impedance 50 ohm

Block Diagram



Logic Table

Combining Mode Operation (Ground Based)			
RF Ports Input DC Voltage			
PCS	AWS/WCS	COMMON	DC/AISG Path Selection
7.5 V ≤ 30	<7	<7	PCS to COMMON "ON"
7.5 V ≤ 30	7.5 V ≤ 30	<7	AWS/WCS to COMMON "ON"
7.5 V ≤ 30	7.5 V ≤ 30	<7	AWS/WCS to COMMON "ON"

Splitting Mode Operation (Tower Top)			
RF Ports Impedance DC (Load sensing)			
PCS	AWS/WCS	COMMON	DC/AISG Path Selection
open/load	short	7.5 V ≤ 30	COMMON to PCS "ON"
short	open/load	7.5 V ≤ 30	COMMON to AWS/WCS "ON"
open/load	open/load	7.5 V ≤ 30	ALL ports ON
short	short	7.5 V ≤ 30	ALL ports OFF

Mechanical Specifications

RF Connector Interface 4.3-10 Female
RF Connector Interface Body Style Long neck
Ground Screw Diameter 6.00 mm
Color Gray
Finish Painted
Wind Loading, frontal 33.0 N @ 150 km/h
7.4 lbf @ 150 km/h
Wind Loading, lateral 13.0 N @ 150 km/h
2.9 lbf @ 150 km/h

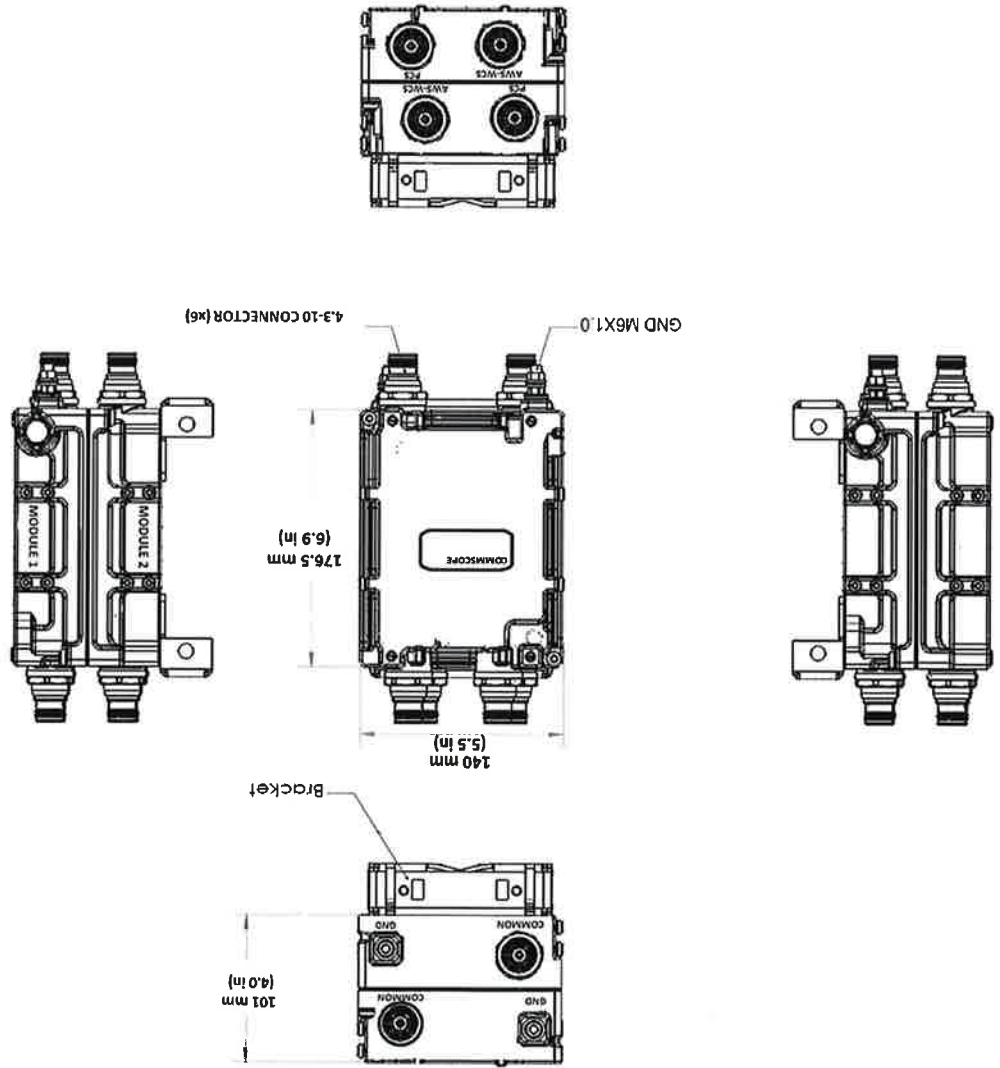
Dimensions

Height 176.5 mm | 6.9 in
Width 140.0 mm | 5.5 in
Depth 101.0 mm | 4.0 in
Volume 2.5 L
Weight, without mounting hardware 3.8 kg | 8.4 lb
Mounting Hardware Weight 0.5 kg | 1.1 lb

Environmental Specifications

Operating Temperature -40 °C to +65 °C (-40 °F to +149 °F)
Relative Humidity Up to 100%
Ingress Protection Test Method IEC 60529:2001, IP67

Outline Drawing



Verizon Wireless Communications Facility

Engineering Necessity Case – “Howland Micro”



City of Beacon
Beacon DT site
Project Location “Howland Micro”
Town of Fishkill
Mt. Beacon Existing Site

Prepared by: Michael R. Crosby

Project: The project is the installation and operation of a telephone pole mounted wireless telecommunications site in the City of Beacon (the “Project Facility”).

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Introduction

The purpose of this subsequent analysis is to summarize and communicate the technical radio frequency (RF) information used in the justification of this new site.

Coverage and/or capacity deficiencies are the two main drivers that prompt the need for a new wireless communications facility/site. All sites provide a mixture of both capacity and coverage for the benefit of the end user.

Coverage can be defined as the existence of signal of usable strength and quality in an area, including but not limited to in-vehicles or in-buildings.

The need for improved coverage is identified by RF Engineers that are responsible for developing and maintaining the network. RF Engineers utilize both theoretical and empirical data sets (propagation maps and real world coverage measurements). Historically, coverage improvements have been the primary justification of new sites.

Capacity can be defined as the amount of traffic (voice and data) a given site can process before significant performance degradation occurs.

When traffic volume exceeds the capacity limits of a site serving a given area, network reliability and user experience degrades. Ultimately this prevents customers from making/receiving calls, applications cease functioning, internet connections time out and data speeds fail. This critical condition is more important than just a simple nuisance for some users. Degradation of network reliability and user experience can affect emergency responders and to persons in a real emergency situation can generally mean life or death.

Project Need Overview

The project area, located within the City of Beacon is currently served by two sites. These sites are overloaded requiring capacity relief. Additionally the project area is impacted by the significant terrain difference between these two serving sites relative to the project area. This excessive difference in terrain combined with distance and area morphology prevents effective capacity and coverage capability of Verizon's RF signals in this area.

The primary serving site is **Mt. Beacon** located in the neighboring town of Fishkill, which is approximately six tenths of a mile south east (of the project location) situated on a mountain top tower located off Mt. Beacon Monument Rd (near Breakneck Ridge Trail). While this site provides coverage (on low band 700MHz) throughout the project area, it does so from such a great difference in elevation (1,200' + difference) that the site is not capable of efficiently or effectively providing the necessary capacity due to Mt. Beacon itself causing excessive interference in and around the project area. This site also provides high band (AWS) service to portions of the project area but again due to the excessive difference in elevation combined with distance to objectives Mt. Beacon is not capable of efficiently or effectively providing the necessary capacity relief and actually degrades area performance and capacity capabilities due to excessive interference in and around the project area (caused by overlapping/overshooting footprint). In order to mitigate the overlapping footprint and improve interference and capacity conditions, Mt. Beacon requires deactivation as it can no longer function properly as an LTE serving site for this area. Regardless of the need to deactivate Mt. Beacon (LTE), additional capacity is currently required even with Mt. Beacon on the air.

The second serving site is **Beacon DT** which is co-located on the roof of a multi-story apartment building off Rt. 9D near South Ave. This site is also requiring capacity relief. While this site is more appropriate for the area than Mt. Beacon, by itself it can not provide the necessary coverage and capacity required to serve the project area.

There are other Verizon sites in this general area but due to distance and terrain they also do not provide any significant overlapping coverage in the area in question that could allow for increased capacity and improved coverage from other sources.

The primary objectives for this project are to increase capacity and improve high band coverage in the Howland Ave, Rt. 9D area including but not limited to portions of Howland, Wolcott Ave, Tioronda Ave, Union St, Depyster Ave, East Main Street as well as the surrounding residential and commercial areas. In order to offload capacity from Mt. Beacon and Beacon DT a new dominant server must be created. This new dominant coverage will effectively offload the existing overloaded sites as well as provide improved high band in building coverage.

Following the search for co-locatable structures to resolve the aforementioned challenges none were found. As a result, Verizon proposes the current application to attach it's antennas to a new 52' tall telephone pole located on Verizon property. Verizon's antennas will utilize 50' for the ACL (Antenna Center Line) with a top of antenna height of 52'. This solution will provide the necessary coverage and capacity improvements needed.

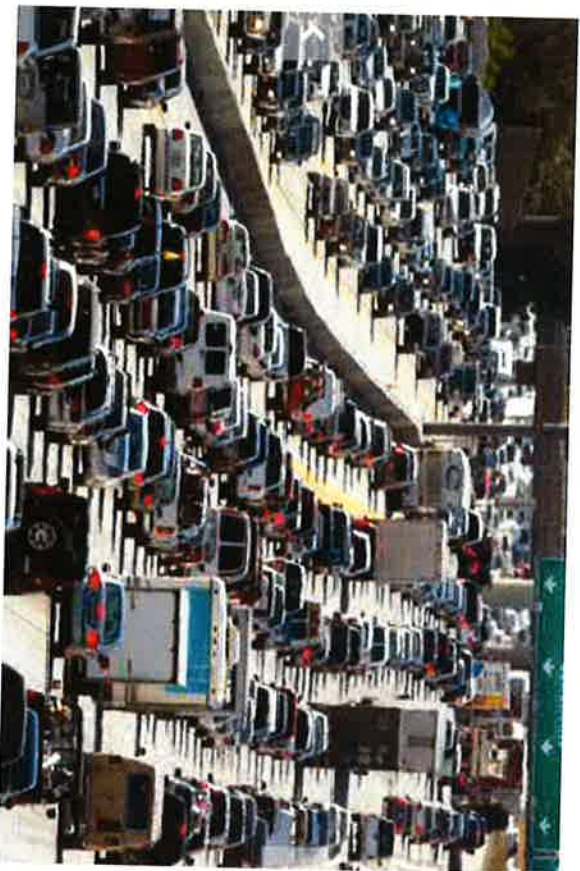
Wireless LTE (Voice and Data) Growth

Each year Verizon experiences substantial increases in data volume including VoLTE (Voice over LTE) that its customers utilize. Data traffic grew 65% between Q3 2016 and Q3 2017 (Ericsson Mobility Report, November 2017)

Machine to Machine communications will also increase the data burden on wireless networks. During the next five years increasingly more services that improve our safety and make our lives easier will become available via the wireless infrastructure, such as:

- Autonomous vehicular communications including automatic 911 notification when airbag deploys.
- Medical monitors that alert caretakers of patient related issues.
- Home alarms that notify people when their child arrives home from school.
- Smart street lights that notify the city when they are not working.
- City garbage cans that let people know when they need to be emptied.
- Tracking watches that can aid in finding lost Alzheimer patients, children, etc.

Explanation of Wireless Capacity

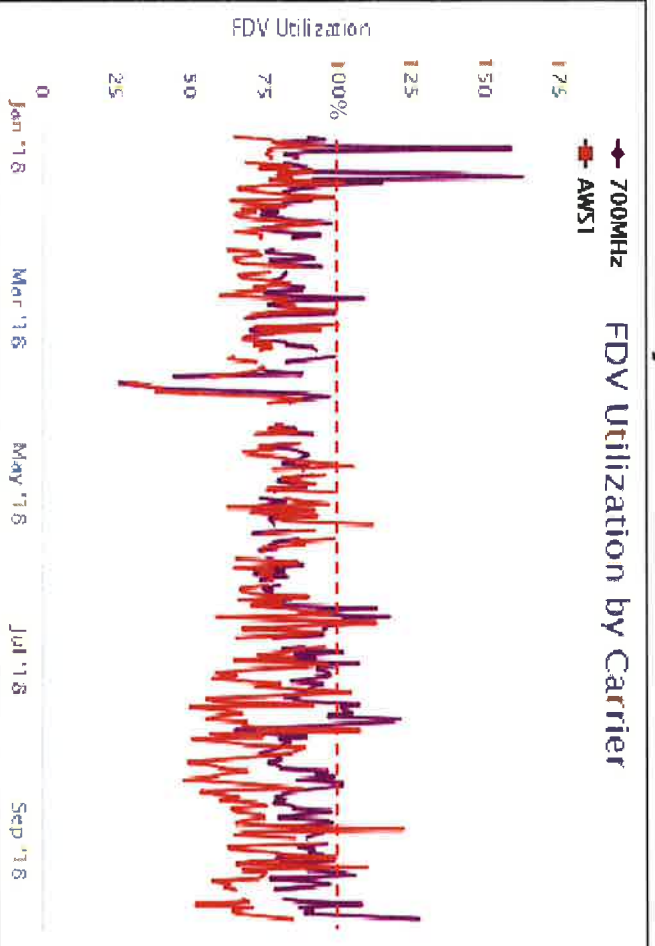


Capacity in this analysis is evaluated with up to three metrics further explained below. These metrics assist in determining actual usage for a given site as well as are used to project when a site is expected to run out of capacity (i.e. reach a point of exhaustion where it can no longer process the volume of voice and data requested by local wireless devices, thus no longer providing adequate service).

- **Forward Data Volume ("FDV")**, is a measurement of usage (data throughput) on a particular site over a given period of time.
- **Average Schedule Eligible User ("ASEU")**, is a measurement of the loading of the control channels and systems of a given site.
- **Average Active Connections ("AvgAC")** is a measurement of the number of devices actively connected to a site in any given time slot.

Verizon Wireless uses proprietary algorithms developed by a task force of engineers and computer programmers to monitor each site in the network and accurately project and identify when sites will approach their capacity limits. Using a rolling two-year window for projected exhaustion dates allows enough time, in most cases, to develop and activate a new site. It is critical that these capacity approaching sectors are identified early and the process gets started and completed in time for new solutions (sites) to be on air before network issues impact the customers.

Capacity Utilization FDV (Mt. Beacon Gamma)



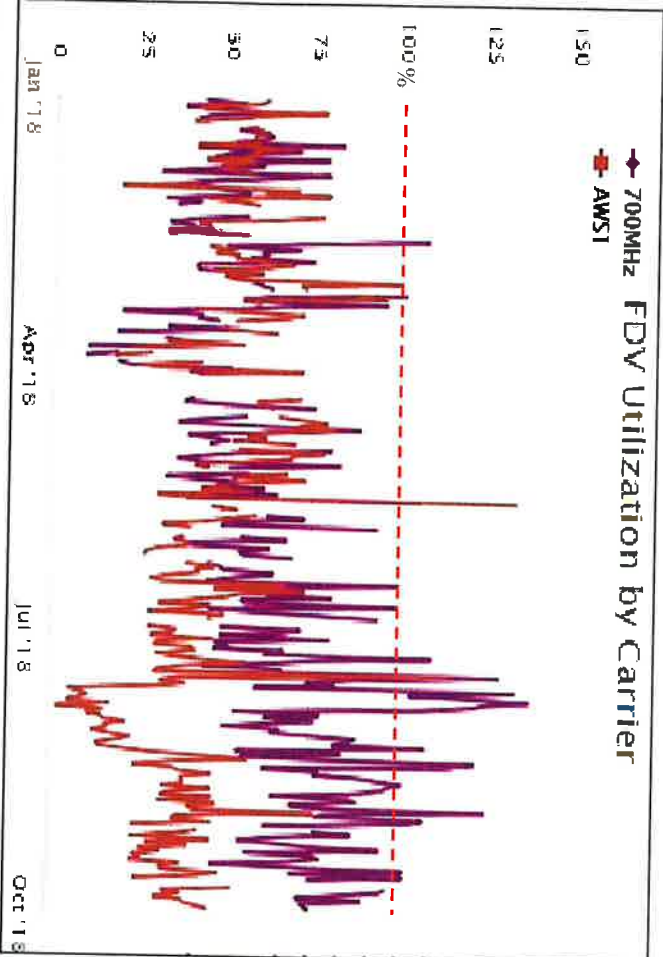
Summary: This graph shows FDV (Forward Data Volume) which is a measurement of the customer data usage that this sector currently serves. As this limit is approached, data rates slow to unacceptable levels, potentially causing unreliable service for Verizon Wireless customers.

The purple line represents the daily max busy hour 700MHz utilization on the **Gamma** sector of the **Mt. Beacon** site. The dark red line represents the daily max busy hour 2100MHz (AWS) utilization on the **Gamma** sector of the **Mt. Beacon** site. The red dashed line is the limit where the sector reaches exhaustion and service starts to significantly degrade. The point in time where we see the purple or dark red lines reach or exceed the red dashed line is when service quickly degrades as usage continues to increase.

Displaying the FDV separately by carrier reveals the inability of high band (AWS) to resolve the capacity issues from existing sites described in this case. High band (AWS/PCS propagation characteristics prevent proper FDV utilization between carriers in coverage challenged areas like the **Electric Blanket** project area. Network densification is required.

Detail: The existing **Mt. Beacon Gamma** sector shown above has exceeded it's capability of supporting FDV requirements as shown by the purple line exceeding the max utilization threshold (red dashed line). While customers served by AWS (high band – dark red line) are not as likely to experience this issue they have recently been subject to this condition as shown by the dark red line exceeding max utilization threshold as well. Keep in mind those customers in weaker RF areas which are more dependent on the low band (700MHz – purple line) continue to experience this issue. Cell edge (weak/variable) conditions create the disparity between high and low bands due to propagation challenges which are more impacted by high band (AWS). FDV is one of three metrics used in this presentation to evaluate capacity capability in this area.

Capacity Utilization FDV (Beacon DT Beta)



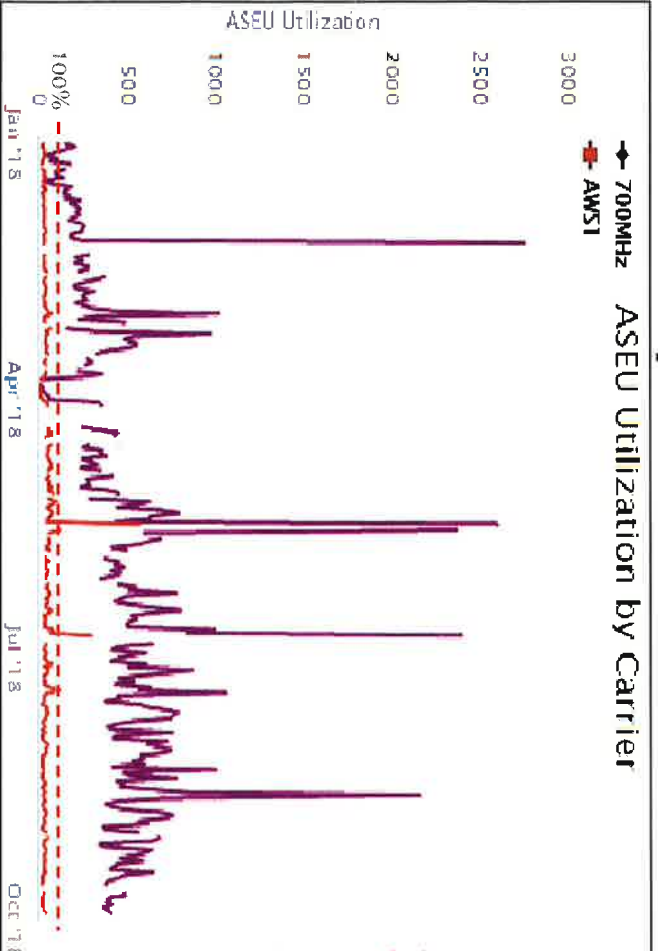
Summary: This graph shows FDV (Forward Data Volume) which is a measurement of the customer data usage that this sector currently serves. As this limit is approached, data rates slow to unacceptable levels, potentially causing unreliable service for Verizon Wireless customers.

The purple line represents the daily max busy hour 700MHz utilization on the **Alpha** sector of the **Beacon DT** site. The dark red line represents the daily max busy hour 2100MHz (AWS) utilization on the **Beta** sector of the **Beacon DT** site. The red dashed line is the limit where the sector reaches exhaustion and service starts to significantly degrade. The point in time where we see the purple or dark red lines reach or exceed the red dashed line is when service quickly degrades as usage continues to increase.

Displaying the FDV separately by carrier reveals the inability of high band (AWS) to resolve the capacity issues from existing sites described in this case. High band (AWS/PCS) propagation characteristics prevent proper FDV utilization between carriers in coverage challenged areas like the **Howland Micro** project area. Network densification is required.

Detail: The existing **Beacon DT Beta** sector shown above has recently exceeded it's capability of supporting FDV requirements as shown by the purple and dark red lines exceeding the max utilization threshold (red dashed line). FDV is one of three metrics used in this presentation to evaluate capacity capability in this area.

Capacity Utilization ASEU (Mt. Beacon Gamma)



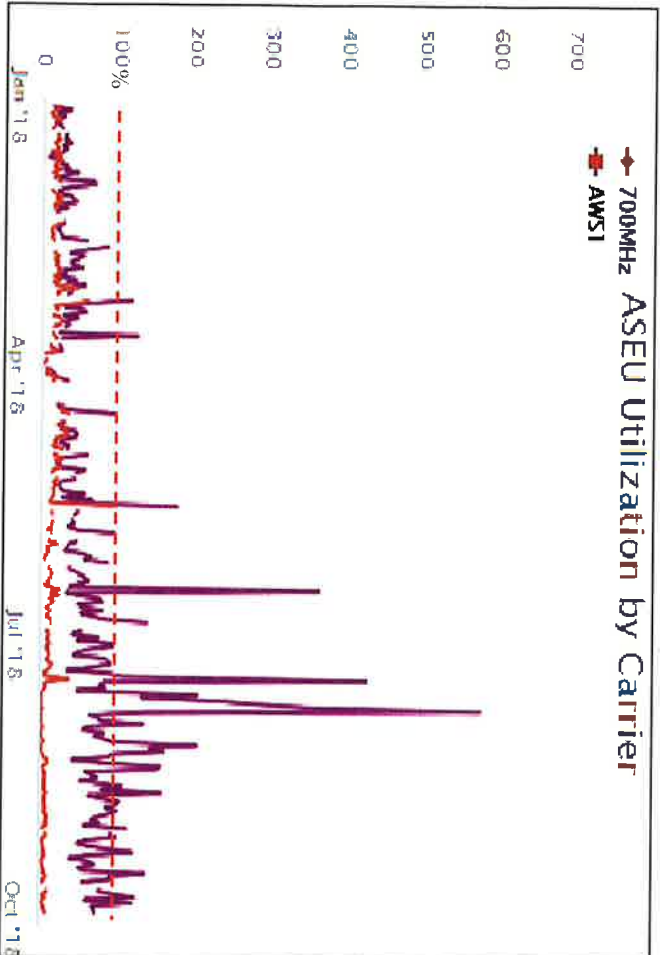
Summary: This graph shows ASEU (Average Schedule Eligible User). ASEU is a measurement of the loading of the control channels and systems of a given site. The ASEU load is heavily impacted by distant users or those in poor RF conditions.

The purple line represents the daily max busy hour 700MHz utilization on the **Gamma** sector of the **Mt. Beacon** site. The dark red line represents the daily max busy hour 2100MHz (AWS) utilization on the **Gamma** sector of the **Mt. Beacon** site. The red dashed line is the limit where the sector reaches exhaustion and service starts to significantly degrade. The point in time where we see the purple or dark red lines reach or exceed the red dashed line is when service quickly degrades as usage continues to increase.

Displaying the ASEU separately by carrier reveals the inability of high band (AWS) to resolve the capacity issues from existing sites described in this case. High band (AWS/PCS propagation characteristics prevent proper ASEU utilization between carriers in coverage challenged areas like the **Electric Blanket** project area. Network densification is required.

Detail: The existing **Mt. Beacon Gamma** sector cannot support the data traffic demand throughout the extents of the excessively large area it covers. **Mt. Beacon Gamma** is already overloaded, as shown by the purple actual use line exceeding the red dashed exhaustion threshold line. Cell edge (weak/variable) conditions create the disparity between high and low bands due to propagation challenges which more significantly impact high band (AWS). The **Mt. Beacon** site is too far away to effectively serve this portion of the City of Beacon.

Capacity Utilization ASEU (Beacon DT Beta)



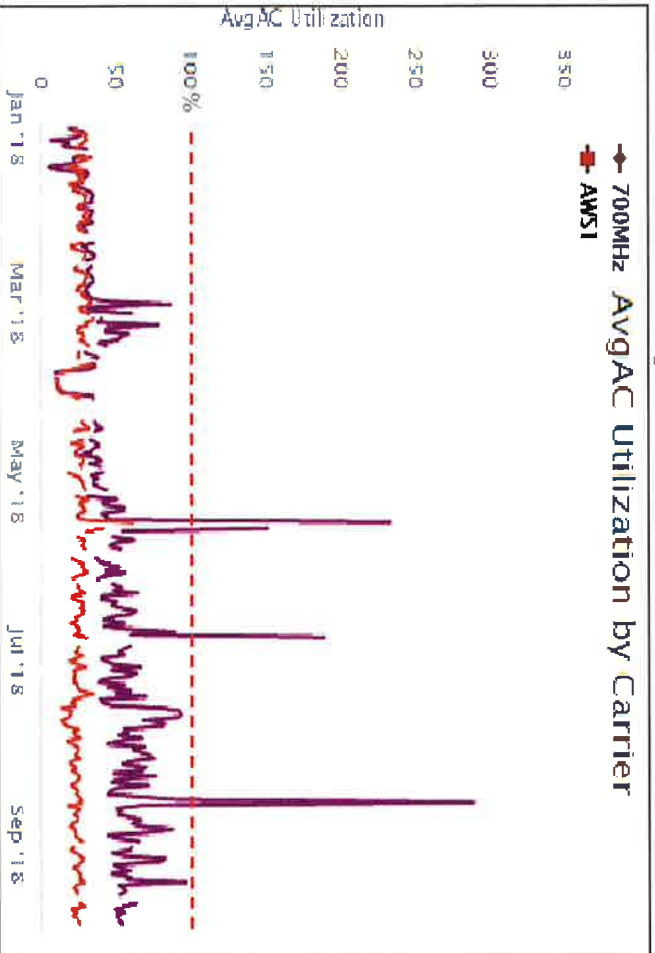
Summary: This graph shows ASEU (Average Schedule Eligible User). ASEU is a measurement of the loading of the control channels and systems of a given site. The ASEU load is heavily impacted by distant users or those in poor RF conditions.

The purple line represents the daily max busy hour 700MHz utilization on the **Beta** sector of the **Beacon DT** site. The dark red line represents the daily max busy hour 2100MHz (AWS) utilization on the **Beta** sector of the **Beacon DT** site. The red dashed line is the limit where the sector reaches exhaustion and service starts to significantly degrade. The point in time where we see the purple or dark red lines reach or exceed the red dashed line is when service quickly degrades as usage continues to increase.

Displaying the ASEU separately by carrier reveals the inability of high band (AWS) to resolve the capacity issues from existing sites described in this case. High band (AWS/PCS propagation characteristics prevent proper ASEU utilization between carriers in coverage challenged areas like the **Howland Micro** project area. Network densification is required.

Detail: The existing **Beacon DT Beta** sector cannot support the data traffic demand throughout the extents of the area it covers. **Beacon DT Beta** is already overloaded, as shown by the purple actual use line exceeding the red dashed exhaustion threshold line. Cell edge (weak/variable) conditions create the disparity between high and low bands due to propagation challenges which more significantly impact high band (AWS). The **Beacon DT** site requires network densification throughout it's serving footprint.

Capacity Utilization AvgAC (Mt. Beacon Gamma)



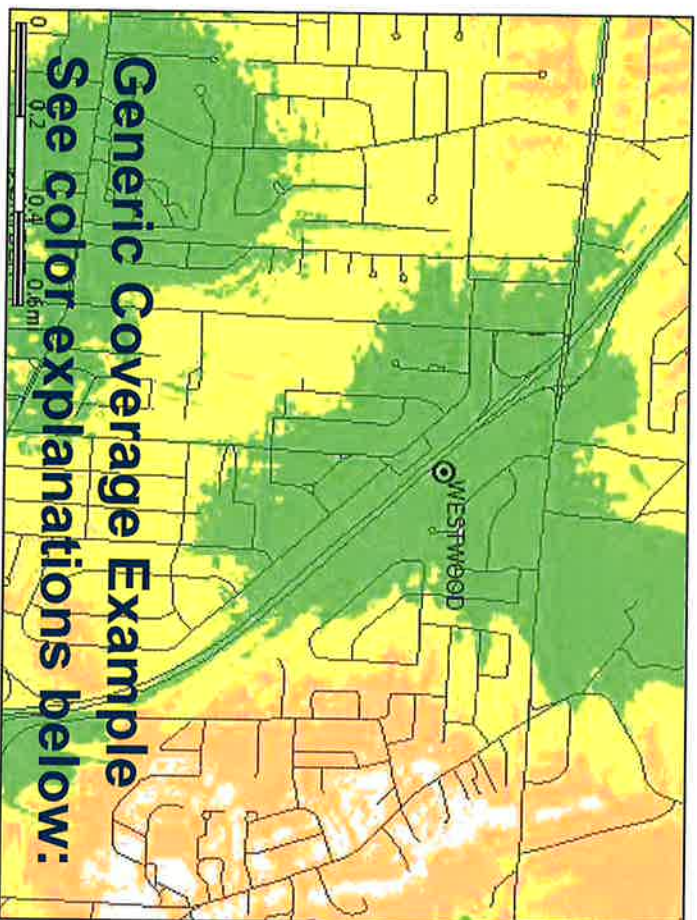
Summary: This graph shows AvgAC (**A**verage **A**ctive **C**onnections). AvgAC utilization by carrier is a measurement of max active connection capacity per sector in any given time slot. When this limit is reached, no additional devices will be able to connect to the site, resulting in connection failures and dropped calls.

The purple line represents the daily max busy hour 700MHz utilization on the **Gamma** sector of the **Mt. Beacon** site. The dark red line represents the daily max busy hour 2100MHz (AWS) utilization on the **Gamma** sector of the **Mt. Beacon** site. The red dashed line is the limit where the sector reaches exhaustion and service starts to significantly degrade. The point in time where we see the purple or dark red lines reach or exceed the red dashed line is when service quickly degrades as usage continues to increase.

This graph helps to reveal foliage impact affecting variable coverage areas which result with a decline in AWS utilization while 700MHz utilization increases at the time of increased springtime foliage. This further complicates capacity offload capability for high band carriers. Network densification is required.

Detail: The existing **Mt. Beacon Gamma** sector cannot support the number of users in the excessively large area it covers and has already reached overloaded conditions recently, as shown by the daily max busy hour utilization line peaking above the red dashed exhaustion threshold line.

Explanation of Wireless Coverage



Coverage is best shown via coverage maps. RF engineers use computer simulation tools that take into account terrain, vegetation, building types, and site specifics to model the RF environment. This model is used to simulate the real world network and assist engineers to evaluate the impact of a proposed site (along with industry experience and other tools).

Most Verizon Wireless sites provide 3G CDMA at 850 MHz and 4G LTE at 700 MHz. As capacity requirements increase, higher frequency PCS (1900 MHz) and AWS (2100 MHz) carriers are added. In some mountaintop situations the high band AWS and PCS carriers are not effective due to excessive distance from the user population.

Coverage provided by a given site is affected by the frequencies used. Lower frequencies propagate further distances, and are less attenuated by clutter than higher frequencies. To provide similar coverage levels at higher frequencies, a denser network of sites is required (network densification).

Note the affect of clutter on the predicted coverage footprint above

Green = -85dBm RSRP, typically serves suburban residential and light commercial buildings (stronger coverage levels may be needed for proper evaluation in urban applications or where more substantial building construction exists)

Yellow = -95dBm RSRP, typically serves most rural/suburban-residential and in car applications

Orange = -105dBm RSRP, rural highway coverage, subject to variable conditions including fading and seasonality gaps

White = <-105dBm RSRP, variable to no reliable coverage gap area

More detailed, site-specific coverage slides are later in the presentation

*Signal strength requirements vary as dictated by specific market conditions

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Explanation of this Search Area



A **Search Area** is the geographical area within which a new site is targeted to solve a coverage or capacity deficiency. Three of the factors taken into consideration when defining a search area are topography, user density, and the existing network.

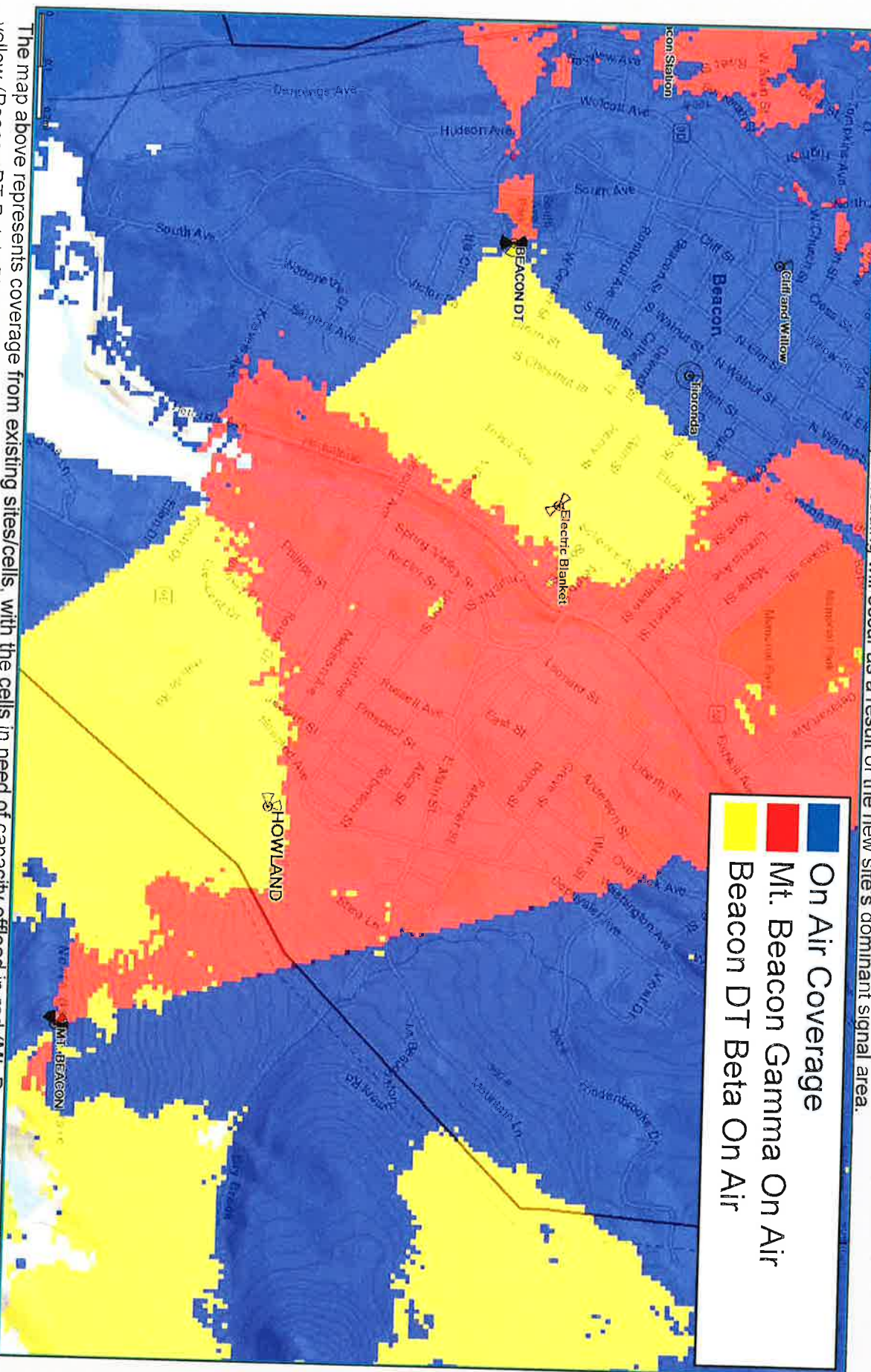
- **Topography** must be considered to minimize the obstacles between the proposed site and the target coverage area. For example, a site at the bottom of a ridge will not be able to cover the other side from a certain height.
- In general, the farther from a site the **User Population** is, the weaker the RF conditions are and the worse their experience is likely to be. These distant users also have an increased impact on the serving site's capacity. In the case of a multi sector site, centralized proximity is essential to allow users to be evenly distributed and allow efficient utilization of the site's resources.
- The existing **Network Conditions** also guide the design of a new site. Sites placed too close together create interference due to overlap and are an inefficient use of resources. Sites that are too tall or not properly integrated with existing sites cause interference and degrade service for existing users.
- Existing co-locatable structures inside the search area as well as within a reasonable distance of the search area are submitted by site acquisition and reviewed by RF Engineering. If possible RF will make use of existing or nearby structures before proposing to build new towers.

Howland micro Search Area

To resolve the coverage and capacity deficiencies previously detailed, Verizon Wireless is seeking to add one new 'micro' cell facility within or as near as possible to this centrally and strategically located area to improve wireless service capacity and coverage. By offloading Beacon DT and displacing traffic from Mt. Beacon with the proposed site, adequate and reliable service will be provided. The new Howland micro site will provide dominant and dedicated signal to portions of Beacon helping to improve not only the area roads but also adjacent populated areas.

Existing 700MHz Best Server -95dBm RSRP

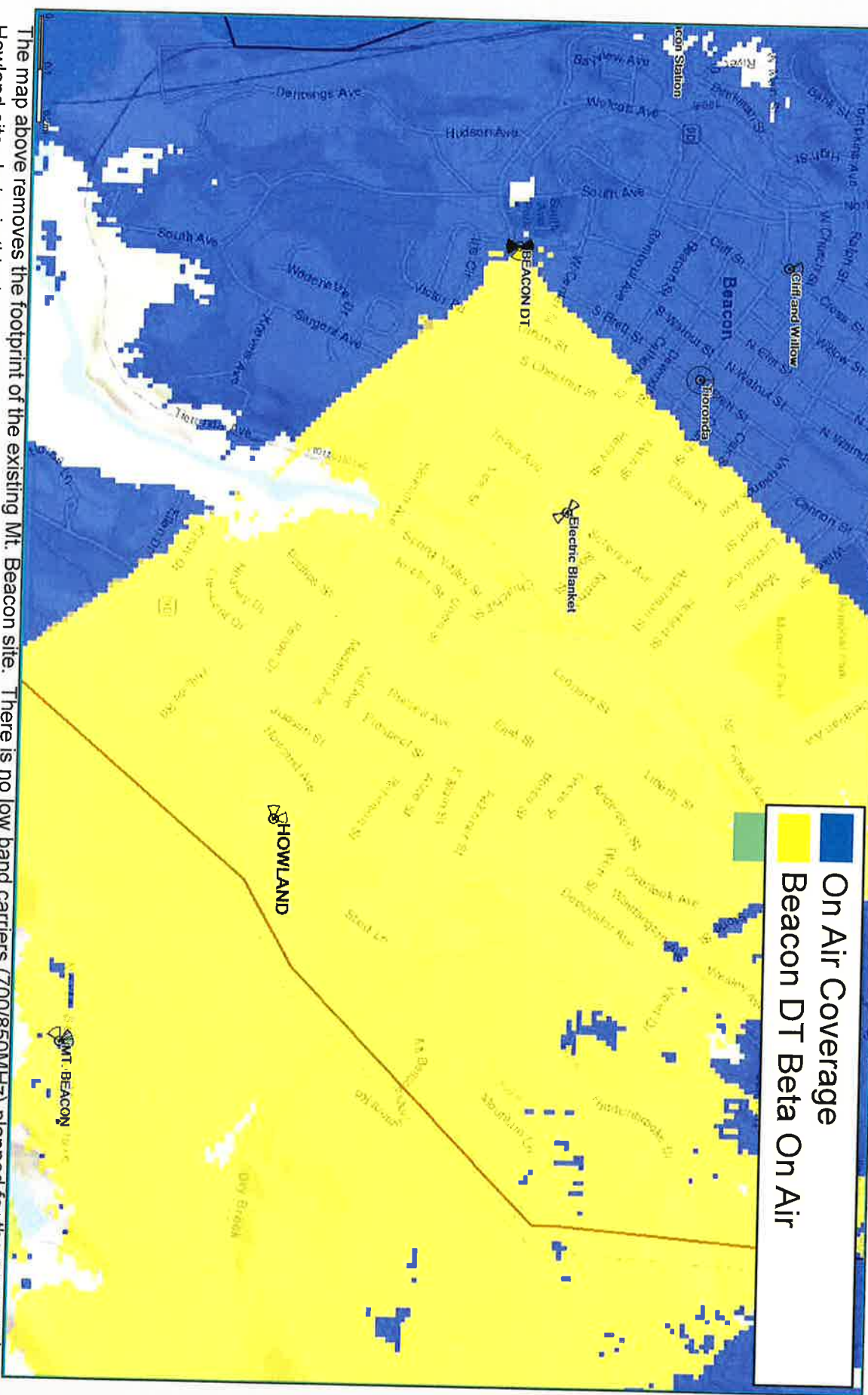
Best Server plots depict the actual best server or dominant footprint of each sector in question. The following map shows one threshold so the viewer can accurately evaluate where primary offloading will occur as a result of the new site's dominant signal area.



The map above represents coverage from existing sites/cells, with the cells in need of capacity offload in red (Mt. Beacon Gamma) and yellow (Beacon DT Beta). Blue coverage is from other on air sites/sectors.

Mt. Beacon LTE OFF 700MHz Best Server -95dBm RSRP

Best Server plots depict the actual best server or dominant footprint of each sector in question. The following map shows one threshold so the viewer can accurately evaluate the overwhelming impact to Beacon DT will occur due to deactivation of Mt. Beacon macro.

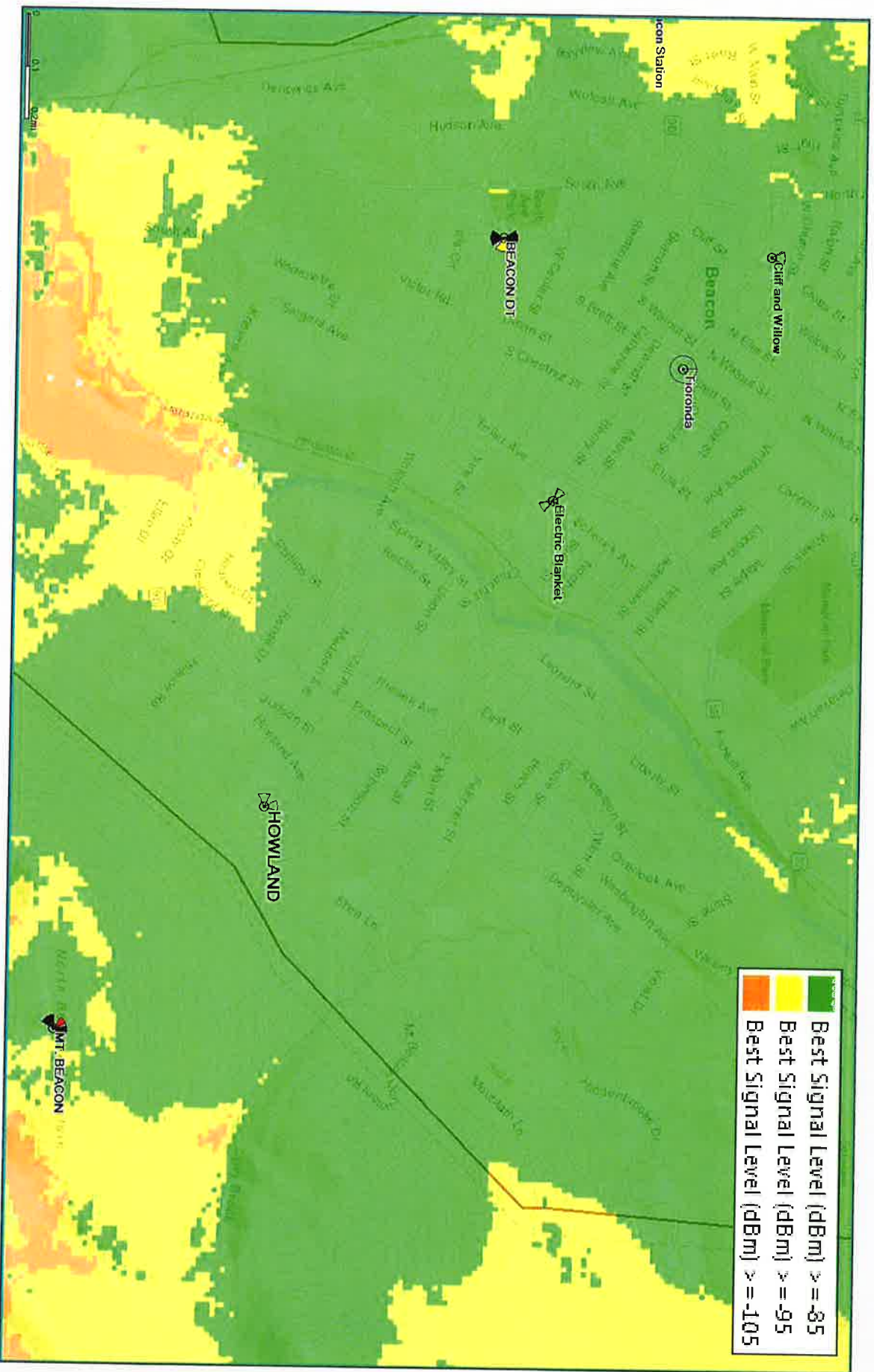


The map above removes the footprint of the existing Mt. Beacon site. There is no low band carriers (700/850MHz) planned for the proposed Howland site. Later in this document are slides showing where the proposed high band carriers (AWS/PCS) will provide offload.



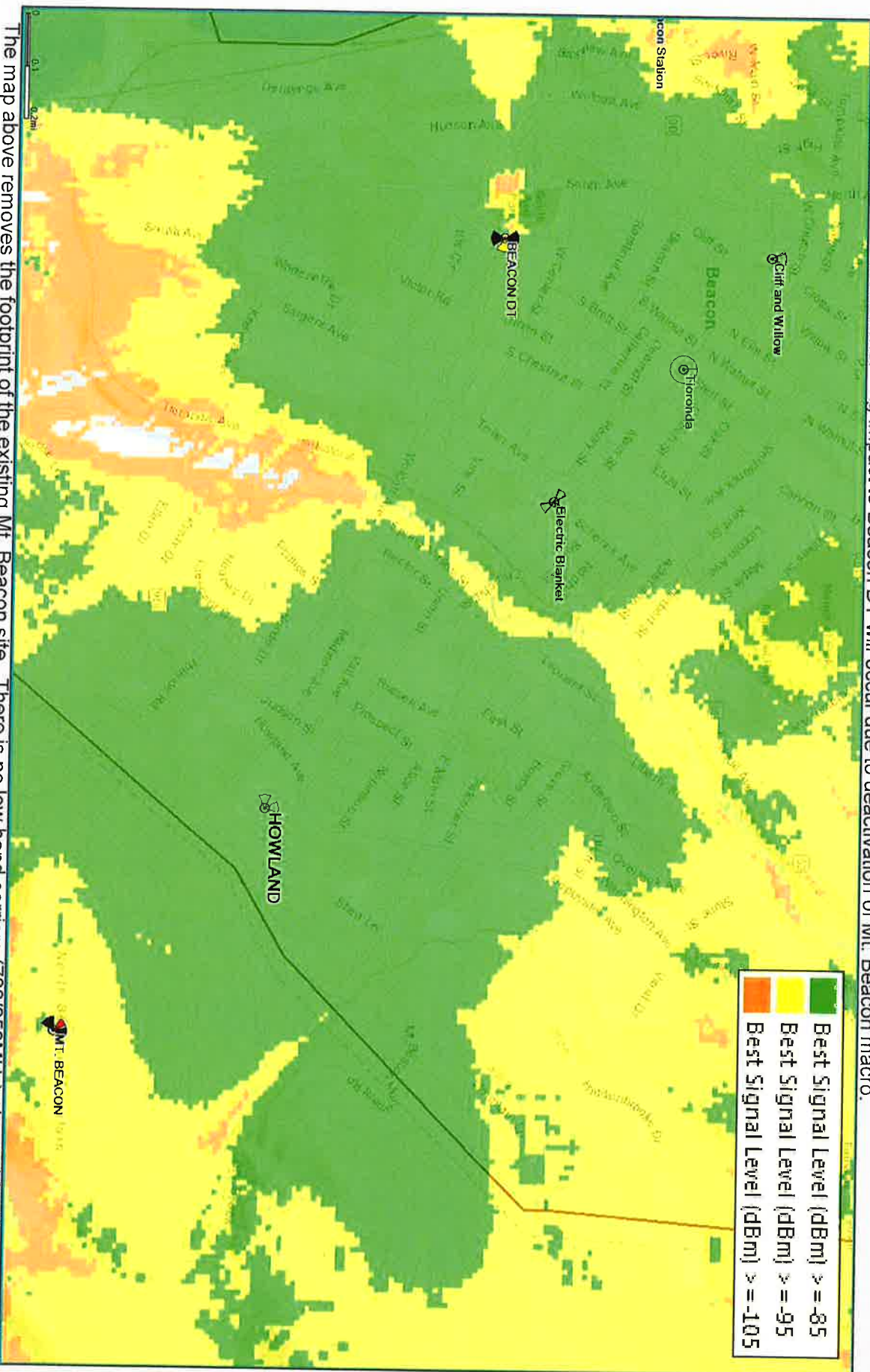
Existing 700MHz Coverage

This coverage map shows existing low band RF conditions in and around the Howland Micro site area.



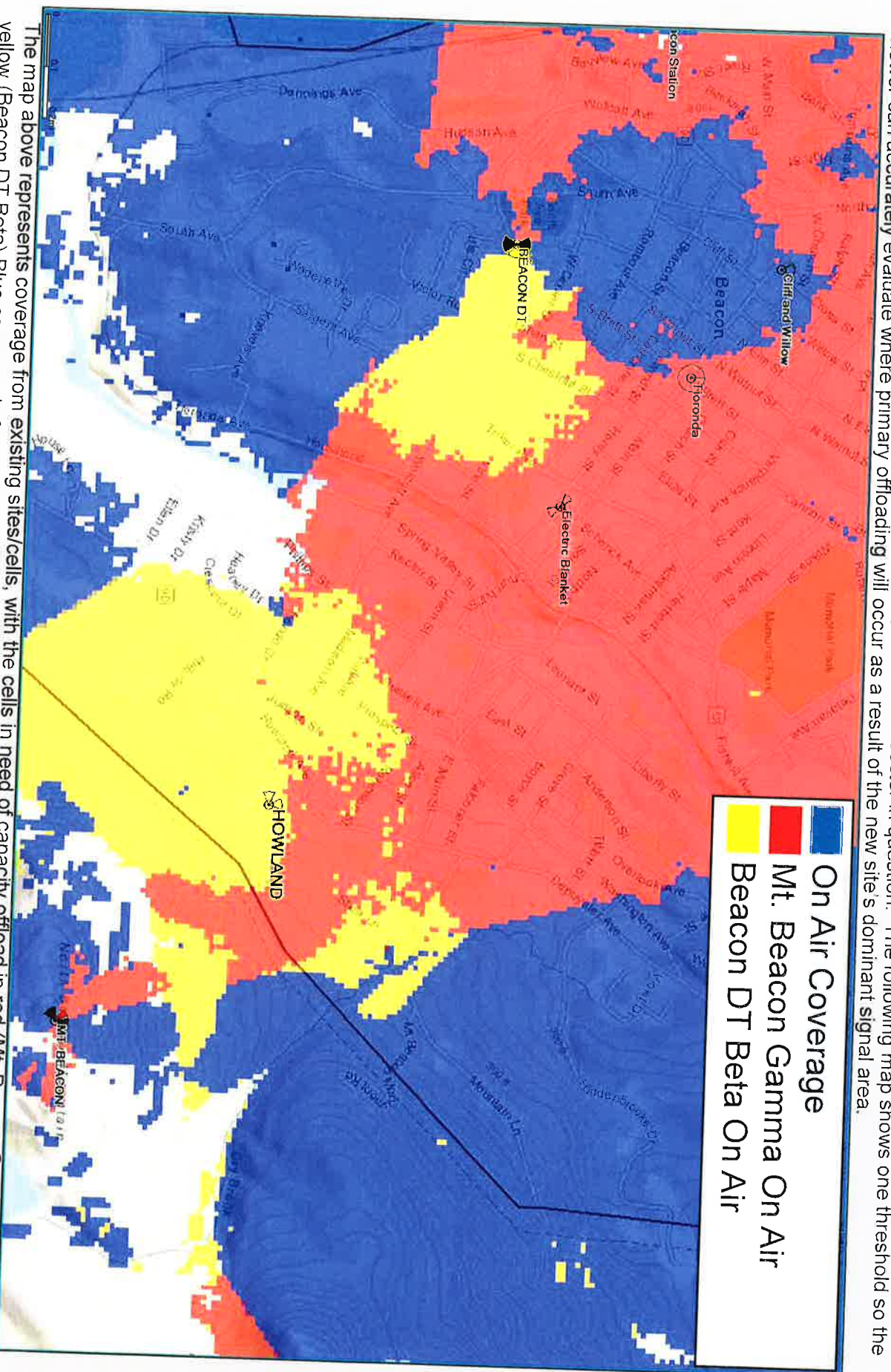
Mt. Beacon LTE OFF 700MHz Best Server -105dBm RSRP

Best Server plots depict the actual best server or dominant footprint of each sector in question. The following map shows one threshold so the viewer can accurately evaluate the overwhelming impact to Beacon DT will occur due to deactivation of Mt. Beacon macro.



Existing 2100MHz Best Server -105dBm RSRP

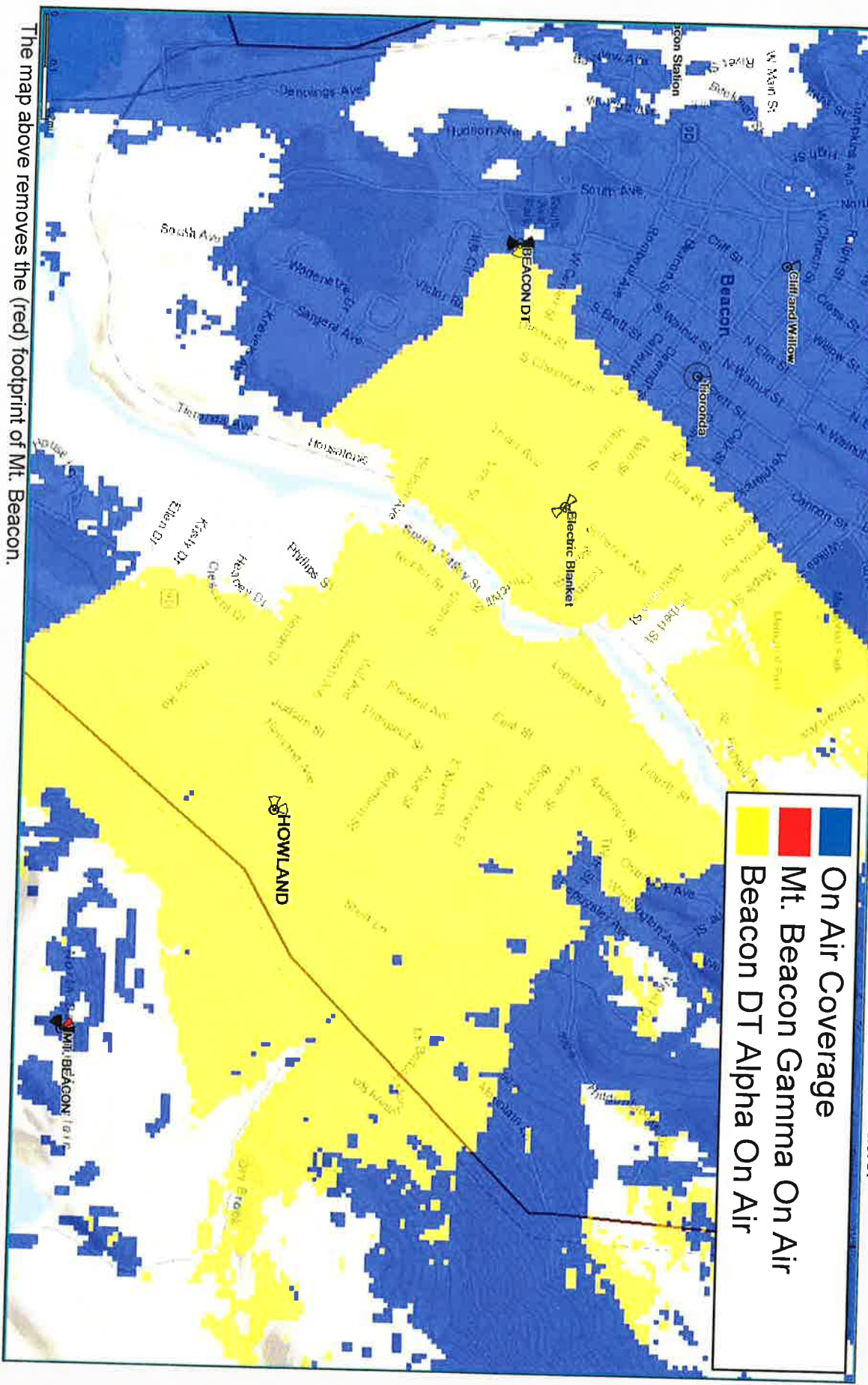
Best Server plots depict the actual best server or dominant footprint of each sector in question. The following map shows one threshold so the viewer can accurately evaluate where primary offloading will occur as a result of the new site's dominant signal area.



The map above represents coverage from existing sites/cells, with the cells in need of capacity offload in red (Mt. Beacon Gamma) and yellow (Beacon DT Beta) Blue coverage is from other on air sites/sectors.

Proposed 2100MHz Best Server -105dBm RSRP

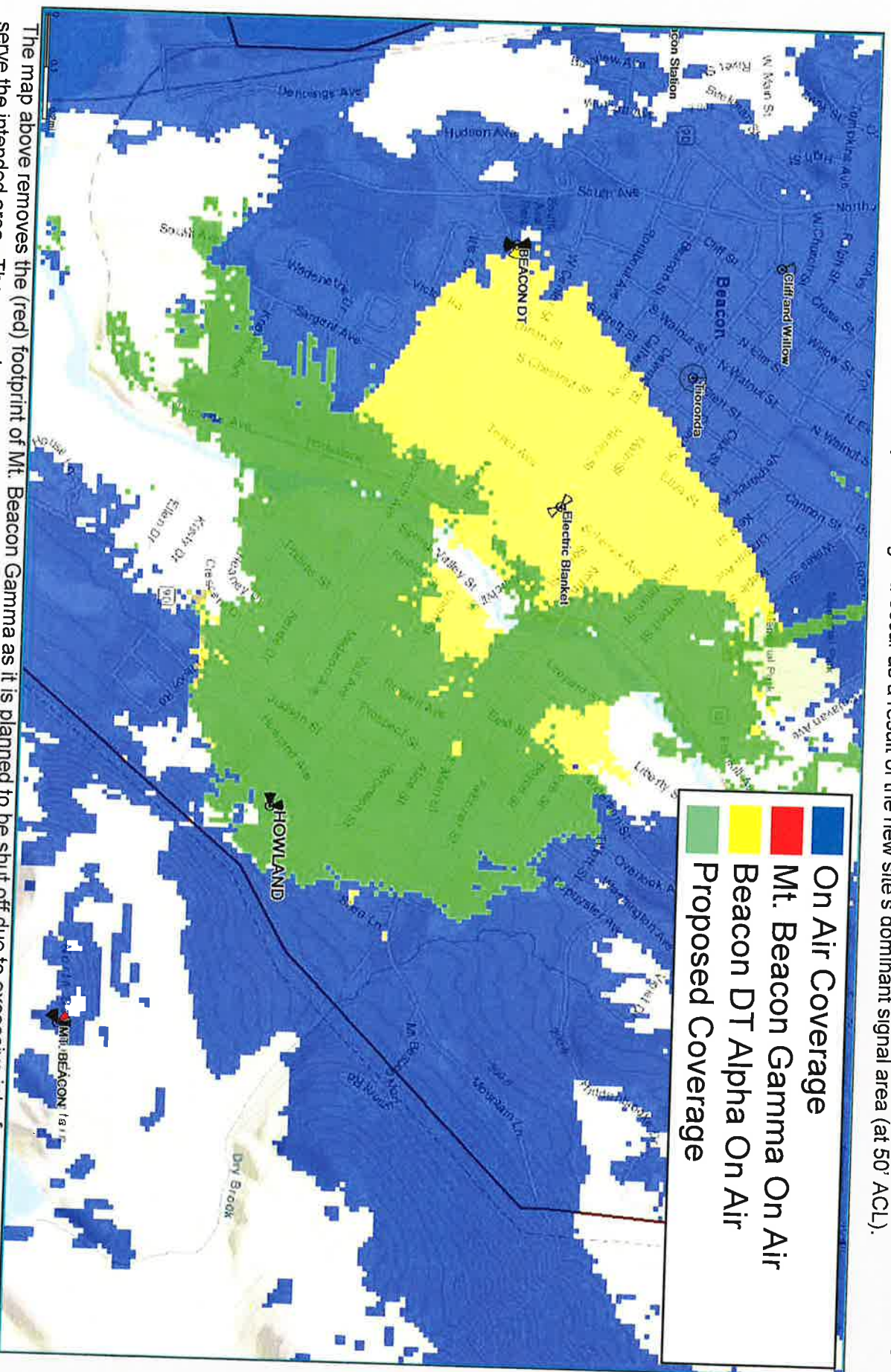
Best Server plots depict the actual best server or dominant footprint of each sector in question. The following map shows one threshold so the viewer can accurately evaluate the overwhelming impact to Beacon DT will occur due to deactivation of Mt. Beacon macro.



The map above removes the (red) footprint of Mt. Beacon.

Proposed (Mt. Beacon Gamma Off) 2100MHz Best Server -105dBm RSRP

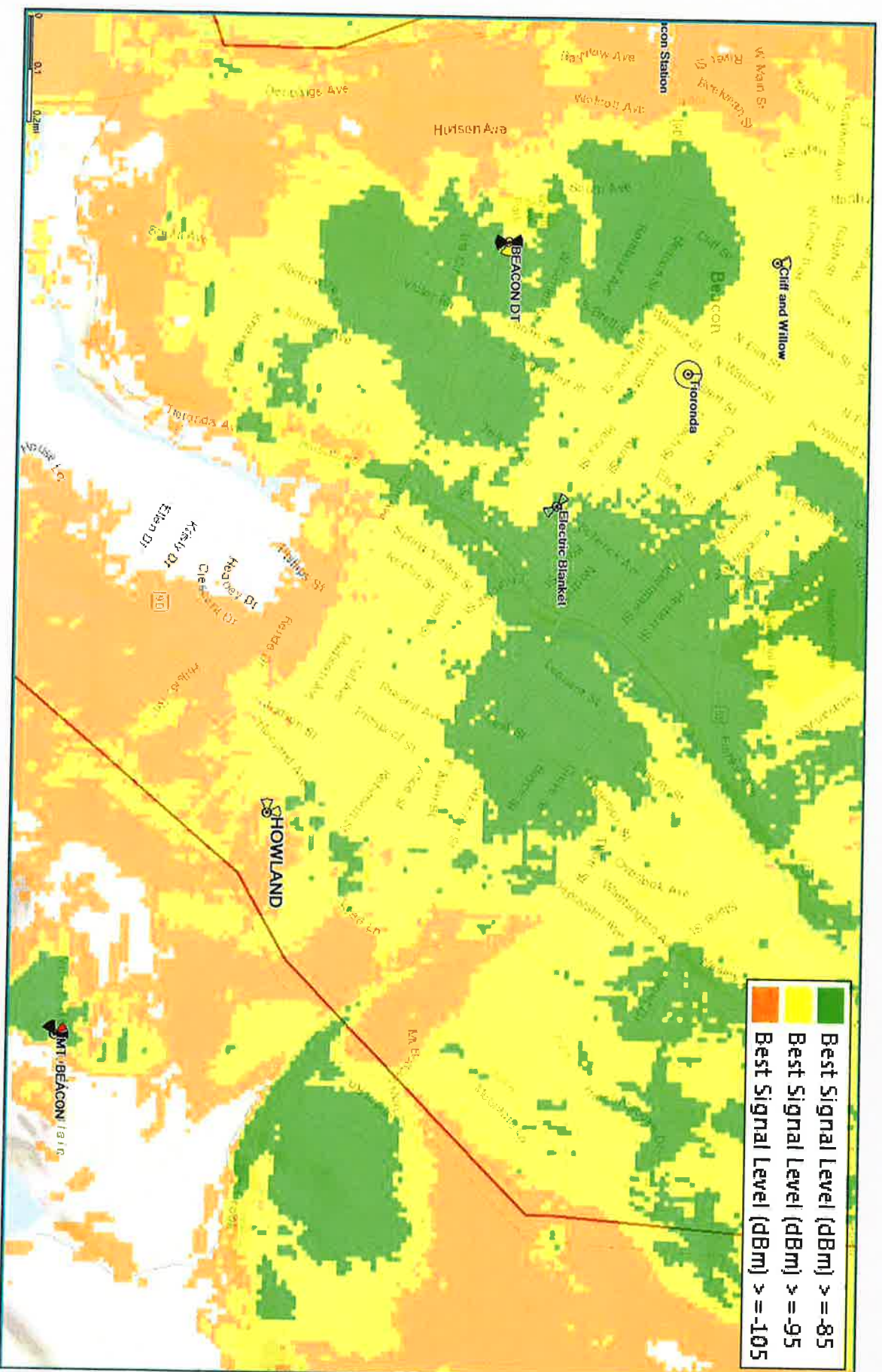
Best Server plots depict the actual best server or dominant footprint of each sector in question. The following map shows one threshold so the viewer can accurately evaluate where primary offloading will occur as a result of the new site's dominant signal area (at 50' ACL).



The map above removes the (red) footprint of Mt. Beacon Gamma as it is planned to be shut off due to excessive interference and inability to serve the intended area. The green best server footprint represents the proposed Howland coverage area. Activation of Howland will be a coordinated event along with additional containment of Beacon DT in order to maintain sector dominance and proper network performance.

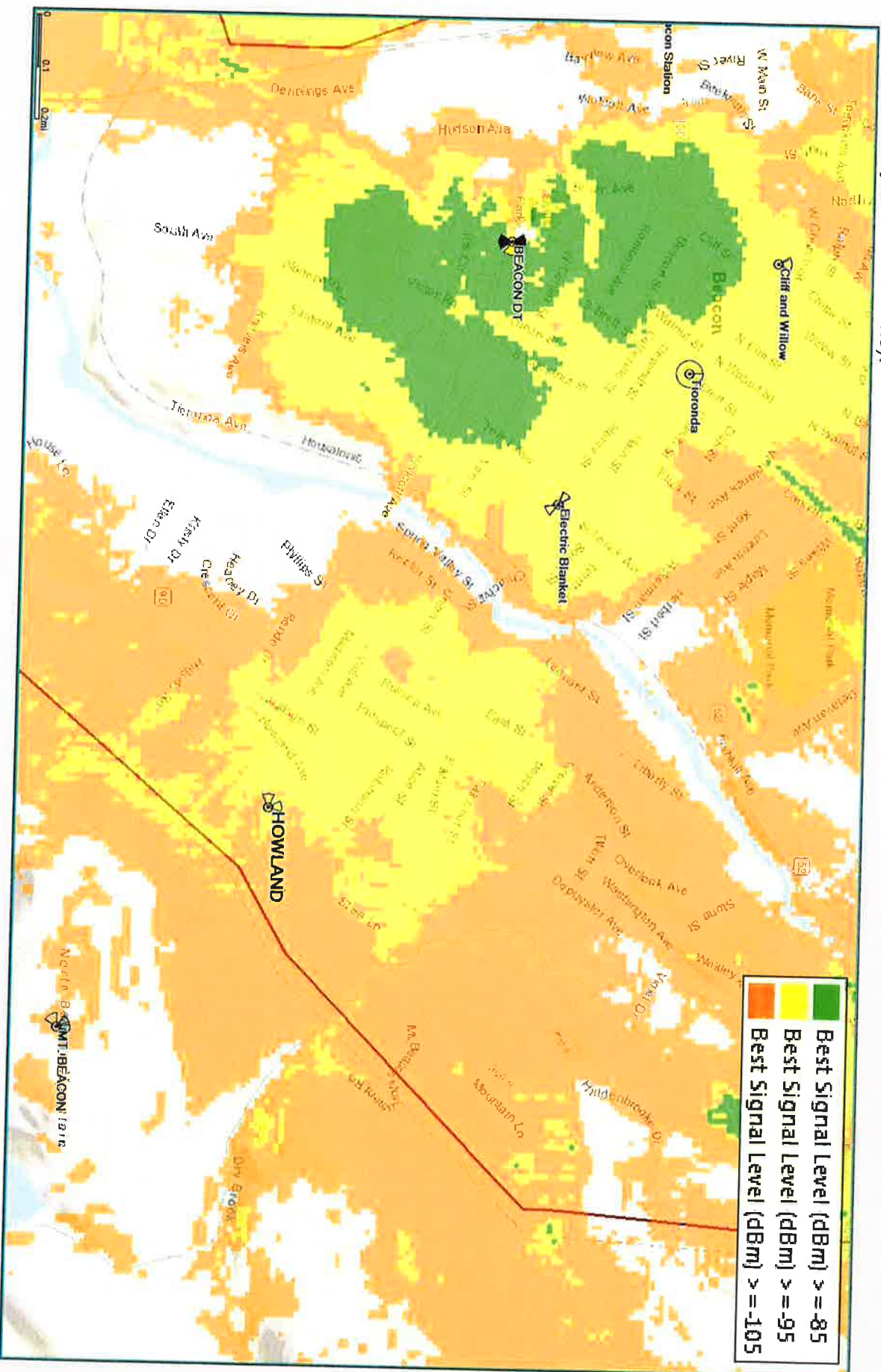
Existing 2100MHz Coverage

This coverage map shows existing high band RF conditions in and around the Electric Blanket site area.



Existing 2100MHz Coverage (Mt. Beacon Gamma Off Air)

This coverage map shows future high band RF conditions in and around the Howland Micro site area after Mt. Beacon Gamma is off air (prior to any new activations).

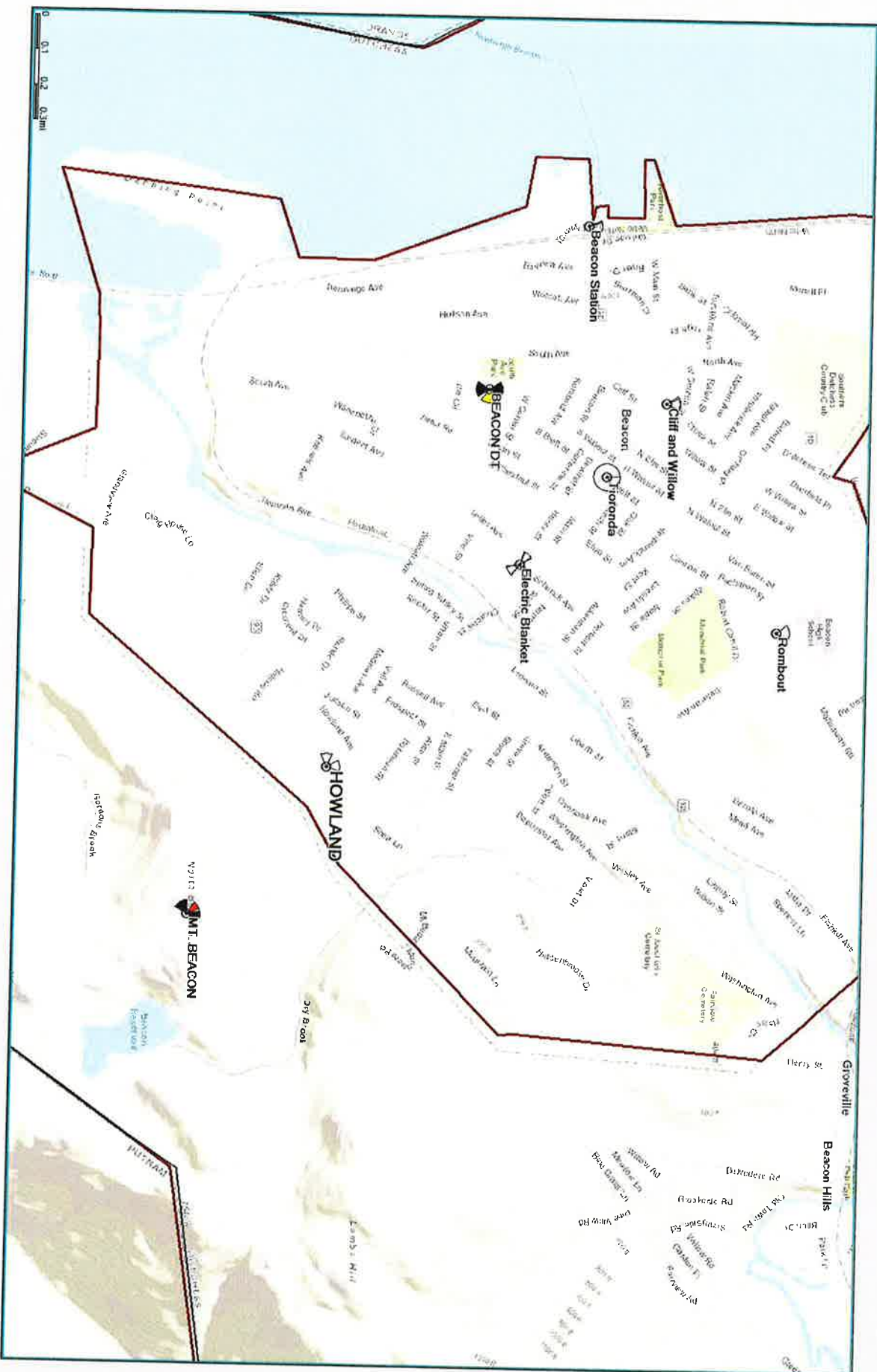


This coverage map shows proposed high band RF conditions (Mt. Beacon off air) in and around the Howland Micro site area (at 50' ACL).



Other sites in development

This map shows the approximate locations of other sites at various stages of development including Beacon Station, Rombout, Cliff and Willow, Tioronda and Electric Blanket.



Site Selection Analysis and Stealth Design

The following candidates were considered throughout the process of developing the Howland ring:

- A. 41.494749°, -73.955751° (Ability Beyond Disability Roof Co-Lo) RF Rejected, ACL too low, obscured by local clutter
- B. 41.494518°, -73.955562°, (Ability Beyond Disability Telephone Pole) RF Approved at 50' ACL

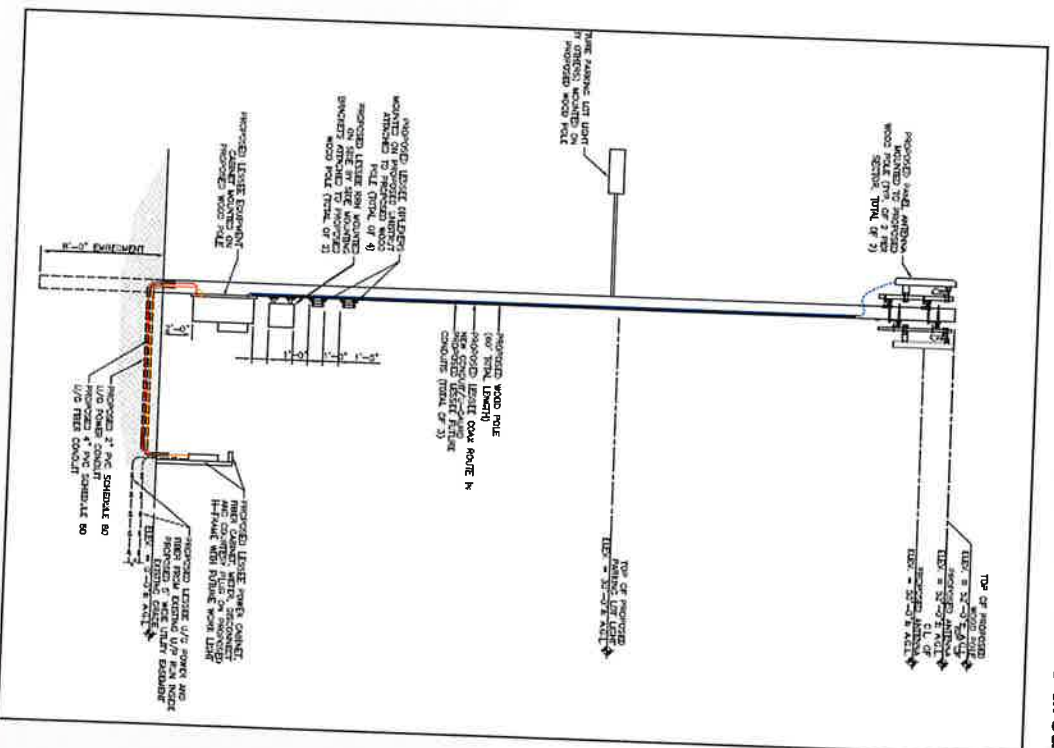
As is the case with other micro sites the search area provided to Site Acquisition (SACQ) by RF Engineering is relatively limited in size which in turn limits the number of potential candidates, in this case there were two. Due to the small nature of the target area, coordination with other sites in design, interest in maximizing site capabilities while limiting the number of solutions required limits the areas where this site will work as identified below.

The new town code was reviewed and there were no city owned or higher priority potential sites available to co-locate on in this area.

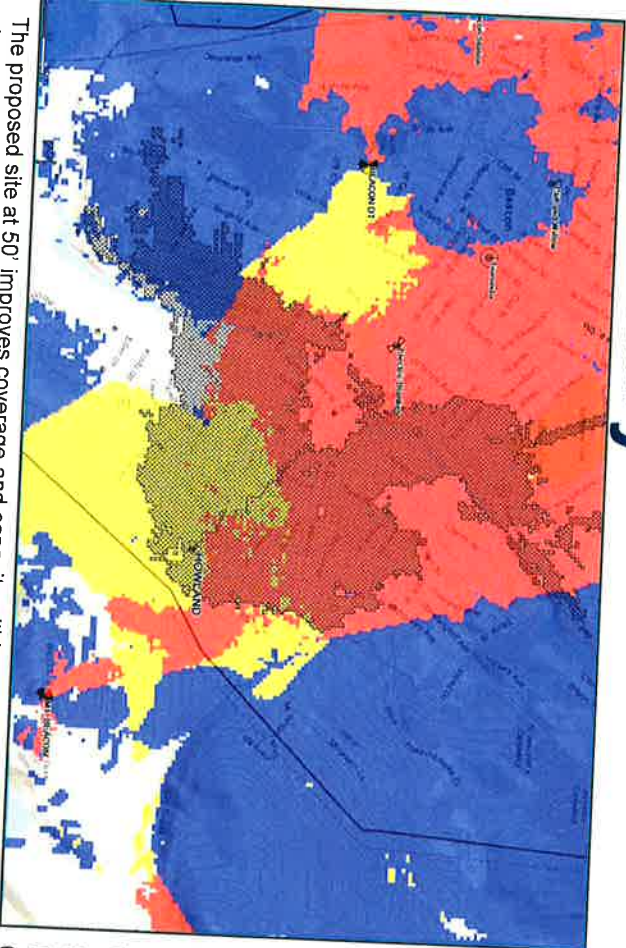


Search Area

The proposed use of a wooden telephone pole to mount the required antennas is a stealth proposal. The antennas are flush mounted to the pole limiting the size of the antenna array. This pole can also be utilized as a parking lot light structure as shown in the elevation view. Telephone poles are commonly utilized in this area of the city and by use of a wooden telephone pole versus a steel monopole, self support or other lattice type tower allows the proposed application to blend into the surroundings. Additionally since it is located between the adjacent building and the unpopulated hillside it is out of the way with no skyline profile. It will blend into the hillside by design achieving stealth.



RF Justification Summary



The proposed site at 50' improves coverage and capacity within the entire shaded area shown above. The significant gaps within these areas which currently result with overburdened low band conditions as shown on slides 8&9 will be significantly improved and are expected to be resolved in conjunction with other area activations planned which will allow for deactivation of Mt. Beacon Gamma sector.

The network was analyzed to determine whether there is sufficient **RF coverage and capacity** in the City of Beacon. It was determined that there are significant gaps in adequate LTE service for Verizon Wireless in the 700 and 2100MHz frequency bands. In addition to the coverage deficiencies, Verizon Wireless' network does not have sufficient capacity (low band or high band) to handle the existing and projected LTE voice and data traffic in the area near and neighboring the proposed Howland micro facility ("targeted service improvement area"). Based on the need for additional coverage and capacity while considering the topography and wide area requiring service, any further addition of capacity to long distance existing sites does not remedy Verizon's significant gap in reliable service. Therefore, the proposed facility is also needed to provide "capacity relief" to the existing nearby Verizon Wireless sites, allowing the proposed facility and those neighboring sites to adequately serve the existing and projected capacity demand in this area.

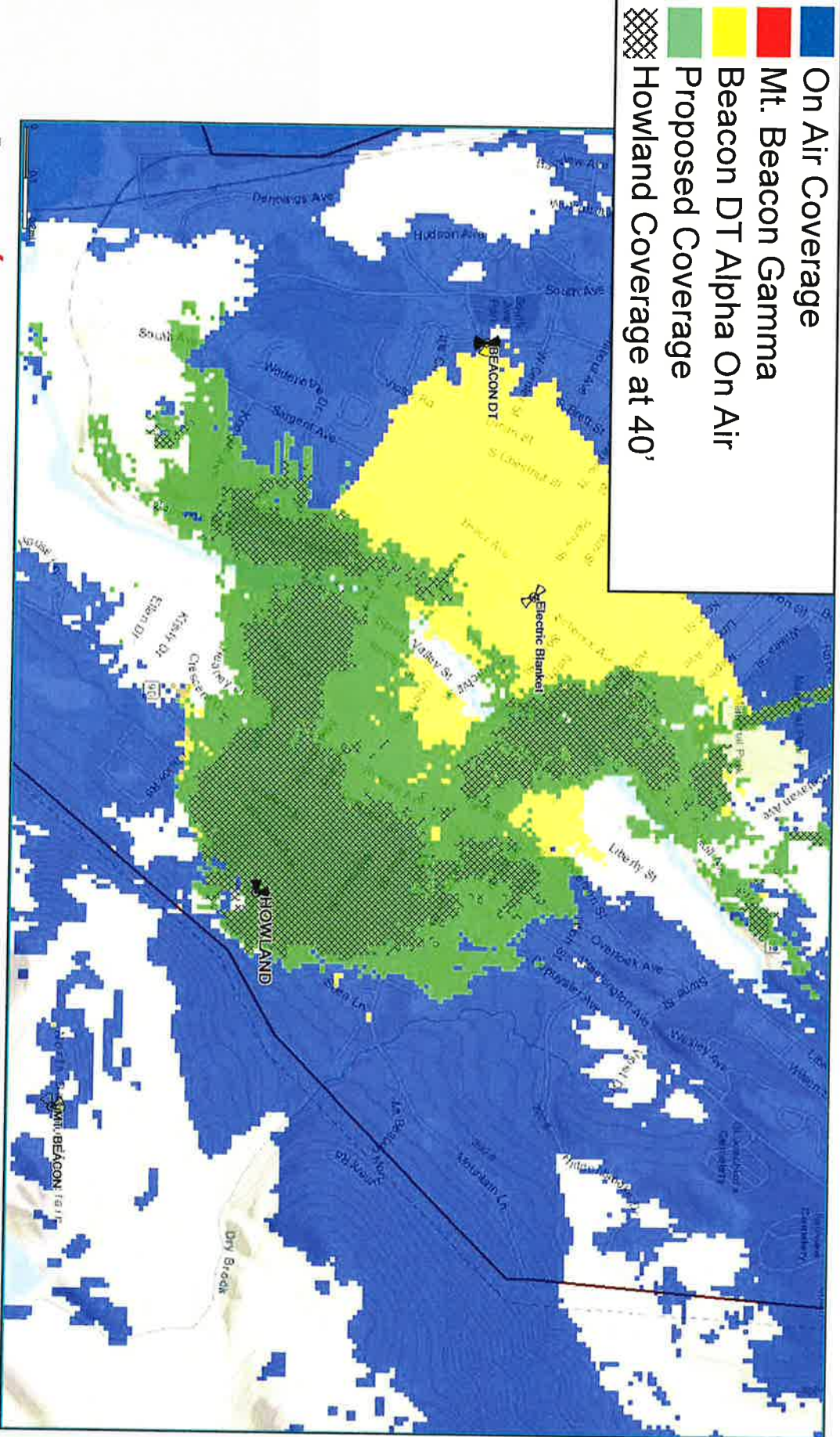
With the existing network configuration there are significant gaps in service which restricts Verizon Wireless customers from originating, maintaining or receiving reliable calls and network access. It is our expert opinion that the proposed height will satisfy the coverage and capacity needs of Verizon Wireless and its subscribers in this portion of Beacon and the Howland micro project area. The proposed location depicted herein satisfies the identified service gaps and is proposed at the minimum height necessary for adequate service.

Michael R. Crosby

Michael R. Crosby
Engineer IV – RF Design
Verizon Wireless

Supplemental: Height Justification

Lowering the antenna centerline from 50' to 40' causes unacceptable loss of sector dominance as well as weaker signal strength throughout the intended coverage area which would result with compromised offload and coverage capabilities. The comparison of expected dominant sector footprints is shown below.

















City of Beacon Workshop Agenda
3/11/2019

Title:

Revised Use of Dimensional Tables

Subject:

Background:

ATTACHMENTS:

Description	Type
Zoning Use Table Draft 2.16.19	Backup Material
Zoning Use Table Draft 2.16.19 Edits	Backup Material
Zoning Dimensional Table Draft 3.3.19	Backup Material
Zoning Dimensional Table Draft 3.3.19 Edits - Copy	Backup Material

Section 223-17, City of Beacon Schedule of Use Regulations (Suggested Edits)

Permitted Uses by District	Reference Notes	<u>All R1</u>	<u>All RD</u>	<u>I</u>	<u>GB</u>	<u>CMS</u>	<u>L</u>	<u>WD</u>	<u>WP</u>	<u>FCD</u>	<u>LI</u>	<u>HI</u>
Residential												
One-Family Detached Dwelling		P	P	P	x	x	x	x	x	x	x	x
One-Family Attached/Semidetached	Including Townhouses	x	P	P	x	x	P	x	x	P	x	x
Two-Family Dwelling		x	P	P	x	x	x	x	x	x	x	x
Multifamily Dwelling		x	SP	P	P	P	P	P	x	P	x	x
Artist Live/Work Space	Subject to §223-24.3	x	x	P	P	P	P	P	x	P	P	x
Retail/Office/Service												
Retail, Personal Service, or Bank		x	x	x	P	P	SP	P	x	x	P	x
Office		x	x	P	P	P	SP	P	x	P	P	x
Artist Studio, Art Gallery/Exhibit Space		x	x	P	P	P	P	x	x	P	P	SP
Funeral Home		x	x	x	P	x	x	x	x	x	P	x
Commercial Recreation, Indoor		x	x	x	P	P	x	x	x	x	P	P
Auction Gallery		x	x	x	P	x	x	x	x	x	P	SP
Adult Use	Subject to §223-20.1	x	x	x	x	x	x	x	x	x	SP	x
Food/Lodging												
Restaurant, Coffee House, Brew Pub		x	x	x	P	P	SP	P	SP	P	x	x
Bar		x	x	x	SP	SP	SP	P	x	P	SP	x
Microbrewery/Microdistillery		x	x	x	SP	SP	SP	x	x	x	P	P
Food Preparation Business		x	x	x	P	SP	SP	x	x	x	P	P
Bed and Breakfast	Subject to §223-24.4	SP	SP	SP	SP	x	P	x	SP	P	SP	x
Inn		x	x	x	P	P	P	P	SP	P	P	x
Hotel	Subject to §223-20	x	x	x	P	P	P	P	x	x	P	x
Social/Community												
Spa/Fitness Center/Exercise Studio		x	x	P	P	P	P	P	x	P	P	x
Day Care Center		x	x	P	P	x	P	P	x	P	SP	x
Park, Preserve, Community Garden		P	P	P	P	SP	P	P	P	x	x	x
Theater, Concert or Conference Space		x	x	x	P	P	P	P	x	P	P	x
Museum		SP	SP	SP	P	P	P	P	x	P	P	x
Place of Worship/Religious Facility		P	P	P	P	x	x	x	x	x	P	x
Social Club	Subject to §223-24.2	SP	SP	SP	SP	SP	x	x	x	x	SP	x
Government Facility		P	P	P	P	P	P	P	P	P	P	P
Golf Course		SP	SP	x	x	x	x	x	x	x	x	x
Healthcare												
Hospital, Clinic, or Nursing Home	Subject to 223-21.1/22	SP	SP	x	x	x	x	x	x	x	x	x
Animal Care Facility		SP	SP	x	SP	x	x	x	x	x	SP	x
Educational												
College or University		SP	SP	x	P	P	P	x	x	P	P	x
Trade School or Training Program		x	x	x	P	P	SP	x	x	P	P	P
Private School or Nursery School		SP	SP	SP	P	x	P	x	x	P	SP	x

x = Use Not Permitted
P = Permitted Use
SP = Special Permit Use

For Specific
Standards See -->

Article IVD Article IVE Article IVA Article IVA Article IVC

2.16.19 DRAFT

Section 223-17, City of Beacon Schedule of Use Regulations (Suggested Edits)

Permitted Uses by District	Reference Notes	<u>All R1</u>	<u>All RD</u>	<u>I</u>	<u>GB</u>	<u>CMS</u>	<u>L</u>	<u>WD</u>	<u>WP</u>	<u>FCD</u>	<u>LI</u>	<u>HI</u>
Parking/Auto-Oriented												
Off-Street Parking as Principal Use	Subject to §223-26	x	x	P	P	x	x	x	x	x	x	x
Vehicle Sales or Rental Lot		x	x	x	SP	x	x	x	x	x	SP	x
Gas Filling Station and/or Car Wash	Subject to Ch.210/§223-21	x	x	x	SP	x	x	x	x	x	SP	x
Auto Body or Repair Shop	Subject to Chapter 210	x	x	x	SP	x	x	x	x	x	SP	SP
Ambulance Service		SP	SP	SP	P	x	x	x	x	x	P	x
Industrial or Assembly												
Wholesale or Storage Business		x	x	x	P	x	x	x	x	x	P	P
Workshop		x	x	SP	P	P	P	x	x	P	P	P
Industrial/Manufacturing Use		x	x	x	x	x	SP	x	x	P	P	P
Other												
Wireless Telecommunications Facility	Subject to §223-24.5	SP	SP	SP	SP	SP	SP	SP	SP	SP	SP	SP
Small Cell Wireless Facility	Subject to §223-26.4	P/SP	P/SP	P/SP	P/SP	P/SP	P/SP	P/SP	P/SP	P/SP	P/SP	P/SP
Farm		P	x	x	x	x	x	x	x	x	x	x
Horticultural Nursery		SP	SP	x	SP	x	x	x	x	x	SP	x
Historic District Overlay Use	Subject to §223-24.7	SP	SP	SP	SP	SP	SP	SP	SP	SP	SP	SP
Permitted Accessory Uses (includes uses/structures customarily incidental to a permitted principal use, but not an activity for commercial gain in a residential district)												
Accessory Apartment	Subject to §223-24.1	SP	SP	SP	x	x	x	x	x	x	x	x
Private Tennis Court or Pool	Subject to §223-13	P	P	P	x	x	x	x	x	x	x	x
Home Occupation or Artist Studio	Subject to §223-17.1	P	P	P	x	x	x	x	x	x	x	x
Medical Service Structure	Subject to §223-13	P	P	P	x	x	x	x	x	x	x	x
Parking Structure		x	x	x	x	P	P	P	x	P	x	x
Roof Garden or Greenhouse		P	P	P	P	P	P	P	P	P	P	P
Solar Collectors	Subject to Article X	P	P	P	P	P	P	P	P	P	P	P

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For Specific
Standards See -->

Article IVD Article IVE Article IVA Article IVA Article IVC

2.16.19 DRAFT

Section 223-17, City of Beacon Schedule of Use Regulations (Suggested Edits)

Permitted Uses by District	Reference Notes	All R1	All RD	PB	QBT	LB	GB	CMS	L	WD	WP	FCD	LI	HI
Residential														
One-Family Detached Dwelling		P	P	P	P	P	x	P x	x	x	x	x	x	x
One-Family Attached/Semidetached	Including Townhouses	x	P	x	x P	P	x	P x	P	P x	x	P	x	x
Two-Family Dwelling		x	SP P	x	x P	x	x	P x	P x	x	x	x	x	x
Multifamily Dwelling		x	SP	x	x P	x	SP P	P	P	P	x	P	x	x
Artist Live/Work Space	Subject to §223-24.3	x	x	x	x P	SP	SP P	P	SP P	P	x	P	SP P	x
Retail/Office/Service														
Retail, Personal Service, or Bank		x	x	x	x	P	P	P	SP	P	x	x	P	P x
Office		x	x	x	P	P	P	P	SP	P	x	P	P	P x
Retail Truck or Trailer	Subject to §223-26.3	x	x	x	x	x	P	P	P	x	SP	x	P	P
Artist Studio, Art Gallery/Exhibit Space		SP x	SP x	SP	SP P	SP	SP P	P	P	x	x	P	SP P	SP
Funeral Home		x	x	x	x	P	P	P x	x	x	x	x	P	P x
Commercial Recreation, Indoor		x	x	x	x	x	P	P	x	x	x	x	P	P
Auction Gallery		x	x	x	x	x	P	P x	x	x	x	x	P	P SP
Tattoo Parlor	Subject to §223-26.2	x	x	x	x	x	P	P	x	x	x	x	P	P
Adult Use	Subject to §223-20.1	x	x	x	x	x	x	x	x	x	x	x	SP	SP x
Food/Lodging														
Restaurant, Coffee House, Brew Pub		x	x	x	SP x	SP	P	P	SP	P	SP	P	P x	P x
Bar		x	x	x	x	SP	SP	SP	x SP	P	x	P	SP	SP x
Microbrewery/Microdistillery		x	x	x	x	SP	SP	P SP	SP	x	x	x	SP P	SP P
Food Preparation Business		x	x	x	x	x	x P	P SP	SP	x	x	x	x P	x P
Bed and Breakfast	Subject to §223-24.4	SP	SP	SP	SP	SP	SP	P x	P	x	SP	P	SP	P x
Inn		x	x	x	x	x	x P	P	P	P	SP	P	x P	x
Hotel	Subject to §223-20	x	x	x	x	x	SP P	P	P	P	x	x	SP P	SP x
Social/Community														
Spa/Fitness Center/Exercise Studio		x	x	x	x P	x	x P	P	x P	P	x	P	x P	x
Day Care Center		x	x	x	x P	x	x P	x	x P	P	x	P	x SP	x
Park, Preserve, Community Garden	With No Admission Fee	SP P	SP P	SP	SP P	SP	SP P	P SP	P	P	P	x	SP x	SP x
Theater, Concert or Conference Space		x	x	x	x	x	P	P	x P	SP P	x	P	P	P x
Museum		SP	SP	SP	SP	P	P	P	x P	SP P	x	P	P	SP x
Place of Worship/Religious Facility		P	P	P	P	P	P	x	x	x	x	x	P	P x
Social Club	Subject to §223-24.2	SP	SP	SP	SP	SP	SP	SP	x	x	x	x	SP	SP x
Government Facility		P	P	P	P	P	P	P	P	P	P	P	P	P
Golf Course		SP	SP		x		x	x	x	x	x	x	x	x
Healthcare														
Hospital, Clinic, or Nursing Home	Subject to 223-21.1/22	SP	SP	SP	SP x	SP	x	x	x	x	x	x	x	x
Animal Care Facility		x SP	x SP		x		x SP	x	x	x	x	x	x SP	x
Educational														
College or University		x SP	x SP	x	x	x	SP P	P	x P	x	x	x P	SP P	SP x
Trade School or Training Program		x	x	x	x	x	SP P	P	x SP	x	x	x P	SP P	SP P
Private School or Nursery School		SP	SP	SP	SP	SP	x P	P x	x P	x	x	x P	SP	SP x

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For Specific
Standards See -->

Article Article Article Article Article
IVD IVE IVA IVA IVC

2.16.19 DRAFT

Section 223-17, City of Beacon Schedule of Use Regulations (Suggested Edits)

Permitted Uses by District	Reference Notes	All R1	All RD	PB	QBT	LB	GB	CMS	L	WD	WP	FCD	LI	HI
Parking/Auto-Oriented														
Off-Street Parking as Principal Use	Subject to §223-26	SPx	SPx	SP	P	P	P	P x	x	x	x	x	P x	P x
Vehicle Sales or Rental Lot		x	x		x		SP	x	x	x	x	x	*SP	x
Gas Filling Station and/or Car Wash	Subject to Ch.210/§223-21	x	x	*	x	*	SP	x	x	x	x	x	*SP	SP x
Auto Body or Repair Shop	Subject to Chapter 210	x	x	*	x	*	SP	x	x	x	x	x	SP	SP
Ambulance Service		SP	SP	SP	SP	SP	SP P	x	x	x	x	x	SP P	SP x
Industrial or Assembly														
Wholesale or Storage Business		x	x	*	x	*	P	x	x	x	x	x	SP P	P
Workshop		x	x	*	*SP	*	P	P	*P	x	x	P	P	P
Industrial/Manufacturing Use		x	x	*	x	*	x	x	SP	x	x	P	P	P
Other														
Wireless Communication	Subject to §223-24.5	SP	SP	SP	SP	SP	SP	P SP	P SP	*SP	*SP	*SP	SP	SP
Small Cell Wireless Facility	Subject to §223-26.4	P/SP	P/SP	P/SP	P/SP	P/SP	P/SP	P/SP	P/SP	P/SP	P/SP	P/SP	P/SP	P/SP
Farm		P	P x	P	P x	P	x	x	x	x	x	x	x	x
Horticultural Nursery		SP	SP	SP	SP x	SP	SP	x	x	x	x	x	SP	SP x
Historic District Overlay Use	Subject to §223-24.7	SP	SP	SP	SP	SP	SP	SP	SP	SP	SP	SP	SP	SP
Ski Facility (Mt. Beacon)		SP	*	*	*	*	*	*	*	*	*	*	*	*
Permitted Accessory Uses (includes uses/structures customarily incidental to a permitted principal use, but not an activity for commercial gain in a residential district)														
Accessory Apartment	Subject to §223-24.1	SP	SP	*	*SP	*	x	x	x	x	x	x	x	x
Private Tennis Court or Pool	Subject to §223-13	P	P	*	*P	*	x	x	x	x	x	x	x	x
Home Occupation or Artist Studio	Subject to §223-17.1	P	P	*	*P	*	x	P x	P x	x	x	x	x	x
Medical Service Structure	Subject to §223-13	P	P		P	*	x	x	x	x	x	x	x	x
Parking Structure		x	x		x		x	P	*P	*P	x	*P	x	x
Roof Garden or Greenhouse		P	P	*	*P	*	*P	P	P	P	*P	*P	*P	*P
Solar Collectors	Subject to Article X	P	P	P	P	P	P	P	P	P	P	P	P	P
x = Use Not Permitted P = Permitted Use SP = Special Permit Use		For Specific Standards See -->						Article IVD	Article IVE	Article IVA	Article IVA	Article IVC	2.16.19	DRAFT

Section 223-17, Schedule of Dimensional Regulations (suggested edits in red)

DRAFT 3.3.19

Zoning District	Minimum Lot Size (see also 223-12 I) Area ^h				Minimum Yard Side ^a				Minimum % Building Separation Same Lot (ft)	Maximum Height Main Building (see 223-13) (stories ft)	Maximum % Building Coverage		Maximum Number of Units per Building	Minimum Open Space	Zoning District	Also Refer to Pertinent Sections
	Area (sf)	Per Unit (sf)	Width (ft)	Depth (ft)	Front (ft)	Total		Rear ^{d,e} (ft)								
						Min. (ft)	of 2 (ft)									
R1-120	120,000	120,000	250'	350'	75'	50'	100'	75'		2.5 35'	N.A.	7%	1		R1-120	
R1-80	80,000	80,000	150'	200'	50'	30'	70'	50'		2.5 35'	N.A.	10%	1		R1-80	
R1-40	40,000	40,000	150'	150'	40'	25'	60'	50'		2.5 35'	N.A.	15%	1		R1-40	
R1-20	20,000	20,000	125'	125'	30'	20'	50'	40'		2.5 35'	N.A.	20%	1		R1-20	
R1-10	10,000	10,000	85'	100'	25'	15'	40'	35'		2.5 35'	N.A.	25%	1		R1-10	
R1-7.5	7,500	7,500	75'	100'	20'	10'	20'	30'		2.5 35'	N.A.	30%	1		R1-7.5	
R1-5	5,000	5,000	50'	100'	15'	10'	20'	30'		2.5 35'	N.A.		1		R1-5	
RD-7.5 ^{d,e}	2 acres	7,500	200'	200'	20-35'	25'	50'	50'	30'	3 35'	15%	20%	12		RD-7.5 ^{d,e}	
RD-6 ^{d,e}	2 acres	6,000	200'	200'	50'	25'	50'	50'	30'	2.5 35'	15%	20%	16		RD-6 ^{d,e}	
RD-5 ^{d,e}	5,000	5,000	50'	100'	30'	10'	20'	25'	30'	3 35'	20%	30%	16		RD-5 ^{d,e}	
RD-4 ^{d,e}	5,000	4,000	200'	200'	40'	20'	40'	40'	30'	2.5 35'	20%	25%	20		RD-4 ^{d,e}	
RD-3 ^{d,e}	5,000	3,000	50'	100'	30'	20'	40'	25'	30'	3.5 45'	20%	40%	24		RD-3 ^{d,e}	
RD-1.8 ^{d,e}	5,000	1,800	50'	100'	30'	20'	40'	25'	30'	10 ^b 100'	25'	40%	c		RD-1.8 ^{d,e}	
RD-1.7 ^{d,e}	5,000	1,700	50'	100'	30'	20'	40'	25'	30'	4.5 ^f 55 ^f	25%	40%	36 ^g		RD-1.7 ^{d,e}	
T	5,000	i	50'	100'	10'	10'		25'		– 35'					T	
GB		1,500		100'	15'	20'		25'		– 35'					GB	
CMS				75'	0-10'	0'		25'		3 48'				10%	CMS	Art IVD
L				75'	0-20'	0-30'		25'		4 48'				15%	L	Art IVE
FCD	2 acres	3,960								3 40'	35%			30%	FCD	Art IVC
WP	1 acre				10'					2.5 35'	20%				WP	Art IVA
WD	5 acres									See Art IVA				15%	WD	Art IVA
LI		1,500	60'	100'	20'	20'		25'		35'	70%			20%	LI	
HI			60'	100'	30'	20'		25'		40'	70%			20%	HI	

NOTES:

- ~~a~~ If not occupied by a dwelling unit. Notwithstanding the one story and 15 feet height limitation, a clubhouse in a multifamily project shall not exceed 2 1/2 stories and 35 feet in height. [Amended 2-16-2010 by L.L. No. 2-2010]
- ~~a~~b Except in multifamily developments, A private garage may be built across a common lot line in multifamily developments by mutual agreement between adjoining property owners, a copy of such agreement to be filed with the building permit application for such garage.
- ~~c~~ A main building containing two or more dwelling units in an RD-3 District may be erected to a height of 3 1/2 stories or 45 feet, and a main building for a permitted nonresidential use may be erected to a height of five stories or 50 feet, provided that it is set back from any street or adjoining residential property a distance at least equal to its height.
- ~~d~~ But 2,500 square feet per dwelling unit for the first two dwelling units if the average height of main buildings is to be less than six stories, and except that for each one bedroom or smaller dwelling unit, the required minimum lot area per dwelling unit shall be reduced by 20%, and for each three bedroom or larger dwelling unit, increased by 20%.
- ~~e~~ But not less than 1/2 the height of the permitted building.
- ~~f~~ A one family house may be located on a lot meeting all the requirements of, and subject to the standards of, the most restrictive adjoining single family residence district.
- ~~g~~ Except that any side yard containing a driveway for an apartment development shall be at least as large as a required front yard.
- ~~h~~b But not more than 65% of the dwelling units in a multifamily development may be contained in buildings more than 3 1/2 stories in height.
- ~~c~~i But not more than 24 dwelling units in any building 3 1/2 stories or less in height.
- ~~j~~ This maximum may be increased to 20% for multifamily developments having 3,000 square feet or more of a lot area per dwelling unit.
- ~~k~~d For multifamily developments, a well-designed and landscaped recreation or usable open space area, approved by the Planning Board, of 2,000 square feet for the first 20 dwelling units or part thereof, plus 100 square feet for each additional dwelling unit will be required.
- ~~e~~l In any RD District, the Planning Board may approve a subdivision of land into individual building lots containing a minimum of 1,800 square feet of area each and designed for attached or semi-attached single-family dwellings (townhouses), provided that the design is such that the gross dwelling unit density for the entire tract does not exceed that which can normally be permitted for multiple dwellings in the district in which the property is located and further provided that the Planning Board attaches such conditions and safeguards to its approval as, in its opinion, are necessary to assure that the entire property, including any designated common areas for open space, recreational or other purposes, will be properly maintained for the intended purpose(s) and not further subdivided or developed in the future.
- ~~m~~ Except that any new one family detached dwelling lot created subsequent to July 11, 1988, shall be required to comply with the minimum size and dimensional requirements of the R1-7.5 District. [Added 7-5-1988]
- ~~f~~a A maximum of one story of parking under a building shall not count toward the maximum building height limitation in feet and stories. [Added 2-16-2010 by L.L. No. 2-2010]
- ~~g~~e And each building shall not exceed 150 feet in length. [Added 2-16-2010 by L.L. No. 2-2010]
- ~~p~~ There shall be no parking in the front yard. [Added 10-17-2016 by L.L. No. 11-2016]
- ~~h~~q For all development proposals involving a total lot area of more than three acres within a R1, RD, or Fishkill Creek Development zoning district, the lot area per dwelling unit calculation shall first deduct any lot area covered by surface water, within a federal regulatory floodway, within a state or federally regulated wetland, or with existing, pre-development very steep slopes of 25 percent or more as defined in § 223-63.
- i As regulated in the least restrictive adjoining residential district.
- ~~b~~ Abutting residential districts or where driveway is proposed between building and lot line.
- ~~c~~ First floor area shall be limited to the extent necessary to provide required off street parking and loading spaces.

Section 223-17, Schedule of Dimensional Regulations (suggested edits in red)

DRAFT 3.3.19

Zoning District	Minimum Lot Size (see also 223-12 I) Area ^h				Minimum Yard Side ^a				Minimum % Building Separation Same Lot (ft)	Maximum Height Main Building (see 223-13) (stories ft)	Minimum-Height (stories ft)	Maximum % Building Coverage		Maximum Number of Units per Building	Floor-Area-Ratio	Zoning District	Also Refer to Pertinent Sections
	Area (sf)	Per Unit (sf)	Width (ft)	Depth (ft)	Front (ft)	Total		Rear ^{d,e} (ft)									
						Min. (ft)	of 2 (ft)										
R1-120	120,000	120,000	250'	350'	75'	50'	100'	75'	—	2.5 35'	1 + 12'	N.A.	7%	1	—	R1-120	
R1-80	80,000	80,000	150'	200'	50'	30'	70'	50'	—	2.5 35'	1 + 12'	N.A.	10%	1	—	R1-80	
R1-40	40,000	40,000	150'	150'	50' 40'	25'	60'	50'	—	2.5 35'	1 + 12'	N.A.	15%	1	—	R1-40	
R1-20	20,000	20,000	125'	125'	40' 30'	20'	50'	40'	—	2.5 35'	1 + 12'	20%NA.	20%	1	—	R1-20	
R1-10	10,000	10,000	85'	100'	35' 25'	15'	40'	35'	—	2.5 35'	1 + 12'	N.A.	25%	1	—	R1-10	
R1-7.5	7,500	7,500	75'	100'	30' 20'	10'	20'	30'	—	2.5 35'	1 + 12'	N.A.	30%	1	—	R1-7.5	
R1-5	5,000	5,000	50'	100'	30' 15'	10'	20'	30'	—	2.5 35'	1 + 12'	N.A.	—	1	—	R1-5	
RD-7.5 ^{d,e}	2 acres	7,500	200'	200'	20-35'	25'	50'	50'	70' 30'	3 35'	1 + 12'	15%	20%	12	—	RD-7.5 ^{d,e}	
RD-6 ^{d,e}	5 2 acres	6,000	3 200'	200'	50'	25'	50'	50'	70' 30'	2.5 35'	1 + 12'	15%	20%	16	—	RD-6 ^{d,e}	
RD-5 ^{d,e}	5,000	5,000	50'	100'	30'	10'	20'	25'	30'	3 35'	1 + 12'	20%	30%	16	—	RD-5 ^{d,e}	
RD-4 ^{d,e}	2 acres-5,000	4,000	200'	200'	40'	20'	40'	40'	70' 30'	2.5 35'	1 + 12'	20%	25%	20	—	RD-4 ^{d,e}	
RD-3 ^{d,e}	5,000	3,000	50'	100'	30'	10' 20'	20' 40'	25'	30'	2.5 + 35' 3.5 45'	1 + 12'	20%	40%	24	—	RD-3 ^{d,e}	
RD-1.8 ^{d,e}	5,000	1,800	50'	100'	30'	10' 20'	20' 40'	25'	30'	10 ^b 100'	1 + 12'	15 25%	40%	— ^c	—	RD-1.8 ^{d,e}	
RD-1.7 ^{d,e}	5,000	1,700	50'	100'	30'	10' 20'	20' 40'	25'	30'	4.5 ^f 55' ^f	1 + 12'	25%	40%	36 ^g	—	RD-1.7 ^{d,e}	
PB	As regulated in the least restrictive adjoining residential district															PB	
QB T	5,000	i	40' 50'	100'	30' 10'	20' 10'	—	25'	—	— 35'	—	—	—	—	1	QB T	
LB	—	—	—	100'	—	20'	—	25'	—	+ 35'	—	—	—	Min Open Space	2	LB	
GB	—	1,500	—	100'	— 15'	20'	—	25'	—	— 35'	—	—	—		2	GB	
CMS	—	—	—	75'	0-10'	0'	—	25'	—	3 48'	2 + —	—	—	10%	—	CMS	Art IVD
L	—	—	—	75'	0-20'	0-30'	—	25'	—	4 48'	2 + —	—	—	15%	—	L	Art IVE
FCD	2 acres	3,960	—	—	—	—	—	—	—	3 40'	—	35%		30%	—	FCD	Art IVC
WP	1 acre	—	—	—	10'	—	—	—	—	2.5 35'	—	20%		—	0.5	WP	Art IVA
WD	5 acres	—	—	—	—	—	—	—	—	See Art IVA	—	—		15%	3/2	WD	Art IVA
LI	—	1,500	— 60'	100'	— 20'	20'	—	25'	—	— — 35'	—	70%		— 20%	2	LI	
HI	—	—	— 60'	100'	— 30'	20'	—	25'	—	— 35' 40'	—	70%		— 20%	2	HI	

NOTES:

- ~~a~~ If not occupied by a dwelling unit. Notwithstanding the one story and 15 feet height limitation, a clubhouse in a multifamily project shall not exceed 2 1/2 stories and 35 feet in height. [Amended 2-16-2010 by L.L. No. 2-2010]
- ~~ab~~ Except in multifamily developments, A private garage may be built across a common lot line in multifamily developments by mutual agreement between adjoining property owners, a copy of such agreement to be filed with the building permit application for such garage.
- ~~c~~ A main building containing two or more dwelling units in an RD-3 District may be erected to a height of 3 1/2 stories or 45 feet, and a main building for a permitted nonresidential use may be erected to a height of five stories or 50 feet, provided that it is set back from any street or adjoining residential property a distance at least equal to its height.
- ~~d~~ But 2,500 square feet per dwelling unit for the first two dwelling units if the average height of main buildings is to be less than six stories, and except that for each one bedroom or smaller dwelling unit, the required minimum lot area per dwelling unit shall be reduced by 20%, and for each three-bedroom or larger dwelling unit, increased by 20%.
- ~~e~~ But not less than 1/2 the height of the permitted building.
- ~~f~~ A one family house may be located on a lot meeting all the requirements of, and subject to the standards of, the most restrictive adjoining single family residence district.
- ~~g~~ Except that any side yard containing a driveway for an apartment development shall be at least as large as a required front yard.
- ~~h~~ But not more than 65% of the dwelling units in a multifamily development may be contained in buildings more than 3 1/2 stories in height.
- ~~i~~ But not more than 24 dwelling units in any building 3 1/2 stories or less in height.
- ~~j~~ This maximum may be increased to 20% for multifamily developments having 3,000 square feet or more of a lot area per dwelling unit.
- ~~k~~ For multifamily developments, a well-designed and landscaped recreation or usable open space area, approved by the Planning Board, of 2,000 square feet for the first 20 dwelling units or part thereof, plus 100 square feet for each additional dwelling unit will be required.
- ~~l~~ In any RD District, the Planning Board may approve a subdivision of land into individual building lots containing a minimum of 1,800 square feet of area each and designed for attached or semi-attached single-family dwellings (townhouses), provided that the design is such that the gross dwelling unit density for the entire tract does not exceed that which can normally be permitted for multiple dwellings in the district in which the property is located and further provided that the Planning Board attaches such conditions and safeguards to its approval as, in its opinion, are necessary to assure that the entire property, including any designated common areas for open space, recreational or other purposes, will be properly maintained for the intended purpose(s) and not further subdivided or developed in the future.
- ~~m~~ Except that any new one family detached dwelling lot created subsequent to July 11, 1988, shall be required to comply with the minimum size and dimensional requirements of the R1-7.5 District. [Added 7-5-1988]
- ~~n~~ A maximum of one story of parking under a building shall not count toward the maximum building height limitation in feet and stories. [Added 2-16-2010 by L.L. No. 2-2010]
- ~~o~~ And each building shall not exceed 150 feet in length. [Added 2-16-2010 by L.L. No. 2-2010]
- ~~p~~ There shall be no parking in the front yard. [Added 10-17-2016 by L.L. No. 11-2016]
- ~~q~~ For all development proposals involving a total lot area of more than three acres within a R1, RD, or Fishkill Creek Development zoning district, the lot area per dwelling unit calculation shall first deduct any lot area covered by surface water, within a federal regulatory floodway, within a state or federally regulated wetland, or with existing, pre-development very steep slopes of 25 percent or more as defined in § 223-63.
- i As regulated in the least restrictive adjoining residential district.
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- ~~c~~ First floor area shall be limited to the extent necessary to provide required off street parking and loading spaces.

City of Beacon Workshop Agenda
3/11/2019

Title:

Parking and Parking Meters

Subject:

Background:

ATTACHMENTS:

Description	Type
BeaconCenterCityParkingAnalysis Final_small	Backup Material
Access_Technology_Integration_Paid_Parking_Program_2013-03-21	Backup Material
Access_Technology_Integration_Paid_Parking_Summary_2013-05-01	Backup Material
BeaconCenterCityParkingAnalysis_Recommendations	Backup Material
Res._dedicated_budget_line_for_parking_improvements	Backup Material

Beacon Center City Parking Analysis



*Prepared by the Dutchess County Department of Planning and Development
With assistance from the City of Beacon
November 2014*

The preparation of this report has been financed in part through grant[s] from the Federal Highway Administration and Federal Transit Administration, U.S. Department of Transportation, under the State Planning and Research Program, Section 505 [or Metropolitan Planning Program, Section 104(f)] of Title 23, U.S. Code. The contents of this report do not necessarily reflect the official views or policy of the U.S. Department of Transportation.

Introduction

With the aim of measuring and managing current and projected parking impacts, Beacon City leaders requested that the Dutchess County Department of Planning and Development (“the Planning Department”) lead a Center City Parking Analysis. The Planning Department, which hosts the Poughkeepsie-Dutchess County Transportation Council (PDCTC), has completed numerous transportation and land use analyses for local municipalities. We applaud Beacon’s efforts to proactively address parking concerns and we hope that this Analysis enhances Beacon’s progress as a thriving, diverse, healthy, and multi-modal community.

Several factors propel development in Beacon. The City is served by major highways and a rail station which conveniently connects to New York City and cities throughout the Northeast and beyond. The Hudson River, Fishkill Creek and Hudson Highlands are close at hand. Main Street contains a variety of public and private uses, including government, residential, non-profit, varied services, galleries, offices, restaurants, grocers and entertainment venues. Beacon’s reputation as a desirable place to live, work and play has grown and dovetails with strong demographic and cultural trends favoring mixed-use, vibrant communities that are walkable, bikeable and provide transportation options beyond the single occupancy vehicle. The opening of DIA: Beacon in 2003 helped establish Beacon as “up and coming.” Subsequent projects along Main Street, the waterfront, and the Fishkill Creek have further set the stage for the significant activity currently underway. While it is true that no new buildings have been constructed on Main Street in several decades, many existing structures were rehabilitated in the last ten years. The pace of activity has quickened, particularly in

the West and East Ends. The Roundhouse at Beacon, a very significant East End project, is nearing completion.

Land Use Decisions & Parking Policy

Key City policy directives reflect broad support for center city development. The City’s 2007 Comprehensive Plan promotes infill on vacant parcels and parking lots and establishment of a string of activity nodes/public greens along Main Street (p. 12). Main Street is forwarded as *“the most important civic space... and the City expects to benefit from (increased development) through the physical revitalization of the area, economic revitalization of local businesses where new residents will shop, and increased property tax revenues”* (p. 56). In 2013, the City Council rezoned a large portion of downtown into the Central Main Street (CMS) District. The CMS encourages infill development by raising development potential and lowering parking requirements. The Planning Department supports new development on Beacon’s Main Street and Linkage Districts as a matter of policy.

Land use decisions by the City Council, Zoning Board of Appeals and Planning Board typically accommodate reasonable requests to reduce parking provisions for specific projects below required minimums. Residents, business owners and elected representatives, however, recognize that vehicle parking can be a “limiting factor” to Beacon’s continued revitalization. High parking demand is likely a sign of success, but the costs that it imposes cannot be ignored. Excessive parking provision will undercut Beacon’s potential by keeping buildings widely spaced apart, rendering walking and bicycling unpleasant and unsafe. Greenway Connections states that: “Centers work best when they are close-knit and compact in form, supporting central utilities and having a mixture of uses

within a five to ten minute walk of surrounding residential areas.” (p. 24) Parking facilities generate environmental costs, such as air, noise and water pollution and heat island effects. Despite the high cost to build and maintain, parking in Beacon is free to users; on-street and off-street parking is not charged and time restrictions are not enforced. When parking is provided for free, economically rational consumers use it at a high rate and are less inclined to choose alternative means of transportation. Parking demand is greater in some portions of center city and at certain time periods. Concern about the impact of anticipated development is high, given these projects will increase parking demand. This Analysis quantifies utilization of existing parking resources and seeks to project and plan for growing demand.

Analysis Methodology

The Planning Department and the City jointly developed a methodology that sought to answer the following key questions:

- What is the available supply of downtown parking spaces on city streets and in private and municipal parking lots?
- What are the parking utilization rates at different days and time periods? When and where do they exceed the optimal rate?
- How much will parking demand increase over the next 10 years and how can this increase be effectively accommodated?

The Study Area includes the area within one block of Main Street from Route 9D to just east of the Fishkill Creek. It is one mile long and 0.14 mile across at its widest point (see Overview Map on page 3). A quarter-mile buffer shown on

this map demonstrates the large area of the City that lies within a short walk of Main Street.

Using in-house digital resources and Google Maps, Planning Department staff determined the parking capacity of street segments/parking lots and developed forms and maps which City staff used to record parking counts. Data was then entered into the County’s Geographic Information System (GIS), where utilization rates were generated and displayed.

Department staff reviewed key documents including the Zoning Code, Comprehensive Plan, and prior parking studies. Parking regulations within the City Code were mapped. The City Building Inspector provided data about recently approved and anticipated downtown development projects from which staff projected anticipated parking demand increase. Lastly, the Planning Department developed strategy recommendations to address current and future parking needs.

Previous Studies

In 2007 Frederick Clark Associates completed a *Traffic and Parking Study: Zoning Changes Transportation Study for the Proposed Comprehensive Plan*. The Study identified 250 private lot spaces, 346 municipal lot spaces and 260 on-street spaces along Main Street-facing blocks. A parking count determined that “for each block face along Main Street, the total current parking demand was substantially lower than available parking.” (p. 14). For the entire corridor, observed weekday parking utilization was 61% on-street, 51% within municipal lots and 45% within private lots. The East End, however, revealed a “generally high demand for day, evening and overnight parking with little or no available off-street parking areas.” (p. 14) The Frederick Clark study recommended that

developments along Main Street and other areas should include adequate off-street parking spaces within each development site and that additional municipal/private parking lots and garages should be constructed “within reasonable walking distance of Main Street and each of the developments around Main Street.” (p. 1) The City was encouraged to pursue public/private shared parking arrangements for specified existing off-street lots.

In 2008, BFJ Planning completed the *Beacon Transportation Linkages Program Final Report*. This study did not include parking counts but recommended expanded use of shared parking, off-site parking, structured parking facilities and reduced parking requirements in areas well served by transit. (p. 38) The Study also made recommendations for parking signage which have been implemented to some degree. (p. 58)

Parking Regulations and Enforcement

Beacon’s City Code restricts parking on several downtown streets. During weekdays, parking on Main Street is limited to two hours between 9 AM to 5 PM and along Dewindt, Henry



and Van Nydeck Streets is restricted to two hours between 7 AM to 5 PM. Other than site specific limitations bounding fire hydrants, loading zones and stop signs, parking on side streets is unrestricted. A few side streets prohibit parking at any time. Field observations by Department staff indicate that most street segments are adequately signed. Parking at municipal lots is limited to 24 hours. Parking at private lots is

typically limited to on-site business patrons, but it is not known if or where these rules are enforced or towing occurs. Some private lots, such as at Key Foods, seem to function almost as public lots. Only one private lot is gated.

The City does not enforce parking restrictions but plans to hire enforcement personnel to do so in the near future. Department staff observed low turnover at parking stalls, indicating that lack of enforcement might be impacting functional parking capacity.

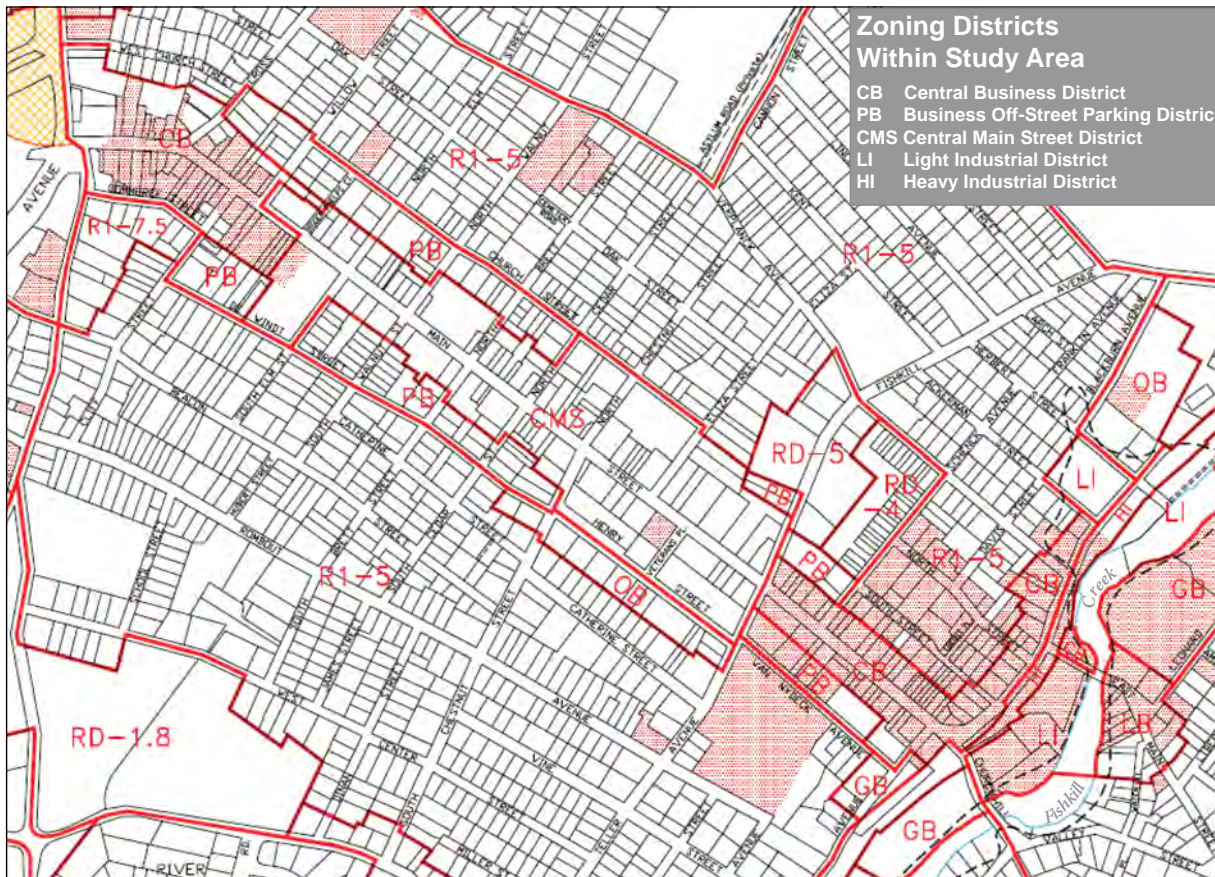
Parking requirements in Zoning Code

Zoning regulations have an important impact upon the amount and type of parking provided in new construction. The Zoning map to the right shows that most of the center city lies within the Central Main Street (CMS) or Central Business (CB) Districts with



lesser amounts in the Business Off-Street Parking (PB), Residential (R1-5) and Light Industry (LI) Districts.

Within the PB and CB Districts, minimum parking requirements can be waived or reduced by the Zoning



Board of Appeals. CMS District regulations allow for a parking modification by the Planning Board if the applicant demonstrates that adequate shared off-street parking is available to meet “foreseeable demand.” The alternative shared parking must be within 500 feet of the site and within the CMS or PB Districts. Modest reductions can be justified by providing on-site bicycle parking. Developers may also dedicate land to the City for public parking use. Such dedications can occur either on-site or via purchase/long-term lease of property within 800 feet of the site and within the CMS or PB Districts. The Planning Board may also

consider the findings of a professional parking study for the proposed use and surrounding area to justify the provision of fewer than required parking spaces. For lots of 8,000 square feet or less, where on-site parking is not feasible, the Board may waive all parking requirements, provided that the total floor area of the building is no greater than 5,000 square feet.

The ZBA and Planning Board have provided numerous parking variances and waivers for center city projects. This may reflect a pro-development viewpoint, but also may indicate that parking requirements in the Zoning Code are too high and ill-suited to the development market and/or downtown’s fabric. Parking requirements vary by Zoning District and those in the CB and PB Districts

resemble suburban standards. Projects in the CB District, for example, must provide one parking space for each 200 sf of floor area for “Retail or service businesses” and “Offices for professional or business” uses. Minimum requirements in the CMS are a better fit with Beacon’s downtown fabric. In the CMS District, “Office and nonretail commercial” uses must provide 1 space per 400 sf floor area while “Retail Commercial and Personal Services” must provide 1 space per 333 sf. The PB Zone appears to, at least indirectly, encourage conversion of homes, businesses and vacant parcels to principal use parking lots. The Fishkill Creek Development District,

south of the Study Area contains minimum and maximum parking requirements. The City might consider application of maximum standards in center city Districts.

Current Conditions

This Analysis quantifies parking supply and demand. Department staff derived capacity figures through a review of aerial photography. Where streets and lots are striped, capacity figures are verifiable. Several lots and side streets, however, are not striped and in these cases, staff generated approximate capacity figures in consideration of parking lot area and geometry, street length, curb cuts and other obstructions. On-site observations helped to verify relative accuracy of these estimates.

The industry-standard 85% utilization (15% vacancy) rate is

Center City Parking Capacity

Type	# Spaces
on-street (Main Street)	326
on-street (other than Main Street)	778
on-street TOTAL =	1,104
Private lots	316
Municipal lots*	478
parking lot TOTAL =	794
Study Area TOTAL=	1,898

*Includes lots owned/operated by the City of Beacon, Dutchess County

the benchmark for this Analysis. 85% occupancy is defined as “optimal” because enough vacant spaces remain to accommodate newly arriving vehicles looking for a space, which facilitates ingress and egress and minimizes the amount of wasteful “cruising.” 85% utilization indicates that the supply of parking is being efficiently maximized. Note: the reader should bear in mind that the varying capacity of lots and blocks results in a different absolute number of vacant

spaces for a given utilization rate. The examples below illustrate this point:

Block #1 example

$$85\% \text{ utilization rate} = \frac{17 \text{ parked cars}}{20 \text{ space capacity}} = 3 \text{ vacant spaces}$$

Block #2 example

$$85\% \text{ utilization rate} = \frac{51 \text{ parked cars}}{60 \text{ space capacity}} = 9 \text{ vacant spaces}$$

Parking count results

City staff and volunteers recorded point-in-time parking counts in the morning (9-11 AM), afternoon (1-3 PM) and evening (5-7 PM) on Tuesday August 5th, Thursday August 14th and Saturday September 6th. For reporting purposes, the two weekday counts for each time period have been averaged into one figure. It is important to acknowledge that the counts are representative. The City may wish to conduct additional counts to refine precision or to capture data from other time periods, such as later in the evening.

Analysis of count data indicates that, outside of specific street segments or lots at specific time periods, utilization rates generally do not exceed the 85% optimal rate. This demonstrates that, generally speaking, capacity is sufficient to meet demand. Utilization is generally low along streets perpendicular and parallel to Main Street and on several private lots. The fairly low number of instances where counts exceeded the 85% optimal utilization rate is reflected in the low values for the entire Study Area in the table at the top of the next page.

The East End and West End contained most of the counts exceeding 85% utilization. In the East End (the area east of Fishkill Avenue), the highest number of these occurred on Saturday evening. In the West end (the area west of Elm

Utilization Rates for entire Study Area

Time Period of count	In Parking Lots	On-street
Weekday morning	53%	38%
Weekday afternoon	59%	47%
Weekday evening	31%	40%
Saturday morning	43%	43%
Saturday afternoon	43%	44%
Saturday evening	38%	40%

that there is underutilized capacity on streets and lots around high utilization clusters on the East and West Ends. Most side streets, portions of Main Street, and numerous lots remained well below the 85% rate. On Saturday evening, the East End's highest utilization period, 273 cars were counted on- and off-street, yet the sub-area contains approximately 455 total available spaces. During the weekday afternoon, the West End's highest utilization period, 270 cars were counted where the area contains approximately 491 spaces.

Utilization – projected future condition

Indications from the parking counts completed for this project echo those from the 2007 Frederick Clark Associates study; current center city parking supply is adequate to meet demand. Anticipated development projects, however, will significantly increase demand. The City Building Inspector provided a list of downtown projects that have obtained or are seeking

Street) the time period with the most such counts was during the weekday afternoon. The parking counts also indicate

approvals/permits. Some projects are less certain to be developed than others, but herein we assume it is likely that the subject parcels will be developed in some fashion. In the list of “Anticipated Center City Projects with Parking”, the column “# Spaces Required” indicates the minimum number of parking spaces required per the use proposed and Zoning District designation. The column “# Spaces to be Provided (est.)” indicates how many on-site spaces are proposed (or assumed) to be built. As described above, the Planning and Zoning Boards can authorize less on-site parking than is required. The “Shortfall” column = (“# Spaces Required” minus “# Spaces to be Provided”). The Analysis utilizes this shortfall as an indication of potential development induced parking demand that is not provided on-site and thus must be absorbed on streets and lots.

Anticipated Center City projects with parking

Sub-area	Address	Project Type	# Spaces Required	# Spaces to be Provided (est.)	Shortfall
West End	151 Main St.	Long View Hotel	15	--	(15)
West End	Main & Cross St.	Commercial/residential	8	8	
Central	378 Main St.	Office space 3rd floor	14	--	(14)
Central	344 Main St.	Commercial/residential	8	8	--
Central	395 Main St.	Apartments/restaurant	20	--	(20)
East End	416 Main St.	Triplex dinner theater	36	6	(30)
East End	426 Main St.	Mt. Beacon Hotel	30	20	(10)
East End	425 Main St.	Commercial	30	--	(30)
East End	445 Main St.	Theater	125	--	(125)
East End	1 East Main St.	Brewery/restaurant	80	8	(72)
East End	448 Main St.	Apartments	6	6	--
East End	536 Main St.	Commercial/residential	8	5	(3)
		Total West End	54	15	(39)
		Total East End	357	53	(304)
		TOTAL Downtown	411	68	(343)

Beacon Parking Analysis parking utilization rates



Beacon Parking Analysis parking utilization rates



Beacon Parking Analysis parking utilization rates



Beacon Parking Analysis parking utilization rates



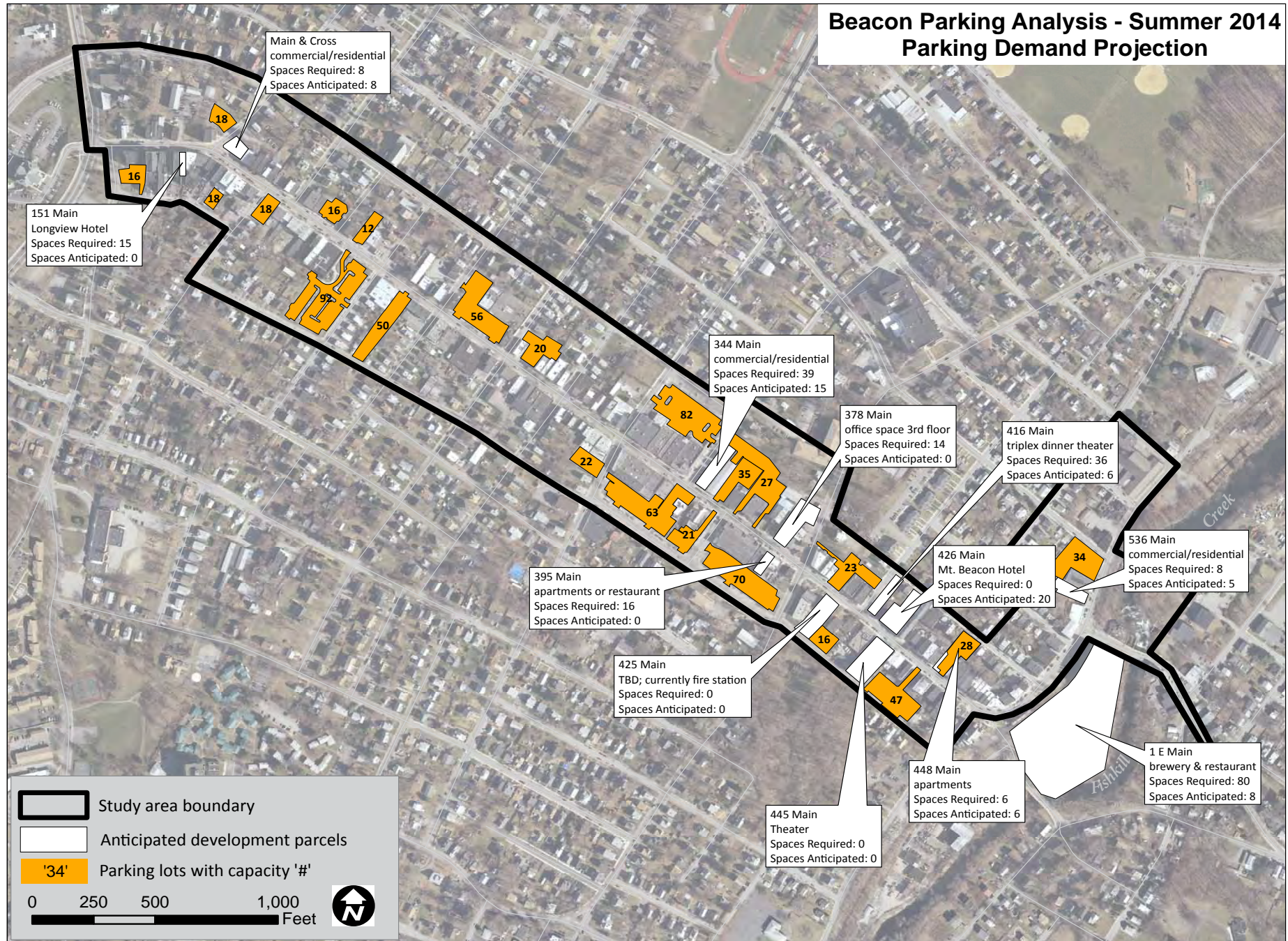
Beacon Parking Analysis parking utilization rates



Beacon Parking Analysis
parking utilization rates



Beacon Parking Analysis - Summer 2014 Parking Demand Projection



The potential increase in parking demand represented by anticipated projects is large and, in the East End, dramatic. On an existing base of 455 total existing spaces, the projects above would increase demand in the East End by 304 spaces or 75%. The increase in the West End would be more modest at an increase of 39 spaces on a base of 491 for an increase of 8%. The projected increase indicates that, within certain sections of downtown, anticipated development will result in large increases of greater than 85% utilization. The challenge facing City government and stakeholders, is to accommodate this rising demand without degrading the downtown environment and curtailing continued revitalization. In order to achieve this balance, two main goals must be sought 1) efficiently utilize capacity and 2) manage demand.



Recommended Strategies

High parking utilization is an unavoidable effect of revitalization within a compact urban environment. Given that parking demand is projected to increase significantly

in the near future, the Planning Department recommends consideration of several strategies to utilize capacity more efficiently and to manage demand. Implementation involves changes to policy, parking infrastructure and modes of transport and emphasizes flexibility in response to changing conditions. Development of prime properties to their best use is an important goal and, with few exceptions, parking lots do not meet that standard. This Analysis provides a baseline of actual parking conditions. As strategies are implemented amid ever changing conditions, we recommend that the City regularly gather data to gauge strategy impacts.

Recommendation #1: Increase shared use of parking lots

Parking lots typically experience parking associated with office and retail uses during the morning and afternoon periods. Residential, restaurant and entertainment uses account for a greater share of demand in the evening. City-owned lots allow parking for 24 hours and, therefore, accommodate demand generated by many types of uses. The Towne Crier entertainment venue is adjacent to a large municipal lot which experiences high utilization during the morning and afternoon, but typically low utilization in the evening. During its evening and weekend events, Towne Crier employees and guests park in this lot. A different lot, at the corner of Verplanck and East Main contains cross-access easements that permit parking by the public and for private use associated with an adjacent apartment building.

Shared parking at private lots should particularly be encouraged and incentivized. Parking counts indicate that several private lots are poorly utilized at one or all time periods. Two adjacent private lots with high capacity but very low utilization rates all day are located on the northeast

corner of Main and Eliza Street. These lots are close-by the high utilization East End and, if they could be opened up for broader use, available capacity in that area would be significantly increased. Shared parking arrangements typically generate revenue for the property owner. The City could provide incentives for private owners to open up lots for public use by placing parking stations in them and splitting the resulting revenue.



Recommendation #2: Develop additional capacity along the Van Nydeck Street corridor

Anticipated development will likely necessitate development of additional parking capacity in the East End. The City is considering purchase of land at Churchill and Main Streets within the 1 East Main Street project site. Development of a large parking lot at this site is perhaps not the best use of this valuable Creek frontage, but including amenities such as a Greenway trail and park features could ameliorate such impact.

It appears that the Van Nydeck Street corridor between Tioranda and Teller Avenues presents a unique opportunity to significantly increase parking capacity within the East End, while also enhancing streetscape, pedestrian access, and infill development opportunities. Current parking capacity within this small corridor consists of approximately 73 off-street and 16 on-street spaces for a total of 89 spaces. Conservative estimates indicate that the corridor could be improved to accommodate a total of 177 spaces which is a net increase of 88 spaces by:

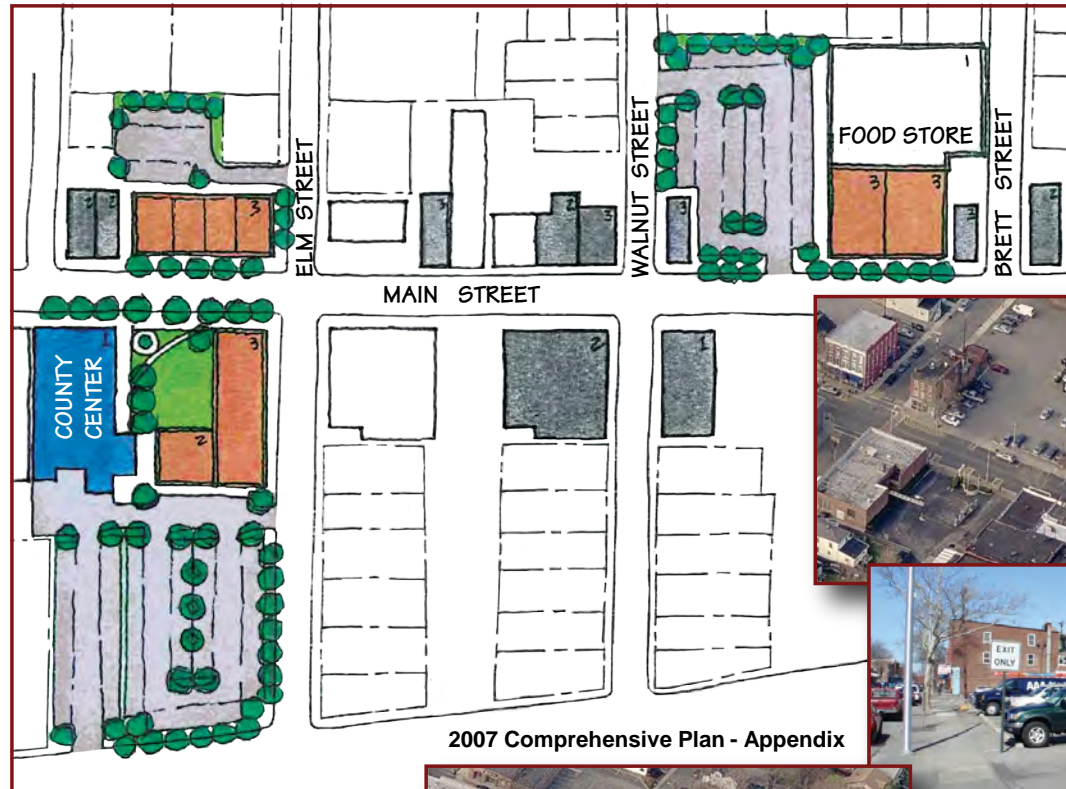
- Increasing capacity at the existing 47 space municipal lot to 52 spaces;
- Developing a parking lot on the east side of the Madam Brett House property. An attractive, well-screened and compatible lot at the site could yield 85 spaces; and
- Organizing on-street parking along the south side of Van Nydeck Street could yield a total of approximately 40 spaces.



A parking lot near the Madam Brett House, the County's oldest extant house, could generate significant revenue for its upkeep and increase visitorship by increasing local foot traffic and improving the streetscape. Infill opportunities at underutilized properties such as the firehouse would also be enhanced.

Recommendation #3: Increase functional capacity on existing lots and streets

Parking is permitted all-day on most downtown streets perpendicular and parallel to Main Street, but their current utilization is low. Many of these streets are not striped for parking. The City can encourage better parking utilization of roadways by striping parking spaces, closing defunct curb cuts, deploying way-finding and adjusting access to and from Main Street (one-way/two-way



- Expand food store to street frontage;
- Multi-story buildings face Main Street;
- Relocate parking behind storefronts;
- Add trees and landscape screening.



Main Street Infill Strategies Illustrative Sketch Plan

streets). It is recognized that a few side streets are too narrow to accommodate more parked cars. Van Nydeck Street and Tioranda Avenue are notable examples of underutilized East End streets where parking capacity could be far better utilized.

Publicly accessible parking lots should provide the maximum number of parking spaces feasible. Opportunities to increase the number of parking spaces in municipal lots should be examined. The County Government Center, for example, is currently striped for 92 parking spaces. The site layout is inefficient, and the Illustrative Sketch Design by Department staff, completed for the Beacon Comprehensive Plan, shows how parking capacity could be increased to 107 spaces while also adding Main Street liner buildings and a small public green. This site could possibly accommodate a parking garage.

Recommendation #4: Charge for parking & enforce regulations

Parking in Beacon is currently free to users, but is expensive to build and maintain. Excluding land costs, nationwide parking construction costs in 2012 averaged to \$4,000-\$8,000 per space¹. Because downtown parking is free to the user, taxpayers pay for construction and maintenance. Free parking subsidizes and, hence, encourages use of single occupancy vehicles. Where parking is free and restrictions not enforced, drivers are encouraged to park their cars in the most valuable on-street spaces and leave them there for hours. Their good fortune in securing a convenient parking space on a given day is a misfortune for others who are then unable to park. Lower turnover means foregone consumer spending. Free parking perversely discourages infill development.

The countermeasure to free parking is paid parking. Professor Donald Shoup has famously documented the beneficial changes that can accrue when communities charge for parking, increased municipal revenue being only one. The truly transformative effect is that parking demand becomes more

¹ Shoup, Donald, The High Cost of Free Parking. American Planning Association Planner's Press, page 185.

evenly distributed, creating availability in the most desirable center city locations.² Pricing drives parking behavior. Where utilization exceeds the optimal 85% utilization rate, parking prices should be raised until the utilization rate falls below that threshold. Where utilization is well below 85%, pricing is too high. Modern electronic stations facilitate discrete price toggling. Pricing has strong potential to maximize efficient use of capacity in Beacon's center. In the West and East Ends, at times when curb parking is over-utilized, pricing will cause some portion of drivers to make use of slightly more distant but "free" side streets and parking lots, thus stalling needless and expensive expansion of parking facilities. There are a range of detailed decision points to consider before implementing paid parking in the city center (payment station type, financing options, maintenance, etc.) that are best addressed by vendors. Start-up costs can be significant. Old-style meters have been supplanted by better looking and functioning electronic pay stations that collect data and facilitates management of the parking system. We suggest that in concert with charging for parking, the City seriously consider implementing a parking benefit district (see Recommendation #5 below). The City can also consider implementing paid parking in phases. Phase One, for example, could include pay stations just at on-street parking along Main Street (approximately 326 spaces). Later phases could expand to municipal lots, side streets and even private lots.

It is important to emphasize that business owners and center city residents stand to gain the most from paid parking in Beacon's center city, yet revenue generation can also be significant. An initial estimate of projected income from a

² Shoup (p. 205)

Phase One implementation (326 spaces along Main Street) could generate between \$612,000 to \$867,000 gross annual revenue. Subsequent Phases would increase gross revenue (as well as marginal costs).

Effective implementation of paid parking in Beacon will require enforcement. The City is reportedly already hiring such personnel. Enforcement will ensure that meters achieve the desired parking turnover crucial to center city business and also meet revenue potential. Enforcement will also generate revenue from issuance of violations.

Recommendation #5: Develop a Center City Benefit Fund

Maintaining, expanding or improving center city parking requires money. We recommend creation of a Center City Benefit Fund to implement parking strategies and other center city transportation improvements. Expensive structured parking could even be contemplated if the fund grows large enough and/or the garage is developed in partnership with a private development project.

This Fund would be maintained via two main sources: The experience of other communities suggests that paid parking is more readily embraced when the resulting funds are reinvested into parking and target area needs. The City should consider reserving funds generated at parking stations for improvements within the center city. Beacon decision-makers have provided generous relief to developers seeking to build less parking than is required by Code. It can be argued that such relief is a (justifiable) public subsidy to new development, where the newly generated off-site parking impact is absorbed on-street or in municipal lots. Parking variances or waivers, however, allow development to proceed without providing the

money necessary for construction and upkeep of the actually needed parking facilities. The City should consider instituting a ‘payment-in-lieu of parking’ system that captures the costs of parking provision. Such a system facilitates infill development particularly on parcels that cannot provide required spaces on-site, pooling funds from multiple small developments to invest in facilities available to all. The City may find that spreading payments over time via quarterly billing may ease resistance from property owners and establish a larger ongoing revenue stream.

Recommendation #6: Adjust parking regulations in Zoning Code

Some parking requirements for the Central Business (CB) and Business Off Street Parking (PB) Districts resemble suburban standards. The frequency with which the Planning and Zoning Boards issue waivers and variances for parking requirements seems to indicate that the requirements are not in line with the development market or what the center city can to accommodate. We recommend that the City consider the following changes:

Apply Central Main Street (CMS) parking standards, which better serve downtown’s needs, to the CB and PB Districts. In addition, consider that the Fishkill Creek Development District established minimum and maximum parking requirements and that maximum standards may also be advantageously applied along Main Street.

Extend the Planning Board parking waiver process used in the CMS throughout downtown. This process is streamlined in comparison to a Zoning Board of Appeals variance process and is supportive of affordable infill development.

The PB Zone appears to, at least indirectly, encourage conversion of homes, businesses and vacant parcels to principal use parking lots. Consider eliminating the District. Concurrent adjustments to the Planning Board parking waiver process would be necessary.

Recommendation #7: Wayfinding

The City should facilitate use of existing parking capacity. We recommend improving municipal lot signage by ensuring that they are all of the same design and are correctly situated.



Several of the existing municipal lot signs along Main Street are pointing in the wrong direction or are absent. A sign in front of the Beacon Center is of a different design and difficult to read. The City may consider installing all new signs with a more visible dark background and white letter design. The City should create an

easily located webpage on its website. This page should include a map of municipal and (perhaps) private lots, indicate parking limits on streets and contain information on meters if and when these are installed. The map should also be placed along Main Street at lots, kiosks or other streetside gathering areas.

Recommendation #8: Improve the biking and walking environment

The goal of a balanced transportation system is to offer community residents a variety of travel choices. Beacon is already well suited to alternative transportation, exhibiting the County's highest percentage of zero car and one-car households.(p. 112) Ample opportunity exists to provide

meaningful, relatively inexpensive improvement to the City's walking and bicycling environment. The Overview Map on page 3 demonstrates the large area of the City that lies within a quarter-mile buffer of Main Street. Parking demand can be reduced by encouraging and equipping shifts from single occupancy vehicles to other travel modes.

Adopted in 2014, *Walk-Bike Dutchess* is a County-wide transportation planning tool that includes recommendations specific to Beacon:

- Install bicycle parking at key locations such as City Hall, the Beacon Welcome Center, Post Office, Library, Dutchess County Building, DIA-Beacon, Beacon High School, Riverfront Park, and along Main Street, and provide bicycle lockers at the Beacon train station;
- Mark sharrows on Beekman Street and Red Flynn Drive between Route 9D and the Beacon train station and ferry dock. Sharrows were recently added to Main Street and should be regularly painted;
- Provide a sidewalk on the northwest side of Beekman Street to complete the gap between West Main Street and the existing sidewalk south of River Street;
- Create a new sidewalk or path south of City Hall between Beekman Street and Wolcott Avenue/Route 9D to connect the train station and Main Street; and
- Consider a formal path or sidewalk connection between Ferry Street and Wolcott Avenue/Route 9D.

Very recently the City was awarded \$958,064 to construct pedestrian improvements at intersections along Main Street in the City Center.



Recommendation #9: Enhance Main Street bus service

Beacon is served by intercity and County bus service. We recommend that the City confer with County officials to develop convenient and frequent service along Main Street in order to reduce parking demand by supporting zero- or one-car households, indeed, those households most likely to choose to live in Beacon's Center City. The transit experience could be further enhanced by establishing a small number of Main Street "transit activity centers" complete with benches, route signage, shelters, retail kiosks and landscaping. These could be developed as part of scheduled projects and one potential location would be in front of the County-owned Beacon Center.

March 21, 2013

Chief Douglas Solomon
City of Beacon Police Dept
One Municipal Plaza Suite 3
Beacon NY 12508

Chief Soloman,

As a follow up to our discussion from February and a recent Parkeon dealer meeting I'm pleased to provide our insight and an overview of a fully integrated paid parking program. The City of Beacon has some unique characteristics such as curb-outs which tend to break contiguous parking into smaller sectional parking along Main Street. In order to maximize revenue, provide a better customer experience, and minimize operational efforts, we are recommending the City of Beacon implement a mix of multi space meters and single/double head meters. Parkeon and POM formed a relationship late last year allowing for integration which is now available for dealers such as ATI to implement.

Chief Soloman, for more than 11 years ATI has been focused on delivering parking solutions to the market for paid parking spaces, parking lots and garages. During this time we have helped more than 500 customers with their paid parking needs. Located in the NY State Capital District area of Albany-Schenectady-Troy, we are a short drive from the City of Beacon, our customers stretch from this area, to as far west as Syracuse and east to Vermont and Western Massachusetts.

Delivering a successful paid parking solution means providing expert advice based on experience and understanding industry and technology trends, the ability to install and implement parking equipment and any associated computer software system, and the ability to service and support this solution to ensure uptime and reliability.

Specifically as it relates to the City of Beacon the following diagram represents potential meter locations along Main Street. The number within each circle represents the number of contiguous spaces. Where there is more than one number the parking spaces are separated by a curb-out or some other obstruction. The diagram is meant to be a starting point and actual placements would further be defined once foot traffic was reviewed.

Please contact me at (518) 237-8510 or via e-mail at todd@atiaccesscontrol.com should you have any questions regarding our proposal or need any additional information.

Sincerely,



Todd D. Schroeder

City of Beacon Paid Parking



Parkeon Strada BNA Pay Station

Strada pay station works in **Pay & Display** and Park-by-ID modes including Pay-by-Space and Pay-by-Plate configurations and includes features including:

A/C power supply or solar power supply. True Solar Autonomy – average of 3+ year's battery life; no special sun orientation

Strada pay station accepts coins, tokens, bills, contact and contactless credit cards and smart cards

Wireless communications & real-time on-line credit card authorization.

Strada pay station is PCI Level 1 certified, the highest rank available from the major credit card providers (VISA, MasterCard, AMEX) and is only given to those third-party providers who handle thousands of credit card transactions monthly and who meet their stringent - and audited - credit card transaction security protocols to protect your customers' personal transaction data.

Remote wireless download of rates and messages. Communicates all data on machine status, revenue, etc...wirelessly to back-office management software.

Cash box security (collection canister) without equal

Machine has ability to print not only the driver receipt for display but also collection audit reports for proper revenue counts of totals, bills, coins, etc...

Strada pay station is an open system and integrates with other technologies such as cell phone payment, citation management software, & vehicle sensors

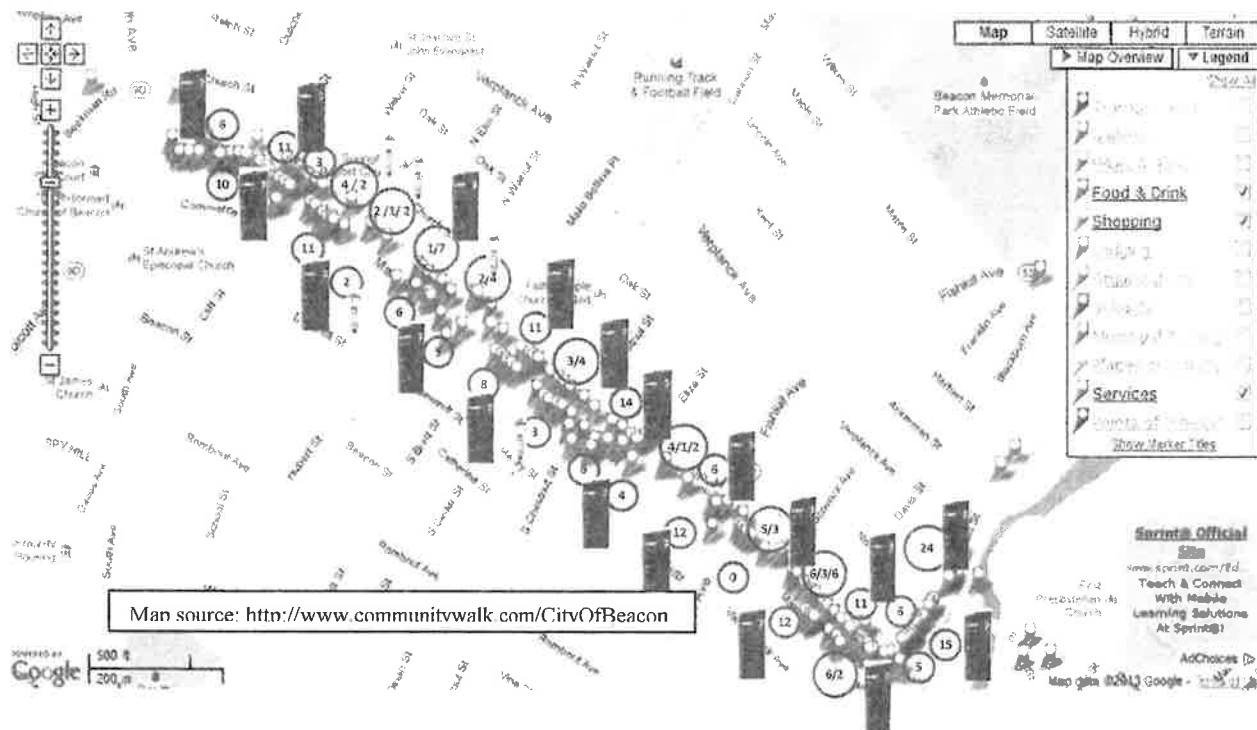
Snap-in-place components for ease of maintenance and/or repair

Strada pay station is ADA compliant, motorist-friendly & easy-to-use

Sleek design for a pay station; small footprint; Strada looks great on your streetscape

City of Beacon Paid Parking

DRAFT: City of Beacon multi space / single space meter locations



Represents parking spaces with potential curb-out or other obstruction.



Represents potential location for multi-space meter



Represents potential single/double space meter

		List Price	Total Sell
Pay-by-Space			
Parkeon Rapide (Multi-space)	19	\$10,000.00	\$190,000.00
Credit Card Setup	1	\$525.00	\$ 525.00
Single Head Meter	5	\$500.00	\$ 2,500.00
Installation	1	\$10,000.00	\$ 10,000.00
freight	19	\$225.00	\$ 4,275.00

Total Estimate			\$207,300.00
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Spare vaults (1 each)	10	\$250.00	\$2,500.00
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Annual Credit Processing and Management	24	\$45.00	\$12,960.00
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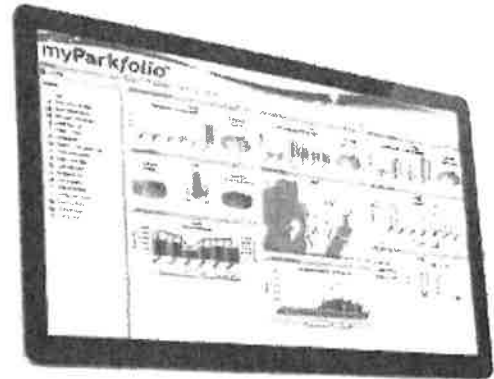
City of Beacon Paid Parking

Software

The Parkeon solution includes fully-equipped hosted back-office management software called myParkfolio.

myParkfolio is:

- An easy-to-use, web based parking management system, that allows you and your staff to be faster, work more efficiently, and have more control over your parking operations.
- Designed with your entire organization in mind, it provides the fast reporting your management team wants and the level of detail your financial, maintenance, collection, and enforcement teams need.
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- Customizable, on-demand statistical reports with a variety of displays (pie charts, line graphs, bar charts) as well as mappable statistics offering color coded indicators for easy analysis. Easy to compare past and current data for trend analysis



Example: myParkfolio Dashboard

Example: Listing of Alarms

ID	Time	Vehicle	Plate	Alarm	Alarm
1	10/10/2011	10/10	100000	Car Alarm	Car alarm (no motion) - not detected
2	10/10/2011	10/10	100000	Car Alarm	Car alarm (no motion) - not detected
3	10/10/2011	10/10	100000	Car Alarm	Car alarm (no motion) - not detected
4	10/10/2011	10/10	100000	Car Alarm	Car alarm (no motion) - not detected
5	10/10/2011	10/10	100000	Car Alarm	Car alarm (no motion) - not detected
6	10/10/2011	10/10	100000	Car Alarm	Car alarm (no motion) - not detected
7	10/10/2011	10/10	100000	Car Alarm	Car alarm (no motion) - not detected
8	10/10/2011	10/10	100000	Car Alarm	Car alarm (no motion) - not detected
9	10/10/2011	10/10	100000	Car Alarm	Car alarm (no motion) - not detected
10	10/10/2011	10/10	100000	Car Alarm	Car alarm (no motion) - not detected
11	10/10/2011	10/10	100000	Car Alarm	Car alarm (no motion) - not detected
12	10/10/2011	10/10	100000	Car Alarm	Car alarm (no motion) - not detected
13	10/10/2011	10/10	100000	Car Alarm	Car alarm (no motion) - not detected
14	10/10/2011	10/10	100000	Car Alarm	Car alarm (no motion) - not detected
15	10/10/2011	10/10	100000	Car Alarm	Car alarm (no motion) - not detected
16	10/10/2011	10/10	100000	Car Alarm	Car alarm (no motion) - not detected
17	10/10/2011	10/10	100000	Car Alarm	Car alarm (no motion) - not detected

Example: Park Occupancy Map



May 1, 2013

Chief Douglas Solomon
City of Beacon Police Dept
One Municipal Plaza Suite 3
Beacon NY 12508

Chief Soloman,

As follow up to our discussion from Monday I'm pleased to provide the following a return on investment summary. The summary is meant to provide insight into potential revenue, associated startup costs and recurring expenses. For the purposes of this analysis there are several assumptions which may easily be refined in the accompanying spreadsheet for fast and simple "what-if" scenarios.

Assumptions include:

Car Volume Sheet

- | | |
|---|---------------------|
| ➤ Number of hours per day when collecting | 10 |
| ➤ Weekday Rate & Weekend Rate | \$1.00/hr |
| ➤ Percent of daily revenue recognized | 40, 50, 75, 80, 90% |
| ➤ Enforcement Revenue | varies |
| ➤ Capacity / Collections after 6:00pm | \$52 |

ROI Sheet

- | | |
|---------------------|----------------|
| ➤ Enforcement staff | 4@60k per year |
|---------------------|----------------|

To accomplish "what-if" scenarios simply modify the data on the Car Volume Sheet. Staffing changes should be performed on the ROI Sheet.

Please contact me at (518) 237-8510 or via e-mail at todd@atiaccesscontrol.com should you have any questions regarding the analysis or spreadsheet.

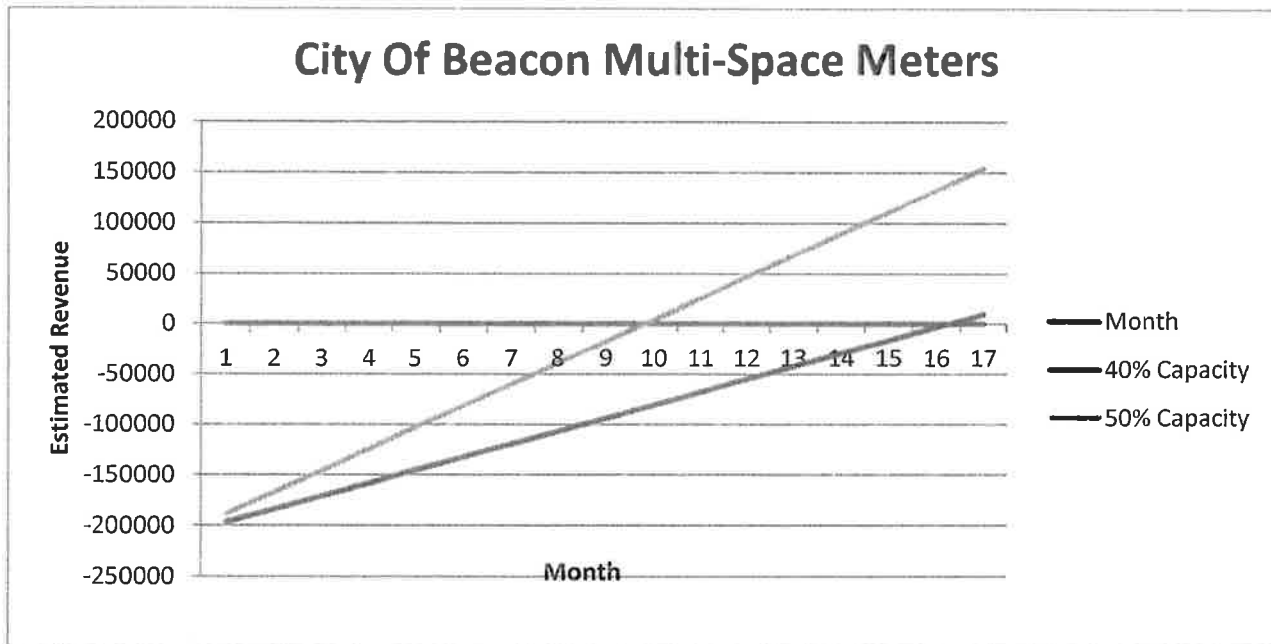
Regards,



Todd D. Schroeder

City of Beacon Multi-Space Analysis

Summary: Based on several assumptions such as 210 spaces, 19 multi space meters, 5 single head meters, list price, and staffing for enforcement there is approximately sixteen month return on investment if 40% of the revenues are realized. At 50% the return on investment will be ten months.



Parkeon Rapide		\$209,800
Monthly fees	\$	1,080
Annual Staff (4 Staff @		
60k/yr)	\$	240,000
Monthly Staff	\$	20,000

Monthly Revenues		40%		50%
	\$	33,997	\$	42,497

Month	40% Capacity	50% Capacity
1	\$ (196,883)	\$ (188,383)
2	\$ (183,965)	\$ (166,967)
3	\$ (171,048)	\$ (145,550)
4	\$ (158,131)	\$ (124,133)
5	\$ (145,213)	\$ (102,717)
6	\$ (132,296)	\$ (81,300)
7	\$ (119,379)	\$ (59,883)
8	\$ (106,461)	\$ (38,467)
9	\$ (93,544)	\$ (17,050)
10	\$ (80,627)	\$ 4,366
11	\$ (67,709)	\$ 25,783
12	\$ (54,792)	\$ 47,200
13	\$ (41,875)	\$ 68,616
14	\$ (28,958)	\$ 90,033
15	\$ (16,040)	\$ 111,450
16	\$ (3,123)	\$ 132,866
17	\$ 9,794	\$ 154,283

[illegible]



**A NYS CERTIFIED MINORITY
& WOMEN OWNED BUSINESS (MWBE)**

City of Beacon Multi-Space Meters



PO Box 292, Troy, New York, 12182
(518) 237 – 8510



May 1, 2013

Chief Douglas Solomon
City of Beacon Police Dept
One Municipal Plaza Suite 3
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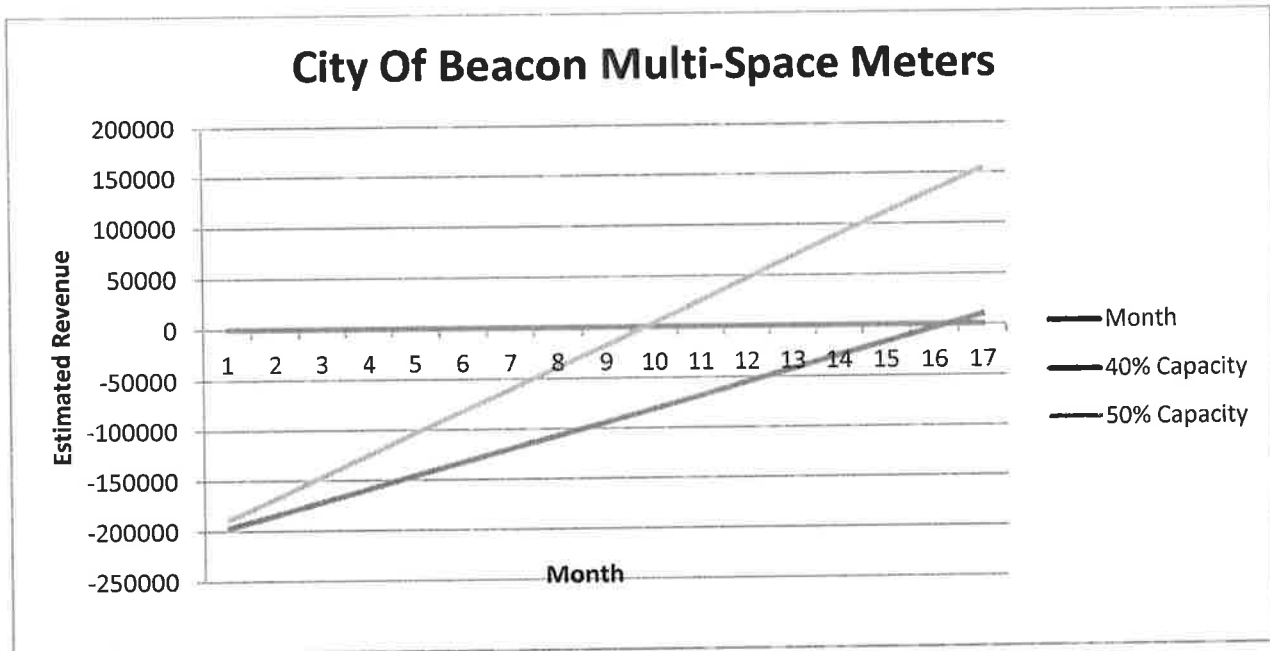
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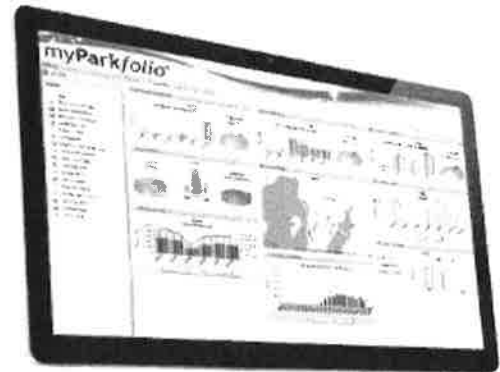
City of Beacon Paid Parking

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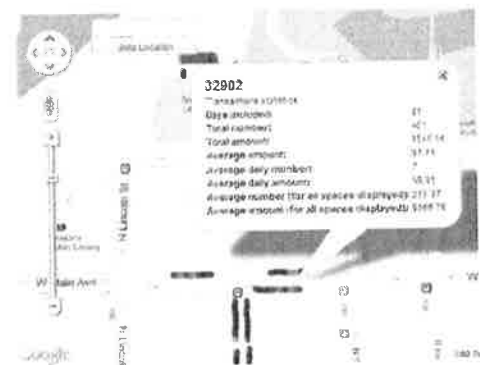


Example: myParkfolio Dashboard

Example: Listing of Alarms

Date	Source	Alarm Type	Description	Action
10/17/2018	100118	100001	Garage door open	Garage door open
10/17/2018	100118	100002	Garage door closed	Garage door closed
10/17/2018	100118	100003	Garage door open	Garage door open
10/17/2018	100118	100004	Garage door closed	Garage door closed
10/17/2018	100118	100005	Garage door open	Garage door open
10/17/2018	100118	100006	Garage door closed	Garage door closed
10/17/2018	100118	100007	Garage door open	Garage door open
10/17/2018	100118	100008	Garage door closed	Garage door closed
10/17/2018	100118	100009	Garage door open	Garage door open
10/17/2018	100118	100010	Garage door closed	Garage door closed
10/17/2018	100118	100011	Garage door open	Garage door open
10/17/2018	100118	100012	Garage door closed	Garage door closed
10/17/2018	100118	100013	Garage door open	Garage door open
10/17/2018	100118	100014	Garage door closed	Garage door closed
10/17/2018	100118	100015	Garage door open	Garage door open
10/17/2018	100118	100016	Garage door closed	Garage door closed
10/17/2018	100118	100017	Garage door open	Garage door open
10/17/2018	100118	100018	Garage door closed	Garage door closed
10/17/2018	100118	100019	Garage door open	Garage door open
10/17/2018	100118	100020	Garage door closed	Garage door closed

Example: Park Occupancy Map



Assumptions

Expenses	
A) Equipment	<div style="display: flex; justify-content: space-between;"> <div>Number of Multi-Space Meters</div> <div style="border: 1px solid black; width: 100px; text-align: center;">22</div> </div>
B) Staffing	<div style="display: flex; justify-content: space-between;"> <div>Number of People</div> <div style="border: 1px solid black; width: 100px; text-align: center;">4</div> </div> <div style="display: flex; justify-content: space-between;"> <div>Annual Compensation per Person</div> <div style="border: 1px solid black; width: 100px; text-align: center;">\$60,000</div> </div>
C) Lease Terms	<div style="display: flex; justify-content: space-between;"> <div>Number of Payments (Months)</div> <div style="border: 1px solid black; width: 100px; text-align: center;">36</div> </div> <div style="display: flex; justify-content: space-between;"> <div>Annual Interest Rate (%)</div> <div style="border: 1px solid black; width: 100px; text-align: center;">8.00%</div> </div>
Income	
A) Number of Parking Spaces	<div style="display: flex; justify-content: space-between;"> <div></div> <div style="border: 1px solid black; width: 100px; text-align: center;">261</div> </div>
B) Number of Hours/Day Parking Fees Assessed	<div style="display: flex; justify-content: space-between;"> <div>Weekdays (Mon-Fri)</div> <div style="border: 1px solid black; width: 100px; text-align: center;">10</div> </div> <div style="display: flex; justify-content: space-between;"> <div>Weekends (Sat-Sun)</div> <div style="border: 1px solid black; width: 100px; text-align: center;">10</div> </div>
C) Meter Rates (\$/hr)	<div style="display: flex; justify-content: space-between;"> <div>Weekdays (Mon-Fri)</div> <div style="border: 1px solid black; width: 100px; text-align: center;">\$ 2.00</div> </div> <div style="display: flex; justify-content: space-between;"> <div>Weekends (Sat-Sun)</div> <div style="border: 1px solid black; width: 100px; text-align: center;">\$ 1.00</div> </div>
D) Occupancy Rate (%)	<div style="display: flex; justify-content: space-between;"> <div></div> <div style="border: 1px solid black; width: 100px; text-align: center;">20%</div> </div>
E) Average per day parking ticket revenue (\$/day)	<div style="display: flex; justify-content: space-between;"> <div>Weekdays (Mon-Fri)</div> <div style="border: 1px solid black; width: 100px; text-align: center;">\$25.00</div> </div> <div style="display: flex; justify-content: space-between;"> <div>Weekends (Sat-Sun)</div> <div style="border: 1px solid black; width: 100px; text-align: center;">\$50.00</div> </div>

EQUIPMENT PURCHASE	Year 1	Year 2	Year 3	Year 4	Year 5
Cash Outlay	(\$237,975)				
Projected Revenue	\$407,853	\$407,853	\$407,853	\$407,853	\$407,853
Projected Operating Expense	(\$251,880)	(\$251,880)	(\$251,880)	(\$251,880)	(\$251,880)
Net Income (loss)	(\$82,002)	\$155,973	\$155,973	\$155,973	\$155,973
Cumulative Net Income (loss)	(\$82,002)	\$73,971	\$229,944	\$385,917	\$541,890

EQUIPMENT LEASE	Year 1	Year 2	Year 3	Year 4	Year 5
Cash Down	\$0				
Projected Revenue	\$407,853	\$407,853	\$407,853	\$407,853	\$407,853
Projected Operating Expense	(\$251,880)	(\$251,880)	(\$251,880)	(\$251,880)	(\$251,880)
Annual Lease Payments	(\$89,487)	(\$89,487)	(\$89,487)	\$0	\$0
Net Income (loss)	\$66,486	\$66,486	\$66,486	\$155,973	\$155,973
Cumulative Net Income (loss)	\$66,486	\$132,971	\$199,457	\$355,430	\$511,403

INSTRUCTIONS

Enter your assumptions in the Yellow fields. Numbers in the Equipment Purchase and Equipment Lease alternatives will change accordingly. You can print the Assumptions and results by choosing File then Print then OK.

The potential increase in parking demand represented by anticipated projects is large and, in the East End, dramatic. On an existing base of 455 total existing spaces, the projects above would increase demand in the East End by 304 spaces or 75%. The increase in the West End would be more modest at an increase of 39 spaces on a base of 491 for an increase of 8%. The projected increase indicates that, within certain sections of downtown, anticipated development will result in large increases of greater than 85% utilization. The challenge facing City government and stakeholders, is to accommodate this rising demand without degrading the downtown environment and curtailing continued revitalization. In order to achieve this balance, two main goals must be sought 1) efficiently utilize capacity and 2) manage demand.



Recommended Strategies

High parking utilization is an unavoidable effect of revitalization within a compact urban environment. Given that parking demand is projected to increase significantly

in the near future, the Planning Department recommends consideration of several strategies to utilize capacity more efficiently and to manage demand. Implementation involves changes to policy, parking infrastructure and modes of transport and emphasizes flexibility in response to changing conditions. Development of prime properties to their best use is an important goal and, with few exceptions, parking lots do not meet that standard. This Analysis provides a baseline of actual parking conditions. As strategies are implemented amid ever changing conditions, we recommend that the City regularly gather data to gauge strategy impacts.

Recommendation #1: Increase shared use of parking lots

Parking lots typically experience parking associated with office and retail uses during the morning and afternoon periods. Residential, restaurant and entertainment uses account for a greater share of demand in the evening. City-owned lots allow parking for 24 hours and, therefore, accommodate demand generated by many types of uses. The Towne Crier entertainment venue is adjacent to a large municipal lot which experiences high utilization during the morning and afternoon, but typically low utilization in the evening. During its evening and weekend events, Towne Crier employees and guests park in this lot. A different lot, at the corner of Verplanck and East Main contains cross-access easements that permit parking by the public and for private use associated with an adjacent apartment building.

Shared parking at private lots should particularly be encouraged and incentivized. Parking counts indicate that several private lots are poorly utilized at one or all time periods. Two adjacent private lots with high capacity but very low utilization rates all day are located on the northeast

corner of Main and Eliza Street. These lots are close-by the high utilization East End and, if they could be opened up for broader use, available capacity in that area would be significantly increased. Shared parking arrangements typically generate revenue for the property owner. The City could provide incentives for private owners to open up lots for public use by placing parking stations in them and splitting the resulting revenue.



Recommendation #2: Develop additional capacity along the Van Nydeck Street corridor

Anticipated development will likely necessitate development of additional parking capacity in the East End. The City is considering purchase of land at Churchill and Main Streets within the 1 East Main Street project site. Development of a large parking lot at this site is perhaps not the best use of this valuable Creek frontage, but including amenities such as a Greenway trail and park features could ameliorate such impact.

It appears that the Van Nydeck Street corridor between Tioranda and Teller Avenues presents a unique opportunity to significantly increase parking capacity within the East End, while also enhancing streetscape, pedestrian access, and infill development opportunities. Current parking capacity within this small corridor consists of approximately 73 off-street and 16 on-street spaces for a total of 89 spaces. Conservative estimates indicate that the corridor could be improved to accommodate a total of 177 spaces which is a net increase of 88 spaces by:

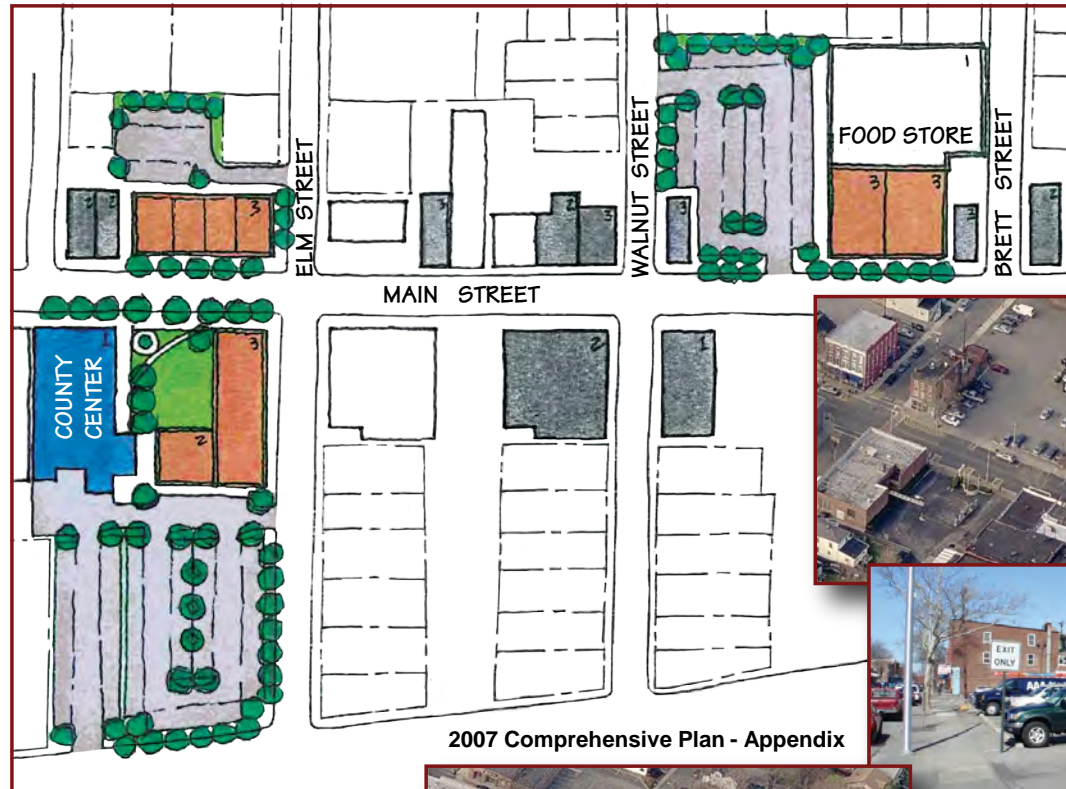
- Increasing capacity at the existing 47 space municipal lot to 52 spaces;
- Developing a parking lot on the east side of the Madam Brett House property. An attractive, well-screened and compatible lot at the site could yield 85 spaces; and
- Organizing on-street parking along the south side of Van Nydeck Street could yield a total of approximately 40 spaces.



A parking lot near the Madam Brett House, the County's oldest extant house, could generate significant revenue for its upkeep and increase visitorship by increasing local foot traffic and improving the streetscape. Infill opportunities at underutilized properties such as the firehouse would also be enhanced.

Recommendation #3: Increase functional capacity on existing lots and streets

Parking is permitted all-day on most downtown streets perpendicular and parallel to Main Street, but their current utilization is low. Many of these streets are not striped for parking. The City can encourage better parking utilization of roadways by striping parking spaces, closing defunct curb cuts, deploying way-finding and adjusting access to and from Main Street (one-way/two-way



- Expand food store to street frontage;
- Multi-story buildings face Main Street;
- Relocate parking behind storefronts;
- Add trees and landscape screening.



- New infill buildings along street;
- Add pocket park with visitor info, art, and bus stop next to civic use;
- Place parking lots behind buildings with trees and landscape screening.

Main Street Infill Strategies Illustrative Sketch Plan

streets). It is recognized that a few side streets are too narrow to accommodate more parked cars. Van Nydeck Street and Tioranda Avenue are notable examples of underutilized East End streets where parking capacity could be far better utilized.

Publicly accessible parking lots should provide the maximum number of parking spaces feasible. Opportunities to increase the number of parking spaces in municipal lots should be examined. The County Government Center, for example, is currently striped for 92 parking spaces. The site layout is inefficient, and the Illustrative Sketch Design by Department staff, completed for the Beacon Comprehensive Plan, shows how parking capacity could be increased to 107 spaces while also adding Main Street liner buildings and a small public green. This site could possibly accommodate a parking garage.

Recommendation #4: Charge for parking & enforce regulations

Parking in Beacon is currently free to users, but is expensive to build and maintain. Excluding land costs, nationwide parking construction costs in 2012 averaged to \$4,000-\$8,000 per space¹. Because downtown parking is free to the user, taxpayers pay for construction and maintenance. Free parking subsidizes and, hence, encourages use of single occupancy vehicles. Where parking is free and restrictions not enforced, drivers are encouraged to park their cars in the most valuable on-street spaces and leave them there for hours. Their good fortune in securing a convenient parking space on a given day is a misfortune for others who are then unable to park. Lower turnover means foregone consumer spending. Free parking perversely discourages infill development.

The countermeasure to free parking is paid parking. Professor Donald Shoup has famously documented the beneficial changes that can accrue when communities charge for parking, increased municipal revenue being only one. The truly transformative effect is that parking demand becomes more

¹ Shoup, Donald, The High Cost of Free Parking. American Planning Association Planner's Press, page 185.

evenly distributed, creating availability in the most desirable center city locations.² Pricing drives parking behavior. Where utilization exceeds the optimal 85% utilization rate, parking prices should be raised until the utilization rate falls below that threshold. Where utilization is well below 85%, pricing is too high. Modern electronic stations facilitate discrete price toggling. Pricing has strong potential to maximize efficient use of capacity in Beacon's center. In the West and East Ends, at times when curb parking is over-utilized, pricing will cause some portion of drivers to make use of slightly more distant but "free" side streets and parking lots, thus stalling needless and expensive expansion of parking facilities. There are a range of detailed decision points to consider before implementing paid parking in the city center (payment station type, financing options, maintenance, etc.) that are best addressed by vendors. Start-up costs can be significant. Old-style meters have been supplanted by better looking and functioning electronic pay stations that collect data and facilitates management of the parking system. We suggest that in concert with charging for parking, the City seriously consider implementing a parking benefit district (see Recommendation #5 below). The City can also consider implementing paid parking in phases. Phase One, for example, could include pay stations just at on-street parking along Main Street (approximately 326 spaces). Later phases could expand to municipal lots, side streets and even private lots.

It is important to emphasize that business owners and center city residents stand to gain the most from paid parking in Beacon's center city, yet revenue generation can also be significant. An initial estimate of projected income from a

² Shoup (p. 205)

Phase One implementation (326 spaces along Main Street) could generate between \$612,000 to \$867,000 gross annual revenue. Subsequent Phases would increase gross revenue (as well as marginal costs).

Effective implementation of paid parking in Beacon will require enforcement. The City is reportedly already hiring such personnel. Enforcement will ensure that meters achieve the desired parking turnover crucial to center city business and also meet revenue potential. Enforcement will also generate revenue from issuance of violations.

Recommendation #5: Develop a Center City Benefit Fund

Maintaining, expanding or improving center city parking requires money. We recommend creation of a Center City Benefit Fund to implement parking strategies and other center city transportation improvements. Expensive structured parking could even be contemplated if the fund grows large enough and/or the garage is developed in partnership with a private development project.

This Fund would be maintained via two main sources: The experience of other communities suggests that paid parking is more readily embraced when the resulting funds are reinvested into parking and target area needs. The City should consider reserving funds generated at parking stations for improvements within the center city. Beacon decision-makers have provided generous relief to developers seeking to build less parking than is required by Code. It can be argued that such relief is a (justifiable) public subsidy to new development, where the newly generated off-site parking impact is absorbed on-street or in municipal lots. Parking variances or waivers, however, allow development to proceed without providing the

money necessary for construction and upkeep of the actually needed parking facilities. The City should consider instituting a ‘payment-in-lieu of parking’ system that captures the costs of parking provision. Such a system facilitates infill development particularly on parcels that cannot provide required spaces on-site, pooling funds from multiple small developments to invest in facilities available to all. The City may find that spreading payments over time via quarterly billing may ease resistance from property owners and establish a larger ongoing revenue stream.

Recommendation #6: Adjust parking regulations in Zoning Code

Some parking requirements for the Central Business (CB) and Business Off Street Parking (PB) Districts resemble suburban standards. The frequency with which the Planning and Zoning Boards issue waivers and variances for parking requirements seems to indicate that the requirements are not in line with the development market or what the center city can to accommodate. We recommend that the City consider the following changes:

Apply Central Main Street (CMS) parking standards, which better serve downtown’s needs, to the CB and PB Districts. In addition, consider that the Fishkill Creek Development District established minimum and maximum parking requirements and that maximum standards may also be advantageously applied along Main Street.

Extend the Planning Board parking waiver process used in the CMS throughout downtown. This process is streamlined in comparison to a Zoning Board of Appeals variance process and is supportive of affordable infill development.

The PB Zone appears to, at least indirectly, encourage conversion of homes, businesses and vacant parcels to principal use parking lots. Consider eliminating the District. Concurrent adjustments to the Planning Board parking waiver process would be necessary.

Recommendation #7: Wayfinding

The City should facilitate use of existing parking capacity. We recommend improving municipal lot signage by ensuring that they are all of the same design and are correctly situated.



Several of the existing municipal lot signs along Main Street are pointing in the wrong direction or are absent. A sign in front of the Beacon Center is of a different design and difficult to read. The City may consider installing all new signs with a more visible dark background and white letter design. The City should create an

easily located webpage on its website. This page should include a map of municipal and (perhaps) private lots, indicate parking limits on streets and contain information on meters if and when these are installed. The map should also be placed along Main Street at lots, kiosks or other streetside gathering areas.

Recommendation #8: Improve the biking and walking environment

The goal of a balanced transportation system is to offer community residents a variety of travel choices. Beacon is already well suited to alternative transportation, exhibiting the County's highest percentage of zero car and one-car households.(p. 112) Ample opportunity exists to provide

meaningful, relatively inexpensive improvement to the City's walking and bicycling environment. The Overview Map on page 3 demonstrates the large area of the City that lies within a quarter-mile buffer of Main Street. Parking demand can be reduced by encouraging and equipping shifts from single occupancy vehicles to other travel modes.

Adopted in 2014, *Walk-Bike Dutchess* is a County-wide transportation planning tool that includes recommendations specific to Beacon:

- Install bicycle parking at key locations such as City Hall, the Beacon Welcome Center, Post Office, Library, Dutchess County Building, DIA-Beacon, Beacon High School, Riverfront Park, and along Main Street, and provide bicycle lockers at the Beacon train station;
- Mark sharrows on Beekman Street and Red Flynn Drive between Route 9D and the Beacon train station and ferry dock. Sharrows were recently added to Main Street and should be regularly painted;
- Provide a sidewalk on the northwest side of Beekman Street to complete the gap between West Main Street and the existing sidewalk south of River Street;
- Create a new sidewalk or path south of City Hall between Beekman Street and Wolcott Avenue/Route 9D to connect the train station and Main Street; and
- Consider a formal path or sidewalk connection between Ferry Street and Wolcott Avenue/Route 9D.

Very recently the City was awarded \$958,064 to construct pedestrian improvements at intersections along Main Street in the City Center.



Recommendation #9: Enhance Main Street bus service

Beacon is served by intercity and County bus service. We recommend that the City confer with County officials to develop convenient and frequent service along Main Street in order to reduce parking demand by supporting zero- or one-car households, indeed, those households most likely to choose to live in Beacon's Center City. The transit experience could be further enhanced by establishing a small number of Main Street "transit activity centers" complete with benches, route signage, shelters, retail kiosks and landscaping. These could be developed as part of scheduled projects and one potential location would be in front of the County-owned Beacon Center.



**CITY OF BEACON
CITY COUNCIL**

Resolution No. 52 - 2015

**RESOLUTION REQUESTING THE DIRECTOR OF FINANCE
TO ESTABLISH A RESTRICTED FUND TITLED
“MAIN STREET PARKING AND STREETScape IMPROVEMENT FUND”**

WHEREAS, the City Council of the City of Beacon anticipates authorizing a license agreement with O'Donnell Construction Corp. for the use of eighteen parking spaces for a fee and the Council anticipates potential additional revenue sources in the future to be generated in the Main Street area from parking meters and potentially other license agreements; and

WHEREAS, the City Council wishes to ensure that such revenue is not deposited into the City's general fund, but rather that such revenue be deposited into a restricted fund which monies, with the approval of the Council, shall only be used for improvements to the Main Street parking and streetscape improvements.

NOW THEREFORE, BE IT RESOLVED, that the City's Director of Finance is directed to establish a Restricted Fund titled “Main Street Parking and Streetscape Improvement Restricted Fund” and that all revenue derived from the license agreement between the City and O'Donnell Construction Corp. for the use of parking spaces at the Eliza Street parking lot and any future license agreements for parking in the Main Street area, and from parking meters, if installed, be deposited into said Restricted Fund; and that no monies shall be expended from the Restricted Fund unless authorized by the City Council and used specifically for improvements to the Main Street parking area or the Main Streetscape improvements;

AND BE IT FURTHER RESOLVED, that at no point in time shall any of the funds placed in this Restricted Fund be used for general budget purposes or for any purpose other than set forth in this resolution;

AND BE IT FURTHER RESOLVED, that the Council recognizes that it is appropriate to use monies from this Restricted Fund (in addition to monies from the General Fund) to purchase land for and construct new parking spaces and for the operation and maintenance of parking spaces, including but not limited to striping, signage, paving, enforcement, landscaping, drainage and lights and other work directly

related to the maintenance, repair or operation of parking spaces used in the Main Street area and other streetscape improvements.

Resolution No. <u>52</u> of 2015			Date: <u>May 4, 2015</u>				
<input type="checkbox"/> Amendments						<input type="checkbox"/> 2/3 Required	
<input type="checkbox"/> Not on roll call.			<input type="checkbox"/> On roll call			<input type="checkbox"/> 3/4 Required	
Motion	Second	Council Member	Yes	No	Abstain	Reason	Absent
		Ross, Peggy	x				
		Kelly, Charles P.	x				
	x	Wetherbee, Pamela	x				
x		Muhammad, Ali T.	x				
		Kyriacou, Lee	x				
		Mansfield, George	x				
		Mayor Randy J. Casale	x				
		Motion Carried	x				

City of Beacon Workshop Agenda
3/11/2019

Title:

Main Street Pedestrian Improvements

Subject:

Background:

ATTACHMENTS:

Description	Type
Beacon Main Street and Pedestrian Signals Construction Inspection Proposal	Backup Material



February 22, 2019

City of Beacon
One Municipal Plaza
Beacon, New York 12508

Attn: Mr. Anthony Ruggiero, City Administrator

Re: PIN 8761.25 Main Street Pedestrian Improvements
PIN 8761.45 Beacon Pedestrian Signal Development
Construction Inspection Services

Dear Mr. Ruggiero:

Attached please find our cost proposal and scope to add construction inspection services to the Main Street Pedestrian Improvements and Pedestrian Signal Development projects. In order to offer the most cost effective services to the City, we propose to use one inspection team to oversee both projects simultaneously.

The scope employs the NYSDOT's requirements for federal-aid local projects. As discussed, the federally funded projects require complete oversight during construction to ensure the project is built according to the plans and specifications and extensive documentation.

Thank you very much for considering us for the inspection services. We look forward to continuing working with you and the City.

If you have any questions, please call me.

Sincerely,

HVEA Engineers

A handwritten signature in blue ink, appearing to read "JG", is written over the printed name and title.

Jack Gorton, P.E.
Project Manager

Section 9 - Construction Inspection

9.01 Equipment

The **Contractor** will furnish office space and basic office furnishings for the **Consultant**, as part of the contract.

The **Consultant** will furnish all other office, field and field laboratory supplies and equipment required to properly perform the inspection services listed below.

9.02 Inspection

The **Consultant** must provide, to the satisfaction of the **Sponsor**, contract administration and construction inspection services from such time as directed to proceed until the completion of the final agreement and issuance of final payment for the contract. The **Consultant** must assume responsibility, as appropriate, for the administration of the contract including maintaining complete project records, processing payments, performing detailed inspection work and on-site field tests of all materials and items of work incorporated into the contract consistent with federal policies and the specifications and plans applicable to the project.

9.03 Municipal Project Manager

This Project Manager will be the **Municipality's** official representative on the contract and the **Consultant** must report to and be directly responsible to said Project Manager.

9.04 Ethics

Prior to the start of work, the **Consultant** will submit to the **Sponsor** a statement regarding conflicts of interest.

9.05 Health and Safety Requirements

The **Consultant** must provide all necessary health and safety related training, supervision, equipment and programs for their inspection staff assigned to the project.

9.06 Staff Qualifications and Training

The **Consultant** must provide sufficient trained personnel to adequately and competently perform the requirements of this agreement. The **Consultant** will recommend inspectors to the Sponsor for approval prior to their assignment to the project. Resumes, proof of required certification and the proposed initial salary shall be furnished. The Sponsor may want to interview before approval, and reserves the right to disapprove any application. The employment of all consultant personnel is conditional, subject to satisfactory performance, as determined by the Sponsor.

For all construction inspection agreements, it is mandatory that all technician personnel be identified by the National Institute for Certification in Engineering Technologies (NICET) certification levels in the staffing tables. In addition, all Transportation Engineering Technicians-Construction assigned to the project at and above level III, Engineering and Senior Engineering Technicians, must be certified by NICET. Transportation Engineering Technicians-Construction below level III assigned to the project must have successfully

completed the General Work Element requirements and at least those Special Work Elements which apply to their specific project assignments at the level of their rating.

In lieu of the NICET certification requirements, the Sponsor may accept evidence that the person proposed for employment (1) has satisfactorily performed similar duties as a former NYS Department of Transportation (NYSDOT) employee or (2) has a combination of education and appropriate experience commensurate with the scope of the position in question.

Technicians employed by the **consultant** that perform field inspection of Portland cement concrete shall possess a current certification from the American Concrete Institute (ACI) as a Concrete field-testing Technician-Grade 1, or have completed all of the following NICET work elements, which are equivalent to the ACI certification:

NICET LEVEL	NICET CODE	NICET WORK ELEMENT
I	82019	Sample Fresh Concrete
I	82020	Slump Test
II	84068	Air Content, Pressure
II	84069	Air Content, Gravimetric
II	84070	Air Content, Volumetric
II	84076	Field Prepared Test Specimens

Inspectors designated as the responsible person in charge of work zone traffic control must have sufficient classroom training, or a combination of classroom training and experience, to develop needed knowledge and skills. Acceptable training should consist of a formal course presented by a recognized training program which includes at least two full days of classroom training. A minimum of two days classroom training is normally required, although one day of classroom training plus responsible experience may be considered. Recognized training providers include American Traffic Safety Services Association (ATSSA), National Safety Council (NSC), Federal Highway Administration's National Highway Institute (FHWA-NHI), and accredited colleges and universities with advanced degree programs in Civil/Transportation/Traffic Engineering. Former DOT employees may be considered on the basis of at least one day of formal classroom training combined with responsible M&PT experience.

Technicians employed by the **consultant** who perform field inspection of geotechnical construction (earthwork), including, but not limited to embankment construction, subbase placement, structure and culvert backfill placement, and testing of earthwork items for in-place density and/or gradation, shall possess a current certification and/or proof of training from the following organization:

North East Transportation Technician Certification Program (NETTCP) Soils and Aggregate Inspector Certification. An alternative to the certification/training listed above would be proof of previous training (within the past 5 years) of the NYSDOT Earthwork Inspectors School,

given by the Department's Geotechnical Engineering Bureau.

9.07 Scope of Services/Performance Requirements

A. Quality

The Consultant will enforce the specifications and identify in a timely manner to the **Sponsor** local conditions, methods of construction, errors on the plans or defects in the work or materials which would conflict with the quality of work, and conflict with the successful completion of the project.

B. Record Keeping & Payments to the Contractor

- 1) All records must be kept in accordance with the directions of the **Sponsor and must be consistent with the requirements of the [NYSDOT Manual of Uniform Recordkeeping \(MURK\)](#)**.¹ The **Consultant** must take all measurements and collect all other pertinent information necessary to prepare daily inspection reports, monthly and final estimates, survey notes, record plans showing all changes from contract plans, photographs of various phases of construction, and other pertinent data, records and reports for proper completion of records of the contract.
- 2) Any record plans, engineering data, survey notes or other data provided by the Sponsor should be returned to the Sponsor at the completion of the contract. Original tracings of record plans, maps, engineering data, the final estimate and any other engineering data produced by the Consultant will bear the endorsement of the Consultant. Any documents that require an appropriate review and approval of a Professional Engineer (P.E.) licensed and registered to practice in New York State must be signed by the P.E.
- 3) Unless otherwise modified by this agreement, the **Sponsor** will check, and when **acceptable**, approve all structural **shop drawings**.
- 4) The **Consultant** must submit the final estimate of the contract to the **Sponsor** within four (4) weeks after the date of acceptance of the contract. All **project records** must be cataloged, indexed, **packaged**, and delivered to the **Sponsor** within five (5) weeks after the date of the acceptance of the contract.

Health & Safety/Work Zone Traffic Control

- 1) The **Consultant** must ensure that all inspection staff assigned to the project are knowledgeable concerning the health and safety requirements of the contract per **Sponsor** policy, procedures and specifications and adhere to all standards. Individual inspectors must be instructed relative to the safety concerns for construction operations they are assigned to inspect to protect

¹ <https://www.dot.ny.gov/main/business-center/contractors/construction-division/forms-manuals-computer-applications-general-information>

their personal safety, and to ensure they are prepared to recognize and address any contractor oversight or disregard of project safety requirements.

- 2) The **Consultant** is responsible for monitoring the Contractor's and Subcontractor's efforts to maintain traffic and protect the public from damage to person and property within the limits of, and for the duration of the contract.

Monitoring Equal Opportunity/Labor Requirements

The **Consultant** must assign to one individual the responsibility of monitoring the Contractor's adherence to Equal Opportunity and Labor requirements contained in the contract. When monitoring the Contractor's Equal Opportunity and Labor compliance, the Consultant, will utilize the guidance contained in the contract, standard specifications and the **Sponsor's** policies. The Consultant is also to input required disadvantaged business enterprise (DBE) information into the NYSDOT maintained [Equitable Business Opportunities \(EBO\) database](https://www.dot.ny.gov/dotapp/ebo)².

² <https://www.dot.ny.gov/dotapp/ebo>

Section 10 - Estimating and Technical Assumptions

10.01 Estimating Assumptions

The following assumptions have been made for estimating purposes:

Section 9 Construction Inspection will include but not be limited to:

- Providing on-site construction inspection and oversight to ensure the quality of construction and conformity with the final plans and specifications.
- Preparation of as-built plans.

Estimate construction will begin on June 1, 2019 and will be completed by November 30, 2019.

HVEA will staff the project with:

1 Full time Resident/Office Engineer
1 Project Engineer as-needed
1 Full time Inspector

HVEA will provide cell phones for inspectors' use.

Laptops, printers and other technology items will be provided by the Contractor under the Office Technology item.

HVEA will provide APPIA management software as a direct non-salary cost in this contract.

An 11x17 color scanner/photocopier will be included by the Contractor under the field office item.

High speed internet access will be provided by the Contractor as part of the field office item.

HVEA's Project Engineer will review shop drawings and submittals.

HVEA will provide nuclear gauge testing for backfilling operations.

HVEA will provide concrete testing for all concrete pours.

Exhibit A, Page 1
Salary Schedule

JOB TITLE	ASCE (A) OR	AVERAGE ENGINEERING SALARY RATES		
	NICET (N)	PRESENT	PROJECTED	OVERTIME
	GRADE	(02/19)	(07/19)	CATEGORY
Project Manager	VI (A)	\$76.00	\$76.00	A
Resident/Office Engineer	IV (A)	\$52.00	\$52.00	C
Project Engineer	IV (A)	\$48.00	\$48.00	B
Chief Inspector	IV (N)	\$47.14	\$47.14	C
Office Engineer	III (N)	\$45.00	\$45.00	C
Senior Inspector	III (N)	\$41.00	\$41.00	C
Inspector	II (N)	\$31.00	\$31.00	C

OVERTIME POLICY

- Category A - No overtime compensation.
Category B - Overtime compensated at straight time rate.
Category C - Overtime compensated at straight time rate x 1.50.

Exhibit A, Page 2
Staffing Table

JOB TITLE	ASCE OR NICET GRADE	2019										2020			Hours	Rate	Premium Portion of Overtime	Direct	Labor
		A	M	J	J	A	S	O	N	D	J	F	M						
Project Manager	VI (A)													0	\$76.00			\$0.00	
Resident/ Office Engineer	IV (A)		80	168	168	168	168	168	168	80				1168	\$52.00			\$60,736.00	
Overtime														0	\$52.00	\$0.00		\$0.00	
Project Engineer	IV (A)			16	16	16	16	16	16					96	\$48.00			\$4,608.00	
Chief Inspector	IV (N)													0	\$47.14			\$0.00	
Office Engineer	III (N)													0	\$45.00			\$0.00	
Senior Inspector	III (N)													0	\$41.00			\$0.00	
Overtime														0	\$41.00	\$0.00		\$0.00	
Inspector	II (N)			80	168	168	168	168	80					832	\$31.00			\$25,792.00	
Overtime				4	8	8	8	8	4					40	\$31.00	\$620.00		\$1,240.00	
															2,136		\$620.00		\$92,376.00

Exhibit B, Page 1
Estimate of Direct Non-Salary Cost

1. TRAVEL

a) On-Job Travel -				
1 inspectors x 21 days/month x	6 months x	10 miles/day =	\$1,260.00	
Total On-Job Travel-	1,260 mi. x	\$0.545 /mi.=	\$686.70	

SUBTOTAL, TRAVEL \$686.70

b) Material Testing - as needed

SERVICES	RATE	UNIT	APPROX QTY	APPROX PRICE
CONCRETE FIELD TESTING:				
1 Technician: Complete Field Testing; Including Slump, Air, Temperature, Unit Weight, and Casting Cylinders (ACI Grade I Certified Staff)*	\$	488.00 day	4 \$	1,952.00
2 Compressive Strength Test of Cylinder; Per Cast, Cast by HVEA (ASTM C39)	\$	16.00 each	24 \$	384.00
EARTHWORK TESTING:				
1 Sieve Analysis of Soil (ASTM D6913)	\$	65.00 each	2 \$	130.00
2 Wash Sieve Analysis of Soil (ASTM D1140)	\$	37.00 each	2 \$	74.00
3 Particle Size Analysis with Hydrometer (ASTM D422)	\$	125.00 each	2 \$	250.00
4 Proctor Analysis (ASTM D698/D1557)	\$	210.00 each	2 \$	420.00
5 Organic Content (ASTM D2974)	\$	35.00 each	2 \$	70.00
6 pH of Soil (ASTM D4972)	\$	15.00 each	2 \$	30.00
7 Flat and Elongated Particles (ASTM D4791)	\$	75.00 each	2 \$	150.00
8 Atterberg Limits (ASTM D4318)	\$	90.00 each	2 \$	180.00
9 Magnesium Sulfate Soundness (4 Cycles) (ASTM C88)	\$	200.00 each	2 \$	400.00
10 Technician (Up to 8 Hours Onsite): Compaction Testing with Nuclear Density Gauge (Certified Technician)*	\$	488.00 day	0 \$	-
11 Daily Gauge Fee, Per Gauge (Unlimited Tests)	\$	75.00 day	4 \$	300.00
TRAVEL:				
1 Travel (Round Trip - Includes Labor & Mileage)	\$	72.50 trip	4 \$	290.00
2b Sample Pickup, On Site - Roundtrip	\$	130.00 trip	4 \$	520.00
2c Sample Pickup, at Location Off Site (Billed Portal-to-Portal, Plus Mileage at the Current IRS Mileage Rate)	\$	55.00 hour	\$	-
PROFESSIONAL STAFF:				
1 Project Management (Client Coordination, Review Results and Reports)	\$	140.00 hour	2 \$	280.00
2 Professional Engineer	\$	210.00 hour	\$	-

*Prices are per technician, per eight (8) hour day between the hours of 6AM and 4PM; Saturday and night rates will be charged at 1.5 times the unit rate. Sunday and Holiday rates will be charged at 2 times the unit rate.

SUBTOTAL, MATERIAL TESTING \$5,430.00

c) Construction Management Software

14 inspector Months - Appia Construction Estimating Software @	\$158.33 per month	\$2,216.62
1 Inspectors *6 month project = 6		
1 Resident/Office thru close out *8 month project = 8		

SUBTOTAL, SOFTWARE \$2,216.62

TOTAL DIRECT NON-SALARY COST \$8,333.32

Exhibit C
Summary

	Total	PIN 8761.25 80%	PIN 8761.45 20%
Item IA, Direct Technical Salaries (estimated) subject to audit	\$ 92,376.00	\$ 73,900.80	\$ 18,475.20
Item IA, Direct Technical Salaries, Premium Portion of Overtime (estimated) subject to audit	\$ 620.00	\$ 496.00	\$ 124.00
Item II, Direct Non-Salary Cost (estimated) subject to audit	\$ 8,333.32	\$ 6,666.66	\$ 1,666.66
Item III, Overhead, 117% subject to audit	\$ 108,079.92	\$ 86,463.94	\$ 21,615.98
Item IV, Fixed Fee (12%) (applied to Items IA & III)	\$ 24,054.71	\$ 19,243.77	\$ 4,810.94
Total:	\$ 233,463.95	\$ 186,771.16	\$ 46,692.79

City of Beacon Workshop Agenda
3/11/2019

Title:

Recreation Committee Application

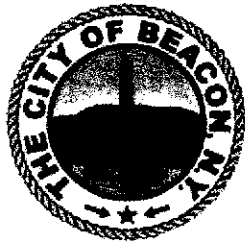
Subject:

Background:

ATTACHMENTS:

Description	Type
Rec Committee Application Jebediah Berry_	Application

Committee Application



Submit Forms:
One Municipal Plaza, Suite One
Beacon, NY 12508

Phone: (845) 838-5010
FAX: (845) 838-5012
Email: cityofbeacon@cityofbeacon.org

Name

Jebediah Berry

Address

103 Washington Ave. Beacon ny

Phone Number

845-765-8014

Alternate Phone

914-424-9445

Email Address

mtside007@yahoo.com

Committee You are
Interested In

- ☐ Board of Assessment Review
- ☐ Board of Ethics
- ☐ Conservation Advisory Committee
- ☐ Emergency Management Committee
- ☐ Human Relations Commission
- ☐ Planning Board
- ☒ Recreation Committee
- ☐ Traffic Safety Committee
- ☐ Zoning Board of Appeals
- ☐ Any of the above
- ☐ Other

Available number of
Hours per week (for
Committee work)

4-6 hours

Occupation

landscape / excavation owner

Employer

mountain side landscaping llc

Work Address

P.O. Box 1155 Beacon ny 12508

Work Phone

845-838-2733

Education

- ☐ Some High School
☒ High School Diploma
☐ Some College
☐ Associates Degree
☐ Bachelor's Degree
☐ Master's Degree
☐ Doctorate Degree

Interest & Skills

Spending time with my family
fishing, biking and other outdoor activity

**Areas of Expertise
(business & civic)**

Business ownership
operating machinery

Reference

Reference Name

Steve Burns

Address

58 Teller Ave.
Bancan NY 12508

Phone

845-546-3310

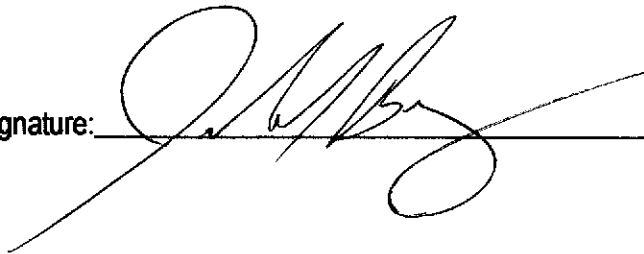
Email Address

Sburns@burnsengineeringservices.com

Relationship

Friend

Applicant Signature:



Date:

2/20/2019

City of Beacon Workshop Agenda
3/11/2019

Title:

Phillips Street Reconstruction

Subject:

Background:

ATTACHMENTS:

Description	Type
Phillips Street Reconstruction Recommendation of Award	Cover Memo/Letter

LANC & TULLY
ENGINEERING AND SURVEYING, P.C.

John J. O'Rourke, P.E., Principal
David E. Higgins, P.E., Principal
John Queenan, P.E., Principal

Rodney C. Knowlton, L.S., Principal
Jerry A. Woods, L.S., Principal

John D. Russo, P.E., Principal
John Lanc, P.E., L.S.
Arthur R. Tully, P.E.

March 8, 2019

Mr. Anthony Ruggiero
City Administrator
City of Beacon City Hall
1 Municipal Plaza
Beacon, NY 12508

and

Mr. Michael Manzi
Highway Superintendent
City of Beacon City Hall
1 Municipal Plaza
Beacon, NY 12508

RE: Phillips Street Reconstruction
City of Beacon
Award Recommendation

Dear Mr. Ruggiero & Mr. Manzi:

A total of two (2) bid proposals were submitted and opened on March 7, 2019 for the **Phillips Street Reconstruction** project. The two proposals were carefully reviewed; all multiplication between estimated quantities and unit prices checked; and addition of total prices checked against the total contract amount. All proposals submitted were complete.

The following tabulation shows the order from lowest bidder, the name of the bidder, and the total contract amount. The engineer's estimate for the project was approximately \$3,500,000.00.

NAME OF BIDDER	TOTAL CONTRACT AMOUNT
Merritt Construction, Inc. Saugerties, NY	\$3,085,681.50
Ben Ciccone, Inc. Poughkeepsie, NY	\$3,722,320.80

The lowest bidder is Merritt Construction Inc., with the total base bid amount of \$3,085,681.50. Merritt Construction Inc. has submitted information related to several projects in which they have completed the work as outlined within the proposed project. References supplied were called and checked to verify the work completed by the prospective low bidder and were found to be acceptable. In our opinion, Merritt Construction Inc. should be considered the lowest responsible bidder based upon the submitted information and Chapter 53 of the City Code. Along with the bid, the contractor has submitted a Non-Collusive Bidding Certificate, and a Bid Bond.

It is our recommendation to the City Council to award the ***Phillips Street Reconstruction*** project to Merritt Construction, Inc.

If you have any questions, or need any further information, please do not hesitate to contact our office.

Very truly

LANC & TULLY, P.C.



John Russo, P.E.

Cc: Nick Ward-Willis, City Attorney

City of Beacon Workshop Agenda
3/11/2019

Title:

Sign Local Law

Subject:

Background:

ATTACHMENTS:

Description	Type
Beacon Sign Local Law	Local Law
Memorandum from Keane and Beane Regarding Sign Local Law	Cover Memo/Letter

DRAFT LOCAL LAW NO. ____ OF 2019

CITY COUNCIL
CITY OF BEACON

PROPOSED LOCAL LAW TO
DELETE CHAPTER 183 AND AMEND
CHAPTER 223 SECTIONS 15 AND 63 OF THE
CODE OF THE CITY OF BEACON

A LOCAL LAW to
deleted Chapter 183
entitled “Signs” and to
amend Chapter 223
Sections 15 and 63 of
Code of the City of
Beacon, concerning sign
regulations in the City of
Beacon.

BE IT ENACTED by the City Council of the City of Beacon as follows:

Section 1. Chapter 183 of the Code of the City of Beacon entitled “Signs” is hereby deleted in its entirety.

Section 2. Chapter 223, Section 63 of the Code of the City of Beacon entitled “Definitions” is hereby amended to add the following definitions:

SIGN

Any material, structure or device, or part thereof, composed of lettered or pictorial matter which is located out of doors, or on the exterior of any building, including window signs located within 18 inches of the window surface and intended to be viewed from the exterior of the building, displaying an advertisement, announcement notice or name, and includes sign frames, billboards, signboards, painted wall signs, hanging signs, illuminated signs, fluttering devices or projecting signs, and shall include any declaration, demonstration, display, illustration or insignia used to advertise or promote the interests of any person or business or cause when the same is placed in view of the general public. A sign for the purposes of this section does not include temporary holiday displays or works of art, including murals or other works of art, approved by the Planning Board.

~~Any structure or part thereof, or any device attached thereto or painted thereon, or any material or thing, illuminated or otherwise, which displays or includes any numeral, letter, work, model, banner, emblem, light, device, trademark or other representation used as an announcement, designation, direction, display or advertisement of any person, firm, group, organization, commodity, service, profession or enterprise when placed in such~~

~~manner that it provides visual communication to the general public out of doors, but not including the following:~~

- ~~A. Signs maintained or required to be maintained by law or governmental order.~~
- ~~B. The flag or insignia of any government or governmental agency.~~
- ~~C. The flag of any civic, political, charitable, religious, fraternal or similar organization, which is hung on a flagpole or mast.~~
- ~~D. Religious or other seasonal holiday decorations which do not contain commercial lettering, wording, designs, symbols or other devices.~~

SIGN AREA

Where a sign consists of a single board or face with information on one or both sides, the area which results by including the outside dimensions of such sign, not including the vertical, horizontal or diagonal supports which may affix the sign to the ground or to a structure or building unless such supports are evidently designed to be part of the sign as defined herein. Where a sign consists of several individual faces, the area shall be the total of the area of all such faces which can be observed from any one point. Where the sign consists of individual letters or symbols attached to or painted on any building, window, or part thereof, the area shall be considered to be that of the smallest basic geometric shape (rectangle, triangle or circle) which encompasses all of the letters, symbols and/or any background of a different color than the color of the building.

SIGN, AWNING

Any visual message incorporated in an awning attached to a building. This sign type does not include canopies over gas pumps.

SIGN, BANNER

Any sign constructed of fabric or other flexible material. Flags are not considered banner signs.

SIGN, BILLBOARD OR OTHER OFF-PREMISES COMMERCIAL SIGN

Any sign, other than an exempt sign, which advertises or otherwise directs attention to a business, commodity, service, industry or other activity which is not, or is only incidentally, sold, offered or conducted at the real property at which such sign is located.

SIGN, FREESTANDING

Any sign independent of any building but permanently affixed, by any other means, to the ground.

SIGN, LAWN

Temporary freestanding signs placed or inserted into the ground.

SIGN, PROJECTING

Any sign which is attached perpendicular to a building or other structure and extends 12 inches beyond the line of the building or structure or beyond the surface of that portion of the building or structure to which it is attached.

SIGN, ROOF

A sign erected on a roof or extending in height above the cornice or projecting eave of the roofline of the building on which the sign is erected.

SIGN, SANDWICH BOARD

A two-sided hinged sign, portable in nature and capable of standing without support or attachment. The area of a sandwich board sign shall be the total area of one face of the sandwich board sign.

SIGN, TEMPORARY

A banner, poster or advertising display constructed of paper, cloth, canvas, plastic sheet, cardboard, wallboard, plywood or other like materials and that appears to be intended or is determined by the Building Inspector, or his or her designee, to be displayed for a limited period of time of no more than four months in a twelve month period.

SIGN, WALL

Any painted sign or poster or any surface or place that may be affixed to the front, side or rear walls of any building.

SIGN, WINDOW

A type of sign applied onto or attached to the inside or outside of a window or a transparent door or within 18 inches of the window or transparent door surface.

Section 3. Chapter 223, Section 15 of the Code of the City of Beacon entitled “Signs” is hereby amended as follows:

§ 223-15 Signs.

A. Purpose. The purpose of this section is to promote and protect the public health, safety and welfare by regulating signs of all types within the City of Beacon. This section is intended to protect property values, create a more attractive economic and business climate, ensure pedestrian and vehicular safety, enhance and protect the physical appearance of the community and preserve the scenic and natural beauty of the City. It is the City’s policy to regulate signs in a constitutional manner that is content neutral as to noncommercial messages which are within the protections of the First Amendment to the U.S. Constitution and the corollary provisions of the New York State Constitution.

B. Objectives. These regulations also serve to achieve the following objectives:

(1) Ensure right to free speech as protected under the Constitution;

- (2) Protect property values, create a more attractive economic and business climate, and protect the physical appearance of the community;
- (3) Provide structures and uses with effective means of identification while reducing visual clutter through the prevention of excessive and confusing sign displays;
- (4) Reduce traffic conflicts or hazards by minimizing visual distractions or obstacles in or visible from the public rights-of-way;
- (5) Minimize the adverse effect of signs on nearby public and private property;
- (6) Avoid personal injury and property damage from unsafe or confusing signs; and
- (7) Establish a clear and impartial process for those seeking to install signs.

C. Conformity required. No sign or billboard shall be erected, constructed, displayed, maintained, moved, reconstructed, extended, enlarged or altered, except in conformity with and expressly authorized by the provisions of this chapter.

D. Substitution clause. A protected noncommercial message of any type may be substituted, in whole or in part, for the message displayed on any sign for which the sign structure or mounting device is legal without consideration of message content. This provision applies to all signs, including outdoor general advertising devices, allowed under this Section. Such substitution of message may be made without any additional approval, permitting, registration or notice to the City.

E. Permit required.

- (1) Unless specifically exempted from obtaining a permit under the provisions of this section, no person shall erect, construct, replace, relocate or structurally alter any sign within the City without first obtaining a sign permit from the Building Inspector and paying the required fee to the City Clerk. The repainting, repairing, changing of parts or sign facing, and maintenance of signs shall not require the issuance of a sign permit provided such maintenance, change or alteration does not in any way alter the size, illumination or location of the sign on the property.
- (2) Submission of a permit application shall be on a form issued by the Building Department and the application fee shall be set forth in the City of Beacon Fee Schedule. The application shall include plans and/or specification of the sign, including the dimensions, materials and details of construction of the proposed sign.
- (3) If a sign is not erected within six months following the issuance of a sign permit for said sign, the sign permit will automatically become void.

~~A. Relationship to a permitted use. All signs must pertain to a use conducted on the same property on which they are located.~~

~~B. Signs in residence districts. In residence districts, the following signs are hereby authorized:~~

~~(1) One identification sign stating the name and address of the resident or property or the number of the lot, not exceeding one square foot in area.~~

~~(2) One identification sign announcing any profession or occupation permitted as an accessory use on the lot, not exceeding one square foot of area.~~

~~(3) For other permitted uses, one sign at each street frontage where the use has an access drive, provided that the total area of such sign does not exceed 50 square feet.~~

~~(4) Temporary signs in accordance with Subsection F below.~~

~~(5)(1) Interior signs displayed through windows shall not require a permit under this section, and said signs shall not count toward maximum number of signs affixed to a building per establishment. However, interior window signs affixed to or placed so as to be visible through a window shall be limited to the windows of the structure within which the permitted use is situated, facing the principal street giving access to such structure. The total amount of signage shall not exceed 30% of the total glass area. All signs shall be maintained in a legible, neat and orderly fashion.~~

F. Prohibited Signs.

~~(1) Signs that contain words or pictures of an obscene or pornographic nature.~~

~~(2) Signs that emit audible sounds, odor or visible matter.~~

~~(3) Signs placed on a curb, sidewalk, hydrant, utility pole, trees or other objects located on or over any public street, public property or within any public right-of-way, unless otherwise permitted. The City reserves the right to remove any sign placed on public property without notice.~~

~~(4) Portable signs, including signs that are mounted on wheels or mounted on any structure on wheels, but not including permitted sandwich board signs.~~

~~(5) Signs with mirrors or any other reflective material.~~

~~(6) Roof signs.~~

~~(7) Billboards or other off-premise commercial signs.~~

~~(8) Signs that are mechanically, digitally or electronically animated.~~

- (9) Inflated signs, wind-animated banners, tethered balloons, and projected images.

G. Signs exempt from permit requirements. The following signs are exempt from the permit requirements of this section. Unless otherwise limited below, such exempt sign shall not exceed four feet in height and shall not exceed six square feet in sign area per sign. Each exempt sign must comply with all other provisions of this section.

- (1) Any official sign, public notice, or warning sign prescribed by federal, state or local law, including but not limited to signs erected and maintained pursuant to and in discharge of any government functions. The sign must comply with the size restrictions set forth herein, unless otherwise prescribed by federal, state or local law.
- (2) Property identification signs not exceeding two square feet in area, such as signs bearing only the property name, numbers, postal route box numbers, image or logo or names of the occupants of the premises.
- (3) One nonilluminated secondary window signs communicating accessory information such as hours of operation, "in" or "out" signs, and totaling no more than one square foot in size.
- (4) Temporary nonilluminated window signs in non-residential uses. The total amount of signage shall not exceed 20% of the total window surface area. Temporary window signs shall include signs that identify special events and sales.
- (5) Nonilluminated signs used for the purpose of selling, renting or leasing land or buildings, and displayed only on the premises for sale or lease. No such signs shall exceed four feet in height or six square feet in area, shall be limited to one per premises, and shall be removed immediately upon sale, rental or lease of the premises. The top of the sign shall be no more than six feet off the ground. The sign shall be placed at least five feet from all property lines and shall not be placed in such a way as to obstruct proper sight distance or otherwise interfere with pedestrian or traffic flow.
- (6) One nonilluminated construction sign not exceeding six square feet in area identifying the parties involved in the design, financing and/or provision of labor and materials associated with the labor on the premises where the sign is located, but not including the advertisement of any product. Such sign shall be removed prior to the issuance of a certificate of occupancy authorizing the initiation of intended use of the premises. The sign shall be placed at least five feet from all property lines and shall not be placed in such a way as to obstruct proper sight distance or otherwise interfere with pedestrian or traffic flow.
- (7) Flags of any nation or state, and seasonal flags shall not require a sign permit. Flags shall not exceed 20 square feet.

- (8) Historical markers, monuments or signs as approved by local, state or federal authorities.
- (9) One nameplate or sign not exceeding two square feet for home occupation and home professional offices uses.
- (10) Lawn signs on any lot provided that each lawn sign does not exceed three feet in height and three square feet in area. The aggregate area of all lawn signs on any lot shall not exceed 32 square feet. The top of the lawn sign shall be no more than five feet off the ground. The lawn sign shall be placed at least five feet from all property lines and shall not be placed in such a way as to obstruct proper sight distance or otherwise interfere with pedestrian or traffic flow. Such signs are to be nonilluminated and shall be displayed for a limited period of time of no more than four months in a twelve month period. Lawn signs shall be removed within seven calendar days after the event for which they are displayed.
- (11) Signs within a building not legible from the public right-of-way or adjacent lots, or any sign within an enclosed outdoor space, such as an athletic field, where such sign is not legible beyond the property lines.

C.H. Sign regulations in ~~residence~~ all districts.

- (1) Animation. No sign shall be mechanically animated, such as moving, rotating or revolving.
- (2) Setback. All signs shall be located within the setback lines of the lot or on the building, unless otherwise permitted.
- (3) Repair. All signs and components thereof shall be kept in good repair and in safe, neat, clean and attractive condition.-
- (4) Illumination. Permitted signs may be internally or externally illuminated, unless otherwise prohibited, except by means of a neon-type electric material, provided that such illumination shall not be twinkling, flashing, intermittent, or of changing degrees of intensity or projected outward from the property onto adjacent properties or public rights-of-way and provided that the source of such illumination shall not be visible beyond the boundaries of the lot on which it is located. Notwithstanding the above, neon, LCD-fluorescent and LED signs shall not be permitted for any residential use, but may be permitted in nonresidential districts, unless otherwise prohibited. All illumination shall be focused downward from above, shall create no direct glare and shall light only the sign area.
- (5) Placement. No sign shall be located so as to obscure any signs displayed by a public authority, nor shall any sign be placed in such a way as to obstruct proper sight distance or otherwise interfere with pedestrian or traffic flow.

- (6) No sign shall be placed in a location that would cause a violation of the provisions of the Americans with Disabilities Act.

I. Signs for residential uses.

- (1) No sign for a residential use, including exempt signs under § 223-15G, shall be placed above the first floor.
- (2) The aggregate sign area of all signs with permits on any lot shall not exceed 16 square feet.
- (3) A subdivision, apartment or multi-family housing development consisting of more than 15 dwelling units may display freestanding identification sign at each street entrance to the development, designating only the name of the development, the address and name of the owner and the names of any buildings located therein, provided that the maximum sign area of said sign shall not exceed 24 square feet and shall not be more than six feet in height. The top of the sign shall be no more than eight feet off the ground. Such sign shall maintain at least a five foot setback from all property lines.

D.J. Signs in for nonresidence districts nonresidential uses. In nonresidence districts, the following signs are hereby permitted for nonresidential uses: authorized:

- (1) Not more than one sign affixed to the outer wall of the structure within which the permitted use is situated, which outer wall faces the principal street giving access to such structure, provided that:
- (a) The aggregate area of each such sign shall not exceed one square foot for each linear foot of building facing the street.
- (b) The aggregate area of all signs with permits on any lot shall not exceed two square feet for each linear foot of a building facing the street.
- (c) No such sign shall exceed two feet in height, except that a vertical projecting wall sign shall not exceed eight feet in height or ten square feet. A vertical projecting wall sign is defined as any sign which is attached to the building wall or structure which is perpendicular to the face of such wall or structure.
- (d) No sign shall project above the eaves of the building on which it is affixed or, if no eaves exist thereon, the roof, nor shall any wall sign extend more than six inches from the building into any required yard.
- (d) No sign shall face an abutting residential zoning district if located within 50 feet of such district.

- (e) ~~Vertical~~ projecting wall signs shall not have more than two faces.
 - (f) The exterior edge of a ~~vertical~~ projecting wall sign shall not extend more than ~~five-six~~ feet from the outer wall of the structure ~~or 1/3 the width of the sidewalk, whichever is less.~~
 - (g) No part of a ~~vertical~~ projecting wall sign shall extend into vehicular traffic areas, and any part over pedestrian areas shall have a minimum clearance of seven feet, six inches.
- (2) Not more than one freestanding sign facing each street on which the lot abuts, provided that:
- (a) The building is set back ~~not less than~~ at least 50 feet from the street line, in which case the sign shall not exceed 20 square feet in area.
 - ~~(b) The building is set back not less than 100 feet from the street line, in which case the sign shall not exceed 35 square feet in area.~~
 - ~~(c) No dimension shall exceed 12 feet. The top of the sign shall be no higher than 16 feet off the ground.~~
- ~~(3) Permanent window signs. The total amount of signage shall not exceed 20% of the total window surface area and shall not exceed four feet in height and 16 square feet in area.~~
- ~~(4) Awning signs. One sign for each premise shall be allowed. The area of such sign shall not exceed 20% of the area of the awning.~~
- ~~(5) Sandwich board signs. A single sandwich board sign shall be permitted on any lot provided that such sign does not exceed three feet in height and six feet in area. All sandwich board signs shall be brought in each day at the close of business. Signs shall not be placed in such a way as to obstruct property sight distance or otherwise interfere with pedestrian or traffic flow. A pedestrian clearway of at least six feet shall be maintained in a pedestrian walkway, and a pedestrian clearway of at least eight feet shall be maintained whenever possible.~~
- ~~(3)(6) One identification sign, not exceeding 10 square feet in area, to the outer wall of the structure facing upon a street or parking lot not faced by a sign as permitted in Subsection E(1) above.~~
- ~~(4)(7) In addition to other permitted signs, necessary small directional signs are permitted on access roads and parking areas, provided that the area of each sign shall not exceed two square feet.~~
- ~~(5)(8) Interior signs displayed through windows shall not require a permit under this section, and said signs shall not count toward maximum number of signs~~

~~affixed to a building per establishment. However, interior window signs affixed to or placed so as to be visible through a window shall be limited to the windows of the structure within which the permitted use is situated, facing the principal street giving access to such structure. The total amount of signage shall not exceed 30% of the total glass area. All signs shall be maintained in a legible, neat and orderly fashion.~~

~~(6) Temporary signs in accordance with Subsection F below.~~

E.K. Signs in the Historic District and Landmark Overlay Zone. All signs in the Historic District and Landmark Overlay Zone shall be approved by the Planning Board pursuant to § 134-6.

F.L. Temporary signs.

(1) All signs of a temporary nature must receive permits before being displayed, except those specified in 123-15G.

(2) Requirements. Any proposed temporary sign shall conform to the following:

(a) Such sign shall not exceed four feet in height and 32 square feet in area for any non-residential use. The top of the temporary sign shall be no more than 16 feet off the ground.

(b) Such sign shall not exceed four feet in height and 32 square feet in area for any residential use. The top of the temporary sign shall be no more than six feet off the ground.

(c) Such sign shall not be displayed for more than four months in a twelve month period.

(d) Such sign shall not be illuminated.

(e) Such sign shall maintain at least a five foot setback from all property lines.

(f) Such sign shall be placed in such a way as to not obstruct proper sight distance or otherwise interfere with pedestrian or traffic flow.

(3) Banners shall be permitted as temporary signs and shall be subject to the provisions set forth above.

~~(i.) A temporary sign is a nonilluminated sign that is used in connection with a circumstance, situation or event that is designed, intended or expected to take place or to be completed within a reasonably short or definite period after the erection of such sign, such as signs displayed during campaigns, drives or~~

~~events of civic, political, philanthropic, educational or religious institutions. If such sign display area is permanent but the message displayed is subject to periodic changes, that sign shall not be regarded as "temporary." Unless otherwise provided in this section, signs shall not be considered temporary if they are effectively displayed on an ongoing basis, interrupted by short intervals when they are not displayed. Temporary signs shall not require a permit under this section, unless located in the public right-of-way or on public property.~~

- ~~(2) Temporary signs must be removed by the individual or organization which posted, or caused to be posted, such temporary signs within seven calendar days after the event for which they are displayed, unless otherwise provided in this section.~~
- ~~(3) No temporary sign shall be located so as to obscure any signs displayed by a public authority, nor shall any sign be placed in such a way as to obstruct proper sight distance or otherwise interfere with pedestrian or traffic flow.~~
- ~~(4) The following temporary signs shall be permitted in all districts, unless otherwise provided in this section:~~
 - ~~(a) Not more than one temporary sign for each street frontage of the lot, identifying the architect, engineer and/or contractor, and not exceeding 40 square feet in area in nonresidence districts and six square feet in residence districts, shall be permitted during the course of construction only.~~
 - ~~(b) One "for sale" or one "to let" sign not exceeding six square feet in area for a single lot, or 50 square feet in area for a real estate subdivision, and set back at least 15 feet along the frontage of the street upon which the property is located. A "sold" sign shall not be displayed for more than 30 calendar days.~~
 - ~~(c) Signs indicating that a special event such as a grand opening, fair, carnival, circus, festival or similar event is taking place on the lot where the sign is located, not exceeding 40 square feet in area in nonresidence districts and six square feet in residence districts, and limited to one sign for each street frontage of the lot. The sign shall not be posted sooner than two weeks prior to the special event and shall be removed by the individual or organization which posted, or caused to be posted, such sign within three calendar days following the special event.~~
 - ~~(d) Sidewalk signs with no more than two faces, including but not limited to sandwich boards, in nonresidence districts, or in any other district provided the sign is located on Route 52 (Fishkill Avenue and Teller Avenue) or Route 9D (North Avenue and Wolcott Avenue), not exceeding one sign per business and not exceeding two feet in width~~

~~and three feet in height. Sidewalk signs may be displayed on an ongoing basis, but shall not be displayed between the hours of 11:00 p.m. and 6:00 a.m., shall not include banners, and shall not be tethered. Sidewalk signs shall be located in the front of the business for which the sign is displayed, unless the business is located on a corner lot in which case the sign may be located to the side of the business, or unless the business maintains a rear entrance in which case the sign may be located to the rear of the business.~~

~~(e) Signs for tag, garage or yard sales, not exceeding six square feet.~~

~~(f) Signs conveying a nonpolitical, noncommercial message, not exceeding 40 square feet in area in nonresidence districts and six square feet in residence districts and limited to one sign for each street frontage of the lot.~~

~~(g)(a) Political posters, banners, promotional devices and similar political signs.~~

~~G. Sign regulations in nonresidence districts.~~

~~(1) Illumination. Permitted signs may be internally or externally illuminated, provided that such illumination shall not be twinkling, flashing, intermittent, of changing degrees of intensity or projected outward from the property onto adjacent properties or public rights-of-way and provided that the source of such illumination shall not be visible beyond the boundaries of the lot on which it is located. Notwithstanding the above, neon, LCD and LED signs may be permitted.~~

~~(2) Placement. No sign shall be located so as to obscure any signs displayed by public authority, nor shall any sign be placed in such a way as to obstruct proper sight distance or otherwise interfere with pedestrian or traffic flow.~~

~~(3) Setback. Unless otherwise specified, all signs shall be located within the setback lines of the lot or on the building.~~

~~(4) Repair. All signs and components thereof shall be kept in good repair and in safe, neat, clean and attractive condition.~~

~~(5)(1) Animation. No sign shall be mechanically animated, such as moving, rotating or revolving.~~

~~H. Temporary signs in the public right-of-way and on public property.~~

~~(1) Permit required. In all districts, no temporary signs shall be erected in the public right-of-way or on public property without a permit, unless specifically exempted below.~~

- ~~(2) Exceptions. The following signs shall not be subject to the issuance of a permit:~~
- ~~(a) Public signs erected by or on behalf of a governmental body to post legal notices, identify public property, convey public information, and direct or regulate pedestrian or vehicular traffic.~~
 - ~~(b) Temporary emergency warning signs erected by a governmental body, public utility company or contractor doing authorized or permitted work within the public right-of-way, provided that such signs shall be located outside of the public vehicular and pedestrian travel ways and shall be placed so as not to create any nuisance or threat to public safety.~~
 - ~~(c) Bus stops erected by a public transit company.~~
 - ~~(d) Informational signs of a public utility regarding its poles, lines, pipes or facilities.~~
- ~~(3) Permit standards. The Building Inspector or his duly authorized designee shall issue a permit within a reasonable period of time following receipt of a complete permit application for the placement of a temporary sign in the right-of-way or on public property, provided the following conditions are satisfied:~~
- ~~(a) Submission of a permit application on a form issued by the Building Department and payment of the application fee as set forth in the City of Beacon Fee Schedule.~~
 - ~~(b) No sign shall be placed in a location that would cause a violation of the provisions of the Americans with Disabilities Act, as may be amended from time to time.~~
 - ~~(c) All signs must comply with the provisions of Subsection F, above.~~
 - ~~(d) No sign shall be located so as to obscure any signs displayed by a public authority, nor shall any sign be placed in such a way as to obstruct proper sight distance or otherwise interfere with pedestrian or traffic flow or means of egress.~~
 - ~~(e) The necessity of surety bonds and/or insurance shall be determined by the Building Inspector or his duly authorized designee. If it is determined that such surety bond and/or insurance is necessary, the amount of such surety bond and/or insurance shall be determined by the Building Inspector or his duly authorized designee, in his/her sole discretion, as may be necessary to defray any expense of liability from the City. Surety bonds and/or insurance policies shall be approved as to form by the City Attorney.~~

- ~~(f) — Permits for sidewalk signs shall be valid for one year from the date of issuance and shall not be transferrable.~~

M. Nonconforming signs.

- ~~(1) All nonconforming temporary signs shall be removed or brought into compliance within 90 days of the adoption date of this section.~~
- ~~(2) Any nonconforming sign for a residential use that is removed from its position or siting and not replaced in-kind within 30 days shall be presumed to be abandoned and discontinued and may not be restored or re-erected except in compliance with this section.~~
- ~~(3) No nonconforming sign may be altered in any way that would increase its nonconformity with the regulations of this section, including but not limited to area, height, setback and illumination.~~
- ~~(4) Nothing herein shall be deemed to prevent maintaining a nonconforming sign in good repair and safe condition.~~

N. Violations.

- (1) Noncompliance with any of the foregoing provisions shall constitute an offense, punishable as provided for in § 1-3, General penalty. When a person has received written notice from the Building Inspector or has been served with a summons and complaint in an action to enjoin continuance of any violation, each day in excess of 10 days thereafter that he shall continue to be guilty of such violation shall constitute an additional, separate and distinct offense.
- (2) Any temporary sign installed or placed, except in conformance with the requirements of this section, shall be subject to removal. In addition to other remedies hereunder, the City shall have the right to recover from the owner or person placing such sign the full costs of removal and disposal of such signs in accordance with the administrative fee set forth in the City of Beacon Schedule of Fees. The fee shall be paid by the individual or entity retrieving the signs from the City. The City shall dispose of the sign(s) after five calendar days from the removal of the sign(s) by the City.
- (3) The display of any sign at a location containing the name or address of a person or entity and a commercial message relating to such person or address shall be presumptive evidence that such person installed, created, erected and maintained the sign at the location where it was displayed. This presumption shall be subject to rebuttal by competent evidence.

Section 4. Ratification, Readoption and Confirmation

Except as specifically modified by the amendments contained herein, Chapter 223 of the

City of Beacon Code is otherwise to remain in full force and effect and is otherwise ratified, readopted and confirmed.

Section 5. Severability

The provisions of this Local Law are separable and if any provision, clause, sentence, subsection, word or part thereof is held illegal, invalid or unconstitutional, or inapplicable to any person or circumstance, such illegality, invalidity or unconstitutionality, or inapplicability shall not affect or impair any of the remaining provisions, clauses, sentences, subsections, words or parts of this Local Law or their petition to other persons or circumstances. It is hereby declared to be the legislative intent that this Local law would have been adopted if such illegal, invalid or unconstitutional provision, clause, sentence, subsection, word or part had not been included therein, and if such person or circumstance to which the Local Law or part hereof is held inapplicable had been specifically exempt therefrom.

Section 6. Effective Date

This local law shall take effect immediately upon filing with the Office of the Secretary of State.

City of Beacon Workshop Agenda
3/11/2019

Title:

Advice of Counsel

Subject:

Background:

ATTACHMENTS:

Description
Lease agreement

Type
Backup Material

City of Beacon Workshop Agenda
3/11/2019

Title:

Real Estate

Subject:

Background:

City of Beacon Workshop Agenda
3/11/2019

Title:

Personnel

Subject:

Background:

City of Beacon Workshop Agenda
3/11/2019

Title:

Discussion of Sale/Purchase of Real Property

Subject:

Background:

ATTACHMENTS:

Description

Term Sheet

Type

Backup Material