



COURTROOM
1 MUNICIPAL PLAZA
BEACON, NY 12508
AND LIVE VIA ZOOM

Mayor Lee Kyriacou
Councilmember George Mansfield, At Large
Councilmember Paloma Wake, At Large
Councilmember Molly Rhodes, Ward 1
Councilmember Justice McCray, Ward 2
Councilmember Wren Longno, Ward 3
Councilmember Dan Aymar-Blair, Ward 4
City Administrator Chris White

**May 15, 2023
7:00 PM
City Council Agenda**

Roll Call

Workshop Agenda Items

1. Beacon Historical Society Presentation Regarding the 110th Anniversary of the City of Beacon
2. Appointment of Jennifer McGuire to the Position of Account Clerk Typist
3. Addition & Renovation for Beacon Fire Station Bid Results
4. Agreement with Tectonic Engineering Consultants, Geologists & Land Surveyors, D.P.C. for Special Inspection Materials Testing Services on the Addition & Renovation for Beacon Fire Station Project
5. Affordable Housing Discussion
6. Leaf Blower Regulations

City of Beacon City Council Agenda
05/15/2023

Title:

Beacon Historical Society Presentation Regarding the 110th Anniversary of the City of Beacon

ATTACHMENTS

[Proclamation in Honor of the 110th Anniversary of the City of Beacon](#)



Proclamation

In Honor of the 110th Anniversary of the City of Beacon

WHEREAS, the City of Beacon was formed on May 15, 1913 through the merger of the two conjoined Villages of Fishkill Landing (established 1866) and Matteawan (established 1886); and

WHEREAS, the newly formed City became the first commission form of government in New York State, a system that was replaced with a Strong Mayor and City Council in 1992;

WHEREAS, the City of Beacon was named in honor of the Revolutionary War signal fires built atop Mount Beacon; and

WHEREAS, the City of Beacon became known as the hat capital of New York State, with hat production second nationally only to Danbury, Connecticut, and produced scores of products, including rubber tires, locomotives, leather jackets, boxes, textiles, baby carriages, insecticides, blankets, and industrial fans; and

WHEREAS, the City of Beacon has featured one of the longest-running ferry systems in the United States, hosted one of the earliest trolley lines in the Hudson River Valley, and housed the world-famous Mount Beacon Incline Railway, which was billed as the Eighth Wonder of the World and the world's steepest funicular; and

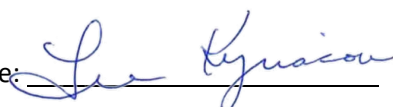
WHEREAS, the City of Beacon has become a thriving center for the arts and culture, due in part to the arrival of the world-class Dia Beacon art museum in 2003; and

WHEREAS, the City of Beacon can claim famous leaders, athletes, entertainers and artists, including Robert Montgomery, James Forrestal, Melio Bettina, Digger Phelps, and Lenny Torres Jr.; and

WHEREAS, Architectural Digest has declared Beacon's one of the "15 Most Beautiful Main Streets in America;" and

WHEREAS, May 15th 2023 marks the 110th anniversary of the City of Beacon.

NOW, BE IT RESOLVED that all who live in or visit Beacon join in honoring this significant milestone which marks 110 years of prosperity and community for the city born of two villages on May 15, 1913.

Signature:  Date: 5/11/2023

Lee Kyriacou, Mayor

City of Beacon City Council Agenda
05/15/2023

Title:

Appointment of Jennifer McGuire to the Position of Account Clerk Typist

ATTACHMENTS

[Jennifer McGuire Resume](#)

[Director of Finance Memorandum Regarding the Appointment of Jennifer McGuire to the Position of Account Clerk Typist](#)

JENNIFER L. MCGUIRE

Phone: [REDACTED]

Email: [REDACTED]

Experience

08/21-present JLM BOOKKEEPING SOLUTIONS, LLC, Beacon, NY

08/21-present Owner/Virtual Bookkeeping Professional

- Reconcile business checking, credit card and line of credit accounts on a monthly basis
- Consult and coordinate with clients to create a customized process, including set up of chart of accounts, financial statements and insurance audits
- Prepare monthly financial statements for various clients
- Prepare custom weekly client cashflow reporting
- Process weekly payroll
- 1099 Filing
- Process accounts receivable and accounts payable

09/19-04/21 PZENA INVESTMENT MANAGEMENT, New York, NY

09/19-04/21 Portfolio Accountant

- Reconciled all cash, transactions, holdings and accrued income for domestic and multi-currency portfolios on a monthly basis
- Communicated with custodian banks to resolve discrepancies
- Opened and closed client accounts, including coordination and execution of new account paperwork and validation of asset transfers in and out of firm
- Provided operational support to Portfolio Managers and Marketing
- Handled daily position, cash and performance analysis
- Handled client inquiries
- Created and managed client custom reports

01/12-09/19 ALLIANCE BERNSTEIN, LLC/W.P. STEWART, New York, NY

01/12-09/19 Associate Portfolio Manager/Private Client Associate

- Handled all client inquiries
- Managed all aspects of client cash outflows, including raising cash, trade execution and wiring funds
- Managed all aspects of client cash inflows, including rebalancing of portfolio to target weighting
- Opened and closed client accounts, including coordination and execution of new account paperwork
- Implemented Portfolio Manager decisions including trade allocations, guideline and compliance adherence and execution monitoring
- Rebalanced portfolios to model/target weights
- Provided operational, analytical and trading support to Portfolio Managers
- Provided service and support to Financial Advisors
- Handled daily position, cash and performance analysis
- Assisted marketing with client presentations
- Reviewed all marketing materials and client performance reports

02/09-12/11 EVERCORE ASSET MANAGEMENT, New York, NY

- 02/09-12/11 Investment Operations Manager
- Managed and coordinated daily interaction with outsourced service providers, including BNY Mellon (back office support), Tourmaline Partners, LLC (trading), ISS (proxy voting) and EZE Castle Software (Order Management System)
 - Implemented and oversaw Portfolio Manager decisions including trade allocations, guideline and compliance adherence and execution monitoring
 - Provided operational, analytical and trading support to Portfolio Managers
 - Handled daily position, cash and performance analysis
 - Responsible for monitoring and reviewing all proxy voting and corporate actions
 - Monitored and reviewed commissions, manage soft dollar budgets and conduct monthly soft dollar reconciliation
 - Assisted marketing with client presentations and RFPs
 - Reviewed all marketing materials and client performance reports
 - Handled all opening and closing procedures for each trading day

06/06-02/09 AG ASSET MANAGEMENT, New York, NY

- 06/06-02/09 **Vice President, Distribution Management Operations/Wrap Trading and Operations**
- Designed, developed and implemented the Distribution Management System
 - Developed and implemented all distribution management operational procedures
 - Coordinated with trading room, brokers and outside counsel to sell restricted securities
 - Prepared paperwork for sales of restricted stock (Rule 144, 144K, 145 and S3)
 - Coordinated trade settlement of physical stock with brokers and custodians
 - Reviewed all account reconciliations between portfolio accounting system and custodial records
 - Maintained and review hypothetical account transactions which are used as a benchmark versus actual portfolio returns
- Wrap Trading and Operations**
- Responsible for the reconciliation of \$250M in WRAP accounts using the Security APL system
 - Processed daily WRAP transactions such as cash withdrawals, deposits, security additions & withdrawals and tax loss requests
 - Generated and executed WRAP block trades and account maintenance trades on various platforms
 - Maintained sponsor rotation for WRAP accounts
 - Analyzed WRAP dispersion and outlier reports, ensuring all accounts were properly invested according to the corresponding model
 - Maintained quality control of prior days WRAP trades using over 15 different sponsor operating systems
 - Implemented portfolio manager decisions including trade allocations, wrap orders, guideline adherence, execution monitoring and compliance with firm's trading rotation
 - Provided trading and operational support to portfolio managers, analysts and traders

8/94-6/06 CREDIT SUISSE ASSET MANAGEMENT, LLC, New York, NY

- 11/99-6/06 **Assistant Vice President, Post Venture/Distribution Management Administration**
- Supervised team of administrators on daily operations
 - Coordinated with trading room, brokers and outside counsel to sell restricted securities
 - Prepared paperwork for sales of restricted stock (Rule 144, 144K, 145 and S3)
 - Coordinated trade settlement of physical stock with brokers and custodians
 - Reviewed all account reconciliations between portfolio accounting system and custodial records
 - Maintained and reviewed hypothetical account transactions which are used as a benchmark versus actual portfolio returns
 - Instrumental in the design, development and implementation of the Sales and Distribution Management System

1/97-11/99	Team Leader, Fund Administration	
	• Supervised administration of mutual funds and fund administrators • Projected daily cash positions for fund managers based on trade settlement and investment income • Monitored and analyzed available cash, Repo rates and Repo Collateral • Performed daily, monthly and quarterly reconciliations for all funds • Acted as liaison between Portfolio Managers, Corporate Actions Department and Custodians to monitor inflows and outflows of cash and stock • Secured lines of credit for all overdrawn funds • Created and maintained fund information systems with MIS department, including Funds Distribution Database and 12B-1 Reporting System • Reviewed and approved all advisory and quarterly dealer fees • Responsible for all dealer inquiries regarding payment status and fees	
8/94-1/97	Client Services Associate, Operations	
	• Entered daily trade tickets • Prepared and voted proxies • Monitored trade settlement • Prepared monthly reconciliations of investment income • Participated in the preparation of monthly client appraisal packages	
9/93-8/94	BLACKROCK FINANCIAL MANAGEMENT, New York, NY	
9/93-8/94	Analyst Assistant	
	• Responsible for the daily administration of various institutional accounts • Prepared monthly Net Asset Valuation reports for diverse private accounts • Assisted in the calculation and reporting of portfolio total returns • Performed monthly reconciliation of custodian bank transactions and asset holdings to the internal record keeping system • Prepared analyses for internal review purposes	
11/91-9/93	THE FIRST BOSTON CORPORATION, New York, NY	
11/91-9/93	Customer Accounts Analyst	
	• Opened and maintained customer accounts • Researched inquiries regarding account status and delivery instructions • Assigned and updated the Firm's numerical identification systems for all accounts • Maintained extensive telephone contact with the company's branch representatives, brokers and sales assistants • Responsible for even distribution of workflow within the department	
Professional Licenses	Series 7 Series 63 QuickBooks Online Certified ProAdvisor	August 2014 - September 2019 November 2014 - September 2019 August 2021 - current
Skills	Electra Reconciliation, Indata (Portfolio Accounting System), Moxy (Order Entry System), APX, EZE Castle (Order Entry System), Security APL and GIM II, Bloomberg, Microsoft Word, Excel, PowerPoint, Outlook, ISS ProxyExchange Proprietary Software: AIMS (Account Information Management System), BEAMS and Sales and Distribution Management System	
Languages	Conversational German	
Education	Alfred University, Alfred, NY Concentration: Finance B.S. Degree, Business Administration, January 1991	

Memorandum
Finance Department



To: Chris White

From: Susan Tucker, Director of Finance

Re: Account Clerk Typist

Date: May 15, 2023

Please be advised that on May 4th and May 11th we conducted interview to fill the position of Account Clerk Typist due to the vacancy at City Hall. The interviews were conducted with Sara Morris, Kristine Marino, and myself. Based on the interviews it was our determination to move forward with hiring the following individual to fill the position:

Jennifer McGuire

Thank you!

City of Beacon City Council Agenda
05/15/2023

Title:

Addition & Renovation for Beacon Fire Station Bid Results

ATTACHMENTS

Addition & Renovation for Beacon Fire Station Bid Result Presentation

The Palombo Group Bid Award Recommendation Letter Regarding the Addition & Renovation for Beacon Fire Station

Mitchell Associates Architects, PLLC Bid Award Recommendation Letter Regarding the Addition & Renovation for Beacon Fire Station

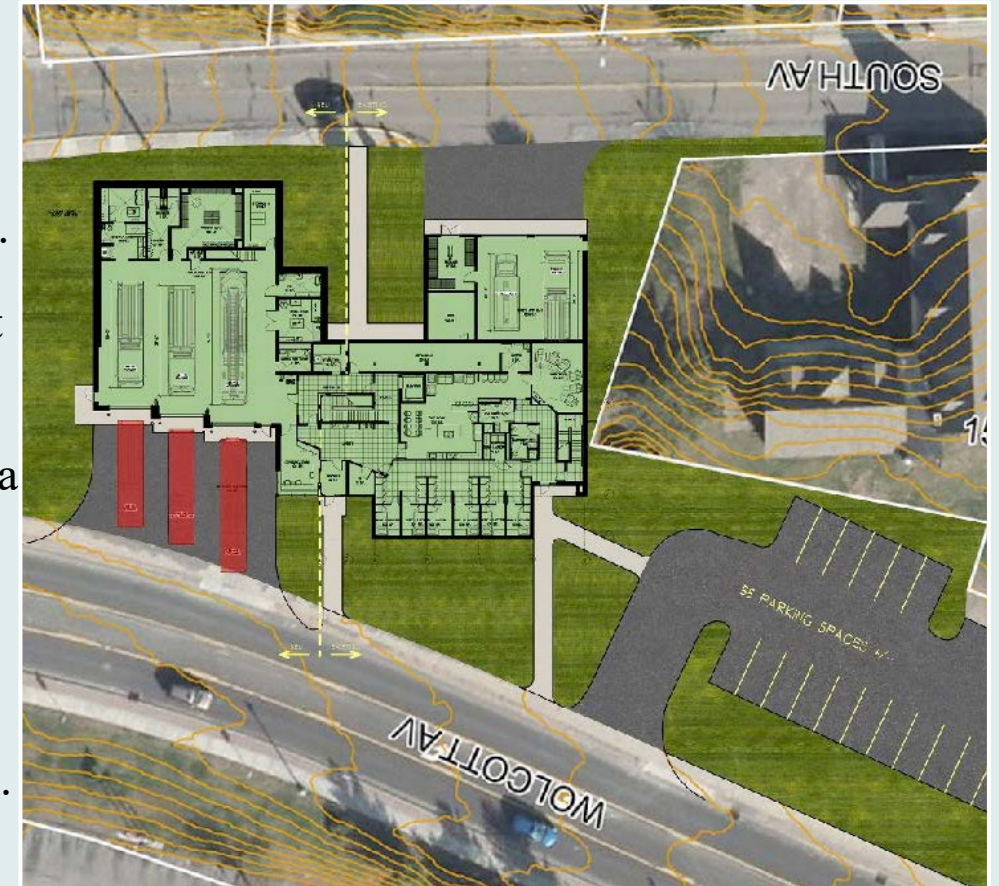


CITY OF BEACON

FIRE STATION RENOVATION AND ADDITION
MAY 15, 2023

SCOPE OF WORK

- The Fire Station will be reoriented so the front faces Wolcott Avenue rather than South Avenue and increase apparatus bays from 3 to 5.
- The approximately 10,000 sf existing facility will receive a complete renovation and a 6,400 sf addition will be constructed on the north side.
- The renovated facility will be energy efficient and fully electric (except backup generators) and feature a geothermal heat pump system.
- The adjacent parking area will be completed renovated and restored as a 50+ spot public parking area (after geothermal wells installed).
- The fire station is being constructed with real brick and quality materials to ensure a long useful life and improved aesthetic appeal.
- The facility will serve as the consolidated single fire station for Beacon. Mase Hook & Ladder will be decommissioned as was Beacon Engine.





PROJECT TIMELINE

- January/February 2023: Hazardous Materials Abatement
- April 2023: Bids Issued for Main Project
- May 1, 2023: Bids Received
- May 22, 2023: Bid Award
- June 6, 2023: Project Mobilization
- August / September 2024: Project Completion

BIDDING PROCESS

- The Bids are broken down into seven packages/ contracts:
 - General Contractor (7 Proposals) / *Mid Hudson Construction Mgt. Inc.*
 - Mechanical Contract (5 Proposals) / *MDS HVAC-R Inc.*
 - Plumbing (5 Proposals) / *S&O Construction Services, Inc.*
 - Electrical (4 Proposals) / *RLJ Electric Corporation*
 - Fire Sprinkler (1 Proposal) / *SRI Fire Sprinkler, LLC*
 - Geothermal Wells (1 Proposal) / *Connecticut Wells Geothermal Services, Inc.*
 - Sitework (3 Proposals) / *Mid Hudson Construction Mgt. Inc. (Same as GC)*
- The City also needs to contract for Independent Materials Testing, for which Tectonic Engineering Consultants was selected based on four cost proposals solicited by The Palombo Group.



COUNCIL ACTIONS

- Award bids for the seven prime contracts (six contractors)
- Authorize agreement with Tectonic Engineering Consultants for Independent Testing Services
- Increase Capital Program for Project from \$10.47 M to \$14.66 M (Propose \$4 Million from Fund Balance)
- (Possible) Pass Local Law converting South Avenue between Main Street and Beacon Street into One-Way Only (going South) and stripe new parking on both sides of street (to replace spots displaced at St. Andrew's Church)



BUILDING A MODERN FIRE STATION THAT RESPECTS BEACON'S PAST



**Commitment to
Quality
in Construction Management**

May 11, 2023

CONSTRUCTION MANAGEMENT

Mr. Chris White

GENERAL CONTRACTING

City Administrator

City of Beacon

DESIGN BUILD

One Municipal Plaza

Beacon, New York 12508

STRATEGIC PLANNING /
CONSULTING

**Re: Bid Award Recommendation – Addition & Renovation to Beacon
Fire Station, City of Beacon**

FACILITIES MANAGEMENT

Mr. White:

On Monday, May 1st, 2023, bids were received for the above referenced project. The following is our bid award recommendation for the Multiple Prime Contracts.

THE PALOMBO GROUP

SUMMARY OF PROPOSED CONTRACT BIDS

22 NOXON ST.

POUGHKEEPSIE, NY 12601

Upon review of the Bid Results for the above referenced project, we have reviewed all scopes of work with the low bidders for these contracts. We have gathered all applicable information from the low bidders via the Contractor's Qualifications and, based on our findings, offer the City of Beacon the following for consideration.

T.845.868.1239

F.845.845.1220

www.thepalombogroup.com

We have summarized the lowest qualified bid contracts and based on review with Mitchell Associates Architects, The Palombo Group finds no reason to believe that the low bidders will not complete their scope of work. We have successfully worked with these contractors previously; therefore, we see no reason why the following contracts should not be awarded to the subsequent contractors:

GENERAL CONSTRUCTION CONTRACT (GCC) No. 1
Mid Hudson Construction Management Inc.
Poughkeepsie, NY

BASE BID	\$6,887,000.00
TOTAL CONTRACT VALUE	\$ 6,887,000.00

MECHANICAL CONTRACT (MC) No. 2
MDS HVAC-R Inc.
Walden, NY

BASE BID	\$1,427,101.00
TOTAL CONTRACT VALUE	\$ 1,427,101.00

PLUMBING CONTRACT (PC) No. 3
S&O Construction Services, Inc.
Pleasant Valley, NY

BASE BID	\$758,451.00
TOTAL CONTRACT VALUE	\$ 758,451.00

ELECTRICAL CONTRACT (EC) No. 4
RLJ Electric Corporation
Peekskill, NY

BASE BID	\$1,123,000.00
TOTAL CONTRACT VALUE	\$ 1,123,000.00

FIRE SPRINKLER CONTRACT (FSC) No. 5
SRI Fire Sprinkler, LLC
Albany, NY

BASE BID	\$189,000.00
TOTAL CONTRACT VALUE	\$ 189,000.00

GEOHERMAL CONTRACT (GTC) No. 6
Connecticut Wells / Geothermal Services, Inc.
Bethlehem, CT

BASE BID	\$435,000.00
TOTAL CONTRACT VALUE	\$ 435,000.00

SITWORK CONTRACT (SC) No. 7
Mid Hudson Construction Management Inc.
Poughkeepsie, NY

BASE BID	\$1,514,000.00
TOTAL CONTRACT VALUE	\$ 1,514,000.00

TOTAL CONSTRUCTION COST FOR CONTRACTS:	\$12,333,552.00
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References contacted gave no reason for disqualification. In addition, the New York State Department of Labor has indicated that there are no wage infractions against the above contractors.

The Palombo Group recommends a \$250,000.00 contingency be maintained by the City of Beacon going into construction to cover any unforeseen conditions.

If you should have any questions, please do not hesitate to call.

Very truly yours,
THE PALOMBO GROUP



Luis Rodriguez
Project Executive

MITCHELL ASSOCIATES ARCHITECTS, PLLC • EMERGENCY SERVICES FACILITIES •

RECOMMENDATION FOR AWARD

Dated: May 11, 2023

To: **Chris White**
City Administrator
City of Beacon
One Municipal Plaza
Beacon, New York 12508

Project Name: Addition & Renovation to Beacon Fire Station

Dear Mr. White,

Pursuant to a successful invitation to bid, Mitchell Associates Architects, PLLC (**MAA**) and The Palombo Group (**TPG**) reviewed all submitted bids for the Beacon Fire Station Project. Bids were reviewed for their completeness and adherence to the project scope along with their submitted paperwork and bonding. The apparent low bidders were as follows:

- | | |
|----------------|---|
| Contract No. 1 | General Construction Contract (GCC)
Mid-Hudson Construction Management - \$6,887,000.00 |
| Contract No. 2 | Mechanical Contract (MC)
MDS - \$1,427,101.00 |
| Contract No. 3 | Plumbing Contract (PC)
S&O Construction - \$758,451.00 |
| Contract No. 4 | Electrical Contract (EC)
RLJ Electric Corp. - \$1,123,000.00 |
| Contract No. 5 | Fire Sprinkler Contract (FSC)
SRI - \$189,000.00 |
| Contract No. 6 | Geothermal Contract (GTC)
Connecticut Wells/Geothermal - \$435,000.00 |
| Contract No. 7 | Sitework Contract (SC)
Mid-Hudson Construction - \$1,514,000.00
<i>Approved subject to contractor modifying their unit prices to conform with the contract documents.</i> |

Upon verification that all apparent low bidder's submittals were complete and in adherence with the project bidding requirements, interviews were organized and led by Tom Chesser of TPG. Mr. Chesser ran a series of well-organized and thorough interviews with all low bidders with participation by members of MAA's office. The interview documents verified that all apparent low

bidder were comfortable with their bids, that they contained all necessary scope to complete the project as pertaining to their specific work and within the required timeline, and that they contained no exclusions or variances from the written project scope.

Each of the apparent low bidders submitted AIA Document A305 – 2020, Contractor's Qualification Statement & completed the Bid Qualification Form that was prepared by TPC, both verbally in an interview as well as in writing at the time of the interview. We find all the information is in order.

While we are not financial experts, no issues seem to be present in the financial information provided in these documents. We recommend the City's attorneys also review these forms for completeness and accuracy.

We recommend that the City of Beacon accept the above bid amounts and award the contracts for construction.

Sincerely,



Robert Mitchell, AIA, NCARB, Principal
Mitchell Associates Architects, PLLC

City of Beacon City Council Agenda
05/15/2023

Title:

Agreement with Tectonic Engineering Consultants, Geologists & Land Surveyors, D.P.C. for Special Inspection Materials Testing Services on the Addition & Renovation for Beacon Fire Station Project

ATTACHMENTS

[Tectonic Engineering Consultants, Geologists & Land Surveyors, D.P.C. Proposal for Special Inspection Materials Testing Services](#)



PRACTICAL SOLUTIONS. EXCEPTIONAL SERVICE.



TECHNICAL PROPOSAL

Special Inspection Materials Testing Services

Beacon Fire Station Addition / Alterations

13 South Avenue, Beacon, NY 12508

Submitted To:

**City of Beacon Fire Dept.
C/O The Palombo Group**

13 South Avenue
Beacon, NY 12508
ATTN: Jose Otero

March 15, 2023
TECTONIC PN 23-0317

Submitted By:

James Duesel

James Duesel
Executive Director
Construction Inspection Services
jduesel@tectonicengineering.com

845 534 5959 x 2611 tel



City of Beacon Fire District
13 South Avenue
Beacon, NY 12508
C/O
The Palombo Group

Attn: Jose Otero
Via E-Mail: jotero@thepalombogroup.com

March 15, 2023

**RE: PN 23-0317
SPECIAL INSPECTION & MATERIALS TESTING SERVICES
CITY OF BEACON FIRE STATION ADDITION / ALTERATIONS PROJECT
13 SOUTH AVENUE
BEACON, NY, 12508**

In accordance with your request, Tectonic Engineering Consultants, Geologists & Land Surveyors D.P.C. is pleased to provide you with the enclosed statement of our qualifications and unit rates to provide Special Inspection & Materials Testing Services in accordance with Chapter 17 of 2020 the Building Code of NYS and the project documents for the above referenced project located in the City of Beacon, NY.

Based on our review of the plans, specifications and Statement of Special Inspections by Mitchell Associates Architects, PLLC, it is our understanding that the scope of our services is to include, but may not be limited to, the following Code required structural special inspections:

- Soils (Excavation & Filling, Subgrade Bearing Verification, Modular Retaining Walls)
- Cast-In-Place Concrete
- Structural Steel (Bolting / Welding)
- Cold-Formed Light Steel Framing
- Spray Fire Resistant Materials (SFRM)
- Masonry (Level 2)

Our inspection and testing services are performed in accordance with all applicable ASTM and AASHTO guidelines; including the requirements of ASTM E329, Standards and Recommended Practices of Inspection and Testing Agencies. Our in-house material testing laboratory is AASHTO accredited and participants in the bi -annual AASHTO Materials Reference Laboratory (AMRL) and the Cement and Concrete Reference Laboratory (CCRL) laboratory inspection programs and is also accredited by the US Army Corp of Engineers.

Our staff of experienced inspection technicians are certified by the American Concrete Institute (ACI), International Code Council (ICC), National Institute for Certification in Engineering Technologies (NICET), the Northeast Transportation Technical Certification Program (NETTCP), the American Welding Society (AWS), the American Society of Non-Destructive Testing (ASNT), the Associated General Contractors of America for NYS Hot-Mixed Asphalt and the Pre-stressed Concrete Institute (PCI) to name a few. Many of our inspection technician staff are cross-trained in conducting soils, rebar, concrete, asphalt and masonry inspections and field testing. This allows us to provide a single inspector to cover multiple tasks in one day, which often saves budgeted man-hours.

Newburgh Lab Office

280 Little Britain Road, Building 2 | Newburgh, NY 12550
845.563.9081 Tel | 845.563.9085 Fax

tectonicengineering.com
Equal Opportunity Employer

Please have an authorized representative complete and sign the attached *Work Authorization and Proposal Acceptance Form* to indicate acceptance of this agreement and the attached *Unit Rate Schedule* and *General Terms and Conditions*. Please return to Tectonic one signed and completed copy of the *Work Authorization and Proposal Acceptance Form*. We appreciate the opportunity to provide this you with this proposal, and look forward to assisting you on this project. If you have any questions, please do not hesitate to call me at 845-563-9081 ext. 2611.

Sincerely,

TECTONIC ENGINEERING CONSULTANTS, GEOLOGISTS & LAND SURVEYORS, D.P.C.



James Duesel
Executive Director - Construction Inspection Services

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Organizational Chart
4. Relevant Project Experience
5. Completed Unit Pricing Spreadsheet
6. Corporate Certifications & Licenses
7. Sample Insurance
8. General Terms and Conditions / Work Authorization Form



1.0 FIRM OVERVIEW

Tectonic Engineering & Surveying Consultants P.C. (Tectonic) offers a full spectrum of professional engineering and design services to match its clients' growing needs. Established in 1986, Tectonic has grown to become a multi-disciplined engineering firm with a staff of approximately 500. As one of the top 500 Engineering News-Record engineering design firms, since 2001, Tectonic is committed to providing a well-organized, thorough, and practical team that delivers a timely, economical, and quality work product offered from offices located in the Northeast.

**One of the Top 500
Engineering News-
Record engineering
design firms, since
2001.**

Tectonic's mission is to provide the highest level of quality and service; therefore, we concentrate our services on market sectors that reflect the strength and talent of our staff. Our core services include civil, structural, geotechnical, environmental, and transportation engineering, surveying, cultural resource management, design engineering (including planning and permitting), construction management, construction inspection and materials testing for design and construction projects varying in size and scope. Over the past 30 plus years, Tectonic has become one of the leading providers of Construction Inspection services in the Metropolitan area.

Offering multi-disciplinary engineering and design services that enable our clients to succeed across a wide range of goals – regardless of size, scope or complexity - we endeavor to educate our clients on the regulatory framework with which projects must comply throughout development and streamline the permitting process to result in timely performance in accordance with applicable state, federal and local regulations. Our approach to the management and administration of projects is grounded in basic practiced strategies, which have proven to reliably deliver successful products.

CONSTRUCTION INSPECTION & MATERIALS TESTING SERVICES

Tectonic has been providing construction inspection services for over 33 years. Tectonic's inspection and materials testing services are provided in accordance with all applicable ASTM and AASHTO guidelines, including the requirements of ASTM E329, "*Standards and Recommended Practices of Inspection and Testing Agencies.*" Our staff of over 190 field inspection personnel are all OSHA 10-hour trained, and are comprised of professional engineers, engineering geologists, and technicians certified in accordance with the National Institute for Certification in Engineering Technologies (NICET), the American Concrete Institute (ACI), the American Welding Society (AWS), the International Code Council (ICC), the New York State Associated General Contractors (AGS) for Hot-Mix Asphalt, and the Northeast Transportation Training & Certification Program (NETTCP). Each of our staff is cross-trained and certified in multiple areas of construction inspection, which can often save budget man-hours by performing multiple inspections on-site each day. Tectonic maintains its professional integrity by adapting our Quality Assurance (QA) Plan to each project with the employment of full-time QA/QC Supervisory personnel.

Tectonic has recently obtained a preliminary accreditation relative to the IAS Accreditation Criteria for Special Inspection Agencies (AC291), commencing on May 29, 2012 to provide special inspections conducted under the 2008 New York City Building Code Chapter 17, Section BC 1704 – Special Inspections. Tectonic has also obtained accreditation to perform all special inspections listed on the Technical Report (TR) 1 form.



We are accredited by AASHTO under their AASHTO Materials Reference Laboratory (AMRL) and Cement and Concrete Reference Laboratory (CCRL) programs, and we have received certification by the US Department of Commerce National Institute of Standards and Technology – National Voluntary Laboratory Accreditation Program (NVLAP) to provide construction materials testing. Our new NVLAP certification is currently pending. We are also licensed by the New York City Department of Buildings and registered with them as a **Special Inspection Agency**. Tectonic’s inspection and testing services are provided in accordance with the requirements of **ASTM E329** outlining the Standards and Recommended Practices of Inspection and Testing Agencies.

Our laboratories operate in compliance with the company’s Quality Control Program (QCP) assuring personnel are properly trained, equipment is calibrated and properly maintained, and tests are conducted according to detailed procedures with the results properly recorded and documented. **All major equipment is maintained and calibrated at regular intervals against recognized standards.** Routine check-out of equipment is performed prior to the start of each test to ensure normal operation.

Additionally, Tectonic’s in-house testing laboratory is accredited by AASHTO and the US Army Corp of Engineers for Concrete, Concrete Aggregate and Soil material testing. We are also participants in the bi-annual Cement and Concrete Reference Laboratory (CCRL) laboratory inspection program. Tectonic’s lab is also licensed by the City of New York Department of Buildings to perform all tests on concrete and concrete materials as required by the provisions of the Administrative Code.

Construction Management

- Resident Engineering
- Contract Administration
- Constructability Review
- Schedule Review
- Verification of Conformance to Contract Specifications and Drawings
- Monitoring of Progress and Costs
- Shop Drawing Submittals and Review
- Document Control
- Safety Compliance Monitoring
- Site Surveys and Evaluations
- Expert Opinion Testimony
- Claims Evaluation and Counter Claims
- Preparation of As-Built Plans

Special Inspection and Materials Testing for:

- Asphalt and Concrete Pavement
- Soils and Subgrades
- Concrete and Steel Reinforcement
- Structural Steel
- Firestopping
- Roofing
- Rock Anchors and Bolts
- Structural Cold-Formed Steel
- Masonry
- Precast and Post-Tensioned Concrete
- Sheeting, Shoring, and Bracing
- Pile and Pier Foundations
- Ground Improvements
- Underpinning
- Curtain Walls
- Exterior Insulation Finishing Systems
- Mechanical & Sprinkler Systems
- Stormwater Pollution Prevention Plans (SWPPP)
- Standpipe Systems
- Wood Framing



2.0 PROJECT APPROACH & SCHEDULE

Tectonic understands that the City of Beacon Fire Department (Owner) C/O The Palombo Group (Construction Managers) is seeking to retain the services of a qualified professional and experienced firm to provide Special Inspection and Materials Testing services in accordance with Chapter 17 of the 2020 Building Code of NYS and the Contract Documents for Additions & Renovations to the Beacon Fire Station located on 13 South Avenue, Beacon, NY.

Tectonic's project team will be assembled from the Construction Inspection group with an in-depth, experienced, and qualified staff. We believe the expertise required by this project will best be served by this approach, and will be directed and coordinated by our Project Manager, James Duesel, Executive Director of Construction Inspection Services. Our firm has the staffing resources and proven experience of working on many projects in both the upstate New York and metro New York areas to deliver a high-quality, cost-effective, and timely variety of projects including educational, institutional and residential facilities, and municipal and regional government projects.

Tectonic's goal is to achieve technical excellence by striving to maintain the highest level of proficiency in the performance of our engineering, surveying, and related support services. To accomplish this, we will dedicate the best professional talents, supported with the necessary resources to ensure that the most technically feasible and cost effective solutions are an integral part of the final product delivered to the client. Tectonic's Quality Assurance (QA) Plan will be adapted to this specific project and further used as a guide in the performance of our professional services. The success of any project is determined by our ability to achieve and sustain a high standard of performance through the dedication and commitment of competent staff. It is our philosophy that we have an obligation to provide a quality product to all our clients through responsive and innovative application of practical experience, technical competence, and state-of-the-art technology. Our QA Plan has been developed to assist in achieving this goal.

Effective communication at all levels is essential. Understanding the client's requirements and expectations at the start of the project is the first step in establishing an effective channel of communication. Maintaining these lines of communication throughout the project duration is essential to ensure the transfer of all information necessary to produce a final acceptable product. Tectonic's Quality Assurance program begins with a clear definition of expectations. In summary, Tectonic's management approach is based on the point-of-contact method where our Project Manager will be the focus of all correspondence between the client and Tectonic's staff. This presents a clear line of communication so Tectonic can effectively and rapidly respond to project demands.

Tectonic strives to have all projects stay within the approved budget and meet all project schedule milestones and deadlines. Conformance to established project schedules is achieved by assigning a proficient Project Manager to an experienced design team, who will coordinate all parties involved in the project and track progress on a regular basis. Tectonic utilizes several controls to ensure adherence to project schedules. Our interactive project reporting system allows Project Managers to obtain updated information on the status of a project, from both a technical and financial standpoint. This information is updated daily and used as a focal point for project status meetings. These internal resources provide for close project tracking and prevent any deviations from the established schedule. In addition, we keep the client informed as the project progresses to ensure a clear understanding of scheduling goals and objectives.

Tectonic offers a streamlined management program (including top supervisory skills and tailored quality assurance measures), state of the art resources and diverse expertise.



Our staff of professionals will be assisted by staff in their respective fields to complete the specific tasks under their coordination and supervision. This management approach ensures that all project activities are integrated, clear lines of authority are established and all the necessary “pieces” of the effort are collated into a comprehensive and complete plan that is delivered on-time and within budget.

As a minimum, all of Tectonic’s field personnel have satisfactorily completed the 10-Hour OSHA Construction Safety Certification Program which provides our field staff with general awareness on recognizing and preventing hazards on a construction site. Tectonic also offers mandatory safety orientation for new employees and bi-annual refresher safety training sessions from our Corporate Health & Safety Officer, James Armstrong.



3.0 PROJECT TEAM OVERVIEW

Identified below are the key participants that will be involved in providing professional services to the City of Beacon Fire Department and their designated representative(s). These individuals are available for immediate assignment, and they will direct and supervise individual tasks under this contract in their corresponding field of expertise. Detailed resumes for each of the key staff members are provided.

■ **Donald A. Benvie, P.E., P.G., President & Chief Executive Officer**, will serve as the **Principal-in-Charge**. Mr. Benvie will be responsible for oversight and independent peer review of the administration of the contract and product deliverables. Mr. Benvie has over 35 years of experience in the fields of civil engineering and project/construction management. He has directed numerous engineering assignments for government agencies, municipalities and educational facilities throughout the State of New York.

■ **Mark Stier, P.E., P.G., Executive Vice President of Geotechnical Engineering & Construction Inspection Services** will serve as **Project Director**. Mr. Stier will interface between the Owner's designated representative and Tectonic. He will assure that all staff assigned to this project are familiar with the project manual & specifications for inspections and materials testing work. Mr. Stier has over 32 years of experience in geotechnical engineering and construction support services. Mr. Stier also serves as the director of Tectonic's in-house laboratory and provides quality control and engineering oversight associated with laboratory testing.

■ **James Duesel, Executive Director of Construction Inspection**, will serve as **Project Manager**. Mr. Duesel has over 29 years of relevant field and project management experience for a wide range of commercial, residential, medical, municipal and educational facilities projects. Responsibilities include: direct management for the coordination and scheduling of field staff, reviewing and finalizing detailed field reports/lab test data, review of submittals, generating letter correspondence to clients/contractors relative to non-conformance issues and/or controlled inspection sign-off and engineering direction of field personnel and monitoring project budgets. He has over 10 years of experience as a Senior Construction Inspector, and was responsible for the supervision of large earthwork projects, including foundation subgrade preparation and the placement and compaction of structural fill; materials testing and sampling of cast-in-place concrete; reinforcement steel placement; post-tension slab construction; reinforced masonry wall construction including the testing and sampling of mortar and grout; asphalt paving inspections for commercial, residential and public agency projects, inspection of pile driving activities and generating detailed inspection reports.

■ **Christopher Burke, Ph.D., P.E., P.M.P, Manager of Geotechnical Services**, has over 23 years of experience and is responsible for the management of geotechnical site investigations incorporating soil and rock borings, borehole image processing, test pits, piezocone testing, piezometers, monitoring wells, inclinometer installation and monitoring, and rock structure/geologic mapping. Responsibilities also include the performance of engineering evaluations, geotechnical report preparation and the management of supporting staff performing same and QA/QC duties for the construction of buildings, bridges, roads, earth dams, telecommunications projects and utilities. Projects have included spread footings, mats, drilled shafts, mini piles, piled and rock anchored foundations, underpinning, the application of surcharging, light-weight fill and wick drains, reinforced earth slopes and retaining walls. Projects have also addressed analyzing the stability of existing rock slopes and proposed rock cuts, the design of rock stabilization measures including rock bolt, shotcrete, rock fall protection netting and fencing installations, the evaluation of karst related hazards and the performance of construction vibration consulting services.



■ **Joseph Minnetto, Senior Construction Inspector;** as Senior Inspector and Senior Steel Inspector responsible for inspections of structural steel framing, including bolted and welded connections, structural wood framing, cast-in-place concrete including pre-pour inspections of form work geometry, reinforcement steel and embedment's, field testing and sampling of cast-in-place concrete, witness of site preparations including proof-rolling and subgrade preparations, controlled soils fill placement and compaction testing, reinforced masonry construction, asphalt placement inspections, forensic investigations of hardened concrete by Windsor Probe Testing and Coring Operations. Preparation of detailed field reports to document job-site activities and field test data results.

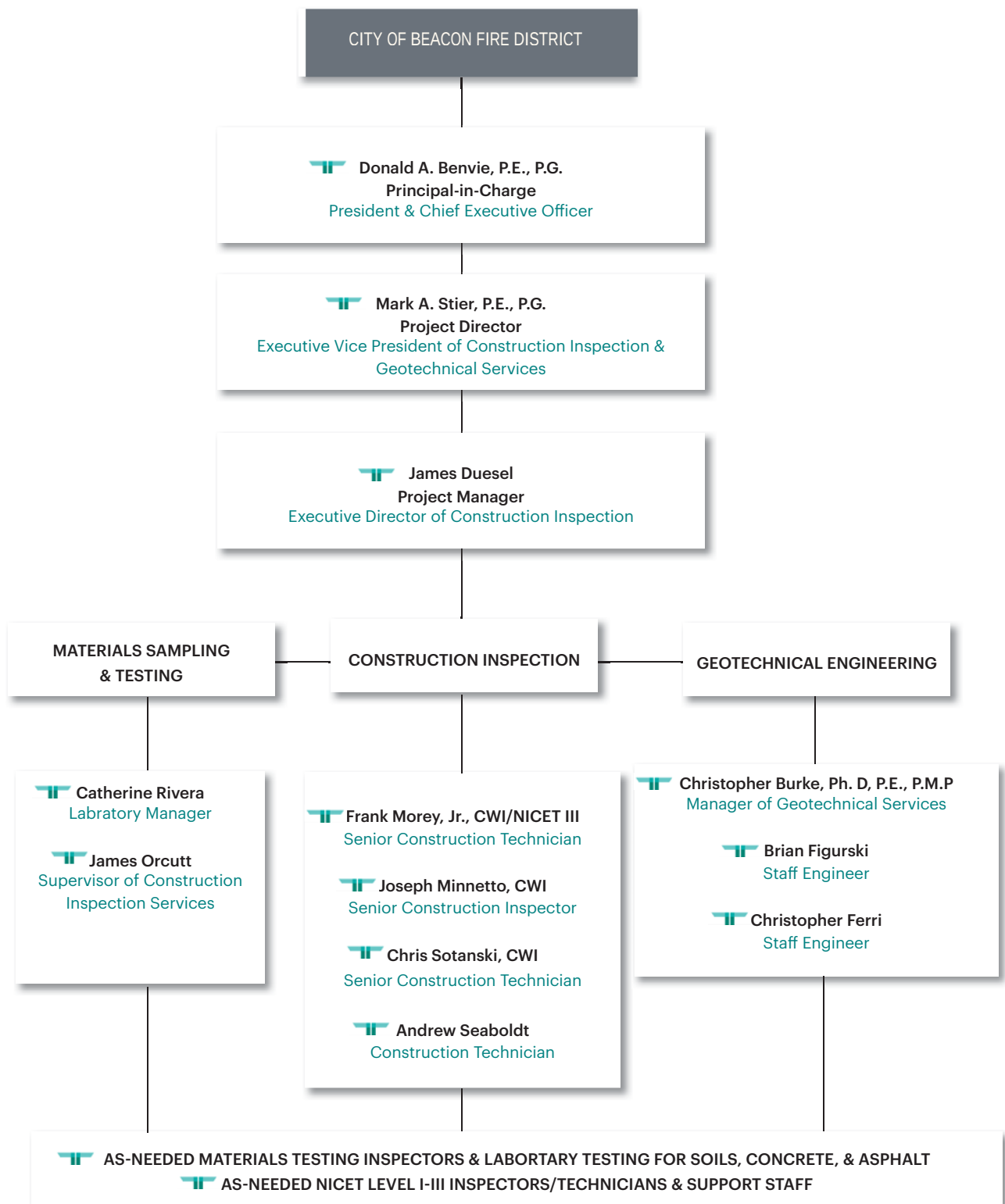
■ **Andrew Seaboldt, Senior Construction Technician,** responsible for field testing and sampling of cast-in-place concrete, controlled fill placement and compaction testing with a Troxler nuclear density gauge, reinforced masonry inspections including grout placement and test and sampling of mortar & grout components, Preparation of detailed field reports documenting job-site activities and test data/results. Other responsibilities include laboratory testing of soils for gradation, moisture-density relationships (proctor analyses), and organic content of soils.

■ **As-Needed Inspection and Material Testing Staff** shall be further incorporated as necessary to provide timely and quality services in the field and laboratory. These additional staff members will encompass experienced and certified inspection personnel who will be managed and supervised by the key staff noted above.



ORGANIZATIONAL CHART





4.0 RELEVANT PROJECT EXPERIENCE



Good Will Fire Department Newburgh, NY Special Inspection & Materials Testing Services



PROJECT DESCRIPTION:

Tectonic is providing special inspection and materials testing services in accordance with Chapter 17 of the Building Code of NYS for new construction of a proposed 9,655 square foot fire house with 4 new bays and a 1,789 square foot mezzanine. This new \$4 million dollar firehouse will replace the current one located on South Plank Road in Newburgh, NY and construction is expected to last between 12 to 18 months.



PROJECT OWNER :
Good Will Fire District

PROJECT CLIENT:
Good Will Fire District

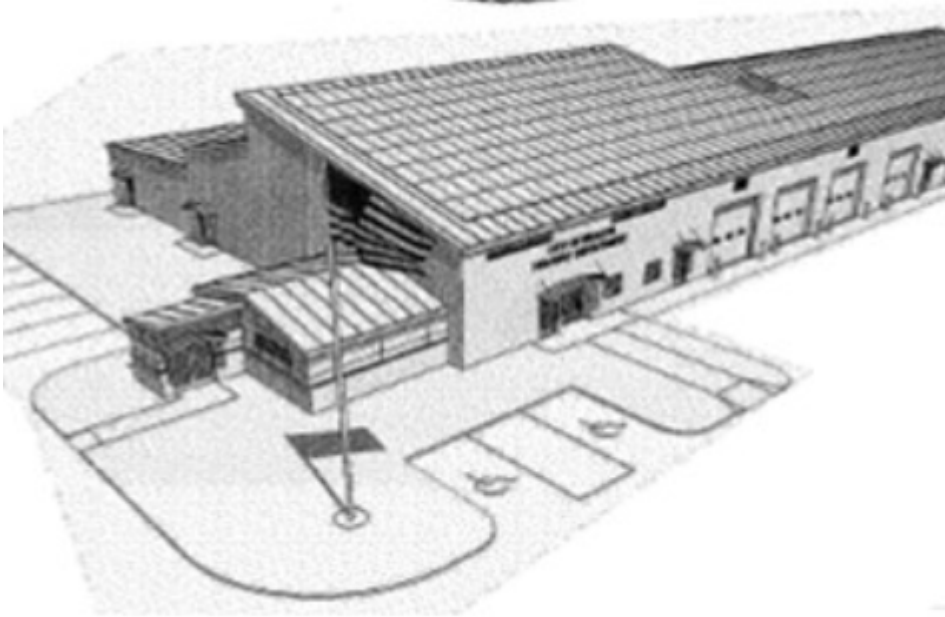
LOCATION:
Newburgh, NY

DATE:
2016 – 2018

PROJECT COST:
\$4 Million

CONTACT:
Frank Valdina Jr.
Good Will Fire District
c/o Matthew Tether (CSArch)
(845) 561-3179
mtether@csarchpc.com

City of Beacon Highway Facility Beacon, NY Special Inspection & Materials Testing Services



PROJECT DESCRIPTION:

Tectonic is providing special inspection materials testing services in accordance with Chapter 17 of the NYS Building Code to the City of Beacon for a new transportation facility. The project consists of new construction of a 22,000+/- square foot single story pre engineered metal building with prefinished insulated metal wall panels and standing seam roof panels. The building will also contain a 3,800 square foot mezzanine, a three (3) bay vehicle service area with service equipment and radiant heated floor slab, a wash bay, and a three (3) bay vehicle storage.

PROJECT OWNER:
City of Beacon, NY

PROJECT CLIENT:
Cosentino Architecture, PLLC.

LOCATION:
Beacon, NY

DATE:
2016 - 2018

CONTRACT VALUE:
\$30 Thousand

CONTACT:
Ron Cosentino
(845) 562-2320



TZC – State Police Barracks Tarrytown, NY Special Inspection & Materials Testing Services



PROJECT DESCRIPTION:

Tectonic is currently providing Special Inspection Materials Testing Services to the Tappan Zee Bridge State Police Barracks for the construction of a new 16,000 square foot Zone 1 Headquarters for Troop T in Tarrytown, NY. The Barracks are being designed to include numerous environmentally efficient features including reduced water and energy usage. The building will also be construction with many recycled elements including steel, aluminum, glass and even carpeting. Tectonic provided controlled inspections and materials testing for site work including cast-in-place concrete for foundations and structural masonry inspections.



PROJECT OWNER :
Tappan Zee Erectors, Inc.

PROJECT CLIENT :
Casabella Contracting of NY, Inc.

LOCATION:
Tarrytown, NY

DATE:
2017 – 2018

CONTRACT VALUE:
\$25 Thousand

CONTACT:
Ryan Chianelli
Casabella Contracting
Project Manager
(914) 218-4330



PROJECT PROFILE

Term Contract for Engineering, Testing, and Inspection Services

Under a consecutive on-call term contract with the City, Tectonic is providing quality assurance/quality control inspections, environmental assessments, air monitoring, and geotechnical/materials sampling & testing services related to municipal civil, site work, and facility construction projects.

Special inspection services have included inspection of footing subgrades, pre-pour inspections of the reinforcement steel associated with footings, grade beams and foundation walls, and field and laboratory testing of concrete for various infrastructure upgrades and improvements requested by the City.

Additionally, environmental services have included environmental site assessments and Phase I and Phase II environmental site assessments to identify potential environmental impacts, as well as the presence and extent of possible contamination of designated sites. Services also included consultation, investigation and remediation design related to underground storage tanks and contaminated soils.

Various projects under this contract that are completed or currently underway include:

- Yonkers Firehouse #1
- Richter Park
- Redmond Park
- City Hall Parking Upgrades
- Hudson River Museum Upgrades



PROJECT CLIENT:

City of Yonkers, New York

LOCATION:

Yonkers, New York

DATE:

2014-2017; 2018-2022 (Ongoing)

Contact:

Alex Schenck (914) 377-6037

PROJECT PROFILE

Project Redtail (Distribution Warehouse)

Tectonic is providing geotechnical engineering, special inspections and materials testing services for the construction of a Distribution Center at the former IBM West Campus in the Town of East Fishkill, Dutchess County, NY. The development will include a 630,000-sf distribution warehouse structure, two guardhouses, 700 trailer parking spaces, 1,0000 employee parking spaces, 132 loading docks, and stormwater management facilities. The warehouse will be a receiving center that will take products in from manufacturers and redistribute them to fulfillment centers.

Field services at the site included a geotechnical investigation that involved the drilling, sampling, and logging of 42 test borings to a depth of 40 feet below existing grade; installation of a 20-foot deep groundwater observation well; and stormwater infiltration testing. Soil samples were tested at Tectonic's material testing laboratory. Design recommendations for the proposed site development was provided in a geotechnical report.

Additionally, Tectonic is providing special inspection and materials testing services in accordance with Chapter 17 of the International Building Code and Project Documents. These services are provided for soils, concrete, masonry, asphalt, and structural steel materials, preparation of inspection reports and performance of on-site investigations. Other duties include pile driving inspection and load testing, caisson and earth anchor inspection and in-situ testing of footing subgrades.



PROJECT CLIENT:

Bluewater Property Group

LOCATION:

East Fishkill, New York

DATE:

2020-2022



PROJECT PROFILE

Cricket Valley Energy Center

Cricket Valley Energy Center is a fully-permitted approximately 1,100 MW, natural gas-fired power plant under construction on an industrially-zoned site. The 193-acre property, located at 2241 Route 22 in Dover, NY, has existing energy infrastructure including electric power lines and a natural gas pipeline, and a substantial tree buffer that will minimize visual and sound impacts. Tectonic is providing the following services at the site:

- **Stormwater Pollution Prevention Plan (SWPPP) Preparation and Inspection:** The main site and the 55-acre laydown area have separate Stormwater Pollution Prevention Plans (SWPPP) that have NYSDEC approval for disturbance of over 5 acres which require SWPPP inspections of construction activities twice a week. Tectonic is performing the inspections for both areas and prepared weekly SWPPP inspection reports including a photographic log of the site identifying all potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges from the construction site, recommending additional practices to be used to reduce pollutants in storm water discharges from the construction site, and help assure compliance with the terms and conditions of the permit.
- **Survey:** Providing quality control checks on all survey work performed at the site. We tied into the existing site plan and set the initial horizontal and vertical site control for all other survey companies to use. We perform reviews of all layout performed by other survey companies. We also preform as-built surveys including flatness surveys on concrete slabs, location of anchor bolts and other features as needed.
- **Construction Inspection:** Providing qualified personnel to monitor construction activities and perform specified testing and sampling for compliance with the project specifications for: Cast-in-Place Concrete, Earthwork (including Subgrade Bearing and Controlled Fill placement inspections and testing) and Bituminous Asphalt Pavement inspections and testing. A mobile materials testing laboratory facility is being used by Tectonic to provide quick and efficient materials testing services exclusively for the project.

PROJECT CLIENT:
Bechtel Infrastructure and
Power Corporation

LOCATION:
Dover, New York

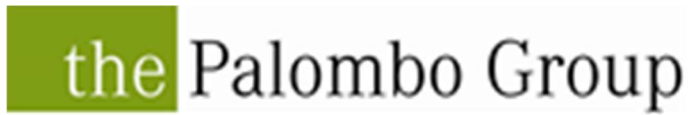
DATE: 2017 - 2020

REFERENCE:
Michael Hamilton,
Subcontract Mgr
Bechtel

16808 Armstrong Avenue
Suite 225
Irvine, CA 92606
(301) 228-6009

5.0 COMPLETED UNIT RATE SPREADSHEET





City of Beacon
City Of Beacon Fire House

We invite your bid for inspection and testing services for the above referenced project. Fieldwork is expected to begin in May 2023 and will conclude in June 2024. We are seeking a quality firm that will provide professional service to the construction team assembled for this project.

Inspection and testing services to be bid are listed on the attached proposal form. When returning this RFP please provide all certifications for the various inspection required for this project.

Program Description

The City of Beacon is seeking proposal(s) to provide testing and inspection services for the project referenced. Testing will be required for the following systems:

Structure Excavation, Backfilling and Compaction
Earthwork
Seismic Resistance
Trench Excavation & Backfill Systems
Compacted Fills
Hot-Mix Asphalt Paving
Cement Concrete Pavement
Cast-in Place Concrete
Unit Masonry
Structural Steel
Steel Deck
Specialized Coatings
Smoke Control

In addition, the selected Contractor shall:

1. Work at the direction of the Construction Manager, The Palombo Group or their appointed representative.
2. Attend a maximum of 12 hours of meetings as necessary to fulfill project requirements.
3. Prepare reports satisfactory to The Palombo Group and Mitchell Associates Architects, PLLC relating to this Contract.
4. Provide technical assistance on an as-needed basis during the construction process.

CONSTRUCTION INSPECTION AND TESTING SERVICES

(City of Beacon Fire Station Alteration / Renovations Project)

A. Site Services

1. **Soil**- Sampling and in-place density and moisture content testing using nuclear density gauge.
2. **Concrete**- ACI Certified Grade 1 Technician. Cylinder fabrication and field testing for air, slump temperature and unit weight. Inspection of reinforcing placement. This project is utilizing an ICF foundation system with high lift walls. The inspection agency should have experience with this type of system.
3. **Steel**- AWS Certified welding inspector and ASNT Level 2 technician. Inspection and testing of field welded shear connectors, verification of size, type and torque of bolted connections, visual inspection of field welds, verification of steel plumb and alignment.
4. **Masonry**- Inspection of materials such as Mortar cube, compressive strength test, admixtures, reinforcing: inspection during placement such as mortar slump, joints, reinforcing, accessories, procedures and masonry unit prism compressive strength tests.
5. **Specialized Coatings**- Inspection and testing of intumescent paint application.
6. **Asphalt Concrete** - Placement temp. and Depth. Aggregate gradation, in place density.

B. Lab Services

1. Compressive strength of concrete Cylinders including molds and tags (ASTM C39).
2. Modified Proctor Moisture Density Relationship of Soil (ASTM 1557)
3. Concrete Mix Design Review
4. Mortar and Grout Cube compressive strength samples
5. Paint thickness determination
6. Asphalt Cores (includes coring, transport & report)
7. Fireproofing- Inspection of sprayed on fireproofing and installation of fire stopping.

C. Equipment Rental

1. Nuclear Moisture Density Gauge (included in Section A tests)
2. Use of Coring Equipment for Concrete and Asphalt Cores

D. Geo-technical Engineer Inspection of Sub grades (Prof. Eng)

E. Travel Rates

All expenses to be *included* in hourly rates.



(City of Beacon Fire Station Addition / Alterations Project)
PRICE PROPOSAL RETURN SHEET

A. Site Services

1. **Soil**- Sampling, footing bearing, lift thickness & compaction during fill placement, in-place density and moisture content testing using nuclear density gauge. @ \$65.00 per hour
@ \$260.00 per ½ day
@ \$520.00 per day
2. **Concrete**- ACI Certified Grade 1 Technician for Cylinder fabrication and field testing for air, slump temperature & unit weight. @ \$60.00 per hour
@ \$240.00 per ½ day
@ \$480.00 per day
- ACI Certified Grade 2 Technician for Inspection of reinforcing Steel & placement. @ \$65.00 per hour
@ \$260.00 per ½ day
@ \$520.00 per day
- Floor slab Flatness & Levelness: Finished concrete slab tolerances as measured in accordance with ASTM E1155 standard test method for determining Ff Floor Flatness & FI Floor Levelness Numbers. Rate to include equipment, labor and report. @ \$450.00 per ½ day
@ \$700.00 per day
3. **Steel**- AWS Certified welding inspector and ASNT Level 2 technician. Inspection and testing of field welded shear connectors, verification of size, type and torque of bolted connections, visual inspection of field welds, verification of steel plumb and alignment. Inspection of deck material, connections and installation. @ \$100.00 per hour
@ \$400.00 per ½ day
@ \$800.00 per day
- ASNT Level 2 Inspector (Ultrasonic Testing Welds) @ \$900.00 Per Day
(Includes all equipment, labor and report)
4. **Masonry** - Inspection of various materials, mortar cubes, compressive strength test, admixtures, reinforcing: inspection during placement such as mortar slump, joints, reinforcing, accessories and procedures. @ \$65.00 per hour
@ \$260.00 per ½ day
@ \$520.00 per day
5. **Coatings** - Inspection and testing of applied intumescent paint application, thickness, density, and bond strength. @ \$60.00 per hour
@ \$260.00 per ½ day
@ \$520.00 per day
6. **Asphalt Concrete** - Placement temperature, placement depth and verification of gradation and in place density. @ \$65.00 per hour
@ \$260.00 per ½ day
@ \$520.00 per day
7. **Samples** – pick up and transport from site to lab. @ \$75.00 per trip
8. **Smoke Control**- 1704.14.2. Smoke control systems shall be tested by a special inspector. @ \$100.00 per hour
@ \$400.00 per ½ day

@ \$800.00 per day

9. **Sprayed fire Resistant-** Special inspections for sprayed fire-resistant materials applied to structural elements and decks shall be in accordance with Sections 1704.11.1 through 1704.11.5. Special inspections shall be based on the fire-resistance design as designated in the approved construction documents.

9A. Density of Spray-Applied Fireproofing Samples (ASTM E605) @ \$50.00 EACH @ \$65.00 per hour @ \$260.00 per 1/2 day @ \$520.00 per day **EACH TEST**

B. Lab Services

- 1. Compressive strength of concrete Cylinders including molds and tags (ASTM C39). \$ 18.00
- 2. Modified Proctor Moisture Density Relationship of Soil (ASTM 1557) (Including sieve analysis) \$ 140.00 (Proctor) \$ 80.00 (Sieve)
- 3. Concrete Mix Design Review \$95.00
- 4. Atterberg Limits (ASTM 4318) \$70.00
- 5. Mortar Cube \$18.00
- 6. Compressive Strength of Grout Samples \$18.00
- 7 Paint thickness determination Note: Included in Technician Rate Section A \$No Additional Charge
- 8 Asphalt Cores (includes coring, transport & report) \$See Below C;2

C. Equipment Rental

- 1. Nuclear Moisture Density Gauge (~~included in Section A tests~~) @ \$85.00 per day
- 2. Use of Coring Equipment for Concrete and Asphalt Cores @ \$750.00 per day (Includes Mobilization, Labor, Equipment & Report)

D. **Geo-technical Engineer Inspection of Sub grades (Prof. Eng)** @ \$100.00 per hour @ \$400.00 per 1/2 day @ \$800.00 per day

NOTE:

- 1. Hourly rates for up to two (2) hours.
- 2. Half day is considered two (2) hours to four (4) hours.
- 3. One day is considered up to eight (8) hours.
- 4. Payment for services will be based on actual time spent on the jobsite.
- 5. Unit rates above are to include all administration, reporting, travel, and overhead costs.
- 6. Unit rates are to be maintained through September 2025.

*****END OF PROPOSAL FORM*****

- 7. For Hours Worked in Excess of 8-Hours During Normal Work Days Monday thru Friday and all Time on Weekends/Holidays, Multiply Hourly Rates Above by 1.5X (Overtime)

6.0 CORPORATE CERTIFICATIONS & LICENSES





CERTIFICATE OF ACCREDITATION



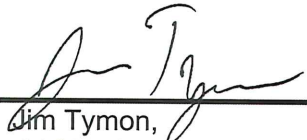
Tectonic Engineering Consultants, Geologists & Land Surveyors, D.P.C.

in

Newburgh, New York, USA

has demonstrated proficiency for the testing of construction materials and has conformed to the requirements established in AASHTO R 18 and the AASHTO Accreditation policies established by the AASHTO Committee on Materials and Pavements.

The scope of accreditation can be viewed on the Directory of AASHTO Accredited Laboratories (aashtoresource.org).


Jim Tymon,
AASHTO Executive Director


Moe Jamshidi,
AASHTO COMP Chair

This certificate was generated on 09/01/2022 at 4:06 PM Eastern Time. Please confirm the current accreditation status of this laboratory at aashtoresource.org/aap/accreditation-directory

To: Licensee/Registrant

- ◆ Please review the Registration Certificate below to be sure the information on it is correct.
- ◆ If any of the information is not correct, please contact us at OPREGFEE@mail.nysed.gov or (518) 474-3817, Ext. 410.
- ◆ If the information is correct, sign above the Licensee/Registrant block and please destroy any previous Registration Certificates you may have, as certificates with incorrect information are not valid and should not be kept.
- ◆ Should your address or name change, please notify us as described on the reverse and a new certificate will be issued.

UPON RECEIPT OF THIS REGISTRATION CERTIFICATE YOUR PREVIOUSLY ISSUED REGISTRATION CERTIFICATE IS NULL AND VOID. PLEASE DESTROY THE PREVIOUSLY ISSUED REGISTRATION CERTIFICATE.

SEE BACK FOR IMPORTANT INFORMATION

The University of the State of New York
Education Department
Office of the Professions
REGISTRATION CERTIFICATE
Do not accept a copy of this certificate

License Number: 076154-01

Certificate Number: 1686618

STIER MARK ANDREW
7 ARDEN DR
HIGHLAND

NY 12528-2870

is registered to practice in New York State through 02/28/2025 as a(n)
PROFESSIONAL ENGINEER

LICENSEE/REGISTRANT

James S. Blum
EXECUTIVE SECRETARY

COMMISSIONER OF EDUCATION

Darrah A. Benson
DEPUTY COMMISSIONER
FOR THE PROFESSIONS

This document is valid only if it has not expired, name and address are correct, it has not been tampered with and is an original - not a copy. To verify that this registration certificate is valid or for more information please visit www.op.nysed.gov.

**THE UNIVERSITY OF THE STATE OF NEW YORK
EDUCATION DEPARTMENT**

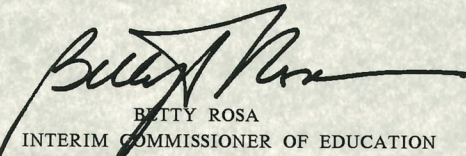
THIS IS TO CERTIFY THAT HAVING MET THE REQUIREMENTS OF SECTION 7210 OF THE
EDUCATION LAW AND IN ACCORDANCE THEREWITH THIS CERTIFICATE OF AUTHORIZATION
IS GRANTED WHICH ENTITLES

**TECTONIC ENGINEERING CONSULTANTS GEOLOGISTS &
LAND SURVEYORS DPC
PO BOX 37
70 PLEASANT HILL RD
MOUNTAINVILLE, NY 10953-0000**

TO PROVIDE PROFESSIONAL ENGINEERING SERVICES IN THE STATE OF NEW YORK FOR
THE PERIOD 01/01/2021 TO 12/31/2023.

CERTIFICATE NUMBER
0017898




BETTY ROSA
INTERIM COMMISSIONER OF EDUCATION

7.0 SAMPLE INSURANCE



ACORD™

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

7/22/2022

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer any rights to the certificate holder in lieu of such endorsement(s).

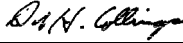
PRODUCER Greyling Ins. Brokerage/EPIC 3780 Mansell Road, Suite 370 Alpharetta, GA 30022		CONTACT NAME: Carly Underwood PHONE (A/C, No, Ext): 770.670.5324 FAX (A/C, No): 770.670.5324 E-MAIL ADDRESS: carly.underwood@greyling.com	
		INSURER(S) AFFORDING COVERAGE	
		INSURER A : National Union Fire Ins. Co.	
		INSURER B : Allied World National Assurance Company	
		INSURER C : Commerce & Industry Ins. Co.	
		INSURER D : Continental Casualty Company	
		INSURER E :	
		INSURER F :	

COVERAGES **CERTIFICATE NUMBER: 22-23** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	☒ COMMERCIAL GENERAL LIABILITY ☐ CLAIMS-MADE ☒ OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: ☐ POLICY ☒ PRO-JECT ☒ LOC OTHER:			GL3296866	08/01/2022	08/01/2023	EACH OCCURRENCE \$2,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$500,000 MED EXP (Any one person) \$25,000 PERSONAL & ADV INJURY \$2,000,000 GENERAL AGGREGATE \$4,000,000 PRODUCTS - COMP/OP AGG \$4,000,000 \$
A	AUTOMOBILE LIABILITY ☒ ANY AUTO OWNED AUTOS ONLY ☒ HIRED AUTOS ONLY ☐ SCHEDULED AUTOS NON-OWNED AUTOS ONLY			CA2507789	08/01/2022	08/01/2023	COMBINED SINGLE LIMIT (Ea accident) \$2,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
B	☒ UMBRELLA LIAB ☒ EXCESS LIAB ☒ DED ☐ RETENTION \$			03130667	08/01/2022	08/01/2023	EACH OCCURRENCE \$10,000,000 AGGREGATE \$10,000,000 \$
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? ☒ Y ☒ N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below		N/A	WC048240217 (AOS) WC048240218 (CA)	08/01/2022	08/01/2023	☒ PER STATUTE ☐ OTH-ER E.L. EACH ACCIDENT \$1,000,000 E.L. DISEASE - EA EMPLOYEE \$1,000,000 E.L. DISEASE - POLICY LIMIT \$1,000,000
D	Professional Liab incl. Pollution			AEH591958805	08/01/2022	08/01/2023	Per Claim \$5,000,000 Aggregate \$10,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER		CANCELLATION	
Sample Certificate		SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.	
		AUTHORIZED REPRESENTATIVE 	

8.0 GENERAL TERMS AND CONDITIONS / WORK AUTHORIZATION



TECTONIC ENGINEERING CONSULTANTS, GEOLOGISTS & LAND SURVEYORS, D.P.C.
GENERAL TERMS AND CONDITIONS OF AGREEMENT

The engagement of Tectonic Engineering Consultants, Geologists & Land Surveyors, D.P.C. (TECTONIC) by CLIENT is under the following terms and conditions, which are an integral part of the collective Agreement between CLIENT and TECTONIC.

1.0 GENERAL

1. The fee estimate for the services to be provided is valid for 60 days from the date of Proposal. Upon authorization to proceed, the fee estimate unit rates shall remain in effect for a period of one (1) year.
2. Payment to TECTONIC is the sole responsibility of the CLIENT who has executed this Agreement and is not subject to third party agreements. By accepting this proposal, the CLIENT represents and acknowledges that funding has been secured and that adequate funding will remain available to pay all TECTONIC's invoices within 30 days of date of invoice through final payment.
3. All schedules required to perform the services shall commence upon receipt of a signed Agreement and, if requested, a retainer. All retainer amounts will be applied to the final invoice.
4. Requests for additional services must be authorized by CLIENT in writing before additional services can begin. Any fee adjustment required shall be established at that time. Directives from CLIENT that change TECTONIC's scope of services or increase fees must also be provided by written notice. For avoidance of doubt, e-mail will constitute written notice.
5. All drawings, specifications, reports, computations, survey notes, electronic files, and other original documents as instruments of service are and shall remain the property of TECTONIC unless otherwise provided by law or noted above. In consideration for this Agreement, TECTONIC grants CLIENT a non-exclusive license to use the instruments of service in connection with this Project. TECTONIC may elect, if it does not receive full payment of its invoices, to terminate this Agreement and/or revoke CLIENT's license to use the instruments of service. CLIENT shall not use such items on other projects without TECTONIC's prior written consent. TECTONIC shall not release CLIENT's data without authorization. CLIENT agrees to indemnify and hold harmless, Tectonic, its officers, directors, employees, agents and sub-consultants against all damages, liabilities, or cost, including reasonable attorneys' fees and defense costs, arising from any use or modification of the instruments of service without TECTONIC's involvement or and use on other projects without prior written consent of TECTONIC.
6. Changes requested by CLIENT (i) in the Schematic Design, Design Development, or Construction Documents after each respective phase has been completed and approved by CLIENT; or (ii) that are inconsistent with CLIENT's program after the Schematic Design Phase will be considered an Additional Service.
7. Any delay, default, or termination in or of the performance of any obligation of TECTONIC under this Agreement caused directly or indirectly by any cause beyond TECTONIC's reasonable control, including but not limited to strikes, accidents, acts of God, epidemics, pandemics, mandated quarantines, shortage or unavailability of labor, materials, power or transportation through normal commercial channels, failure of CLIENT or CLIENT's agents to furnish information or to approve or disapprove TECTONIC's work promptly, late, slow or faulty performance by CLIENT, other contractors or governmental agencies, the performance of whose work is precedent to or concurrent with the performance of TECTONIC's work, or any other acts of the CLIENT of any other Federal, State or Local Government agency, or any other cause beyond TECTONIC's reasonable control, shall not be deemed a breach of this Agreement. The occurrence of any such event shall suspend the obligations of TECTONIC as long as performance is delayed or prevented thereby, and the fees due thereunder shall be equitably increased.
8. The obligation to provide further services under this Agreement may be terminated by either party upon seven (7) days written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof through no fault of the terminating party. In the event of any termination, TECTONIC shall be paid for all services rendered to the date of termination, as well as for all reimbursable expenses and termination expenses and any other costs which could not reasonably have been avoided and for which TECTONIC is not otherwise compensated.



TECTONIC ENGINEERING CONSULTANTS, GEOLOGISTS & LAND SURVEYORS, D.P.C.
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9. It is understood that the services to be provided are based on the information provided by CLIENT. CLIENT will provide all relevant and applicable information, requirements, and surveys for the Project in CLIENT's possession or reasonably accessible to CLIENT at no additional cost, including program information describing CLIENT's objectives, schedule, constraints and criteria, space requirements and relationships, flexibility, expandability, special equipment, systems, and site requirements, and budget. TECTONIC shall be entitled to rely upon the accuracy and completeness of all such information provided by the CLIENT. If this information is incomplete or inaccurate, or if unexpected site conditions are discovered, or if additional services are required, the scope of work may change even as the work is in progress. TECTONIC shall make reasonable effort to contact the CLIENT when a change in the scope of work appears necessary, and the CLIENT, by agreeing to the change, also recognizes that the estimate of cost or contract amount may also change.
10. Unless otherwise agreed in writing, CLIENT will furnish TECTONIC with right-of-way access to the site in order to conduct the planned exploration or field services. TECTONIC shall take reasonable precautions to minimize damage to the site due to its operations but has not included in the fee the cost of restoration of any damage resulting from the field services. If CLIENT desires, TECTONIC will restore any damage to the site and add the cost of restoration to the fee.
11. CLIENT shall make prompt and timely decisions regarding design, budget, consultant retention (if applicable) and other issues that may affect TECTONIC's ability to perform and complete its services on schedule. CLIENT shall provide prompt written notice to TECTONIC if it becomes aware of any fault or defect in the instruments of service or the Project.
12. During the term of this Agreement and for a period of two years thereafter, CLIENT and any subsidiary or affiliate company of CLIENT, and any company for which the CLIENT is an agent or has any interest in, shall not directly or indirectly solicit for employment, employ or engage the services of any person who is employed or, within 12 months of such solicitation, employment or engagement had been employed, directly by TECTONIC as a full-time employee, part-time employee or independent consultant.
13. CLIENT agrees not to use or permit any other person to use instruments of service prepared by TECTONIC which are not final, and which are not signed and sealed by the Engineer and/or Land Surveyor. CLIENT hereby waives any claim for liability against TECTONIC for such use.
14. CLIENT agrees to allow TECTONIC to utilize its name as a client, a general description of the project, and a description of the services performed for reference purposes. CLIENT further agrees to allow TECTONIC to photograph the project and to use those photographs for promotional purposes such as advertising, marketing materials, and/or website and social media content.
15. The laws of New York State shall govern the validity and interpretation of this Agreement without reference to principles of conflict of laws or choice of laws. The parties agree that the venue and jurisdiction for any disputes arising hereunder shall be in the courts of the County of New York, State of New York, or the United States District Court for the Southern District of New York. If any part of the Agreement be found invalid, it will not invalidate the remainder of the Agreement.

2.0 INVOICING AND PAYMENT

1. Invoices will be rendered monthly and become due and payable upon receipt. Any invoice outstanding for more than 30 days after date of invoice will be subject to a charge of 1.5 percent per month (18 percent annual interest rate). If client disagrees with any portion of an invoice, it shall notify Tectonic within 21 days of receipt of the invoice, or the invoice shall be deemed accepted. The entire invoice shall be paid in full without deduction, setoff or counterclaim, and CLIENT shall not retain or defer payment due to any alleged dispute with Tectonic. Any disputed amounts may result in a partial refund at a later date upon resolution of the item(s) in dispute.
2. Should it become necessary to utilize legal or other resources to collect any or all moneys rightfully due for services rendered under this Agreement, TECTONIC shall be entitled to full reimbursement of all such costs associated with collection of balances past due, including reasonable attorney's fees and court costs, as part of this Agreement.



TECTONIC ENGINEERING CONSULTANTS, GEOLOGISTS & LAND SURVEYORS, D.P.C.
GENERAL TERMS AND CONDITIONS OF AGREEMENT

3. Invoice payments must be kept current for the work to continue. CLIENT'S failure to make payments in accordance with this Agreement shall constitute substantial non-performance and a cause for suspension of services or termination by TECTONIC. If CLIENT fails to pay any invoice due to TECTONIC within 45 days of the date of the invoice, TECTONIC may, without waiving any other claim or right against CLIENT and without thereby incurring any direct or consequential liability to CLIENT, suspend services under this Agreement until TECTONIC has been paid in full all amounts due TECTONIC and/or any of its Consultants and Subcontractors for services, expenses and other related charges.
4. TECTONIC reserves the right to stop its services in this Agreement at any time, if payment of any invoice due to TECTONIC is not received within 45 days of the date of the invoice for services performed by TECTONIC on other parties' projects for which TECTONIC believes CLIENT is or may be a stakeholder with such other party. Stakeholder shall be defined as an affiliate, subsidiary, partner, shareholder, investor, or principal authorizing agent of the other party. If CLIENT represents that they are not a stakeholder with such other party, written documentation shall be provided within 3 days of TECTONIC's written request. Such documentation will make known CLIENT's complete ownership and attest to no stakeholder involvement that TECTONIC believes exists with such other party.
5. Invoicing for out-of-pocket expenses including, but not limited to, copying, renderings, travel, telephone, and overnight mailing shall be billed at cost.

3.0 INSURANCE, INDEMNITY AND LIMITATIONS OF PROFESSIONAL LIABILITY

1. TECTONIC agrees to carry the following insurance during the term of this Agreement: Workmen's Compensation, General Liability, Professional Liability and Comprehensive Automobile Liability. Certificates of insurance will be furnished upon execution of this Agreement. If CLIENT requires insurance coverage or limits in excess of TECTONIC's normal policies, and it is available, CLIENT agrees to reimburse TECTONIC for such additional expense.
2. To the fullest extent permitted by law, CLIENT shall at all times indemnify and hold harmless TECTONIC and its officers, agents, consultants and employees from and against claims, damages, losses, litigation, expenses, counsel fees, and compensation arising out of or resulting from any claims, damages, losses or expenses attributable to bodily injury, sickness, disease or death, property losses and/or economic damages sustained by or alleged to have been sustained by any person or entity, to the extent caused by negligent acts, omissions or negligence of CLIENT, its agents, employees, professional consultants, subcontractors or anyone whose acts they may be liable for in connection with this Agreement unless said loss was caused solely by TECTONIC's own negligence.
3. To the fullest extent permitted by law, the total liability, in the aggregate, of TECTONIC and its officers, directors, partners, employees, agents, and subconsultants, to CLIENT, and anyone claiming through or under CLIENT, for any claims, losses, costs, or damages whatsoever arising out of, resulting from or in any way relating to this Project or Contract, from any cause or causes, including but not limited to tort (including negligence and professional errors and omissions), strict liability, breach of contract, or breach of warranty shall not exceed the total compensation received by TECTONIC or \$50,000, whichever is greater.
4. TECTONIC and CLIENT waive all consequential or special damages, including, but not limited to, loss of use, profits, revenue, business opportunity, or production, for claims, disputes, or other matters arising out of or relating to the Contract or the services provided by TECTONIC, regardless of whether such claim or dispute is based upon breach of contract, willful misconduct or negligent act or omission of either of them or their employees, agents, subconsultants, or other legal theory, even if the affected party has knowledge of the possibility of such damages. This mutual waiver shall survive termination or completion of this Contract.
5. TECTONIC shall not be responsible for failure to perform or for delays in the performance of work, which arise out of causes beyond the control of TECTONIC, including delinquent payment by CLIENT.



TECTONIC ENGINEERING CONSULTANTS, GEOLOGISTS & LAND SURVEYORS, D.P.C.
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6. If the scope of services includes services related to applying for or seeking approval of governmental permits (e.g., zoning, planning, environmental, etc.), such services shall not constitute a representation or warranty that such permits will be approved. TECTONIC shall not be required to execute certificates, consents or reliance letters that would require knowledge, services or responsibilities beyond the scope of this Agreement, and shall not be required to sign any documents that would result in TECTONIC having to certify the existence of conditions whose existence TECTONIC cannot ascertain. Any certificate will state that it is based on the best of the TECTONIC's knowledge, information, and belief.
7. TECTONIC shall perform its services consistent with the professional skill and care ordinarily provided by engineers performing similar engineering services on projects of similar size, nature and complexity in the same geographic location as the project (the "Standard of Care"). Nothing herein or otherwise shall be construed to extend or exceed the Standard of Care or establish a fiduciary relationship between the parties. Regardless of any term herein or otherwise, TECTONIC makes no express or implied warranty of any kind as to its findings, recommendations, opinions, professional advice, or otherwise with respect to the Services.
8. TECTONIC employees or consultants may act as licensed, certified, or registered professionals (including but not limited to Professional Engineers, Professional Land Surveyors, Licensed Site Remediation Professionals, Environmental Professionals, and Certified Industrial Hygienists collectively referred to in this section as "TECTONIC Professionals") whose duties may include the rendering of independent professional opinions. CLIENT acknowledges that a federal, state, or local agency or other third party may audit or review the services of TECTONIC or other contractor/consultant(s), which audit/review may require additional services, even though TECTONIC and such TECTONIC Professionals have each performed such services in accordance with the Standard of Care set forth herein. CLIENT agrees that any supplemental requirements imposed on CLIENT constitute additional services and CLIENT agrees to compensate TECTONIC for all services performed in response to such an action and its requirements, at the rates set forth in the applicable Proposal, amendment or change order.
9. Any opinion or estimate prepared by TECTONIC of the probable construction cost of the project or any part thereof is not to be construed, nor is it intended, as, guarantee that proposals, bid or actual construction cost will not vary from TECTONIC's opinions or estimates of probable construction costs. Any cost related to re-design of the project subsequent to bidding to lower the project cost will be considered additional services for which TECTONIC will be entitled to additional compensation.

4.0 SUBSURFACE INVESTIGATIONS AND FIELD EXPLORATIONS

1. The appropriate underground utility mark-out service shall be contacted prior to performing any underground drilling, excavating, testing, etc. that are part of the scope of services in this Agreement to verify the location of existing utilities. CLIENT agrees to provide TECTONIC with the location of known or suspected underground utilities or subsurface structures not marked out by the mark-out service. TECTONIC shall not be responsible for damage to any undocumented or miss-located utilities, or subsurface structures; and for any impact this damage may cause.
2. TECTONIC shall not be responsible for the sampling or testing of hazardous materials unless specifically agreed to in the scope of services of this Agreement. Further, CLIENT shall notify TECTONIC as to the presence of any known or suspected hazardous materials on-site. Should unanticipated hazardous materials be encountered TECTONIC shall take immediate health and safety measures and notify CLIENT. Hazardous materials constitute a changed condition mandating a renegotiation of the scope of services and fees.
3. If the scope of services includes performance of soil borings by TECTONIC, it is understood that CLIENT will furnish TECTONIC with a diagram indicating the location of the site and the borings on that site, including plans and specifications pertinent to its services, unless preparation of said plan is part of TECTONIC's scope of service. TECTONIC reserves the right to deviate a reasonable distance from the specified boring location unless the right to deviate is specifically revoked by CLIENT in writing at the time the location diagram is supplied.



TECTONIC ENGINEERING CONSULTANTS, GEOLOGISTS & LAND SURVEYORS, D.P.C.
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4. All samples of water, soil and rock will be discarded sixty (60) days after submission of the report unless CLIENT advises TECTONIC in writing to the contrary. Upon request, the samples will be delivered, and shipping charges will be collected.
5. TECTONIC shall not be responsible for obtaining permits for working in wetland or wetland buffers or as required by local agencies for access clearing, tree removal or grading. All costs and fees for permits, permit document preparation and implementation of erosion control measures, site stabilization and restoration shall be added to the costs and fees of this agreement unless specifically agreed to in the scope of services of this Agreement.
6. Costs for borings and excavation are based on non-prevailing wages unless specifically stated otherwise in proposal.

5.0 CONSTRUCTION SUPPORT SERVICES

1. The presence of TECTONIC's field representative shall be for the purpose of providing observation and field testing. Such services shall be performed by TECTONIC using that degree of care and skill ordinarily exercised under similar circumstances by reputable members of the profession practicing in this or similar locations. Neither the professional activities of TECTONIC, nor the presence of TECTONIC or its employees and sub-consultants at the site shall relieve any 3rd Party Contractor(s) for construction and any other entity of their obligations, duties and responsibilities including, but not limited to, construction means, methods, sequence, techniques and procedures necessary for performing, superintending or coordinating all portions of the work of construction in accordance with their respective contracts, any health or safety precautions required by any regulatory agencies, and all other applicable laws, rules, and regulations governing the project. TECTONIC and its personnel have no authority to exercise any control over any 3rd Party Contractor(s), or other entity or their employees in connection with their construction work or any health or safety precautions, programs, or enforcements. CLIENT agrees that any 3rd Party Contractor(s) for construction are solely responsible for job site safety and warrants this intent shall be made evident in CLIENT's agreement with any 3rd Party Contractor(s). CLIENT also agrees that the CLIENT, TECTONIC and TECTONIC's consultants shall be indemnified and shall be named as an additional insured under any 3rd Party Contractor(s)' general liability insurance policy. It is further understood and agreed that TECTONIC has no responsibility for job site safety pursuant to §§ 200, 240 and 241(6) of the New York Labor Law.
2. Before any hazardous or contaminated materials are removed from the site, CLIENT will sign manifests naming CLIENT as the generator of the waste (or, if CLIENT is not the generator, CLIENT will arrange for the generator to sign). CLIENT will select the treatment or disposal facility to which any waste is taken. TECTONIC will not be the generator or owner of, nor will it possess, take title to, or assume legal liability for, any hazardous or contaminated materials at or removed from the site. TECTONIC will not have responsibility for or control of the site or of operations or activities at the site other than its own. TECTONIC will not undertake, arrange for or control the handling, treatment, storage, removal, shipment, transportation or disposal of any hazardous or contaminated materials at or removed from the site, other than any laboratory samples it collects or tests. CLIENT agrees to defend, indemnify, and hold TECTONIC harmless for any costs or liability incurred by TECTONIC in defense of or in payment for any legal actions in which it is alleged that TECTONIC is the owner, generator, transporter, treater, storer or disposer of hazardous waste.



**TECTONIC ENGINEERING CONSULTANTS, GEOLOGISTS & LAND SURVEYORS, D.P.C.
GENERAL TERMS AND CONDITIONS OF AGREEMENT**

3. To the fullest extent permitted by law and to the extent claims, damages, losses or expenses are not covered by liability insurance purchased by any 3rd Party Contractor(s) in accordance with paragraph 2 of Section 5.0, CLIENT shall indemnify and hold harmless TECTONIC, TECTONIC's consultants, and agents and employees of any of them from and against claims, damages, losses and expenses, including but not limited to attorney' fees, arising out of or resulting from performance of any 3rd Party Contractor(s)' construction work, provided that such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property, but only to the extent caused by the negligent acts or omissions of any 3rd Party Contractor(s), a subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, regardless of whether or not such a claim, damage, loss or expense is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity which would otherwise exist as to a party or person described in this paragraph.
4. Unless specifically stated in the Scope of Services TECTONIC shall not be responsible for measuring, determining or verifying quantities of the constructed items of work.
5. CLIENT agrees to supply TECTONIC with specifications, plans and other necessary materials for the project pertinent to providing its services.

6.0 DISPUTE RESOLUTION

1. Any claim, dispute or other matter in question arising out of or related to this Agreement shall be subject to non-binding mediation as a condition precedent to the institution of legal proceedings by either party. If the matter is not resolved through mediation, it shall be resolved through litigation in a court of competent jurisdiction in New York State. The parties voluntarily and irrevocably waive their respective right to a trial by jury.

GTC – Ver. 03/08/2023



WORK AUTHORIZATION AND PROPOSAL ACCEPTANCE FORM

Proposal No: 23-0317

Date: 3/15/23

Retainer Amount Required: NA

Project Name & Location: **City of Beacon Fire Station Addition / Alterations Project; 13 South Ave., Beacon, NY**

Proposed Services: **Special Inspection & Materials Testing Services**

Proposal Acceptance

Acceptance(Signature):

Date:

Printed Name:

Title:

Company or Organization Name:

Client Contact Information

All of the following information about the person responsible for the identified tasks must be provided prior to starting work.

Scheduling Work and Receipt of Deliverables	Name:	Phone:	Email:
	Address:		
Receipt of Invoices(Original)	Name:	Phone:	Email:
	Address:		
Receipt of Invoices (Copies)	Name:	Phone:	Email:
	Address:		
Issuing Payments of Invoices	Name:	Phone:	Email:
	Address:		

Newburgh Lab Office

280 Little Britain Road, Building 2 | Newburgh, NY 12550
845.563.9081 Tel | 845.563.9085 Fax

tectonicengineering.com
Equal Opportunity Employer



Corporate Office

70 Pleasant Hill Road, PO Box 37 | Mountainville, NY 10953
845.534.5959 Tel | 845.534.5999 Fax | 845.534.5666 HR Fax

tectonicengineering.com

City of Beacon City Council Agenda
05/15/2023

Title:

Affordable Housing Discussion

ATTACHMENTS

Keane & Beane, P.C. Decision Tree Regarding Senior Affordable Housing Overlay District

City Planner Memorandum Regarding Affordable Housing

City of Beacon Projects and Proposals from 2012 - 2023

City Planner Housing Priorities Presentation

PRIVILEGED AND CONFIDENTIAL
ATTORNEY-CLIENT CORRESPONDENCE

MEMORANDUM

TO: Mayor Kyriacou and Members of the City Council of the City of Beacon

FROM: Keane & Beane, P.C.

RE: Legislative Amendments to the City's Senior Affordable Housing Overlay (SAHO) District

DATE: May 11, 2023

At the April 3, 2023, April 17, 2023 and May 1, 2023 City Council meetings, the City Council, with the assistance of the City Planner, John Clarke, discussed the need for more affordable housing within its jurisdiction. The need for such affordable housing culminated in a discussion regarding a potential development of amendments to existing city law regarding the Senior Affordable Housing Overlay District ("SAHO"). See generally City Code § 223-41.22 The SAHO, adopted in 2012, has only been used once, to allow the re-adaptive reuse of the former Highlands Hospital. Accordingly, the City Planner has suggested that the text for the SAHO be modified with the intent for it to encourage use of the overlay zone to create more affordable housing for seniors.

This memorandum outlines the questions the Council should consider in connection with certain amendments to the existing code that are designed to allow for more affordable housing for seniors with less restrictive zoning provisions.

1. Question: In what Zoning Districts should a Senior Affordable Housing Development be permitted?

Discussion: The SAHO is an overlay zoning district, which means it is not presently applied to any property. A property owner needs to apply to the City Council requesting the overlay zone be applied to its property, which occurs after a public hearing and referral to the Planning Board, which adds time and cost to a project and increases

the cost of housing. Making the use a permitted use in the Table of Uses in the Zoning Code would mean the City Council not have to consider applying the overlay district to each property when an applicant wishes to construct a Senior Affordable Housing Development.

Does the Council wish to 1) make a Senior Affordable Housing Development as a permitted use in all Zoning Districts on a property 0.50 acres or larger and prohibit such use in the WP and HI Districts or 2) continue permitting such use only pursuant to rezoning by applying the overlay district? Other potential option: Permitted use in all districts, except the WP, HI, and R1 districts, but allowed by City Council special permit in the R1 districts. Could also additionally limit in an R1 district to parcels within a 1,000-foot convenient walking distance of major transit routes, such as Route 9D, Main Street, and Fishkill/Teller Avenue.

2. Question: Does the City Council wish to require the Applicant to obtain a Special Permit from the Council?

Discussion: In addition to having the SAHO applied to the property, the applicant is required to obtain a special permit from the City Council before seeking site plan approval from the Planning Board. The Council should consider if the multiple levels of land use approvals (application of the SAHO, special permit and site plan approval) is necessary.

Does the Council wish to remove the requirement to obtain a Special Permit from the City Council?

3. What age restrictions does the City wish to impose on the SAHO District?

Discussion: Occupancy within the SAHO District will continue to include certain age restrictions. As currently written, the city code imposes an age restriction upon the SAHO of at least sixty-two (62) years of age. See City Code § 223-41.22(I)(1). The City Council will need to consider whether it wishes to reduce that number, as common local laws across the State and Country consider eligibility for senior housing to begin at the age of fifty-five (55)¹. Title VII of the Civil Rights Act of 1968, (Fair Housing Act), generally prohibits age discrimination in housing, 1988 and 1995 amendments created an exemption for housing for adults age 55 and over.

¹ For example, the United States Department of Housing and Urban Development (HUD) has found that the fifty-five (55) or older group is the most common type of housing for older persons. See e.g. https://www.hud.gov/program_offices/fair_housing_equal_opp/fair_housing_act_housing_older_persons#/How_to_Qualify, last accessed April 26, 2023.

Should the age be: (a) 62, (b) 60, or (c) 55?

4. Question: Does the City desire to increase the allowable units per acre from its current limitations?

Discussion: As currently written, the SAHO regulations provide that the maximum number of dwelling units in a senior affordable housing project cannot exceed four (4) units per gross acre of lot size. See City Code § 223-41.22(D)(1).

Would the Council like to increase the number of units permitted per acre to 17 units per acre (similar to the T district) or 29 units per acre (like the GB and LI districts)?

5. Question: Does the City Council wish to decrease the minimum number of units required for a Senior Affordable Housing Development?

Discussion: City Code § 223-41.22(D)(1) requires that the proposed project must contain a minimum of 20 twenty (20) dwelling units. The City Council may want to explore a lower number of acceptable dwelling units that would otherwise attract and encourage more low-density development to enable senior housing projects for smaller applicants.

The Council may consider: (a) 20 , (b) 15, (c) 10, or (d) 6 dwelling units as the minimum required for a Senior Affordable Housing Development.

6. Question: Does the City wish to establish a minimum or maximum size of the dwelling unit?

Discussion: The size of a dwelling unit impacts its affordability and the smaller the unit size, the greater opportunity exists for additional units. Alternatively, smaller units may not be what the market is dictating.

Is the City Council interested in regulating the minimum or maximum size of a dwelling unit? If so, what minimum size? What maximum size?

7. Question: Does the City Council wish to lower parking requirements in the SAHO?

Discussion: Current supplementary site regulations maintain a ratio of parking spaces provided at 1.2 spaces per dwelling unit. See City Code § 223-41.22(E)(1). If the City seeks to attract developmental interest by allowing smaller projects, it may wish to consider reducing the burden of such parking ratio restrictions to a ratio of 0.5 per unit.

Should the Council reduce the minimum parking requirement per unit to: (a) 1; (b) , 0.67 [current senior housing requirement in 223-26F] (c) 0.50, or (d) 0 and let the Planning Board determine during site plan review, after a parking study by the applicant.

8. Question: How will the new code define “Affordability” in the context of a Senior Affordable Housing Project?

Discussion: The City Code currently maintains that, all units in a senior affordable housing project must be one-hundred percent affordable as provided. See City Code § 223-41.22(H) et seq. The City Council may wish to consider permitting a variation to such a substantial requirement. For example, the Council might consider permitting a minimum of 50 percent affordable rate units or 25 percent with a mix of market-rate units that would otherwise encourage diversity in attraction to such a project.

9. Question: Does the City want to lower the percentage of the Area Median Income (AMI) from its current 100% to a lower number?

Discussion: In order to make housing more affordable, the City Council might consider the reduction of the AMI to a range between 60% and 80%.

Should the Council expand eligibility to those with an AMI of: (a) 80%; (b) 70% (c) 60% or (d) an average of 70% with a broader range of options?

To: Mayor Kyriacou and the Beacon City Council
From: John Clarke, City Planner
Date: March 22, 2023
Re: **Affordable Housing Options**

As requested, this memo updates my September 10, 2021 recommendations to the Council on affordable housing options. The following options could be enacted in the near-term to correct impediments in the Zoning Code to affordable housing. More site-specific solutions can still be simultaneously pursued, such as working on projects to create a higher percentage of affordable housing units on publicly-owned properties, similar to the example of West End Lofts. Two locations are suggested below.

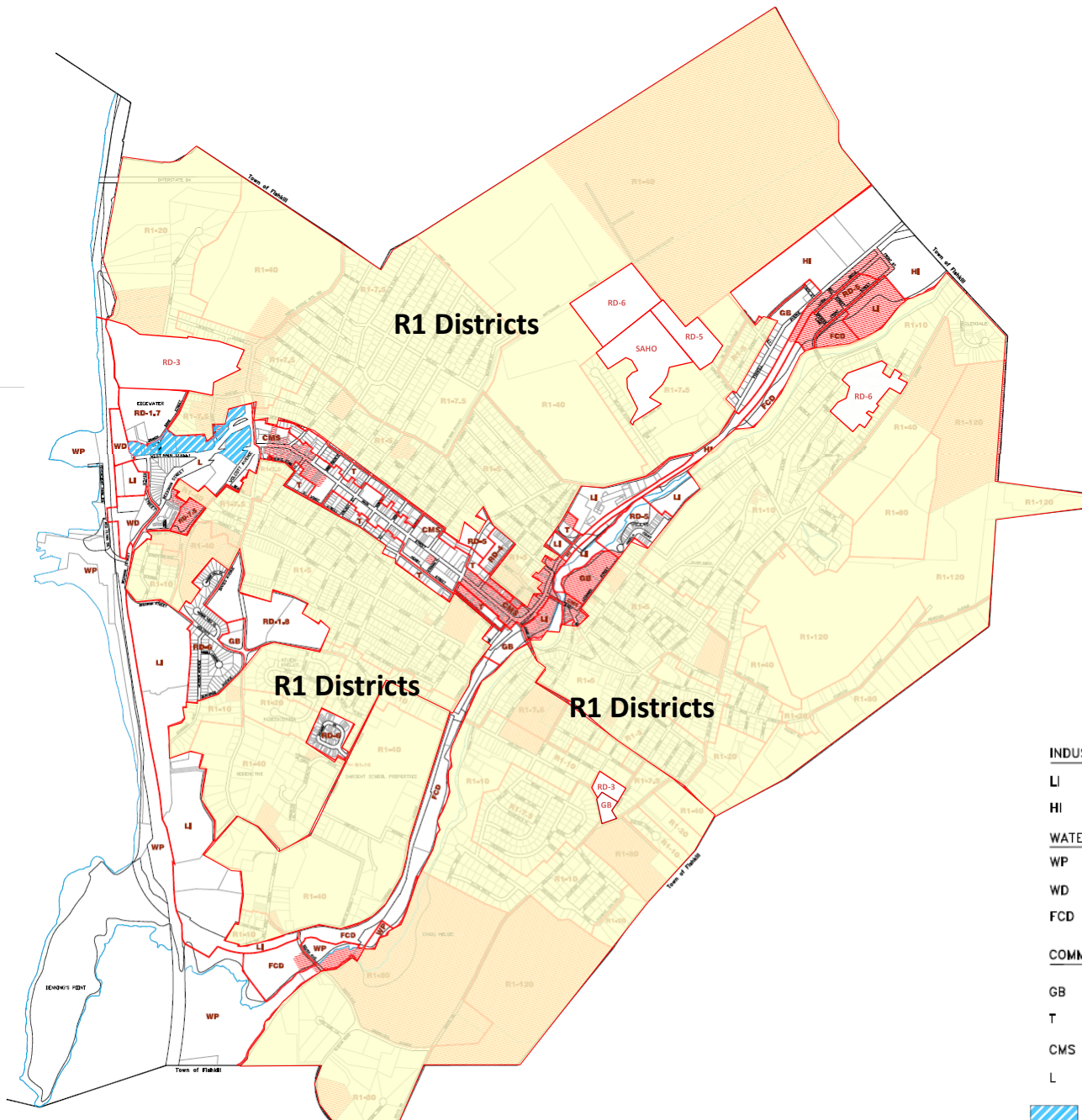
1. **Revise the Senior Affordable Housing Overlay (SAHO) district.** The City should encourage additional affordable housing for seniors with less restrictive zoning provisions, allowing more widespread use of the overlay zone on other sites. Changes could include:
 - a. Permit new construction, not just adaptive reuse of existing buildings over 50 years old.
 - b. Substantially increase the allowable units per acre from the current 4 per acre.
 - c. Reduce the required project size from the existing minimum of 20 dwelling units.
 - d. Lower the required parking standard from 1.2 spaces per unit to perhaps 0.5 per unit.
 - e. Decrease the eligible age limit from at least 62 years old to 55 or 60 years and older.
 - f. Lower the percentage of the Area Median Income (AMI) from 100% to 70-80%.
 - g. Eliminate the requirement for a separate special permit from the City Council, since the Council must have already designated the property for this use.
2. **Eliminate required parking for designated affordable units and lower other multifamily parking requirements.**
3. **Identify opportunities for additional RD districts** on remaining larger-scale parcels.
4. **Make multifamily dwellings a permitted use in the RD districts**, with no need for a special permit.
5. **Allow two-family dwellings in R1 residential districts**, without a special permit or site plan approval.
6. **Facilitate housing projects with a higher percentage of affordable apartments on public land**, such as:
 - a. **The County Center parking lot at Elm Street** can be targeted with a request for proposals for a 3-story, mixed-use building and a transit-linked public park along the Main Street frontage with an expanded rear parking lot. The Farmers' Market should be integrated into the design, using the park as an entrance feature. This Main Street infill proposal was recommended in the 2017 Comprehensive Plan Update and endorsed by the Main Street Access Committee. The building could require a higher percentage of affordable units and also encourage more affordable market-rate units by featuring micro-apartments under 300 square feet. A cooperative proposal from the County and City might have a good chance of receiving state housing funds.
 - b. **The Metro-North northern parking lot** was also identified in the 2017 Comprehensive Plan as an excellent opportunity for new housing, within easy walking distance of the Train Station and in a location up against a rock cliff with low view impacts. The MTA has recently indicated interest in soliciting developer proposals for its parking lots in cooperation with the City.

Beacon Projects and Proposals, 2012 - 2023

Beacon Project/Location	Commercial Sq. Ft.	Total Housing Units	BMR Units	Initial Review Date	Status/Approval
Highland Meadows, Hastings Dr.		68 Sr. Affordable Apts.	68	2012	Completed
1 East Main Street	5,746 sq. ft.	19 Condominiums	0	2014	Completed
Beacon Theater, Main Street	Theater+3,325 sq. ft.	29 Apartments	3	2015	Completed
The View, Beekman Street		41 Condominiums	4	2015	Completed
Lofts at Beacon Falls, Leonard St.		78 Apartments	0	2012	Completed
Weber III, 9-11 Creek Drive		46 Apartments	5	2015	Completed
344 Main Street	8,000 sq. ft.	24 Apartments	2	2015	Completed
HIP Lofts Phase I, Mason Circle		114 Artist Live/Work	12	2013	Completed
249 Main Street	11,000 sq. ft.	28 Apartments	3	2015	Completed
West End Lofts, Wolcott Ave.		98 Apartments	72	Nov. 2016	Completed
Edgewater, Tompkins Ave.		246 Apartments	25	Feb. 2017	Under Construction
25 Townsend Avenue		13 Single-Family	0	Apr. 2017	Under Construction
226 Main Street	3,300 sq. ft.	7 Condominiums	0	May. 2017	Completed
123 Rombout Avenue		10 Apartments	1	Aug. 2017	Completed
River Ridge, Wolcott Ave.		18 Townhouses	2	Aug. 2017	Completed
HIP Lofts Phase II, Mason Cr.		29 Net New Apartments	3	Aug. 2017	Under Construction
Ferry Landing, Beekman St.		6 Townhouses	0	Aug. 2017	Under Construction
208 Main Street	Existing 1st Floor	9 Apartments	0	May. 2018	Completed
248 Tioronda Avenue	24,500 sq. ft.	64 Apartments	6	Sept. 2018	Under Construction
53 Eliza Street		9 Condominiums	0	Sept. 2018	Under Construction
23-28 Creek Drive	20,000 sq. ft.	8 Apartments	0	Nov. 2018	Under Construction
Beacon Views, Townsend St.		37 Townhouses	4	Sept. 2019	Approved
2 Cross Street at Main Street	4,980 sq. ft.	18 Apartments	11	Sept. 2019	Approved
Beacon Commons, 16 W. Main St.		62 Apts/Live-Work	6	Sept. 2019	Approved
416-420 Main Street	11,715 sq. ft.	2 Apt/Live-Work	0	May. 2020	Under Construction
364 Main Street	8,892 sq. ft.	20 Apartments	2	June. 2021	Approved
HIP Lofts, Front Street	30,000 sq. ft.	28 Apartments	3	Aug. 2022	Under Review
393-397 Fishkill Avenue	3,500 sq. ft.	12 Apartments	1	Nov. 2022	Under Review
152-158 Fishkill Avenue	8,213 sq. ft.	16 Apartments	2	Mar. 2023	Under Review
Totals:	143,171 sq. ft.	1,159 Units	235 (20%)		

Affordable Housing Options:

1. **Revise the Senior Affordable Housing Overlay (SAHO) district.** The City should encourage additional affordable housing for seniors with less restrictive zoning provisions, allowing more widespread use of the overlay zone on other sites. Changes could include:
 - a. Permit new construction, not just adaptive reuse of existing buildings over 50 years old.
 - b. Substantially increase the allowable units per acre from the current 4 per acre.
 - c. Reduce the required project size from the existing minimum of 20 dwelling units.
 - d. Lower the required parking standard from 1.2 spaces per unit to perhaps 0.5 per unit.
 - e. Decrease the eligible age limit from at least 62 years old to 55 or 60 years and older.
 - f. Lower the percentage of the Area Median Income (AMI) from 100% to 70-80%.
 - g. Eliminate the requirement for a separate special permit from the City Council, since the Council must have already designated the property for this use.



LEGEND

 Historic District and Landmark Overlay Zone

INDUSTRIAL DISTRICTS

LI Light Industrial
HI Heavy Industrial

WATERFRONT DISTRICTS

WP Waterfront Park
WD Waterfront Development
FCD Fishkill Creek Development

COMMERCIAL DISTRICTS

GB General Business
T Transitional
CMS Central Main Street
L Linkage



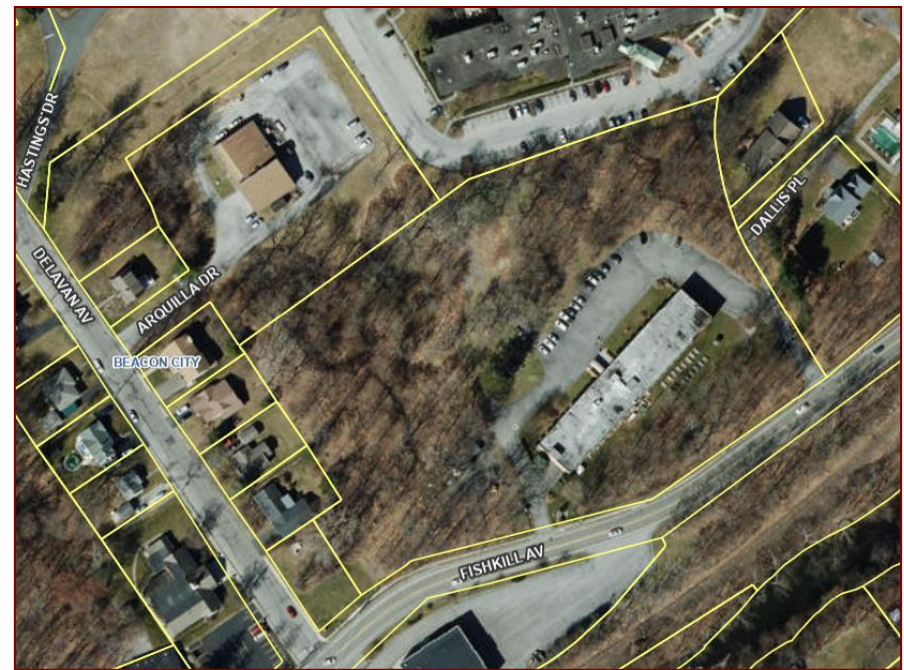
L District – additional commercial and industrial uses permitted.

RESIDENTIAL DISTRICTS

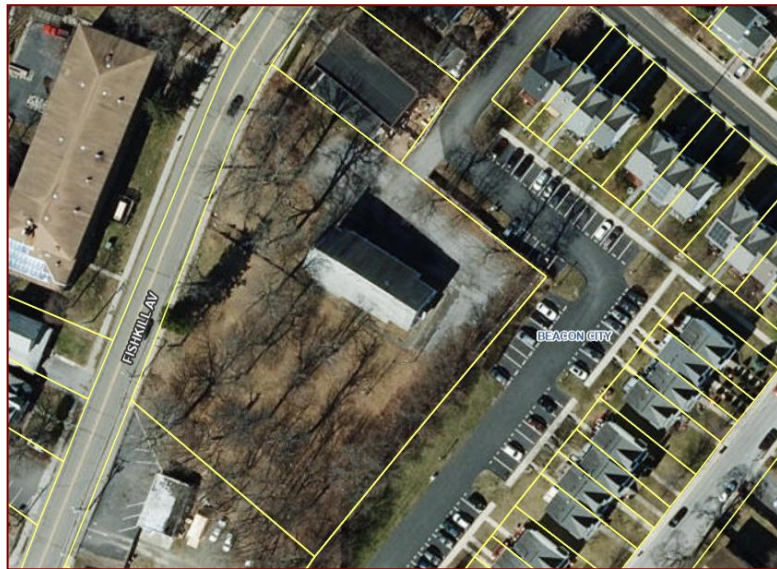
R1-120	One Family	120,000 sqft./dwelling
R1-80	One Family	80,000 sqft./dwelling
R1-40	One Family	40,000 sqft./dwelling
R1-20	One Family	20,000 sqft./dwelling
R1-10	One Family	10,000 sqft./dwelling
R1-7.5	One Family	7,500 sqft./dwelling
R1-5	One Family	5,000 sqft./dwelling
RD-7.5	Designed Residence	7,500 sqft./dwelling
RD-6	Designed Residence	6,000 sqft./dwelling
RD-5	Designed Residence	5,000 sqft./dwelling
RD-4	Designed Residence	4,000 sqft./dwelling
RD-3	Designed Residence	3,000 sqft./dwelling
RD-1.8	Designed Residence	1,800 sqft./dwelling
RD-1.7	Designed Residence	1,700 sqft./dwelling



Elks parcel off Wolcott Avenue, 3.9 Acres/2
R1-5 = 16 units; T (2,500) = 33 units; GB (1,500) = 56 units



Hedgewood, 355 Fishkill Avenue 6.1 acres/2
R1-7.5 = 17 units; T (2,500) = 53 units; GB (1,500) = 87 units



333 Verplanck Avenue Club Building, 1.2 Acre
RD-5 = 10 units; T (2,500) = 20 units; GB (1,500) = 34 units

**Sample
 Parcels
 for Senior
 Affordable
 Housing
 Overlay
 Zoning**



Vacant Lot: N. Chestnut and Church, 0.31 acres 71
T(2,500) = 5 units, GB (1,500) = 9 units

Affordable Housing Options:

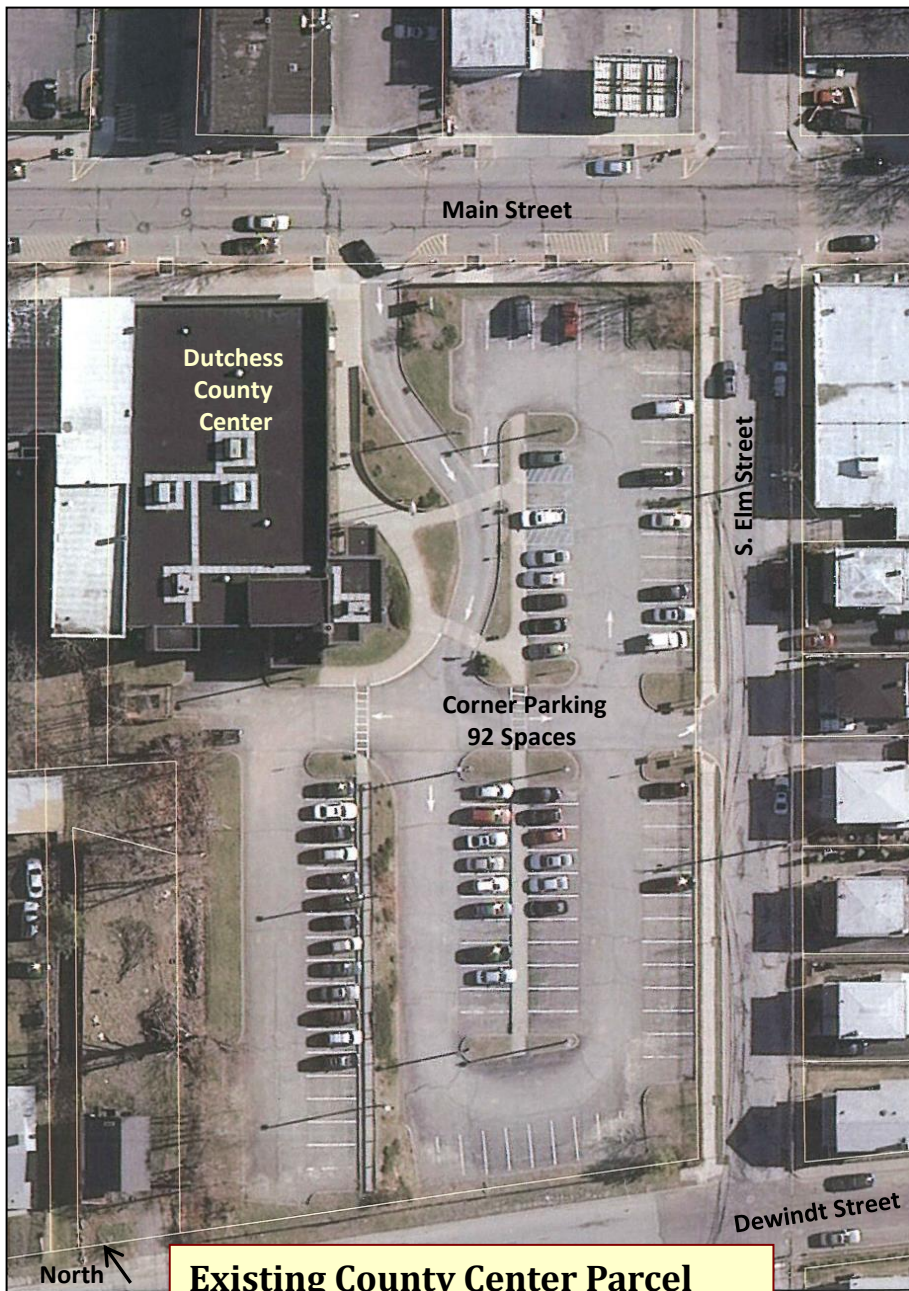
- 2. Eliminate required parking for designated affordable units and lower other multifamily parking requirements.**
- 3. Identify opportunities for additional RD districts on remaining larger-scale parcels.**
- 4. Make multifamily dwellings a permitted use in the RD districts, with no need for a special permit.**
- 5. Allow two-family dwellings in R1 residential districts, without a special permit or site plan approval.**

Affordable Housing Options:

Facilitate housing projects with a higher percentage of affordable apartments on public land, such as:

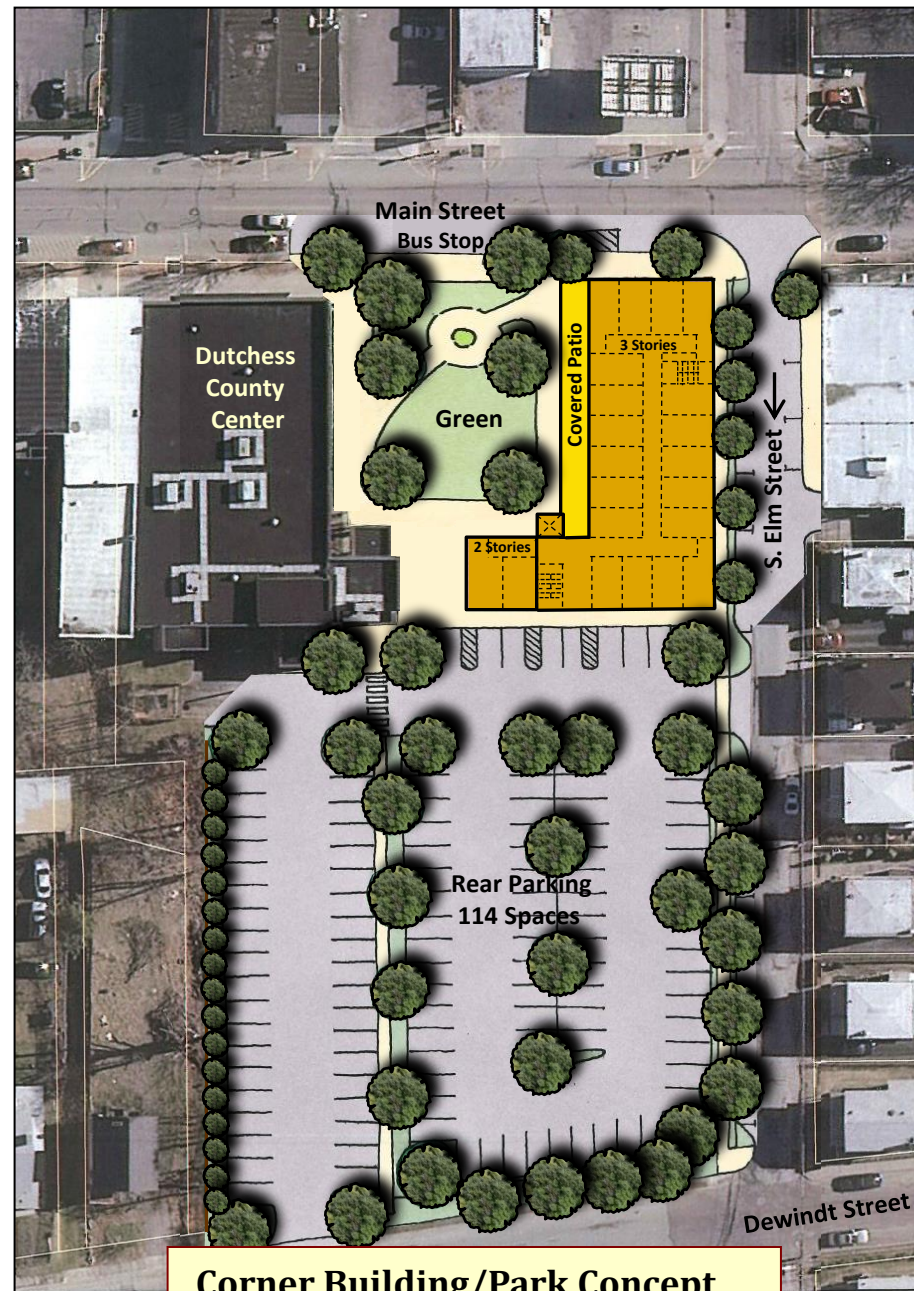
a. The County Center parking lot at Elm Street can be targeted with a request for proposals for a 3-story, mixed-use building and a transit-linked public park along the Main Street frontage with an expanded rear parking lot. The Farmers' Market should be integrated into the design, using the park as an entrance feature. This Main Street infill proposal was recommended in the 2017 Comprehensive Plan Update and endorsed by the Main Street Access Committee. The building could require a higher percentage of affordable units and also encourage more affordable market-rate units by featuring micro-apartments under 300 square feet. A cooperative proposal from the County and City might have a good chance of receiving state housing funds.

b. The Metro-North northern parking lot was also identified in the 2017 Comprehensive Plan as an excellent opportunity for new housing, within easy walking distance of the Train Station and in a location up against a rock cliff with low view impacts. The MTA has recently indicated interest in soliciting developer proposals for its parking lots in cooperation with the City.



Existing County Center Parcel

- Parking lot at prime Main Street corner
- Expansive asphalt with inefficient layout
- Poorly landscaped with no interior trees



Corner Building/Park Concept

- 40 micro-apartments for affordability
- 7,200 square feet 1st floor commercial
- Transit-linked park framed by active uses



Waterfront Development District

- Designed to cover gaping MTA parking lots
- Bridge gap between waterfront and Main St.
- Create a new mixed-use front porch for City

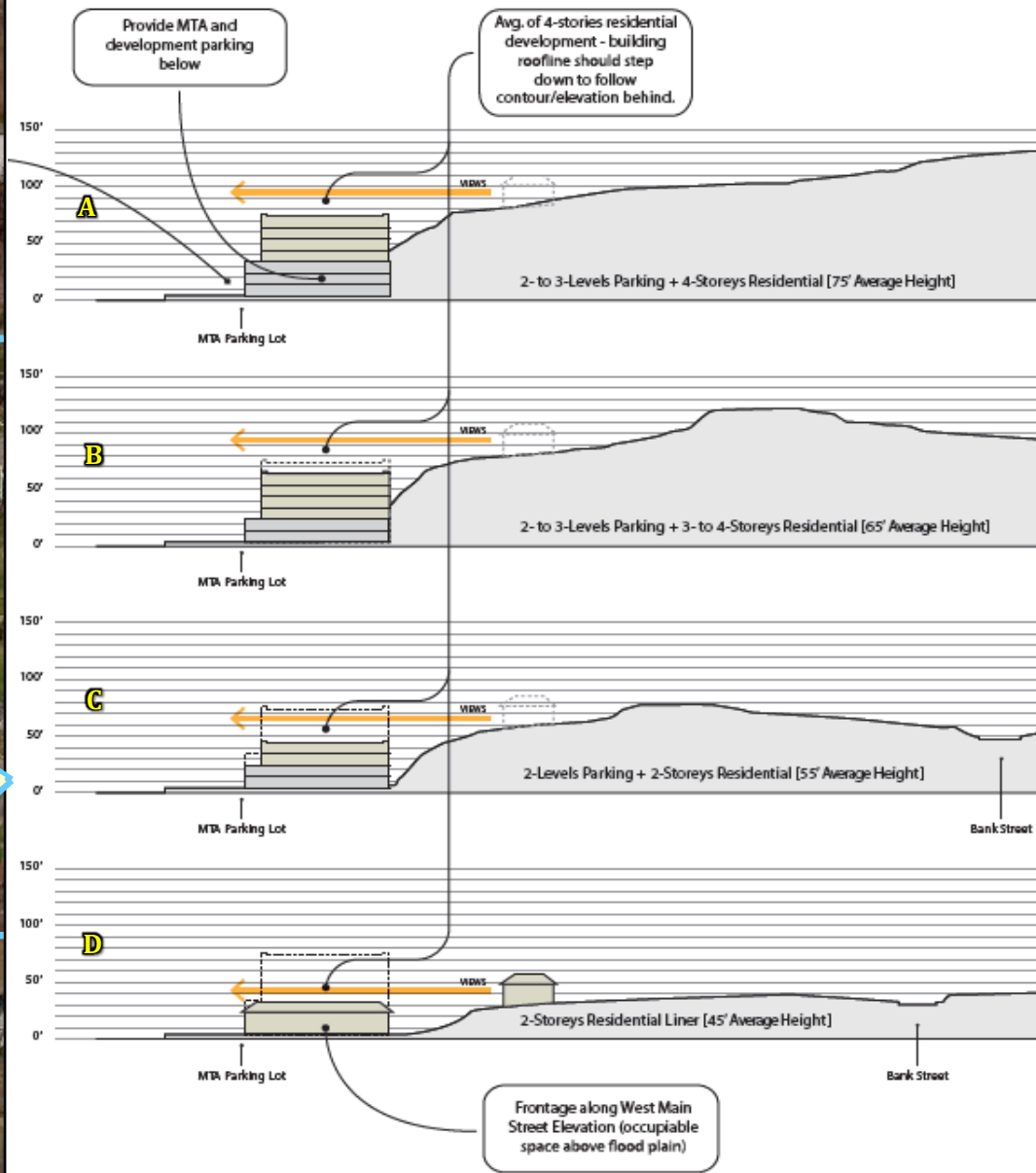


FIGURE 10-4: WATERFRONT/STATION AREA DEVELOPMENT PROFILE (NORTH SITE)

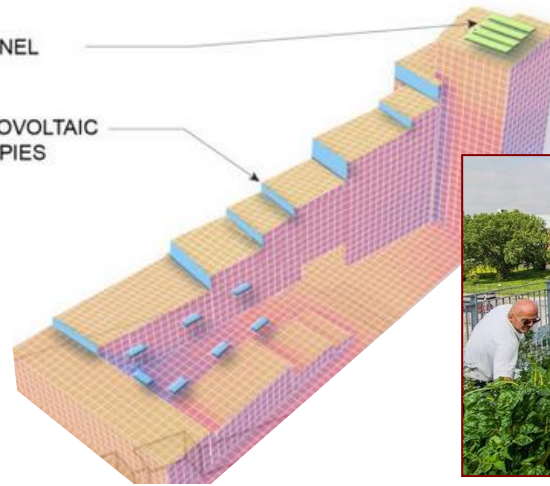
Via Verde by Jonathan Rose Companies

- 2012 LEED gold-rated housing in the South Bronx;
- 222 mixed-income and affordable apartments;
- Solar panels on multiple south-facing terraces;
- 40,000 square feet of green roofs and gardens.



PV PANEL

PHOTOVOLTAIC
CANOPIES



CASCADING
LANDSCAPE

PLAZA

PARTY ROOF

UPPER QUAD

AMPHITHEATRE

CONIFERS

ORCHARD

URBAN FARM

INTENSIVE GREEN
ROOFS PROMOTE
BIODIVERSITY
LOWER QUAD

RAINWATER
STORAGE TANKS
TOWNHOME
GARDENS

LANDSCAPE
PLAN
76

Waterfront Development South (Metro North Parking Area)



Profile Section Cuts

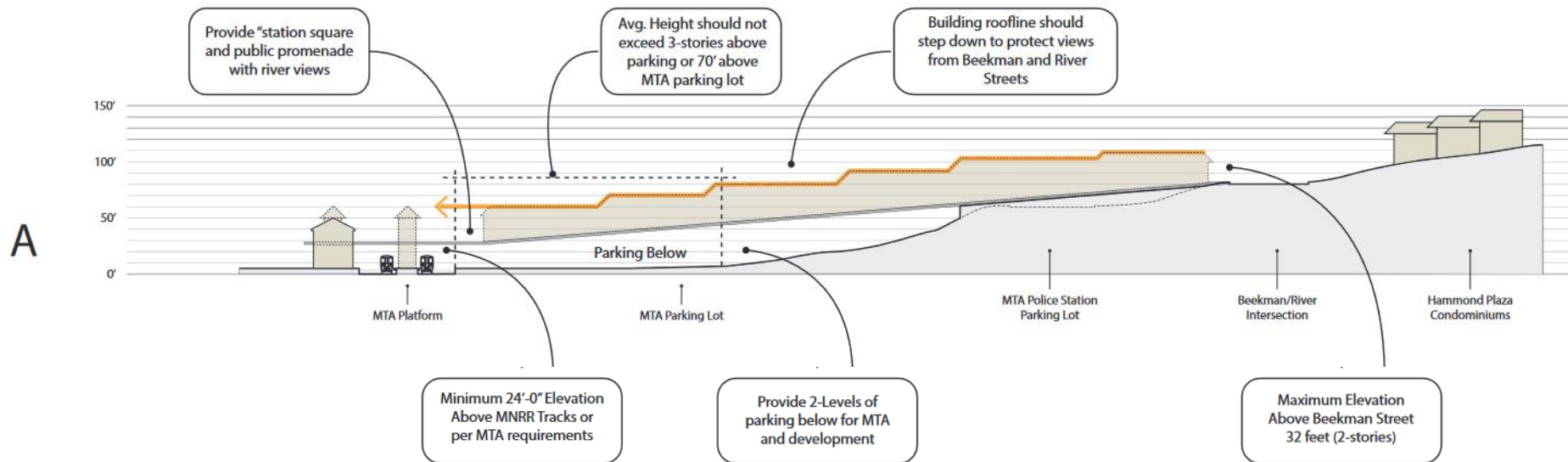
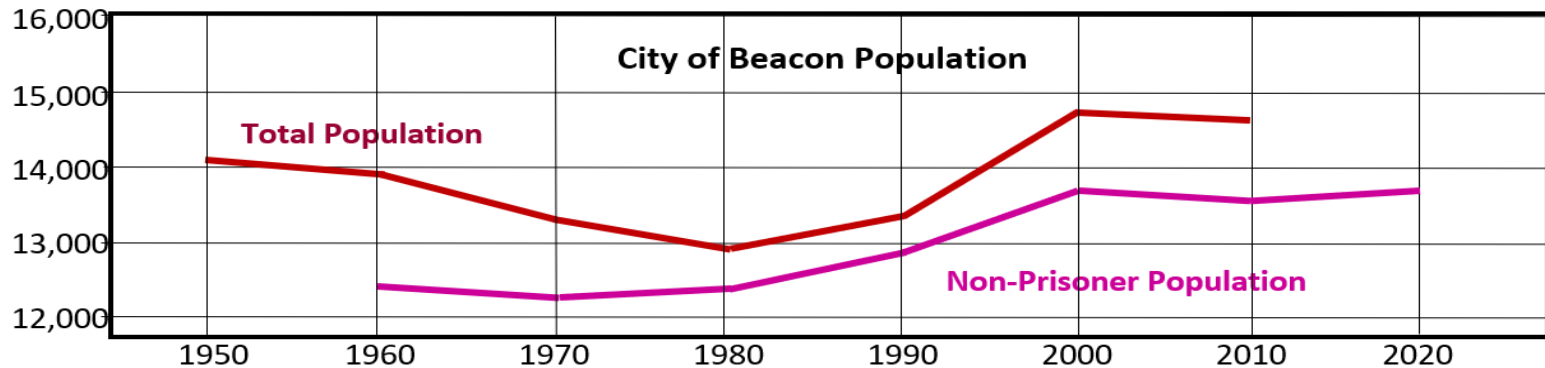


FIGURE 10-5: WATERFRONT/STATION AREA DEVELOPMENT PROFILE (SOUTH SITE)

U.S. Census:	Total Population	Institutional Population	Non-Prison Population	Population Per Household
1950	14,012			
1960	13,922	1,583	12,339	
1970	13,255	1,116	12,139	3.09
1980	12,937	762	12,367	2.76
1990	13,243	495	12,940	2.68
2000	14,810	1,442	13,720	2.61
2010	14,599	1,125 (Prison Pop: 966)	13,633	2.47
2020 Preliminary			13,723	2.28

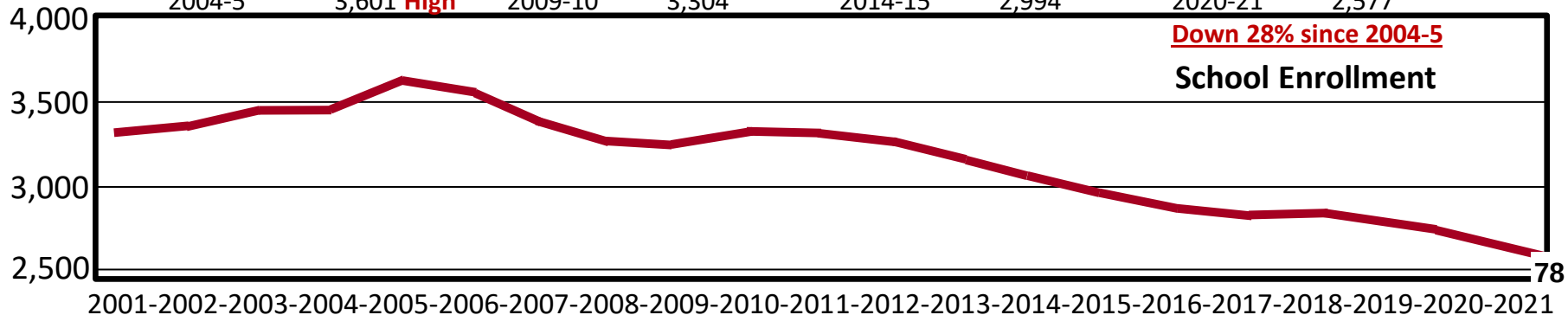
Steady Since 2000 Down 12.6% Since 2000



Beacon School District Enrollment

Source: NYS Education Department

2000-1	3,312	2005-6	3,532	2010-11	3,292	2015-16	2,866
2001-2	3,385	2006-7	3,376	2011-12	3,241	2016-17	2,812
2002-3	3,486	2007-8	3,254	2012-13	3,143	2017-18	2,841
2003-4	3,476	2008-9	3,228	2013-14	3,060	2019-20	2,723
2004-5	3,601 High	2009-10	3,304	2014-15	2,994	2020-21	2,577



City of Beacon City Council Agenda
05/15/2023

Title:

Leaf Blower Regulations

ATTACHMENTS

[Conservation Advisory Committee Memorandum Regarding Leaf Blower Regulations](#)

MEMO

TO: Christopher White, City Administrator
FROM: Sergei Krasikov, Chair, Conservation Advisory Committee (CAC)
RE: Possible Local Laws Restricting Use of Gas Leaf Blowers
DATE: November 14, 2022, updated April 13, 2023

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1. Are there effective alternatives to gasoline-powered leaf blowers such as battery and plug-in models (or operational changes such as mowing leaves instead of collecting them) that meet the demands for various users, including homeowners, businesses, commercial landscapers, etc.? Are these alternatives significantly less noisy and prone to create dust and public health issues? 5

2. If the City restricts the time and/or season in which gasoline-powered leaf blowers can be utilized, how has that worked in other communities in terms of compliance with the policy and enforcement? Is there a case that these devices should be prohibited during certain times of the year? 6

3. When municipalities have implemented restrictions, how have they educated the public on such legislation? 7

4. Are there any exemptions that would be appropriate for the City of Beacon, such as for use by municipal public works, on residential and commercial properties over a certain size? 7

5. If the City restricts or bans gas leaf blowers, should it also restrict or ban non-gas leaf blowers? 8

6. What impact have restrictions in other local areas had on the community? Have the results been positive and/or have there been unanticipated adverse consequences of restrictions/ bans? 8

7. Overall, what are the benefits of restricting/banning gasoline powered leaf blowers? What are the potential detriments? 8

CONSERVATION ADVISORY COMMITTEE OPINION 8

APPENDIX 14

INTRODUCTION

This memo was created in response to a request from Beacon City Council, who are exploring adopting additional provisions in the City Code to regulate the use of leaf blowers in the City of Beacon. The Council requested the CAC consider the pros and cons of regulating gasoline-powered leaf blowers in

the City and report back its findings and recommendations. Below, we provide answers to each of the seven questions that the Council asked us to investigate. As part of our research, four CAC members (Sergei Krasikov [chair], Esther Jackson, Eleanor Peck, and Thomas Wright) reached out to 19 contacts in 18 municipalities, receiving email or phone responses from 13 of the contacts. We have provided summaries of the responses in this document, and include the raw data as an enclosure, as well as a longer narrative opinion on this topic.

In summary, the CAC is supportive of the Council taking steps to regulate gas-powered lawn equipment, starting with gas-powered leaf blower regulation. We were cautioned not to use the word “ban,” as it may alienate residents and commercial entities. We recommend that any regulatory changes presented during several public sessions over the next year, allowing Beacon residents, business owners, and landscape companies to contribute to the discussion and be well-informed of any upcoming changes. We recommend that the Council first restrict times when leaf blowers can be used and implement a seasonal restriction on gas-powered leaf blowers, and consider developing a timeline to restrict other gas-powered lawn equipment over time. Several municipalities in NYS have restricted the use of all the gas powered landscape equipment, e.g. Larchmont, Croton-on-Hudson, Pelham. Any regulation should clearly define what is meant by a “gas leaf blower,” and we offer [legislation](#) from Maplewood, NJ¹² as a model. We will also note that commercial landscaping companies and property owners should have the same restrictions, with an exemption (at least to start) for larger properties (proposed: 1 acre or larger) and cleanups following extreme weather events. Many municipalities also limit how many gas powered leaf blowers can be used simultaneously on lots of a certain size.

We also strongly encourage the Council to explore a buy-back program for gas-powered equipment, as the initial costs needed to switch to electric devices can be significant for those with fewer financial resources. We believe that there may be opportunities to work with New York State or Dutchess County on incentive and buy-back programs, although there is not a clear funding stream for such a program at this time.

Finally, we will note that some municipalities maintain databases of commercial landscaping companies for the purpose of communication, education, and in some cases collect a compulsory registration fee. We recommend that the Council consider the feasibility of creating and maintaining such a database for the City, primarily so that it can be used as a tool for communication and education.

Attachments: Leaf Blower Municipal Contacts - CC copy.xlsx
 Maplewood NJ - Leaf Blowers, Gas-Powered.pdf

¹ “Township of Maplewood, NJ: Leaf Blowers, Gas-Powered.”

² This is suggested as a model because Maplewood, NJ was challenged in court for their original legislation and amended the law based on that challenge.

NOISE AND LEAF BLOWERS

Acknowledging that the leaf blower regulation process started with noise complaints, we want to explain several fundamentals about sound and noise for better understanding issues at hand.

Loud noise greatly impacts our hearing and non-hearing health³, can lead to cardiovascular issues, psychological distress, and disrupt people from studies or work. Vulnerable populations include municipal employees, landscapers, children, seniors, and people with hearing and neurological disorders, such as autism. According to NIH, more than 100 million people⁴ in the US are estimated to be exposed to harmful levels of environmental noise. Hearing loss can result from a single loud sound (like firecrackers) near your ear. Or, more often, hearing loss can result over time from damage caused by repeated exposures to loud sounds. The louder the sound, the shorter the amount of time it takes for hearing loss to occur. CDC's hearing loss web page⁵ lists gasoline powered leaf blowers as a common cause of hearing damage. According to the CDC, any noise above 70 decibels begins to cause hearing damage, while any noise above 120 dBs causes immediate hearing damage. Commercial gas-powered leaf blower noise at close range is up to 115 dBA.

Noise is measured in decibels, or dBs. Refrigerator hums at 40dB, normal conversation is 60dB, an approaching subway train - 100dB. It is very important to understand that an increase of 10dB on the decibel scale is equal to a 10-fold increase in sound pressure level. So when we evaluate a 60dB leaf blower model it is not 16% louder than 50dB, but 10 times louder.

The broad impact of gas leaf blower noise on communities is explained by a strong low frequency component. NIH pilot study⁶ shows that low frequency noise from commercial gas leaf blowers exceed WHO outdoor daytime standards (55 dB) up to 800 feet from the source. Low frequency sound travels over long distances and penetrates walls and windows. Electric leaf blowers operate at higher frequencies and their noise has a harder time penetrating walls/windows, dissipates much faster and within a much smaller radius. Please see APPENDIX at the end of this document for quick comparison of noise ratings among some available gas and electric leaf blowers.

AIR-BORNE PARTICULATE MATTER

According to The University of California School of Engineering study leaf blowers are a major source of air-borne particulate matters⁷. 2018 Institute for Health Metrics and Evaluation (IHME)⁸ found that

³ [http://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736\(13\)61613-X.pdf](http://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(13)61613-X.pdf)

⁴ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3915267/>

⁵ https://www.cdc.gov/nceh/hearing_loss/what_noises_cause_hearing_loss.html

⁶ [NIH Characteristics of Lawn and Garden Equipment Sound: A Community Pilot Study](#)

⁷ <http://www.valleyair.org/news/leafblowers/leafblower.pdf>

⁸ <https://www.science.org/doi/10.1126/sciadv.abf4491>

ambient fine particulate matter air pollution is responsible for 85,000-200,000 excess deaths per year in the US. According to the American Lung Association, those most at risk are infants, children, teens, individuals with asthma, and people of color. Leaf blower legislation is supported by the Medical Society of the State of NY, the American Cancer Society, the Asthma Coalition, and the Breast Cancer Coalition.

LEAF BLOWER ALTERNATIVES

There are a number of alternatives for leaf blowers for dealing with grass cuttings and leaves. It is much better for soil health to leave cuttings in place to decay and mulch leaves with a lawn mower as it provides needed nutrients for the plants. Additionally, it is a good land stewardship practice to leave last fall leaves on the ground as they provide insulation and shelter for bugs and critters. Raking certain areas and composting the leaves is another alternative. CAC can prepare a short presentation on non-leaf blower management of lawns and yards.

QUESTIONS

1. *Are there effective alternatives to gasoline-powered leaf blowers such as battery and plug-in models (or operational changes such as mowing leaves instead of collecting them) that meet the demands for various users, including homeowners, businesses, commercial landscapers, etc.? Are these alternatives significantly less noisy and prone to create dust and public health issues?*

- Battery-powered and plug-in leaf blowers provide the same functionality on all but most demanding jobs. One drawback is the weight of the commercial battery pack.
- Some battery-powered leaf blowers are significantly quieter than gas-powered machines. However, with ever increasing power battery powered blowers are also becoming louder. A study conducted by CAC from the City of Greenburgh found that out of 150 electric blower models they compared only 5 performed below 55 decibels allowed by their Town Code⁹. Beacon allows up to 60 decibel for residential / 65 decibel for commercial.
- Blowing dust is still a major concern.
- From committee members' professional experience with One Nature (ON) and Atlas Studios electric blowers provide adequate substitution even in commercial applications, especially when in use with a battery backpack.
- ON, a commercial landscaping company, uses [STIHL Battery KombiSystem](#), with one powerhead driving an assortment of landscaping attachments. Stihl also has a line of stand alone battery powered blowers called [BGA](#).

⁹ <https://ecode360.com/35275661?highlight=decibel.decibels&searchId=28223039627796729#35275661>

- In general, it is advisable to “buy into” a battery system and build your electric tool library around a battery system. This allows you to power multiple tools using the same set of batteries. The same equipment would be appropriate for all but the very largest properties, including residential and business properties, and could be used by both property owners and commercial landscapers.
- Because it can take time to charge electric equipment, one of the tactics advocated by other communities is for homeowners to ask their landscapers to use homeowners’ battery powered leaf blowers on their property.

2. *If the City restricts the time and/or season in which gasoline-powered leaf blowers can be utilized, how has that worked in other communities in terms of compliance with the policy and enforcement? Is there a case that these devices should be prohibited during certain times of the year?*

- Most if not all communities have seasonal restrictions. Generally, gas leaf blowers are not permitted after “spring cleanup” until leaves begin to fall in autumn. Most communities also restrict time of day when leaf blowers can be used.
- Municipalities vary in the dates they have restrictions. An example of a common restriction: *Prohibited May 16 – Oct 14, Allowed Oct 15 - May 15*. A stricter season restriction: *Prohibited May 2 – Oct 14 & Dec 16 – Mar 14; Allowed Mar 15 – May 1, and Oct 15 – Dec 15*. Examples of seasonal restrictions can be found [here](#).
- For enforcement, some communities use the police, some use their building department or code enforcement officer, some use the combination, but seems most effective when it is enforced by the police department. Some municipalities ticket both the landscaping company and the property owner, if the violation is by a landscaping company.
- Some cities including Princeton NJ and Bedford NY allow time stamped pictures and videos from community members documenting the use of regulated equipment, license plates, landscape company names and residence addresses to be sent to the police/building department/code enforcement¹⁰. Many require the police to witness the infraction. In most communities both the landscaper and the homeowner would first get a warning, and then both would get escalating fines for repeated offenses. However, some municipalities, including Pelham Manor, have a zero tolerance policy with no warnings.
- Communities that restricted leaf blower use by setting a permitted noise decibel level have struggled to enforce the regulations as a police officer has to be present during usage and be in

¹⁰ <https://planetprinceton.com/2021/12/06/what-you-can-do-to-help-enforce-the-gas-leaf-blower-ban-in-princeton/>

possession of an approved noise level meter. Other communities that chose “blanket” restrictions on season/time of leaf blower usage had much easier time with enforcement.

- In towns with landscaper registries certain number of offenses can lead to banning the company from doing business in the municipality. In general, very few tickets are issued in practice in most places. Feedback we received indicates that within a year or two of implementing restrictions people and businesses change their practices. Some communities opted to have a very high fine and possible imprisonment attached to the restrictions to facilitate compliance.
- Seasonal restrictions can be a way to roll out broader regulations in stages and not alienate residents with an immediate “total ban” on leaf blowers. They are also a good place to start public conversations about this topic, by inviting comments on the seasonal windows.

3. *When municipalities have implemented restrictions, how have they educated the public on such legislation?*

- Had public hearings and used public feedback to craft legislation
- Sent emails from the municipal government
- Put information on municipal websites
- Posted on municipal social media
- Sent out press releases
- Posted information on electronic signs within municipalities
- Tabled at the farmer’s market and other events
- Created an electric equipment rebate (highly effective) associated in part with a gas-powered equipment trade-in
- Worked with the police department hands out flyers in English and Spanish in the weeks before the restrictions go into effect
- Put door-hangers on every door
- Collaborated with vendors and manufacturers to organize equipment presentations / try-outs
- Created a database of landscapers by visually cataloging companies working in towns. The city sends a letter to them at the beginning of each season to remind them about rules and regulations.
- Relatedly, several municipalities have created landscape business registries. Companies wanting to do business in these towns must register and pay a small fee. This gives the government contact info to update/remind landscapers about regulations.

4. *Are there any exemptions that would be appropriate for the City of Beacon, such as for use by municipal public works, on residential and commercial properties over a certain size?*

- Most towns have exemptions for municipal workforce, school districts and large landowners (usually 1 acre and more). However, we would strongly encourage the city and BCSD to set examples of respectful land management and minimize the use of leaf blowers as much as possible. As per the City's [Green Purchasing Policy](#)¹¹ we would encourage the city to replace aging landscaping equipment with battery powered alternatives.
- Several towns have exemptions for cleanups following extreme weather events.
- Maplewood NJ allows an exemption to clean up leaves and yard debris based for people with certain documented medical conditions.
- In some towns and villages, including Scarsdale, the Village parks department, department of public works, and school district are all using electric leaf blowers to lead by example.

5. *If the City restricts or bans gas leaf blowers, should it also restrict or ban non-gas leaf blowers?*

- As noted earlier, electric powered leaf blowers operate at higher frequencies that do not travel as far or penetrate walls as well as low frequency noise generated by gas powered leaf blowers, especially powerful commercial models. Additionally, many of the electric leaf blowers available at big box stores tend to be quieter than many of the gas powered ones.
- While electric leaf blowers would still cause concern over airborne dust particles, to minimize pushback and maximize general adoption of battery powered lawn care equipment, we would advise to allow battery powered leaf blowers. Coupled with a robust education campaign on benefits of alternative approaches to leaf management this should lead to much quieter streets in our town. Perhaps the council can set a timeframe to revisit total leaf blower ban 5-7 years down the road if there is public support for this.
- CAC recommends conducting an electric comparison blower study similar to the quoted above study by Town of Greenburgh¹² a year or two after the roll out of gas-powered regulations to analyze stated decibel levels of commercially available electric blowers. The study can be used as a base for electric blower regulations should the trend of noise level increase continue.

¹¹ City of Beacon, "CITY OF BEACON PROCUREMENT POLICY."

¹² <https://www.greenburghny.com/666/Appendix-I---Leaf-Blowers>

6. *What impact have restrictions in other local areas had on the community? Have the results been positive and/or have there been unanticipated adverse consequences of restrictions/bans?*

- By and large, municipalities reported positive feedback once restrictions were in place. Many also reported compliance, at least in terms of actual tickets or warnings written.
- That said, some communities implementing partial restrictions have seen some negative feedback. There are calls about landscapers not being in compliance, although after a few years that seems to dissipate as landscapers understand the restrictions better.
- Communities closer to Beacon demographically have seen more pushback, particularly as a low-moderate income community with people making their living in the landscaping business. Enforcement is challenging for many communities.

7. *Overall, what are the benefits of restricting/banning gasoline powered leaf blowers? What are the potential detriments?*

- The main benefits are public health benefits. A reduction in gas-powered leaf blowers means that fewer people - equipment operators and community members - will be exposed to dangerous noise levels, airborne particles & pollutants from burning gasoline including highly dangerous ground level ozone.
- Electric leaf blowers create less noise pollution than gas-powered leaf blowers, although they do create noise and dust.
- Both gas and electric leaf blowers have negative impacts on local wildlife, undermine the health of plants, and increase rainwater run-off and erosion.
- The primary barrier to restricting gas-powered leaf blowers is the up-front cost for residents. This can be remedied through buy-back programs, rebate programs, or other financial incentives and a gradual phase-in of any restrictions.
- The other large barrier to restriction is public opinion, including that of commercial landscaping companies. This can be managed through community engagement, including gathering feedback on the creation of any restrictions, providing educational materials to the public, and developing and maintaining communication channels with commercial landscaping businesses.
- We provide a longer, more nuanced narrative below.

CONSERVATION ADVISORY COMMITTEE OPINION

The Conservation Advisory Committee (CAC) has sought comments and recommendations from neighboring communities that have implemented leaf-blower restrictions. After review of this

information, and discussion among CAC members, we encourage the City of Beacon (COB) to take the necessary steps toward planning and implementation of such a restriction in Beacon.

As with any regulation, the goals must be made clear. In this case, the primary goal is one of improved health and well-being of the members of the communities of Beacon. This is true for both the operators of the machines, and for the persons living in proximity to their use.

Reduction of gas powered lawn care equipment use is one of the CLCPA goals. Gas-powered outdoor equipment negatively affects equipment operators, communities and the environment. We advocate for the state of New York to phase out sale of such equipment and recommend pursuing local education and buy-back/rebate programs to mitigate noise, contribution to climate change and a seldom discussed issue of spilled gas/oil during refueling¹³ of existing equipment. Equipment with older 2-stroke engines should be targeted first, as they are extremely polluting, due to burning both gasoline and oil, as well as being loud.¹⁴ While the City of Beacon is preempted to regulate air pollution, we recommend you to learn more about detrimental health impacts for the users of gas-powered yard equipment in EPA National Emissions from Lawn and Garden Equipment report¹⁵. The exhaust is filled with noxious fumes¹⁶, to which the operators are directly exposed.

ENVIRONMENTAL JUSTICE

In considering the commercial use group, it is important to evaluate the environmental justice benefit. Many landscape maintenance companies employ members of communities that as a whole bear a more direct impact from both workplace hazards, and increasingly, the impacts of climate heating.¹⁷ A transition to electric-powered leaf blowers would eliminate the toxic exhaust created by gas-powered leaf blowers, and greatly reduce noise levels endured by the equipment user, thereby creating an environmental justice benefit.

WIDER BENEFITS

Beyond the direct health impacts is a potential co-benefit to global climate heating mitigation efforts. While leaf blowers might seem not an important contributor to global warming, they are in fact extremely polluting. According to a study conducted by Edmunds¹⁸, “the hydrocarbon emissions from a

¹³ <https://psci.princeton.edu/tips/2020/5/11/law-maintenance-and-climate-change>

¹⁴ Steyer, Clara, “Electric or Gas Leaf Blowers...Neither?”

¹⁵ [National Emissions from Lawn and Garden Equipment](#), EPA

¹⁶

¹⁷ The White House, “FACT SHEET: Biden Administration Mobilizes to Protect Workers and Communities from Extreme Heat.”

¹⁸

<https://www.edmunds.com/about/press/leaf-blowers-emissions-dirtier-than-high-performance-pick-up-trucks-says-edmunds-insidelinecom.html>

half-hour of yard work with the two-stroke leaf blower are about the same as a 3,900-mile drive from Texas to Alaska in a Raptor pickup truck.” Collectively, all gas powered landscape equipment is a major contributor to pollution¹⁹ and climate change

While there may be reluctance among city officials to enter into a program which is seen as dictating the purchasing decisions of its residents, it should instead see this as a way to communicate the stated values of the city in regards to its electrification and decarbonization efforts. Restrictions can be presented not as a way to punish those who already own gas-powered leaf blowers, but as a way to communicate to its residents a low-cost way to make a transition to electric-powered machines.

This exposure may result in more rapid adoption of other electric-powered machines. As an illustration, a resident who may be skeptical about electric vehicles, could be persuaded of their benefits by trying smaller equipment first. In this way, these smaller machines can serve as a gateway to larger machines such as battery powered electric vehicles, and electric heat pumps for home heating.

Another benefit is that electric-powered equipment has lower operating costs over time as well,²⁰ which should be emphasized during a public education and engagement phase. This should be welcome news at a time when inflation concerns run high.

BROADER SCOPE FOR RESTRICTIONS

We have referred to gas-powered leaf blowers above. It is important to consider expanding restrictions to include all gas-powered lawn equipment where leaf blowers are seen as a first phase, and machines such as lawnmowers a later phase. If lawnmowers were included as part of future restrictions, it may be necessary to distinguish between push mowers and ride on lawnmowers and the users of each, with the former being used more by consumer users, and the latter by commercial users. In many ways, lawnmowers are a lighter lift since there seem to be more models available, and the costs are probably lower as a result.

CAC would further recommend that all commercial entity workers using gas-powered leaf blowers must be provided with and must wear safety equipment for hearing and breathing. Such regulations are on the books in several communities, including Maplewood NJ.

We also recommend exploring whether leaf blower use on hard surfaces (roads, driveways, etc) can be restricted as this is a major cause of dust pollution.

¹⁹ [National Emissions from Lawn and Garden Equipment](#), EPA

²⁰ [“Will a Battery-Powered Mower Save You Money Over a Gas Mower?”](#)

COMMUNITY ENGAGEMENT

Restrictions would not be implemented overnight. The CAC recommends a carefully planned community education and engagement phase, which includes a timeline for community feedback, modifications to any restrictions, as needed, and the restriction implementation itself.

Community engagement sessions would need to be held to both educate impacted users about the health and well-being benefits of restrictions, and to serve as a forum for hearing concerns and feedback from these users. The positive aspects of restrictions should always be emphasized over what may be seen by some as negative, or overreaching. Electrification has been used by some as a politically divisive issue.

The COB should investigate incentives including rebates or buy-back programs for gas-powered equipment. Funding sources would need to be identified and secured, and should be part of the overall planning of the ban. Examples of rebate programs include the [City of Yonkers](#), Town of Bedford, Village of Pleasantville, and Town of Lewisboro.

The electric battery-powered product offerings, and capacity of the batteries themselves, are increasing every year.²¹ An effective educational campaign would communicate these offerings to those impacted by new restrictions. As a way of connecting community members with affordable electric battery-powered options, retailers and/or manufacturers could be invited to present and offer trials on equipment. The financial impacts of the regulations on lower-income communities need to be considered. If buy-back, rebate, or discounting efforts are embraced, a sliding-scale structure based on annual household income could be one way to address this concern.

The COB would help-to jump start the engagement and education process by leading the way in a transition away from fossil-fuel powered landscape equipment. Ideally, education efforts would include information about all landscape care equipment. By doing so, the COB would not only make its intentions regarding the restrictions clear, but it would serve as a case study for how residents and commercial users can make the transition, and a showcase for the type of equipment currently available.

Existing commercial users of electric landscaping equipment offer a good resource for feedback on equipment, and also serve as useful case studies for other commercial users. These users would need to be engaged to fully utilize this resource. Perhaps a user registry for companies and/or municipalities

²¹ Burrows, “Researchers Design Long-Lasting, Solid-State Lithium Battery.”

who use only battery electric leaf blowers and other equipment could be created to facilitate the implementation of the restrictions among these users.

CONCLUSION

Recently, the state of California passed legislation that bans the sale of gas-powered vehicles by 2035.²² The stated goal is a reduction of carbon-dioxide emissions, but viewed more generally, the state is acting to protect the well-being of its residents by implementing a ban on machines powered by health and climate-harming fossil fuels.

Creating restrictions on the use of gas-powered leaf blowers is directly analogous, in that it serves to protect the health and well-being of Beacon's residents. Not only does this service align with the responsibilities of the COB, it aligns with its stated goals for electrification and decarbonization.

The CAC advises the COB to take the necessary steps to implement restrictions on gas leaf blowers, and other gas-powered outdoor equipment over time. We look forward to actively assisting in this process.

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Mitigating the Health, Environmental, and Quality of Life Impacts of Gas-Powered Leaf Blowers
Bronxville Green Committee, Bronxville, NY June 14, 2021
https://www.villageofbronxville.com/sites/g/files/vyhlif336/f/pages/cody_bronxville_leaf_blower_report_june14_2021_2_2.pdf

Leaf Blowers, Town of Greenburgh CAC presentation at Town Board Public Hearing
<https://www.greenburghny.com/666/Appendix-I---Leaf-Blowers>

We compared the first 4 electric and gas leaf blowers HomeDepot website showed, homeowner electric leaf blower models still tend to be quieter than gas.

NOISE RATING (dB):

75.4

NOISE RATING (dB):

61