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

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

City Council Workshop Agenda
September 30, 2019
7:00 PM

Workshop Agenda Items:

1. Asset Management
2. Local Law Regarding Site Plan Enforcement
3. Noise Ordinance Local Law
4. 23-28 Creek Drive
5. New Windsor Treatment Discussion
6. Naming Policy
7. Linkage/CMS Zones Discussion
8. A Resolution Authorizing the Submission of the Fiscal Year 2020 Dutchess County Community Development Block Grant Program Application for Construction of Walkway in Memorial Park Along Wilkes Street
9. Personnel

Upcoming Agenda Items and Meetings:

1. Budget Presentation October 7, 2019

Upcoming Public Hearings

1. Public Hearing for a Special Use Permit Application for 305 Main Street October 7, 2019
2. Public Hearing Resumption Regarding 248 Tioronda Avenue October 7, 2019

Executive Session:

1. Real Property

City of Beacon Workshop Agenda
9/30/2019

Title:

Asset Management

Subject:

Background:

ATTACHMENTS:

Description	Type
Asset Management Presentation	Presentation
Asset Tool User Manual	Backup Material
Asset Management and Capital Planning Guide	Backup Material

A1

Asset Management and Capital Planning

CITY OF BEACON

Presentation to the City Council

September 30, 2019

By

Mary Beth Bianconi and Tracey Ledder, Delaware Engineering, D.P.C.

Andy Stewart, Hudson Valley Pattern for Progress

Slide 1

A1 logos for DE, Pattern, image for Beacon City Hall

Andy, 9/19/2019

Collaboration between
Delaware Engineering, D.P.C
and Hudson Valley Pattern for Progress

AND A CORE GROUP OF CITY STAFF:

- Mayor - Randy Casale
- City Administrator - Anthony Ruggiero
- Highway Department - Mike Manzi
- Sewer and Water Department - Ed Balicki
- City Engineer - John Russo

CITY OF BEACON
cityofbeacon.org

APPROACH TO ASSET MANAGEMENT

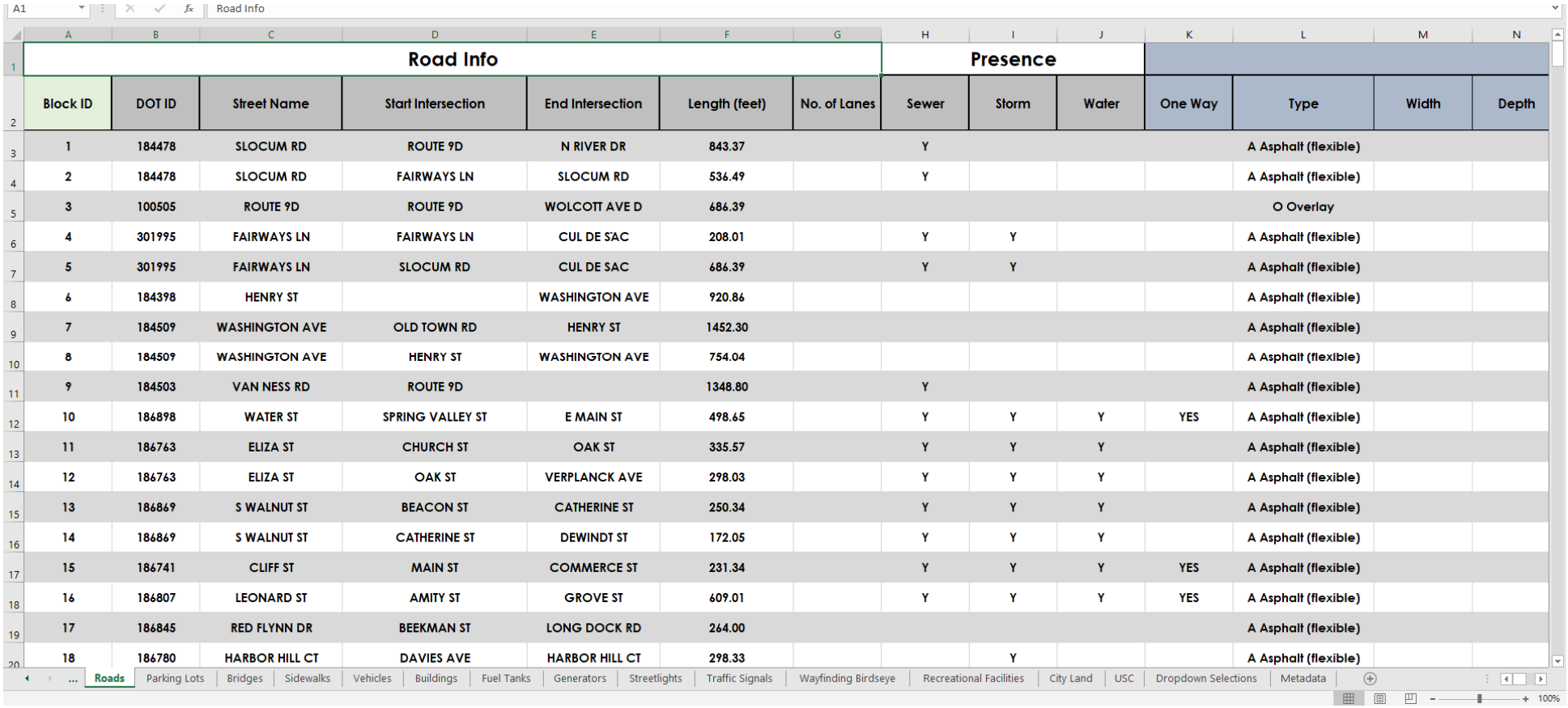
- Business Case for Asset Management
  - Dynamic Asset Inventory
  - Plan Strategic Infrastructure Investments
  - Reduce Costly Emergency Repairs
- Deliverables
  - Excel Inventory "Tool"
  - User Manual
  - Guide for Asset Management and Capital Planning
- Supports
  - Management Deliberations
  - Prioritization and Budgeting

ASSET INVENTORY

- 22 asset types included
- Over 80,000 data points from:
  - GIS of roads, pipes, etc.
  - Insurance, tax and other records
  - Staff knowledge
  - City plans and reports
  - Field assessment and analysis

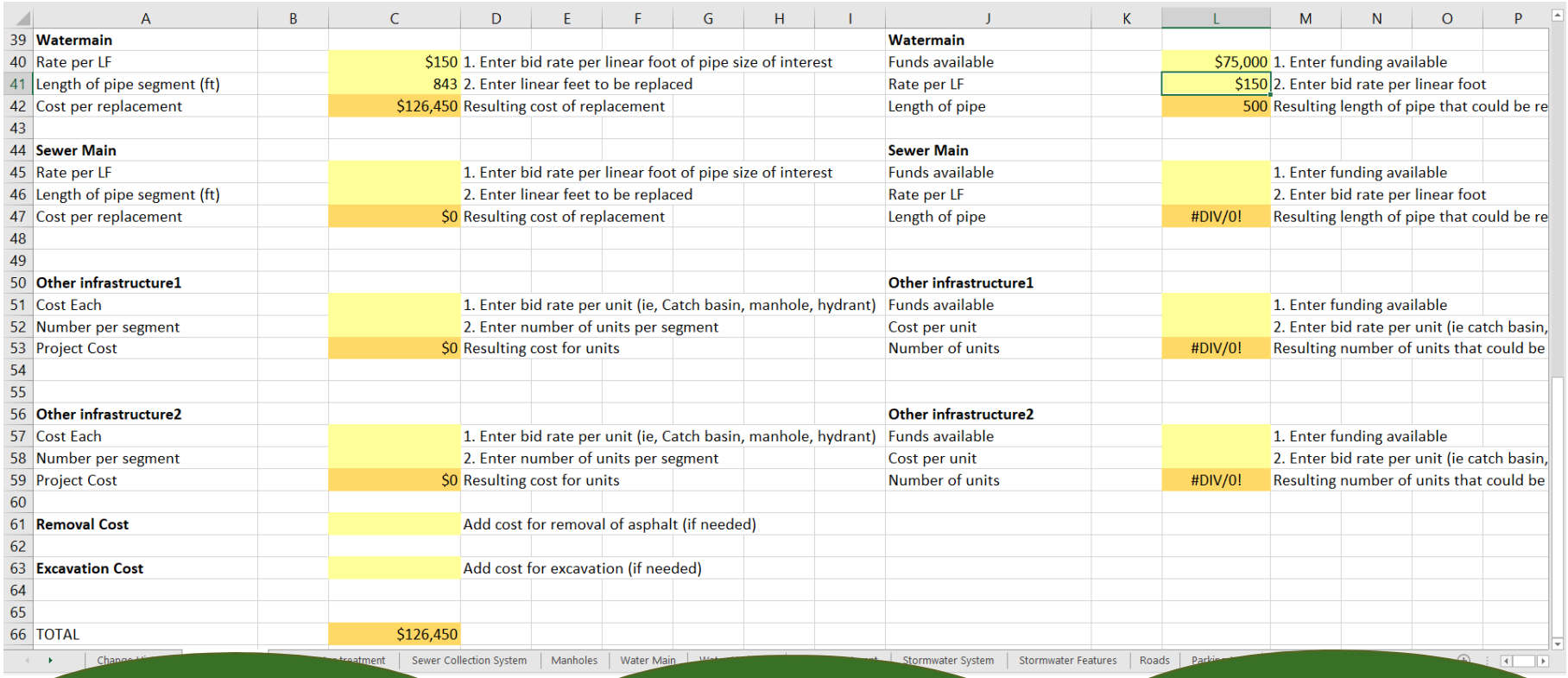
ASSET	DESCRIPTION
Wastewater treatment system	$28.7 million assessed value
Wastewater collection system	Approx. 47 miles of pipe
Manholes	1282
Water treatment system	$16 million assessed value
Water distribution system	Approx. 21 miles of pipe
Fire hydrants	435
Stormwater structures	Approx. 2070 catch basins
Roads	50.6 miles
Parking lots	705 spaces
Bridges	6
Sidewalks	Approx. 60.5 miles
Vehicles	109
Generators	10
Streetlights	1450
Traffic signals	12
Wayfinding signs	5
Buildings	$27.8 million assessed value
Recreational Facilities	7 sites, assessed value $4.55 million
City Lands	76 parcels listed, $88.8 million assessed value
University Settlement Camp	44 structures with pool

INVENTORY SUPPORTS BUDGETING AND PLANNING



Road Info							Presence						
Block ID	DOT ID	Street Name	Start Intersection	End Intersection	Length (feet)	No. of Lanes	Sewer	Storm	Water	One Way	Type	Width	Depth
1	184478	SLOCUM RD	ROUTE 9D	N RIVER DR	843.37		Y				A Asphalt (flexible)		
2	184478	SLOCUM RD	FAIRWAYS LN	SLOCUM RD	536.49		Y				A Asphalt (flexible)		
3	100505	ROUTE 9D	ROUTE 9D	WOLCOTT AVE D	686.39						O Overlay		
4	301995	FAIRWAYS LN	FAIRWAYS LN	CUL DE SAC	208.01		Y	Y			A Asphalt (flexible)		
5	301995	FAIRWAYS LN	SLOCUM RD	CUL DE SAC	686.39		Y	Y			A Asphalt (flexible)		
6	184398	HENRY ST		WASHINGTON AVE	920.86						A Asphalt (flexible)		
7	184509	WASHINGTON AVE	OLD TOWN RD	HENRY ST	1452.30						A Asphalt (flexible)		
8	184509	WASHINGTON AVE	HENRY ST	WASHINGTON AVE	754.04						A Asphalt (flexible)		
9	184503	VAN NESS RD	ROUTE 9D		1348.80		Y				A Asphalt (flexible)		
10	186898	WATER ST	SPRING VALLEY ST	E MAIN ST	498.65		Y	Y	Y	YES	A Asphalt (flexible)		
11	186763	ELIZA ST	CHURCH ST	OAK ST	335.57		Y	Y	Y		A Asphalt (flexible)		
12	186763	ELIZA ST	OAK ST	VERPLANCK AVE	298.03		Y	Y	Y		A Asphalt (flexible)		
13	186869	S WALNUT ST	BEACON ST	CATHERINE ST	250.34		Y	Y	Y		A Asphalt (flexible)		
14	186869	S WALNUT ST	CATHERINE ST	DEWINDT ST	172.05		Y	Y	Y		A Asphalt (flexible)		
15	186741	CLIFF ST	MAIN ST	COMMERCE ST	231.34		Y	Y	Y	YES	A Asphalt (flexible)		
16	186807	LEONARD ST	AMITY ST	GROVE ST	609.01		Y	Y	Y	YES	A Asphalt (flexible)		
17	186845	RED FLYNN DR	BEEKMAN ST	LONG DOCK RD	264.00						A Asphalt (flexible)		
18	186780	HARBOR HILL CT	DAVIES AVE	HARBOR HILL CT	298.33			Y			A Asphalt (flexible)		

BOTTOM UP AND TOP DOWN COST ANALYSIS COMPARISONS



	A	C	D	J	L	M
39	**Watermain**			**Watermain**		
40	Rate per LF	$150	1. Enter bid rate per linear foot of pipe size of interest	Funds available	$75,000	1. Enter funding available
41	Length of pipe segment (ft)	843	2. Enter linear feet to be replaced	Rate per LF	$150	2. Enter bid rate per linear foot
42	Cost per replacement	$126,450	Resulting cost of replacement	Length of pipe	500	Resulting length of pipe that could be re
43						
44	**Sewer Main**			**Sewer Main**		
45	Rate per LF		1. Enter bid rate per linear foot of pipe size of interest	Funds available		1. Enter funding available
46	Length of pipe segment (ft)		2. Enter linear feet to be replaced	Rate per LF		2. Enter bid rate per linear foot
47	Cost per replacement	$0	Resulting cost of replacement	Length of pipe	#DIV/0!	Resulting length of pipe that could be re
48						
49						
50	**Other infrastructure1**			**Other infrastructure1**		
51	Cost Each		1. Enter bid rate per unit (ie, Catch basin, manhole, hydrant)	Funds available		1. Enter funding available
52	Number per segment		2. Enter number of units per segment	Cost per unit		2. Enter bid rate per unit (ie catch basin,
53	Project Cost	$0	Resulting cost for units	Number of units	#DIV/0!	Resulting number of units that could be
54						
55						
56	**Other infrastructure2**			**Other infrastructure2**		
57	Cost Each		1. Enter bid rate per unit (ie, Catch basin, manhole, hydrant)	Funds available		1. Enter funding available
58	Number per segment		2. Enter number of units per segment	Cost per unit		2. Enter bid rate per unit (ie catch basin,
59	Project Cost	$0	Resulting cost for units	Number of units	#DIV/0!	Resulting number of units that could be
60						
61	**Removal Cost**		Add cost for removal of asphalt (if needed)			
62						
63	**Excavation Cost**		Add cost for excavation (if needed)			
64						
65						
66	TOTAL	$126,450				

Sewer Collection System | Manholes | Water Main | Stormwater System | Stormwater Features | Roads

Bottom Up Cost Analysis:
- Project-Based Math
- Objective Budgeting

Compare for Informed Decisions Regarding Budgets And Priorities

Top Down Cost Analysis:
- Budget-Based Math
- Subjective Budgeting

USER MANUAL

Guide to:

- Sort and filter data
- Update data
- Conduct cost analysis
- Edit & maintain data
- Log change history
- Document control
  - Quality Control

Water lines, stormwater, sewer lines, water treatment facility, wastewater treatment facility	Roads	Vehicles
• Data update after replacement projects are completed	• Data update after pavement or reconstruction projects, especially important to update water, sewer and stormwater system work done at the same time in those worksheets	• Update when vehicle is added to or removed from the fleet
Streetlights, traffic lights, way-finding signs	**Buildings, City Land, University Settlement**	**Bridges, Stormwater MS4 inspections**
• Update when replaced	• Update when projects are completed or property ownership changes	• Update asset when inspected under regulatory programs

FUNDING FOR CAPITAL PROJECTS AND EQUIPMENT

	Asset Management Activity		
Methods of Finance to Consider	**Repair & Maintenance**	**Replacement & Upgrade**	**Expansion & New**
Pay as You Go	X	X	
Bonded Debt/Loan		X	X
Lease/Purchase			X
Outright Grant	X	X	X
Fee for Services	X	X	X
Public Private Partnership	X	X	X
Land Developer Investment		X	X

CITY OF BEACON:
A CULTURE OF ASSET MANAGEMENT

- Consider the impact of economic, demographic and housing trends on the tax base and infrastructure
- Align asset management, capital planning, and vision for the City
- Technological innovations aids integration of work order software with asset management, GIS, tablets and finance
- Adopt an asset management policy to institutionalize asset management as an organizational priority, embedded in the City's culture, and the subject of continuous attention.

thank you!

City of Beacon

Asset Management Database User Manual

September 2019

Delaware Engineering, D.P.C
28 Madison Avenue Extension
Albany, NY 12203

Hudson Valley Pattern for Progress
3 Washington Center
Newburgh, New York 12550

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1.0 PURPOSE

The City of Beacon did not previously have an inventory of its assets. Prior to this City of Beacon Asset Management and Capital Planning Project, asset information was dispersed across many different documents, departments, data sets and maps. An asset inventory is the essential foundation of management and planning, especially with regard to assets of high value and criticality such as sewer and water infrastructure. The creation of an inventory is a major step toward continuity of institutional knowledge as older, knowledgeable workers may retire, taking their knowledge with them, and leaving the City vulnerable to making decisions with incomplete information. The maintenance of an inventory is essential to the City's on-going ability to manage its assets. This Asset Management and Capital Planning Tool will assist the City in maintaining infrastructure and public assets at the desired level of service at the lowest life cycle cost. The products of this work are an Excel database tool, a User Manual and an Asset Management and Capital Planning Guide.

This User Manual describes the use and maintenance of the database Tool that includes an inventory of the City's major assets identifying current asset conditions and levels of service using Excel software.

The city will be able to use the Tool to prioritize investments in major repairs or replacements, including estimating costs and lifecycles, and to align similar or related projects for efficient implementation. In addition, the tool will be used to evaluate financing alternatives to allow for sound planning and implementation. The Tool enables the City to cross check asset inventories with insurance lists to ensure all critical assets are covered, and that assets that have been sold or demolished or otherwise are no longer part of the asset inventory are no longer covered under insurance.

As a stand-alone capital asset planning and management decision support tool, the database is not designed for tracking daily work and repair activities. More specifically the Tool is intended to be used to answer questions about assets. Different assets are listed on separate worksheets which allows the use to search for, sort and filter different aspects of those assets. Lists generated in answer to a specific question can also be mapped in a geographical information system (GIS) in most cases.

2.0 INTRODUCTION

The data in the database was compiled primarily from available reports and information supplied by the City of Beacon; including existing Geographical Information System (GIS) data, insurance information, facility plans and information provided by City staff. This information is organized in the database according to type, with one asset type to a worksheet.

The database data can also be tied to, and worked with, in a Geographical Information System. Lists of specific assets of interest can be generated within the database Tool and then visualized spatially in GIS. The database Tool is intended to be actively managed and updated by the City. It contains analysis features that allow the City to sort, view, rank, correlate and otherwise

analyze diverse asset information, and update this information as needed. Updates to the information on the assets within the tool are necessary to maintaining the tool's usefulness. The metadata file for the Tool is included in the Appendices of this User Manual and includes information helpful to understanding the information included in the database. As the City adds information to the database Tool, the metadata file should also be updated to reflect origin of data added.

The database Tool was designed to facilitate the City adding data, using drop-down menus and other tools, in ways that ensure the new data is added in a standardized format that permits filtering, ranking and sorting methods to function. The database Tool includes all data provided by the City during the project timeframe, and provides a structure for filling in data that the City develops as need arises.

This Tool is created in Microsoft Excel. Excel includes a "Help" tab in the main menu as well on-line assistance. This user manual is intended to demonstrate how to manage, update and utilize the Tool for answering City questions on assets and asset management at the level of a basic understanding of Excel.

3.0 SCOPE

Asset management is a process municipalities can use to make sure that planned maintenance can be conducted and capital assets can be repaired, replaced or upgraded on time and that funding is in place when needed. Asset management is the practice of managing infrastructure capital assets to minimize the total cost of owning and operating these assets while delivering the desired service levels. Information about assets is critical to this process. The database Tool is intended to assist in maintaining information about the assets of the City.

The Major Assets that populate the database tool include:

*Wastewater Treatment
*Sewer Collection System
*Manholes
*Water Treatment
*Water Lines
*Water Hydrants
*Stormwater Pipes
*Stormwater Features
*Roads
*Parking Lots
*Bridges
*Sidewalks
*Vehicles
*Fuel tanks
*Generators
*Buildings

*Recreational Facilities
*City Land
*Streetlights
*Traffic Signals
*Wayfinding and Welcome Signage
*University Settlement Camp

4.0 DEFINITIONS

These terms are used in this manner in this Manual;

Document Control – Management of document flow and storage in an organization through various functions and processes. These include maintaining files and using proper distribution and revision procedures to maintain quality.

Data Format – Excel lets you specify the way data is displayed in a cell, as a number, text or date, for example.

Drop-down menu – A list of valid entries that can be set for a data range; will make data entry easier and, by limiting entries to certain values, standardize spelling and other factors to ensure data can be filtered, sorted or otherwise analyzed consistently.

Revision History – Part of Document Control, a record of changes made to a document, by whom and for what purpose.

Workbook – in Excel, a single file consisting of at least one up to a large number of worksheets

Worksheet – in Excel, a single spreadsheet composed of rows and columns, each worksheet is identified as a tab across the bottom of the workbook.

5.0 RESPONSIBILITIES

The City of Beacon is responsible for the maintenance of this tool, both in document control and data updates. It is the decision of the City to whom to assign the responsibility of data management and document control (see Section 8.0 for recommendations). That individual may assign specific update tasks as needed, while always maintaining a Master version of the database for recovery/to prevent accidental deletions or corruption of the Tool/database. A copy of the database, with a department specific name, may be given to various City departments, as needed, for their use. Changing the name of each copy that is created/distributed will help avoid confusion with the Master.

The database has been populated with as much data on as many priority assets as possible during the development process. It is the responsibility of the City to add data to those assets that are not complete as the City moves forward.

6.0 Specific Procedures

This Tool is created in Microsoft Excel, using tables. Microsoft maintains Excel "help" sites on-line and there is a "Help" tab in the main menu in Excel. Excel works with spreadsheets organized into columns and rows. In this database, there are many individual worksheets, identified by tabs along the bottom of the workbook open in the Excel window. Each tab has the title of the asset type on that worksheet, they are listed across the bottom of the Excel window. Click on a particular tab to view the worksheet with the data for that asset. Each worksheet row has information about a particular component of that tab's asset type. The available information is kept in columns, with titles across the top.

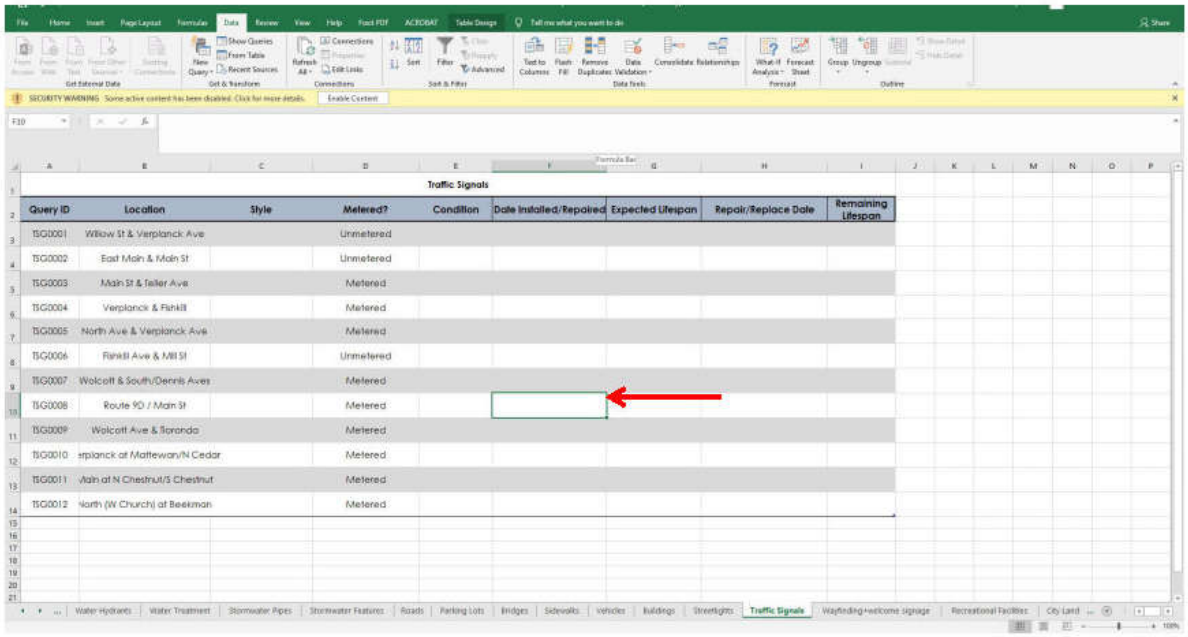
The Database Tool can be "locked" to prevent changes, and "unlocked" for use when needed. When the database is protected, some functionality is unavailable. For example, if a worksheet is protected, and the database Tool "locked" the filter function will not be available.

6.1 Adding Data

On many worksheets, data is lacking for a particular asset. For example, for Traffic Signals there is no entry for "date installed/repaired" or "Condition". As the City continues regular work on traffic signals, the information can be populated as appropriate.

To enter data, select the Tab (what asset type) at the bottom of the Excel database to open the correct worksheet. Find the asset row, identify the column of information to add, select the cell and type the information in (Figure 6.1). Often there will be a drop-down menu available so that standardized entries can be made (Figure 6.2).

FIGURE 6.1



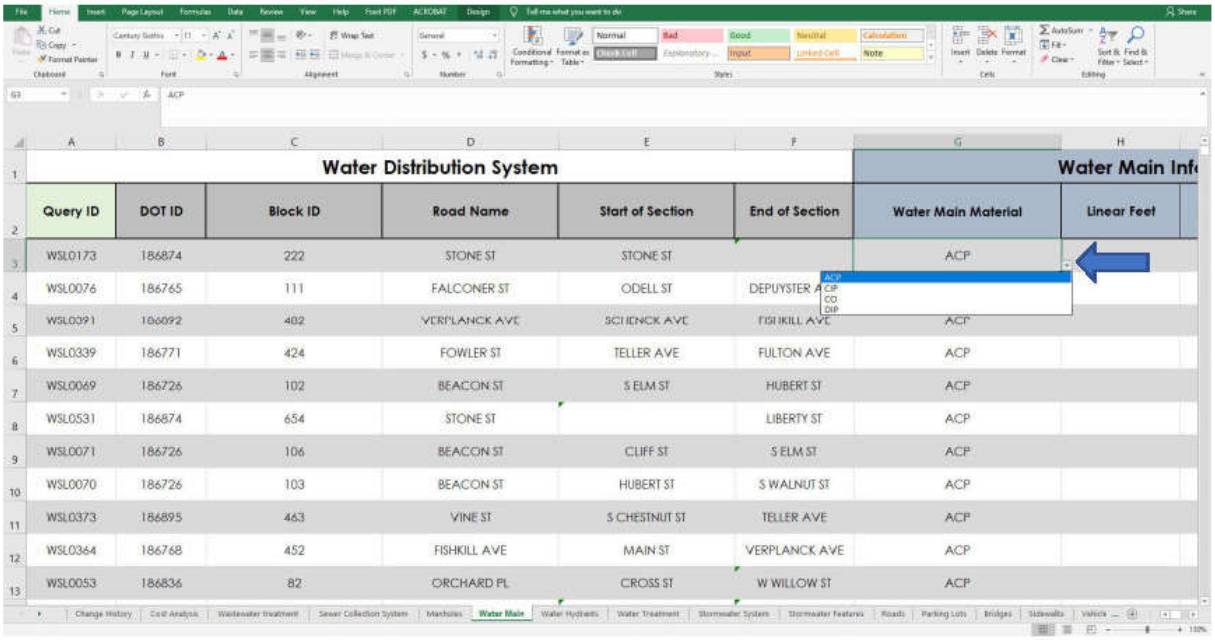
NOTE: to add install/repair date data for the Route 90/Main Street light, find the correct cell, select it, type the date, press Enter.

6.2 Writing over existing data

Often the existing information will need to be changed for a particular asset, such as the "installed" date on the Water Line worksheet. If a particular water line is replaced, the date can be changed simply by writing over the existing date in a particular cell. In some cases, such as the water line material, there are specific abbreviations for each type that can be chosen from a drop-down menu. This standardization of naming materials allows the sorting and filtering functions to create more useful lists. At the appropriate cell, chose the drop-down arrow to the right to reveal the list of materials and chose the correct updated material type (Figure 6.2).

If a section of waterline, for example, is replaced, the date, material and length of new pipe may all need to be updated.

FIGURE 6.2



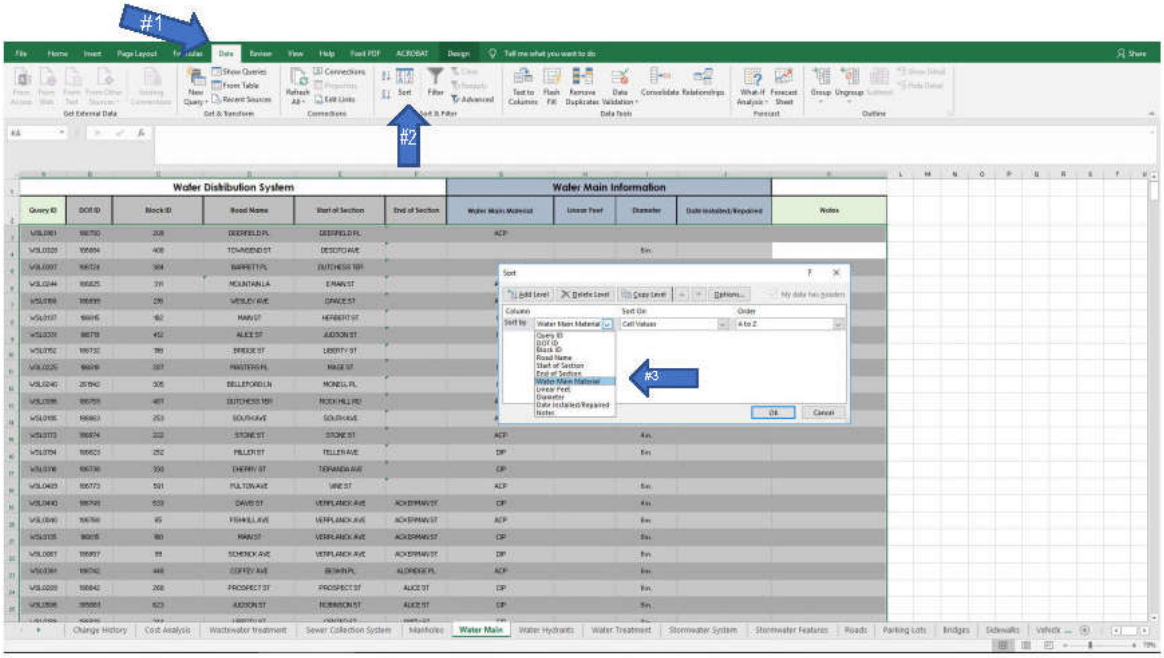
NOTE: Cells with drop-down menus will have a "down arrow" when the cell is selected. Click the down arrow and then scroll through the drop-down list to select the menu item to place in the cell.

6.3 Sorting Data

Each of the worksheets can be sorted. For example, one might want to have a list of water lines by pipe material for prioritization of replacement of a particular material. From the main menu across the top of the page choose the "Data" menu. Within the Data menu, choose "Sort". A new window will open. In that Sort window, select the column you want to sort by using the drop-down menu (small arrow down). Then choose what to Sort On, using the next drop-down menu and then select the order for the list (Figure 6.3a). Click "OK", and the list will be re-arranged as you selected (Figure 6.3b). If Water Main Material is sorted by AtoZ, all pipes of ACP will be listed first, then CIP, then DIP, etc. With this sorted list, you can sort again within each material

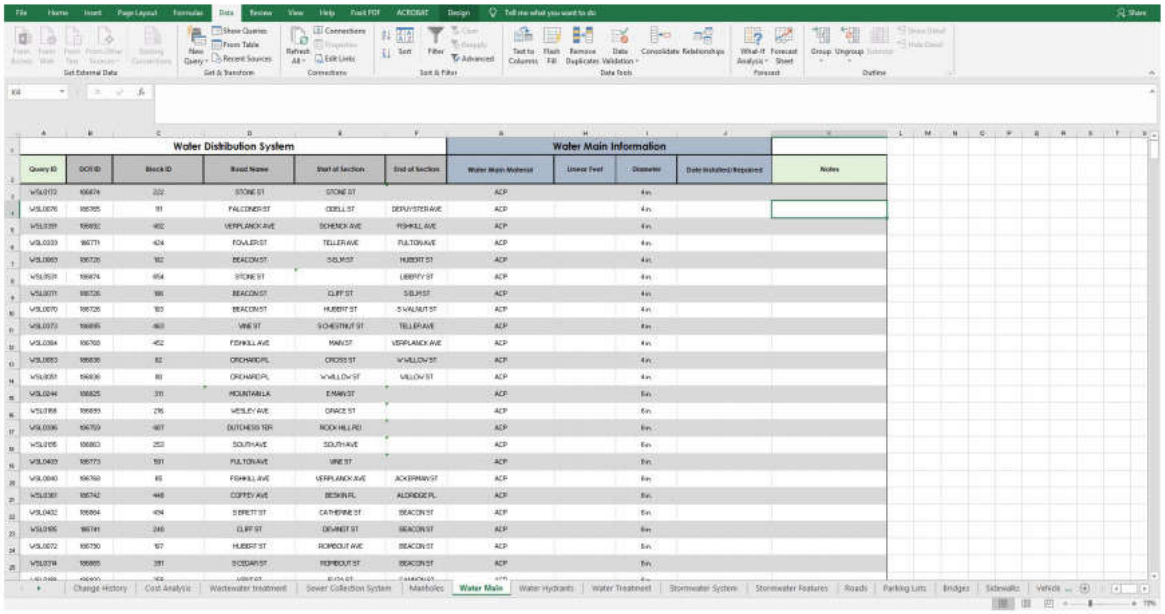
type. Open the Sort window again, and select “Add Level” and again choose which column to sort, diameter for example. The list will then be ordered by pipe material, and within each pipe material type the list will be ordered by diameter. This new list can be printed, or saved as a new worksheet in Excel outside of the database for use elsewhere.

FIGURE 6.3a



NOTE: 1 – Select Data Menu, 2 – Select Sort, 3 – Select Water Main Material to Sort By

FIGURE 6.3b



NOTE: Result is Water Main sorted by Material and then Diameter

To save this new sorted list for use elsewhere (copy to Word as a table, copy to a new Excel spreadsheet for other work), select the columns and rows you want with the cursor, from the Home menu choose “copy” (on the left side of the menu bar) or simultaneously click Ctrl+C. Go to a new Excel sheet or Word document and select “Paste” from the Home menu, or click Ctrl+V. Your sorted list will be pasted.

The worksheet can be returned to its original order by again clicking Sort, selecting the second sorting level and clicking “Delete Level” and selecting to again sort by Query ID in the first level. Or simply do not save changes to the database after this sorting is completed before closing the database.

6.4 Filtering Data

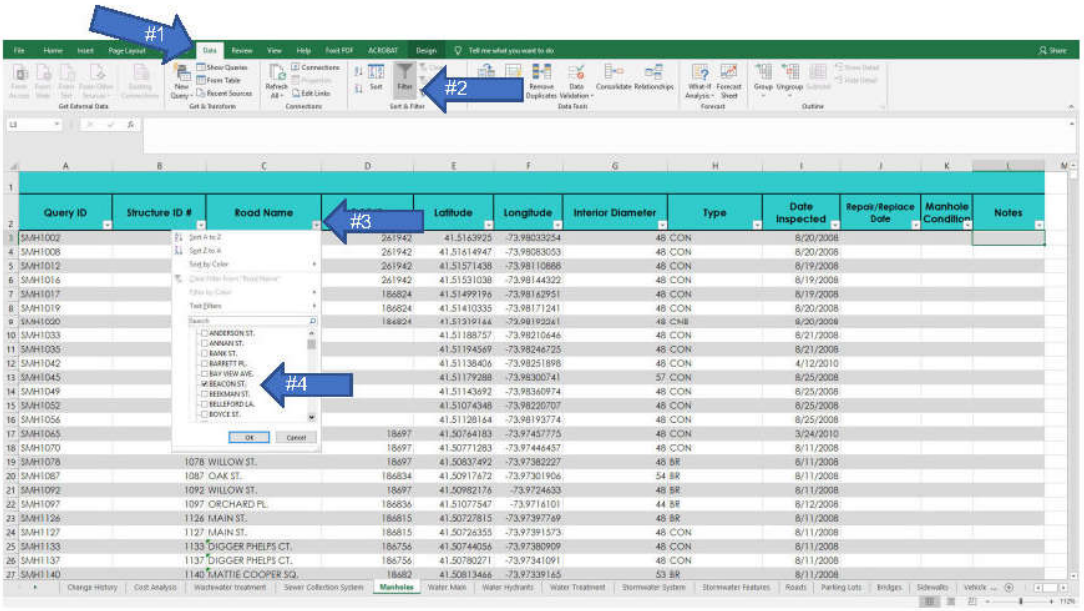
The Data Menu also includes a Filter symbol (a funnel shape) that allows one to see only the selected filtered items. Filtering data is possible for most asset types and characteristics. Once the City completes Condition data for major assets, the City will be able to filter by Condition to see the assets most in need of investment. The City owns over 100 vehicles, filtering the vehicle inventory by year, department, vehicle type or cost of replacement enables informed discussions about the overall vehicle fleet and assists the City in planning ahead for purchases. Also, using either the NYS DOT ID (a code assigned by Department of Transportation to street segments), BLOCK ID, or road names, a user can filter lists of assets such as water and sewer mains, to see which are located on that road segment.

For example, suppose work was going to be done on Beacon Street and one wanted a list of those manholes on Beacon Street. Go to the Manholes worksheet by selecting its tab at the bottom of the workbook page. From the main menu at the top of the page, choose “Data” to open the Data menu. Select the Filter symbol, the background behind the symbol will change color when Filter is selected. To de-select it, simply click it again.

With the Filter symbol selected, each column will have a down arrow on its right side. Click that arrow to see the drop-down menu of filterable selections. To choose to see manholes on Beacon Street, click the drop-down menu on the Road column. The default is “Select All”. Click the check box on “Select All” to select none. Then click the check box next to Beacon St in the drop-down menu (Figure 6.4a). Click “OK”. Now the only manholes visible will be those on Beacon St. (Figure 6.4b).

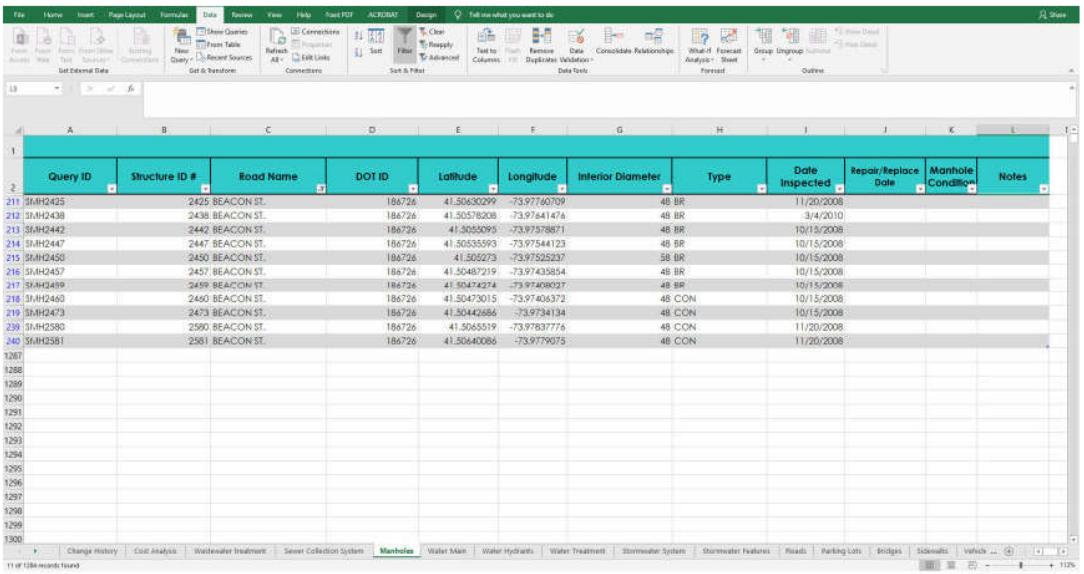
To save this new filtered list for use elsewhere (copy to Word as a table, copy to a new Excel spreadsheet for other work), select the columns and rows you want, from the Home menu choose “copy” (on the left side of the menu bar) or simultaneously click Ctrl+C. Go to a new Excel sheet or Word document and select “Paste” from the Home menu, or click Ctrl+V. Your filtered list will be pasted. Then save that new file with a new name, as you need.

FIGURE 6.4a



NOTE: 1 – Select Data Menu, 2 – Select Filter, 3 – at the Roads filter dropdown, uncheck “Select All” and 4 -check “Beacon St”

FIGURE 6.4b



NOTE: The result is a list of manholes on Beacon Street

However, if you are working with Excel 2010 or a previous version, the Copy and Paste operation may copy all cells in the filtered range you selected, visible (filtered) and invisible (filtered out). In this case, select the columns and rows you want to copy, i.e. your filtered list. On the Home menu, choose Find+Select (far right), go to “Go To Special” then select the circle

for Visible Cells Only, and Click OK. Use Ctrl+C or “Copy” from the Home menu. Then go to the Word document or new Excel spreadsheet and select Paste or use Ctrl+V. Only the filtered table elements will be pasted.

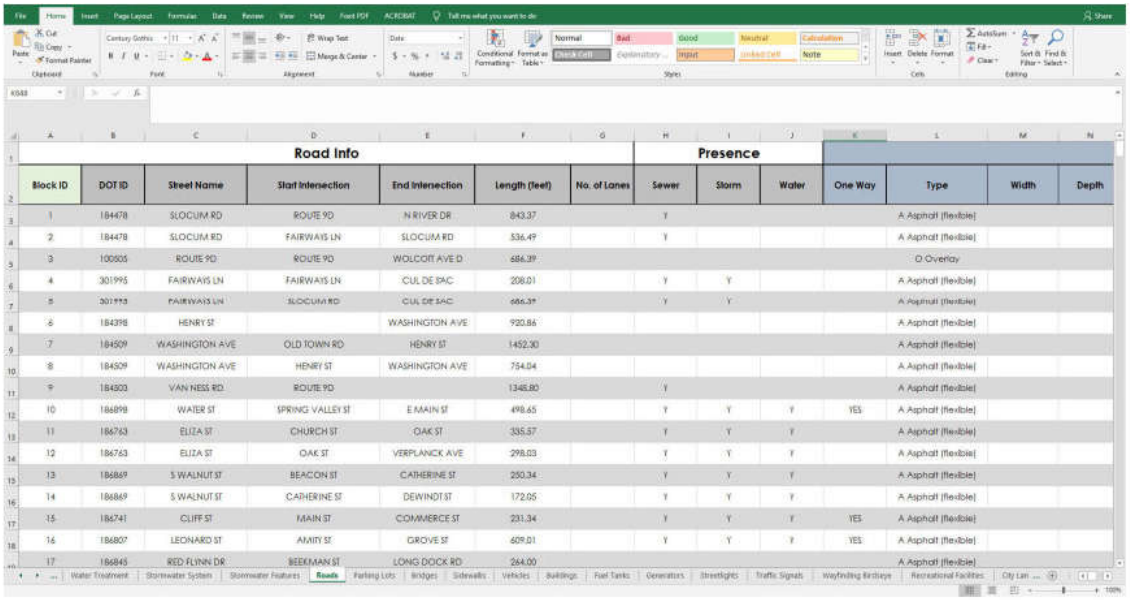
The worksheet can be returned to its original order by turning off the Filter (click it again). Or clicking on Select All in the Filter for that column. Or simply do not save changes to the database after this filtering is completed, and then close the database without saving.

6.5 Combining Asset Information

Each worksheet can be sorted or filtered as needed to display the information wanted. If similar information is needed on more than one asset type, that data can be gathered from separate worksheets and/or mapped in the City’s Geographical Information System (GIS).

One main question the Tool can be used to answer is “what assets are located in this location”. For example, a particular stretch of road is to be reconstructed, and there might be water or sewer or stormwater pipes under that stretch that could be replaced at the same time. The Roads worksheet includes a column for the presence of water, sewer or stormwater for each road segment (Figure 6.5). More information on those pipes is available by filtering the Water Lines, Stormwater and Sewer Collection worksheets for the particular block of road and producing a list of pipe type, size and age (where that information is available). The lists that are produced can also be shared with other City staff to get other information on these assets, such as how often do water line breaks occur in that location on these pipes.

Figure 6.5



Road Info							Presence						
Block ID	DOT ID	Street Name	Start Intersection	End Intersection	Length (feet)	No. of Lanes	Sewer	Storm	Water	One Way	Type	Width	Depth
1	184478	SLOCUM RD	ROUTE 9D	N RIVER DR	843.37		Y				A Asphalt (flexible)		
2	184478	SLOCUM RD	FAIRWAYS LN	SLOCUM RD	536.49		Y				A Asphalt (flexible)		
3	100505	ROUTE 9D	ROUTE 9D	WOLCOTT AVE D	686.39						O Overlay		
4	301995	FAIRWAYS LN	FAIRWAYS LN	CUL DE SAC	208.01		Y	Y			A Asphalt (flexible)		
5	301993	FAIRWAYS LN	SLOCUM RD	CUL DE SAC	686.39		Y	Y			A Asphalt (flexible)		
6	184398	HENRY ST		WASHINGTON AVE	920.86						A Asphalt (flexible)		
7	184509	WASHINGTON AVE	OLD TOWN RD	HENRY ST	1452.30						A Asphalt (flexible)		
8	184509	WASHINGTON AVE	HENRY ST	WASHINGTON AVE	754.04						A Asphalt (flexible)		
9	184303	VAN NESS RD	ROUTE 9D		1348.80		Y				A Asphalt (flexible)		
10	186898	WATER ST	SPRING VALLEY ST	E MAIN ST	498.65		Y	Y	Y	YES	A Asphalt (flexible)		
11	186763	ELIZA ST	CHURCH ST	OAK ST	335.57		Y	Y	Y		A Asphalt (flexible)		
12	186763	ELIZA ST	OAK ST	VERPLANCK AVE	298.03		Y	Y	Y		A Asphalt (flexible)		
13	186869	S WALNUT ST	BEACON ST	CATHERINE ST	250.34		Y	Y	Y		A Asphalt (flexible)		
14	186869	S WALNUT ST	CATHERINE ST	DEWINDT ST	172.05		Y	Y	Y		A Asphalt (flexible)		
15	186741	CLIFF ST	MAIN ST	COMMERCE ST	231.34		Y	Y	Y	YES	A Asphalt (flexible)		
16	186807	LEONARD ST	AMITY ST	GROVE ST	609.01		Y	Y	Y	YES	A Asphalt (flexible)		
17	186845	RED FLYNN DR	BEEKMAN ST	LONG DOCK RD	264.00						A Asphalt (flexible)		

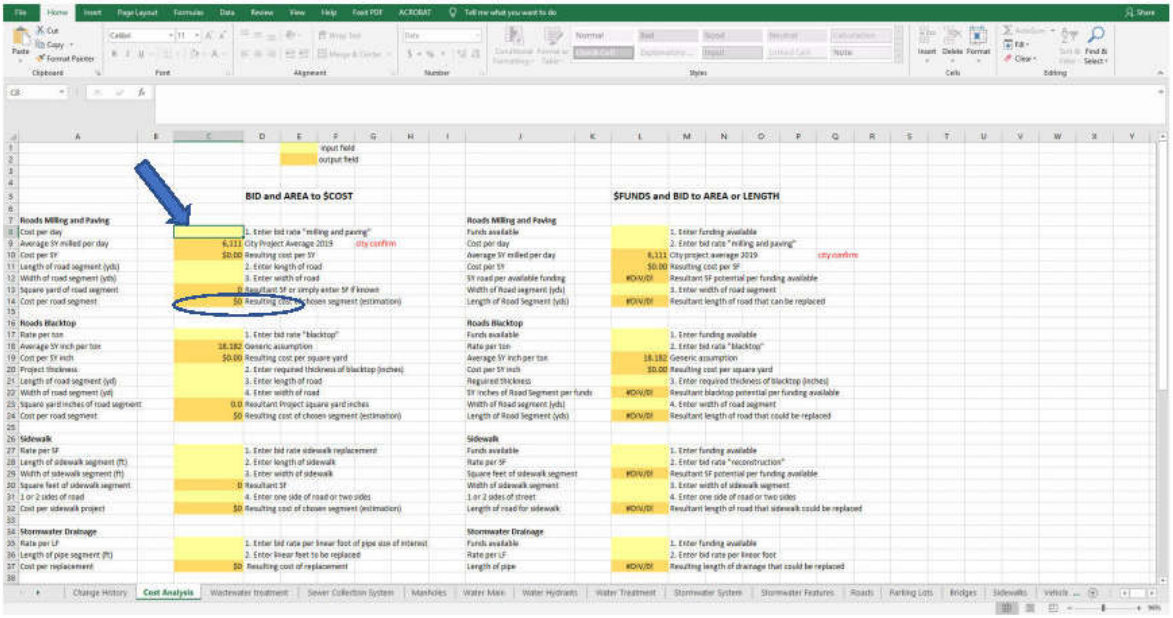
6.6 Cost Analysis Worksheet

The Cost Analysis worksheet (Figure 6.6) includes equations that can be used to estimate project costs, or to estimate how much of a project can be completed given funding availability. In each case the user will input either the bid price for a project and the extent of the project to estimate cost, or the amount of funding and bid price to estimate project extent.

There is a "total cost" cell at the bottom on the Project Cost side that will total all entries currently made in specific project types.

Directions on the worksheet indicate where inputs are needed. Other cells include calculations and are protected so that changes cannot be made accidentally. Information on the current bid for road work, water line replacement, etc., is necessary to utilize this cost estimation worksheet.

Figure 6.6



NOTE: Set-up of Cost Analysis worksheet, with spaces for your project information (input) and calculation results. The Left-side calculations are set up for accepting bid information and project area information and providing basic cost estimates. The Right-side calculations are set up for accepting information on the amount of funding available and bid information and providing project area or length estimates.
NOTE: enter the information specified in the input cells. Results will show in the output cells. There is a Total cost output cell at the bottom of the left-hand section for total costs with multiple project elements.

The Cost Analysis worksheet can be used to make calculations for a project and print the page to a hard copy or .pdf. The Cost Analysis worksheet can also be saved as an excel file with a different name for work apart from the database Tool. The cells in the calculation area are protected and cannot be chosen for copying directly to another excel file or word document until

unprotected. It is recommended that the Cost Analysis sheet be left blank after use in order to be ready for next user.

6.7 Drop-down Menus

Standardization of data is very important to being able to sort or filter that data. Specific information entered when updating the database needs to be entered in a standard format so that the filtering and sorting tools continue to function. For example, if the location data “Cedar Street” is typed in as “Cedar St”, and as “Cedar Street”, and as “Cdar St” by mistake, sorting for “Cedar Street” will not capture all locations. Dropdown menus have been created and linked to several worksheets to assist in the standardization of data entry.

Drop-down menus are listed on the worksheet named “Drop-down menus” by asset type. Each menu is connected to the relevant asset worksheet through data validation. Each menu also has several blank cells left ready at the bottom of the list. If new Street names or material types are added to those blank cells, the drop-down menu will be automatically updated. If major drop-down menu extensions are required, see Excel guidance on drop-down menus and data validation.

Note that there are different street naming conventions on several asset worksheets due to differing origins of data. The Drop-down menu for that page is connected to a consistent naming convention for that particular worksheet. For example, the Roads, Sewer Collection System and Water Line worksheets use the same format (PROSPECT ST.), while Storm Water Pipes and Hydrants worksheets uses another (PROSPECT ST). This is due to the Sewer Collection System and Water Line data coming from the same data source, while Storm Water data came from a different source and structure. These have been left as they were received so that this data can be worked with its original source data when necessary.

7.0 Updating the Tool

The Asset Management Tool includes information on many different types of assets. These assets are utilized by or maintained by different City departments. The maintenance needs and schedules for the different assets are different and therefore the need for updating data will also differ by department.

The City will assign an Asset Database Tool “keeper” to maintain the integrity of the database. This person should also be coordinating with the different City departments to maintain updated asset data. Communication between departments is important to keeping asset data up-to-date.

Any major changes to the database Tool, including the addition of data from new sources, should also be updated in the Metadata. The Metadata is included as the last worksheet within the database Tool, and is meant to document data sources and data creation methods.

Table 7.0 Update Schedule

Asset Type	Update Schedule
Water lines, stormwater, sewer lines, water treatment facility, wastewater treatment facility	Data update after replacement projects are completed
Roads	Data updated after pavement or reconstruction projects, especially important to update water, sewer and stormwater system work done at the same time in those worksheets
Vehicles	Update when a vehicle is added to or removed from the fleet
Streetlights, traffic lights, way-finding signs	Update when replaced
Buildings, City Land, University Settlement	Update when projects are completed or property ownership changes
Bridges, Stormwater MS4 inspections	Update asset when inspected under regulatory programs

7.1 Additional Data Capture

There are assets in the database Tool for which additional information is needed. Most often there will be a need to update data as specific work projects or inspections are completed, as in Table 7.0, however specific needs for data capture identified include entry of hydrant replacement and re-numbering information that currently exists in handwritten form. The hydrants data provided in the database Tool is taken from the City of Beacon Access Database compiled by Lanc and Tully Engineering and Surveying PC. The information is outdated to due a hydrant replacement project between 2002 and 2009. The database Tool includes a worksheet of hydrant locations to assist the City in updating this information.

The City may also consider compilation of data that was not available to Delaware Engineering during the creation of the Tool, such as the department assignment for each vehicle, and area of each parking lot, for example.

7.2 Standardization of Units

There may also be discrepancies in the units of measure between different assets. The data in the Tool came from several different sources, and lengths, for example, may be in different units, such as feet or yards. Users should be aware of this. It may be best to keep each asset in the same units as the original data set for integration of lists created from the Tool with the original data. The City will have to determine how best to standardize units in the future.

8.0 Database Document Control and Change History

Document Control includes maintaining databases and using proper distribution and revision procedures to maintain quality. Maintaining a history of changes and updates made to the

database Tool will be part of document control by keeping a record of what changes are made when and why. A Change History form is included as the first worksheet of the database Tool.

One or two City staff should be assigned primary roles in maintaining the database Tool and determining who may edit the database and upon what occasions. These people will maintain the current "Master" of the database Tool on the City network and any back-up media. When someone is assigned a database update duty, they will be the only one making changes at that time. Each Department should submit update needs and request updates (hydrants replace under X project, vehicles disposed of, etc.).

When changes are made the database Tool keepers will ensure that the Change History is completed (see Table 8.0 for example) and return the new database to Lock for use. While Locked, no changes can be made to the database Tool, however, the filtering and sorting functions will not be available.

Other departments may take a copy of the Tool for their own use but the copy will be renamed something different from the Master File name so that it is not returned to Master File status by mistake. For example, "Asset Tool Beacon 08062019", may be copied to the DPW and called "DPW Asset Tool copy 08062019". Thereafter that copy is the DPWs. Not to be confused with current Master File.

Table 8.0 Change History Form Example

Database Name	Date of Change	Purpose of Change	By Whom	New Name
Asset Tool 08062019	original		Delaware Engineering	
Asset Tool 08062019	11/05/2019	Update Hydrant data	DPW John Smith	Asset Tool 11052019

Change History Sheet Instructions

Database Name – current database that is being updated, current date in name "City of Beacon Asset Tool 08062019"

Date of Change – when are changes/updates made

Purpose of Change – list updates to what asset or tab, why (for example, Vehicle Tab updated to include purchase of new vehicles, or removal of vehicles from inventory)

By Whom – person and department making change

New Name – rename the database with date of change,
example "City of Beacon Asset Tool 11052019"

City of Beacon Asset Management and Capital Planning Guide

September 2019

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28 Madison Avenue Extension
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1.0 EXECUTIVE SUMMARY

Public assets – pavement, water and sewer pipes, buildings, facilities, vehicles, etc. – are enormously valuable investments, many of which are inherited from previous generations of taxpayers. Maintenance and investment decisions today will affect the lives of city residents, businesses and visitors for decades to come. Every municipal investment decision involves trade-offs and prioritization among competing needs. Asset management is the practice of managing infrastructure and capital assets to minimize the total cost of owning and operating these assets while delivering the desired service levels. Asset management applied to municipal infrastructure assists communities in ensuring that maintenance, repairs, upgrades and replacements are conducted when needed, not only during a crisis, and that funds are available to make these vital investments. Accurate, comprehensive and accessible information on assets is critical to this process. While few small cities and towns in the Hudson Valley have created asset management inventories and processes, these undertakings are increasingly being used in larger better-resourced governments.

Municipalities undertake asset management improvement efforts to overcome the deficiencies typical of traditional asset management. Asset management is often "siloed" by department – each department keeps its own information and department managers cannot easily see how their work may align with that of another department. Municipal leaders then cannot easily access information about the different classes of assets for financial planning purposes. The public, for its part, has little information about the true value and extent of public assets and the challenges staff and elected officials face in prioritizing funding decisions. These conditions limit the municipality's ability to plan infrastructure projects, estimate budget needs, make informed decisions and demonstrate the financial needs behind decisions.

The City of Beacon Asset Management and Capital Planning effort is intended to assist the City in maintaining infrastructure and public assets in condition to meet the needs of the public at a reasonable cost. The products of this effort are an Excel database Tool, a User Manual and this Asset Management and Capital Planning Guide.

The asset database Tool is the product of collaboration between consultants and City staff through a series of working meetings between December 2018 and September 2019. The initial and most

intense activity conducted was gathering, verifying, managing and manipulating data regarding the nature, condition and location of various assets of the City. The database Tool integrates data on City assets into a single database, including worksheets for basic project cost analyses. The Tool is intended to assist in maintaining information about the assets of the City. The Tool is a resource for, not a substitute for, management decision-making amidst the inevitable trade-offs among competing priorities in meeting public needs and spending public funds. The User Manual recommends processes by which the database Tool is to be updated as the City repairs, replaces, inventories and adds relevant information about its assets. This Guide provides an overall asset management and capital planning framework.

2.0 INTRODUCTION

Once a manufacturing center, the historic City of Beacon is experiencing an artistic and economic renaissance, primarily due to forward thinking planning by City leaders. The City's identity has been redefined as a cultural and recreational destination, and a Hudson River community that is a desirable place to live, work and play. In order to ensure that Beacon's public assets and infrastructure will continue to support future growth and development, the City has caused the preparation of an Asset Management and Capital Planning program.

As a result of these efforts, for the first time the City has a comprehensive list of its most valuable assets in one place, and a plan for keeping this list updated and using it to support financial and operational planning. The diagram below (Figure 1) illustrates how asset management connects to the broader municipal planning strategy. This strategy encompasses assembling asset information and connecting this information to target levels of service for each, capital investment planning on a 1- to 5-year timeframe, long-term financial planning, and to the City's overall vision and long-term strategic and financial goals.

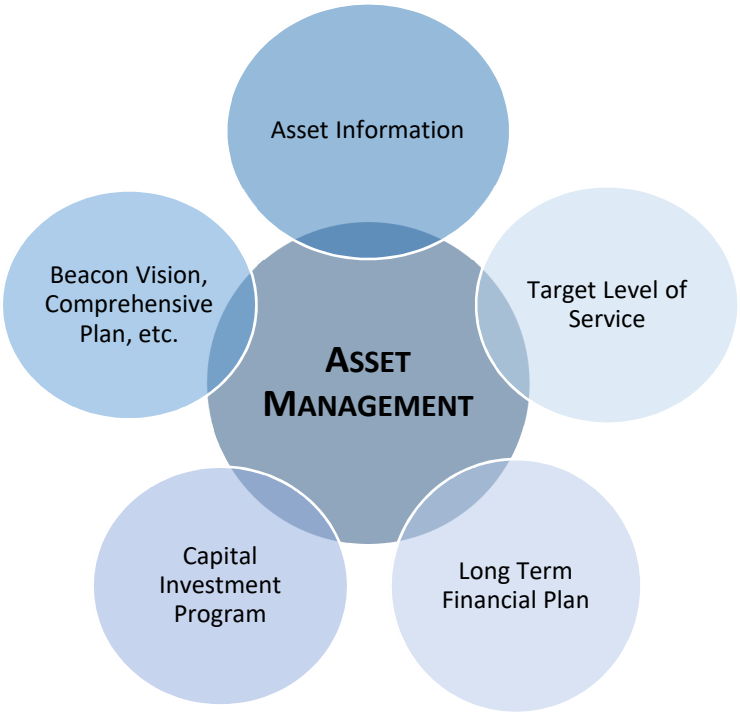

Figure 1: The Comprehensive View of Asset Management

2.1 Business Case

The business case for asset management is powerful – it saves money and reduces risk of failure.

First, it is critical that the City be in a position to view its physical assets in an integrated way, as changes in one class of assets, say pavement, must be aligned with changes in others, such as underlying pipes, and choices of equipment and vehicles.

Second, the integration of asset management information helps the City move from a reactive to proactive mode of management in order to save money. There is no more expensive way to manage assets than to constantly be spot-repairing and responding to emergencies due to failure, especially considering the disruption to business, travel and community reputation these failures cause.

Third, the asset management database Tool supports continuity of operations and lowers risk of failure by making institutional memory easily shared, rather than leaving it siloed by department or even locked away in the personal memories of long-serving City employees, and thus subject to loss with their eventual retirement. The asset inventory will support decision-making by

assisting in prioritization of critical infrastructure such as water and wastewater facilities, the failure of which severely disrupt community life and business operations.

Lastly, the adoption of an asset management program is increasingly a requirement of federal funding programs, for the obvious reason that the federal government, too, is concerned to use its money in the most cost-effective way possible. The state, which also administers federal funds, will likely soon follow suit with its own funding.

The City did not previously have a comprehensive inventory of its assets. Prior to this effort, asset information was dispersed across dozens of different documents, data sets and maps, as well as located only in the memories of certain long-term public servants and officials. This asset inventory Tool is the essential foundation of management control and planning with regard to assets of great value and criticality. The inventory is a major step forward to continuity of institutional knowledge as older, very knowledgeable workers may retire, taking their knowledge with them, and leaving the City vulnerable to making decisions with insufficient information.

2.2 METHOD

The Asset Management and Capital Plan was prepared through a collaboration between City staff and management, Delaware Engineering, D.P.C, and Hudson Valley Pattern for Progress (Pattern).

Principle tasks included:

- Collection and review of existing data on City assets, including insurance records, GIS data, and City department records, mainly highway, water and wastewater.
- Field review of water, wastewater and building assets to evaluate current conditions.
- Working meetings of City staff, management, Delaware Engineering and Pattern, to identify data sources, prioritize features of assets to include in the database Tool, include the knowledge of City staff relevant to these features, and choose among various options for organizing and recording asset information in the database Tool.
- Follow-up with the City to close data gaps where possible within the project timeframe and to the extent practical.

- Population of the database Tool with data obtained from the City, noting data gaps for follow-up.
- Production of database Tool with worksheets for cost calculation and metadata, User Manual, and Asset Management and Capital Planning Guide.
- Trial use of the draft database Tool by City staff to identify organizational and process issues for incorporation of the Tool into the management framework.
- Submission to City and City Engineer of shapefiles and data otherwise produced through the above.

2.3 USE OF THE DATABASE TOOL

The database Tool contains lists of assets on Excel worksheets within an Excel workbook. Assets are those things owned by the City that are considered to be relatively expensive and durable, ranging from water and wastewater treatment facilities and piping, to roads, streetlights, stormwater piping, vehicles, parking lots, buildings, recreational facilities and more. The Tool was created in Excel to allow the City to easily add and manipulate data and potentially upload that data into a Geographical Information System (GIS) or other future management software. Through such functions as sorting and filtering, specific lists of assets of interest can be created for planning discussions and/or mapped in a Geographical Information System (GIS). For example, staff may want to;

- List water, sewer and stormwater lines along a particular road segment to aid in the planning of road reconstruction projects
- Sort water or sewer pipes by material to aid in prioritizing pipe replacement projects
- List vehicles by department or by age to assist in budgeting for replacement
- Find the linear feet of sidewalk along a segment of road to calculate repair costs
- Extract summary data on assets for use in grant applications

The Tool includes a cost analysis worksheet with pre-loaded formulas and places to insert bid information to facilitate project budgeting. For example, one can estimate the cost of paving a certain length of road or how much road can be paved given a certain level of funding, both of which aid in project planning.

An accurate inventory of important assets with significant data attached is the most basic building block of asset management, asset control and decision-making on investments in those assets. It will be the City's responsibility to maintain the Tool and ensure that its asset data is up-to-date in order to continue its usefulness.

3.0 STATE OF CITY INFRASTRUCTURE AND OTHER ASSETS

As a historic, small and full-service city, Beacon has a wide range of assets. These assets vary in terms of their age, condition, criticality and the amount of information that is currently available about them. The Database Tool is a compilation of basic information on the City's assets deemed most useful to asset management. The Tool requires continual updating to maintain its usefulness and is a major component of capital planning. Table 3.0 summarizes the contents of the database Tool and demonstrates the variety and extent of the City's assets.

Given the variability in asset types, ages, and condition information available, an overall status rating of City infrastructure is not useful information. Nor is it possible to make a summary statement as to whether or not the City has been investing the right amount of money in asset maintenance. Determinations of priority must be made on a case-by-case basis, based on the best available information, trends in repair history, asset criticality and available funding. The database Tool is intended to support decision-making with better information than previously available.

Table 3.0 Summary of City of Beacon Assets

ASSET	DESCRIPTION
Wastewater treatment system	$28.7 million assessed value
Wastewater collection system	Approx. 47 miles of pipe
Manholes	1282
Water treatment system	$16 million assessed value
Water distribution system	Approx. 21 miles of pipe
Fire hydrants	Approx. 500
Stormwater structures	Approx. 2070 catch basins
Roads	Approx. 54 miles
Parking lots	705 spaces
Bridges	6
Sidewalks	Approx. 60.5 miles
Vehicles	109
Generators	10
Streetlights	1450
Traffic signals	12
Wayfinding signs	5
Buildings	$27.8 million assessed value
Recreational Facilities and Lands	7 sites, assessed value $4.55 million; approx. 330 acres of parks
City Lands	76 parcels listed, $88.8 million assessed value
University Settlement Camp	44 structures with pool

Note: estimates based on the Tool, existing City of Beacon GIS, City staff

In general, the database Tool contains more condition information on assets that have been recently upgraded. Other asset types such as water lines are impossible to view without specific equipment (unless there is a water line break or road reconstruction), and are variable in terms of materials of which they are made; the environment, age and the material affect the asset condition and potential life span. Records of the existence of old piping materials in both the water and sewer systems indicate aging infrastructure. As these systems age they are more prone to breakage, but the condition of these pipes has not been generally assessed. There are also several assets that are regularly inspected through regulatory programs such as Department of Transportation bridge inspection and inspections required through the Municipal Separate Storm Sewer System (MS4).

Other assets such as the structures at the University Settlement Camp were assessed for condition approximately ten years ago (Master Plan, 2009). The current condition, or what upgrades have been made since then is unknown at this time. The University Settlement Camp structures were included in the database Tool as assets the City manages through agreements, though the City does not own these structures.

As part of this effort, Delaware Engineering performed walkthrough condition assessments of City buildings, water treatment facilities and wastewater treatment facilities. The resulting condition ratings are included on the appropriate worksheet within the database Tool and note several components that are in need of repair or replacement.

Other available documents also provide information. For example, the 2017 update to the City of Beacon Comprehensive Plan stated that “water supply issues have more to do with maintaining Beacon’s aging infrastructure, rather than having enough supply for existing and new development.” The Plan recommends replacing water distribution pipes from the 1940s and 1950s whenever roads are upgraded throughout the City. As illustrated in Figure 1.0, these types of plans and information integrated with the Asset Tool allow a more comprehensive Asset Plan.

4.0 FRAMEWORK FOR IMPLEMENTATION PLANNING

Using the accumulated data with appropriate maintenance and the tools provided, the City of Beacon will have fact-based information upon which to make decisions regarding budgeting and spending. The difference between budgeting and spending is significant and worthy of discussion. Budgeting, from an infrastructure perspective, is a forward-thinking plan that attempts to predict the amount of money needed over a period of time to provide a service. Spending is the act of committing money on an immediate basis to conduct an activity or purchase a product. Ideally, budgeting has a reasonable alignment with spending. However, if budgeting fails to consider repairs and maintenance, spending may not match budgeting. The classic situation is the need to repair more broken water lines than planned in any given fiscal year.

Implementation planning using the database and tools will assist the City in aligning budgeting and spending. The City has flexibility in terms of how to conduct implementation planning using top down or bottom up approaches. While there are other means to conduct implementation planning, this Guide provides an overview of these methods as a starting point.

Top down implementation planning for the City's asset management would be conducted by establishing an initial overall budget figure for each relevant major asset class based on factors that could range from overall tax burden in any given year (e.g. the tax cap calculation), anticipated change in expenses outside of the control of the city (e.g. the cost of power, chemicals, human resources, solid waste disposal, etc.), budget windfall, or overall consumer sentiment regarding the ability to pay for City services.

Once the initial overall budget figures are established for relevant asset classes under the top down implementation planning approach, City staff would use the Tool to evaluate priorities in each asset class and determine how much maintenance or replacement work could be achieved for each asset class, and how much priority work would remain unfunded, and thus, not conducted, in the fiscal year.

Critical to informed budgeting is an understanding not only of the work that would be conducted in a given year, but also the implications of deferring other priority work to future fiscal years. For example, the City prioritizes replacement of 1,000 feet of water line on a particular street together with road reconstruction as restoration due to poor service conditions (e.g. frequent breaks,

discolored water, poor pavement condition due to undermining and patching from water breaks, etc.). However, only 500 feet are replaced due to the initial top down budget figure. During the fiscal year, as predicted based on the aforementioned condition assessment, breaks occur on the remaining 500 feet of road. Repairing these breaks is now an unplanned, unbudgeted emergency spending scenario, and the costs of emergency repairs are typically much higher than planned and coordinated reconstruction. In the end, the entire 1000 feet of road is reconstructed and the underlying pipes replaced, but the total cost could exceed that of budgeting to replace the entire 1000 feet of water line with road reconstruction in the first place.

Thus, the recommended steps in top down implementation planning include but are not limited to:

1. Initial overall budget for each relevant asset class
2. Determining which specific priorities will be addressed with the initial budget and which will be deferred
3. Reviewing the implications in terms of cost and level of service resulting from deferring priority work for which budget does not exist in the initial overall budget
4. Review and adjustment of overall budget figure to ensure alignment with priorities and to clearly define risks of deferring priority work

Bottom up implementation planning involves City staff utilizing the database and tools to develop priorities for each relevant asset class to determine the amount that should be budgeted to meet high priority needs. In conducting this work, priorities would be clearly defined in order to keep annual budget costs reasonable. This method of planning prioritizes the City's infrastructure needs over considerations such as the tax cap or citizen sentiment regarding the cost of City services.

With a list of priorities and associated costs determined for each asset class, the next step would be to calculate the user cost impact to meet the high priority needs. In addition to this mathematical step, it is critical that the value derived from the expense is well defined. For instance, using the 1000 feet of water line replacement and road reconstruction example, if given the options of paying a $100 tax increase to fix half of the distance and potentially suffer more water main breaks, service outages, emergency construction, discolored water and a bumpy road versus a $150 tax increase to fix the problem for good, citizens may well support the $150 increase.

Thus, the recommended steps in bottom up implementation planning include but are not limited to:

1. Evaluate and list high priority work including costs for each relevant asset class
2. Determining user cost impact to meet high priority needs
3. Reviewing the implications in terms of cost and level of service resulting from meeting needs versus deferring priority work
4. Determine the appropriate budget figure to ensure alignment with priorities and to clearly define risks of deferring priority work

In reality, the City of Beacon may find that a combination of top down and bottom up implementation planning may achieve the best result in attempting to align budgeting with spending and to ensure that the assets of the City receive the level of investment needed to avoid the pitfalls of costly deferred maintenance and emergency repairs.

5.0 GUIDELINES FOR FINANCE PLANS

Regardless of the nature of the asset management activities undertaken by the City of Beacon (e.g. maintenance, repair, replacement, upgrade, reconstruction, expansion, etc.), the source of funds to support the work is generally derived from the tax payers of the City with the exception of grant funds (which are tax dollars aggregated by higher levels of government and redistributed) or land developer or benevolent foundation investments. Given that the majority of revenue used to support asset management is taxpayer generated, it is important to understand that how the tax revenue is spent makes a difference in the value that every dollar brings.

There are two fundamental means of evaluating the value of each dollar invested in asset management, namely what is the dollar funding and how is that dollar funding the asset. With respect to what is funded, the useful life of the asset should be considered. In the City's water system, there is equipment at the City water plant that supports the treatment of drinking water. The assets at the City's water plant include pumps to move water against gravity. The pumps are critical to the operation of the water plant; however, they have a relatively short service life due to wear and tear associated with constant operation. Even in a situation where there may be a series

of pumps that are operated in turn to provide redundancy and opportunities for maintenance, a pump could require a major re-build of its motor or drive (parts that wear during operation) every ten years. A dollar invested today in a pump has a value that decreases over time towards the approximately ten-year mark when additional funds will be required to restore operability and extend useful life. Pumps are an asset with a rapid depreciation schedule.

Similarly, the City's water system requires water mains to transmit and distribute water to the City's residents and businesses. A ductile iron pipe (DIP) water main is just as vital to providing water service as the pump at the City's water plant; however, a dollar invested today in a DIP water main is an asset that may not appreciate in a traditional sense, but is has a lengthy depreciation schedule, a minimum of 50 years, with many water line in service over 100 years.

In these ways, it is important to understand what each dollar is funding when considering plans of finance for asset management. Similarly, it is important to understand how each dollar is spent. A dollar in tax revenue that is received in a fiscal year, held in the City's treasury for a short duration, and invested in vital infrastructure with a long depreciation schedule could be considered an investment with almost immediate return that will continue to generate a reasonable return for the service life of the asset in which it was invested. The same dollar received by the City and used to fund a payment on a bonded dept for which interest is paid to the bond holder also funds a long-term investment with return in terms of service, but some portion of that dollar is not a direct investment in City infrastructure. Rather, a portion of this dollar funds fees associated with the bonding as well as the interest rate paid back to the bond holder.

Another aspect of what is paid for is the availability of options for finance outside direct tax-payer support. For instance, the City owns several dams. Due to restrictions in both the federal and state legislation, low-cost financing and grants are rarely available to pay for dam infrastructure work. However, if a dam is associated with a park or recreational area, it may be possible to seek grants from the State Office of Parks, Recreation and Historic Preservation to offset tax-payer support for necessary improvements. Another example of assets that are difficult to fund as stand-alone infrastructure are water tanks. While a water tank may be used to provide pressure and fire flow to the City, as a stand-alone asset in the competitive world of water infrastructure financing and grants, low cost financing and grants for stand-alone water tank improvements are rare. As with

dams, water tank projects may be bundled with other, more compelling related projects aimed at improving human health to obtain grants and low-cost financing for the water tank.

With these basic concepts in mind, developing plans of finance for asset management should be considered in a customized fashion. This Guide provides considerations regarding several methods of finance that may be employed by the City including pay-as-you-go, debt financing, lease-purchase agreements, grants, fee for service, public-private partnerships, and investment by land developers. It is by no means intended to describe every potential financial opportunity that may exist; however, the following information and Table 5.0 provide a framework for decision-making.

Methods of Finance to Consider;

Pay-as-you-go – the use of revenues derived from line items in the budget to fund the work. This is direct financing of asset management activities from the taxpayer to the work being conducted.

Debt financing – the issuance of bonds or securing of loans to fund the work, the repayment of which is derived from revenues secured through a line item for debt repayment in the budget. This is indirect financing of asset management activities from a taxpayer perspective because the costs paid by the taxpayer include fees and interest that do not directly contribute to the conduct of the work.

Lease-purchase agreements – obtaining equipment or real property through execution of a lease with an option to purchase rather than an outright purchase. Lease-purchase agreements can act as a financing instrument for large purchases in that there is generally a schedule of payments over time. This is indirect financing of asset management activities from a taxpayer perspective because the costs paid by the taxpayer include fees and interest that do not directly contribute to the conduct of the work.

Grants – sources of funding from outside entities that are provided without a required repayment. Grant funds may be distributed as a line of credit to provide working capital during implementation of the work, reimbursement upon completion of the work or principal forgiveness the latter of which reduces the total amount of long-term debt secured to complete the work. Grants do not require taxpayer support; however, it is noted that the source of many grants is the redistribution of tax dollars and grants often require local match funding.

Fee for service – charges to users of a particular service the revenues from which are used for the work (e.g. water and sewer fees, or a fee to use a public park, the revenue from which is used for asset management). This is direct financing of asset management activities from the taxpayer to the work being conducted.

Public-private partnerships (PPP) – a long term agreement between a governmental entity and a private company for the provision of goods or services. PPPs related to asset management may include any combination of design, build, own, operate or financing of infrastructure. This is indirect financing of asset management activities from a taxpayer perspective because the costs paid by the taxpayer include profit for the private entity that does not directly contribute to the conduct of the work.

Development-based Infrastructure – land developers are either required to invest in municipal infrastructure to provide proper level of service to their development work or investments are made in municipal infrastructure as mitigation for impacts caused by development. Investment by land developers does not require taxpayer support; however, to bring taxpayers value, investment by land developers must not only meet the needs of the development, but also consider the needs of the community at large (e.g. a water main interior to a property meets the developers needs but a water main along the public road meets the needs of the developer and the community).

TABLE 5.0: Plans of Finance Framework

	Asset Management Activity		
Methods of Finance to Consider	Repair & Maintenance	Replacement & Upgrade	Expansion & New
Pay as You Go	X	X	
Bonded Debt/Loan		X	X
Lease/Purchase			X
Outright Grant	X	X	X
Fee for Services	X	X	X
Public Private Partnership	X	X	X
Development-based Infrastructure		X	X

6.0 POTENTIAL EXTERNAL FUNDING SOURCES

Each low-cost financing or grant program is operated by an agency under a program specific timeline for announcements of availability of funds, application due dates, award notices and execution of agreements for assistance which allows the grantee to obtain funds from the grantor. A general description of the timeframes for each aspect of selected programs is described herein; however, it is noted that programmatic changes do occur and it is prudent to review each low-cost financing or grant opportunity annually to ensure the most up to date information is considered.

- ***State Revolving Loan Fund (Loan and Grant Program)***

  The Drinking Water and Clean Water State Revolving Loan Funds (DWSRF and CWSRF) programs fund the vast majority of municipal water and sewer infrastructure in the State for which outside sources of funds are sought. The programs function on a Federal Fiscal Year

(FFY) calendar, with an Intended Use Plan (IUP) published effective on October 1 of each year listing projects for which funds may be encumbered during the following fiscal year. In order to receive program funds, a project must be listed on the Annual List which requires submission of a listing form, a Preliminary Engineering Report (PER), and a Smart Growth Assessment generally in late August or early September.

Once a project is listed on the Annual List and a community determines it will proceed with the project, an application for financing is submitted in the summer or early fall of the following year.

The application for financing must include an application form, documentation that the State Environmental Quality Review Act (SEQRA) has been conducted, the State Historic Preservation Office has been consulted, and any special districts have been created among other requirements. If a Special District is required to be formed, documentation that the district has been formed, including review by the Office of the State Comptroller if necessary, is required. And, a bond resolution with referendum period concluded is also required.

Once a complete application is submitted, financing can usually be closed with four to six months. Short-term financing is available to support project development and construction costs at no cost or very low interest rate for two to three years after which long-term financing is established with interest rates ranging from zero percent interest through market rate financing. To the extent that the community qualifies for a grant (based on environmental/public health need and ability to pay), the community borrows less over the long term, reducing annual debt service and impacts to the customer rates.

The SRF program accommodates adjustments to project cost and scope through submission of engineering amendments and budget updates. If project costs change beyond anticipated contingency, it may be necessary for the community to issue short-term borrowing; however, all eligible, approved project costs are rolled into long-term financing and any additional short-term borrowing is decreased.

Generally, the SRF process requires approximately 18 months from initiation any given spring (preparation of an engineering report and associated documents) through to the late end of the

following year. Because the program has hard deadlines, there is no opportunity to speed the application process.

- ***State Water Infrastructure Improvement Program (Grant)***

The NYS Legislature initially committed $400 million in grant funds in the State Budget towards the Water Infrastructure Improvement Program over three fiscal years spanning 2015, 2016 and 2017. In 2017, the Legislature expanded the program through the Water Infrastructure Improvement Act (WIIA) and Intermunicipal Grant (IMG) programs to $2.5 billion over a five-year period for a variety of programs focused on water quality. The WIIA program works in concert with the SRF programs discussed herein with application materials for projects intending to make use of SRF funds for the balance of project costs mirroring the SRF financing requirements. However, communities may also submit applications for grant without SRF financing if other sources of funds will be used to

For funding rounds to date, up to 60% or $3 million of eligible drinking water project costs and up to 25% or $5 million of eligible wastewater project costs have been awarded to recipients. While public health, environmental impact and consumers ability to pay for improvements are considered, this grant program is unique in that it may be awarded to projects that do not achieve a high ranking based on IUP scoring criteria but that are vital to the long-term sustainability of public infrastructure.

- ***US Department of Agriculture Rural Development (Loan and Grant Program)***

The USDA accepts pre-applications for loan and grant packages to support community infrastructure on a rolling, invitation basis. Submission of a pre-application incorporates an application form, engineering report, environmental review and other fiscal and legal documentation. Upon receipt of a completed pre-application, the USDA will invite submission of a full application. Once a complete application is submitted and accepted, closing on financing occurs within several months' time.

The overall process to obtain USDA RD funding is a multi-step process without hard timeframes, so it can be difficult to predict the timeframe for agency reviews. The agency's workload fluctuates but staffing does not and staffing is geographically assigned, so if there

are many projects being submitted in the same geographic area, it can take time for the agency to review all materials.

The USDA RD program does not accommodate project scope and budget changes per se. Minor modifications within the overall scope and contingency are acceptable, but significant changes in scope or budget are generally not accommodated by the RD program. Therefore, appropriate and detailed project planning is key to a successful USDA RD project.

- ***Consolidated Funding Applications: DOS Local Waterfront Revitalization, OCR Community Development Block Grants, DEC Water Quality Improvement Program, DEC Green Infrastructure Grant Program, OPRHP Parks Grant Program, ESD Infrastructure Investment, New York State Energy Research and Development (NYSERDA)***

The Consolidated Funding Application (CFA) process was borne from the State combining the grant activities of over ten state agencies administering nearly 30 grant programs into a single, annual action, directed by regional councils and under the review and approval of the agencies and the Governor's Office. This process has operated for a number of years, aggregating between $800 million and nearly $1 billion dollars annually in state aid through various programs.

The application schedule involves a call for applications in the early summer each year, with applications due towards the end of summer. Grant awards have been announced in December, with State Assistance Agreements executed in the spring nor summer of the following year and funds available thereafter in the same year. The overall schedule from application to funding is about a year, driven by the state's process.

7.0 RECOMMENDATIONS FOR ADDITIONAL DATA CAPTURE

While an overall framework for data capture and management has been created, there are assets for which additional information is needed to apply the full functionality of the Tool to every asset class. The database has been established in such a manner that it should be straightforward for City staff to add information and update information as the City determines it is needed or

appropriate. Most often there will be a need to update data as specific work projects or inspections are completed. Recommendations for basic database Tool updates are included in Section 8.2, and technical guidance is provided in the User Manual.

Specific needs for data capture identified include entry of hydrant replacement and re-numbering information that currently exists in handwritten form. The hydrant data provided in the database Tool is taken from the City of Beacon Access Database compiled by Lanc and Tully Engineering and Surveying PC. This information is outdated due to hydrant replacements between 2002 and 2009; however, the Tool includes a worksheet of the hydrant locations to assist the City in updating this information.

The City may also consider compilation of data that was not available to Delaware Engineering during the creation of the Tool, such as the department assignment for vehicles, area of each parking lot, current condition of structures at University Settlement Camp and dates of installation for sewer and water lines as they are replaced.

The database Tool is not designed to be used for logging of routine maintenance activities. There are other software solutions currently available for work orders and/or site inspections. However, information from regular maintenance activities and staff knowledge should be integrated with the asset data for planning purposes. For example, the Notes columns can be used for stating if a particular segment of water main has experienced breaks with a higher than usual frequency based on City work records. This information may be useful in prioritizing road and water line work. Regular agency inspections for bridges, and inspections/maintenance required for stormwater infrastructure under MS4 regulations will provide updated Condition information with which the City should update the database Tool.

8.0 BEST PRACTICES TO UPDATE THE TOOL

The database Tool is not a static report, but an evolving resource. City staff must develop new routines around using the database to plan asset management, updating the database with new asset information, etc., as well as preserving a quality database intact for use by various departments.

The User Manual was developed to aid the City in the use, maintenance and preservation of the database Tool.

The City of Beacon is responsible for the maintenance of this Tool, both in document control and data updates. The database Tool workbook can be protected and "locked" so that no changes can be made, however, filtering and sorting are not possible on a locked worksheet. It is the decision of the City to whom to assign the responsibility of data management and document control. That individual/individuals may assign specific update tasks as needed, while always maintaining a "Master" version of the database for recovery/to prevent accidental deletions or corruption of the Tool. A copy of the database, renamed with a department specific name, may be given to various City departments, as needed, for their use. Changing the name of each copy that is created/distributed will help avoid confusion with the "Master".

For example, other departments may take a copy of the Tool for their own use but the copy will be renamed something different from the Master File name so that it is not returned to Master File status by mistake. "Asset Tool Beacon 07072019", may be copied to the DPW and called "DPW Asset Tool copy 07072019". Thereafter that copy is the DPWs. Not to be confused with the current Master File.

The database has been populated with as much data on as many priority assets as possible during the development process. It is the responsibility of the City to add data for those assets for which information is not complete as the City continues regular work and/or project work.

City staff assigned primary roles in determining who may edit the database and upon what occasions will maintain the current Database Master File on the City network and maintain current back-up. When someone is assigned the update duty, they will be the only one making changes at that time. Each Department should submit update needs and request updates (hydrants replace under X project, vehicles disposed of, etc.) to the person responsible for the database. Decisions can then be made as to when and how that information will be updated in the Tool. Any such updates or changes made will be recorded in the Change History worksheet, and new information, such as source of new data, added to the Metadata.

8.1 Change History

When changes are made the Master File keepers should ensure that the Change History is completed and return the updated database to Lock. This table will allow the City to keep a record of database Tool updates and maintain the current version of the Tool. See the Change History form instructions in Section 8.0 of the User Manual.

8.2 Updates to Asset Information

The Asset Management Tool includes information on many different types of assets. These assets are utilized by or maintained by different City departments. The maintenance needs and schedules for the different assets are different and therefore the need for updating data will also differ by asset type.

Table 8.0 Update Schedule by Asset Type

Asset Type	**Update Schedule**
Water lines, stormwater, sewer lines, hydrants, water treatment facility, wastewater treatment facility	Data update after replacement projects are completed
Roads, sidewalks	Data updated after pavement or reconstruction projects, especially important to update water, sewer and stormwater system work done at the same time in those worksheets
Vehicles	Update when a vehicle is added to or removed from the fleet
Streetlights, traffic lights, way-finding signs	Update when replaced
Buildings, City Land, University Settlement	Update when projects are completed or property ownership changes
Bridges, Stormwater	Update asset when inspected under regulatory programs

9.0 DISCUSSION OF TRENDS TO CONSIDER

Beacon's investment in asset management occurs in the context of several other important trends affecting the city and the region. These trends, discussed briefly here, include:

- Economic developments, especially housing and tourism
- Alignment of capital planning with comprehensive planning
- Burgeoning regulatory requirements, especially affecting water quality
- Technological innovation in municipal management, especially the digital transformation of administrative and record keeping processes

9.1 ECONOMIC, DEMOGRAPHIC AND HOUSING TRENDS

Beacon is a small historic city on the banks of the Hudson River and within commuting distance of lower Westchester and Manhattan. Like most small cities in the Hudson Valley, Beacon has transitioned from being a center of industrial growth and commerce, through urban renewal demolition of historic buildings in the 1860s and severe economic downturns of the 1970s and 1980s, to an economic rebound over the last thirty years. Beacon is now regarded as one of the premier examples of successful urban revitalization in the Hudson Valley.

The current period is one in which New York City housing prices and demographic trends, along with Beacon's various attractions, are producing increased demand for market rate housing in the City. The demand for affordable housing is growing as well, given the growth in low-income population, escalating costs of living and wage stagnation. There is also a broad concern to preserve social diversity in the face of a wave of market rate investment that pushes up housing costs, especially in the rental market. Since 2000, the median rent in Beacon has increased by 20% when adjusted for inflation, while median income has decreased, and median home values have leapt 44%. The overall result has been a recent "boom" in new apartment construction. In 2017, for example, there were 673 residential units under construction or in the approval process (Parks and Recreation Fee Study, 2017). Recent examples include:

- West End Lofts on Wolcott Avenue – 90 affordable/workforce units
- 248 Tioronda Ave – 100 units

- Hip Lofts on Mason Circle – 144 artist live/work units
- Beacon Theater conversion – 32 units
- Lofts at Beacon Falls – 68 units

Despite these highly visible changes, the city's overall population growth has been modest at most, having increased less than 1% per year over the last two decades to reach 14,289 in 2016. Over this period city demographics have followed regional trends, with the population aging and becoming more diverse, led by a 20% increase in the Hispanic population, which now accounts for at least 20% of the city population (Hudson Valley Pattern for Progress, Urban Action Agenda, Housing Profiles, City of Beacon, 2016). A recent parks and recreation study projects modest population growth in the coming years, with the city reaching 16,237 by 2025 (Parks and Recreation Fee Study, 2017). Despite a low population growth trend, a recent Beacon Water Supply Plan anticipated a modest growth in water demand, well within the city's water system capacity by 2035 (Cusack, LBG Hydrogeologic Engineering Services, Beacon Water Supply Plan).

The impact of new housing construction on the city's infrastructure is mitigated in part due to the location of most recent housing construction in the downtown area, whereas earlier periods of housing construction were more suburban in nature, leading to expansions of the city's roads, drainage, water and sewer systems in the 1960s, '70s and '80s. About 35% of housing units in Beacon were built after 1970, but new construction essentially ended with the Great Recession of 2008 until the pickup in recent years (Hudson Valley Pattern for Progress, Urban Action Agenda, Housing Profiles, City of Beacon, 2016). Homestead assessed value declined from the Great Recession until 2014, when it hit a low of $808 million overall, but has been increasing in recent years. This indicates the tax base is increasingly capable of paying for needed capital improvements, almost reaching its overall pre-Recession value (City of Beacon, 2018 City Budget, October 2, 2018).

Beacon's location on the MetroNorth rail line has been critical to its economic wellbeing, but it must be recognized that only about 8% of the city's workers commute via public transit, with the vast majority getting to work via driving alone in a car. Only about 20% of city residents work within the City of Beacon, and about half of city residents commute outside of Dutchess County

to work (Pattern for Progress, Urban Action Agenda, Community Profiles, City of Beacon, 2018). The City will continue to need to maintain and invest in pavement.

Tourism is a growing sector of the Hudson Valley regional, state and global economies. Regionally, tourism growth is strongest in New York City. Weekend outbound ridership on MetroNorth from NYC to Beacon and other popular destinations on the Hudson Line, such as Cold Spring, Breakneck Ridge and Poughkeepsie, is increasing far more rapidly than inbound commuter ridership. In general, places that attract visitors also attract permanent residents, and vice versa. Beacon's public and private investments in the wheeled trolley, visitor's center, and various food, arts and entertainment promotional events and publications, makes sense in light of the tourism trend. The City should continue to find ways to align its asset management and capital investments with the goal of connecting the city to the rail station, water front and Dia:Beacon.

9.2 Alignment of Capital Planning with Comprehensive Planning

The asset management plan is meant to aid both city staff in managing existing infrastructure and assets and city management in planning and prioritizing capital investments. In this latter sense of supporting the city's capital improvement planning, it is important to maintain awareness of how asset management can and must support the vision for city development contained in the city's Comprehensive Plan. This alignment is important because sometimes infrastructure is paid for by private investment, such as development-based infrastructure work, resulting from land use planning and zoning decisions that are guided by the comprehensive plan, and because without proper investment in infrastructure, the vision of the comprehensive plan is unlikely to be realized. However, such alignment of capital and comprehensive planning is challenging due to the fact that capital investment decisions are driven by emerging maintenance needs and funding opportunities managed within the timeframe of the annual budget process, and by finance and public works officials. Comprehensive planning encompasses a much longer timeframe and different responsible parties. Drawing connections between these two areas of municipal management is a recognized trend and priority (Greathouse, Integrating Capital Improvements Planning with the Comprehensive Plan, American Planning Association, September/October 2018).

The City has commissioned planning studies in recent years, the insights and priorities of which should be incorporated into asset management decisions, especially as they relate to capital investments. These studies include:

- Comprehensive Plan Update (2017)
- Parks and Recreation Fee Study (2017)
- Report: Site Selection for a New Fire Station (2017)
- Complete Streets Guidelines (2016)
- Beacon Center City Parking Analysis (2014)
- Reservoir Safe Yield Analysis and Groundwater Supply (2014)
- Fishkill Creek Greenway and Heritage Trail Master Plan (2013)
- City of Beacon LWRP (2012)

Short of a full evaluation of opportunities for alignment of capital and land use planning in Beacon, which is outside the scope of this study, it is useful to point out a number of ways in which the newly developed asset management database Tool can be helpful to the comprehensive planning process, and vice versa. For example, the 2017 Plan calls for a focus on transit-oriented development and improved connections between Main Street, the waterfront/rail station area, and Dia:Beacon, including improved streetscapes, a wheeled trolley service, pocket parks and the development of the Beacon Line as a ped-bike path with potential for future commuter service. These priorities in the Plan should weigh heavily in asset management and capital investment decisions. For its part, the Parks and Recreation Study provides a needs assessment listing $1.8 million in capital projects for Beacon parks. The asset management Tool pulled all park assets into a single inventory that can be used to further analyze and prioritize investments.

9.3 Burgeoning Regulatory Requirements

While it is difficult to predict the timing and exact nature of regulatory changes that will influence the nature and cost of infrastructure in the City of Beacon, there are a number of areas whereby the City will be prudent to be mindful. While there are likely many regulatory changes that will affect City infrastructure, such as the recent change to the length of slope of accessible sidewalk

to pavement, the areas with the most major cost implications are likely to include drinking water, wastewater treatment and stormwater management.

With respect to drinking water, regulation of Emerging Contaminants is underway or under serious federal and state consideration. The discovery of Per- and polyfluoroalkyl substances (PFAS) in drinking water sources in Newburgh and in Hoosick Falls have raised awareness that the drinking water standards are adequate for most situations, but vigilance and common sense in terms of historic land uses that may have contaminated soil and water should be applied in terms of testing and regulation. The State has created a Drinking Water Quality Council whose charge is to determine which substances shall be recommended as emerging contaminants for which regulatory standards should be considered. The emerging contaminants to be considered, at a minimum, are:

A. unregulated contaminants monitored pursuant to the federal Safe Drinking Water Act (42 USC § 300g-1) as amended from time to time;

B. substances that require regulation or monitoring when present in drinking water in other jurisdictions outside the state of New York;

C. pesticide chemicals for which the United States environmental protection agency has set human health benchmarks for drinking water;

D. substances found at sites in remedial programs located inside and outside the state of New York, including but not limited to inactive hazardous waste sites; and

E. waterborne pathogens and microbiological contaminants.

As a result, the City should be mindful of discussions at the state and federal level regarding Emerging Contaminants through on-going dialogue with contacts as the Department of Health.

With respect to wastewater treatment, there is a current focus on nutrient reduction targeting both phosphorus and nitrogen (including ammonia (NH_3)). Nitrogen is generally reduced through the biological treatment process of a wastewater treatment plant, whereby phosphorus is reduced to some degree through biological uptake, the most robust treatment method is filtration. With proper planning, a regulatory demand to reduce either or both of these constituents would not be overly

costly. There are other state-wide programs influencing wastewater treatment including mercury minimization and reduction in chlorine discharged to the environment. These are also not overly costly to address given proper planning. Aside from these trends, it would be prudent for the City to maintain open lines of communication with the Department of Environmental Conservation. It is rare that new criteria are foisted upon the regulated community. Rather, the process generally involves first a request to monitor a particular constituent and later, after data is captured, a regulatory requirement. By maintaining an open dialogue with the regulatory community, the City can avoid surprises and plan for required improvements.

Stormwater is the final area where regulatory changes could have significant financial implications to the City of Beacon. The preference towards green infrastructure will influence redevelopment projects within the City which will assist in achieving regulatory standards; however, it may be prudent or necessary to undertake conversion projects to eliminate gray infrastructure (catch basins and storm drains with direct discharges to the River) in favor of green infrastructure (practices that utilize natural systems to slow and treat stormwater with an emphasis on infiltration into groundwater rather than point source discharges). Current stormwater regulations generally require treatment as close to the source as possible, green infrastructure when possible, maintenance of volume pre- and post-development, elimination of trash, and reduction in sediment carried to waterbodies. In addition, there has been regulatory discussion regarding the need to reduce nutrients carried to waterbodies with a preference towards the use of natural systems to do so. As the City plans reconstruction of public spaces, attention should be paid to the use of natural systems to achieve these objectives. In addition to being ahead of a future regulatory curve, there is current funding available to implement such systems.

9.4 TECHNOLOGICAL INNOVATION IN ASSET MANAGEMENT

This asset management database Tool and associated User Manual, worksheets and Guide, are critical steps forward in the digital transformation of municipal administrative and work processes. Beacon, like every other municipality, has adopted computer-aided processes widely, but incompletely. Opportunities are proliferating for the further automation of clerical labor processes, generation of useful data and analytics, and the use of this information to improve asset management. The creation of a comprehensive inventory of assets via this current effort, and

linking this inventory to public works and financial planning, is a necessary first step. A five-year strategic plan for asset management could include further digitization of paper records, such as maps and repair histories, access to these records by workers in the field via tablets, and the integration of GIS capability into routine operations.

For example, a public works employee would log asset maintenance activities, including photos and notes, on a tablet while in the field, and the tablet would be armed with a barcode reader to easily identify barcode-tagged assets. This same employee may soon be able to pull up maps of rights-of-way to know, for example, if a damaged tree is more likely located on public or private property. These activities will generate digital records that can be searched and analyzed for the labor and material costs associated with the maintenance of any asset, and these results presented both in tables, trendlines and on maps, via integration with GIS, to be used for planning purposes. The City is currently exploring use of WebDPW for work orders and the City's engineer maintains the City's GIS data.

One important way to ensure the City stays on track with its asset management goals is to formulate and adopt formal policies for guiding asset management and capital investment decision-making.

9.5 Adopting Policies to Guide Asset Management and Capital Improvement Programs

The asset management database Tool, as noted earlier, is part of a larger effort to use asset data to plan and coordinate management and investment activities to yield the lowest possible asset lifecycle costs at desired levels of service. Such an effort, like the working group assembled to complete this project, is of necessity interdisciplinary, innovative and made urgent by organizational leadership. The adoption of an asset management policy is one important way that the City can institutionalize asset management as an organizational priority at the highest possible level, as part of organizational culture, and insure its continuation. Such a policy should be drafted at the request of the city council by the city's asset management team or steering committee, involving staff from relevant departments, supported by finance and IT personnel. An effective asset management policy should address the following areas, at a minimum:

- Scope and purpose – the policy should be a statement by the city council that sets a high priority for all staff to continually seek to steward the public's valuable assets according to principles and procedures in the adopted asset management policy, ie, at lowest possible lifecycle cost.
- Inventory of assets – the policy should establish that all physical assets shall be inventoried and the inventories regularly updated, and then provides guidance on how to do this, including definitions. For example, many cities include items worth at least $5000. Other, often less costly, assets, such as tablets, guns, tools or cell phones, should be considered for inventory and tracking precisely because they are small, attractive and have a heightened risk of loss or theft.
- Additions, transfers, disposals and losses of assets and keeping the inventory up to date– the policy should provide guidance for updating asset inventory with changed asset status, surplusage and auctioning assets, reporting of theft, etc., and establishes timeframes and standards for periodic inventory and condition assessment.
- Maintenance and repair of assets – all assets should be managed with an understanding and analysis of total life-cycle costs in an effort to minimize these costs. The policy may set standards for measuring levels of service, and expectations for the life expectancy of various assets. The policy should establish the collection and analysis of digital data on asset maintenance and performance as an organizational priority.
- Funding of assets – the policy should provide for stable, long-term funding to renew or replace assets before excessive costs are incurred due to age and deterioration and unplanned repairs. Consider fiscal policies for management of debt and capital improvements, the process by which a capital improvement program is developed, including how candidate projects are evaluated, use of reserve funds, restriction of debt periods to the expected useful lives of the improvements so financed, how frequently the city intends to issue debt, and so on.

Effective asset management requires leadership and the development of new organizational cultures focused on data-driven decision-making. A powerful tool for showing leadership and expressing organizational culture is the creation and adoption of an asset management policy. The

policy articulates the general principles and specific goals of the asset management process and calls upon all city staff to incorporate these principles and goals into their work.

City of Beacon Workshop Agenda
9/30/2019

Title:

Local Law Regarding Site Plan Enforcement

Subject:

Background:

ATTACHMENTS:

Description	Type
Memorandum from City Attorney Regarding Zoning Enforcement Local Law	Cover Memo/Letter
Local Law to Amend Chapter 223, Article III, Section 7 of the Code of the City of Beacon Regarding Zoning Enforcement	Local Law

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MEMORANDUM

TO: **Mayor Randy Casale and Beacon City Council Members**

FROM: **Keane & Beane, P.C.**

RE: **Zoning Enforcement Local Law**

DATE: **July 18, 2019**

Currently, enforcement of an approved Site Plan and/or Approval Resolution is predicated on the fact that a building permit and certificate of occupancy would be issued prior to the enforcement action. (See, Section 223-51 of the City of Beacon Zoning Code). Such enforcement reflects the typical case whereby approval for construction is issued, the applicant satisfies certain conditions, obtains a building permit, constructs the improvement, and receives a certificate of occupancy to close out the building permit.

However, in some cases, implementation of an approved Site Plan does not require the issuance of a building permit or certificate of occupancy. In these cases, the Building Inspector does not have a clear and unequivocal enforcement tool upon which to issue violations returnable in the Beacon City Court.

The proposed local law to amend Section 223-7 of the City of Beacon Zoning Code is intended to provide a broad tool for use by the Building Inspector where a property is not in conformance with an approved Site Plan or Approval Resolution, regardless of whether a building permit or certificate of occupancy is required for the approved improvements or uses.

To move forward with the local law, the City Council is required to refer the local law to the Beacon Planning Board and to the Dutchess County Planning Department. A public hearing on the local law will also be required.

CITY COUNCIL
CITY OF BEACON

LOCAL LAW TO AMEND CHAPTER 223, ARTICLE III, SECTION 7, OF THE CODE OF THE CITY OF BEACON

A LOCAL LAW amend Chapter 223, Article III, Section 7 of the Code of the City of Beacon concerning conformity required for land use approvals.

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

Section 1. Chapter 223, Article III, Section 7 of the Code of the City of Beacon entitled "Conformity Required" is hereby amended as follows:

§ 223-7. Conformity required.

No building shall be erected, moved, altered, rebuilt or enlarged, nor shall any land or building be used, designed or arranged to be used, for any purpose or any manner, except in conformity with all regulations, requirements and restrictions specified in this chapter for the district in which such building or land is located. The details of any plan or site plan approved by the City Council, Planning Board or Board of Appeals acting under the terms of this chapter and any conditions attached to such approval as set forth on the plan or Resolution shall be deemed to be such requirements.

Section 2. Ratification, Readoption and Confirmation

Except as specifically modified by the amendments contained herein, Chapter 223, Article III, of the Code of the City of Beacon is otherwise to remain in full force and effect and are otherwise ratified, readopted and confirmed.

Section 3. Numbering for Codification

It is the intention of the City of Beacon and it is hereby enacted that the provisions of this Local Law shall be included in the Code of the City of Beacon; that the sections and subsections of this

Local Law may be re-numbered or re-lettered by the Codifier to accomplish such intention; that the Codifier shall make no substantive changes to this Local Law; that the word " Local Law" shall be changed to " Chapter," " Section" or other appropriate word as required for codification; and that any such rearranging of the numbering and editing shall not affect the validity of this Local Law or the provisions of the Code affected thereby.

Section 4. Severability.

If any clause, sentence, paragraph, subdivision, section, or part of this chapter or the application thereof to any person, individual, corporation, firm, partnership, entity, or circumstance shall be adjudged by any court of competent jurisdiction to be invalid or unconstitutional, such order or judgment shall not affect, impair, or invalidate the remainder thereof, but shall be confined in its operation to the clause, sentence, paragraph, subdivision, section, or part of this chapter, or in its application to the person, individual, corporation, firm, partnership, entity, or circumstance directly involved in the controversy in which such order or judgment shall be rendered.

Section 5. Effective date.

This chapter shall take effect immediately upon filing with the Office of the Secretary of State of the State of New York.

City of Beacon Workshop Agenda
9/30/2019

Title:

Noise Ordinance Local Law

Subject:

Background:

ATTACHMENTS:

Description	Type
Memorandum from City Attorney Regarding the Proposed Noise Ordinance	Cover Memo/Letter
Proposed Local Law to Amend Chapter 149 and Chapter 223 Section 29 of the Code of the City of Beacon	Local Law

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MEMORANDUM

TO: **Mayor Casale and Members of the City Council of the City of Beacon**

FROM: **Keane & Beane, P.c.**

RE: **Proposed Noise Ordinance**

DATE: **September 26, 2019**

Based on the City Council's comments at the August 29, 2019 workshop meeting and comments raised by the City's staff and the City's noise consultant, the following changes have been made to the local law amending Chapter 149 of the Code of the City of Beacon entitled Noise. All revisions are marked as track changes in the attached local law.

1. It is our understanding the City Council was in agreement that the current exemptions and specified prohibited acts that have time restrictions associated with them should have the same time restrictions. Therefore, the proposed Local Law has been amended to create uniform daytime hours (7 a.m. – 9 p.m.) and nighttime hours (9 p.m. – 7 a.m.). We have updated the definitions in the proposed Local Law to reflect this change.

2. At the August 29, 2019 workshop, the Council did not want to have different time restrictions for weekends or holidays for exempted and prohibited actions. The proposed Local Law has been updated to address this by removing the definitions of weekday, weekday night, weekend and weekend night. All references to these terms have been removed in the proposed Local Law.

3. It is our understanding the Council wishes to keep footnote one in Table 1 in the proposed Local Law. However, the Council agreed that it would be easier for enforcement purposes to eliminate any reference to zoning districts, and amend the provision so that the permissible sound level limits are increased by 5 dB(A) during daytime hours if the residential receptor lives on property within a distance of 200 feet of a commercial facility or industrial use, such distance shall be measured from the sound source to the property line of the residential receptor . Police officers do not always know what zoning district a property is located in. This language is easier and more efficient to enforce because it does not rely on the zoning district designations.

4. The plainly audible standard has been updated to specify that noise disturbance is considered plainly audible if it can be heard inside the dwelling of an affected person with all windows and doors closed.

5. We eliminated Section 149-7.D which prohibited loading and unloading of boxes, crates, etc. between the hours of 10:00 p.m. and 7:00 a.m. The loading and unloading of boxes is addressed by the decibel restrictions set forth in the proposed Local Law. The City's noise consultant, Eric Zwerling, advises such a provision is no longer necessary and is outdated.

6. It remains unclear how the City Council would like to address the issue of outdoor music. We have updated the proposed Local Law to require outdoor noise permits for commercial establishments (§149-10) and to require outdoor noise permits for (a) private or public celebrations and (b) certain construction projects (§ 149-11). In connection with commercial establishments, the proposed Local Law, as drafted, requires commercial establishments to obtain a permit to operate, play or permit the operation or playing of any sound production device outdoors. The permit is good for a year and allows the permit holder to play/operate any sound production device outdoors once a week (Sunday-Monday). This is one option the City may pursue.

   The City's noise consultant has prepared the attached chart to clarify the options available to regulate outdoor music on commercial properties. The chart also includes a pros/cons analysis of each option. The City Council should review the attached chart and provide additional feedback and direction concerning the regulation of outdoor music.

ecc: Anthony Ruggiero, City Administrator
Lieutenant Tom Figlia
John Clarke, City Planner
Eric Zwerling, Noise Consultant

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OPTION #1 – Prohibit outdoor amplified music
PROS – This is very simple to enforce. If there is an outdoor speaker in use, it is a prima facie violation. No measurements are necessary. It is extremely protective of affected parties.
CONS – This is very restrictive on the facilities so regulated, and affords no opportunity for any outdoor amplified sound. This would apply even to those facilities utilizing background music for outdoor dining, and those with no potentially sensitive receptors in close proximity.
OPTION #2 - Allow outdoor amplified music, any day, and regulate it pursuant to the limits in Table I during daytime hours (7:00 AM to 9:00 PM). During nighttime hours (9:00 PM to 7:00 AM) the applicable standard would be the prohibition against plain audibility inside a dwelling [Specific Prohibited Acts §149-7(A)(1)].
PROS – This is relatively simple. If the sound is below the permissible limit, it's compliant. If it's above, it's not. Objective limits allow for some level of activity, and a facility can calibrate their system to remain compliant, and/or conduct measurements to self-police to remain so.
CONS – outdoor music is a volitional noise. The facility chooses when, how and where to emit the noise. There are affected parties who do not want to be exposed to even compliant levels all of the time it would be permissible. Deterrence is limited to the penalties in §149-15, which can escalate to a misdemeanor on the third offense. There is no specific provision for depriving a recidivist facility from the right to utilize outdoor amplification during daytime hours (assuming no intervention from NYS State Liquor Authority (SLA)). I would suggest that we state in the code that Beacon finds it disorderly for a commercial establishment that serves alcohol to violate Chapter 149: "any facility whose permit is revoked is determined to be disorderly pursuant to the NYS State Liquor Authority Handbook for Retail Licensees" (or somesuch). The SLA requires compliance with all state and local laws and regulations, and if a facility is in violation they "face disciplinary action by the SLA". Thus, the meaning and import of declaring the revocation of an outdoor music permit to represent a disorderly operation will be quite clear, and hopefully deterrent.
OPTION #3 – Annual permit, specified number of days/annum (e.g., 1 day per week).
PROS – same as Option #2. In addition, if there is amplified outdoor sound on a non-permitted day, simple observation of its use is prima facie evidence of a violation and no measurements are required. This option has a limited number of permitted days, and abutting properties can plan accordingly with an established calendar of "amplified days" and "non-amplified days". This approach is less burdensome on the City than having to permit each individual date. Includes

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provision for revocation of permit upon 2nd or 3rd violation. Revocation or non-reissuance of the permit may prove a more compelling penalty than the penalties in § 149-15, especially if this can be reported to the SLA to some potential effect .

The available days/times could be limited (e.g., the applicant can choose Fridays and Saturdays 4PM-9PM, and Sundays 12PM-5 PM).

CONS – outdoor music is a volitional noise. The facility chooses when, how and where to emit the noise. There are affected parties who do not want to be exposed to even compliant levels. However, this objection would be partially addressed by limiting the number of days/annum.

If the choice is to permit outdoor amplified sound one day per week, and that day is not fixed (e.g., Saturdays), this will create a layer of complexity for enforcement officers who will have to check a master list to determine if outdoor amplification is permitted for that date at that facility. That list could be kept with the dispatcher.

This provision, unamended (see option below), would apply even to those facilities utilizing background music for outdoor dining, and those with no potentially sensitive receptors in close proximity. The result would be a potentially unnecessary limitation on the days they can employ such amplification. That said, if there were no complaints there would be no investigation. However, if there were a complaint and the facility either had not applied for a permit or was had outdoor amplification on a non-permitted date they would be in violation, regardless of the level.

Language similar to the following would address this situation: "if the sound production device is used for the purposes of providing low-level background music for outdoor dining and the device is more than 100 feet from the property line of any potentially affected person, the requirement to obtain a permit is waived". "For the purposes of this provision 'low-level background music' shall mean music that does not exceed 65 dBA at a distance of 10 feet from any speaker or other sound production device". This sound level would propagate to 45 dBA at 100 feet, which is below the night time permissible limit. This limit is substantially more restrictive than Table 1, however it would allow these facilities to employ outdoor amplification all the time, without the need for a permit. If they wanted to play their music louder, they could apply for a permit and that would get them one day per week at the Table 1 limits.

The amendments for background music could also be crafted to allow low-level music in front of shops or restaurants, facing a public right of way (the sidewalk, and not towards residences), in a manner that would allow such music more frequently than a permitting scheme would allow.

DRAFT LOCAL LAW NO. ____ OF 2019

CITY COUNCIL
CITY OF BEACON

PROPOSED LOCAL LAW TO AMEND CHAPTER 149 AND CHAPTER 223 SECTION 29 OF THE CODE OF THE CITY OF BEACON

A LOCAL LAW to amend Chapter 149 and Chapter 223 Section 29 of Code of the City of Beacon, concerning noise regulations.

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

Section 1. Chapter 149 of the Code of the City of Beacon entitled "Noise" is hereby repealed in its entirety.

Section 2. Chapter 149 of the Code of the City of Beacon entitled "Noise" is hereby adopted as follows:

§ 149-1 Title.

This Chapter shall be known and cited as the "City of Beacon Noise Control Law."

§ 149-2 Legislative Intent.

The intent of this Chapter is to supersede the present Noise Control Law of the City of Beacon by the enactment of the following provisions, definitions and standards for noise elimination or abatement in the City of Beacon.

§ 149-3 Findings and declarations.

It is hereby found and declared that:

A. The making, creation or maintenance of loud, unnatural or unusual noises, which are prolonged and unnatural in their time, place and use, affect and are a detriment to the public health, comfort, convenience, safety and welfare of the residents of the City of Beacon.

B. The necessity in the public interest for the provisions and prohibitions hereinafter contained and enacted is declared as a matter of legislative determination and public policy, and it is further declared that the provisions and prohibitions hereinafter contained and enacted are for the purpose of securing and promoting the public health, comfort, convenience, safety and welfare, and the peace and quiet of the City of Beacon and its inhabitants.

§ 149-4 Definitions.

As used in this Chapter, the following terms shall have the meanings as indicated:

AFFECTED PERSON

Any person who has lodged a Noise complaint with the Building Department or Police Department that he or she is the receptor of Noise on property within the City, and said Affected Person has an interest in the property as an owner, tenant, or employee.

AMBIENT SOUND

The sound level at a given location that exists as a result of the combined contribution in that location of all sound sources, excluding the contribution of the source or sources under investigation for potential violation of this Chapter and excluding the contribution of extraneous sound sources. Ambient sounds are differentiated from extraneous sounds by the fact that ambient sounds are being emitted the majority of the time although they may not be continuous. Examples of ambient sounds may include steady traffic of properly muffled vehicles, summer insects in the distance, pedestrians talking, and adjacent commercial/industrial operations or mechanical equipment.

COMMERCIAL DISTRICT

All commercial districts as defined § 223-2 of the Code of the City of Beacon.

COMMON WALL BUILDING

Any building wherein there are two or more dwelling units.

COMMERCIAL FACILITY

Any premises, property or facility involving traffic in goods or furnishing of services for sale or profit, including but not limited to:

A. Banking or other financial institutions.

B. Dining establishments.

C. Establishments providing retail services.

D. Establishments providing wholesale services.

E. Establishments for recreation and entertainment, including the serving of alcohol.

F. Office buildings.

G. Transportation.

H. Warehouses.

I. Establishments providing commercial living accommodations and commercial property used for human habitation, when such is the source of the sound under investigation.

CONSTRUCTION

Any site preparation, assembly, erection, repair, alteration or similar action, but excluding demolition of buildings or structures.

CONTINUOUS SOUND

Sound with a duration of one second or longer measured by the slow response of a sound level meter. Impulsive sounds that are rapidly repetitive and occur over a period of time with a

duration of one second or longer shall be measured as continuous sound.

CORRECTED SOURCE SOUND LEVEL

The sound level attributable to the source or sources under investigation for potential violation of this Chapter, which is calculated by subtracting the measured ambient sound level from the measured total sound level.

DAYTIME HOURS

The hours between 7:00 a.m. and 9:00 p.m.

dBA

The sound level as measured using the "A" weighting network with a sound level meter meeting the standards set forth in ANSI S1.4-1983 or its successors. The unit of reporting is dB(A). The "A" weighting network discriminates against the lower frequencies according to a relationship approximating the auditory sensitivity of the human ear.

DECIBEL

The practical unit of measurement for sound pressure level. The number of decibels of a measured sound is equal to 20 times the logarithm to the base of 10 of the ratio of the sound pressure of the measured sound to the sound pressure of a standard sound (20 micropascals); abbreviated as "dB."

DEMOLITION

Any dismantling, intentional destruction or removal of buildings or structures.

EMERGENCY WORK

Any work or action necessary to deliver essential services, including but not limited to repairing water, gas, electricity, telephone or sewer facilities or public transportation facilities, removing fallen trees on public rights-of-way or abating life-threatening conditions.

EXTRANEOUS SOUND

Any sound that is intense and intermittent, and is neither ambient sound nor sound attributable to a source or sources under investigation for a potential violation of this chapter. Such sound includes but is not limited to sirens of emergency vehicles, unusually loud motor vehicle exhaust or braking, people shouting or talking next to the sound level meter, animal vocalizations, aircraft or trains passing, car door slams, etc. When conducting compliance measurements, such extraneous sound sources may be noted but their sound levels are excluded.

INDUSTRIAL PROPERTY

Property used for the production and fabrication of durable and nondurable man-made goods.

INDUSTRIAL DISTRICT

All industrial districts as defined in § 223-2 of the Code of the City of Beacon.

IMPULSE SOUND

Any sound with a rapid onset and rapid decay with either a single pressure peak or a single burst (multiple pressure peaks) having a duration of less than one second.

LEGAL HOLIDAYS

New Year's Day, Lincoln's Birthday, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans Day, Thanksgiving Day and Christmas Day.

MOTORIZED EQUIPMENT

Any power equipment utilizing an electric or internal-combustion engine.

MOTOR VEHICLE

Any vehicle that is propelled or drawn on land by an engine or motor.

MUFFLER

A sound-dissipative device or system for abating the sounds of escaping gasses of an internal-combustion engine.

MULTI-USE PROPERTY

Any distinct parcel of land that is used for more than one category of activity. Examples include, but are not limited to:

A. A commercial, residential, industrial or public service property having boilers, incinerators, elevators, automatic garage doors, air conditioners, laundry rooms, utility provisions, or health and recreational facilities, or other similar devices or areas, either in the interior or on the exterior of the building, which may be a source of elevated sound levels at another category on the same distinct parcel of land; or

B. A building which is both commercial (usually on the ground floor) and residential property located above, behind, below or adjacent thereto.

NIGHTTIME HOURS

The hours between 9:00 p.m. and 7:00 a.m. .

NOISE CONTROL ADMINISTRATOR

The Code Enforcement Officer, the Building Inspector of the City of Beacon or the City of Beacon Police Department.

NOISE DISTURBANCE

Any sound that:

A. Endangers the safety or health of any person.

B. Disturbs a reasonable person of normal sensitivities, or

C. Endangers personal or real property.

OUTDOOR SOUND

Sound or noise originating or emanating from outside a building or structure.

PERSON

Any individual, corporation, company, association, society, firm, partnership or joint-stock company.

PLAINLY AUDIBLE

Any sound that can be detected by an investigator using his or her unaided hearing faculties of normal acuity. As an example, if the sound source under investigation is a sound production

device, the detection of the rhythmic bass component of the music is sufficient to verify plainly audible sound. The investigator need not determine the title, specific words, or the artist performing the song.

PUBLIC RIGHT-OF-WAY

Any street, avenue, boulevard, road, highway, sidewalk, alley or parking lot used by members of the general public.

PUBLIC SPACE

Any real property or structures therein that are either owned, leased or controlled by a governmental entity. Public space includes but is not limited to parks, sports fields or lots.

REAL PROPERTY LINE

Either (a**)** the vertical boundary that separates one parcel of property (i.e., lot and block) from another residential or commercial property; (b) the vertical and horizontal boundaries of a dwelling unit that is part of a common wall building; or (c) on a multi-use property as defined herein, the vertical or horizontal boundaries between the two portions of the property on which different categories of activity are being performed (e.g., if the multi-use property is a building which is residential upstairs and commercial downstairs, then the real property line would be the interface between the residential area and the commercial area, or if there is an outdoor sound source such as an HVAC unit on the same parcel of property, the boundary line is the exterior wall of the receiving unit).

RESIDENTIAL PROPERTY

Property used for human habitation, including but not limited to:

A. Private property used for human habitation.

B. Commercial living accommodations and commercial property used for human habitation.

C. Recreational and entertainment property used for human habitation.

D. Community service property used for human habitation.

E. Hospitals, long-term medical or residential care facilities.

SOUND LEVEL

Unless otherwise stated, the sound pressure level measured in decibels with a sound level meter set for A-weighing; sound level is expressed in dBA.

SOUND-LEVEL METER

An instrument used to measure sound level which conforms to Type 1 or Type 2 standards specified by the American National Standards Institute "Specifications for Sound Level Meters" S1.4-1984 (or subsequent revisions).

SOUND LEVEL METER CALIBRATOR

An instrument used to conduct field calibration checks of a sound level meter, and which conforms to the American National Standards Institute "Specifications and Verification Procedures for Sound Calibrator" S1.40-2006 (or subsequent revisions).

SOUND PRODUCTION DEVICE

Any device whose primary function is the production of sound, including, but not limited to any musical instrument, loudspeaker, radio, television, digital or analog music player, public address system or sound-amplifying equipment.

TOTAL SOUND LEVEL

The measured level which represents the sum of sound from the source or sources under investigation for potential violation of this code and the ambient sound sources, excluding any extraneous sound, when measured on the property of an affected person or at another specified location.

§ 149-5 Noise disturbance prohibited.

It shall be unlawful for any person to make, continue, cause or allow, orally or mechanically, any noise disturbance affecting persons in the City of Beacon.

A. The general standards to be considered in determining whether such noise disturbance exists include, but are not limited to, the following:

(1) The intensity of the noise under investigation for violation of this Chapter.

(2) Whether the nature of the noise is usual or unusual.

(3) Whether the origin of the noise is natural or unnatural.

(4) The volume and intensity of the ambient noise, if any.

(5) The proximity of the noise to parks or other public places, hospitals, nursing homes, day-care centers or schools, and houses of worship.

(6) The nature and the zoning district of the area within which the noise emanates.

(7) Whether the noise trespasses into a residential dwelling and infringes on the ability of an affected person to repose or sleep, or trespasses into a commercial establishment and infringes on the ability of an affected person to conduct normal business activities.

(8) The time of day or night the noise occurs.

(9) The duration of the noise.

(10) Whether the sound source is temporary.

(11) Whether the noise is continuous or impulsive.

(12) The presence of discrete tones

(13) Whether the emission of the noise is purposeful or unnecessary and serves no legitimate purpose.

§ 149-6 Sound level limits.

A. No person shall operate or cause to be operated any source of sound from any use occupancy in such a manner as to create a sound level which exceeds the limits set forth in the use

occupancy category in Table 1, when measured at or within the property line of an affected person.

(1) Continuous Sound. The limit in Table 1 may not be exceeded in three or more measurement periods within any one-hour period. Each measurement period must be no less than one half minute. If the total duration of the sound under investigation is less than one and one half minute, the requirement for a minimum of three measurements shall be waived.

TABLE 1
MAXIMUM PERMISSIBLE SOUND LEVEL LIMITS
BY RECEIVING LAND USE
dB(A)

Residential[1] 7:00 AM – 9:00 PM	Residential 9:00 PM – 7 AM	Commercial 24 hours	Industrial 24 hours
OUTDOORS			
60	50	65	70
INDOORS[2]			
50	40	55	60

1. If the residential receptor is within 200 feet of a commercial facility or industrial use,, the permissible sound level limits in Table 1 are increased by 5 dB(A) during daytime hours. Such distance shall be measured from the sound source to the property line of the residential receptor.

2. Indoor measurements for compliance with Table 1 shall only be taken if the sound source is on or within the same property as the receiving property, as in the case of a common wall building or a multi-use property (e.g., sound generated within a commercial unit of a multi-use property building and received within a residential unit of the same building). In addition, indoor measurements shall be taken if the property line between the receiving property and the source property is a common wall, floor or ceiling

(2) Impulsive Sound:

(a) No person shall make, cause, allow or permit the operation of any impulsive source of sound that has a maximum sound level in excess of eighty (80) dBA, when measured at or within the real property line of an affected person. If an impulsive sound occurs more frequently than ten (10) times in any half hour period the levels set forth in Table 1 shall apply. At nighttime, if an impulsive sound occurs more frequently than four (4) times in any half hour the levels set forth in Table 1 shall apply.

(b) If measurements of impulsive sound are conducted indoors, the permissible limit is sixty (60) dBA. If an impulsive sound occurs more frequently than ten (10) times in any hour the levels set forth in Table 1 shall apply. At nighttime, if an impulsive sound occurs more frequently than four (4) times in any hour the levels set forth in Table 1 shall apply.

§ 149-7 Specific prohibited acts, restricted uses and activities

In addition to the general prohibitions set out above and the maximum permissible sound levels set out in Table 1, and unless otherwise exempted in this Chapter, the following specific acts are hereby declared to be in violation of this Chapter. This enumeration shall not be deemed to be exclusive.

A. Sound production devices: operating, playing or permitting the operation or playing of any sound production device, in such a manner as to create a noise disturbance at or within the property line of any affected person. No commercial facility shall operate, play, or permit the operation or playing of any sound production device outdoors, without first obtaining a permit pursuant to § 149-10. Commercial facilities operating playing or permitting the operation or playing of any sound production device indoors, shall keep their doors and windows closed after 9:00 PM, except as necessary for entrance or egress.

(1) Prima facie evidence of a violation of this section and the creation of a noise disturbance shall include but not be limited to the operation of such a device during nighttime hours in such a manner that it is plainly audible inside the dwelling of an affected person, with all windows and doors closed.

(2) The limits in Table I shall also apply at all times.

B. Loudspeakers and public-address systems mounted outdoors or indoors within 10 feet of an open door or window: using or operating any loudspeaker, public-address system or similar device is prohibited during nighttime hours. No commercial facility shall operate, play, or permit the operation or playing of any sound production device outdoors, without first obtaining a permit pursuant to § 149-10. Commercial facilities operating playing or permitting the operation or playing of any sound production device indoors, shall keep their doors and windows closed at all times, except as necessary for entrance or egress.

C. Animals: it shall be unlawful for any property owner or tenant to allow any domesticated or caged animal to create a sound across a real property line which creates a noise disturbance or interferes with the peace, comfort, and repose of any resident, or to refuse or intentionally fail to cease the noise disturbance when ordered to do so by a Noise Control Administrator. Prima facie evidence of a violation of this section shall include but not be limited to:

(1) Vocalizing (howling, yelping, barking, squawking etc.) for five (5) minutes without interruption, defined as an average of four or more vocalizations per minute in that period; or,

(2) Vocalizing for ten (10) minutes intermittently, defined as an average of two vocalizations or more per minute in that period.

(3) It is an affirmative defense under this subsection that the dog or other animal was intentionally provoked to bark or make any other noise.

D.

E. Motor vehicles:

(1) Operating or permitting the operation of any motor vehicle, or any auxiliary equipment attached to such a vehicle, for a period longer than five minutes in any sixty-minute period

so out of repair or in such a condition as to create a noise disturbance.

(2) No motor vehicle may be operated without a properly functioning muffler on a public right-of-way. The operation of a vehicle which is unmuffled or is equipped with straight pipes is a violation of this Chapter.

(3) Personal or commercial vehicular music amplification or reproduction equipment shall not be operated in such a manner that it is plainly audible at distance of 25 feet in any direction from the operator.

(4) The registered owner of the vehicle, if present when the violation occurs, is in violation of this section. If the owner of the vehicle is not present, the violation will be served upon the person in charge or control of the vehicle, or anyone who assists in the production of the sound that is found to be in violation.

(5) The horn or signaling device on any motor vehicle may not be operated, except when used as a danger or traffic warning signal, and such operation must terminate when the danger has passed.

(6) An exterior alarm of a motor vehicle must not audibly sound for more than five minutes continuously or 10 minutes intermittently. While operating within these parameters, the limits in Table 1 do not apply.

(7) It shall be unlawful to create a noise or disturbance or operate a motor vehicle in such a manner as to cause excessive squealing or other excessive noise of the tires.

F. Construction, repair and demolition: excluding emergency work, operating or permitting the operation of any tool or equipment used in construction, repair, demolition or excavation shall not be permitted during nighttime hours on any day unless it can meet the limits in Table 1. At all other times the limits set forth in Table 1 do not apply. This section shall not apply to road maintenance/ improvement on preexisting roads or preventative maintenance on the sewer mains and pipes, on which daytime construction would prove disruptive to traffic flow. All motorized equipment used in construction and demolition activity shall be operated with a muffler.

G. Power tools: operating power tools used for landscaping and yard maintenance, excluding emergency work, within 200 feet of a residential property line shall not be permitted during nighttime hours , unless such activities can meet the limits set forth in Table I. All motorized equipment used in these activities shall be operated with a muffler. At all other times, the limits in Table 1 do not apply.

I. Miscellaneous sound producers: creating or emitting a noise which constitutes a noise disturbance by any manner, including but not limited to a horn, siren, whistle, shout, bell, musical instrument, tool or engine.

J. The operation of a standby or portable generator is exempt from the limits in this Chapter when there is a power outage. The regular testing/exercising of a generator must be conducted on weekdays (Monday-Friday) during daytime hours and for the minimum duration suggested by the manufacturer. Such testing/exercising of a generator shall not be conducted on any Legal Holiday. During such testing the sound level limit shall be 70 dBA at the property line of any affected person. The permissible limits in Table 1 apply to the operation of generators tested

outside of the prescribed hours or operated when there is no power outage. No person shall at any time operate a generator during nighttime hours in a Residential District unless there is a power outage. Generators used on a permitted construction site may not exceed 65 dBA at the property line of any affected person.

K. Repairing, rebuilding, modifying or testing any motor vehicle, motorcycle or motorboat in such a manner as to cause a frequent, repetitive or continuous noise disturbance across the real property line of an affected person or during nighttime hours is prohibited. When these activities are conducted during daytime hours, and do not cause a noise disturbance, the limits in Table 1 do not apply.

§ 149-8 Exemptions.

The following sounds are exempt from the restrictions of this Chapter:

A. Sounds from motorized equipment such as power tools, lawn mowers and garden equipment when operated during daytime hours. ,

B. Sound from bells or chimes, which may include electronic devices that imitate the sound of bells or chimes, while being used in conjunction with religious services.

C. Sound from a snow blower, snow thrower, electric snow shovel or snowplow used for the purpose of snow removal.

D. Sound from an exterior burglar alarm of any building, provided that such alarm shall terminate within 15 minutes after it has been activated.

E. Sound used for the purposes of alerting a person of an emergency.

F. Sound from the performance of emergency work.

G. Sound from a municipally sponsored event or one for which a permit has been issued by the city. Permitted events are subject to the conditions of the permit, which may include restrictions on the hours of operation and alternative sound level limits.

H. National warning system (NAWAS); systems used to warn the community of attack or imminent public danger such as flooding, explosion or hurricane.

I. Sounds from municipal-sponsored projects, work or repairs as ordered by the City Administrator, or his or her designee, including public or private garbage pickup.

J. Motor vehicles on public roadways otherwise in compliance with §149-7E

K. The unamplified human voice **is exempt from the sound level limits of this Chapter, however, it may be determined that an individual is creating a noise disturbance pursuant to § 149-5**.

L. Surface carriers engaged in commerce by railroad.

M. Noise of aircraft flight operations.

§ 149-9 Inspections.

A. For the purpose of determining compliance with the provisions of this Chapter, the Noise

Control Administrator or his or her designated representative is hereby authorized to make inspections of all noise sources and to take measurements and make tests whenever necessary to determine the quantity and character of noise.

B. No person shall refuse to allow the Noise Control Administrator or his or her designated representative to perform reasonable sound testing on any device or devices, including but not limited to requiring the temporary shutting down of said device or devices for the purposes of such testing except that upon showing that the inspection would produce a noticeable interruption of services that would cause discomfort to employees or customers or require a building engineer or other professional to work with the equipment, such authorized employee shall reschedule the inspection for a more convenient time.

C. In the event that any person refuses or restricts entry and free access to any part of a premises or refuses inspection, testing or noise measurement of any activity, device, facility or process where inspection is sought, the Noise Control Administrator and/or designated representative may seek from the appropriate court a warrant without interference, restriction or obstruction, at a reasonable time, for the purpose of inspecting, testing or measuring noise.

D. No person shall hinder, obstruct, delay, resist, prevent in any way, interfere or attempt to interfere with any authorized person while in the performance of his/her duties under this Chapter.

§ 149-10 Outdoor Music Permits for Commercial Establishments

A. Any commercial facility operating, playing or permitting the operation or playing of any sound production device outdoors shall require a noise permit, except where such outdoor music is played in connection with any special event permitted under § 211-13.2 , including Spirit of Beacon Day.

B. Noise Permit Application Procedures

(1) Applications for permits shall be made to the City Clerk and shall be reviewed and approved by the City Administrator, Chief of Police and Building Inspector. The permit shall be issued by the City Clerk. The City shall have the power to impose restrictions and conditions upon any sound source site.

(2) Applicants must file for a permit with the City Clerk prior to January 1 of each year.

(3) Said permit shall be valid for one year unless or until suspended or revoked. The permit year shall run from January 1 to December 31 of each calendar year.

(4) Applications for a noise permit shall set forth the following information. The applicant's failure to supply the foregoing information shall be cause for rejection of the application.

(a) The name and address of the applicant.

(b) The name and location of the noise source for which such application is made.

(c) The nature and intensity of noise that will occur during the period of the permit.

(5) The permit shall be posed conspicuously within the facility.

(6) No permit issued under the provisions of this Chapter may be transferred or assigned from one owner to another owner or from one establishment to another establishment.

(7) A permit fee as set forth on the City of Beacon fee schedule shall be required.

C. The following factors shall be taken into consideration when determining whether to grand said noise permit application:

(1) The character and degree of injury to, or interference with, the health and welfare of the reasonable use of property which is caused or threatened to be caused by the sound to result from the permit.

(2) The social and economic value of the activity for which the permit is sought.

(3) The ability of the applicant to apply best practical noise control measures, if appropriate.

(4) The number of permits previously issued to the applicant.

(5) The number of permits issued permitting sound source operations at the subject property.

(6) The number of previous noise complaints received in connection with the operation of any sound source at the subject property.

D. Under the permit, the Applicant shall be permitted to operate or play any sound production device outdoors one day a week (Sunday-Saturday) until 9 p.m. The permit holder is not required to operate or play a sound production device every week and shall not be required to operate or play a sound production device outdoors the same day each every week. Such music must be within the applicable sound level limits set forth in this Chapter and may not continue after 9 p.m.

E. If the noise permit is denied, the reasons for the denial shall be provided to the applicant in writing.

F. Revocation of permit. The permit may be immediately revoked by the Building Inspector, Chief of Police and/or City Administrator if:

(1) There is a material misrepresentation of fact in the permit application; or

(2) There is a material change in any of the circumstances relied upon in granting the permit.

G. If the City determines that any commercial establishment has received three summonses for any violation of Chapter 149 of the City Code in any permit year, the City Council shall hold a public hearing to determine whether or not to suspend, revoke, modify, or limit the permit.

(1) Written notice of the public hearing shall be served on the permit holder personally or by certified mail, return receipt requested, addressed to the place of business of the permit holder as set forth in the most recent permit application, at least 10 days prior

to the hearing. The commercial facility shall not operate, place, or permit the operation or playing of any sound production device outdoors upon receipt of the notice described herein.

(2) The permit holder will be notified of the determination of the City Council, in writing, within 15 days of the close of the hearing. Such determination will remain on file in the Office of the City Clerk.

§ 149-11 Outdoor music permits for private or public celebrations and certain construction projects.

A. For purposes of this section, the following sound sources shall require permit approval from the City of Beacon:

(1) Private or public celebrations. Any person seeking to hold a public or private celebration which may violate provisions of this Chapter may apply for a permit which will allow the event to exceed the restrictions within this Chapter, subject to the restrictions set forth in said permit. A separate noise permit will not be required where the Applicant is required to obtain a permit in connection with any special event permit defined in § 211-13.2.

(2) Construction projects outside of permissible hours.

B. Noise Permit Application Procedures

(1) Applications for permits shall be made to the City Clerk and shall be reviewed and approved by the City Administrator, Chief of Police and Building Inspector. The permit shall be issued by the City Clerk. The City shall have the power to impose restrictions and conditions upon any sound source site.

(2) Applicants shall submit an application at least 30 days prior to the proposed occurrence/event. The City may, in its sole discretion, accept applications on less than 30 days notice upon good cause shown for not timely submitting

(3) Applications for a noise permit shall set forth the following information. The applicant's failure to supply the foregoing information shall be cause for rejection of the application.

(a) The name and address of the applicant.

(b) The name and location of the noise source for which such application is made.

(c) The nature and intensity of noise that will occur during the period of the permit.

(d) Applications for after-hours construction permits shall also include an explanation as to why the construction could not be completed during regular hours, as well as a presentation of adequate proof that compliance with this Chapter would impose an arbitrary or unreasonable hardship upon the applicant without equal or greater benefit to the public

(4) The permit shall enumerate the specific date(s) and times for which the permit is valid and may establish specific sound level limits that apply during the period of the permit which may not be exceeded at the nearest affected residential or noise sensitive property

(5) The permit shall be posed conspicuously within the facility.

(6) No permit issued under the provisions of this Chapter may be transferred or assigned from one owner to another owner or from one establishment to another

establishment.

(7) A permit fee as set forth on the City of Beacon fee schedule shall be required.

C. The following factors shall be taken into consideration when determining said noise permit application:

(1) The character and degree of injury to, or interference with, the health and welfare of the reasonable use of property which is caused or threatened to be caused by the sound to result from the permit.

(2) The social and economic value of the activity for which the permit is sought.

(3) The ability of the applicant to apply best practical noise control measures, if appropriate.

(4) The number of permits previously issued to the applicant.

(5) The number of permits issued permitting sound source operations at the subject property.

(6) The number of previous noise complaints received in connection with the operation of any sound source at the subject property.

D. If the noise permit is denied, the reasons for the denial shall be provided to the applicant in writing.

E. Revocation of permit. The permit may be immediately revoked by the Building Inspector, Chief of Police and/or City Administrator if:

(3) There is a violation of one or more conditions of the permit, including but not limited to sound level limits specified in the permit; or

(4) There is a material misrepresentation of fact in the permit application; or

(5) There is a material change in any of the circumstances relied upon in granting the permit.

§ 149-12 Enforcement

The Code Enforcement Officer, the Building Inspector of the City of Beacon or the City of Beacon Police Department is hereby empowered and authorized to exercise such powers as may be necessary or convenient to carry out and effectuate the purposes and provisions of this Chapter.

§ 149-13 Penalties for offenses.

A. Any violation of this chapter shall be punished as prescribed in § 1-3.

B. B. If the sound source found to be in violation is a sound production device, each separate hour in which a violation of this Chapter exists shall constitute a separate violation. The owner of the property and/or the owner of the commercial establishment from which sound is emitted and the person causing the generation of the sound are separately liable for a violation of this Chapter.

Section 3. Chapter 223, Article IV Section 29 of the Code of the City of Beacon entitled "Noise" is hereby deleted in its entirety.

Section 4. Ratification, Readoption and Confirmation

Except as specifically modified by the amendments contained herein, Chapter 223 of the Code of the City of Beacon is otherwise to remain in full force and effect and is otherwise ratified, readopted and confirmed.

Section 5. Numbering for Codification

It is the intention of the City of Beacon and it is hereby enacted that the provisions of this Local Law shall be included in the Code of the City of Beacon; that the sections and subsections of this Local Law may be re-numbered or re-lettered by the Codifier to accomplish such intention; that the Codifier shall make no substantive changes to this Local Law; that the word " Local Law" shall be changed to " Chapter," " Section" or other appropriate word as required for codification; and that any such rearranging of the numbering and editing shall not affect the validity of this Local Law or the provisions of the Code affected thereby.

Section 6. Severability

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

Section 7. Effective Date

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

City of Beacon Workshop Agenda
9/30/2019

Title:

23-28 Creek Drive

Subject:

Background:

ATTACHMENTS:

Description	Type
Creek Drive Cover Letter	Cover Memo/Letter
Zoning Board of Appeals Resolution Regarding 23-28 Creek Drive	Backup Material
Advisory Opinion from the City of Beacon Zoning Board of Appeals Regarding 23-28 Creek Drive	Cover Memo/Letter
Creek Drive Site Plan 1 of 12	Plans
Creek Drive Site Plan 2 of 12	Plans
Creek Drive Site Plan 3 of 12	Plans
Creek Drive Site Plan 4 of 12	Plans
Creek Drive Site Plan 5 of 12	Plans
Creek Drive Site Plan 6 of 12	Plans
Creek Drive Site Plan 7 of 12	Plans
Creek Drive Site Plan 8 of 12	Plans
Creek Drive Site Plan 9 of 12	Plans
Creek Drive Site Plan 10 of 12	Plans
Creek Drive Site Plan 11 of 12	Plans
Creek Drive Site Plan 12 of 12	Plans

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September 27, 2019

BY FEDERAL EXPRESS
AND E-MAIL
Mayor Randy Casale
and Members of the City Council
City of Beacon
1 Municipal Plaza
Beacon, New York 12508

Re: Application for Concept Plan Approval – Continued Review
Premises: 23-28 Creek Drive, Beacon, New York
Tax Parcel ID: 6054-37-037625

Dear Mayor Casale and Members of the City Council:

On behalf of 23-28 Creek Drive, LLC (the "Applicant"), the Contract-Vendee of the above-referenced Premises, we respectfully submit this letter and enclosures in furtherance of the above-referenced Application for Concept Plan Approval proposing to redevelop the underutilized former City of Beacon Department of Public Works ("DPW") Premises for a proposed mixed-use development consisting of 20,000 sq. ft. of commercial space and eight (8) residential apartment units (the "Project").[1]

For the reasons set forth herein, we respectfully submit that the record for this Application for Concept Plan Approval demonstrates compliance with all applicable Fishkill Creek Development ("FCD") District review criteria for the proposed mixed-use development.

APPLICATION STATUS – PRIOR APPROVALS

Planning Board – Environmental Review & Negative Declaration:

The Proposed Action is an Unlisted Action under SEQRA, and has undergone Coordinated Review with the Planning Board acting as Lead Agency. A Full Environmental Assessment Form was

[1] Note: As the Council is aware, on September 4, 2018 the Applicant and its consultants met with the City's Planning, Engineering, Building Department and Legal staff in connection with a Pre-Submission Conference regarding the Project. The Applicant also appeared at the City Council's November 26, 2018 Work Session; December 3, 2018 Regular Meeting; February 25, 2019 Work Session and March 4, 2019 Regular Meeting in connection with the Application for Concept Plan Approval.

submitted to the City Council, as well as to the Planning Board at the beginning of the application process.

As part of the Coordinated SEQRA review conducted by the Planning Board as Lead Agency, the Applicant retained the services of Maser Consulting, P.A., in order to review the traffic and parking impacts of the Project. Enclosed as **Exhibit A**, please find a copy of the Parking and Traffic Impact Study prepared by Maser Consulting P.A., dated March 25, 2019 (the "PTIS"),[2] which confirms that "... the 93 proposed parking spaces will sufficiently meet the parking needs of the development." *See* PTIS at page 5.[3]

The Applicant proposes to provide 93 total parking spaces on the Premises, including 80 spaces for the proposed 20,000 sq. ft. commercial space and thirteen (13) spaces for the eight (8) apartment units. As was discussed with the Planning Board's Traffic Consultant during the SEQRA review, as well as with the Zoning Board of Appeals ("ZBA") during its Public Hearing on the Project, it is respectfully submitted that 93 parking spaces will *overpark* the Premises. Indeed, the PTIS provides that "... in comparison to the nearby CMS District and Linkage District[s] the City Code would only require 48 and 58 spaces respectively, which is a reasonable comparison due to the Project's proximity to Main Street and these districts." *See* PTIS at page 4.

The Planning Board also issued an Advisory Opinion dated July 11, 2019, which provides in relevant part that:

> "The Fishkill Creek Development zone relies on general parking standards, while the similar mixed use Linkage and CMS zoning districts would require far fewer spaces, and in this case the commercial space is the main factor in the parking requirement. A shared parking situation will exist because some of the employees will live and work on site, and the commercial operation will take not be operating when some residents are at home. Lastly fewer parking spaces would cut down on the amount of impervious surfaces and add more accessible greenspace. After careful consideration, members unanimously supported and send a positive recommendation with regard to the parking variance."

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[2] Note: The enclosed PTIS updated the Applicant's original PTIS dated July 26, 2018 in order to reflect the increased commercial space and the reduction in the total number of residential apartment units that are included in the Project before this board.

[3] Note: Also enclosed in **Exhibit A (Tabs 2 & 3)** are copies of the Traffic Consultant's response to comments from the Planning Board's Traffic Consultant during the SEQR review (**Tab 2**), as well as a copy of the signage plan requested by the Planning Board (**Tab 3**) for additional reference.

Provided the above, following a four (4) month SEQRA Public Hearing, the Planning Board adopted a Negative Declaration on July 9, 2019, and determined that the entire action, including the requested variances, *will have no potential significant adverse environmental impacts. See* **Exhibit B** – Negative Declaration.[4] This concludes the SEQRA review process for the Project.

Zoning Board of Appeals – Area Variance Review:

Following the completion of the Coordinated Environmental Review of this Project, the Applicant appeared at the ZBA in connection with a request for four (4) area variances, including relief for off-street parking; maximum building height; maximum number of stories and the maximum dwelling unit size for two (2) of the eight (8) residential units.

The ZBA opened the Public Hearing on the Applicant's request for area variances on July 16, 2019 and continued the Public Hearing until August 20, 2019, at which time the Public Hearing was closed.

Ultimately, after carefully executing the balancing test for each of the requested variances, as well as considering public comments during the Public Hearing, the ZBA determined that the benefit of the requested variances clearly outweigh any possible detriment to the health, safety, and welfare of the neighborhood or community by such grant, and granted the requested four (4) area variances at its September 17, 2019 meeting. *See* **Exhibit C.**

Planning Board – Site Plan & Subdivision Review:

At this time, the Applicant is appearing at the City Council in connection with its continued review of its Application for Concept Plan Approval. While the SEQRA process is complete, the Applicant must appear again before the Planning Board as the reviewing authority that is reviewing the Applicant's request for Site Plan Approval and Subdivision (Lot Line Adjustment) Approval. Additional Public Hearing(s) will be held in connection with the Planning Board's continued review of the Project.

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[4] Note: The Negative Declaration adopted by the Planning Board on July 9, 2019 also determines that the building design will not have a significant adverse environmental impact on aesthetic resources, providing in relevant part that:

> The Proposed Action will not result in the obstruction, elimination or significant screening of one or more official designated scenic views. The Proposed Action will be visible from Fishkill Creek but the aesthetics of the site will be far improved from the existing condition of the DPW facility. Further, public viewing of Fishkill Creek from the Site will be enhanced by providing a Greenway Trail segment and a public park at the south end of the site.

CONCLUSION & DOCUMENTS ENCLOSED IN SUPPORT OF APPLICATION

For the foregoing reasons, and as will be further discussed at this Council's Board's September 30th Work Session and the subsequent Public Hearing before the City Council, the Applicant respectfully submits that the proposed Project satisfies the purposes of the FCD, providing a mix of commercial and residential uses that will add handsome architectural features on an underutilized former industrial property. The Project also incorporates important linkages to the Greenway Trail and the proposed half-acre park, maximizing the public view corridor along the Fishkill Creek.

In further support of this Application we respectfully submit electronic copies of the following site plan sheets entitled "Site Plan Application – 23-28 Creek Drive", prepared by Aryeh Siegel, Architect, and Hudson Land Design Professional Engineering, P.C., last revised May 28, 2019, numbered and titled as follows:

- Sheet 1 of 12 – Site Plan;
- Sheet 2 of 12 – Existing Conditions & Demolition Plan;
- Sheet 3 of 12 – Site Section Diagram;
- Sheet 4 of 12 – Landscape Plan & Planting Schedule;
- Sheet 5 of 12 – Building Plans;
- Sheet 6 of 12 – Renderings;
- Sheet 7 of 12 – Grading & Utility Plan;
- Sheet 8 of 12 – Erosion and Sediment Control Plan;
- Sheet 9 of 12 – Profiles;
- Sheet 10 of 12 – Site & Erosion Sediment Control Details;
- Sheet 11 of 12 – Stormwater Details; and
- Sheet 12 of 12 – Water and Sewer Details.

In further support of this Application, we respectfully submit the instant letter and the following documentation:

Exhibit A: Parking and Traffic Impact Study;

Tab 1: Parking and Traffic Impact Study prepared by Maser Consulting P.A., dated March 25, 2019;

Tab 2: Maser Consulting P.A. Response to Planning Board Traffic Consultant Comments dated April 30, 2019; and

Tab 3: Traffic Signage Plan.

Exhibit B: SEQRA Negative Declaration Adopted by Planning Board on July 9, 2019; and

Exhibit C: City of Beacon Zoning Board of Appeals Resolution Granting Four (4) Area Variances dated September 17, 2019.

Thank you for your consideration in this matter. The Applicant looks forward to continuing the review of the Application for Concept Plan Approval at the City Council's September 30th Work Session. Further, the Applicant respectfully requests that the City Council consider scheduling the Public Hearing on the Concept Plan for the Council's November 4th regular meeting Agenda.

In the meantime, should the City Council or City Staff have any questions or comments with regard to the foregoing, please do not hesitate to contact me.

Very truly yours,

Taylor Palmer

Taylor M. Palmer

cc:

Anthony Ruggiero, City Administrator
Nicholas M. Ward-Willis, Esq.
Aryeh J. Seigel Architect
Michael A. Bodendorf, P.E. – Hudson Land Design Professional Engineering, P.C.
23-28 Creek Drive, LLC

CITY OF BEACON
ZONING BOARD OF APPEALS

RESOLUTION

WHEREAS, an application has been made to the City of Beacon Zoning Board of Appeals ("Board of Appeals" or "Zoning Board") by **23-28 Creek Drive, LLC** (the "Applicant") for (1) a variance of 20 parking spaces, where 113 parking spaces are required for a mixed-used building consisting of 20,000 square feet of commercial space and eight (8) residential units pursuant to City Code § 223-26.F and 93 parking spaces are proposed; (2) a 750 square foot variance for two apartment units, where the maximum permitted dwelling unit size is 2,000 square feet pursuant to City Code § 223-41.14.C and two apartment units are proposed to be 2,750 square feet; (3) a one story height variance, where the maximum permitted building height is three stories pursuant to City Code § 223-41.14.F and the proposed building height is four stories; and (4) a 13 foot 4 inch building height variance where the maximum permitted building height is 40 feet pursuant to City Code § 41.14.F and the proposed building height is 53 feet-4 inches, in connection with the Applicant's proposal to construct a mixed use development with eight (8) apartments and 20,000 square feet of commercial space (the "Proposed Action" or "Project"), on property located at 23-28 Creek Drive in the Fishkill Creek Development ("FCD") Zoning District, said premises being known and designated on the tax map of the City of Beacon as **Parcel ID# 6054-37-037625** (the "Property"); and

WHEREAS, the Project is located on the former City of Beacon Department of Public Works ("DPW") property which consists of approximately 2.582 acres of land and a 0.228 acre portion of land owned by Weber Projects III. LLC located at 7-15 Creek Drive, as designated on the City tax map as Parcel ID# 6054-37-066670, which said 0.228 acres is the subject of a resubdivision application before the Planning Board and which is not part of this variance application; and

WHEREAS, the Applicant submitted its application to the Zoning Board of Appeals in conjunction with its application to the City Council for Concept Plan approval and its application to the City Planning Board for Site Plan and Subdivision (lot line adjustment) approval; and

WHEREAS, the Proposed Action is an Unlisted Action pursuant to the New York State Environmental Quality Review Act; and

WHEREAS, on December 3, 2019, the City Council referred the application for Concept Plan approval to the City Planning Board for report and recommendation and asked the Planning Board to be lead agency for the coordinated environmental review of the Project; and

WHEREAS, the City Planning Board considered the Proposed Action at its March 12, 2019, April 9, 2019, May 14, 2019, June 11, 2019 and July 9, 2019 meetings; and

WHEREAS, the City Planning Board held a duly advertised SEQRA public hearing on April 9, 2019 and continued the SEQRA public to May 14, 2019 and June 11, 2019, at which time all those wishing to raise SEQRA concerns were given such opportunity; and

WHEREAS, the City Planning Board closed the SEQRA public hearing on June 11, 2019; and

WHEREAS, on July 9, 2019 after taking a "hard look" at each of the relevant areas of environmental concern through review of the Environmental Assessment Form and all associated materials prepared in connection with the Proposed Action, the City Planning Board, as part of a coordinated review, hereby adopted a Negative Declaration; and

WHEREAS, a duly advertised public hearing on the application for area variances was held on July 16, 2019, and continued to August 20, 2019, at which time all those wishing to be heard on the application were given such opportunity; and

WHEREAS, the Board closed the public hearing on August 20, 2019; and

WHEREAS, pursuant to New York State General City Law Section 81-b(4) and City Code Section 223.55.C(2)(b), when deciding the request for an area variance:

> The Zoning Board of Appeals shall take into consideration the benefit to the applicant if the variance is granted, as weighed against the detriment to the health, safety and welfare of the neighborhood or community by such grant. In making such a determination, the Board shall also consider:

[1] Whether an undesirable change will be produced in the character of the neighborhood or a detriment to nearby properties will be created by the granting of the area variance;

[2] Whether the benefit sought by the applicant can be achieved by some method, feasible for the applicant to pursue, other than an area variance;

[3] Whether the requested area variance is substantial;

[4] Whether the proposed variance will have an adverse effect or impact on the physical or environmental conditions in the neighborhood or district; and

[5] Whether the alleged difficulty was self-created, which consideration shall be relevant to the decision of the Board of Appeals, but shall not necessarily preclude the granting of the area variance; and

WHEREAS, the Board of Appeals, in granting variances, shall grant the minimum variance that it shall deem necessary and adequate to address the unnecessary hardship proven by the Applicant, and at the same time preserve and protect the character of the neighborhood and the health, safety and welfare of the community; and

NOW, THEREFORE, BE IT RESOLVED, based upon the Record before it and after viewing the premises and neighborhood concerned and upon considering each of the factors set forth in Section 223.55(C)(2)(b)[1]-[5] of the City Code, the Zoning Board hereby finds with respect to the requested area variances as follows:

1. Overview of the Project

The Property which is the subject of this variance application was previously used for decades as the City's Highway Garage. The Proposed Project involves demolition of the existing buildings on the site and construction of a new four story mixed use building containing 20,000 square feet for commercial use and eight (8) residential dwelling units. The Applicant has an ownership interest in the adjacent property at 7-15 Creek Drive (owned by Weber Projects III, LLC), which has been redeveloped from a junk yard into a multi-family residential development with a new building, and includes expansion of the Fishkill Creek Greenway & Heritage Trail. The Applicant submitted the Proposed Project for 23-28 Creek Drive in response to the City's Request for Qualifications and Proposals to renovate and develop the Property. The City Council selected the Applicant's proposal and on May 11, 2018, the Applicant entered into a Contract of Sale with the City of Beacon. The Applicant's Contract with the City requires the Applicant to construct a park

and expand the Fishkill Creek Greenway & Heritage Trail, to connect with the Trail at 7-15 Creek Drive.

On March 17, 2015, the Applicant's related entity at 7-15 Creek Drive (Weber Projects III, LLC) received area variances from the Zoning Board of Appeals to allow construction of two new four-story multi-family residential buildings on 9-11 Creek Drive. One of those buildings was constructed. As part of the Proposed Project at 23-28 Creek Drive the height variance for the second building will not be used and the second approved four story building at 9-11 Creek Drive will not be constructed. Instead such building is being proposed to be constructed on this Property.

2. **The variances will not produce an undesirable change in the character of the neighborhood and there will not be a detriment to nearby properties created by the granting of the area variances.**

A. Minimum Number of Parking Spaces

The Applicant requests a variance of twenty (20) parking spaces. The total number of parking spaces required is 113 as thirteen (13) spaces are required for the residential dwelling units and 100 spaces are required for the commercial space. The Project will provide a total of 93 parking spaces located in several lots on the site, as well as beneath the building. The parking will be screened by landscaping to mitigate views from the street and neighboring properties. The Applicant's parking and traffic consultant prepared a Traffic Impact Study that stated in relevant part that: "... in connection to the nearby CMS District and Linkage District[s] the City Code would only require 48 and 58 spaces respectively, which is a reasonable comparison due to the Project's proximity to Main Street and these districts."

The Applicant will install a combination of fencing and plant material to create a visual buffer between the street and parking areas. In addition, the residential use and commercial use on the site allows for shared parking such that the thirteen (13) residential spaces can be used for commercial space parking.

It should also be noted that the Planning Board discussed the variance for parking and considered the following factors. The Planning Board found that the Fishkill Creek Development zone relies on general parking standards, while similar mixed uses in the adjacent Linkage and CMS Zoning

Districts would require far fewer parking spaces. In addition, a shared parking situation will exist on the Property because some of the employees will live and work on site, and the commercial operation will not be operating when some residents are at home. Lastly fewer parking spaces would cut down the amount of impervious surfaces and add more accessible green space. After careful consideration, the members of the Planning Board unanimously supported a positive recommendation with regard to the parking variance.

Based on the traffic study, trip analysis, review of the City's parking requirements in adjacent zoning districts that mirror the proposed use, shared parking and availability of parking in the vicinity of the site, the variance of 20 parking spaces for this Project, where 113 parking spaces are required for a mixed-used building consisting of 20,000 square feet of commercial space and eight (8) residential units, and will not produce an undesirable change in the character of the neighborhood and will not create a detriment to nearby properties.

B. Maximum Dwelling Unit Size

The Applicant requests a variance to permit two (2) 2,750 square foot residential dwelling units, where the maximum permitted dwelling unit size is 2,000 square feet. The Project includes eight total apartment units comprising 13,515 square feet, which includes three 1,380 square foot two-bedroom units, two 1,325 square foot two-bedroom units, one 1,225 square foot two-bedroom units and two 2,750 square foot three-bedroom units located on the third and fourth floors of the building. The average size of the eight units in the proposed building, including the two 2,750 square foot units, is approximately 1,689 square feet, which is 311 square feet below the maximum permitted unit size. The makeup of the units creates a diversity of unit sizes in the building, without changing the exterior look of the building. In addition the variance requested applies to only two dwelling units.

In 2010 the City Council of the City of Beacon adopted the FCD Zoning District, which established the maximum dwelling unit size restriction of 2,000 square feet of gross floor area. After reviewing the available legislative history and available minutes, memorandums and correspondence pertaining to the adoption of the FCD Zoning District, the Zoning Board is unable to determine the City Council's original intent and justification for this bulk regulation.

At the Planning Board's June 11, 2019 meeting, the Planning Board discussed what "basis" there is for the maximum dwelling unit size restriction in the FCD Zoning District. The City Planner, John Clarke, explained that such a provision was adopted before he was the Planner for the City of Beacon, therefore he did not participate in the drafting of the 2010 legislation. At the Planning Board meeting John Clarke was unable to supply the Planning Board with a reason as to why the 2,000 square foot restriction was adopted. Mr. Clarke explained to the Planning Board that such a provision is not typically found in zoning laws; sometimes a minimum unit size is adopted to prevent developers from constructing dwelling units that are too small, however, in his experience he has not seen a maximum dwelling unit size restriction.

Therefore, the 750 square foot variance per unit for two units, where the maximum permitted dwelling unit size is 2,000 square feet will not result in any adverse impacts to the neighborhood character or nearby properties.

C. Maximum Building Height and Number of Stories

The Applicant requests a one story height and a thirteen foot four inches (13'4") variance to construct a four story building, 53 feet 4 inches in height, where the maximum permitted building height in the FCD Zoning District is three stories and 40 feet. The four story building is set at a low elevation relative to the street. The elevation of the property helps mitigate any potential visual impacts of the building from Tioronda Avenue. Plantings will also be designed to soften the building and enhance views of Fishkill Creek and Mount Beacon. In addition, the height of building will not produce an undesirable change to the character of the neighborhood because the building sits at a lower elevation than the street. The existing topography of the site minimizes the impact of the fourth story from Tioronda Avenue. Furthermore, the proposed landscaping, in conjunction with the existing elevation, will limit views of the roof and mechanical equipment on the roof of the building from the street. The building will be visible from Fishkill Creek; however, the aesthetics of the site will be enhanced when compared to the existing conditions of the DPW facility.

As noted above, the Applicant will not be building the originally approved four-story building, for which the Applicant received a height variance, located on the Applicant's adjacent 7-15 Creek

Drive property. As a result, a significant viewshed towards Mount Beacon from Tioronda Avenue will be maintained. Therefore, this variance will not produce an undesirable change in the character of the neighborhood and will not be a detriment to nearby properties.

3. The benefit sought by the Applicant cannot be achieved by some method feasible for the Applicant to pursue, other than the requested area variances.

A. Minimum Number of Parking Spaces

The Project uses a garage underneath the building to house 34 parking spaces. The development is situated and designed to allow for meaningful development that conforms with the 2017 Comprehensive Plan Update, which encourages mixed use developments, and is consistent with recent zoning changes which rezoned the property from the LI- Light Industrial Zoning District to the FCD Zoning District. The Project is also consistent with surrounding uses and structures in the neighborhood. By utilizing a parking garage under the building, the Applicant minimizes the surface parking footprint and amount of impervious coverage while maintaining the proposed amount of commercial and residential space. The requested variance allows the Applicant to enhance the layout and functionality of the site and preserves a significant amount of open space. The Applicant cannot achieve these benefits by any feasible alternatives. While the additional 20 parking spaces could be constructed on site, such construction would intrude into open spaces and as detailed herein such additional spaces are not necessary, and could necessitate additional are variances.

B. Maximum Dwelling Unit Size

The Applicant's goal is to develop a mixed use commercial and residential development building with a diversity of unit sizes in the building. While the Applicant can achieve its goal and stay within the 2,000 square foot requirement, the variance only applies to two units and the rest of the building contains residential units under 2,000 square feet. As a result the average size of all eight units combined (when factoring in the assumption of granting the requested area variance for the two units) is well below the maximum dwelling unit requirement in the FCD Zoning District.

C. Maximum Building Height and Number of Stories

The building consists of 20,000 square feet of commercial space and eight residential rental apartment units. The Project was designed to limit the building footprint. To construct the buildings as permitted on the Property by the City's Zoning Code, without a variance, would result in more impervious surface, encroachment into green space and increase massing of the building. The amount of commercial space, the number of residential units, the preserved open space, the design and flow of the site are all benefits the Applicant can only achieve by developing a fourth story.

4. The requested variances are mathematically substantial; however, this does not outweigh the other factors meriting the granting of the variances.

The Applicant's requested area variances for this Project (1) a variance of 20 parking spaces, where 113 parking spaces are required for a mixed-used building consisting of 20,000 square feet of commercial space and eight (8) residential units pursuant to City Code § 223-26.F and 93 parking spaces are proposed; (2) a 750 square foot variance for two apartment units, where the maximum permitted dwelling unit size is 2,000 square feet pursuant to City Code § 223-41.14.C and two apartment units are proposed to be 2,750 square feet; (3) a one story height variance, where the maximum permitted building height is three stories pursuant to City Code § 223-41.14.F and the proposed building height is four stories; and (4) a 13 foot 4 inch building height variance where the maximum permitted building height is 40 feet pursuant to City Code § 41.14 are mathematically substantial. However, in considering whether a variance is substantial, the Board must examine the totality of the circumstances within the application and the overall effect of granting the requested relief. Here, the requested variances are not substantial in their effect.

The landscaping of the project site and the large creek-side park will form a cohesive extension to the recent landscaping planted at 7-15 Creek Drive. The Applicant will demolish the existing three (3) bay garages with attached office, main garage, tire shed, tool shed, salt shed and carpenter's shed. The Applicant will construct a new building that is compatible with the neighborhood. The new building will provide a desired mixed used development with substantial commercial space while preserving open space. Additionally, the granting of the requested variances will result in

the second building proposed at 9-11 Creek Drive in not being constructed which will maintain views of Fishkill Creek and Mount Beacon.

5. The proposed variances will not have an adverse effect or impact on the physical or environmental conditions in the neighborhood or district.

The proposed variances will not have an adverse effect or impact on the physical or environmental conditions of the neighborhood or district. There will be no adverse effects of noise, vibrations, odor, traffic, or impact on public services caused by the development associated with the granting of this variance. As part of the Coordinated SEQRA review conducted by the Planning Board as Lead Agency, the Planning Board determined that the Proposed Action will have no potential significant adverse environmental impacts. The Proposed Project includes a one-acre public park and extension of the Greenway Trail along the Creek. Therefore, the Zoning Board finds that the proposed variances will not have a significant adverse effect or impact on the physical or environmental conditions in the neighborhood or district.

A. Minimum Number of Parking Spaces

As discussed above, a variance from the City's minimum required number of parking spaces in the FCD Zoning District will not result in any adverse effects or impacts on the physical or environmental conditions in the neighborhood or district. The Property is located one block from Main Street, and is adjacent to residential properties and a brewery. Such uses will not be impacted by approval of the requested parking variance.

The construction of additional parking would not only create more impervious surface, but it would eliminate a significant stormwater management area, which would then need to be relocated underground or pushed to the south of the site. In addition, developing the required 20 parking spaces would result in increased impervious surface area development, which would require further stormwater management.

B. Maximum Dwelling Unit Size

This variance addresses the size of the residential dwelling units; such a variance concerns the inside of the building and will not impact the physical or environmental conditions in the

surrounding neighborhood or district. The outside of the building will look the same whether the units are 2,000 square feet or 2,750 square feet. Therefore, the requested variance to permit two residential dwelling units at 2,750 square feet out of the total eight units, where the maximum dwelling unit size in the FCD Zoning District is 2,000 square feet will not have an adverse effect or impact on the physical or environmental conditions in the neighborhood or district.

C. Maximum Building Height and Number of Stories

The Project is designed to reduce the footprint of the building and facilitate an efficient design and flow of the site. The Proposed Action will not result in the obstruction, elimination or significant screening of one or more officially designated scenic views. Further, public viewing of Fishkill Creek from the Site will be enhanced by providing a Greenway Trail segment and a public park at the south end of the site.

The applicable zoning specifically permits higher residential density on the Property. However, the Applicant is not proposing to construct any additional density. Furthermore, the Applicant will not be building the second approved four-story building located on the Applicant's property (9-11 Creek Drive) north of the subject Property, thereby maintaining the significant viewshed towards Mount Beacon from Tioronda Avenue.

Therefore, the proposed building height variance will not have an adverse effect on the physical or environmental conditions in the neighborhood or district.

6. The alleged difficulty is self-created.

The need for the variances is self-created since it is presumed the Applicant selected the Property as the location for its proposed development knowing the zoning requirements pertaining to the required number of parking spaces, maximum dwelling unit size and maximum building height permitted.

7. The variances requested are the minimum necessary and adequate to address the unnecessary hardship proven by the Applicant and at the same time shall preserve and protect the character of the neighborhood and the health, safety and welfare of the community.

BE IT FURTHER RESOLVED, that for the reasons set forth above, the application of 23-28 Creek Drive, LLC for a variance of 20 parking spaces, where 113 parking spaces are required for a mixed-used building consisting of 20,000 square feet of commercial space and eight (8) residential units are required pursuant to City Code § 223-26.F and 93 parking spaces are proposed, is hereby GRANTED based on the Board's specific findings herein regarding the Project as proposed with 20,000 square feet commercial space and eight (8) residential units, subject to the following conditions:

1. The Applicant shall provide bicycle parking on the site for residents and office workers.
2. The Applicant is encouraged to consider allowing shared weekend parking to the general public on at least a portion of the Property, as a majority of the sites off-street parking spaces are not otherwise anticipated to be used during the weekend.

BE IT FURTHER RESOLVED, that for the reasons set forth above, the application of 23-28 Creek Drive, LLC for a 750 square foot variance for two apartment units; where the maximum permitted dwelling unit size is 2,000 square feet pursuant to City Code § 223-41.14, is hereby GRANTED.

BE IT FURTHER RESOLVED, that for the reasons set forth above, the application 23-28 Creek Drive, LLC for a one story height variance, where the maximum permitted building height is three stories pursuant to City Code § 223-41.14.F and the proposed building height is four stories, is hereby GRANTED.

BE IT FURTHER RESOLVED, that for the reasons set forth above, the application of 23-28 Creek Drive, LLC for a 13 foot 4 inch building height variance where the maximum permitted building height is 40 feet pursuant to City Code § 41.14.F and the proposed building height is 53 feet-4 inches, is hereby GRANTED, subject to the following conditions:

1. All variances issued by the Zoning Board of Appeals on March 17, 2015 to Weber Projects III, LLC pertaining to a second four story building approved on property located at 9-11 Creek Drive and not yet constructed, are rescinded and deemed null and void and a statement to that affect by the Applicant's related entity, Weber Projects III, LLC shall be

filed within thirty (30) days after the Planning Board's Site Plan approval and made a part of the records for both this Property and the 7-15 Creek Drive property files.

BE IT FURTHER RESOLVED, that all the variances granted herein are subject to the following conditions:

1. No permit or Certificate of Occupancy shall be issued until the Applicant has paid in full all application and consultant fees incurred by the City of Beacon in connection with the review of this application.

2. These variances shall be void if the Applicant fails to (i) obtain a building permit within six months from the date of the Planning Board's Site Plan approval; (ii) commence construction within six months following the date of issuance of the building permit; and (iii) fails to complete construction and obtain a certificate of occupancy within 24 months after the date of issuance of said building permit..

3. The Zoning Board of Appeals may grant six month extensions of this variance approval provided that a written request for an extension is submitted before the variance expires. Such extensions shall only be granted upon a showing by the Applicant that the circumstances and conditions upon which the variances were originally granted have not substantially change

Dated: September 17, 2019

Robert K Lanier

Mr. Robert Lanier, Chairman

A VARIANCE OF 20 PARKING SPACES

Chairman Lanier called the roll:

Motion	Second	Zoning Board Member	Aye	Nay	Abstain	Excused	Absent
		Robert Lanier	X				
X		Garrett Duquesne	X				
	X	Jordan Haug	X				
		Judy Smith	X				
		David Jensen	X				
		Motion Carried	**5**	**0**			

A 750 SQUARE FOOT VARIANCE FOR TWO APARTMENT UNITS

Chairman Lanier called the roll:

Motion	Second	Zoning Board Member	Aye	Nay	Abstain	Excused	Absent
		Robert Lanier	X				
		Garrett Duquesne	X				
X		Jordan Haug	X				
	X	Judy Smith	X				
		David Jensen	X				
		Motion Carried	**5**	**0**			

A ONE STORY VARIANCE

Chairman Lanier called the roll:

Motion	Second	Zoning Board Member	Aye	Nay	Abstain	Excused	Absent
		Robert Lanier	X				
	X	Garrett Duquesne	X				
		Jordan Haug		X			
X		Judy Smith	X				
		David Jensen		X			
		Motion Carried	**3**	**2**			

A 13 FOOT 3 INCH BUILDING HEIGHT VARIANCE

Chairman Lanier called the roll:

Motion	Second	Zoning Board Member	Aye	Nay	Abstain	Excused	Absent
		Robert Lanier	X				
X		Garrett Duquesne	X				
		Jordan Haug		X			
	X	Judy Smith	X				
		David Jensen		X			
		Motion Carried	**3**	**2**			

Memorandum

Zoning Board of Appeals

TO: Mayor Randy Casale and Members of the City of Beacon City Council
Planning Board Chairman Gunn and Planning Board Members

FROM: Zoning Board of Appeals Chairman Lanier and Zoning Board Members

RE: Advisory Opinion
23-28 Creek Drive
Applicant: 23-28 Creek Drive, LLC

DATE: September 20, 2019

At its July 16, 2019, August 20, 2019 and September 17, 2019 meetings, the Zoning Board of Appeals ("ZBA") reviewed an application by 23-28 Creek Drive, LLC (the "Applicant") for (1) a variance of 20 parking spaces, where 113 parking spaces are required pursuant to City Code § 223-26.F and 93 parking spaces are proposed; (2) a 750 square foot variance for two apartment units, where the maximum permitted dwelling unit size is 2,000 square feet pursuant to City Code § 223-41.14.C and two apartment units are proposed to be 2,750 square feet; (3) a one story height variance, where the maximum permitted building height is three stories pursuant to City Code § 223-41.14.F and the proposed building height is four stories; and (4) a 13 foot 4 inch building height variance where the maximum permitted building height is 40 feet pursuant to City Code § 41.14.F and the proposed building height is 53 feet-4 inches, in connection with the Applicant's proposal to construct a mixed use development with eight apartments and 20,000 square feet of commercial space, on property located at 23-28 Creek Drive in the Fishkill Creek Development ("FCD") Zoning District (the "Property"). On September 17, 2019, the ZBA granted the above-referenced variances.

Of the 113 parking spaces, thirteen (13) parking spaces are required for the eight (8) residential units and 100 are required for the commercial use. The ZBA recognized that the office spaces are likely to be vacant on weekends and therefore the ZBA also discussed the possibility of the site being used for public parking on the weekends. To further the opportunity for public parking on the Property, the ZBA adopted the following condition: "The Applicant is encouraged to consider allowing shared weekend parking to the general public on at least a portion of the Property, as a majority of the sites off-street parking spaces are not otherwise anticipated to be used during the weekend." The ZBA wrote the condition as a recommendation and not as a required mitigation measure because this Board does not have the legal authority to

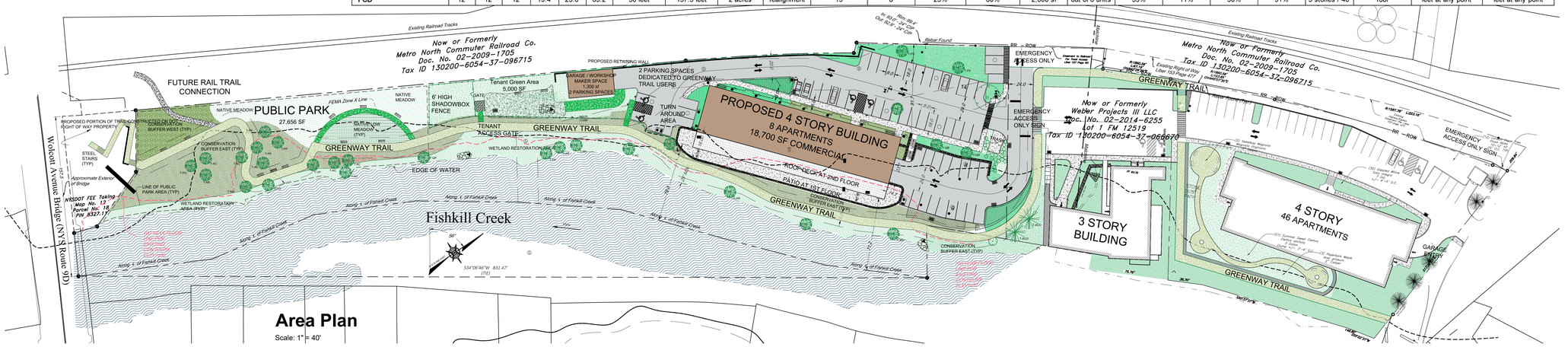
do so as such condition does not minimize any adverse impacts on the neighborhood or community resulting from the Applicant's variance for twenty (20) parking spaces. It is therefore beyond the authority of the Zoning Board to mandate such a requirement.

Additionally, in connection with the Applicant's variance request of twenty (20) parking spaces, Members considered the following condition to minimize any adverse impacts on the neighborhood or community resulting from grant of the variance: "To allow for shared parking between the residential use and commercial use, the Applicant shall not reserve parking for residents from 9 a.m. to 5 p.m. Monday-Friday, or during the office hours of the commercial tenant." A lengthy discussion took place regarding the potential unintended consequences of such a condition. The ZBA Members discussed their concern that not all residents will work from 9 a.m. to 5 p.m. and concluded that residents should be able to have a spot on the Property to park their car during business hours. In addition, the traffic studies prepared indicate that the site includes sufficient parking to accommodate the number of employees. The Fishkill Creek Development Zone relies on general parking standards, while similar mixed uses in the adjacent Linkage and CMS Zoning Districts would require far fewer spaces. After careful consideration, Members voted to remove this condition from the final Resolution. A copy of the ZBA's Resolution and the Applicant's Site Plan are attached.

The ZBA submits this memorandum to recommend the City Council or Planning Board consider requiring the Applicant provide general public parking on at least a portion of the Property on weekends. The ZBA believes such a condition will benefit the community as a whole and possibility alleviate parking issues on Main Street. As always, the final decision will be based on your review of the application, but the ZBA felt the aforementioned condition should be offered as an advisory viewpoint.

Zoning Regulations Table

	Required Setbacks			Proposed Setbacks			Minimum frontage on public street right-of-way	Proposed frontage on public street right-of-way	Minimum Site Area	Existing Site Area	Maximum Residential Development Potential	Proposed Number of Residential Units	Required Commercial Space	Proposed Commercial Space	Maximum Dwelling Size	Proposed Dwelling Size	Maximum Building Coverage	Proposed Building Coverage	Minimum Open Space	Proposed Open Space	Maximum Building Height	Proposed Building Height	Minimum setback from and buffer width along Fishkill Creek	Proposed setback from and buffer width along Fishkill Creek
	Front	Side	Rear	Front	Side	Rear																		
Zoning District																								
FCD	12'	12'	12'	19.4'	23.8'	65.2'	50 feet	157.5 feet	2 acres	2.807 acres existing 3.144 acres with lot line realignment	15	8	25%	60%	2,000 sf	2,975 sf for 2 out of 8 units	35%	11%	30%	91%	3 stories / 40'	4 stories / 52' from 1st floor to roof	An average of 50 feet, but not less than 25 feet at any point	An average of 50 feet, but not less than 25 feet at any point

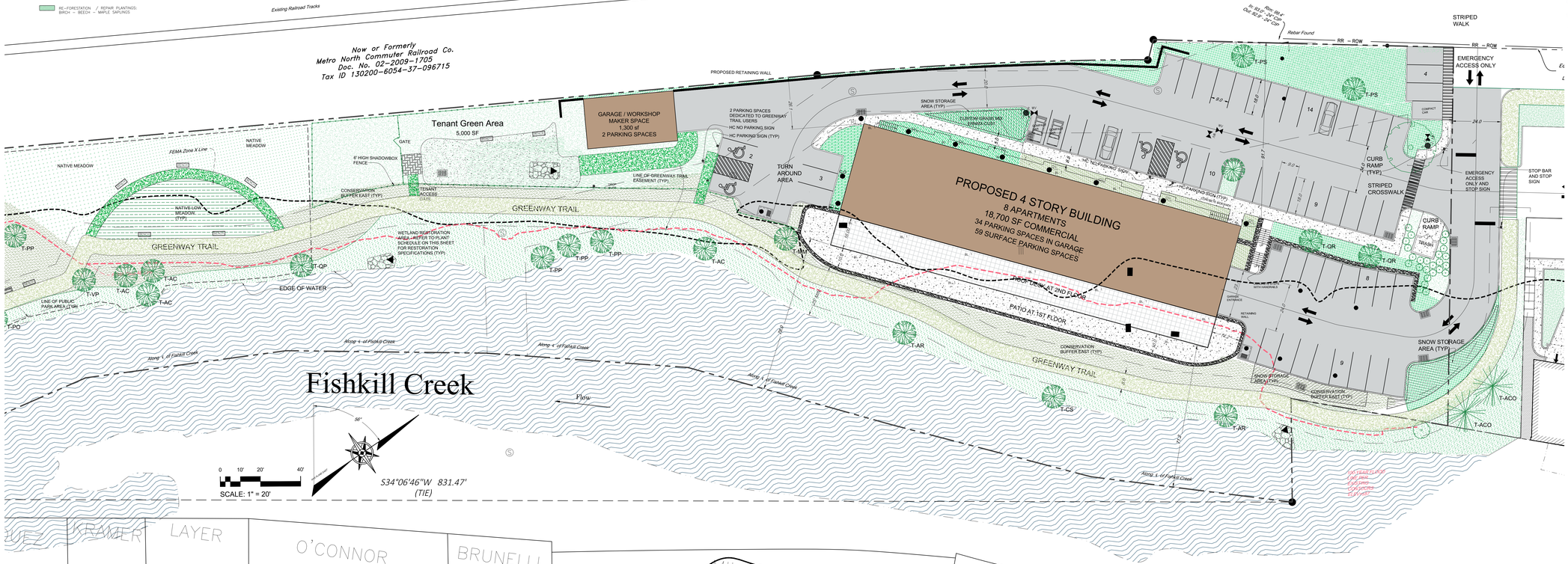


Area Plan

Scale: 1" = 40'

HATCHING & LANDSCAPE LEGEND

- CONCRETE SIDEWALK
- ASPHALT PAVING
- GRAVEL PATH (STEEL EDGING)
- CONSERVATION BUFFER – WEST
- CONSERVATION BUFFER – EAST
- WETLAND RESTORATION AREA
- NATIVE MEADOW
- INDIAN SWITCHGRASS (G–PV)
- CUSTOM GRASS MIX – (ERMIX–CUS1)
- SEDGE (G–CP)
- EVERGREEN SHRUB (S–IG)
- BIO–RETENTION AREA MIX
- PROPOSED NEW ORNAMENTAL NATIVE TREE
- PROPOSED NATIVE EVERGREEN
- EXISTING TREE TO REMAIN (WITH 24" CALIPER)
- RE–FORESTATION / REPAIR PLANTINGS: BIRCH – BEECH – MAPLE SAPLINGS



Site Plan

Scale: 1" = 20'

Location Map

Scale: 1" = 400'

Zoning Summary

Zoning District:	FCD (FISHKILL CREEK DEVELOPMENT)
Tax Map No.:	6054-37-037625
Lot Area:	2.807 acres (122,272.92 sf) before lot line realignment 3.144 acres (136,974.99 sf) after lot line realignment – 0.337 acres (14,700.76 sf)conveyed from 7 Creek drive to 23-28 Creek Drive
Building Area:	33,590 square feet (20,000 sf commercial + 13,590 Residential)
Historical Overlay District:	No
Parking Overlay District:	No
Existing Use:	Industrial (Vacant)
Proposed Uses:	Commercial / Residential

Land Use Compliance

Use	Permitted / Required	Proposed
Commercial	25% of building area	60% of building area
Residential *Maximum number of dwelling units per acre of lot area, after deducting on all development proposals involving a total lot area of more than three acres any lot area with existing, predevelopment very steep slopes of 25% or more as defined in, covered by surface water, within a federal regulatory floodway, or within a state or federally regulated wetland: 11.*	15 Dwelling Units (after lot line adjustment and deductions)	8 Dwelling Units

Parking & Loading

Residential *1 space for each dwelling unit plus 1/4 space per bedroom*	8 apartments + 18 bedrooms	13 spaces
Office *1 space for each 200 square feet*	20,000 sf	100 spaces
Total Required Parking Spaces		***113 spaces required***
Total Proposed Parking Spaces		**93 spaces proposed**

Notes:

1. The Fishkill Creek Development Zone requires that a minimum of 25% of the building area be an approved non-residential use. This project proposes 60% approved non-residential use.
2. The proposed section of Greenway Trail traversing the property follows the standard requirements for materials, dimensions, proximity to the Creek, screening from the proposed building. Due to the steep grades the trail has stairs in sections. Where practicable, the Trail and public park are accessible, as are the parking spaces and gate associated with the Trail. This is in accordance with the Greenway Trail Design Recommendations: *Design the trail to provide accessibility to outdoor enjoyment and education for users of all abilities.*
3. 2 parking spaces will be dedicated for Greenway Trail visitors on a first come first serve basis during the specified times and days that the Trail is open to the public. The spaces can be used by building tenants during all other times. The public shall not park in any but the 2 designated Trail spaces.
4. A large public park, connected to the Greenway Trail, is proposed to be constructed by the Applicant. A future spur from the Greenway Trail to the future Rail Trail has been designed into the plan.
5. Signage will comply with the City of Beacon Zoning Code
6. Commercial Hours of Operation: 8am to 6pm
7. A variance to allow 93 parking spaces to be provided where 20 more are required will be requested from the Zoning Board of Appeals. A total of 113 parking spaces are required. The Applicant believes that the actual parking requirement will be mitigated by the shared commercial and residential use of the site.
8. A variance to exceed the maximum height will be requested from the Zoning Board of Appeals
9. A variance to exceed the maximum number of stories will be requested from the Zoning Board of Appeals
10. A variance to exceed the maximum apartment area for 2 apartments will be requested from the Zoning Board of Appeals

REVISIONS:			
NO.	DATE	DESCRIPTION	BY
1	12/25/18	NO CHANGE	AJS
2	02/22/19	REVISED PER PLANNING BOARD COMMENTS	AJS
3	03/26/19	REVISED PER PLANNING BOARD COMMENTS	AJS
4	04/30/19	REVISED PER PLANNING BOARD COMMENTS	AJS
5	05/28/19	REVISED PER PLANNING BOARD COMMENTS	AJS

Index of Drawings

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Sheet 1 of 1	Signing Plan - Maser Consulting
Sheet 1 of 12	Site Plan
Sheet 2 of 12	Existing Conditions & Demolition Plan
Sheet 3 of 12	Site Section Diagram
Sheet 4 of 12	Landscape Plan & Planting Schedule
Sheet 5 of 12	Building Plans
Sheet 6 of 12	Renderings
Sheet 7 of 12	Grading & Utility Plan
Sheet 8 of 12	Erosion and Sediment Control Plan
Sheet 9 of 12	Profiles
Sheet 10 of 12	Site & Erosion Sediment Control Details
Sheet 11 of 12	Stormwater Details
Sheet 12 of 12	Water and Sewer Details

Site Plan Application

Sheet 1 of 12 - Site Plan

Owner:
Weber Projects III, LLC
11 Creek Drive
Beacon, New York 12508

Architect:
Aryeh Siegel, Architect
84 Mason Circle
Beacon, New York 12508

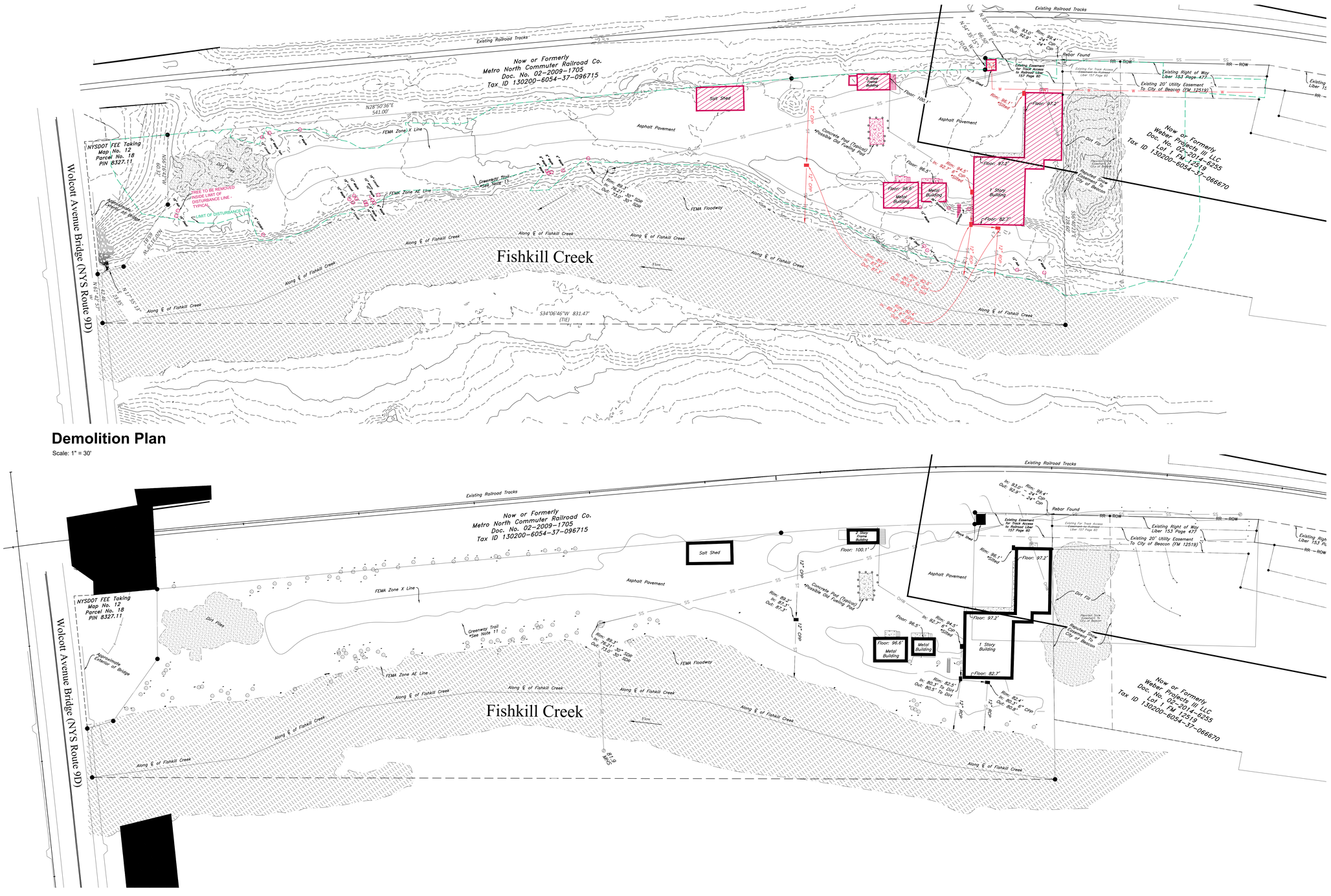
Site / Civil Engineer:
Hudson Land Design
174 Main Street
Beacon, New York 12508

Surveyor:
TEC Land Surveying, P.C.
15C Tioronda Avenue
Beacon, New York 12508

Landscape Designer:
Landscape Restorations
P.O. Box 286
Beacon, New York 12508

23 - 28 Creek Drive

Beacon, New York
Scale: As Noted
October 23, 2018



Demolition Plan

Scale: 1" = 30'

Existing Conditions Plan

Scale: 1" = 30'

TOPOGRAPHIC INFORMATION AND EXISTING CONDITIONS INFORMATION BASED ON THE SURVEY BY TEC LAND SURVEYING, P.C DATED JULY 12, 2018

POLE MOUNTED LIGHT (L1A)

SELUX LIGHTING "BETA PENDANT" POLE MOUNTED 100W FIXTURE. MODEL #BPC-L-R2-1-H100-BK-120-HS-PC WITH LOW GLARE CUTOFF SHIELD, COLOR: BLACK. PHOTOCELL CONTROL, OR APPROVED EQUAL. MOUNTING HEIGHT ON A35 SERIES BLACK ALUMINUM POLE = 10 FEET

POLE MOUNTED LIGHT (L1B)

SELUX LIGHTING "BETA PENDANT" POLE MOUNTED 150W FIXTURE. MODEL #BPC-L-R2-1-H150-BK-120-HS-PC WITH LOW GLARE CUTOFF SHIELD, COLOR: BLACK. PHOTOCELL CONTROL, OR APPROVED EQUAL. MOUNTING HEIGHT ON A35 SERIES BLACK ALUMINUM POLE = 12 FEET

NOTE: AS AN ALTERNATE, THE OWNER MAY INSTALL EQUIVALENT WATTAGE LED FIXTURES IN PLACE OF THE INCANDESCENT FIXTURES SHOWN. LED LIGHTING WILL MEET THE SAME SPECIFICATIONS FOR LOW GLARE CUT OFF CONTROLS, EITHER BY SHIELDING OR INTERNAL CONTROLS.

NOTE: ALL EXTERIOR LIGHTING ON THE SITE SHALL BE DIRECTED AND/OR SHIELDED SO AS NOT TO CAUSE ANY OBJECTIONABLE GLARE OBSERVABLE FROM NEIGHBORING STREETS AND PROPERTIES. THE SOURCE (BULBS) OF SUCH LIGHTING SHALL NOT BE VISIBLE FROM SAID NEIGHBORING STREETS AND PROPERTIES. PHOTOMETRIC DIAGRAMS ARE SHOWN WITH SHIELDED CONDITIONS.

WALL MOUNTED LIGHT (L2)

SELUX LIGHTING "BETA PENDANT" WALL MOUNTED FIXTURE. MODEL #BPC-L-R2-1-H50-BK-120-HS-PC WITH LOW GLARE CUTOFF SHIELD, COLOR: BLACK. PHOTOCELL CONTROL, OR APPROVED EQUAL. MOUNTING HEIGHT = 12 FEET

WALL MOUNTED HOUSE LIGHT (BL1)

BARNLIGHT ELECTRIC. WALL MOUNTED FIXTURE. MODEL "WESCO GOOSENECK", 100W, COLOR: DARK GREEN METAL SHADE, OR APPROVED EQUAL. MOUNTING HEIGHT = 7 FEET.

NOTE THAT THE MANUFACTURER DOES NOT PROVIDE FOOTCANDLE DIAGRAMS FOR THIS FIXTURE. THE FIXTURE IS SHADED AND DOES NOT EMIT GLARE

REVISIONS:			
NO.	DATE	DESCRIPTION	BY
1	12/25/18	NO CHANGE	AJS
2	02/22/19	NO CHANGE	AJS
3	03/26/19	REVISED PER PLANNING BOARD COMMENTS	AJS
4	04/30/19	REVISED PER PLANNING BOARD COMMENTS	AJS
5	05/28/19	REVISED PER PLANNING BOARD COMMENTS	AJS

Site Plan Application

Sheet 2 of 12 - Existing Conditions & Demolition Plan

Owner:
Weber Projects III, LLC
11 Creek Drive
Beacon, New York 12508

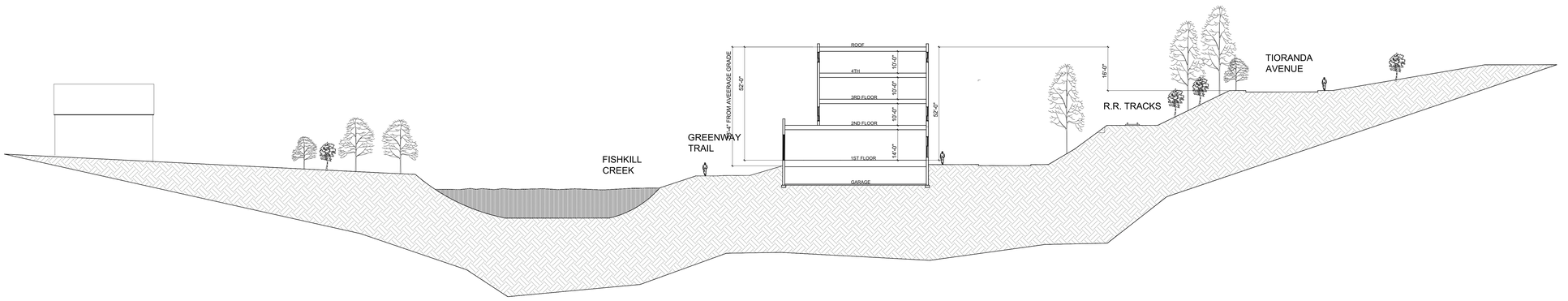
Architect:
Aryeh Siegel, Architect
84 Mason Circle
Beacon, New York 12508

Site / Civil Engineer:
Hudson Land Design
174 Main Street
Beacon, New York 12508

Surveyor:
TEC Land Surveying, P.C.
15C Tioronda Avenue
Beacon, New York 12508

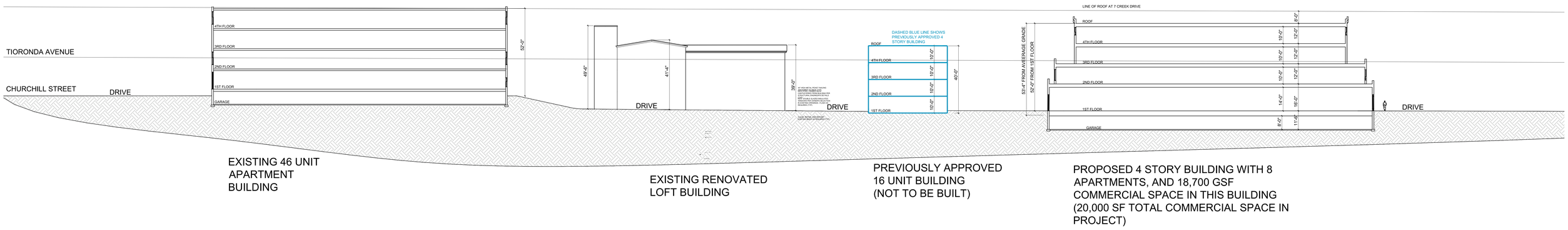
Landscape Designer:
Landscape Restorations
P.O. Box 286
Beacon, New York 12508

23 - 28 Creek Drive
Beacon, New York
Scale: 1" = 30'
October 23, 2018



Site Section: Cross

Scale: 1" = 20'



EXISTING 46 UNIT APARTMENT BUILDING

EXISTING RENOVATED LOFT BUILDING

PREVIOUSLY APPROVED 16 UNIT BUILDING (NOT TO BE BUILT)

PROPOSED 4 STORY BUILDING WITH 8 APARTMENTS, AND 18,700 GSF COMMERCIAL SPACE IN THIS BUILDING (20,000 SF TOTAL COMMERCIAL SPACE IN PROJECT)

Site Section: Longitudinal

Scale: 1" = 20'

REVISIONS:			
NO.	DATE	DESCRIPTION	BY
1	12/25/18	REVISED PER PLANNING BOARD COMMENTS	AJS
2	02/22/19	REVISED PER PLANNING BOARD COMMENTS	AJS
3	03/26/19	NO CHANGE	AJS
4	04/30/19	NO CHANGE	AJS
5	05/28/19	NO CHANGE	AJS

Site Plan Application

Sheet 3 of 12 - Site Section Diagram

Owner:
Weber Projects III, LLC
11 Creek Drive
Beacon, New York 12508

Architect:
Aryeh Siegel, Architect
84 Mason Circle
Beacon, New York 12508

Site / Civil Engineer:
Hudson Land Design
174 Main Street
Beacon, New York 12508

Surveyor:
TEC Land Surveying, P.C.
15C Tioronda Avenue
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Landscape Designer:
Landscape Restorations
P.O. Box 286
Beacon, New York 12508

23 - 28 Creek Drive
Beacon, New York
Scale: 1" = 20'
October 23, 2018

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4	04/30/19	REVISED PER PLANNING BOARD COMMENTS	AJS
5	05/28/19	REVISED PER PLANNING BOARD COMMENTS	AJS

HATCHING & LANDSCAPE LEGEND

- CONCRETE SIDEWALK
- ASPHALT PAVING
- GRAVEL PATH (STEEL EDGING)
- CONSERVATION BUFFER – WEST
- CONSERVATION BUFFER – EAST
- WETLAND RESTORATION AREA
- NATIVE MEADOW
- INDIAN SWITCHGRASS (G-PV)
- CUSTOM GRASS MIX – (ERNMX-CUS1)
- SEDGE (G-CP)
- EVERGREEN SHRUB (S-IG)
- BIO-RETENTION AREA MIX
- PROPOSED NEW ORNAMENTAL NATIVE TREE
- PROPOSED NATIVE EVERGREEN
- EXISTING TREE TO REMAIN (WITH CALIPER)
- RE-FORESTATION / REPAIR PLANTINGS: BIRCH – BEECH – MAPLE SAPLINGS

PLANT SCHEDULE — PHASE ONE

23-28 Creek Drive
Beacon

Created and compiled by D. Adamsons December 15 2018

QUANTITY	KEY	BOTANIC NAME	COMMON NAME	SIZE	Planting Time	AREA
FERNS						
Trays	F-DP	*Dennstaedtia punctilobula*	Hay-scented fern	Plugs	Spring Fall	NM,CBE,CBW
Trays	F-DI	*Dryopteris intermedia*	Evergreen Wood Fern	Plugs	Spring Fall	CBE
Trays	F-OC	*Osmunda cinnamomea*	Cinnamon Fern	Quarts	Spring Fall	WR,CBE
Trays	F-PA	*Polystichum acrostichoides*	Christmas Fern	Plugs	Spring Fall	BE,NM,CBW,CBE
GRASSES						
Trays	G-AG	*Andropogon gerardii*	Big Bluestem	Plugs	Spring Summer	BE,NM,CBW
Trays	ECO-LAWN	*Buchloe dactyloides 'Texoka'*	Eco Lawn	Seed	Spring Summer	BE
Trays	G-CA	*Carex appallachica*	Appallachian Sedge	Plugs	Spring Summer	BE,CBW,CBE,WR
Trays	G-CB	*Carex bromoides*	Bromlike Sedge	Plugs	Spring Summer	BE,CBE,CBW,WR
Trays	G-CP	*Carex pensylvanica*	Sedge	Plugs	Spring Summer	BE,CBE,CBW,WR
Trays	G-CL	*Chasmanthium latifolia*	Northern Sea Oats	Plugs	Spring Summer	BE,CBE,CBW,HCS
Trays	G-PV	*Panicum virgatum*	Indian Switchgrass	Plugs	Spring Summer	BE,NM,HCS
Trays	G-SS	*Schizachyrium scoparium*	Little Bluestem	Plugs	Spring Summer	BE,NM,HCS
HERBACEOUS						
Trays	H-AT	*Asclepias incarnata*	Swamp Milkweed	Plugs	Spring Summer	WR
Trays	H-AI	*Asclepias tuberosa*	Butterfly MilkWeed	Plugs	Spring Summer	NM,CBE,CBW
Trays	H-AT	*Amsonia tabernaemontana*	Common Bluestar	Plugs	Spring Summer	WR, NM
Trays	H-A	*Asters*	Aster(NY and Woodland)	Plugs	Spring Summer	WR, NM
Trays	H-IC	*Iris cristada*	Crested Iris	Plugs	Spring Summer	WR
Trays	H-PR	*Palemonium reptan*	Jacob's Ladder	Plugs	Spring Summer	WR, NM
Trays	H-S	*Solidago*	Goldenrod	Plugs	Spring Summer	WR,NM
Trays	H-T	*Trillium*	Trillium	Plugs	Spring Summer	WR
Trays	H-V	*Viola*	Violet	Plugs	Spring Summer	WR,BE,CBE,CBW
SHRUBS						
	S-AF	*Amorpha fructicosa*	Indigo Bush	5 gal	Spring Fall	WR,CBE,CBW
	S-AA	*Aronia arbutifolia*	Red Chokeberry	3 gal	Spring Fall	WR,BE
	S-AM	*Aronia melanocarpa*	Black Chokeberry	3 gal	Spring Fall	WR,BE
	S-CP	*Comptonia peregrina*	Sweetfern	1 gal	Spring Fall	ALL
	S-DL	*Diervilla lonicera*	Bush Honeysuckle	3 gal	Spring Fall	WR,NM,CBE,CBW
	S-Hvi	*Hamamelis virginiana*	Witch Hazel	10 gal	Spring Fall	CBE,CBW
	S-IG	*Ilex glabra*	Inkberry	10 gal	Spring Fall	BE,CBW,
	S-Ivf	*Ilex verticillata female*	Winterberry	7 gal	Spring Fall	WR,CNE,CBW,NM
	S-Ivm	*Ilex verticillata male*	Winterberry	7 gal	Spring Fall	WR,CBE,CBW,NM
	S-LB	*Lindera benzoin*	Spicebush	10 gal	Spring Fall	WR
	S-MP	*Myrica pensylvanica*	Bayberry	5 gal	Spring Fall	WR,BE,NM
	S-RA	*Rhus aromatica*	Aromatic sumac	3 gal	Spring Fall	BE,NM,HCS
	S-RC	*Rosa carolina*	Carolina Rose	3 gal	Spring Fall	CBE,CBW,NM
	S-RO	*Rubus odoratus*	Flowering Raspberry	3 gal	Spring Fall	CBE,NM,WR
	S-XS	*Xanthorhiza simplicissima*	Yellowroot	Plugs	Spring Fall	WR,NM,CBE,CBW
TREES						
	T-ACO	*Abies concolor*	White Fir	5-7'	Spring Fall	CBW,NM
	T-AR	*Acer rubrum*	Red Maple	5-7'	Spring Fall	WR,BE
	T-AC	*Amelanchier canadensis*	Serviceberry	5-6'	Spring Fall	WR,CBE,CBW,BE
	T-BL	*Betula lenta*	Black Birch	4-5'	Spring Fall	WR,CBW
	T-CS	*Catalpa speciosa*	Catalpa	5-6'	Spring Fall	ALL
	T-CC	*Carpinus caroliana*	American Hornbeam		Spring Fall	CBW,CBE
	T-CT	*Chamaecyparis thyoides*	Atlantic White Cedar	5-7'	Spring Fall	WR
	T-CF	*Carnus florida*	Flowering Dogwood	5-7'	Spring Fall	BE,NM
	T-CP	*Crataegus phaenopyrum*	Washington Hawthorn	5-7'	Spring Fall	BE
	T-IO	*Ilex opaca*	American Holly	5-7'	Spring Fall	BE,CBW
	T-JV	*Juniperus virginiana*	Eastern Red Cedar	5'	Spring Fall	BE,NM
	T-NS	*Nyssa sylvatica*	Blackgum	6-7'	Spring Fall	BE,NM
	T-MM	*Magnolia Macrophyll*	Magnolia	5-7'	Spring Fall	WR
	T-PR	*Picea rubens*	Red Spruce	5-9'	Spring Fall	BE,CBW
	T-PV	*Pinus virginiana*	Scrub Pine	5-9'	Spring Fall	BE,CBW
	T-PS	*Pinus strobus*	White Pine	5-9'	Spring Fall	BE,CBW
	T-PO	*Plantanus occidentalis*	American Sycamore	7'	Spring Fall	WR
	T-PA	*Prunus serotina*	Wild Black Cherry	3-4'	Spring Fall	NM,WR,CBE,CBW
	T-PP	*Prunus pensylanica*	Pin Cherry	3-4'	Spring Fall	NM,WR,CBE,CBW
	T-SD	*Salix discolor*	Pussy Willow	5'	Spring Fall	WR,CBE
	T-QC	*Quercus coccinea*	Scarlet Oak	8-10'	Spring Fall	NM,BE
	T-QP	*Quercus palustris*	Pin Oak	8-10'	Spring Fall	NM,BE
	T-VP	*Viburnum prunifolium*	Blackhaw	6-7'	Spring Fall	NM
VINES						
	V-PQ	*Parthenicissus quinquefolia*	Virginia Creeper	3 gal	Spring Fall	BE

SEED MIXES

lbs	ERNMX-105	Native Meadow	Northeastern Native Mix	Seed/Plug April-October	NM
lbs	ERNMX-120	Native Wetland Restoration	Northeastern Grass and Forb	Seed/Plug April-October	WR
lbs	ERNMX-126	Native Meadow	Retention Basin Low Maint Mix	Seed/Plug April-October	NM
lbs	ERNMX-140	Native Meadow	Partially Shaded Native Mix Deer Resist Native Meadow Mix	Seed/Plug April-October	CBE,CBW
lbs	ERNSMX-155	Native Meadow		Seed/Plug April-October	NM
lbs	ERNMX-180-1	Native Meadow	Rain Garden Mix	Seed/Plug April-October	NM
lbs	ERNMX-181-1	Native Meadow	Native Steep Slope with Oats	Seed/Plug April-October	CBE,CBW
lbs	ERNMX-181-2	Native Meadow	Native Steep Slope with Rye	Seed/Plug April-October	WR
lbs	ERNMX-183	Native Meadow	Native Detention Area Mix	Seed/Plug April-October	NM
lbs	ERNMX	Custom Mix	Salt-tolerant, Shady Mix	Seed/Plug April-October	BE
lbs	ERNMX	Custom Mix	Native Low Meadow	Seed/Plug April-October	HCS

AREA LEGEND	***DESCRIPTION***
BE	Building Envelope Conservation – Trees, shrubs, vines, ferns, grasses, sedges, herbaceous flowering layer and ground cover
CBE	Buffer EAST of GT(Greenway) Conservation – Young trees, shrubs, ferns, grasses, sedges and herbaceous flowering layer and groundcover to stabilize
CBW	Buffer WEST of GT(Greenway) – Young trees, shrubs, ferns, grasses, sedges and herbaceous flowering layer and groundcover to stabilize
HCS	Half Circle Seating Area – Short native meadow species(grasses and herbaceous flowering layer)
NM	Native Meadow – Grasses, sedges, herbaceous flowering layer and ground cover
WR	Wetland Restoration – Young trees, shrubs, ferns, grasses, sedges and herbaceous flowering layer and groundcover to stabilize

NOTE: FOR DETAILS OF SEED MIXES, REFER TO SEPARATE DOCUMENT ENTITLED "23-28 CREEK DRIVE SEED MIX COMPOSITION BREAKDOWN PER AREA"

NOTE: REFER TO SHEET 2 FOR LIGHTING AND LANDSCAPE DETAILS

Practicing Ecological Landscape Design and Management Principles
Landscape Restorations
P.O. Box 286 Beacon New York 12508

TREE PROTECTION

1. Tree Protection shall be built around all trees designated by Owner. See LEGEND. This task shall be performed and/or supervised by an arborist associated with Landscape Designer.
2. Tree Protection shall be honored by General Contractor, and all Contractors, and remain in place for life of project development.
3. A penalty for tree damage and non-compliance with Tree Protection shall be discussed at first Site Meeting and written into GC contract and each penalty shall be billed to General Contractor.
4. Tree Protection is defined as sturdy stakes every 4' connected by strong fencing (not orange nylon fencing) built outside each CRZ(Critical Root Zone), with KEEP OUT:PROTECTED TREE signs.
5. CRZ is defined as extending from the trunk to just outside the Drip Line, or a distance of 1.5' per inch of DSH(Diameter at Standard Height), whichever is greater.
6. Under Penalty, the following activities are not allowed within the CRZ:
   a. Stockpiling of construction materials or demo debris
   b. Vehicle or equipment parking
   c. Trenching for utility installation or repair(unless pre-approved)
   d. Changing soil grade by cutting or filling
   e. Damaging of roots by grading, tearing or grubbing
   f. Compaction of soil by equipment, vehicles, material storage and/or foot traffic
   g. Contaminating soil from washing out equipment(especially concrete) and vehicle maintenance
   h. Attaching anything to trees with nails, screws and/or spikes
   i. Wound or break tree trunks or branches through contact with vehicles and heavy equipment
   j. Wound trunks by string weed trimmers and lawn mowers
   k. Cause injury by fire or excessive heat
7. Most tree roots over 4" are likely to be structural roots. Cutting these roots could cause future catastrophic failure.
8. Make all needed cuts to tree roots cleanly with sharp tools to encourage good wound closure; never tear with a backhoe.
9. After project completion, maintain an "invisible" passive TPZ (Tree Protection Zone) around all important trees though-out their lives by maintaining a mulched, grass-free area around the tree so weed-trimmers and mowers are always kept at bay and foot traffic is kept off the inner CRZ.

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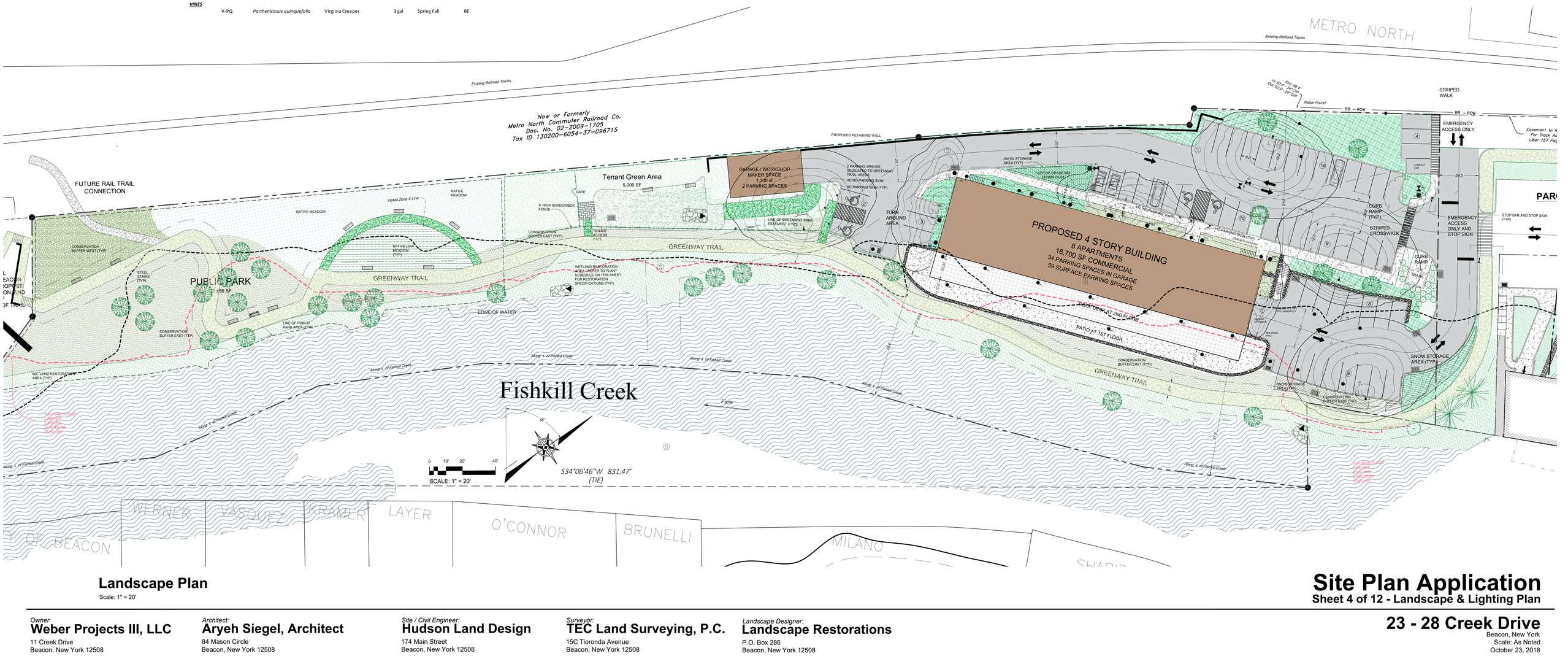
P.O. Box 286 Beacon New York 12508

PLANTING and LANDSCAPE NOTES

1. Tree Protection shall be built prior to any site work and will be honored and respected during construction phase (see separate Tree Protection Notes), or penalties shall be incurred.
2. Woodland Area outside of work-scope shall be left intact other than the removal of dead, diseased and damaged trees in Phase One. In Phase Two (date to be determined), invasive management shall be implemented to begin select-removal of Black Locusts, Norway Maples, Ailanthus, Japanese Knotweed, Barberry, Rosa multiflora, Bittersweet and all invasive plant species, to allow for natives to regain a foothold. Native species will be planted as invasives are removed.
3. Utmost care will be undertaken to protect the integrity of Fishkill Creek banks and steep slopes.
4. Absolutely no materials or liquids shall be dumped into Fishkill Creek or drains.
5. No non-native plant species shall be introduced onto the site. All species shall be indigenous to the northeast region of North America.
6. Disturbance of wild areas on the bank of Fishkill Creek created by construction of Greenway Trail require Conservation Buffers in order to help the areas heal and revert to native habitats. These areas are labeled as CBE(Conservation Buffer east of GT) and CBW(Conservation Buffer west of GT) and WR(Wetland Restoration).
7. If a straight specie is specified, no cultivars will be accepted without prior approval of designer.
8. In level graded areas, soil shall be prepped by removing all construction debris, loose roots and stones larger than 3". In steep slope areas, do not remove any naturally-occurring stones or rocks, as these aid in stabilizing the slope. All duff, plant debris and material such as leaves, twigs,etc, shall remain in soil.
9. Areas to be planted shall be marked and labeled by designer.
10. Each new tree hole tree shall be twice the width of the rootball.
11. Plant all plants so top of rootball is slightly above surrounding native earth (or brought-in soil).
12. Burlap, wire, cords, ties and any wrapping materials must be removed from all rootballs before backfilling.
13. No planting shall be done in muddy, rainy or frozen conditions.
14. Test tree-pit for drainage before planting. Do not plant tree in pit if water is still evident after one hour. Contact site engineer or landscape designer if this condition is encountered.
15. No plants will be accepted that display mechanical injury or specie irregularities.
16. All plants must be labeled when delivered to site.
17. If planting is delayed for more than 6 hours after delivery, set plants in shade. Protect from weather and mechanical damage. Keep roots moist and cover with mulch.
18. All tree-planting to be coordinated with as-built utilities. Trees to be located minimum of 5' from active lines.
19. All trees shall be balled and burlap unless otherwise specified on Plant List.
20. Contractor shall stake all plant locations and orientations in the field and obtain approval prior to installation.
21. Contractors shall leave site neat and orderly during course of project, and store materials and equipment in owner-approved locations away from all trees and plants.
22. If site conditions conflict with intended design, contractor shall alert Owner.
23. Contractor shall enter and exit site through pre-approved routes only.
24. No substitutions are to be made without the written or verbal consent of landscape designer and owner
25. Create a size-specific water-well around each plant, 3' from center of tree, and mulch from the outside. Do not mulch crown.
26. Water thoroughly after planting each plant. Water schedule to be determined.
27. Spray for deer if planted in fall. Sometimes bucks mark their territory with their antlers.



Landscape Plan

Scale: 1" = 20'

Site Plan Application

Sheet 4 of 12 - Landscape & Lighting Plan

Owner:
Weber Projects III, LLC
11 Creek Drive
Beacon, New York 12508

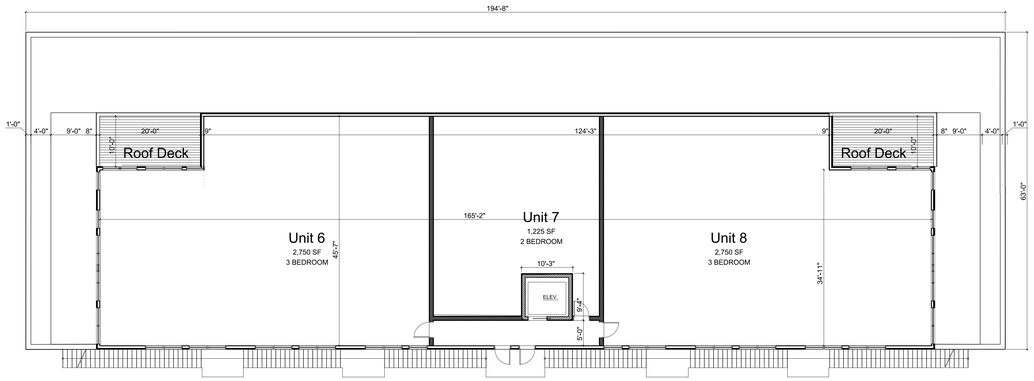
Architect:
Aryeh Siegel, Architect
84 Mason Circle
Beacon, New York 12508

Site / Civil Engineer:
Hudson Land Design
174 Main Street
Beacon, New York 12508

Surveyor:
TEC Land Surveying, P.C.
15C Tioronda Avenue
Beacon, New York 12508

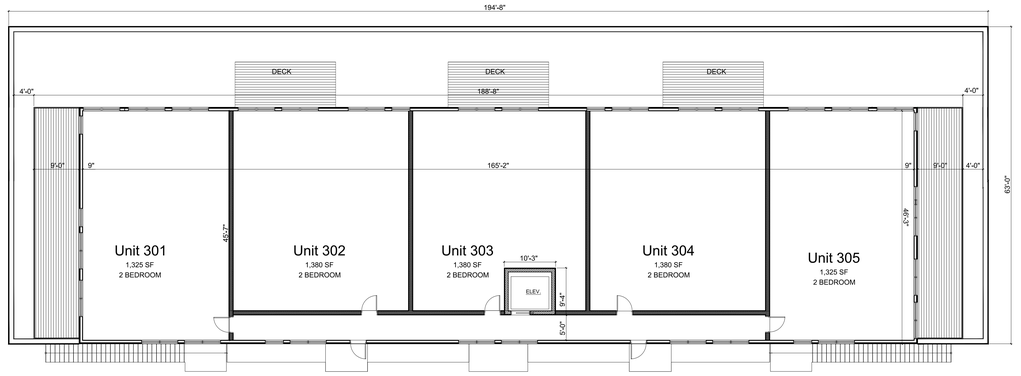
Landscape Designer:
Landscape Restorations
P.O. Box 286
Beacon, New York 12508

23 - 28 Creek Drive
Beacon, New York
Scale: As Noted
October 23, 2018



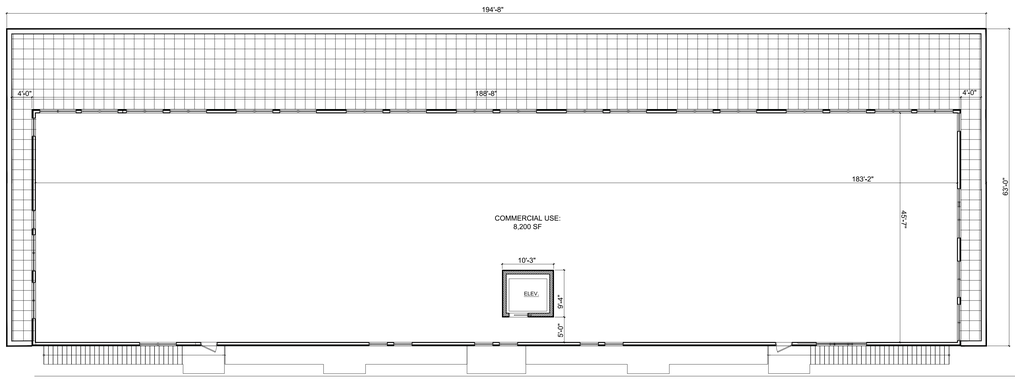
4th Floor Plan

Scale: $\frac{3}{32}$" = 1'-0"



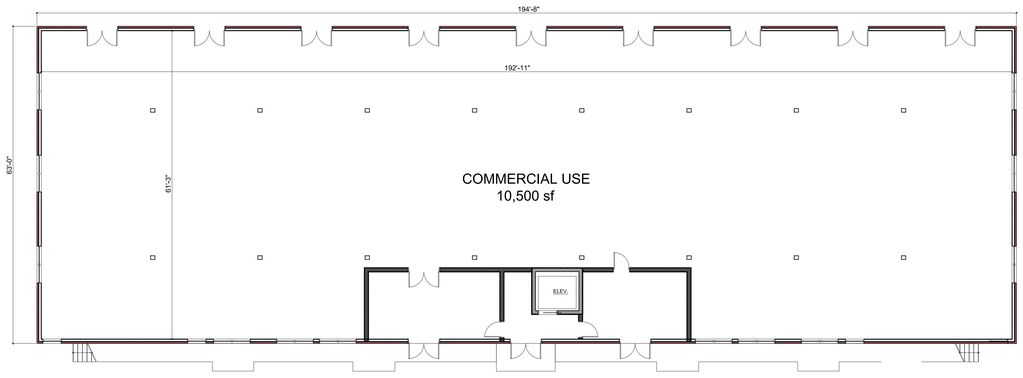
3rd Floor Plan

Scale: $\frac{3}{32}$" = 1'-0"



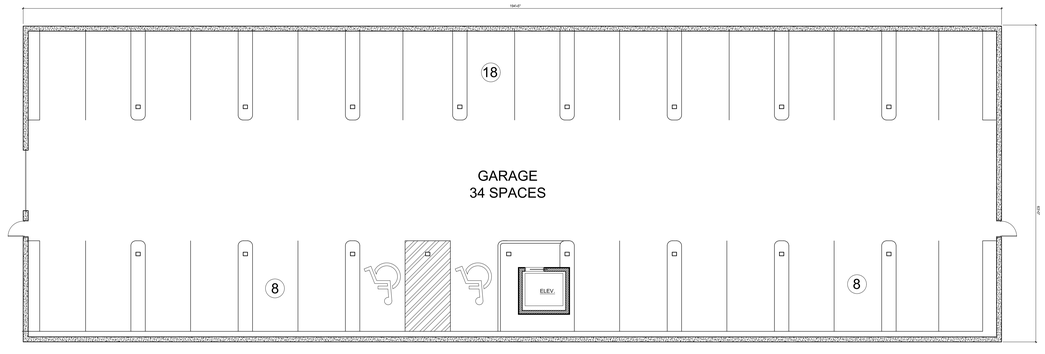
2nd Floor Plan

Scale: $\frac{3}{32}$" = 1'-0"



1st Floor Plan

Scale: $\frac{3}{32}$" = 1'-0"



Garage Plan

Scale: $\frac{3}{32}$" = 1'-0"

REVISIONS:			
NO.	DATE	DESCRIPTION	BY
1	12/25/18	NO CHANGE	AJS
2	02/22/19	REVISED PER PLANNING BOARD COMMENTS	AJS
3	03/26/19	REVISED PER PLANNING BOARD COMMENTS	AJS
4	04/30/19	REVISED PER PLANNING BOARD COMMENTS	AJS
5	05/28/19	REVISED PER PLANNING BOARD COMMENTS	AJS

Site Plan Application

Sheet 5 of 12 - Building Plans

Owner:
Weber Projects III, LLC
11 Creek Drive
Beacon, New York 12508

Architect:
Aryeh Siegel, Architect
84 Mason Circle
Beacon, New York 12508

Site / Civil Engineer:
Hudson Land Design
174 Main Street
Beacon, New York 12508

Surveyor:
TEC Land Surveying, P.C.
15C Tioronda Avenue
Beacon, New York 12508

Landscape Designer:
Landscape Restorations
P.O. Box 286
Beacon, New York 12508

23 - 28 Creek Drive
Beacon, New York
Scale: $\frac{3}{32}$" = 1'-0"
October 23, 2018

REVISIONS:			
NO.	DATE	DESCRIPTION	BY
1	12/25/18	NO CHANGE	AJS
2	02/22/19	REVISED PER PLANNING BOARD COMMENTS	AJS
3	03/26/19	NO CHANGE	AJS
4	04/30/19	NO CHANGE	AJS
5	05/28/19	REVISED PER PLANNING BOARD COMMENTS	AJS

View from Tioronda Avenue

Not to Scale

View of Garage / Workshop

Not to Scale

Elevation: North

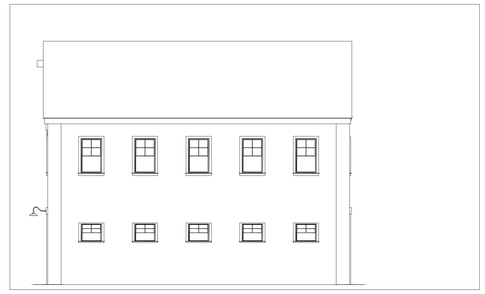
$\frac{1}{8}$" = 1'-0"

ROOF:
GALVALUME RIBBED ROOFING AND SHEET METAL EAVE. GALVALUME GUTTERS AND LEADERS

WINDOWS:
DOUBLE GLAZED INSULATED WINDOWS (ANDERSEN 400 SERIES OR APPROVED EQUAL). COLOR: BLACK. PROVIDE WOOD LINTEL OVER WINDOWS IN BRICK WALLS.

GARAGE DOORS:
SECTIONAL GARAGE DOORS WITH CLEAR GLASS PANELS. COLOR: BLACK

BRICK:
GLEN GARY 56DD OR APPROVED EQUAL



Elevation: West

$\frac{1}{8}$" = 1'-0"

Aerial View

Not to Scale

ROOF BULKHEADS:
CORTEN STEEL PANELS

TRIM:
PAINTED ALUMINUM PROFILES. COLOR: BLACK

RAILING:
42" HIGH PAINTED STEEL RAILING WITH 4" X 4" GRID BALUSTER

WINDOWS:
DOUBLE GLAZED INSULATED WINDOWS (ANDERSEN 400 SERIES OR APPROVED EQUAL). COLOR: BLACK

SIDING:
GALVALUME VERTICAL RIBBED SIDING

BRICK:
GLEN GARY 56DD OR APPROVED EQUAL

RETAINING WALL:
REDI-ROCK (OR APPROVED EQUAL) COBBLESTONE. COLOR: GRAY

Elevation: East

$\frac{1}{16}$" = 1'-0"

BALCONY:
CONCRETE DECK WITH PAINTED STEEL EDGE AND COLUMNS. COLOR: BLACK

STAIR:
STEEL OPEN GRATE STAIR AND RAILING. COLOR: BLACK

GARAGE DOOR:
SECTIONAL GARAGE DOOR WITH OPAQUE GLASS PANELS. COLOR: BLACK

Elevation: North (South Similar)

$\frac{1}{16}$" = 1'-0"

ROOF BULKHEADS:
CORTEN STEEL PANELS

TRIM:
PAINTED ALUMINUM PROFILES. COLOR: BLACK

RAILING:
42" HIGH PAINTED STEEL RAILING WITH 4" X 4" GRID BALUSTER

WINDOWS:
DOUBLE GLAZED INSULATED WINDOWS (ANDERSEN 400 SERIES OR APPROVED EQUAL). COLOR: BLACK

SIDING:
GALVALUME VERTICAL RIBBED SIDING

BRICK:
GLEN GARY 56DD OR APPROVED EQUAL

RETAINING WALL:
REDI-ROCK (OR APPROVED EQUAL) COBBLESTONE. COLOR: GRAY

Elevation: West

$\frac{1}{16}$" = 1'-0"

Site Plan Application

Sheet 6 of 12 - Renderings

Owner:
Weber Projects III, LLC
11 Creek Drive
Beacon, New York 12508

Architect:
Aryeh Siegel, Architect
84 Mason Circle
Beacon, New York 12508

Site / Civil Engineer:
Hudson Land Design
174 Main Street
Beacon, New York 12508

Surveyor:
TEC Land Surveying, P.C.
15C Tioronda Avenue
Beacon, New York 12508

Landscape Designer:
Landscape Restorations
P.O. Box 286
Beacon, New York 12508

23 - 28 Creek Drive
Beacon, New York
Scale: Not to Scale
October 23, 2018

LEGEND:

- EXISTING ROOF LEADER LOCATION
- SEWER MANHOLE
- UNKNOWN MANHOLE
- GUY WIRE ANCHOR
- UTILITY POLE
- ELECTRIC BOX
- HYDRANT
- WATER VALVE
- ROUND DROP INLET
- ELECTRIC METER
- UTILITY POLE WITH LIGHT
- COMMUNICATION BOX
- OVERHEAD WIRES
- FENCE
- DROP INLET
- GAS METER
- LAMP
- UNKNOWN VALVE
- EXISTING WATER EDGE
- EXISTING PROPERTY LINE
- 100-YEAR FLOOD LINE
- 100-YEAR FLOODWAY LINE
- PROPOSED EASEMENT LINE
- PROPOSED CATCH BASIN WITH INLET PROTECTION
- PROPOSED CLEANOUT
- PROPOSED HYDRANT
- PROPOSED WATER VALVE
- PROPOSED SANITARY MANHOLE
- PROPOSED RETAINING WALL
- PROPOSED CULVERT
- PROPOSED UNDERDRAIN
- PROPOSED ROOF LEADER PIPE
- PROPOSED MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED SPOT ELEVATION
- EXISTING CATCH BASIN
- EXISTING UTILITY POLE
- PROPOSED CLEANOUT
- PROPOSED SEWER SERVICE LINE
- PROPOSED WATER SUPPLY LINE
- PROPOSED FENCE
- IMPERVIOUS SURFACE
- PROPOSED RIP RAP
- UTILITY CROSSING LOCATION
- PROPOSED ROOF LEADER LOCATION
- PROPOSED WATER SERVICE LINE
- PROPOSED WATER SHUT-OFF VALVE

INSPECTION SCHEDULE & LONG TERM MAINTENANCE OF STORMWATER STRUCTURES

CATCH BASINS AND PIPING:

ALL CATCH BASINS SHALL BE INSPECTED AFTER EACH STORM EVENT FOR SEDIMENT ACCUMULATION, AND DEBRIS, AND REMOVE AS NECESSARY. WHEN SEDIMENT ACCUMULATION WITHIN THE CATCH BASIN SUMP REACHES 1/2 OF THE SUMP DEPTH, IT SHALL BE REMOVED. ASSOCIATED PIPING SHALL BE INSPECTED ANNUALLY AND ACCUMULATED SEDIMENT SHALL BE REMOVED AS NEEDED.

HYDRODYNAMIC DEVICES:

THE VORTEX UNITS SHALL BE INSPECTED QUARTERLY DURING THE FIRST YEAR OF OPERATION. THE MANUFACTURER RECOMMENDS THAT THE CDS UNITS BE INSPECTED BI-ANNUALLY (ONCE IN THE SPRING AND ONCE IN THE FALL). THE STRUCTURE SHALL BE VISUALLY INSPECTED FOR BLOCKAGES OR OBSTRUCTIONS IN THE INLET OR SEPARATION SCREEN. THE INSPECTION SHOULD ALSO QUANTIFY ACCUMULATION OF HYDROCARBONS, SEDIMENT AND TRASH WITHIN THE SYSTEM. INSPECTIONS AND MAINTENANCE SHALL BE PERFORMED BY QUALIFIED PERSONNEL WITH ADEQUATE TRAINING IN THESE TYPES OF UNITS. THE UNITS SHALL BE CLEANED BY VACUUM TRUCK ONCE A YEAR (EXCEPT FOR THE FIRST YEAR WHERE MORE FREQUENT CLEANINGS MAY BE REQUIRED).

INFILTRATION BASIN:

THE INFILTRATION BASIN SHALL BE INSPECTED MONTHLY FOR SEDIMENT AND DEBRIS ACCUMULATION. INFLOW PIPES, OUTLET STRUCTURES AND SPILLWAYS SHOULD ALSO BE INSPECTED FOR SEDIMENT AND DEBRIS MONTHLY. ANY ACCUMULATED SEDIMENT OR DEBRIS SHOULD BE REMOVED AS NECESSARY. PLANTINGS SHALL BE INSPECTED MONTHLY FOR HEIGHT, FERTILIZER, QUANTITY AND UNAUTHORIZED INVASIVE OR INAPPROPRIATE SPECIES. AFTER STORM EVENTS, THE INFILTRATION BASIN DEWATERING DURATION SHOULD ALSO BE MONITORED. THE BASIN FLOOR SHALL BE MOWED AS REQUIRED; HOWEVER, THE GRASS HEIGHT SHALL NOT EXCEED 18". SEDIMENT SHALL BE CLEANED OUT OF THE INFILTRATION BASIN ANNUALLY.

EXISTING UNDERGROUND UTILITY NOTES:

1. CONTRACTOR SHALL DIG TEST PITS TO VERIFY LOCATION, SIZE AND PIPE MATERIAL OF EXISTING UNDERGROUND UTILITIES. IF ANY EXISTING UTILITIES ARE NOT IN THE LOCATION WHERE THEY ARE SHOWN ON THE PLAN, IT SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION IMMEDIATELY.

GENERAL CONSTRUCTION NOTES:

1. ALL OTHER UTILITIES (TELEPHONE, ELECTRIC, GAS, CABLE, ETC.) SHALL BE INCORPORATED PRIOR TO CONSTRUCTION. ALL SUCH UTILITY DESIGNS SHALL BE DEVELOPED IN COOPERATION WITH THE RESPECTIVE UTILITY COMPANIES.
2. THE CONTRACTOR SHALL PERFORM A UTILITIES CALL-OUT PRIOR TO CONSTRUCTION TO VERIFY ALL UNDERGROUND UTILITY LOCATIONS BY CONTACTING UFPO @ 1-800-962-7962.
3. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS AND INVERTS OF ALL CATCH BASINS & STORM SEWER LINES, SANITARY MANHOLES & SEWER LINES, WATERLINES AND OTHER UNDERGROUND UTILITY LINES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOT ASSUME THAT ALL LOCATIONS AS SHOWN ON THE PLAN ARE CORRECT. INVESTIGATIVE TEST PITS MAY BE REQUIRED TO VERIFY LOCATIONS.
4. PIPE CONNECTIONS TO ALL CATCH BASINS SHALL BE MADE WATERTIGHT, WITH PARTICULAR ATTENTION BEING PAID TO CONNECTIONS LOCATED WITHIN 10 FEET OF SEWER MAINS (AND SERVICE LATERALS).

POST CONSTRUCTION NOTES:

1. UPON COMPLETION OF CONSTRUCTION OF THE STORMWATER FACILITIES, AS-BUILT DRAWINGS OF ALL STORMWATER PRACTICES AND AN OPERATION AND MAINTENANCE PLAN MANUAL SHALL BE PROVIDED TO THE CITY OF BEACON.

WATER AND SEWER MAIN RELOCATION NOTES:

1. THE SECTIONS OF SEWER MAIN TO REMAIN IN-PLACE ON SITE SHALL BE TV INSPECTED AND CLEANED TO VERIFY THE CONDITION OF THE PIPE. THIS WORK SHALL BE COORDINATED WITH THE CITY ENGINEER AND SEWER DEPARTMENT. THE PIPES TO REMAIN IN-PLACE SHALL THEN BE SLIP-LINED BETWEEN EXISTING MANHOLE 11 TO PROPOSED SEWER MANHOLE 12, AND BETWEEN PROPOSED SEWER MANHOLE 14 AND EXISTING SEWER MANHOLE 15.
2. UPON COMPLETION OF CONSTRUCTION OF THE WATER AND SEWER FACILITIES, AS-BUILT DRAWINGS OF FINAL WATER AND SEWER MAIN LOCATIONS SHALL BE PROVIDED TO THE CITY OF BEACON.
3. THE COMPLETED WATER MAIN EXTENSION AND SEWER MAIN RE-LOCATION SHALL BE CERTIFIED BY THE LICENSED PROFESSIONAL OBSERVING CONSTRUCTION TO THE CITY OF BEACON.
4. THE WATER AND SEWER MAINS SHALL BE DEDICATED TO THE CITY OF BEACON UPON ACCEPTANCE OF THE CERTIFICATION.

SNOW REMOVAL AND STORAGE NOTES:

1. THE SITE OWNER WILL UTILIZE A LOADER TO MOVE SNOW TO THE AREAS DESIGNATED FOR SNOW STORAGE.
2. SNOW SHALL BE REMOVED WITHIN 8 HOURS AFTER A SNOW EVENT.

SITE CLEARING NOTES:

1. SITE CLEARING SHALL OCCUR BETWEEN OCTOBER 1ST THROUGH MARCH 31ST IN ACCORDANCE WITH NYSDEC REGULATIONS.

ROCK REMOVAL NOTES:

1. ROCK REMOVAL (IF NECESSARY) SHALL BE ACCOMPLISHED BY MECHANICAL METHODS AS MUCH AS POSSIBLE AND SHALL ONLY BE PERMITTED BETWEEN 8:00AM AND 5:00 PM ON ANY DAY WHICH ROCK REMOVAL IS PERMITTED.
2. ACCEPTABLE ROCK REMOVAL METHODS ARE RIPPING, HYDRAULIC HAMMER OR DRILLING HOLES WITH USE OF EXPANSIVE TOOLS AND/OR WEDGES.
3. IF MECHANICAL METHODS BECOME INEFFECTIVE DUE TO HARD ROCK, AND IT IS DETERMINED THAT BLASTING IS REQUIRED, IT SHALL BE BROUGHT TO THE ATTENTION OF THE CITY OF BEACON BUILDING DEPARTMENT. NO BLASTING SHALL COMMENCE UNTIL A BLASTING PROTOCOL IS SUBMITTED TO THE CITY OF BEACON BUILDING DEPARTMENT FOR REVIEW AND APPROVAL.
4. BLASTING PROTOCOL SHALL BE IN ACCORDANCE WITH §111 OF THE CITY OF BEACON CODE.

PRESSURE REDUCING VALVE AND BACKFLOW PREVENTION NOTES:

1. HYDRANT FLOW TESTS IN THE VICINITY OF THE PROJECT REVEALED STATIC PRESSURES RANGING FROM 88 PSI TO 100 PSI. THEREFORE PRESSURE REDUCING VALVES WILL BE REQUIRED AT ALL PROPOSED DOMESTIC WATER CONNECTIONS TO BUILDINGS.
2. PRESSURE REDUCING VALVES (PRV) SHALL BE FURNISHED BY MUELLER OR WATTS AND COORDINATED WITH THE MECHANICAL ENGINEERING CONSULTANT AS TO TYPE AND SIZE.
3. SPECIFICATIONS FOR THE PROPOSED PRV SHALL BE PROVIDED TO THE CITY OF BEACON BUILDING DEPARTMENT PRIOR TO INSTALLATION.
4. DOUBLE CHECK VALVES SHALL BE PROVIDED ON ALL SERVICE CONNECTIONS TO THE ON-SITE BUILDINGS.
5. DOUBLE CHECK VALVES SHALL BE WATTS SERIES 909 OR APPROVED EQUAL ON DOMESTIC CONNECTIONS AND COORDINATED WITH THE MECHANICAL ENGINEERING CONSULTANT AS TO TYPE AND SIZE.
6. SPECIFICATIONS FOR THE PROPOSED DOUBLE CHECK VALVES SHALL BE PROVIDED TO THE CITY OF BEACON PRIOR TO INSTALLATION.

RETAINING WALL NOTES:

1. ALL RETAINING WALLS SHOWN ON THIS PLAN SHALL BE DESIGNED BY A NEW YORK STATE LICENSED ENGINEER AND PLANS SHALL BE SUBMITTED TO THE BEACON BUILDING DEPARTMENT PRIOR TO CONSTRUCTION.

LOT LINE RE-ALIGNMENT NOTES:

1. PARCEL 6054-37-066670 (7-15 CREEK DRIVE) IS CONVEYING 14,700.76 SQFT, (0.337 AC.) TO THIS PARCEL 6054-37-037625 (23-28 CREEK DRIVE).
2. THE RESULTANT AREA FOR PARCEL 6054-37-066670 (7-15 CREEK DRIVE) AFTER THE LOT LINE RE-ALIGNMENT IS ±69,918.03 SQFT, OR ±1.605 AC.
3. THE RESULTANT AREA FOR PARCEL 6054-37-037625 (23-28 CREEK DRIVE) AFTER THE LOT LINE RE-ALIGNMENT IS ±136,953.88 SQFT, OR ±3.144 AC.

SITE SPECIFIC NOTES:

1. THE CONTRACTOR SHALL PERFORM A UTILITIES CALL-OUT PRIOR TO CONSTRUCTION TO VERIFY ALL UNDERGROUND UTILITY LOCATIONS BY CONTACTING UFPO @ 1-800-962-7962.
SPECIFIC ATTENTION SHALL BE PAID TO THE LOCATIONS OF THE GAS, WATER AND SEWER MAINS WITH RESPECT TO THE PROPOSED LOCATIONS FOR THE SERVICE LINES.
2. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS AND INVERTS OF ALL DRAINAGE, SANITARY SEWER, WATER AND GAS LINES AND STRUCTURES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOT ASSUME THAT ALL LOCATIONS AS SHOWN ON THE PLAN ARE CORRECT.
3. THE PROPOSED LOT SHALL BE SERVED BY THE CITY OF BEACON MUNICIPAL WATER AND SEWER SERVICES. AS SUCH, THE CONTRACTOR SHALL CONTACT THE CITY OF BEACON WATER AND SEWER DEPARTMENTS TO SCHEDULE A PRE-CONSTRUCTION MEETING TO ENSURE THAT THE ARRANGEMENTS FOR WATER SUPPLY AND SEWAGE DISPOSAL ARE COMMENCED IN ACCORDANCE WITH THE APPROVED PLANS AND AMENDMENTS THERETO AND GENERALLY ACCEPTED STANDARDS.
4. THE WATER SERVICE LINE AND METER FOR EACH UNIT SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF BEACON WATER DEPARTMENT REQUIREMENTS.
5. THE WATER MAIN EXTENSION SHALL BE 8"ø CLASS 52 DIP.
6. THE SEWER SERVICE LATERAL SHALL BE 6"ø SDR-35 PVC PIPE WITH PITCH AS SHOWN ON THE PLAN.
7. STREET CLOSURE FOR WATER, SEWER AND GAS SERVICE CONNECTIONS AND DRIVEWAY CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH CITY OF BEACON REQUIREMENTS. A PLAN SHALL BE IN PLACE FOR MAINTENANCE AND PROTECTION OF TRAFFIC.
8. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO CONSTRUCTION. MAIN STREET AND NORTH ELM STREET SHALL BE KEPT CLEAN AND SWEPT DURING CONSTRUCTION.
9. SUMP PUMPS TO BE PROVIDED FOR FOOTING DRAINS, AS REQUIRED. THE TYPES OF PUMPS AND METHODS USED TO ENSURE PROPER DRAINAGE SHALL BE ACCEPTABLE TO THE CITY OF BEACON BUILDING DEPARTMENT.
10. THE BUILDING DEPARTMENT SHALL HAVE THE RIGHT TO INSPECT THE EXISTING BUILDING TO CONFIRM THAT THERE ARE NOT EXISTING STORMWATER CONNECTIONS TO THE CITY'S SANITARY SEWER SYSTEM PRIOR TO THE MAP BEING SIGNED.
11. THE EXISTING WATER SERVICE LINE SHALL BE CUT, CAPPED AND ABANDONED IN-PLACE.
12. THE EXISTING SEWER SERVICE LATERAL SHALL BE REMOVED AND PLUGGED TO PREVENT ANY GROUNDWATER INFLOW INTO THE CITY SEWER SYSTEM.
13. THE EXISTING 24" SEWER MAIN SHALL BE TV INSPECTED AND THE RESULTS PROVIDED TO THE BEACON BUILDING DEPARTMENT.
14. THE EXISTING SECTIONS OF SEWER MAIN TO REMAIN IN USE ON THE PARCEL SHALL BE SLIP-LINED.

STORM SEWER STRUCTURE TABLE

STRUCTURE	STRUCTURE DETAILS
CB1	RIM = 95.31 SUMP = 92.20 PIPE 1 INV OUT = 93.20
CB2	RIM = 95.10 SUMP = 91.90 PIPE 1 INV IN = 93.00 PIPE 2 INV OUT = 92.90
CB3	RIM = 91.35 SUMP = 88.25 PIPE 4 INV IN = 88.40 PIPE 5 INV IN = 87.80 PIPE 3 INV OUT = 87.70
CB4	RIM = 96.61 SUMP = 92.90 PIPE 3 INV IN = 93.00 PIPE 4 INV OUT = 93.90
CB6	RIM = 91.14 SUMP = 87.10 PIPE 6 INV OUT = 88.10
WQ5	RIM = 88.66 SUMP = 82.00 PIPE 4 INV IN = 83.50 PIPE 5 INV OUT = 83.20

STORM SEWER STRUCTURE TABLE

STRUCTURE	STRUCTURE DETAILS
CB7	RIM = 97.01 SUMP = 93.90 PIPE 7 INV OUT = 93.60
CB8	RIM = 94.74 SUMP = 89.90 PIPE 7 INV IN = 91.00 PIPE 8 INV OUT = 89.90
CB9	RIM = 91.56 SUMP = 87.60 PIPE 8 INV IN = 88.70 PIPE 9 INV OUT = 88.60

SANITARY SEWER STRUCTURE TABLE

STRUCTURE	STRUCTURE DETAILS
EX. SMH 11	RIM = 99.23 PIPE 11 INV OUT = 82.90
EX. SMH 15	RIM = 89.23 PIPE 14 INV IN = 76.21
SMH 13	RIM = 94.24 PIPE 12 INV IN = 87.00 PIPE 13 INV OUT = 86.90
SMH 12	RIM = 91.56 PIPE 11 INV IN = 83.68 PIPE 12 INV OUT = 89.70
SMH 14	RIM = 92.00 PIPE 13 INV IN = 81.90 PIPE 14 INV OUT = 81.20

STORM SEWER PIPE TABLE

PIPE NAME	LENGTH	SIZE AND MATERIAL	SLOPE
PIPE 1	19 LF	15" ø CORR HDPE	1.03%
PIPE 2	31 LF	15" ø CORR HDPE	14.61%
PIPE 3	81 LF	15" ø CORR HDPE	4.67%
PIPE 4	57 LF	15" ø CORR HDPE	1.05%
PIPE 5	17 LF	15" ø CORR HDPE	1.18%
PIPE 6	22 LF	15" ø CORR HDPE	1.37%

STORM SEWER PIPE TABLE

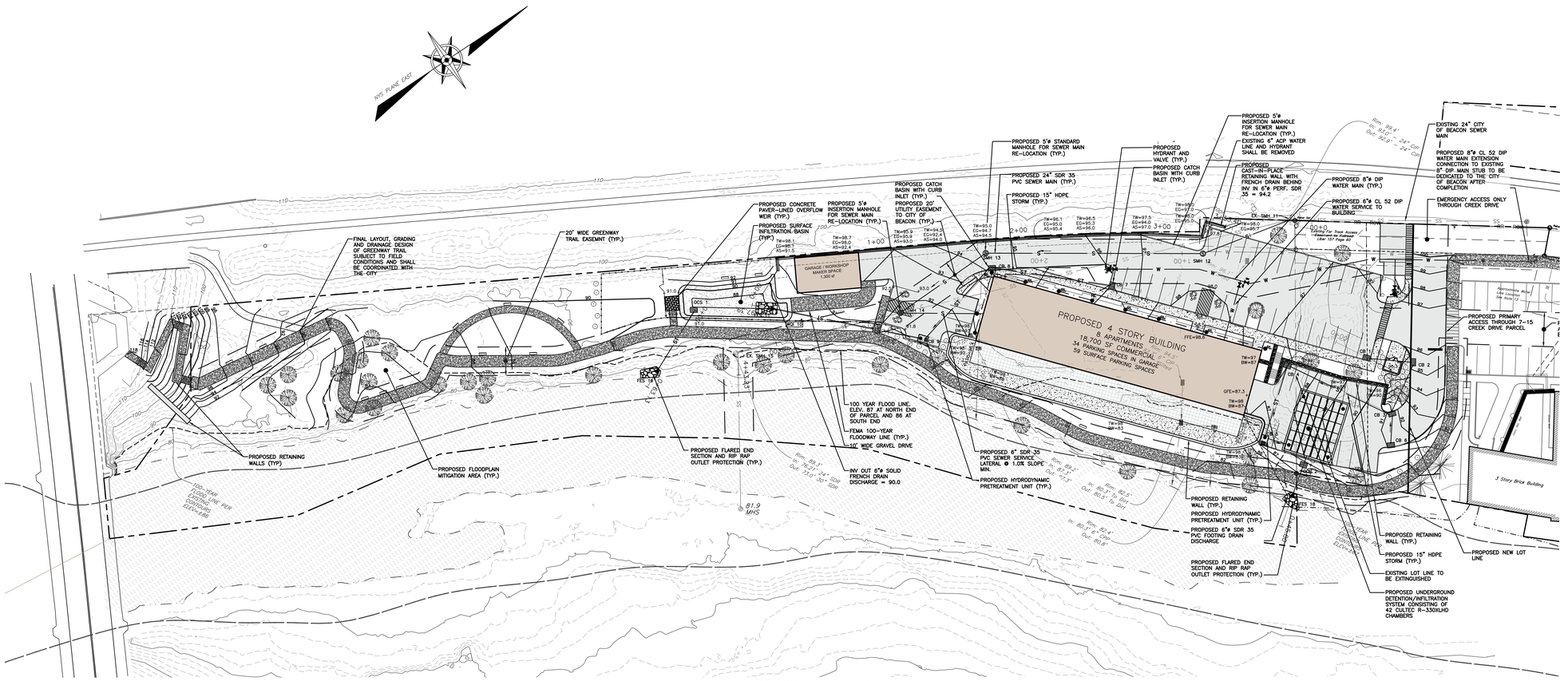
PIPE NAME	LENGTH	SIZE AND MATERIAL	SLOPE
PIPE 7	85 LF	15" ø CORR HDPE	3.04%
PIPE 8	69 LF	15" ø CORR HDPE	1.73%
PIPE 9	106 LF	15" ø CORR HDPE	0.47%

FLARED END SECTION TABLE

STRUCTURE	STRUCTURE DETAILS
FES 11	PIPE 9 INV IN = 88.10
FES 18	PIPE 15 INV IN = 80.00
FES 19	PIPE 16 INV IN = 79.50

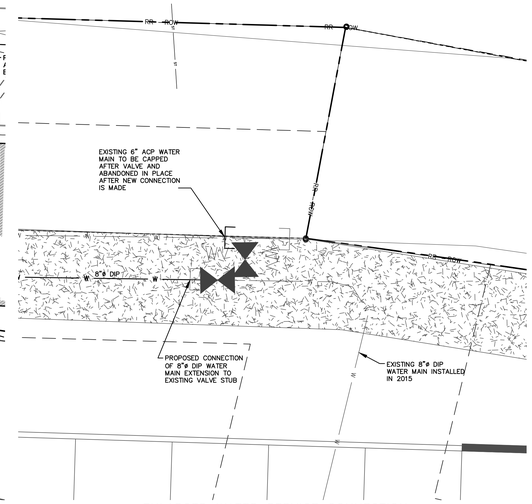
SANITARY SEWER PIPE TABLE

PIPE NAME	LENGTH	SIZE AND MATERIAL	SLOPE
PIPE 11	85 LF	24 Inch PVC	4.62%
PIPE 12	152 LF	24 Inch PVC	1.78%
PIPE 13	73 LF	24 Inch PVC	6.86%
PIPE 14	117 LF	24 Inch PVC	4.25%



GRADING AND UTILITY PLAN
SCALE: 1" = 30'
GRAPHIC SCALE

30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.



ENLARGED WATER SERVICE CONNECTION
SCALE: 1" = 5'
GRAPHIC SCALE

5 0 2.5 5 10 20
(IN FEET)
1 inch = 5 ft.

DUTCHESS COUNTY DEPARTMENT OF BEHAVIORAL & COMMUNITY HEALTH

STANDARD NOTES FOR PROJECTS W/CENTRAL WATER & SEWER

THE DESIGN, CONSTRUCTION AND INSTALLATION SHALL BE IN ACCORDANCE WITH THIS PLAN AND GENERALLY ACCEPTED STANDARDS IN EFFECT AT THE TIME OF CONSTRUCTION WHICH INCLUDE:

"NEW YORK STATE DESIGN STANDARDS FOR INTERMEDIATE SIZED WASTEWATER TREATMENT SYSTEMS"; NYSDEC

"RECOMMENDED STANDARDS FOR SEWAGE TREATMENT WORKS, (TEN STATES)."

"RECOMMENDED STANDARDS FOR WATER WORKS, (TEN STATES)."

"NEW YORK STATE DEPARTMENT OF HEALTH AND DUTCHESS COUNTY ENVIRONMENTAL HEALTH SERVICES DIVISION POLICIES, PROCEDURES AND STANDARDS."

"DUTCHESS COUNTY AND NEW YORK STATE SANITARY CODES."

"DUTCHESS COUNTY ENVIRONMENTAL HEALTH SERVICES DIVISION CERTIFICATE OF APPROVAL LETTER."

THIS PLAN IS APPROVED AS MEETING THE APPROPRIATE AND APPLIED TECHNICAL STANDARDS, GUIDELINES, POLICIES AND PROCEDURES FOR ARRANGEMENT OF SEWAGE DISPOSAL AND WATER SUPPLY FACILITIES.

UPON COMPLETION OF THE FACILITIES, THE FINISHED WORKS SHALL BE INSPECTED, TESTED, AND CERTIFIED COMPLETE TO THE DC EHSD BY THE NEW YORK STATE LICENSED PROFESSIONAL ENGINEER SUPERVISING CONSTRUCTION. NO PART OF THE FACILITIES SHALL BE PLACED INTO SERVICE UNTIL ACCEPTED BY THE DC EHSD.

APPROVAL OF ANY PLAN(S) OR AMENDMENT THERETO SHALL BE VALID FOR A PERIOD OF FIVE (5) YEARS FROM THE DATE OF APPROVAL. FOLLOWING THE EXPIRATION OF SAID APPROVAL, THE PLAN(S) SHALL BE RE-SUBMITTED TO THE COMMISSIONER OF HEALTH FOR CONSIDERATION FOR RE-APPROVAL. RE-SUBMISSION OR REVISED SUBMISSION OF PLANS AND/OR ASSOCIATED DOCUMENTS SHALL BE SUBJECT TO COMPLIANCE WITH THE TECHNICAL STANDARDS, GUIDELINES, POLICIES AND PROCEDURES IN EFFECT AT THE TIME OF THE RE-SUBMISSION.

NO CELLAR, FOOTING, FLOOR, GARAGE, COOLER OR ROOF DRAINS SHALL BE DISCHARGED INTO THE SEWAGE COLLECTION SYSTEM.

ALL BUILDINGS SHALL BE CONSTRUCTED AT AN ELEVATION HIGH ENOUGH TO ENSURE GRAVITY FLOW TO THE SEWAGE COLLECTION SYSTEM.

ALL REQUIRED EROSION & SEDIMENT CONTROL AND STORMWATER POLLUTION PREVENTION WATER QUALITY & QUANTITY CONTROL STRUCTURES, PERMANENT AND TEMPORARY, ARE SHOWN ON THE PLANS.

THE DC EHSD SHALL BE NOTIFIED SIXTY DAYS PRIOR TO ANY CHANGE IN USE; USE CHANGES MAY REQUIRE RE-APPROVAL BY THE DC EHSD.

NO BUILDINGS ARE TO BE OCCUPIED AND THE NEW WATER SYSTEM SHALL NOT BE PLACED INTO SERVICE, UNTIL A "COMPLETED WORKS APPROVAL" IS ISSUED UNDER SECTION 5-1.22(D) OF PART 5 OF THE NEW YORK STATE SANITARY CODE (10NYCRR5).

NO BUILDINGS ARE TO BE OCCUPIED AND THE NEW WASTEWATER COLLECTION SYSTEM SHALL NOT BE PLACED INTO SERVICE UNTIL, A "CERTIFICATE OF CONSTRUCTION COMPLIANCE" IS ISSUED UNDER SECTION 19.7 OF ARTICLE 19 OF THE DUTCHESS COUNTY SANITARY CODE.

ALL SERVICE LINES ARE THE RESPONSIBILITY OF THE OWNER UP TO THE PROPERTY LINE. THE WATER AND SEWER COMPANIES SHALL BE RESPONSIBLE FOR ALL VALVES AND PIPES WHICH ARE NOT ON THE OWNER'S PROPERTY.

THE UNDERSIGNED OWNERS OF THE PROPERTY HEREON STATE THAT THEY ARE FAMILIAR WITH THIS MAP, ITS CONTENTS AND ITS LEGENDS AND HEREBY CONSENT TO ALL SAID TERMS AND CONDITIONS AS STATED HEREON.

DRAWN BY: MAB				CHECKED BY: DGK			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	12/25/18	REVISED FOR PLANNING BOARD SUBMISSION	MAB				
2	02/22/19	REVISED BUILDING USE	MAB				
3	02/26/19	REVISED FOR PLANNING BOARD SUBMISSION	MAB				
4	03/26/19	REVISED PER PLANNING BOARD COMMENTS	MAB				
5	04/30/19	REVISED PER PLANNING BOARD COMMENTS	MAB				
6	05/28/19	REVISED PER PLANNING BOARD COMMENTS	MAB				

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13 CHAMBERS ST., NEWBURGH, NEW YORK 12550
PH: 845-440-6926
F: 845-440-6637

SEAL

GRADING AND UTILITY PLAN

23-28 CREEK DRIVE

23-28 CREEK ROAD
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-37-037625

JOB #:	2018:029
DATE:	10/23/2018
SCALE:	SCALE: AS SHOWN
TITLE:	GU-1
SHEET:	7 OF 12

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW

LEGEND:

- RL● EXISTING ROOF LEADER LOCATION
- SEWER MANHOLE
- UNKNOWN MANHOLE
- GUY WIRE ANCHOR
- UTILITY POLE
- ELECTRIC BOX
- HYDRANT
- WATER VALVE
- ROUND DROP INLET
- ELECTRIC METER
- UTILITY POLE WITH LIGHT
- COMMUNICATION BOX
- OVERHEAD WIRES
- FENCE
- DROP INLET
- GAS METER
- LAMP
- UNKNOWN VALVE
- EXISTING WATER EDGE
- EXISTING PROPERTY LINE
- 100-YEAR FLOOD LINE
- 100-YEAR FLOODWAY LINE
- PROPOSED EASEMENT LINE
- CB 3 PROPOSED CATCH BASIN WITH INLET PROTECTION
- PROPOSED CLEANOUT
- PROPOSED HYDRANT
- PROPOSED WATER VALVE
- PROPOSED SANITARY MANHOLE
- PROPOSED RETAINING WALL
- ST PROPOSED CULVERT
- PROPOSED UNDERDRAIN
- PROPOSED ROOF LEADER PIPE
- 92 PROPOSED MINOR CONTOUR
- 90 PROPOSED MAJOR CONTOUR
- ●92.5 PROPOSED SPOT ELEVATION
- EXISTING CATCH BASIN
- EXISTING UTILITY POLE
- CO PROPOSED CLEANOUT
- S PROPOSED SEWER SERVICE LINE
- W PROPOSED WATER SUPPLY LINE
- x x PROPOSED FENCE
- IMPERVIOUS SURFACE
- PROPOSED RIP RAP
- UTILITY CROSSING LOCATION
- RL● PROPOSED ROOF LEADER LOCATION
- WS PROPOSED WATER SERVICE LINE
- PROPOSED WATER SHUT-OFF VALVE

EROSION AND SEDIMENT CONTROL NOTES

1. ALL EROSION CONTROL MEASURES EMPLOYED DURING THE CONSTRUCTION PROCESS SHALL BE INSPECTED BY THE CONTRACTOR IN ACCORDANCE WITH THE MAINTENANCE SCHEDULE PROVIDED ON THIS SHEET. ALL EROSION CONTROL STRUCTURES SHALL BE REPAIRED AND MAINTAINED AS NECESSARY BY THE CONTRACTOR.
2. ALL STORMWATER MANAGEMENT STRUCTURES (E.G., SWALES, CULVERTS) SHALL BE REGULARLY INSPECTED FOR SEDIMENT ACCUMULATIONS. SEDIMENT AND TRASH SHALL BE REMOVED, AS NECESSARY.
3. ALL EROSION CONTROL INSTALLATION AND MAINTENANCE MEASURES SHALL MEET THE REQUIREMENTS OF THE NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL.
4. ANY PILE OF POTENTIALLY EROSIVE MATERIAL TEMPORARILY STOCKPILED ON THE SITE DURING THE CONSTRUCTION PROCESS SHALL BE LOCATED IN AN AREA AWAY FROM STORM DRAINAGE AND SHALL BE PROPERLY PROTECTED FROM EROSION BY A SURROUNDING SILT FENCE.
5. PERMANENT SEEDED AREAS FOR EROSION CONTROL SHALL BE IN ACCORDANCE WITH DETAIL AND SPECIFICATIONS ON THE DETAIL SHEET.
6. AREAS UNDERGOING CLEARING OR GRADING AND WHERE WORK IS DELAYED OR COMPLETED AND WILL NOT BE REDISTURBED FOR A PERIOD OF 21 DAYS OR MORE SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT VEGETATIVE COVER WITHIN 14 DAYS.
7. ON-SITE DUST CONTROL SHALL BE ACCOMPLISHED BY STANDARD METHODS OF LIGHTLY WATERING ALL EXPOSED SOIL AND RAPIDLY STABILIZING THE REGRADED AREAS WITH TOPSOIL, LOAM AND/OR SEEDING.
8. THE PROJECT ENGINEER SHALL BE NOTIFIED NO LESS THAN 48 HOURS PRIOR TO THE START OF ANY SITE WORK, AND BY SUCH NOTIFICATION, SHALL BE PROVIDED WITH THE NAME AND TELEPHONE NUMBER OF THE GENERAL CONTRACTOR RESPONSIBLE FOR SUCH WORK.
9. THE CITY MAY INSPECT EROSION AND SEDIMENT CONTROL PRACTICES ON THE SITE DURING CONSTRUCTION AND RECOMMEND THAT THE CONTRACTOR INSTALL ADDITIONAL EROSION CONTROL MEASURES IF DEEMED NECESSARY TO PROTECT ANY UNDISTURBED AREAS OF THE SITE. ANY SUCH REQUESTS SHALL BE MADE DIRECTLY TO THE CONTRACTOR AND QUALIFIED PROFESSIONAL AND FOLLOWED UP WITH A WRITTEN NOTIFICATION TO THE DEVELOPER. IN ADDITION, THE CITY SHALL BE CONSULTED ON ANY SPECIAL ADDITIONS OR DELETIONS OF EROSION CONTROL MEASURES WARRANTED BY CHANGING FIELD CONDITIONS. THE NOTICE OF INTENT (NOI) MAY NEED TO BE UPDATED AS A RESULT OF THE CHANGES.
10. THE CONTRACTOR/OWNER SHALL MAINTAIN A RECORD OF ALL EROSION AND SEDIMENT CONTROL INSPECTION REPORTS AT THE SITE IN A LOG BOOK. THE SITE LOG BOOK SHALL BE MAINTAINED ON SITE AND BE MADE AVAILABLE TO THE PERMITTING AUTHORITY. THE OWNER/CONTRACTOR SHALL, ON A MONTHLY BASIS, POST AT THE SITE A SUMMARY OF THE SITE INSPECTION ACTIVITIES IN A PUBLICLY ACCESSIBLE LOCATION.
11. THE OWNER SHALL FILE A NOI WITH THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC) PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES AND A NOTICE OF TERMINATION (NOT) WITH THE NYSDEC FOLLOWING CONSTRUCTION ACTIVITIES.
12. IF GROUNDWATER IS ENCOUNTERED DURING CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL CONSTRUCT A DEWATERING PIT IN ACCORDANCE WITH NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL (AKA SUMP PIT) TO FILTER WATER FOR PUMPING TO A SUITABLE LOCATION.
13. WHEN ALL DISTURBED AREAS ARE STABLE, ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED PER THE APPROVAL OF THE CITY AND QUALIFIED PROFESSIONAL.
14. UPON COMPLETION OF CONSTRUCTION, THE PARCEL OWNER(S) AND SUBSEQUENTLY THE HOMEOWNERS ASSOCIATION SHALL BE RESPONSIBLE FOR THE INSPECTION AND MAINTENANCE OF THE STORMWATER MANAGEMENT SYSTEM. THE STORMWATER MANAGEMENT SYSTEM SHALL BE INSPECTED QUARTERLY AND AFTER EACH SIGNIFICANT RAINFALL EVENT. THE OWNER(S) SHALL MAINTAIN A RECORD OF INSPECTION AND MAINTENANCE REPORTS AT THE SITE. REFER TO THE SWPPP FOR INSPECTION REQUIREMENTS AND FUTURE MAINTENANCE.

SOIL RESTORATION NOTES:

1. THE CONSTRACTOR SHALL EMPLOY SOIL RESTORATION TO ALL DISTURBED AREAS THAT WILL REMAIN LANDSCAPED.
2. FOR HEAVY TRAFFIC AREAS, FULL SOIL REASTORATION WILL BE REQUIRED. FULL SOIL RESTORATION CONSISTS OF USE OF A BULLDOZER WITH A DEEP RIPPER ATTACHED TO IT, THE RIPPING SHALL BE DONE TO A DEPTH OF 12"–24". COMPOST IS PLACED OVER THE RIPPED SOIL, THEN WORKED INTO THE SOIL WITH A DEEP SUB-SOILER.
3. FOR LIGHT TRAFFIC AREAS, SOIL RESTORATION MAY BE ACCOMPLISHED BY MEANS OF TILLING THE SOIL WITH A DISK TYPE TILLER PULLED BY A TRACTOR OR PLACEMENT OF TOPSOIL OVER THE EXISTING SOIL A.O.B.E..

CONSTRUCTION SEQUENCING NOTES:

DISTURBED AREA= 2.17 AC.

1. SCHEDULE A PRE-CONSTRUCTION MEETING WHICH SHALL INCLUDE THE CITY ENGINEER, OWNER OR OWNER'S REPRESENTATIVE, PROJECT ENGINEER, CONTRACTOR AND SUBCONTRACTORS (IF NECESSARY) WHO ARE TO PERFORM THE CONSTRUCTION.
2. ESTABLISH THE LIMIT OF DISTURBANCE FOR PROPOSED CLEARING AND GRADING ASSOCIATED WITH THE PROPOSED PARKING AREAS AND STORMWATER MANAGEMENT AREA.
3. INSTALL STABILIZED CONSTRUCTION ENTRANCE AS DEPICTED ON THE PLAN.
4. CLEAR LOCATIONS FOR INSTALLATION OF PROPOSED EROSION AND SEDIMENT CONTROL MEASURES.
5. INSTALL SILT FENCE AS SHOWN ON THIS PLAN AND IN OTHER AREAS THAT BECOME APPARENT FOLLOWING CLEARING ACTIVITIES.
6. PRIOR TO FURTHER CONSTRUCTION ACTIVITIES, CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER TO CONDUCT A PRE-CONSTRUCTION SITE ASSESSMENT TO VERIFY THAT THE APPROPRIATE EROSION AND SEDIMENT CONTROLS SHOWN ON THIS PLAN HAVE BEEN ADEQUATELY INSTALLED ENSURING OVERALL PREPAREDNESS OF THIS SITE FOR THE COMMENCEMENT OF CONSTRUCTION.
7. COMMENCE MASS GRADING ACTIVITIES ON PROJECT AREA.
8. INSTALL UNDERGROUND DETENTION SYSTEM. INSTALL SILT FENCE SURROUNDING UNDERGROUND DETENTION FOOTPRINT. USE ORANGE CONSTRUCTION FENCE IN ADDITION TO THE SILT FENCE IF NECESSARY.
9. CONSTRUCT STORM SEWER SYSTEM.
10. CONSTRUCT CURBING AND PARKING AREAS TO BINDER COURSE.
11. TILL SOIL IN ALL LANDSCAPED AREAS THAT HAVE PREVIOUSLY BEEN DISTURBED.
12. INSTALL ALL PROPOSED LANDSCAPING.
13. PAVE TOP COURSE ON PARKING AREAS.
14. INSTALL INFILTRATION BASIN.
15. REMOVE EROSION AND SEDIMENT CONTROLS WHEN CONTRIBUTING DRAINAGE AREAS HAVE BECOME STABILIZED.

GENERAL NOTE: EROSION CONTROL MEASURES SHALL BE INSPECTED AND REPAIRED AS NEEDED DURING CONSTRUCTION ACTIVITIES AND BASED ON THE MAINTENANCE SCHEDULE. ADDITIONAL EROSION CONTROL MEASURES BASED ON SITE CONDITIONS SHALL BE PROVIDED AS NECESSARY IN ORDER TO PROTECT ADJACENT PARCELS AND WATERS.

INSPECTION SCHEDULE & MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES

PERMANENT AND TEMPORARY VEGETATION:
INSPECT ALL AREAS THAT HAVE RECEIVED VEGETATION EVERY SEVEN DAYS AND AFTER EVERY STORM EVENT WITH RAINFALL THAT EQUALS OR EXCEEDS 0.5 INCH. ALL AREAS DAMAGED BY EROSION OR WHERE SEED HAS NOT ESTABLISHED SHALL BE REPAIRED AND RESTABLIZED IMMEDIATELY.

STABILIZED CONSTRUCTION ENTRANCE:
INSPECT THE ENTRANCE PAD EVERY SEVEN DAYS AND AFTER EVERY STORM EVENT WITH RAINFALL THAT EQUALS OR EXCEEDS 0.5 INCH. CHECK FOR MUD, SEDIMENT BUILD-UP AND PAD INTEGRITY. MAKE DAILY INSPECTIONS DURING WET WEATHER. REGRADE PAD AS NEEDED FOR RUNOFF CONTROL. WASH AND REPLACE STONE AS NEEDED. THE STONE IN THE ENTRANCE SHOULD BE WASHED OR REPLACED WHENEVER THE ENTRANCE FAILS TO REDUCE MUD BEING CARRIED OFF SITE BY VEHICLES. IMMEDIATELY REMOVE MUD AND SEDIMENT TRACKED OR WASHED ONTO PUBLIC ROADS BY BRUSHING OR SWEEPING. REMOVE TEMPORARY CONSTRUCTION ENTRANCE AS SOON AS THEY ARE NO LONGER NEEDED TO PROVIDE ACCESS TO THE SITE AS DIRECTED BY PROJECT ENGINEER.

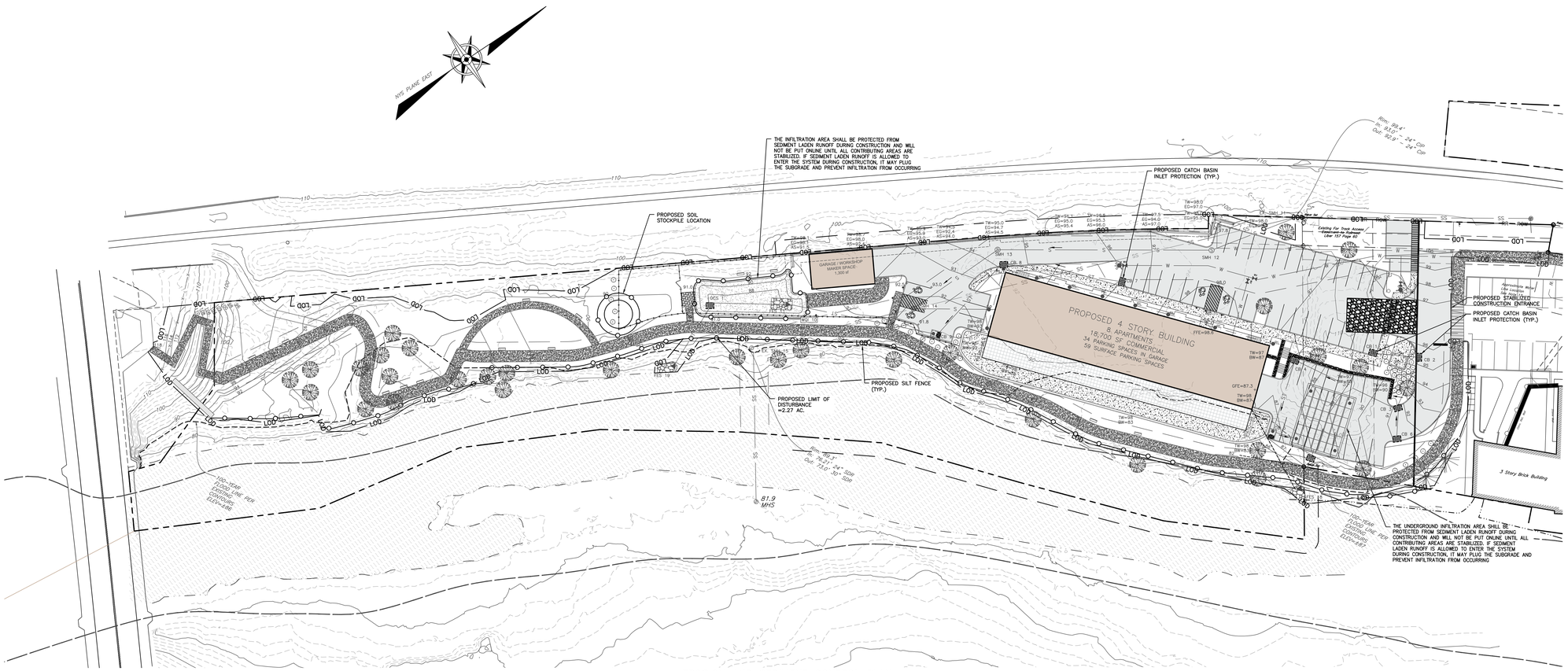
SILT FENCE:
INSPECT FOR DAMAGE EVERY SEVEN DAYS AND AFTER EVERY STORM EVENT WITH RAINFALL THAT EQUALS OR EXCEEDS 0.5 INCH. MAKE ALL REPAIRS IMMEDIATELY. REMOVE SEDIMENT FROM THE UP-SLOPE FACE OF THE FENCE BEFORE IT ACCUMULATES TO A HEIGHT EQUAL TO ONE-QUARTER THE HEIGHT OF THE FENCE. IF FENCE FABRIC TEARS, BEGINS TO DECOMPOSE, OR IN ANY WAY BECOMES INEFFECTIVE, REPLACE THE AFFECTED SECTION OF FENCE IMMEDIATELY.

SOIL STOCKPILE:
INSPECT SEDIMENT CONTROL BARRIERS (SILT FENCE) AND VEGETATION FOR DAMAGE EVERY SEVEN DAYS AND AFTER EVERY STORM EVENT WITH RAINFALL THAT EQUALS OR EXCEEDS 0.5 INCH. MAKE ALL REPAIRS IMMEDIATELY. REMOVE SEDIMENT FROM THE UP-SLOPE FACE OF THE SEDIMENT CONTROL BARRIER BEFORE IT ACCUMULATES TO A HEIGHT EQUAL TO ONE-QUARTER THE HEIGHT OF THE SEDIMENT CONTROL BARRIER. IF SEDIMENT CONTROL BARRIER TEARS, BEGINS TO DECOMPOSE, OR IN ANY WAY BECOMES INEFFECTIVE, REPLACE THE AFFECTED SECTION OF SEDIMENT CONTROL BARRIER IMMEDIATELY. REVEGETATE DISTURBED AREA TO STABILIZE SOIL STOCKPILE. REMOVE THE SEDIMENT CONTROL BARRIER WHEN THE SOIL STOCKPILE HAS BEEN REMOVED.

DUST CONTROL:
SCHEDULE CONSTRUCTION OPERATIONS TO MINIMIZE THE AMOUNT OF DISTURBED AREAS AT ANY ONE TIME DURING THE COURSE OF WORKS. APPLY TEMPORARY SOIL STABILIZATION PRACTICES SUCH AS MULCHING, SEEDING, AND SPRAYING (WATER). STRUCTURAL MEASURES (MULCH, SEEDING) SHALL BE INSTALLED IN DISTURBED AREAS BEFORE SIGNIFICANT BLOWING PROBLEMS DEVELOP. WATER SHALL BE SPRAYED AS NEEDED. REPEAT AS NEEDED, BUT AVOID EXCESSIVE SPRAYING, WHICH COULD CREATE RUNOFF AND EROSION PROBLEMS.

DEWATERING PITS:
(IF REQUIRED) – INSPECT DAILY DURING OPERATION FOR CLOGGING OR OVERFLOW. CLEAR INLET AND DISCHARGE PIPES OF OBSTRUCTIONS. IF A FILTER MATERIAL BECOMES CLOGGED WITH SEDIMENT, PIT SHALL BE DISMANTLED AND NEW PITS SHALL BE CONSTRUCTED AS NEEDED.

CATCH BASINS:
ALL CATCH BASINS SHALL BE INSPECTED AFTER EACH STORM EVENT FOR SEDIMENT ACCUMULATION, AND DEBRIS, AND REMOVE AS NECESSARY. THE INLET PROTECTION SHALL BE INSPECTED FOR SEDIMENT ACCUMULATION AND REPLACED AS NECESSARY. WHEN SEDIMENT ACCUMULATION WITHIN THE CATCH BASIN SUMP REACHES 1/2 OF THE SUMP DEPTH, IT SHALL BE REMOVED.



EROSION AND SEDIMENT CONTROL PLAN
SCALE: 1" = 30'
GRAPHIC SCALE

30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

DRAWN BY: MAB				CHECKED BY: DGK			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	12/25/18	REVISED FOR PLANNING BOARD SUBMISSION	MAB				
2	02/26/19	REVISED FOR PLANNING BOARD SUBMISSION	MAB				
3	03/26/19	REVISED PER PLANNING BOARD COMMENTS	MAB				
4	04/30/19	REVISED PER PLANNING BOARD COMMENTS	MAB				
5	05/28/19	REVISED PER PLANNING BOARD COMMENTS	MAB				

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F: 845-440-6637

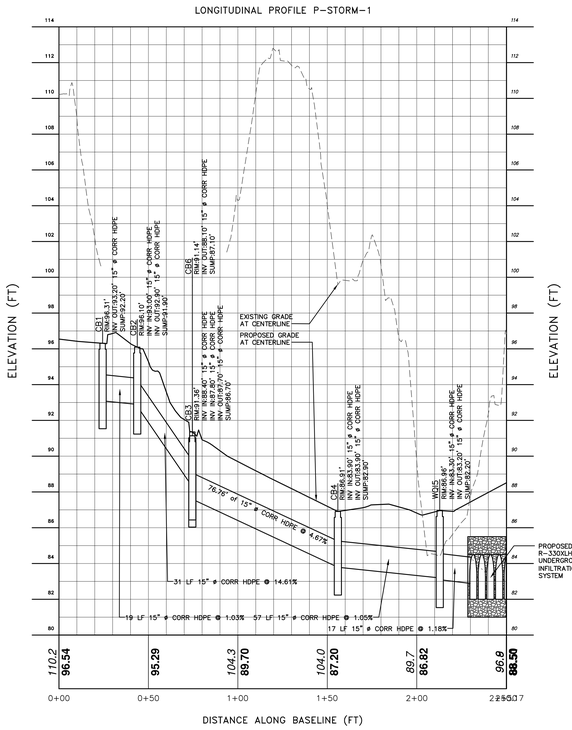
EROSION AND SEDIMENT CONTROL PLAN

23-28 CREEK DRIVE

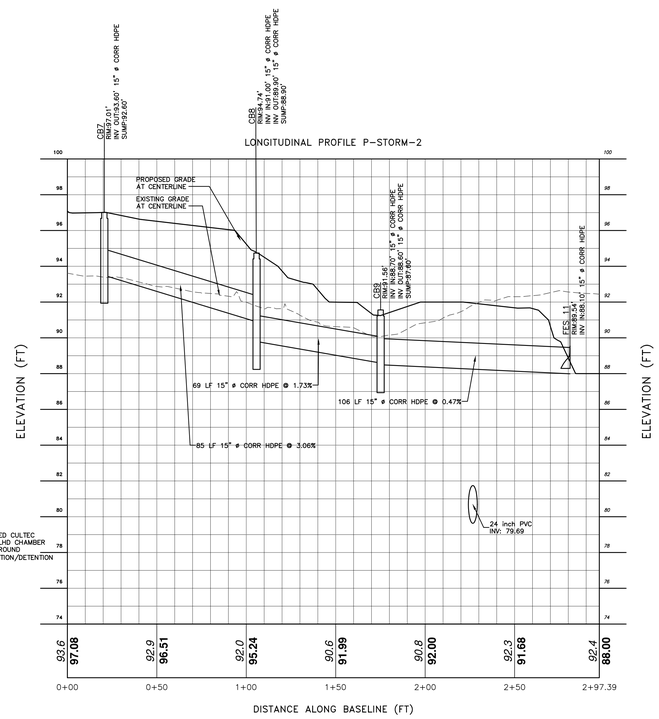
23-28 CREEK ROAD
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-37-037625

JOB #:	2018:029
DATE:	10/23/2018
SCALE:	SCALE: 1" = 30'
TITLE:	EC-1
SHEET:	8 OF 12

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW



STORM LINE 1 PROFILE
SCALE: 1"= 3'V
1" = 30'H



STORM LINE 2 PROFILE
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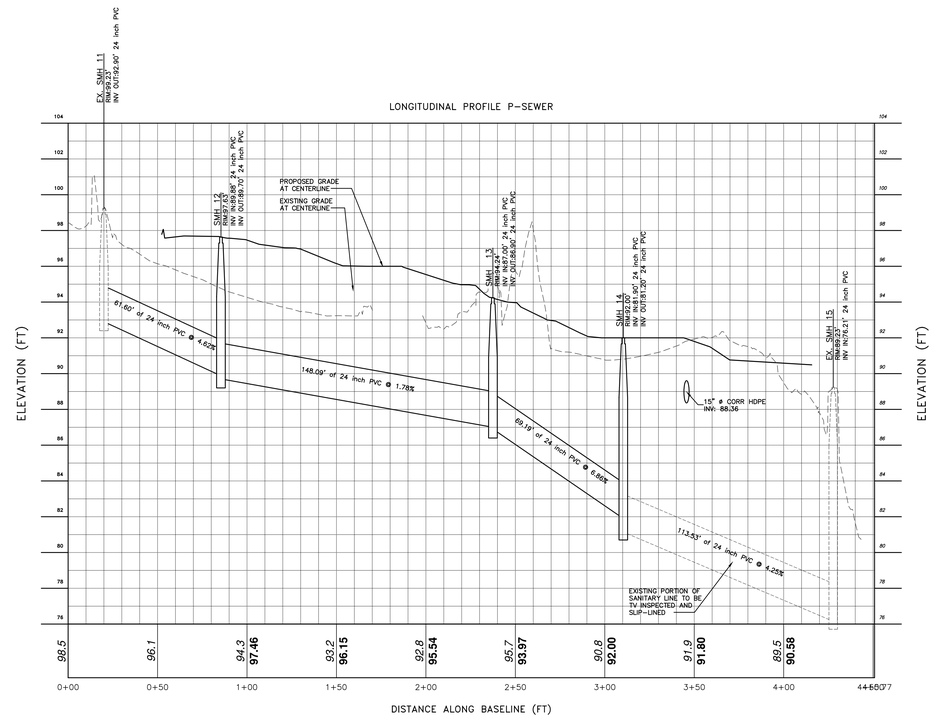
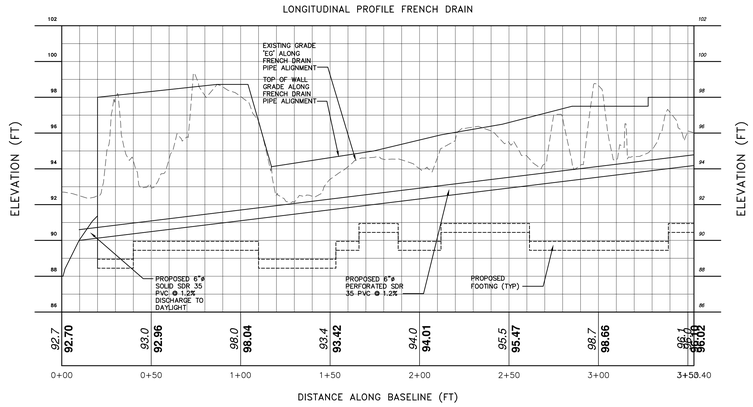
1" = 30'H



SEWER LINE PROFILE
SCALE: 1"= 3'V
1" = 30'H



FRENCH DRAIN/RETAINING WALL PROFILE
SCALE: 1"= 3'V
1" = 30'H

DRAWN BY: MAB				CHECKED BY: DGK			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	12/25/18	REVISED FOR PLANNING BOARD SUBMISSION	MAB				
2	02/26/19	REVISED FOR PLANNING BOARD SUBMISSION	MAB				
3	03/26/19	REVISED FOR PLANNING BOARD COMMENTS	MAB				
4	04/30/19	REVISED PER PLANNING BOARD COMMENTS	MAB				
5	05/28/19	REVISED PER PLANNING BOARD COMMENTS	MAB				

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PROFILES

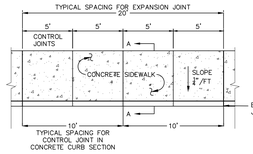
23-28 CREEK DRIVE

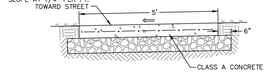
23-28 CREEK ROAD
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-37-037625

JOB #:	2018:029
DATE:	10/23/2018
SCALE:	AS SHOWN
TITLE:	P-1
SHEET:	9 OF 12

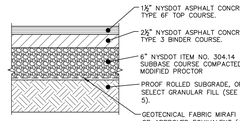
UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW

SITE DETAILS



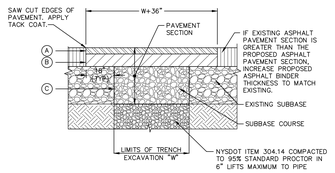


SECTION A–A



NOTES:
1. MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYSDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, DATED JANUARY 2, 2002.
2. SUBGRADE SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, LARGE STONES OR OTHER UNSUITABLE MATERIALS..
3. TACK COAT WHEN SPECIFIED OR CALLED OUT IN THESE DRAWINGS OR REQUIRED BY THE REFERENCED SPECIFICATIONS SHALL CONFORM WITH SECTION 407–TACK COAT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
4. WHERE IT IS NECESSARY TO PLACE FILL FOR PURPOSES OF BRINGING THE SUBGRADE ELEVATION UP TO A SPECIFIED GRADE, THE FILL MATERIAL PLACED SHALL BE IN CONFORMANCE WITH SECTION 203–EXCAVATION AND EMBANKMENT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
5. IT IS EXPECTED THAT THE EXISTING SITE SUB–SOILS ARE SAND AND GRAVEL IN NATURE (CALIFORNIA BEARING RATIO RANGE BETWEEN 40 AND 80) . IF UNSUITABLE SOILS ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL CONTACT THE ENGINEER FOR POSSIBLE MODIFICATIONS TO THE PAVEMENT DETAIL.

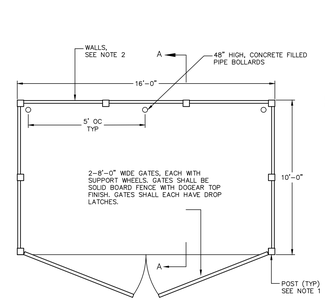
PAVEMENT SECTION DETAIL
NOT TO SCALE



LEGEND
(A) 1–1/2" ASPHALT CONCRETE TOP COURSE– NYSDOT TYPE 6F
(B) 2 1/2" ASPHALT CONCRETE BINDER COURSE– NYSDOT TYPE 3
(C) 6" GRANULAR SUBBASE COURSE– NYSDOT ITEM 304.14

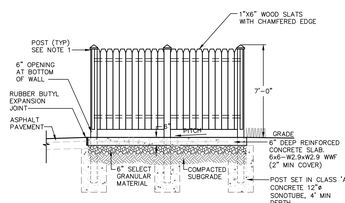
NOTES:
1. SAW CUT MIN. 18" BEYOND EXCAVATION WITH SMOOTH EDGES. 18" JOINT BETWEEN EXISTING AND NEW TOP COURSE TO BE MILLED. JOINT TO BE SEALED WITH POLYMER MODIFIED SEALER.
2. FURNISH, PLACE, AND COMPACT SUBBASE.
3. TACK COAT IN ACCORDANCE WITH NYSDOT STANDARD SPEC.
4. FURNISH AND PLACE ASPHALT CONCRETE PAVEMENT AS SPECIFIED.

PAVEMENT RESTORATION DETAIL
NOT TO SCALE



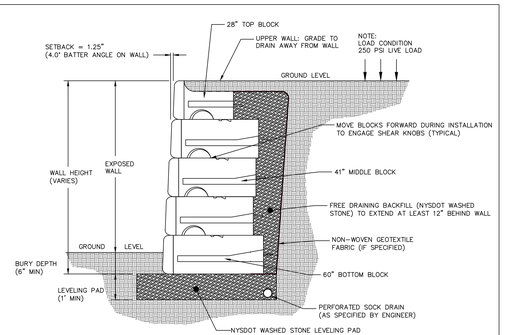
PLAN

TRASH ENCLOSURE DETAILS
NOT TO SCALE



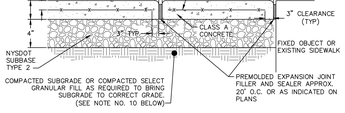
SECTION A–A

NOTES
1. POSTS SHALL HAVE A DECORATIVE CAP, CONSISTENT WITH THE ARTS & CRAFTS STYLE, AS APPROVED BY OWNER. POST SPACING SHALL BE AS REQUIRED BY WALL CONSTRUCTION.
2. WALLS OF DUMPSTER ENCLOSURE SHALL BE A SOLID WOOD PRIVACY FENCING NATURAL STAIL OR PAINT TO COMPLEMENT BUILDING.

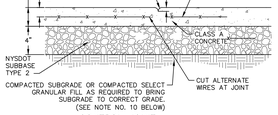


NOTES:
1. RETAINING WALL MANUFACTURED BY REDI–ROCK OR APPROVED EQUAL.
2. THIS DETAIL FOR SITE PLAN APPROVAL ONLY TO SHOW GENERAL WALL ASSEMBLY. FINAL DESIGN DOCUMENTS SHALL BE PROVIDED TO THE CITY OF BEACON FOR REVIEW PRIOR TO CONSTRUCTION.

TYPICAL REDI–ROCK GRAVITY WALL
NOT TO SCALE



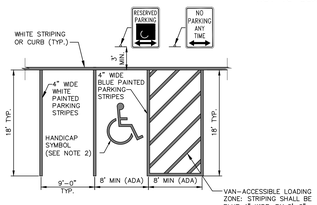
EXPANSION JOINT



CONTROL JOINT

NOTES:
1) 10' SPACING OF CONTROL JOINTS SHALL BE USED FOR CAST IN PLACE CONCRETE CURBS.
2) MATERIAL AND METHODS OF CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYSDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, DATED JANUARY 2, 2002, AND ALL ADDENDA THERETO; THE ONLY EXCEPTION BEING THAT THE WORK OF THIS CONTRACT SHALL BE MEASURED IN ENGLISH UNITS.
3) ALL CONCRETE SHALL BE 3,500 PSI CLASS A CONCRETE. CONCRETE MATERIALS, PLACEMENT, AND CONSTRUCTION SHALL CONFORM WITH SECTION 500 OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
4) REINFORCING STEEL FOR CONCRETE SHALL CONFORM WITH SECTION 556 – REINFORCING STEEL FOR CONCRETE STRUCTURES OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS AND AS SPECIFICALLY CALLED OUT IN THE DRAWINGS.
5) ALL EXPOSED SURFACED SHALL HAVE A BROOM TEXTURED FINISH.
6) EXPANSION JOINTS SHALL BE LOCATED A MAXIMUM OF 20' ON CENTER, OR AS INDICATED ON PLANS.
7) JOINTS SHALL NOT BE SAW CUT.
8) EXPOSED CONCRETE SURFACES SHALL BE TREATED WITH "SUREBOND"/"SAFEBOND"SB–7000 INTENSIFIER BRIGHT PROTECTOR AND SIDEWALK SEALER, OR EQUAL. RATE AND METHOD OF APPLICATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
9) SUBBASE MATERIAL SHALL CONFORM WITH SECTION 304 OF THE ABOVE REFERENCED NYSDOT STANDARD.
10) WHERE IT IS NECESSARY TO PLACE FILL FOR PURPOSE OF BRINGING THE SUBGRADE ELEVATION UP TO A SPECIFIED GRADE, THE FILL MATERIAL PLACED SHALL BE IN CONFORMATION WITH SECTION 203–EXCAVATION AND EMBANKMENT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
11) ALL WORK SHALL CONFORM WITH SECTION 608–SIDEWALK, DRIVEWAYS, AND BICYCLE PATHS OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.

CONCRETE SIDEWALK DETAIL
NOT TO SCALE

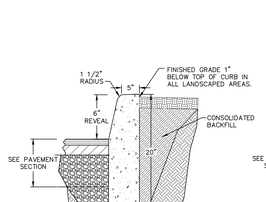


TYPICAL PARKING STRIPING

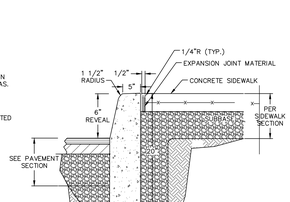
HANDICAP PARKING STRIPING

NOTES:
1. ALL DIMENSIONS SUBJECT TO CURRENT MUNICIPALITY ZONING AND SITE REGULATIONS.
2. PAINTED HANDICAP SYMBOL TO BE IN ACCORDANCE WITH NYSDOT AND ADA STANDARDS.
3. IF PARKING ABUTS A SIDEWALK, THEN THE REGULATORY SIGNS SHALL BE PLACED BEHIND THE SIDEWALK.

PARKING AND STRIPING DETAIL
NOT TO SCALE



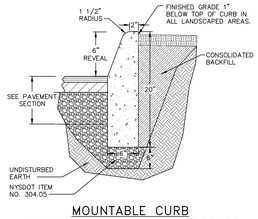
ABUTTING GRASS OR LANDSCAPE



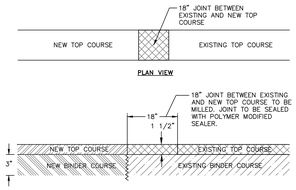
ABUTTING SIDEWALK

NOTES:
1. CONCRETE CURB SHALL BE 4,000 PSI CAST–IN–PLACE, AND IN ACCORDANCE WITH NYSDOT STANDARD SPECIFICATION SECTION 609.
2. EXPANSION JOINTS OF 1/2" CELLULOSE OR SIMILAR MATERIAL SHALL BE PLACED AT 10 FOOT INTERVALS.
3. FOR MOUNTABLE CURBS ABUTTING SIDEWALK OR OTHER HARDSCAPE, REFER TO "ABUTTING SIDEWALK" DETAIL.

CAST–IN–PLACE CONCRETE CURB DETAIL
NOT TO SCALE

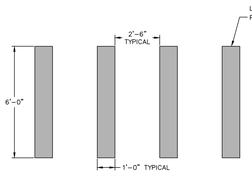


MOUNTABLE CURB
ABUTTING GRASS OR LANDSCAPE
NOT TO SCALE



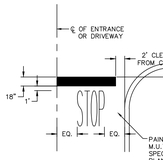
NOTES:
1. 3" BINDER COURSE AND 1½" TOP COURSE TO BE USED FOR RESTORATION OF PAVEMENT WITHIN CITY ROADS.
2. EXCAVATIONS ARE TO BE SAW CUT SMOOTH, ALL EDGES TACK COATED, AND ALL SEAMS SEALED WITH A HOT POLYMER MODIFIED CRACK SEALANT.
3. IF EXISTING ASPHALT PAVEMENT DEPTH IS GREATER THAN THE PROPOSED ASPHALT PAVEMENT SECTION, INCREASE PROPOSED ASPHALT BINDER THICKNESS TO MATCH EXISTING.

MILLED KEYWAY DETAIL
NOT TO SCALE

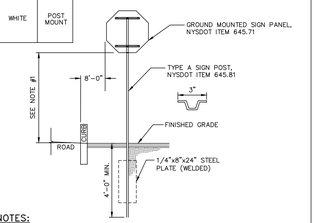


PAINTED CROSSWALK DETAIL
NOT TO SCALE

TEXT	APPROXIMTE SIZE OF SIGN	MUTCD NO.	COLOR		TYPE OF MOUNTING
			BACKGROUND	LEGEND	
STOP	30"x30"	R1–1	RED	WHITE	POST MOUNT

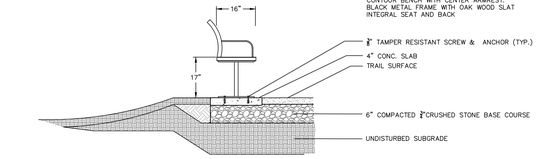


STOP BAR DETAIL
NOT TO SCALE

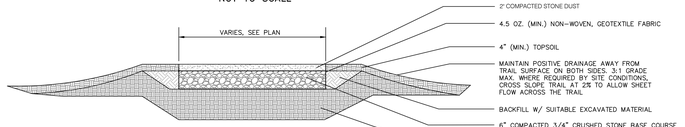


NOTES:
1. SIGN MOUNTING HEIGHT SHALL BE A MINIMUM OF 7'. MINIMUM MOUNTING HEIGHT MAY BE ADJUSTED ONLY IN ACCORDANCE WITH PROVISIONS OUTLINED IN "NYCRR, CHAPTER V–UNIFORM TRAFFIC CONTROL DEVICES."
2. SIGN POST SHALL BE IN ACCORDANCE W/ NYSDOT STANDARD SPECS SECTION 730.
3. SIGN BRACING PER NYSDOT STANDARD SHEETS.
4. SIGN POSTS WITHIN THE COUNTY RIGHT–OF–WAY SHALL BE BREAKAWAY TYPE MEETING THE REQUIREMENTS OF THE NYSDOT.

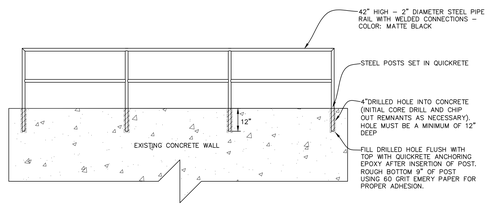
SINGLE POST SIGN DETAIL
NOT TO SCALE



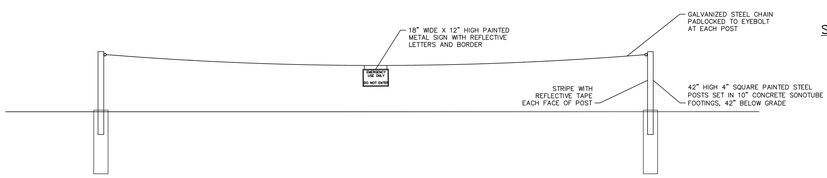
GREEN WAY TRAIL BENCH DETAIL
NOT TO SCALE



GREEN WAY TRAIL CROSS SECTION
NOT TO SCALE

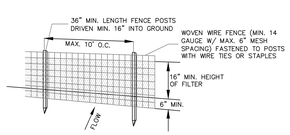


HAND RAIL DETAIL
NOT TO SCALE

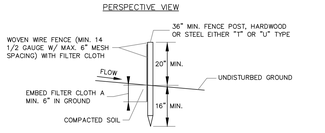


EMERGENCY GATE AT CREEK
DRIVE DETAIL
NOT TO SCALE

LANDSCAPE & EROSION AND SEDIMENT CONTROL DETAILS



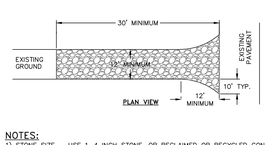
PERSPECTIVE VIEW



SECTION VIEW

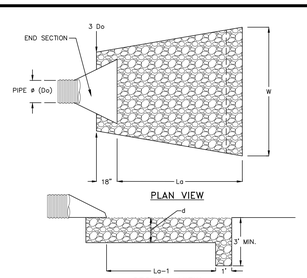
NOTES:
1. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
2. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER–LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N OR APPROVED EQUAL.
3. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE OR APPROVED EQUAL.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

SILT FENCE DETAIL
NOT TO SCALE



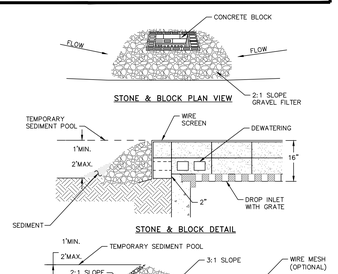
NOTES:
1) STONE SIZE – USE 1–4 INCH STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2) LENGTH – NOT LESS THAN 30 FEET FOR A SINGLE RESIDENCE LOT.
3) THICKNESS – NOT LESS THAN SIX (6) INCHES.
4) WIDTH – 12 FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. 24 FOOT MINIMUM IF SINGLE ENTRANCE TO SITE.
5) GEOTEXTILE – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6) SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED BENEATH THE ENTRANCE, IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7) MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS–OF–WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURE USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACTED ONTO PUBLIC RIGHTS–OF–WAY MUST BE REMOVED IMMEDIATELY.
8) WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9) PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

STABILIZED CONSTRUCTION ENTRANCE DETAIL
NOT TO SCALE



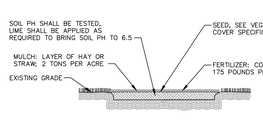
NOTES:
1. SIZING INFORMATION TAKEN FROM FIGURE 5B.12 (PAGE 5B.25) AND/OR FIGURE 5B.13 (PAGE 5B.26) OF THE "NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL" 2016 EDITION.
2. RIPRAP SHALL BE COMPOSED OF A WELL–GRADED MIXTURE OF STONE SIZE SO THAT 50% OF THE PIECES SHALL BE LARGER, BY WEIGHT, THAN THE SPECIFIED ø50. THE LARGEST STONE SIZE SHALL BE 1.5 TIMES ø50.
3. THE MINIMUM THICKNESS OF THE RIPRAP LAYER SHALL BE 1.5 TIMES THE MAXIMUM STONE DIAMETER FOR ø50 OF 15 INCHES OR LESS, AND 1.2 TIMES THE MAXIMUM STONE SIZE FOR ø50 GREATER THAN 15 INCHES.
4. A LAYER OF FILTER FABRIC (THICKNESS 20–60 MILS, GRAB STRENGTH 90–120 LBS, SHALL CONFORM TO ASTM D–1777 AND ASTM D–1682) SHALL BE PLACED BETWEEN THE RIPRAP AND THE UNDERLYING SOIL SURFACE. FILTER FABRIC SHALL HAVE A MINIMUM 1" OVERLAP AT ALL SEEMS.

ROCK OUTLET PROTECTION DETAIL
NOT TO SCALE



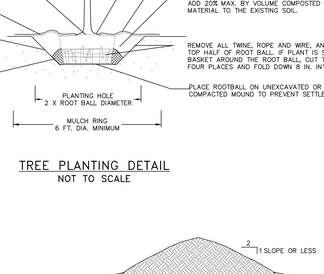
NOTES:
1. LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE ON ITS SIDE FOR DEWATERING. FOUNDATION SHALL BE 2 INCHES MINIMUM BELOW REST OF INLET AND BLOCKS SHALL BE PLACED AGAINST INLET FOR SUPPORT.
2. HARDWARE CLOTH OR 1/2" WIRE MESH SHALL BE PLACED OVER BLOCK OPENINGS TO SUPPORT STONE.
3. USE CLEAN STONE OR GRAVEL 1/2–3/4 INCH IN DIAMETER PLACED 2 INCHES BELOW TOP OF THE BLOCK ON A 2:1 SLOPE OR FLATTER.
4. FOR STONE STRUCTURES ONLY, A 1 FOOT THICK LAYER OF THE FILTER STONE WILL BE PLACED AGAINST THE 3 INCH STONE AS SHOWN ON THE DRAWINGS. MAXIMUM DRAINAGE AREA 1 ACRE

CATCH BASIN INLET PROTECTION DETAIL
NOT TO SCALE

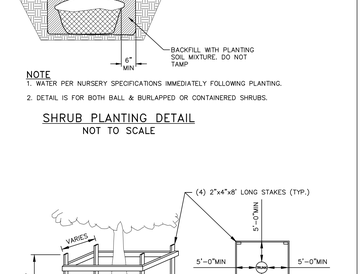


NOTES:
1. TOPSOIL, SEED, MULCH, AND FERTILIZE DISTURBED SOIL AREAS THAT WILL BE LEFT EXPOSED FOR 14 DAYS OR MORE.
2. SEED MIXTURE FOR USE ON LAWNS IN SUNNY AREAS:
65% KENTUCKY BLUE GRASS BLEND 114 POUNDS PER ACRE
20% PERENNIAL RYEGRASS 35 POUNDS PER ACRE
15% FINE FESCUE 26 POUNDS PER ACRE
175 POUNDS PER ACRE
3. SEED MIXTURE FOR USE IN SHADY AREAS:
80% BLEND OF SHADE TOLERANT KENTUCKY BLUEGRASS 138 POUNDS PER ACRE
20% FINE FESCUE 37 POUNDS PER ACRE
175 POUNDS PER ACRE
4. SEED BETWEEN APRIL 1ST AND MAY 15TH OR AUGUST 15TH AND OCTOBER 15TH. SEEDING MAY OCCUR BETWEEN MAY 15TH AND AUGUST 15TH IF ADEQUATE IRRIGATION IS PROVIDED.
5. TOPSOIL SHALL HAVE AT LEAST 6% BY WEIGHT OF FINE TEXTURED STABLE ORGANIC MATERIAL, AND NO GREATER THAN 20% TOPSOIL SHALL HAVE NOT LESS THAN 20% FINE TEXTURED MATERIAL (PASSING THE NO. 200 SIEVE) AND NOT MORE THAN 15% CLAY.

TOPSOIL, SEED AND MULCH DETAIL
NOT TO SCALE

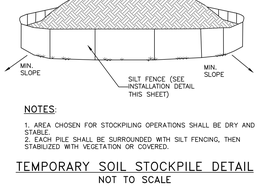


TREE PLANTING DETAIL
NOT TO SCALE



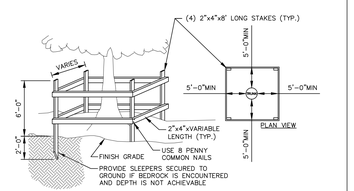
NOTE
1. WATER PER NURSERY SPECIFICATIONS IMMEDIATELY FOLLOWING PLANTING.
2. DETAIL IS FOR BOTH BALL & BURLAPPED OR CONTAINERED SHRUBS.

SHRUB PLANTING DETAIL
NOT TO SCALE



NOTES:
1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
2. EACH PILE SHALL BE SURROUNDED WITH SILT FENCING, THEN STABILIZED WITH VEGETATION OR COVERED.

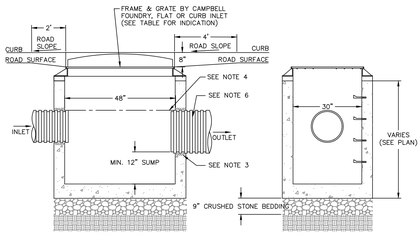
TEMPORARY SOIL STOCKPILE DETAIL
NOT TO SCALE



NOTES:
1. TREES TO REMAIN NOTED ON EXISTING CONDITIONS PLAN.
2. NOT ALL TREES TO REMAIN REQUIRE PROTECTION. TREE PROTECTION TO BE UTILIZED ON TREES WHERE CONSTRUCTION TRAFFIC WOULD COMPACT THE ROOT ZONE OF THE TREE.
PROVIDE SLEEPERS SECURED TO GROUND IF BEDROCK IS ENCOUNTERED AND DEPTH IS NOT ACHIEVABLE

TEMPORARY TREE PROTECTION DETAIL
NOT TO SCALE

| DRAWN BY: MAB | | | | CHECKED B

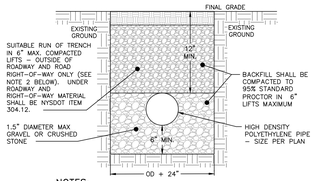


FRONT VIEW SIDE VIEW

NOTES:

1. PRECAST CONCRETE CATCH BASIN WITH CONCRETE STRENGTH OF 4,000 PSI @ 28 DAYS.
2. THE ENDS OF ALL PIPES SHALL BE CUT OFF FLUSH WITH THE INSIDE SURFACE OF THE CATCH BASIN AND PARGED AROUND.
3. PIPES SHALL BE PARGED AROUND INTERIOR AND EXTERIOR PRIOR TO BACKFILLING OF STRUCTURE. CONNECTIONS MADE WITHIN 10 FEET OF A WATER MAIN (OR SERVICE LINE) OR A SEWER MAIN (OR SERVICE LATERAL), SHALL BE MADE WATERTIGHT.
4. PROVIDE A MINIMUM 0.1' DROP BETWEEN INLET AND OUTLET INVERTS (MATCH CROWNS FOR PIPES WITH DIFFERENT SIZE) UNLESS OTHERWISE NOTED ON THE PLAN.
5. CATCH BASINS WITH AN INTERIOR DEPTH OF 4' AND GREATER SHALL BE FURNISHED WITH STEEL REINFORCED POLYPROPYLENE PLASTIC STEPS AT 12" INTERVALS.
6. HDPE PIPE SHALL BE PROVIDED WITH WATERTIGHT CONNECTIONS. ADS MODEL N12 WT IB OR APPROVED EQUAL.

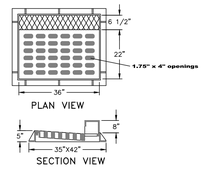
CATCH BASIN DETAIL
NOT TO SCALE



NOTES:

1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.

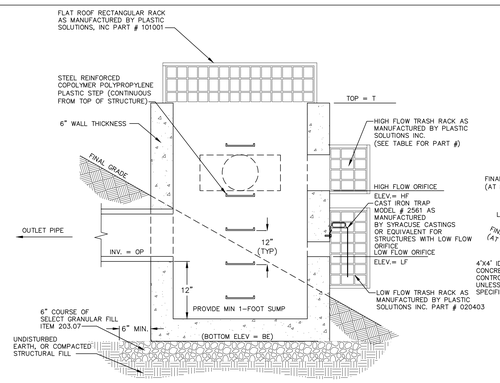
STORM LINE TRENCH DETAIL
NOT TO SCALE



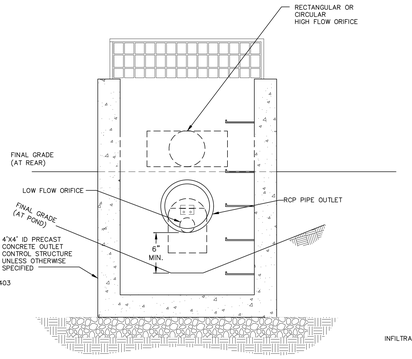
NOTES:

1. HEAVY DUTY RECTANGULAR STORMWATER INLET GRATE TO BE CAMPBELL FOUNDRY MODEL 2541, OR APPROVED EQUAL.
2. CATCH BASINS TO RECEIVE CURB INLETS ARE: CB 104, CB 301, CB 301A, CB 302, CB 303, CB 304, AND CB 305.

CAST IRON STORMWATER CURB INLET GRATE DETAIL
NOT TO SCALE



SIDE VIEW

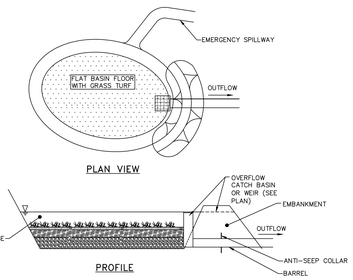


FRONT VIEW

OUTLET CONTROL STRUCTURE DATA										
OCS ID	STRUCTURE DIMENSIONS	LOW FLOW ORIFICE DIM	"LF" (FT)	HIGH FLOW ORIFICE DIM	# OF HIGH FLOW INLETS	"HF" (FT)	"T" (FT)	OUTLET PIPE ø (IN)	"OP" (FT)	HIGH FLOW ORIFICE TRASH RACK PART #
1	4'X4' I.D.	3" ø	89.55	NONE	NONE	N/A	89.9	15	86.0	020601

NOTES:
1. ALL TRASH RACKS SHALL HAVE UV PROTECTION MEETING OR EXCEEDING THE REQUIREMENTS OF ASTM D2565-99.
2. TRASH RACKS SHALL BE SECURED PER THE MANUFACTURER'S RECOMMENDATIONS.
3. WHERE HIGH FLOW ORIFICE EXTENDS TO TOP OF STRUCTURE, THE MAXIMUM ALLOWABLE GAP BETWEEN THE TRASH RACKS SHALL BE 4".

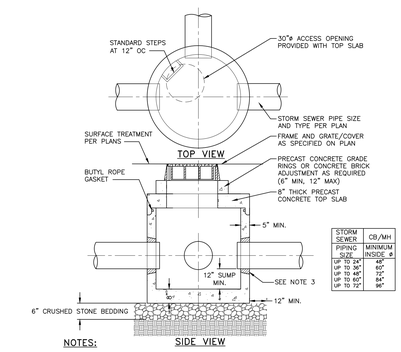
INFILTRATION BASIN OUTLET CONTROL STRUCTURE DETAIL
NOT TO SCALE



NOTES:

1. THE INFILTRATION BASIN SHALL NOT SERVE AS A SEDIMENT TRAP DURING CONSTRUCTION AND SHALL BE PROTECTED FROM CONSTRUCTION ACTIVITY.
2. RELATIVELY LIGHT TRACKED EQUIPMENT IS RECOMMENDED FOR CONSTRUCTION PURPOSES TO AVOID COMPACTION OF THE BASIN FLOOR.
3. A HIGHLY POROUS SURFACE TEXTURE SHALL BE RETAINED ALONG THE BASIN FLOOR, ESPECIALLY WITHIN THE AREA IDENTIFIED AS BEING USED FOR INFILTRATION.
4. ESTABLISH DENSE VEGETATION ON THE BASIN SIDE SLOPES AND FLOOR TO PREVENT EROSION AND SLOUGHING AND TO PROVIDE A NATURAL MEANS OF MAINTAINING RELATIVELY HIGH INFILTRATION RATES. GRASSES OF THE FESCUE FAMILY (ALTAI FESCUE, WESTERN FESCUE OR RED FESCUE) ARE SPECIFIED ON THIS PLAN, PRIMARILY DUE TO THEIR ADAPTABILITY TO DRY SANDY SOILS, DROUGHT RESISTANCE, HARDINESS, AND ABILITY TO WITHSTAND BRIEF INUNDATIONS. FESCUE WILL ALSO ALLOW FOR LONG INTERVALS BETWEEN MOWINGS, WHICH SHALL OCCUR TWICE PER YEAR MINIMUM, TYPICALLY IN JUNE AND SEPTEMBER IS SATISFACTORY.
5. THE BERMS SHALL BE SUFFICIENTLY COMPACTED AND OF SUCH MATERIAL TO PREVENT SEEPAGE.

TYPICAL INFILTRATION BASIN DETAIL
NOT TO SCALE

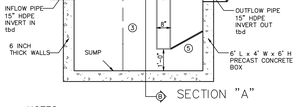


STORM SEWER PIPING SIZE	CB/MH MINIMUM INSIDE ø
UP TO 24"	48"
UP TO 36"	72"
UP TO 48"	96"
UP TO 60"	84"
UP TO 72"	96"

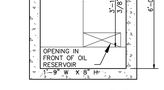
NOTES:

1. PRECAST CONCRETE MANHOLE WITH CONCRETE STRENGTH OF 4,000 PSI @ 28 DAYS.
2. THE ENDS OF ALL PIPES SHALL BE CUT OFF FLUSH WITH THE INSIDE SURFACE OF THE MANHOLE AND PARGED AROUND.
3. PIPES SHALL BE PARGED AROUND INTERIOR AND EXTERIOR PRIOR TO BACKFILLING OF STRUCTURE. 4. CONCRETE STRUCTURE AND CASTING SHALL BE RATED FOR H20 TRAFFIC LOADING.
5. INLET FRAME SHALL BE FULLY SUPPORTED ON THE CONCRETE STRUCTURE FOR H20 LOADING.
6. MANHOLES WITH AN INTERIOR DEPTH OF 4' AND GREATER SHALL BE FURNISHED WITH STEEL REINFORCED POLYPROPYLENE PLASTIC STEPS AT 12" INTERVALS.

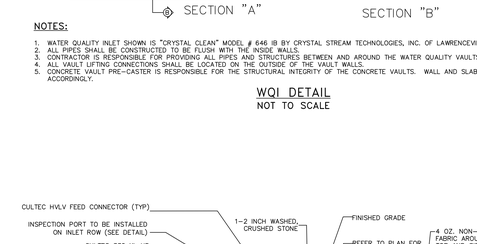
STORMWATER MANHOLE DETAIL
NOT TO SCALE



TOP VIEW (INTERNAL)



TOP VIEW (SLAB)



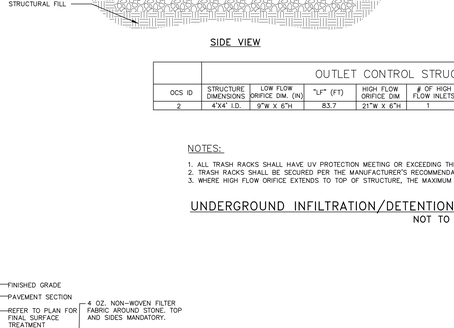
NOTES:

1. WATER QUALITY INLET SHOWN IS "CRYSTAL CLEAN" MODEL # 646 iB BY CRYSTAL STREAM TECHNOLOGIES, INC. OF LAWRENCEVILLE, GA., 1-800-648-6945.
2. ALL PIPES SHALL BE CONSTRUCTED TO BE FLUSH WITH THE INSIDE WALLS.
3. CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL PIPES AND STRUCTURES BETWEEN AND AROUND THE WATER QUALITY VAULTS.
4. ALL VAULT LIFTING CONNECTIONS SHALL BE LOCATED ON THE OUTSIDE OF THE VAULT WALLS.
5. CONCRETE VAULT PRE-CASTER IS RESPONSIBLE FOR THE STRUCTURAL INTEGRITY OF THE CONCRETE VAULTS. WALL AND SLAB THICKNESSES SHALL BE ALTERED ACCORDINGLY.

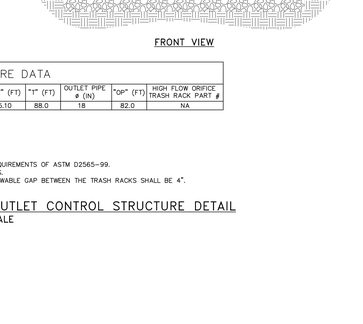
WQI DETAIL
NOT TO SCALE

LEGEND

1. EXPANDED ALUMINUM BASKET W/ 1/4" MESH LINING, 1'-6" H x 2'-0" L x 4'-0" W, Upfit 3'-6 3/4" FROM SUMP
2. 2ND INTERNAL BAFFLE W/ 1" HOLES DRILLED AT 1 1/4" O.C., 4'-0" H.
3. SPILL PROTECTION RESERVOIR 5'-0" H. WITH A 1'-8" FRONT CUT.
4. 3/4"COCONUT FIBER FILTER IN ALUMINUM FRAME 1'-8" LONG.
5. 1/4"ALUMINUM PLATE, 9" H., 1'-11" WIDE.



SIDE VIEW



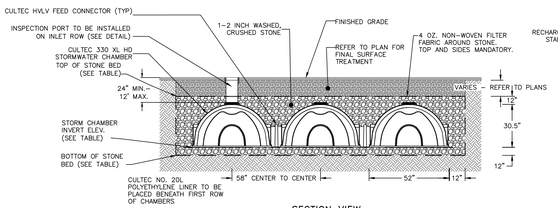
FRONT VIEW

OUTLET CONTROL STRUCTURE DATA										
OCS ID	STRUCTURE DIMENSIONS	LOW FLOW ORIFICE DIM. (IN)	"LF" (FT)	HIGH FLOW ORIFICE DIM	# OF HIGH FLOW INLETS	"HF" (FT)	"T" (FT)	OUTLET PIPE ø (IN)	"OP" (FT)	HIGH FLOW ORIFICE TRASH RACK PART #
2	4'X4' I.D.	9"W X 6"H	83.7	21"W X 6"H	1	85.10	88.0	18	82.0	NA

NOTES:

1. ALL TRASH RACKS SHALL HAVE UV PROTECTION MEETING OR EXCEEDING THE REQUIREMENTS OF ASTM D2565-99.
2. TRASH RACKS SHALL BE SECURED PER THE MANUFACTURER'S RECOMMENDATIONS.
3. WHERE HIGH FLOW ORIFICE EXTENDS TO TOP OF STRUCTURE, THE MAXIMUM ALLOWABLE GAP BETWEEN THE TRASH RACKS SHALL BE 4".

UNDERGROUND INFILTRATION/DETENTION OUTLET CONTROL STRUCTURE DETAIL
NOT TO SCALE



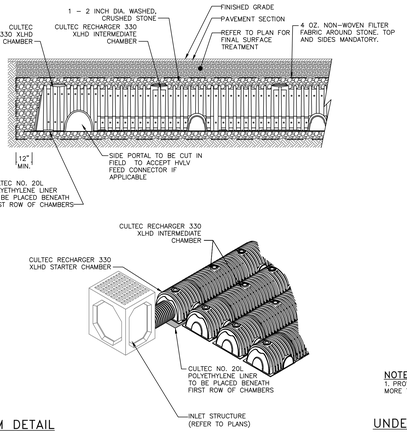
SECTION VIEW

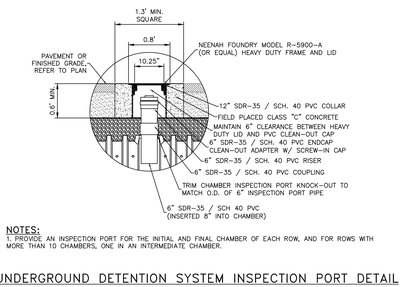
NOTES:

1. CULTEC RECHARGER 330XLHD CHAMBERS BY CULTEC, INC. OF BROOKFIELD, CT. ALL CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH CULTEC INC.'S CURRENT RECOMMENDED INSTALLATION GUIDELINES.
2. THE BED OF THE SYSTEM FOOTPRINT SHALL BE LAID NEARLY LEVEL.
3. EACH ROW OF CHAMBERS SHALL BE FED VIA A 12" MANIFOLD WITH TEE CONNECTIONS BY CULTEC OR EQUAL.
4. THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IF SUBSURFACE CONDITIONS IN THE AREAS OF THE INFILTRATOR TRENCHES IS NOT CONSISTENT WITH THE TEST PIT OR PERCOLATION DATA (E.G. GROUNDWATER OR BEDROCK ENCOUNTERED, SOIL PROPERTIES ARE NOT CONSISTENT, ETC.).
5. REFER TO THE INSPECTION SCHEDULE & LONG TERM MAINTENANCE OF STORMWATER STRUCTURES NOTES ON THE GRADING SHEET.
6. SEE ALSO CLAY KEY DETAIL THIS SHEET.

SYSTEM ID	BOTTOM OF STONE BED ELEVATION	CHAMBER INVERT	TOP OF STONE BED ELEVATION	STONE BED FOOTPRINT	STONE BED DIMENSIONS	NO. OF CHAMBERS
A	81.0	82.0	85.54	1,599 S.F.	44.84'X35.66	42

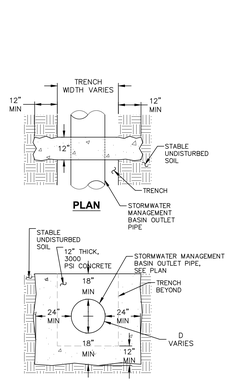
UNDERGROUND INFILTRATION/ DETENTION SYSTEM DETAIL
NOT TO SCALE





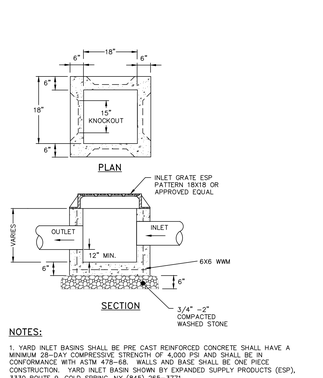
NOTES:
1. PROVIDE AN INSPECTION PORT FOR THE INITIAL AND FINAL CHAMBER OF EACH ROW, AND FOR ROWS WITH MORE THAN 10 CHAMBERS, ONE IN AN INTERMEDIATE CHAMBER.

UNDERGROUND DETENTION SYSTEM INSPECTION PORT DETAIL
NOT TO SCALE



NOTES:
1. TO BE PROVIDED AT INFILTRATION BASIN A.

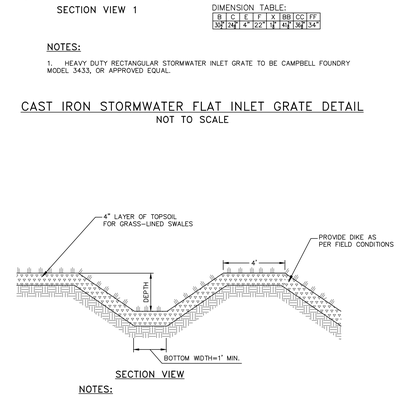
ANTI-SEEP COLLAR DETAIL
NOT TO SCALE



NOTES:

1. YARD INLET BASINS SHALL BE PRE CAST REINFORCED CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4,000 PSI AND SHALL BE IN CONFORMANCE WITH ASTM 478-68. WALLS AND BASE SHALL BE ONE PIECE CONSTRUCTION. YARD INLET BASIN SHOWN BY EXPANDED SUPPLY PRODUCTS (ESP), 3330 ROUTE 9, COLD SPRING, NY (845) 265-3771.
2. BACKFILL USING SELECT MATERIAL, COMPACTED IN 6" LIFTS.
3. SUMP SHALL BE 12".
4. FRAMES AND GRATES SHALL BE SET IN A FULL BED OF MORTAR.

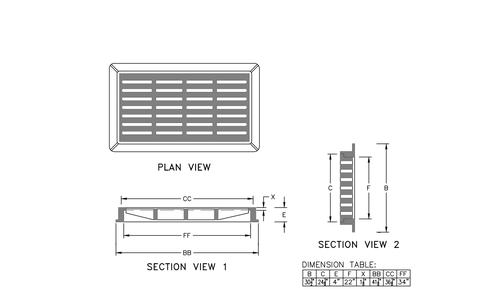
PRE-CAST CONCRETE YARD INLET DETAIL
NOT TO SCALE



NOTES:

1. MINIMUM 1' DEPTH AND 1' WIDTH FOR ALL SWALES.
2. SWALE SHALL BE SEEDED WITH FAST GERMINATING RYE 15 TO 25 POUNDS PER 1,000 SQUARE FEET AND MULCHED.

TEMPORARY GRASS LINED SWALE/DIKE DETAIL
NOT TO SCALE



EMERGENCY OVERFLOW WEIR TABLE

SWM ID	OVERFLOW WEIR ELEVATION (FT)	DIMENSION A (FT)	DIMENSION B (FT)	DIMENSION D (IN)
BIORETENTION AREA 1	90.0	6	3	12

NOTES:

1. RIP RAP OUTLET PROTECTION SHALL BE 15" OF LIGHT STONE FILLING. STONE FILLING SIZE d50=6", RIVER ROCK MAY BE SUBSTITUTED FOR ANGULAR STONE.

EMERGENCY OVERFLOW WEIR DETAIL
NOT TO SCALE

DIMENSION TABLE:

B	C	E	F	X	BB	CC	FF
30"	24"	4"	22"	3"	18"	36"	34"

NOTES:

1. HEAVY DUTY RECTANGULAR STORMWATER INLET GRATE TO BE CAMPBELL FOUNDRY MODEL 3433, OR APPROVED EQUAL.

CAST IRON STORMWATER FLAT INLET GRATE DETAIL
NOT TO SCALE

DRAWN BY: MAB	CHECKED BY: DGK

REVISIONS:

NO.	DATE	DESCRIPTION	BY
1	12/25/18	REVISED FOR PLANNING BOARD SUBMISSION	MAB
2	02/26/19	REVISED FOR PLANNING BOARD SUBMISSION	MAB
3	03/26/19	REVISED PER PLANNING BOARD COMMENTS	MAB
4	04/30/19	REVISED PER PLANNING BOARD COMMENTS	MAB
5	05/28/19	NO CHANGE THIS SHEET	MAB

REVISIONS:

NO.	DATE	DESCRIPTION	BY

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STORMWATER DETAILS

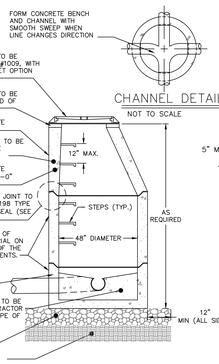
23-28 CREEK ROAD

23-28 CREEK ROAD
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK
TAX ID: 6054-37-037625

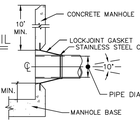
JOB #:	2016:029
DATE:	10/23/2018
SCALE:	AS SHOWN
TITLE:	D-2
SHEET:	11 OF 12

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW

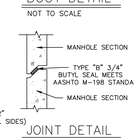
SEWER DETAILS



CHANNEL DETAIL
NOT TO SCALE



BOOT DETAIL
NOT TO SCALE

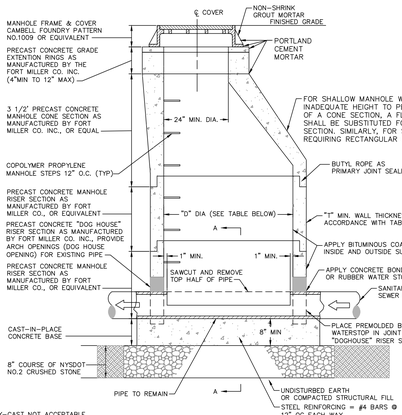


JOINT DETAIL
NOT TO SCALE

NOTES:

1. PIPE CONNECTION TO BE STANDARD "LOCKJOINT" BOOT 5" OFF BASE OF MANHOLE (SEE DETAIL).
2. CONCRETE STRENGTH OF MANHOLE COMPONENTS TO BE 4000 PSI @ 28 DAYS IN ACCORDANCE WITH ASTM C-478-86.
3. STEEL REINFORCEMENT OF MANHOLE COMPONENTS TO MEET ASTM A615-A497 REQUIREMENTS.
4. LOADING OF MANHOLE COMPONENTS TO MEET H-20 REQUIREMENTS.
5. CONCRETE USED IN MANHOLE COMPONENTS TO CONTAIN 6% AIR ENTRAINMENT.
6. 4' MAXIMUM FROM MANHOLE TO PIPE JOINT.

PRE-CAST CONCRETE SANITARY MANHOLE DETAIL
NOT TO SCALE



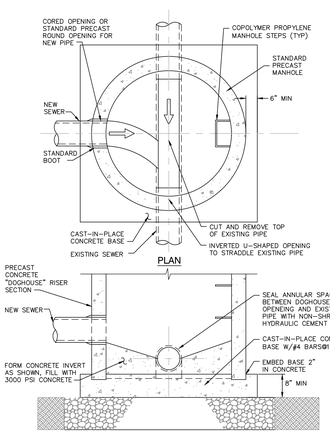
MANHOLE NOTES:

1. USE ONLY WET-CAST UNITS. DRY-CAST NOT ACCEPTABLE.
2. MANUFACTURER TO VERIFY REQUIRED "T" DIMENSION ASSOCIATED WITH DEPTH OF INDIVIDUAL MANHOLES.

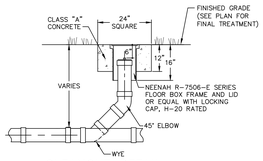
TABLE

OUTLET SEWER PIPE SIZE	"D" DIA MIN	"T" WALL THICKNESS MIN
8" THRU 21"	4'-0"	5"
24" THRU 30"	5'-0"	6"

PRECAST CONCRETE INSERTION "DOGHOUSE" MANHOLE DETAIL
NOT TO SCALE

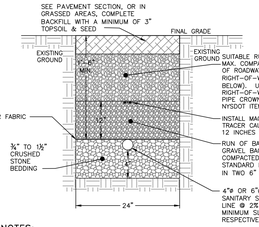


CLEANOUT DETAIL
NOT TO SCALE



SANITARY SEWER NOTES:

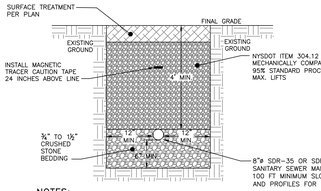
1. THE PROPOSED APARTMENTS ARE TO BE SERVED BY THE CITY OF BEACON MUNICIPAL SEWER SYSTEM. INSTALLATION OF ALL COMPONENTS SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY CODE, CHAPTER 179.
2. REFER TO THE DUTCHESS COUNTY DEPARTMENT OF HEALTH STANDARD NOTES FOR ADDITIONAL PERTINENT INFORMATION.
3. THE DUTCHESS COUNTY DEPARTMENT OF HEALTH, CITY OF BEACON CHIEF SEWER OPERATOR, AND THE CERTIFYING PROFESSIONAL ENGINEER SHALL BE NOTIFIED PRIOR TO COMMENCEMENT OF THE SEWER MAIN INSTALLATION.
4. SEWER MAIN MATERIAL SHALL BE 8" DIAMETER SDR-35 OR SDR-26 PVC BELL AND SPIGOT GRAVITY SEWER PIPE, WITH GASTIGHT AND WATERTIGHT JOINTS.
5. SEWER MAIN SHALL BE LAID IN STRAIGHT ALIGNMENT. MANHOLES SHALL BE CONSTRUCTED AT ALL CHANGES IN SLOPE, ALIGNMENT OR AT INTERVALS NOT EXCEEDING 400 LINEAR FEET. STRAIGHT ALIGNMENT SHALL BE VERIFIED BY DEFLECTION TESTING.
6. THE SEWER MAIN SHALL BE INSTALLED AND TESTED FOR EXFILTRATION PRIOR TO BEING PERMITTED TO OPERATE. ALL NEW SANITARY SEWER GRAVITY LINES SHALL PASS A LOW PRESSURE AIR TEST IN ACCORDANCE WITH ASTM C-828 AT A PRESSURE OF 3.5 PSI.
7. MANHOLES SHALL BE VACUUM TESTED IN ACCORDANCE WITH ASTM C-1244. IF PRESSURE DROP EXCEEDS THE SPECIFIED AMOUNT, THE NECESSARY REPAIRS OR REPLACEMENTS REQUIRED SHALL BE MADE TO REDUCE THE PRESSURE DROP TO WITHIN THE SPECIFIED LIMIT, AND THE TESTS SHALL BE REPEATED UNTIL THE REQUIREMENT IS MET.
8. SERVICE LATERALS SHALL BE 4" DIAMETER SDR-35 PVC WITH A MINIMUM SLOPE OF 2%, UNLESS OTHERWISE NOTED ON THE PLAN.
9. ALL SANITARY SEWER MAINS AND MANHOLES UP TO, BUT NOT INCLUDING, THE EXISTING MANHOLE SHALL BE OWNED, OPERATED AND MAINTAINED BY THE HOMEOWNERS ASSOCIATION.



NOTES:

1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.

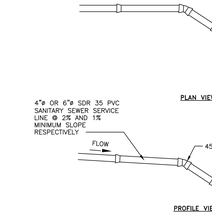
SANITARY SEWER SERVICE LINE TRENCH DETAIL
NOT TO SCALE



NOTES:

1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
2. SEWER MAIN MATERIAL SHALL BE 8 DIAMETER SDR-26 PVC BELL AND SPIGOT GRAVITY SEWER PIPE, WITH GASTIGHT AND WATERTIGHT JOINTS.

SANITARY SEWER MAIN TRENCH DETAIL
NOT TO SCALE

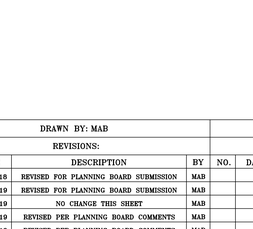


NOTES:

1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.

SANITARY SEWER SERVICE CONNECTION DETAIL
NOT TO SCALE

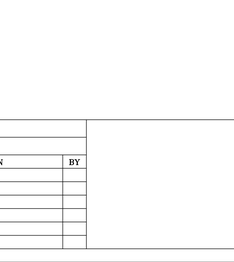
WATER DETAILS



NOTES:

1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, ENLOGATED PARTICLES, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.
3. IN AREAS WHERE 5' COVER REQUIREMENT CANNOT BE MET, THE CONTRACTOR SHALL PROVIDE PIPE INSULATION TO PREVENT FREEZING.

WATER SERVICE LINE TRENCH DETAIL
NOT TO SCALE



NOTES:

1. ALL VALVES SHALL OPEN BY TURNING LEFT (COUNTERCLOCKWISE) AND HAVE A 2-INCH SQUARE-OPERATING NUT PAINTED RED.
2. ALL VALVES SHALL BE M.J. RESILIENT WEDGE TYPE WITH "O" RING PACKING, DESIGNED FOR A WORKING PRESSURE OF 150 PSI AND BE IN FULL CONFORMANCE WITH AWWA C500.
3. TAPPING SLEEVE AND GATE VALVE SHOWN ARE MUELLER H-615, AND T-2630 RESPECTIVELY.

TAPPING SLEEVE DETAIL
NOT TO SCALE

NOTES:

1. CONCRETE COLLAR TO BE PROVIDED IN AREAS THAT ARE NOT PAVED. THE COLLAR SHALL BE 6" FROM THE COVER AND SHALL EXTEND 6" BELOW FINAL GRADE.
2. CURB STOP TO BE COMPRESSION TYPE BY MUELLER.
3. AREA AROUND CURB BOX TO BE BACKFILLED WITH GRAVELLY MATERIAL.

WATER SHUT-OFF VALVE DETAIL
NOT TO SCALE

NOTES:

1. CONCRETE COLLAR TO BE PROVIDED IN AREAS THAT ARE NOT PAVED. THE COLLAR SHALL BE 6" FROM THE COVER AND SHALL EXTEND 6" BELOW FINAL GRADE.

GATE VALVE DETAIL
NOT TO SCALE

WATERMAIN DISINFECTION & TESTING

1. THE CONTRACTOR SHALL NOTIFY THE CITY OF BEACON WATER DEPARTMENT PRIOR TO TESTING AND SHALL ALSO COORDINATE HIS ACTIONS WITH THE CITY ENGINEER SO AS TO AVOID UNDUE DISTURBANCE OF THE WATER SUPPLY TO ANY EXISTING USERS.
2. THE CONTRACTOR SHALL INFORM THE DESIGN ENGINEER'S AND CITY ENGINEER'S OFFICE A MINIMUM OF 24 HOURS PRIOR TO TESTING SUCH THAT WITNESSING CAN TAKE PLACE AND PROPER CERTIFICATIONS CAN BE ISSUED.
3. ALL NEWLY INSTALLED WATER MAINS SHALL BE FLUSHED AT A MINIMUM VELOCITY OF 2.5 FT/SECOND BEFORE AND AFTER DISINFECTION.
4. ALL WATER LINES SHALL BE DISINFECTED WITH THE PROCEDURES DESCRIBED IN THE LATEST EDITION OF AWWA C651 SPECIFICATIONS FOR DISINFECTION OF WATER LINES (WITH THE EXCEPTION OF THE TABLET METHOD). WATER ENTERING THE NEW MAIN SHALL RECEIVE A DOSE OF CHLORINE FED AT A CONSTANT RATE SUCH THAT THE WATER WILL HAVE NOT LESS THAN 25 MG/L FREE CHLORINE. CHLORINE APPLICATION SHALL NOT CEASE UNTIL THE ENTIRE MAIN IS FILLED WITH HEAVILY CHLORINATED WATER.
5. DISINFECTED WATER SHALL REMAIN IN THE NEWLY INSTALLED WATER LINE FOR A MINIMUM OF 24 HOURS. AFTER THIS RETENTION PERIOD, THE HEAVILY CHLORINATED WATER SHALL BE FLUSHED FROM THE MAIN UNTIL CHLORINE MEASUREMENTS SHOW A CONCENTRATION IN THE WATER LEAVING THE MAIN HAS NO HIGHER THAN THAT GENERALLY PREVAILING IN THE SYSTEM. AT SUCH TIME, BACTERIOLOGICAL SAMPLING FOR SUBMITTAL TO STATE HEALTH LABORATORIES SHALL BE PERFORMED BY THE CONTRACTOR.
6. WATER SAMPLES SHALL BE TESTED FOR TOTAL COLIFORM, TPC (HETEROTROPHIC PLATE COUNT), TURBIDITY & COLOR.
7. CONTRACTOR WILL CONTINUE FLUSHING AND DISINFECTION OPERATION UNTIL ACCEPTABLE BACTERIOLOGICAL RESULTS ARE OBTAINED. TWO (2) SUCCESSIVE SAMPLES ARE TO BE TAKEN AT TWENTY-FOUR (24) HOUR INTERVALS.
8. THE ENVIRONMENT INTO WHICH THE HEAVILY CHLORINATED WATER IS TO BE DISCHARGED SHALL BE INSPECTED, AND IF THERE IS ANY LIKELIHOOD THAT THE CHLORINATED DISCHARGE WILL CAUSE DAMAGE, THEN A REDUCING AGENT SHALL BE APPLIED TO THE WATER TO BE WASTED TO THOROUGHLY NEUTRALIZE THE CHLORINE RESIDUAL IN THE WATER. PERMITS MAY BE REQUIRED. THE CITY ENGINEER SHALL BE NOTIFIED PRIOR TO DISPOSAL OF HIGHLY CHLORINATED WATER.

WATER NOTES:

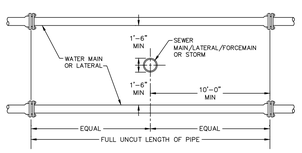
1. THE PROPOSED BUILDING IS TO BE SERVED BY THE CITY OF BEACON MUNICIPAL WATER SYSTEM. INSTALLATION OF ALL COMPONENTS SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY CODE, CHAPTER 219.
2. REFER TO THE DUTCHESS COUNTY DEPARTMENT OF HEALTH STANDARD NOTES FOR ADDITIONAL PERTINENT INFORMATION.
3. THE WATER MAIN SHALL BE INSTALLED, PRESSURE TESTED AND LEAKAGE TESTED IN ACCORDANCE WITH THE LATEST EDITION OF AWWA C600 (SEE NOTES BELOW).
4. THE DUTCHESS COUNTY DEPARTMENT OF HEALTH, CITY OF BEACON WATER OPERATOR, AND THE CERTIFYING PROFESSIONAL ENGINEER SHALL BE NOTIFIED PRIOR TO COMMENCEMENT OF THE WATER MAIN INSTALLATION.
5. THE WATER MAIN SHALL BE DISINFECTED IN ACCORDANCE WITH THE LATEST EDITION OF AWWA C651 (SEE NOTES BELOW).
6. WATER MAIN MATERIAL SHALL BE CLASS 52 CEMENT LINED DUCTILE IRON PIPE WITH MECHANICAL JOINTS AND SHALL MEET THE REQUIREMENTS OF AWWA C150 AND ANSI A21.51.
7. MEGALUG RESTRAINING SYSTEMS SHALL BE USED AT ALL FITTINGS, VALVES AND HYDRANTS (SEE SCHEDULE ON SHEET 14).
8. GATE VALVES SHALL BE MUELLER RESILIENT WEDGE, NON-RISING STEM, MECHANICAL JOINT.
9. HYDRANTS SHALL BE A-423 MUELLER CENTURION, WITH A MUELLER GATE VALVE BEFORE THE HYDRANT.
10. SERVICE LINES SHALL BE 3/4" TYPE K UNLESS OTHERWISE NOTED ON THE PLAN.
11. THE CONTRACTOR SHALL VERIFY THE EXISTING WATER MAIN MATERIAL AND BE PREPARED TO PROVIDE A SPECIAL COUPLING FOR CONNECTION OF THE PROPOSED DUCTILE IRON WATER MAIN.
12. A PRESSURE REDUCING VALVE SHALL BE INSTALLED FOR EACH NEW TOWNHOME, WATTS MODEL 25AUB-Z3 OR EQUAL AS APPROVED BY THE CITY OF BEACON WATER DEPARTMENT.
13. THE CITY OF BEACON SHALL OWN, OPERATE AND MAINTAIN THE WATER MAIN THROUGHOUT THE SITE, INCLUDING ALL APPURTENANCES.
14. THE HOA OR OWNER SHALL ANNUALLY EXERCISE ALL WATER VALVES.

WATER MAIN PRESSURE & LEAKAGE TESTING

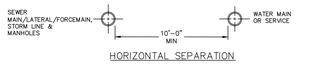
GENERAL: ALL PIPING SHALL BE TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE LATEST EDITION OF AWWA C600, EXCEPT AS ADDED OR AMENDED BELOW.
1. THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY FOR ANY AND ALL REQUIRED PIPE TAPS FOR TESTING, AND AS NECESSARY FOR TESTING AS SPECIFIED. EQUIPMENT WILL BE SUCH THAT THE ENGINEER MAY INSTALL HIS OWN PRESSURE GAUGE.
2. A PRESSURE TEST AND LEAKAGE TEST ARE REQUIRED FOR ALL PIPE.
3. TESTING TO BE PERFORMED ONLY AFTER PARTIAL OR COMPLETE BACKFILL AND RESTRAINT BLOCKING (USING HIGH EARLY CEMENT) HAS HAD 36 HOURS TO CURE OR BLOCKING USING STANDARD CEMENT HAS HAD 7 DAYS TO CURE.
4. THE MAIN SHALL BE PARTIALLY BACKFILLED OR BRACED AGAINST MOVEMENT DURING THE TEST. ALL AIR MUST BE BLED OUT OF THE SECTION TO BE TESTED. IF NECESSARY, CONTRACTOR SHALL INSTALL CORPORATION STOPS AT THE HIGH POINTS, FOR BLOW-OFFS. AFTER ALL AIR HAS BEEN EXPELLED, THE CORPORATION COCKS SHALL BE CLOSED AND THE PRESSURE TEST APPLIED. AFTER EXAMINATION OF EXPOSED PARTS OF THE SYSTEM, THE TEST PRESSURE SHALL BE INCREASED TO 1 1/2 TIMES THE NORMAL PRESSURE, BASED UPON THE ELEVATION OF THE LOWEST POINT IN THE LINE OR SECTION UNDER THE TEST, BUT SUCH PRESSURE SHALL NOT BE LESS THAN 150 PSI NOR MORE THAN 200 PSI, AND EXPOSED PARTS AGAIN EXAMINED. THE MINIMUM DURATION OF THE LEAKAGE TEST SHALL BE TWO (2) HOURS.
5. ALLOWABLE SYSTEM LEAKAGE AS SPECIFIED IN THE REFERENCED STANDARDS. IF LEAKAGE IN SYSTEM IS GREATER THAN ALLOWABLE, CONTRACTOR WILL LOCATE AND REPAIR SYSTEM AT HIS EXPENSE AND RETEST, CONTINUE TO TEST AND REPAIR THE SYSTEM UNTIL LEAKAGE IS WITHIN ACCEPTABLE LIMITS.
6. NO DUCTILE IRON PIPE INSTALLATION WILL BE ACCEPTED IF THE LEAKAGE IS GREATER THAN THAT DETERMINED BY THE FOLLOWING FORMULA:

$$L = \frac{SD\sqrt{P}}{148{,}000}$$

WHERE
L = LEAKAGE IN GALLONS PER HOUR
S = LENGTH OF PIPE TESTED, IN FEET
D = NOMINAL DIAMETER OF PIPE IN INCHES
P = AVERAGE TEST PRESSURE DURING LEAKAGE TEST, IN PSI (GAUGE)



VERTICAL SEPARATION

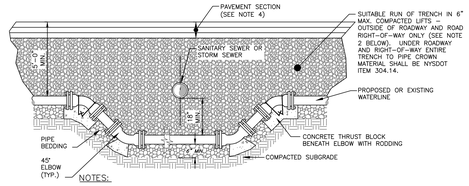


HORIZONTAL SEPARATION

NOTE:

1. NO DEVIATION IN THE SEPARATION REQUIREMENTS WILL BE PERMITTED WITHOUT THE EXPRESS APPROVAL OF THE DUTCHESS COUNTY DEPARTMENT OF HEALTH AND THE CITY OF BEACON. CONCRETE ENCASEMENT OF WATERLINE OR OFFSETTING OF WATERLINE SHALL BE REQUIRED WHERE SEPARATION DISTANCES CANNOT BE MAINTAINED.

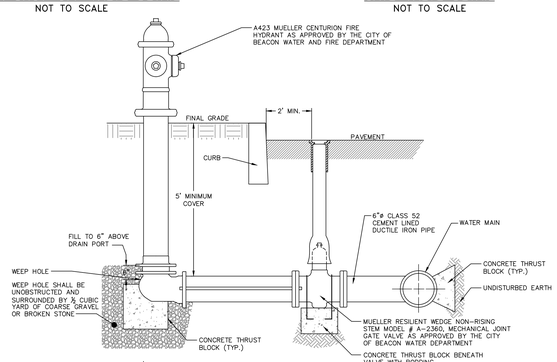
WATER LINE SEPARATION DETAIL
NOT TO SCALE



NOTES:

1. WHEN THE ELEVATION OF THE SANITARY OR STORM SEWER CAN NOT BE VARIED TO MEET THE ABOVE REQUIREMENTS, THE WATER SERVICE LINE OR MAIN SHALL BE RELOCATED TO PROVIDE THIS REQUIRED SEPARATION OR RECONSTRUCTED WITH MECHANICAL JOINT PIPE FOR A DISTANCE OF TEN (10) FEET ON EACH SIDE OF THE SEWER. ONE FULL LENGTH OF WATERMAIN SHALL BE CENTERED OVER THE SEWER SO THAT BOTH JOINTS WILL BE AS FAR AWAY FROM THE SEWER AS POSSIBLE.
2. SUITABLE RUN OF TRENCH SHALL NOT INCLUDE FROZEN MATERIALS, DEBRIS, ORGANIC MATERIALS, ENLOGATED PARTICLES, LARGE STONES OR OTHER UNSUITABLE MATERIALS. IF THE RUN OF TRENCH MATERIAL IS FOUND TO BE UNSUITABLE, A SUITABLE BACKFILL MATERIAL SHALL BE IMPORTED AND USED.
3. THE RELOCATED WATER MAIN/SERVICE LINE SHALL BE DISINFECTED IN ACCORDANCE WITH AWWA, NYSDOH AND DCDOH STANDARDS.
4. PAVEMENT RESTORATION SHALL BE IN ACCORDANCE WITH THE PAVEMENT RESTORATION DETAIL.
5. ALL REPLACED WATERMAIN SHALL BE 12"ø CLASS 52 DUCTILE IRON.

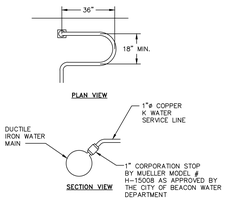
WATER LINE OFFSET DETAIL
NOT TO SCALE



NOTES:

1. THE GATE VALVE SHALL BE LOCATED THIRTY SIX (36) INCHES FROM THE HYDRANT CENTER LINE.
2. 3/4" STEEL TIE RODS TO BE PROVIDED BETWEEN THE GATE VALVE AND THE HYDRANT.

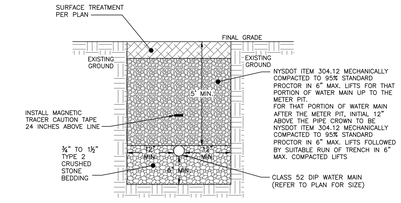
HYDRANT DETAIL
NOT TO SCALE



NOTES:

1. A MINIMUM 5' COVER SHALL BE PROVIDED ON THE WATER SERVICE LINE (CONDITIONED ON ACTUAL WATER MAIN DEPTH).
2. CORPORATION STOP TO BE COMPRESSION TYPE BY MUELLER.
3. WATER SERVICE LINE TO HAVE A "GOOSENECK" NEAR CORPORATION STOP.
4. CORPORATION STOP TO BE INSTALLED IN THE UPPER HALF OF THE WATER MAIN AT AN ANGLE OF APPROXIMATELY 45° FROM HORIZONTAL.

WATER SERVICE CONNECTION DETAIL
NOT TO SCALE



NOTES:

1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.
2. WATER MAIN MATERIAL SHALL BE CLASS 52 CEMENT LINED DUCTILE IRON PIPE WITH MECHANICAL JOINTS AND SHALL MEET THE REQUIREMENTS OF AWWA C150 AND ANSI A21.51, UNLESS NOTED OTHERWISE ON THE PLANS.

WATER MAIN TRENCH DETAIL
NOT TO SCALE

DRAWN BY: MAB				CHECKED BY: DGK			
REVISIONS:				REVISIONS:			
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY
1	12/25/18	REVISED FOR PLANNING BOARD SUBMISSION	MAB				
2	02/26/19	REVISED FOR PLANNING BOARD SUBMISSION	MAB				
3	03/26/19	NO CHANGE THIS SHEET	MAB				
4	04

City of Beacon Workshop Agenda
9/30/2019

Title:

New Windsor Treatment Discussion

Subject:

Background:

ATTACHMENTS:

Description	Type
Agreement Between the City of Beacon and New Windsor Treatment	Agreement

AGREEMENT

Between City of Beacon and New Windsor Treatment, LLC

This Agreement is entered into this ____ day of ____, 2019 by and between New Windsor Treatment, LLC, a domestic limited liability company, with corporate offices located at 117 Green Road, Sparta, New Jersey and local offices located at 77 Lehigh Avenue Chester, New York (hereinafter "New Windsor") and the City of Beacon, a municipal corporation, duly organized and existing under the laws of the State of New York, having its principal office at One Municipal Plaza, Beacon, New York (hereinafter the "City") (collectively referred to herein as the "Parties").

WHEREAS, the City's Wastewater Treatment Facility Plant (the "Plant") receives all the wastewater produced in the City of Beacon and the Dutchess Park area of Fishkill; and

WHEREAS, the Treatment Facility also accepts and processes septage and sewer sludge from New Windsor, an outsider hauler, to generate revenue to assist in the Plant's operation and maintenance.

NOW, THEREFORE, in consideration of the mutual covenants and conditions contained herein, it is agreed as follows:

1. **PURCHASE AND USE OF UNUSED SEWAGE CAPACITY**.

   a. New Windsor may purchase from the City of Beacon portions of the permitted, unused leachate/sewage capacity as determined by the City of Beacon.

   b. New Windsor shall pay the City, one-month in advance, two (2) cents per gallon, in 20,000-gallon increments for the above-referenced capacity.

   c. Only sewage pre-approved by the City of Beacon Waste Water Treatment Plant may be delivered to the Plant and placed in a storage tank supplied by New Windsor.

   d. Every vehicle delivering sewage shall have a current, valid New York State Department of Environmental Conservation (DEC) permit.

   e. New Windsor shall provide the Plant Operator a list of all delivery vehicles. The list shall include, at a minimum, the following information for each vehicle: (i) New York State DEC permit number, (ii) capacity and (iii) license plate number.

   f. If at any time, the Plant requires maintenance or there is a Plant malfunction delivery will cease immediately and resume only when the Plant maintenance or malfunction has been corrected. The Plant Operator shall provide reasonable notice to New Windsor, if feasible, of any scheduled maintenance. The Plant Operator shall notify New Windsor when deliveries are permitted to continue.

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2. **PERMITTED STORAGE TANK**. New Windsor shall install one storage tank in a location approved by the Wastewater Superintendent. The Wastewater Superintendent, may at any time, in his or her sole discretion, select a new location for the storage tank. New Windsor shall be required to move the storage tank to the approved location upon ten (10) days written notice.

3. **OPERATIONS**.

   a. The Wastewater Superintendent must approve any and all waste before it can be dumped into a storage tank.

   b. New Windsor shall pay the City of Beacon a one-time $75.00 waste acceptability verification approval fee for each new customer.

   c. The Wastewater Superintendent shall review and approve the analyticals for each new customer.

   d. Hauled wastes are subject to sampling by the City. The hauler may be required to suspend the discharging of wastes until the analysis is complete. The City reserves the right to refuse permission to dump any load.

   e. Any waste that may cause pass-through of pollutants or interfere with the wastewater treatment plant operations, or that violates Federal, State, or local restrictions, shall not be discharged to the Plant.

4. **DUTY TO MITIGATE**. New Windsor shall take all reasonable steps to minimize or correct any adverse impact to the Plant or the environment resulting from New Windsor's use of the Plant and any noncomplying discharge or release, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge or release.

5. **MONTHLY RENTAL FEE**. New Windsor shall pay the City a monthly rental fee of $100.00 by the last day of every month, to receive and process septage and sewer sludge from New Windsor.

6. **TERM**. This Agreement shall commence on the date set forth herein and shall continue in effect for ten (10) years, unless terminated earlier as provided herein.

7. **TERMINATION**. This Agreement can be terminated by either party at any time upon thirty (30) days written notice to the other party for any reason. Upon termination of the Agreement, New Windsor shall stop all work and remove all equipment from the site.

8. **DEFENSE AND INDEMNIFICATION**. New Windsor agrees to the fullest extent permitted by law to defend, indemnify and hold the City, its Administrator, officers, officials, and employees harmless from any and all losses, claims, liens, demands and causes for action, including but not limited to, judgments, penalties, interest, court costs, and legal fees, which, in whole or in part, arise from, relate to, or are connected with the

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willful, reckless or negligent actions of New Windsor, its employees, directors, officers, agents or assigns under this Agreement; and any breach or violation by New Windsor of any provision of this Agreement, or any federal, state or local law or regulation.

9. **INSURANCE**.

a. New Windsor shall, at its sole cost and expense, maintain and keep in full force and effect during the Term of this Agreement the following types of insurance:

i. General Liability Insurance, with limits of no less than $1,000,000 each occurrence and $2,000,000.00 annual aggregate limits. The City of Beacon shall be named as an additional insured on the policy. The insurance policy shall be written on a primary and non-contributing coverage basis, including any self-insured retentions. To the extent permitted by New York law, New Windsor waives all rights of subrogation or similar rights against the City of Beacon, its assigns, officers, employees, representatives and agents.

ii. Workers' Compensation, Employers Liability Insurance and New York State Disability Insurance, covering operations in New York State. Policy shall include all employees. Proof of coverage must be on the approved specific form, as required by the New York State Workers' Compensation Board. ACORD certificates are not acceptable. To the extent permitted by New York law, New Windsor waives all rights of subrogation or similar rights against City of Beacon, its assigns, officers, employees, representatives and agents.

iii. Comprehensive Automobile Policy, with limits no less than $1,000,000 Bodily Injury and Injury and Property Damage liability including coverage for owned, non-owned, and hired private passenger and commercial vehicles. The policy shall be written on a primary and non-contributing coverage basis. To the extent permitted by New York law, New Windsor waives all rights of subrogation or similar rights against City of Beacon, its assigns, officers, employees, representatives and agents. The City of Beacon shall be named as an Additional Insured on the policy.

iv. Umbrella Liability, with limits no less than $5,000,000, including coverage for General Liability and Automobile Liability. The City of Beacon shall be named as an Additional Insured on the policy. The insurance policy shall be written on a primary and non-contributing coverage basis, including any self-insured retentions. To the extent permitted by New York law, the New Windsor waives all rights of subrogation or similar rights against the City of Beacon, its assigns, officers, employees, representatives and agents.

v. Environmental Contractors Liability (Pollution Liability) in the amount of $2,000,000 occurrence/$2,000,000 aggregate, including products and completed

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operations. If a retroactive date is used, it must pre-date the inception of the contract. If the contractor is using motor vehicles for transporting hazardous materials, the contractor shall provide pollution liability broadened coverage (ISO endorsement CA 9948 or equivalent) as well as proof of MCS 90. The Additional Insured status should also be primary and non-contributory with all rights of subrogation waved for the City of Beacon, its assigns, officers, employees, representatives and agents.

b. Certificates shall provide that thirty (30) days written notice, by registered mail with return receipt requested, prior to cancellation or expiration be given to the City of Beacon. Policies that lapse and/or expire during term of work shall be recertified and received by the City of Beacon no less than thirty (30) days prior to expiration or cancellation.

c. New Windsor shall furnish to the City of Beacon Certificates of Insurance as evidence of coverage naming the City of Beacon as an Additional Insured by endorsement. The cost of furnishing the above insurance shall be borne by New Windsor. Copies of the required insurance certificates shall be provided by June 15th of each year.

10. **COMPLIANCE**. New Windsor, at its sole cost and expense, shall comply with all federal, state and municipal laws, rules and regulations applicable to the work and/or services to be performed hereunder.

11. **NOTICES**. Wherever in this Agreement notices are required to be delivered by one party to the other, then the same shall be in writing by first-class mail or personal delivery and addressed to the City at One Municipal Plaza, Beacon, New York 12508, and to New Windsor at both addresses set forth above.

12. **NON-ASSIGNMENT.** New Windsor, shall not assign, transfer or convey any of its respective rights or obligations under this Agreement or subcontract any portion of the services set forth herein, without the prior written consent of the City, which consent may be withheld for any reason whatsoever.

13. **NON-WAIVER**. No failure by the City to insist upon the strict performance of any term, covenant, agreement or provision of this Agreement or to exercise any right or remedy upon a breach thereof, and no acceptance by the City of any services during the continuance of any breach, shall constitute a waiver of any breach or of any term, covenant, agreement or provision.

14. **MODIFICATION OR AMENDMENT**. No amendment, change or modification of this Agreement shall be valid unless in writing, signed by both parties hereto.

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15. **ENTIRE UNDERSTANDING**. This Agreement shall constitute the entire understanding between the parties and any and all prior agreements, commitments, understandings and representations are merged herein and are of no further force and effect.

16. **GOVERNING LAW**. This Agreement shall be governed by the laws of the State of New York. Any litigation between the parties shall be venued in an appropriate court located in Dutchess County, New York.

17. S**EVERABILITY**. If any provision of this Agreement shall be held invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not be affected or impaired thereby but shall remain in full force and effect.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year last written above.

BY:	BY:
Frank G. Coppola New Windsor Treatment, LLC	Anthony Ruggiero City Administrator, City of Beacon

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ACKNOWLEDGEMENTS

STATE OF NEW YORK)
COUNTY OF DUTCHESS) ss.:

On the ____ day of _____, in the year 2019, before me, the undersigned, a Notary Public in and for said State, personally appeared _____, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his capacity, and that by his signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

_____
Notary Public

STATE OF NEW YORK)
COUNTY OF DUTCHESS) ss.:

On the ____ day of _____, in the year 2019, before me, the undersigned, a Notary Public in and for said State, personally appeared _____, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his capacity, and that by his signatures on the instrument, the individual, and the person upon behalf of which the individual acted, executed the instrument.

_____
Notary Public

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City of Beacon Workshop Agenda
9/30/2019

Title:

Naming Policy

Subject:

Background:

ATTACHMENTS:

Description	Type
Resolution Adopting a Municipal Policy on the Naming of City Properties and Other Locations Within the City	Resolution
City of Beacon Municipal Naming Policy	Backup Material

CITY COUNCIL

Resolution No. _____ of 2019

RESOLUTION ADOPTING A MUNICIPAL POLICY ON THE NAMING OF CITY PROPERTIES AND OTHER LOCATIONS WITHIN THE CITY

WHEREAS, the City Council has determined that it is in the interest of the City government and the public to adopt a formal written policy for the naming of City-owned property.

NOW THEREFORE, BE IT RESOLVED, that the City Council of the City of Beacon hereby adopts the attached Municipal Naming Policy for use by the City in naming of City properties and other locations within the City as described in the Policy.

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City of Beacon

Municipal Naming Policy

I. PURPOSE

The purpose of this policy is to establish a uniform policy regarding requests for the naming or renaming of City-owned land and facilities including parks, recreation facilities, buildings, and streets ("City Assets"). This policy provides a guide to ensure that such name designations are compatible with community interests and will enhance the values and heritage of the City of Beacon.

II. GENERAL

A. The City Council shall have the final authority to name and rename any City Asset and shall have the authority to designate commemorative street names and plaques.

B. Under extraordinary circumstances that would cast a negative image upon the City, any naming of City-owned facilities in honor of an individual, family or group may be revoked at the discretion of City Council.

C. The names of individuals or corporations or groups involved in controversial enterprises or activities, such as those that would be detrimental to the mission or image of the City of Beacon, shall be avoided.

D. The donation of land, facilities or funds for the acquisition, renovation or maintenance of land or facilities shall not constitute an obligation by the City to name the City Asset or any portion thereof after an individual, family or organization.

E. Any naming or renaming of any City property or other location within the City shall be made by resolution of the City Council.

F. To avoid duplication, confusing similarity or inappropriateness, the City Council in considering name suggestions, shall review existing park, facility and/or street names, as applicable.

G. In considering any proposal to name or rename a City Asset, the following questions shall be considered individually and collectively:

1. Will the name have historical, cultural and social significance for generations to come?

2. Will the name engender a strong and positive image?

3. Will the name memorialize or commemorate people, places or events that are of enduring importance to the community or the nation?

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4. Will the name engender significant ties of friendship and mutual recognition and support within the community or with those outside of the community?

5. Will the name be identified with some major achievement or the advancement of the public good within the community or the nation?

6. Will the name be particularly suitable for the park or recreational facility based on the location or history of the park, recreational facility or the surrounding neighborhood?

7. Will the name have symbolic value that transcends its ordinary meaning or use and enhance the character and identity of the park or recreational facility?

III. NAMING CRITERIA

A. *Naming a City Asset Generally*

1. Location. As a general policy, a name should assist the public in identifying its location. The City shall first consider the name of the community area, the names of nearby geographic features, and the names of adjacent schools and streets when it is considering a naming/renaming request.

2. Significant Events, People, and Places. The history of a major event, place, or person may play an important role to preserve and honor a community's history, landmarks, or prominent geographical features. The City may name a City Asset for a major event, place, or person of social, cultural or historical significance to the local area when the City Asset is associated with or located near the events, people, or places of social, cultural or historical significance. The relationship of the event, person, or place to the City Asset must be demonstrated through research and documentation.

3. Outstanding Individuals: This category is designed to acknowledge individuals who have made substantial contributions to benefit the City, local community, park and recreation system, or public library. Naming or renaming a City Asset for an outstanding individual is encouraged for those person's whose significance and good reputation have been accepted in the community, City and/or State/National history. Naming or renaming can be subordinate to the name of the larger City Asset or the City may name an area or portion of the City Asset after an individual, including but not limited to a meeting room, structure, fountain, or garden. The individual must be deceased and shall have performed outstanding service in one or more of the following categories:

    a. Maintained involvement in a leadership role in civic organizations that are devoted to community improvement.

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b. Provided assistance to the underprivileged, economically disadvantaged or physically and/or mentally handicapped.

c. Actively promoted and directed community events and activities that have clearly added to the enrichment of the quality and quantity of cultural life within the community.

d. Actively promoted and implemented effective programs and activities within the community for the City's youth.

e. Actively promoted and implemented effective programs and activities within the community for the City's senior citizens.

f. Assumed an active leadership role in developing and implementing programs directed to the improvement of the visual aesthetic appearance of the community at the commercial, public or residential level.

g. Assumed an active leadership role in developing programs and Facilities directed toward the improvement of community social and health needs as well as programs directed toward humanitarian purposes.

B. *Additional Criteria Applicable for Honorary Street Names*

1. The person whose name is proposed for such honorary naming shall have resided in the City of Beacon for at least five continuous or non-continuous years during his/her lifetime, during which time such person shall have preferably resided on the street in question.

2. Names shall be unique, easily discernible and simple to pronounce for public safety consideration. Similar sounding or duplicate street names shall not be considered.

3. Street names may recognize native wildlife, flora, fauna or natural geologic features related to the community and the City of Beacon.

4. Street names shall not contain more than 18-letter characters, including any combination of spaces or letters.

5. Cumbersome, corrupted or modified names, discriminatory or derogatory names, from the point of view of race, sex, color, creed, ethnicity, religious affiliation, political affiliation or other social factors are not acceptable.

6. Commemorative street name signs are additions to the street name and will not change the street address. Existing street names shall be retained and a supplemental sign or plaque shall be installed. Commemorative street name signs shall consider the same criteria as for naming of streets.

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IV. NAMING PROCEDURE

A. Staff, city residents, community leaders and organizations interested in proposing a name for a park, recreational area or facility must submit written recommendations, petitions, etc. for presentation to the City Council.

B. The request shall provide clear evidence that the individual to be honored has made significant contributions to the economic vitality and/or quality of life in the Beacon community.

C. When naming after a person or persons, written documentation of approval by next of kin to be honored (if available/possible) is required as part of the proposal.

D. Upon a petition to designate a secondary honorary name for an existing street or portion of existing street, the City Council shall refer such petition to the City Historian/City Historical Society for his/her or its report to the City Council regarding the following:

1. Such person's history of contributions to the City of Beacon, County of Dutchess, State of New York.

2. Such person's history of residence in the City, including duration and location of such residence.

E. The City Council shall consider all requests at a public meeting. The City Council shall provide appropriate public notice of any street or facility naming actions, as required.

F. The City Council shall allow for public input and comment.

G. The City Council will confirm adopt a proposed name for a City Asset by resolution.

H. The City Council has final approval and may reject any naming or renaming request.

I. The City Council also reserves the right to rename any City Asset for any reason, for instance if the resident, organization, or business for which it is named turns out to be disreputable, becomes disreputable or does not otherwise support the guiding principles set forth in this Policy.

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City of Beacon Workshop Agenda
9/30/2019

Title:

Linkage/CMS Zones Discussion

Subject:

Background:

ATTACHMENTS:

Description	Type
Zoning Discussion Topics	Backup Material
City Code Regarding the Linkage District	Backup Material
City Code Regarding the Central Main Street District	Backup Material

Zoning Discussion Topics

1. Central Main Street District
   - Making 4th floor always a City Council Special Use Permit as opposed to being split between the Planning Board and the City Council
   - Making 4th floor a matter of discretion based on positive additions to the community, not a matter of right if specific criteria met

2. Linkage District
   - Applying Linkage District density only in the corridor between Main Street and the train station, and not backs of lots or frontage on other streets
   - Identifying additional viewsheds, and tightening view shed protections
   - Specifically identifying green space areas

3. Balconies

4. Setbacks

5. Unsecure air conditioners

ARTICLE IVE
Linkage District (L)
[Added 2-19-2013 by L.L. No. 3-2013]

§ 223-41.19. Purpose.

The purpose of this Article IVE is to increase the vitality, attractiveness and marketability of the part of the City of Beacon lying between Main Street and the Metro North Train Station (the "Linkage District") by providing more residential development along with flexibility of land use, while enhancing urban form as recommended in the City of Beacon Comprehensive Plan adopted on December 17, 2007. This article is intended to encourage residential development to help support Main Street businesses and to create a vibrant, economically successful, walkable, and environmentally sustainable connection between Beacon's Central Business District and the train station and riverfront. It is intended to implement the general intent of the plan entitled "Connecting Beacon's Main Street with the Hudson River and Railroad Station," dated March 6, 2007 (hereinafter the "Linkage Plan"), prepared by the Dutchess County Department of Planning and Development and contained in the Appendix of the Comprehensive Plan (see Figure 21-21).[1] This article is also intended to provide a simplified and streamlined review process that facilitates redevelopment in accordance with its provisions and the intent of the Comprehensive Plan.

§ 223-41.20. Applicability and boundaries. [Amended 7-21-2014 by L.L. No. 11-2014; 4-3-2017 by L.L. No. 5-2017]

The provisions of this article apply to the area shown as the Linkage District (L) on the City of Beacon Zoning Map. All new uses of land and structures shall comply with this article. Existing nonconforming uses may continue as provided in § 223-10, Nonconforming uses and structures, except as may be otherwise provided in this article. Conforming residential uses existing on the effective date of this article shall be bound by the zoning of the subject property immediately prior to the enactment of the Linkage District. Any existing conforming building that is destroyed by fire or casualty to an extent of more than 50% may be rebuilt on the same footprint and with the same dimensions and may be extended at the same height along its frontage. Any existing building that does not satisfy the minimum building height requirements in the district may continue and may be expanded at the same height, provided that it is in

1. **Editor's Note: See § 223-41.21L.**

conformity with all other dimensional requirements in the district. In case of any conflict between this article and other provisions of this Zoning Chapter, this article shall control. In order to encourage mixed uses, more than one permitted use shall be allowed on any lot or parcel, subject to all approval criteria contained herein.

§ 223-41.21. Regulations.

A. Uses by right. Uses listed below in this Subsection A are permitted by right subject to site plan review, except as otherwise noted, to be conducted in an expedited fashion pursuant to Subsection H below. Site plan review shall not be required for a change of use in an existing building where the new use is allowed by right, the building will not be expanded, and the minimum number of off-street parking spaces required for the new use in § 223-41.21F(2) is not more than 25% greater than the requirement for the existing use in § 223-26F herein. The following uses are allowed by right subject to site plan review: **[Amended 8-19-2013 by L.L. No. 14-2013]**

(1) Two-family dwelling.

(2) Attached dwelling units.

(3) Apartment building.

(4) Inn.

(5) Bed-and-breakfast establishment.

(6) Artist studio.

(7) Hotel. **[Amended 7-21-2014 by L.L. No. 11-2014]**

(8) Park, plaza, green, community garden, greenhouse, and commercial plant cultivation.

(9) (Reserved)[2]

(10) Wireless telecommunications services facilities, provided that they are mounted on a building and do not increase its height by more than 15 feet above applicable height limits and are consistent with § 223-24.5.

(11) Buildings, structures and uses owned or operated by the City of Beacon or any department or agency thereof.

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2. Editor's Note: Former Subsection A(9), Home occupation, was repealed 7-21-2014 by L.L. No. 11-2014.

B. Uses by special permit. **[Amended 7-21-2014 by L.L. No. 11-2014; 4-3-2017 by L.L. No. 5-2017; 1-16-2018 by L.L. No. 1-2018; 10-15-2018 by L.L. No. 17-2018]**

(1) The following uses are allowed in existing buildings as permitted uses. For newly constructed buildings, the following uses are allowed by special permit from the Planning Board, upon a finding that the proposed use is consistent with the City of Beacon Comprehensive Plan, will enhance the architectural character of the street, and will contribute to creating a more urban, pedestrian-friendly quality in the L District, and that the conditions and standards in § 223-18 B(1)(a) through (d) have been met:

(a) Retail, personal services business or restaurant, coffee house, retail sales from trucks or trailers in accordance with § 223-26.3 or other establishment that serves food, with or without alcoholic beverages, provided that:

[1] The floor area of each such establishment is not greater than 5,000 square feet;

[2] The use is within 400 feet of the Route 9D-Beekman Street intersection, as identified on the Zoning Map, or located along the north side of West Main Street between Beekman Street and River Street; and

[3] The Planning Board finds that there are no substantial detrimental effects on parking, traffic or on the character of surrounding neighborhoods or the community.

(b) Office and manufacturing uses, including but not limited to microbreweries, micro distilleries, wineries and other food preparation businesses, with or without tasting rooms, that may also sell goods made on the site for consumption off the premises, provided that:

[1] The total office or manufacturing floor area of the building is no greater than 25,000 square feet;

[2] The use is on West Main Street or the use is within 400 feet of the Route 9D-Beekman Street intersection as identified on the Zoning Map; and

[3] The Planning Board finds that there are no substantial detrimental effects on parking, traffic or

on the character of surrounding neighborhoods or the community.

(2) In considering the appropriateness of the proposed use, the Planning Board shall consider impacts on shadows, traffic, and parking and may impose traffic and parking mitigation measures, including but not limited to provision of pedestrian walkways and stairways on site. When making a decision on a special permit, the Planning Board shall follow the procedures indicated in § 223-41.21H(2) of this chapter.

B.1. Accessory uses. The following are permitted accessory uses in the L District: **[Added 7-21-2014 by L.L. No. 11-2014]**

(1) Any accessory building or use customarily incident to a permitted use, except outside storage.

(2) Signs, in accordance with the provisions of § 223-15, as applicable.

(3) Off-street parking areas, in accordance with § 223-41.21F.

(4) Exterior lighting, in accordance with the provisions of § 223-41.21K(12).

(5) Home occupation, site plan review not required.

(6) Roof garden, site plan review not required.

(7) Greenhouse.

C. Prohibited uses. Uses not listed in Subsection A or B above and the following specific uses are prohibited in the L District:

(1) Gasoline filling station.

(2) Drive-through facilities, stand-alone or used in connection with any other use.

D. Dimensional regulations. All new construction or enlargement of existing structures in the L District shall be subject to the following minimum and maximum dimensional regulations:

(1) Front setback: minimum zero, maximum 20 feet, except that a larger maximum may be allowed if a) surrounding buildings have a larger setback, in which case the setback line may be placed in a location that harmonizes with the prevailing setbacks, provided that there is no parking in the front yard other than on a driveway accessing a rear garage; and b) the area in front of a building has no parking spaces and is

landscaped and used in a manner that enhances the street life by such means as pocket parks, gardens, fountains, outdoor tables, public art, and outdoor display of items for sale on the premises. At least 30% of any such outdoor space shall be landscaped with plant materials in a configuration approved by the Planning Board.

(2) Corner buildings: Corner buildings shall be treated as having frontage on both streets and front setbacks shall apply to both, as appropriate to the street.

(3) Side setbacks: minimum of zero, maximum of 30 feet. The minimum side setback may be increased by the Planning Board to allow light and air to continue to penetrate an existing building that has side windows.

(4) Rear setbacks: minimum 25 feet, except that if the rear yard is voluntarily dedicated to the City of Beacon as all or part of a public parking lot or parking structure, the minimum setback shall be 10 feet with landscaping to screen adjacent uses.

(5) Building height: minimum two stories, average maximum four stories and 48 feet, as determined from the average street front level. Stories built below the grade of the street front shall not be counted toward building height. The second story of a two-story building shall be built in a manner that allows actual occupancy for one or more permitted uses and does not create the mere appearance of a second story. For any building over three stories, a stepback of at least 15 feet behind the facade shall be required above the third story. Chimneys, vent pipes, mechanical systems, elevator shafts, antennas, wireless communications facilities, roof gardens and fences, greenhouses, solar collectors, wind energy systems, and other rooftop accessory structures may project up to 15 feet above the maximum height. With the exception of roof gardens and solar collectors, such projections may occupy no more than 20% of the roof area and must be set back at least 15 feet from the front edge of the roof. **[Amended 4-3-2017 by L.L. No. 5-2017]**

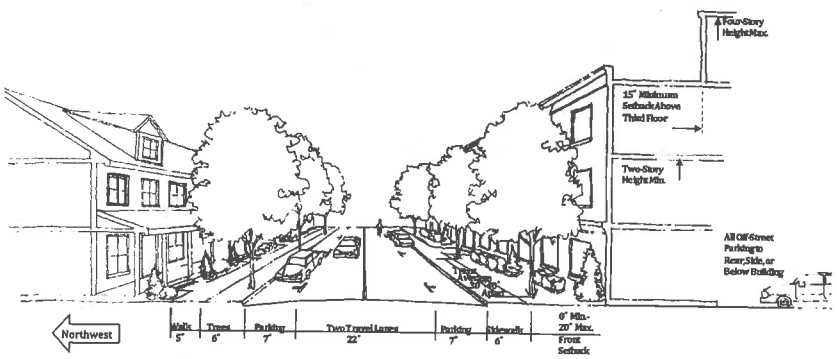
(6) Lot area and lot width: There are no minimum lot area or lot width requirements.

(7) Lot depth: Minimum lot depth is 75 feet, except that on any lot in which the area behind a building is voluntarily dedicated to the City as public parking, there shall be no minimum depth requirement.

(8) Floor area ratio: There is no maximum floor area ratio.

(9) Landscaped area: A minimum of 15% of the lot shall be landscaped with trees, shrubs, or grass, in locations approved by the Planning Board that enhance the streetscape or provide a landscaped interior courtyard and are found to be consistent with the intent of the L District. This requirement shall be reduced to 5% if the landscaped area is accessible to the public. These requirements may be waived for preexisting lots of 5,000 square feet or less.

Figure 21-0: Illustrative View of Proposed Linkage Zoning Requirements



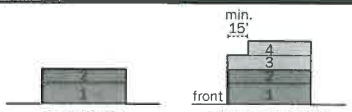
Beacon Linkage District
Design Speed 20-25 MPH
See Article IVD for Details and Exceptions

(10) Linkage Zone standards.

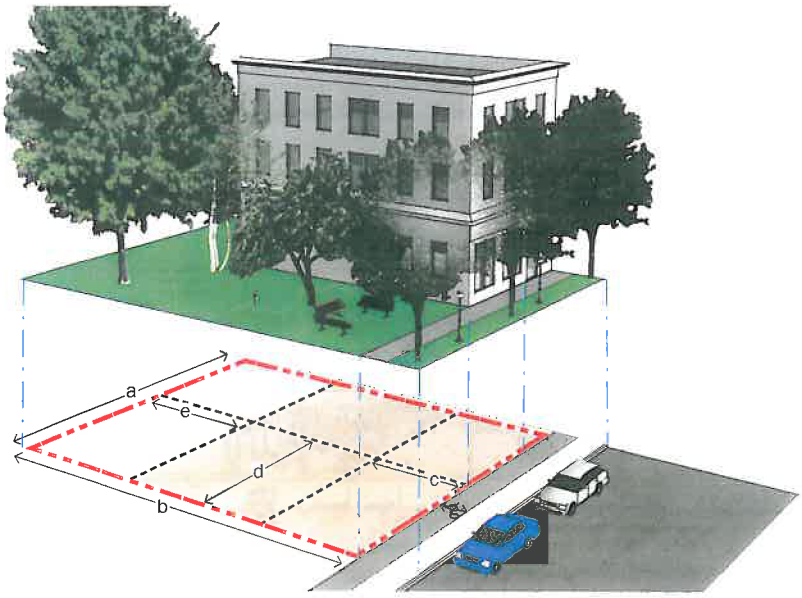
Figure 21-1: Linkage Zone Standards

LOT STANDARDS			
		Min.	Max.
	Lot Area	–	–
(a)	Lot Width	–	–
(b)	Lot Depth	75'	–
	F.A.R.	–	–
(c)	Front Setback	0'	20'
(d)	Side Setback	0'	30'
(e)	Rear Setback	25'	–
(f)	Landscaped Area	15%	–
	Frontage Occupancy	–	–
(g)	Pedestrian Clearway	5'	–

BUILDING HEIGHTS



FRONTAGE TYPES	
	Allowed
Storefront	within 400' of Rt. 9-D/Beekman St. intersection
Forecourt	yes
Stoop	yes
Porch	yes
Lightwell	yes



See text for exceptions and clarifications to Figure 21-1

E. Frontage types.

(1) The following building frontage types are permitted:

(a) Storefront, only at locations within 400 feet of the Route 9D-Beekman Street intersection.

(b) Forecourt.

(c) Stoop.

(d) Porch.

(e) Lightwell.

(2) Storefront: a frontage type where the building facade is placed at or close to the right-of-way line, with the entrance at sidewalk grade. This building frontage type is conventional for retail use. It is characterized by a high percentage of glazing on the first floor, a prominent entrance, and often an awning. Recessed doors on storefronts are acceptable.

Figure 21-2: Illustrative View of Storefront Frontage Type

Figure 21-3: Section View of Storefront Frontage Type

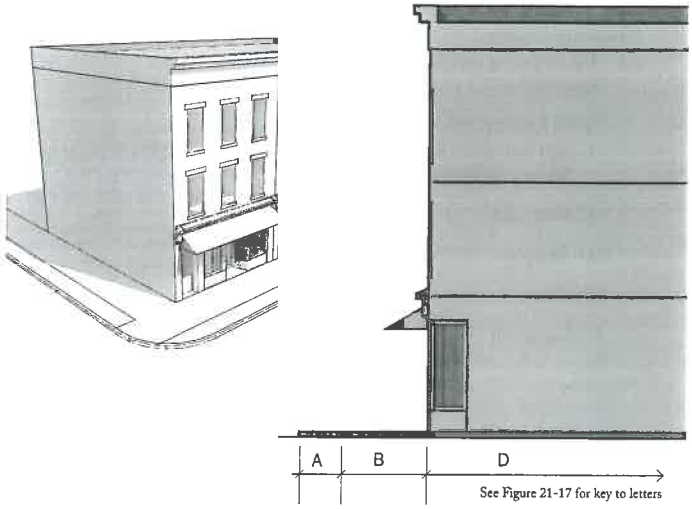
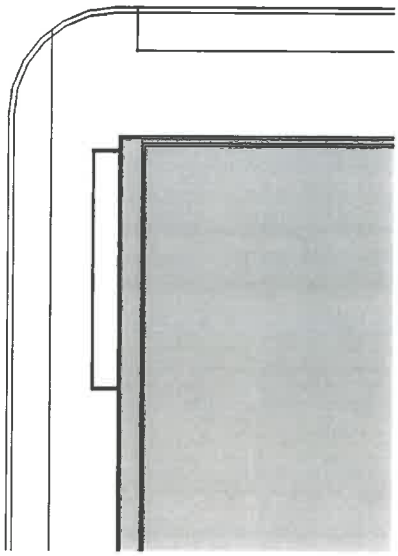


Figure 21-4: Plan View of Storefront Frontage Type



(3) Forecourt. A forecourt is a semi-public exterior space whose back and sides are surrounded by a building and whose front opens to a thoroughfare—forming a court. The court is suitable for gardens, gathering space, and outdoor dining.

Figure 21-5: Illustrative View of Forecourt Frontage Type

Figure 21-6: Section View of Forecourt Frontage Type

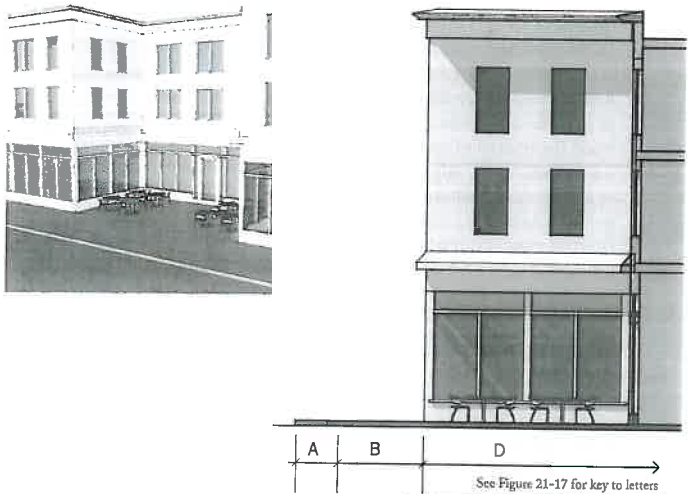
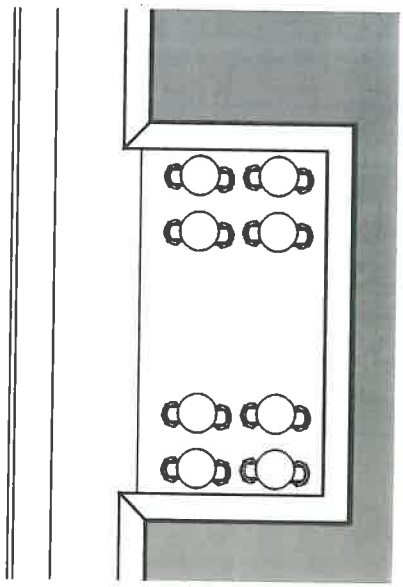


Figure 21-7: Plan View of Forecourt Frontage Type



(4) Stoop. In this frontage type, the building facade is aligned close to the frontage line. The first story is usually elevated sufficiently to provide some privacy for occupants. A stoop (composed of an elevated pad and stairs) lands at the edge of the sidewalk or a short front walkway. A small porch or roof may cover the stoop. This frontage type is suitable for ground-floor residential uses with short setbacks.

Figure 21-8: Illustrative View of Stoop Frontage Type

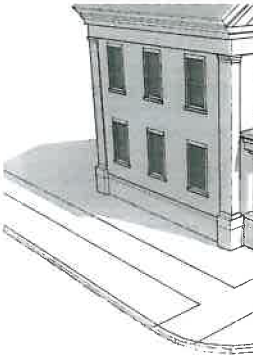


Figure 21-9: Section View of Stoop Frontage Type

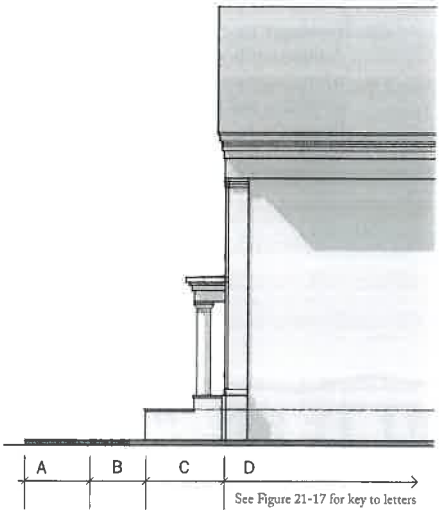
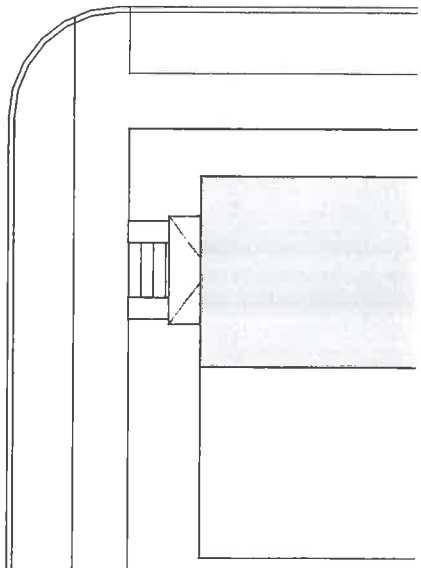


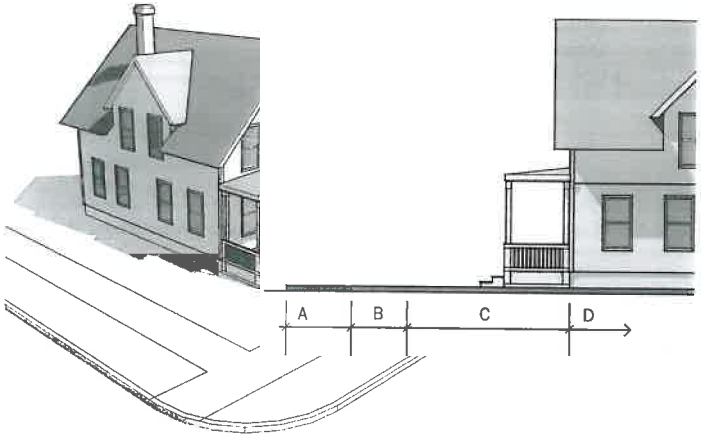
Figure 21-10: Plan View of Stoop Frontage Type



(5) Porch. A frontage type where the building facade is set back from the frontage line. The porch (a covered, but not enclosed, space) sits between the facade and the frontage line. The porch provides a transition from the public realm to the private realm. Porches are typically elevated above the surrounding grade. A porch should have a clear space that is a minimum of six feet deep and 10 feet wide.

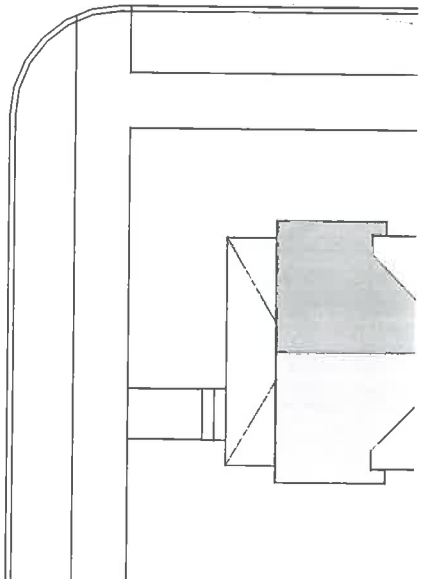
Figure 21-11: Illustrative View of Porch Frontage Type

Figure 21-12: Section View of Porch Frontage Type



See Figure 21-17 for key to letters

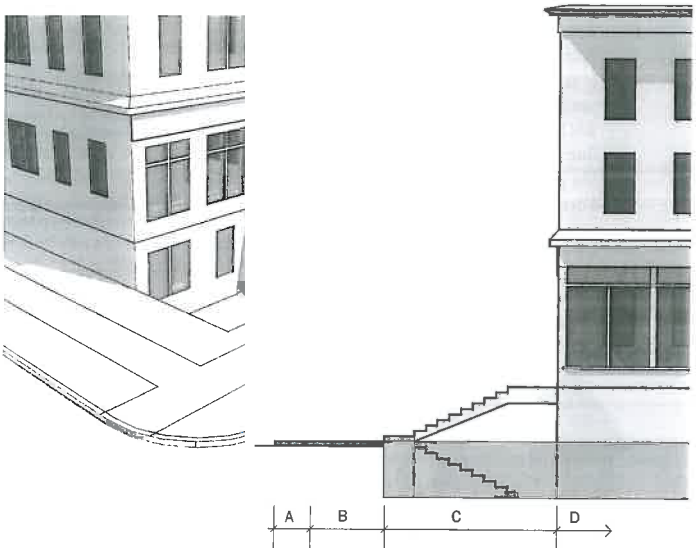
Figure 21-13: Plan View of Porch Frontage Type



(6) Lightwell: a frontage type where the facade is set back from the frontage line. The ground floor of the building is elevated to allow light to enter the basement, which is typically occupied. Stairs lead up to the ground floor and down to a below-grade entrance and/or sunken court. The stairs typically land at the frontage line.

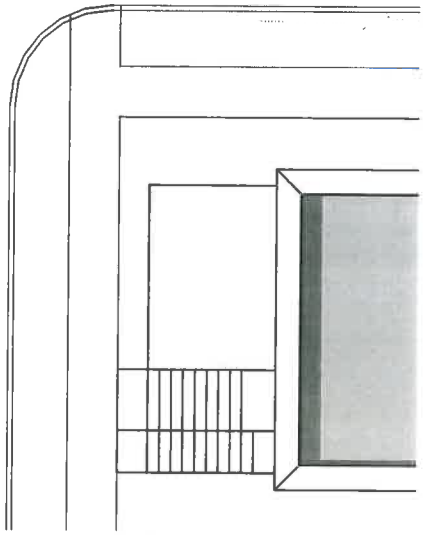
Figure 21-14: Illustrative View of Lightwell Frontage Type

Figure 21-15: Section View of Lightwell Frontage Type



See Figure 21-17 for key to letters

Figure 21-16: Plan View of Lightwell Frontage Type



F. Parking location and quantity.

(1) All off-street parking shall be located behind, underneath, or to the side of a building. If on the side, it shall be located at least 40 feet from any property line that fronts on a street and be screened by a low brick or stone wall, hedge, ornamental fence, and/or other landscaping that maintains the continuity of the street and that screens parked cars from view from the street.

(2) The minimum quantity of required on-site parking spaces shall be as follows:

(a) Residential: one space per unit.

(b) Office and general commercial: 2.5 spaces per 1,000 square feet of floor area.

(c) Retail commercial and personal services: three spaces per 1,000 square feet of floor area.

(d) Other uses: as listed in § 223-26 of this chapter. **[Amended 4-3-2017 by L.L. No. 5-2017]**

(3) The quantity of required on-site parking in Subsection F(2) above may be modified by the Planning Board, in its discretion, based upon information submitted by the applicant or otherwise made available to the Planning Board in the public record, demonstrating one or more of the following:

(a) That the projected operational characteristics of the proposed use and/or its proximity within walking distance of the train station and other services justify a reduction in the required amount of parking.

(b) That adequate shared parking, contractually obligated for the duration of the proposed use, is available within 500 feet of the site and in the L District.

(c) That the applicant has provided sufficient bicycle parking to reduce anticipated vehicular travel demand, as supported by a professional parking study. **[Amended 4-3-2017 by L.L. No. 5-2017]**

(d) That there is sufficient public parking available within 800 feet of the site and in the L District to meet foreseeable parking needs of the proposed use and surrounding uses for the duration of the proposed use.

(e) That the applicant will voluntarily dedicate land for public parking on site or will acquire land by purchase or long-term lease (for the duration of the proposed use) within 800 feet of the site and in the L District and voluntarily dedicate such land to the City for public parking.

(f) That a professional parking study of the proposed use and the surrounding area demonstrates that a different amount of parking would be appropriate for the use in its particular location and/or that existing and/or proposed off-site parking is sufficient.

(4) For small preexisting lots where the provision of on-site parking is infeasible, the Planning Board may waive up to 50% of the parking requirements, provided that the total floor area of the building is no greater than 3,000 square feet. The Planning Board may grant additional parking waivers, at its discretion, subject to an in-lieu payment of $10,000 per parking space. **[Amended 4-3-2017 by L.L. No. 5-2017]**

(5) Section 223-26B of this chapter shall not apply in the L District.

G. Streetscape improvements.

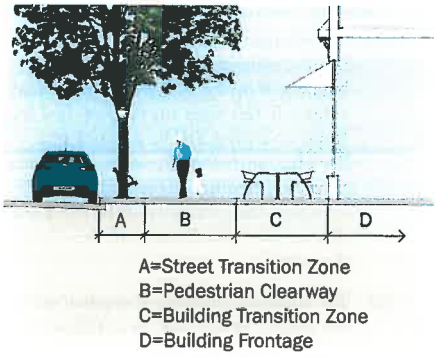
(1) On West Main Street, Beekman Street, and Wolcott Avenue, within the building transition zone, the Planning Board may require the lot owner to provide planters, trees, shrubs, or other landscaping to enhance the appearance of the streetscape. Ornamental fencing four feet or less in height may be provided to separate privately owned space from public space. Chain link, vinyl, and solid fencing shall be prohibited. For commercial uses, display areas, and outdoor dining and seating areas may be provided.

(2) A pedestrian clearway, at least five feet wide, with unobstructed space for pedestrian activity, shall be provided along the sidewalk, unless site conditions require a narrower clearway. A pedestrian clearway of eight feet shall be provided along storefront frontages.

(3) Within the street transition zone, if space permits, lot owners may plant trees and place benches, tables, and outdoor seating areas with the approval of the Department of Public Works. The Planning Board may require the planting of street trees on average 30 feet to 40 feet apart as a condition of site plan approval. To the extent practical, an applicant shall, in cooperation with the City of Beacon Department of Public Works, implement the recommendations in the Linkage Plan street sections for Beekman Street and Wolcott Avenue.

(4) The Planning Board may require that an applicant constructing a building greater than 10,000 square feet in floor area pay for the provision of related street improvements to improve pedestrian and/or bicycle safety.

Figure 21-17: Parts of the Streetscape



H. Site plan review/special permit procedures and criteria.

(1) In order to ensure an expedited review of site plans, this article contains a streamlined site plan review procedure for any proposed building or group buildings with 10,000 square feet or less in footprint area, as follows:

(a) The applicant shall meet with the Building Inspector, who shall provide a site plan application and instruction sheet describing the requirements for site plan approval and who may recommend that the applicant have a preapplication meeting with the Planning Board to determine application submission requirements.

(b) The applicant shall prepare a site plan with sufficient information for the Planning Board to determine whether or not it complies with the provisions of this article and is consistent with the general intent of the Linkage Plan.

(c) If no special permit is required, the applicant shall then meet with the Planning Board to discuss the proposal. No public hearing will be required, unless the Planning Board determines that the proposal may have substantial detrimental effects or may cause public controversy.

(d) Within 45 days after such meeting, or if there is a public hearing, within 45 days after the closing of the public hearing, the Planning Board shall issue an approval,

approval with modifications, or denial of the application, stating the reasons for any modifications or denial. The Planning Board shall also issue a required schedule for initiation and completion of the project. Such approval shall lapse within two years if the applicant does not diligently pursue construction of the project, unless the applicant requests an extension, which may only be granted for good cause by the Planning Board.

(2) For projects with over 20,000 square feet in building footprint area, or projects that require a special permit, the applicant shall follow the procedures in §§ 223-18 and 223-25, except that the Planning Board shall take the place of the City Council in § 223-18. Such applications shall comply with those sections to the extent that such sections do not contain standards that conflict with this article. In case of a conflict, this article shall control. **[Amended 7-21-2014 by L.L. No. 11-2014; 4-3-2017 by L.L. No. 5-2017]**

(3) The Planning Board may require a performance guarantee for the construction of public improvements in connection with any project of 10,000 square feet or more in floor area.

(4) After completion of construction for a new building, the applicant shall submit as-built plans to the Building Inspector showing the exact location of all site alterations and construction.

I. Site plan and special permit amendments. For any proposed change to an approved site plan, the applicant shall meet with the Building Inspector who shall make a determination as to whether or not the proposed change is significant. If the Building Inspector determines that the change is significant (e.g., a change of use and/or a change in dimensions of more than 10% shall be presumed to be significant), the application shall be referred to the Planning Board for an amendment to the site plan or special permit, as appropriate. If the Building Inspector determines that the change is not significant and otherwise complies with applicable requirements, the Building Inspector is authorized to issue a building permit without further review.

J. Compliance with below market rate housing requirements. All applications involving residential development shall comply with Article IVB of this chapter (Affordable-Workforce Housing).

K. Design standards.

(1) Because of the design standards in this section, the architectural review provisions of Chapter 86 shall not apply within the L District. In addition to the preceding sections of this article, all new buildings or substantial alterations of existing buildings shall comply with the following design requirements. These design standards are intended to promote the following purposes:

(a) Preserve and enhance the unique character of the City of Beacon;

(b) Promote pedestrian access and activity, as well as a general sense of area security;

(c) Restore and maintain the role of streets as civic and social spaces, framed by active uses;

(d) Encourage economic development and a convenient mix of uses and services; and

(e) Support a sense of design context that appropriately relates historic buildings, general facade and window patterns, and traditional streetscapes in the area to new redevelopment efforts, while still allowing contemporary architectural flexibility.

(2) Standards using the verb "shall" are required; "should" is used when the standard is to be applied unless the Planning Board finds a strong justification for an alternative solution in an unusual and specific circumstance; and "may" means that the "standard" is an optional guideline that is encouraged but not required.

(3) Buildings should have a top-floor cornice feature and first-floor architectural articulation, such as a storefront with a secondary cornice or an architecturally emphasized entrance doorway, to accent the central body of the building.

(4) Architectural features and windows should be continued on all sides of the building that are clearly visible from a street or public parking area, avoiding any blank walls, except in cases of existing walls or potential common property walls. Larger buildings shall incorporate significant breaks in the facades and rooflines at intervals of no more than 35 feet.

(5) Building elements that provide additional architectural interest, such as balconies, bay windows, open porches, and cornices, may encroach up to four feet beyond the front lot

line if the bottom of the encroaching building elements is at least 12 feet above grade.

(6) Metal, glass or canvas-type awnings and canopies or projecting signs are encouraged and may encroach up to six feet into the front setback and over the sidewalk above seven feet. Vinyl awnings are discouraged unless the applicant can demonstrate to the Planning Board's satisfaction that the finish and design of such awning are of high quality, aesthetically pleasing and meet the intended standards of the district, as determined by said Board. **[Amended 7-21-2014 by L.L. No. 11-2014]**

(7) Buildings shall have a front entrance door facing the primary street and connected to the sidewalk. Front entrance doors for commercial buildings and retail storefronts shall be active and provide main access during business hours.

(8) Primary individual window proportions shall be greater in height than in width. Mirrored, reflective, or tinted glass, all-glass walls, and exterior roll-down security gates shall not be permitted. Any shutters shall match the size of the window opening, appear functional, and be attached to the window frame.

(9) Commercial buildings shall have at least 70% glass on the first-floor facades, located between two feet and 10 feet above the sidewalk. Residential buildings shall have at least 30% glass on the first-floor facades.

(10) Finish building materials should be wood, brick, traditional cement-based stucco, stone or fiber-cement siding or other material deemed acceptable by the Planning Board. Vinyl, aluminum or sheet metal siding or sheet trim, exposed concrete blocks or concrete walls, plywood or other similar prefabricated panels, unpainted or unstained lumber, synthetic stone or brick, or synthetic stucco, exterior insulation and finishing system (EIFS), or direct-applied finish system (DAFS), and chain link fencing shall not be permitted. **[Amended 7-21-2014 by L.L. No. 11-2014]**

(11) Materials and colors should complement historic buildings on the block.

(12) Lighting fixtures shall be a maximum of 15 feet in height, except pole lights in rear parking lots shall be a maximum of 20 feet high. Lighting shall be energy efficient, have full

spectrum color quality, and shall prevent any lighting above 60 watts that directly projects above the horizontal level into the night sky.

(13) Mechanical equipment and refuse containers shall be concealed from public view by approved architectural elements and shall be located to the rear of the site. Window or projecting air conditioners shall not be permitted on the front facade.

(14) The Planning Board may waive setback requirements for landmark civic buildings, including government buildings, schools, libraries, or places of worship, and for pedestrian-oriented places, such as public greens or plazas and outdoor eating areas.

Figure 21-18: Design Standards Examples A

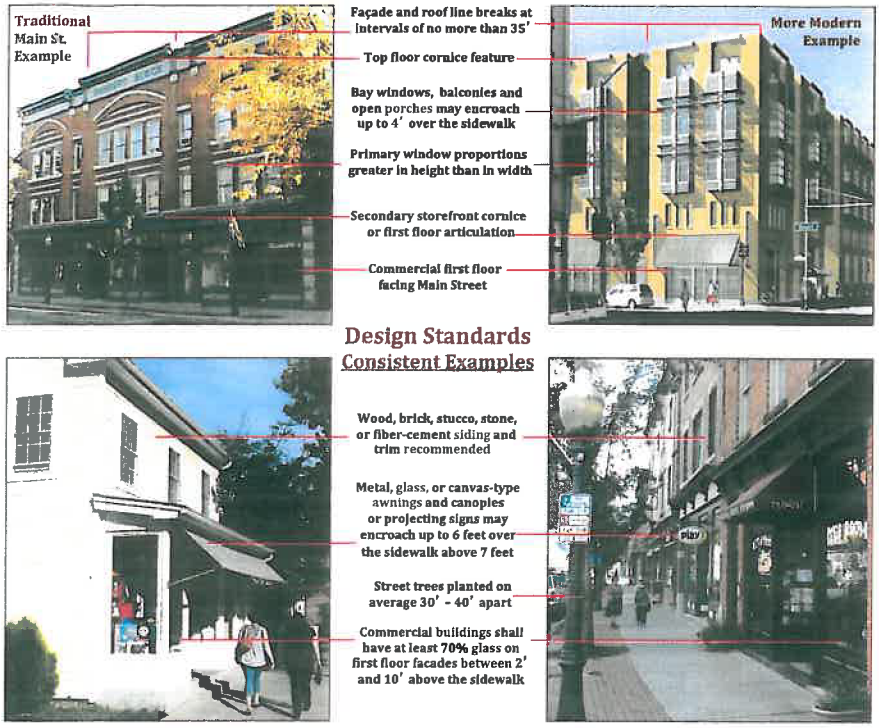


Figure 21-19: Design Standards Examples B

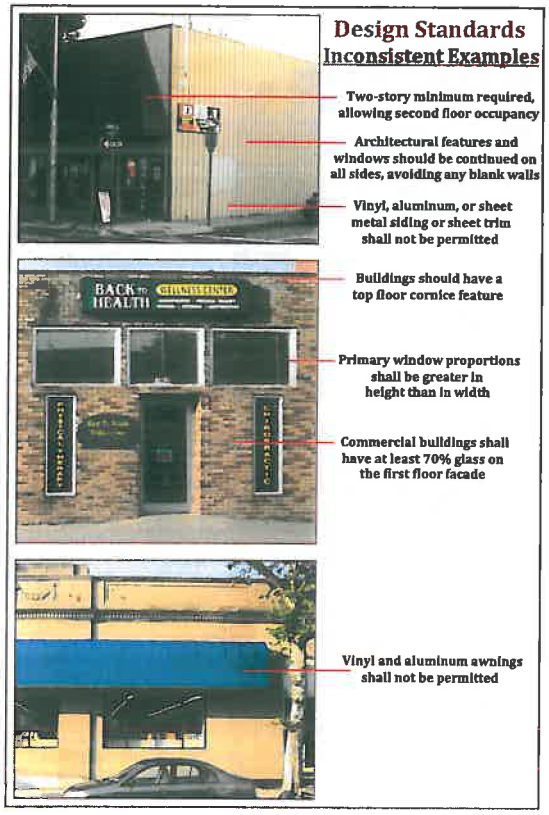
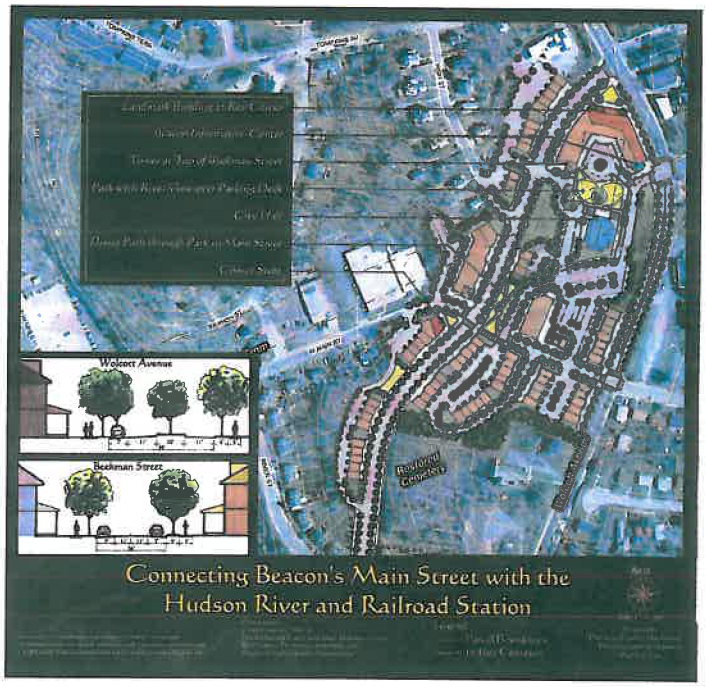


Figure 21-20: Design Standards Examples C

L. Linkage plan. This sketch plan provides one possible set of design solutions, which was included in the 2007 Comprehensive Plan Appendix as an illustration of planning principles for the Linkage District.

Figure 21-21: Connecting Beacon's Main Street with the Hudson River and Railroad Station



ARTICLE IVD

Central Main Street (CMS) District

[Added 2-19-2013 by L.L. No. 3-2013; amended 8-9-2013 by L.L. No. 14-2013; 5-19-2014 by L.L. No. 8-2014; 7-21-2014 by L.L. No. 10-2014; 7-21-2014 by L.L. No. 11-2014; 6-4-2018 by L.L. No. 10-2018]

§ 223-41.16. Purpose.

The purpose of this Article IVD is to preserve the traditional character of Main Street, particularly for buildings in the Historic District and Landmark Overlay (HDLO) Zone, while also increasing the vitality, attractiveness, and marketability of Main Street, as recommended in the City of Beacon Comprehensive Plan Update adopted on April 3, 2017. This article promotes a vibrant, economically successful, and environmentally sustainable Main Street with a pedestrian-oriented public realm and mixed uses.

§ 223-41.17. Applicability and boundaries.

The provisions of this article apply to the area shown as the Central Main Street District (CMS) on the City of Beacon Zoning Map.[1] All new uses of land and structures and changed uses of land and structures shall comply with this article. Existing nonconforming uses may continue as provided in § 223-10, Nonconforming uses and structures, except as may be otherwise provided in this article. Any existing conforming building that is destroyed by fire or casualty to an extent of more than 50% may be rebuilt on the same footprint and with the same dimensions and may be extended at the same height along its frontage. Any existing building that does not satisfy the minimum building height requirements in the district may continue, but any future expansion must conform to this chapter. In case of any conflict between this article and other provisions of this zoning chapter, this article shall control. In order to encourage mixed uses, more than one permitted use shall be allowed on any lot or parcel, subject to all approval criteria contained herein.

§ 223-41.18. Regulations.

A. Uses by right. The uses listed below are permitted by right in the CMS District, in the manner and under the conditions specified below. Unless otherwise indicated in this § 223-41.18, all such uses require site plan review and approval. Site plan review shall not be required for a change of use in an existing building where

1. **Editor's Note: The Zoning Map is on file in the City offices.**

the new use is allowed by right, the building will not be expanded, and the minimum number of off-street parking spaces required for the new use in § 223-41.18G(2) is not more than 25% greater than the requirement for the existing use in § 223-26F herein.

(1) Apartments, provided that for parcels fronting on Main Street or East Main Street they shall only be located on upper stories or at least 50 feet behind the facade in the rear portion of a ground floor. The nonconforming residential uses on Main Street in § 223-10H shall not apply in the CMS District.

(2) One-family, two-family, attached, and multifamily dwellings, provided that for parcels fronting on Main Street or East Main Street such uses are not permitted on the ground floor in the first 50 feet from the facade.

(3) Hotel, subject to § 223-20; inn, or bed-and-breakfast establishment, subject to § 223-24.4.

(4) Offices of any kind, including professional, medical, business, and banks or other financial institutions.

(5) Artist studio.

(6) Art gallery.

(7) Restaurant, coffee house, brew pub, and other establishments that serve food with or without alcoholic beverages, and are not a bar.

(8) Food preparation business.

(9) Retail and personal services.

(10) Funeral home.

(11) Off-street parking facilities, provided that they are set back at least 40 feet from the Main Street or East Main Street property line and screened from the street by buildings and/or landscaping.

(12) Public garage, as defined in this chapter, without motor vehicle repair, vehicle sales, or fuel sales, provided that it is set back at least 40 feet and screened from the street by buildings and/or landscaping.

(13) School, public or not-for-profit educational institution, trade or vocational school, job placement or training program, continuing education program or instructional school such

as karate school, dance school or studio, language school or vehicular driving school.

(14) Indoor commercial recreation.

(15) Park, plaza, green, community garden, and other forms of outdoor plant cultivation.

(16) Artist live/work space subject to § 223-24.3, provided that they may only be located on upper stories or at least 50 feet behind the facade, in the rear portion of a ground floor, along Main Street or East Main Street, unless the space in the 50 feet behind the facade is used for the retail sale of the artist's wares.

(17) Theater, museum, library, concert hall and other music venues, and other similar kinds of cultural facilities.

(18) Auction gallery.

(19) Wireless telecommunications services facilities, provided that they are consistent with § 223-24.5 and, if mounted on a building, they do not increase its height by more than 15 feet above applicable height limits.

(20) Buildings, structures and uses owned or operated by the City of Beacon or any department or agency thereof.

(21) Spa, health club, gym, yoga and pilates studio, and similar kinds of fitness centers.

(22) Microbrewery or microdistillery which has a retail or tasting room component of at least 200 square feet of floor area.

(23) Retail sales from a truck or trailer, subject to § 223-26.3.

(24) Workshop for the making or repair of clocks, watches, jewelry, musical instruments or similar artisan workshops, having a retail component of at least 200 square feet.

(25) Tattoo parlor, subject to § 223-26.2.

(26) Club, civic or fraternal, subject to § 223-24.2, provided that for parcels fronting on Main Street or East Main Street such uses are not permitted on the ground floor in the first 50 feet from the facade.

B. Uses by special permit.

(1) The following uses are allowed by special permit from the City Council, upon a finding that the proposed use is consistent with the City of Beacon Comprehensive Plan Update, will enhance the architectural character of the street and will benefit the urban, pedestrian-friendly qualities of Main Street and East Main Street, and that the conditions and standards in § 223-18B(1)(a) through (d) have been met:

(a) A public garage, as defined in this chapter, containing facilities used for repair of motor vehicles, but not for the sale of motor fuel. Such repair facilities shall not front on or be visible from Main Street or East Main Street.

(b) A bar in which the primary product is alcoholic beverages and food service is incidental. Any establishment that serves alcoholic beverages and is open later than 1:00 a.m. on any night shall be presumed to be a bar for purposes of this section.

(2) In considering the appropriateness of the proposed use, the City Council shall consider impacts on shadows, traffic, and parking and may impose traffic and parking mitigation measures. When making a decision on a special permit, the City Council shall follow the regulations in § 223-18 of this chapter.

C. Accessory uses. The following are permitted accessory uses in the CMS District:

(1) Any accessory building or use customarily incident to a permitted use, except outside storage.

(2) Signs, in accordance with the provisions of § 223-15, as applicable.

(3) Off-street parking areas, in accordance with § 223-41.18G.

(4) Exterior lighting, in accordance with the provisions of § 223-41.18J(13).

(5) Home occupation, subject to § 223-17.1.

(6) Roof garden.

(7) Greenhouse.

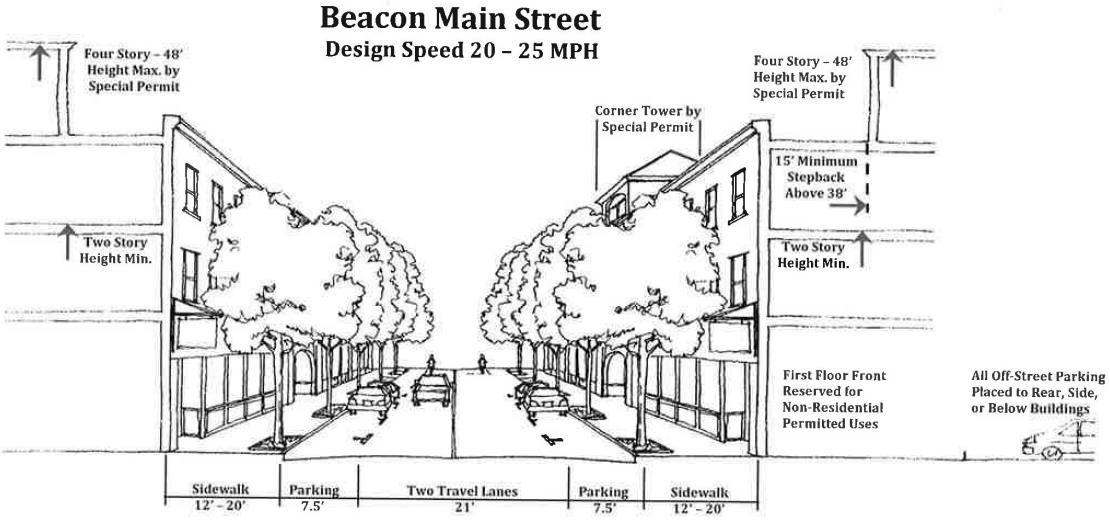
D. Prohibited uses. Uses not listed in Subsection A or B above and the following specific uses are prohibited in the CMS District:

(1) Gasoline filling stations.

(2) Drive-through facilities, standalone or used in connection with any other use.

E. Dimensional regulations. All new construction or enlargement of existing structures in the CMS District shall be subject to the following minimum and maximum dimensional regulations. These may be modified as provided in Subsection J(15).

Figure 18-1: Central Main Street Zoning Requirements Illustrative View



(1) Front setback: minimum zero, maximum 10 feet, except that a larger maximum may be allowed if the area in front of a building has no parking spaces and is landscaped and used in a manner that enhances street life by such means as pocket parks or plazas, fountains, outdoor dining, public art, and outdoor display of items for sale on the premises. Such outdoor space shall be landscaped with plant materials as appropriate to the use, in a configuration approved by the Planning Board.

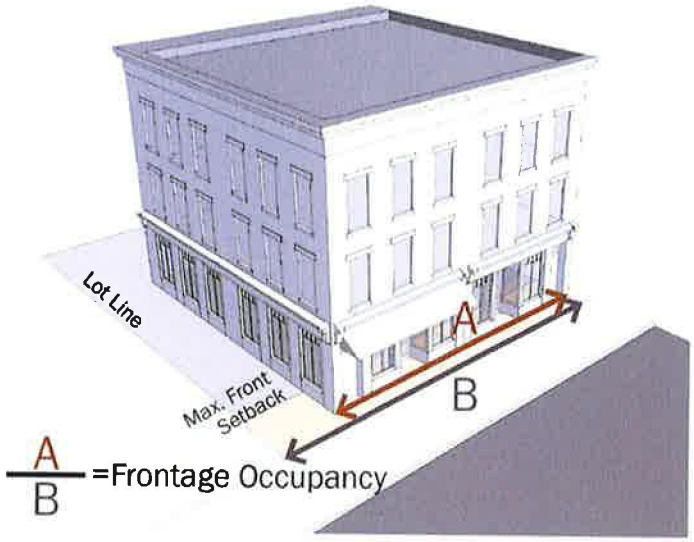
(2) Corner buildings: Corner buildings shall be treated as having frontage on both streets and front yard setbacks shall apply to both, as appropriate to the street.

(3) Side setbacks: minimum of zero. The minimum side setback may be increased by the Planning Board to allow light and air to continue to penetrate an existing building that has side windows or to allow future development of an abutting parcel to the permitted building height.

(4) Rear setbacks: minimum 25 feet for parcels 100 feet deep or more and minimum 10 feet for parcels under 100 feet deep, except that if the rear yard is voluntarily dedicated to the City of Beacon as all or part of a public parking lot or parking structure, the minimum setback shall be 10 feet with landscaping to screen adjacent uses.

(5) Minimum frontage occupancy on Main Street or East Main Street: 100% for buildings with a shared side wall and 80% for detached buildings. Frontage occupancy is the percentage of the lot width which must be occupied by either a front building facade or structures that screen parking, located within the area between the minimum and maximum front setback. The purpose of this requirement is to maintain a sense of enclosure of the street. This requirement may be reduced by the Planning Board: a) to the extent necessary to allow light and air into an adjacent building that has side windows; b) allow future development of an abutting parcel to the permitted building height; or c) if the applicant provides a suitably surfaced and lighted pedestrian passageway between the street and parking areas, public open spaces, or other streets, located behind the building.

Figure 18-2: Frontage Occupancy



(6) Building height: minimum two stories, maximum three stories and 38 feet, as determined from the average street front level. Stories built below the grade of the street shall not be counted toward building height. The second story of a two-story building shall be built in a manner that allows actual occupancy for one or more permitted uses and does not create the mere appearance of a second story. Chimneys, vent pipes, mechanical systems, elevator shafts, antennas, wireless communications facilities, roof gardens, fences, greenhouses, solar collectors, wind energy systems, and other rooftop accessory structures may project up to 15 feet above the maximum permitted height. With the exception of roof gardens and solar collectors, such projections may occupy no more than 20% of the roof area and must be set back at least 15 feet from the edge of the roof along any street frontage.

(7) Except for parcels facing East Main Street, a special permit may be granted by the Planning Board for a fourth story with a stepback of at least 15 feet behind the facade along any street frontage. A fifteen-foot building stepback above 38 feet shall also be required for any side of a four-story building within 40 feet of a lot line abutting another zoning district.

Except for parcels facing East Main Street, a special permit may also be granted for a four-story tower without a stepback at a corner facing an intersection and occupying no more than 25 feet of the corner frontage of the building.

(a) For proposed buildings on CMS parcels in or abutting the Historic District and Landmark Overlay Zone, any fourth story shall require a special permit by the City Council. The City Council may reduce a permitted building height to be no more than six feet higher than an existing building on an adjoining HDLO parcel for a distance of 30 feet along the frontage from the historic structure.

(b) All such special permits in the CMS District shall require a finding that there are no substantial detrimental effects on shadows, parking, traffic, or specific views adopted as important by the City Council or in the Comprehensive Plan Update, that the new building will be compatible with the historic character of adjacent buildings, and that the conditions and standards in § 223-18B(1)(a) through (d) have been met. Although not required, additional below-market-rate housing above what would be otherwise mandated in Article IVB, commercial uses included on an upper floor, or extra sidewalk width, plaza space, or green space that is accessible to the public may be a positive factor for consideration during the special permit review process.

(8) Building depth: Corner buildings shall not extend along a side street more than 150 feet from the Main Street or East Main Street frontage, unless the rear building height is reduced to two stories.

(9) Lot area and lot width: There are no minimum lot area or lot width requirements.

(10) Lot depth: Minimum lot depth is 75 feet, except that on any lot in which the area behind a building is voluntarily dedicated to the City and accepted by the City Council for public parking, there shall be no minimum depth requirement.

(11) Floor area ratio: There is no maximum floor area ratio.

(12) Landscaped area: A minimum of 10% of the lot shall be landscaped with trees, shrubs, or grass in locations approved by the Planning Board that enhance the streetscape, provide

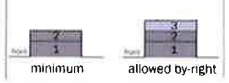
a landscaped rear yard or courtyard, and are found to be consistent with the intent of the CMS District. This requirement shall be reduced to 5% if the landscaped area is accessible to the public. These requirements may be waived for lots of 5,000 square feet or less.

(13)Dimensional standards.

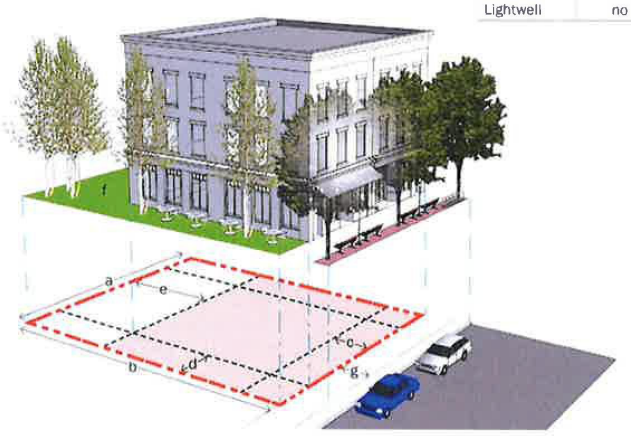
Figure 18-3: Dimensional Standards

LOT STANDARDS		Min.	Max.
	Lot Area	--	--
(a)	Lot Width	--	--
(b)	Lot Depth	75'	--
	F.A.R.	--	--
(c)	Front Setback	0'	10'
(d)	Side Setback	0'	--
(e)	Rear Setback	25'	--
(f)	Landscaped Area	10%	--
	Frontage Occupancy, detached building	80%	--
	Frontage Occupancy, buildings w/shared side wall	100%	--
(g)	Pedestrian Clearway	8'	--

BUILDING HEIGHTS



FRONTAGE TYPES	Allowed
Storefront	yes
Forecourt	yes
Stoop	no
Porch	no
Lightwell	no



See text for exceptions and clarifications to Figure 18.3. Rear setback 10 feet for lots less than 100 feet deep.

F. Frontage types.

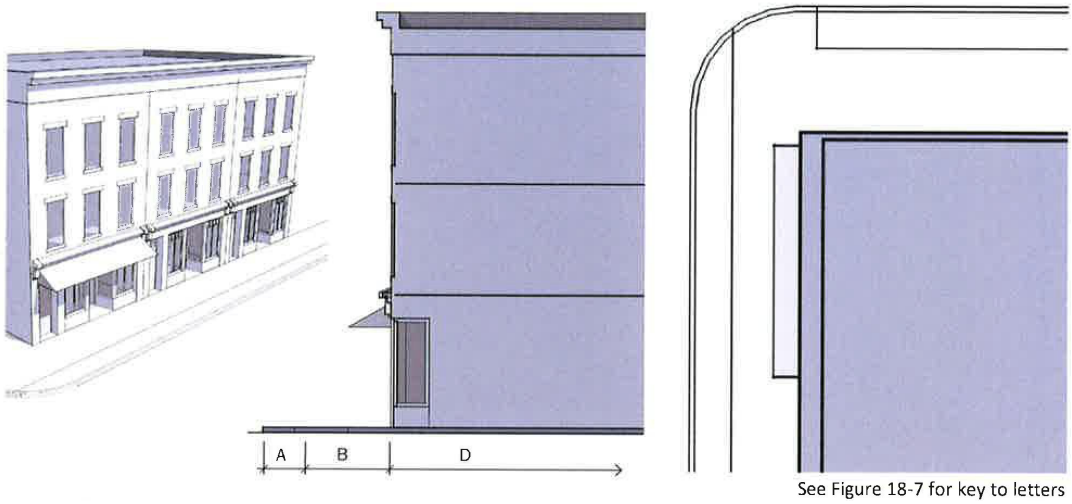
(1) For new buildings, only the following building frontage types are permitted:

(a) Storefront.

(b) Forecourt.

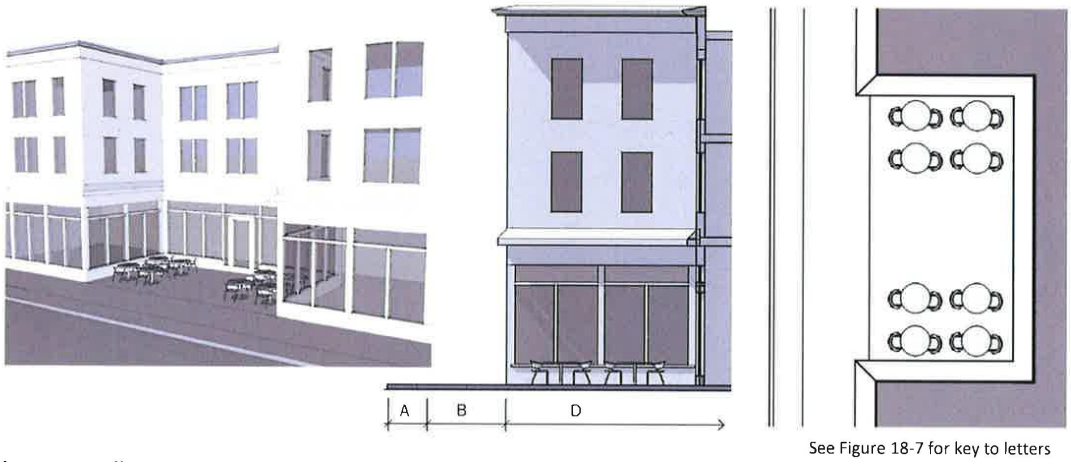
(2) Storefront frontage type: a frontage type where the building facade is placed at or close to the right-of-way line, with the entrance at sidewalk grade. This building frontage type is conventional for retail use. It is characterized by a high percentage of glazing on the first floor, a prominent entrance, and often an awning. Recessed doors are typically used to avoid doors opening into the sidewalk.

Figure 18-4: Illustrative View, Section View, and Plan View of Storefront Frontage Type



(3) Forecourt frontage type. A forecourt is a semipublic exterior space whose back and sides are surrounded by a building and whose front opens to a thoroughfare, forming a court. The court is suitable for gardens, gathering space, and outdoor dining.

Figure 18-5: Illustrative View, Section View, and Plan View of Forecourt Frontage Type



G. Parking location and quantity.

(1) All off-street parking shall be located behind, under the ground floor, or to the side of a building. If on the side, the parking area shall be located at least 40 feet from the Main Street or East Main Street property line and be screened by a low brick or stone wall, hedge, ornamental fence, and/or other landscaping that maintains the continuity of the street wall in compliance with frontage occupancy requirements, and that screens parked cars from view from the street. A public garage shall have a storefront "liner building" at least 40 feet deep and one story high between the parking structure and the main street, but may have a zero-foot setback on the upper floors of the parking structure (over the storefront) and along any street that intersects the main street. Parking areas fronting on side streets shall have a

minimum setback of five feet in which ornamental and/or buffer landscaping is planted.

(2) The minimum quantity of required on-site parking spaces shall be as follows:

(a) Residential: one space per unit.

(b) Office and nonretail commercial: two spaces per 1,000 square feet of floor area.

(c) Retail commercial and personal services: two spaces per 1,000 square feet of floor area.

(d) Other uses: as determined to be appropriate by the Planning Board in the course of site plan review, or in the case of a new use where site plan review is not required under § 223-41.18A, as determined by the Building Inspector in consultation with the City Planner.

(3) The requirements in Subsection G(2) above may be modified by the Planning Board, in its discretion, based upon information submitted by the applicant or otherwise made available in the public record, demonstrating one or more of the following:

(a) That the projected operational characteristics of the proposed use require a different amount of parking.

(b) That adequate shared parking, contractually obligated for the duration of the proposed use, is available within 500 feet of the site and within the CMS or PB Districts.

(c) That the applicant has provided sufficient bicycle parking to reduce anticipated vehicular travel demand.

(d) That there is sufficient public parking available within 800 feet of the site and within the CMS or PB Districts to meet foreseeable parking needs of the proposed use and surrounding uses for the duration of the proposed use.

(e) That the applicant will voluntarily dedicate land for public parking on site or will acquire land by purchase or long-term lease (for the duration of the proposed use) within 800 feet of the site and within the CMS or PB Districts and voluntarily dedicate such land to the City for public parking.

(f) That a professional parking study of the proposed use and the surrounding area demonstrates that a different amount of parking would be appropriate for the use in its particular location and/or that existing and/or proposed off-site parking is sufficient.

(4) For lots of 8,000 square feet or less, where the provision of on-site parking is infeasible, the Planning Board may waive all parking requirements, provided that the total floor area of the building is no greater than 5,000 square feet.

(5) Section 223-26B of this chapter shall apply in the CMS District.

H. Streetscape improvements.

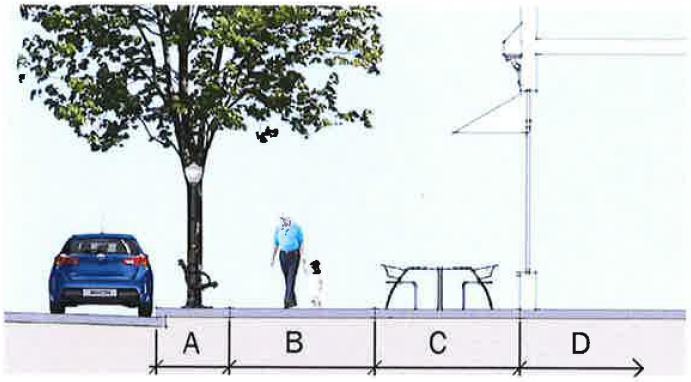
(1) Within the building transition zone, the Planning Board may require the lot owner to provide planters, trees, shrubs, or other landscaping to enhance the appearance of the streetscape. Ornamental fencing four feet or less in height may be provided to separate privately owned space from public space. Chain link, vinyl, and solid fencing shall be prohibited. For commercial uses, display areas, and outdoor dining and seating areas may be provided.

(2) A pedestrian clearway, at least eight feet wide, with unobstructed space for pedestrian activity shall be provided along the sidewalk, unless site conditions require a narrower clearway. Within the street transition zone, if space permits, lot owners may place benches, tables, and outdoor seating areas with the approval of the Department of Public Works. The Planning Board shall require the planting of street trees on average 30 feet to 40 feet apart as a condition of site plan approval, whenever street and sidewalk conditions permit.

(3) The Planning Board may require the placement of bicycle racks of an approved design within the street transition and building transition zones. The Planning Board may require any building containing 5,000 square feet or more of floor area to provide one bicycle rack or equivalent indoor bicycle parking space for every 2,000 square feet of floor area.

(4) The Planning Board may require that an applicant constructing a building greater than 10,000 square feet in floor area pay for the provision of related street improvements to improve pedestrian and/or bicycle safety.

Figure 18-6: Parts of the Streetscape



A = Street Transition Zone
B = Pedestrian Clearway
C = Building Transition Zone
D = Building Frontage

I. Site plan and special permit amendments. For any proposed change to an approved site plan, the applicant shall meet with the Building Inspector who shall make a determination as to whether or not the proposed change is significant. If the Building Inspector determines that the change is significant (e.g., a change in dimensions of more than 10% shall be presumed to be significant), the application shall be referred to the Planning Board for an amendment to the site plan or special permit, as appropriate. If the Building Inspector determines that the change is not significant and otherwise complies with applicable requirements, the Building Inspector is authorized to issue a building permit without further review.

J. Design standards.

(1) Because of the design standards in this section, the architectural review provisions of Chapter 86 shall not apply within the CMS District. In addition to the preceding sections of this article, all new buildings or substantial alterations of existing buildings shall comply with the following design requirements. These design standards are intended to promote the following purposes:

(a) Preserve and enhance the unique character and general public welfare of the City of Beacon;

(b) Promote pedestrian access and activity, as well as a general sense of area security;

(c) Restore and maintain the role of streets as civic and social spaces, framed by active uses;

(d) Encourage economic development and a convenient mix of uses and services; and

(e) Support a sense of design context that appropriately relates historic buildings, general facade and window patterns, and traditional streetscapes in the area to new redevelopment efforts, while still allowing architectural flexibility.

(2) Key terms: Standards using the verb "shall" are required; "should" is used when the standard is to be applied unless the Planning Board finds a strong justification for an alternative solution in an unusual and specific circumstance; and "may" means that the "standard" is an optional guideline that is encouraged but not required.

(3) Proposed new buildings should be compatible with nearby historic-quality buildings along Main Street. References to the existing context should include scale, type and texture of materials, roof and cornice forms, spacing and proportion of windows and doors, signs, and street-front fixtures. Building exteriors in or directly adjoining the Historic District and Landmark Overlay sections of the CMS District shall reinforce historic patterns and neighboring buildings with an emphasis on continuity and compatibility, not contrast, but new construction may still be distinguishable in architectural details, most evident in window construction and interiors.

(4) Buildings should have a top-floor cornice feature and first-floor architectural articulation, such as a storefront with a secondary cornice or an architecturally emphasized entrance doorway, to accent the central body of the building.

(5) Architectural features and windows shall be continued on all sides of the building that are clearly visible from a street or public parking area, avoiding any blank walls, except in cases of existing walls or potential common property walls. Larger buildings shall incorporate significant breaks in the facades and rooflines at intervals of no more than 35 feet.

(6) Building elements that provide additional architectural interest, such as balconies, bay windows, open porches, and

cornices, may encroach up to four feet above the sidewalk, if the bottom of the encroaching building elements is at least 12 feet above grade.

(7) Metal, glass or canvas-type awnings and canopies or projecting signs are encouraged and may encroach up to six feet over the sidewalk above seven feet. Vinyl awnings are discouraged unless the applicant can demonstrate to the Planning Board's satisfaction that the finish and design of such awning are of high quality, aesthetically pleasing and meet the intended standards of the district.

(8) Buildings shall have a front entrance door facing the primary street and connected to the sidewalk. Front entrance doors for commercial buildings and retail storefronts shall be active and provide main access during business hours.

(9) Primary individual window proportions shall be greater in height than in width, but the Planning Board may allow exceptions for storefront, transom, and specialty windows. Mirrored, reflective, or tinted glass, all-glass walls, and exterior roll-down security gates shall not be permitted. Any shutters shall match the size of the window opening and appear functional.

(10) Commercial buildings shall have at least 70% glass on the first-floor facades, located between two feet and 10 feet above the sidewalk. Main Street or East Main Street buildings should have at least 30% glass on the upper-floor facades.

(11) Finish building materials should be wood, brick, traditional cement-based stucco, stone, smooth cast stone, smooth-finished fiber-cement siding, or other materials deemed acceptable by the approving body. Vinyl, aluminum or sheet metal siding or sheet trim, exposed concrete blocks or concrete walls, plywood or other similar prefabricated panels, unpainted or unstained lumber, synthetic rough-cut stone, synthetic brick, synthetic stucco, exterior insulation and finishing system (EIFS), direct-applied finish system (DAFS), and chain link, barbed wire, plastic, or vinyl fencing shall not be permitted.

(12) Materials and colors should complement historic buildings on the block. Fluorescent, neon, metallic, or other intentionally garish colors, as well as stripes, dots, or other incompatible patterns, shall be prohibited.

(13) Lighting fixtures shall be a maximum of 15 feet in height, except pole lights in rear parking lots shall be a maximum of 20 feet high. Lighting shall be energy efficient, have full spectrum color quality, and, except for short-term event lighting, shall prevent any lighting above 500 lumens that directly projects above the horizontal level into the night sky with full cut-off fixtures.

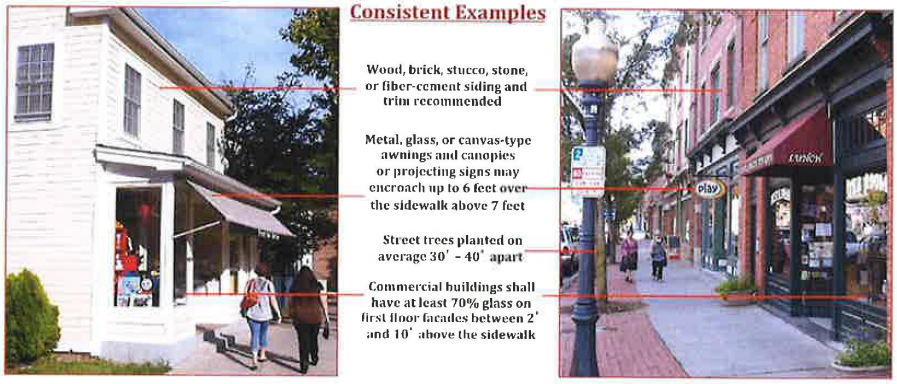
(14) Mechanical equipment and refuse containers shall be concealed from public view by approved architectural or landscaping elements and shall be located to the rear of the site. Window or projecting air conditioners shall not be permitted on the front facade of new buildings or additions.

(15) The Planning Board may waive setback requirements for landmark civic buildings, including government buildings, schools, libraries, or places of worship, and for pedestrian-oriented places, such as public greens or plazas and outdoor eating areas.

(16) The following Figure 18-7 provides annotated photographs to illustrate design standards in this section:

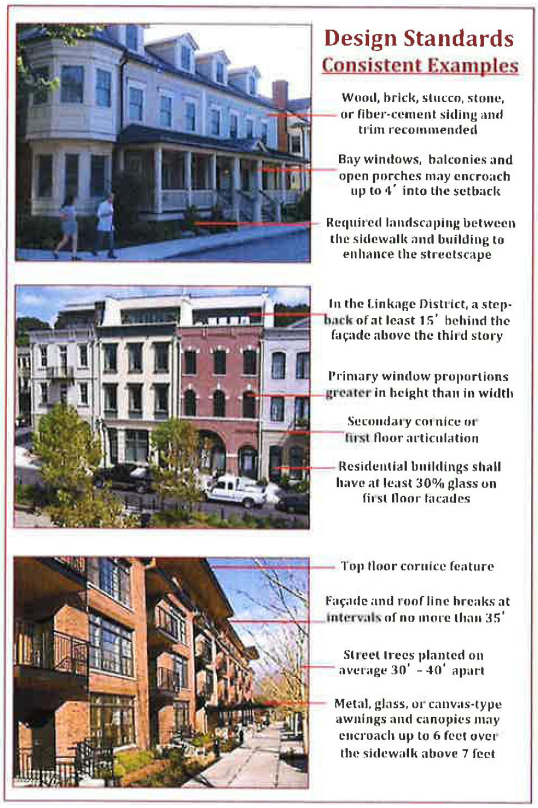
Figure 18-7: Design Illustrations

Design Standards
Consistent Examples



Design Standards
Inconsistent Examples

Design Standards
Consistent Examples



K. Main Street infill strategies illustrative sketch plan. This sketch plan provides one possible set of design solutions for infill development with parking to the rear, which was included in the 2017 Comprehensive Plan Update as an illustration of planning principles for the Central Main Street District. The Plan also recommended the provision of periodic pocket parks or plazas and transit shuttle stops to be coordinated with new development projects and civic uses (see pages 61-67).[2]

Figure 18-8: Central Main Street Infill Strategies and Illustrative Sketch Plan

2. **Editor's Note: The 2017 Comprehensive Plan Update is on file in the City offices.**

City of Beacon Workshop Agenda
9/30/2019

Title:

A Resolution Authorizing the Submission of the Fiscal Year 2020 Dutchess County Community Development Block Grant Program Application for Construction of Walkway in Memorial Park Along Wilkes Street

Subject:

Background:

ATTACHMENTS:

Description	Type
A Resolution Authorizing the Submission of the Fiscal Year 2020 Dutchess County Community Development Block Grant Program Application for Construction of Walkway in Memorial Park Along Wilkes Street	Resolution
Wilkes Street Walkway	Backup Material
Wilkes Street Walkway Cost Estimates	Backup Material

CITY OF BEACON
CITY COUNCIL

RESOLUTION NO._____ OF 2019

A RESOLUTION AUTHORIZING THE SUBMISSION OF THE FISCAL YEAR 2020 DUTCHESS COUNTY COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM APPLICATION FOR CONSTRUCTION OF WALKWAY IN MEMORIAL PARK ALONG WILKES STREET

WHEREAS, City of Beacon is participating in the Dutchess County Community Development Consortium for Fiscal Year 2020, and

WHEREAS, input from citizens and groups has been received and considered, and

WHEREAS, an application has been prepared which addresses Beacon community concerns; and

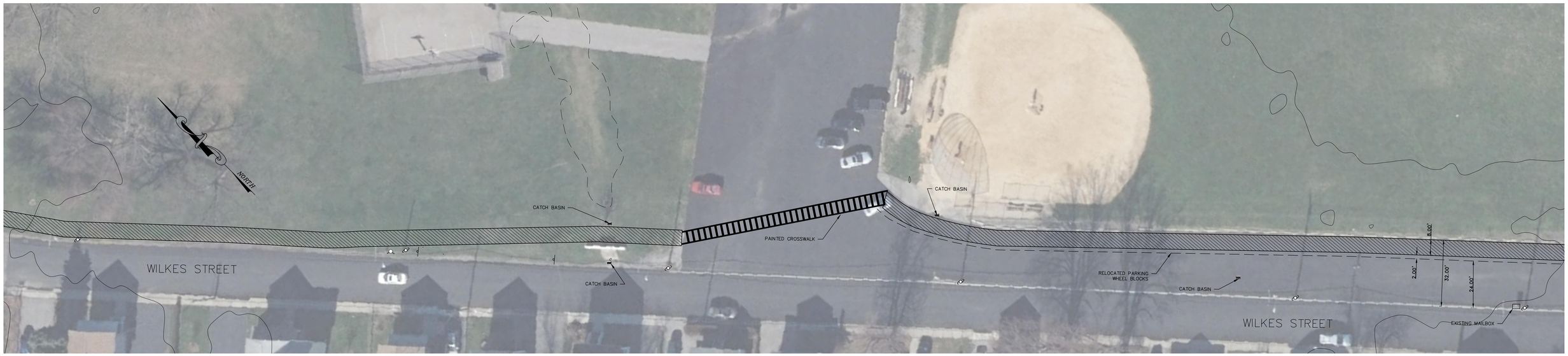
NOW, THEREFORE BE IT RESOLVED, that the Dutchess County Community Development Block Grant Program for the above referenced activity is approved.

BE IT FURTHER RESOLVED, that the submission of said application to the Dutchess County Department of Planning and Development be and hereby is authorized.

Resolution No.____of 2019		**Date: _____**					
¨ Amendments					**¨ 2/3 Required**		
¨ Not on roll call			**¨ On roll call**			**¨ 3/4 Required**	
Motion	Second	Council Member	Yes	No	Abstain	Reason	Absent
		Terry Nelson					
		John Rembert					
		Lee Kyriacou					
		George Mansfield					
		Jodi McCredo					
		Amber Grant					
		Mayor Randy Casale					

LOCATION PLAN

1 INCH = 2000 FEET



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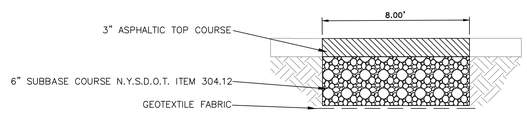
LEGEND

- EXISTING FIRE HYDRANT
- EXISTING SIGN
- EXISTING UTILITY POLE
- PROPOSED WALKWAY



WALKWAY DETAIL

NOT TO SCALE

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)

1 inch = 20 ft.

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(845) 294-3700

WALKWAY PLAN PREPARED FOR

WILKES STREET WALKWAY

CITY OF BEACON
DUTCHESS COUNTY, NEW YORK

Drawn By:	Checked By:	Scale:	Tax Map No.:
CB		1" = 20'	N/A

Date: SEPTEMBER 13, 2019
Revisions:
CAD File: 19A55-SITEPLANALT.DWG
Layout: SITE PLAN
Sheet No.: 1 OF 1
Drawing No.: C.3.0
A - 19 - 5855 - 01

WILKES STREET WALKWAY
CITY OF BEACON, DUTCHESS COUNTY, NY

All items are *complete items* & include furnishing, installation, excavation, backfilling, labor, etc., unless mentioned otherwise in this Bid Form.

BIDDER will complete the BASE BID work on **Wilkes Street Walkway** using the following unit prices:

Item #	Item Description	Unit	Est. Qty	Total Price Per Unit (Material, Labor, Installation, etc.)	Total Amount
1	Bonds and Insurance	LS	1	$15,000.00	$15,000.00
2	Removal and stockpiling of topsoil; excavation of existing subgrade below topsoil to allow for geotextile fabric, 6" of Select Material No. 4 and 3" of asphalt in areas of newly proposed walkway. Includes disposal of all wastes, grading, and compaction.	SY	1400	$15.00	$21,000.00
3	Installation of new street sign and/or relocation of existing street sign	Each	1	$250.00	$250.00
4	Installation of painted striping for crosswalks and hatched areas as shown on plans	LF	665	$4.00	$2,660.00
5	Installation of geotextile fabric for jogging trail	SY	1400	$1.50	$2,100.00
6	Installation, grading and compaction of 6" Select Material No. 4 (NYSDOT Item 304.12) for jogging trail subbase.	SY	1400	$25.00	$35,000.00
7	3" top course, Type 6FX for jogging trail top course	SY	1400	$40.00	$56,000.00

WILKES STREET WALKWAY
City of Beacon, Dutchess County, NY

Item #	Item Description	Unit	Est. Qty	Total Price Per Unit (Material, Labor, Installation, etc.)	Total Amount
8	Relocation of existing parking wheel blocks as shown on plans or as directed by Engineer	Each	40	$200.00	$8,000.00
9	Grading, topsoiling, and seeding all disturbed areas.	LS	1	$20,000.00	$20,000.00
10	Additional Select Material No. 4, as ordered by Engineer, installed and compacted.	CY	5	$50.00	$250.00
				10% Contingency	$16,026.00
				Estimated Total Construction Cost	$176,286.00
				Surveying	$7,500.00
				Engineering	$15,000.00
				Construction Administration	$5,000.00
				Construction Observation (30-Days)	$16,000.00
				Estimated Total Project Cost	$219,786.00

City of Beacon Workshop Agenda
9/30/2019

Title:

Personnel

Subject:

Background:

ATTACHMENTS:

Description	Type
Memorandum from the Water and Wastewater Superintendent Regarding a Promotion	Backup Material
Memorandum from the Water and Wastewater Superintendent Regarding a Promotion	Backup Material

CITY OF BEACON
New York

WATER DEPARTMENT 845-831-3136

To: Anthony Ruggiero

From: Edward Balicki

Re: Department Promotion

Date: August 16, 2019

Anthony,

I would to recommend Bryan Conti for promotion to Water and Sewer Maintenance Mechanic. This would be one step higher than his current position as Water and Sewer Maintenance Mechanic.

Bryan has distinguished himself as a very dependable, conscientious and responsible employee. During his employment with the City Bryan has acquired the knowledge to perform water taps, flush or rod plugged sewers, shut off water mains, plow snow and repair broken water mains. Prior to Bryan's employment with the City he had already attained a CDL. Bryan can operate heavy equipment such as the vac truck, sewer jet truck and drive the large dump trucks. Bryan assists the Highway Department with snow plowing, snow removal and milling and paving of City streets.

This promotion was include in the 2019 operating budget. If you have any questions please feel free to contact me. Thank you for your consideration.

Respectfully,

Edward Balicki
Chief Operator
City of Beacon

CITY OF BEACON
New York

WATER DEPARTMENT 845-831-3136

To: Anthony Ruggiero

From: Edward Balicki

Re: Department Promotion

Date: August 16, 2019

Anthony,

I would to recommend George Joseph for a promotion to Water and Sewer Maintenance Mechanic. This would be one step higher than his current position as Water and Sewer Maintenance Helper. We currently have two open Water and Sewer Maintenance Mechanic titles open from the promotions of Sean Burke and Andrew Stevens to HMEO.

During his time with the City he has distinguished himself as a very dependable, conscientious and responsible employee. George has learned to perform water main taps, clear plugged sewers, repair water main breaks and installation of fire hydrants. George assists the Highway Department with snow removal and milling and paving of City streets. Recently George has also learned how to read, repair and install water meters. Furthermore George has expressed interest in transferring to the filter plant to become a water plant operator.

This promotion and salary was included in the 2019 operating budget. If you have any questions please feel free to contact me. Thank you for your consideration.

Respectfully,

Edward Balicki
Chief Operator
City of Beacon

City of Beacon Workshop Agenda
9/30/2019

Title:

Real Property

Subject:

Background: