

Town of **Belmont** MASSACHUSETTS



**Fiscal Year 2023
Capital Requests
January 13, 2022**

Cover Photo Credit to Amanda Chambers

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TOWN ADMINISTRATOR
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TO: Select Board
Capital Budget Committee
Warrant Committee

FROM: Glenn Clancy, Acting Assistant Town Administrator

CC: Patrice Garvin, Town Administrator

RE: Town Administrator's Capital Memorandum

Attached is a listing of capital requests, which will be reviewed by the Capital Budget Committee for a final recommendation and vote. This is a five-year plan which contains the requests for FY2023 as well as initial requests for fiscal years 2024- 2027.

The annual capital needs of the Town are larger than the ability to fund. FY2023 requests from Department Heads total \$5,422,253 of which \$3,645,321 is available to fund these projects. The discretionary capital portion of the total before identifying any money to be turned back from open projects is \$1,549,953. The Town has been struggling to adequately fund its capital needs due to limited revenue growth. Absent new sources of funds, our capital needs will continue to be inadequately addressed.

Department	Location	Project Title	Fiscal Year	Category	Type	Estimate Basis	FY2023	Useful Life	Description	Urgency
Facilities	OTHER	2022 Hybrid Explorer	FY23	Vehicle	New	Quote	\$55,666	5	New Fleet Vehicle for Facilities	2 - System is likely to fail
Facilities	BUTLER ELEMENTARY SCHOOL	Fix Masonry Facade	FY23	Public improvement	Reconstruction	Consultant	\$487,000	25	Repair weaknesses in the schools brick façade by repointing and grouting vulnerable areas.	3 - System has needed unanticipated
Facilities	BUTLER ELEMENTARY SCHOOL	BUTLER PHASE VI WINDOW REPLACEMENT	FY22 FY23	Public improvement	Replacement	Other	\$235,000	25	Continuation of window replacement project and envelope repointing and sealing. There are 72 remaining windows to be replaced - including those in this request.	6
Facilities	BUTLER ELEMENTARY SCHOOL	Supplemental funding for new Fire Alarm	FY23	Equipment	Replacement	Consultant	\$66,000	15	Start and complete the the upgrade of a new Fire Alarm system	4 - Has outlived its useful life
Facilities	OTHER	New Electric Van	FY23	Vehicle	New	Quote	\$54,756	5	Added to fleet to support new positions within the Facilities Department.	6
Facilities	OTHER	Electric Van	FY23	Vehicle	New	Quote	\$54,704	5	New Electric Van	5 - New: to address quality of life
Facilities	WELLINGTON ELEMENTARY SCHOOL	Replace Heat Exchanger	FY23	Equipment	Replacement	In-house estimate	\$150,000	12	The Heat Exchanger that supports the heating side of the geo thermal system at the Wellington school needs to be replaced to take advantage of the state of the art heating and cooling system. We have made improvements to make the system work during shoulder cooling seasons but it is not able to cool or heat in height of seasons. BMS Programming is also apart of the repair project.	1 - System has failed
Facilities	WINN BROOK ELEMENTARY SCHOOL	Supplemental Funding for a new Fire Alarm and PA	FY23	Equipment	Replacement	Consultant	\$75,000	15	Update the Fire Alarm and PA system at the Winn Brook School. This received approved funding in FY19 FY20, and FY21. This amount will cover the estimated value for the project.	4 - Has outlived its useful life
Facilities Summary							\$1,057,422			
Fire		Air Packs	FY23	Equipment	Replacement	Quote	\$376,584	10	Requesting funds to replace outdated air packs with equipment that meets the current standard. The current air packs are 10 years old and are beginning to experience frequent breakdowns (cost for repairs in past 12 months \$2500). More than the cost for repairs, the downtime for the equipment has become a problem. Current air packs are also 2 editions behind for NFPA safety standards. We are unable to employ current safety standards for air management with this equipment.	2 - System is likely to fail
Fire		Ambulance Replacement	FY23 FY24 FY25 FY26 FY27 FY28	Vehicle	Replacement	Quote	\$80,000	10	This appropriation from EMS Revenue will be \$80,000 per year for 5 years resulting in the purchase of a new vehicle using \$400,000. In purchasing a vehicle in 2021 to replace a 10-year-old ambulance the department has encountered conditions where prices have risen sharply. This appropriation will help ensure adequate funds are available to continue to replace the ambulance in five years. The department will also maintain diligence in monitoring cost trends throughout the five-year span.	4 - Has outlived its useful life
Fire		Cardiac monitor replacement	FY23 FY24 FY25 FY26 FY27 FY28	Equipment	Replacement	In-house estimate	\$7,000	10	Annual request of \$7,000 to replace cardiac monitor after five years. Funds from ambulance revenues. A new monitor is scheduled for purchase in FY 23. The cost will be approximately \$37,000 with a trade-in. A modification of the annual allotment allowing \$10,000 per year for five years is being requested in order to ensure the ability purchase a new monitor in 2028. The technology and capability of this equipment is constantly being updated. In order to allow paramedics to perform the latest advanced interventions our	2 - System is likely to fail
Fire		Power Load Ambulance Cot System	FY23	Equipment	New	Quote	\$42,000	10	This system will be installed in the new ambulance currently on order. It allows patients to be loaded safely into the ambulance. The system greatly lessens the chance for firefighter injury from lifting patients and cot into the ambulance. It also prevents patients from being dropped while lifting into the ambulance and provides a safe connection of the cot to the vehicle lessening the chance for patient injury in the event of a crash.	6
Fire		Replace Staff Car	FY23	Vehicle	Replacement	In-house estimate	\$75,000	10	Staff car assigned to the fire chief. This will replace a 10-year-old (2013) vehicle currently assigned to Fire Prevention. The current chief's vehicle (2017) will be assigned to Fire Prevention. The new purchase will be a Ford Interceptor/SUV hybrid model (similar to current police hybrid vehicles) It shall be upfitted with equipment necessary to operate Incident Command and support Emergency Management functions.	3 - System has needed unanticipated
Fire Summary							\$580,584			
Information Technology		Fiber Reconfiguration Burbank/Wellington	FY23	Equipment	New	Quote	\$20,000	25	Burbank and Wellington are to be spliced into the backbone network for assignment to the High School or Chenery, or both. The objective is to remove the above sites from the current fiber terminations at the Library. Please see attached proposal for complete description.	6
Information Technology		Increase Network Storage	FY23	Equipment	Replacement	Vendor	\$60,000	5	The project is to add disk storage to our SAN. This is to accommodate the need for increased resources for Virtual Servers as well as the need for increase in file storage capacity.	2 - System is likely to fail
Information Technology		Redundant fiber line to antenna site	FY23	Equipment	New	Other	\$150,000	10	This is a request that affects all Town agencies with radios. We currently have a single fiber run from 460 Concord Ave that carries all Town radio connections to the main antenna site at 760 Concord Ave. A short distance of this run is underground, but the majority of the run is pole to pole. If a pole is knocked down it could knock out all Town radio systems.	6
IT Summary							\$230,000			

Department	Location	Project Title	Fiscal Year	Category	Type	Estimate Basis	FY2023	Useful Life	Description	Urgency
Library		RFID Tags and Equipment	FY23	Public improvement	New	Quote	\$ 32,306	20	RFID technology has been utilized more and more in public libraries over the last 10 years, and it's time for Belmont to take this step in service. With RFID tags in each physical item, citizens will be able to check out items faster, with less errors, and in some cases without the support of a staff member. This will not reduce the need for staff, but hopefully help to avoid the need to increase the amount of Library Assistant positions. This work should be completed before the opening of a new library.	5 - New: to address quality of life
Library Summary							\$ 32,306			
Police		Install Uni-Directional Radio Amplifier at 460	FY23	Equipment	New	Quote	\$ 30,000	7	Install UDA in the lower area of 460 Concord Ave, to allow officers to receive radio transmissions	6
Police		Replace EMD Server	FY23	Equipment	Replacement	In-house estimate	\$ 12,000	5	This server controls and stores the Emergency Medical Dispatch software and the quality assurance software. This server was last replaced in FY17	4 - Has outlived its useful life
Police Summary							\$ 42,000			
Public Works		#55 Brush Chipper	FY23	Equipment	Replacement	Quote	\$ 57,950	20	Replace #55 Brush Chipper	4 - Has outlived its useful life
Public Works		Public Shade Tree Inventory & Health Assessment	FY23	Public improvement	New	In-house estimate	\$ 55,000	5	Public shade tree inventory and health assessment.	Top Dept Priority
Public Works - Cemetery		#117 - 1 Ton 4WD Pick-up Truck	FY23	Equipment	Replacement	Quote	\$ 58,310	8	Replace #117 - 1 Ton 4WD Pick-up Truck	3 - System has needed unanticipated
Public Works - Parks		#108 - Small Front End Loader	FY23	Equipment	Replacement	Quote	\$ 112,450	15	Replace #108 - Small Front End Loader	2 - System is likely to fail
Public Works - Parks		#110 - 1 Ton 4WD Pick-up Truck	FY23	Equipment	Replacement	Quote	\$ 58,310	8	Replace #110 - 1 Ton 4WD Pick-up Truck	3 - System has needed unanticipated
DPW Summary							\$ 284,070			
Public Works - Sewer		#2 - Administrative Hybrid Vehicle	FY23	Equipment	Replacement	Quote	\$ 56,765	8	Replace #2 - Administrative Vehicle	3 - System has needed unanticipated
Public Works - Sewer		#21 - 1 Ton 4WD Pick-up Truck	FY23	Equipment	Replacement	Quote	\$ 58,310	8	Replace #21 - 1 Ton Pick-up Truck	3 - System has needed unanticipated
Public Works - Sewer		#24 - Front End Loader	FY23	Equipment	Replacement	Quote	\$ 220,625	15	Replace #24 - Front End Loader	3 - System has needed unanticipated
Public Works - Sewer		Replace Winn Brook culvert on Claflin street	FY23	Public improvement	Replacement	In-house estimate	\$ 250,000	75	Remove the existing brick and stone masonry and to replace with a structure similar to the one that was installed by the library	2 - System is likely to fail
Public Works - Sewer		Replace Trapelo Road Culvert	FY23	Public improvement	Replacement	Quote	\$ 800,000	75	Replace Trapelo Road Culvert - Joint Project with Waltham	2 - System is likely to fail
Community Development		Sewer and Drain Rehabilitation	FY23 FY24 FY25 FY26 FY27 FY28	Public improvement	Reconstruction	In-house estimate	\$ 600,000	75	Investigate, evaluate and mitigate sewer and storm drain failures. Repair / replace mains and services, test water quality of the storm water system and correct deficiencies as required. Fund the Annual MS4 DEP storm water permitting program.	2 - System is likely to fail
Sewer Summary							\$ 1,985,700			
Public Works - Water		#81 Administrative Hybrid Vehicle	FY23	Equipment	Replacement	Quote	\$ 31,575	8	Replace #81 - Administrative Vehicle	3 - System has needed unanticipated
Public Works - Water		Electronic Sign Board	FY23	Equipment	New	Quote	\$ 20,850	10	Electronic sign board	5 - New: to address quality of life
Public Works - Water		Tag Along Compressor	FY23	Equipment	New	Quote	\$ 30,000	10	Tag along compressor	6
Public Works - Water		Trailer Mounted Vacmachine/Valve Turner	FY23	Equipment	New	Quote	\$ 86,850	10	Trailer mounted valve turner	6
Water Summary							\$ 169,275			

Department	Location	Project Title	Fiscal Year	Category	Type	Estimate Basis	FY2023	Useful Life	Description	Urgency
Community Development		Pavement Management	FY23 FY24 FY25 FY26 FY27 FY28	Public improvement	Reconstruction	In-house estimate	\$ 1,857,772	25	Reconstruction of Town roadways utilizing two override sources of funding (2001 and 2015) and Ch 90 state aid (not reflected in the CBC request)	1 - System has failed
Public Works		Sidewalk Maintenance	FY23 FY24 FY25 FY26 FY27 FY28	Public improvement	Reconstruction	Other	\$ 237,730	25	Repair or Replace Cement Concrete Sidewalks and Granite Curbing as needed throughout the town.	1 - System has failed
Pavement Summary							\$ 2,095,502			
Total Discretionary							\$ 2,226,382.00			
Total Sewer							\$ 1,985,700.00			
Total Water							\$ 169,275.00			
Total Pavement							\$ 2,095,502.00			
Grand Total							\$ 6,476,859.00			



Commonwealth of Massachusetts

Town of Belmont

Capital Request #FY 23 CBR-15

Department:
Facilities

Title:
2022 Hybrid Explorer

Description: New Fleet Vehicle for Facilities

Location (if available): OTHER

FY 23: \$55666

FY 24: \$

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$55666

Project Category: Vehicle

Project Type: New

Basis For Estimate: Quote

Life Expectancy: 5

Operational Cost Impact: Neutral

Note:

Urgency: 2 - System is likely to fail

Note: Current Facility Director's vehicle has 95K miles on it and if approved the vehicle will have over 120K when the vehicle becomes available. If not approved and put off for another year the vehicle will be over 150K. This is a take home vehicle and must be reliable for emergency responses. The vehicle is spec'd as a Hybrid to respect the energy conservation guidelines. A 100% electric vehicle is not a reliable source for emergencies and storms situations.

Previous Phases: No

Can This Be Phased: No

Grants:

2022 Explorer 4dr 4x4 Limited (K8F)

Price Level: 220



Client Proposal

Prepared by:
Stan Tagarelis
Office: 617-924-3673
Date: 11/03/2021





Prepared by: Stan Tagarelis

11/03/2021

Watertown Ford, Inc. | 625 Pleasant Street Watertown Massachusetts | 024722406

2022 Explorer 4dr 4x4 Limited (K8F)

Price Level: 220

Major Equipment

Fuel Economy

City

23 mpg



Hwy

26 mpg

As Configured Vehicle

MSRP

110V/150W AC Power Outlet	Included
Memory Driver's Seat	Included
Hands-Free Foot-Activated Liftgate	Included
Sideview Mirrors w/Gloss Black Caps	Included
3rd Row PowerFold Seat	Included
Power Tilt/Telescoping Steering Column	Included
Active Noise Cancellation	Included
High-Series Brakes	Included
T165/70R18 Mini Spare Tire	Included
Pedestrian Alert Sounder	Included
Front License Plate Bracket	N/C
Iconic Silver Metallic	N/C
Ebony	N/C

SUBTOTAL	\$52,280.00
Destination Charge	\$1,245.00
TOTAL	\$53,525.00

Prices and content availability as shown are subject to change and should be treated as estimates only. Actual base vehicle, package and option pricing may vary from this estimate because of special local pricing, availability or pricing adjustments not reflected in the dealer's computer system. See salesperson for the most current information.

VEHICLE	YEAR	Make & Model	VIN	PLATE	MILEAGE	Designee	Notes
FAC-1	2014	CHEVY Silverado 3500HD	1GC3KZCGXEF171461	M87257	26992	School - Maint	Hand down from DPW
FAC-2	2003	CHEVY Silverado P/U	1GCHK24U63E167573	M71175	60289	N/A	Taken of the road 7/21
FAC-3	2018	CHEVY CITY EXPRESS VAN	3N63M0YN1JK696358	M99384	21700	School - Maint	
FAC-4	2010	CHEVY Silverado P/U	1GC3KVBG0AF154821	M82989	59638	Town - Maint.	Hand down from DPW
FAC-5	2017	CHEVY VAN	1GCZGHFG2J1169213	M99234	20842	HVAC	
FAC-6	2002	FORD F-450	1FDXF47F62ED10699	M2071	71034	Carp./ Elec	Hand down from DPW
FAC-7	2017	NISSAN LEAF (Electric)	1N4BZ0CP1HC302369	M3972A	37757	Admin.	Does not hold charge no long distances
FAC-8	2018	FORD Explorer	1FM5K8D82KGA16415	M2057	94890	Director	Loaner from DPW



Commonwealth of Massachusetts
Town of Belmont
Capital Request #FY 23 CBR-24

Department:
Facilities

Title:
Fix Masonry Facade

Description: Repair weaknesses in the schools brick façade by repointing and grouting vulnerable areas.

Location (if available): BUTLER ELEMENTARY SCHOOL

FY 23: \$475000

FY 24: \$

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$475000

Project Category: Public improvement

Project Type: Reconstruction

Basis For Estimate: Consultant

Life Expectancy: 25

Operational Cost Impact: Decrease to expenses

Note: Reduces potential spalling of interior wall surfaces and moisture infiltration into the building.

Urgency: 3 - System has needed unanticipated repairs

Note:

Previous Phases: No

Can This Be Phased: No

Grants:



November 10, 2021

Mr. David Blazon
Director of Facilities
Belmont Public Works
37 C Street
Belmont, MA 02478

Re: Building Envelope Survey
Daniel Butler Elementary School
Belmont, MA

Dear Mr. Blazon:

On August 16, 17, and 18, 2021, an enclosure condition assessment was performed on the Daniel Butler Elementary School at 90 White Street in Belmont by representatives of R. J. Kenney Associates, Inc. (RJK). The Town of Belmont, through the office of Belmont Public Works, requested that RJK perform a building envelope study to determine and report on the existing condition of the entire building envelope, including the foundation, brick masonry, windows, and roofs. The goal of the study was to identify the cause(s) of various active water leaks, provide Scope of Work recommendations for maintenance and rehabilitation of the building envelope, develop a plan to address the various building envelope components, including recommendations on the capital project organization, prioritization, and cost estimates associated with each capital project. This assessment and our findings as documented herein represent the extent of our investigation for the project to date.

1. BUILDING DESCRIPTION

The original Daniel Butler Elementary School Building was completed in 1900. Additions were made in 1923, the 1930's, and 1979, which cumulatively brought the footprint of the entire school to roughly 57,300 square feet across three levels. New windows have been installed in various locations on all of the buildings within the last twenty years, although some older windows remain. (Figure 1)

1.1 The Original 1900 Building

The masonry of the original 1900 Building (Building B as indicated on the 1979 addition drawings) is laid in a running bond, with quoins at elevation corners and a dentil band at the cornice. There is an ogee-shaped water table at the floor line between the grade level and the first floor level and is typical to all the building additions. The building has punched masonry openings with aluminum replacement windows, limestone sills and triple course jack arches, with keystones above the windows. The windows at grade level do not have keystones within the jack arches. The foundation is of granite stone construction. The former entrance on the north elevation is now a window. There is a brownstone balcony construction over the former entrance with wrought iron railings and wood moldings framing the now window openings. The soffit construction is wood plank with wood brackets extending to a fascia board and hung copper gutters, which are also tied-in to the roof. The roof is a high slope configuration clad with gray slate laid in a standard pattern and is original to the building. The slate is installed

over asphalt saturated rag felt laid on wood sheathing. Hip slates are installed so that butt joints do not join with the roof courses, typical of a saddle hip. The roof is flashed with copper at the dormers and lead-coated copper at the ridge, while lead was used at interfaces with the elevator tower. Wire loop snow guards are present on all elevations. (Figures 2 - 4)

1.2 The 1923 Addition

The first addition (Building A as indicated on the 1979 addition drawings), completed in 1923, was constructed off the south elevation of the original school. The brick used was laid in a common bond with Flemish headers at every eighth course, like that of the original building. This style of brick coursing is consistent in the construction of the 1930's addition (Building C) and the 1979 gym addition. The building has punched masonry openings with aluminum replacement windows, precast concrete sills, and triple course jack arches with keystones like the original building. The foundation is a poured-in-place concrete construction. The detail work of the arched west elevation entry portal, the cornice band molding, and the south portico entry are all done in precast concrete. The roof is a low slope configuration with an aluminum coping installed over the parapet. The roof is a single membrane TPO roofing system installed over tapered insulation. This low slope roof construction type is the same for each subsequent addition. The elevator penthouse roof, part of the 1979 addition, located at the connection between the two buildings, is clad in lead-coated copper double-lock standing seams that drains back onto the low slope roof. (Figures 5 - 7)

1.3 The 1930 Addition

The 1930 addition (Building C as indicated on the 1979 Addition Drawings) was constructed off the east elevation of the original school and is clad in brick masonry resting on a poured-in-place concrete foundation. The building has punched masonry openings with aluminum replacement windows, limestone sills, and a single course jack arch header on a steel lintel with skewbacks but no keystones. There is a limestone band molding near the top of the building at the roof line and the parapet has an aluminum coping. A soldier course of masonry is laid below the ogee-shaped water table. The former entrance on the north elevation, now a window, is clad in limestone and flashed with copper at the top of the pediment. (Figures 11 - 15)

1.4 The 1979 Gymnasium Addition

A gymnasium was constructed to the south of Building C in 1979. The wall construction is CMU interior with a brick veneer to match the aesthetic of the older buildings on the exterior. There are vertical control joints approximately every 15' that are the full height of the brick veneer and appear to be filled with polyurethane sealant that has failed. A soldier course of brick is laid at the top of the wall, above which are installed light-diffusing, insulated, structural sandwich panels. The panels are similar in construction to that of a Kalwall system. The panels have faded and are degrading due to UV and atmospheric exposure. There are numerous broken or cracked panels in the system and the sealants of the system are failing. The wall construction supports an open web truss system and what appears to be tectum decking for the roof. The single membrane roofing system is as described for Building A. (Figures 8 - 10)

1.5 The Connector

The “connector”, the covered corridor portion of the 1979 addition, encloses the space between the gymnasium and Buildings A, B, and C. Part of the connector is comprised of an aluminum-framed sloped glazing skylight adjacent to the elevator tower. The single ply TPO membrane roofing system installed on the connector is turned up onto a curb at the base of the skylight, over which a lead-coated copper flashing is installed. The base of the sloped glazing is flashed over the lead flashing. The head and rake conditions of the skylight are flashed into the adjacent walls of Building A and the elevator tower with lead-coated copper. The elevator tower intersects the soffit of Building B, interrupting the gutter line where a downspout now runs down the elevator tower wall. The standing seam roof of the Building A penthouse extends over the elevator tower, where it is flashed to the parapet with lead-coated copper. No coping cap is installed over the parapet. Similarly, the connector entrance parapets at the south and east elevations have no coping. (Figure 16)

2. BACKGROUND

Jay Marcotte with the Public Works Department contacted RJK in March of 2021. He requested that a Building Envelope study be conducted on the school building.

An initial site meeting took place on April 6, 2021, where the general condition of the building was discussed and site logistics were reviewed.

RJK performed a review of documents provided by the client, which consisted of plan and elevation drawings for each building, and which were incorporated into the roof plan and elevation drawings developed for the on-site survey.

The assessment was based on a visual survey of the building from the ground using binoculars and from an aerial lift. Exploratory probes of building envelope components were not included in the assessment. Locations of exterior wall distress and other components were documented on the elevation drawings, which are attached to this report as Appendix B. These annotated elevations of the building identify types and locations of distress noted on the exterior walls.

3. OBSERVATIONS

Our observations are annotated in Appendix B. From our visual survey of the buildings, we were able to identify items or systems that require repair or replacement. Included below is a general description of the condition of each of the major building enclosure components organized by building.

3.1 1900 Building (Building B)

3.1.1 Roof Systems

- The steep slope slate roof system appears to be original and in poor condition. The slate is 120 years old and has reached the end of its service life. A majority of the slate has either cracked, chipped, split, broken, or come loose. The copper flashings and sealants at many locations have failed or are missing, and there are numerous

indications of repair to the system. The wire loop snow guards are corroding; some are bent flat and some are broken or missing. (Figures 17 - 20)

- The slate used on the cheek walls and gable ends of the dormers appears to be original and in fair to poor condition. This slate is reaching the end of its service life. (Figures 21 - 23)
- The copper gutters appear to be original and in poor condition. They are reaching the end of their service life. Seams have opened along the gutter box and at connections to downspouts; the gutters have been deformed due to ice damage; some of the gutter ties and their fasteners have failed and flashings and sealants have failed or are missing. Some soldered seams in the gutters have been repaired with roofing mastic. The repair mastic has deteriorated. Sealant between the copper counterflashing and brick has also deteriorated and there appears to have been numerous repairs to the system. (Figures 24 - 27)
- The copper flashings on the north elevation of the elevator tower at the roof line between the 1900 Building (Building B) and the 1920 Addition (Building A) have been covered over in roofing cement. This area drains along the elevator shaft wall to the gutter system where the elevator shaft interrupts the soffit of the original 1900 Building. A downspout from the collection box at this location was found to be hanging from the collection box and not attached to the masonry wall. (Figures 28 - 30)
- The metal cladding seams and drip edge over the brownstone ornamental work on the north elevation needs repair. The soldered seams have opened and the drip edge has bent back. (Figures 31, 32)

3.1.2 Soffits and Wood Trim Work

- The wood soffit boards of the main roof appear to be original and in fair to poor condition. They are reaching the end of their service life. Many boards have cupped and are deteriorating where the board ends intersect or are touching masonry.
- The soffit overhangs appear to have moved/shifted and there is a gap between the top of the masonry wall and the soffit on each elevation of the building. Bird droppings are visible at some locations on the masonry wall just below the soffit. Birds have been reported in the attic space of the 1900 Building and animal carcass was observed in the eaves of the attic. The soffit fascia boards and moldings pieces are deteriorating, opening up at the outside corners, or have warped. (Figures 33, 34)
- Some of the soffit brackets are detached. (Figure 34)
- The general condition of the dormer trim work is in poor condition. The boards have opened at the corners and seams, warped, split, deteriorated, or have been covered over with brake metal. There have been numerous repairs to the dormers. (Figures 35 - 37)

3.1.3 Masonry

- The brownstone ornamental work on the north elevation is in fair to good condition. The brownstone has efflorescence and staining from airborne soot and water runoff. (Figures 31, 32)
- Brick mortar joint deterioration was noted at many isolated locations throughout the brick façade. Some repointing work was observed. (Figures 38 - 40)
- Mortar joints below and behind downspouts are missing and/or are severely deteriorated. (Figures 41, 42)
- Through-masonry cracking was observed, typically originating at window head and sill conditions, and combined with step cracking of the mortar joints. (Figure 43, 44)
- Mortar joints of the triple course jack arches with keystones above the windows are missing and/or deteriorated and the brick masonry is shifting down in several locations. (Figures 45, 46)
- Brick masonry and mortar joints are damaged due to anchors having been installed and then removed. (Figures 47, 48)
- Mortar joints of the limestone sills and granite sills are typically deteriorated and/or missing. (Figures 49 - 51)
- The mortar joints between the first course of brick and the stone accent band or concrete at grade are deteriorated and contain open voids on the east elevation between the 1900 Building and the 1930 Addition, Building C. (Figures 52, 53)
- Freeze thaw damage has opened gaps between the poured concrete retaining wall and masonry at the entrance to the connector on the north elevation. Freeze thaw has also deteriorated the walkway around the railing posts, at the base of the retaining wall, and around the drain cover. (Figures 54 - 56)
- The head mortar joints of the ogee-shaped water table masonry accent band at the second floor are typically deteriorated, contain open voids and have algae or dirt on them throughout. (Figure 57)
- Algae growth on the masonry is occurring at the northeast corner from grade to the level of ornamental brick water table at the second floor level. (Figures 58)

3.1.4 Sealant Joints

- Sealant joints are deteriorated on the north, south, east, and west elevations where the gutter flashing interfaces with the masonry. Sealant in these locations is embrittled and contain large voids.
- Sealant at the perimeter of windows are generally in good condition. Some windows were obscured from visual survey, due to protective screens installed over the windows in the openings.
- The sealant at through-wall vent perimeters are failing. Sealant joints are deteriorating, embrittled, and contain large voids. (Figures 59)

3.1.5 Windows

- The aluminum windows appear to be generally in good condition. Some windows were obscured from visual survey due to protective screens installed over the windows in the openings.

3.1.6 General Cleaning

- The brownstone balcony construction over the former entrance on the north elevation is significantly stained. (Figures 31, 32)
- Areas of the masonry are stained and contain organic growth. (Figures 51, 52, 57, 58)

3.2 1920 Addition (Building A)

3.2.1 Roofing Systems

- The roof is a Sarnafil single ply membrane TPO roofing system installed over tapered insulation. The membrane is approaching the end of its service life. The membrane is beginning to degrade. It is estimated that the membrane could last another 4 - 6 years with normal conditions before needing to be fully replaced. (Figures 60 - 64)
- TPO laps installed at the south elevation portico entry coping are failed. (Figure 65)

3.2.2 Masonry

- Cracked or damaged precast architectural elements are present on all elevations, primarily at the windowsill condition but also at the west elevation entry portal. (Figures 66 - 70)
- Brick mortar joint deterioration was noted at many isolated locations throughout the brick façade. Some repointing work was observed. (Figures 71, 72)
- Through-masonry cracking was observed in many locations, typically originating at window head and sill conditions and combined with step cracking of the mortar joints. (Figure 73)
- Mortar joints of the precast sills are typically deteriorated throughout. (Figure 74)
- Mortar joints below and behind downspouts are missing and/or severely deteriorated. (Figure 75)
- The head mortar joints of the ogee-shaped water table masonry accent band at the second floor are typically deteriorated, contain open voids, and have algae or dirt on them throughout. (Figure 76)
- There are several locations along the south elevation parapet where the brick masonry has spalled below the metal coping. (Figures 77, 78)
- There are numerous locations of efflorescence on the underside of precast band molding/cornice that has bubbled the finish paint. These areas typically coincide with precast butt joint locations. (Figures 79, 80)

3.2.3 Sealant Joints

- Sealant at the perimeter of windows is generally in good condition. Some windows are obscured from visual survey due to protective screens installed over the windows in the openings. The sealant at through-wall vent perimeters are failing. Sealant joints are deteriorating, embrittled, and contain large voids. (Figures 81, 82)

3.2.4 Windows

- The aluminum windows appear to be generally in good condition. Some windows are obscured from visual survey, due to protective screens installed over the windows in the openings. (Figure 82)

3.2.5 General Cleaning

- The south portico entry cornice molding is significantly stained. (Figure 83)
- The precast sills on the east elevation contain organic growth. (Figure 84)
- Efflorescence at band molding/cornice. (Figures 79, 80)

3.3 1930 Addition (Building C)

3.3.1 Roofing Systems

- The roof is a Sarnafil single ply membrane TPO roofing system installed over tapered insulation. The membrane is approaching the end of its service life. The membrane is beginning to degrade. It is estimated that the membrane could last another 4 - 6 years with normal conditions before needing to be fully replaced. (Figures 85 - 94)

3.3.2 Masonry

- Cracked or damaged limestone architectural elements are present on all elevations, primarily at the windowsill condition. (Figure 95)
- Brick mortar joint deterioration was noted at many isolated locations throughout the brick façade. Some repointing work was observed. (Figures 95 - 97)
- Through-masonry cracking was observed in many locations, typically originating at window head and sill conditions and combined with step cracking of the mortar joints. (Figures 95 - 97)
- Brick masonry and mortar joints are damaged due to anchors having been installed and then removed. (Figure 98)
- Algae growth on the masonry is occurring on the north and east elevations from grade to the level of ornamental brick water table at the second floor level, particularly where there is a tree near the building. (Figure 98)
- The limestone ornamental work around the abandoned entry on the north elevation is in fair to good condition. (Figure 99)
- The head mortar joints of the ogee-shaped water table masonry accent band at the second floor are typically deteriorated, contain open voids, and have algae or dirt on them throughout. (Figure 100)
- Mortar joints of the limestone sills are missing and/or deteriorated.

3.3.3 Sealant Joints

- Sealant at the perimeter of windows is generally in good condition. Some windows were obscured from visual survey due to protective screens installed over the windows in the openings. (Figure 101)
- The sealant at through-wall vent perimeters are failing. Sealant joints are deteriorating, embrittled, and contain large voids. (Figure 101, 102)

3.3.4 Windows

- The aluminum windows appear to be generally in good condition. Some windows were obscured from visual survey due to protective screens installed over the windows in the openings. (Figure 101)

3.3.5 General Cleaning

- The limestone band molding all around the building is stained. (Figures 89, 97 and 101)
- Areas of the masonry are stained and contain organic growth. (Figure 98)
- The ornamental limestone of the former entrance on the north elevation is stained. (Figure 99)

3.4 1979 Gym Addition

3.4.1 Roofing Systems

- The roof is a Sarnafil single ply membrane TPO roofing system installed over tapered insulation. The membrane is approaching the end of its service life. The membrane is beginning to degrade. It is estimated that the membrane could last another 4 - 6 years with normal conditions before needing to be fully replaced. (Figures 103 - 104)

3.4.2 Masonry

- Brick mortar joint deterioration was noted at many isolated locations throughout the brick façade. Some repointing work was observed. (Figure 105)
- The head mortar joints of the ogee-shaped water table masonry accent band at the second floor are typically deteriorated, contain open voids, and have algae or dirt on them throughout. (Figure 107)

3.4.3 Sealant Joints

- Brick vertical control joints are failing. Sealants are deteriorating, embrittled and contain large voids. (Figures 105, 106)
- Sealant at the perimeter of translucent windows is generally in poor condition. (Figures 107, 108)

3.4.4 Translucent Wall System

- The translucent wall system at the gym clerestory is generally in poor condition. (Figures 108 - 111)

3.5 Connector

3.5.1 Roofing Systems

- The roof is a Sarnafil single ply membrane TPO roofing system installed over tapered insulation. The membrane is approaching the end of its service life. The membrane is beginning to degrade. It is estimated that the membrane could last another 4 - 6 years with normal conditions before needing to be fully replaced. (Figures 112 - 117)

3.5.2 Masonry

- The head mortar joints of the ogee-shaped water table masonry accent band at the second floor are typically deteriorated, contain open voids, and have algae or dirt on them throughout. (Figures 118 - 125)
- Through-wall flashings are generally deteriorated and contain open seams. (Figures 118 - 125)

3.5.3 Sealant Joints

- Sealant at the perimeter of the connector roof to wall is generally in poor condition. Sealants are deteriorating, embrittled, and contain large voids. (Figures 118 - 125)

3.5.4 Skylight

- The flashing and rake of the sloped glazing have typically failed. Joints are open and sealant has failed. (Figures 126 - 131)

4. WATER TESTING

Water testing was conducted during our assessment. Testing was performed in general accordance with ASTM E 2128-17 "Standard Guide for Evaluating Water Leakage of Building Walls". Diagnostic water testing was conducted on the walls, roof, and sloped glazing at a total of five areas, in an effort to replicate previously reported water leakage. The test locations are shown on the drawing contained in Appendix B. The results of the individual tests are tabulated in Appendix C. Results of the tests, which recreated water infiltration, are discussed in detail below.

4.1 Test Area 1 - Test 1.1 - Flood Test of Connector Roof Drain and Sump, Column Line 3 (Figures 132 - 133)

- The roof drain was blocked with an inflatable bladder and water was applied to the area until the drain bowl, sump, and TPO in the immediate vicinity of the drain were submerged.
- Water leakage occurred 58 minutes into the test. Water was observed dripping from a hole in the ceiling of the storage room adjacent to the gym. The water leak occurred exactly where the ceiling finish showed previous damage.

4.2 Test Area 5 - Test 5.1 - Elevator Tower Wall Over Sloped Glazing Rake Flashing (Figure 134)

- Water was applied with a spray rack to the elevator tower masonry wall just above the masonry through-wall flashing along the sloped glazing rake.
- Water leakage occurred 20 minutes into the test. Infiltration was observed over the doorway in the ground floor elevator mechanical room. Water leakage had been reported in this location by school staff.

5. DISCUSSION AND RECOMMENDATIONS

Based on the results of our assessment, it is apparent that the brick masonry façades on each of the buildings is in good to fair condition but are in need of significant general maintenance, including flashing work, repointing, limestone and precast patching, and some limited sealant replacement. Once this work is completed, each façade should be pressure washed using a masonry cleaning product.

The low-slope TPO membrane roofing on Building A, Building C, the gymnasium, and on the connector roof is approaching the end of its expected service life. The membrane is beginning to degrade, contract, and thin as the plasticizers are leached out by the sun. It is estimated that the membrane roofing on the school has 5 years of service life before replacement of the roofing is recommended.

The translucent panels along the upper gymnasium walls are in fair to poor condition. The fiberglass sandwich panels are severely degraded due to UV exposure, particularly on the south and east elevations. There are holes in the panels, some of which have been temporarily sealed with tape. The system has reached the end of its expected service life and a full replacement of the translucent panels is recommended.

The slate roof on the original Building B is in poor condition. The roof is 120 years old. The roof exhibits significant signs of deterioration, including cracked slate, missing slate, nail holes, and deteriorated copper flashing and gutters. A full slate roof and copper gutter replacement is recommended. Repair work and painting of the wood soffit and trim at the Building B roof is also recommended.

Immediate localized repairs are recommended for two conditions on the connector roof. The membrane at the roof drain that is leaking into the gym storage room should be replaced. The replaced membrane should extend 5 feet out in all directions from the drain. The second immediate project concerns the metal base flashing at the perimeter of the connector roof. The reglet type flashing is installed into a kerf cut in the adjacent brick walls. The metal flashing has moved in many areas allowing water to bypass the flashing and potentially migrate under the connector roof membrane. Remedial sealant has been applied to the flashing termination but it has failed in many locations. RJK recommends that additional sealant be applied to this interface as a short-term measure. The flashing should be fully replaced when the roof membrane at the connector is replaced.

6. CAPITAL PROJECT ORGANIZATION AND ESTIMATES

Based on the results of our survey and our experience with similar projects, RJK recommends that the following capital projects and emergency repairs be submitted for potential funding. The cost

estimates provided include general condition, overhead/profit, access and engineering/architecture services.

Project Title	Description	Budget Estimate	Priority Level ¹
Slate Roof and Gutter Replacement on 1920 Portion of School (Building B)	Replacement of 120 year old original slate roof, copper flashing, caps, and gutters, and associated wood soffit and trim repair and painting	\$1,600,000	2
Brick Masonry Façade Repair and Maintenance	Flashing work, repointing, limestone and precast patching, and limited sealant replacement	\$475,000	2
Translucent Wall Panel Replacement at Top of Gymnasium Wall	Replacement of 40+ year old translucent wall panels (Kalwall); panels are deteriorated and damaged	\$415,000	3
Emergency Repairs to Roof Drain and Roof Base of Wall Flashing at Connector Roof	Roof drain above gym storage room is leaking; roof to wall base metal flashing is detached and open at the top edge and could allow water to migrate below roof	\$12,000	1

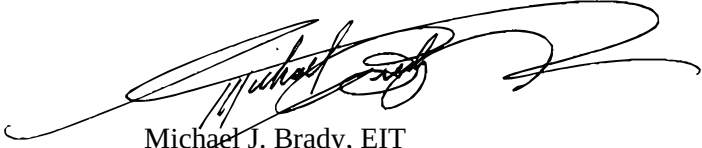
1. Refer to Appendix D for description of the Priority Level

If you should have any questions or require additional information, please do not hesitate to contact our office.

Respectfully submitted,

R. J. KENNEY ASSOCIATES, INC.


Mike Bingley, AIA NCARB
Consultant II


Michael J. Brady, EIT
Field Consultant II

MEB/MJB/RMK/ek

Attachments: Appendix A - Detailed Photographs
Appendix B - Marked-Up Elevations
Appendix C - Test Log
Appendix D - Priority Level Table

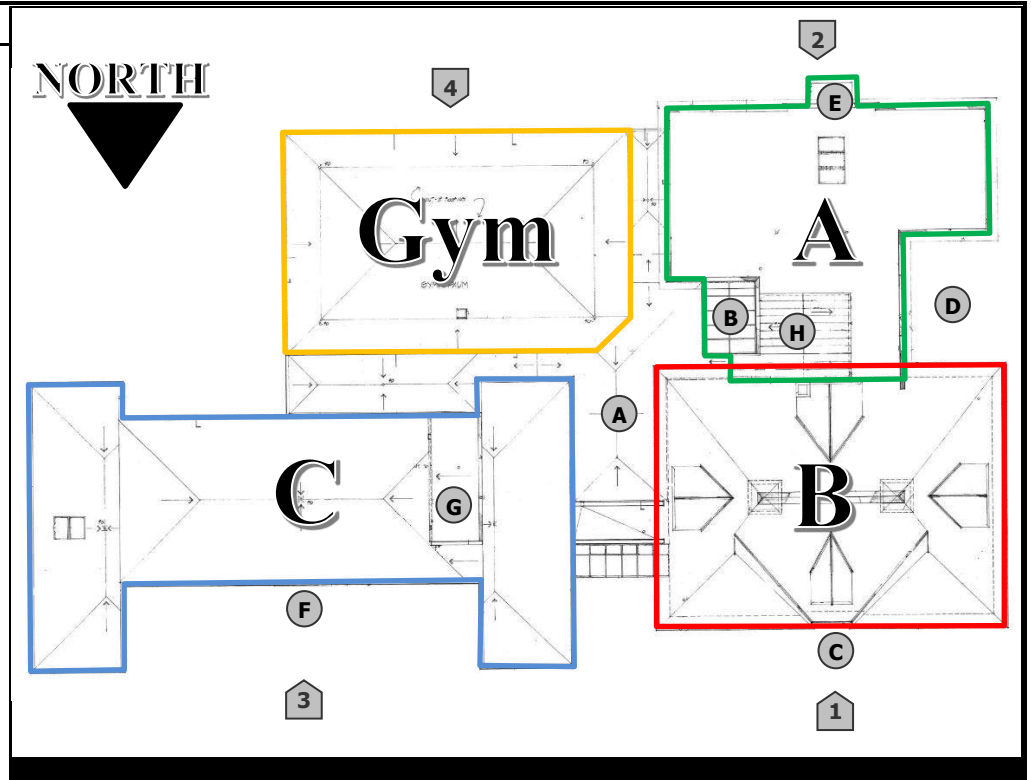
Figure 1

Callouts:

1. 1900 Building (B)
2. 1920 Building (A)
3. 1930 Building (C)
4. 1979 Gym Addition

Comments:

- A. Connector
- B. Skylight
- C. 1900 Original Entry
- D. 1920 New Entry
- E. 1920 Portico Entry
- F. 1930 Original Entry
- G. 1930 Penthouse
- H. 1920 Penthouse



Title:

Building Footprint

Figure 2

Callouts:

1. Abandoned entry.
2. Brownstone decorative balcony.

Comments:



B_0818040

R. J. Kenney Associates, Inc.

Title:

1900 Building B - North Elevation

Figure 3

Callouts:

Comments:



B_0818005

R. J. Kenney Associates, Inc.

Title:

1900 Building B - East Elevation

Figure 4

Callouts:

Comments:

1920 New entry where it connects to the original 1900 Building.



B_0818011

R. J. Kenney Associates, Inc.

Title:

1920 Building A - West Elevation Entry

Figure 5

Callouts:

Comments:

1920 New entry where it connects to the original 1900 Building.



C_0817268

R. J. Kenney Associates, Inc.

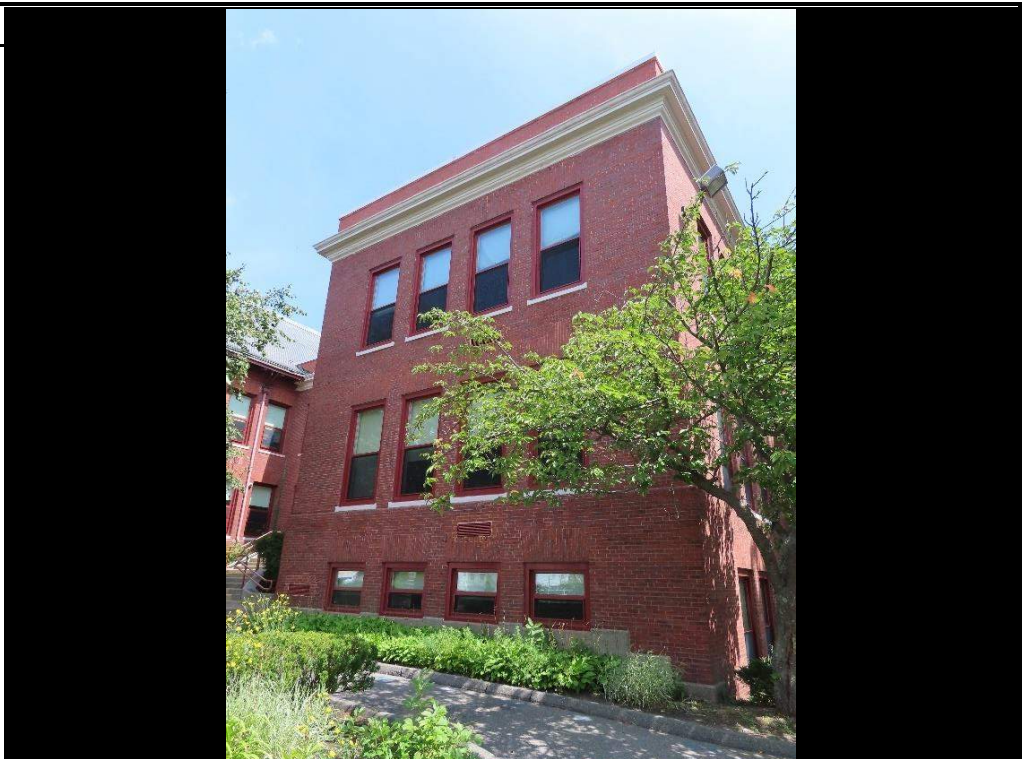
Title:

1920 Building A - West Elevation Entry

Figure 6

Callouts:

Comments:



C_0817273

R. J. Kenney Associates, Inc.

Title:

1920 Building A - West Elevation

Figure 7

Callouts:

1. 1920 Building Portico entry.
2. Connection to the 1979 Gym Addition.

Comments:



Title:

1920 Building A - South Elevation

Figure 8

Callouts:

1. Vertical control joints.
2. Staining from the paint of the translucent panel system above.

Comments:



Title:

1979 Gym Addition - South Elevation

Figure 9

Callouts:

1. Vertical control joints.
2. Staining from the paint of the translucent panel system above.
3. Damaged panel patched with tape.

Comments:

Note the discoloration of the translucent panels.



B 0818023

R. J. Kenney Associates, Inc.

Title:

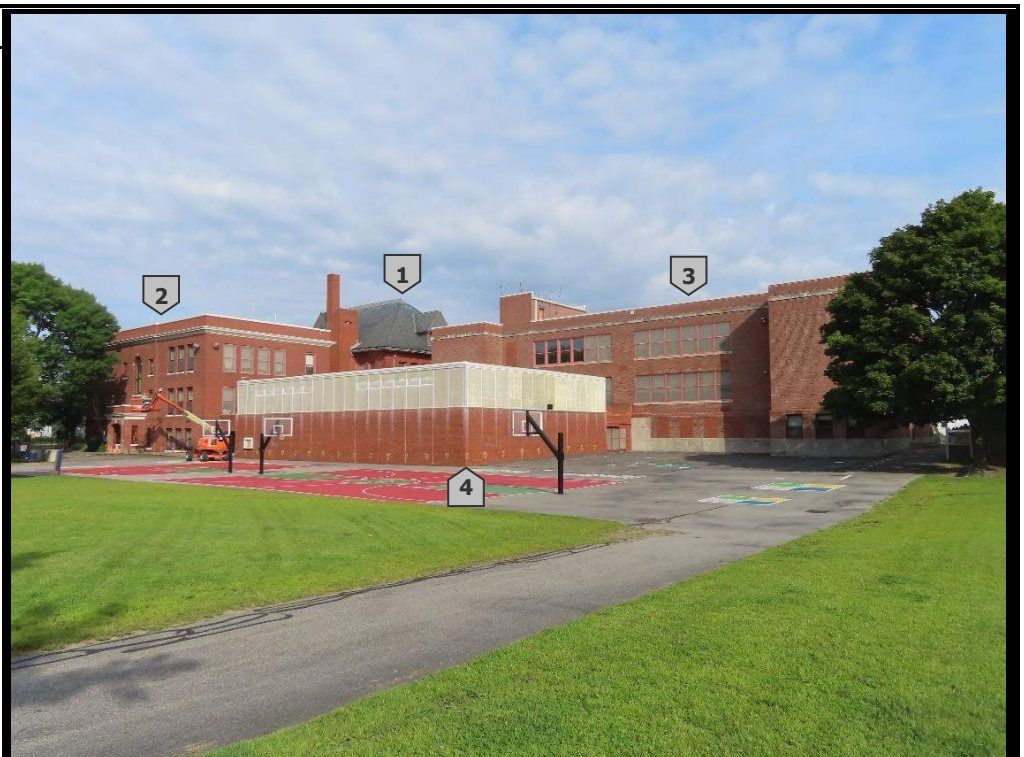
1979 Gym Addition - East Elevation

Figure 10

Callouts:

1. 1900 Original School
2. 1920 Addition
3. 1930 Addition
4. 1979 Gym Addition

Comments:



B 0818020

R. J. Kenney Associates, Inc.

Title:

Southeast Elevation - Overall View

Figure 11

Callouts:

Comments:



Title:

1930 Building C - South Elevation

Figure 12

Callouts:

Comments:



Title:

1930 Building C - East Elevation

Figure 13

Callouts:

1. Note the algae growth on the north elevation masonry.

Comments:



B_0818027

R. J. Kenney Associates, Inc.

Title:

1930 Building C - East Elevation

Figure 14

Callouts:

1. Abandoned entry.

Comments:



B_0818030

R. J. Kenney Associates, Inc.

Title:

1930 Building C - North Elevation

Figure 15

Callouts:

1. Abandoned decorative limestone entry.
2. Algae growth on the masonry.

Comments:



Title:

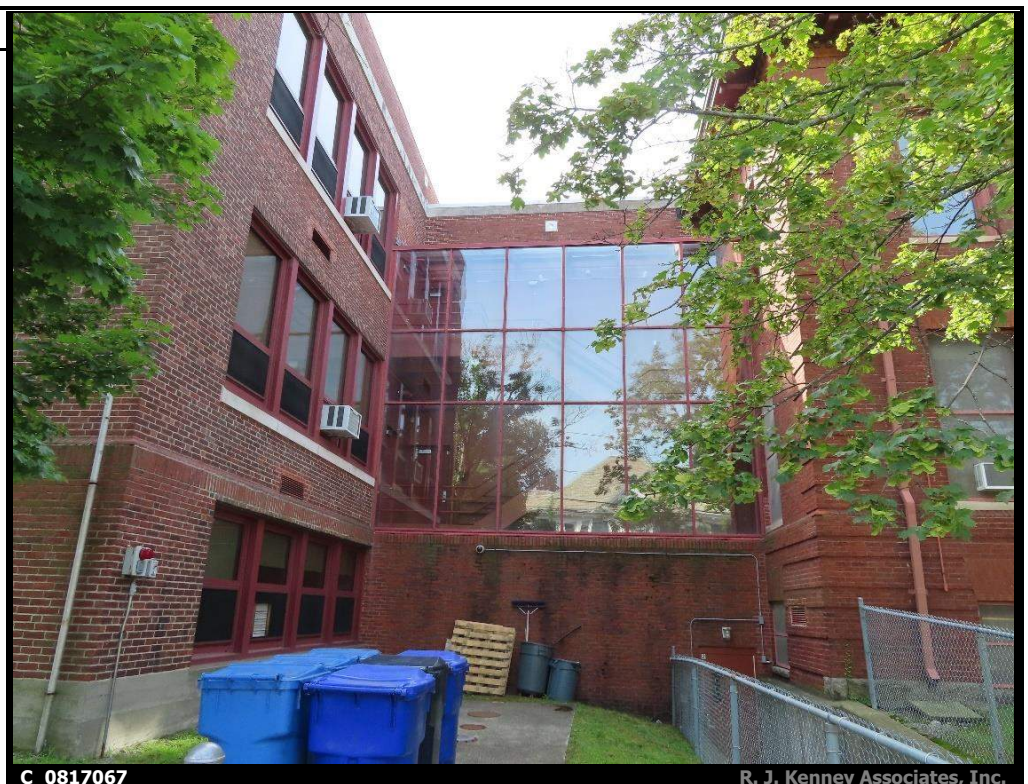
1930 Building C - North Elevation

Figure 16

Callouts:

Comments:

Connection between the 1900 and 1930 Buildings.



Title:

Connector - North Elevation

Figure 17

Callouts:

1. Broken slate.
2. Cracked slate.
3. Disintegrating slate.

Comments:

1900 Building slate roof existing conditions. Typical Conditions.



A 0816026

R. J. Kenney Associates, Inc.

Title:

1900 Building - Slate Roof - Typical

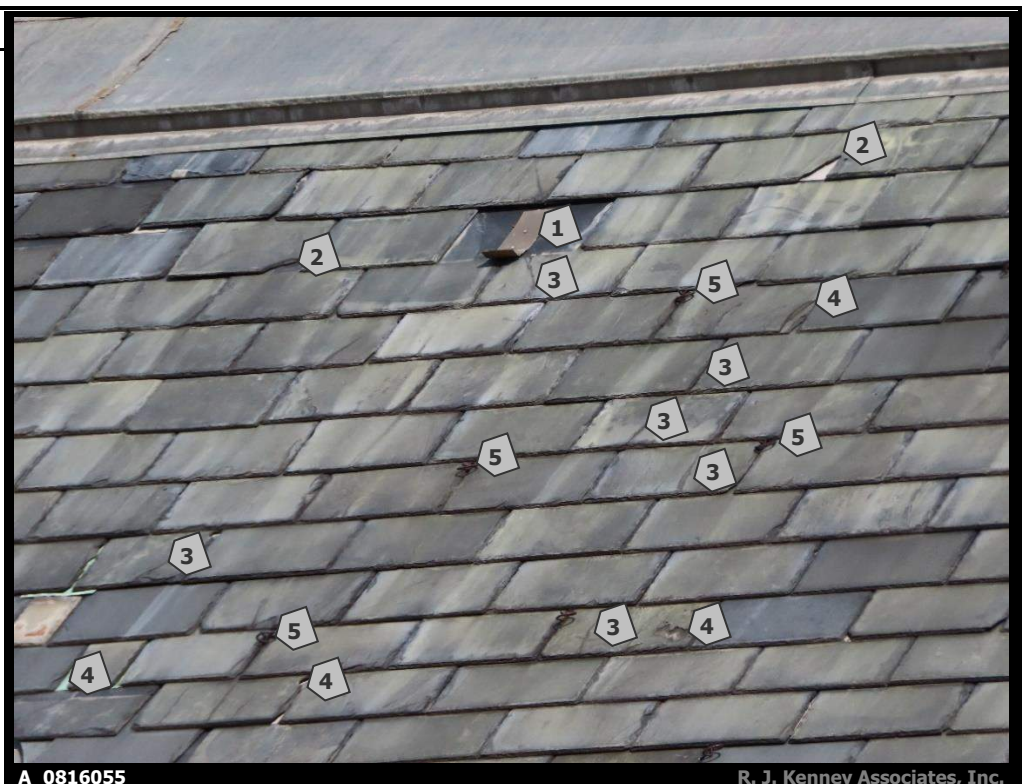
Figure 18

Callouts:

1. Missing slate where one was loose or replaced previously.
2. Broken slate.
3. Cracked slate.
4. Disintegrating slate.
5. Failed snow guard.

Comments:

1900 Building slate roof existing conditions.



A 0816055

R. J. Kenney Associates, Inc.

Title:

1900 Building - South Elevation - Slate Roof

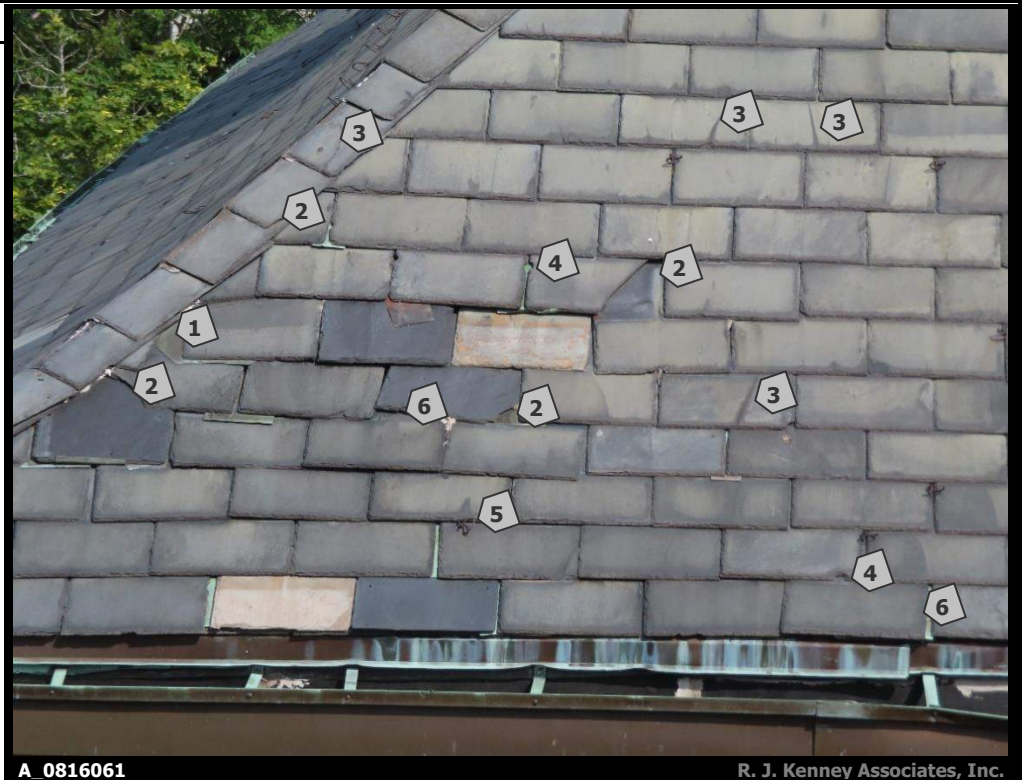
Figure 19

Callouts:

1. Missing slate where one was loose or replaced previously.
2. Broken slate.
3. Cracked slate.
4. Disintegrating slate.
5. Failed snow guard
6. Loose slate.

Comments:

1900 Building slate roof existing conditions.



A 0816061

R. J. Kenney Associates, Inc.

Title:

1900 Building B - Southeast Corner - Slate Roof

Figure 20

Callouts:

1. Missing slate where one was loose or replaced previously. Felt paper is gone and the sheathing is exposed.
2. Broken slate.
3. Cracked slate.
4. Disintegrating slate.
5. Failed snow guard.
6. Loose slate.
7. Open corner.

Comments:

1900 Building slate roof existing conditions



A 0816089

R. J. Kenney Associates, Inc.

Title:

1900 Building B - Northeast Corner - Slate Roof

Figure 21

Callouts:

1. Broken slate.
2. Cracked slate.
3. Disintegrating slate.
4. Open corner.

Comments:

1900 Building Dormer Cheek
Wall



A 0816014

R. J. Kenney Associates, Inc.

Title:

1900 Building B - South Elevation Dormer - Slate Roof

Figure 22

Callouts:

1. Broken slate.
2. Cracked slate.
3. Loose slate.

Comments:

1900 Building Dormer Cheek
Wall



A 0816063

R. J. Kenney Associates, Inc.

Title:

1900 Building B - West Elevation Dormer - Slate Roof

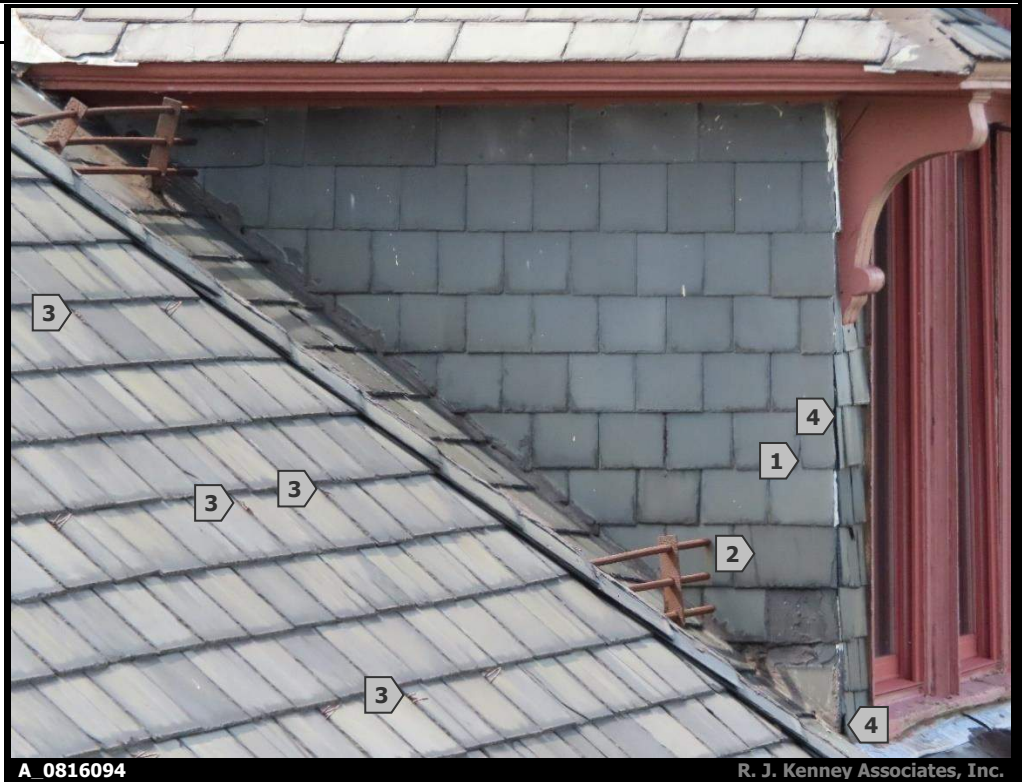
Figure 23

Callouts:

1. Broken slate.
2. Cracked slate.
3. Failed snow guard.
4. Open corner.

Comments:

1900 Building Dormer Cheek
Wall



A_0816094

R. J. Kenney Associates, Inc.

Title:

1900 Building B - North Elevation Dormer - Slate Roof

Figure 24

Callouts:

1. Opening at failed gutter tie.
2. Failed fastener.

Comments:



A_0816011

R. J. Kenney Associates, Inc.

Title:

1900 Building B - Southwest Corner Gutter

Figure 25

Callouts:

1. Damaged gutter box.
2. Fasteners missing or loose.

Comments:



Title:

1900 Building B - Southwest Corner Gutter

Figure 26

Callouts:

1. Gutter box.
2. Seams.
3. Fascia board is deteriorated and pulled away from gutter box.

Comments:



Title:

1900 Building B - Southeast Corner

Figure 27

Callouts:

1. Gutter seams are not sealed.
2. Valley flashing is loose in gutter box.

Comments:



A_0816109

R. J. Kenney Associates, Inc.

Title:

1900 Building B - North Elevation

Figure 28

Callouts:

1. Roofing cement.

Comments:



A_0816069

R. J. Kenney Associates, Inc.

Title:

1900 Building B - South Elevation Dormer and Roof Transition at 1920 Building A

Figure 29

Callouts:

Comments:



A_0816082

R. J. Kenney Associates, Inc.

Title:

1900 Building - South Elevation Roof Transition at 1920 Building A

Figure 30

Callouts:

1. Damaged gutter box.
2. Seam is leaking.
3. Fascia boards are deteriorated.
4. Gap between soffit and top of masonry wall.
5. Detached downspout.

Comments:



A_0818019

R. J. Kenney Associates, Inc.

Title:

1900 Building - South Elevation at Connection to 1920 Building A

Figure 31

Callouts:

Comments:



Title:

1900 Building B - Ornamental Brownstone

Figure 32

Callouts:

1. Metal cladding lifted off brownstone.
2. Efflorescence staining.
3. Cracks in the brownstone.
4. Brownstone is stained from airborne soot and water runoff.

Comments:



Title:

1900 Building B - Ornamental Brownstone

Figure 33

Callouts:

1. Fascia boards are deteriorated.
2. Gap between soffit and top of masonry wall.

Comments:



A 0818020

R. J. Kenney Associates, Inc.

Title:

1900 Building B - South Elevation

Figure 34

Callouts:

1. Fascia boards are deteriorated.
2. Soffit Bracket is coming loose.
3. Gap between soffit and top of masonry wall.

Comments:



A 0818029

R. J. Kenney Associates, Inc.

Title:

1900 Building B - East Elevation

Figure 35

Callouts:

1. Damaged trim.

Comments:



A_0816019

R. J. Kenney Associates, Inc.

Title:

1900 Building B - South Elevation Dormer

Figure 36

Callouts:

Comments:



A_0816099

R. J. Kenney Associates, Inc.

Title:

1900 Building B - North Elevation Dormer

Figure 37

Callouts:

Comments:



A 0816096

R. J. Kenney Associates, Inc.

Title:

1900 Building B - North Elevation Dormer

Figure 38

Callouts:

1. Brick mortar joint deterioration.
2. Previous pointing work.
3. Sealant joint deterioration around vent.

Comments:



C 0817287

R. J. Kenney Associates, Inc.

Title:

1900 Building B - West Elevation

Figure 39

Callouts:

1. Brick mortar joint deterioration.
2. Algae growth on masonry.
3. Limestone sill mortar joint deterioration.

Comments:



C 0817165

R. J. Kenney Associates, Inc.

Title:

1900 Building B - South Elevation at Connector

Figure 40

Callouts:

1. Brick mortar joint deterioration.

Comments:



A 0818061

R. J. Kenney Associates, Inc.

Title:

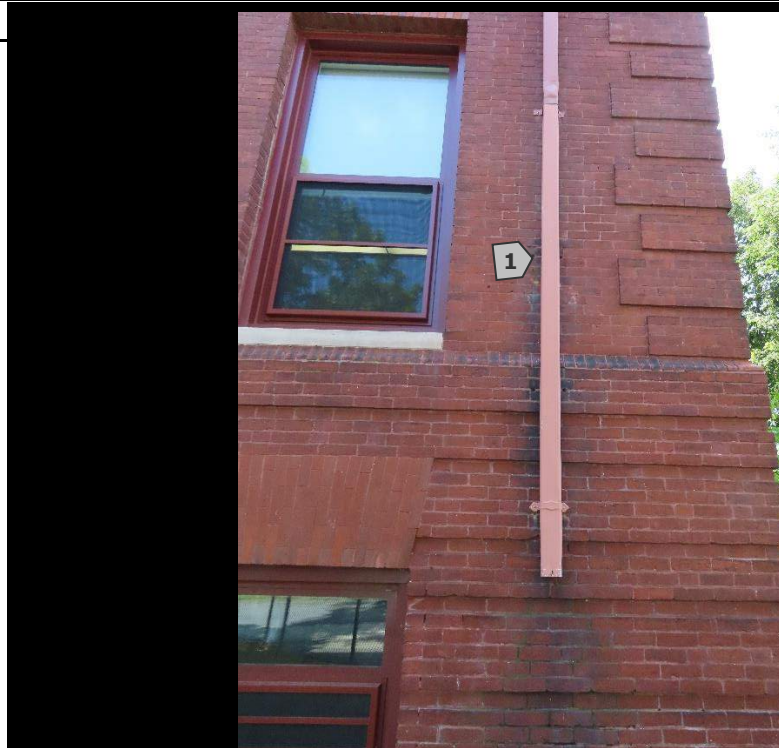
1900 Building B - South Elevation at Connector

Figure 41

Callouts:

1. Deteriorated or missing mortar joints behind downspouts.

Comments:



C 0817212

R. J. Kenney Associates, Inc.

Title:

1900 Building B - Typical Mortar Joint Deterioration Behind Downspouts

Figure 42

Callouts:

1. Deteriorated or missing mortar joints behind downspouts.

Comments:



C 0817245

R. J. Kenney Associates, Inc.

Title:

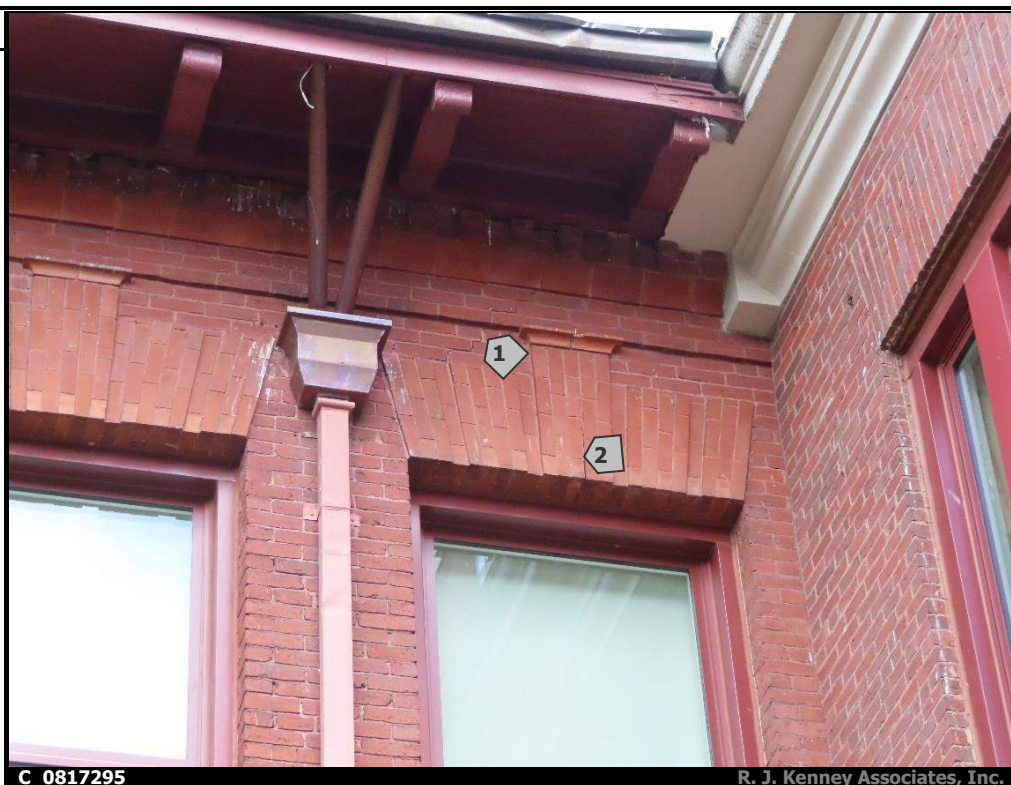
1900 Building B - Typical Mortar Joint Deterioration Behind Downspouts

Figure 43

Callouts:

1. Through-masonry cracking and step cracking.
2. Deteriorated mortar joint.

Comments:



C 0817295

R. J. Kenney Associates, Inc.

Title:

1900 Building B - South Elevation at Connection to 1920 Building A

Figure 44

Callouts:

1. Through-masonry cracking and step cracking.
2. Deteriorated mortar joint.

Comments:

Figure 43 Close-up photo of condition.



C 0817296

R. J. Kenney Associates, Inc.

Title:

1900 Building B - South Elevation at Connection to 1920 Building A

Figure 45

Callouts:

Comments:



A_0818029

Title:

1900 Building B - East Elevation at Connection to 1930 Building A

Figure 46

Callouts:

Comments:



B_0817074

Title:

R. J. Kenney Associates, Inc.

1900 Building B- South Elevation at Connection to 1920 Building A

Figure 47

Callouts:

Comments:



C 0817221

R. J. Kenney Associates, Inc.

Title:

1900 Building B - Masonry Damaged from Anchor Removal

Figure 48

Callouts:

Comments:



C 0817182

Title:

1900 Building B - Anchor in Masonry

Figure 49

Callouts:

Comments:



A 0813144

R. J. Kenney Associates, Inc.

Title:

1900 Building B - Deteriorated Mortar Joints at Window Sill

Figure 50

Callouts:

Comments:



B 0813212

R. J. Kenney Associates, Inc.

Title:

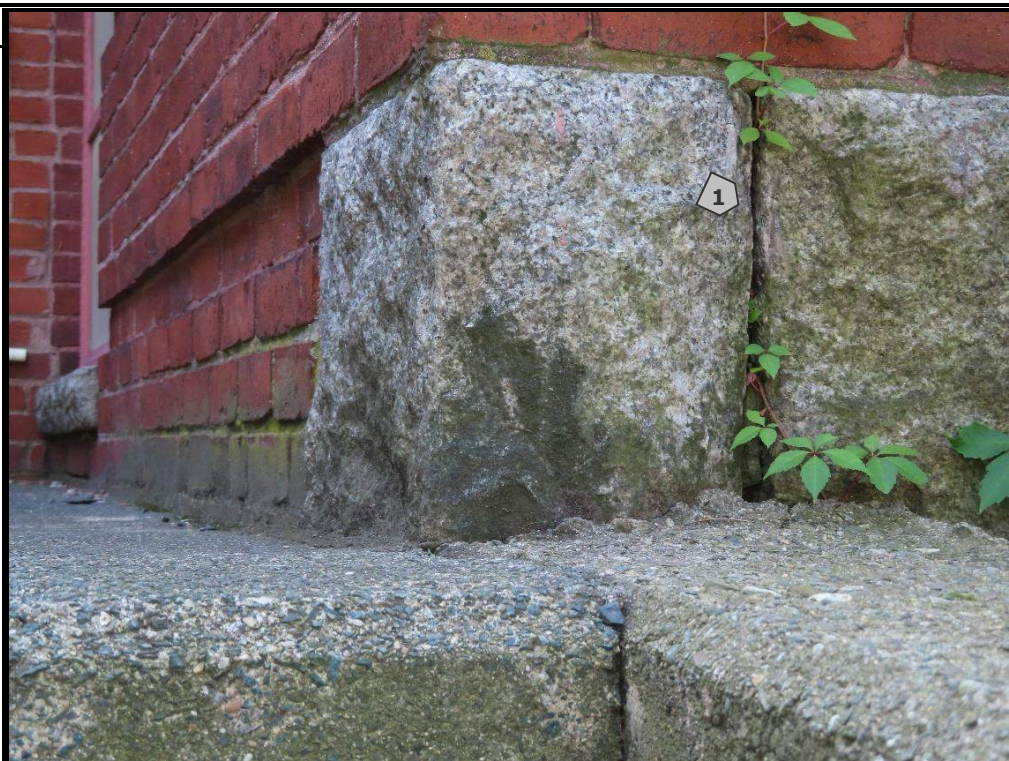
1900 Building B - Deteriorated Mortar Joints at Window Sill

Figure 51

Callouts:

1. Deteriorated mortar joint.

Comments:



C 0817190

R. J. Kenney Associates, Inc.

Title:

1900 Building B - Deteriorated Mortar at Head Joint of Granite Sills.

Figure 52

Callouts:

Comments:



C 0817191

R. J. Kenney Associates, Inc.

Title:

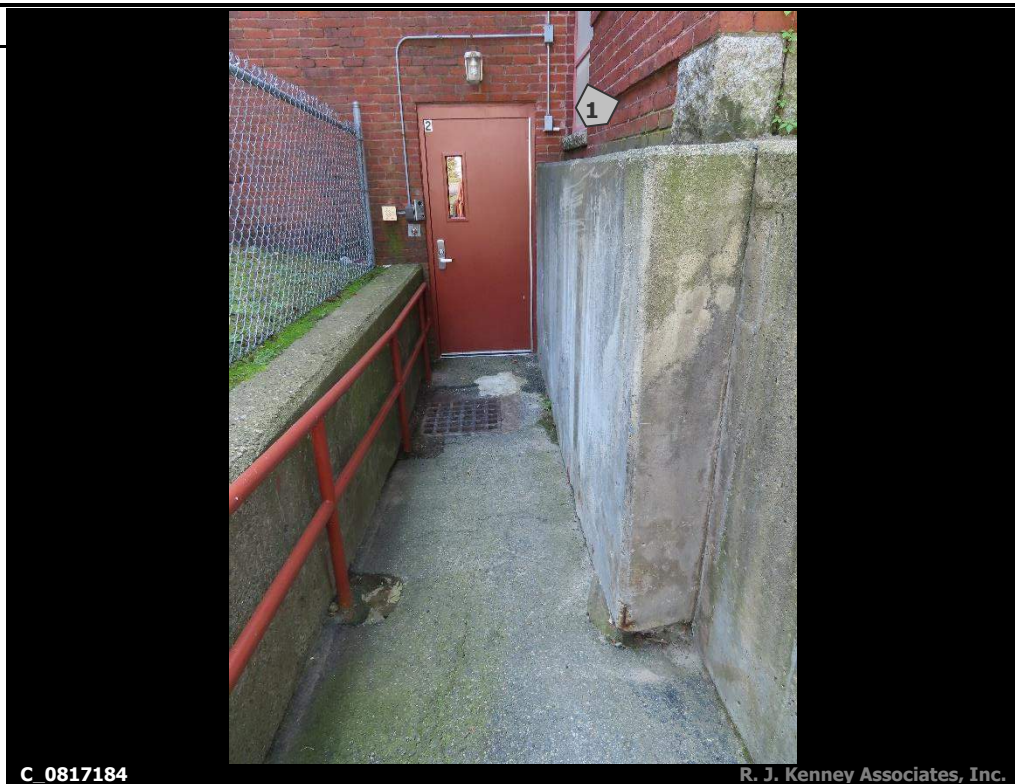
1900 Building B - South Elevation

Figure 53

Callouts:

1. Sill detailed in previous figure.

Comments:



C_0817184

R. J. Kenney Associates, Inc.

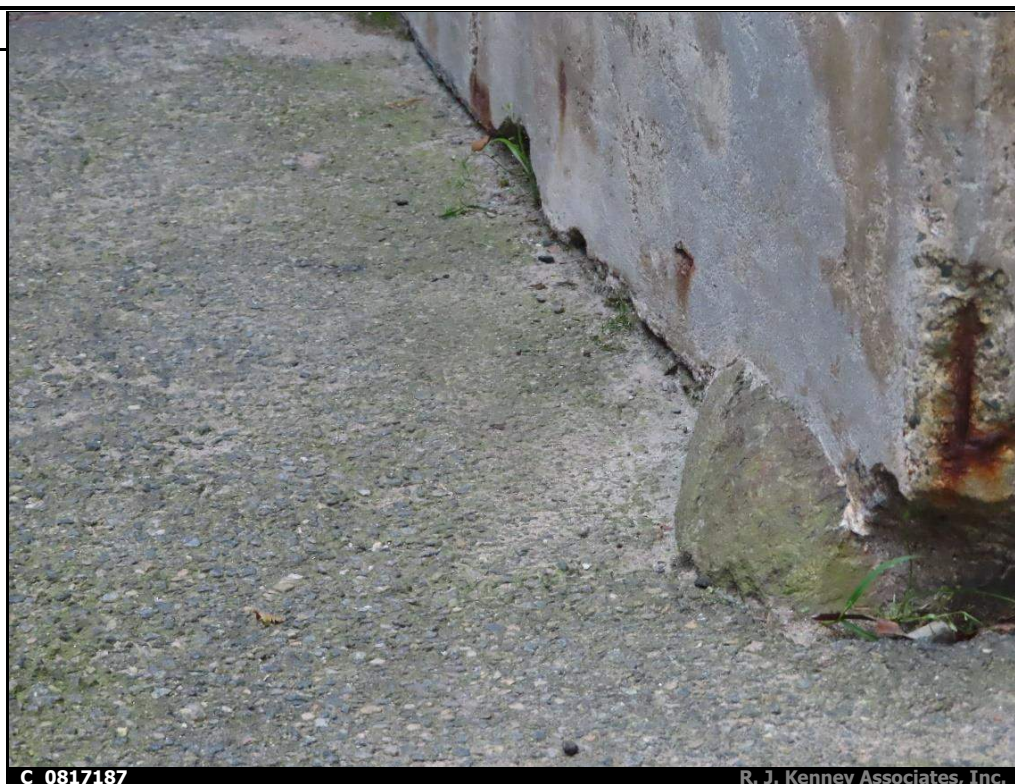
Title:

1900 Building B - North Elevation Entrance to Connector

Figure 54

Callouts:

Comments:



C_0817187

R. J. Kenney Associates, Inc.

Title:

1900 Building B - North Elevation Entrance to Connector

Figure 55

Callouts:

Comments:



C_0817192

R. J. Kenney Associates, Inc.

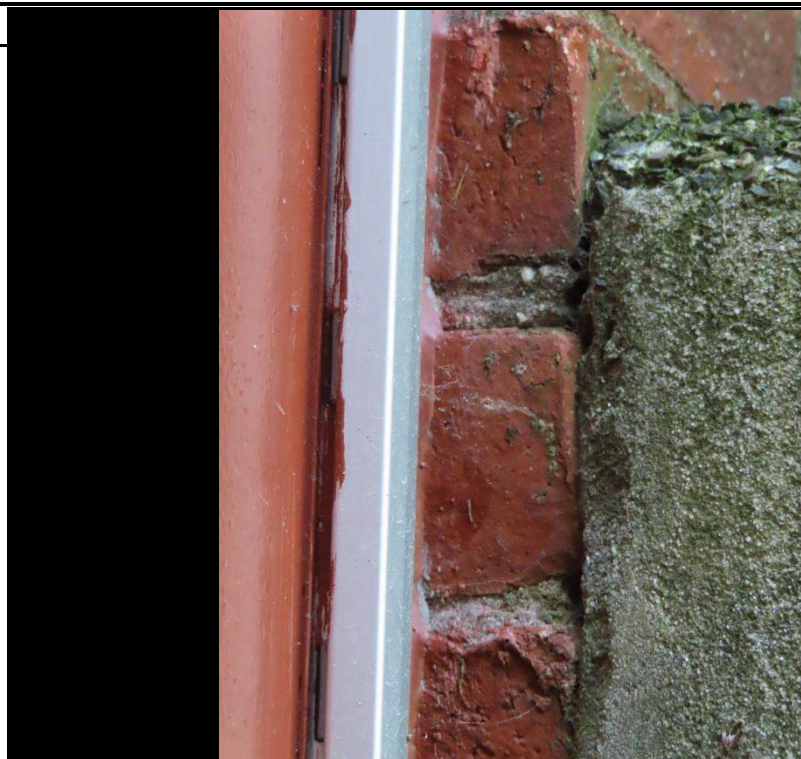
Title:

1900 Building B - North Elevation Entrance to Connector

Figure 56

Callouts:

Comments:



C_0817199

R. J. Kenney Associates, Inc.

Title:

1900 Building B - North Elevation Entrance to Connector

Figure 57

Callouts:

Comments:



C_0817243

R. J. Kenney Associates, Inc.

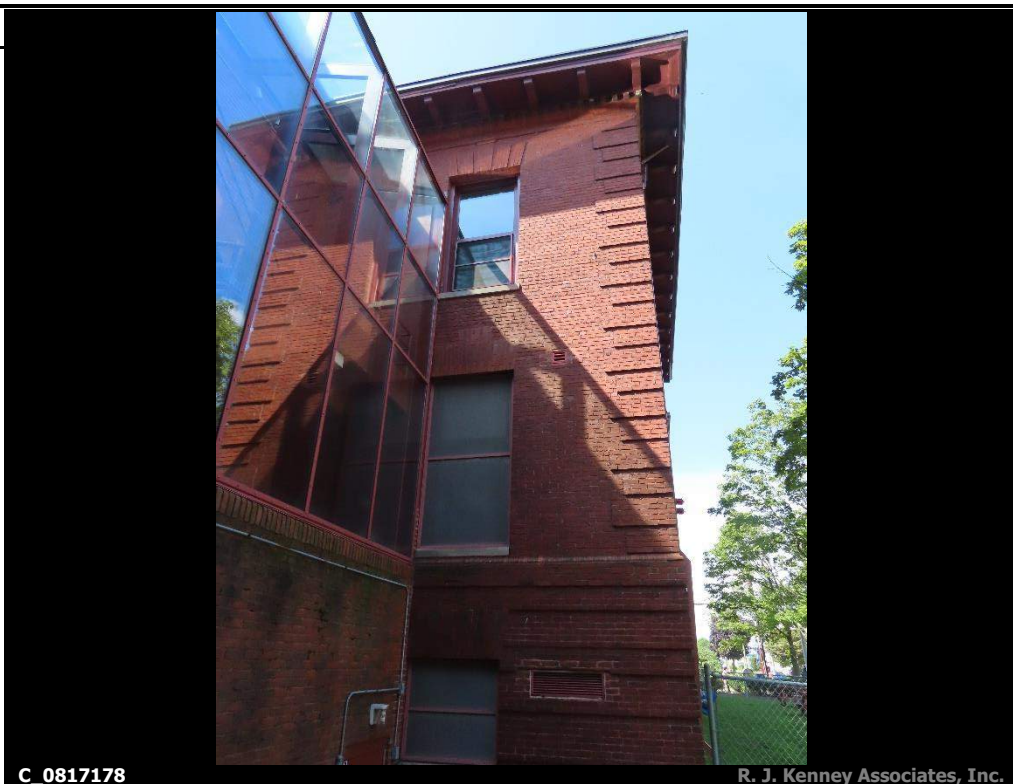
Title:

1900 Building B - North Elevation

Figure 58

Callouts:

Comments:



C_0817178

R. J. Kenney Associates, Inc.

Title:

1900 Building B - South Elevation at Connector

Figure 59

Callouts:

1. Failed sealant.

Comments:



Title:

1900 Building B - North Elevation

Figure 60

Callouts:

Comments:



Title:

1920 Building A - Roof Looking Northeast

Figure 61

Callouts:

Comments:



B_0813361

R. J. Kenney Associates, Inc.

Title:

1920 Building A - Roof Looking North

Figure 62

Callouts:

Comments:



A_0816048

R. J. Kenney Associates, Inc.

Title:

1920 Building A - Roof Looking Northwest



Figure 63

Callouts:

Comments:



B_0816032

R. J. Kenney Associates, Inc.

Title:

1920 Building A - Roof Looking Southwest

Figure 64

Callouts:

Comments:



B_0816033

R. J. Kenney Associates, Inc.

Title:

1920 Building A - Roof Looking Southeast

Figure 65

Callouts:

Comments:



A_0818010

R. J. Kenney Associates, Inc.

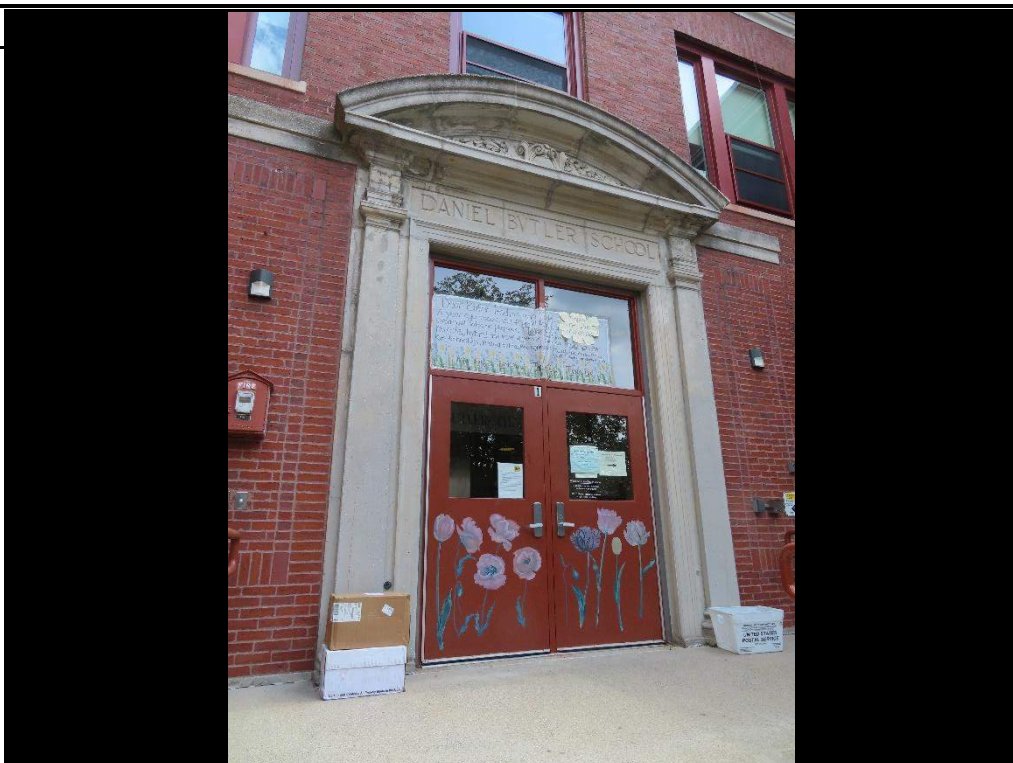
Title:

1920 Building A - South Elevation - Portico Entry Roof

Figure 66

Callouts:

Comments:



C_0817317

R. J. Kenney Associates, Inc.

Title:

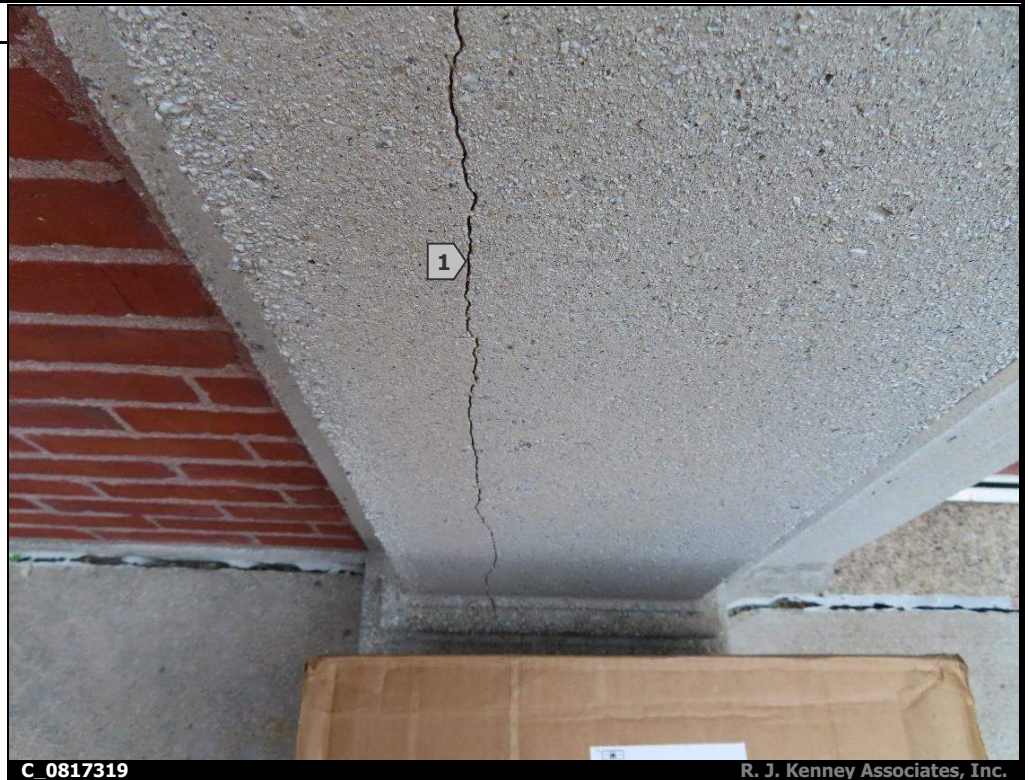
1920 Building A - West Elevation Entry

Figure 67

Callouts:

1. Crack.

Comments:



Title:

1920 Building A - West Elevation - Typical Cracked Precast at Entry

Figure 68

Callouts:

Comments:

Deteriorated precast at entry.



Title:

1920 Building A - West Elevation - Cracked/Deteriorating Precast at Entry

Figure 69

Callouts:

Comments:



Title:

1920 Building A - West Elevation - Cracked Precast Window Sill

Figure 70

Callouts:

Comments:



Title:

1920 Building A - West Elevation - Cracked Precast Window Sill

Figure 71

Callouts:

Comments:



Title:

1920 Building A - West Elevation - Mortar Joint Deterioration

Figure 72

Callouts:

Comments:



Title:

1920 Building A - South Elevation - Mortar Joint Deterioration at Window Head

Figure 73

Callouts:

1. Through-masonry cracking

Comments:



A 0818368

R. J. Kenney Associates, Inc.

Title:

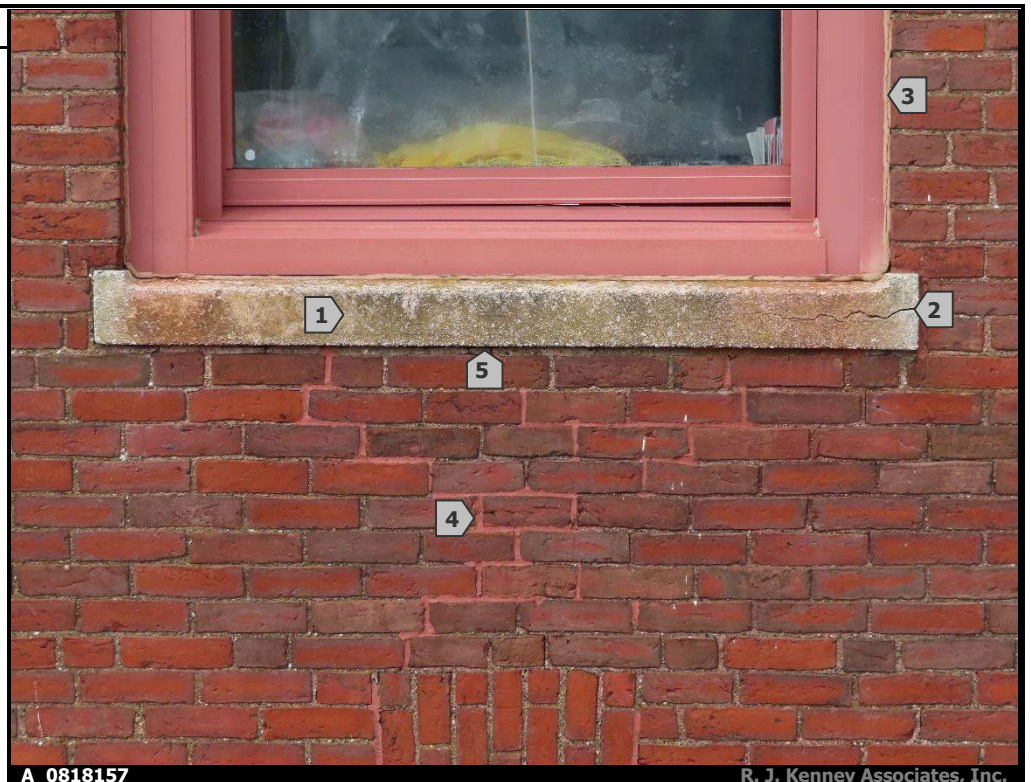
1920 Building A - South Elevation - Step Cracking Between Windows

Figure 74

Callouts:

1. Organic growth on the precast.
2. Cracked precast sill.
3. Failing perimeter sealant.
4. Deteriorating mortar joint repointed. Step cracking pattern.
5. Deteriorating mortar joint at sill.

Comments:



A 0818157

R. J. Kenney Associates, Inc.

Title:

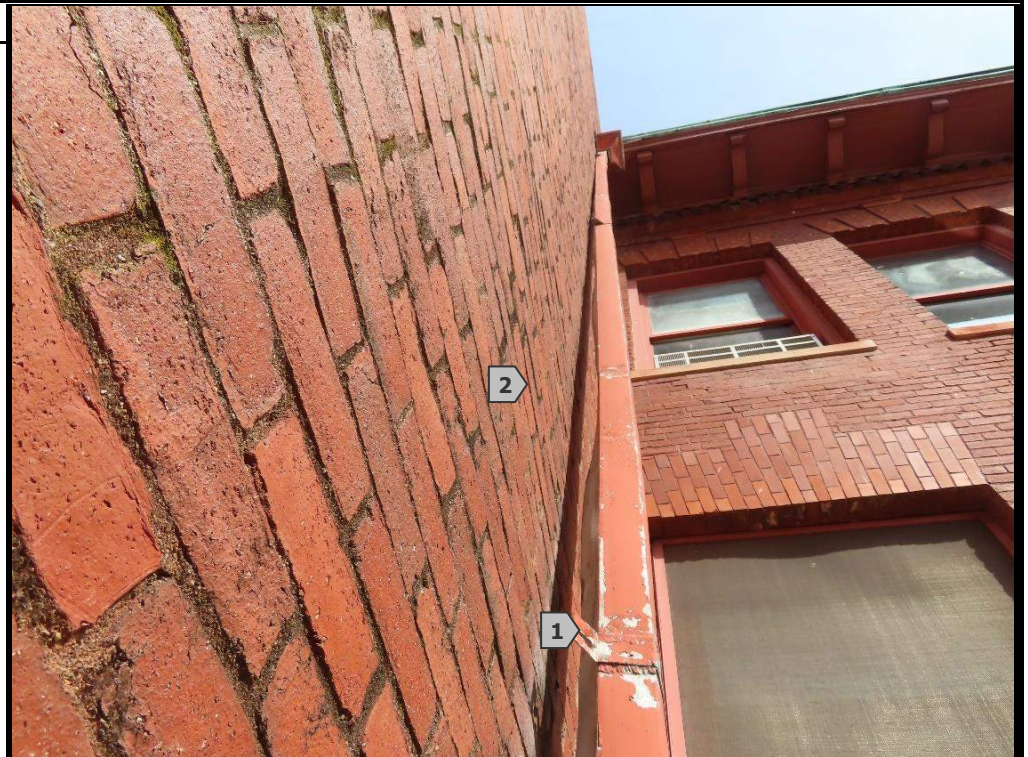
1920 Building A - East Elevation

Figure 75

Callouts:

1. Detached gutter.
2. Deteriorated mortar.

Comments:



B_0817020

R. J. Kenney Associates, Inc.

Title:

1920 Building A - East Elevation - Detached Gutter

Figure 76

Callouts:

1. Deteriorated mortar

Comments:



B_0816178

R. J. Kenney Associates, Inc.

Title:

1920 Building A - East Elevation

Figure 77

Callouts:

1. Missing brick.

Comments:



C 0817340

R. J. Kenney Associates, Inc.

Title:

1920 Building A - South Elevation - Parapet

Figure 78

Callouts:

Comments:



C 0817341

R. J. Kenney Associates, Inc.

Title:

1920 Building A - South Elevation - Parapet

Figure 79

Callouts:

1. Efflorescence due to water migration through cornice joints.

Comments:



Title:

1920 Building A - South Elevation Cornice

Figure 80

Callouts:

1. Paint blistering due to water migration through cornice joints.

Comments:



Title:

1920 Building A - South Elevation Cornice

Figure 81

Callouts:

Comments:



C 0817269

R. J. Kenney Associates, Inc.

Title:

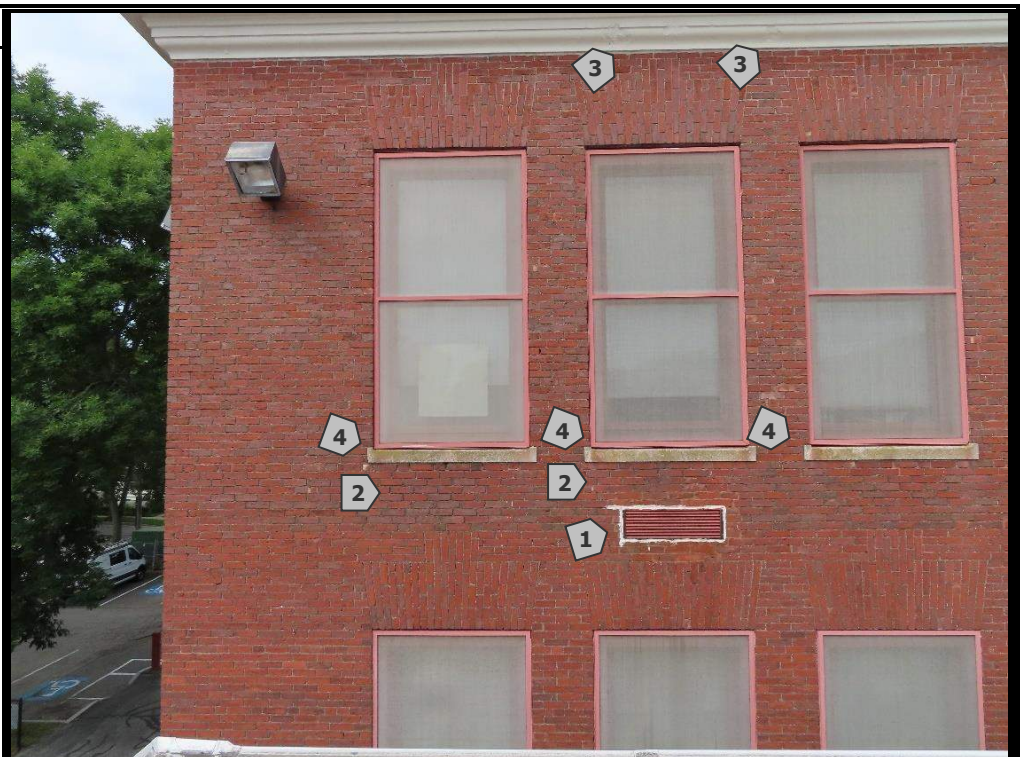
1920 Building A - West Elevation

Figure 82

Callouts:

1. Sealant joint is deteriorating.
2. Brick mortar deterioration.
3. Efflorescence damage to cornice.
4. Organic growth on masonry.

Comments:



A 0818149

R. J. Kenney Associates, Inc.

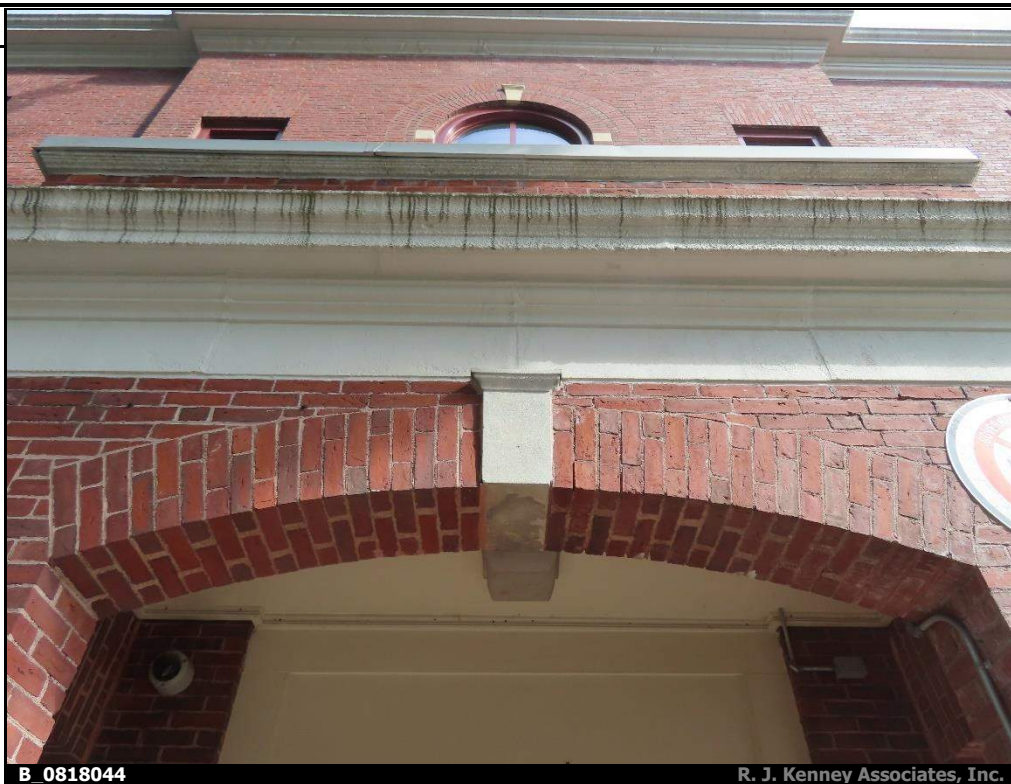
Title:

1920 Building A - East Elevation

Figure 83

Callouts:

Comments:



B_0818044

R. J. Kenney Associates, Inc.

Title:

1920 Building A - South Elevation - Portico Entry

Figure 84

Callouts:

1. Organic growth on masonry.

Comments:

View standing on the connector roof.



B_0817003

R. J. Kenney Associates, Inc.

Title:

1920 Building A - East Elevation

Figure 85

Callouts:

Comments:

View from the stair tower
penthouse looking east.



Title:

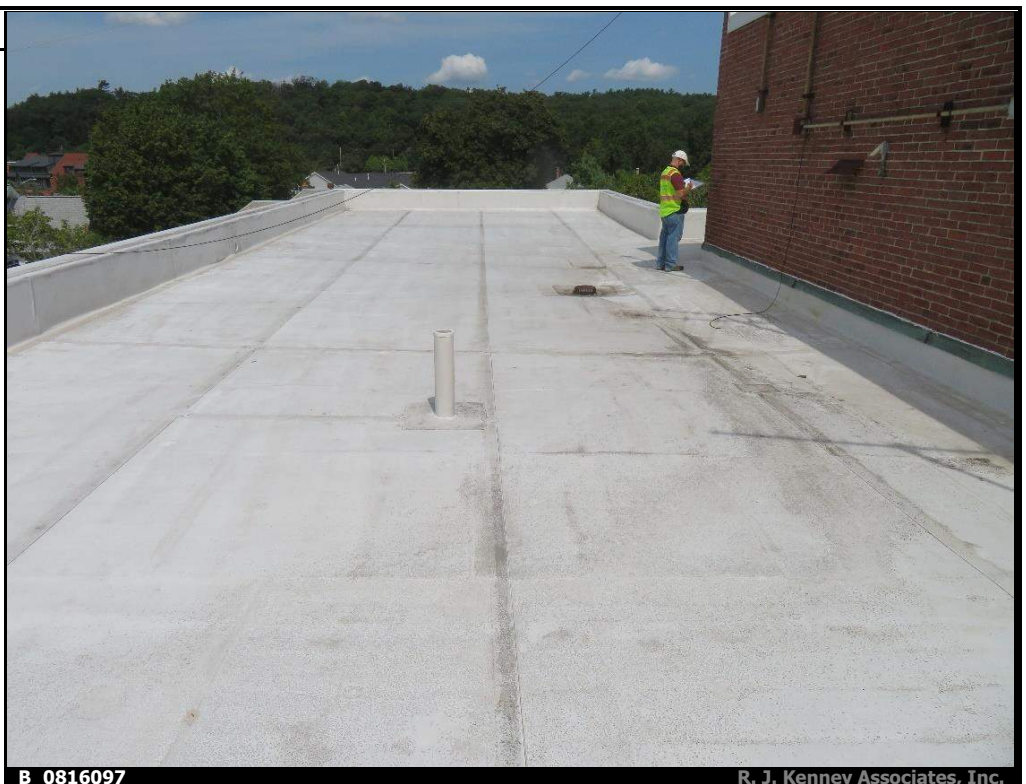
1930 Building C - Roof Looking East

Figure 86

Callouts:

Comments:

View from the west end of the
roof behind the stair tower
penthouse.



Title:

1930 Building C - Roof Looking North

Figure 87

Callouts:

Comments:



A 0816135

R. J. Kenney Associates, Inc.

Title:

1930 Building C - Stair Penthouse

Figure 88

Callouts:

Comments:

View from the 1930's addition
looking at the connector roof.



A 0816145

R. J. Kenney Associates, Inc.

Title:

1930 Building C - Roof Looking West

Figure 89

Callouts:

Comments:



A_0816150

R. J. Kenney Associates, Inc.

Title:

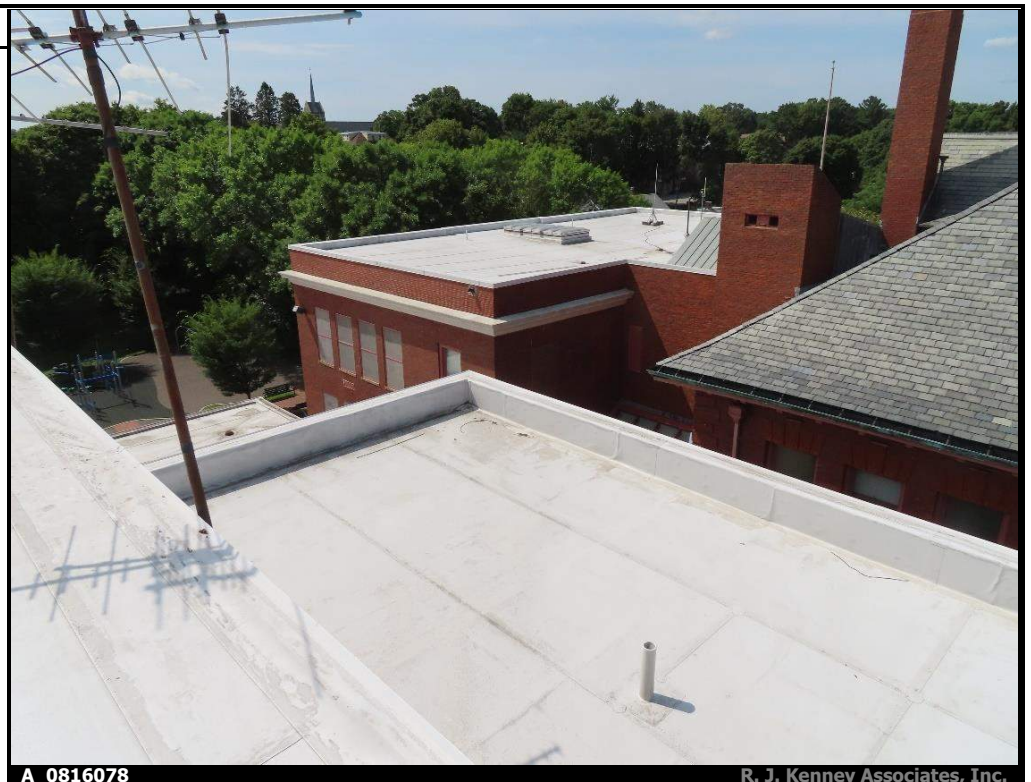
1930 Building C - Roof Looking West

Figure 90

Callouts:

Comments:

View from penthouse roof.



A_0816078

R. J. Kenney Associates, Inc.

Title:

1930 Building C - Roof Looking Southeast

Figure 91

Callouts:

1. Opening at a seam of the edge metal on the penthouse roof that has caused a tear in the membrane.

Comments:



B_0816050

R. J. Kenney Associates, Inc.

Title:

1930 Building C - Penthouse Roof Edge Metal

Figure 92

Callouts:

Comments:



B_0816036

R. J. Kenney Associates, Inc.

Title:

1930 Building C - Penthouse Door Head Flashing Condition

Figure 93

Callouts:

Comments:



B_0816090

R. J. Kenney Associates, Inc.

Title:

1930 Building C - Penthouse Door and Sill Flashing Condition

Figure 94

Callouts:

Comments:



B_0816100

R. J. Kenney Associates, Inc.

Title:

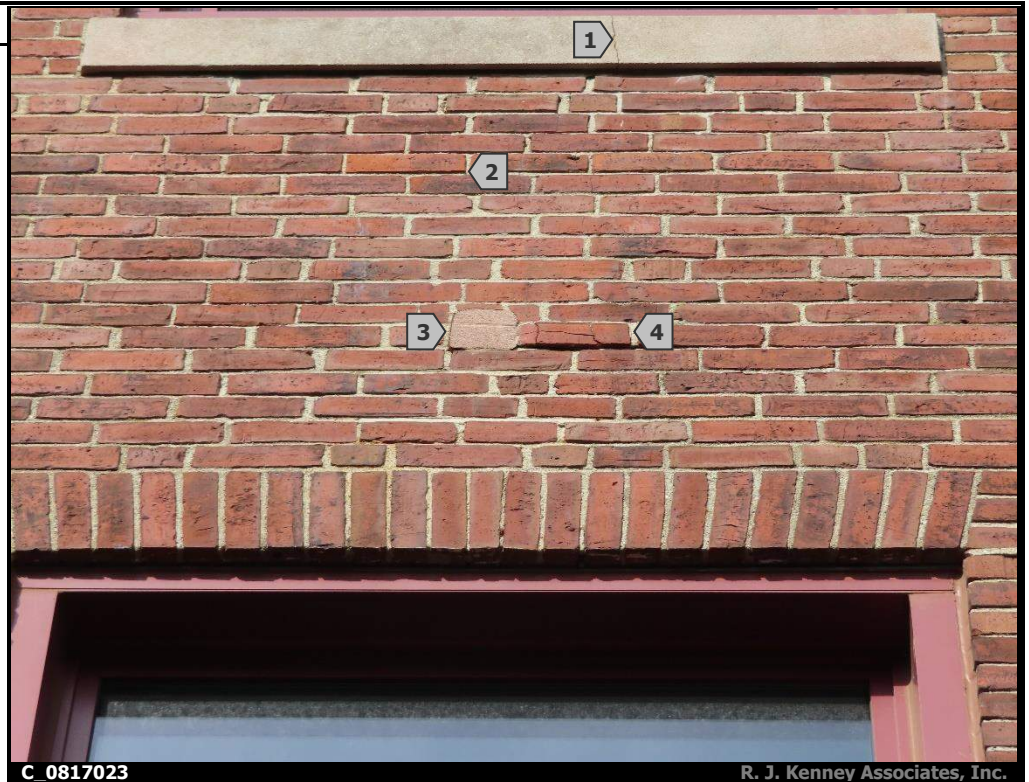
1930 Building C - Penthouse Flashing Condition

Figure 95

Callouts:

1. Cracked limestone sill.
2. Brick mortar deterioration.
3. Masonry repair with mortar.
4. Damaged masonry.

Comments:



Title:

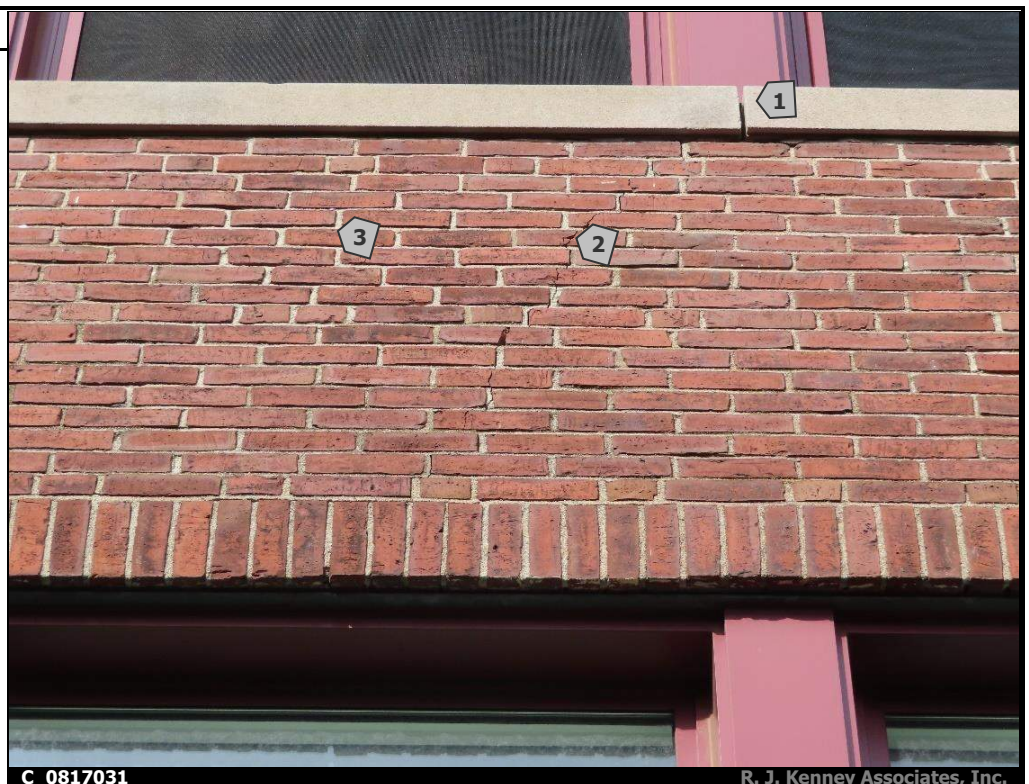
1930 Building C - East Elevation

Figure 96

Callouts:

1. Limestone sill mortar joint is missing.
2. Through masonry cracking and step cracking.
3. Mortar deterioration.

Comments:



Title:

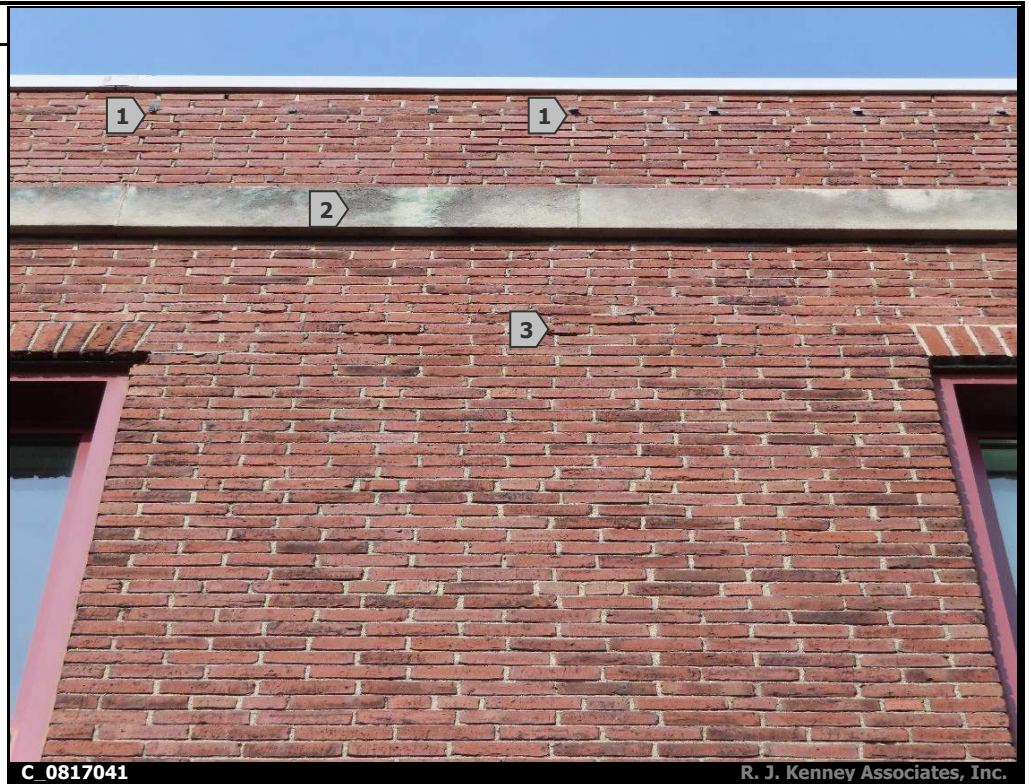
1930 Building C - East Elevation

Figure 97

Callouts:

1. Damage to masonry and joints due to anchors.
2. Limestone banding is stained.
3. Deteriorating masonry and mortar.

Comments:



Title:

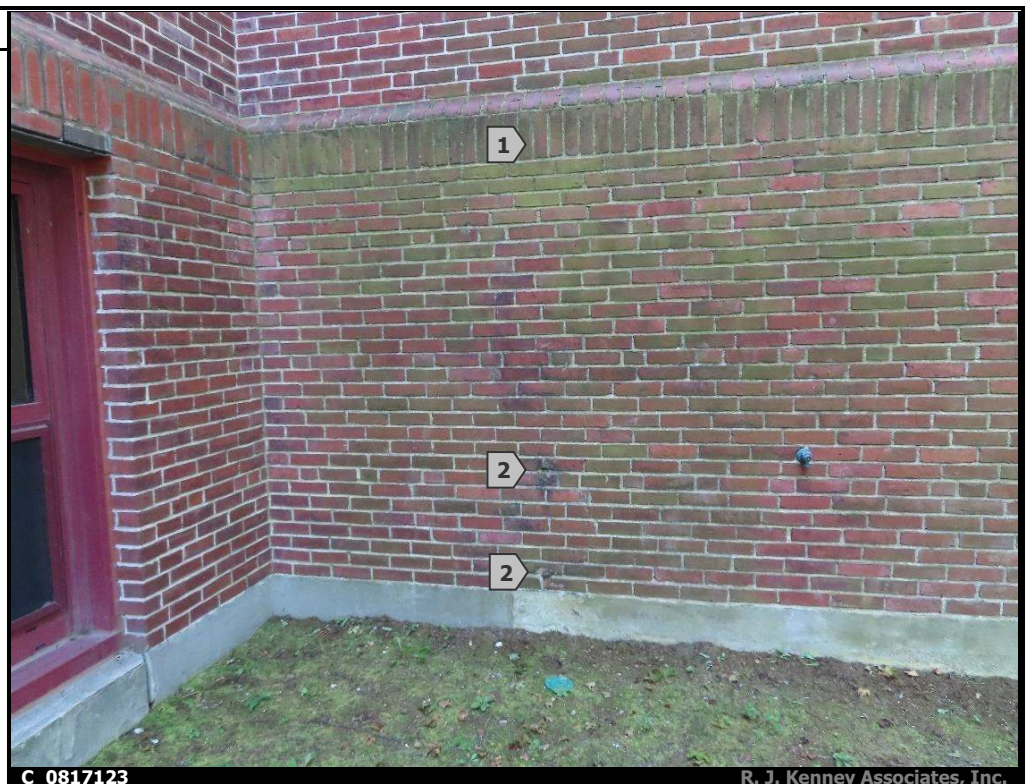
1930 Building C - East Elevation

Figure 98

Callouts:

1. Organic growth on masonry.
2. Damaged masonry and mortar due to anchors.

Comments:



Title:

1930 Building C - North Elevation

Figure 99

Callouts:

Comments:

Ornamental limestone is stained.



C 0817110

R. J. Kenney Associates, Inc.

Title:

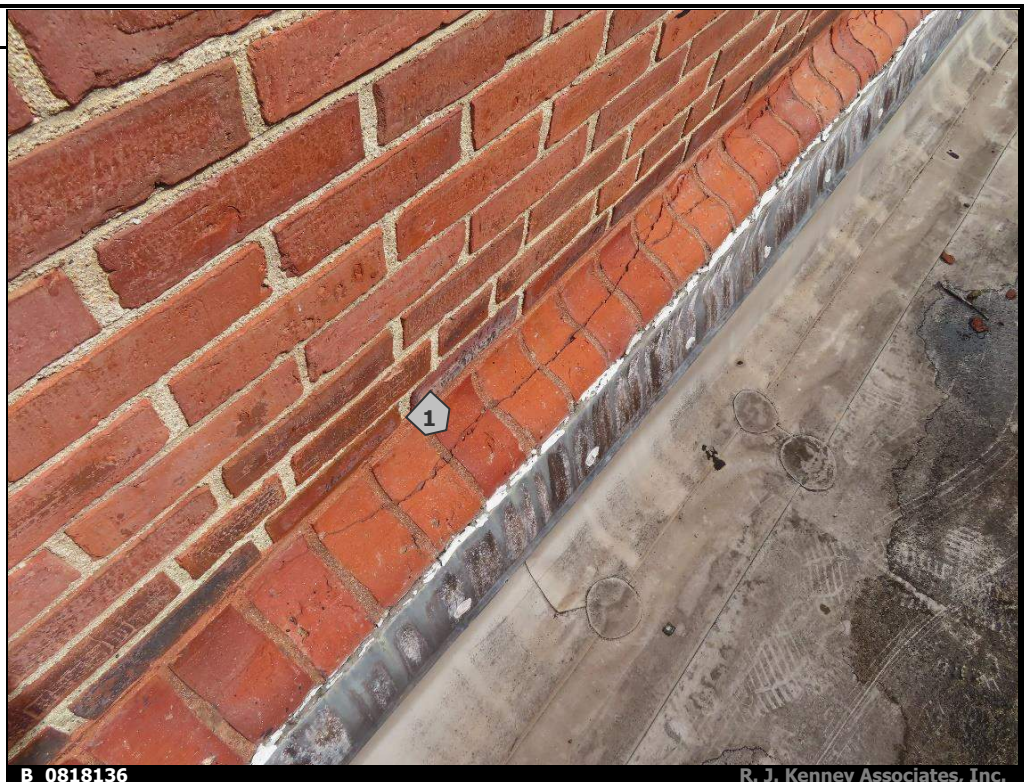
1930 Building C - North Elevation

Figure 100

Callouts:

1. Cracking of bricks.

Comments:



B 0818136

R. J. Kenney Associates, Inc.

Title:

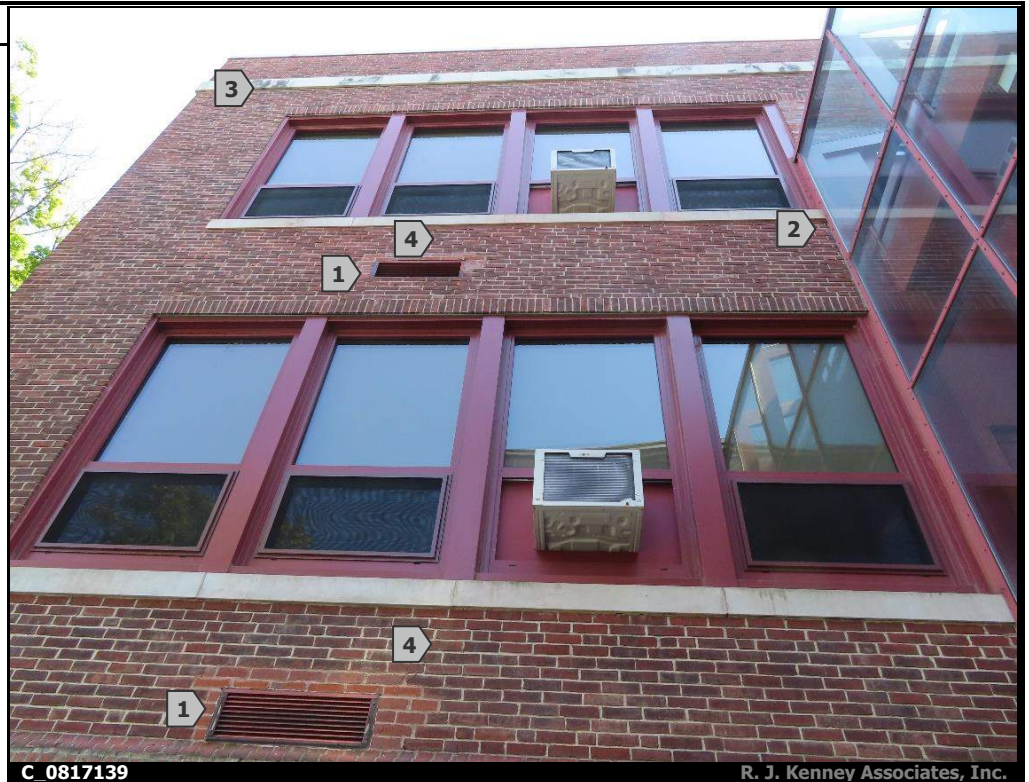
1930 Building C - South Elevation

Figure 101

Callouts:

1. Sealant joints are failing.
2. Hole in wall; missing masonry units.
3. Limestone band is stained.
4. Deteriorating mortar joints.

Comments:



Title:

1930 Building C - North Elevation

Figure 102

Callouts:

Comments:



Title:

1930 Building C - South Elevation - Connector Roof

Figure 103

Callouts:

Comments:



B_0818097

R. J. Kenney Associates, Inc.

Title:

1979 Gym Addition

Figure 104

Callouts:

Comments:



C_0817383

R. J. Kenney Associates, Inc.

Title:

1979 Gym Addition - South Elevation

Figure 105

Callouts:

1. Failed sealant.

Comments:



Title:

1979 Gym Addition - South Elevation

Figure 106

Callouts:

1. Failed sealant.

Comments:



Title:

1979 Gym Addition - South Elevation

Figure 107

Callouts:

Comments:



Title:

1979 Gym Addition

Figure 108

Callouts:

Comments:



Title:

1979 Gym Addition

Figure 109

Callouts:

Comments:



A_0818228

R. J. Kenney Associates, Inc.

Title:

1979 Gym Addition - North Elevation

Figure 110

Callouts:

Comments:



B_0816245

R. J. Kenney Associates, Inc.

Title:

1979 Gym Addition

Figure 111

Callouts:

Comments:



B 0816167

R. J. Kenney Associates, Inc.

Title:

1979 Gym Addition

Figure 112

Callouts:

Comments:



A 0816164

R. J. Kenney Associates, Inc.

Title:

Connector Roof - Looking Southwest

Figure 113

Callouts:

Comments:



A 0816165

R. J. Kenney Associates, Inc.

Title:

Connector Roof - Looking South

Figure 114

Callouts:

Comments:



C 0816169

R. J. Kenney Associates, Inc.

Title:

Connector Roof - Looking South

Figure 115

Callouts:

Comments:



A_0816167

R. J. Kenney Associates, Inc.

Title:

Connector Roof - Looking North

Figure 116

Callouts:

Comments:



C_0817169

R. J. Kenney Associates, Inc.

Title:

Connector Roof - Looking East

Figure 117

Callouts:

Comments:



A_0818120

R. J. Kenney Associates, Inc.

Title:

Connector Roof - Looking East

Figure 118

Callouts:

Comments:



B_0816165

R. J. Kenney Associates, Inc.

Title:

Connector Roof - Flashing

Figure 119

Callouts:

Comments:



B 0816170

R. J. Kenney Associates, Inc.

Title:

Connector Roof - Flashing

Figure 120

Callouts:

Comments:



B 0816124

R. J. Kenney Associates, Inc.

Title:

Connector Roof - Flashing

Figure 121

Callouts:

Comments:



B_0816114

R. J. Kenney Associates, Inc.

Title:

Connector Roof - Flashing

Figure 122

Callouts:

Comments:



B_0816172

R. J. Kenney Associates, Inc.

Title:

Connector Roof - Flashing

Figure 123

Callouts:

Comments:



B_0817025

R. J. Kenney Associates, Inc.

Title:

Connector Roof - Flashing

Figure 124

Callouts:

Comments:



B_0817027

R. J. Kenney Associates, Inc.

Title:

Connector Roof - Flashing

Figure 125

Callouts:

Comments:



B_0817021

R. J. Kenney Associates, Inc.

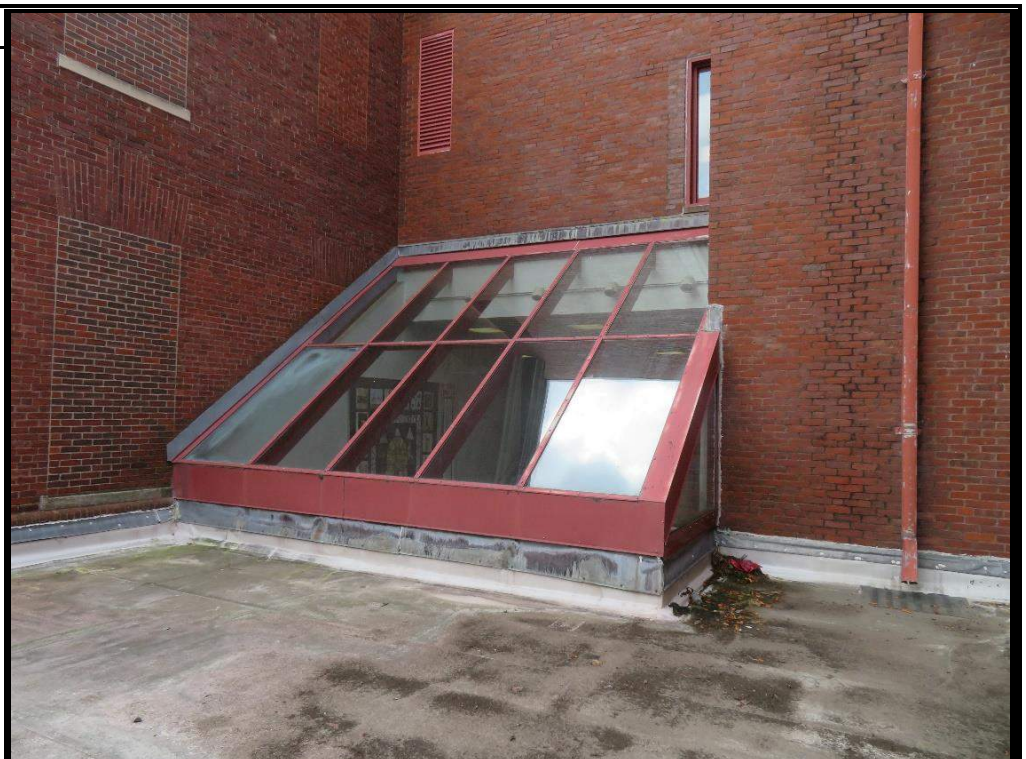
Title:

Connector Roof - Flashing

Figure 126

Callouts:

Comments:



B_0816134

R. J. Kenney Associates, Inc.

Title:

Connector Roof - Skylight

Figure 127

Callouts:

Comments:



B 0816137

R. J. Kenney Associates, Inc.

Title:

Connector Roof - Skylight

Figure 128

Callouts:

Comments:



A 0817047

R. J. Kenney Associates, Inc.

Title:

Connector Roof - Skylight



Figure 129

Callouts:

Comments:



Title:

Connector Roof - Skylight

Figure 130

Callouts:

Comments:



Title:

Connector Roof - Skylight

Figure 131

Callouts:

Comments:



B_0816146

R. J. Kenney Associates, Inc.

Title:

Connector Roof - Skylight

Figure 132

Callouts:

Comments:



A_0817001

R. J. Kenney Associates, Inc.

Title:

Test 1.1 - Flood Test of Drain and Sump

Figure 133

Callouts:

Comments:



B_0817052

R. J. Kenney Associates, Inc.

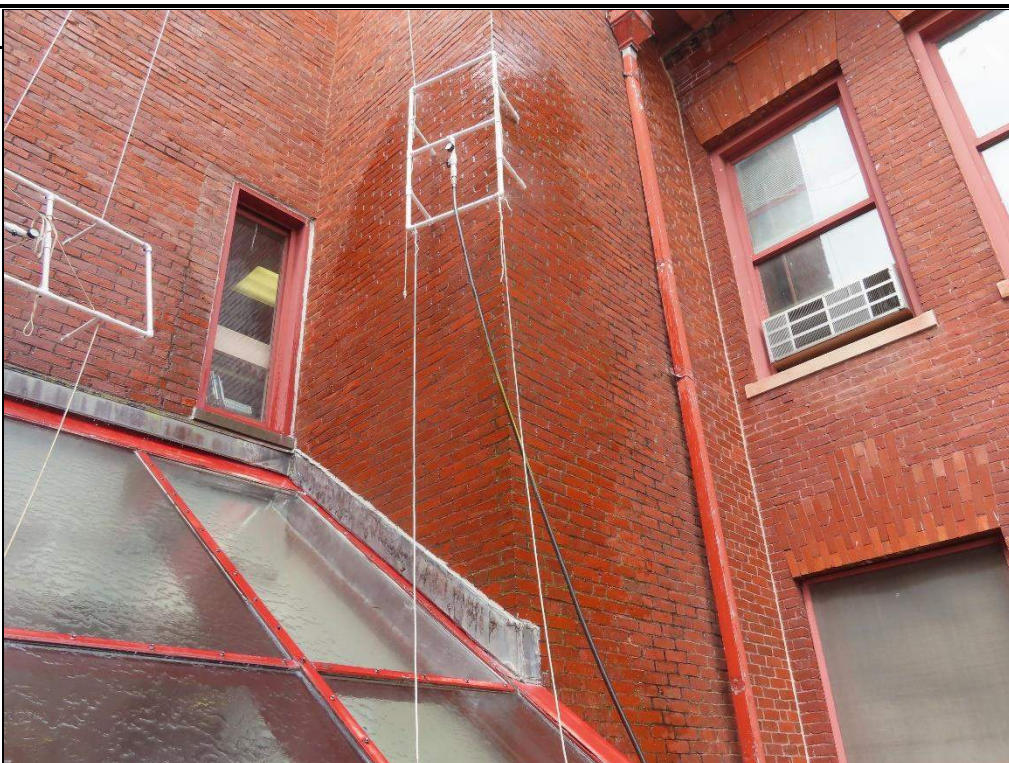
Title:

Test 1.1 - Water Infiltration in Storage Room 031

Figure 134

Callouts:

Comments:



B_0818147

R. J. Kenney Associates, Inc.

Title:

Test 5.1 - Elevator Tower Over Sloped Glazing

BUILDING A ROOF
- 5 years remaining life.
- Good to fair condition, seam welds good. Typical surface wear for 15 - 20 year old roof.
- Some minor debonding, membrane tightening at drains.
- Coping/terminations are good.

BUILDING B ROOF
- Slates are cracked and chipped.
- Sealing mastic used has failed.
- Snow guards are damaged.
- Vertical corners are open at dormer cheek walls.

BUILDING C ROOF
- Refer to Building A notes.

CONNECTOR ROOF
- Fair to poor condition, heavy staining, improper patching, base flashing pulling away from walls.
- Roof cement sporadically strewn across membrane.

RJK: Recommended roof-to-wall flashing removal/replacement area.

RJK: Debris

RJK: Open clad edge metal seam.

RJK: Repair edge through-wall flashing.

RJK: Connector (Hatched Area).

RJK: Damaged parapet where fence was removed, masonry is surrounding area is damaged.

RJK: Open fish mouth on parapet.

RJK: Deteriorated antenna pad.

RJK: Missing splash block, deteriorated walking pads.

RJK: Wall top plate is deflected about 1" from original location.

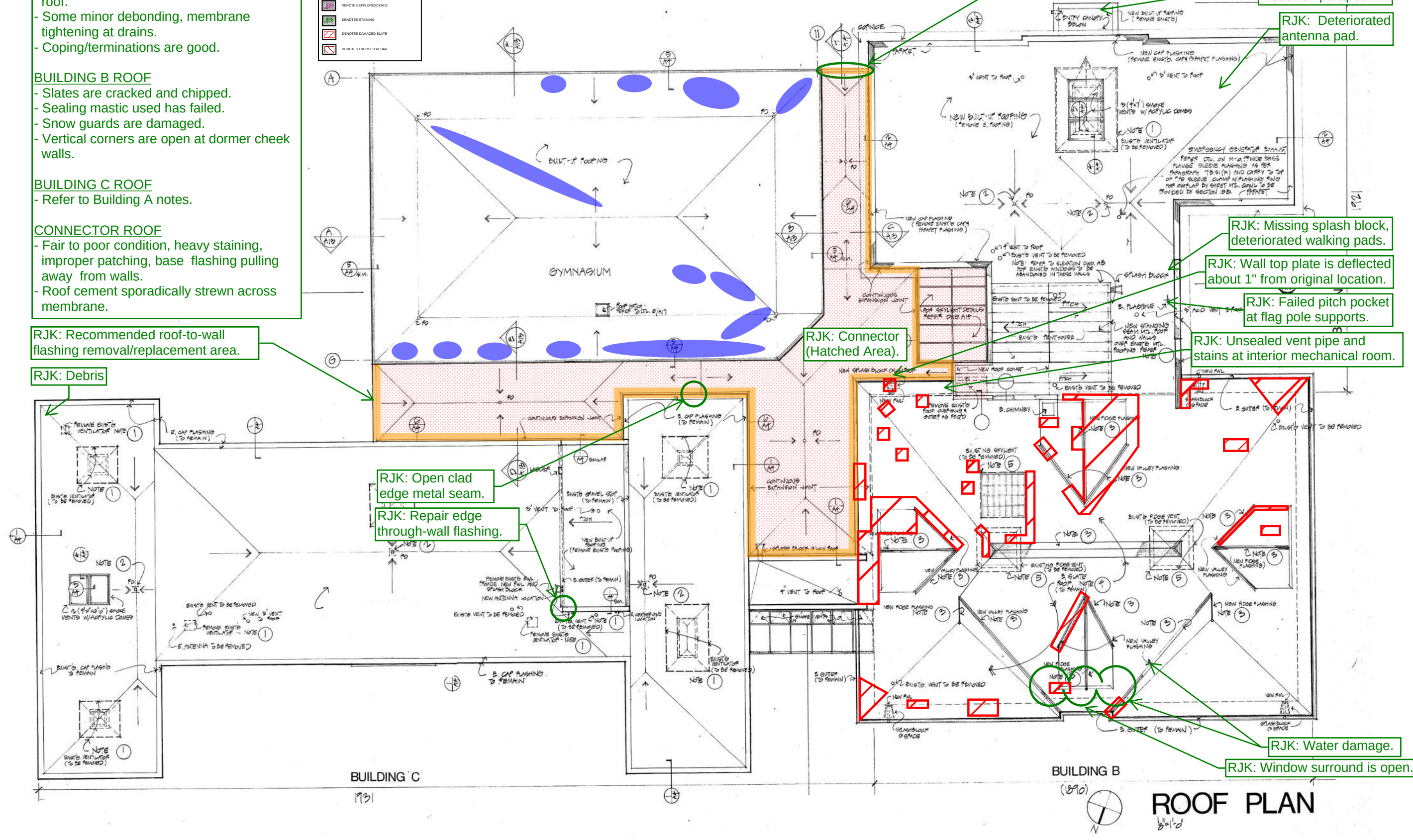
RJK: Failed pitch pocket at flag pole supports.

RJK: Unsealed vent pipe and stains at interior mechanical room.

RJK: Water damage.

RJK: Window surround is open.

RJK EXTERIOR SURVEY LEGEND	
	DENOTES AREA WHERE THERE IS A CRACK IN THE MASONRY. REPAIR AS NOTED.
	DENOTES LOCATION WHERE REBUILDING/REPAIRING IS REQUIRED.
	DENOTES PONDING WATER
	DENOTES PIPE PENETRATION OR HOLE
	DENOTES EFFLORESCENCE
	DENOTES STAINING
	DENOTES DAMAGED SLATE
	DENOTES EXPOSED REBAR



TYPICAL NOTES

1. Repoint head/bed joints and horizontal joint over band molding, Building C South Elevation.
2. Repoint headers over all windows, Building C South Elevation.

RJK: Point 2' down from top of wall.

RJK: Clean.

RJK: Point head joint in sill.

RJK: Remove anchors and point.

RJK: Replace all vertical sealant joints on gym.

RJK: Failed joint at building transition.

RJK: Wall not capped, cracked brick, deteriorated mortar, flashing does not go entirely through-wall.

RJK: Failed sealant joint at window perimeters.

RJK: Repoint sill butt joints.

RJK: Water damage.

RJK: Failed perimeter sealant.

RJK: Copper gutter deteriorated.

RJK: Wood trim damaged/missing. Soffit is deflected, paint deteriorated.

RJK: Open joint between soffit, brick.

RJK: Loose flat arch brick.

RJK: Open penetration.

RJK: Failed lintel.

RJK: Deteriorated flashing.

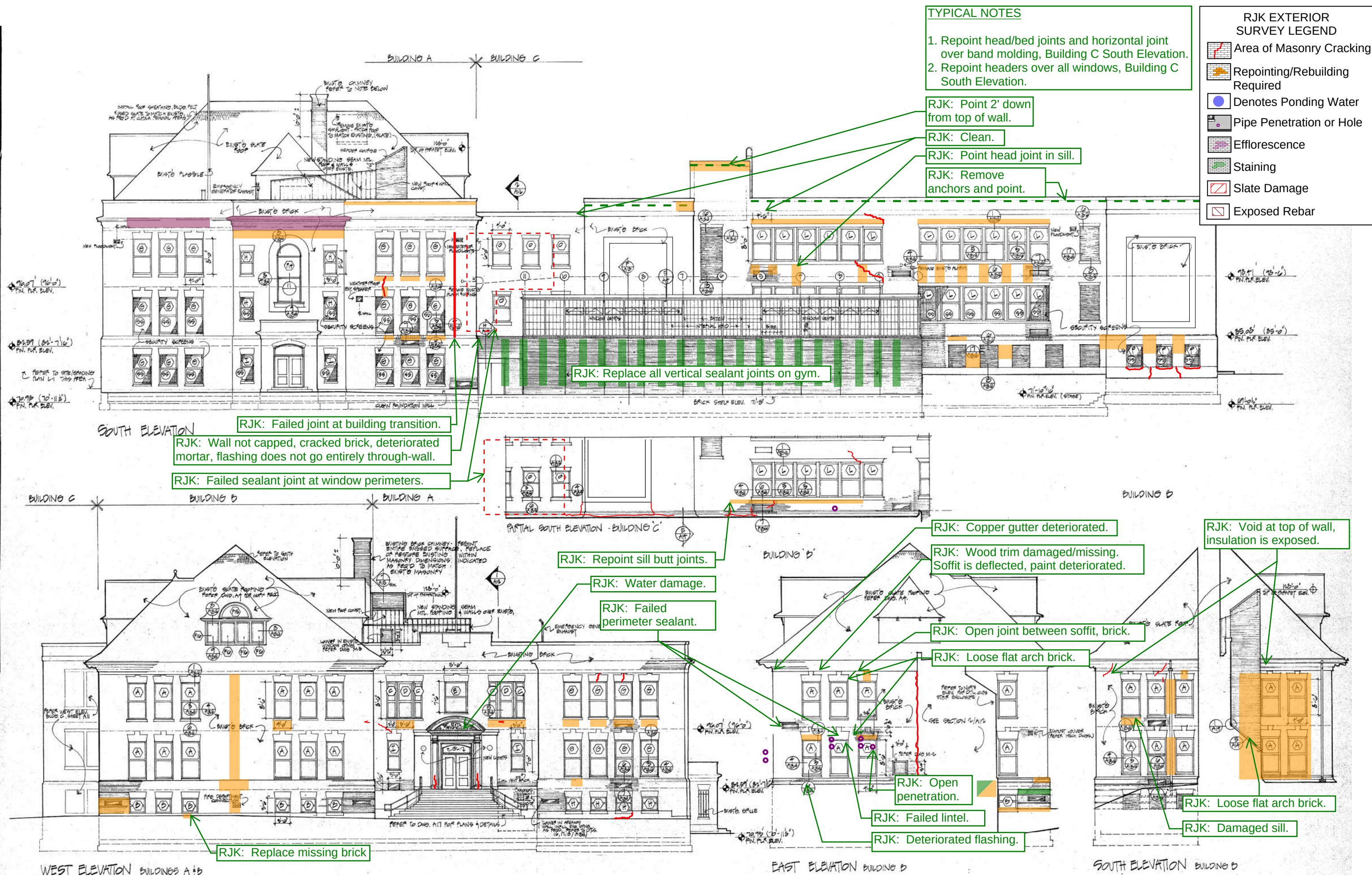
RJK: Void at top of wall, insulation is exposed.

RJK: Loose flat arch brick.

RJK: Damaged sill.

RJK: Replace missing brick

RJK EXTERIOR SURVEY LEGEND	
	Area of Masonry Cracking
	Repointing/Rebuilding Required
	Denotes Ponding Water
	Pipe Penetration or Hole
	Efflorescence
	Staining
	Slate Damage
	Exposed Rebar



RJK: Remove anchors, clean precast band.

RJK: Trim tree back from building.

RJK: Copper staining at pediment.

RJK: Clean brick of algae at east elevation ell return.

RJK: Window perimeter is not sealed, daylight visible from interior.

RJK: Interior water stains.

- TYPICAL NOTES**
1. Repoint head joints at window sills.
 2. Repoint and seal at lintel conditions.
 3. Remove anchors in the parapet.
 4. Clean band molding and all 1970's masonry.
 5. Replace missing weep vents at head conditions.

RJK EXTERIOR SURVEY LEGEND

- Area of Masonry Cracking
- Repointing/Rebuilding Required
- Denotes Ponding Water
- Pipe Penetration or Hole
- Efflorescence
- Staining
- Slate Damage
- Exposed Rebar

RJK: Clean brick. Coping recommended.

RJK: Minor spall, peeling paint at soffit underside.

RJK: Install new perimeter caulk joint.

RJK: Coping cap recommend.

RJK: Redo through-wall flashing.

RJK: Abrade/paint all lintels.

RJK: Damaged copper head flashing.

RJK: Downspout not anchored, gap at leader box. Soffit is open.

RJK: Abandoned metal antenna anchors.

RJK: Open joint.

RJK: Line of anchors in parapet to be removed.

RJK: Extend downspout, eroded mortar.

RJK: Point 3' from each corner.

RJK: Line of anchors in parapet to be removed.

RJK: Duct tape used to repair panel.

RJK: Replace all sealant joints on gym.

RJK: Abrade/paint all lintels, clean all sills.

RJK: Reseal perimeter.

RJK: Connector entrance, east elevation.

RJK: Repair parging.

RJK: Spall, peeling paint.

RJK: Mortar of bricked-up windows does not match surrounds.

RJK: Water damage below through-wall flashing.

RJK: Redo sealant/through-wall flashing at the roof termination.

RJK: Coping cap recommended.

PARTIAL EAST ELEVATION (EXIT FROM CORRIDOR 050) REFER TO H/AT THIS AREA

PARTIAL EAST ELEV. / BUILDING A

REFER TO H/AT THIS AREA

RJK WATER LEAKAGE INVESTIGATION

AUGUST 17 - 18, 2021

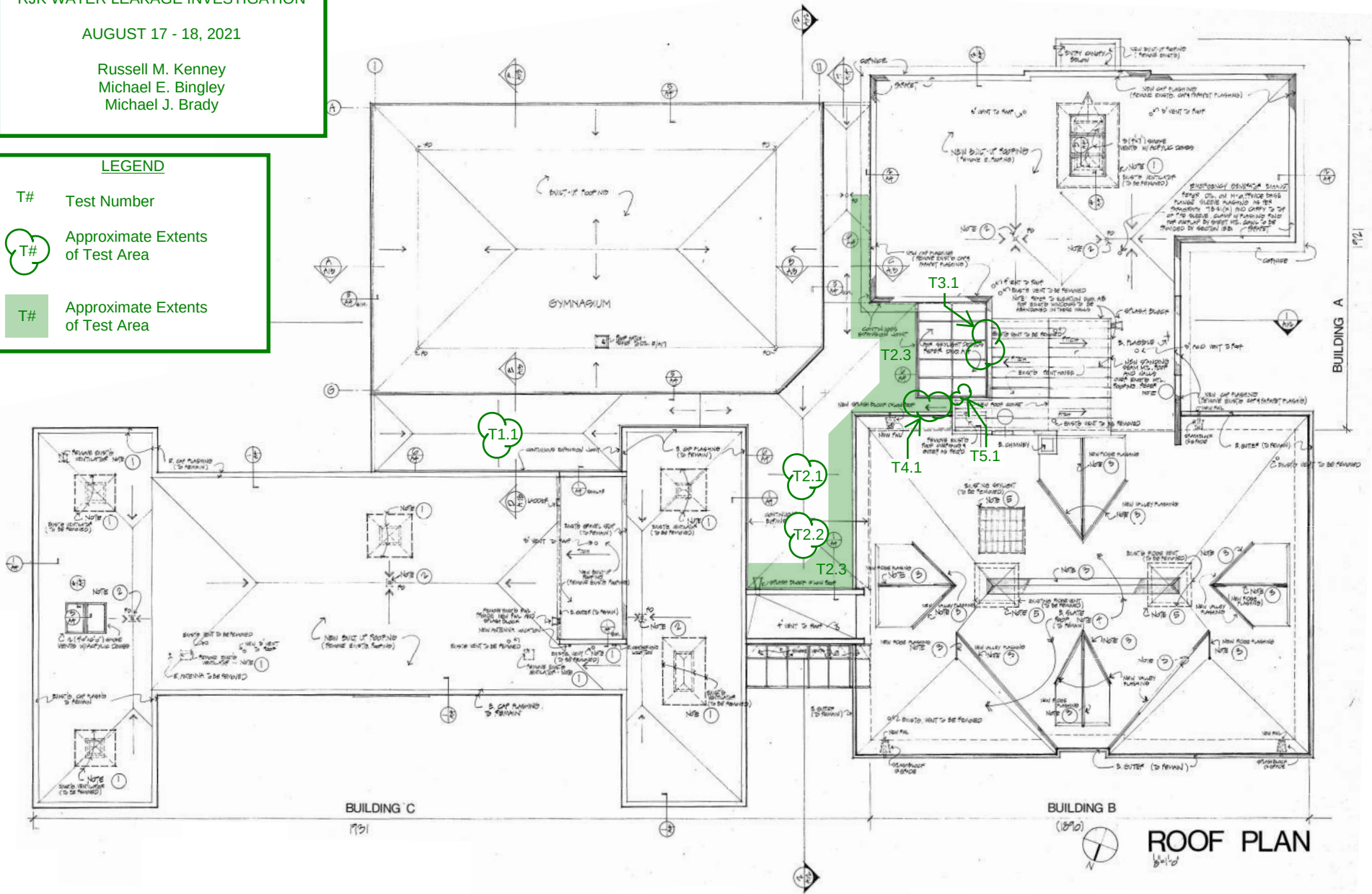
Russell M. Kenney
Michael E. Bingley
Michael J. Brady

LEGEND

T# Test Number

 T# Approximate Extents of Test Area

 T# Approximate Extents of Test Area



ROOF PLAN
8/1/21

RJK WATER LEAKAGE INVESTIGATION

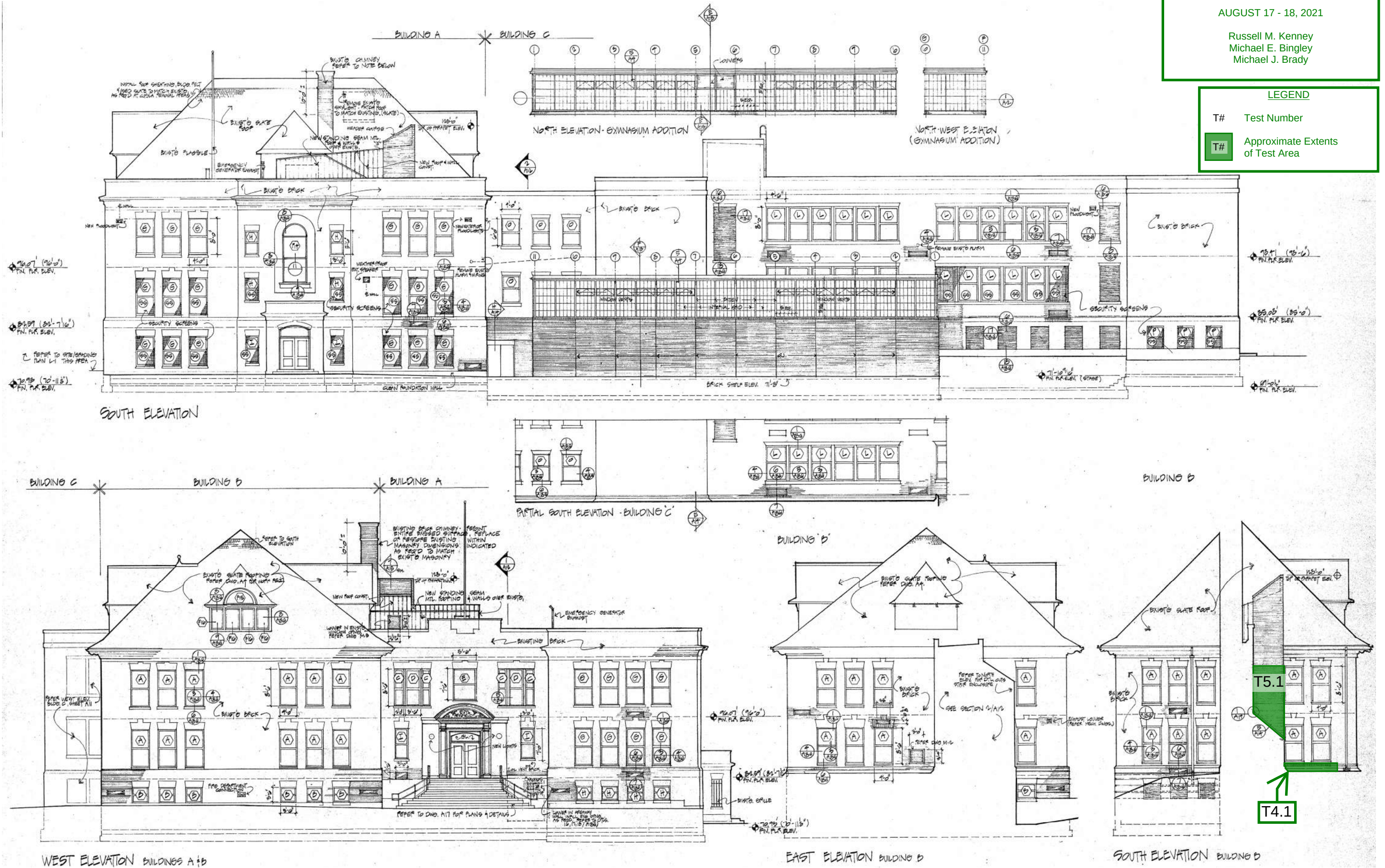
AUGUST 17 - 18, 2021

Russell M. Kenney
Michael E. Bingley
Michael J. Brady

LEGEND

T# Test Number

T# Approximate Extents
of Test Area



RJK WATER LEAKAGE INVESTIGATION

AUGUST 17 - 18, 2021

Russell M. Kenney
Michael E. Bingley
Michael J. Brady

LEGEND

T#	Test Number
 T#	Approximate Extents of Test Area

LEGEND

T#	Test Number
 T#	Approximate Extents of Test Area

LEGEND

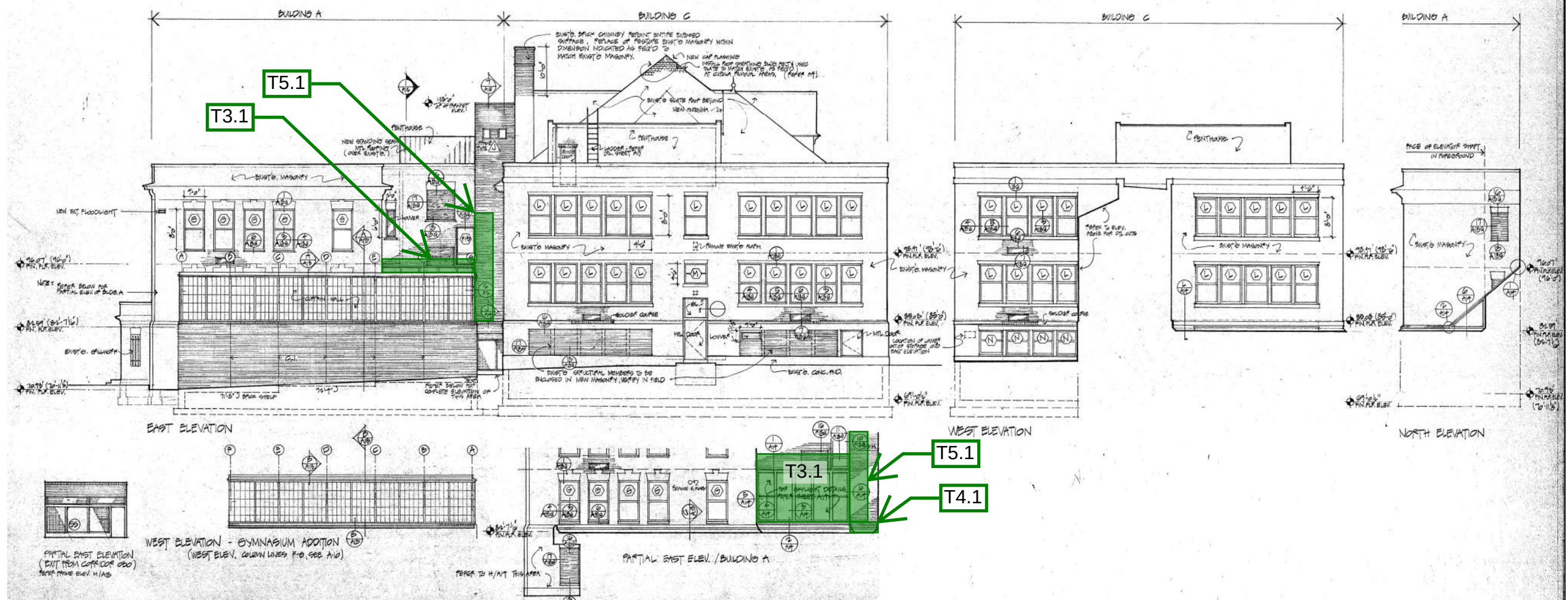
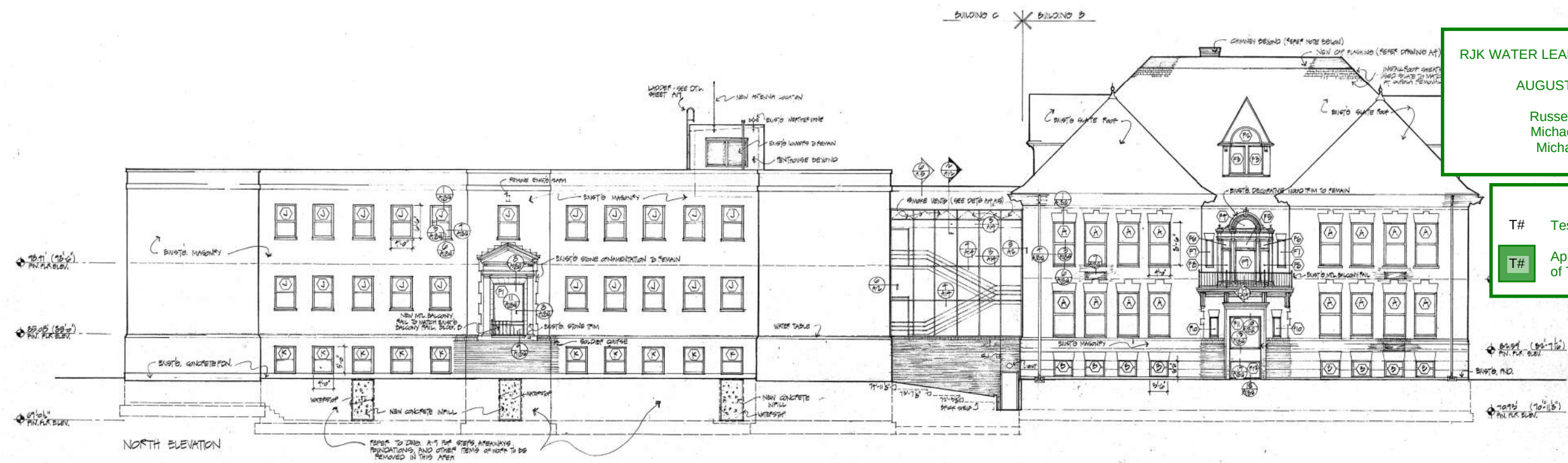
T#	Test Number
T#	Approximate Extents of Test Area

LEGEND

T#	Test Number
 T#	Approximate Extents of Test Area

LEGEND

T#	Test Number
 T#	Approximate Extents of Test Area





Appendix C - Test Log

Test Area/ Test Number	Date	Leak Observed	Results/Comments
Test Area #1			
T1.1	8/17/2021	58 min.	Flood test of drain and drain sump. Water observed dripping from the ceiling of Gymnasium Storage Room 031 in the same location as water damage on the ceiling. A bucket was already located on the ground in the location where leakage was observed.
Test Area #2			
T2.1	8/17/2021	None	Flood test of drain and drain sump.
T2.2	8/17/2021	None	Flood test of drain and drain sump.
T2.3	8/17/2021	None	Flood test of drain and drain sump.
Test Area #3			
T3.1	8/18/2021	None	Spray rack test at top of sloped glazing through-wall flashing over damaged ceiling at interior.
Test Area #4			
T4.1	8/18/2021	None	Test of base of wall through-wall flashing by elevator tower.
Test Area #5			
T5.1	8/18/2021	20 min.	Spray rack test at southeast corner of elevator tower over the sloped glazing rake flashing. Water was observed over the doorway in the elevator mechanical room.



Appendix D - Priority Level Table

Priority Level	Description
1	Immediate risk to public safety. Immediate stabilization or localized repair is required.
2	Severely deteriorated system or material that requires wholesale system replacement. Or a localized condition that requires prompt attention to prevent deterioration of other materials or systems.
3	Moderately deteriorated system or material that will require replacement or major repair in the future. Or a localized condition that requires attention in the short term to prevent continued deterioration.
4	Condition of the system is good and does not require replacement or major repair in the short term.
5	Condition of system is very good and replacement or major repair is not anticipated for at least 10 years.



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-61

Department:
Facilities

Title:
BUTLER PHASE VI WINDOW REPLACEMENT

Description: Continuation of window replacement project and envelope repointing and sealing. There are 72 remaining windows to be replaced - including those in this request.

Location (if available): BUTLER ELEMENTARY SCHOOL

FY 23: \$235000

FY 24: \$

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$235000

Project Category: Public improvement

Project Type: Replacement

Basis For Estimate: Other

Life Expectancy: 25

Operational Cost Impact: Decrease to expenses

Note: The new windows are more energy efficient than the existing because of low E glass and thermopane double insulated glass.

Urgency: 6

Note: Continuation of a long term decision to upgrade the windows.

Previous Phases: Yes

Can This Be Phased: Yes

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #FY 23 CBR-21

Department:
Facilities

Title:
Supplemental funding for new Fire Alarm

Description: Start and complete the the upgrade of a new Fire Alarm system

Location (if available): BUTLER ELEMENTARY SCHOOL

FY 23: \$66000

FY 24: \$

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$66000

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: Consultant

Life Expectancy: 15

Operational Cost Impact: Neutral

Note:

Urgency: 4 - Has outlived its useful life

Note: Funding was approved in FY 16 and FY20. Increased construction cost has pushed the estimated value to \$327,185. Public bids will determine actual cost.

Previous Phases: No

Can This Be Phased: No

Grants:



Pricing Set Estimate

Belmont Public Schools Daniel Butler ES School Fire Alarm System Upgrade

Belmont, MA

Prepared for:

SMMA

November 10, 2021

**Belmont Public Schools**

Daniel Butler ES School Fire Alarm System Upgrade

Belmont, MA

10-Nov-21

Pricing Set Estimate**MAIN CONSTRUCTION COST SUMMARY**

		Gross Floor Area	\$/sf	Estimated Construction Cost
FIRE ALARM REPLACEMENT		58,850	\$4.51	\$265,573
REMOVE HAZARDOUS MATERIALS				NIC
SUB-TOTAL		58,850	\$4.51	\$265,573
DESIGN/PRICING	10.00%			\$26,557
ESCALATION	2.00%			\$5,311
SUB-TOTAL Incl. CONTINGENCY & ESCALATION				\$297,441
GENERAL CONDITIONS	Incl			
SUB-TOTAL				\$297,441
BONDS	Incl			
INSURANCE - GLI	Incl			
PERMIT				NIC
SUB-TOTAL				\$297,441
OVERHEAD AND FEE	10.00%			\$29,744
TOTAL OF ALL CONSTRUCTION		58,850	\$5.56	\$327,185

**Belmont Public Schools**

Daniel Butler ES School Fire Alarm System Upgrade

Belmont, MA

10-Nov-21

Pricing Set Estimate

This Pricing Set cost estimate was produced from existing drawings and narratives prepared by SMMA, dated October 29th, 2021. Design and engineering changes occurring subsequent to the issue of these documents have not been incorporated in this estimate.

This estimate includes all direct construction costs, subcontractors overhead and profit and design contingency. Cost escalation assumes start dates indicated.

Bidding conditions are expected to be public bidding under 149 of the Massachusetts General Laws to pre-qualified sub-contractors, and pre-qualified sub-contractors, open specifications for materials and manufactures. If GC is selected as the prime contractor costs will in all likelihood increase from this estimate

The estimate is based on prevailing wage rates for construction in this market and represents a reasonable opinion of cost. It is not a prediction of the successful bid from a contractor as bids will vary due to fluctuating market conditions, errors and omissions, proprietary specifications, lack or surplus of bidders, perception of risk, etc. Consequently the estimate is expected to fall within the range of bids from a number of competitive contractors or subcontractors, however we do not warrant that bids or negotiated prices will not vary from the final construction cost estimate.

ITEMS NOT CONSIDERED IN THIS ESTIMATE

Items not included in this estimate are:

- Any Overtime, accelerated schedule or phasing premiums
- Project is assumed to be done over the summer of 2022 when school is unoccupied
- All professional fees and insurance
- Removal of any hazardous materials
- Building Permit costs
- Land acquisition, feasibility, and financing costs
- All Furnishings, Fixtures and Equipment (including moving existing furniture)
- Items identified in the design as Not In Contract (NIC)
- Items identified in the design as by others
- Owner supplied and/or installed items (e.g. draperies, furniture and equipment)



Belmont Public Schools
Daniel Butler ES School Fire Alarm System Upgrade
Belmont, MA

10-Nov-21

Pricing Set Estimate

GFA 58,850

CONSTRUCTION COST SUMMARY					
<i>BUILDING SYSTEM</i>		<i>SUB-TOTAL</i>	<i>TOTAL</i>	<i>\$/SF</i>	<i>%</i>
FIRE ALARM REPLACEMENT					
C10	INTERIOR CONSTRUCTION				
C1010	Partitions	\$10,000	\$10,000	\$0.17	3.8%
C30	INTERIOR FINISHES				
C3010	Wall Finishes	\$15,000			
C3030	Ceiling Finishes	\$10,000	\$35,200	\$0.60	13.3%
D30	HVAC				
D30	HVAC	\$0	\$0	\$0.00	0.0%
D50	ELECTRICAL				
D5020	Gear + Distribution	\$5,000			
D5030	Fire Alarm Systems	\$204,351			
D5040	Other Electrical Systems	\$11,022	\$220,373	\$3.74	83.0%
TOTAL DIRECT COST (Trade Costs)			\$265,573	\$4.51	100.0%



Belmont Public Schools
Daniel Butler ES School Fire Alarm System Upgrade
Belmont, MA

10-Nov-21

Pricing Set Estimate

GFA 58,850

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
-------------	-------------	-----	------	--------------	---------------	--------------	---------------

FIRE ALARM REPLACEMENT

Ground Floor	19,275
1st Floor	17,252
2nd Floor	17,317
Attic	5,006

TOTAL GROSS FLOOR AREA (GFA)

58,850 sf

C10 INTERIOR CONSTRUCTION

0929000 Gypsum panels

092900	Allowance for patching existing walls for penetrations for new FA system	1	ls	10,000.00	10,000		
--------	--	---	----	-----------	--------	--	--

SUBTOTAL						10,000	
----------	--	--	--	--	--	--------	--

TOTAL - INTERIOR CONSTRUCTION

\$10,000

C30 INTERIOR FINISHES

C3010 WALL FINISHES

099000 Painting

099000	Paint and patching walls	1	ls	15,000.00	15,000		
--------	--------------------------	---	----	-----------	--------	--	--

SUBTOTAL						15,000	
----------	--	--	--	--	--	--------	--

C3030 CEILING FINISHES

099003 Acoustic Ceiling

099003	Allowance to remove and reinstall ceilings for access	120	hrs	85.00	10,200		
--------	---	-----	-----	-------	--------	--	--

SUBTOTAL						10,200	
----------	--	--	--	--	--	--------	--

099000 Painting

099000	Paint and patching ceilings	1	ls	10,000.00	10,000		
--------	-----------------------------	---	----	-----------	--------	--	--

SUBTOTAL						10,000	
----------	--	--	--	--	--	--------	--

TOTAL - INTERIOR FINISHES

35,200

D30 HVAC

D30 HVAC, GENERALLY

SUBTOTAL

TOTAL - HVAC

D50 ELECTRICAL



Belmont Public Schools
Daniel Butler ES School Fire Alarm System Upgrade
Belmont, MA

10-Nov-21

Pricing Set Estimate

GFA

58,850

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
-------------	-------------	-----	------	--------------	---------------	--------------	---------------

FIRE ALARM REPLACEMENT

Gear & Distribution

Allow for new circuit breakers in existing gear

1

ls

5,000.00

5,000

SUBTOTAL

5,000

D5030 COMMUNICATION & SECURITY SYSTEMS

Fire Alarm with Voice EVAC

Control panel

1

ea

15,000.00

15,000

FAA

1

ea

2,200.00

2,200

Beam detector

2

ea

1,200.00

2,400

Duct smoke detector

3

ea

550.00

1,650

FP connection

2

ea

275.00

550

Knox box

1

ea

650.00

650

Manual pull station

14

ea

140.00

1,960

Radio master box

1

ea

9,500.00

9,500

Monitoring/control module

11

ea

250.00

2,750

Signaling device

72

ea

170.00

12,240

Smoke detector

52

ea

150.00

7,800

Device box

160

ea

30.00

4,800

3/4" EMT

4,000

lf

9.00

36,000

#14 THHN

12,000

lf

1.00

12,000

FA MC cable

4,000

lf

5.25

21,000

Testing programming

1

ls

15,000.00

15,000

Keep existing system operating during construction

58,850

sf

0.25

14,713

Allow for fire alarm not yet detailed

58,850

sf

0.50

29,425

Demo and make of existing

58,850

sf

0.25

14,713

Bi-Directional System

BDA system

NIC

SUBTOTAL

204,351

D5040 OTHER ELECTRICAL SYSTEMS

Allowance for permits

1

ls

1,021.76

1,022

Allowance for final clean

1

ls

10,000.00

10,000

SUBTOTAL

11,022

TOTAL - ELECTRICAL

\$220,373



Commonwealth of Massachusetts

Town of Belmont

Capital Request #FY 23 CBR-14

Department:
Facilities

Title:
Electric Van

Description: New Electric Van

Location (if available): OTHER

FY 23: \$54704

FY 24: \$

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$54704

Project Category: Vehicle

Project Type: New

Basis For Estimate: Quote

Life Expectancy: 5

Operational Cost Impact: Neutral

Note:

Urgency: 5 - New: to address quality of life

Note: Fleet Vehicle (elec.) to support new staff

Previous Phases: No

Can This Be Phased: No

Grants:

2022 E-Transit-350 Cargo RWD Medium Roof Van 130" WB Base (W9C)

Price Level: 220



Client Proposal

Prepared by:

Stan Tagarelis

Office: 617-924-3673

Date: 11/03/2021



Watertown Ford, Inc. | 625 Pleasant Street, Watertown, Massachusetts, 024722406
Office: 617-924-3673 | Fax: 781-926-3255



Prepared by: Stan Tagarelis
11/03/2021

Watertown Ford, Inc. | 625 Pleasant Street Watertown Massachusetts | 024722406

2022 E-Transit-350 Cargo RWD Medium Roof Van 130" WB Base (W9C)

Price Level: 220

<i>As Configured Vehicle</i>	MSRP
Short-Arm Manual-Folding Heated Pwr Adjusting Mirrors	\$150.00
Fixed Rear Cargo Door & Passenger-Side Glass	\$395.00
Rear-Window Defroster	Included
Rearview Mirror	Included
6 Cargo Tie-Down Hooks	\$25.00
Full Rear Compartment Lighting	\$70.00
Window Only Bulkhead	\$830.00
Passenger-Side B-Pillar Assist Handle	Included
120V/2.4kW Pro Power Onboard	\$950.00
12V Powerpoint	Included
2 Additional Keys (4 Total)	\$70.00
SUBTOTAL	\$50,955.00
Destination Charge	\$1,695.00
TOTAL	\$52,650.00

Prices and content availability as shown are subject to change and should be treated as estimates only. Actual base vehicle, package and option pricing may vary from this estimate because of special local pricing, availability or pricing adjustments not reflected in the dealer's computer system. See salesperson for the most current information.

VEHICLE	YEAR	Make & Model	VIN	PLATE	MILEAGE	Designee	Notes
FAC-1	2014	CHEVY Silverado 3500HD	1GC3KZCGXEF171461	M87257	26992	School - Maint	Hand down from DPW
FAC-2	2003	CHEVY Silverado P/U	1GCHK24U63E167573	M71175	60289	N/A	Taken of the road 7/21
FAC-3	2018	CHEVY CITY EXPRESS VAN	3N63M0YN1JK696358	M99384	21700	School - Maint	
FAC-4	2010	CHEVY Silverado P/U	1GC3KVBG0AF154821	M82989	59638	Town - Maint.	Hand down from DPW
FAC-5	2017	CHEVY VAN	1GCZGHFG2J1169213	M99234	20842	HVAC	
FAC-6	2002	FORD F-450	1FDXF47F62ED10699	M2071	71034	Carp./ Elec	Hand down from DPW
FAC-7	2017	NISSAN LEAF (Electric)	1N4BZ0CP1HC302369	M3972A	37757	Admin.	Does not hold charge no long distances
FAC-8	2018	FORD Explorer	1FM5K8D82KGA16415	M2057	94890	Director	Loaner from DPW



Commonwealth of Massachusetts

Town of Belmont

Capital Request #FY 23 CBR-12

Department:
Facilities

Title:
New Electric Van

Description: Added to fleet to support new positions within the Facilities Department.

Location (if available): OTHER

FY 23: \$54756

FY 24: \$

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$54756

Project Category: Vehicle

Project Type: New

Basis For Estimate: Quote

Life Expectancy: 5

Operational Cost Impact: Neutral

Note:

Urgency: 6

Note: Support to growing and improving Department

Previous Phases: No

Can This Be Phased: No

Grants: Have not been identified

2022 E-Transit-350 Cargo RWD Medium Roof Van 130" WB Base (W9C)

Price Level: 220



Client Proposal

Prepared by:

Stan Tagarelis

Office: 617-924-3673

Date: 11/03/2021



Watertown Ford, Inc. | 625 Pleasant Street, Watertown, Massachusetts, 024722406
Office: 617-924-3673 | Fax: 781-926-3255



Prepared by: Stan Tagarelis
11/03/2021

Watertown Ford, Inc. | 625 Pleasant Street Watertown Massachusetts | 024722406

2022 E-Transit-350 Cargo RWD Medium Roof Van 130" WB Base (W9C)

Price Level: 220

<i>As Configured Vehicle</i>	MSRP
Short-Arm Manual-Folding Heated Pwr Adjusting Mirrors	\$150.00
Fixed Rear Cargo Door & Passenger-Side Glass	\$395.00
Rear-Window Defroster	Included
Rearview Mirror	Included
6 Cargo Tie-Down Hooks	\$25.00
Full Rear Compartment Lighting	\$70.00
Window Only Bulkhead	\$830.00
Passenger-Side B-Pillar Assist Handle	Included
120V/2.4kW Pro Power Onboard	\$950.00
12V Powerpoint	Included
2 Additional Keys (4 Total)	\$70.00
SUBTOTAL	\$50,955.00
Destination Charge	\$1,695.00
TOTAL	\$52,650.00

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VEHICLE	YEAR	Make & Model	VIN	PLATE	MILEAGE	Designee	Notes
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FAC-2	2003	CHEVY Silverado P/U	1GCHK24U63E167573	M71175	60289	N/A	Taken of the road 7/21
FAC-3	2018	CHEVY CITY EXPRESS VAN	3N63M0YN1JK696358	M99384	21700	School - Maint	
FAC-4	2010	CHEVY Silverado P/U	1GC3KVBG0AF154821	M82989	59638	Town - Maint.	Hand down from DPW
FAC-5	2017	CHEVY VAN	1GCZGHFG2J1169213	M99234	20842	HVAC	
FAC-6	2002	FORD F-450	1FDXF47F62ED10699	M2071	71034	Carp./ Elec	Hand down from DPW
FAC-7	2017	NISSAN LEAF (Electric)	1N4BZ0CP1HC302369	M3972A	37757	Admin.	Does not hold charge no long distances
FAC-8	2018	FORD Explorer	1FM5K8D82KGA16415	M2057	94890	Director	Loaner from DPW



Commonwealth of Massachusetts
Town of Belmont
Capital Request #FY 23 CBR-16

Department:
Facilities

Title:
Replace Heat Exchanger

Description: The Heat Exchanger that supports the heating side of the geo thermal system at the Wellington school needs to be replaced to take advantage of the state of the art heating and cooling system. We have made improvements to make the system work during shoulder cooling seasons but it is not able to cool or heat in height of seasons. BMS Programming is also apart of the repair project.

Location (if available): WELLINGTON ELEMENTARY SCHOOL

FY 23: \$150000

FY 24: \$

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$150000

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: In-house estimate

Life Expectancy: 12

Operational Cost Impact: Decrease to expenses

Note: Geothermal heating and cooling means less fossil fuel needs to be used to manage school temperatures.

Urgency: 1 - System has failed

Note: System failed over 5 years ago do to operator error.

Previous Phases: No

Can This Be Phased: No

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #FY 23 CBR-22

Department:
Facilities

Title:
Supplemental Funding for a new Fire Alarm and PA

Description: Update the Fire Alarm and PA system at the Winn Brook School. This received approved funding in FY19 FY20, and FY21. This amount will cover the estimated value for the project.

Location (if available): WINN BROOK ELEMENTARY SCHOOL

FY 23: \$75000

FY 24: \$

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$75000

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: Consultant

Life Expectancy: 15

Operational Cost Impact: Neutral

Note:

Urgency: 4 - Has outlived its useful life

Note:

Previous Phases: No

Can This Be Phased: No

Grants:



Pricing Set Estimate

Belmont Public Schools Winn Brook ES School Fire Alarm + PA System Upgrade

Belmont, MA

Prepared for:

SMMA

November 10, 2021

**Belmont Public Schools**

Winn Brook ES School Fire Alarm + PA System Upgrade

Belmont, MA

10-Nov-21

Pricing Set Estimate**MAIN CONSTRUCTION COST SUMMARY**

		Gross Floor Area	\$/sf	Estimated Construction Cost
FIRE ALARM + PA SYSTEM REPLACEMENT		68,739	\$5.41	\$371,760
REMOVE HAZARDOUS MATERIALS				NIC
SUB-TOTAL		68,739	\$5.41	\$371,760
DESIGN/PRICING	10.00%			\$37,176
ESCALATION	2.00%			\$7,435
SUB-TOTAL Incl. CONTINGENCY & ESCALATION				\$416,371
GENERAL CONDITIONS	Incl			
SUB-TOTAL				\$416,371
BONDS	Incl			
INSURANCE - GLI	Incl			
PERMIT				NIC
SUB-TOTAL				\$416,371
OVERHEAD AND FEE	10.00%			\$41,637
TOTAL OF ALL CONSTRUCTION		68,739	\$6.66	\$458,008



Belmont Public Schools

Winn Brook ES School Fire Alarm + PA System Upgrade

Belmont, MA

10-Nov-21

Pricing Set Estimate

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This estimate includes all direct construction costs, subcontractors overhead and profit and design contingency. Cost escalation assumes start dates indicated.

Bidding conditions are expected to be public bidding under 149 of the Massachusetts General Laws to pre-qualified sub-contractors, and pre-qualified sub-contractors, open specifications for materials and manufactures. If GC is selected as the prime contractor costs will in all likelihood increase from this estimate

The estimate is based on prevailing wage rates for construction in this market and represents a reasonable opinion of cost. It is not a prediction of the successful bid from a contractor as bids will vary due to fluctuating market conditions, errors and omissions, proprietary specifications, lack or surplus of bidders, perception of risk, etc. Consequently the estimate is expected to fall within the range of bids from a number of competitive contractors or subcontractors, however we do not warrant that bids or negotiated prices will not vary from the final construction cost estimate.

ITEMS NOT CONSIDERED IN THIS ESTIMATE

Items not included in this estimate are:

- Any Overtime, accelerated schedule or phasing premiums
- Project is assumed to be done over the summer of 2022 when school is unoccupied
- All professional fees and insurance
- Removal of any hazardous materials
- Building Permit costs
- Land acquisition, feasibility, and financing costs
- All Furnishings, Fixtures and Equipment (including moving existing furniture)
- Items identified in the design as Not In Contract (NIC)
- Items identified in the design as by others
- Owner supplied and/or installed items (e.g. draperies, furniture and equipment)



Belmont Public Schools
Winn Brook ES School Fire Alarm + PA System Upgrade
Belmont, MA

10-Nov-21

Pricing Set Estimate

GFA 68,739

CONSTRUCTION COST SUMMARY					
<i>BUILDING SYSTEM</i>		<i>SUB-TOTAL</i>	<i>TOTAL</i>	<i>\$/SF</i>	<i>%</i>
FIRE ALARM + PA SYSTEM REPLACEMENT					
C10	INTERIOR CONSTRUCTION				
C1010	Partitions	\$15,000	\$15,000	\$0.22	4.0%
C30	INTERIOR FINISHES				
C3010	Wall Finishes	\$20,000			
C3030	Ceiling Finishes	\$10,000	\$40,200	\$0.58	10.8%
D30	HVAC				
D30	HVAC	\$0	\$0	\$0.00	0.0%
D50	ELECTRICAL				
D5020	Gear + Distribution	\$5,000			
D5030	Fire Alarm Systems	\$300,060			
D5040	Other Electrical Systems	\$11,500	\$316,560	\$4.61	85.2%
TOTAL DIRECT COST (Trade Costs)			\$371,760	\$5.41	100.0%



Belmont Public Schools
Winn Brook ES School Fire Alarm + PA System Upgrade
Belmont, MA

10-Nov-21

Pricing Set Estimate

GFA 68,739

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
-------------	-------------	-----	------	--------------	---------------	--------------	---------------

FIRE ALARM + PA SYSTEM REPLACEMENT

1st Floor 46,232
2nd Floor 22,507

TOTAL GROSS FLOOR AREA (GFA)

68,739 sf

C10 INTERIOR CONSTRUCTION

0929000 Gypsum panels

092900 Allowance for patching existing walls for penetrations 1 ls 15,000.00 15,000
for new FA system

SUBTOTAL 15,000

TOTAL - INTERIOR CONSTRUCTION

\$15,000

C30 INTERIOR FINISHES

C3010 WALL FINISHES

0990000 Painting

099000 Paint and patching walls 1 ls 20,000.00 20,000

SUBTOTAL 20,000

C3030 CEILING FINISHES

099003 Acoustic Ceiling

099003 Allowance to remove and reinstall ceilings for access 120 hrs 85.00 10,200

SUBTOTAL 10,200

0990000 Painting

099000 Paint and patching ceilings 1 ls 10,000.00 10,000

SUBTOTAL 10,000

TOTAL - INTERIOR FINISHES

40,200

D30 HVAC

D30 HVAC, GENERALLY

SUBTOTAL

TOTAL - HVAC

D50 ELECTRICAL



Belmont Public Schools
Winn Brook ES School Fire Alarm + PA System Upgrade
Belmont, MA

10-Nov-21

Pricing Set Estimate

GFA

68,739

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
-------------	-------------	-----	------	--------------	---------------	--------------	---------------

FIRE ALARM + PA SYSTEM REPLACEMENT

Gear & Distribution

Allow for new circuit breakers in existing gear

1

ls

5,000.00

5,000

SUBTOTAL

5,000

D5030 COMMUNICATION & SECURITY SYSTEMS

Fire Alarm with Voice EVAC

Control panel

1

ea

15,000.00

15,000

FAA

1

ea

2,200.00

2,200

Beam detector

2

ea

1,200.00

2,400

Heat detector

2

ea

140.00

280

FP connection

2

ea

275.00

550

Knox box

1

ea

650.00

650

Manual pull station

13

ea

140.00

1,820

Duct smoke detector

3

ea

1,200.00

3,600

Radio master box

1

ea

9,500.00

9,500

Monitoring/control module

9

ea

250.00

2,250

Signaling device

76

ea

170.00

12,920

Smoke detector

64

ea

150.00

9,600

Device box

175

ea

30.00

5,250

3/4" EMT

3,500

lf

9.00

31,500

#14 THHN

10,500

lf

1.00

10,500

FA MC cable

3,500

lf

5.25

18,375

Testing programming

1

ls

15,000.00

15,000

Keep existing system operating during construction

68,739

sf

0.25

17,185

Allow for fire alarm not yet detailed

68,739

sf

0.50

34,370

Demo and make of existing

68,739

sf

0.25

17,185

Bi-Directional System

BDA system

NIC

Public Announcement System

Head end

1

ls

15,000.00

15,000

Hand set

35

ea

200.00

7,000

Speaker (incl back box)

87

ea

200.00

17,400

Talkback speaker (incl back box)

35

ea

240.00

8,400

Exterior speaker WP

3

ea

500.00

1,500

Device box with conduit stubbed

35

ea

150.00

5,250

Low voltage cabling

15,000

lf

1.35

20,250

Interfacing

1

ls

2,000.00

2,000

Allow for j-hooks

1,875

ea

7.00

13,125

SUBTOTAL

300,060

D5040 OTHER ELECTRICAL SYSTEMS

Allowance for permits

1

ls

1,500.30

1,500

Allowance for final clean

1

ls

10,000.00

10,000

SUBTOTAL

11,500

TOTAL - ELECTRICAL

\$316,560



Commonwealth of Massachusetts
Town of Belmont
Capital Request #FY 23 CBR-2

Department:
Fire

Title:
Air Packs

Description: Requesting funds to replace outdated air packs with equipment that meets the current standard. The current air packs are 10 years old and are beginning to experience frequent breakdowns (cost for repairs in past 12 months \$2500). More than the cost for repairs, the downtime for the equipment has become a problem. Current air packs are also 2 editions behind for NFPA safety standards. We are unable to employ current safety standards for air management with this equipment.

Location (if available):

FY 23: \$376584

FY 24: \$

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$376584

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: Quote

Life Expectancy: 10

Operational Cost Impact: Decrease to expenses

Note: After capital investment the cost to maintain the appropriate number of air packs would be much less. There would be few if any repairs needed compared to weekly repairs now.

Urgency: 2 - System is likely to fail

Note: Current air packs require excessive repair. Experiencing weekly repairs to keep the air packs in service. Two new standards have been published since purchase with increased safety practices and upgrades to the air packs.

Previous Phases: No

Can This Be Phased: No

Grants: Grants are available but not secured



Industrial Protection Services, LLC

33 northwestern Dr. Salem NH 03079

125 Roberts Rd, Ste 4, South Portland, ME 04106

www.ipp-ips.com

Sales Order

Date: 15-Oct-2021

Bill To: Chief David DeStefano
Belmont Fire
299 Trapelo Rd
Belmont MA 02478

Ship to: Chief David DeStefano
Belmont Fire
299 Trapelo Rd
Belmont MA 02478

Salesperson	Shipping Method	Purchase Order No
Danielle Elliott	UPS Gnd	budget planning

Qty	Item #	Description	Each Price	Line Total
40	X8915025005304	Scott X3Pro Air-Pak 5500psi - w/ quick connect and snap change - E-Z flow regulator	6,799.00	271,960.00
55	200970-01	Scott 5.5 45min cylinders	1,361.58	74,886.90
25	200970-01	Scott 5.5 45min cylinders		
40	201215-02	Scott AV-3000HT facemask	313.00	12,520.00
2	200954-05	Scott RIT Pak III - 5.5 AV3000-HT face mask	3,423.00	6,846.00
2	200973-01	Scott 60min Carbon cylinder	1,512.00	3,024.00
		price is per Mas State contract FIR04		

Danielle Elliott

Email: delliott@ipp-ips.com
Cell: 617-590-3382 Fax: 978-658-0257

Quoted Freight Charges TBD

\$ 369,236.90



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-57

Department:
Fire

Title:
Ambulance Replacement

Description: This appropriation from EMS Revenue will be \$80,000 per year for 5 years resulting in the purchase of a new vehicle using \$400,000. In purchasing a vehicle in 2021 to replace a 10-year-old ambulance the department has encountered conditions where prices have risen sharply. This appropriation will help ensure adequate funds are available to continue to replace the ambulance in five years. The department will also maintain diligence in monitoring cost trends throughout the five-year span.

Location (if available):

FY 23: \$80000

FY 24: \$80000

FY 25: \$80000

FY 26: \$80000

FY 27: \$80000

FY 28: \$

FY 23 – 28 Total: \$400000

Project Category: Vehicle

Project Type: Replacement

Basis For Estimate: Quote

Life Expectancy: 10

Operational Cost Impact: Neutral

Note: Newer vehicles have lower maintenance and repair costs.

Urgency: 4 - Has outlived its useful life

Note:

Previous Phases: Yes

Can This Be Phased: Yes

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-58

Department:
Fire

Title:
Cardiac monitor replacement

Description: Annual request of \$7,000 to replace cardiac monitor after five years. Funds from ambulance revenues. A new monitor is scheduled for purchase in FY 23. The cost will be approximately \$37,000 with a trade-in. A modification of the annual allotment allowing \$10,000 per year for five years is being requested in order to ensure the ability purchase a new monitor in 2028. The technology and capability of this equipment is constantly being updated. In order to allow paramedics to perform the latest advanced interventions our equipment must keep pace.

Location (if available):

FY 23: \$7000

FY 24: \$10000

FY 25: \$10000

FY 26: \$10000

FY 27: \$10000

FY 28: \$10000

FY 23 – 28 Total: \$57000

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: In-house estimate

Life Expectancy: 10

Operational Cost Impact: Neutral

Note:

Urgency: 2 - System is likely to fail

Note:

Previous Phases: Yes

Can This Be Phased: Yes

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #FY 23 CBR-3

Department:
Fire

Title:
Power Load Ambulance Cot System

Description: This system will be installed in the new ambulance currently on order. It allows patients to be loaded safely into the ambulance. The system greatly lessens the chance for firefighter injury from lifting patients and cot into the ambulance. It also prevents patients from being dropped while lifting into the ambulance and provides a safe connection of the cot to the vehicle lessening the chance for patient injury in the event of a crash.

Location (if available):

FY 23: \$42000

FY 24: \$

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$42000

Project Category: Equipment

Project Type: New

Basis For Estimate: Quote

Life Expectancy: 10

Operational Cost Impact: Decrease to expenses

Note: Similar system is in current rescue and has resulted in preventing employee injuries during patient loading and prevents injuries to patients as the cot is securely locked in prior to transport.

Urgency: 6

Note: Needed equipment for new rescue truck currently being ordered. The base cost of the vehicle does not allow this system to be included in the order.

Previous Phases: No

Can This Be Phased: No

Grants: State/Federal funding is available but not secured



NEW AMB- Powered System w Trade

Quote Number: 10436302

Remit to: Stryker Medical

Version: 1

P.O. Box 93308

Prepared For: BELMONT FIRE HEADQUARTERS

Chicago, IL 60673-3308

Attn:

Rep: Robert Stewart

Email: robert.stewart@stryker.com

Phone Number:

Quote Date: 09/29/2021

Expiration Date: 12/28/2021

Delivery Address

Name: BELMONT FIRE
HEADQUARTERS

Account #: 1267707

Address: 299 TRAPELO RD

BELMONT

Massachusetts 02478-1855

End User - Shipping - Billing

Name: BELMONT FIRE
HEADQUARTERS

Account #: 1267707

Address: 299 TRAPELO RD

BELMONT

Massachusetts 02478-1855

Bill To Account

Name: BELMONT FIRE
HEADQUARTERS

Account #: 1267707

Address: 299 TRAPELO RD

BELMONT

Massachusetts 02478-1855

Equipment Products:

#	Product	Description	Qty	Sell Price	Total
1.0	639005550001	MTS POWER LOAD	1	\$23,200.34	\$23,200.34
2.0	650605550003	Power-PRO XT MTS High: Dual wheel lock, x-restraint package, retractable head section 02 bottle holder, 3-stage IV pole PR, equipment hook, H/E storage flat, XPS side rail, XPS mattress, Knee-Gatch, Dual compatibility, backrest storage pouch, steer-lock	1	\$21,267.69	\$21,267.69
Equipment Total:					\$44,468.03

Trade In Credit:

Product	Description	Qty	Credit Ea.	Total Credit
TR-SPCOT-PPXT	TRADE-IN-STRYKER POWER COT TOWARDS PURCHASE OF POWERPRO XT	1	-\$2,500.00	-\$2,500.00

Price Totals:

Estimated Sales Tax (0.000%):	\$0.00
Freight/Shipping:	\$0.00
Grand Total:	\$41,968.03

Prices: In effect for 90 days

Terms: Net 30 Days



Commonwealth of Massachusetts
Town of Belmont
Capital Request #FY 22 CBR-3

Department:
Fire

Title:
Replace Staff Car

Description: Staff car assigned to the fire chief. This will replace a 10-year-old (2013) vehicle currently assigned to Fire Prevention. The current chief's vehicle (2017) will be assigned to Fire Prevention. The new purchase will be a Ford Interceptor/SUV hybrid model (similar to current police hybrid vehicles) It shall be upfitted with equipment necessary to operate Incident Command and support Emergency Management functions.

Location (if available):

FY 23: \$75000

FY 24: \$

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$75000

Project Category: Vehicle

Project Type: Replacement

Basis For Estimate: In-house estimate

Life Expectancy: 10

Operational Cost Impact: Neutral

Note: New vehicles have lower maintenance and repair costs. Hybrid models have proven usable for service in law enforcement and fire service applications and we will begin to transition our fleet where appropriate to hybrid technology.

Urgency: 3 - System has needed unanticipated repairs

Note: Detailed fleet evaluation will be presented to Capital Budget Committee.

Previous Phases: No

Can This Be Phased: No

Grants:

Vehicle to be Replaced

Make: Ford

Model: Interceptor SUV

Year:2013

Mileage:75,000

Maintenance Costs (last 2 FY's): \$1244.00 (previous 12 months- will need to research additional year)

Repurpose Plan (if any): No

Given to Another Department (which one):

Trade-in Value (dollar amount):

New Vehicle

Make: Ford

Model: Interceptor SUV (hybrid)

Year:2023

Engine Type: Hybrid gas/electric

Estimated Purchase Price (please provide an official proposal no older than 90 days): **

Estimated Useful Life: 10 years

** Total price includes vehicle, upfit for command use and firefighting equipment, radios, warning package, graphics. Based on Tahoe currently in process the \$75,000 requested will be sufficient. Although their vehicles have less upfitting I have reached out to PD to get the base cost of their last Interceptor SUV purchase.



BELMONT

FIRE DEPARTMENT

CAPITAL BUDGET

NEEDS ASSESSMENT

FY 2023

&

BEYOND

BELMONT FIRE DEPARTMENT

MISSION STATEMENT

The mission of the Belmont Fire Department is to protect the lives and property of our community from fires, natural disasters, accidents, hazardous materials incidents, and other causes. We will save lives by providing exceptional emergency medical care and prevent harm through public education and community risk reduction activities. We will remain community-focused, diligent, and loyal to our duty.

This information has been assembled to inform the Capital Budget Committee on the Fire Department's current and future capital needs. The items contained in this report are those that are known at the time of this report and may change in future years as the Department's needs change. The cost estimated for future projects are the best estimate of what current costs are, and will be adjusted annually as a report is prepared.

We have looked at each upcoming project and have adjusted the Fire Department's Capital Budget program. As you are aware, many of these items appear on a department's list many years before they are needed. Over time the needs of the department, emerging best practices and technology, as well as usable service life may change. This necessitates yearly review and potential revision of longer term goals and projects. These longer range projections may require cost modification over time as the acquisition cost of certain resources may increase at varying rates. At the Capital Budget Committee's request we have also tried to space out our "larger" vehicles out over different fiscal years.

Creative use of Resources

The Fire Department will adhere to its mission with the protection of life and property utmost in our mind. Remaining community focused and diligent the department will continually seek creative resource solutions that enhance our ability to provide service with the greatest economy of financial resources. Annual review has allowed us to make some changes to the schedule for replacement. The Department will continue to seek out and apply creative funding resources to aid the acquisition of supplies and equipment. At the time of this draft the department has undertaken an effort to fund new equipment acquisition through grants.

The Fire Department applies a risk versus benefit analysis during incident operations, and completes a similar standard of measure when making financial decisions. Conducting a 360 degree analysis of viable options often includes consideration of current and emerging standards and trends as well as consideration of longevity and potential liability associated with decisions, or lack thereof.

The Fire Department will make the best effort possible to provide the Capital Budget Committee with

accurate projections of equipment needs and the anticipated replacement time and cost. In some instances a purchase may be deferred for one year without a major operational or cost impact. Due to the nature of emergency services there may be situations where critical items may not be deferred without an impact on public safety. In addition, some pieces of equipment may age out of their cost effective or safe service life slightly faster than anticipated. These situations will be identified in our yearly review. The fire department respects the difficult task of the Capital Budget Committee and will strive to accurately forecast and request equipment for safe and efficient operations on a basis where if approved accordingly our mission readiness will be properly maintained.

Update on Current Projects

FY2020

Replace Fire Pumper

The fire pumper that was ordered in January 2020 **has been delivered** and is in service at Engine Co. 2 on Leonard Street. This delivery was fraught with a long delay due to the COVID 19 pandemic. However, the apparatus is now protecting life and property and responding to a multitude of different calls for service. Engine 2 has performed well and is expected to provide an excellent service life to the fire department and the citizens of Belmont.

FY2022

Replace Portable Radio Equipment

The portable radios carried by members of the Operations Division **have been received** and will be in full service as this document is submitted. They feature current digital technology as well as the latest NFPA standard for thermal protection which the radios that they replaced were lacking.

FY2022

Shift Commander's Response Vehicle

An order for the new Shift Commander's vehicle has been executed. However, due to the current status of new vehicle deliveries the dealer is unable to provide a dependable delivery date. When it arrives locally, plans have been made for up-fitting of the vehicle to provide comprehensive Incident Command and communication capability as well as meet the current standard for the storage of firefighting PPE.

FY 2022 Ambulance Replacement

The fire department has organized a committee to analyze specifications for the new ambulance to be purchased this fiscal year. The committee has been in discussion with the apparatus dealer and has learned that the delivery of this vehicle will be significantly impacted by the on-going new vehicle shortage. In addition, the cost of a new ambulance of similar specification to our current model has risen beyond what was originally anticipated by previous capital Budget forecasts. The fire department is currently working to creatively address this issue.

FY 2023 Requests

FY 2023 Replace Cardiac Monitor

An annual allotment of \$7,000 to provide sufficient funds to replace one cardiac monitor on a five year schedule.

FY2023 Ambulance Replacement Installment

An annual allotment of \$80,000 to provide sufficient funds for the next ambulance replacement in 2027.

FY 2023 Replace Staff Car

This request will replace a 2013 Ford Interceptor (pictured) currently assigned to the Fire Prevention Division that has over 74,000 miles on the odometer. The Fire Prevention Division will be assigned a 2017 Ford Interceptor currently used by the Chief of Department. The department will purchase a replacement vehicle that is outfitted with equipment used by the Chief for emergency response and incident command and communications. The vehicle will contain capabilities to support all fire and rescue command elements as well as emergency management functions. The expected cost to obtain and equip this vehicle is \$75,000.



FY 2023 Purchase Power Load Ambulance Cot Sys.

This request will allow the fire department to outfit the new ambulance (FY2022) to be outfitted with the same type of patient loading system as has been used in the 2017 ambulance. This system has proven safer for patient and firefighter/paramedics alike. It prevents missing safety hooks when loading and potential career-ending back injuries. Additional documentation may be found within this packet. The cost to purchase this system is approximately \$42,000.



FY 2023 Air Pack Replacement

The fire department currently uses Scott 4.5 Self Contained Breathing Apparatus (air packs) equipped with 30 minute air cylinders (bottles). These air packs will be 10 years old in May 2022. We find that when tested for serviceability several air packs are often sent out for repair each week. This is an escalating cost, but more importantly a potential life safety hazard should an air pack malfunction during incident operations. The air packs met NFPA standards when purchased, however two sets of new standards with significant safety updates have been issued since that time. The current air packs make compliance with the accepted best practice for air management very difficult at best.

In addition to the air pack systems being outdated the cylinders (air bottles) have a serviceable life after which they will no longer be certified for use. Through attrition the department had found itself with a low supply of spare cylinders often needed for longer duration operations or training evolutions. As a temporary solution we were able to obtain at no cost, cylinders from another area fire department that had upgraded their system. This has allowed us to refrain from purchasing additional cylinders that are part of an outdated system. With ALL our cylinders scheduled for their last possible certification testing in 2022 we would like to avoid having to expend resources on the cost of testing and potentially needing to purchase replacements for the old air cylinders. The fire department anticipates the cost to purchase the new air packs at approximately \$377,000. Pictured is a new Scott 5.5 Self Contained Breathing Apparatus.



Project Deferral

The fire department has analyzed the performance of the current pumper in service at Engine Co. 1 as well as the status of the pumper recently placed in reserve as Engine Co. 4. In so doing we have found that the pumper scheduled for purchase in FY 2023 may be deferred until FY 2024.

Summary

The table in the next section projects the known and anticipated capital expenses for the upcoming years. Cost estimates are developed using **today's** known costs or estimates. For larger apparatus there has been a flat 4% escalation per year included in the estimate, to provide a more realistic estimate of the future cost. It should be noted that most specialized equipment has extremely long lead times with apparatus lead time being a year or more. These projections are not a complete list of needs but the currently anticipated. Additional items, not in this capital budget report, may appear in future years. The Department actively seeks funding through grants and gifts to mitigate the impact on the Capital Budget and the Capital portion of the Operating Budget.



The Fire Department understands and appreciates the work that the Capital Budget Committee must accomplish given the limited financial resources available. We look forward to discussing the Department's capital needs with the Town Administrator and the Capital Budget Committee.

Fire Department Capital Budget				
Fiscal Year	Priority	Item	Current Cost	Notes
2023	High	Replace Staff Car	\$75,000	
2023	High	Replace cardiac monitor	\$7,000	From EMS Revenue 5 years contributions
2023	High	Ambulance Replacement	\$80,000	From EMS Revenue
2023	High	Power Load Cot System	\$42,000	
2023	High	Replace Air packs	\$370,000	
2023		Total	\$ 602,000	
2024		Replace Cardiac Monitor	\$10,000	From EMS Revenue
2024	High	Ambulance Replacement	\$80,000	From EMS Revenue
2024	High	Replace 2005/2014 Engine	\$840,000	
2024		Total	\$930,000	
2025	High	Replace Cardiac Monitor	\$10,000	From EMS Revenue
2025	High	Ambulance Replacement	\$80,000	From EMS Revenue
2025	High	Replace Staff Vehicle	\$75,000	
2025		Total	\$165,000	
2026	High	Ambulance Replacement	\$80,000	From EMS Revenue
2026	High	Replace Cardiac Monitor	\$10,000	From EMS Revenue
2026	High	Replace Shift commander's Response Vehicle	\$85,000	
2026		Total	\$175,000	
2027	High	Ambulance Replacement	\$80,000	From EMS Revenue
2027	High	Replace Cardiac Monitor	\$10,000	From EMS Revenue
2027		Replace Shift Commander's Response Vehicle	\$85,000	
2027		Replace 2005 Engine	974,000	Replace 22 year old pumper
2027		Total	\$1,059,00	
2029		Replace 2014 Ladder Truck	\$1,616,000	Replace 15 year old ladder truck 30 year old reserve
2034		Replace 2019 Engine	1,248,000	

FIRE DEPARTMENT

FLEET VEHICLE REPORT

February 2021

We have developed a practice of requesting a vehicle in the Capital Budget Program in the year replacement is projected. We have developed a plan to maximize the use of a vehicle and to minimize the expense to the taxpayers. A constant evaluation is conducted on vehicle usage and vehicle condition. This evaluation allows the Department flexibility to transfer vehicles within the Department to meet our goals.

Vehicles are broken up into different categories. Large apparatus response vehicles are engines and ladder trucks. These vehicles are the most expensive but generally are in "front line" service responding to calls for 10 to 15 years. The second category is the cars or staff vehicles. We continue to experience better service with these vehicles now than in previous years. This experience has allowed us to revise our current replacement strategy. It should be noted that after approximately six years of day in and day out fire response, the cost to maintain and operate these vehicles increases (negative effect on operating budget). For vehicles used for administrative or staff duties the life expectancy of a vehicle is approximately ten years (again this may require rotating vehicles within the Department to maximize life expectancy). We have not experienced good service or reliability on vehicles that are required to be in service beyond 10 years. History has shown that these assumptions have proven true.

As previously mentioned the Department has explored alternate fueled environmentally friendly vehicles (AFV). With more AFV being designed and manufactured specifically for public safety use there are more options available. The Department will explore the options available for a cost effective AFV that also meets the Department's needs.

VEHICLE	VEHICLE	ASSIGNMENT	MILEAGE	HOURS	REPAIRS LAST 12 MONTHS
CAR 1	2017 FORD INTERCEPTOR	Chief	52,400		\$ 1,091.00
CAR 2	2017 FORD INTERCEPTOR	Assistant Chief	50,528		\$ 228.00
CAR 3	2015 FORD EXPEDITION	Shift Commander	30,966		\$ 1,419.00
CAR 4	2013 FORD INTERCEPTOR	Fire Prevention	74,285		\$ 1,244.00
CAR 5	2015 FORD F-150	Training Officer	16,637		\$ 821.00
CAR 6	2007 FORD EXPEDITION	Spare	65,761		\$ 101.00
SQUAD 1	2008 FORD F-550	Utility	25,522	1835	\$ 3,246.00
ENGINE 1	2014 E-ONE PUMPER	Headquarters	36,450	4485	\$ 5,213.00
ENGINE 2	2021 E-ONEPUMPER	Station 2	1,791	158	\$ 185.00
ENGINE 3	2008 INT'L 7300 PUMPER	Station 2 (Reserve)	10,630	N/A	\$ 4,067.00
ENGINE 4	2005 E-ONE PUMPER	Headquarters (Reserve)	77,166	9611	\$ 23,800.00
LADDER 1	2014 E-ONE LADDER	Station 2	18,504	2942	\$ 18,441.00
LADDER 2	1999 E-ONE LADDER	Station 2 (Reserve)	68,400		\$ 6,991.00
RESCUE 1	2017 FORD/ HORTON F-550	Headquarters	51,640		\$ 5,625.00
RESCUE 2	2012 FORD/HORTON F-450	Headquarters (Reserve)	70,189		\$ 1,288.00
TECH RESCUE	TECH RESCUE TRAILER	Headquarters			
BOAT TRAILER	RESCUE BOAT TRAILER	Station 2			
SPILL RESPONSE	SPILL RESPONSE TRAILER	Headquarters			
				TOTAL	\$ 73,760.00



NEW AMB- Powered System w Trade

Quote Number: 10436302

Remit to: Stryker Medical

Version: 1

P.O. Box 93308

Prepared For: BELMONT FIRE HEADQUARTERS

Chicago, IL 60673-3308

Attn:

Rep: Robert Stewart

Email: robert.stewart@stryker.com

Phone Number:

Quote Date: 09/29/2021

Expiration Date: 12/28/2021

Delivery Address

Name: BELMONT FIRE
HEADQUARTERS

Account #: 1267707

Address: 299 TRAPELO RD

BELMONT

Massachusetts 02478-1855

End User - Shipping - Billing

Name: BELMONT FIRE
HEADQUARTERS

Account #: 1267707

Address: 299 TRAPELO RD

BELMONT

Massachusetts 02478-1855

Bill To Account

Name: BELMONT FIRE
HEADQUARTERS

Account #: 1267707

Address: 299 TRAPELO RD

BELMONT

Massachusetts 02478-1855

Equipment Products:

#	Product	Description	Qty	Sell Price	Total
1.0	639005550001	MTS POWER LOAD	1	\$23,200.34	\$23,200.34
2.0	650605550003	Power-PRO XT MTS High: Dual wheel lock, x-restraint package, retractable head section 02 bottle holder, 3-stage IV pole PR, equipment hook, H/E storage flat, XPS side rail, XPS mattress, Knee-Gatch, Dual compatibility, backrest storage pouch, steer-lock	1	\$21,267.69	\$21,267.69
Equipment Total:					\$44,468.03

Trade In Credit:

Product	Description	Qty	Credit Ea.	Total Credit
TR-SPCOT-PPXT	TRADE-IN-STRYKER POWER COT TOWARDS PURCHASE OF POWERPRO XT	1	-\$2,500.00	-\$2,500.00

Price Totals:

Estimated Sales Tax (0.000%):	\$0.00
Freight/Shipping:	\$0.00
Grand Total:	\$41,968.03

Prices: In effect for 90 days

Terms: Net 30 Days

Sales Order

Industrial Protection Services, LLC

33 northwestern Dr. Salem NH 03079

125 Roberts Rd, Ste 4, South Portland, ME 04106

www.ipp-ips.com

Date: 15-Oct-2021

Bill To: Chief David DeStefano
Belmont Fire
299 Trapelo Rd
Belmont MA 02478

Ship to: **Chief David DeStefano**
Belmont Fire
299 Trapelo Rd
Belmont MA 02478

Salesperson	Shipping Method	Purchase Order No
Danielle Elliott	UPS Gnd	budget planning

Qty	Item #	Description	Each Price	Line Total
40	X8915025005304	Scott X3Pro Air-Pak 5500psi - w/ quick connect	6,799.00	271,960.00
		and snap change - E-Z flow regulator		
55	200970-01	Scott 5.5 45min cylinders	1,361.58	74,886.90
25	200970-01	Scott 5.5 45min cylinders		
40	201215-02	Scott AV-3000HT facemask	313.00	12,520.00
2	200954-05	Scott RIT Pak III - 5.5 AV3000-HT face mask	3,423.00	6,846.00
2	200973-01	Scott 60min Carbon cylinder	1,512.00	3,024.00
		price is per Mas State contract FIR04		

Danielle Elliott

Email: delliott@ipp-ips.com

Cell: 617-590-3382 Fax: 978-658-0257

Quoted Freight Charges TBD

S TBD

\$ 369,236.90



BELMONT FIRE DEPARTMENT

HEADQUARTERS
299 TRAPELO ROAD
BELMONT, MASSACHUSETTS 02478



DAVID DeSTEFANO, MPA
CHIEF OF DEPARTMENT

TELEPHONE 617-993-2200
FAX 617-993-2201

November 12, 2021
Anne Marie Mahoney, Chair
Capital Budget Committee
Town Hall
Belmont, MA 02478

Dear Ms. Mahoney and Committee,

The Fire Department would like to take this opportunity to update you on its Capital Budget projects and plan for mission sustainability into the future with regard to equipment needs. We will continue to forecast our needs as accurately as possible into the future in order to assist you in maintaining effective management of the Town's financial resources.

Our FY 2023 request is listed below and supported in the attached material. Please don't hesitate to contact me at your convenience if you have any questions or would like additional information.

FY 2023 Request

- Replace Staff Car \$75,000
- Replace cardiac Monitor \$35,000
- Yearly contribution toward next Ambulance Replacement \$80,000
- Replace Self-Contained Breathing Apparatus (air packs) \$370,000
- Purchase Power Lift Ambulance Stretcher Load System \$42,000

Thank you for your continued support.

Respectfully submitted,

David DeStefano
Chief of Department



Commonwealth of Massachusetts

Town of Belmont

Capital Request #FY 23 CBR-26

Department:
Information
Technology

Title:
Fiber Reconfiguration Burbank/Wellington

Description: Burbank and Wellington are to be spliced into the backbone network for assignment to the High School or Chenery, or both. The objective is to remove the above sites from the current fiber terminations at the Library.

Please see attached proposal for complete description.

Location (if available):

FY 23: \$20000

FY 24: \$

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$20000

Project Category: Equipment

Project Type: New

Basis For Estimate: Quote

Life Expectancy: 25

Operational Cost Impact: Neutral

Note:

Urgency: 6

Note: Continued Fiber Construction to eliminate hub at Library.

Previous Phases: Yes

Can This Be Phased: No

Grants: Have not been identified



Belmont Public Schools
Scope of Work ITC 68
Fiber Optic Municipal Area Network
Network Reconfiguration – Burbank/Wellington

Prepared by:	Comm-Tract 235 Summer Road Bldg. 4 Boxborough, MA 01719	Contact: Telephone: Email:	Bryan Hopkins (781) 890-5070 x6952 bhopkins@comm-tract.com
Date:	October 18 th 2021		

Bid No.	Belmont FMAN – Reconfig Burbank/Wellington V.01
SPIN:	143008129
ITC 54:	VC 6000166632
FCC Registration:	0024175408

Bill To: Company: Address: Contact Name: Phone: Fax: Email:	Belmont Public Schools 221 Concord Avenue Belmont, MA 02478 Steve Mazzola (617) 993-5455 smazzola@belmont.k12.ma.us	Ship To: Company: Address: Contact Name: Phone: Fax: Email:	Belmont Public Schools 221 Concord Avenue Belmont, MA 02478 Steve Mazzola (617) 993-5455 smazzola@belmont.k12.ma.us
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Description of Work

This Scope of Work (SOW) that follows was developed in with information as provided by the Belmont Public Schools (BPS) IT personnel and has been supplemented by field site surveys as conducted by Comm-Tract engineers to develop the design for the changes to the network. Comm-Tract will provide and install the following fiber optic municipal area network (FMAN) reconfiguration changes and additions:

A. Sites:

1. Wellington Elementary School – 121 Orchard Street
2. Burbank Elementary School – 266 School Street

B. Overview of the Project:

1. The sites above are to be spliced into the backbone network for assignment to the High School or Chenery, or both. The objective is to remove the above sites from the current fiber terminations at the Library as follows:
2. The existing splice case at BMLD manhole (MH) 178 will be replaced due to its existing condition, and the current 12 strand single mode fiber (SMF) and the existing 12/12 (MMF and SMF) to Burbank ES and Wellington ES will be re-spliced to a new 24 strand SMF that will be installed to the existing splice point at School and Goden. (The actual repair is under separate SOW.)



**Belmont Public Schools
Scope of Work ITC 68
Fiber Optic Municipal Area Network**

Network Reconfiguration – Burbank/Wellington

3. One (1) new 24 strand SMF will be installed from the Pool to the splice point at School and Goden.
4. One (1) new 48 strand SMF will be installed from the School/Goden splice case to the 36 strand splice case at the end of Goden and the fiber strands allocated by BPS IT will be spliced into the backbone network.
5. All work will be fully complete including all fiber splicing at the pole location for the fiber lateral into the building, the fiber entrance cable, the fiber termination panels, the connectors, and all other materials for a complete and fully functional fiber termination in the communications room of each individual site.
6. The new High School Network Hub Communications Room will utilize the existing high-density Single Mode Fiber (SMF) SC/PC rack mount housing and have the associated termination panel installed.
7. Both the backbone and lateral fiber cables will be field terminated using SC/PC single-mode connectors.
8. All backbone fibers throughout the network will be fusion spliced.
9. All optical testing will conform to industry standards.
10. The customer shall receive OTDR traces and Power Meter Test results at both 1310nm and 1550nm.
11. All test data will be compiled in electronic copy.

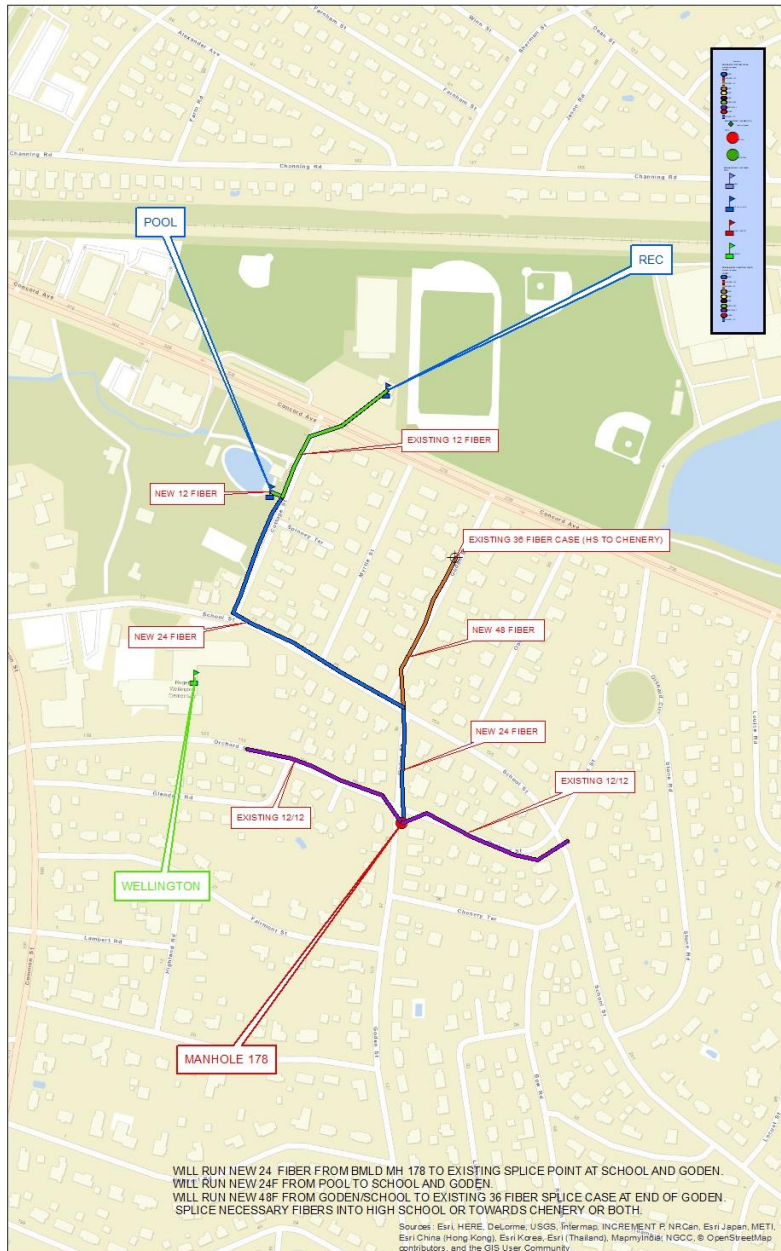
C. Notes:

1. Pricing assumes access to the aerial routes, and/or conduit systems is not restricted in any way, and Comm-Tract will have free and clear access for installation purposes.
2. Pricing assumes the Customer would utilize existing location agreements with the carrier and/or utility for rights to the municipal space on the poles and/or conduits for the route(s).
3. Pricing assumes the project is installed in one deployment. Should any site(s) not be ready for installation and require return trip(s) additional costs may apply.
4. Customer is responsible for providing trash receptacle for non-hazardous waste disposal of fiber cable scrap, wooden fiber reels, and corrugated shipping boxes.



Belmont Public Schools
Scope of Work ITC 68
Fiber Optic Municipal Area Network
Network Reconfiguration – Burbank/Wellington

Overview Map of Reconfigurations and Additions:



CITY OF BELMONT
PLACEMENT AND SPLICING OF
NEW FIBER FOR BURBANK, WELLINGTON
REC AND POOL TO GET OUT OF LIBRARY

PREPARED BY: C. AUCOIN
DATE: OCTOBER 12, 2021
PROPRIETARY AND CONFIDENTIAL



Belmont Public Schools
Scope of Work ITC 68
Fiber Optic Municipal Area Network
Network Reconfiguration – Burbank/Wellington

Quantity	Bill of Materials Description
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To be provided with final submittals on the project



Belmont Public Schools
Scope of Work ITC 68
Fiber Optic Municipal Area Network
Network Reconfiguration – Burbank/Wellington

Warranty Information - Technical and Compliance Notes:

The Comm-Tract provided warranty and technical compliance with design and installation standards information is provided below as associated with this scope of work.

- Comm-Tract is a certified provider and partner for the Manufacturer and provides a 25 Year Warranty.
- The 25 Year Warranty commencing on the date of an accepted installation by the Customer covers all Manufacturer's products and materials, and covers the repair, and/or replacement of all installed components including, but not limited to fiber cable, fiber connectors, fiber patch panels, fiber jumpers and patch cords, and other materials as installed.
- The repair and/or replacement of any component in the certified and approved network solution as provided and installed by Comm-Tract under the 25 Year Warranty is provided at no cost to the Customer over the period of the 25 Year Warranty.

- Comm-Tract adheres to the following design and installation standards relative to the scope of work as provided.
- BICSI Design and Installation Applicable Standards
- Telecommunications Industry Association (TIA) Applicable Standards
- Electronics Industry Association (EIA) Applicable Standards
- ANSI/TIA/EIA – 568 Standards
- ANSI/TIA/EIA – 569 Standards
- TIA/EIA 604 Fiber Optic Standards
- TIA-492 Fiber Optic Installation Standards
- TSB-149 Fiber Optic Workmanship Standards
- IEEE 802.3 Standards



Belmont Public Schools
Scope of Work ITC 68
Fiber Optic Municipal Area Network
Network Reconfiguration – Burbank/Wellington

Pricing and Terms

Customer agrees to the following payment schedule:

30% Initial Payment upon Delivery of Materials:	\$ 5,010.00
65% Payment upon actual Project Progress:	\$ 10,855.00
5% Final Balance upon Completion:	\$ 835.00

- The Project Price shall be subject to adjustment in the event of any mutually agreed upon written changes made to the Scope of Work.
- Prices are valid for 90-days.
- The Project Price does not include licensing of pole or underground facilities.
- The Project Price does not include police details.
- The Project Price does not include permitting if applicable.
- The Project Price does not include any new underground construction.
- The Project Price does not include any applicable taxes as the project is tax exempt.
- The Project Price includes shipping charges.
- The Project Price assumes access to each location is free and clear for installation and all sites are ready for installation under a single deployment. Should a site not be ready, and return trip(s) are required, additional charges will apply.
- Comm-Tract will perform during normal business hours – Monday through Friday, 7am to 3pm unless otherwise specified in the Description of Work.
- Customer hereby agrees to the terms and conditions set forth in the Scope of Work by signing below or issuing a Purchase order referencing this Scope of Work.
- This Scope of Work is governed by the terms and conditions of the Commonwealth of Massachusetts ITC 68 blanket contract.

Site Surveys, Design and Engineering:	Included
Materials:	Included
Labor:	Included
Certification and Warranty:	Included
Total	\$ 16,700.00

Customer Name:	
Authorized Signature:	
Name:	
Date:	



Commonwealth of Massachusetts
Town of Belmont
Capital Request #FY 22 CBR-22

Department:
Information
Technology

Title:
Increase Network Storage

Description: The project is to add disk storage to our SAN.
This is to accommodate the need for increased resources for Virtual Servers as well as the need for increase in file storage capacity.

Location (if available):

FY 23: \$60000

FY 24: \$

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$60000

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: Vendor

Life Expectancy: 5

Operational Cost Impact: Neutral

Note:

Urgency: 2 - System is likely to fail

Note: Software updates to servers require more storage to effectively operate. Also, the increase in file creation requires more capacity. If storage is not available, servers will cease to function and files will not be able to be saved.

Previous Phases: No

Can This Be Phased: No

Grants: Have not been identified



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-81

Department:
Information
Technology

Title:
Redundant fiber line to antenna site

Description: This is a request that affects all Town agencies with radios. We currently have a single fiber run from 460 Concord Ave that carries all Town radio connections to the main antenna site at 760 Concord Ave. A short distance of this run is underground, but the majority of the run is pole to pole. If a pole is knocked down it could knock out all Town radio systems.

Location (if available):

FY 23: \$150000

FY 24: \$

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$150000

Project Category: Equipment

Project Type: New

Basis For Estimate: Other

Life Expectancy: 10

Operational Cost Impact: Neutral

Note: No Impact

Urgency: 6

Note: This request is to cover the Town in the event of a break or damage to the single fiber run and allow Town departments to continue to function at full radio capacity.

Previous Phases: No

Can This Be Phased: No

Grants: Have not been identified



Commonwealth of Massachusetts

Town of Belmont

Capital Request #FY 23 CBR-19

Department:
Library

Title:
RFID Tags and Equipment

Description: RFID technology has been utilized more and more in public libraries over the last 10 years, and it's time for Belmont to take this step in service. With RFID tags in each physical item, citizens will be able to check out items faster, with less errors, and in some cases without the support of a staff member. This will not reduce the need for staff, but hopefully help to avoid the need to increase the amount of Library Assistant positions. This work should be completed before the opening of a new library.

Location (if available):

FY 23: \$32306

FY 24: \$

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$32306

Project Category: Public improvement

Project Type: New

Basis For Estimate: Quote

Life Expectancy: 20

Operational Cost Impact: Decrease to expenses

Note: This function will help to change the way funds are used on staffing. We will not decrease staff, but alter the types of workflows that staff can perform. Less transactional focus, and more focus on programs and other information and technology services.

Urgency: 5 - New: to address quality of life

Note:

Previous Phases: No

Can This Be Phased: No

Grants:

Bill To

Belmont Public Library
Peter Struzziero
336 Concord Avenue
P.O. Box 125
Belmont MA 02478-0904
United States

Ship To

Belmont Public Library
Peter Struzziero
336 Concord Avenue
P.O. Box 125
Belmont MA 02478-0904
United States

Quote

QUO-US02097

Date

08/19/2021

Customer:

C0000986-US

Payment Terms:

Net 30 Days

Quote Expiration:

11/19/2021

Sales Rep:

Donald Jannazzo

Memo (External):

Pricing per MHEC L53 contract

Item	Quantity	Net Price	Net Extended
Freight Standard Service SHP000001-000	1	950.00	950.00
RFID tag™ square (2,000/Roll) TAG000010-000	75	280.00	21,000.00
RFID workstation shielded NA STF000017-001	6	895.00	5,370.00
bibliotheca RFID workstation™ USB STF313202-000	2	824.00	1,648.00
Managing an RFID Conversion EDU090011-000	1	1,799.00	1,799.00
Total:			30,767.00
Currency:			US Dollar

Terms and Conditions:

All prices including Service and Maintenance do not include any applicable sales tax. If tax exempt, A copy of Tax Exemption Certificate is required with purchase order for all taxexempt customers.

Terms are NET 30 Days from Date of Invoice. Invoice is generated at the time of Shipment.

Quotations are good for 60 days. All dates are based on ship dates. Order must ship within the 60-day window.

After 60 days, quotation expires. Contact Bibliotheca for a New Quotation.

A 20% restocking fee, in addition to in-bound and out-bound shipping, will be charged for all returns.

Submit Purchase Order by fax to 877-689-2269 or by email to orders-us@bibliotheca.com.

Accepted By: _____

Accepted Date: _____

Customer Purchase Order Number: _____



bibliotheca RFID workstation™ shielded desktop solutions designed to assist staff with administration activities

The workstation™ shielded provides staff with a fast and efficient solution to programme and verify RFID tags. Library staff can now have the ability to add or remove item security without the LMS/ILS. The system can be used with multiple items of mixed media, placed on the antenna at any time.

Additionally, using our staffConnect™ circ software, the workstation™ allows staff to perform multiple item issue, return and renew processes at the staff desk using a direct link with the LMS/ILS, including the ability to print receipts for the customer.

benefits of the RFID workstation shielded

focused read area

A fully shielded antenna providing concentrated detection field mean that only items placed directly on the workstation™ antenna will be detected.

compact design

Smaller in size, workstation™ shielded allows you to work discreetly in more compact desktop environments.

multiple read capability

The workstation™ antenna can read multiple stacked items of varying size, weight and thickness.



Specifications : bibliotheca RFID workstation™ shielded

Dimensions (w x d x h):	350 mm x 280 mm x 15 mm
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Shield:	fully shielded
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Weight:	Kilograms 1.5 kg Pounds: 3.825 lbs
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Power:	RFID reader connects to PC via USB; it is supplied with a localised plug-in supply (110V ac/60Hz or 240V ac/50Hz). The RF power output is 1.2 Watt and the workstation™ shielded conforms to CE and FCC.
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Membership cards supported:	Barcode and RFID-enabled membership cards.
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Software:	Our staffConnect™ circ software will need to be installed on your existing PC, running Microsoft™ Windows (XP SP3 or W7 32/64). Connection to the LMS/ILS is only required for some of the functionalities.
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Options:	A receipt printer and/or barcode scanner can be added to any workstation™.
-----------------	--

Although we make every effort to ensure information is correct at the time of release, it is possible that specifications and features may vary or change over time. bibliotheca therefore makes no representations or warranties as to the completeness or accuracy of the information contained within this document.

 **bibliotheca**®
transforming libraries



bibliotheca RFID workstation™ USB

small form factor delivers ultimate in convenience

Small form factor utilizes tiny spaces

We know space can be a luxury, so we've designed the RFID Workstation USB to save you valuable real estate on any surface you wish to convert or process library materials. .

Ideal as an extra conversion station

If you've got an extra set of hands to put to work, this portable RFID workstation can easily be set up as an extra station during your conversion process.

Use on-the-go out in the community

Portable by nature, the RFID Workstation USB is great to take on the road with you so you can offer quick and convenient transactions

Harness the power of a laptop

The RFID Workstation USB can be powered by USB, allowing you to freely work from any location, not just near a power outlet.

Specifications : RFID workstation™ USB

Computer (customer-supplied):		For optimum utility as a portable system, select a computer capable of extended battery-powered operation.
		Windows® operating system (XP or later)
		1024 x 600 min. screen resolution
		2 USB ports minimum (required for RFID reader/pad and barcode scanner)
		Internal or USB external CD-ROM drive
RFID Workstation USB (USB cable included):		Dimensions: 7.21 in. (18.3 cm) L x 6.44 in. (16.3 cm) W x 0.6 in. (1.5 cm) H
		Weight: 16 oz. (454 g)
		Read range: At least 6 in. (15.2 cm) with the tag in the center of the pad (Metal surfaces within two inches of the pad will reduce the pad's read range.)
		Operating temperature range: 50°F to 104°F (10°C to 40°C)
		Storage temperature range: -40°F to 131°F (-40°C to 55°C)
		Humidity: 0% to 85% RH, non-condensing
Conversion station software:		Customer-installed using internal or USB external CD-ROM drive or thumb drive
Datalogic™ QuickScan™ barcode reader (optional; USB cable and goose-neck stand included):		Dimensions: 6.7 in. (17 cm) L x 2.8 in. (7.1 cm) H x 2.6 in. (6.6 cm) W
		Weight: 4.3 oz. (121.9 g)
		Interface/power source: USB cable to computer
		Operating temperature range: 32°F to 122°F (0°C to 50°C)
		Storage temperature range: -40°F to 158°F (-40°C to 70°C)
		Humidity: 5% to 95% RH, non-condensing
		Stand dimensions: 6.25 in. (15.9 cm) L x 9 in. (22.9 cm) max. H (flexible gooseneck) x 4 in. (10.2 cm) W
		Stand weight: 10.7 oz. (303 g)
Manual tag dispenser (optional):		Used to present blank RFID tags one at a time for programming with the RFID Workstation USB.

Although we make every effort to ensure information is correct at the time of release, it is possible that specifications and features may vary or change over time. Bibliotheca therefore makes no representations or warranties as to the completeness or accuracy of the information contained within this document.



Commonwealth of Massachusetts
Town of Belmont
Capital Request #FY 23 CBR-4

Department:
Police

Title:
Install Uni-Directional Radio Amplifier at 460

Description: Install UDA in the lower area of 460 Concord Ave, to allow officers to receive radio transmissions

Location (if available):

FY 23: \$30000

FY 24: \$

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$30000

Project Category: Equipment

Project Type: New

Basis For Estimate: Quote

Life Expectancy: 7

Operational Cost Impact: Neutral

Note: No impact

Urgency: 6

Note: officers are now unable to hear if they are being called on the radio while in the lower area of the police station

Previous Phases: No

Can This Be Phased: No

Grants: Have not been identified



Commonwealth of Massachusetts
Town of Belmont
Capital Request #FY 22 CBR-11

Department:
Police

Title:
Replace EMD Server

Description: This server controls and stores the Emergency Medical Dispatch software and the quality assurance software. This server was last replaced in FY17

Location (if available):

FY 23: \$12000

FY 24: \$

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$12000

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: In-house estimate

Life Expectancy: 5

Operational Cost Impact: Neutral

Note:

Urgency: 4 - Has outlived its useful life

Note:

Previous Phases: No

Can This Be Phased: No

Grants:



Commonwealth of Massachusetts

Town of Belmont

Capital Request #FY 22 CBR-17

Department:
Public Works

Title:
#55 Brush Chipper

Description: Replace #55 Brush Chipper

Location (if available):

FY 23: \$57950

FY 24: \$

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$57950

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: Quote

Life Expectancy: 20

Operational Cost Impact: Increase to expenses

Note: By replacing this piece of equipment it will run more efficient with lower repair & maintenance costs

Urgency: 4 - Has outlived its useful life

Note:

Previous Phases: No

Can This Be Phased: No

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #FY 23 CBR-6

Department:
Public Works

Title:
Public Shade Tree Inventory & Health Assessment

Description: Public shade tree inventory and health assessment.

Location (if available):

FY 23: \$55000

FY 24: \$

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$55000

Project Category: Public improvement

Project Type: New

Basis For Estimate: In-house estimate

Life Expectancy: 5

Operational Cost Impact: Neutral

Note:

Urgency: 5 - New: to address quality of life

Note:

Previous Phases: No

Can This Be Phased: No

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-35

Department:
Public Works -
Cemetery

Title:
#117 - 1 Ton 4WD Pick-up Truck

Description: Replace #117 - 1 Ton 4WD Pick-up Truck

Location (if available):

FY 23: \$58310

FY 24: \$

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$58310

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: Quote

Life Expectancy: 8

Operational Cost Impact: Decrease to expenses

Note: Repair or Replace Cement Concrete Sidewalks and Granite Curbing as needed throughout the town.

Urgency: 3 - System has needed unanticipated repairs

Note:

Previous Phases: No

Can This Be Phased: No

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-33

Department:
Public Works - Parks

Title:
#108 - Small Front End Loader

Description: Replace #108 - Small Front End Loader

Location (if available):

FY 23: \$112450

FY 24: \$

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$112450

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: Quote

Life Expectancy: 15

Operational Cost Impact: Decrease to expenses

Note: Repair or Replace Cement Concrete Sidewalks and Granite Curbing as needed throughout the town.

Urgency: 2 - System is likely to fail

Note:

Previous Phases: No

Can This Be Phased: No

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-34

Department:
Public Works - Parks

Title:
#110 - 1 Ton 4WD Pick-up Truck

Description: Replace #110 - 1 Ton 4WD Pick-up Truck

Location (if available):

FY 23: \$58310

FY 24: \$

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$58310

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: Quote

Life Expectancy: 8

Operational Cost Impact: Decrease to expenses

Note: Repair or Replace Cement Concrete Sidewalks and Granite Curbing as needed throughout the town.

Urgency: 3 - System has needed unanticipated repairs

Note:

Previous Phases: No

Can This Be Phased: No

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-16

Department:
Public Works - Sewer

Title:
#2 - Administrative Hybrid Vehicle

Description: Replace #2 - Administrative Vehicle

Location (if available):

FY 23: \$56765

FY 24: \$

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$56765

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: Quote

Life Expectancy: 8

Operational Cost Impact: Decrease to expenses

Note: By replacing this piece of equipment it will run more efficient with lower repair & maintenance costs.

Urgency: 3 - System has needed unanticipated repairs

Note:

Previous Phases: No

Can This Be Phased: No

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-13

Department:
Public Works - Sewer

Title:
#21 - 1 Ton 4WD Pick-up Truck

Description: Replace #21 - 1 Ton Pick-up Truck

Location (if available):

FY 23: \$58310

FY 24: \$

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$58310

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: Quote

Life Expectancy: 8

Operational Cost Impact: Decrease to expenses

Note: By replacing this piece of equipment it will run more efficient with lower repair & maintenance costs.

Urgency: 3 - System has needed unanticipated repairs

Note:

Previous Phases: No

Can This Be Phased: No

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-12

Department:
Public Works - Sewer

Title:
#24 - Front End Loader

Description: Replace #24 - Front End Loader

Location (if available):

FY 23: \$220625

FY 24: \$

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$220625

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: Quote

Life Expectancy: 15

Operational Cost Impact: Decrease to expenses

Note: By replacing this piece of equipment it will run more efficient with lower repair & maintenance costs.

Urgency: 3 - System has needed unanticipated repairs

Note:

Previous Phases: No

Can This Be Phased: No

Grants:



Commonwealth of Massachusetts

Town of Belmont

Capital Request #FY 23 CBR-28

Department:
Community
Development

Title:
Sewer and Drain Rehabilitation

Description: Investigate, evaluate and mitigate sewer and storm drain failures. Repair / replace mains and services, test water quality of the storm water system and correct deficiencies as required. Fund the Annual MS4 DEP storm water permitting program.

Location (if available):

FY 23: \$600000

FY 24: \$600000

FY 25: \$600000

FY 26: \$600000

FY 27: \$600000

FY 28: \$600000

FY 23 – 28 Total: \$3600000

Project Category: Public improvement

Project Type: Reconstruction

Basis For Estimate: In-house estimate

Life Expectancy: 75

Operational Cost Impact: Decrease to expenses

Note: Work to rehabilitate sewer and storm water systems will reduce DPW need to perform maintenance. The real savings comes from avoiding catastrophic failure that would require a major capital outlay to repair.

Urgency: 2 - System is likely to fail

Note: Work includes repairing identified failures in the systems and also making repairs in advance of potential failure. Work also includes identifying sources of problems that need to be addressed such as illicit connections to storm water systems.

Previous Phases: Yes

Can This Be Phased: Yes

Grants: Have not been identified



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-6

Department:
Public Works - Water

Title:
#81 Administrative Hybrid Vehicle

Description: Replace #81 - Administrative Vehicle

Location (if available):

FY 23: \$31575

FY 24: \$

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$31575

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: Quote

Life Expectancy: 8

Operational Cost Impact: Decrease to expenses

Note: By replacing this piece of equipment it will run more efficient with lower repair & maintenance costs.

Urgency: 3 - System has needed unanticipated repairs

Note:

Previous Phases: No

Can This Be Phased: No

Grants:



Commonwealth of Massachusetts

Town of Belmont

Capital Request #FY 23 CBR-10

Department:
Public Works - Water

Title:
Electronic Sign Board

Description: Electronic sign board

Location (if available):

FY 23: \$20850

FY 24: \$

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$20850

Project Category: Equipment

Project Type: New

Basis For Estimate: Quote

Life Expectancy: 10

Operational Cost Impact: Neutral

Note:

Urgency: 5 - New: to address quality of life

Note:

Previous Phases: No

Can This Be Phased: No

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #FY 23 CBR-13

Department:
Public Works - Water

Title:
Tag Along Compressor

Description: Tag along compressor

Location (if available):

FY 23: \$30000

FY 24: \$

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$30000

Project Category: Equipment

Project Type: New

Basis For Estimate: Quote

Life Expectancy: 10

Operational Cost Impact: Neutral

Note:

Urgency: 6

Note:

Previous Phases: No

Can This Be Phased: No

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #FY 23 CBR-9

Department:
Public Works - Water

Title:
Trailer Mounted Vacmachine/Valve Turner

Description: Trailer mounted valve turner

Location (if available):

FY 23: \$86850

FY 24: \$

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$86850

Project Category: Equipment

Project Type: New

Basis For Estimate: Quote

Life Expectancy: 10

Operational Cost Impact: Neutral

Note:

Urgency: 6

Note:

Previous Phases: No

Can This Be Phased: No

Grants:



Commonwealth of Massachusetts

Town of Belmont

Capital Request #FY 23 CBR-27

Department:
Community
Development

Title:
Pavement Management

Description: Reconstruction of Town roadways utilizing two override sources of funding (2001 and 2015) and Ch 90 state aid (not reflected in the CBC request)

Location (if available):

FY 23: \$1857772

FY 24: \$1904216

FY 25: \$1951821

FY 26: \$2000617

FY 27: \$2050632

FY 28: \$2101898

FY 23 – 28 Total: \$11866956

Project Category: Public improvement

Project Type: Reconstruction

Basis For Estimate: In-house estimate

Life Expectancy: 25

Operational Cost Impact: Decrease to expenses

Note: Decrease in expenses due to less need for routine maintenance on roads to be reconstructed.

Urgency: 1 - System has failed

Note: Roads to be reconstructed have failed and are in need of repair.

Previous Phases: Yes

Can This Be Phased: Yes

Grants: Other



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-2

Department:
Public Works

Title:
Sidewalk Maintenance

Description: Repair or Replace Cement Concrete Sidewalks and Granite Curbing as needed throughout the town.

Location (if available):

FY 23: \$237730

FY 24: \$243680

FY 25: \$249770

FY 26: \$256010

FY 27: \$262410

FY 28: \$268970

FY 23 – 28 Total: \$1518570

Project Category: Public improvement

Project Type: Reconstruction

Basis For Estimate: Other

Life Expectancy: 25

Operational Cost Impact: Neutral

Note:

Urgency: 1 - System has failed

Note:

Previous Phases: Yes

Can This Be Phased: Yes

Grants:

Department	Location	Project Title	Fiscal Year	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY23-28	Description	urgency
Community Development		Sewer and Drain Rehabilitation	FY23 FY24 FY25 FY26 FY27 FY28	\$ 600,000	\$ 600,000	\$ 600,000	\$ 600,000	\$ 600,000	\$ 600,000	\$ 3,600,000	Investigate, evaluate and mitigate sewer and storm drain failures. Repair / replace mains and services, test water quality of the storm water system and correct deficiencies as required. Fund the Annual MS4 DEP storm water permitting program.	2 - System is likely to fail
Community Development Summary				\$ 600,000	\$ 600,000	\$ 600,000	\$ 600,000	\$ 600,000	\$ 600,000	\$ 3,600,000		

Department	Location	Project Title	Fiscal Year	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY23-28	Description	urgency
Facilities	BUTLER ELEMENTARY SCHOOL	BUTLER PHASE VI WINDOW REPLACEMENT	FY22 FY23	\$ 235,000						\$ 235,000	Continuation of window replacement project and envelope repointing and sealing. There are 72 remaining windows to be replaced - including those in this request.	6 - Continuation of a long term decision to upgrade the windows.
Facilities	Facilities Fleet	New Electric Van	FY23	\$ 54,756						\$ 54,756	Added to fleet to support new positions within the Facilities Department.	6 - Support to growing and improving Department
Facilities	Fleet Vehicle	Electric Van	FY23	\$ 54,704						\$ 54,704	New Electric Van	5 - New: to address quality of life
Facilities	Fleet Vehicle	2022 Hybrid Explorer	FY23	\$ 55,666						\$ 55,666	New Fleet Vehicle for Facilities	2 - System is likely to fail
Facilities	WELLINGTON ELEMENTARY SCHOOL	Replace Heat Exchanger	FY23	\$ 150,000						\$ 150,000	The Heat Exchanger that supports the heating side of the geo thermal system at the Wellington school needs to be replaced to take advantage of the state of the art heating and cooling system. We have made improvements to make the system work during shoulder cooling seasons but it is not able to cool or heat in height of seasons. BMS Programming is also apart of the repair project.	1 - System has failed
Facilities	BUTLER ELEMENTARY SCHOOL	Supplemental funding for new Fire Alarm	FY23	\$ 66,000						\$ 66,000	Start and complete the the upgrade of a new Fire Alarm system	4 - Has outlived its useful life
Facilities	WINN BROOK ELEMENTARY SCHOOL	Supplemental Funding for a new Fire Alarm and PA	FY23	\$ 75,000						\$ 75,000	Update the Fire Alarm and PA system at the Winn Brook School. This received approved funding in FY19 FY20, and FY21. This amount will cover the estimated value for the project.	4 - Has outlived its useful life
Facilities	BUTLER ELEMENTARY SCHOOL	Fix Masonry Facade	FY23	\$ 475,000						\$ 475,000	Repair weaknesses in the schools brick façade by repointing and grouting vulnerable areas.	3 - System has needed unanticipated repairs
Facilities	BUTLER ELEMENTARY SCHOOL	Replace Translucent Wall panels over Gym	FY24		\$ 415,000					\$ 415,000	Replace existing Translucent panels over Gym with new. Existing panels have deteriorated from UV and over lived its useful life.	4 - Has outlived its useful life
Facilities	BUTLER ELEMENTARY SCHOOL	Slate Roof, Flashing, Caps and Gutters	FY24		\$ 1,600,000					\$ 1,600,000	Based on the building envelope study the Slate Roof has been determined to be well over its useful life being over 120 years.	4 - Has outlived its useful life
Facilities	CHENERY MIDDLE SCHOOL	Chenery Middle School Roof	FY27							\$ -	The flat roof on Chenery is 28 years old and is nearing its useful life. Leaks have started to occur but have been contained. Walking pads made of rubber do not age the same way as the plastic roof and has caused stretching and tearing of the roof. Minimal operating investment can sustain this roof for the next 3-5 years. Estimates at this point is not advised as the building materials and labor can not be accurately estimated for 5 years away.	4 - Has outlived its useful life
Facilities Summary				\$ 1,166,126	\$ 2,015,000	\$ -	\$ -	\$ -	\$ -	\$ 3,181,126		

Department	Location	Project Title	Fiscal Year	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY23-28	Description	urgency
Fire		Ambulance Replacement	FY23 FY24 FY25 FY26 FY27 FY28	\$ 80,000	\$ 80,000	\$ 80,000	\$ 80,000	\$ 80,000		\$ 400,000	This appropriation from EMS Revenue will be \$80,000 per year for 5 years resulting in the purchase of a new vehicle using \$400,000. In purchasing a vehicle in 2021 to replace a 10-year-old ambulance the department has encountered conditions where prices have risen sharply. This appropriation will help ensure adequate funds are available to continue to replace the ambulance in five years. The department will also maintain diligence in monitoring cost trends throughout the five-year span.	4 - Has outlived its useful life
Fire		Cardiac monitor replacement	FY23 FY24 FY25 FY26 FY27 FY28	\$ 7,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 57,000	Annual request of \$7,000 to replace cardiac monitor after five years. Funds from ambulance revenues. A new monitor is scheduled for purchase in FY 23. The cost will be approximately \$37,000 with a trade-in. A modification of the annual allotment allowing \$10,000 per year for five years is being requested in order to ensure the ability purchase a new monitor in 2028. The technology and capability of this equipment is constantly being updated. In order to allow paramedics to perform the latest advanced interventions our equipment must keep pace.	2 - System is likely to fail
Fire		Replace Staff Car	FY23	\$ 75,000						\$ 75,000	Staff car assigned to the fire chief. This will replace a 10-year-old (2013) vehicle currently assigned to Fire Prevention. The current chief's vehicle (2017) will be assigned to Fire Prevention. The new purchase will be a Ford Interceptor/SUV hybrid model (similar to current police hybrid vehicles) It shall be upfitted with equipment necessary to operate Incident Command and support Emergency Management functions.	3 - System has needed unanticipated repairs
Fire		Air Packs	FY23	\$ 376,584						\$ 376,584	Requesting funds to replace outdated air packs with equipment that meets the current standard. The current air packs are 10 years old and are beginning to experience frequent breakdowns (cost for repairs in past 12 months \$2500). More than the cost for repairs, the downtime for the equipment has become a problem. Current air packs are also 2 editions behind for NFPA safety standards. We are unable to employ current safety standards for air management with this equipment.	2 - System is likely to fail

Department	Location	Project Title	Fiscal Year	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY23-28	Description	urgency
Fire		Power Load Ambulance Cot System	FY23	\$ 42,000						\$ 42,000	This system will be installed in the new ambulance currently on order. It allows patients to be loaded safely into the ambulance. The system greatly lessens the chance for firefighter injury from lifting patients and cot into the ambulance. It also prevents patients from being dropped while lifting into the ambulance and provides a safe connection of the cot to the vehicle lessening the chance for patient injury in the event of a crash.	6 - Needed equipment for new rescue truck currently being ordered. The base cost of the vehicle does not allow this system to be included in the order.
Fire		Replace 2005/2014 Engine	FY24		\$ 840,000					\$ 840,000	Replace 2005 fire engine (pumper). Re-assign 2014 engine to reserve status. New engine will be front line fire apparatus. Build time is approximately 12 months based on past experience. Expected delivery would be mid-late 2025.	3 - System has needed unanticipated repairs
Fire		Replace Staff Vehicle	FY25			\$ 75,000				\$ 75,000	Replace 2015 staff vehicle. This is the Department's pick-up truck. It is used for various purposes including training, picking up and delivering equipment, and can be utilized by the fire investigation unit.	4 - Has outlived its useful life
Fire		Replace 2005 Engine	FY27					\$ 974,000		\$ 974,000	Replace 2007 fire engine (pumper). Re-assign 2020 engine to reserve status. New engine will be front line fire apparatus. Build time is approximately 12 months based on past experience. Expected delivery would be mid-late 2028. The 2007 vehicle that is being replaced is a four-wheel drive commercial type 'brush" truck. The brush fire fighting function is better served by the Fire Department's smaller brush truck (2008 Ford F-550). The replacement vehicle should be a custom pumper type of vehicle that is safer (due to rollover protection) and built to the specifications of our other front-line fire engines.	4 - Has outlived its useful life
Fire Summary				\$ 580,584	\$ 930,000	\$ 165,000	\$ 90,000	\$ 1,064,000	\$ 10,000	\$ 2,839,584		

Department	Location	Project Title	Fiscal Year	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY23-28	Description	urgency
Information Technology		Redundant fiber line to antenna site	FY23	\$ 150,000						\$ 150,000	This is a request that affects all Town agencies with radios. We currently have a single fiber run from 460 Concord Ave that carries all Town radio connections to the main antenna site at 760 Concord Ave. A short distance of this run is underground, but the majority of the run is pole to pole. If a pole is knocked down it could knock out all Town radio systems.	6 - This request is to cover the Town in the event of a break or damage to the single fiber run and allow Town departments to continue to function at full radio capacity.
Information Technology		Increase Network Storage	FY23	\$ 60,000						\$ 60,000	The project is to add disk storage to our SAN. This is to accommodate the need for increased resources for Virtual Servers as well as the need for increase in file storage capacity.	2 - System is likely to fail
Information Technology		Fiber Reconfiguration Burbank/Wellington	FY23	\$ 20,000						\$ 20,000	Burbank and Wellington are to be spliced into the backbone network for assignment to the High School or Chenery, or both. The objective is to remove the above sites from the current fiber terminations at the Library. Please see attached proposal for complete description.	6 - Continued Fiber Construction to eliminate hub at Library.
IT Summary				\$ 230,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 230,000		

Department	Location	Project Title	Fiscal Year	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY23-28	Description	urgency
Library		RFID Tags and Equipment	FY23	\$ 32,306						\$ 32,306	RFID technology has been utilized more and more in public libraries over the last 10 years, and it's time for Belmont to take this step in service. With RFID tags in each physical item, citizens will be able to check out items faster, with less errors, and in some cases without the support of a staff member. This will not reduce the need for staff, but hopefully help to avoid the need to increase the amount of Library Assistant positions. This work should be completed before the opening of a new library.	5 - New: to address quality of life
Library		Asbestos Abatement 2nd and 3rd floors	FY24		\$ 639,870					\$ 639,870	Scope includes all remaining areas that have asbestos tiles(fiction, nonfiction, bathrooms, etc. for an estimated Sq. footage of 24000. Includes a 30K allowance for moving furniture and an additional 65k for new furniture.	2 - System is likely to fail
Library		Extend Useful Life of Existing AC Equipment	FY24	\$ -	\$ 70,304	\$ -	\$ -			\$ 70,304	Extend useful life of HVAC – Given the age of the system and the background information that it cannot keep up with the energy demands/loads of the building, this is a lump sum number that assumes a rather significant overhaul of the HVAC systems. a. This includes any make up air fans, fans, cooling units and otherwise would be considered heating, ventilation, and air conditioning equipment. b. A component of this scope would include rebalancing of the system, looking at diffusers within the deficient spaces as well as some insulation to further contain air conditioning or heating in more severe weather. c. The scope of the actual work would be unknown until the system is fully assessed by an MEP engineer or qualified service vendor.	3 - System has needed unanticipated repairs

Department	Location	Project Title	Fiscal Year	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY23-28	Description	urgency
Library		Upgrade Fire Alarm System	FY24		\$ 787,592					\$ 787,592	Fire alarm upgrades – The existing system is deficient by way of fire alarm smoke detector and/or heat sensors coverage. Upgrading the system would mean bringing it up to code. a. Cost assumes addressable fire alarm system. b. Cost includes opening the walls and updating the electrical backbone of the system, the applicable conduits and environmental remediation needed to assess the “hot” areas. c. Cost assumes not only the actual areas of electrical runs but also means and methods of getting the devices power support to each location. d. A new annunciator panel is assumed in the costs. e. A good portion of the costs is associated with the logistics of the installation of the upgraded components and updated wiring of the same. f. This cost does not include a fire sprinkler suppression system or fire pump for the same. g. An appropriate and recommended approach would be for a Fire, Life Safety (FLS) engineer design and provide specifications for the fire alarm replacement/upgrade. A vendor maybe able to do the same but a vendor assumes no other scope of services such as the coordination and handling of the electrical upgrades, environmental remediation, patching of all the walls and painting of the same. These costs are included in this line item	4 - Has outlived its useful life
Library		Paint Exterior of Building	FY24		\$ 82,300					\$ 82,300	Exterior painting – The assumption under CHA costs considers an allocation for repairing and replacement of rotted wood. a. It does not entail replacement of all the wood, but rather repair and replacement as needed which can be assumed at 30% of the existing wood. b. A full assessment of the exterior by an envelope firm would determine the full scope of work but it is reasonable to expect at least 30% would need to be repaired and/or selectively replaced. c. Scope includes removal of old caulking and installation of new caulking.	4 - Has outlived its useful life
Library		Expand existing security camera system	FY24		\$ 100,800					\$ 100,800	Expand existing security camera system – Assumption is made that expanding the security system would require more cameras in select locations. a. As such, those cameras need to be powered and/or have cat 6 wiring hard wired to those locations. b. Such wiring may require wall and ceiling cutting and create the need for environmental remediation. c. Also, the duplexer and recording device equipment would/should be replaced to accommodate for the expansion of the system. d. Main power electrical upgrades are not considered as part of this scope but ancillary electrical work to support the expanded system is included.	6 - It's time to add cameras to unsecure sections of the library. East and West Wings, Third Floor Balcony, 1st floor hallway, door to Flett Room, exterior of the building etc.

Department	Location	Project Title	Fiscal Year	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY23-28	Description	urgency
Library		Upgrade & Replace Unit Ventilators	FY24 FY25		\$ 308,900					\$ 308,900	Upgrade/replace unit ventilators - Cost assumes replacement of the ventilators. a. Cost provided based on unit pricing and logistics for removal and installation of new including ancillary costs for electrical and plumbing. b. Specifications for such would come from a mechanical, Electrical, plumbing (MEP) engineer.	3 - System has needed unanticipated repairs
Library		Chiller Rooftop Replacement	FY24		\$ 358,000					\$ 358,000	Chiller replacement – Cost assumes chiller replacement in like kind in tonnage. a. An MEP engineer would provide specifications for such a replacement. b. We also suggest an energy model be performed as this directly affects the tonnage requirements and may provide some insight of the heat loss/AC deficiencies in the interior thereby dictating further insulation work or more controls for the system. c. The cost does not provide for a building management system or updated controls – simply the replacement of the existing unit. d. It accounts for ancillary electrical and plumbing work – however, it does not account for any major plumbing or electrical upgrades that very possibly maybe needed. e. The cost includes roof repairs associated with the replacement. f. The cost does not include any structural repairs that maybe required for code reasons or otherwise. g. A vibration absorbing structure is also not included in the cost.	4 - Has outlived its useful life
Library		Replace Windows and Exterior Doors	FY24		\$ 530,500					\$ 530,500	Replace windows and exterior doors – Window specifications would be an important component to understand. Windows have energy components, reflectivity attributes and aesthetics. a. The cost assumption is to replace windows like kind with new double pane windows with no consideration for upgraded UV glass, energy, or reflectivity. b. Associated woodwork and caulking are included in cost assumption. c. Environmental is not included in the cost assumption for this line item. d. Door replacement would include keeping the existing frame and only replacement of the door, weather stripping and threshold. i. Frames remain as removing the same very possibly can create a structural issue and additional work to prep the opening for a new frame.	4 - Has outlived its useful life

Department	Location	Project Title	Fiscal Year	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY23-28	Description	urgency
Library		Repoint Masonry	FY25			\$ 314,500				\$ 314,500	Repoint Masonry – Repointing scope includes removal of the old mortar and replacement with new. a. Compromised existing motor can provide an area of water infiltration of which cannot be seen necessarily from the interior. i. If this is occurring, it is very possible there is mold within the interior walls which would need to be mitigated. It may be encountered thru the other upgrades where walls would need to be opened to do the work. b. Spot pointing is an option where only the visible and clearly compromised mortar would be replaced. c. Repointing does not include any structural work on the brick but more specifically at the headers and lintels. d. CHA cost estimate assumes full repointing. i. An envelope consultant would further advise as the specifications of the mortar and whether the full repointing is needed. ii. The consultant may advise on weather sealant as well in select areas of which cost is not included in the assumptions.	4 - Has outlived its useful life
Library		Renovate 8-10 bathrooms(new toilets and fixtures)	FY25			\$ 1,223,000				\$ 1,223,000	Renovate 8 - 10 bathrooms (new toilets) – Cost assumption includes heavy renovations for the bathrooms, additional water fixtures and compliance with ADA. a. Cost assumptions includes new core drilling, plumbing and electrical as well as expanding the footprint of the bathrooms to provide for accessibility. b. Expansion of the bathroom footprint may include relocation of other plumbing and electrical which is considered in the cost estimate. c. Loss of hallway and/or usable space would occur. d. An Architect would need to provide for a schematic design to understand the entirety of the scope which may cause for more cost impact. e. CHA cost estimate is conservative. Environmental remediation would be needed as well.	Out of code. Not accessible. Useful life 20 years.
Library		Elevator Replacement	FY25			\$ 1,687,400				\$ 1,687,400	Elevator replacement – Cost includes new exterior shaft for the elevator. a. The shaft will be structural which will require a foundation. i. Assumption assumes steel and CMU masonry. b. Shaft is fire sprinklered and temperature controlled. c. Cost includes new openings in each floor and associated structural work and wall/interior work and flooring. d. Replacement of the existing elevator may not be possible due to newer elevators being differently sized and requiring more space. e. Replacement in current location would require major structural work should the shaft be expanded as well as loss of space and relocation of MEP and as such very well would be more than installing a new elevator on the outside of the building.	4 - Has outlived its useful life

Department	Location	Project Title	Fiscal Year	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY23-28	Description	urgency
Library		Limited Roof Repair (Membrane Replacement)	FY25			\$ 388,538				\$ 388,538	Cost assumes the replacement of the membrane.	1 - System has failed
Library		Exterior front upper staircase and landing repairs	FY25			\$ 479,752				\$ 479,752	Front stairs – The stairs are in disrepair. Stair replacement cost assumptions include: a. Demolition of the stairs b. Resetting of the base and new structural – including possible regrading c. Installation of new stairs, treads, and railings d. Lighting maybe required so consideration of electrical is assumed.	1 - System has failed
Library		Replace Interior Doors & Hardware	FY26				\$ 219,000			\$ 219,000	Replace interior doors and hardware – Given the size of the building and programming areas, the cost estimate includes replacement of all the doors and hardware. a. Replacement includes the doors frames for non-fire rated doors. i. Fire rated door frames would remain in place. b. Hardware is generic and does not include any FOB or electronic system. It can include a master keyed system. i. If there was a new building, we would recommend an FOB/electronic system for safety and security control.	6 - Out of code
Library		New Furniture	FY26				\$ 266,900			\$ 266,900	New Furniture with electrical integrated – The furniture layout would need to be designed and provided but assuming in most locations, cost assumption provides for electrical feeds. a. Electrical feeds would be surface mounted where possible. b. If trenching into the slab or deck is needed, this is assumed in our cost for a few areas but not everywhere. c. There is some consideration for environmental remediation. d. Upgraded of main electrical panel is not included but an ancillary panel is considered in the assumption. e. An MEP engineer would need to calculate the loads of the electrical needs of the building which would determine to what extent electrical panel upgrades are needed.	4 - Has outlived its useful life
Library		Repave Parking Lot	FY26				\$ 628,300			\$ 628,300	Repave parking lot – Cost assumption includes a full rip up of existing for the entire footprint and replace with asphalt in two 1.5” lifts and line painting. a. Cost assumption includes some regrading where needed. b. Replacement of storm water catch basins and lines is not included. c. No underground civil work is included. d. Recommendation from CHA would be go to a permeable surface instead of asphalt which helps with storm water management but is an appropriate sustainable approach.	4 - Has outlived its useful life
Library		Paint Interior of Building	FY27				\$ 215,300			\$ 215,300	Planned refresh of Library walls. Cost assumption includes crack repairs, prime and paint like color.	4 - Has outlived its useful life

Department	Location	Project Title	Fiscal Year	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY23-28	Description	urgency
Library		Fire Suppression for Claflin Room	FY27					\$ 52,800		\$ 52,800	Fire suppression for Claflin Room – Cost assumption is for a dry system for this room. a. The pipe work would be surface mounted and the equipment on the exterior. b. A FLS engineer would need to advise on the design detail and whether its viable and code approved. c. A wet system is not possible without creating a fire suppression pump equipment dedicated interior area and as well provide for a separate fire sprinkler line from the street which is why we assumed a dry system as being most viable. i. A dry system is a chemical fire suppression system like you would see in a garage. ii. A wet system is pressured water which is normally seen in interior of buildings.	5 - New: to address quality of life
Library		Automatic Sprinkler	FY27					\$ 506,400		\$ 506,400	Automatic sprinkler system (wet) – The viability of this work would need to be determined by a FLS engineer. a. A fire pump would be needed. b. A room or area for the fire pump would be needed, fire alarm would be integrated with the sprinkler system. c. CHA cost assumption is for surface mounted piping, new fire pump and ancillary work for a functional system. d. CHA cost does not include new fire water supply from the street to the fire pump location. e. Electrical is considered in the cost but not a fully new electrical power feed or main replacement.	5 - New: to address quality of life
Library		Upgrade electrical coverage and service	FY27					\$ 437,100		\$ 437,100	Upgrade electrical coverage and service – Allowance provided. a. Assumption includes replacement of existing in same location. b. Replacement of outlets throughout not included. c. Replacement of light fixtures to LED not included. d. Replacement of old wiring throughout not included. e. Low voltage wiring / rewiring not included. f. Relocation of existing main and panels not included. i. Do not recommend this scope without fully understanding and/or deciding upon future electrical requirements.	4 - Has outlived its useful life
Library		Complete the Replacement of the HVAC System	FY28						\$ 2,317,260	\$ 2,317,260	Complete the replacement of any remaining HVAC systems and components. Cost assumes replacement of the HVAC system including all components, duct work and equipment. a. Cost assumes environmental remediation and all wall/ceiling replacement that is removed. b. Cost includes building management systems and controls. c. Cost assumes replacement in similar size and general locations. d. This effort must coordinate with MEP and FLS engineers as well as an architect. i. Involves energy modeling and should consider other components of the renovation such as insulation and window replacement which directly affects the efficiency of the system.	4 - Has outlived its useful life

Department	Location	Project Title	Fiscal Year	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY23-28	Description	urgency
Library		Building Management System	FY28						\$ 389,000	\$ 389,000	Building Management System (BMS) – Scope includes tying in the existing HVAC system and all its pieces into a centralized control console. a. An MEP engineer would be needed to design and specify the system. b. CHA note – This scope may not be possible as the current HVAC system and its equipment may not accommodate a BMS system and as such would require the replacement of the HVAC system.	6 - No System Currently Exists
Library Summary				\$ 32,306	\$ 2,878,266	\$ 4,093,190	\$ 1,329,500	\$ 996,300	\$ 2,706,260	\$ 12,035,822		

Department	Location	Project Title	Fiscal Year	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY23-28	Description	urgency
Police		Install Uni-Directional Radio Amplifier at 460	FY23	\$ 30,000						\$ 30,000	Install UDA in the lower area of 460 Concord Ave, to allow officers to receive radio transmissions	6 - officers are now unable to hear if they are being called on the radio while in the lower area of the police station
Police		Replace EMD Server	FY23	\$ 12,000						\$ 12,000	This server controls and strores the Emergency Medical Dispatch software and the quality assurance software. This server was last replaced in FY17	4 - Has outlived its useful life
Police		Replace Update Server	FY24		\$ 12,000					\$ 12,000	This is to replace our windows update server, last replaced in FY18	4 - Has outlived its useful life
Police		Replace Police portable radios	FY24		\$ 150,000	\$ 150,000				\$ 300,000	Replacement of Police department portable radios, last replaced in FY16	4 - Has outlived its useful life
Police		Replace Fiber Multiplexers	FY25			\$ 100,000				\$ 100,000	This is a Town Wide benefit request. This is to replace the fiber multiplexers that are used to connect all the Town radio equipment, base radios, receivers, and remotes to the main antenna site. There are also multiplexers that tie together the fire stations and police station. Placeholder amount	4 - Has outlived its useful life
Police		Replace CAD and RMS Server	FY25			\$ 20,000				\$ 20,000	To replace the Computer Aided Dispatch and Records Management System server, last replaced in FY20	4 - Has outlived its useful life
Police		Replace Call/Radio Logging Recoder	FY25			\$ 18,000				\$ 18,000	To replace the telephone and radio logging recorder, we last updated the unit in FY19	4 - Has outlived its useful life
Police		Replacement of Police Domain Controllers	FY25			\$ 20,000				\$ 20,000	Replacement of Police network domain controller computers, last replaced in FY19 they will be at the end of the life cycle for system support and maintenance	4 - Has outlived its useful life
Police		Town-wide Base Radio Replacement	FY26 FY27				\$ 100,000	\$ 100,000		\$ 200,000	Replace all Town base radio equipment and infrastructure, this is a Town wide request as the Police department maintains all base equipment and connectivity for the antenna site. The equipment was last replaced in FY16 Note budget number is a placeholder	4 - Has outlived its useful life
Police		Replacement of Police Network Switches	FY26				\$ 35,000			\$ 35,000	Replacement of Police department network switches, last replaced in FY18	4 - Has outlived its useful life
Police		Replace Department Sidearms	FY26				\$ 30,000			\$ 30,000	Officer's sidearms were last replaced around 2015 and will be at the end of their expected life	4 - Has outlived its useful life
Police Summary				\$ 42,000	\$ 162,000	\$ 308,000	\$ 165,000	\$ 100,000	\$ -	\$ 777,000		

Department	Location	Project Title	Fiscal Year	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY23-28	Description	urgency
Public Works		#55 Brush Chipper	FY23	\$ 57,950						\$ 57,950	Replace #55 Brush Chipper	4 - Has outlived its useful life
Public Works		Public Shade Tree Inventory & Health Assessment	FY23	\$ 55,000						\$ 55,000	Public shade tree inventory and health assessment.	5 - New: to address quality of life
Public Works - Parks		#108 - Small Front End Loader	FY23	\$ 112,450						\$ 112,450	Replace #108 - Small Front End Loader	2 - System is likely to fail
Public Works - Parks		#110 - 1 Ton 4WD Pick-up Truck	FY23	\$ 58,310						\$ 58,310	Replace #110 - 1 Ton 4WD Pick-up Truck	3 - System has needed unanticipated repairs
Public Works - Cemetery		#117 - 1 Ton 4WD Pick-up Truck	FY23	\$ 58,310						\$ 58,310	Replace #117 - 1 Ton 4WD Pick-up Truck	3 - System has needed unanticipated repairs
Public Works		#73 - 10" Material Spreader	FY24		\$ 26,265					\$ 26,265	Replace #73 - 10' Material Spreader	3 - System has needed unanticipated repairs
Public Works		#32 - Snowfighter Conversion	FY24		\$ 49,545					\$ 49,545	Replace #32 - Snow Fighter Conversion	3 - System has needed unanticipated repairs

Department	Location	Project Title	Fiscal Year	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY23-28	Description	urgency
Public Works		#1 - Administrative Hybrid Vehicle	FY25			\$ 40,850				\$ 40,850	Replace #1 - Administrative Vehicle	3 - System has needed unanticipated repairs
Public Works		#67 - 9' Material Spreader	FY26				\$ 16,710			\$ 16,710	Replace #67 - 9' Material Spreader	3 - System has needed unanticipated repairs
Public Works		#37 - Snow Fighter Conversion	FY26				\$ 49,545			\$ 49,545	Replace #37 - Snow Fighter Conversion	3 - System has needed unanticipated repairs
Public Works		#34 - Snow Fighter Conversion	FY27					\$ 49,545		\$ 49,545	Replace #34 - Snow Fighter Conversion	3 - System has needed unanticipated repairs
Public Works		#47 - Wacker Sidewalk Snowblower	FY27					\$ 95,235		\$ 95,235	Replace #47 - Wacker Sidewalk Snowblower	3 - System has needed unanticipated repairs
Public Works		#46 Wacker Sidewalk Tractor	FY28						\$ 95,235	\$ 95,235	Sidewalk tractor for snow removal	4 - Has outlived its useful life
Public Works		#42 Vent-Trac Sidewalk Tractor	FY28						\$ 61,500	\$ 61,500	Sidewalk tractor for snow removal	4 - Has outlived its useful life
Public Works - Cemetery		#119 - 19,000 GVW Dump Truck	FY24		\$ 71,155					\$ 71,155	Replace #119 - 19,000 GVW Dump Truck	3 - System has needed unanticipated repairs
Public Works - Cemetery		#116 - 19,000 GVW Dump Truck	FY25			\$ 71,155				\$ 71,155	Replace #116 - 19,000 GVW Dump Truck	3 - System has needed unanticipated repairs
Public Works - Parks		#102 - 1 Ton 4WS Pick-up Truck	FY24		\$ 58,310					\$ 58,310	Replace #102 - 1 Ton 4WD Pick-up Truck	3 - System has needed unanticipated repairs
Public Works - Parks		Toro - 16' Cut Riding Mower	FY24		\$ 92,925					\$ 92,925	Replace Toro 16' Cut Riding Mower	3 - System has needed unanticipated repairs
Public Works - Parks		#104 - 1 Ton 4WD Pick-up Truck	FY25			\$ 58,310				\$ 58,310	Replace #104 - 1 Ton 4WD Pick-up Truck	3 - System has needed unanticipated repairs
Public Works - Parks		#107 John Deere Tractor	FY26				\$ 44,570			\$ 44,570	Replace #107 - John Deere Tractor	3 - System has needed unanticipated repairs
DPW Summary				\$ 342,020	\$ 298,200	\$ 170,315	\$ 110,825	\$ 144,780	\$ 156,735	\$ 1,222,875		

Department	Location	Project Title	Fiscal Year	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY23-28	Description	urgency
Public Works - Sewer		#24 - Front End Loader	FY23	\$ 220,625						\$ 220,625	Replace #24 - Front End Loader	3 - System has needed unanticipated repairs
Public Works - Sewer		#21 - 1 Ton 4WD Pick-up Truck	FY23	\$ 58,310						\$ 58,310	Replace #21 - 1 Ton Pick-up Truck	3 - System has needed unanticipated repairs
Public Works - Sewer		#5 - 1 Ton 4WD Pick-up Truck	FY25			\$ 58,310				\$ 58,310	Replace #5 - 1 Ton Pick-up Truck	3 - System has needed unanticipated repairs
Public Works - Sewer		#52 - Emergency Service Hybrid Van	FY25			\$ 40,225				\$ 40,225	Replace #52 - Emergency Service Van	3 - System has needed unanticipated repairs
Public Works - Sewer		#2 - Administrative Hybrid Vehicle	FY23	\$ 56,765						\$ 56,765	Replace #2 - Administrative Vehicle	3 - System has needed unanticipated repairs
Public Works - Sewer		#17 - 40,000 GVW Dump Truck	FY24		\$ 153,320					\$ 153,320	Replace #17 - 40,000 GVW Dump Truck	3 - System has needed unanticipated repairs
Public Works - Sewer		#8 - 1 Ton 4WD Pick-up Truck	FY25			\$ 58,310				\$ 58,310	Replace #8 - 1 Ton 4WD Pick-up Truck	3 - System has needed unanticipated repairs
Public Works - Sewer		#50 - Vactor Machine	FY24		\$ 257,500					\$ 257,500	Replace #50 - Vactor Machine (split cost with Water Enterprise)	3 - System has needed unanticipated repairs
Public Works - Sewer		#11- 40,000GVW Dump Truck	FY28						\$ 153,320	\$ 153,320	Replace #11 - 40,000 GVW Dump Truck	3 - System has needed unanticipated repairs
Public Works - Sewer		#12 - 40,000 GVW Dump Truck	FY26				\$ 153,320			\$ 153,320	Replace #12 - 40,000 GVW Dump Truck	3 - System has needed unanticipated repairs
Public Works - Sewer		Replace #25 Front End Loader	FY26				\$ 220,625			\$ 220,625	Replace #25 Front End Loader	4 - Has outlived its useful life
Public Works - Sewer		#25 Front End Loader	FY27					\$ 220,625		\$ 220,625	Front end loader	4 - Has outlived its useful life
Sewer Summary				\$ 335,700	\$ 410,820	\$ 156,845	\$ 373,945	\$ 220,625	\$ 153,320	\$ 1,651,255		

Department	Location	Project Title	Fiscal Year	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY23-28	Description	urgency
Public Works - Water		#81 Administrative Hybrid Vehicle	FY23	\$ 31,575						\$ 31,575	Replace #81 - Administrative Vehicle	3 - System has needed unanticipated repairs
Public Works - Water		#85 - 40,000 GVW Dump Truck	FY25			\$ 153,320				\$ 153,320	Replace #85 - 40,000 GVW Dump Truck	3 - System has needed unanticipated repairs
Public Works - Water		#77 - Administrative Hybrid Vehicle	FY26				\$ 31,575			\$ 31,575	Replace #77 - Administrative Vehicle	3 - System has needed unanticipated repairs
Public Works - Water		#88 - Closed Utility 4WD Truck	FY24		\$ 79,800					\$ 79,800	Replace #88 - Closed Utility 4WD Truck	3 - System has needed unanticipated repairs
Public Works - Water		#83 - Closed Utility 4WD Truck	FY25			\$ 79,800				\$ 79,800	Replace #83 - Closed Utility 4WD Truck	3 - System has needed unanticipated repairs
Public Works - Water		#76 - Administrative Hybrid Vehicle	FY27					\$ 31,575		\$ 31,575	Replace #76 - Administrative Vehicle	3 - System has needed unanticipated repairs
Public Works - Water		#50 - Vactor Machine	FY24		\$ 257,500					\$ 257,500	Replace #50 - Vactor Machine (split cost with Sewer Enterprise)	3 - System has needed unanticipated repairs
Public Works - Water		#80 - Emergency Service Hybrid Van	FY26				\$ 38,310			\$ 38,310	Replace #80 - Emergency Service Van	3 - System has needed unanticipated repairs
Public Works - Water		#89 - Emergency Lighting Plant	FY27					\$ 25,450		\$ 25,450	Replace #89 - Emergency Lighting Plant	3 - System has needed unanticipated repairs
Public Works - Water		Trailer Mounted Vacmachine/Valve Turner	FY23	\$ 86,850						\$ 86,850	Trailer mounted valve turner	6
Public Works - Water		Electronic Sign Board	FY23	\$ 20,850						\$ 20,850	Electronic sign board	5 - New: to address quality of life
Public Works - Water		Tag Along Compressor	FY23	\$ 30,000						\$ 30,000	Tag along compressor	6
Water Summary				\$ 169,275	\$ 337,300	\$ 233,120	\$ 69,885	\$ 57,025	\$ -	\$ 866,605		

Department	Location	Project Title	Fiscal Year	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY23-28	Description	urgency
Community Development		Pavement Management	FY23 FY24 FY25 FY26 FY27 FY28	\$ 1,857,772	\$ 1,904,216	\$ 1,951,821	\$ 2,000,617	\$ 2,050,632	\$ 2,101,898	\$ 11,866,956	Reconstruction of Town roadways utilizing two override sources of funding (2001 and 2015) and Ch 90 state aid (not reflected in the CBC request)	1 - System has failed
Public Works		Sidewalk Maintenance	FY23 FY24 FY25 FY26 FY27 FY28	\$ 237,730	\$ 243,680	\$ 249,770	\$ 256,010	\$ 262,410	\$ 268,970	\$ 1,518,570	Repair or Replace Cement Concrete Sidewalks and Granite Curbing as needed throughout the town.	1 - System has failed
Pavement Summary				\$ 2,095,502	\$ 2,147,896	\$ 2,201,591	\$ 2,256,627	\$ 2,313,042	\$ 2,370,868	\$ 13,385,526		
GRAND TOTAL				\$ 5,593,513	\$ 9,779,482	\$ 7,928,061	\$ 4,995,782	\$ 5,495,772	\$ 5,997,183	\$ 39,789,793		

Department	Location	Project Title	Fiscal Year	FY2024	FY2025	FY2026	FY2027	FY2028
Community Development		Sewer and Drain Rehabilitation	FY23 FY24 FY25 FY26 FY27 FY28	\$ 600,000	\$ 600,000	\$ 600,000	\$ 600,000	\$ 600,000
Community Development Summary				\$ 600,000	\$ 600,000	\$ 600,000	\$ 600,000	\$ 600,000



Commonwealth of Massachusetts

Town of Belmont

Capital Request #FY 23 CBR-28

Department:
Community
Development

Title:
Sewer and Drain Rehabilitation

Description: Investigate, evaluate and mitigate sewer and storm drain failures. Repair / replace mains and services, test water quality of the storm water system and correct deficiencies as required. Fund the Annual MS4 DEP storm water permitting program.

Location (if available):

FY 23: \$600000

FY 24: \$600000

FY 25: \$600000

FY 26: \$600000

FY 27: \$600000

FY 28: \$600000

FY 23 – 28 Total: \$3600000

Project Category: Public improvement

Project Type: Reconstruction

Basis For Estimate: In-house estimate

Life Expectancy: 75

Operational Cost Impact: Decrease to expenses

Note: Work to rehabilitate sewer and storm water systems will reduce DPW need to perform maintenance. The real savings comes from avoiding catastrophic failure that would require a major capital outlay to repair.

Urgency: 2 - System is likely to fail

Note: Work includes repairing identified failures in the systems and also making repairs in advance of potential failure. Work also includes identifying sources of problems that need to be addressed such as illicit connections to storm water systems.

Previous Phases: Yes

Can This Be Phased: Yes

Grants: Have not been identified

Department	Location	Project Title	Fiscal Year	FY2024	FY2025	FY2026	FY2027	FY2028
Facilities	BUTLER ELEMENTARY SCHOOL	Replace Translucent Wall panels over Gym	FY24	\$ 415,000				
Facilities	BUTLER ELEMENTARY SCHOOL	Slate Roof, Flashing, Caps and Gutters	FY24	\$ 1,600,000				
Facilities	CHENERY MIDDLE SCHOOL	Chenery Middle School Roof	FY27					
Facilities Summary				\$ 2,015,000	\$ -	\$ -	\$ -	\$ -



Commonwealth of Massachusetts
Town of Belmont
Capital Request #FY 23 CBR-25

Department:
Facilities

Title:
Replace Translucent Wall panels over Gym

Description: Replace existing Translucent panels over Gym with new. Existing panels have deteriorated from UV and over lived its useful life.

Location (if available): BUTLER ELEMENTARY SCHOOL

FY 23: \$

FY 24: \$415000

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$415000

Project Category: Public improvement

Project Type: Replacement

Basis For Estimate: Consultant

Life Expectancy: 25

Operational Cost Impact: Neutral

Note:

Urgency: 4 - Has outlived its useful life

Note:

Previous Phases: No

Can This Be Phased: No

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #FY 23 CBR-23

Department:
Facilities

Title:
Slate Roof, Flashing, Caps and Gutters

Description: Based on the building envelope study the Slate Roof has been determined to be well over its useful life being over 120 years.

Location (if available): BUTLER ELEMENTARY SCHOOL

FY 23: \$

FY 24: \$1600000

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$1600000

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: Consultant

Life Expectancy: 25

Operational Cost Impact: Decrease to expenses

Note: New roof will lower the repair cost and internal repairs resulting from said leaks.

Urgency: 4 - Has outlived its useful life

Note:

Previous Phases: No

Can This Be Phased: No

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #FY 22 CBR-7

Department:
Facilities

Title:
Chenery Middle School Roof

Description: The flat roof on Chenery is 28 years old and is nearing its useful life. Leaks have started to occur but have been contained. Walking pads made of rubber do not age the same way as the plastic roof and has caused stretching and tearing of the roof. Minimal operating investment can sustain this roof for the next 3-5 years. Estimates at this point is not advised as the building materials and labor can not be accurately estimated for 5 years away.

Location (if available): CHENERY MIDDLE SCHOOL

FY 23: \$

FY 24: \$

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$0

Project Category: Public improvement

Project Type: Replacement

Basis For Estimate: In-house estimate

Life Expectancy: 30

Operational Cost Impact: Neutral

Note:

Urgency: 4 - Has outlived its useful life

Note: The existing roof is reaching its designed useful life and should anticipate a replacement in about 3-5 years.

Previous Phases: No

Can This Be Phased: Yes

Grants:

Department	Location	Project Title	Fiscal Year	FY2024	FY2025	FY2026	FY2027	FY2028
Fire		Ambulance Replacement	FY23 FY24 FY25 FY26 FY27 FY28	\$ 80,000	\$ 80,000	\$ 80,000	\$ 80,000	
Fire		Cardiac monitor replacement	FY23 FY24 FY25 FY26 FY27 FY28	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000
Fire		Replace 2005/2014 Engine	FY24	\$ 840,000				
Fire		Replace Staff Vehicle	FY25		\$ 75,000			
Fire		Replace 2005 Engine	FY27				\$ 974,000	
Fire Summary				\$ 930,000	\$ 165,000	\$ 90,000	\$ 1,064,000	\$ 10,000



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-57

Department:
Fire

Title:
Ambulance Replacement

Description: This appropriation from EMS Revenue will be \$80,000 per year for 5 years resulting in the purchase of a new vehicle using \$400,000. In purchasing a vehicle in 2021 to replace a 10-year-old ambulance the department has encountered conditions where prices have risen sharply. This appropriation will help ensure adequate funds are available to continue to replace the ambulance in five years. The department will also maintain diligence in monitoring cost trends throughout the five-year span.

Location (if available):

FY 23: \$80000

FY 24: \$80000

FY 25: \$80000

FY 26: \$80000

FY 27: \$80000

FY 28: \$

FY 23 – 28 Total: \$400000

Project Category: Vehicle

Project Type: Replacement

Basis For Estimate: Quote

Life Expectancy: 10

Operational Cost Impact: Neutral

Note: Newer vehicles have lower maintenance and repair costs.

Urgency: 4 - Has outlived its useful life

Note:

Previous Phases: Yes

Can This Be Phased: Yes

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-58

Department:
Fire

Title:
Cardiac monitor replacement

Description: Annual request of \$7,000 to replace cardiac monitor after five years. Funds from ambulance revenues. A new monitor is scheduled for purchase in FY 23. The cost will be approximately \$37,000 with a trade-in. A modification of the annual allotment allowing \$10,000 per year for five years is being requested in order to ensure the ability purchase a new monitor in 2028. The technology and capability of this equipment is constantly being updated. In order to allow paramedics to perform the latest advanced interventions our equipment must keep pace.

Location (if available):

FY 23: \$7000

FY 24: \$10000

FY 25: \$10000

FY 26: \$10000

FY 27: \$10000

FY 28: \$10000

FY 23 – 28 Total: \$57000

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: In-house estimate

Life Expectancy: 10

Operational Cost Impact: Neutral

Note:

Urgency: 2 - System is likely to fail

Note:

Previous Phases: Yes

Can This Be Phased: Yes

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #FY 22 CBR-4

Department:
Fire

Title:
Replace 2005/2014 Engine

Description: Replace 2005 fire engine (pumper). Re-assign 2014 engine to reserve status. New engine will be front line fire apparatus. Build time is approximately 12 months based on past experience. Expected delivery would be mid-late 2025.

Location (if available):

FY 23: \$

FY 24: \$840000

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$840000

Project Category: Vehicle

Project Type: Replacement

Basis For Estimate: In-house estimate

Life Expectancy: 20

Operational Cost Impact: Neutral

Note: Newer vehicles have less frequent repair needs. Having reliable reserve apparatus allows the fire department to maintain fire and EMS protections when front line vehicles are being serviced and when additional staffing is required. The 2005 reserve engine that is slated for replacement underwent a \$20,000 frame repair in 2019. Avoiding these costly repairs is the goal.

Urgency: 3 - System has needed unanticipated repairs

Note: The purchase of this engine has been deferred by one year. The department has prioritized other needs and the current fleet shows that it should remain adequate for one more year.

Previous Phases: No

Can This Be Phased: No

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #FY 22 CBR-5

Department:
Fire

Title:
Replace Staff Vehicle

Description: Replace 2015 staff vehicle. This is the Department's pick-up truck. It is used for various purposes including training, picking up and delivering equipment, and can be utilized by the fire investigation unit.

Location (if available):

FY 23: \$

FY 24: \$

FY 25: \$75000

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$75000

Project Category: Vehicle

Project Type: Replacement

Basis For Estimate: In-house estimate

Life Expectancy: 10

Operational Cost Impact: Neutral

Note: Newer vehicles have lower repair costs. Hybrid models are being explored and, if feasible, could be utilized for this application. Hybrid vehicles have lower fuel costs.

Urgency: 4 - Has outlived its useful life

Note: The 2015 vehicle would either be retained as a reserve piece of equipment or traded in. This would be further evaluated in the year leading up to the request. Detailed fleet report will be submitted to the Capital Budget Committee.

Previous Phases: No

Can This Be Phased: No

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #FY 22 CBR-6

Department:
Fire

Title:
Replace 2005 Engine

Description: Replace 2007 fire engine (pumper). Re-assign 2020 engine to reserve status. New engine will be front line fire apparatus. Build time is approximately 12 months based on past experience. Expected delivery would be mid-late 2028.

The 2007 vehicle that is being replaced is a four-wheel drive commercial type 'brush' truck. The brush fire fighting function is better served by the Fire Department's smaller brush truck (2008 Ford F-550). The replacement vehicle should be a custom pumper type of vehicle that is safer (due to rollover protection) and built to the specifications of our other front-line fire engines.

Location (if available):

FY 23: \$

FY 24: \$

FY 25: \$

FY 26: \$

FY 27: \$974000

FY 28: \$

FY 23 – 28 Total: \$974000

Project Category: Vehicle

Project Type: Replacement

Basis For Estimate: In-house estimate

Life Expectancy: 20

Operational Cost Impact: Neutral

Note: Newer vehicles have less frequent repair needs. Having reliable reserve apparatus allows the fire department to maintain fire and EMS protections when front line vehicles are being serviced and when additional staffing is required.

Urgency: 4 - Has outlived its useful life

Note: Detailed fleet report will be submitted to Capital Budget Committee.

Previous Phases: No

Can This Be Phased: No

Grants:

Department	Location	Project Title	Fiscal Year	FY2024	FY2025	FY2026	FY2027	FY2028
Library		Asbestos Abatement 2nd and 3rd floors	FY24	\$ 639,870				
Library		Extend Useful Life of Existing AC Equipment	FY24	\$ 70,304	\$ -	\$ -		
Library		Upgrade Fire Alarm System	FY24	\$ 787,592				
Library		Paint Exterior of Building	FY24	\$ 82,300				
Library		Expand existing security camera system	FY24	\$ 100,800				
Library		Upgrade & Replace Unit Ventilators	FY24 FY25	\$ 308,900				
Library		Chiller Rooftop	FY24	\$ 358,000				
Library		Replace Windows and Exterior Doors	FY24	\$ 530,500				

Department	Location	Project Title	Fiscal Year	FY2024	FY2025	FY2026	FY2027	FY2028
Library		Repoint Masonry	FY25		\$ 314,500			
Library		Renovate 8-10 bathrooms(new toilets and fixtures)	FY25		\$ 1,223,000			
Library		Elevator Replacement	FY25		\$ 1,687,400			
Library		Limited Roof Repair (Membrane Replacement)	FY25		\$ 388,538			
Library		Exterior front upper staircase and landing repairs	FY25		\$ 479,752			
Library		Replace Interior Doors & Hardware	FY26			\$ 219,000		

Department	Location	Project Title	Fiscal Year	FY2024	FY2025	FY2026	FY2027	FY2028
Library		New Furniture	FY26			\$ 266,900		
Library		Repave Parking Lot	FY26			\$ 628,300		
Library		Paint Interior of Building	FY27			\$ 215,300		
Library		Fire Suppression for Claflin Room	FY27				\$ 52,800	
Library		Automatic Sprinkler	FY27				\$ 506,400	
Library		Upgrade electrical coverage and service	FY27				\$ 437,100	
Library		Complete the Replacement of the HVAC System	FY28					\$ 2,317,260
Library		Building Management System	FY28					\$ 389,000
Library Summary				\$ 2,878,266	\$ 4,093,190	\$ 1,329,500	\$ 996,300	\$ 2,706,260



Commonwealth of Massachusetts
Town of Belmont
Capital Request #FY 23 CBR-20

Department:
Library

Title:
Asbestos Abatement 2nd and 3rd floors

Description: Scope includes all remaining areas that have asbestos tiles(fiction, nonfiction, bathrooms, etc. for an estimated Sq. footage of 24000. Includes a 30K allowance for moving furniture and an additional 65k for new furniture.

Location (if available):

FY 23: \$

FY 24: \$639870

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$639870

Project Category: Public improvement

Project Type: Replacement

Basis For Estimate: Consultant

Life Expectancy: 20

Operational Cost Impact: Neutral

Note:

Urgency: 2 - System is likely to fail

Note: The tiles are wearing thin, literally.

Previous Phases: Yes

Can This Be Phased: Yes

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-76

Department:
Library

Title:
Extend Useful Life of Existing AC Equipment

Description: Extend useful life of HVAC – Given the age of the system and the background information that it cannot keep up with the energy demands/loads of the building, this is a lump sum number that assumes a rather significant overhaul of the HVAC systems.

a. This includes any make up air fans, fans, cooling units and otherwise would be considered heating, ventilation, and air conditioning equipment.

b. A component of this scope would include rebalancing of the system, looking at diffusers within the deficient spaces as well as some insulation to further contain air conditioning or heating in more severe weather.

c. The scope of the actual work would be unknown until the system is fully assessed by an MEP engineer or qualified service vendor.

Location (if available):

FY 23: \$0

FY 24: \$70304

FY 25: \$0

FY 26: \$0

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$70304

Project Category: Equipment

Project Type: Reconstruction

Basis For Estimate: Consultant

Life Expectancy: 5

Operational Cost Impact: Neutral

Note: Thousands are spent in Air Conditioning repairs each year as our now obsolete equipment fails. A proactive approach to improvement should see the total spent overall decrease. Useful life 5 years.

Urgency: 3 - System has needed unanticipated repairs

Note:

Previous Phases: No

Can This Be Phased: No
Grants: Have not been identified



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-77

Department:
Library

Title:
Upgrade Fire Alarm System

Description: Fire alarm upgrades – The existing system is deficient by way of fire alarm smoke detector and/or heat sensors coverage. Upgrading the system would mean bringing it up to code.

- a. Cost assumes addressable fire alarm system.
- b. Cost includes opening the walls and updating the electrical backbone of the system, the applicable conduits and environmental remediation needed to assess the “hot” areas.
- c. Cost assumes not only the actual areas of electrical runs but also means and methods of getting the devices power support to each location.
- d. A new annunciator panel is assumed in the costs.
- e. A good portion of the costs is associated with the logistics of the installation of the upgraded components and updated wiring of the same.
- f. This cost does not include a fire sprinkler suppression system or fire pump for the same.
- g. An appropriate and recommended approach would be for a Fire, Life Safety (FLS) engineer design and provide specifications for the fire alarm replacement/upgrade. A vendor maybe able to do the same but a vendor assumes no other scope of services such as the coordination and handling of the electrical upgrades, environmental remediation, patching of all the walls and painting of the same. These costs are included in this line item

Location (if available):

FY 23: \$	FY 24: \$787592	FY 25: \$	FY 26: \$
FY 27: \$	FY 28: \$	FY 23 – 28 Total: \$787592	
Project Category: Equipment		Project Type: Replacement	
Basis For Estimate: Consultant		Life Expectancy: 20	

Operational Cost Impact: Neutral

Note:

Urgency: 4 - Has outlived its useful life

Note:

Previous Phases: No
Can This Be Phased: No
Grants: Have not been identified



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-85

Department:
Library

Title:
Paint Exterior of Building

Description: Exterior painting – The assumption under CHA costs considers an allocation for repairing and replacement of rotted wood.

- a. It does not entail replacement of all the wood, but rather repair and replacement as needed which can be assumed at 30% of the existing wood.
- b. A full assessment of the exterior by an envelope firm would determine the full scope of work but it is reasonable to expect at least 30% would need to be repaired and/or selectively replaced.
- c. Scope includes removal of old caulking and installation of new caulking.

Location (if available):

FY 23: \$	FY 24: \$82300	FY 25: \$	FY 26: \$
FY 27: \$	FY 28: \$	FY 23 – 28 Total: \$82300	
Project Category: Public improvement		Project Type: Replacement	
Basis For Estimate: Consultant		Life Expectancy: 15	

Operational Cost Impact: Decrease to expenses

Note: Planned maintenance of coding to prevent wood from further rotting. Useful life 15 years.

Urgency: 4 - Has outlived its useful life

Note:

Previous Phases: No

Can This Be Phased: No

Grants: Have not been identified



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-86

Department:
Library

Title:
Expand existing security camera system

Description: Expand existing security camera system – Assumption is made that expanding the security system would require more cameras in select locations.

- a. As such, those cameras need to be powered and/or have cat 6 wiring hard wired to those locations.
- b. Such wiring may require wall and ceiling cutting and create the need for environmental remediation.
- c. Also, the duplexer and recording device equipment would/should be replaced to accommodate for the expansion of the system.
- d. Main power electrical upgrades are not considered as part of this scope but ancillary electrical work to support the expanded system is included.

Location (if available):

FY 23: \$	FY 24: \$100800	FY 25: \$	FY 26: \$
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FY 27: \$	FY 28: \$	FY 23 – 28 Total: \$100800
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Project Category: Equipment	Project Type: New
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Basis For Estimate: Consultant	Life Expectancy: 15
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Operational Cost Impact: Neutral

Note: No change.

Urgency: 6

Note: It's time to add cameras to unsecure sections of the library. East and West Wings, Third Floor Balcony, 1st floor hallway, door to Flett Room, exterior of the building etc.

Previous Phases: Yes

Can This Be Phased: No

Grants: Have not been identified



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-87

Department:
Library

Title:
Upgrade & Replace Unit Ventilators

Description: Upgrade/replace unit ventilators - Cost assumes replacement of the ventilators.
a. Cost provided based on unit pricing and logistics for removal and installation of new including ancillary costs for electrical and plumbing.
b. Specifications for such would come from a mechanical, Electrical, plumbing (MEP) engineer.

Location (if available):

FY 23: \$

FY 24: \$308900

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$308900

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: Consultant

Life Expectancy: 20

Operational Cost Impact: Decrease to expenses

Note: More expensive to not replace than replace. Useful Life 20 years.

Urgency: 3 - System has needed unanticipated repairs

Note: Beyond useful life

Previous Phases: No

Can This Be Phased: No

Grants: Have not been identified



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-88

Department:
Library

Title:
Chiller Rooftop Replacement

Description: Chiller replacement – Cost assumes chiller replacement in like kind in tonnage.
a. An MEP engineer would provide specifications for such a replacement.
b. We also suggest an energy model be performed as this directly affects the tonnage requirements and may provide some insight of the heat loss/AC deficiencies in the interior thereby dictating further insulation work or more controls for the system.
c. The cost does not provide for a building management system or updated controls – simply the replacement of the existing unit.
d. It accounts for ancillary electrical and plumbing work – however, it does not account for any major plumbing or electrical upgrades that very possibly maybe needed.
e. The cost includes roof repairs associated with the replacement.
f. The cost does not include any structural repairs that maybe required for code reasons or otherwise.
g. A vibration absorbing structure is also not included in the cost.

Location (if available):

FY 23: \$	FY 24: \$358000	FY 25: \$	FY 26: \$
FY 27: \$	FY 28: \$	FY 23 – 28 Total: \$358000	
Project Category: Equipment		Project Type: Replacement	
Basis For Estimate: Consultant		Life Expectancy: 20	

Operational Cost Impact: Decrease to expenses

Note: Less repairs, less expenditures.

Urgency: 4 - Has outlived its useful life

Note: Health and Safety. This past summer cooling centers were needed often. The Library was not listed as one, as the HVAC system is unreliable. Useful Life 20 years.

Previous Phases: No

Can This Be Phased: No

Grants: Have not been identified



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-89

Department:
Library

Title:
Replace Windows and Exterior Doors

Description: Replace windows and exterior doors – Window specifications would be an important component to understand. Windows have energy components, reflectivity attributes and aesthetics.

- a. The cost assumption is to replace windows like kind with new double pane windows with no consideration for upgraded UV glass, energy, or reflectivity.
- b. Associated woodwork and caulking are included in cost assumption.
- c. Environmental is not included in the cost assumption for this line item.
- d. Door replacement would include keeping the existing frame and only replacement of the door, weather stripping and threshold.
- i. Frames remain as removing the same very possibly can create a structural issue and additional work to prep the opening for a new frame.

Location (if available):

FY 23: \$	FY 24: \$530500	FY 25: \$	FY 26: \$
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FY 27: \$	FY 28: \$	FY 23 – 28 Total: \$530500
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Project Category: Equipment	Project Type: Replacement
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Basis For Estimate: Consultant	Life Expectancy: 20
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Operational Cost Impact: Decrease to expenses

Note: Far improved energy efficiency

Urgency: 4 - Has outlived its useful life

Note: Some won't open, many won't stay open. Many are rotted and let water into the walls and building exterior.

Previous Phases: No

Can This Be Phased: No

Grants: Other

Department	Location	Project Title	Fiscal Year	FY2024	FY2025	FY2026	FY2027	FY2028
Police		Replace Update Server	FY24	\$ 12,000				
Police		Replace Police portable radios	FY24	\$ 150,000	\$ 150,000			
Police		Replace Fiber Multiplexers	FY25		\$ 100,000			
Police		Replace CAD and RMS Server	FY25		\$ 20,000			
Police		Replace Call/Radio Logging Recorder	FY25		\$ 18,000			
Police		Replacement of Police Domain Controllers	FY25		\$ 20,000			
Police		Town-wide Base Radio Replacement	FY26 FY27			\$ 100,000	\$ 100,000	
Police		Replacement of Police Network Switches	FY26			\$ 35,000		
Police		Replace Department Sidearms	FY26			\$ 30,000		
Police Summary				\$ 162,000	\$ 308,000	\$ 165,000	\$ 100,000	\$ -



Commonwealth of Massachusetts
Town of Belmont
Capital Request #FY 22 CBR-12

Department:
Police

Title:
Replace Update Server

Description: This is to replace our windows update server, last replaced in FY18

Location (if available):

FY 23: \$

FY 24: \$12000

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$12000

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: In-house estimate

Life Expectancy: 5

Operational Cost Impact: Neutral

Note:

Urgency: 4 - Has outlived its useful life

Note:

Previous Phases: No

Can This Be Phased: No

Grants: Have not been identified



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-82

Department:
Police

Title:
Replace Police portable radios

Description: Replacement of Police department portable radios, last replaced in FY16

Location (if available):

FY 23: \$

FY 24: \$150000

FY 25: \$150000

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$300000

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: Vendor

Life Expectancy: 7

Operational Cost Impact: Neutral

Note: No Impact

Urgency: 4 - Has outlived its useful life

Note:

Previous Phases: No

Can This Be Phased: Yes

Grants: Have not been identified



Commonwealth of Massachusetts

Town of Belmont

Capital Request #FY 22 CBR-13

Department:
Police

Title:
Replace Fiber Multiplexers

Description: This is a Town Wide benefit request. This is to replace the fiber multiplexers that are used to connect all the Town radio equipment, base radios, receivers, and remotes to the main antenna site. There are also multiplexers that tie together the fire stations and police station.
Placeholder amount

Location (if available):

FY 23: \$

FY 24: \$

FY 25: \$100000

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$100000

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: Other

Life Expectancy: 10

Operational Cost Impact: Neutral

Note:

Urgency: 4 - Has outlived its useful life

Note:

Previous Phases: No

Can This Be Phased: Yes

Grants: Have not been identified



Commonwealth of Massachusetts

Town of Belmont

Capital Request #FY 22 CBR-14

Department:
Police

Title:
Replace CAD and RMS Server

Description: To replace the Computer Aided Dispatch and Records Management System server, last replaced in FY20

Location (if available):

FY 23: \$

FY 24: \$

FY 25: \$20000

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$20000

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: In-house estimate

Life Expectancy: 5

Operational Cost Impact: Neutral

Note:

Urgency: 4 - Has outlived its useful life

Note:

Previous Phases: No

Can This Be Phased: No

Grants: Have not been identified



Commonwealth of Massachusetts

Town of Belmont

Capital Request #FY 22 CBR-15

Department:
Police

Title:
Replace Call/Radio Logging Recorder

Description: To replace the telephone and radio logging recorder, we last updated the unit in FY19

Location (if available):

FY 23: \$

FY 24: \$

FY 25: \$18000

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$18000

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: In-house estimate

Life Expectancy: 5

Operational Cost Impact: Neutral

Note:

Urgency: 4 - Has outlived its useful life

Note:

Previous Phases: No

Can This Be Phased: No

Grants: Have not been identified



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-79

Department:
Police

Title:
Replacement of Police Domain Controllers

Description: Replacement of Police network domain controller computers, last replaced in FY19 they will be at the end of the life cycle for system support and maintenance

Location (if available):

FY 23: \$

FY 24: \$

FY 25: \$20000

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$20000

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: In-house estimate

Life Expectancy: 5

Operational Cost Impact: Neutral

Note: No impact

Urgency: 4 - Has outlived its useful life

Note:

Previous Phases: No

Can This Be Phased: No

Grants: Have not been identified



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-83

Department:
Police

Title:
Town-wide Base Radio Replacement

Description: Replace all Town base radio equipment and infrastructure, this is a Town wide request as the Police department maintains all base equipment and connectivity for the antenna site. The equipment was last replaced in FY16 Note budget number is a placeholder

Location (if available):

FY 23: \$

FY 24: \$

FY 25: \$

FY 26: \$100000

FY 27: \$100000

FY 28: \$

FY 23 – 28 Total: \$200000

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: Other

Life Expectancy: 10

Operational Cost Impact: Neutral

Note: No impact

Urgency: 4 - Has outlived its useful life

Note:

Previous Phases: No

Can This Be Phased: Yes

Grants: Have not been identified



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-84

Department:
Police

Title:
Replacement of Police Network Switches

Description: Replacement of Police department network switches, last replaced in FY18

Location (if available):

FY 23: \$

FY 24: \$

FY 25: \$

FY 26: \$35000

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$35000

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: In-house estimate

Life Expectancy: 7

Operational Cost Impact: Neutral

Note: No Impact

Urgency: 4 - Has outlived its useful life

Note:

Previous Phases: No

Can This Be Phased: No

Grants: Have not been identified



Commonwealth of Massachusetts
Town of Belmont
Capital Request #FY 22 CBR-16

Department:
Police

Title:
Replace Department Sidearms

Description: Officer's sidearms were last replaced around 2015 and will be at the end of their expected life

Location (if available):

FY 23: \$	FY 24: \$	FY 25: \$	FY 26: \$30000
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FY 27: \$	FY 28: \$	FY 23 – 28 Total: \$30000
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Project Category: Equipment

Project Type: Replacement

Basis For Estimate: In-house estimate

Life Expectancy: 10

Operational Cost Impact: Neutral

Note:

Urgency: 4 - Has outlived its useful life

Note:

Previous Phases: No

Can This Be Phased: No

Grants: Have not been identified

Department	Location	Project Title	Fiscal Year	FY2024	FY2025	FY2026	FY2027	FY2028
Public Works		#73 - 10" Material Spreader	FY24	\$ 26,265				
Public Works		#32 - Snowfighter Conversion	FY24	\$ 49,545				
Public Works		#1 - Administrative Hybrid Vehicle	FY25		\$ 40,850			
Public Works		#67 - 9' Material Spreader	FY26			\$ 16,710		
Public Works		#37 - Snow Fighter Conversion	FY26			\$ 49,545		
Public Works		#34 - Snow Fighter Conversion	FY27				\$ 49,545	
Public Works		#47 - Wacker Sidewalk Snowblower	FY27				\$ 95,235	
Public Works		#46 Wacker Sidewalk Tractor	FY28					\$ 95,235
Public Works		#42 Vent-Trac Sidewalk Tractor	FY28					\$ 61,500

Department	Location	Project Title	Fiscal Year	FY2024	FY2025	FY2026	FY2027	FY2028
Public Works - Cemetery		#119 - 19,000 GVW Dump Truck	FY24	\$ 71,155				
Public Works - Cemetery		#116 - 19,000 GVW Dump Truck	FY25		\$ 71,155			
Public Works - Parks		#102 - 1 Ton 4WS Pick-up Truck	FY24	\$ 58,310				
Public Works - Parks		Toro - 16' Cut Riding Mower	FY24	\$ 92,925				
Public Works - Parks		#104 - 1 Ton 4WD Pick-up Truck	FY25		\$ 58,310			
Public Works - Parks		#107 John Deere Tractor	FY26			\$ 44,570		
DPW Summary				\$ 298,200	\$ 170,315	\$ 110,825	\$ 144,780	\$ 156,735



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-36

Department:
Public Works

Title:
#73 - 10" Material Spreader

Description: Replace #73 - 10' Material Spreader

Location (if available):

FY 23: \$

FY 24: \$26265

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$26265

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: Quote

Life Expectancy: 12

Operational Cost Impact: Decrease to expenses

Note: By replacing this piece of equipment it will run more efficient with lower repair & maintenance costs.

Urgency: 3 - System has needed unanticipated repairs

Note:

Previous Phases: No

Can This Be Phased: No

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-38

Department:
Public Works

Title:
#32 - Snowfighter Conversion

Description: Replace #32 - Snow Fighter Conversion

Location (if available):

FY 23: \$

FY 24: \$49545

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$49545

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: Quote

Life Expectancy: 10

Operational Cost Impact: Decrease to expenses

Note: By replacing this piece of equipment it will run more efficient with lower repair & maintenance costs.

Urgency: 3 - System has needed unanticipated repairs

Note:

Previous Phases: No

Can This Be Phased: No

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-43

Department:
Public Works

Title:
#1 - Administrative Hybrid Vehicle

Description: Replace #1 - Administrative Vehicle

Location (if available):

FY 23: \$

FY 24: \$

FY 25: \$40850

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$40850

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: Quote

Life Expectancy: 8

Operational Cost Impact: Decrease to expenses

Note: By replacing this piece of equipment it will run more efficient with lower repair & maintenance costs.

Urgency: 3 - System has needed unanticipated repairs

Note:

Previous Phases: No

Can This Be Phased: No

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-46

Department:
Public Works

Title:
#67 - 9' Material Spreader

Description: Replace #67 - 9' Material Spreader

Location (if available):

FY 23: \$

FY 24: \$

FY 25: \$

FY 26: \$16710

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$16710

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: Quote

Life Expectancy: 18

Operational Cost Impact: Decrease to expenses

Note: By replacing this piece of equipment it will run more efficient with lower repair & maintenance costs.

Urgency: 3 - System has needed unanticipated repairs

Note:

Previous Phases: No

Can This Be Phased: No

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-48

Department:
Public Works

Title:
#37 - Snow Fighter Conversion

Description: Replace #37 - Snow Fighter Conversion

Location (if available):

FY 23: \$

FY 24: \$

FY 25: \$

FY 26: \$49545

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$49545

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: Quote

Life Expectancy: 10

Operational Cost Impact: Decrease to expenses

Note: By replacing this piece of equipment it will run more efficient with lower repair & maintenance costs.

Urgency: 3 - System has needed unanticipated repairs

Note:

Previous Phases: No

Can This Be Phased: No

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-49

Department:
Public Works

Title:
#34 - Snow Fighter Conversion

Description: Replace #34 - Snow Fighter Conversion

Location (if available):

FY 23: \$

FY 24: \$

FY 25: \$

FY 26: \$

FY 27: \$49545

FY 28: \$

FY 23 – 28 Total: \$49545

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: Quote

Life Expectancy: 10

Operational Cost Impact: Decrease to expenses

Note: By replacing this piece of equipment it will run more efficient with lower repair & maintenance costs.

Urgency: 3 - System has needed unanticipated repairs

Note:

Previous Phases: No

Can This Be Phased: No

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-50

Department:
Public Works

Title:
#47 - Wacker Sidewalk Snowblower

Description: Replace #47 - Wacker Sidewalk Snowblower

Location (if available):

FY 23: \$

FY 24: \$

FY 25: \$

FY 26: \$

FY 27: \$95235

FY 28: \$

FY 23 – 28 Total: \$95235

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: Quote

Life Expectancy: 12

Operational Cost Impact: Decrease to expenses

Note: By replacing this piece of equipment it will run more efficient with lower repair & maintenance costs.

Urgency: 3 - System has needed unanticipated repairs

Note:

Previous Phases: No

Can This Be Phased: No

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #FY 23 CBR-7

Department:
Public Works

Title:
#46 Wacker Sidewalk Tractor

Description: Sidewalk tractor for snow removal

Location (if available):

FY 23: \$

FY 24: \$

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$95235

FY 23 – 28 Total: \$95235

Project Category: Equipment

Project Type: New

Basis For Estimate: Quote

Life Expectancy: 20

Operational Cost Impact: Neutral

Note:

Urgency: 4 - Has outlived its useful life

Note:

Previous Phases: No

Can This Be Phased: No

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #FY 23 CBR-8

Department:
Public Works

Title:
#42 Vent-Trac Sidewalk Tractor

Description: Sidewalk tractor for snow removal

Location (if available):

FY 23: \$

FY 24: \$

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$61500

FY 23 – 28 Total: \$61500

Project Category: Equipment

Project Type: New

Basis For Estimate: Quote

Life Expectancy: 20

Operational Cost Impact: Neutral

Note:

Urgency: 4 - Has outlived its useful life

Note:

Previous Phases: No

Can This Be Phased: Yes

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-41

Department:
Public Works -
Cemetery

Title:
#119 - 19,000 GVW Dump Truck

Description: Replace #119 - 19,000 GVW Dump Truck

Location (if available):

FY 23: \$

FY 24: \$71155

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$71155

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: Quote

Life Expectancy: 8

Operational Cost Impact: Decrease to expenses

Note: By replacing this piece of equipment it will run more efficient with lower repair & maintenance costs.

Urgency: 3 - System has needed unanticipated repairs

Note:

Previous Phases: No

Can This Be Phased: No

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-45

Department:
Public Works -
Cemetery

Title:
#116 - 19,000 GVW Dump Truck

Description: Replace #116 - 19,000 GVW Dump Truck

Location (if available):

FY 23: \$

FY 24: \$

FY 25: \$71155

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$71155

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: Quote

Life Expectancy: 8

Operational Cost Impact: Decrease to expenses

Note: By replacing this piece of equipment it will run more efficient with lower repair & maintenance costs.

Urgency: 3 - System has needed unanticipated repairs

Note:

Previous Phases: No

Can This Be Phased: No

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-39

Department:
Public Works - Parks

Title:
#102 - 1 Ton 4WS Pick-up Truck

Description: Replace #102 - 1 Ton 4WD Pick-up Truck

Location (if available):

FY 23: \$

FY 24: \$58310

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$58310

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: Quote

Life Expectancy: 8

Operational Cost Impact: Decrease to expenses

Note: By replacing this piece of equipment it will run more efficient with lower repair & maintenance costs.

Urgency: 3 - System has needed unanticipated repairs

Note:

Previous Phases: No

Can This Be Phased: No

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-40

Department:
Public Works - Parks

Title:
Toro - 16' Cut Riding Mower

Description: Replace Toro 16' Cut Riding Mower

Location (if available):

FY 23: \$

FY 24: \$92925

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$92925

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: Quote

Life Expectancy: 8

Operational Cost Impact: Decrease to expenses

Note: By replacing this piece of equipment it will run more efficient with lower repair & maintenance costs.

Urgency: 3 - System has needed unanticipated repairs

Note:

Previous Phases: No

Can This Be Phased: No

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-44

Department:
Public Works - Parks

Title:
#104 - 1 Ton 4WD Pick-up Truck

Description: Replace #104 - 1 Ton 4WD Pick-up Truck

Location (if available):

FY 23: \$

FY 24: \$

FY 25: \$58310

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$58310

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: Quote

Life Expectancy: 8

Operational Cost Impact: Decrease to expenses

Note: By replacing this piece of equipment it will run more efficient with lower repair & maintenance costs.

Urgency: 3 - System has needed unanticipated repairs

Note:

Previous Phases: No

Can This Be Phased: No

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-47

Department:
Public Works - Parks

Title:
#107 John Deere Tractor

Description: Replace #107 - John Deere Tractor

Location (if available):

FY 23: \$

FY 24: \$

FY 25: \$

FY 26: \$44570

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$44570

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: Quote

Life Expectancy: 10

Operational Cost Impact: Decrease to expenses

Note: By replacing this piece of equipment it will run more efficient with lower repair & maintenance costs.

Urgency: 3 - System has needed unanticipated repairs

Note:

Previous Phases: No

Can This Be Phased: No

Grants:

Department	Location	Project Title	Fiscal Year	FY2024	FY2025	FY2026	FY2027	FY2028
Public Works - Sewer		#5 - 1 Ton 4WD Pick-up Truck	FY25		\$ 58,310			
Public Works - Sewer		#52 - Emergency Service Hybrid Van	FY25		\$ 40,225			
Public Works - Sewer		#17 - 40,000 GVW Dump Truck	FY24	\$ 153,320				
Public Works - Sewer		#50 - Vactor Machine	FY24	\$ 257,500				
Public Works - Sewer		#8 - 1 Ton 4WD Pick-up Truck	FY25		\$ 58,310			
Public Works - Sewer		#12 - 40,000 GVW Dump Truck	FY26			\$ 153,320		
Public Works - Sewer		Replace #25 Front End Loader	FY26			\$ 220,625		
Public Works - Sewer		#25 Front End Loader	FY27				\$ 220,625	
Public Works - Sewer		#11- 40,000GVW Dump Truck	FY28					\$ 153,320
Sewer Summary				\$ 410,820	\$ 156,845	\$ 373,945	\$ 220,625	\$ 153,320



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-14

Department:
Public Works - Sewer

Title:
#5 - 1 Ton 4WD Pick-up Truck

Description: Replace #5 - 1 Ton Pick-up Truck

Location (if available):

FY 23: \$

FY 24: \$

FY 25: \$58310

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$58310

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: Quote

Life Expectancy: 8

Operational Cost Impact: Decrease to expenses

Note: By replacing this piece of equipment it will run more efficient with lower repair & maintenance costs.

Urgency: 3 - System has needed unanticipated repairs

Note:

Previous Phases: No

Can This Be Phased: No

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-15

Department:
Public Works - Sewer

Title:
#52 - Emergency Service Hybrid Van

Description: Replace #52 - Emergency Service Van

Location (if available):

FY 23: \$

FY 24: \$

FY 25: \$40225

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$40225

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: Quote

Life Expectancy: 8

Operational Cost Impact: Decrease to expenses

Note: By replacing this piece of equipment it will run more efficient with lower repair & maintenance costs.

Urgency: 3 - System has needed unanticipated repairs

Note:

Previous Phases: No

Can This Be Phased: No

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-17

Department:
Public Works - Sewer

Title:
#17 - 40,000 GVW Dump Truck

Description: Replace #17 - 40,000 GVW Dump Truck

Location (if available):

FY 23: \$

FY 24: \$153320

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$153320

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: Quote

Life Expectancy: 15

Operational Cost Impact: Decrease to expenses

Note: By replacing this piece of equipment it will run more efficient with lower repair & maintenance costs.

Urgency: 3 - System has needed unanticipated repairs

Note:

Previous Phases: No

Can This Be Phased: No

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-19

Department:
Public Works - Sewer

Title:
#50 - Vactor Machine

Description: Replace #50 - Vactor Machine (split cost with Water Enterprise)

Location (if available):

FY 23: \$

FY 24: \$257500

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$257500

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: Quote

Life Expectancy: 15

Operational Cost Impact: Decrease to expenses

Note: By replacing this piece of equipment it will run more efficient with lower repair & maintenance costs.

Urgency: 3 - System has needed unanticipated repairs

Note:

Previous Phases: No

Can This Be Phased: No

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-18

Department:
Public Works - Sewer

Title:
#8 - 1 Ton 4WD Pick-up Truck

Description: Replace #8 - 1 Ton 4WD Pick-up Truck

Location (if available):

FY 23: \$

FY 24: \$

FY 25: \$58310

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$58310

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: Quote

Life Expectancy: 8

Operational Cost Impact: Decrease to expenses

Note: By replacing this piece of equipment it will run more efficient with lower repair & maintenance costs.

Urgency: 3 - System has needed unanticipated repairs

Note:

Previous Phases: No

Can This Be Phased: No

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-21

Department:
Public Works - Sewer

Title:
#12 - 40,000 GVW Dump Truck

Description: Replace #12 - 40,000 GVW Dump Truck

Location (if available):

FY 23: \$

FY 24: \$

FY 25: \$

FY 26: \$153320

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$153320

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: Quote

Life Expectancy: 15

Operational Cost Impact: Decrease to expenses

Note: By replacing this piece of equipment it will run more efficient with lower repair & maintenance costs.

Urgency: 3 - System has needed unanticipated repairs

Note:

Previous Phases: No

Can This Be Phased: No

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #FY 22 CBR-18

Department:
Public Works - Sewer

Title:
Replace #25 Front End Loader

Description: Replace #25 Front End Loader

Location (if available):

FY 23: \$

FY 24: \$

FY 25: \$

FY 26: \$220625

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$220625

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: Quote

Life Expectancy: 15

Operational Cost Impact: Increase to expenses

Note: By replacing this piece of equipment it will run more efficient with lower repair & maintenance costs

Urgency: 4 - Has outlived its useful life

Note:

Previous Phases: No

Can This Be Phased: No

Grants:



Commonwealth of Massachusetts

Town of Belmont

Capital Request #FY 23 CBR-11

Department:
Public Works - Sewer

Title:
#25 Front End Loader

Description: Front end loader

Location (if available):

FY 23: \$

FY 24: \$

FY 25: \$

FY 26: \$

FY 27: \$220625

FY 28: \$

FY 23 – 28 Total: \$220625

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: Quote

Life Expectancy: 15

Operational Cost Impact: Neutral

Note:

Urgency: 4 - Has outlived its useful life

Note:

Previous Phases: No

Can This Be Phased: No

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-20

Department:
Public Works - Sewer

Title:
#11-40,000GVW Dump Truck

Description: Replace #11 - 40,000 GVW Dump Truck

Location (if available):

FY 23: \$

FY 24: \$

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$153320

FY 23 – 28 Total: \$153320

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: Quote

Life Expectancy: 15

Operational Cost Impact: Decrease to expenses

Note: By replacing this piece of equipment it will run more efficient with lower repair & maintenance costs.

Urgency: 3 - System has needed unanticipated repairs

Note:

Previous Phases: No

Can This Be Phased: No

Grants:

Department	Location	Project Title	Fiscal Year	FY2024	FY2025	FY2026	FY2027	FY2028
Public Works - Water		#88 - Closed Utility 4WD Truck	FY24	\$ 79,800				
Public Works - Water		#50 - Vactor Machine	FY24	\$ 257,500				
Public Works - Water		#83 - Closed Utility 4WD Truck	FY25		\$ 79,800			
Public Works - Water		#85 - 40,000 GVW Dump Truck	FY25		\$ 153,320			
Public Works - Water		#77 - Administrative Hybrid Vehicle	FY26			\$ 31,575		
Public Works - Water		#80 - Emergency Service Hybrid Van	FY26			\$ 38,310		
Public Works - Water		#76 - Administrative Hybrid Vehicle	FY27				\$ 31,575	
Public Works - Water		#89 - Emergency Lighting Plant	FY27				\$ 25,450	
Water Summary				\$ 337,300	\$ 233,120	\$ 69,885	\$ 57,025	\$ -



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-25

Department:
Public Works - Water

Title:
#88 - Closed Utility 4WD Truck

Description: Replace #88 - Closed Utility 4WD Truck

Location (if available):

FY 23: \$

FY 24: \$79800

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$79800

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: Quote

Life Expectancy: 10

Operational Cost Impact: Decrease to expenses

Note: By replacing this piece of equipment it will run more efficient with lower repair & maintenance costs.

Urgency: 3 - System has needed unanticipated repairs

Note:

Previous Phases: No

Can This Be Phased: No

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-28

Department:
Public Works - Water

Title:
#50 - Vactor Machine

Description: Replace #50 - Vactor Machine (split cost with Sewer Enterprise)

Location (if available):

FY 23: \$

FY 24: \$257500

FY 25: \$

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$257500

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: Quote

Life Expectancy: 15

Operational Cost Impact: Decrease to expenses

Note: By replacing this piece of equipment it will run more efficient with lower repair & maintenance costs.

Urgency: 3 - System has needed unanticipated repairs

Note:

Previous Phases: No

Can This Be Phased: No

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-26

Department:
Public Works - Water

Title:
#83 - Closed Utility 4WD Truck

Description: Replace #83 - Closed Utility 4WD Truck

Location (if available):

FY 23: \$

FY 24: \$

FY 25: \$79800

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$79800

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: Quote

Life Expectancy: 8

Operational Cost Impact: Decrease to expenses

Note: By replacing this piece of equipment it will run more efficient with lower repair & maintenance costs.

Urgency: 3 - System has needed unanticipated repairs

Note:

Previous Phases: No

Can This Be Phased: No

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-22

Department:
Public Works - Water

Title:
#85 - 40,000 GVW Dump Truck

Description: Replace #85 - 40,000 GVW Dump Truck

Location (if available):

FY 23: \$

FY 24: \$

FY 25: \$153320

FY 26: \$

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$153320

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: Quote

Life Expectancy: 15

Operational Cost Impact: Decrease to expenses

Note: By replacing this piece of equipment it will run more efficient with lower repair & maintenance costs.

Urgency: 3 - System has needed unanticipated repairs

Note:

Previous Phases: No

Can This Be Phased: No

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-24

Department:
Public Works - Water

Title:
#77 - Administrative Hybrid Vehicle

Description: Replace #77 - Administrative Vehicle

Location (if available):

FY 23: \$

FY 24: \$

FY 25: \$

FY 26: \$31575

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$31575

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: Quote

Life Expectancy: 8

Operational Cost Impact: Decrease to expenses

Note: By replacing this piece of equipment it will run more efficient with lower repair & maintenance costs.

Urgency: 3 - System has needed unanticipated repairs

Note:

Previous Phases: No

Can This Be Phased: No

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-29

Department:
Public Works - Water

Title:
#80 - Emergency Service Hybrid Van

Description: Replace #80 - Emergency Service Van

Location (if available):

FY 23: \$

FY 24: \$

FY 25: \$

FY 26: \$38310

FY 27: \$

FY 28: \$

FY 23 – 28 Total: \$38310

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: Quote

Life Expectancy: 10

Operational Cost Impact: Decrease to expenses

Note: By replacing this piece of equipment it will run more efficient with lower repair & maintenance costs.

Urgency: 3 - System has needed unanticipated repairs

Note:

Previous Phases: No

Can This Be Phased: No

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-27

Department:
Public Works - Water

Title:
#76 - Administrative Hybrid Vehicle

Description: Replace #76 - Administrative Vehicle

Location (if available):

FY 23: \$

FY 24: \$

FY 25: \$

FY 26: \$

FY 27: \$31575

FY 28: \$

FY 23 – 28 Total: \$31575

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: Quote

Life Expectancy: 8

Operational Cost Impact: Decrease to expenses

Note: By replacing this piece of equipment it will run more efficient with lower repair & maintenance costs.

Urgency: 3 - System has needed unanticipated repairs

Note:

Previous Phases: No

Can This Be Phased: No

Grants:



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-30

Department:
Public Works - Water

Title:
#89 - Emergency Lighting Plant

Description: Replace #89 - Emergency Lighting Plant

Location (if available):

FY 23: \$

FY 24: \$

FY 25: \$

FY 26: \$

FY 27: \$25450

FY 28: \$

FY 23 – 28 Total: \$25450

Project Category: Equipment

Project Type: Replacement

Basis For Estimate: Quote

Life Expectancy: 20

Operational Cost Impact: Decrease to expenses

Note: By replacing this piece of equipment it will run more efficient with lower repair & maintenance costs.

Urgency: 3 - System has needed unanticipated repairs

Note:

Previous Phases: No

Can This Be Phased: No

Grants:

Department	Location	Project Title	Fiscal Year	FY2024	FY2025	FY2026	FY2027	FY2028
Community Development		Pavement Management	FY23 FY24 FY25 FY26 FY27 FY28	\$ 1,904,216	\$ 1,951,821	\$ 2,000,617	\$ 2,050,632	\$ 2,101,898
Public Works		Sidewalk Maintenance	FY23 FY24 FY25 FY26 FY27 FY28	\$ 243,680	\$ 249,770	\$ 256,010	\$ 262,410	\$ 268,970
Pavement Summary				\$ 2,147,896	\$ 2,201,591	\$ 2,256,627	\$ 2,313,042	\$ 2,370,868
GRAND TOTAL				\$ 9,779,482	\$ 7,928,061	\$ 4,995,782	\$ 5,495,772	\$ 5,997,183



Commonwealth of Massachusetts

Town of Belmont

Capital Request #FY 23 CBR-27

Department:
Community
Development

Title:
Pavement Management

Description: Reconstruction of Town roadways utilizing two override sources of funding (2001 and 2015) and Ch 90 state aid (not reflected in the CBC request)

Location (if available):

FY 23: \$1857772

FY 24: \$1904216

FY 25: \$1951821

FY 26: \$2000617

FY 27: \$2050632

FY 28: \$2101898

FY 23 – 28 Total: \$11866956

Project Category: Public improvement

Project Type: Reconstruction

Basis For Estimate: In-house estimate

Life Expectancy: 25

Operational Cost Impact: Decrease to expenses

Note: Decrease in expenses due to less need for routine maintenance on roads to be reconstructed.

Urgency: 1 - System has failed

Note: Roads to be reconstructed have failed and are in need of repair.

Previous Phases: Yes

Can This Be Phased: Yes

Grants: Other



Commonwealth of Massachusetts
Town of Belmont
Capital Request #fy21sub-2

Department:
Public Works

Title:
Sidewalk Maintenance

Description: Repair or Replace Cement Concrete Sidewalks and Granite Curbing as needed throughout the town.

Location (if available):

FY 23: \$237730

FY 24: \$243680

FY 25: \$249770

FY 26: \$256010

FY 27: \$262410

FY 28: \$268970

FY 23 – 28 Total: \$1518570

Project Category: Public improvement

Project Type: Reconstruction

Basis For Estimate: Other

Life Expectancy: 25

Operational Cost Impact: Neutral

Note:

Urgency: 1 - System has failed

Note:

Previous Phases: Yes

Can This Be Phased: Yes

Grants: