

Public Facilities Committee Report City of Newton In City Council

Wednesday, April 17, 2019

Present: Councilors Crossley (Chair), Leary, Kelley, Gentile, Danberg, Laredo, Lappin, Rice, Grossman, Greenberg, Albright, Kalis, Krintzman, Baker

Absent: Councilors Norton

City Staff Present: Commissioner of Public Buildings Josh Morse

#132-19 Appointment of Anne Cedrone to the Design Review Committee
 <u>HER HONOR THE MAYOR</u> appointing ANNE CEDRONE, 49 Walker Street, Newtonville, as a community representative member of the DESIGN REVIEW COMMITTEE for the 687 Watertown Street Project for a term to expire upon completion of the building project. (60 days: 5/29/19)

Action: Public Facilities Held 7-0

Note: Ms. Cedrone was not available to attend the meeting. Councilor Leary motioned to hold the item which carried unanimously.

#147-19 Appointment of Tom Enselek to the Design Review Committee <u>PRESIDENT LAREDO</u> appointing Tom Enselek, 28 Davis Avenue, West Newton, 02465 as a member of the DESIGN REVIEW COMMITTEE for the 687 Watertown Street Project for a term to expire upon completion of the building project.

Action: Public Facilities Approved 7-0

Note: Mr. Tom Enselek noted that he owns the business at 665 Watertown Street. He explained that his employment experience includes work as a Project Manager and noted that his educational background is in Elementary Education. Mr. Enselek stated that he was asked to serve on the Committee and is looking forward to volunteering. Committee members were appreciative of Mr. Enselek's volunteering to serve. Councilor Laredo moved approval of the appointment which carried unanimously.

Referred to Programs & Services, Public Facilities, and Finance Committees

#102-19 Request to appropriate \$400,000 for NewCAL project
 <u>HER HONOR THE MAYOR</u> requesting authorization to appropriate and expend four hundred thousand dollars (\$400,000) from Free Cash for the purpose of funding the completion of feasibility, schematic design, and site plan approval for the NewCAL project.

 Action: Public Facilities Approved as Amended 6-0-1

Note: The Public Facilities Committee and Programs and Services Committee met jointly to discuss this item. Councilor Baker noted that the PowerPoint presentations were not available 72 hours prior to the meeting. The Public Facilities Committee Chair explained that it has not been the Committee's practice to distribute PowerPoint slides prior to the public presentation, but instead include them as attachments to the Committee Reports. Since the department shared the presentation via email the day of the meeting, Councilor Baker said that proper protocol is to suspend the rules to allow the item to be discussed. Motions to suspend the rules from Councilor Baker in Programs and Services and Councilor Lappin in Public Facilities carried unanimously.

Commissioner of Public Buildings Josh Morse explained that the \$400,000 request would fund the completion of program development, feasibility assessment, including evaluation of potential sites to suit the program developed for the NewCAL (Newton Center for Active Living) project. The Commissioner stated that the \$100,000 appropriated stated that the \$100,000 appropriated in 2018 was used to work with Steffian Bradley architects and community stakeholders to develop a building program, identify potential site and begin feasibility analysis for the NewCAL project. Commissioner Morse described the work to date as shown in the attached PowerPoint slides. The current request for \$400,000 is intended to fund preliminary design through site plan development and schematic design of the building, once a site is selected. However, it is unclear what further efforts may be in order to achieve site approval.

The Commissioner noted that multiple groups have been working to develop and review the plans for NewCAL including; a working group that includes members of the Council on Aging, Parks and Recreation Commission, Parks and Recreation Staff, Public Buildings staff, the Design Review Committee and members of the City Council. The groups are working collaboratively. The Commissioner stated that many community meetings have been held and estimated that approximately 50,000 man hours have been dedicated to the project up to this point. The Commissioner noted that members of the working groups have toured Senior facilities throughout the state and have met with stakeholders to establish the program.

The Commissioner noted that an early Vision Statement prepared by the administration was not well received by member representatives of the senior community. He confirmed that the program for NewCAL is now being designed, operated and prioritized for seniors. Director of Senior Services Jayne Colino noted that this means the program is being designed for adults aged 50+ but added that some grant programs only apply to specific populations of seniors. Available space in the center may be used in a way that complements the senior programming.

The Commissioner stated that it is anticipated that to meet the desired building program, as well as to allow for some flexibility, NewCAL is expected to be a two-story, 38,000 sq. ft building, where the existing Senior Center is about 10,000 sq. ft. The Commissioner noted that there are several outlying questions (size of the fitness equipment room, whether the facility should have an aquatics program/pool) but stated that other communities have strongly recommended the inclusion of flexible multi-purpose rooms. The Commissioner stated that it is likely that the facility will require a site that is 2-2.5 acres, including 75 parking stalls at grade, and noted that if a site is available with supportive parking, a smaller site could be considered. He stated that the inclusion of a pool will be site dependent and can be added as an

independent structure or wing if space allows. Current hours of operation at the Senior Center are 10:00 am - 4:00 pm Monday – Friday. The new hours of operation are expected to be from 7:00 am up to 10:00 pm, up to seven days a week. The Commissioner noted that the expanded hours of operation will help to mitigate the need for a larger building.

Questions

Q: Typically, you select very intentional words for the Vision Statement. Is NewCAL intended for seniors or the whole community?

A: The facility will be designed and operated for seniors aged 50+. When spaces are available, we will work with the community to allow other programming that is complementary to the senior services. It will be prioritized toward seniors. The building will be fully accessible and will exceed accessibility (ADA) code requirements.

Q: How will a site be selected?

A: Part of the 2.5 acres is to include parking. If we end up with a site with supported parking, we may not need as much land area. Each site offers different opportunities and we will analyze every site. There are 145 City-owned properties identified for consideration. Article 97 protects the conservation of open space. In order to take such protected land for non-recreational purposes, the City must offer up compensatory land. Some Court cases have determined that this use is recreational. This does not mean that we are exclusively looking at open space, but we must consider all options.

Q: Could you go up a story (from 2-3) to reduce the required land area?

A: We can consider going to three-stories, but the roof area would also be smaller, reducing solar energy potential.

Q: Can you think about making the building net zero as you design?

A: Yes, as we design, we are considering opportunities to build to a Net Zero standard.

Q: What will the \$400,000 be used for?

A: To continue the feasibility study. We need to continue to refine the program. We currently have no design detail. The additional funds will be used TO test fit (the program) at potential sites, to evaluate building and solar orientation, site, parking and traffic circulation.

(Later the Commissioner clarified that if site selection goes smoothly, this amount of funding should bring the project through to schematic design, reading for the Council to consider for site plan approval).

Q: A lot of the size constraints are based on the desire to have a pool and gym. Have you given thought to not including those amenities?

A: The 38,000 sq. ft. estimate does not include the pool but does include the gym. The gym is a large space that offers an opportunity for expansion and contraction for programs. It is a multi-purpose space where different activities can be located. The proposed gym is approximately 10,000 sq. ft. and represents 10% of the total land area or 1/3-1/4 of the building space.

Q: What will happen to the current senior center? Can you locate off-site facilities?

A: The building will be maintained. No decisions have been made yet as to what the building will be used for in the future. We are considering decentralized activities and investigating the use of underutilized facilities in village centers. Off-site activities will offer an opportunity to get services closer to residents in village centers as well as encourage them to visit NewCAL.

Q: How much have we spent so far? What is included in architectural services?

A: We have spent \$97,000. "Architectural services" includes everything from program development, design test fits, traffic and other specialty consultants. We are rapidly and aggressively pursuing next steps to get a new design team on board so that we don't lose momentum on the project.

Q: There are multiple sites located near public transportation. Can you look at facilities that minimize the requirement for people to drive to the site?

A: We are looking at options located near public transportation. Access to ride share is also criteria under consideration.

Committee members shared concerns that the program and design would develop too much and expend too many funds prior to the selection of a site. The Commissioner explained that establishing a site is the next step in the process. He noted that it is not expected that more than \$150,000 will be expended prior to the selection of a site. Committee members questioned why the Commissioner is requesting \$400,000 if he is not anticipating spending the full amount prior to selecting a site. The Commissioner noted that the request for \$400,000 allows the City to enter into a sizable contract, which is better for negotiation purposes. The Commissioner confirmed that he will present a short list of sites to the Council prior to schematic design.

Councilors questioned how the project timeline might be impacted by the bankruptcy of the architectural firm who began the project. The Commissioner stated that the City is aggressively pursuing a new design firm to avoid losing momentum. He confirmed that site selection is primarily driven by in-house decisions and noted that the change in designer should not significantly impact the timeline for the project.

The Chair of the Finance Committee noted that there are several ongoing projects in the City and questioned what the estimated cost for the project is. The Commissioner stated that the total project budget is estimated at \$16.45 million dollars. The Chair of Finance noted he has requested that the Administration provide a bonding analysis of ongoing projects FOR the Finance Committee meeting.

Councilor Albright moved approval in Programs and Services with the condition that the Public Buildings Department return to the Council prior to expending more than \$150,000 of the requested funds for feasibility. Councilor Lappin motioned to approve the item with the condition that the Public Buildings Department and NewCAL Working Group return to the Council to present a recommended site or sites, which must be prior to the expenditure of \$150,000. Committee members voted 6-0-1, Councilor Gentile abstaining.

Chairs Note: The Public Buildings Department will present an update to the Committee on the Newton Early Childhood Program at 687 Watertown Street.

Note: Commissioner of Public Buildings Josh Morse presented an update on the Newton Early Childhood Program (NECP) at 687 Watertown Street. The Commissioner noted that the NECP working group has held over 21 public meetings and provided updates to the City Council in November and January. The Commissioner stated that the working group has established the program and is now working to ensure that the final design meets the program. He stated that the group is also working to address the concerns raised by the Design Review Committee (DRC).

The Commissioner explained that it was expected that traffic and parking would be a challenge at the site but noted that the peak demand for the NECP program is less than the peak demand of the existing Horace Mann use. He stated that because drop-off and pick-up for NECP is spaced out throughout the day, the total peak demand is 140-150 parking spaces. Commissioner Morse noted that there are 265 parking spaces in the neighborhood within a reasonable walking distance (measured from the farthest parking space in the parking lot). He noted that the working group is also collaborating with the Parks & Rec Department to allow busses in the emergency access, to help reduce bottlenecking.

Commissioner Morse stated that the current design shifts the main entrance from Watertown Street to Albermarle Street. He noted that the City was previously considering an arrangement with the Boys and Girls Club to allow overflow parking on their site but has determined it not to be necessary. He stated that the City is still working with the Boys and Girls Club regarding development of the site circulation and noted that there may be some opportunities to utilize complementary parking between the two properties.

The Commissioner noted that 687 Watertown Street is outside of the flood plain but confirmed that the City will ensure that the work at the site will not create any flooding conditions. The Commissioner presented details of the project as shown on the attached presentation. He noted that the program will include 17 classrooms as well as space for administrative staff. The Commissioner noted that the updated project estimate is \$10 million dollars, including the gym.

The project also includes cleaning and painting of the interior, installation of light wells to introduce natural lighting, and landscaping. The Commissioner noted that it is possible that the building will be powered without the use of fossil fuels. He stated that the project is on track for holding a site plan and schematic design approval (5-58) hearing in June. In response to questions from Committee members, the Commissioner confirmed that if a site in the vicinity was selected for NewCAL, they would re-evaluate the parking, but noted that it should not overlap with the NECP program. A Committee member asked the Commissioner to consider security measures as the project moves forward, given there are several entrances to the building.

The Commissioner acknowledged that many years ago, oil contamination was identified on site, and clean-up efforts have been ongoing. He confirmed that the project includes excavation and removal of

the remaining oil which he estimates will cost approximately \$50,000. Committee members expressed no concerns relative to the update.

The Committee adjourned at 9:30 pm.

Respectfully Submitted,

Deborah Crossley, Chair

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NewCAL Vision Statement

The City of Newton's goal, as an age friendly community, is to build a large, well equipped, comfortable Center to meet the unique interests and needs of older adults, both those currently using the Senior Center and many others who are not. The Center will foster a special sense of community and belonging for this growing group. This facility will be designed to optimize the quality of life for Newton's older adults and those who support them, through welcoming, respectful and meaningful opportunities that engage, value, and empower older adults to remain independent and important assets in our community.

When spaces within this facility are not programmed for older adults, the goal is to offer well managed, quality and enriching community and multigenerational experiences for all residents of Newton.

New CAL

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UPDATE: DRAFT GUIDING PRINCIPLES – updated on 2/8

- 1. Promote and support the Mission Statements of the Senior Services and Parks and Recreation Departments.
- 2. Spaces within this facility that support one another will be clustered to preserve and support the wonderful sense of community that exists in the current Senior Center.
- 3. The Center will be age friendly, welcoming to everyone, and will be designed and programmed to meet the needs of seniors and of the broader community.
- 4. Ensure safety and accessibility both inside and outside the facility through design and operation.
- 5. Promote social equality and maximize access to programs and services to those who are unserved and/or underserved.
- 6. This facility will be environmentally conscious, strive to be carbon neutral, and will leave a legacy of responsible design and operation.

New CAL

Data Comparison - Senior Center site visits Wellesley / Needham / Marlborough (8/17/18)



Newton Council on Aging - The Senior Center 345 Walnut Street, Newton, MA

- ~ 9,850 bgsf (2 1/2 flrs.)
- Current Population 2010 Census: 85,146 (87,018**)
- Age 60+ population 2010 Census: 18,636 (19,230**) 21.8% of Total Population (22.1%**)
- SF per Senior over 60 = 0.6 (2010 Census) (.58**)
- Projected Population Change over 65 years old from 2010 to 2030: 61% to 63% *



Wellesley - Tolles Parson Center: Wellesley Counsel on Aging 2017 500 Washington Street, Wellesley, MA

- ~ 13.096 sf (2 floors + attic) \$7.2 M project costs (\$9.7M total)
- Current Population 2010 Census: 27.982
- Age 60+ population 2010 Census: 5,429 19.4% of Total Population
- SF per Senior over 60 = 2.4 (2010 Census)
- **Projected Population Change** over 65 years old from 2010 to 2030: 46% to 48%



Needham Center At The Heights & Council on Aging 2013? 300 Hillside Avenue, Needham, MA

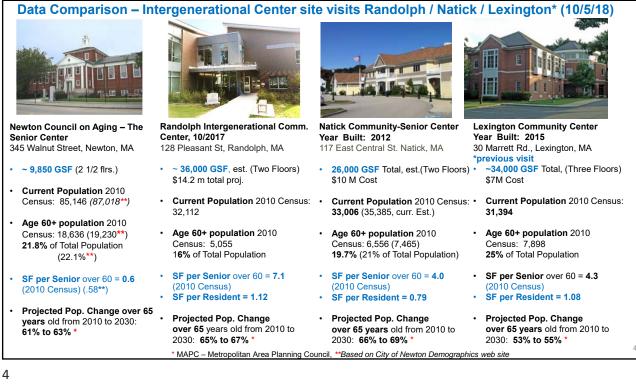
- ~ 20,000 sf est (2 flrs+partial base.) \$ cost tbd
- Current Population 2010 Census: 28,886
- Age 60+ population 2010 Census: 6.498 22.5% of Total Population
- SF per Senior over 60 = 3.1 (2010 Census)
- Projected Population Change over 65 years old from 2010 to 2030: 57% to 59%

MAPC - Metropolitan Area Planning Council, **Based on City of Newton Demographics web site



Marlborough Council on Aging and Senior Center 2015 40 New Street, Marlborough MA

- ~ 23.000 sf est. (2 floors) \$6.5 M construct.cost (tbd)
- Current Population 2010 Census: 38,499
- Age 60+ population 2010 Census: 6,703 17.4% of Total Population
- SF per Senior over 60 = 3.5 (2010 census)
- Projected Population Change over 65 years old from 2010 to 2030: 85% to 88% *



General Observations – Senior Centers

Wellesley – Tolles Parson Center: Wellesley Counsel on



Overall Impression – a very well crafted center with attention paid to details and high-end woodworking. Great storage placed in logical locations for each type of space.

Footprint smaller than other centers and they use other resources in the community to support their program needs, including the nearby park for outdoor activities Needham Center at the Heights & Council on Aging



Overall Impression – a large center with high use activities on the first floor. Welcoming Desk and Store visible when entering the center. Two story spaces allow you to have easy orientation to your location in the building on the first and second floors.

A very active center with limited exterior space, with the exception of a very large 2nd floor **outdoor deck – a great feature.** A lot of spots in the center for unprogrammed use on the second floor Marlborough Council on Aging and Senior Center



Overall Impression – a large center adjacent to public park land to share amenity spaces. Welcoming spaces on first floor with view of outdoor patio and park as you enter the building.

Took time to understand community needs and budget before building out second floor.

Lessons learned – permanent stage may limit flexibility in large multipurpose room and do not locate kitchen on same side as stage/performance area to avoid cross traffic in busy areas

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General Observations – Intergenerational Centers

Randolph Intergenerational Community Center



Overall Impression – Abundant natural light, bright colors and modern furniture. High ceilings, wide public corridors enhance volume of space. Program areas visible from corridors with garage doors allowing easy access for large events.

Gym area dividable in to 4 sections with indoor walking track and large door to connect with outside activities.

Majority of programs devoted to activity spaces, lesser amount used for unprogrammed social and quiet spaces (nooks, dining, etc). Center



Overall Impression – large agefriendly center, extended hours, Mon-Sun. Anchored on one side with dividable great room for dining and activities. The other side anchored by a large gym with marked walking path.

An exterior walking path surrounds the building and opens green space and garden. Additional outdoor activities such as Bocce are planned..

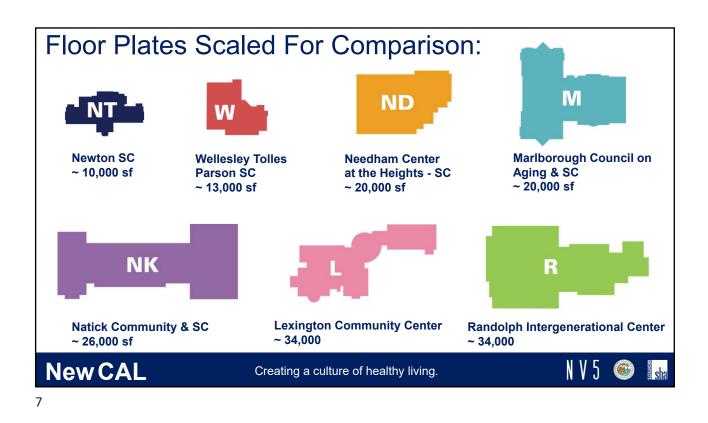
Efficiently designed with variety of room sizes to serve community needs and accommodates clubs, sports and classes in the evening. Lexington Community

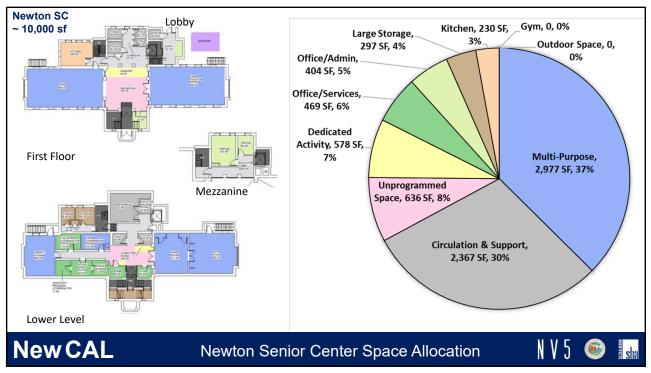


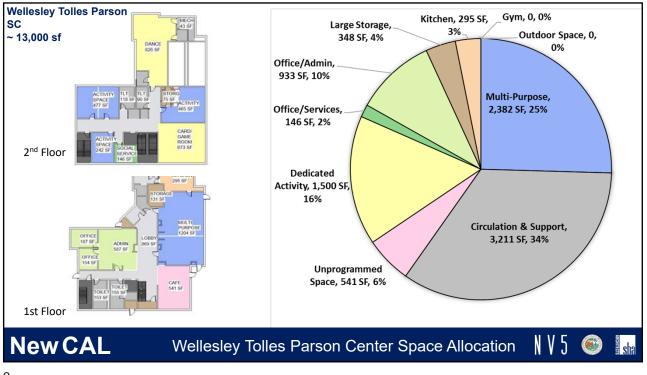
Overall Impression – an intergenerational center created from 2 existing buildings –1905 Mansion and addition in 2000 on 10 acres. Part of campus plan including town preschool/playground connected to site.

Goal to maximize program space and minimize interior renovations while retaining the original features in the Mansion for unprogrammed spaces.

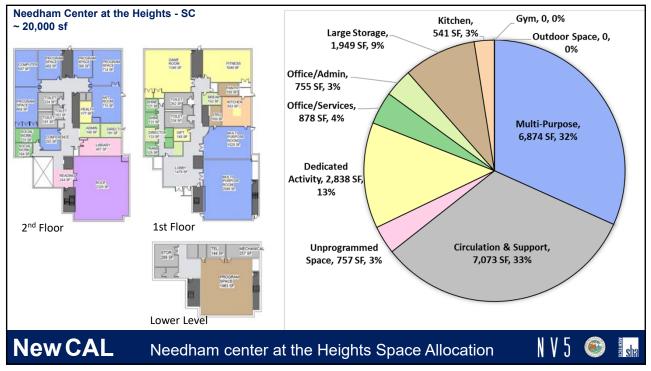
Dedicated fitness, game and dining rooms mix with multipurpose rooms and veterans/senior services. Furniture selected to serve all ages.

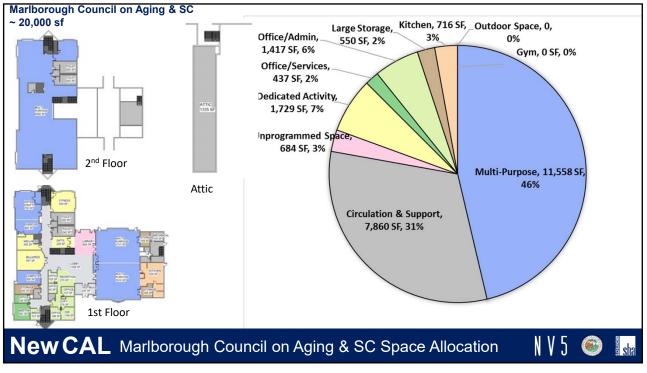


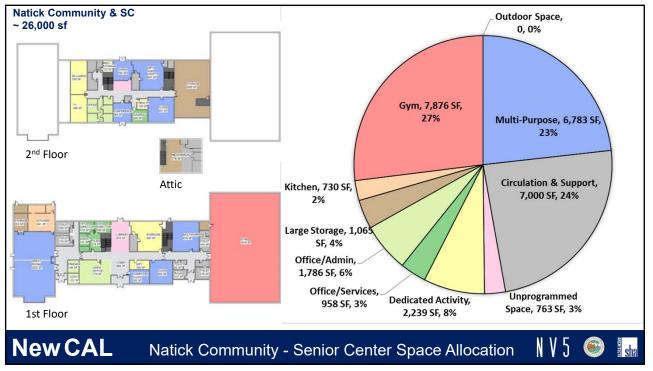


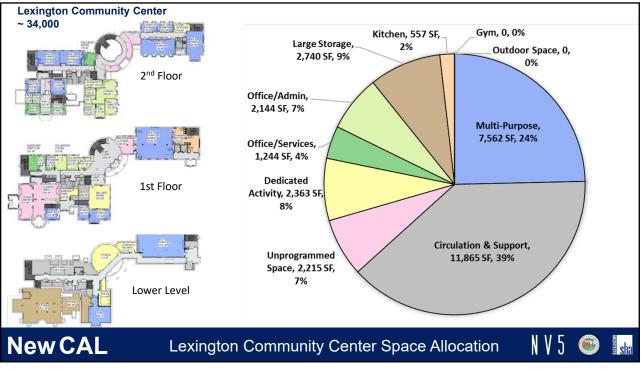


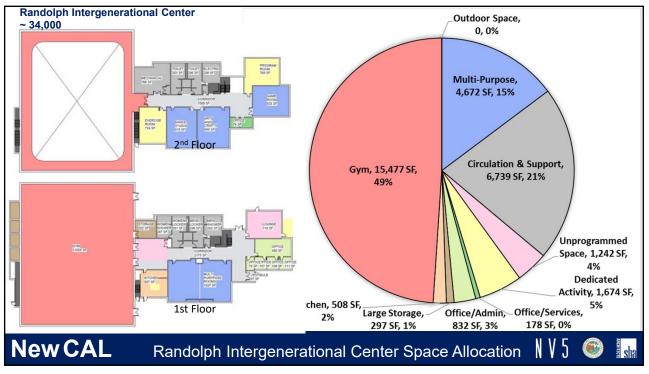


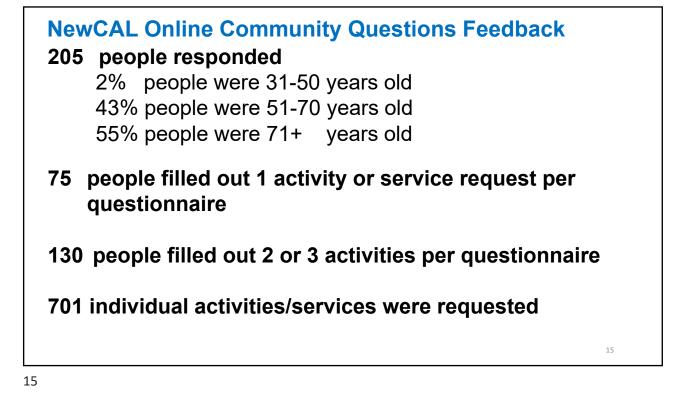


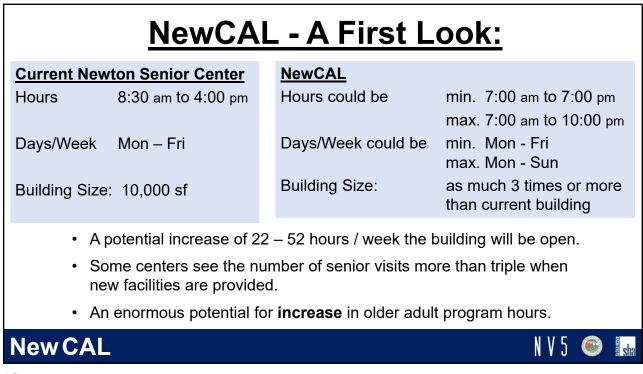












Newton Senior Center – Current Programs

Sample list of current activities provided at the Newton Senior Center:

- AARP Tax Support, Social Services
- Caregiving Support Group
- Workshops and Lectures
- Intermediate Spanish
- The SHINE Program
- Vigorous Minds
- LGBTQ Cafe

- Mindful Meditation
- Water Colors
- Theater Club
- Chess Club
- Mah Jong
- Ceramics
- Tai Chi

- Zumba Gold
- Men's Club
- Chair Yoga
- Pool Cues

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- Coloring
- Lunch
- Store

All current activities and services provided at the Newton Senior Center will also be included in the NewCAL program.

New CAL

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Locations for over 55 Programming are located at:

- LFCC Lower Falls Community Center
- Hut Jeannette West Recreation Center
- ALB Albemarle Field House
- Hawthorne
- Emerson



Parks and Recreation Dept.- Current Programs

Sample list of current "over 55" activities provided through Parks and Recreation:

- Volleyball
- Pickleball
- Line Dancing
- Zumba
- Bridge Group

- TiaYo Ba
- Basketball
- Bingo
- Music
- Art/Painting

New CAL

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NewCAL Potential Programs

In addition to your current programs at the Senior Center and Parks and Recreation venues, there is the potential to add or improve space for popular activities. A **sample** of activities that could be increased or added:

- Ping Pong/Billiards Tournaments
- Fitness Rm & Exercise Equip. Rm
- Library/Reading Room
- Demonstration/Teaching Kitchen,
- Outdoor Gardening & Activity Space
- Recording/Video Studio

Computer Room

- Stage
- Health Room
- Café
- Gymnasium
- Swimming Pool
- Basketball
- Pickleball
- Indoor Walk. Track

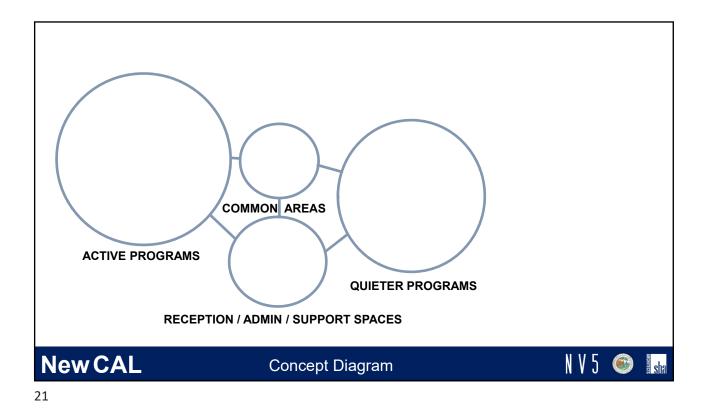
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- Lounge Space
- Bocce
- Fix-It/Workshop

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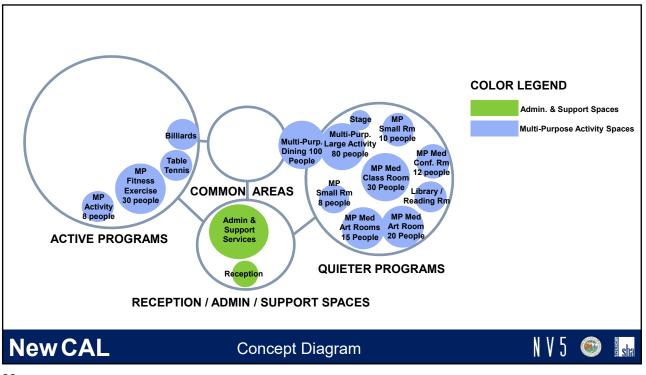
 Admin. & Support Spaces

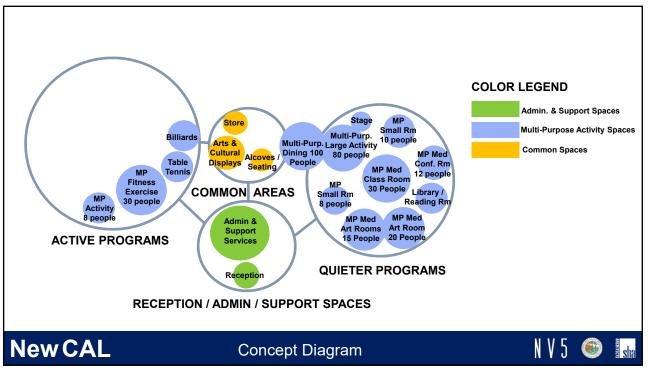
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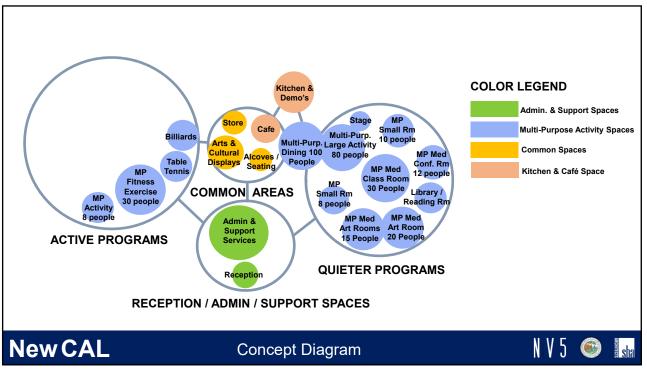
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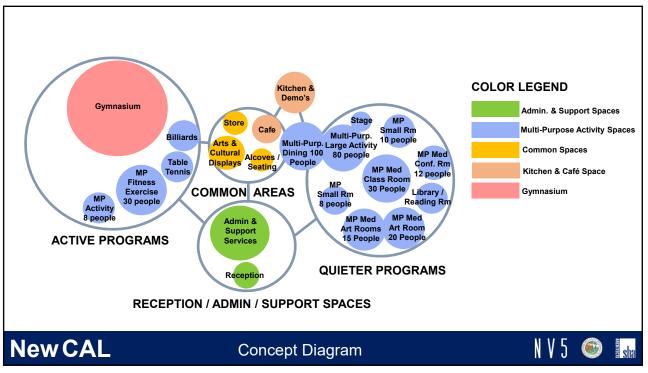
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 Areas

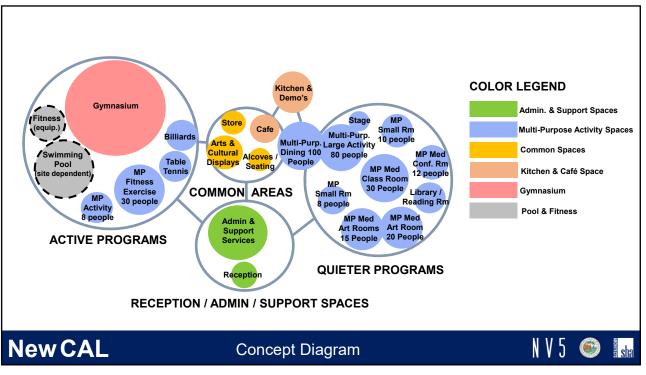
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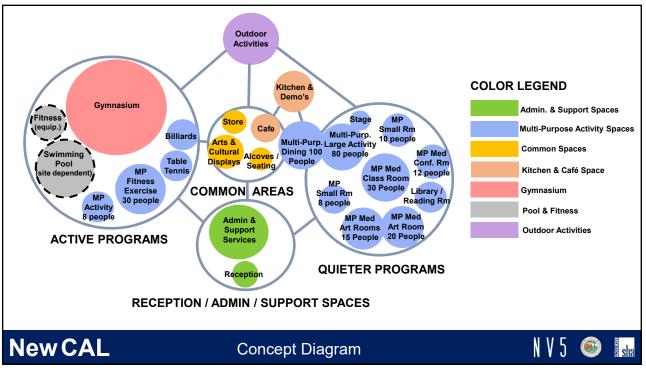




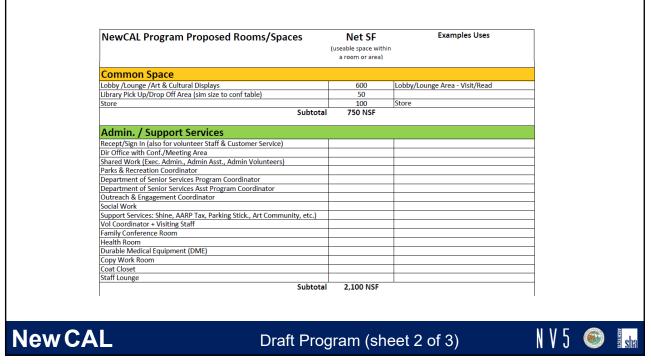




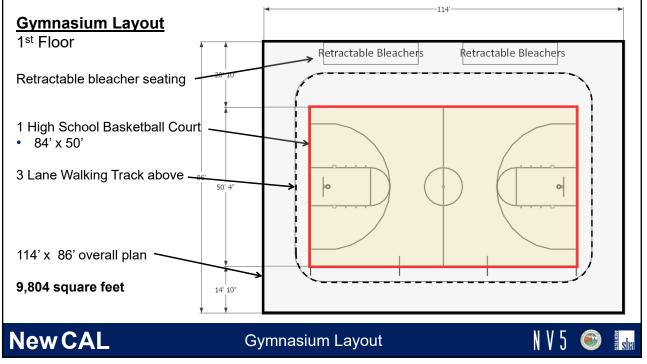


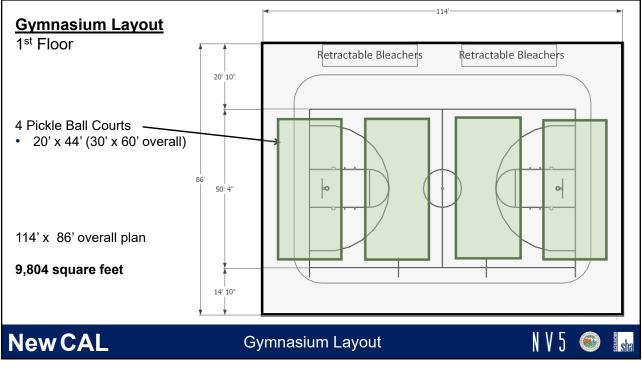


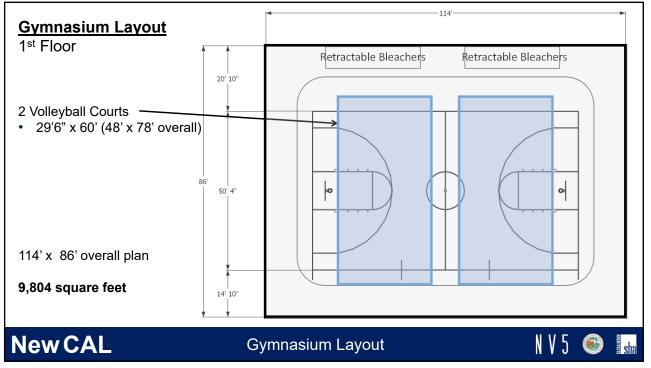
NewCAL Program Prop	osed Rooms/Spaces	Net SF	Examples Uses		
		(useable space within	n		
		a room or area)			
Multi-Purpose Activity	Spaces				
Fitness/Exercise Room with bench/	coat hooks	1,500		1	
Activity Room		400		1	
Ping Pong Room with coat alcove		600		1	
Billiards & Game Room		600	2 competition billiard tables & game	1	
Computer Lab Room / Meeting Use	with coat alcove	160	Tutorials, Vigorous Mind	7	
Art Room 1 with coat alcove (share	d moveable wall with Art Room 2)	300	Water Color, Drawing, Ceramics	7	
Art Room 2 with coat alcove (share	moveable wall with Art Room 1)	400	Water Color, Drawing, Ceramics	7	
Art Storage Room		70	shared by both rooms	7	
Dining with coat alcove (shared mo	eable wall with Activity Room)	1,500	lunch program	7	
Activity Room with coat alcove (sha	red moveable wall with Dining)	1,500	Clubs/Movies/Stage	7	
Chair Table Storage		120	shared by both rooms		
Classroom/Meeting Room small		150	tables and chairs		
Classroom/Meeting Room med		450	tables and chairs		
Conference Room / Meeting Room		180	Conf table and chairs		
Library/Reading Room		400	Comfortable Chairs & Tables		
General MP Storage		70	Supplies		
	Subtotal	8,400 NSF			
Gymnasium					
Gym (may be used for more than or	ne activity at a time)	9,800	114' x 86' includes retractable bleachers]	
Gym Walking Track (second Floor)		3,700	114' x 86' gym below w/10' perim. Walk above		
Gym Storage		300			
	Subtotal	13,800 NSF			

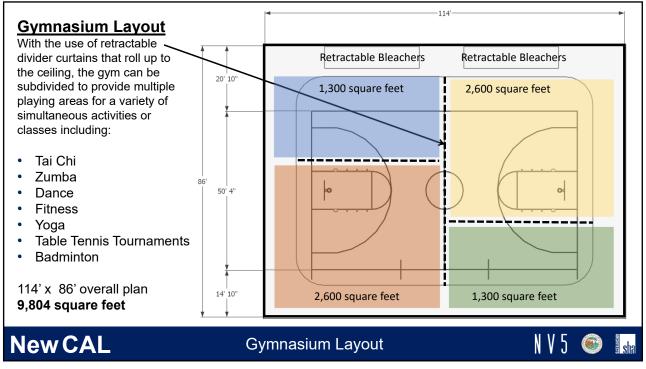


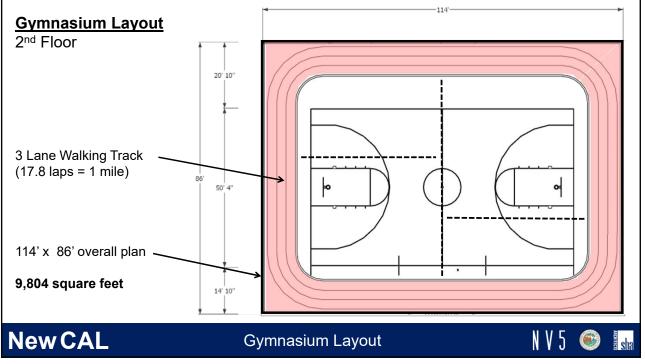
ewCAL Program Proposed Rooms/Spaces	Net SF (useable space within	Examples Uses]		
itchen & Café					
ce Bar/Café	200				
		Kitchen/Serving Counter			
	_,				
upport					
	100	Public/staff use			
	85				
	240	first floor			
	110	first floor locate next to gym			
	240	first floor			
	110	first floor locate next to gym			
	800	67			
stodial Space	100				
neral Storage	500	Storage			
Subtotal	2,285 NSF				
	28 375 NSF				
IOTAL NET SQUARE FOOTAGE	-	30 % Estimated Gross. Factor for Int/Ext Walls			
	8,513	Thick., Stairs, Elevators, Corridors, Etc.)			
TOTAL BUILDING GROSS SQUARE FOOTAGE	36.888 BGSF				
	itchen & Café re Bar/Café nding chen (commercial / teaching) Pantry Receiving Subtotal support liet Rms - Accessible (2 per floor) mily Toilet with Shower men's Room (2 stalls each floor) men's Shower/Dressing Room adj (near gym) en's Room (2 stalls + Urinal first floor) n's Shower/Dressing Room adj (near gym) en's Room (2 stalls + Urinal first floor) n's Shower/Dressing Room adj (near gym) en's Room (2 stalls + Urinal first floor) n's Shower/Dressing Room adj (near gym) en's Room (2 stalls + Urinal first floor) nen's Shower/Dressing Room adj (near gym) en's Shower/Dressing Room adj (near gym) en's Shower/Dressing Room adj (near gym) en's Room (2 stalls + Urinal first floor) nen's Shower Room adj (near gym) en's Shower Ro	(useable space within tichen & Café te Bar/Café nding 60 chen (commercial / teaching) 500 Pantry 200 Receiving 80 Subtotal 1,040 NSF Ipport liet Rms - Accessible (2 per floor) 100 mily Toilet with Shower 85 somen's Soow (2 stalls each floor) 240 omen's Shower/Dressing Room adj (near gym) 110 omen's Shower/Dressing Room adj (near gym) 240 omen's Shower coom adj (near gym) 110 ech/Elec/Tel-Data/Sprinkler 800 stodial Space 100 neral Storage 500	Receiving Subtotal 1,040 NSF Import Import Receiving Interview Receiving Counter Public/staff use Import Interview Receiving Interview Receiving Interview Receiving Public/staff use Interview Receiving Interview Receiving Interview Receiving Receiving Receiving Receiving <td< th=""><th>Receiving Receiving (useable space within (useable space (Usea scale scal</th><th>Interest of the space within itchen & Café ise Bar/Café oding oding of Commercial / teaching) Pantry Receiving Subtotal 1,040 NSF Import illet Rms - Accessible (2 per floor) inity Toilet with Shower men's Room (2 stalls each floor) pane's Room (2 stalls each floor) omen's Shower/Dressing Room adj (near gym) n's Shower Room adj (near gym) n's Shower Room adj (near gym) n's Shower Room adj (near gym) en's Shower Room adj (near gym) in Som (2 stalls e urinal first floor) pane's Sower Room adj (near gym) in Som (2 stalls e urinal first floor) pane's Sower Room adj (near gym) in S shower Room adj (near gym) <</th></td<>	Receiving Receiving (useable space within (useable space (Usea scale scal	Interest of the space within itchen & Café ise Bar/Café oding oding of Commercial / teaching) Pantry Receiving Subtotal 1,040 NSF Import illet Rms - Accessible (2 per floor) inity Toilet with Shower men's Room (2 stalls each floor) pane's Room (2 stalls each floor) omen's Shower/Dressing Room adj (near gym) n's Shower Room adj (near gym) n's Shower Room adj (near gym) n's Shower Room adj (near gym) en's Shower Room adj (near gym) in Som (2 stalls e urinal first floor) pane's Sower Room adj (near gym) in Som (2 stalls e urinal first floor) pane's Sower Room adj (near gym) in S shower Room adj (near gym) <

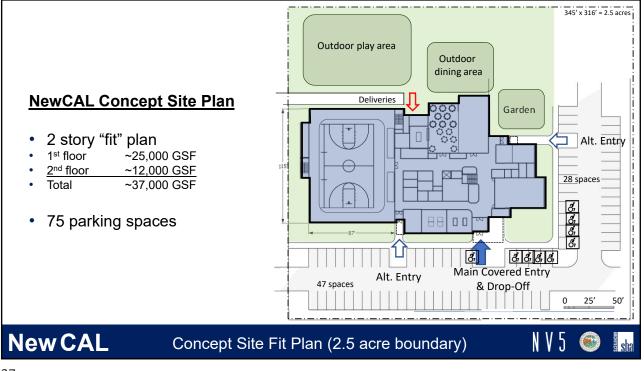


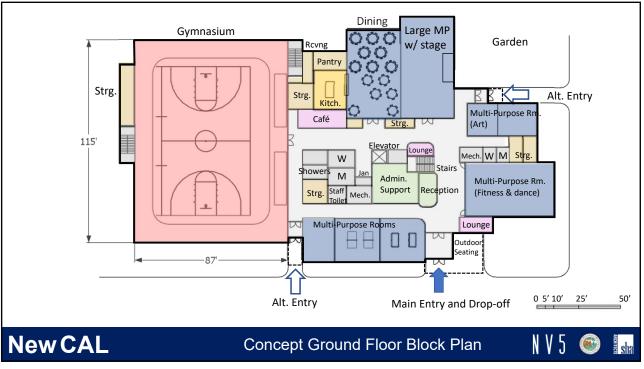


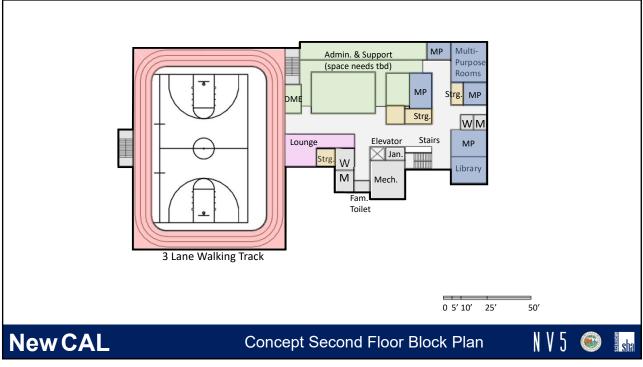
















Agenda

- » Parking Plan
- >> Preferred Site Plan
- » Floodplain
- » Building Layout, Entry, and Circulation
- » Building Performance Review
- » Sustainability Guidelines
- » Site Plan Approvals Schedule Update

NEWTON EARLY CHILDHOOD PROGRAM 687 WATERTOWN STREET

PUBLIC FACILITIES MEETING

Newton Public Schools Newton, Massachusetts

April 17, 2019

ARROWSTREET 10 POST OFFICE SQUARE SUITE 700N BOSTON, MA 02109 617.623.5555

www.arrowstreet.com

Hill International 75 SECOND AVENUE SUITE 300 NEEDHAM, MA 02494 617.778.0900 www.hillintl.com

687 Watertown Street

Meetings we have had since our last meeting with DRC on March 13th

- » DPW 3/13
- » School Building Committee 3/14
- » Newton Engineering Department Site/Civil Plan Review 3/21
- » Development Review Team 3/27
- » School Building Committee 4/4
- » Several Working Group Meetings

- 3/14, 3/21, 4/4

>> Public Buildings

- 3/15

» Newton Public School Administration

ARROWSTREET NEWTON EARLY CHILDHOOD PROGRAM AT 687 WATERTOWN STREET Newton, MA

PUBLIC FACILITIES 17 April 2019

Design Review Committee

Topics discussed at last DRC Meeting

- » Site Plan and Layout
- >>> Floor Plans
- » Building Entry and Circulation
- >> HVAC Systems
- » Exterior Insulation System
- >> Daylight at Lower Level

Program Summary and Design Guidelines

Projected NECP at 687 Watertown Street

Exterior/ Site

- >> Outdoor age appropriate playground
- Car-centric due to nature of program
- » Vans operation: 12 15 Vans
- » Parent/ guardian vehicles: 45 65
- » Staff vehicles: 85 100

Building/ Program

- » Building Size: 38,000 SF on 3 levels
- » Remove modulars
- » Occupancy: 305 total students (ages 2.9 to under 6 years old) 104 Special needs 90 Typically developing 111 Related services 85 - 105 Staff
- » Hours of Operation: Entry 8:30am to 9:00am Dismissal 12:00 to 12:30pm, 1:30pm, and 2:30pm

>> 14 - 18 Classrooms Arrowstreet Newton Early Childhood Program at 687 Watertown Street Newton, MA

Features/ Goals

- Improve pick-up/ drop off and entry to provide access and security for families and caregivers
- Design with regard with understanding the mobility and sensory needs of population
- Design for inclusiveness and spaces for specialists adjacent or within classrooms
- » Create shared specialist offices to foster collaboration and sharing between teachers

PUBLIC FACILITIES 17 April 2019



RROWSTREET NEWTON EARLY CHILDHOOD PROGRAM AT 687 WATERTOWN STREET Newton, MA

687 Watertown Street

Trip Generation – Projected NECP

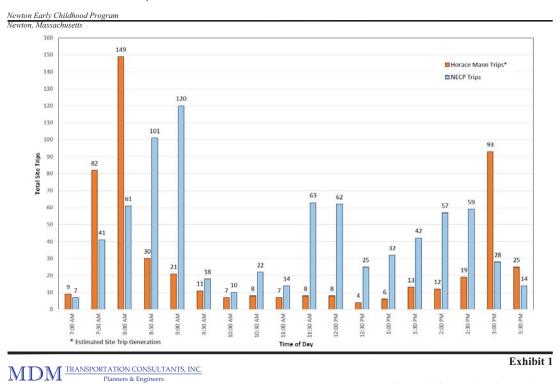
	Vehicle-trips ¹					
Period	Staff Auto	Student Auto	Van	Total		
Weekday Morning Drop-Off Peri	od (8:15-9:15 AM):					
Enter	50	89	12	151		
<u>Exit</u>	=	<u>89</u>	<u>10</u>	99		
Total	50	178	22	250		
Weekday Midday Pick-Up Period Enter	(11:30 AM-12:30 PM):	59	3	62		
Litter				02		
<u>Exit</u>	<u>8</u>	<u>59</u>				
	<u>8</u> 8	<u>59</u> 118	<u>6</u> 9	<u>73</u> 135		
<u>Exit</u>	8			73		
<u>Exit</u> Total	8			73		
<u>Exit</u> Total Weekday Afternoon Pick-Up Peri	8	118	<u>6</u> 9	<u>73</u> 135		

¹Peak hour trips based on empirical trip generation observed at NECP on January 31, 2019 with projected increases based on information provided by NECP staff.

ARROWSTREET NEWTON EARLY CHILDHOOD PROGRAM AT 687 WATERTOWN STREET Newton, MA

Planners & Engineers
PUBLIC FACILITIES 17 April 2019

Site Trip Generation Comparison Existing Horace Mann School vs. Proposed NECP



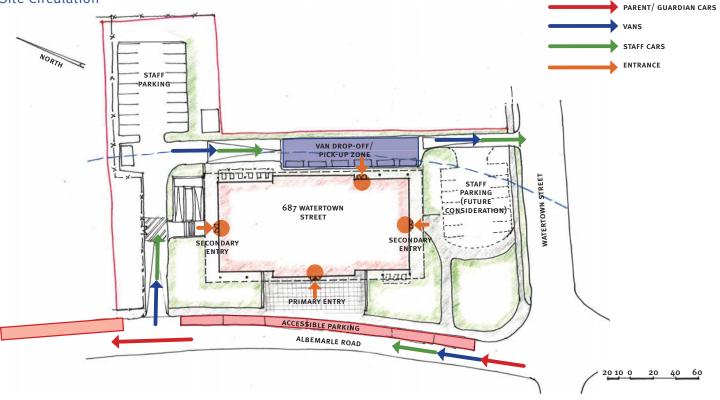
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687 Watertown Street Parking Plan



ARROWSTREET NEWTON EARLY CHILDHOOD PROGRAM AT 687 WATERTOWN STREET Newton, MA

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ARROWSTREET NEWTON EARLY CHILDHOOD PROGRAM AT 687 WATERTOWN STREET Newton, MA

687 Watertown Street

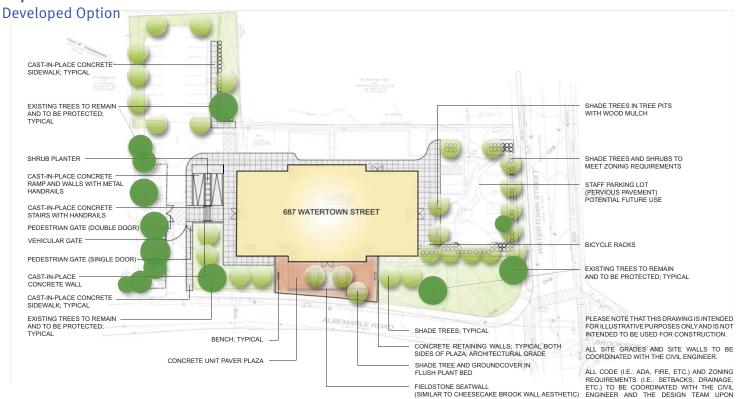
Site Circulation

687 Watertown Street Developed Option



ARROWSTREET NEWTON EARLY CHILDHOOD PROGRAM AT 687 WATERTOWN STREET Newton, MA

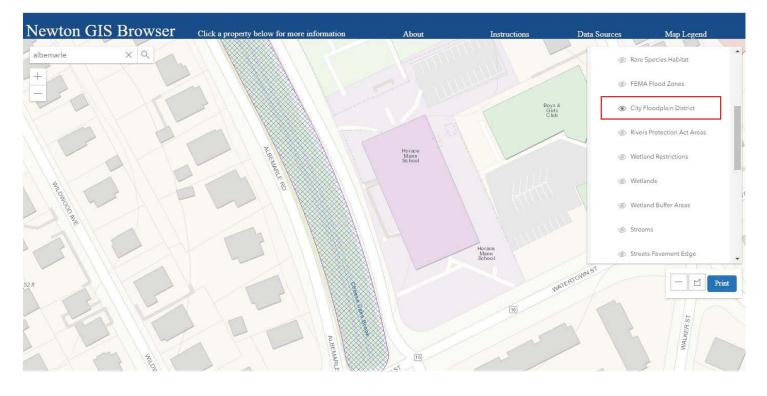
PUBLIC FACILITIES 17 April 2019



687 Watertown Street

ALL CODE (I.E.: ADA, FIRE, ETC.) AND ZONING REQUIREMENTS (I.E.: SETBACKS, DRAINAGE, ETC.) TO BE COORDINATED WITH THE CIVIL ENGINEER AND THE DESIGN THE DESIGN UPON CONCEPT DESIGN APPROVAL.

687 Watertown Street City Floodplain District

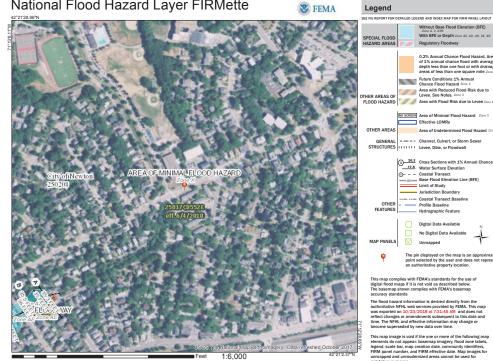


ARROWSTREET NEWTON EARLY CHILDHOOD PROGRAM AT 687 WATERTOWN STREET Newton, MA

PUBLIC FACILITIES 17 April 2019

687 Watertown Street National Flood Hazard

National Flood Hazard Layer FIRMette

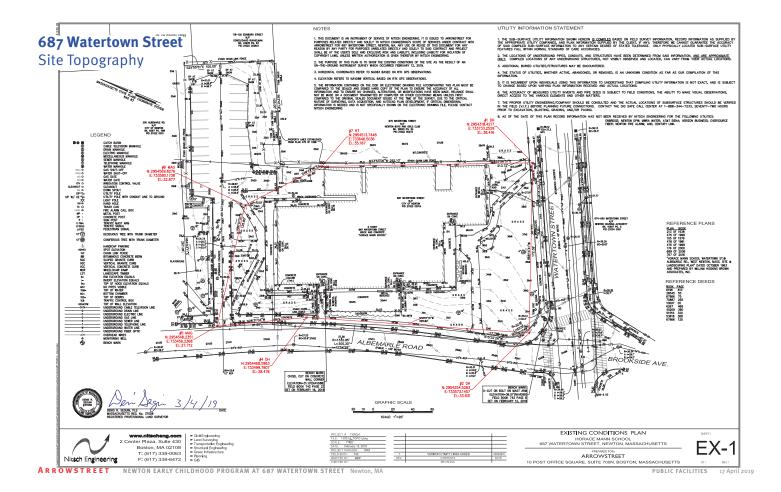


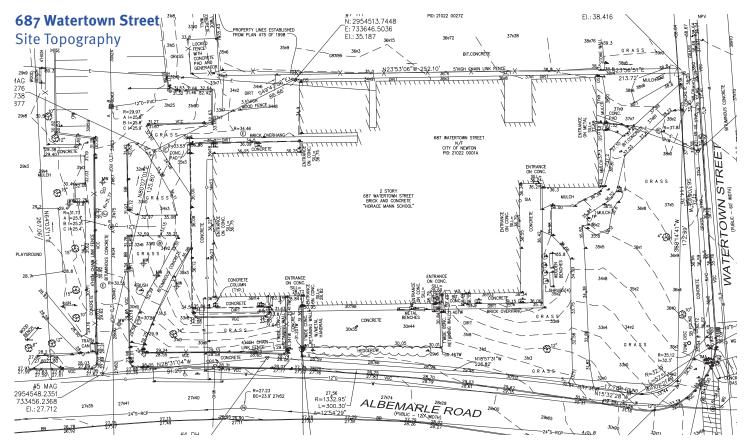
Area of Minimal Flood Hazard

The site is within an Area of Minimal Flood Hazard **Zone X**, which is identified as an area outside of the 100year floodplain.

ARROWSTREET

NEWTON EARLY CHILDHOOD PROGRAM AT 687 WATERTOWN STREET Newton, MA





ARROWSTREET NEWTON EARLY CHILDHOOD PROGRAM AT 687 WATERTOWN STREET Newton, MA

PUBLIC FACILITIES 17 April 2019

Requirements:

» Located within 200' Riverfront Area

» Subject to the DEP's Wetland Protection Act for Riverfronts

Goals:

» To meet the Riverfront requirements, the proposed site improvements will include:

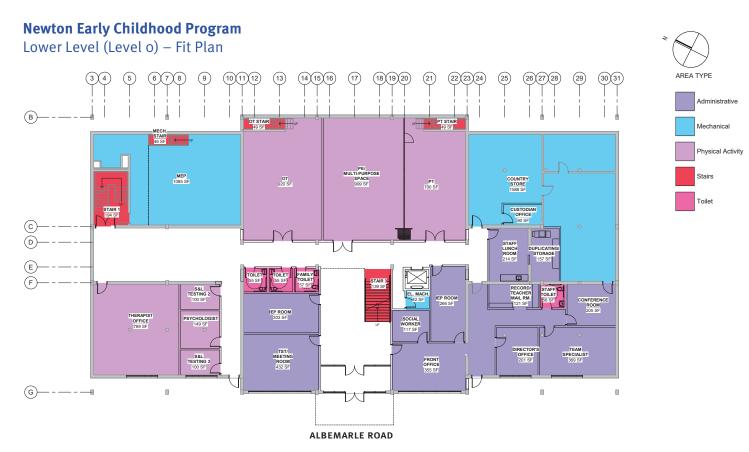
- Limiting disturbance of the existing site
- Minimizing increase in impervious cover on the site
- Installation of stormwater management systems to collect, treat, and infiltrate stormwater

Next:

» Meet with Conservation Commission on April 18th

ARROWSTREET NEWTON EARLY CHILDHOOD PROGRAM AT 687 WATERTOWN STREET Newton, MA

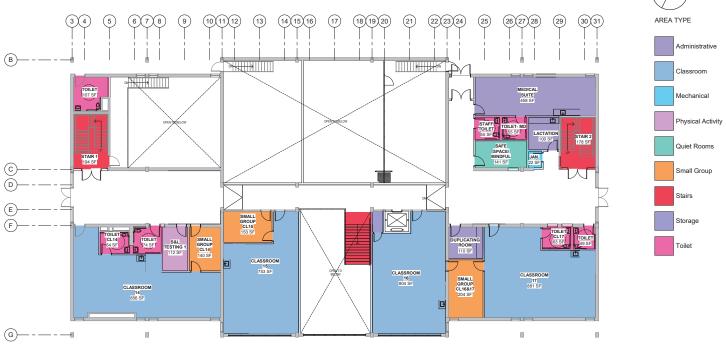
PUBLIC FACILITIES 17 April 2019



ARROWSTREET NEWTON EARLY CHILDHOOD PROGRAM AT 687 WATERTOWN STREET Newton, MA

Newton Early Childhood Program

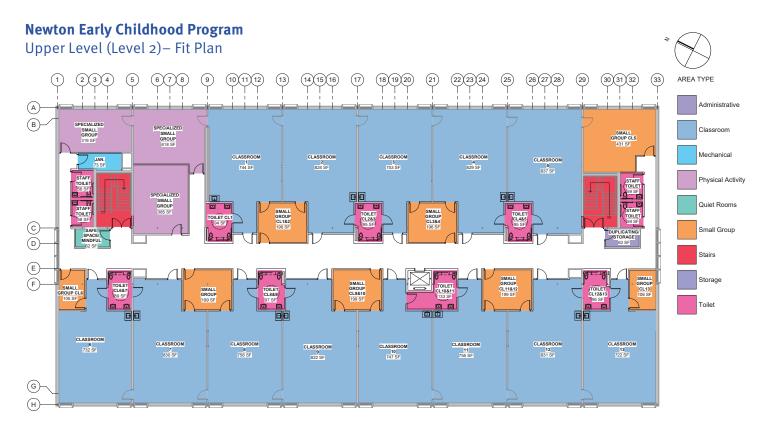




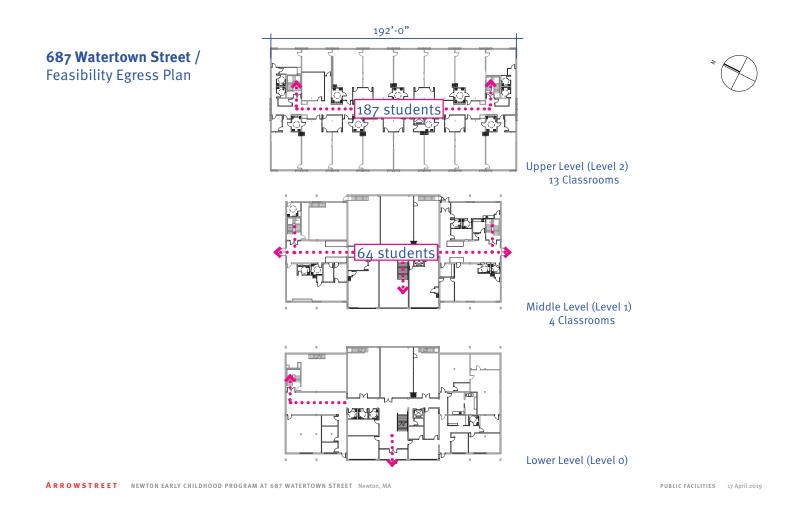
ALBEMARLE ROAD

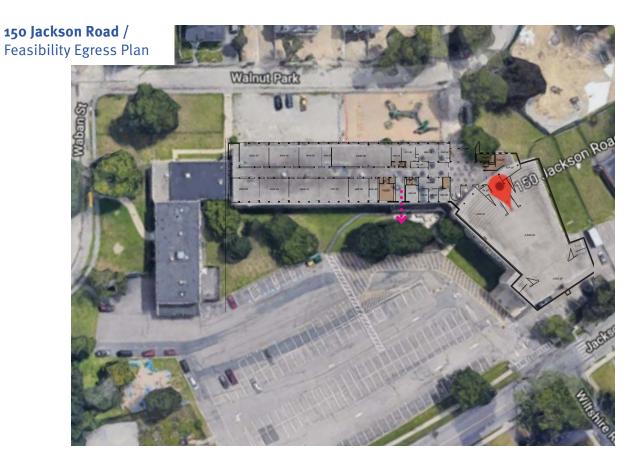
ARROWSTREET NEWTON EARLY CHILDHOOD PROGRAM AT 687 WATERTOWN STREET Newton, MA

PUBLIC FACILITIES 17 April 2019



ALBEMARLE ROAD





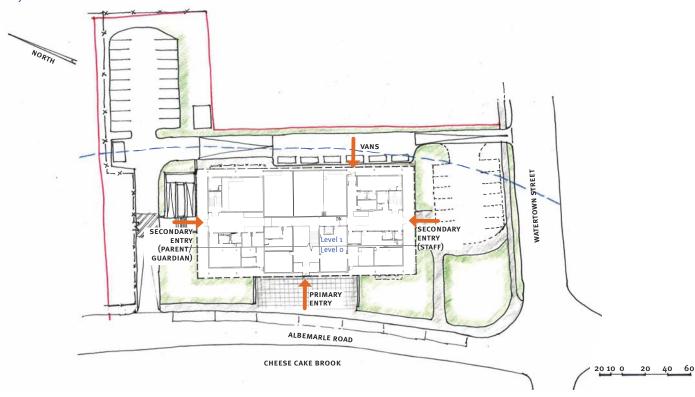


ARROWSTREET NEWTON EARLY CHILDHOOD PROGRAM AT 687 WATERTOWN STREET Newton, MA

PUBLIC FACILITIES 17 April 2019

687 Watertown Street /

Entry Plan





Newton Early Childhood Program/

Daylight at Lower Level



687 Watertown Street

Building Performance - HVAC Systems/ Heating and Cooling

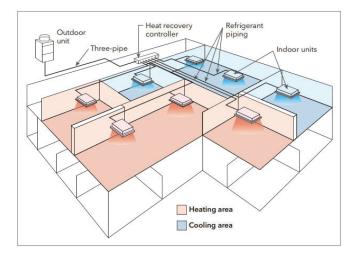
Option 1:

Variable Refrigerant Flow (VRF) System » All electric

- » Indoor VRF System Units in every room
- >> On grade VRF Condensing Units (6 Units Required)

Mechanical System Payback Summary:

Lowest life cycle cost by yielding approx.
 \$524,600 savings over the 30-year study period compared to the baseline system



ARROWSTREET NEWTON EARLY CHILDHOOD PROGRAM AT 687 WATERTOWN STREET Newton, MA

PUBLIC FACILITIES 17 April 2019

687 Watertown Street

Building Performance - HVAC Systems/ Heating and Cooling

Option 2:

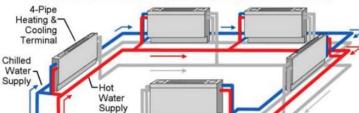
Hot water/ chilled water fan coil unit system

» Indoor fan coil units in every room

- » Air cooled chiller
- » Two new gas fired hot water boilers
- » Hot water pumps located throughout the building
- » HW/ CW Fan Coil System Added Cost: \$163,354

Mechanical System Payback Summary:

» Life cycle cost by yielding approx. \$110,787 savings over the 30-year study period compared to the baseline system



System

Pumps

Distributes hot and cold water simultaneously

Chiller

687 Watertown Street Mechanical System Payback Summary



GARCIA • GALUSIKA • DESOUSA Consulting Engineers Inc.

370 Faunce Corner Road, Dartmouth, MA 02747-1217

687 Watertown Street - Mechanical System Payback Summary

Baseline	System	Gross Capital Investment*	Annual Elec. Cons. (kWh)	Annual Gas Cons. (MBTU)	Annual Electric Cost	Annual Gas Cost	Combined Utility Cost	Annual Utility \$/s.f.	Annual kBTU/s.f. (EUI)	Annual Maint. Cost	Combined Annual Expense	Combined Expense Savings**	Total Life-Cycle Savings***	Discounted Payback (Years)****
-	1. Hot water coil heating/dx cooling VAV RTU systems with energy recovery wheels serving terminal VAV boxes with hot water reheat coils 2. Standard efficiency gas-fired boiler plant	\$2,004,900	245,000	2,183.9	\$46,379	\$26,731	\$73,110	\$1.74	71.90	\$15,875	\$88,985	-	-	-

Option	System	Gross Capital Investment*	Annual Elec. Cons. (kWh)	Annual Gas Cons. (MBTU)	Annual Electric Cost	Annual Gas Cost	Combined Utility Cost	Annual Utility \$/s.f.	Annual kBTU/s.f. (EUI)	Annual Maint. Cost	Combined Annual Expense	Combined Expense Savings**	Total Life-Cycle Savings***	Discounted Payback (Years)****
1	 Variable refrigerant flow (VRF) terminal evaporator units with air-cooled condensing units and supplemental electric radiation heating 2. Air-cooled heat pump heating/cooling 100% VAV O.A. ventilating units with energy recovery with terminal VAV boxes with CO2 controls providing ventilation Supplemental electric terminal heating units 	\$2,048,600	226,750	0.0	\$42,924	\$0	\$42,924	\$1.02	18.42	\$23,300	\$66,224	\$22,761	\$524,606	2
2	Chilled/hot water coil fan coil units with supplemental hot water radiation heating Chilled/hot water coil 100% VAV O.A. ventilating units with energy recovery with terminal VAV boxes with CO2 controls providing ventilation Sight officiency gas-fired condensing boiler plant High efficiency air-cooled chiller plant	\$2,224,600	191,720	1,541.4	\$36,293	\$18,867	\$55,160	\$1.31	52.27	\$20,250	\$75,410	\$13,575	\$110,787	18

ARROWSTREET NEWTON EARLY CHILDHOOD PROGRAM AT 687 WATERTOWN STREET Newton, MA

PUBLIC FACILITIES 17 April 2019

Newton Early Childhood Program/

Building Performance- Exterior wall Insulation

OPTION 1 - EXTERIOR INSULATION FINISHING SYSTEM (EIFS)





Exterior Wall (at Upper Level)	R-Value
Brick with EIFS	
Exterior Air - Avg Summer/Winter	0.17
Synthetic Stucco	0.20
Rigid Insulation (Expanded Polystyrene	9.2
Insulation - 2")	
Waterproofing Membrane	0.0
3 5/8" Face Brick	0.44
1" Air Space	1.0
3/4" Concrete (parge at cavity, Concrete	0.05
Light Weight (110 lb/cft)	
3 5/8" Face Brick	0.44
Interior Air - Vertical	0.68
Assembly Total:	12.18

Exterior envelope upgrades with added EIFS system and waterproofing Construction Cost: \$819,294

* Our observations of the Building Envelope Payback Summary suggests that adding 2" of rigid insulation to the existing walls **does not result** in a payback within the 30 year study period. It should be noted that improvements to the existing walls will provide other benefits to the building beyond cost implications such as improvements to thermal comfort, moisture management, and other factors that should be considered.

OPTION 2 - INSULATED RAIN SCREEN SYSTEM





Exterior Wall (at Upper Level)	R-Value
Brick with Metal Rain Screen	
Exterior Air - Avg Summer/Winter	0.17
Metal Panel	0.15
1" Air Space	1.0
4" Mineral Wool Insulation w/	8.6
continuous galvanized girt	
3 5/8" Face Brick	0.44
1" Air Space	1.0
3/4" Concrete (parge at cavity, Concrete	0.05
Light Weight (110 lb/cft)	
3 5/8" Face Brick	0.44
Interior Air - Vertical	0.68
Assembly Total:	12.53

Exterior envelope upgrades with added metal panel rainscreen system, insulation, and waterproofing Construction Cost: \$1,513,736

* Our observations of the Building Envelope Payback Summary suggests that adding 2" of rigid insulation to the existing walls does not result in a payback within the 30 year study period. Results in a 48- Year Simple Payback. It should be noted that improvements to the existing walls will provide other benefits to the building beyond cost implications such as improvements to thermal comfort, moisture management, and other factors that should be considered.

ARROWSTREET NEWTON EARLY CHILDHOOD PROGRAM AT 687 WATERTOWN STREET Newton, MA

PUBLIC FACILITIES 17 April 2019

687 Watertown Street Building Envelope Payback Summary

id, Dartmouth, MA 02747-1217



GARCIA • GALUSKA • DESOUSA a Ena

687 Watertown Street - Building Envelope Payback Summary

Design	Enve Roof Assembly R-Value		Window U-Value	Window SHGC	Curtainwall U-Value	Curtainwall SHGC	Capital Investment Increase*	Annual Elec. Cons. (kWh)	Annual Electric Cost	Combined Utility Cost	Annual Utility \$/s.f.	Annual kBTU/s.f. (EUI)	Combined Utility Savings**	Total Life-Cycle Savings**	Discounted Payback (Years)****
	35.8	2.7 & 4.12	0.43	0.32	0.38	0.39	-	226,750	\$42,924	\$42,924	\$1.02	18.4	-	-	-

Envelope	Enve	Envelope		Window	Curtainwall	Curtainwall	Capital	Annual	Annual	Combined	Annual	Annual	Combined	Total	Discounted
Option	Roof Assembly R-Value	Wall Assembly R-Value	Window U-Value	SHGC	U-Value	SHGC	Investment Increase*	Elec. Cons. (kWh)	Electric Cost	Utility Cost	Utility \$/s.f.	kBTU/s.f. (EUI)	Utility Savings**	Life-Cycle Savings**	Payback (Years)****
A	35.8	12.2 & 13.5	0.43	0.32	0.38	0.39	\$255,200	198,620	\$37,599	\$37,599	\$0.90	16.1	\$5,325	-\$131,503	N/A*****

*Capital Investment Increase accounts for architectural costs provided by architect and system sizing reduction credits outlined in the cost estimate. **Combined utility savings is the difference between the combined utility cost of the baseline and system in comparison. **Total life-cycle savings is based on a 30 year study period. ***Discounted payback years is based upon BLCC5 Life Cycle Analysis. ****Discounted payback never reached within 30 year study period.

687 Watertown Street

City of Newton - Building Design and Construction Sustainability Guidelines

Conceptual Design Phase:

» Option 1: Meets all codes and budget

- Will be met with baseline VRF System, DDC controls, lighting controls, and minimizing site impacts
- > Option 2: Reduces energy use to 30% below code requirements, but exceeds budget for systems
 - Option 1 systems noted above; plus
 - Wall insulation assembly;
 - Will need to purchase renewable energy
- » Option 3: Reducing energy use to net zero
 - Based on items above, NZE is not practical nor affordable

ARROWSTREET NEWTON EARLY CHILDHOOD PROGRAM AT 687 WATERTOWN STREET Newton, MA

PUBLIC FACILITIES 17 April 2019

Newton Early Childhood Program at 687 Watertown Street

Site Approvals Schedule

Site Plan Approvals Schedule NECP at 687 Watertown Street Property	January 31, 2019, Amended 4/1/2019
Task:	Meeting Date:
Design Review Committee (DRC) Meeting	February 13, 2019
Building Test Fit	
Preliminary Site Concept Options Plan	
Development Review Team (DRT) Meeting	February 27, 2019
 Professional Team Introduction 	
 Review DRT Site Review Process/Criteria 	
Preliminary Site Concept Options Plan	
DPW - Transportation Division Meeting	March 13, 2019
 Preliminary Site Concept Options Plan 	
Report -Traffic Study	
Design Review Committee (DRC) Meeting	March 13, 2019
 Study Progress Report 	
Site Plan Development and Preferred Option Evaluation	
LE-NECP School Building Committee Meeting	March 14, 2019
 Study Progress Report 	
Site Plan Development and Preferred Option Evaluation	
Development Review Team (DRT) Meeting	March 27, 2019
 Progress Report, Site Plan Development and Preferred Option Evaluation 	
LE-NECP School Building Committee Meeting	April 4, 2019
 Progress Report, Site Plan Development and Preferred Option Evaluation 	
• Vote - authorize submission of documents to DRC for 5-58 Ordinance Site Plan Appro	val

Newton Early Childhood Program at 687 Watertown Street

Site Approvals Schedule

	Site Plan Approvals Schedule		
	NECP at 687 Watertown Street Property	January 31, 2019, Amended 4/1/2019	
	Task:	Meeting Date:	
TODAY	Design Review Committee (DRC) Meeting	April 10, 2019	
── →	Schematic Floor Plans and Preferred Site Plan		
	Public Facilities Committee Meeting	April 17, 2019	
	Building Test Fit	(p)(12) 2020	
	Progress Report, Site Plan Development and Preferred Option Evaluation		
	Conservation Commission Meeting	April 18, 2019	
	Project Introduction		
	Design Review Committee (DRC) Meeting	April 24, 2019	
	Schematic Floor Plans and Preferred Site Plan		
	<u>Vote</u> - 5-58 Ordinance Site Plan Approval		
	Conservation Commission Meeting	May 9, 2019	
	Site Plan Review		
	Basis of Design and Regulation Compliance		
	PUBLIC HEARING DOCKET & PUBLIC NOTICES ISSUED – City Council Clerk by	May 15, 2019	
	Public Facilities Committee Hearing	June 5, 2019	
	Public Hearing on Proposed Site Development/Plan	June 3, 2013	
	Public Facilities Committee Meeting	June 19, 2019	
	Vote - 5-58 Ordinance Site Plan Approval	June 19, 2019	
	Finance Committee Meeting	June 24, 2019 687 WATER OCCUP	
	 Preferred Schematic Report and Total Project Budget Request 	OCCOP	MI
	<u>Vote</u> – Total Project Budget Appropriation NEWTON EARLY CHILDHOOD PROGRAM AT 687 WATERTOWN STREET Newton, MA		
ROWSTREET	NEWION EARLY CHILDHOOD PROGRAM AT 687 WATERTOWN STREET Newton, MA	PUBLIC FACILITIES	

687 Watertown Street

A

5-58 Conditions of Approval

Continue to:

- > Refine and address all parking, traffic, and site circulation challenges
- Develop site drainage and storm water management system to meet Con Comm requirements
- Develop the landscaping and site lighting plans to minimize the impact to the abutters and neighborhood
- > Work with Parks and Recreation to facilitate the installation of the playgrounds
- Pursue Sustainability initiatives, reduce project energy consumption and embodied carbon, and eliminate and/or reduce our fossil fuel consumption

Discussion

www.newtonma.gov/gov/building/capital_projects
www.lincolneliot-necp-projects.com

NEWTON EARLY CHILDHOOD PROGRAM 687 WATERTOWN STREET

PUBLIC FACILITIES MEETING

Newton Public Schools Newton, Massachusetts

April 17, 2019

ARROWSTREET 10 POST OFFICE SQUARE SUITE 700N BOSTON, MA 02109 617.623.5555

www.arrowstreet.com

Hill International 75 SECOND AVENUE SUITE 300 NEEDHAM, MA 02494 617.778.0900 www.billintl.com

ARROWSTREET NEWTON EARLY CHILDHOOD PROGRAM AT 687 WATERTOWN STREET Newton, MA

PUBLIC FACILITIES 17 April :

Trip Generation – Existing NECP

		Vehicle	e-trips¹	
Period	Staff Auto	Student Auto	Van	Total
Weekday Morning Drop-Ofj	f Period (8:15-9:15 AM):			
Enter	40	69	12	121
Exit	<u></u>	<u>69</u>	<u>10</u>	<u>79</u>
Total	40	138	22	200
Weekday Midday Pick-Up P	eriod (11:30 AM-12:30 PM):			
Enter		49	3	52
Exit	<u>5</u>	<u>49</u>	6	60
2.00				00
Total	5	98	<u>6</u> 9	<u>60</u> 112
	5		9	
Total	5		9	
Total Weekday Afternoon Pick-Up	5	98		112

¹Peak hour trips based on empirical trip generation observed at NECP (150 Jackson Street) on January 31, 2019.

MDM TRANSPORTATION CONSULTANTS, INC. Planners & Engineers

ARROWSTREET NEWTON EARLY CHILDHOOD PROGRAM AT 687 WATERTOWN STREET Newton, MA

PUBLIC FACILITIES 17 April 2019

Peak Parking Demand - Existing

at Existing NECP at 150 Jackson Road



Current Summer Program	Proposed
» Albemarle Acres Summer Program (currently gathering information)	» NECP E
	» Operat
» Operation:	July 1
July 1 through August 16 for 7 weeks Monday through Friday	Mond
	» Enrollm
» Enrollment:	- 1
» Hours:	- 6
8:00 Morning Extended Day 8:30 Activities	» Hours:
3:30 Departure	
6:oo Afternoon Extended Day	

Summer Program

- xtended School Year Program (ESY)
- ion:

through August 8 for 6 weeks lay through Thursday

- nent: (summer 2018) .65 Students 60 to 65 Staff
- Varies by student 8:30am - 11:30am 8:30am - 1:30pm 8:30am- 2:30pm 11:30am - 2:30pm

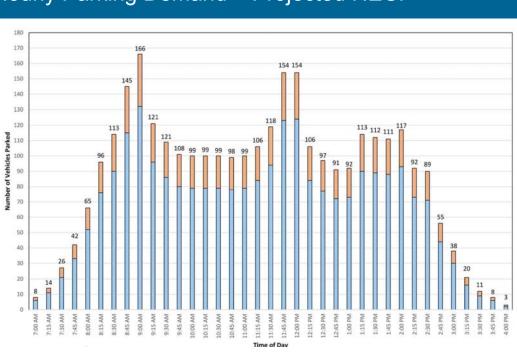
Projected Increase

Observed Parking Demand - 150 Jackson

PUBLIC FACILITIES 17 April 2019

ARROWSTREET NEWTON EARLY CHILDHOOD PROGRAM AT 687 WATERTOWN STREET Newton, MA

Parking Demand - Projected Projected NECP at 687 Watertown Street



Hourly Parking Demand – Projected NECP

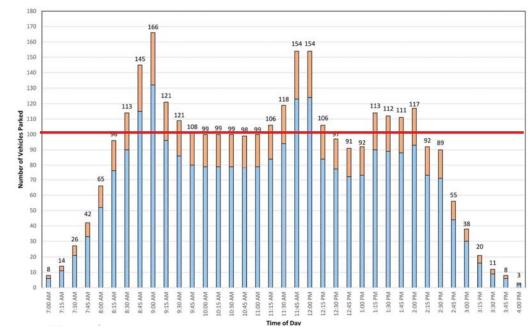
Parking Demand - Traffic Impact Assessment

Projected Increase
 Observed Parking Demand - 150 Jackson

Projected Parking Demand NECP at 687 Watertown

Street

Hourly Parking Demand – Projected NECP



ARROWSTREET NEWTON EARLY CHILDHOOD PROGRAM AT 687 WATERTOWN STREET Newton, MA

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