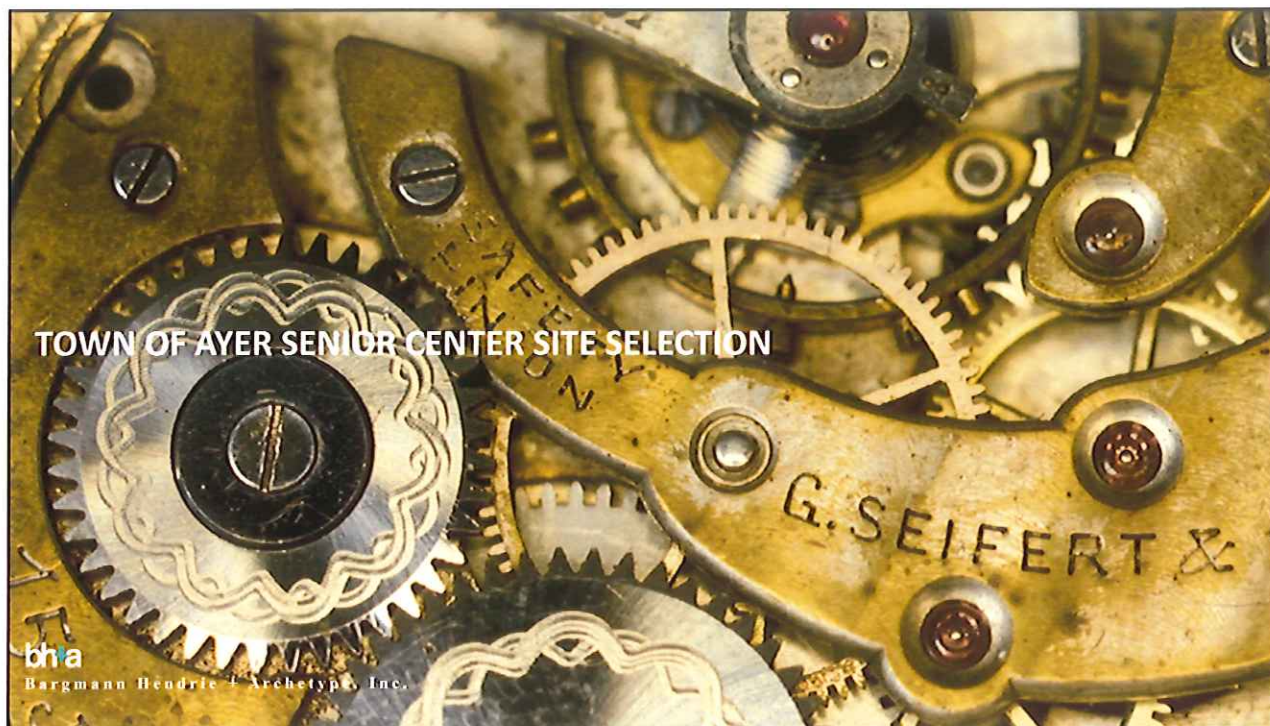




2



We are Senior & Community Center Architects

Sudbury Fairbank Community Center*
 Randolph Intergenerational Community Center
 Scituate Senior and Recreation Center*
 Pembroke Community Center
 Sandwich Center for Active Living
 NewCAL (Newton Center for Active Living)*
 Needham Senior Center (CATH)
 Falmouth Senior Center
 Wellesley Senior Center (opm services)
 Sharon Community & Senior Center*
 Wiscasset Community Center
 Old East Suffolk Community Center
 Passamaquoddy Tribe Community Center
 Kittery Community Center at Frisbee Commons*
 Kennebunk Community Center*
 Chatham Community Center*
 Andover Senior Center*
 Dartmouth Senior Center
 Mansfield Senior Center & Recreation Department*
 Plymouth Senior Center
 Standish Community Center
 Malta Community Center*
 Bluemont Community Center
 Luckett's Community Center
 Cohasset Senior Center
 PFD Hyde Park Community Center*
 PFD Curley Community Center*
 PFD Shelburne Community Center*
 PFD Vine Street Community Center*
 59th Street Community Center*
 Belmont Senior Center

Joseph N. Hermann Youth Center
 Andover Cormier Community Youth Center
 Danny's Place Youth Center
 Milford Youth Center
 Winchester Teen Center
 Marshfield Boys & Girls Club
 Needham Recreation Department Building
 Worcester Boys & Girls Club*
 Forest River Recreational Center, Salem, MA
 Hollis Street Community Center
 Providence Boys & Girls Clubs
 Northeast Family YMCA, Haverhill, MA*
 Lowell YMCA*
 Lawrence YMCA*
 Greater Burlington City & YMCA recreation plan*
 Falmouth Aquatic Center & Ice Rink
 Smith Aquatic & Community Center
 Orangetown Community Center
 Allied Veterans Memorial Rink*
 Greater Burlington Rec/YMCA, joint facility*
 Maple Street Community Pool
 Wansuck Boys & Girls Clubs, Providence, RI
 South Burlington Community Recreation Center
 Cormier Youth Center, Andover, MA
 Milford Youth Center
 Greater Billerica Boys & Girls Club, Billerica, MA
 Jackson Square Recreation Center, Roxbury, MA
 The Swimming Hole Community Pool
 Dartmouth Community Recreation Shed
 Squamscott Community Commons
 Hyannis Youth & Community Center

3

Project Team



bh/a

Engineer/Architect - Architecture, Inc.

Joel Bergman, AIA
Principal-in-Charge
MA Reg. #5390

Rachel Young, RA, LEED AP
Project Manager
MA Reg. #22154

Jeremy Robin, RA, LEED AP
Project Architect
MA Reg. #50467

Potential Consultant Team

PARE Engineering
Civil / Traffic Engineer
Jim Jackson, PE
Amy Archer, PE

Kyle Zick Landscape Architecture
Landscape Architecture
Kyle Zick, ASLA

Rimmer Environmental
Consultants
Wetlands Expert/Geologist
Mary Rimmer, MA, PWS

Interlek
Geotech Consultant
Paul McMichael
Brianna Hansen

Control Point
Survey / Site
Eric Loevalin
Garry Holtzright

Universal Environmental
Consultants
Hazard Consultant
Amrout Dib

Allied Consulting Engineers
MEP
John Wood
Anish Patel

CHA
Cost Estimator
Debra Williamson

4

Site Selection

Comparative Analytics



5

Available Parcels in Ayer

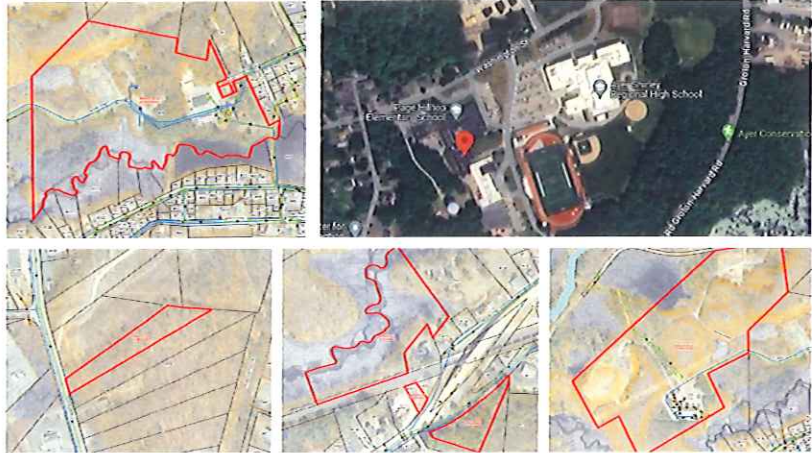
Town of Ayer
Town-Owned Parcels

(Note: Parcels in red determined to be not viable by Committee.
Highlighted parcels will be further examined by the Committee)

PARCEL	ADDRESS	ACRES	COMMENT
0-27	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
0-28	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-30	0 MAIN STREET DRIVE	0.11	
12-31	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-32	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-33	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-34	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-35	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-36	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-37	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-38	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-39	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-40	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-41	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-42	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-43	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-44	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-45	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-46	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-47	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-48	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-49	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-50	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-51	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-52	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-53	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-54	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-55	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-56	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-57	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-58	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-59	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-60	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-61	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-62	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-63	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-64	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-65	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-66	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-67	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-68	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-69	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-70	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-71	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-72	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-73	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-74	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-75	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-76	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-77	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-78	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-79	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-80	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-81	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-82	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-83	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-84	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-85	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-86	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-87	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-88	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-89	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-90	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-91	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-92	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-93	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-94	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-95	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-96	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-97	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-98	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
12-99	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School
13-00	0 CANTON AVENUE ROAD	0.50	Owner - West Ayer High School

Parcel 20-1
Parcel 19-24
Parcel 25-23
Parcel 26-10
Parcel 32-40

115 Washington Street
0 Park Street
0 MacPherson Road
25 Brook Street
0 West Main Street



6

Tight Sights



7

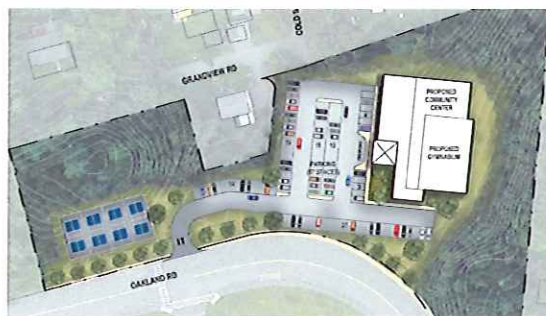
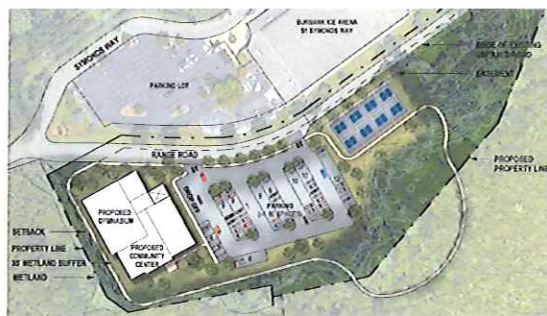
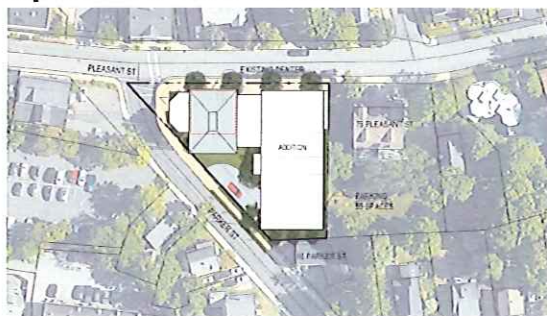
Site Data Matrix

SITE DATA MATRIX SUMMARY									
Data Category	Block Size	note	High School	note	Our City	note	Tested	note	
Town Meeting Vote for Zoning Change Environmental Impact Statement Planning Board Required Conservation Commission Required Permitting Surcharge or soft cost									
1. Site Access Major street access from Access to Parking Entry and Exit from Site Off Street Loading & Service provision Construction Vehicle Access Contractor Parking Available Pedestrian Access Bicycle Access Buckle Up Drop Off Public Transportation Auxiliary transportation required	Block Size	note	High School	note	Our City	note	Tested	note	
2. Emergency Vehicle Access Police Department response time Fire Department response time Fire Department Access requirements	Block Size	note	High School	note	Our City	note	Tested	note	
3. Parking provided required lots parking for site existing parking available at site new on-grade parking available & feasible Structured Parking Required Handicapped parking provided Expansion capability Shared use Alternative parking sources	Block Size	note	High School	note	Our City	note	Tested	note	
4. Utility Connections Storm Drainage Gas	Block Size	note	High School	note	Our City	note	Tested	note	

SITE DATA MATRIX SUMMARY									
Data Category	Block Size	note	High School	note	Our City	note	Tested	note	
Parking Requirements handicapped parking required number of spaces required width of spaces depth of spaces aisle width parking set back requirements front yard parking set back requirements side & rear yard parking location parking green space requirements parking green space requirements off street loading equipment off street loading screening bicycle spaces required	Block Size	note	High School	note	Our City	note	Tested	note	
5. Natural Site Conditions Available Soil Report Soil Conditions Water Table Topography Vegetation Orientation, N-S-E-W	Block Size	note	High School	note	Our City	note	Tested	note	
6. Environmental Issues Contamination Flood Considerations Wetlands River or "Water Body" Setbacks Vernal Pools	Block Size	note	High School	note	Our City	note	Tested	note	
7. Environmental Hazard Sub-Surface Soil Contamination Building Adhesives Building Lead Paint	Block Size	note	High School	note	Our City	note	Tested	note	
8. Permitting	Block Size	note	High School	note	Our City	note	Tested	note	

SITE DATA MATRIX SUMMARY									
Data Category	Block Size	note	High School	note	Our City	note	Tested	note	
9. Zoning & Dimensional Data District Road plan district buffer protection district municipal building or allowed use deed restriction Access to K of C adjacent and setback	Block Size	note	High School	note	Our City	note	Tested	note	
Dimensional Restrictions actual lot area from GIS map actual square foot lot area from GIS map minimum lot area minimum lot width minimum lot depth front yard setback rear yard setback side yard setback allowable lot coverage for structures allowable lot coverage for parking proposed building footprint coverage proposed building footprint coverage allowable lot coverage for parking allowable lot coverage for parking actual lot coverage for building & 150 cars actual lot coverage for building & parking min lot area req for building & parking in zone min lot area req for building & parking in zone min building height (stories) min building height (feet) accessory buildings at site (stories) accessory buildings at site (height)	Block Size	note	High School	note	Our City	note	Tested	note	

Comparative Site Plans



Comparative Cost Matrix

COST COMPONENT	cost range High School Site #2	cost range High School Site #3	cost range High School Site #4	cost range School Administration Site	cost range Gus Cnty Reuse
Sitework	\$1,481,000 to \$1,629,100	\$1,058,000 to \$1,163,800	\$2,162,000 to \$2,378,200	\$1,501,000 to \$1,651,100	
Building	\$6,829,000 to \$7,511,900	\$6,386,000 to \$7,024,600	\$7,245,000 to \$7,969,500	\$7,316,000 to \$8,047,600	\$2,027,000 to \$2,837,800
Field or Playground Relocation	\$708,000 to \$778,800	\$708,000 to \$778,800		\$275,000	\$150,000 to \$300,000
TOTAL PROJECT COST RANGE	\$9,018,000 to \$9,919,800	\$8,152,000 to \$8,967,200	\$9,407,000 to \$10,347,700	\$8,817,000 to \$9,973,700	\$2,177,000 to \$3,137,800
Negative Cost Factors	long distance to pump station field relocation required	electrical service extension req'd field relocation required	end moraine soil conditions site increases building cost long access road & site utilities larger site cost	need to extend sewer or septic sloping site increases bldg cost potential basement or crawl space field improvements "desirable"	interior requires upgrade cost to relocate rec department playground relocated on or off site
Positive Cost Factors	potential existing overflow parking flat site high level of visibility	close to pump station flat site stormwater management benefits	potential savings overflow parking no field relocation stormwater management benefits	field relocation is not "required"	existing parking & access existing site utilities & drainage existing building

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Traffic Report & Analysis

Sight distance

August 3, 2016

Mr. Joel Burgeon
Burgeon Fielder + Architects, Inc.
100 A Street
Leicester, MA 01525-1710

Re: Professional Traffic Engineering Services
Falmouth Senior Center
Falmouth, Massachusetts
PAU Project No. 15025-00

Dear Mr. Burgeon:

Enclosed for you is the requested traffic engineering study related to the proposed Falmouth Senior Center. A new 11,000 square foot senior center is proposed within the Town of Falmouth with special features under consideration. The traffic engineering study associated with the current site plan was submitted for review and a right-of-way (ROW) study was conducted at the proposed Falmouth High School. The results of these two studies are provided below.

Sight Distance Analysis

A sight distance analysis was performed at the existing north Falmouth High School driveway located adjacent to the High School campus. It is understood that the use of this driveway has been proposed to serve the Falmouth Senior Center site adjacent to the High School property. Safety concerns regarding the available sight distance from the driveway have been expressed for traffic entering the driveway from the eastbound direction. A sight distance analysis was conducted at the driveway to determine whether the existing sight distance is adequate to meet existing requirements.

In the vicinity of the high school driveway, Falmouth Senior Center has a posted regulatory speed limit of 25 miles per hour in the eastbound direction. A 25 mile per hour regulatory sign is posted in the eastbound direction just north of Brookside Road approximately 1,500 feet south of the driveway. In the eastbound direction, a 25 mile per hour warning sign is posted just north of Brookside Road and accompanies a school zone advance sign.

A design speed of 35 miles per hour was selected for Falmouth Senior Center. This design speed was selected based on the posted speed limit of the roadway plus 10 miles per hour. Analysis has indicated that a 35 mile per hour design speed is appropriate for the roadway plus 10 miles per hour. Therefore, the 35 mile per hour design speed provides a conservative representation of typical roadway speeds. According to the American Association of State Highway and Transportation Officials (AASHTO) publication A Policy on the Design of Highways and Streets, Sixth Edition (2011), the minimum sight distance (SD) for a 35 mile per hour design speed is 235 feet. The minimum intersection sight distance (ISD) for a 35 mile per hour design speed is 435 feet.

Mr. Joel Burgeon **CS** **August 3, 2016**

Table 1. Sight Distance Summary

	Required ISD (ft)	Available ISD (ft)	Required ISD (ft)	Available ISD (ft)
North Falmouth High School Driveway	235	305	435	265
East Falmouth High School Driveway	235	345	435	305

Notes: Required Sight Distance
Available Sight Distance

As indicated in Table 1, the required intersection sight distance for a driveway entering the north Falmouth High School Driveway is 435 feet. The available sight distance is 305 feet. The table below the AASHTO requirement of 235 feet. Photo 1 shows the visibility intersection. Visibility to the north is obscured by the horizontal curvature in Falmouth Senior Center and the presence of trees and shrubs on the west side of the roadway. Available Sight Distance is adequate for this area and vertical curve does not limit sight distance.



Photo 1. View from north Falmouth High School Driveway looking to the north.

The required sight distance can be achieved with the existing roadway conditions and by the use of the north Falmouth Senior Center. Only second hand of vegetation on the north side of the driveway would require removal, allowing a person of the vegetation to be able to remain between the driveway and across a view. Additionally, there is a small berm (12' x 12') above the driveway in this area that needs to be removed. Some of this berm may need to be graded down to achieve the required sight distance for the driveway. During the final period of vegetation and a partially removing a portion of the berm underneath is necessary. Vegetation is not to be removed as a part of the site construction.

PAU PROJECT NO. 15025-00 **IN CHARGE: JOEL BURGEON, P.E.**

PAU PROJECT NO. 15025-00 **PAU PROJECT NO. 15025-00**

28 FALMOUTH SENIOR CENTER FEASIBILITY STUDY PHASE 2

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Parking

Case Study: Norton Senior Center

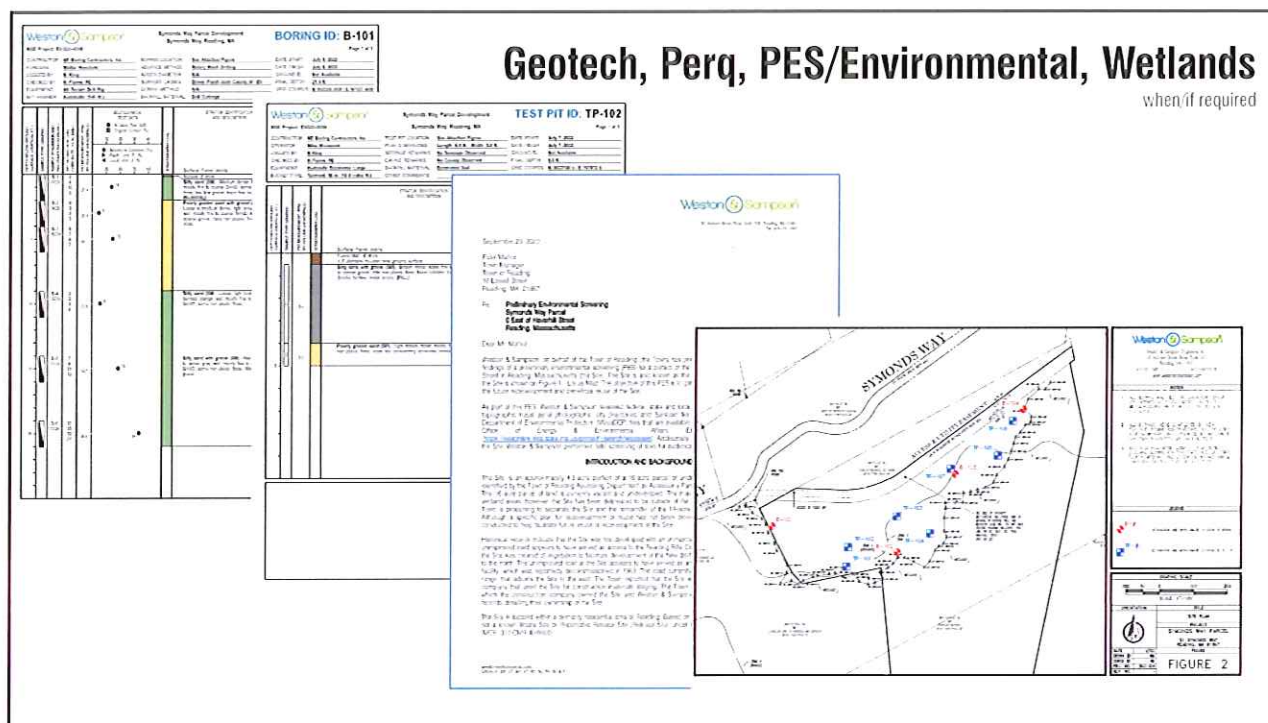


Table 7. Program Duration and Participation at New Center, Scenario 1 - Typical Weekday

Program Times	Program	Participants
8:30 a.m. - 4:00 p.m.	Social services, SHINE, and Additional services	30
8:30 a.m. - 10:30 a.m.	Breakfast	30
9:00 a.m. - 4:00 p.m.	Pool	12
9:00 a.m. - 12:00 a.m.	Bridge/Canoa	12
9:30 a.m. - 10:30 a.m.	Yoga	12
9:30 a.m. - 10:30 a.m.	Wii	12
10:00 a.m. - 11:00 a.m.	French	12
10:00 a.m. - 11:00 a.m.	Biology	12
11:00 a.m. - 12:00 p.m.	Aerobics	12
11:00 a.m. - 1:00 p.m.	Current Politics	12
11:45 a.m. - 1:00 p.m.	Lunch	30
12:15 p.m. - 1:15 p.m.	Strength Training	12
1:00 p.m. - 4:00 p.m.	Canoa/Cribbage	12
1:00 p.m. - 2:00 p.m.	Religion	12
1:30 p.m. - 2:30 p.m.	Better Balance	12
1:30 p.m. - 3:30 p.m.	Movie	30
2:00 p.m. - 4:00 p.m.	Support Group	12
2:00 p.m. - 3:00 p.m.	Arthritis Exercise	12
3:00 p.m. - 4:00 p.m.	Meditation	12
Total		300

Note that the 300 program participants reflect 200 daily visitors. Based on discussions with COA, it is assumed that 40% of participants stay for 1 activity, 40% stay for 2 activities, and 20% stay for 3 activities. Does not include employees.

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Comparative Factors				
Comparative Factor	Pleasant Street		Oakland Road	Symonds Way
Building Area	35,040	to 36,840	26,300	26,300
Program Area	19,472	to 21,272	26,300	26,300
Construction Cost	\$21,369,893	to \$22,495,678	21,940,766	22,024,570
Total Project Cost	\$27,939,000	to \$29,375,000	28,172,126	28,309,023
Parking Spaces	52		90	85
Adequate Parking	parking deficit of 18 - 28 spaces		✓	✓
Surface Parking Lot	requires parking garage		✓	✓
Service Loading Space	street side service & delivery		✓	✓
Temp. Space Not Required	will require 10,000 sf rental for 18 months		✓	✓
Moving	2 times		1 time	1 time
Indoor Track	no		✓	✓
Outside Pickleball Courts	site is too small for exterior pickleball		✓	✓
Outdoor Trail & Amenities	site is too small for outdoor amenities		✓	✓
Building appears free of Hazmat	suspect lead paint and/or asbestos		✓	✓
Clean Site Environmental	any site contamination from fire dept use?		✓	any site contaminant from DPW use?
Minimal Impact on abutters	visual & audio impact on immediate abutters		visual & audio impact on immediate abutters	✓
Hazmat Free	testing and verification of building required		✓	✓
Zoning Variance	front setback and parking count			
Allows for Sale of Pleasant St			✓	✓

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Site Ranking Worksheet

Scoring Each Site

1 Area of the Site points The site has sufficient area for the building, parking and future expansion. 7-10 The site has sufficient area for the building, parking but not future expansion. 4-6 The site has sufficient area for the building but not parking or future expansion. 1-3 reviewer awarded points 5 total 5 weighted points factor 2 10		2 Impact on Adjacent points Development has no impact on adjacent in terms of views, noise levels, or the site's character. 7-10 Development has some impact on adjacent in terms of views, noise levels, and the site's character. 4-6 Development has major impact on adjacent in terms of views, noise levels, and the site's character. 1-3 reviewer awarded points 5 total 5 weighted points factor 1.5 7.5		3 Traffic Conditions points Traffic conditions do not impact travel to and from the site. 7-10 Traffic conditions have a moderate impact on travel to and from the site. 4-6 Traffic conditions have a major impact on travel to and from the site. 1-3 reviewer awarded points 5 total 5 weighted points factor 1 5	
4 Parking Quantity points The site has sufficient parking and sufficient overflow parking. 7-10 The site has sufficient parking but no overflow parking. 4-6 The site does not have sufficient parking. 1-3 reviewer awarded points 5 total 5 weighted points factor 2 10		5 Location of Parking points All parking is located within 125 feet from the front door. 7-10 Some parking is located within 125 feet from the front door. 4-6 No parking is located within 125 feet from the front door. 1-3 reviewer awarded points 5 total 5 weighted points factor 1.5 7.5		6 Wetlands and Floodplains points Design, constructability, post control and user comfort are not impacted by the proximity to wetlands/floodplains. 7-10 Design, constructability, post control and user comfort are not impacted by the proximity to wetlands/floodplains. 4-6 Design, constructability, post control and user comfort are not impacted by the proximity to wetlands/floodplains. 1-3 reviewer awarded points 5 total 5 weighted points factor 1.5 7.5	
7 Site Construction Cost points Site construction budget is minimally impacted by topography, utilities and other factors. 7-10 Site construction budget is somewhat impacted by topography, utilities and other factors. 4-6 Site construction budget is heavily impacted by topography, utilities and other factors. 1-3 reviewer awarded points 5 total 5 weighted points factor 1.5 7.5		8 Operational Costs points Operational costs are minimally impacted by insurance, maintenance, landscaping and garage repairs. 7-10 Operational costs are moderately impacted by insurance, maintenance, landscaping and garage repairs. 4-6 Operational costs are heavily impacted by insurance, maintenance, landscaping and garage repairs. 1-3 reviewer awarded points 5 total 5 weighted points factor 1.5 7.5		9 Facilities With Generational Use points Site is in close proximity to multiple other programs. 7-10 Site is in close proximity to one other program. 4-6 Site is not in close proximity to other programs. 1-3 reviewer awarded points 5 total 5 weighted points factor 1 5	
10 Accommodate Other Outdoor Activities points Multiple other outdoor recreational activities will fit on the site. 7-10 One other outdoor recreational activity will fit on the site. 4-6 No other outdoor recreational activities will fit on the site. 1-3 reviewer awarded points 5 total 5 weighted points factor 1.5 7.5		11 Sustainability Impact on Design points Sustainability goals have no impact on the building's design. 7-10 Sustainability goals have some impact on the building's design including roof shape. 4-6 Sustainability goals have a major impact on the building's design including roof shape. 1-3 reviewer awarded points 5 total 5 weighted points factor 1 5		12 Suitability for a Senior Center points The site is well suited for a senior center. 7-10 The site is somewhat suited for a senior center. 4-6 The site is not well suited for a senior center. 1-3 reviewer awarded points 5 total 5 weighted points factor 2 10	
combined points 90					

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Site Ranking Worksheet

Ranking Each Site

Sites	Combined Points	Reviewer Points	Final Score	Final Ranking	Explanation of Reviewer Points Awarded
Pleasant Street	90	10	100	3	I have concerns about the site as parking is limited
Oakland Road	144	20	164	1	I think the site works great as a senior center
Symonds Way	108	15	123	2	I like the site but I am concerned about the wetlands

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Site Selection

Ranking the sites relative to each other

The community can rank the sites 1, 2 or 3 relative to each criteria with 3 being the best. The cumulative highest score gives the Town some indication as to site preferences.

Equal Weight Analysis
Ranking System: 3 (most favorable) 2 (middle) 1 (least favorable)

#	Factor	Outland	Symonds	Pleasant	Description
1	Ownership				The Town owns the land and land taking is not required
2	Easement or Deed Reservation				Use of property is in some way restricted
3	Site Area				Site has sufficient area for building, parking and expansion
4	Topography				Site is relatively flat, easy to construct and use
5	One or Two-Story Option				Site area is sufficient to support a one or two-story building
6	Location: Proximity for User Access				Site is centralized or easily accessible for most of the population
7	Location: Proximity for EMT & Fire Department Access				Response Time from 15 Union Street or patrol car
8	Location: Proximity for Police Department Access				Response Time from 751 Main Street
9	Alternative Transportation: Access other than Car				Bicycle access, pedestrian access, public transportation bus access
10	Visibility of Facility to Public				Is the building visible from a public way
11	Timing of Availability				Are there factors that impede ability to proceed on the desired timeline
12	Temporary CoA Space Required				A temporary site during construction and an additional move is required
13	Traffic				Traffic around site and getting to the site
14	Access and Egress				Entry and Exit access to the Site
15	Parking Quantity				Amount of parking available on the site
16	Proximity and Accessibility of Parking				Parking is near the building (50% within 125' of entry) and there is a single lot
17	One-Flow Parking				Parking available for large, special events that bring additional cars to building
18	Site Utilities				Water, sewer, power and telecommunications are available
19	Soil Characteristics				Soil characteristics allows for conventional foundations versus ground improvement
20	Subsurface Water				De-watering required during construction
21	Wetlands				Wetlands impact building footprint, consistency or limit expansion area
22	Insects				Wetlands impact exterior use due to insects
23	Nature				Wetlands enhance the natural environment surrounding the site (an asset)
24	Floodplains				Building footprint is in the floodplain and floor thus needs to be raised
25	Habitat Restrictions				Site has habitat restrictions
26	Site Hazardous Materials				Site contamination prevents removal or causes it to be very expensive
27	Site Construction Cost				Does the site bring with it a construction cost
28	Construction: Surcharge for Site Clearing				Is the site required to be cleared
29	Construction: Surcharge for Oil Tank Removal				Does the site contain an existing septic system or tank
30	Tree Clearing: Carbon Footprint Reduction				Tree Clearing reduces "Carbon Sink"
31	Collateral Cost of Construction				Are there other expenses required to make the site viable
32	Collateral Benefits of Construction				Does development on the site create other benefits
33	Acquisition of Adjacent Sites				Acquisition improves site condition and increases site assets
34	Facilitates Multi-Generational Use				Adjacency to other programs provides use of building by other age groups
35	Accommodates Other Outdoor Activities				Prohibits walking trails, basketball or other outdoor recreation activities
36	Other Indoor Activities				Adjacency promotes access to other properties (library, high school, town hall)
Total Cumulative Score (higher is more favorable)		0	0	0	

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Community Involvement

For and through the community

Empowering

Community controlled development

Co-Creating

Devolving a degree of decision-making to the community

Involving

Running events like workshops and charettes to involve the community in the project's development

Consulting

Seeking and taking account of their views

Informing

Telling the community about the plans

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Getting to Community Buy In

Ownership in the Process

Steps to Get Town and Community Buy In

1. Program Meetings w/ Senior & Rec Staff
2. Meetings w/ Related Departments
Veterans, Health, Disabilities, Town Administration
3. Community Program Presentation
4. Workshop
5. Community Meeting: Present Data
6. Staff: program & budget needs
7. Staff: IT & Technology, FF&E needs
8. Present Design Alternatives
9. Informal Inter-Department Review
10. Informal Planning Board
11. Departmental Preferences
12. Board of Selectmen
13. Finance Committee
14. Pre-Town Meeting Presentation
15. Town Meeting Vote



Kid-focused Focus Groups



Meetings to Discuss Selected Preferences



Moderated Focus Groups



Listening to Ideas and Space Needs



Online Community Meetings

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Community Involvement via Website



The NewCAL project website contains the following information:

- Project Updates
- Design Approvals
- Presentations & Recordings
- Meeting Minutes
- Feasibility Study
- Program & Site Selection

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The Reconciliation Process

Free-Stream Service Center
Free-Stream, N.J.
201-979-6258

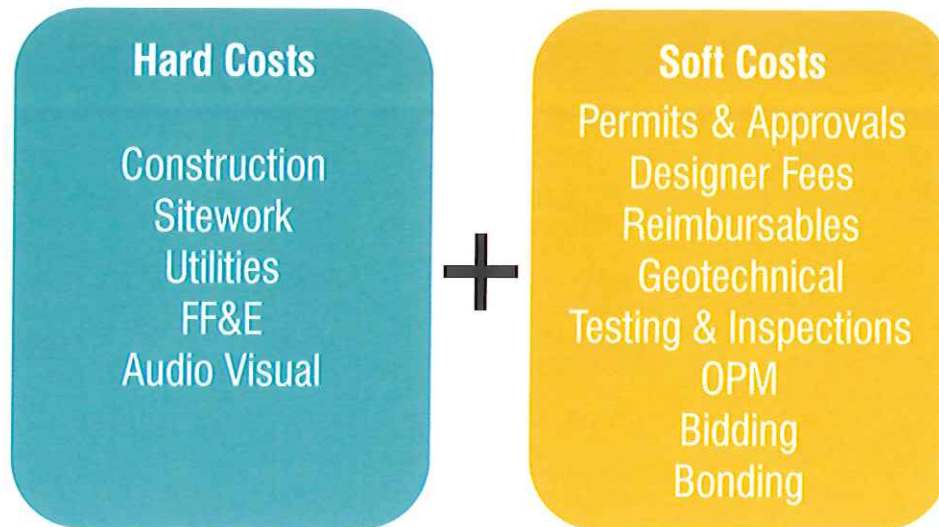
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Estimates vs. Actual Costs

25

Total Project Costs

Case Study: Halliwell Community Center



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Operational Budget Impacts

What is the Real Impact of the Project on the Town's Operational Budget?

Category:	Existing Cost	Additional Cost	Total Cost
CONTRACTUAL			
Gas/Electric	\$5,450	\$52,500	\$57,950
Water/Sewer	-	\$3,500	\$3,500
Advertising	-	\$5,000	\$5,000
Communications	\$2,100	\$6,000	\$8,100
Trash Removal	-	\$3,500	\$3,500
Insurance	-	\$5,000	\$5,000
Other: Dues/Memberships	\$2,170	\$1,500	\$3,670
Volunteer/Elderly Services	\$1,000	\$0	\$1,000
Total	\$10,720	\$77,000	\$87,720

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Operational Budget Impacts

What is the Real Impact of the Project on the Town's Operational Budget?

Category:	Existing Cost	Additional Cost	Total Cost
COMMODITIES			
Office Supplies	\$1,125	\$3,000	\$4,125
Maintenance/Repair Materials	\$2,500	\$5,000	\$7,500
Janitorial Supplies	-	\$6,000	\$6,000
Rec. Program Supplies	-	\$2,500	\$2,500
Food/Meals on Wheels	\$15,000	\$5,000	\$20,000
Uniforms	-	\$1,500	\$1,500
Printing/Postage	\$4,700	\$2,000	\$6,700
Other: Travel	\$1,000	\$1,000	\$2,000
Total	\$24,325	\$26,000	\$50,325

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Operational Budget Impacts

What is the Real Impact of the Project on the Town's Operational Budget?

Category:	Existing Wages	Additional Wages	Total Cost
SALARIES			
FT COA Director	\$86,486	-	\$86,486
PT Outreach Coordinator	\$24,367	-	\$24,367
FT Mini Bus Driver	\$44,970	-	\$44,970
PT Admin. Assistant	\$45,903	-	\$45,903
FT Program Coordinator	-	\$58,500	\$58,500
FT Maintenance Worker	-	\$52,000	\$52,000
PT Front Desk	-	\$43,988	\$43,988
PT Fitness Attendant	-	\$16,891	\$16,891
PT Kitchen Staff	-	\$61,583	\$61,583
PT Computer Lab Attendant	-	\$17,595	\$17,595
PT Building Attendant	-	-	-
PT General Instructor I	-	\$19,872	\$19,872
PT General Instructor II	-	\$13,248	\$13,248
Total	\$201,726	\$283,677	\$485,403
Overall Total	\$236,771	\$386,677	\$623,448

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Sustainability



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Sustainability Methodology



Reduce Building Energy Demand

How: Establish realistic Energy Usage Intensity (EUI) Targets early in Design and verify at Milestones (SD, DD, CD).
Collaborate with utility company early in design.



Maximize Building Efficiency

How: Maximize Building Insulation and Building Envelope Air Tightness ($<0.08\text{ACH/sf}$ Air Change Rates)
Selection of Highest Efficiency HVAC system with cost and benefit analysis
Accurate Energy Modeling and verify at early key Milestones (Feasibility, SD, DD)



Minimize Carbon Footprint and Reduce Green House Gas

How: By reducing Concrete and Steel usage during building design and Construction. Wood Construction when applicable
Life Cycle Assessment (LCA) to evaluate material Embody Carbon with up-to-date Environment Product Declarations (EPD)
Minimize and/or Establish No Fossil Fuel usage for this project



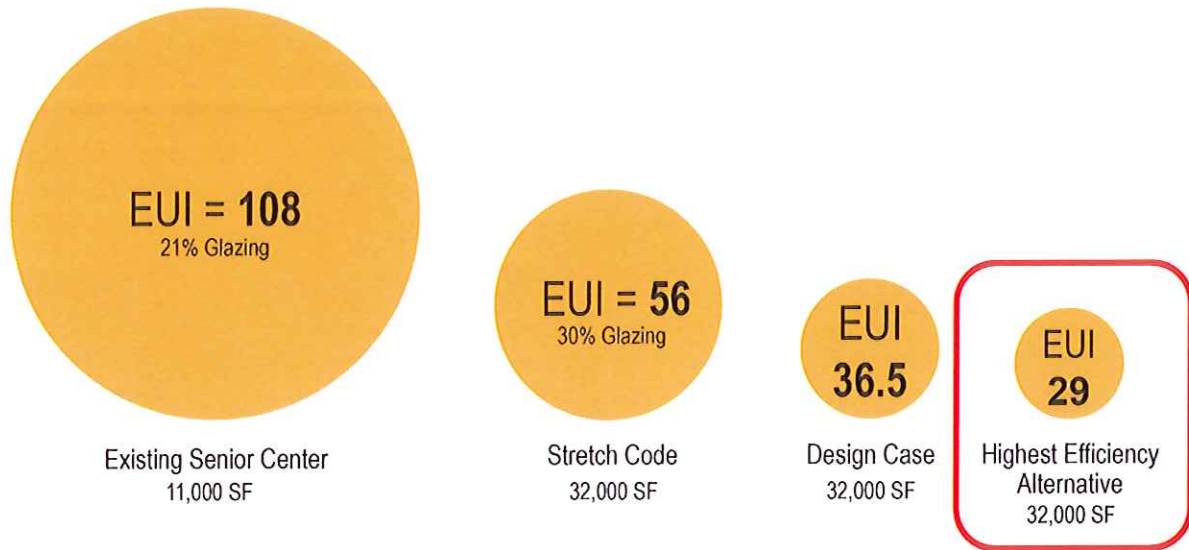
Eliminate Fossil Fuel with All Electrification & Harvest Site Energy

How: Eliminate gas fuel for the project. Use heat pump systems for cooling and heating.
Explore PV Solar panels, and evaluate Ground Source/Geo-Thermal Heat pumps

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Energy Usage Intensity – Target 35% to 50% Energy Use Reduction

Case Study: NewCAL - Newton Center for Active Living

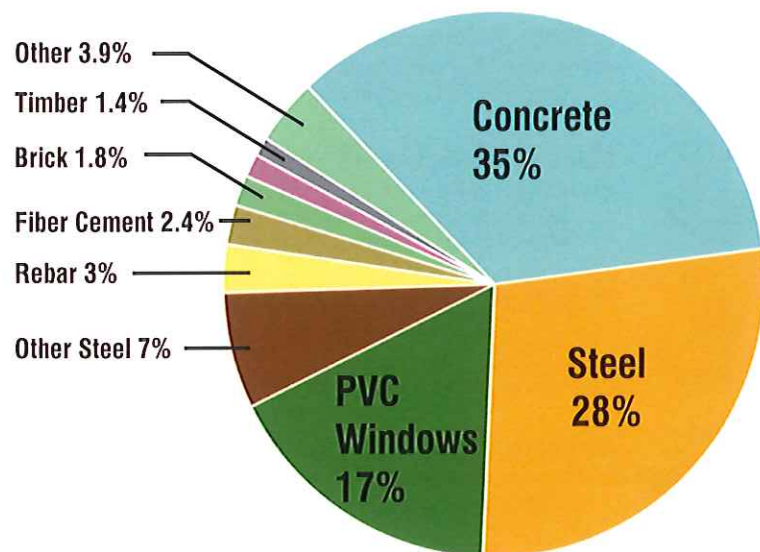


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Embodied Carbon In Building Materials

Case Study: NewCAL - Newton Center for Active Living

91% of a building's embodied carbon is from construction materials & their replacement



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Embodied Carbon in Building Materials

Mass Timber Construction



34



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Programming

Spaces that Respond to Ayer's Needs and Wants



Maker space replaces traditional arts & crafts



A wipier green house



Library and living room spaces



A teaching & social kitchen can be run by volunteers



Fitness Room as Performance space



Flexible Multi-Purpose Rooms

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Programming

Flexible vs. Purpose-Built Spaces



37

Programming

Designing for Generations



Fitness Center



Future Memory Care Room



Bocce Court

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Programming

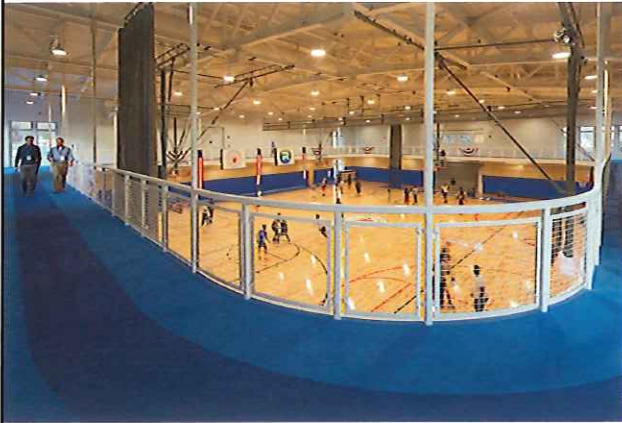
Social Spaces



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Programming

Gyms



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Programming

Turning Support Spaces into Learning Spaces



41

Programming

Sizing Spaces

Spaces need to be generously sized to allow for social distancing.

Spaces also need to be right-sized for their use. Not every program room needs to be 800 sf.

Infrastructure

Robust HVAC but also versatile audio-visual systems allow for safe hybrid instruction.



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