

MEMORANDUM

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from: James Liebman, AIA – HMFH Architects

re: Franklin Elementary School – Project Description and Program Summary

OFFICE. (617) 492 2200
FAX. (617) 876 9775

130 Bishop Allen Drive
Cambridge, MA 02139

hmfh.com

This project is a new three-story elementary school building for the Franklin Elementary School located at 125 Derby Street, Newton, Massachusetts. The proposed school is planned to support an enrollment of 396-414 students, kindergarten through fifth grade. The school will include general education classrooms and support spaces, special education classrooms and support spaces, administrative offices, a gymnasium, cafeteria, a music classroom, an art classroom, and media center. The sitework will include a new parking lot, driveways, walkways, entrance plaza and terrace, outdoor learning areas, playground, basketball court, multi-purpose field, and a practice softball field.

The proposed three-story school is configured as an “L” shape. The north-south facing wing along Derby Street contains classrooms and support spaces, including 18 general education classrooms. The east-west facing wing contains spaces that may also be used by the community, including the Gymnasium, Cafeteria, and Media Center. The building exterior is proposed to be mostly masonry, with phenolic panel volumes expressing special spaces, and the overall composition and scale respond appropriately to the context of the neighborhood.

The Franklin School site provides several challenges related to site topography. The building is proposed to be sited at the eastern side of the site to take advantage of the site lower site elevation and the slope of Derby Street, with a first floor elevation set approximately five feet above Derby Street at that end of the site. By siting the building in this location, the school building is accessed by a sloped walkway, providing universal access, with no stairs or ramps across the site. This also allows for an accessible sloped walkway from Russell Road and Cherry Street.

The City of Newton has established Building Design and Sustainability Guidelines for new and major renovation projects, which have served as a basis for the design process. The Franklin Elementary School project will be LEED Gold certifiable. The proposed building will be all-electric, designed to support photovoltaic panels on the roof. The possibility of canopy-mounted photovoltaic panels will continue to be evaluated and coordinated with the City of Newton. The proposed HVAC system for the building is Ground Source Heat Pumps (GSHP) with VRF distribution, free of fossil fuels.

During the 5-58 Site Plan Approval process, and on Wednesday, May 15th, 2024, the Design Review Committee reviewed proposed site plans for the new Franklin Elementary School at 125 Derby Street. The committee stated that the current proposed plans are appropriately developed to begin the Site Plan Review and Approval process. The DRC recognizes that there are few items that will continue to be evaluated, developed, and refined during the next design phase. These include:

- Integrated Building Design – Coordination of systems, including but not limited to mechanical systems, building envelope, floor to floor heights, ceiling heights including the height and extent of glass and glazing, methods of sun control, day lighting, electrical lighting, and acoustic considerations.
- Building Design:
 - o Overall building facades, massing and scale, as well as fencing, as it relates to abutting neighbors
 - o Continue to track recent lead-time and pricing trends with curtainwall and explore alternatives and potentially bid alternates to curtainwall as made necessary by these trends
 - o Building Efficiency and Performance:
 - Provide updated LCCA for the selected HVAC system (GSHP + VRF) in Design Development and Construction Documents
 - Building and site design to meet or exceed Newton’s sustainability goals with strategies to reduce energy use intensity (EUI)
- Site Design:
 - o Backup generator and transformer location and screening, in concert with the receiving and trash pickup area
 - o Bollard and guardrail alternatives at the Derby Street entry plaza and bus lane
 - o Site photometric plan to verify site lighting design, density, and light cut off.
 - o Stormwater management design options, including potential location of a memorial/ pollinator garden
 - o Continued exploration into universally accessible and useful playground design and requirements for baseball netting/fencing, and review with Department of Parks, Recreation, and Culture
 - o Continue to work with Newton Public Schools, Department of Public Works traffic staff, and the City’s Accessibility Coordinator on a parking management plan, including provisions for accessible loading areas for parent drop off / pick up and pedestrian and bicycle safety. This may include additional blue-zone pick-up and drop-off area on Cherry Street

The following is the Franklin Elementary School program space summary. This describes the building program and identifies the space sizes for the proposed Franklin Elementary School.

ROOM TYPE	PROPOSED FRANKLIN			MSBA Guidelines		
	ROOM	# OF	area	ROOM NF ¹ A	# OF RMS	area totals
CORE ACADEMIC SPACES		18	18,000		18	17,100
(List classrooms of different sizes						
Pre-Kindergarten w/ toilet				1,125		-
Kindergarten w/ toilet	1,125	4	4,500	1,125	4	4,500
General Classrooms - Grade 1-5	900	14	12,600	900	14	12,600
ELL Program	150	2	300			
Kindergarten Project Area	100	1	100			
Classroom Project Area	100	5	500			
SPECIAL ED, RESOURCE & SUPPORT SP			7,205			4,530
(List rooms of different sizes						
Bridge Program Classroom	850	2	1,700	900	3	2,700
Bridge Quiet Room	100	2	200			
Bridge Specialist Office	100	4	400			
Bridge Breakout Room	125	0	0			
Self-Contained Spec Ed - toilet				60	3	180
Resource Room				500	2	1,000
Small Group Reading				500	1	500
Substantially Separate Classroom						
Special Education Teaching Space	360	3	1,080			
OT/PT	425	1	425			
OT/PT Office	150	1	150			
Quiet Room / Mindful Room (1/	100	2	200			
Speech + Language	250	1	250			
Literacy Specialist - Shared Teaching						
Team Specialist + IEP Conf Room (12	400	1	400			
Psychologist (Office, testing,	150	1	150			
Social Worker (Office, testing,	150	1	150			
SPED / Specialist Work Room						
Reading Program/ Literacy Room	900	1	900			
Literacy Specialist Offices	150	1	150			
Math Coach	150	1	150			
Student Support Spaces (small	125	6	750			
SEL Coach	150	1	150			
ART & MUSIC			2,575			2,575
Art Classroom - 25 seats	1000	1	1000	1,000	1	1,000
Art Workroom w/ Storage & kiln	150	1	150	150	1	150
Music Classroom / Large Group - 25-	1200	1	1200	1,200	1	1,200
Music Practice / Ensemble	150	1	150	75	3	225
Music Practice / Ensemble	75	1	75			
HEALTH & PHYSICAL EDUCATION			6,300			6,300
Gymnasium	6,000	1	6000	6,000	1	6,000
Gym Storeroom	175	1	175	150	1	150
Health Instructor's Office w/ Shower	125	1	125	150	1	150

ROOM TYPE	PROPOSED FRANKLIN			MSBA Guidelines		
	ROOM NF ¹ A	# OF RMS	area totals			
MEDIA CENTER			2,700			2,533
Media Center / Reading Room	2,700	1	2,700	2,553	1	2,553
DINING & FOOD SERVICE			6,170			6,360
Cafeteria / Dining	3,000	1	3000	3,105	1	3,105
Stage	950	1	950	1,000	1	1,000
Chair / Table / Equipment Storage	360	1	360	338	1	338
Kitchen	1,460	1	1460	1,714	1	1,714
Staff Lunch Room (1/3 of staff = 60	400	1	400	204	1	204
MEDICAL			510			510
Medical Suite Toilet	60	1	60	60	1	60
Nurses' Office / Waiting Room	250	1	250	250	1	250
Examination Room / Resting	100	2	200	100	2	200
ADMINISTRATION & GUIDANCE			2180			2,279
General Office / Waiting Room /	675	1	675	357	1	357
Teachers' Mail and Time Room	Included in General Office			100	1	100
Duplicating Room	Included in General Office			150	1	150
Records Room	80	1	80	110	1	110
Principal's Office w/ Conference	300	1	300	375	1	375
Principal's Secretary / Waiting	Included in General Office			125	1	125
Assistant Principal's Office	125	1	125	120	0	0
Extended Day (Afterschool) Program	250	1	250	120	1	120
Conference Room	200	1	200	250	1	250
Guidance Office				150	2	300
Guidance Storage				35	1	35
Teachers' Work Room	200	2	400	357	1	357
Lactation Room	100	1	100			
CUSTODIAL & MAINTENANCE			1625			2,014
Custodian's Office	100	1	100	150	1	150
Custodian's Workshop	200	0	0	375	1	375
Custodian's Storage	375	1	375	375	1	375
Recycling Room / Trash	700	1	700	400	1	400
Receiving and General Supply	Included Above			255	1	238
Storeroom	200	1	200	310	1	276
Network / Telecom Room	250	1	250	200	1	200
OTHER			0			0
Total Building Net Floor Area (NFA)			47,265			44,201
Proposed Student Capacity / Design			396-414			
			70,898			66,302
Grossing factor (GFA/NFA)			1.50			1.50