

## BOXBOROUGH FIRE STATION - SITE SELECTION MATRIX - ROUND 2

Date: 3/20/24

Vertex and Context Scoring

				502 Mass Ave			72 Stow Road		
				New Bldg	Weighted Score	Notes	New Bldg	Weighted Score	Notes
EVALUATION CRITERIA				Definitions			Weight %		
Evaluation Round 2				Score 1-5			Score 1-5		
1	Well Water	Available.	5	5	25	Well water already onsite from Hager Well	3	15	Assumed existing wells for existing structure but inadequate for FS. New wells needed. See Exhibit 1 - preliminary plan from HKT study.
2	Percolation Test for septic	Adequate percolation for new septic system.	10	4	40	See Exhibit 2 - Samiotes email dated 3/18/25 and Test Pit report dated 1/10/25 page 1 - High water table. Perc test performed on 3/14 by Samiotes and BOH. Perc test acceptable.	5	50	See Exhibit 2 - Samiotes email dated 3/18/25 and Test Pit report dated 1/10/25 page 2. Perc test performed on 3/14 by Samiotes and BOH. Perc test acceptable.
3	Geotech Survey - Borings	Condition of existing soil and capacity to support new structure.	7	5	35	See Exhibit 3 - McPhail Geotechnical Memo report on 502 Mas Ave, page 4 for positive soil results to bear foundations. More "robust" groundwater control required during construction per page 6	5	35	See Exhibit 3 - McPhail Geotechnical Memo report on 72 Stow, page 4 for positive soil results to bear foundations.
4	Response Time	Relationship between the location of the proposed site and the ability to dispatch from the facility to all parts of Town. Based of traffic study results.	10	5	50	Existing station proven response time. Chappell Engineering Associates - Traffic Impact and Access Study - See Exhibit 4 page 10 and 11 of 502 report.	4	40	0.9 minutes longer to properties east of 72. Chappell Engineering Associates - Traffic Impact and Access Study - See Exhibit 4 page 10 and 11 of 72 report.
5	Supports FD program	Delivers the type, quantity, size, layout of spaces as well as the site features, required by the program.	10	3	30	Due to restrictions on buildable footprint the App Bay is 7' lower than 1st floor Admin level and there are less parking spaces for FD (shared parking with PD). See Exhibit 5 for Context conceptual floor and site plans Exhibit 5	5	50	Admin/public areas all on 1st floor. See Context conceptual floor plans Exhibit 5
6	Abutter Impact - FS Operations	Project impacts direct abutters and/or neighborhood permanently due to fire station 24/7 operations. Mitigation measures included in design.	9	4	36	Impacts future expansion of Police Department. See Exhibit 6	4	36	Noise and lights per neighboring residents. See Exhibit 6. Mitigation to be included in design. Also prevents high density multi-story affordable multi-family housing being built.
7	Conceptual Estimated Total Cost	Overall project cost (including hard costs, soft costs, contingencies).	10	1	10	See Exhibit 7. Total estimated cost at Conceptual Phase is \$39.7M. Construction duration 24.5 months due to construction of temp facilities.	5	50	See Exhibit 7. Total estimated cost at Conceptual Phase is \$33.6M. Construction duration 19 months.
8	Wetlands/Survey	Confirmed location of wetlands or bodies of water; and impacts to building location on site.	8	2	16	Wetlands encroach onto site. 1/22 ConCom meeting established delineation per Samiotes ANRAD plan. See Exhibit #8 for plan and Places letter	5	40	Small Area of wetlands buffer in NW corner of parcel. Apron exit drive designed to avoid if required. See Exhibit 8 for plan
9	Traffic Study/Vehicle Access/Sight Lines/Safety	Impact on the operation of the facility by any known traffic issues from adjacent streets and neighborhood; ability of vehicles to enter or leave the site; ease of maneuverability within the site. Consultant study.	8	5	40	Chappell Engineering Associates - Traffic Impact and Access Study - See Exhibit 9 page 18 and 19 of the 502 report for positive results.	5	40	Chappell Engineering Associates - Traffic Impact and Access Study - See Exhibit 9 page 18 and 19 of the 72 report for positive results. Trees and stone wall (Scenic) to be addressed.
10	Sustainability	Based on criteria from third party organizations. Site related only.	8	2	16	See Exhibit 10 comparison spreadsheet based on USGBC and LEED definitions which shows less sustainable items than 72.	4	32	See Exhibit 10 comparison spreadsheet based on USGBC and LEED definitions which shows more sustainable items than 502.
11	Special Site Conditions	Site costs above and beyond basic foundation prep; parking lots and exterior improvements (e.g., additional clearing; grading; ledge; archaeology; added site scope (e.g., paving, sidewalks); off-site work (e.g., signals)).	5	3	15	See Exhibit 11 spreadsheet - high groundwater, excess dewatering, MassDOT requirements unknown	4	20	See Exhibit 11 spreadsheet - scenic stone wall

12	<b>Zoning</b>	Existing or potential conflicts with community zoning regulations. Setbacks.	5	3	15	Need to merge FD and PD properties. Current zoning language needs to be changed at Town Meeting. No municipal building can be built anywhere in Boxborough. Town Counsel input.	1	5	Current zoning language needs to be changed at Town Meeting. No municipal building can be built anywhere in Boxborough. Town Counsel input. In addition the current Ag/Res zoning does not exclude governmental use.
13	<b>Abutter Impact - Construction</b>	Project impacts direct abutters and/or neighborhood during construction.	5	3	15	Impact to PD and possibly school during construction. See Exhibit 13 spreadsheet.	3	15	Impact to Stow Road residents during construction. See Exhibit 13 spreadsheet.
14	<b>Communications</b>	Relationship to existing communications systems including site elevation and potential need to build communications tower.	2	5	10	Radio communication existing	4	8	Onsite radio field test performed by BFD. Clear signal.
			102	50	353		57	436	

1	Lowest Score/Worst
2	
3	
4	
5	Highest Score/Best