Carver Elementary School



Carver School Building Committee Meeting March 10th, 2015





Detailed Schedule

Activity I)	Activity Name	Original S	Start	Finish $_{_{ abla}}$	٨	F M A	М	J	J	A S	0	N	D J
			Duration		,		001200122011	1 2 0 1 1 2	3 0 1 2 2	0 1 1 2 0 0	1 2 3 0 1 2	2 0 1 1 2	0 0 1 2 2	0 1 2 2 0 1 1
	PDP Repor			22-Jan-15 A			- [
		Compile PDP Report		22-Jan-15 A			Compile PDP Report Local Actions and App	royal Cartifics	ation for DE	ם				
		Local Actions and Approval Certification for PDP	0		06-Feb-15 A		<u> </u>	1 1	ation for FL	<i>/</i> F				
		Submit PDP Report to MSBA		06-Feb-15 A			Submit PDP Report to							
		MSBA Review Period		1-Feb-15 A			MSBA Revie	ew Period						
Н.		chematic Report		20-Jan-15 A										
	PSR Subm			20-Jan-15 A										
		Town Approval of Funding for SD		20-Jan-15 A			own Approv <mark>al of</mark> Funding f							
		Meeting with MSBA		8-Feb-15 A			He <mark>eting</mark> with MSB.	1 1						
		Preliminary Development of 3 Options		3-Feb-15 A			Pr <mark>elimin</mark> ary Devel							
		Update Existing Conditions Evaluation		06-Feb-15 A			Up <mark>date</mark> Existing (
		SBC Preliminary Options Feedback		24-Feb-15 A			SBC Preliminary (
		Green Design Charrette Meeting		06-Mar-15 A			Green Design							
		Further Development of 3 Options			09-Mar-15 A		Further Deve	•						
		SBC Approval of High Performance Objectives			10-Mar-15			al of High Per		Objectives				
		SBC Selection of Preferred Option			10-Mar-15			on of Preferre	d Option					
		Update Design Program		06-Feb-15 A				sign Program						
		Development of Preferred Option			24-Mar-15			oment of Prefe		n				
		Conceptual Building/Site Plans		25-Feb-15 A				tual Building/S			I			
		Preliminary Building Massing Studies			31-Mar-15			ninary Building	-					
		Cost Estimate/Budget/Schedule			31-Mar-15		Cost		-					
		SBC Approve Preferred Option		1-Apr-15	01-Apr-15			Approve Pref	• 1	1				
		SBC Approve Cost & Schedule		1-Apr-15	01-Apr-15			Approve Cos						
		Development of Preferred Schematic Report (PSR))2-Apr-15	17-Apr-15					ed Schematic				
		Local Actions and Approval Certification for PSR		20-Apr-15	20-Apr-15					roval Certifica	tion for PSR			
		Compile & Submit PSR		21-Apr-15	21-Apr-15		<u> </u>	Compile & \$						
		Facilities Assessment Subcommittee (4/29 or 5/13)		9-Apr-15*	29-Apr-15			Facilities	_	1	tee (4/29 or 5/	13)		
	A1720	MSBA Review Period		22-Apr-15	09-Jun-15					Review Perio	_			
	_	MSBA Approval to Proceed to Schematic (6/3/15 Board Target)		0-Jun-15	10-Jun-15*			<u>-</u>	MSBA	Approval to F	Proceed to Sch	ematic (6/3	1/15 Board	Target)
=	Schematic D	Design (MSBA Module 4)	129 1	1-Jun-15	08-Dec-15							 		
	A1750	Schematic Design	80 1	1-Jun-15	30-Sep-15			L,					tic Design	
	A1760	Submit SD for 11/18 MSBA Board Meeting	3 0	1-Oct-15	05-Oct-15						F-			/18 MSBA Board
	A1766	Facilities Assessment Subcommittee (10/14 or 10/28)	1 1	5-Oct-15*	15-Oct-15									essment Subcon
	A1765	MSBA Review Period	35 0	6-Oct-15	23-Nov-15						ـا	-		ISBA Review Pe
	A1770	MSBA Approval of Schematic & Project Scope Budget Agreement	1 2	24-Nov-15*	24-Nov-15								<u>_</u>	MSBA Approval
	A1780	Town Vote	10 2	25-Nov-15	08-Dec-15								Ę_	Town Vote

Review of Site Options



Option 1 - A/R ES Site



Option 2 - N.C. ES Site



Option 3 – N.C. HS Fields Site



Option 4 – N.C. Woods HS Site

Design Objectives

- Fulfill Educational Program
- Minimize Construction Costs
- Achieve Optimal Solar and Wind Orientation
- Provide Separation of Public/Academic Areas
- Mitigate Perceived Building Size
- Maximize Athletic Fields
- Final Building Shape Should Look Intentional

Preliminary Building/Site Option A – Add/Reno



Preliminary Building/Site Option A – Add/Reno



Preliminary Building/Site Option C1 – N.C.



Preliminary Building/Site Option C1 – N.C.



Preliminary Building/Site Option C2 – N.C.



Preliminary Building/Site Option C2 – N.C.



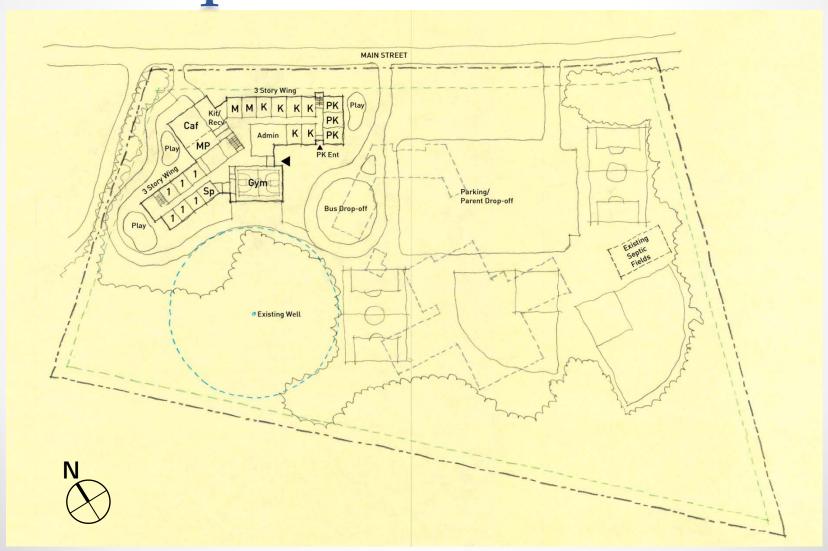
Preliminary Building/Site Option E1 – N.C.



Preliminary Building/Site Option E1 – N.C.



Preliminary Building/Site Option E2 – N.C.



Public Comments on Options

Preliminary Site/Build Options Cost Variables

** DRAFT/PRELIMINARY - ESTIMATED "CONSTRUCTION COSTS" AND "	SOFT COSTS" - D	RAFT/PRELIMINA	ARY			3/10/201
Carver Elementary School Project						
· · · · · · · · · · · · · · · · · · ·	Option 1	Option 2	Option 2A	Option 2B	Option 3	Option 4
ROUGH ORDER MAGNITUDE ESTIMATE OF CONCEPTS (HMFH/PM&C - BASED ON SQFT COSTING)	Add/Reno Existing ES Site Option	New Construction Existing ES Site Option - West Side	New Construction Existing ES Site Option - East Side	New Construction Existing ES Site Option - West Side	New Construction HS Field Site Option	New Construction HS Woods Option
		(Baseline - Lowest Cost)				
New Elementary School (PreK-5)		\$29,349,000	\$29,349,000	\$29,349,000	\$29,349,000	\$29,349,000
New Elementary School Addition	\$21,870,000	-	-	-	-	-
Clear Site and Replicate MHS Fields/Courts or Tree Clearing	-	-	-	-	\$400,000	\$200,000
Construct New Title V System/Remove Old System	=	-	\$200,000	-	-	=
Install New PWS Well at South East Corner	-	-	-	\$110,000	-	-
Remove Hazardous Materials Carver	\$207,684	\$207,684	\$207,684	\$207,684	-	-
Remove Hazardous Materials Washburn	\$386,352	\$386,352			-	-
Overexcavate 6ft unsuitables and add Structural fill	-	-	-	-	\$622,222	\$0
New Wastewater Treatment Plant (ES @ MS/HS Only Premium Cost over New Title V Septic)	-	-	-	-	\$1,500,000	\$1,500,000
Demolish Carver Building (34,614 sqft)	-	\$276,912	\$276,912	\$276,912	- ' '	-
Demolish Washburn Building (64,392 sqft)	\$515,136	\$515,136			-	-
Gut Reno to Carver Building (34,614 sqft) ((34% RENO OF EXISTING = +1.75PTS))	\$8,653,500	-	-	-	-	-
Sitework (18% of Building Cost)	\$5,494,230	\$5,282,820	\$5,282,820	\$5,282,820	-	_
Sitwork (20% of Building Cost)	-	-	-	-	\$5,869,800	\$5,869,800
Sub-Total	\$37,126,902	\$36,017,904	\$36,217,904	\$36,127,904	\$37,741,022	\$36,918,800
GMP Contingency (2%) (*7% on RENO/ADD) (Assumes CM@ Risk/Chapt. 149A Delivery)	\$2,598,883	\$720,358			\$754,820	\$746,820
Escalation (Construction Start 11/16) (5.5%) - (*7% on RENO/ADD Due to Schedule)	\$2,598,884				\$2,075,756	\$2,053,756
Sub-Total Incl. Contin/Escal	\$42,324,669	. , ,			\$40,571,598	\$39,719,376
General Conditions (6%)	\$2,227,614	\$2,161,074	\$2,161,074	\$2,161,074	\$2,264,461	\$2,240,461
General Requirements (2%)	\$742,538	\$720,358	\$720,358	\$720,358	\$754,820	\$746,820
Sub-Total Sub-Total	\$45,294,821	\$41,600,679	\$41,800,679	\$41,710,679	\$43,590,879	\$42,706,657
Bonds (0.8%)	\$297,015	\$288,143	\$288,143	\$288,143	\$301,928	\$298,728
Insurance (1.2%)	\$445,523		\$432,215	\$432,215		\$448,092
Permit	-	-	-	-	-	-
Sub-Total Sub-Total	\$46,037,359	\$42,321,037	\$42,521,037	\$42,431,037	\$44,345,699	\$43,453,477
Overhead and Fee (2%)	\$872,482				\$886,914	\$877,514
Phasing Contingency (5%)	\$1,856,345		-	-	-	-
Total Construction Cost (HMFH/PM&C Estimate)	\$48,766,186	\$43,167,458	\$43,367,458	\$43,277,458	\$45,232,613	\$44,330,991
ESTIMATE MODIFIER - INCLUSION OF PRE-K SQUARE FOOTAGE						
Addition/Reno w/ Pre-K Add - 115,614 GSF >> 118,051 GSF = +2437 GSF = +2.11%	\$49,795,152					
New Construction w/ Pre-K Add - 108,700 GSF >> 112,350 GSF = +3560 GSF = +3.36%		\$44,617,885	\$44,824,605	\$44,731,581	\$46,752,429	\$45,820,512
200/100 doi / 122/000 doi - 10000 doi - 10		ψ. 1,017,003	ψ 1 1,02 1 ,000	ψ : ,,, σ <u>1,</u> σσ1	ψ 10j, 32j=23	ψ 10,020,012
CONSTRUCTION COST PREMIUM OVER "BASELINE"	<u>11.60%</u>	BASELINE	0.46%	0.25%	4.78%	2.70%

** DRAFT/PRELIMINARY - ESTIMATED "CONSTRUCTION COSTS" AND "SOFT COSTS" - DRAFT/PRELIMINARY													
Carver Elementary School Project													
	Option 1	Option 2	Option 2A	Option 2B	Option 3	Option 4							
ROUGH ORDER MAGNITUDE ESTIMATE OF CONCEPTS (HMFH/PM&C - BASED ON SQFT COSTING)	Add/Reno Existing ES Site Option	New Construction Existing ES Site Option - West Side	New Construction Existing ES Site Option - East Side	New Construction Existing ES Site Option - West Side	New Construction HS Field Site Option	New Construction HS Woods Option							
		(Baseline - Lowest Cost)											
PROJECT SOFT COSTS (ROUGH ORDER MAGNITUDE PROJECT BY PMA)	\$10,301,200	\$9,446,951	\$9,481,060	\$9,465,711	\$9,799,151	\$9,645,385							
Design & Engineering & Supplemental Costs (Est. 11%)	\$5,477,467	\$4,907,967	\$4,930,707	\$4,920,474	\$5,142,767	\$5,040,256							
OPM Costs (Est 3.5%)	\$1,742,830	\$1,561,626	\$1,568,861	\$1,565,605	\$1,636,335	\$1,603,718							
Owner Subconsultants & Testing Costs (Est 2%)	\$995,903	\$892,358	\$896,492	\$894,632	\$935,049	\$916,410							
Utilities Allowance (Est)	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000							
Movers Allowance (Est)	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000							
FF&E Design, Specification & Punchlist	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000							
FF&E (MSBA Allowance @ \$1200/Student X 750)	\$900,000	\$900,000	\$900,000	\$900,000	\$900,000	\$900,000							
Technology/AV (MSBA Allowance @ \$1200/Student X 750)	\$900,000	\$900,000	\$900,000	\$900,000	\$900,000	\$900,000							
LEED/MACHPS Fee Allowance (Est)	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000							
Total Project Cost	\$60,096,352	\$54,064,836	\$54,305,664	\$54,197,291	\$56,551,580	\$55,465,897							
Owner Construction Contingency (Est. 7%)	\$3,485,661	\$3,123,252	\$3,137,722	\$3,131,211	\$3,272,670	\$3,207,436							
Owner Soft Cost Contingency (Est. 3.5%)	\$360,542	\$330,643	\$331,837	\$331,300	\$342,970	\$337,588							
Total Project Budget	\$63,942,555	\$57,518,731	\$57,775,224	\$57,659,802	\$60,167,220	\$59,010,921							
Total Project Budget Cost Premium to Baseline			0.45%	0.24%	4.60%	2.59%							
ROUGH ORDER MAGNITUDE													
POTENTIAL <u>ELIGIBLE</u> COSTS (PRORATED FOR INELIGIBLE SITE & OTHER COSTS)	\$55,309,639	\$49,325,609	\$49,361,817	\$49,345,523	\$48,955,249	\$47,906,869							
POTENTIAL REIMBURSEMENT FROM MSBA @ Base Rate of 56.26% of ELIGIBLE COSTS (58% on Reno)	\$32,079,591	\$27,750,588	\$27,770,958	\$27,761,791	\$27,542,223	\$26,952,404							
POTENTIAL TOWN SHARE OF TOTAL PROJECT BUDGET	\$31,862,964	\$29,768,143	\$30,004,265	\$29,898,010	\$32,624,997	\$32,058,517							

MSBA - KEY DATES

- 2/24/15 SBC Meeting
- 3/10/15 SBC Meeting SBC Selection of Preferred Schematic Option
- 3/25/15 SBC Approve Preferred Option
- 4/1/15 Preferred Option Estimate to MSBA
- 4/13/15 SBC Approve Preferred Schematic Report for Submission to MSBA
- 4/29/15 or 5/13/15 Facilities Assessment Subcommittee
- 6/3/15 MSBA Board Approval to Proceed into Schematic Design
- 9/28/15 Schematic Design Submittal to MSBA
- 11/18/15 MSBA Board Approval of Schematic Design
- 12/2/15 Carver Town Meeting/Vote on Project Funding

Workplan Update

Carver Elementary School FS Phase Work Plan: 4/16 Submission					2015																					
HMFH Architects 2/23/15			Dec	Ja	n	Feb					Marc	h			Ar	ril	May Ju						Jun	e		
	Complete	Duration																							\Box	\neg
BC Meetings				(•		•	- 1		•	•										
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reliminary Design Program (PDP)	2/5/15	5 weeks										\neg	\neg	\neg	+	\top	+	\neg	_	\neg	\neg	\neg	\neg	1	\vdash	\neg
Educational Program													\neg		┰		\top	\neg	7		\neg			1		
Review/Revise Existing Ed Program													\neg		1		\top	\top		\neg	\neg					\neg
Meetings with Staff and Teachers (as needed)																	\top	\top		\neg	\neg					\neg
Finalize Ed Program							i	\top					\neg		Ť		\top	\top	T		\neg			i		\neg
Revise Space Summary													\neg		1	\top	\top	\top	1	\top	\neg					\neg
SBC Approve Ed Program & Space Summary					*								\neg		1	\top	\top	\top	7	\top	\neg			1		\neg
Evaluation of Existing Conditions					-		1	\top					\neg	\neg	1		\top	\neg	1	\neg	\neg	\neg				\neg
Site Development Requirements Review													\neg				†	\top			\neg		\neg			\neg
Meeting w/ Town Departments	1/21/15					*		\top	\top				\neg	\top			$^{+}$	\top	1	\top	\neg	\neg	\top	T	\Box	\neg
Preliminary Evaluation of Alternatives								\top	\top			\neg	\neg	\neg	1	\top	\top	\top	T	\top	\neg	\neg	\neg	1	\vdash	\neg
Review/Update Potential Alternatives													\rightarrow		1		+	\top	_	\neg	\neg	\neg	-		\Box	\pm
Identify Preliminary Sites Locations				\pm				\top	-				\neg	$\overline{}$	\top	+	+	$^{+}$	1	$^{+}$	\rightarrow	$\overline{}$	$^{-}$	1		\neg
SBC Approve Site Selections & Alternatives						+		+	+	\Box		\neg	\neg	\neg	┰	+	+	$^{+}$	_	$^{+}$	\neg	\neg	\neg	\neg	+	\neg
Analysis of Sites for Feasibility								\top					\neg	-	1	+	+	$^{+}$	_	\top	\neg	\neg	\top			-
Preliminary Plan and Site Diagrams								\pm	+				\rightarrow	\pm	÷	+	$^{+}$	\pm	Ť	\pm	\rightarrow	\rightarrow	\pm	t	\vdash	\pm
SBC Approve Planning Diagrams			\vdash	-	_		★	+	+	\vdash		_	\rightarrow	+	+	+	+	+	\dashv	+	\rightarrow	\rightarrow	$^+$	+	+	\rightarrow
Cost Evaluation of Alternatives				$\overline{}$	+		Δ.	_	+			\rightarrow	\rightarrow	\rightarrow	_	+	+	+	_	$^{+}$	\dashv	\rightarrow	+	+	+	\rightarrow
Compile PDP Report				\pm	+				_			_	\rightarrow	+	+	+	+	+	+	+	\rightarrow	\rightarrow	+	+	+	\rightarrow
SBC Approve Cost & PDP Submission			\vdash	+	+			-	+			_	\rightarrow	+	+	+	+	+	+	+	\rightarrow	\rightarrow	+	+	+	\pm
MSBA Review Period				\pm	_	\Box		1				\rightarrow	\pm	\rightarrow	t	+	+	\pm	+	\pm	\pm		\pm	1	\Box	\pm
referred Schematic Report	4/16/15	10 weeks		\mp		\vdash		Ŧ									+	7	Ť	7	\exists	7	\mp	1		7
Meeting with MSBA		10 WEEKS	\vdash	+	+	\vdash	-						_	_	-		-	+	-	+	\rightarrow	\rightarrow	+	+	+	\rightarrow
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Update Existing Conditions Evaluation				_	+			_	+			-	\rightarrow		+	-	+	+	-	-	\rightarrow	_	_	-	+	+
Preliminary Development of Options			\vdash	+	+	\vdash	-	-	_			-	\rightarrow	+	+	+	+	+	-	+	+	_	+	+	+	+
SBC Preliminary Options Feedback				-	+	\vdash	-	_		_	-	-	\rightarrow	-	-	+	+	+	-	+	\rightarrow	\rightarrow	+	+	+	\rightarrow
Further development of options			\vdash	+	+	\vdash	-	+	+	X		\rightarrow	\rightarrow	_	+	+	+	+	+	+	+	\rightarrow	+	+	+	+
Team Respond to MSBA PDP Review Comments			\vdash	-	+	\vdash	-	+	+				\rightarrow	_	┿	+	+	+	-	+	\rightarrow	-	+	┿	+	+
Meeting w/ DEP re Wells	the		\vdash	+	+	\vdash	-	+	+				\rightarrow	+	+	+	+	+	-	+	+	\rightarrow	+	+	+	+
Additional Wells Investigations (as needed)	tod			-	+	\vdash	-	+	+					-	+	+	+	+	+	+	+	\rightarrow	+	+	+	+
Green Charrette	2/6/15			_	+	\vdash		+	+	\vdash		_	-	_	\rightarrow	+	+	+	-	+	\rightarrow	\rightarrow	-	+	+	\rightarrow
	3/6/13			_	+	\vdash	-	+	+	-		4	\rightarrow	_	-	+	+	+	-	+	\rightarrow	-	+	┿	+	\rightarrow
SBC Further Options Feedback SBC Approval of High Performance Objectives				+	+	\vdash		+	+			X	\rightarrow	_	+	+	+	+	+	+	\rightarrow	\rightarrow	+	+	+	\rightarrow
Development of Preferred Option			\vdash	_	+	\vdash	-	+	+	H		X	_	-	+	+	+	+	-	+	+	-	+	+	+	\rightarrow
Conceptual Site Plans				-	-		-	+	_					-	-	+	+	+	-	+	\rightarrow	-	+	+	\vdash	\rightarrow
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Preliminary Building Massing Studies			\vdash	-	+	\vdash	-	+	+	-	\vdash	_		A	-	+	+	+	┿	+	\rightarrow	\rightarrow	+	+	+	\rightarrow
SBC Finalize Selection of Preferred Option				+	_	\vdash		+	+			-		X	-	+	+	+	-	+	\rightarrow	\rightarrow	-	-	\vdash	\rightarrow
Cost Estimate/Budget/Schedule				-	+	\vdash		+	+-	-		-	-				+	+	-	+	\rightarrow	-	+	-	+	+
SBC Approve Costs & Schedule			\vdash	+	-	\vdash	-	+	+	\vdash	\vdash	-	+		_ 7	5	\perp	+	+	+	+	+	+	-	\vdash	+
Development of Preferred Schematic Report			\vdash	+	+	\vdash	-	+	_		\vdash	\rightarrow	+		-			+	-	+	+	+	+	+	\vdash	\rightarrow
SBC Approve PSR Submission	414010		\vdash	+	-	\vdash	-	+	+	\vdash	\rightarrow	\rightarrow	+	+	+	7	5	+	4	+	+	+	+	+	\vdash	+
Submit PSR to MSBA	4/16/15		\vdash	-	-	\square	-	+	_	\vdash	\vdash	-	+	-	4			+	-	+	+	+	+	-	+	+
Town Approval of Funding for SD				\perp	+		-	+	_		-	\rightarrow	+	-	+	7	T								+	\rightarrow
MSBA Review Period				\perp	4			\perp	_					\perp	1	_										_
ASBA Approval to Proceed to Schematics	6/3/15	7 weeks						T									T							*	-	

SBC Vote on Preferred Option

- To be Recommended to Board of Selectmen
- New Construction vs. Add/Reno
- 2 Stories vs. 3 Stories
- East Side of ES Site vs. West Side of ES Site

Discussion / Questions?

Carver School Building Committee Meeting March 10th, 2015



