

Fire Station Building Committee

Financing/Budget Review - Webinar - 18 February 2021 – 7:00pm



Project Budgets



SOFT COSTS

Any costs that are not direct construction costs, e.g. architectural and design fees, project management, accounting fees, taxes, legal fees, loan interests, etc.



HARD COSTS

This includes the physical actions and materials needed to raise the building. Grading, landscaping, concrete materials, plumbing and labor are examples of hard costs. If it is a permanent, physical fixture of the project, it falls under hard costs.



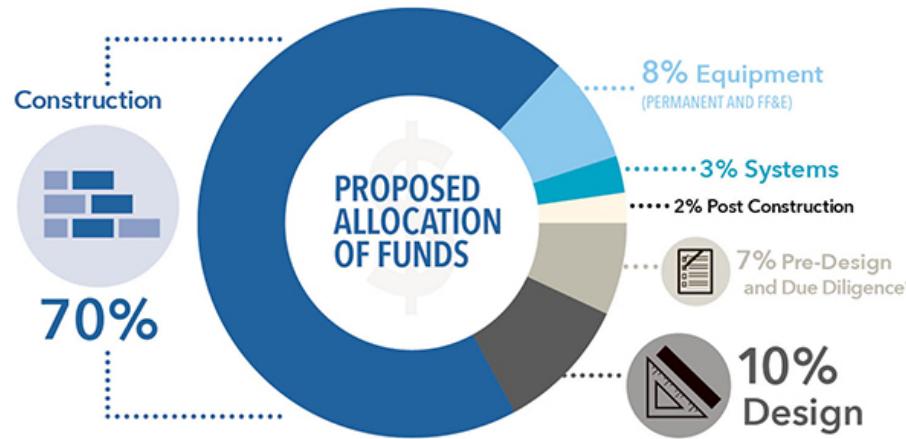
OTHER COSTS

Not all costs affiliated with a construction project fall neatly into these categories, and will often be their own line item. Real estate is the biggest one here - the cost of the land itself is a separate line item.



Project Budgets

Project Budgets



Contingencies

Milestone	Historical Ranges	
	<i>Design</i>	<i>Construction</i>
Conceptual-Feasibility	10% to 15%	7% to 10%
Schematic Design	7% to 10%	5% to 7%
Design Development	3% to 5%	3% to 5%
Construction Documents	0%	2% to 3%

Budget - Construction

A.M. Fogarty & Assoc., Inc.
"Construction Cost Consultants"

175 Derby St., Suite 5, Hingham, MA 02043
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Milton Fire Headquarters
Milton, MA

December 16, 2019

GRAND SUMMARY

NEW BUILDING AND SITEWORK	\$8,598,805
HAZARDOUS MATERIALS ABATEMENT W/RENOVATION ALTERNATE	
 TOTAL DIRECT COST	 \$8,598,805
GENERAL CONDITIONS	6%
GENERAL ADMINISTRATIVE O&P	5%
P&P BOND AND INSURANCE	1.85%
PERMIT	WAIVED
DESIGN CONTINGENCY	7.5%
ESCALATION (spring 2021)	6.0%
 TOTAL CONSTRUCTION COST	 \$11,107,303
COST PER SF	\$557.54
 ALTERNATES:	
ALTERNATE NO. 1 - RENOVATION OF EXISTING 1ST FLOOR HEADQUARTERS BUILDING	\$1,008,338
ALTERNATE NO. 2 - DEDUCT CUT AND POINT	(\$113,787)
 EXCLUDES :	
1. FFRE	
2. IT & AV EQUIPMENT INSTALLATION. AV CABLING	
3. PUBLIC SAFETY ALERTING/COMMUNICATION SYSTEM	
4. COMMUNICATION EQUIPMENT & INSTALLATION	
5. CATV EQUIPMENT & INSTALLATION	

EXISTING BUILDING

PROJECT: Milton Atherton Fire Station	NO. OF SQ. FT.: 6,836		
LOCATION: Milton, MA	COST PER SQ. FT.: 259.63		
CLIENT: Context Architecture			
DATE: 16-Dec-19			
*Scaled GSF A2.0 includes exterior wall			
No. 19093			
HISTORIC FIRE STATION RENOVATION			
 SUMMARY			
DIVISION	PERCENT	COST	
TOTAL	OF PROJECT	PER SF	
 DIVISION 02 - EXISTING CONDITIONS			
022820 HAZARDOUS MATERIAL REMEDIATION	94,750	5%	13.86
024116 DEMOLITION	48,990	3%	7.17
 DIVISION 03 - CONCRETE			
033000 CAST IN PLACE CONCRETE	12,184	1%	1.78
 DIVISION 04 - MASONRY			
042000 UNIT MASONRY*	74,860	4%	10.95
 DIVISION 05 - METALS			
051200 STRUCTURAL STEEL	4,200	0%	0.61
053000 METAL DECKING	0	0%	0.00
054100 EXTERIOR METAL FRAMING & SHEATHING	0	0%	0.00
055000 METAL FABRICATIONS	6,836	0%	1.00
 DIVISION 06 - WOOD, PLASTICS & COMPOSITES			
061000 ROUGH CARPENTRY	16,836	1%	2.46
062000 FINISH CARPENTRY	30,470	2%	4.46
 DIVISION 07 - THERMAL & MOISTURE PROTECTION			
071001 DAMPROOF, WATERPROOF, & SEALANT*	6,751	0%	0.99
070002 ROOFING & FLASHING*	81,900	5%	11.98
072100 THERMAL INSULATION	50,250	3%	7.35
072500 WEATHER BARRIER, VAPOR RETARDERS & AIR BA	9,276	1%	1.36
074000 EXT SIDING & TRIM	39,200	2%	5.73
077000 ROOF ACCESSORIES	0	0%	0.00
078400 FIRESTOPPING	1,000	0%	0.15
 DIVISION 08 - OPENINGS			
080008 GLASS AND GLAZING*	2,000	0%	0.29
081113 HOLLOW METAL DOORS AND FRAMES	4,750	0%	0.69
081416 FLUSH WOOD DOORS	3,500	0%	0.51
083100 ACCESS DOORS AND PANELS	900	0%	0.13
083613 SECTIONAL OVERHEAD DOORS	0	0%	0.00
084000 ALUM ENTRANCES & STOREFRONTS	0	0%	0.00
085414 WINDOWS	26,790	2%	3.92
085800 ALUM. INTERIOR SLIDING WINDOW	0	0%	0.00
087100 DOOR HARDWARE	16,100	1%	2.36
089000 ARCHITECTURAL LOUVERS & VENTS	0	0%	0.00

Milton Fire Headquarters - Alternates
12/16/2019

DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL
 ALTERNATE NO. 1 - RENOVATION OF EXISTING 1ST FLOOR HEADQUARTERS BUILDING				
 Phase 3 Concrete: Foundation wall infill -dr open	1	LOC	2,500.00	2,500
 Phase 3 Earthwork: 10' Partial basement fill	840	CY	55.00	46,200
Gut 1st flr office	688	GSF	8.00	5,504
Gut 1st flr APP RM	1,453	GSF	8.00	11,624
 Renovation 1st flr Training Rm (2,141 GSF):				
 Concrete: Cut & patch slab & plumbing	1	LS	5,000.00	5,000
Misc slab patching	2,141	GSF	1.00	2,141
 Masonry-Complete: Cut and Point Exterior	2,786	SF	30.00	83,580
West wall infill passage open(15'x10')	150	SF	150.00	22,500
Partial infill sgl dr @ new DH window open	1	LOC	2,500.00	2,500
Infill sgl dr / passage open	2	LOC	1,800.00	3,600
Cut in/repair new sgl dr open	1	LOC	2,200.00	2,200
Repair @ tower vest wall rem'l	1	LOC	2,500.00	2,500
Int masonry restoration & partitions		NIC		
 Misc metals	2,141	GSF	2.00	4,282
Int blocking	2,141	GSF	1.00	2,141
Int trim	2,141	GSF	1.00	2,141
 Casework: Lav counter (2 EA)	11	LF	265.00	2,915
Training rm kitchenette	11	LF	600.00	6,600
Training rm coat storage	8	LF	45.00	360
Misc Casework	2,141	GSF	1.00	2,141
 Int sealants	2,141	GSF	0.50	1,071
Ext sealants				
W/ UNIT COST				
Patch / flash roof @ MEP	1	LS	2,500.00	2,500
Reinstate ext wall 14' H	2,786	SF	7.50	20,895
Firestopping	2,141	GSF	0.75	1,606
 Interior Door, Frame, Glass, Glazing & HDW: Vestibule - sgl	2	EA	3,000.00	6,000

Prepared by: A. M. Fogarty & Associates, Inc.
MILTON FIRE HEADQUARTERS 12-1912/16/20194:21 PM

Prepared by: A. M. Fogarty & Associates, Inc.
MILTON ATHERTON FIRE STATION 12-1912/16/20194:22 PM

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Budget

MILTON FIRE STATION PROJECTS

PROJECT BUDGET - CONSTRUCTION PHASE



2/17/2021

	Headquarters	Atherton	East Milton	
1 Later Design thru Construction				
2 Administration		\$10,000		
3 Legal Fees/Advertising			\$5,000	
4 OPM Fees				\$5,000
5 Construction (HQ 24 mo, Atherton 14 mo, East 12 mo)		\$612,000		\$20,000
6 Closeout		incl		
7 Cost Estimates		incl		
8 Permits	waived		incl	
9 Builders Risk Insurance	\$16,500	\$8,000	incl	
10 Other Administrative Costs	\$2,000	\$2,000	waived	
11 Subtotal	\$640,500	\$372,000	\$318,000	\$1,330,500
12				
13 Architecture and Engineering				
14 Basic Services				
15 Construction (HQ 24 mo, Atherton 14 mo, East 12 mo)		\$528,000		\$210,000
16 Extra and Reimbursable Services				\$1,004,000
17 Geotechnical (CA services)	\$21,000	\$18,000	\$18,000	\$57,000
18 Subtotal	\$549,000	\$284,000	\$228,000	\$1,061,000
19				
20 Construction Costs				
21 New Construction (includes Hazardous Abatement)	\$12,000,000	\$6,000,000	\$3,800,000	\$21,800,000
22 Accepted Alternates	\$470,000	\$250,000	\$250,000	\$970,000
23 DD Design Contingency	\$582,000	\$445,000	\$285,000	\$1,312,000
24 Subtotal	\$13,052,000	\$6,695,000	\$4,335,000	\$24,082,000
25				
26 Miscellaneous Project Costs				
28 Printing & Mailing Costs	\$6,000	\$5,000	\$5,000	\$16,000
29 Moving Costs	\$20,000	\$20,000	\$20,000	\$60,000
30 Temporary Facilities Cost	\$0	\$400,000	\$0	\$400,000
31 Hazardous Material Removal Monitoring	\$25,000	\$20,000	\$0	\$45,000
32 Utility Backcharges	\$30,000	\$30,000	\$30,000	\$90,000
33 Signalization / Traffic Control	excluded	excluded	\$800,000	\$800,000
34 Construction Testing	\$40,000	\$35,000	\$30,000	\$105,000
35 Subtotal	\$121,000	\$510,000	\$885,000	\$1,516,000

	Furnishings and Equipment				
37					
38 Furnishings and Fixtures	\$185,000	\$41,000	\$28,000	\$254,000	
39 Equipment	\$91,500	\$61,000	\$41,000	\$193,500	
40 Fitness Equipment	\$36,000	\$36,000	\$36,000	\$108,000	
41 Computers, AV & Phone	\$30,000	\$7,500	\$7,500	\$45,000	
42 Security	\$95,000	\$50,000	\$50,000	\$195,000	
43 Communications Equipment	\$50,000	\$40,000	\$30,000	\$120,000	
44 Station Alerting System	\$40,000	\$32,000	\$23,000	\$95,000	
45 Vehicle Exhaust System	in construction	in construction	in construction	\$0	
46 Municipal Alerting System	tbd			\$0	
47 Subtotal	\$527,500	\$267,500	\$215,500	\$1,010,500	
48					
49 Subtotal	\$14,890,000	\$8,128,500	\$5,981,500	\$29,000,000	
50					
51 Contingency					
52 Owner's Project Contingency (6%)	\$783,000	\$402,000	\$260,000	\$1,445,000	
53					
54 Project Budget (Unescalated) - Construction Phase	\$15,673,000	\$8,530,500	\$6,241,500	\$30,445,000	
55 Construction Start Fall 2021					
56					
57 Escalation to Construction Start Spring 2022 (+3%)		\$16,150,000			
59 Escalation to Construction Start Summer 2024 (+6%)			\$9,100,000		
60 Escalation to Construction Start Fall 2025 (+12%)				\$7,000,000	
61 Project Budget (Escalated) - Construction Phase					\$32,250,000

Budget - Cash Flow



HQ
Groundbreaking

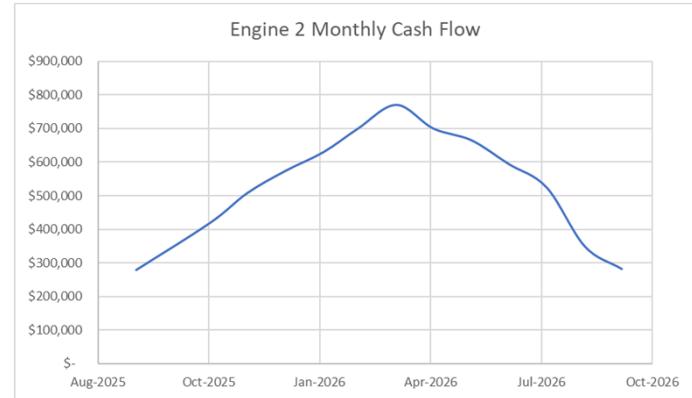
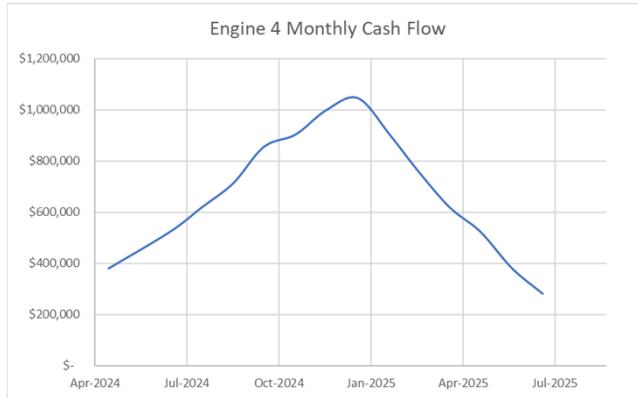
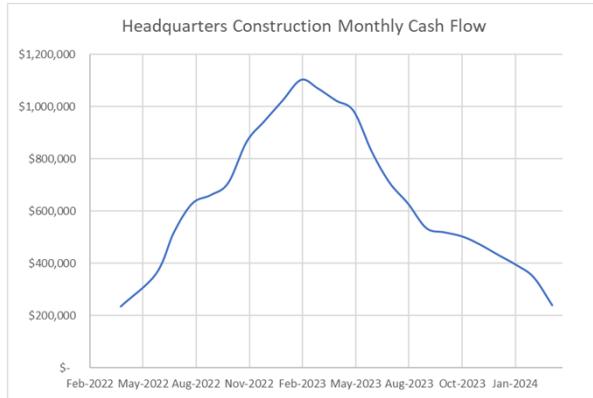
HQ
Opening

Atherton
Groundbreaking

Summer
2025

Fall
2025

Fall
2026



HQ				
Apr-2022	1.5%	\$ 236,000	FY22	\$ 1,118,000
May-2022	2.3%	\$ 362,000	FY23	\$ 10,554,000
Jun-2022	3.3%	\$ 520,000	FY24	\$ 4,078,000
Jul-2022	4.0%	\$ 630,000		\$ 15,750,000
Aug-2022	4.2%	\$ 662,000		100.0% \$ 15,750,000
Sep-2022	4.5%	\$ 709,000		
Oct-2022	5.5%	\$ 866,000		
Nov-2022	6.0%	\$ 945,000		
Dec-2022	6.5%	\$ 1,024,000		
Jan-2023	7.0%	\$ 1,103,000		
Feb-2023	6.8%	\$ 1,071,000		
Mar-2023	6.5%	\$ 1,024,000		
Apr-2023	6.3%	\$ 984,000		
May-2023	5.3%	\$ 827,000		
Jun-2023	4.5%	\$ 709,000		
Jul-2023	4.0%	\$ 630,000		
Aug-2023	3.4%	\$ 536,000		
Sep-2023	3.3%	\$ 520,000		
Oct-2023	3.2%	\$ 504,000		
Nov-2023	3.0%	\$ 473,000		
Dec-2023	2.8%	\$ 433,000		
Jan-2024	2.5%	\$ 394,000		
Feb-2024	2.2%	\$ 347,000		
Mar-2024	1.5%	\$ 241,000		

Atherton				
May-2024	4.0%	\$ 380,000	FY24	\$ 903,000
Jun-2024	5.5%	\$ 523,000	FY25	\$ 8,597,000
Jul-2024	6.5%	\$ 618,000		100.0% \$ 9,500,000
Aug-2024	7.5%	\$ 713,000		
Sep-2024	9.0%	\$ 855,000		
Oct-2024	9.5%	\$ 903,000		
Nov-2024	10.5%	\$ 998,000		
Dec-2024	11.0%	\$ 1,045,000		
Jan-2025	9.5%	\$ 903,000		
Feb-2025	8.0%	\$ 760,000		
Mar-2025	6.5%	\$ 618,000		
Apr-2025	5.5%	\$ 523,000		
May-2025	4.0%	\$ 380,000		
Jun-2025	3.0%	\$ 281,000		

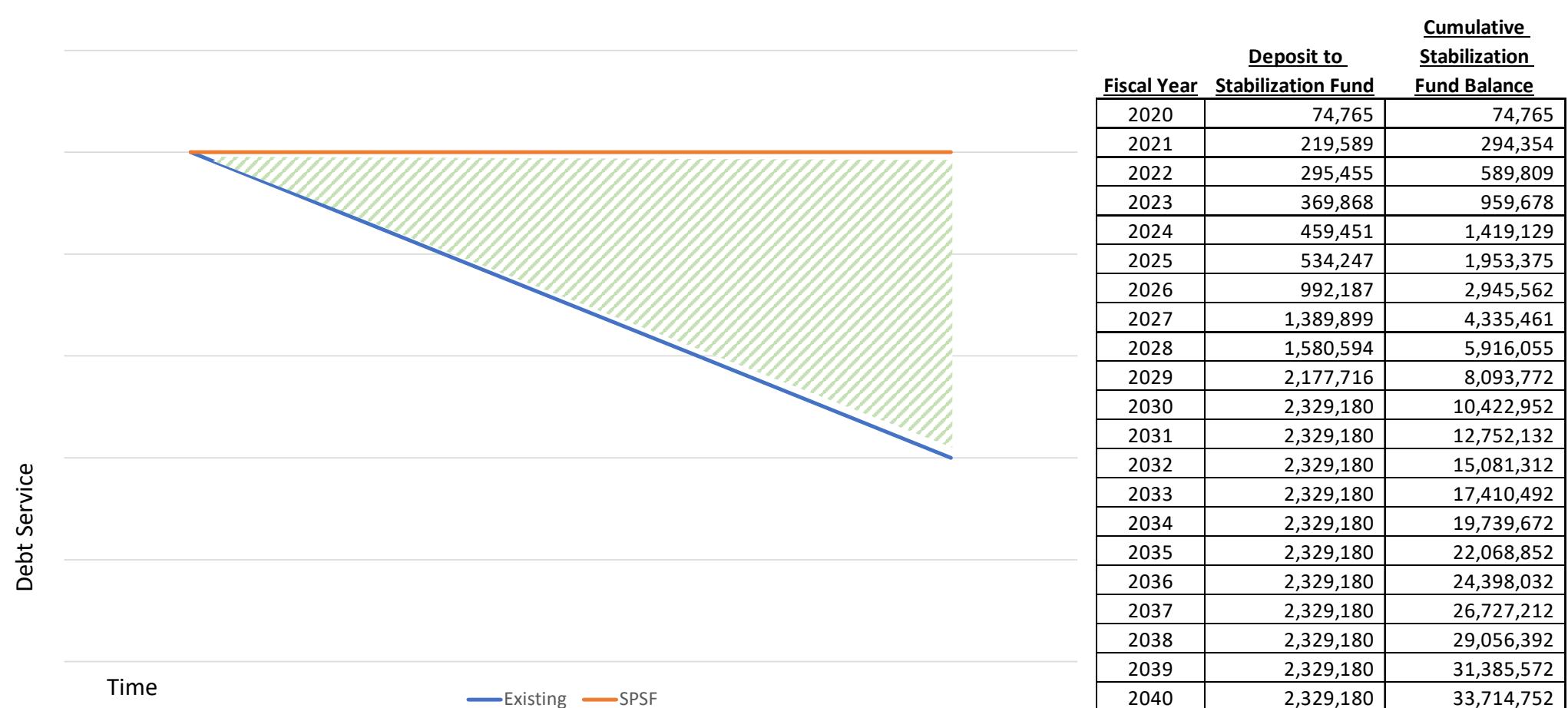
East Milton				
Sep-2025	4.0%	\$ 280,000	FY26	\$ 5,842,000
Oct-2025	6.0%	\$ 420,000	FY27	\$ 1,158,000
Nov-2025	7.3%	\$ 508,000		100.0% \$ 7,000,000
Dec-2025	8.2%	\$ 574,000		
Jan-2026	9.0%	\$ 630,000		
Feb-2026	10.0%	\$ 700,000		
Mar-2026	11.0%	\$ 770,000		
Apr-2026	10.0%	\$ 700,000		
May-2026	9.5%	\$ 665,000		
Jun-2026	8.5%	\$ 595,000		
Jul-2026	7.5%	\$ 525,000		
Aug-2026	5.0%	\$ 350,000		
Sep-2026	4.0%	\$ 283,000		

Budget - CPA Funding

HEADQUARTERS		
ITEM		COST
1. Masonry: cut and point exterior	\$83,580	
2. Masonry: west wall infill passage opening	\$22,500	
3. Masonry: partial infill single door @ new window opening	\$2,500	
4. Masonry: infill single door opening	\$3,600	
5. Masonry: repair at tower vestibule wall removal	\$2,500	
6. Roof: replace roof @ MEP	\$57,200	
7. Windows: window replacement	\$62,400	
8. Doors: overhead door replacement	\$27,000	
9. Doors: entry door replacement	\$5,000	
		Total
		\$266,280

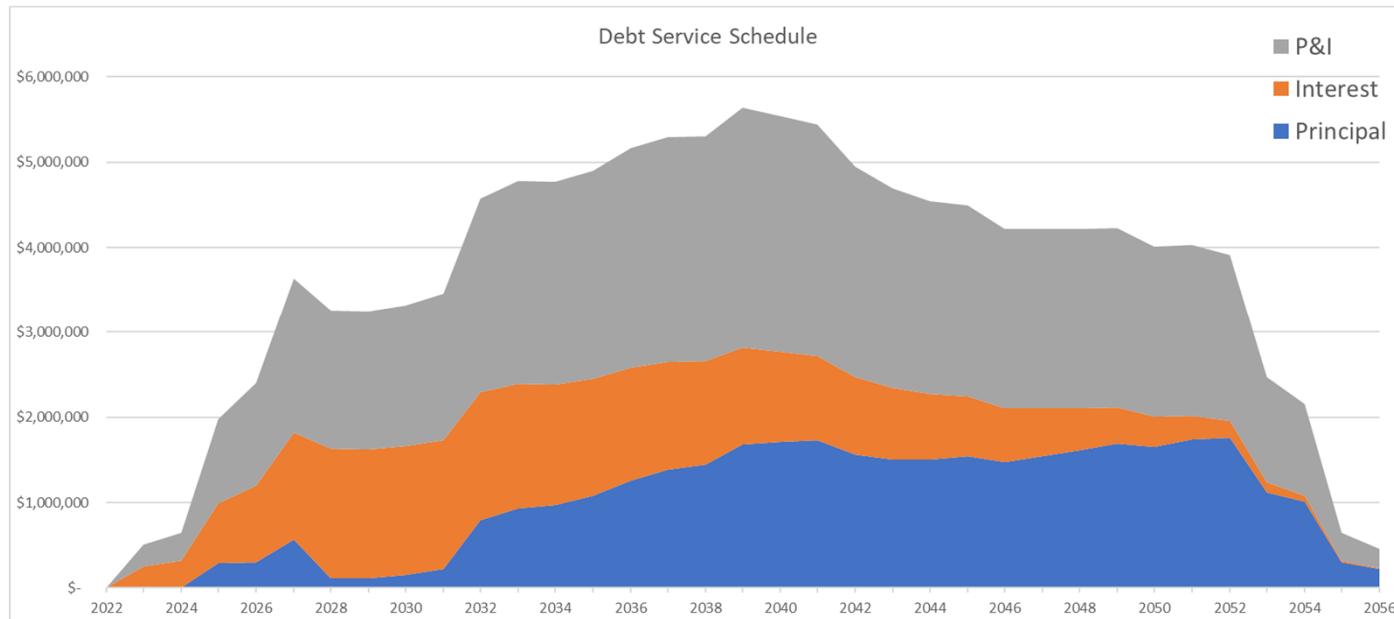
ATHERTON		
ITEM		COST
1. Concrete:patch existing slab	\$14,456	
2. Masonry: Chimney repair, repoint	\$26,500	
3. Masonry: Wall repair, repoint	\$47,340	
4. Metals: Steel lintel at door #111	\$1,750	
5. Metal Fabrications: Upgrade Stair Railing	\$15,000	
6. Rough Carpentry: Infill Floor Opening at Fire Pole	\$2,500	
7. Finish Carpentry: Refinish @Entry, Study, Stair	\$28,862	
8. Roofing & Flashing: New roof, cupola, gutter, downspout	\$99,537	
9. Thermal Insulation: attic insulation, exterior envelope	\$50,250	
10. Air/Resistive Water Barrier: exterior wall/new siding locals	\$10,104	
11. Exterior Siding & Trim: Red cedar shake & replacement of 1/3 running trim	\$37,880	
12. Firestopping: existing walls where required	\$1,000	
13. Repair Wood Doors: 2 doors	\$2,650	
14. Windows: Replace exterior Al. Clad window, 16 total	\$22,528	
15. Door Hardware: Upgrade exterior doors (2), Interior doors (7)	\$14,250	
		Total
		\$374,607

Funding - SPSF (Chapter 43)



*Chart limited to FY 2020-2040 for presentation

Funding - Bond Schedule



Bond Schedule

FY	Amout
22	\$ 14,372,000.00
24	\$ 13,578,000.00
26	\$ 7,000,000.00

When structuring debt service, you can reduce the early years principal payments so long as the total debt service has a faster average life than an issue of that size that is solved as level debt service (this is a calculation is done by UniBank).

Funding - SPSF (Chapter 43)

Fiscal Year	Amount Issued New	Amount Renewal	Additional Information	P&I Total	Cumulative Stabilization Fund Balance	
					74,765	994,809
2020					74,765	
2021					294,354	
2022	14,372,000		Note 1	-	994,809	
2023		14,372,000	Note 2 issued, note 1 interest	251,510	1,113,168	
2024	13,578,000	14,372,000	Note 3 issued, note 2 interest	323,370	1,249,249	
2025		27,662,000	Note 4 issued, note 3 interest	986,750	1,436,745	
2026	7,000,000	27,362,000	note 5 issued, note 4 interest	1,199,015	1,229,917	
2027		33,797,000	note 5 interest, bond	1,819,213	800,603	
2028				1,630,415	750,782	
2029				1,625,465	1,303,034	
2030				1,660,515	1,971,699	
2031				1,726,765	2,574,114	
2032				2,288,730	2,614,564	
2033				2,389,955	2,553,789	
2034				2,385,015	2,497,954	
2035				2,448,410	2,378,724	
2036				2,581,990	2,125,914	
2037				2,648,380	1,806,714	
2038				2,654,235	1,481,659	

Fiscal Year	Amount Issued New	Amount Renewal	Notes	Cumulative Stabilization Fund Balance	
				P&I Total	Fund Balance
2039				2,818,030	992,809
2040				2,771,520	550,469
2041				2,718,705	160,944
2042				2,471,810	18,314
2043				2,345,520	1,974
2044				2,273,750	57,404
2045				2,246,160	140,424
2046				2,108,770	360,834
2047				2,109,440	580,574
2048				2,108,095	801,659
2049				2,113,690	1,017,149
2050				2,006,775	1,339,554
2051				2,017,255	1,651,479
2052				1,953,910	2,026,749
2053				1,234,890	3,121,039
2054				1,076,670	2,044,369
2055				323,310	1,721,059
2056				227,810	1,493,249

Transfer of \$405,000 from capital stabilization fund

CPA grant of \$640,000 by FY25

Last year of stabilization fund deposit, any unused funds are used to reduce tax levy

Fire Station Building Committee

Questions?

