

September 30, 2020

Abby Y. Piersall, AICP
Planning Director, Town of Waterford
15 Rope Ferry Road
Waterford, CT, 06385
(860) 444-5813
apiersall@waterfordct.org

Re: Nevins Cottage
Structural Stabilization and Exterior Rehabilitation
Opinion of Probable Cost

Dear Ms. Piersall:

The following presents the Opinion of Probable Cost for the work outlined in our September 30, 2020 Construction Documents for Grant Submissions. A breakdown of these costs can be found in Appendix A.

Base Bid (Structural Stabilization and Exterior Rehabilitation)

Location	Summary	Estimated Cost
Rear Addition	Removal	\$2,823
Porch	Post dutchman, concrete slab, wood framing and decking	\$3,704
Basement	Crushed stone, vapor retarder, footings, slab-on-grade, brick repointing	\$21,181
Sill Replacement	Shoring, sheathing removal, replacement in kind with historic connections, sheathing reinstallation	\$23,050
1st Floor	Structural reinforcement, new stairs, decking replacement	\$3,753

Mudroom	New foundations and structural reinforcement	\$21,579
Low Roof (Kitchen)	Structural reinforcement	\$7,163
Roof	Removal of trim, removal of soffit, rafter reinforcing, trim and soffit reinstallation	\$3,776
Site	Concrete cap + basement door; excavation and window wells at vents	\$2,646
Exterior	Replace cladding, rehabilitate windows/doors, gutters	\$141,677
Glazing	Allowance	\$600
Electrical	Allowance	\$5,000
Lighting	Allowance	\$2,400
Total Estimated Cost of Base Bid:		\$239,352
Total Estimated Cost of Base Bid (Including Labor, Materials, Permit, Other Fees, & Contingency)*:		\$376,978

Add Alternate No. 1 (Cut and Grind Holly Tree)

Discipline	Summary	Estimated Cost
Cut and Grind Holly Tree	Cut and grind holly tree	2,040
Total Estimated Cost of Add Alternate No. 2		\$2,040
Total Estimated Cost of Add Alternate No. 2 (Including Labor, Materials, Permit, Other Fees, & 15% Contingency)*:		\$3,270

Total Estimated Cost Base Bid and Add Alt. No. 1 (Including Labor, Materials, Permit, Other Fees, & 15% Contingency)*:	\$380,248
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Please review this estimate and let us know if you have questions or comments.

Very truly yours,



Amy Jagaczewski, P.E./Principal

Appendix A: ACE Cost Estimates

Location	Description	Takeoff Quantity	Labor Cost/Unit	Labor Amount	Material Cost/Unit	Material Amount	Sub Amount	Total Cost/Unit	Total Amount
GENERAL REQUIREMENTS									
Personnel: Labor									
	Working Carpenter Foreman 50/50	5.00 wk	1,200.00	<u>6,000</u>	-	-	-	1,200.00 /wk	<u>6,000</u>
Personnel: Labor				6,000				/wk	6,000
Temp: Construction Aids									
7) Mudroom	Temporary Shoring 2" x 6" @16" OC	18.00 lf	28.12	506	7.00	126	-	35.12 /lf	632
2) First Fl	Temporary Shoring 2" x 6" @16" OC	18.00 lf	28.12	506	7.00	126	-	35.12 /lf	632
2) First Fl	Temporary Shoring 2" x 4" @12" OC	72.00 lf	18.75	1,350	6.00	432	-	24.75 /lf	1,782
2) First Fl	Temporary Shoring 2" x 4" @12" OC	10.00 lf	18.75	187	6.00	60	-	24.75 /lf	247
2) First Fl	Temporary Shoring Lite 2" x 4" @16" OC	32.00 lf	14.06	450	5.00	160	-	19.06 /lf	610
2) First Fl	1st Floor Temporary "A" Frame Shoring 2" x 4" @16" OC	35.00 ea	116.38	4,073	22.50	788	-	138.88 /ea	4,861
Temp: Construction Aids				7,073		1,692		/ea	8,764
GENERAL REQUIREMENTS				13,073		1,692		/mo	14,764
DEMOLITION									
Demo: Dumpsters									
1) Basement	30 yd Dumpster + 5 tons	4.00 ea	-	-	-	-	3,800	950.00 /ea	3,800
2) First Fl	30 yd Dumpster + 5 tons	1.00 ea	-	-	-	-	<u>950</u>	950.00 /ea	<u>950</u>
Demo: Dumpsters							4,750	/ea	4,750
Demo: General									
2) First Fl	Demo Rear Addition 1 story	100.00 sf	5.09	509	-	-	-	6.09 /sf	609
1) Basement	MEP/ FP Debris Removal	2.00 day	813.76	<u>1,628</u>	-	-	-	849.76 /day	<u>1,700</u>
Demo: General								/sf	2,308
Demo: Concrete									
1) Basement	Remove Slab on Grade	600.00 sf	6.54	<u>3,924</u>	-	-	-	7.44 /sf	<u>4,464</u>
Demo: Concrete								/cy	4,464
Demo: Wood									
1) Basement	Remove Floor Joists Sub Floor Wd Flooring	12.00 sf	3.39	41	-	-	-	3.39 /sf	41
1) Basement	Remove Existing Temp Shores	3.00 ea	30.01	90	-	-	-	30.01 /ea	90
7) Mudroom	Remove Wood Framing For Re-Use	192.00 sf	2.03	391	-	-	-	2.03 /sf	391
7) Mudroom	Remove Ceiling Framing For Re-Use	65.00 sf	1.02	66	-	-	-	1.02 /sf	66
5) Roof	Remove Sheathing/ Roofing, Rafters Remain	260.00 sf	2.81	731	-	-	-	2.81 /sf	731
7) Mudroom	Remove Roof Rafters/Sheathing/Shingles	100.00 sf	2.81	281	-	-	-	2.81 /sf	281
2) First Fl	Remove Wood Deck & Decking	30.00 sf	3.00	90	-	-	-	3.00 /sf	90
2) First Fl	Remove Wood Decking	45.00 sf	1.27	57	-	-	-	1.27 /sf	57
1) Basement	Remove Flight Wood Stairs	1.00 ea	232.76	<u>233</u>	-	-	-	232.76 /ea	<u>233</u>
Demo: Wood								/sf	1,980
Demo: Insulation									
2) First Fl	Remove Batt Insulation	45.00 sf	0.20	<u>9</u>	-	-	-	0.20 /sf	<u>9</u>
Demo: Insulation								/sq	9
Demo: Doors & Windows									
2) First Fl	Remove Bilco Door	1.00 ea	101.72	<u>102</u>	-	-	-	101.72 /ea	<u>102</u>
Demo: Doors & Windows								/ea	102
Demo: Finishes, Ceilings									
3) Second Fl	Remove Plaster Ceiling For Rough Carp	164.00 sf	2.54	<u>417</u>	-	-	-	2.54 /sf	<u>417</u>
Demo: Finishes, Ceilings								/sf	417
Demo: Exterior Finishes									
2) First Fl	Remove Wood Clapboard Siding	130.00 sf	1.36	<u>176</u>	-	-	-	1.36 /sf	<u>176</u>
Demo: Exterior Finishes								/sf	176
Demo: Mechanical/Elect									
1) Basement	Remove/Dispose Oil Tank	1.00 ea	600.00	600	-	-	0	600.00 /ea	600
1) Basement	Remove/Dispose Furnace	1.00 ea	500.00	<u>500</u>	-	-	-	500.00 /ea	<u>500</u>
Demo: Mechanical/Elect								/sf	1,100
Demo: Elect									
1) Basement	Remove Dist Panel	1.00 ea	-	-	-	-	<u>125</u>	125.00 /ea	<u>125</u>
Demo: Elect							125	/sf	125

Location	Description	Takeoff Quantity	Labor Cost/Unit	Labor Amount	Material Cost/Unit	Material Amount	Sub Amount	Total Cost/Unit	Total Amount
	DEMOLITION			9,844			4,875		15,431
	SITEWORK								
	Clear Site								
8) Site Work	Tree Remove	1.00 ea	160.00	160	-	-	-	1,120.00 /ea	1,120
8) Site Work	Excavate Stump and Remove	1.00 ea	120.00	120	-	-	-	840.00 /ea	840
1) Basement	Remove Misc. Rock/Earth Build up	5.00 cy	50.86	254	-	-	-	50.86 /cy	254
	Clear Site			534				/ea	2,214
	Earthwkw: Cut & Fill Etc								
1) Basement	Dispose Spoils on Site	4.00 cy	6.12	24	-	-	-	14.62 /cy	58
1) Basement	Dispose Surplus	22.00 cy	6.12	135	-	-	-	14.62 /cy	322
2) First Fl	Dispose Surplus	2.00 cy	6.12	12	-	-	-	14.62 /cy	29
	Earthwkw: Cut & Fill Etc			171				/cy	409
	Earthwkw: Excavation All								
1) Basement	Excavate Footing By Hand	4.00 cy	67.81	271	-	-	-	67.81 /cy	271
1) Basement	Excavate Basment SOG By Hand	20.00 cy	67.81	1,356	-	-	-	67.81 /cy	1,356
1) Basement	Excavate For SOG	20.00 cy	4.08	82	-	-	-	9.74 /cy	195
2) First Fl	Excavate For SOG	2.00 cy	4.08	8	-	-	-	9.75 /cy	19
7) Mudroom	Excavate Footing By Machine	30.00 cy	4.08	122	-	-	-	9.74 /cy	292
7) Mudroom	Shape & Grade Footing	96.00 sf	0.51	49	-	-	-	0.51 /sf	49
	Earthwkw: Excavation All			1,888				/cy	2,183
	Earthwkw: Grading								
1) Basement	Fine Grade	590.00 sf	0.76	450	-	-	-	0.76 /sf	450
	Earthwkw: Grading			450				/sy	450
	Backfill: Foot Wall Misc								
1) Basement	Backfill, Spoils By Hand	1.00 cy	50.86	51	-	-	-	50.86 /cy	51
7) Mudroom	Backfill Footings	26.27 cy	8.14	214	-	-	-	10.39 /cy	273
	Backfill: Foot Wall Misc			265				/cy	324
	Drainage: Drainage @ Slab								
1) Basement	Gravel At Slab	11.00 cy	10.00	110	50.63	557	-	64.83 /cy	713
2) First Fl	Crusher Run At Slab	0.56 cy	10.00	6	25.99	14	-	40.20 /cy	22
	Drainage: Drainage @ Slab			116		571		/cy	735
	SITEWORK			3,424		571			6,316
	CONCRETE								
	Forms: Footings								
1) Basement	Footing Forms	160.00 sf	2.86	458	1.29	206	-	4.15 /sf	664
1) Basement	Footing Forms	19.00 sf	2.86	54	1.29	24	-	4.15 /sf	79
7) Mudroom	Footing Forms	52.00 sf	2.86	149	1.29	67	-	4.15 /sf	216
7) Mudroom	Keyway In Footing	48.00 lf	0.86	41	0.93	45	-	1.79 /lf	86
	Forms: Footings			703		342		/sf	1,045
	Forms: Walls								
7) Mudroom	Wall Forms - Patent System	240.00 sf	2.15	516	1.03	247	-	3.18 /sf	763
	Forms: Walls			516		247		/sf	763
	Forms: Edgeform at Walks								
2) First Fl	EdgeForm 2x4 Random Length	60.00 lf	2.00	120	0.49	30	-	2.49 /lf	150
	Forms: Edgeform at Walks			120		30		/lf	150
	Forms: Blockouts								
7) Mudroom	Ledge Blockouts	72.00 sf	4.00	288	1.24	89	-	5.24 /sf	377
	Forms: Blockouts			288		89		/sf	377
	Forms: Screeds								
1) Basement	Screeds	590.00 sf	0.06	35	0.02	15	-	0.08 /sf	50
	Forms: Screeds			35		15		/sq	50
	Forms: Strip & Oil								
7) Mudroom	Strip/Oil Forms-Footings	52.00 sf	1.07	56	0.08	4	-	1.15 /sf	60
7) Mudroom	Strip/Oil Forms-Walls	240.00 sf	0.27	64	0.08	19	-	0.35 /sf	83
7) Mudroom	Strip/Oil Ledge Blockouts	72.00 sf	0.50	36	0.08	6	-	0.58 /sf	42
2) First Fl	Strip/Oil Forms-EdgeForms	60.00 sf	0.72	43	-	-	-	0.72 /sf	43

Location	Description	Takeoff Quantity	Labor Cost/Unit	Labor Amount	Material Cost/Unit	Material Amount	Sub Amount	Total Cost/Unit	Total Amount
	Forms: Strip & Oil								
1) Basement	Strip/Oil Forms-All other	160.00 sf	0.54	86	0.08	12	-	0.61 /sf	98
1) Basement	Strip/Oil Forms-All other	19.00 sf	0.54	<u>10</u>	0.08	<u>1</u>	-	0.61 /sf	<u>12</u>
	Forms: Strip & Oil			295		42		/sf	337
	Forms: Snapties								
7) Mudroom	Snaptie 12 in.	52.00 ea	-	-	0.62	<u>32</u>	-	0.62 /ea	<u>32</u>
	Forms: Snapties					32		/ea	32
	Rebar: Footings								
7) Mudroom	Footing Rebar #3	12.00 lf	1.17	14	0.39	5	-	1.56 /lf	19
1) Basement	Footing Rebar #4	160.00 lf	0.20	33	0.49	78	-	0.69 /lf	111
7) Mudroom	Footing Rebar #5	72.00 lf	0.61	<u>44</u>	1.07	<u>77</u>	-	1.68 /lf	<u>121</u>
	Rebar: Footings			91		160		/tn	251
	Rebar: Wiremesh								
1) Basement	Wiremesh 6x6 6/6	649.00 sf	0.06	39	0.41	267	-	0.47 /sf	306
2) First Fl	Wiremesh 6x6 10/10	33.00 sf	0.73	<u>24</u>	0.21	<u>7</u>	-	0.94 /sf	<u>31</u>
	Rebar: Wiremesh			63		274		/sq	337
	Conc: Pile Caps/Spread Ftgs								
1) Basement	Pile Cap Conc 3000 psi	3.00 cy	26.35	79	128.75	386	-	155.10 /cy	465
1) Basement	Pile Cap Conc 3000 psi	0.56 cy	26.35	<u>15</u>	128.83	<u>72</u>	-	155.18 /cy	<u>86</u>
	Conc: Pile Caps/Spread Ftgs			94		458		/cy	552
	Conc: Footings								
7) Mudroom	Footing Conc 3000 psi	2.00 cy	42.16	<u>84</u>	128.75	<u>258</u>	-	170.91 /cy	<u>342</u>
	Conc: Footings			84		258		/cy	342
	Conc: Walls								
7) Mudroom	Wall Conc 3000 psi	3.56 cy	26.35	<u>94</u>	128.76	<u>458</u>	-	155.11 /cy	<u>552</u>
	Conc: Walls			94		458		/cy	552
	Conc: Slabs On Grade								
1) Basement	S.O.G. Conc 3000 psi	8.00 cy	97.13	<u>777</u>	128.75	<u>1,030</u>	-	225.88 /cy	<u>1,807</u>
	Conc: Slabs On Grade			777		1,030		/cy	1,807
	Conc: Walks								
2) First Fl	Walk Conc 3000 psi	0.37 cy	97.14	<u>36</u>	128.73	<u>48</u>	-	225.86 /cy	<u>84</u>
	Conc: Walks			36		48		/cy	84
	Finish: General								
1) Basement	Trowel Finish	590.00 sf	0.72	423	0.01	4	-	0.72 /sf	427
2) First Fl	Broom/Float Finish	30.00 sf	1.43	43	0.01	0	-	1.44 /sf	43
1) Basement	Rub, Cut, & Patch	160.00 sf	0.86	138	0.01	2	-	0.87 /sf	139
1) Basement	Rub, Cut, & Patch	19.00 sf	0.86	16	0.01	0	-	0.87 /sf	17
7) Mudroom	Rub, Cut, & Patch	240.00 sf	0.86	<u>206</u>	0.01	<u>3</u>	-	0.87 /sf	<u>209</u>
	Finish: General			826		9		/sf	835
	Finish: Protect & Cure								
1) Basement	CS 309 Curing Compound	590.00 sf	0.72	<u>423</u>	0.02	<u>15</u>	-	0.74 /sf	<u>438</u>
	Finish: Protect & Cure			423		15		/sq	438
	CONCRETE			4,445		3,505		/cy	7,950
	MASONRY								
	Stone Misc.								
2) First Fl	Remove Stone Treads for Re-use	10.00 sf	25.00	250			-	25.00 /sf	250
2) First Fl	Re-install Stone Treads	10.00 sf	54.99	<u>550</u>			-	54.99 /sf	<u>550</u>
	Stone Misc.			800				/lf	800
	Stone Veneer								
2) First Fl	Salvage Stone for Re-use	152.00 sf	5.09	773	-	-	-	5.09 /sf	773
7) Mudroom	Field Stone Veneer 4" (salvaged)	144.00 sf	30.02	<u>4,322</u>	21.00	<u>3,024</u>	-	51.02 /sf	<u>7,346</u>
	Stone Veneer			5,095		3,024		/sf	8,119
	Masonry Restoration								
1) Basement	Cut & Repoint Brick Chimney Bases 2 ea	128.00 sf	10.32	<u>1,321</u>	0.37	<u>47</u>	-	10.68 /sf	<u>1,367</u>
	Masonry Restoration			1,321		47		/lm	1,367

Location	Description	Takeoff Quantity	Labor Cost/Unit	Labor Amount	Material Cost/Unit	Material Amount	Sub Amount	Total Cost/Unit	Total Amount
	MASONRY			7,216		3,071			10,287
	WOOD & PLASTICS								
	Division 6 Subcontractors								
7) Mudroom	Reassemble/ Reinstall Mudroom Ext. Wall	24.00 lf	93.74	2,250	-	-	-	93.74 /lf	2,250
7) Mudroom	Reassemble/Reinstall Mudroom Roof	100.00 sf	22.50	2,250	-	-	-	22.50 /sf	2,250
	Division 6 Subcontractors			4,499				/ea	4,499
	Anchors								
7) Mudroom	Sill Anchor 1/2" D x 16"	6.00 ea	1.33	8	4.37	26	-	5.70 /ea	34
7) Mudroom	Shot Anchors	12.00 ea	1.88	23	0.31	4	-	2.19 /ea	26
	Anchors			31		30		/ea	60
	Simpson Strong-Tie								
2) First Fl	LUS212 Joist Hangar	34.00 ea	2.34	80	1.04	35	-	3.38 /ea	115
2) First Fl	A35 Clip	24.00 ea	7.27	175	1.83	44	-	9.10 /ea	219
	Simpson Strong-Tie			254		79		/ea	334
	Fasteners: Nails/Screws								
7) Mudroom	Nails - 16d common	0.03 box	-	-	62.00	2	-	62.00 /box	2
7) Mudroom	Nails - 16d common	1.00 box	-	-	62.40	62	-	62.40 /box	62
7) Mudroom	Sheetrock Nails 1-3/4 x 10 ga.	0.38 lb	-	-	6.22	2	-	6.22 /lb	2
	Fasteners: Nails/Screws					67		/keg	67
	Framing: Plates								
7) Mudroom	Top Plates 2x4 RL	48.00 lf	4.69	225	0.60	29	-	5.29 /lf	254
7) Mudroom	Bottom Plate 2x4 RL	24.00 lf	2.08	50	0.60	14	-	2.68 /lf	64
	Framing: Plates			275		43		/mbf	318
	Framing: Plates PT								
2) First Fl	Remove Rotted Sill	130.00 lf	7.76	1,009	-	-	-	7.76 /lf	1,009
2) First Fl	Plates PT 2x4x10 6/5'	3.00 ea	15.00	45	6.66	20	-	21.66 /ea	65
7) Mudroom	Sill Plates PT 2x6 RL	24.00 lf	2.25	54	1.72	41	-	3.97 /lf	95
	Framing: Plates PT			1,108		61		/mbf	1,169
	Framing: Floor Joist								
7) Mudroom	Floor Joist 2x8 RL	14.00 lf	2.42	34	1.20	17	-	3.62 /lf	51
7) Mudroom	Floor Joist 2x8x12 12/6'	72.00 ea	14.06	1,012	14.31	1,030	-	28.37 /ea	2,043
	Framing: Floor Joist			1,046		1,047		/mbf	2,093
	Framing: Studs/Posts								
7) Mudroom	Studs 2x4x 8	24.00 ea	6.70	161	4.79	115	-	11.49 /ea	276
2) First Fl	Studs 2x4x 8 Sisters	130.00 ea	6.70	870	4.79	623	-	11.49 /ea	1,494
	Framing: Studs/Posts			1,031		738		/mbf	1,769
	Framing: Ceiling Joists								
2) First Fl	Modify Ceiling Joist to Rc've new Beam/Joist hngr	62.00 ea	9.70	601	0.01	0	-	9.71 /ea	602
	Framing: Ceiling Joists			601		0		/mbf	602
	Framing: Roof Rafters								
5) Roof	Rafters, Sister 2x4x 3"	44.00 ea	24.92	1,097	0.15	7	-	25.07 /ea	1,103
2) First Fl	Rafters 2x4x 8	12.00 ea	60.22	723	4.78	57	-	64.99 /ea	780
2) First Fl	Rafters 2x4x 8	12.00 ea	60.22	723	4.78	57	-	64.99 /ea	780
	Framing: Roof Rafters			2,542		121		/mbf	2,663
	Framing: Bridging Sets								
7) Mudroom	Bridging Sets (1 x 4)	11.00 ea	7.60	84	0.62	7	-	8.22 /ea	90
	Framing: Bridging Sets			84		7		/ea	90
	Framing: Beams & Headers								
1) Basement	Beams & Headers 2 2x6 2' 2ea 2 West Chimney	2.00 ea	25.00	50	10.00	20	-	35.00 /ea	70
1) Basement	Beams & Headers 2 2x6 3'	2.00 ea	25.00	50	10.00	20	-	35.00 /ea	70
7) Mudroom	Beams & Headers 2-2x8 3' Access Hatch	4.00 ea	56.24	225	4.77	19	-	61.01 /ea	244
2) First Fl	Beams & Headers 3 -2x10 12'	1.00 ea	70.30	70	41.18	41	-	111.48 /ea	111
2) First Fl	Beams & Headers 3- 2x10 16'	3.00 ea	70.30	211	54.91	165	-	125.22 /ea	376
	Framing: Beams & Headers			606		265		/mbf	871
	Framing: LVL's								
2) First Fl	LVL Sisters 1 3/4" x 5 1/2" LVL 2-6' 2-7'	28.00 lf	35.15	984	3.00	84	-	38.15 /lf	1,068
2) First Fl	1 3/4" x 5 1/2" LVL Sisyer Hips Low Roof 4/10'	40.00 lf	35.15	1,406	3.00	120	-	38.15 /lf	1,526

Location	Description	Takeoff Quantity	Labor Cost/Unit	Labor Amount	Material Cost/Unit	Material Amount	Sub Amount	Total Cost/Unit	Total Amount
Framing: LVL's									
2) First Fl	1 3/4" x 5 1/2" LVL @ 4"x6" 2/18'	36.00 lf	35.15	1,265	3.00	108	-	38.15 /lf	1,373
Framing: LVL's				3,656		312		/mbf	3,968
Framing: Laminated Lumber									
2) First Fl	5 1/4 " x 5 1/4 " PSL col PT Post Down 2/8'	16.00 lf	2.34	37	3.75	60	-	6.09 /lf	97
Framing: Laminated Lumber				37		60		/lf	97
Blocking: Misc.									
2) First Fl	Blocking 2 x 6 R L 2' Sisters 45 ea	90.00 lf	10.00	900	2.00	180	-	12.00 /lf	1,080
Blocking: Misc.				900		180		/mbf	1,080
Heavy Timber Construction									
2) First Fl	Sill Replacement PT 6"x6" Notch For Sister Studs	130.00 lf	55.00	7,150	2.81	365	-	57.81 /lf	7,515
Heavy Timber Construction				7,150		365		/mbf	7,515
Plywood: Subfloor									
7) Mudroom	Subfloor 3/4" CDX Plywood	3.00 ea	28.12	84	10.40	31	-	38.52 /ea	116
Plywood: Subfloor				84		31		/sf	116
Subfloor: All Types									
2) First Fl	Sub Flooring 1 x 6 T&G #2 Pine	70.00 sf	7.27	509	1.56	109	-	8.83 /sf	618
Subfloor: All Types				509		109		/sf	618
Plywood: Wall Sheathing									
7) Mudroom	Wall Sheath 1/2" CDX ea	6.00 ea	35.15	211	23.92	144	-	59.07 /ea	354
Plywood: Wall Sheathing				211		144		/sf	354
Plywood: Roof Sheathing									
2) First Fl	Roof Sheath 5/8" CDX ea Remove and Replace	6.00 ea	35.15	211	23.92	144	-	59.07 /ea	354
Plywood: Roof Sheathing				211		144		/sf	354
WOOD & PLASTICS				24,835		3,803			28,639
FINISH CARPENTRY									
Arch Wd Wrk: Decking									
2) First Fl	5-1/4" x 4" Vertical Grain Fir Decking	110.00 lf	1.16	128	1.25	137	-	2.41 /lf	265
Arch Wd Wrk: Decking				128		137		/sf	265
Arch Wd Wrk: Wood Columns									
2) First Fl	5" x 5" x 8' Wood Turned Colonial Column	1.00 ea	290.95	291	130.00	130	-	420.95 /ea	421
Arch Wd Wrk: Wood Columns				291		130		/ea	421
Arch Wd Wrk: Wood Base									
7) Mudroom	Wood Base 1 Piece No Detail or Spec	48.00 lf	1.94	93	1.25	60	-	3.19 /lf	153
Arch Wd Wrk: Wood Base				93		60		/lf	153
Arch Wd Wrk: Rakes/Gables									
5) Roof	Remove & Replace Existing Soffit	164.00 sf	2.33	382	-	-	-	2.33 /sf	382
Arch Wd Wrk: Rakes/Gables				382				/lf	382
FINISH CARPENTRY				894		327		/sf	1,221
THERMAL & MOISTURE PROT									
Dampproofing: VapBarrier									
7) Mudroom	Sill Sealer	4.00 lf	1.13	5	0.10	0	-	1.23 /lf	5
7) Mudroom	Ty-Vek	96.00 sf	0.28	27	0.12	12	-	0.40 /sf	39
1) Basement	Moistop Vapor Barrier	619.50 sf	0.15	95	0.05	29	-	0.20 /sf	125
Dampproofing: VapBarrier				127		41		/sq	168
Insulation: Batt									
7) Mudroom	Batt Insulation R-13 Kraft 3.5" x 15 1/2" Mudroom Roof	100.00 sf	0.38	38	0.36	36	-	0.73 /sf	73
Insulation: Batt				38		36		/sf	73
Roof Shingles Composition									
7) Mudroom	Ice Shield Felt 30 lb.	1.00 sq	28.05	28	36.05	36	-	64.10 /sq	64
2) First Fl	Ice Shield Felt 30 lb.	2.00 sq	28.05	56	36.05	72	-	64.10 /sq	128
7) Mudroom	Lifetme 3 Tab Roof Shingles	1.00 sq	224.40	224	113.30	113	-	337.70 /sq	338
2) First Fl	Lifetme 3 Tab Roof Shingles	2.00 sq	224.40	449	113.30	227	-	337.70 /sq	675

Location	Description	Takeoff Quantity	Labor Cost/Unit	Labor Amount	Material Cost/Unit	Material Amount	Sub Amount	Total Cost/Unit	Total Amount
Roof Shingles Composition				757		448		/sq	1,205
Wood Siding:									
2) First Fl	Replace Removed (Original) ClapBoards	130.00 sf	2.91	378	0.00	0	-	2.91 /sf	378
Wood Siding:				378				/sf	378
Sheetmetal: Flashing									
7) Mudroom	Flashing Copper 16 oz x 12"	16.00 lf	5.62	90	6.90	110	-	12.53 /lf	200
2) First Fl	Flashing Copper 16 oz x 12"	32.00 lf	5.62	180	6.90	221	-	12.53 /lf	401
7) Mudroom	Flashing; Copper Starter Course	24.00 lf	5.62	135	2.06	49	-	7.68 /lf	184
2) First Fl	Flashing; Copper Starter Course	36.00 lf	5.62	202	2.06	74	-	7.68 /lf	277
2) First Fl	Hip Flashing Copper 16 oz x 12"	20.00 lf	5.28	106	6.39	128	-	11.67 /lf	233
Sheetmetal: Flashing				713		583		/lf	1,296
THERMAL & MOISTURE PROT				2,013		1,108			3,121
DOORS & WINDOWS									
Doors Bilco Steel									
7) Mudroom	Access Door 24 x24	1.00 ea	58.19	58	300.00	300	-	358.19 /ea	358
Doors Bilco Steel				58		300		/ea	358
DOORS & WINDOWS				58		300			358
GYP BD/METAL STUD									
GWB: Boards & Sheathing									
7) Mudroom	GWB 5/8" All Size Regular	192.00 sf	0.58	112	0.34	65	-	0.92 /sf	177
GWB: Boards & Sheathing				112		65		/sf	177
GWB: Finish Mud/Tape									
7) Mudroom	Labor GWB Finish All Steps	192.00 sf	0.55	105	0.10	19	-	0.65 /sf	124
GWB: Finish Mud/Tape				105		19		/sf	124
GYP BD/METAL STUD				216		84			301
STUCCO									
Lath/Plastr: Lath									
3) Second Fl	Plaster Patch and Repair (3 Coat System)	164.00 sf	9.46	1,552			-	9.46 /sf	1,552
2) First Fl	Plaster Patch/Repair Clg @ Post Down	16.00 sf	-	-	-	-	144	9.00 /sf	144
Lath/Plastr: Lath				1,552			144	/sf	1,696
STUCCO				1,552			144		1,696

Estimate Totals

Description	Amount	Totals	Hours	Rate	Percent of Total
Labor	67,572		1,268.041 hrs		48.10%
Material	14,462				10.29%
Subcontract	5,019				3.57%
Equipment	3,032		36.580 hrs		2.16%
Other					
	90,085	90,085			64.13%
General Conditions	11,711			13.000 %	8.34%
	11,711	101,796			8.34%
Estimating Contingency	20,359			20.000 %	14.49%
Contractors O/P	18,323			15.000 %	13.04%
Total		140,478			

Location	Description	Takeoff Quantity	Labor Cost/Unit	Labor Base Amount	Material Cost/Unit	Material Amount	Sub Amount	Total Cost/Unit	Total Amount
GENERAL REQUIREMENTS									
Utilities: Temporary									
All	Temp Toilet	4.00 mo	-	-	110.00	440	-	110.00 /mo	440
Temp: Protection									
All	Temp Floor Protection (Masonite)	1,324.00 sf	0.25	331	0.53	695	-	0.78 /sf	1,026
DEMOLITION									
Demo: Exterior Finishes									
6) Exterior	Remove Wood Clapboard Siding	1,560.00 sf	2.00	3,120	-	-	-	2.00 /sf	3,120
6) Exterior	Remove Running Trims	414.00 lf	1.00	414	-	-	-	1.00 /lf	414
6) Exterior	Remove Door/WindowTrims	315.00 lf	1.00	315	-	-	-	1.00 /lf	315
Demo: Mechanical/Elect									
1) Basement	Remove/Dispose Furnace	1.00 ea	400.00	400	-	-	-	400.00 /ea	400
SITEWORK									
Earthwtk: Cut & Fill Etc									
1) Basement	Dispose Spoils on Site	2.00 cy	40.01	80	-	-	-	40.01 /cy	80
6) Exterior	Dispose Surplus	2.00 cy	6.12	12	-	-	-	14.62 /cy	29
Earthwtk: Excavation All									
1) Basement	Excavate Misc By Hand (Window Wells)	2.00 cy	76.29	153	-	-	-	76.29 /cy	153
6) Exterior	Excavate Misc By Hand	2.00 cy	76.29	153	-	-	-	76.29 /cy	153
Earthwtk: Grading									
6) Exterior	Rough Grade	50.00 sf	0.12	6	-	-	-	0.25 /sf	13
6) Exterior	Fine Grade	509.00 sf	0.76	388	-	-	-	0.76 /sf	388
Backfill: Foot Wall Misc									
6) Exterior	Backfill, Rain Garden 1 1/2" Washed Stone	2.00 cy	16.29	33	30.00	60	-	50.79 /cy	102
1) Basement	Backfill, 3/4" Washed Stone @ Areaway	0.50 cy	40.02	20	30.00	15	-	70.02 /cy	35
Drainage: Site Structures									
1) Basement	Galv Areaway Semi Circ 30"w	2.00 ea	125.00	250	225.00	450	-	350.00 /ea	700
CONCRETE									
Forms: Walls									
1) Basement	Wall Forms - Basement Stair	44.00 sf	2.15	95	1.03	45	-	3.18 /sf	140
Conc: Walls									
1) Basement	Mortar Curb Basement Stair	1.00 cy	26.35	26	128.75	129	-	155.10 /cy	155
Finish: General									
1) Basement	Rub, Cut, & Patch Basement Stair	44.00 sf	0.86	38	0.01	1	-	0.87 /sf	38
FINISH CARPENTRY									
Arch Wd Wrk: Wood Stairs									
1) Basement	Interior Stair Oak Tread Pine Riser F/I	10.00 ri	70.30	703	100.00	1,000	-	170.30 /ri	1,703
1) Basement	Poplar Handrail & Brackets 2 ea/ 10'	20.00 lf	15.00	300	4.00	80	-	19.00 /lf	380
Arch Wd Wrk: Crown Mldg									
6) Exterior	Crown Moulding 4 5/8" Door B	6.00 lf	3.75	23	3.33	20	-	7.08 /lf	42
Arch Wd Wrk: Soffit/Eave									
5) Roof	Bead Board 5/8" Soffit Remove/Replace	32.00 lf	3.00	96	1.82	58	-	4.82 /lf	154
2) First Floor	Bead Board 5/8" x 4' x 8' Porch Ceiling	32.00 sf	5.00	160	1.82	58	-	6.82 /sf	218
Arch Wd Wrk: Door/Window									
8) Doors/Windows	Repair/Restore/Door	3.00 ea	465.52	1,397	416.00	1,248	-	881.52 /ea	2,645
8) Doors/Windows	Remove/Replace Door	3.00 ea	232.76	698	-	-	-	232.76 /ea	698
Arch Wd Wrk: Shutters									
6) Exterior	Shuttercraft Shutters Window A	12.00 ea	174.57	2,095	456.00	5,472	-	630.57 /ea	7,567
6) Exterior	Shuttercraft Shutters Window B	1.00 ea	174.57	175	386.00	386	-	560.57 /ea	561
6) Exterior	Shuttercraft Shutters Window C	5.00 ea	174.57	873	357.00	1,785	-	531.57 /ea	2,658
6) Exterior	Shutter Hardware	1.00 ls	-	-	1,800.00	1,800	-	1,800.00 /ls	1,800
Arch Wd Wrk: Cedar									
6) Exterior	Cedar 2" x 2" Routed out Door Casing	66.00 lf	5.00	330	4.00	264	-	9.00 /lf	594
6) Exterior	Cedar 5/4" x 4" Widow Ext Sill Casing Ripped to Size	60.00 lf	2.00	120	3.15	189	-	5.15 /lf	309
6) Exterior	Cedar 5/4" x 6" Eave Rake Trims Remove/Replace 25% =	100.00 lf	3.00	300	3.25	325	-	6.25 /lf	625
6) Exterior	Cedar 5/4" x 6" Door Crown	8.00 lf	4.00	32	3.25	26	-	7.25 /lf	58
6) Exterior	Cedar 5/4" x 6" Routed Watertable	140.00 lf	5.00	700	3.25	455	-	8.25 /lf	1,155
6) Exterior	Cedar 2" x 4" Routed out Window Casing	234.00 lf	5.00	1,170	4.00	936	-	9.00 /lf	2,106
THERMAL & MOISTURE PROT									
Dampproofing: VaprBarrier									
6) Exterior	3/8" x 1 1/2" PT Lath	1,200.00 lf	0.78	931	0.05	62	-	0.83 /lf	993
6) Exterior	Rainscreen B.Obdyke	1,536.00 sf	0.78	1,192	1.03	1,582	-	1.81 /sf	2,774
6) Exterior	Ty-Vek	1,560.00 sf	0.28	439	0.12	190	-	0.40 /sf	629
6) Exterior	Poly Vapor Barrier 6 mil	75.00 sf	0.07	5	0.04	3	-	0.10 /sf	8
Metal Roof/Siding									
6) Exterior	Copper Roof 16 oz 3 Locations (inc- removal)	50.00 sf	26.42	1,321	24.72	1,236	-	51.14 /sf	2,557
Wood Siding:									
6) Exterior	Cedar Clapboard Siding 1/2"x 6" 4" Exp.	1,560.00 sf	6.00	9,360	4.00	6,240	-	10.00 /sf	15,600
Sheetmetal: Flashing									
6) Exterior	Drip Cap Copper 16 oz x 6"	80.00 lf	2.00	160	6.18	494	-	8.18 /lf	654

Location	Description	Takeoff Quantity	Labor Cost/Unit	Labor Base Amount	Material Cost/Unit	Material Amount	Sub Amount	Total Cost/Unit	Total Amount
Sheetmetal: Guttr DwnSpt									
5) Roof	Remove/Reinstall Existing Gutters	80.00 lf	20.00	1,600	-	-	-	20.00 /lf	1,600
Accessory Roof (General)									
6) Exterior	Ridge Vent B. Obdyke @ Watertable	140.00 lf	10.00	1,400	4.00	560	-	14.00 /lf	1,960
DOORS & WINDOWS									
Division 8 Subcontractors									
8) Doors/Windows	Remove & Replace Storm Windows	21.00 ea	75.00	1,575	500.00	10,500	-	575.00 /ea	12,075
8) Doors/Windows	Remove/Replace Window Type A	16.00 ea	145.48	2,328			-	145.48 /ea	2,328
8) Doors/Windows	Remove/Replace Window Type ,C,D	4.00 ea	116.01	464	2,400.00	9,600	-	2,516.01 /ea	10,064
8) Doors/Windows	Restore/Repair Window Type A	15.00 ea	600.00	9,000	75.00	1,125	-	675.00 /ea	10,125
8) Doors/Windows	Restore/Replace Windows B&E	3.00 ea	600.00	1,800	2,000.00	6,000		2,600.00 /ea	7,800
8) Doors/Windows	Restore/Repair Doors	3.00 ea	-	-	2,500.00	7,500		2,500.00 /ea	7,500
Doors Bilco Steel									
1) Basement	Bilco Door Basement Door	1.00 ea	200.00	200	800.00	800	-	1,000.00 /ea	1,000
Marvin Windows WUDH									
1) Basement	Marvin Basement Window 2610	2.00 ea	116.38	233	450.00	900	-	566.38 /ea	1,133
8) Doors/Windows	Marvin WUDH Basement 2610	2.00 ea	124.99	250	450.00	900	-	574.99 /ea	1,150
Marvin Doors									
8) Doors/Windows	Marvin WIFD 2668 WUDH	1.00 ea	931.04	931	4,500.00	4,500	-	5,431.04 /ea	5,431
Storm Windows									
All	Storm Window F/I 1'8" x 2'6"	1.00 ea	-	-	-	-	150	150.00 /ea	150
All	Storm Window F/I 2'4" x 2'0"	2.00 ea	-	-	-	-	350	175.00 /ea	350
All	Storm Window F/I 2'4" x 4'0"	1.00 ea	-	-	-	-	300	300.00 /ea	300
All	Storm Window F/I 2'4" x 4'6"	16.00 ea	-	-	-	-	6,400	400.00 /ea	6,400
PAINTING									
Painting: Commercial									
8) Doors/Windows	Scrape Sand Paint Wood Door	3.00 ea	429.74	1,289	6.25	19	-	435.99 /ea	1,308
8) Doors/Windows	Scrape Sand Paint Wood Window Type A	16.00 ea	214.87	3,438	10.00	160	-	224.87 /ea	3,598
8) Doors/Windows	Scrape Sand Paint Wood Window Type C,D	4.00 ea	107.44	430	8.00	32	-	115.44 /ea	462
Painting: Residential									
8) Doors/Windows	Paint Exterior Shingles/ Clapboard	1,536.00 sf	10.00	15,360	0.31	475	-	10.31 /sf	15,835
8) Doors/Windows	Prep: Scrape, Sand Fas/Soffitt Rakes/Gables Corners	800.00 lf	5.37	4,297	0.64	515	-	6.02 /lf	4,812
ELECTRICAL									
Electrical Complete									
	Allowance for Unforseen Electrical Circumstances	1.00 ls	-	-	-	-	5,000	5,000.00 /ls	5,000
ALLOWANCES									
Allowances									
6) Exterior	Cedar 5/4" x 6"Eave/Rakes Trims Remove/Replace 50%=-	200.00 lf	5.00	1,000	3.25	650	-	8.25 /lf	1,650
8) Doors/Windows	Glazing Allowance 15%	30.00 sf	-	-	-	-	600	20.00 /sf	600
All	Electrical Lighting Fixture Allowance Item 18	24.00 ea	75.00	1,800	25.00	600	-	100.00 /ea	2,400

Estimate Totals

Description	Amount	Totals	Rate	Cost per Unit	Percent of Total
Labor	75,806			67.085 /sf	31.62%
Material	70,580			62.460 /sf	29.44%
Subcontract	12,800			11.327 /sf	5.34%
Equipment	33			0.029 /sf	0.01%
General Conditions	20,698		##### %	18.317 /sf	8.63%
Estimating Contingency	26,987		##### %	23.883 /sf	11.26%
Building Permit	1,592		1.000 %	1.409 /sf	0.66%
Other					
	208,496	208,496		184.510 /sf	86.96% 86.96%
Contractors O/P	31,274		##### %	27.676 /sf	13.04%
	31,274	239,770		212.186 /sf	13.04% 100.00%
Total		239,770		212.186 /sf	