

Norton Town Offices

70 East Main Street | Elm & Cross Streets
Norton, MA

January 25, 2019

Feasibility Estimate

Architect:

DBVW Architects
111 Chestnut Street
Providence, MA 02903
401-831-1240
Project #: 216255

Cost Estimator:

Miyakoda Consulting
PO Box 47
Raynham, MA
(617) 799-5832



Norton Town Offices

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Introduction

Basis For The Estimate:

- 1** The project consists of Options for the Town of Norton
- 2** Sitework has been included.
- 3** This project will be built in one phase.

Project Particulars:

- 1** Estimate is based on Drawings from DBVW dated 12/17/2018 and VHB dated 11/2018
- 2** GSF provided by the architect. Building for Site 1 and 2 are the same.

Assumptions:

- 1** The project will be publicly bid amongst GC builders. This project will be bid with no less than four General Contractors bidding the project.
- 2** Our costs assume that there will be competitive bidding in all trades and sub-trades i.e. at least three bids per trade or sub-trade
- 3** Unit rates are based on current dollars (prevailing wage rates)
- 4** Design Contingency is an allowance for unforeseen design issues, design detail development and specification clarifications
- 5** General Conditions and Requirements value covers Construction Manager's site office overhead and on-site supervision
- 6** Fee markup is calculated on a percentage of direct construction costs.

Exclusions within the Estimate:

- 1** Design fees and other soft costs
- 2** Interest expense
- 3** Owner's project administration
- 4** Construction of temporary facilities
- 5** Printing and advertising
- 6** Specialties, loose furnishings, fixtures and equipment beyond what is noted
- 7** Site or existing condition surveys and investigations

Norton Town Offices
Elm & Cross Streets
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Town Offices Main Summary For Site 2

24,281 GSF

DESCRIPTION

TOTAL

TOTAL

COST/SF

1	Building Demolition			\$348,206		
2	Hazardous Waste Abatement			NIC		
3	Town Hall Site 2	24,281 GSF		\$8,060,204		\$331.96
4	Sitework Cost for Site 2				\$2,397,057	\$98.72
8	Trade Cost Subtotal			\$8,408,410	\$2,397,057	\$445.02
	Design Contingency	10.00%		\$840,841	\$239,706	\$44.50
9	Trade Cost Total			\$9,249,251	\$2,636,763	\$489.52
	Mark-ups (on Direct Trade Costs Subtotal)					
	General Conditions and Requirements	7.50%	\$9,249,251	\$693,694	\$197,757	\$36.71
	Insurance	1.40%	\$9,942,945	\$139,201	\$39,683	\$7.37
	Bonds	1.00%	\$10,082,146	\$100,821	\$28,742	\$5.34
	Permit		\$10,182,967	NIC	NIC	
	Fee	3.00%	\$10,182,967	\$305,489	\$87,088	\$16.17
10	Estimate Construction Cost Subtotal			\$10,488,456	\$2,990,033	\$555.10
	Escalation Allowance. Construction Start Nov 2020			\$1,037,844		
11	ECC Total, including Escalation			\$14,516,334		\$597.85

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Building Summary For Town Hall Site 1 and 2

24,281 GSF

ELEMENT**TOTAL****Total/GSF**

02 26 00 Hazardous Material Assessment

02-EXISTING CONDITIONS

Main Summary

\$0**\$0.00**

03 00 00 Cast-In-Place Concrete

03-CONCRETE TOTAL

\$422,452

\$17.40

\$422,452**\$17.40**

04 00 00 Masonry

04-MASONRY TOTAL

\$405,835

\$16.71

\$405,835**\$16.71**

05 10 00 Structural Steel Framing

05 30 00 Metal Decking

05 40 00 Cold Formed Metal Framing

05 50 00 Metal Fabrications

05-METALS TOTAL

\$693,825

\$28.57

\$105,556

\$4.35

\$0

\$0.00

\$76,343

\$3.14

\$875,724**\$36.07**

06 10 00 Rough Carpentry

06 20 00 Finish Carpentry

06-WOOD AND PLASTICS TOTAL

\$68,203

\$2.81

\$364,215

\$15.00

\$432,418**\$17.81**

07 10 00 Dampproofing and Waterproofing

07 20 00 Insulation

07 40 00 Roofing and Siding Panels

07 46 00 Siding

07 80 00 Firestopping & Fireproofing

07 92 00 Joint Sealants

07-THERMAL AND MOISTURE TOTAL

\$159,105

\$6.55

\$42,982

\$1.77

\$339,020

\$13.96

\$0

\$0.00

\$12,141

\$0.50

\$0

\$0.00

\$553,248**\$22.79**

08 10 00 Doors & Frames

08 3 1 00 Access Doors & Panels

08 33 23 Coiling and Overhead Doors

08 34 53 Bullet Resistant Opening Protection

08 41 13 Aluminum Framed Entrances, Storefront

08 50 00 Windows

08 80 00 Glazing

08-DOORS AND WINDOWS TOTAL

\$69,250

\$2.85

\$5,000

\$0.21

\$9,075

\$0.37

\$0

\$0.00

\$667,351

\$27.48

\$0

\$0.00

\$16,600

\$0.68

\$767,276**\$31.60**

09 21 00 Plaster and Gypsum Board Assemblies

09 30 00 Tile

09 51 00 ACT

09 65 00 Resilient Flooring

\$597,141

\$24.59

\$193,642

\$7.98

\$99,129

\$4.08

\$173,764

\$7.16

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Building Summary For Town Hall Site 1 and 2

24,281 GSF

<u>ELEMENT</u>	<u>TOTAL</u>	<u>Total/GSF</u>
09 68 00 Carpeting	\$5,625	\$0.23
09 90 00 Painting	\$128,784	\$5.30
09-FINISHES TOTAL	\$1,198,085	\$49.34
10 00 00 Specialties	\$36,401	\$1.50
10 12 00 Toilet Compartments	\$14,800	\$0.61
10 28 13 Toilet Accessories	\$6,120	\$0.25
10-SPECIALTIES TOTAL	\$57,321	\$2.36
11 00 00 Equipment	\$20,000	\$0.82
11 31 00 Residential Appliances	\$0	\$0.00
11-EQUIPMENT TOTAL	\$20,000	\$0.82
12 00 00 Furnishings	\$7,000	\$0.29
12 20 00 Window Treatments	\$40,195	\$1.66
12-FURNISHINGS TOTAL	\$47,195	\$1.94
13 10 00 Vault	\$100,000	\$4.12
13-SPECIAL CONSTRUCTION TOTAL	\$100,000	\$4.12
14 20 00 Elevators	\$138,000	\$5.68
14-CONVEYING DEVICES TOTAL	\$138,000	\$5.68
21 00 00 Fire Protection	\$163,619	\$6.74
22 00 00 Plumbing	\$278,710	\$11.48
23 00 00 HVAC	\$1,238,250	\$51.00
21, 22, 23 - MECHANICAL TOTAL	\$1,680,579	\$69.21
26 00 00 Electrical	\$1,255,879	\$51.72
26-ELECTRICAL TOTAL	\$1,255,879	\$51.72
31 00 00 Earthwork	\$106,192	\$4.37
31-EARTHWORK TOTAL	\$106,192	\$4.37
BUILDING DIRECT COST TOTAL	\$8,060,204	\$331.96
Design Contingency 10.00%	\$8,060,204	\$806,020
Trade Cost Total	\$8,866,224	\$365.15

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Building Summary For Town Hall Site 1 and 2

24,281 GSF

<u>ELEMENT</u>			<u>TOTAL</u>	<u>Total/GSF</u>
Mark-ups (on Direct Trade Costs Subtotal)				
General Conditions and Requirements	7.50%	\$8,866,224	\$664,967	\$27.39
Insurance	1.40%	\$9,531,191	\$133,437	\$5.50
Bonds	1.00%	\$9,664,628	\$96,646	\$3.98
Permit	0.00%	\$9,761,274		
Fee	3.00%	\$9,761,274	\$292,838	\$12.06
Estimate Construction Cost Subtotal			\$10,054,112	\$414.07
<i>Escalation Allowance. Construction Start Nov 2020</i>	7.33%	\$10,054,112	\$736,966	\$30.35
ECC Total, including Escalation			\$10,791,079	\$444.42

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Detailed Estimate For New Town Hall Site 1 and 2

24,281 GSF

<u>Element/Description</u>	<u>Quantity</u>	<u>Unit</u>	<u>Rate</u>	<u>Total</u>
9 <u>02-EXISTING CONDITIONS</u>				
10				
11 02 26 00 Hazardous Material Assessment				
12 Hazmat				
13 02 26 00 Hazardous Material Assessment Total				
14				
15				
16 <u>03-CONCRETE</u>				
17				
18 03 00 00 Cast-In-Place Concrete				
19 <u>Footings</u>				
20 Continuous footings	668	lf		
21 Concrete; material	104	CY	\$130.00	\$13,511
22 Concrete; place	104	CY	\$75.00	\$7,795
23 Reinforcement (65#/cy)	6,756	LB	\$1.15	\$7,769
24 Keyways	668	LF	\$2.00	\$1,336
25 Formwork	1,336	SF	\$8.00	\$10,690
26				
27 <u>Spread footings</u>	28	ea		
28 Concrete; material	82	CY	\$130.00	\$10,660
29 Concrete; place	82	CY	\$75.00	\$6,150
30 Reinforcement (75#/cy)	6,150	LB	\$1.15	\$7,073
31 Formwork	1,617	SF	\$8.00	\$12,936
32				
33 <u>Foundations Walls</u>				
34 Foundation walls	639	lf		
35 Concrete; material	118	CY	\$130.00	\$15,340
36 Concrete; place	118	CY	\$75.00	\$8,850
37 Reinforcement (150#/cy)	17,700	LB	\$1.15	\$20,355
38 Formwork	6,390	SF	\$12.00	\$76,680
39				
40 <u>Elevator pit</u>	1	ea		
41 Concrete; material	16	CY	\$130.00	\$2,044
42 Concrete; place	16	CY	\$75.00	\$1,179
43 Reinforcement (90#/cy)	1,415	LB	\$1.15	\$1,628
44 Keyways & waterstops	88	LF	\$10.00	\$880
45 Formwork	444	SF	\$8.00	\$3,552
46				
47 <u>Slab on Grade</u>	14,070	sf		
48 Concrete; material	192	CY	\$125.00	\$23,939
49 Concrete; place & finish	14,070	SF	\$2.25	\$31,658
50 WWF	14,070	SF	\$0.50	\$7,035
51				

Main Summary
Main Summary



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Detailed Estimate For New Town Hall Site 1 and 2

24,281 GSF

<u>Element/Description</u>	<u>Quantity</u>	<u>Unit</u>	<u>Rate</u>	<u>Total</u>
52 <u>Slab on deck</u>	11,425	sf		
53 Concrete; material	167	CY	\$125.00	\$20,827
54 Concrete; pump, place & finish	11,425	SF	\$2.50	\$28,563
55 Reinforcement (6x6 mesh) 10% overlap	12,568	SF	\$0.50	\$6,284
56				
57 <u>Miscellaneous</u>				
58 Allow for equipment pads	1	LS	\$3,500.00	\$3,500
59 Vapor barrier under slab	14,070	SF	\$1.00	\$14,070
60 Rigid insulation under slab on grade	14,070	SF	\$2.25	\$31,658
61 Moisture vapor control; barrier 1 @ occupied areas	192	CY	\$60.00	\$11,491
62 Dewatering	1	AL	\$15,000.00	\$15,000
63 Concrete accessories	1	LS	\$20,000.00	\$20,000
64 03 00 00 Cast-In-Place Concrete Total				\$422,452
65				
66				
67 <u>Exterior closure total</u>				
68	Brick	7,556	sf	
69	Cast Stone Base	1,813	sf	
70	Curtainwall/Storefront system	5,742	sf	
71	total	15,111	sf	
72				
73 <u>04-MASONRY</u>				
74				
75 04 00 00 Masonry				
76 Brick including scaffolding	7,556	SF	\$34.00	\$256,887
77 Cast Stone Base	1,813	SF	\$42.00	\$76,159
78 Articulation to exterior	15,111	SF	\$3.00	\$45,333
79 Interior CMU partitions	1,248	SF	\$22.00	\$27,456
80 04 00 00 Masonry Total				\$405,835
81				
82				
83 <u>05-METALS</u>				
84				
85 05 10 00 Structural Steel Framing				
86 WF structural steel	127	TNS	\$3,650.00	\$463,550
87 WF structural steel column, allow	46	TNS	\$4,100.00	\$188,600
88 Shear studs	272	EA	\$5.00	\$1,360
89 Moment connections	1	LS	\$5,000.00	\$5,000
90 Base plates	28	EA	\$100.00	\$2,800
91 Allow for relieving angles	929	LF	\$35.00	\$32,515
92 05 10 00 Structural Steel Framing Total				\$693,825
93				



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<u>Element/Description</u>	<u>Quantity</u>	<u>Unit</u>	<u>Rate</u>	<u>Total</u>
94 05 30 00 Metal Decking				
95 Galv. composite metal floor deck	11,425	SF	\$3.75	\$42,844
96 Acoustical roof deck	0	SF	\$6.50	NIC
97 Galvnized roof deck	17,420	SF	\$3.60	\$62,712
98 05 30 00 Metal Decking Total				\$105,556
99				
100 05 40 00 Cold Formed Metal Framing				
101 Light ga metal framing system	9,369	SF	\$10.00	Div 09 21 00
102 05 40 00 Cold Formed Metal Framing Total				\$0
103				
104 05 50 00 Metal Fabrications				
105 Elevator pit ladder and sill angles	1	SET	\$3,500.00	\$3,500
106 Miscellaneous metals; TBD	24,281	GSF	\$3.00	\$72,843
107 05 50 00 Metal Fabrications Total				\$76,343
108				
109				
110 06-WOOD AND PLASTICS				
111				
112 06 10 00 Rough Carpentry				
113 Install doors and frames	50	EA	\$150.00	\$7,500
114 Rough carpentry / blocking	24,281	SF	\$2.50	\$60,703
115 06 10 00 Rough Carpentry Total				\$68,203
116				
117 06 20 00 Finish Carpentry				
118 Miscellaneous standing and running trim and casework	24,281	SF	\$15.00	\$364,215
119 06 20 00 Finish Carpentry Total				\$364,215
120				
121				
122 07-THERMAL AND MOISTURE				
123				
124 07 10 00 Dampproofing and Waterproofing				
125 Waterproofing elevator pit	1	EA	\$3,000.00	\$3,000
126 Waterproof foundation walls	3,195	SF	\$7.00	\$22,365
127 Air/vapor barrier to exterior façade	9,369	SF	\$6.50	\$60,897
128 Caulking and sealants	24,281	SF	\$3.00	\$72,843
129 Vapor barrier under slab				In 03
130 07 10 00 Dampproofing and Waterproofing Total				\$159,105
131				
132 07 20 00 Insulation				
133 Rigid insulation under slab on grade				In 03
134 Insulation to foundation	3,195	SF	\$2.75	\$8,786
135 Insulation at exterior walls	9,369	SF	\$3.65	\$34,196



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24,281 GSF

<u>Element/Description</u>	<u>Quantity</u>	<u>Unit</u>	<u>Rate</u>	<u>Total</u>
136 07 20 00 Insulation Total				\$42,982
137				
138 07 40 00 Roofing and Siding Panels				
139 Roofing system	14,740	SF	\$20.00	\$294,800
140 Roofing accessories	14,740	SF	\$3.00	\$44,220
141 07 40 00 Roofing and Siding Panels Total				\$339,020
142				
143 07 46 00 Siding				
144 Canopies (allowance)				\$0
145 07 46 00 Siding Total				\$0
146				
147 07 80 00 Firestopping & Fireproofing				
148 Fire proof steel and deck				NIC
149 Through floor penetration firestopping	24,281	SF	\$0.50	\$12,141
150 07 80 00 Firestopping & Fireproofing Total				\$12,141
151				
152 07 92 00 Joint Sealants				
153 Caulking and sealants	24,281	SF	\$3.00	Included
154 07 92 00 Joint Sealants Total				\$0
155				
156				
157 <u>08-DOORS AND WINDOWS</u>				
158				
159 08 10 00 Doors & Frames				
160 Interior Doors				
161 3' x 7' Interior doors	40	EA	\$350.00	\$14,000
162 Pair doors	5	PR	\$1,000.00	\$5,000
163 Frames				
164 3' x 7' Interior door frame	40	EA	\$275.00	\$11,000
165 Pair doors	5	EA	\$650.00	\$3,250
166 Hardware				
167 Hardware sets	40	EA	\$700.00	\$28,000
168 Hardware sets to decorative	10	EA	\$800.00	\$8,000
169 08 10 00 Doors & Frames Total				\$69,250
170				
171 08 3 1 00 Access Doors & Panels				
172 Allow for access doors	1	AL	\$5,000.00	\$5,000
173 08 3 1 00 Access Doors & Panels Total				\$5,000
174				
175 08 33 23 Coiling and Overhead Doors				
176 Access control barrier:				
177 Between spaces	1	EA	\$9,075.00	\$9,075



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24,281 GSF

<u>Element/Description</u>	<u>Quantity</u>	<u>Unit</u>	<u>Rate</u>	<u>Total</u>
178 08 33 23 Coiling and Overhead DoorsTotal				\$9,075
179				
180 08 34 53 Bullet Resistant Opening Protection				
181 Bullet resistant transaction windows				NIC
182 08 34 53 Bullet Resistant Opening ProtectionTotal				\$0
183				
184 08 41 13 Aluminum Framed Entrances, Storefront				
185 Curtainwall/Storefront/Window system	5,742	SF	\$115.00	\$660,351
186 Exterior doors; pair	1	PR	\$7,000.00	\$7,000
187 08 41 13 Aluminum Framed Entrances, StorefrontTotal				\$667,351
188				
189 08 50 00 Windows				
190 No work in this section				\$0
191 08 50 00 WindowsTotal				\$0
192				
193 08 80 00 Glazing				
194 Door and frame glazing	1	LS	\$100.00	\$100
195 Interior glazing	300	SF	\$55.00	\$16,500
196 08 80 00 Glazing Total				\$16,600
197				
198				
199 <u>09-FINISHES</u>				
200				
201 09 21 00 Plaster and Gypsum Board Assemblies				
202 Light ga metal framing; exterior walls	9,369	SF	\$10.00	\$93,688
203 Interior of exterior walls	9,369	SF	\$3.50	\$32,791
204 Standard drywall partitions	30,958	SF	\$14.00	\$433,412
205 Premium for bullet resistant sheetrock	1	LS	\$5,000.00	NIC
206 Allow for soffits	1	LS	\$20,000.00	\$20,000
207 GWB ceiling	1,150	SF	\$15.00	\$17,250
208 09 21 00 Plaster and Gypsum Board Assemblies Total				\$597,141
209				
210 09 30 00 Tile				
211 Main floor	1,000	SF	\$25.00	\$25,000
212 Ceramic tile flooring	3,289	SF	\$18.00	\$59,202
213 Tile base	576	LF	\$10.00	\$5,760
214 Tile walls	5,184	SF	\$20.00	\$103,680
215 09 30 00 Tile Total				\$193,642
216				
217 09 51 00 ACT				
218 Acoustical ceiling tile - Typical	19,842	SF	\$4.25	\$84,329
219 Acoustical ceiling tile - moisture resistant	3,289	SF	\$4.50	\$14,801



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Detailed Estimate For New Town Hall Site 1 and 2

24,281 GSF

<u>Element/Description</u>	<u>Quantity</u>	<u>Unit</u>	<u>Rate</u>	<u>Total</u>
220 09 51 00 ACT Total				\$99,129
221				
222 09 65 00 Resilient Flooring				
223 Moisture mitigation	24,281	SF	\$2.00	\$48,562
224 Flooring	18,867	SF	\$6.00	\$113,202
225 Base	1	LS	\$12,000.00	\$12,000
226 09 65 00 Resilient Flooring Total				\$173,764
227				
228 09 68 00 Carpeting				
229 Carpet	125	SY	\$45.00	\$5,625
230 09 68 00 Carpeting Total				\$5,625
231				
232 09 90 00 Painting				
233 Painting ceiling	1,150	SF	\$1.25	\$1,438
234 Painting walls	71,285	SF	\$1.00	\$71,285
235 Paint doors and frames	50	EA	\$150.00	\$7,500
236 Miscellaneous painting	24,281	SF	\$2.00	\$48,562
237 09 90 00 Painting Total				\$128,784
238				
239				
240 <u>10-SPECIALTIES</u>				
241				
242 10 00 00 Specialties				
243 Allow for visual display boards	1	LS	\$1,500.00	\$1,500
244 Interior and exterior signage	24,281	SF	\$1.25	\$30,351
245 Aluminum louvers, allow	50	SF	\$55.00	\$2,750
246 Fire extinguisher cabinets	4	EA	\$450.00	\$1,800
247 10 00 00 Specialties Total				\$36,401
248				
249 10 12 00 Toilet Compartments				
250 Toilet compartments	1	AL	\$14,800.00	\$14,800
251 10 12 00 Toilet Compartments Total				\$14,800
252				
253 10 28 13 Toilet Accessories				
254 Paper towel dispenser/disposal	4	EA	\$250.00	\$1,000
255 Toilet paper holder	8	EA	\$65.00	\$520
256 Soap dispenser	4	EA	\$35.00	\$140
257 Sanitary dispenser	2	EA	\$200.00	\$400
258 Sanitary disposal	2	EA	\$75.00	\$150
259 Hooks	4	EA	\$35.00	\$140
260 Mirrors	4	EA	\$130.00	\$520
261 Mop and broom strip	2	EA	\$125.00	\$250



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24,281 GSF

<u>Element/Description</u>	<u>Quantity</u>	<u>Unit</u>	<u>Rate</u>	<u>Total</u>
262 Installation	30	EA	\$100.00	\$3,000
263 10 28 13 Toilet Accessories Total				\$6,120
264				
265				
266 <u>11-EQUIPMENT</u>				
267				
268 11 00 00 Equipment				
269 Miscellaneous equipment	1	AL	\$20,000.00	\$20,000
270 11 00 00 Equipment Total				\$20,000
271				
272 11 31 00 Residential Appliances				
273 Included in allowance under equipment				\$0
274 11 31 00 Residential Appliances Total				\$0
275				
276				
277 <u>12-FURNISHINGS</u>				
278				
279 12 00 00 Furnishings				
280 Entry mats	200	SF	\$35.00	\$7,000
281 12 00 00 FurnishingsTotal				\$7,000
282				
283 12 20 00 Window Treatments				
284 Window treatment	5,742	SF	\$7.00	\$40,195
285 12 20 00 Window Treatments Total				\$40,195
286				
287				
288 <u>13-SPECIAL CONSTRUCTION</u>				
289				
290 13 10 00 Vault				
291 Vault	1	EA	\$100,000.00	\$100,000
292 13 10 00 Vault Total				\$100,000
293				
294				
295 <u>14-CONVEYING DEVICES</u>				
296				
297 14 20 00 Elevators				
298 Passenger elevator; 2 stops	1	EA	\$138,000.00	\$138,000
299 14 20 00 Elevators Total				\$138,000
300				
301				
302 <u>21, 22, 23 - MECHANICAL</u>				
303				



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24,281 GSF

<u>Element/Description</u>	<u>Quantity</u>	<u>Unit</u>	<u>Rate</u>	<u>Total</u>
304 21 00 00 Fire Protection				
305 Sprinkler Coverage	22,082	SF	\$4.50	\$99,369
306 Sprinkler Coverage (attice area)	-	SF	\$4.75	\$0
307 6" Water service main	1	EA	\$3,500.00	\$3,500
308 6" Double check backflow preventer	1	EA	\$7,850.00	\$7,850
309 6" Alarm valve assembly with trim	1	EA	\$4,850.00	\$4,850
310 4 Alarm valve assembly with compressor	1	EA	\$4,250.00	\$4,250
311 Zones w/ Standpipe	2	EA	\$3,150.00	\$6,300
312 FDV Standpipe	2	EA	\$2,250.00	\$4,500
313 Main piping:	1	LS	\$6,500.00	\$6,500
314 Hydraulic Lifts/rigging	1	LS	\$2,000.00	\$2,000
315 Coring, cutting and sleeves	1	LS	\$4,250.00	\$4,250
316 Seismic restraints and structural steel components	1	LS	\$3,750.00	\$3,750
317 System testing, flushing/sterilize	1	LS	\$4,250.00	\$4,250
318 Commissioning support	1	LS	\$6,650.00	\$6,650
319 Shop drawings / BIM / ENG Calc / As-Builts	1	LS	\$5,600.00	\$5,600
320 Permit & Fees	1	LS	N/A	\$0
321 21 00 00 Fire Protection Total				\$163,619
322				
323 22 00 00 Plumbing				
324 2" Water Service w/ meter	1	EA	\$3,650.00	\$3,650
325 <u>Water Heaters:</u>				
326 - GWH-1 55 gal	1	EA	\$5,250.00	\$5,250
327 Circulating Pump	1	EA	\$595.00	\$595
328 Expantion tank & Mixing Valves	1	EA	\$1,850.00	\$1,850
329 Misc. Pumps and Ejector Pump:				
330 - SEP-1	1	EA	\$12,500.00	\$12,500
331 Reduced pressure backflow preventer				
332 - 2" RPBFP1	1	EA	\$2,650.00	\$2,650
333 - 1-1/4" RPBFP2	1	EA	\$1,850.00	\$1,850
334 <u>Fixtures:</u>				
335 Water closet WC-1	7	EA	\$7,250.00	\$50,750
336 Urinal UR-1A	2	EA	\$7,250.00	\$14,500
337 Lavatory L-1A	8	EA	\$7,250.00	\$58,000
338 Hi-Lo electric water cooler EWC-1	2	EA	\$7,600.00	\$15,200
339 Mop Sink MSB-1	2	EA	\$7,250.00	\$14,500
340 Sink SK-1	2	EA	\$7,250.00	\$14,500
341 Roof Drains:				
342 - 4" RD-A	6	EA	\$4,850.00	\$29,100
343 <u>Floor drains:</u>				
344 - FD-A	4	EA	\$985.00	\$3,940
345 - FD-B	2	EA	\$1,105.00	\$2,210



Norton Town Offices

Norton, MA

Detailed Estimate For New Town Hall Site 1 and 2

24,281 GSF

<u>Element/Description</u>	<u>Quantity</u>	<u>Unit</u>	<u>Rate</u>	<u>Total</u>
346 Floor clean outs:				
347 - ECO	6	EA	\$425.00	\$2,550
348 Vents - VTR	3	EA	\$260.00	\$780
349 Hose bibs:				
350 - HB-1	4	EA	\$315.00	\$1,260
351 Wall hydrant:				
352 - WH-1	5	EA	\$375.00	\$1,875
353 Trap primer:				
354 - TP-1	3	EA	\$780.00	\$2,340
355 Storm Piping below grade:	-	LS	Included in Roof Drains	
356 Storm Piping above grade:	-	LS	Included in Roof Drains	
357 Sanitary piping below grade:	-	LS	Included in Fixtures	
358 Sanitary piping below grade:	-	LS	Included in Fixtures	
359 Potable Water Piping:	-	LS	Included in Fixtures	
360 Insulate Potable Water Piping:	-	LS	Included in Fixtures	
361 Gas piping	1	LS	\$5,000.00	\$5,000
362 Gas Connections	3	EA	\$895.00	\$2,685
363 Demolition	1	LS	\$8,500.00	\$8,500
364 Hydraulic lifts / rigging	1	LS	\$3,650.00	\$3,650
365 System testing, flushing/sterilize	1	LS	\$4,750.00	\$4,750
366 Seismic restraints and structural steel component	1	LS	\$4,125.00	\$4,125
367 Shop drawings / BIM Coordination / As-builts / Engineering Support	1	LS	\$5,650.00	\$5,650
368 Commissioning support	1	LS	\$4,500.00	\$4,500
369 Permits & fees	1	LS	N/A	\$0
370 22 00 00 Plumbing Total				\$278,710
371				
372 23 00 00 HVAC				
373 Boiler	2	EA	\$16,500.00	\$33,000
374 Air separator	1	EA	\$5,500.00	\$5,500
375 Roof Top Units (Energy Recovery)	1	LS	\$250,000.00	\$250,000
376 Chiller	-		N/A	\$0
377 Split Systems	1	LS	\$15,000.00	\$15,000
378 Exhaust fans	1	LS	\$16,000.00	\$16,000
379 Pumps	2	EA	\$18,000.00	\$36,000
380 Fintube Radiators	180	LF	\$95.00	\$17,100
381 Cabinet & Unit Heaters	6	EA	\$2,100.00	\$12,600
382 Registers, grilles & diffusers	24,500	GSF	\$1.10	\$26,950
383 Miscellaneous duct accessories	24,500	GSF	\$1.65	\$40,425
384 Ductwork with fittings & hangers	24,500	LBS	\$11.00	\$269,500
385 Duct insulation	8,750	SF	\$4.50	\$39,375
386 Heating hot water pipe with fittings & hangers	3,850	LF	\$42.00	\$161,700
387 Refrigerant pipe with fittings & hangers	850	LF	\$26.00	\$22,100



Norton Town Offices

Norton, MA

Detailed Estimate For New Town Hall Site 1 and 2

24,281 GSF

<u>Element/Description</u>	<u>Quantity</u>	<u>Unit</u>	<u>Rate</u>	<u>Total</u>
388 Pipe insulation	4,700	LF	\$9.50	\$44,650
389 Miscellaneous HVAC equipment	1	LS	\$16,000.00	\$16,000
390 Chemical feed system	1	LS	\$7,500.00	\$7,500
391 Boiler flue	1	LS	\$9,500.00	\$9,500
392 Controls	1	LS	\$144,000.00	\$144,000
393 Miscellaneous demolition	1	LS	\$16,250.00	\$16,250
394 Testing & balancing	1	LS	\$14,250.00	\$13,500
395 Seismic restraints and structural steel components	1	LS	\$8,250.00	\$10,500
396 Shop drawings / BIM / ENG Support / As-Builts	1	LS	\$10,750.00	\$12,500
397 Commissioning support	1	LS	\$9,650.00	\$9,650
398 Rigging & equipment rental	1	LS	\$8,950.00	\$8,950
399 Permits & fees	-	LS	N/A	\$0
400 <i>23 00 00 HVAC Total</i>				\$1,238,250
401				
402				
403 <u>26-ELECTRICAL</u>				
404				
405 <i>26 00 00 Electrical</i>				
406 Normal power	24,281	SF	\$10.00	\$242,810
407 Digital monitoring	1	EA	\$1,000.00	\$1,000
408 Disconnect safety switch	1	EA	\$500.00	\$500
409 Generator remote status panel	1	EA	\$500.00	\$500
410 Surge protection device	1	LS	\$500.00	\$500
411 Utility company meter (provided by Utility Co)	1	EA	\$450.00	\$450
412 Equipment wiring, feeds and connections	24,281	SF	\$3.50	\$84,984
413 Elevator controller 200AF 125AT	1	EA	\$5,000.00	\$5,000
414 Lighting Fixtures, Lighting controls, branch power devices & assoc	24,281	SF	\$9.00	\$218,529
415 Lighting control system	24,281	SF	\$3.00	\$72,843
416 Branch power Devices	24,281	SF	\$3.00	\$72,843
417 Fire Alarm Detection System	24,281	SF	\$7.50	\$182,108
418 Initiating device	1	LS	\$5,000.00	\$5,000
419 Knox box	2	EA	\$650.00	\$1,300
420 Monitoring device	1	LS	\$2,500.00	\$2,500
421 Sigcom 16 zone radio master transmitter box	1	EA	\$2,500.00	\$2,500
422 Signalling device	1	LS	\$2,000.00	\$2,000
423 Generator remote status panel	1	LS	\$50,000.00	\$50,000
424 Telecommunications IT Systems	24,281	SF	\$5.00	\$121,405
425 Card Access & Surveillance Security Systems	24,281	SF	\$4.00	\$97,124
426 Bi-Directional Amplification System	24,281	SF	\$3.50	\$84,984
427 Audio visual system rough-in and power only	1	LS	\$1,000.00	\$1,000
428 Lightning and grounding protection system	1	LS	\$1,000.00	\$1,000
429 Fees & permits	1	LS	\$2,000.00	\$2,000



Norton Town Offices

Norton, MA

Detailed Estimate For New Town Hall Site 1 and 2

24,281 GSF

<u>Element/Description</u>	<u>Quantity</u>	<u>Unit</u>	<u>Rate</u>	<u>Total</u>
430 Coordination & BIM	1	LS	\$1,000.00	\$1,000
431 Temporary lights & power	1	LS	\$2,000.00	\$2,000
432 26 00 00 Electrical Total				\$1,255,879
433				
434				
435 <u>31-EARTHWORK</u>				
436				
437 31 00 00 Earthwork				
438 Rock removal, using back hoe jack hammer				NIC
439 Rough and fine grade for new slab	14,070	SF	\$1.25	\$17,588
440 Bulk excavation	1,737	CY	\$10.00	\$17,370
441 Gravel below slab	521	CY	\$25.00	\$13,028
442 Perimeter drain system	639	LF	\$16.00	\$10,224
443 Underslab drain system	13,400	SF	\$1.50	\$20,100
444 <i>Exterior strip footings</i>	<i>668</i>	<i>LF</i>		
445 Excavation	619	CY	\$9.00	\$5,571
446 Remove soil	489	CY	\$6.00	\$2,934
447 Backfill with imported fill	500	CY	\$30.00	\$15,000
448 <i>Isolated footings</i>	<i>28</i>	<i>EA</i>		
449 Excavation	166	CY	\$9.00	\$1,494
450 Remove soil	158	CY	\$6.00	\$948
451 Backfill with imported fill	88	CY	\$22.00	\$1,936
452 31 00 00 Earthwork Total				\$106,192
453				
454				



Norton Town Offices

Elm & Cross Streets

Norton, MA

Sitework Detail and Summary Site 2

<u>Description/Element</u>	<u>Quantity</u>	<u>Unit</u>	<u>Rate</u>	<u>Total</u>
10 SITEWORK				
11				
12 Site clearing	3	ACRE	\$5,000.00	\$15,000
13 Site demolition and relocations	1	AL	\$50,000.00	\$50,000
14 Demolition of portion of existing building	464,275	CF	\$0.75	Main Summary
15 Site protection	1	AL	\$12,000.00	\$12,000
16 Safety barricade	1	AL	\$10,000.00	\$10,000
17 Construction fence, install, maintain, remove & reinstall;	2,295	LF	\$12.00	\$27,540
18 Double construction gate	2	PR	\$2,500.00	\$5,000
19 Temporary construction entrance	2	LOC	\$7,000.00	\$14,000
20 Temp signs	1	LS	\$3,000.00	\$3,000
21 Wash down/re-fueling/parking allowance	3,000	SF	\$2.00	\$6,000
22 Temporary seed cover	1	AL	\$10,000.00	\$10,000
23 Install and maintain perimeter erosion control	2,000	LF	\$14.00	\$28,000
24 Haybale at stockpile topsoil for reuse; allow	1,800	LF	\$8.00	\$14,400
25 Earthwork	1	LS	\$75,000.00	\$75,000
26 Remove unsuitable soil			\$16.00	NIC
27 Imported fill	500	CY	\$22.00	\$11,000
28 Strip and store topsoil	6,057	CY	\$12.00	\$72,689
29 Rough grading	149,239	SF	\$0.15	\$22,386
30 Fine grading	64,235	SF	\$1.50	\$96,353
31 Roadways	45,835	SF	\$3.62	\$165,923
32 Gravel	988	CY	\$35.00	\$34,580
33 Parking space marking	158	EA	\$20.00	\$3,160
34 HC parking space marking, signage, etc.	1	LS	\$500.00	\$500
35 Miscellaneous marking	1	LS	\$2,000.00	\$2,000
36 Erosion control	1	LS	\$10,000.00	\$10,000
37 Curbing	2,228	LF	\$42.00	\$93,576
38 Sidewalk	5,000	SF	\$10.00	\$50,000
39 Specialty paving	1	LS	\$5,000.00	\$5,000
40 Site and street furnishes	1	LS	\$100,000.00	\$100,000
41 Fencing	658	LF	\$38.00	\$25,004
42 Enclosed fence	35	LF	\$38.00	\$1,330
43 Gate to enclosure	1	PR	\$500.00	\$500
44 Pad	3	EA	\$5,200.00	\$15,600
45 Bollards	25	EA	\$600.00	\$15,000
46 Retaining Wall:				
47 Concrete	182	CY	\$250.00	\$45,500
48 Rebar	27,300	LBS	\$1.00	\$27,300
49 Formwork	9,808	SF	\$10.00	\$98,080
50 Footings For Retaining Wall:				\$0
51 Concrete	68	CY	\$250.00	\$17,000
52 Rebar	10,200	LBS	\$1.00	\$10,200



Norton Town Offices

Elm & Cross Streets

Norton, MA

Sitework Detail and Summary Site 2

<u>Description/Element</u>	<u>Quantity</u>	<u>Unit</u>	<u>Rate</u>	<u>Total</u>
10 SITEWORK				
11				
53 Formwork	2,452	SF	\$12.00	\$29,424
54 Lawn	163,551	SF	\$0.33	\$53,972
55 Spread stored topsoil	5,755	CY	\$8.00	\$46,040
56 Planting and ground cover	1	LS	\$75,000.00	\$75,000
57 Allow for site improvements along water	1	LS	\$150,000.00	\$150,000
58 Signage (Allowance by the architect)	1	AL	\$10,000.00	\$10,000
59 Water service	1	AL	\$40,000.00	\$40,000
60 Sanitary sewer	1	LS	\$500,000.00	\$500,000
61 Storm drainage	1	AL	\$60,000.00	\$60,000
62 Stormwater filtration system	1	AL	\$50,000.00	\$50,000
63 Gas	1	AL	\$5,000.00	\$5,000
64 Site electrical	1	AL	\$150,000.00	\$150,000
65 Site security	1	AL	\$35,000.00	\$35,000
66 SITEWORK TOTAL				\$2,397,057
67				
68 Design Contingency	10.00%	\$694,139		\$69,414
69				
70 Trade Cost Total				\$2,466,471
71				
72 Mark-ups (on Direct Trade Costs Subtotal)				
73 General Conditions and Requirements	7.50%	\$2,466,471		\$184,985
74 Insurance	1.40%	\$2,651,456		\$37,120
75 Bonds	1.00%	\$2,688,576		\$26,886
76 Permit	0.00%	\$2,715,462		\$0
77 Fee	3.00%	\$2,715,462		\$81,464
78				
79 Estimate Construction Cost Subtotal				\$2,796,926
80				
81 Escalation Allowance. Construction Start Nov 2020	7.33%	\$2,796,926		\$205,015
82				
83 ECC Total, including Escalation				\$3,001,941
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Norton Town Offices
Elm & Cross Streets
Norton, MA

Sitework Detail and Summary Site 2

<u><i>Description/Element</i></u>	<u><i>Quantity</i></u>	<u><i>Unit</i></u>	<u><i>Rate</i></u>	<u><i>Total</i></u>
10 SITEWORK				
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