



Norton Senior Center
New Construction
Norton, MA

February 6, 2019

Concept Design Estimate



Architect:

Bargmann Hendrie Archetype Inc
9 Channel Center Street, Suite 300
Boston, MA 02210
(617) 350 0450

Cost Consultant:

Daedalus Projects Incorporated
1 Faneuil Hall Market Place
South Market Bldg, Suite 4195
Boston, MA 02109-6119
(617) 451 2717

INTRODUCTION

Project Description:

The project consists of a new senior center building in Norton, MA
concrete foundations and slab on grade, combined wood & steel framed structure
fiber cement exterior facade siding, aluminum windows, asphalt shingles pitch roofing
interior program fitout and MEP systems
site preparation, bulk earthwork, site utilities, exterior site improvements

Project Particulars:

Documents prepared by Bargmann Hendrie + Archetype, Inc. received January 4, 2019

Floor Plan Option A drawing
Norton Senior Center Elevations
Senior Center Program matrix
Site Narrative - Norton Senior Center prepared by Pace
47 Elm street Site Plan

Detailed quantity takeoff from these documents where possible
Daedalus Projects, Inc. experience with similar projects of this nature
Design intent and scope review discussions with Bargmann Hendrie + Archetype, Inc.

Project Assumptions:

The project will be by a General Contractor under a Lump Sum Contract in a single construction phase
Our costs assume that there will be competitive bidding in all trades and sub-trades i.e. at least four (4) bids per trade or sub-trade
Unit rates are based on current dollars escalated to mid-point of construction
Subcontractor's markups are included in each unit rate. These markups cover field and home office overhead and subcontractor's profit
Operation during normal business hours
No occupancy of Project zone during construction
Lay-down/storage area, jobsite shed and trailers, and construction site entrance will be located adjacent to Project area
Temporary electrical and water site utility connections will be available. General Conditions value includes utility connections and consumption costs
Noise and vibration disturbances are anticipated and will be minimized or avoided during normal business hours
Design and Pricing Contingency markup is an allowance for unforeseen design issues, design detail development and specification clarifications during the design period
General Conditions includes supervision, general facilities to support Project, and site office overheads that are not attributable to the direct trade costs
Project Requirements value includes scaffolding, staging and access, temporary protection, and cleaning
Fee markup is calculated on a percentage basis of direct trade construction costs
Anticipated start of construction is January 1, 2021
An escalation projection has been included from now to the anticipated start of construction and is carried at a rate of 4% per year. Escalation during construction duration has been included in the unit rate details

Construction Cost Estimate Exclusions:

Unforeseen Conditions Contingency

Utility company back charges during construction

Owner's site representation and project administration

Owner's administration; legal fees, advertising, permitting, Owner's insurance, administration, interest expense

Architectural/Engineering; Designer and other Professional fees, testing, printing, surveying.

Project costs; utility company back charges prior to construction, construction of swing space and temporary program facilities, program related phasing, relocation

Site or existing condition surveys and investigations

Work beyond the boundary of the Project

Third Party testing and commissioning

Owner furnished and installed products; furnishings, equipment, artwork, loose case goods, and similar items

MAIN SUMMARY

DESCRIPTION				COST	COST/GSF
Direct Trade Details					
Sitework				\$909,014	\$3.99
New Senior Center Building	10,825 GSF			\$3,342,091	\$308.74
Direct Trade Details SubTotal				\$4,251,105	\$392.71
Design and Pricing Contingency	10.00%			\$425,200	\$39.28
Direct Trade Cost Total				\$4,676,305	\$431.99
General Conditions, Project Requirements, Overhead	9 MTHS	\$60,000		\$540,000	\$49.88
Performance Bonds	1.10%	\$4,676,305		\$51,400	\$4.75
Insurance	1.20%	\$5,267,705		\$63,200	\$5.84
Profit	2.50%	\$5,330,905		\$133,300	\$12.31
Estimated Construction Cost Total				\$5,464,205	\$504.78
Escalation from now to Bid Jan 2021 @4% per year	7.70%	\$5,464,205		\$420,700	\$38.86
Estimated Construction Cost Total at Bid Opening				\$5,884,905	\$543.64

DIRECT TRADE COST SUMMARY

DESCRIPTION	COST	COST/GSF
02-EXISTING CONDITIONS	\$5,000	\$0.46
03-CONCRETE	\$275,220	\$25.42
04-MASONRY	\$53,379	\$4.93
05-METALS	\$129,491	\$11.96
06-WOOD, PLASTICS AND COMPOSITES	\$593,959	\$54.87
07-THERMAL AND MOISTURE PROTECTION	\$490,508	\$45.31
08-OPENINGS	\$281,170	\$25.97
09-FINISHES	\$367,899	\$33.99
10-SPECIALTIES	\$90,835	\$8.39
11- EQUIPMENT	\$79,800	\$7.37
12-FURNISHINGS	\$13,963	\$1.29
21-FIRE SUPPRESSION	\$77,399	\$7.15
22-PLUMBING	\$198,495	\$18.34
23-HVAC	\$411,350	\$38.00
26-ELECTRICAL	\$273,623	\$25.28
31-EARTHWORK	\$239,162	\$22.09
32-EXTERIOR IMPROVEMENTS	\$254,147	\$23.48
33-UTILITIES	\$415,705	\$38.40
Direct Trade Cost Total	\$4,251,105	\$392.71

Direct Trade Cost Details

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
9 02-EXISTING CONDITIONS				
10				
11 <i>Asbestos Abatement</i>				
12 Hazardous abatement at existing building				By Town
13 Demolition of former factory site				By Town
14 Miscellaneous demolition and disposal	1	AL	\$5,000.00	\$5,000
15 02-EXISTING CONDITIONS TOTAL				\$5,000
16				
17				
18 03-CONCRETE				
19				
20 <i>Strip footing; Assume CF3.0'x12"</i>	503	LF		
21 Concrete; material	59	CY	\$130.00	\$7,670
22 Concrete; place	59	CY	\$85.00	\$5,015
23 Reinforcement	2,582	LBS	\$1.25	\$3,228
24 Formwork	1,257	SF	\$9.00	\$11,309
25 Keyways	503	LF	\$2.50	\$1,257
26 <i>Isolated footing; Assume F6x6x1'-6"</i>	42	EA		
27 Concrete; material	88	CY	\$130.00	\$11,466
28 Concrete; place	88	CY	\$85.00	\$7,497
29 Reinforcement	7,497	LBS	\$1.25	\$9,371
30 Formwork	1,512	SF	\$10.00	\$15,120
31 <i>Foundation wall, Assume 16" thick</i>	1,708	SF		
32 Concrete; material	88	CY	\$130.00	\$11,440
33 Concrete; place	88	CY	\$85.00	\$7,480
34 Reinforcement;	11,000	LBS	\$1.25	\$13,750
35 Formwork	3,416	SF	\$12.00	\$40,992
36 Masonry shelf	458	LF	\$7.00	\$3,206
37 <i>Pier/pilaster; assume 16"x16"</i>	42	EA		
38 Concrete	10	CY	\$130.00	\$1,300
39 Rebar	2,000	LBS	\$1.25	\$2,500
40 Formwork	2,346	SF	\$12.00	\$28,153
41 Place and finish	10	CY	\$85.00	\$850
42 <i>Slab on grade; 5" thick</i>	10,825	SF		
43 Concrete; material	185	CY	\$130.00	\$24,050
44 Concrete; place & finish	10,825	SF	\$2.50	\$27,063
45 Moisture mitigation	185	CY	\$65.00	\$12,025
46 WWF 4x4	12,449	SF	\$0.75	\$9,337
47 10 Mil vapor barrier	12,449	SF	\$0.75	\$9,337
48 Rigid insulation under slab on grade - 4 feet around the perimeter	1,952	SF	\$2.50	\$4,880
49 Slab isolation joints	941	LF	\$5.50	\$5,177
50 <i>Slab on grade at canopy connect; 5" thick</i>	325	SF		

Direct Trade Cost Details

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
51 Concrete; material	6	CY	\$130.00	\$780
52 Concrete; place & finish	325	SF	\$2.50	\$813
53 Slab isolation joints	28	LF	\$5.50	\$155
54 03-CONCRETE TOTAL				\$275,220
55				
56				
57 04-MASONRY				
58				
59 <i>Unit Masonry</i>				
60 Arch. concrete block stone masonry blocks water base	1,130	SF	\$28.50	\$32,205
61 Architectural brick pier base at exterior column	2	EA	\$800.00	\$1,600
62 6" CMU backup at MEP room	441	SF	\$20.00	\$8,820
63 10" CMU wall at Pantry	396	SF	\$24.00	\$9,504
64 Masonry lintels - installation	1	EA	\$1,250.00	\$1,250
65 04-MASONRY TOTAL				\$53,379
66				
67				
68 05-METALS				
69				
70 <i>Structural Steel Framing</i>				
71 <i>Steel Decking</i>				
72 WF roof framing at Multipurpose Room only; Assume 10#/GSF	8	TNS	\$3,900.00	\$31,200
73 HSS-shape columns; Assume 4#/SF	3	TNS	\$4,350.00	\$13,920
74 Galvanized composite steel roof deck at Multipurpose Room	1,600	SF	\$3.75	\$6,000
75 Canopy, Connect for Senior Center and Townhall	325	GSF	\$120.00	\$39,000
76 <i>05 50 00* Miscellaneous and Ornamental Iron</i>				
77 <i>Metal Fabrications</i>				
78 Steel support for operable partitions	42	LF	\$150.00	\$6,300
79 Lintel for masonry construction - material	1	EA	\$250.00	\$250
80 Miscellaneous interior metals	10,825	GSF	\$2.50	\$27,063
81 Miscellaneous metals for new exterior masonry	441	SF	\$3.50	\$1,544
82 Miscellaneous metals for exterior remainder	4,215	SF	\$1.00	\$4,215
83 05-METALS TOTAL				\$129,491
84				
85				
86 06-WOOD, PLASTICS AND COMPOSITES				
87				
88 <i>Rough Carpentry</i>				
89 Exterior wall framing; 2x6 wood stud, 5/8" plywood sheathing	4,215	SF	\$9.50	\$40,043
90 Wood header at wood exterior wall	237	LF	\$14.00	\$3,318
91 Prefabricated wood trusses @ 2'-0" O.C. at roof	15,545	GSF	\$19.50	\$303,128
92 Rough carpentry, roof parapet blocking	574	LF	\$15.00	\$8,610

Direct Trade Cost Details

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
93 5/8" Plywood pitch roof sheathing, rough carpentry, blocking	15,545	SF	\$5.00	\$77,725
94 Wood/steel misc. connections	10,825	GSF	\$1.00	\$10,825
95 Install doors and frames	28	OPEN	\$175.00	\$4,900
96 Rough carpentry/blocking; interior partitions and ceilings	15,051	SF	\$1.50	\$22,577
97 <i>Exterior Finish Carpentry</i>				
98 Decorative column enclosure	2	EA	\$1,800.00	\$3,600
99 <i>Interior Architectural Woodwork</i>				
100 Custom wood cabinets with plastic laminate countertop at Reception	12	LF	\$520.00	\$6,240
101 Vanity counter @ Gangs Restroom	10	LF	\$240.00	\$2,400
102 Corian counter	3	LF	\$240.00	\$720
103 Plastic laminate cabinets and solid countertop at offices	26	LF	\$410.00	\$10,660
104 Built in countertop at café	13	LF	\$240.00	\$3,120
105 Gas fireplace at @ Café	1	EA	\$15,000.00	\$15,000
106 Closets shelf and rod at Storage	5	Room	\$800.00	\$4,000
107 Base and wall cabinet, countertop at Kitchen	34	LF	\$550.00	\$18,700
108 Service counters at Kitchen	9	LF	\$1,080.00	\$9,720
109 Wood base at corridor and lobby	465	LF	\$10.00	\$4,650
110 Wood chair rail at corridor	310	LF	\$35.00	\$10,850
111 Window sill	191	LF	\$32.00	\$6,112
112 Miscellaneous standing and running trim	10,825	GSF	\$2.50	\$27,063
113 06-WOOD, PLASTICS AND COMPOSITES TOTAL				\$593,959
114				
115				
116 07-THERMAL AND MOISTURE PROTECTION				
117				
118 <i>07 00 01* Waterproofing Dampproofing and Caulking</i>				
119 Fluid applied air/vapor barrier @ exterior wall - change to zip system	4,215	SF	\$7.20	\$30,348
120 Caulking and sealants	10,825	GSF	\$2.50	\$27,063
121 <i>07 00 02* Roofing and Flashing</i>				
122 Asphalt shingle roofing assembly	17,145	SF	\$12.50	\$214,313
123 Ice and water shield @ roof	5,658	SF	\$1.50	\$8,487
124 Vented ridge cap	313	LF	\$32.00	\$10,016
125 Roof valley flashing	510	LF	\$16.00	\$8,160
126 New thru wall flashing	574	LF	\$17.00	\$9,758
127 Pad-type, flat-mounted snow guards at entrance	46	LF	\$50.00	\$2,300
128 Roof hatch and curb; allow	1	EA	\$3,500.00	\$3,500
129 Aluminum gutter	330	LF	\$32.00	\$10,560
130 Aluminum downspouts	1	AL	\$6,600.00	\$6,600
131 Misc. roof accessories	1	LS	\$3,500.00	\$3,500
132 <i>07 21 00 Thermal Insulation</i>				
133 2" Rigid insulation at foundation wall	1,708	SF	\$2.50	\$4,270
134 Rigid insulation at exterior wall	4,215	SF	\$2.50	\$10,538

Direct Trade Cost Details

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
135 07 46 10 Cementitious Siding				
136 Fiber cement siding, board and batten	1,630	SF	\$15.00	\$24,450
137 Fiber cement clapboard siding	2,155	SF	\$15.50	\$33,403
138 Fiber cement smooth trim board	670	SF	\$18.00	\$12,060
139 Fiber cement smooth fascia	3,654	SF	\$18.00	\$65,772
140 Firestopping; based on floor area	10,825	GSF	\$0.50	\$5,413
141 07-THERMAL AND MOISTURE PROTECTION TOTAL				\$490,508
142				
143				
144 08-OPENINGS				
145				
146 08 00 01* Glass and Glazing				
147 Door glazing	1	LS	\$1,500.00	\$1,500
148 BLF; Interior window framing	260	SF	\$75.00	\$19,500
149 Exterior door				
150 HM door and frame, 3'-0"x8'-0", hardware	8	LEAF	\$1,500.00	\$12,000
151 Aluminum commercial double door 6'-0"x8'-0"	1	PR	\$7,500.00	\$7,500
152 Overhead Door Rolling at pantry area 8' X 12'	1	EA	\$8,500.00	\$8,500
153 Interior door	29	LEAF		
154 Cooler; single	1	LEAF	\$0.00	Inc. w/ cooler
155 Interior solid core wood door				
156 single door	24	LEAF	\$350.00	\$8,400
157 double door	4	PR	\$700.00	\$2,800
158 Door Frames				
159 HMF, single	24	EA	\$240.00	\$5,760
160 HMF, double	4	EA	\$390.00	\$1,560
161 Access doors at MEP installation	8	EA	\$300.00	\$2,400
162 Overhead Door Rolling at kitchen serving area 8' x 12'	1	EA	\$5,000.00	\$5,000
163 Overhead Door Rolling Counter wood door at Reception desk	1	EA	\$5,000.00	\$5,000
164 Entrance Doors in Existing Frames				
165 Aluminum Vestibule double doors	1	PR	\$7,000.00	\$7,000
166 Aluminum windows, single hung operation, insulating glass				
167 Single hung window; 7' 3" x 3' 0"	1,395	SF	\$90.00	\$125,550
168 Interior glass storefront at Wellness Center & cafe 10' 4" high assumed	340	SF	\$115.00	\$39,100
169 Door Hardware				
170 Door hardware, heavy duty mortise locksets	32	OPEN	\$800.00	\$25,600
171 Automatic door operator	1	SET	\$2,500.00	\$2,500
172 Louvers and Vents				
173 Mechanical louver	1	LS	\$1,500.00	\$1,500
174 08-OPENINGS TOTAL				\$281,170
175				
176				

Direct Trade Cost Details

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
177 09-FINISHES				
178				
179 <i>09 00 01* Tiling</i>				
180 Tile 1: Ceramic mosaic 12"x24" floor tile in bathrooms	580	SF	\$21.50	\$12,470
181 Tile 2: Ceramic 12"x24" wall tile in bathrooms w/metal trim at exposed e	912	SF	\$23.50	\$21,432
182 Tile 3: Quarry floor tile at kitchen, pantry, receiving	545	SF	\$24.00	\$13,080
183 Quarry tile wall base	150	LF	\$14.00	\$2,100
184 <i>09 00 02* Acoustical Panel Ceilings</i>				
185 Acoustical tile ceiling; 2'x2'	6,380	SF	\$5.50	\$35,090
186 ACT at kitchen	545	SF	\$6.00	\$3,270
187 <i>09 00 03* Resilient Flooring</i>				
188 Resilient flooring; Marmoleum Sheet Corridors & program	6,148	SF	\$7.00	\$43,036
189 LVT at Café	474	SF	\$8.00	\$3,792
190 Wall base	1,541	LF	\$3.50	\$5,394
191 <i>09 00 04* Carpet Flooring</i>				
192 Carpet at offices	112	SY	\$45.00	\$5,040
193 <i>09 00 04* Painting and Coating</i>				
194 <i>Interior</i>				
195 Sealed concrete floor assume @ Mechanical & pantry area	1,130	SF	\$1.50	\$1,695
196 GWB walls	18,996	SF	\$1.10	\$20,895
197 GWB ceiling / soffits	7,898	SF	\$1.50	\$11,847
198 CMU wall	1,674	SF	\$1.50	\$2,511
199 Exposed ceiling and trusses@ lobby and cafe, paint	1,245	SF	\$3.00	\$3,735
200 Exposed ceiling @ Sprinkler and Mechanical	1,130	SF	\$1.25	\$1,413
201 Door frame	32	OPEN	\$50.00	\$1,600
202 <i>Exterior</i>				
203 Misc. painting	10,825	SF	\$1.50	\$16,238
204 <i>Gypsum Board Assemblies</i>				
205 Exterior wall, drywall interior layer	4,215	SF	\$2.75	\$11,591
206 <i>Interior partitions; abuse resistant</i>	8,842	SF		
207 GWB partitions 3 ⁵ / ₈ " metal stud, (2) 5 ⁸ / ₈ " GWB, 3 ¹ / ₂ " batt insulation	8,547	SF	\$10.00	\$85,470
208 Chase walls; 3 ⁵ / ₈ " metal stud, (1) 5 ⁸ / ₈ " GWB	295	SF	\$6.50	\$1,918
209 column enclosure	3	EA	\$600.00	\$1,800
210 GWB ceiling @ Restrooms	582	SF	\$12.00	\$6,984
211 GWB ceiling @ vestibule	100	SF	\$12.00	\$1,200
212 Gypsum wallboard soffit @ perimeter windows	1,312	LF	\$25.00	\$32,800
213 Exterior soffit	660	SF	\$25.00	\$16,500
214 Interior soffit; allow	1	AL	\$5,000.00	\$5,000
215 09-FINISHES TOTAL				\$367,899
216				
217				
218				

Direct Trade Cost Details

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
219 10-SPECIALTIES				
220				
221 Visual Display Units				
222 Visual display boards; bulletin board, brochure holder and building map	1	AL	\$2,800.00	\$2,800
223 Signage				
224 Code-required interior panel signage, access. Signage; Interior & Exterior	10,825	GSF	\$1.00	\$10,825
225 Toilet Compartments				
226 Phenolic resin, overhead braced	2	STALL	\$1,150.00	\$2,300
227 ADA	2	STALL	\$1,450.00	\$2,900
228 Urinal screen	2	EA	\$850.00	\$1,700
229 Corner Guards				
230 Corner guards; allow	1	LS	\$1,000.00	\$1,000
231 Movable partition at multi purpose room; motorized	42	LF	\$1,105.00	\$46,410
232 Toilet and Bath Accessories				
233 Toilet accessories; gang toilet	4	EA	\$5,000.00	\$20,000
234 Toilet accessories; single user	2	EA	\$700.00	\$1,400
235 Utility shelf/ mop & broom holder; Janitor	1	SET	\$150.00	\$150
236 Fire Protection Specialties				
237 Recessed fire extinguisher and cabinet	3	EA	\$450.00	\$1,350
238 10-SPECIALTIES TOTAL				\$90,835
239				
240				
241 11- EQUIPMENT				
242				
243 Food service equipment	399	GSF	\$200.00	\$79,800
244 11- EQUIPMENT TOTAL				\$79,800
245				
246				
247 12-FURNISHINGS				
248				
249 Window Treatment				
250 Roller shades, manual shade operators	1,395	SF	\$7.50	\$10,463
251 Entrance Mats				
252 Recessed walk off mats at entry	100	SF	\$35.00	\$3,500
253 12-FURNISHINGS TOTAL				\$13,963
254				
255				
256 21-FIRE SUPPRESSION				
257				
258 Sprinkler Coverage	10,825	GSF	\$7.15	\$77,399
259 21-FIRE SUPPRESSION TOTAL				\$77,399
260				

Direct Trade Cost Details

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
261 22-PLUMBING				
262				
263 <i>Equipment</i>				
264 Gas fired hot water heater w/ storage tank	1	EA	\$18,000.00	\$18,000
265 Water meter assembly	1	EA	\$4,000.00	\$4,000
266 Reduced pressure backflow preventer, 4" main	1	EA	\$4,200.00	\$4,200
267 Backflow preventer, local	1	EA	\$725.00	\$725
268 Connection to gas meter (provided by others)	10	EA	\$750.00	\$7,500
269 Hot water circulation pump assembly	2	EA	\$1,200.00	\$2,400
270 Mixing valve	1	EA	\$4,500.00	\$4,500
271 Floor drain	1	EA	\$700.00	\$700
272 Kitchen floor sink	1	EA	\$950.00	\$950
273 Trap primer	1	EA	\$700.00	\$700
274 Wall hydrant	1	EA	\$325.00	\$325
275 Hose bibb	1	EA	\$250.00	\$250
276 Interior grease interceptor	1	EA	\$3,500.00	\$3,500
277 Rough-in & connection to kitchen equipment	1	EA	\$5,000.00	\$5,000
278 <i>Plumbing Fixtures</i>				
279 - Water Closet	6	EA	\$1,850.00	\$11,100
280 - Urinal	2	EA	\$1,600.00	\$3,200
281 - Lavatory; wall hung	2	EA	\$1,200.00	\$2,400
282 - Lavatory; counter mount	4	EA	\$980.00	\$3,920
283 - Janitor Closet	1	EA	\$2,500.00	\$2,500
284 - kitchen Sinks	3	EA	\$1,800.00	\$5,400
285 <i>Domestic Water Piping</i>				
286 Copper pipe type L with fittings & hangers	10,825	GSF	\$3.50	\$37,888
287 <i>Sanitary Waste And Vent Piping</i>				
288 Cast iron pipe with fittings & hangers	10,825	GSF	\$4.50	\$48,713
289 Natural Gas Piping	10,825	GSF	\$1.00	\$10,825
290 <i>Miscellaneous</i>				
291 System testing and flushing	1	LS	\$2,500.00	\$2,500
292 Coring, cutting, sleeves & fire stopping	1	LS	\$2,000.00	\$2,000
293 Seismic Restraints and Structural Steel Comp.	1	LS	\$1,500.00	\$1,500
294 Hydraulic lifts/rigging	1	LS	\$5,000.00	\$5,000
295 Shop drawings / BIM / ENG Support / As-Built	1	LS	\$3,500.00	\$3,500
296 Commissioning Support	1	LS	\$2,000.00	\$2,000
297 Fees & permits	1	LS	\$3,300.00	\$3,300
298 22-PLUMBING TOTAL				\$198,495
299				
300				

Direct Trade Cost Details

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
301 23-HVAC				
302				
303 HVAC	10,825	GFA	\$38.00	\$411,350
304 23-HVAC TOTAL				\$411,350
305				
306				
307 26-ELECTRICAL				
308				
309 <i>Interior Electrical</i>				
310 <i>Gear & Distribution</i>				
311 Normal Power	10,825	GSF	\$2.50	\$27,063
312 Emergency Power	10,825	GSF	\$0.75	\$8,119
313 Equipment Wiring	10,825	GSF	\$2.25	\$24,356
314 <i>Lighting & Branch Power</i>				
315 Type 2x2 lay-in fixture	79	EA	\$220.00	\$17,380
316 Type Downlight	9	EA	\$250.00	\$2,250
317 Type Pendant fixture	10	EA	\$300.00	\$3,000
318 Type Linear fixture	411	LF	\$80.00	\$32,880
319 Type 4' fixture	4	EA	\$125.00	\$500
320 Lighting control system	10,825	GSF	\$0.75	\$8,119
321 Branch devices	10,825	GSF	\$0.50	\$5,413
322 Branch circuitry	10,825	GSF	\$4.50	\$48,713
323 Fire alarm	10,825	GSF	\$3.00	\$32,475
324 Telephone/Data/CATV	10,825	GSF	\$3.50	\$37,888
325 <i>Security System</i>				
326 Security system				NIC
327 <i>AV/Sound System</i>				
328 Rough-in and power connections	10,825	GSF	\$0.25	\$2,706
329 <i>Lightning Protection</i>				
330 Lightning protection system				NIC
331 <i>Miscellaneous</i>				
332 Fees & Permits	1	LS	\$3,763.00	\$3,763
333 Coordination & management	1	LS	\$8,000.00	\$8,000
334 Testing	1	LS	\$3,500.00	\$3,500
335 Temp power & lights	1	LS	\$7,500.00	\$7,500
336 26-ELECTRICAL TOTAL				\$273,623
338				
339 31-EARTHWORK				
340				
341 <i>Site Clearing</i>				
342 Clear and grub	1	ACRE	\$5,000.00	\$5,522

Direct Trade Cost Details

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
343 Construction fence	1,444	LF	\$14.00	\$20,216
344 Double construction gate	1	EA	\$2,500.00	\$2,500
345 Construction entrance	1	LS	\$7,500.00	\$7,500
346 Wash down/re-fueling	1,500	SF	\$2.50	\$3,750
347 Temp signs	1	LS	\$1,500.00	\$1,500
348 Haybale and erosion control netting; install, maintain and dispose	1,444	LF	\$12.00	\$17,328
349 Haybales at stockpile topsoil areas	1	LS	\$1,500.00	\$1,500
350 <i>Senior Center Building Earthwork</i>	10,825			
351 Bulk excavation, disposal	601	CY	\$27.00	\$16,227
352 <i>Continuous footings</i>	503	LF		
353 Excavation, disposal	279	CY	\$26.00	\$7,254
354 Backfill with imported fill	132	CY	\$25.00	\$3,300
355 Perimeter foundation drain	500	LF	\$18.50	\$9,242
356 <i>Spread footings</i>	42	EA		
357 Excavation, disposal	348	CY	\$26.00	\$9,048
358 Backfill with imported fill	250	CY	\$25.00	\$6,245
359 Backfill selected excavated material behind wall	140	CY	\$10.00	\$1,400
360 Rough and fine grade for new slab	10,825	SF	\$1.50	\$16,238
361 Gravel below slab; 12" thick	441	CY	\$32.00	\$14,112
362				
363 <i>Site Earthwork</i>				
364 Remove & stockpile topsoil	826	CY	\$8.00	\$6,608
365 Asphalt pavement cut and fill	713	CY	\$12.00	\$8,556
366 Concrete pavement cut and fill	55	CY	\$12.00	\$660
367 Site grade cut and fill	1,892	CY	\$10.00	\$18,920
368 Rough and fine grade of sitework	93,072	SF	\$0.50	\$46,536
369 Dewatering	1	LS	\$15,000.00	\$15,000
370 31-EARTHWORK TOTAL				\$239,162
371				
372				
373 32-EXTERIOR IMPROVEMENTS				
374				
375 <i>Exterior Improvements</i>				
376 Bollards	8	EA	\$600.00	\$4,800
377 Flagpole	1	EA	\$7,500.00	\$7,500
378 Bike racks	1	AL	\$1,500.00	\$1,500
379 Bench	4	EA	\$1,500.00	\$6,000
380 Traffic and pedestrian sign	1	AL	\$5,000.00	\$5,000
381 Trash/recycle receptacles	4	EA	\$600.00	\$2,400
382 Misc. site improvement other than above	1	LS	\$50,000.00	\$50,000
383 <i>Paving and Surfacing</i>				
384 Asphalt paving at vehicular: assume 4½" thick	1,710	SY	\$30.00	\$51,300

Direct Trade Cost Details

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
385 Gravel base; 12" crushed stone base	627	CY	\$32.00	\$20,064
386 Precast concrete curbing	564	LF	\$25.00	\$14,100
387 Parking spaces	25	EA	\$25.00	\$625
388 Handicap parking spaces	2	EA	\$75.00	\$150
389 Crosswalks	1	AL	\$400.00	\$400
390 Misc. paving marking	1	AL	\$1,500.00	\$1,500
391 Pedestrian concrete pavement	1,295	SF	\$6.50	\$8,418
392 Entrance pavement	150	SF	\$15.00	\$2,250
393 Gravel base	32	CY	\$32.00	\$1,024
394 Tactile paver	2	EA	\$450.00	\$900
395 Concrete pad	1	AL	\$3,000.00	\$3,000
396 <i>Plantings</i>				
397 Respread stockpiled topsoil	826	CY	\$9.00	\$7,434
398 Mulch	1	AL	\$2,000.00	\$2,000
399 Imported topsoil for plant bed (18")	1	AL	\$2,100.00	\$2,100
400 Lawn area	76,237	SF	\$0.35	\$26,683
401 Planting	1	AL	\$35,000.00	\$35,000
402 32-EXTERIOR IMPROVEMENTS TOTAL				\$254,147
403				
404				
405 33-UTILITIES				
406				
407 <i>Water Distribution</i>				
408 6" CLDI fire water; allow	250	LF	\$80.00	\$20,000
409 2-1/2" domestic water; allow	160	LF	\$40.00	\$6,400
410 6" T, S, & G; allow	1	EA	\$4,800.00	\$4,800
411 <i>Sanitary Sewerage</i>				
412 Sewer pipe; allow	120	LF	\$54.00	\$6,480
413 SMH; allow	1	EA	\$5,000.00	\$5,000
414 Oil water separator	1	EA	\$15,000.00	\$15,000
415 Connection to leaching field	1	EA	\$2,000.00	\$2,000
416 <i>Storm Drainage</i>				
417 Storm drainage base on hard surfacing area	16,835	SF	\$5.00	\$84,175
418 <i>Gas Service</i>				
419 New service line				By Gas Co.
420 Trenching and backfill only for new service line; allow	250	LF	\$35.00	\$8,750
421 <i>Electrical Utilities</i>				
422 Power riser (1-5")	1	EA	\$1,800.00	\$1,800
423 Primary ductbank	85	LF	\$80.00	\$6,800
424 Pad mount transformer, By Utility Co, pad only	1	EA	\$2,200.00	\$2,200
425 Secondary ductbank	100	LF	\$200.00	\$20,000
426 250KW emergency generator	1	EA	\$150,000.00	\$150,000

Direct Trade Cost Details

ELEMENT	QUANTITY	UNIT	UNIT RATE	COST
427 Communications riser 3-3"	1	EA	\$2,500.00	\$2,500
428 Communications duct bank, allow 3-3"	140	LF	\$120.00	\$16,800
429 <i>Site Lighting</i>				
430 Single head pole light fixture, allow	14	EA	\$2,800.00	\$39,200
431 Lighting circuitry	1,260	LF	\$15.00	\$18,900
432 Pole base	14	EA	\$350.00	\$4,900
433 33-UTILITIES TOTAL				\$415,705
434				
435				