

***Westwood Hanlon Elementary School***

790 Gay Street  
Westwood, MA

**January 17, 2022**

**60% Construction Document Estimate**

**Construction Manager:**

Compass Project Management, Inc.  
A Vertex Company  
One Edgewater Drive, Suite 204  
Norwood, MA 02062

**Architect:**

Dore + Whittier  
260 Merrimac Street  
Newburyport, MA 01950  
(978) 499-2999

**Estimator:**

Miyakoda Consulting Inc.  
PO Box 120731  
Boston, MA 02111  
(617) 799-5832

## ***Westwood Hanlon Elementary School***

Westwood, MA

### **INTRODUCTION**

#### **Description:**

- 1** Construction of Westwood Hanlon Elementary School project
- 2** GSF for this building is 113,141 GSF
- 3** Site utility infrastructure, Site improvements and soft landscaping
- 4** Hazardous material abatement of existing 1 story brick building

#### **Particulars:**

- 1** Drawings and Project Manual received from Dore + Whittier dated December 21, 2021
- 2** Detailed quantity takeoff from these documents where possible
- 3** Experience with similar projects of this nature

#### **Assumptions:**

- 1** The Project will be a DBB Chapter 149 bid package
- 2** Our costs assume that there will be at least three subcontractors submitting unrestricted bids in each sub-trade
- 3** Unit rates are based on current dollars
- 4** Subcontractor's markups have been included in each unit rate. Markups cover the cost of field overhead home office overhead and subcontractor's profit
- 5** General Conditions and Requirements value covers Sub-Contractor's bond, site office overheads, and building permit applications
- 6** Fee markup is calculated on a percentage basis of direct construction costs. The value covers Contractor's bond, insurance and profit
- 7** Design and Pricing Contingency markup is an allowance for unforeseen design issues, design detail development and specification clarifications
- 8** Escalation is based on 4% per Annum. We have escalated by 6 months.

#### **Exclusions:**

- 1** Design fees and other soft costs
- 2** Owner's project administration
- 3** Construction of temporary facilities
- 4** Relocation expenses
- 5** Printing and advertising
- 6** Existing condition surveys and investigations
- 7** Work beyond the boundary of the site
- 8** Testing
- 9** Specialties, loose furnishings, fixtures and equipment beyond those noted
- 10** Preconstruction Fee
- 11** Construction Contingency
- 12** Traffic Improvements

**Westwood Hanlon Elementary School**

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113,141 GSF

**MAIN SUMMARY - NEW CONSTRUCTION CHAPTER 149**

<b><u>DESCRIPTION</u></b>			<b><u>TOTAL</u></b>	<b><u>COST/SF</u></b>
<b>1 Direct Trade Costs With Site</b>				
<b>2</b> New Construction	113,141 GSF		\$49,006,552	\$433.15
Building Demolition			\$273,884	
<b>3</b> Site Development			\$10,252,070	
Hazardous Waste			\$750,000	\$6.63
<b>9 Direct Trade Cost SubTotal</b>			<b>\$60,282,506</b>	<b>\$532.81</b>
<b>10</b> Design and Pricing Contingency	2.00%	\$60,282,506	\$1,205,650	\$10.66
<b>11 Trade Cost SubTotal</b>			<b>\$61,488,156</b>	<b>\$543.46</b>
<b>12</b> General Conditions	3.25%	\$61,488,156	\$1,998,365	\$17.66
<b>13</b> General Requirements	3.00%	\$63,486,521	\$1,904,596	\$16.83
<b>14</b> Insurance	1.40%	\$65,391,117	\$915,476	\$8.09
<b>15</b> Bond	1.00%	\$66,306,592	\$663,066	\$5.86
<b>16</b> Permit	Waived	\$66,969,658		
<b>17</b> Fee	3.00%	\$66,969,658	\$2,009,090	\$17.76
<b>18 Estimated Construction Cost Total</b>			<b>\$68,978,748</b>	<b>\$609.67</b>
<b>19</b> Escalation	2.00%	\$68,978,748	\$1,379,575	\$12.19
<b>20</b> (Assume August 2022 Start of Construction)				
<b>21 Estimated Construction Cost Total</b>			<b>\$70,358,324</b>	<b>\$621.86</b>

**Westwood Hanlon Elementary School**

Westwood, MA  
113,141 GSF

**DIRECT COST SUMMARY**

<b><u>ELEMENT</u></b>	<b><u>TOTAL</u></b>	<b><u>COST/SF</u></b>
<b>9</b>		
<b>10</b> A10 FOUNDATIONS	\$3,406,776	\$30.11
<b>11</b>		
<b>12</b> A20 BASEMENT	\$0	\$0.00
<b>13</b>		
<b>14</b> B10 STRUCTURE	\$5,484,540	\$48.48
<b>15</b>		
<b>16</b> B20 EXTERIOR CLOSURE	\$8,031,680	\$70.99
<b>17</b>		
<b>18</b> B30 ROOFING	\$2,295,884	\$20.29
<b>19</b>		
<b>20</b> C10 INTERIOR CONSTRUCTION	\$5,007,976	\$44.26
<b>21</b>		
<b>22</b> C20 STAIRCASES	\$267,403	\$2.36
<b>23</b>		
<b>24</b> C30 INTERIOR FINISHES	\$2,889,093	\$25.54
<b>25</b>		
<b>26</b> D10 CONVEYING SYSTEMS	\$146,850	\$1.30
<b>27</b>		
<b>28</b> D2020 PLUMBING	\$2,096,019	\$18.53
<b>29</b>		
<b>30</b> D3010 HVAC	\$8,952,182	\$79.12
<b>31</b>		
<b>32</b> D4010 FIRE PROTECTION	\$684,179	\$6.05
<b>33</b>		
<b>34</b> D50 ELECTRICAL	\$5,412,938	\$47.84
<b>35</b>		
<b>36</b> E10 EQUIPMENT	\$981,620	\$8.68
<b>37</b>		
<b>38</b> E20 FURNISHINGS	\$1,202,557	\$10.63
<b>39</b>		
<b>40</b> F10 SPECIAL CONSTRUCTION	\$2,146,855	\$18.98
<b>41</b>		
<b>42</b> F30 DEMOLITION	\$0	\$0.00
<b>43</b>		
<b>44</b> <b>TOTAL</b>	<b><u>\$49,006,552</u></b>	<b><u>\$433.15</u></b>
<b>45</b>		
<b>46</b>		

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**DETAILED ESTIMATE - NEW CONSTRUCTION**

<b><u>DESCRIPTION</u></b>	<b><u>QUANTITY</u></b>	<b><u>UNIT</u></b>	<b><u>RATE/UNIT</u></b>	<b><u>TOTAL</u></b>
<b>10 A10 FOUNDATIONS</b>				
<b>11</b>				
<b>12 A1010 FOUNDATIONS</b>				
<b>13 Continuous footing</b>	<b>2,388</b>	<b>LF</b>		
<b>14 Concrete; material</b>	<b>234</b>	<b>CY</b>	<b>\$150.00</b>	<b>\$35,100</b>
<b>15 Concrete; place (combination of pumping/trucking)</b>	<b>234</b>	<b>CY</b>	<b>\$110.00</b>	<b>\$25,740</b>
<b>16 Reinforcement</b>	<b>17,550</b>	<b>LB</b>	<b>\$2.00</b>	<b>\$35,100</b>
<b>17 Formwork</b>	<b>4,776</b>	<b>SF</b>	<b>\$22.00</b>	<b>\$105,072</b>
<b>18 Spread footings:</b>	<b>161</b>	<b>EA</b>		
<b>19 Concrete; material</b>	<b>752</b>	<b>CY</b>	<b>\$150.00</b>	<b>\$112,800</b>
<b>20 Concrete; place</b>	<b>752</b>	<b>CY</b>	<b>\$110.00</b>	<b>\$82,720</b>
<b>21 Reinforcement (85#/cy)</b>	<b>63,920</b>	<b>LB</b>	<b>\$2.00</b>	<b>\$127,840</b>
<b>22 Formwork</b>	<b>9,897</b>	<b>SF</b>	<b>\$25.00</b>	<b>\$247,425</b>
<b>23 Piers</b>	<b>116</b>	<b>EA</b>		
<b>24 Concrete; material</b>	<b>44</b>	<b>CY</b>	<b>\$150.00</b>	<b>\$6,600</b>
<b>25 Concrete; place</b>	<b>44</b>	<b>CY</b>	<b>\$110.00</b>	<b>\$4,840</b>
<b>26 Reinforcement (200#/cy)</b>	<b>8,800</b>	<b>LB</b>	<b>\$2.00</b>	<b>\$17,600</b>
<b>27 Formwork</b>	<b>16,126</b>	<b>SF</b>	<b>\$25.00</b>	<b>\$403,150</b>
<b>28 Foundation walls</b>	<b>4,949</b>	<b>SF</b>		
<b>29 Concrete; material</b>	<b>419</b>	<b>CY</b>	<b>\$150.00</b>	<b>\$62,850</b>
<b>30 Concrete; place</b>	<b>419</b>	<b>CY</b>	<b>\$110.00</b>	<b>\$46,090</b>
<b>31 Reinforcement</b>	<b>62,850</b>	<b>LB</b>	<b>\$2.00</b>	<b>\$125,700</b>
<b>32 Formwork</b>	<b>9,897</b>	<b>SF</b>	<b>\$18.00</b>	<b>\$178,146</b>
<b>33 Brick/ Stone shelf</b>	<b>2,083</b>	<b>LF</b>	<b>\$8.00</b>	<b>\$16,664</b>
<b>34 Elevator pits</b>	<b>1</b>	<b>EA</b>		
<b>35 Concrete; material</b>	<b>14</b>	<b>CY</b>	<b>\$150.00</b>	<b>\$2,100</b>
<b>36 Concrete; place</b>	<b>14</b>	<b>CY</b>	<b>\$110.00</b>	<b>\$1,540</b>
<b>37 Reinforcement</b>	<b>408</b>	<b>LB</b>	<b>\$2.00</b>	<b>\$816</b>
<b>38 Formwork</b>	<b>103</b>	<b>SF</b>	<b>\$25.00</b>	<b>\$2,563</b>
<b>39 Elevator shaft walls</b>	<b>186</b>	<b>SF</b>		
<b>40 Concrete; material</b>	<b>7</b>	<b>CY</b>	<b>\$150.00</b>	<b>\$1,050</b>
<b>41 Concrete; place</b>	<b>7</b>	<b>CY</b>	<b>\$110.00</b>	<b>\$770</b>
<b>42 Reinforcement</b>	<b>1,050</b>	<b>LB</b>	<b>\$2.00</b>	<b>\$2,100</b>
<b>43 Formwork</b>	<b>372</b>	<b>SF</b>	<b>\$22.00</b>	<b>\$8,184</b>
<b>44</b>				
<b>45 Anchor bolts</b>	<b>644</b>	<b>SET</b>	<b>\$42.00</b>	<b>\$27,048</b>
<b>46</b>				
<b>47 Thermal &amp; Moisture Protection</b>				
<b>48 2" Insulation at foundation walls</b>	<b>4,949</b>	<b>SF</b>	<b>\$2.85</b>	<b>\$14,103</b>
<b>49 Waterproofing elevator pit</b>	<b>204</b>	<b>SF</b>	<b>\$22.00</b>	<b>\$4,488</b>
<b>50 Damp proofing to foundation walls</b>	<b>4,949</b>	<b>SF</b>	<b>\$6.00</b>	<b>\$29,691</b>



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**DETAILED ESTIMATE - NEW CONSTRUCTION**

<b>51</b>					
<b>52</b>	Dewatering during excavation	1	LS	\$20,000.00	\$20,000
<b>53</b>	<b>A1010 FOUNDATIONS TOTAL</b>				<b>\$1,747,890</b>
<b>54</b>					
<b>55</b>	<b>A1030 SLAB ON GRADE</b>				
<b>56</b>	<i>Earthwork</i>				
<b>57</b>	Continuous footing w/foundation wall	2,388	LF		
<b>58</b>	Excavation	1,456	CY	\$12.00	\$17,472
<b>59</b>	Backfill from import	803	CY	\$25.00	\$20,075
<b>60</b>	Spread footings	134	EA		
<b>61</b>	Excavation	1,482	CY	\$12.00	\$17,784
<b>62</b>	Backfill from import	730	CY	\$25.00	\$18,250
<b>63</b>	Elevator pits; cut and fill	1	EA	\$3,500.00	\$3,500
<b>64</b>					
<b>65</b>	Building slab excavation				
<b>66</b>	Soil cut and fill	13,861	CY	\$16.00	\$221,776
<b>67</b>	Structural Soil Import	9,891	CY	\$30.00	\$296,730
<b>68</b>	12" base course sand & gravel below slab on grade	3,157	CY	\$38.00	\$119,966
<b>69</b>	Miscellaneous earthwork	1	LS	\$75,000.00	\$75,000
<b>70</b>					
<b>71</b>	<i>Concrete</i>				
<b>72</b>	Slab on grade; 5" thick,	77,330	SF		
<b>73</b>	Concrete; material	1,255	CY	\$150.00	\$188,250
<b>74</b>	Concrete; place & finish	77,330	SF	\$3.00	\$231,990
<b>75</b>	premium slopes and finishes	3,860	SF	\$1.50	\$5,790
<b>76</b>	Reinforcement (6x6 mesh)	88,930	SF	\$1.50	\$133,394
<b>77</b>	Interior concrete ramp	512	SF	\$25.00	\$12,800
<b>78</b>	Slab depressions	125	LF	\$18.00	\$2,250
<b>79</b>	Slab isolation joints	6,190	LF	\$8.00	\$49,520
<b>80</b>					
<b>81</b>	<i>Miscellaneous</i>				
<b>82</b>	Mitigation barrier	1,255	CY	\$75.00	\$94,125
<b>83</b>	Housekeeping & mechanical equipment pads	1	LS	\$10,000.00	\$10,000
<b>84</b>					
<b>85</b>	<i>Thermal &amp; Moisture Protection</i>				
<b>86</b>	Slab on grade; vapor barrier, 15% laps	89,518	SF	\$1.50	\$134,277
<b>87</b>	2" Rigid insulation under slab on grade	77,842	SF	\$2.85	NIC
<b>88</b>	2" Insulation to perimeter	2,083	SF	\$2.85	\$5,937
<b>89</b>	<b>A1030 SLAB ON GRADE TOTAL</b>				<b>\$1,658,886</b>
<b>90</b>					
<b>91</b>	<b>A10 FOUNDATIONS TOTAL</b>				<b>\$3,406,776</b>
<b>92</b>					
<b>93</b>					



## Westwood Hanlon Elementary School

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### DETAILED ESTIMATE - NEW CONSTRUCTION

#### 94 A20 BASEMENT

95

96 No anticipated work

97

## 98 TOTAL SYSTEM A20 BASEMENT

\$0

99

100

## 101 B10 STRUCTURE

102

## 103 B1010 UPPER FLOOR CONSTRUCTION

## 104 Concrete

105 Slab topping on 2" mtl deck; 4 1/2" total thickness

36,885 SF

106 Concrete Light weight material

512

CY

\$158.00

\$80,942

107 Upper level premium

512

CY

\$10.00

\$5,123

108 Reinforcement (6x6 mesh)

40,574

SF

\$1.10

\$44,631

109 Rebar at corners and openings

1,189

LBS

\$2.00

\$2,378

110 Concrete; place &amp; finish

36,885

SF

\$3.00

\$110,655

111

## 112 Structural steel framing

306

TNS

113 HSS shape beam

9

TNS

\$5,500.00

\$49,500

114 WF shape beam

119

TNS

\$5,150.00

\$612,850

115 WF shape beam &gt;100#/LF

12

TNS

\$5,400.00

\$64,800

116 HSS shape column

131

TNS

\$5,500.00

\$720,500

117 Braced framing

20

TNS

\$5,500.00

\$110,000

118 Misc. steel

15

TNS

\$4,800.00

\$72,000

119 Base Plates

161

EA

\$75.00

\$12,075

120 Moment connections

132

EA

\$800.00

\$105,600

121 Shear studs

7,377

EA

\$7.00

\$51,639

122 AESS allowance

1

AL

\$25,000.00

\$25,000

123 2" deep x 20ga galv composite floor deck

36,885

SF

\$3.95

\$145,696

124

## 125 Misc. Metals

126 Misc. steel framing

114,384

SF

\$0.25

\$28,596

127

## 128 Thermal &amp; Moisture Protection

129 Fireproof

1

LS

\$25,000.00

\$25,000

130 Floor Construction Firestopping

114,384

GSF

\$0.35

\$40,034

## 131 B1010 UPPER FLOOR CONSTRUCTION TOTAL

\$2,307,019

132

## 133 B1020 ROOF CONSTRUCTION

## 134 Concrete

135 Slab topping on 2" mtl deck; 6" total thickness @ RTU

2,660

SF



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**DETAILED ESTIMATE - NEW CONSTRUCTION**

<b>136</b>	Concrete NWT material	<b>49</b>	CY	\$158.00	\$7,783
<b>137</b>	Reinforcement (6x6 mesh)	<b>2,926</b>	SF	\$1.10	\$3,219
<b>138</b>	Concrete; place & finish	<b>2,660</b>	SF	\$3.00	\$7,980
<b>139</b>					
<b>140</b>	<i>Structural steel framing</i>	<b>382</b>	<i>TNS</i>		
<b>141</b>	HSS shape beam	<b>27</b>	TNS	\$5,500.00	\$148,500
<b>142</b>	WF shape beam	<b>223</b>	TNS	\$5,150.00	\$1,148,450
<b>143</b>	WF shape beam >100#/LF	<b>43</b>	TNS	\$5,400.00	\$232,453
<b>144</b>	Open wet joists	<b>61</b>	TNS	\$5,700.00	\$347,700
<b>145</b>	Misc. steel	<b>28</b>	TNS	\$5,000.00	\$140,000
<b>146</b>	Moment connections	<b>118</b>	EA	\$750.00	\$88,500
<b>147</b>	shear studs	<b>530</b>	EA	\$7.00	\$3,710
<b>148</b>	HSS hanger from cafe roof	<b>1</b>	EA	\$650.00	\$650
<b>149</b>	3" deep, 20 ga type "B" galv metal roof deck	<b>62,636</b>	SF	\$4.25	\$266,203
<b>150</b>	Galv acoustic roof deck; Gym	<b>12,325</b>	SF	\$8.50	\$104,763
<b>151</b>	Other misc plates, connections	<b>74,961</b>	SF	\$2.00	\$149,922
<b>152</b>	Rough blocking to roof	<b>74,961</b>	SF	\$0.50	\$37,481
<b>153</b>	Formed metal panel roof screen, 8' high	<b>79</b>	LF	\$800.00	\$63,200
<b>154</b>					
<b>155</b>	<i>Canopy roof</i>	<b>0</b>	<i>SF</i>		
<b>156</b>	CLT decking	<b>4,720</b>	SF	\$42.00	\$198,240
<b>157</b>					
<b>158</b>	<i>Misc. Metals</i>				
<b>159</b>	Misc. steel framing	<b>114,384</b>	SF	\$2.00	\$228,768
<b>160</b>	<b>B1020 ROOF CONSTRUCTION TOTAL</b>				<b>\$3,177,521</b>
<b>161</b>					
<b>162</b>	<b>TOTAL SYSTEM B10 SUPERSTRUCTURE</b>				<b>\$5,484,540</b>
<b>163</b>					
<b>164</b>					
<b>165</b>	<b>B20 EXTERIOR CLOSURE</b>				
<b>166</b>					
<b>167</b>	<b>B2010 EXTERIOR WALLS</b>	<b>72,557</b>	<b>SF</b>		
<b>168</b>					
<b>169</b>	<i>Exterior wall</i>	<b>72,557</b>	<i>SF</i>		
<b>170</b>	Staging, scaffolding, hoists, related equipment	<b>72,557</b>	SF	\$3.25	\$235,810
<b>171</b>	Brick veneer	<b>31,688</b>	SF	\$38.00	\$1,204,144
<b>172</b>	Natural stone veneer	<b>4,490</b>	SF	\$75.00	\$336,750
<b>173</b>	Cast stone sill	<b>565</b>	SF	\$60.00	\$33,900
<b>174</b>	Terracotta cladding	<b>16,872</b>	SF	\$80.00	\$1,349,760
<b>175</b>	Terracotta projections	<b>4,516</b>	SF	\$80.00	\$361,280
<b>176</b>	MCP panel system	<b>2,242</b>	SF	\$75.00	\$168,150
<b>177</b>	8" CMU backup wall	<b>12,184</b>	SF	\$24.00	\$292,416
<b>178</b>	12" CMU backup wall	<b>10,563</b>	SF	\$28.50	\$301,046





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**DETAILED ESTIMATE - NEW CONSTRUCTION**

<b>179</b>	6" metal stud	<b>35,094</b>	SF	\$8.00	\$280,754
<b>180</b>	3" rigid insulation	<b>36,743</b>	SF	\$4.50	\$165,344
<b>181</b>	Mineral fiberglass batt	<b>19,114</b>	SF	\$2.50	\$47,785
<b>182</b>	Air vapor barrier	<b>72,557</b>	SF	\$6.50	\$471,621
<b>183</b>	Gyp BD-5 sheathing	<b>35,094</b>	SF	\$2.75	\$96,509
<b>184</b>	5/8 GWB	<b>35,094</b>	SF	\$3.25	\$114,056
<b>185</b>	Fin metal edge trim	<b>2,602</b>	LF	\$25.00	NIC
<b>186</b>	Caulking and sealants	<b>72,557</b>	SF	\$1.00	\$72,557
<b>187</b>					
<b>188</b>	<i>Miscellaneous</i>				
<b>189</b>	Sills	<b>1,814</b>	LF	\$75.00	\$136,044
<b>190</b>	Makerspace tube steel	<b>1</b>	LS	\$35,000.00	\$35,000
<b>191</b>	Fixed rated expansion joint	<b>35</b>	LF	\$65.00	\$2,275
<b>192</b>	Loose galv steel lintel @ doors, windows & louvers	<b>1,088</b>	LF	\$140.00	\$152,320
<b>193</b>	Through wall sheet mtl flashing sheathing & rigid insul.	<b>2,083</b>	LF	\$25.00	\$52,075
<b>194</b>	Dimensional characters; School name	<b>1</b>	LS	\$12,800.00	\$12,800
<b>195</b>	Mockup; allow	<b>1</b>	LS	\$30,000.00	\$30,000
<b>196</b>	<b>B2010 EXTERIOR WALLS TOTAL</b>				<b>\$5,952,395</b>
<b>197</b>					
<b>198</b>	<b>B2020 EXTERIOR WINDOWS</b>	<b>13,415</b>	SF		
<b>199</b>	Curtain wall	<b>9,290</b>	SF	\$125.00	\$1,161,250
<b>200</b>	Translucent glass at gym	<b>1,565</b>	SF	\$130.00	\$203,450
<b>201</b>	Windows	<b>4,125</b>	SF	\$95.00	\$391,875
<b>202</b>	Blocking for windows	<b>4,125</b>	LF	\$5.50	\$22,688
<b>203</b>	Premium for school guard glazing	<b>1</b>	LS	\$50,000.00	\$50,000
<b>204</b>	Add premium for ballastic glazing	<b>1</b>	LS	\$25,000.00	\$25,000
<b>205</b>	Sunshades	<b>258</b>	LF	\$150.00	\$38,700
<b>206</b>	Backer rod	<b>1</b>	LS	\$35,000.00	\$35,000
<b>207</b>	<i>Thermal &amp; Moisture Protection</i>				
<b>208</b>	Window caulking	<b>5,915</b>	LF	\$1.50	\$8,873
<b>209</b>	<b>B2020 EXTERIOR WINDOWS TOTAL</b>				<b>\$1,936,835</b>
<b>210</b>					
<b>211</b>	<b>B2050 EXTERIOR DOORS AND GRILLES</b>				
<b>212</b>	<i>Aluminum entry doors including hardware</i>				
<b>213</b>	Alum FG door; 6'-0 3/4"x7'-0"	<b>6</b>	PR	\$8,000.00	\$48,000
<b>214</b>	Alum FG door; 6'-0"x7'-0"	<b>1</b>	PR	\$8,000.00	\$8,000
<b>215</b>	Alum FG door; 6'-2 1/2"x7'-2 3/4"	<b>3</b>	PR	\$8,000.00	\$24,000
<b>216</b>	Alum FG door; 6'x7'-2 3/4"	<b>3</b>	PR	\$8,000.00	\$24,000
<b>217</b>	Alum G door; 6'-0"x7'-0"	<b>1</b>	PR	\$7,500.00	\$7,500
<b>218</b>	Auto controls	<b>3</b>	SETS	\$2,500.00	\$7,500
<b>219</b>	Premium for school guard glazing	<b>5</b>	PR	\$500.00	\$2,500
<b>220</b>	Premium for Bullet resistant glazing	<b>2</b>	PR	\$500.00	\$1,000



## **Westwood Hanlon Elementary School**

Westwood, MA  
113,141 GSF

### **DETAILED ESTIMATE - NEW CONSTRUCTION**

221	HM doors including hardware				
222	HM F door; 7x7	1	PR	\$3,250.00	\$3,250
223	HM F door; 6x7	4	PR	\$3,200.00	\$12,800
224	Door caulking	1	LS	\$1,900.00	\$1,900
225	B2050 EXTERIOR DOORS AND GRILLES TOTAL				\$140,450
226					
227	B2070 EXTERIOR LOUVERS AND VENTS				
228	Fixed aluminum louvers; allow	20	SF	\$100.00	\$2,000
229	B2070 EXTERIOR LOUVERS AND VENTS TOTAL				\$2,000
230					
231	B2080 EXTERIOR WALL APPURTENANCES				
232	Exterior alum. sun control devices (part of glazing system)				w/ glazing
233	B2080 EXTERIOR WALL APPURTENANCES TOTAL				\$0
234					
235	TOTAL SYSTEM B20 EXTERIOR CLOSURE				\$8,031,680
236					
237					
238	B30 ROOFING				
239					
240	B3010 ROOF COVERINGS				
241	Roofing				
242	PVC membrane roofing system, 60 mil	74,961	SF	\$6.60	\$494,743
243	1/2" cover board	74,961	SF	\$5.00	\$374,805
244	R-60 insulation	74,961	SF	\$6.00	\$449,766
245	Vapor retarder	74,961	SF	\$1.00	\$74,961
246	1/2" substrate board	74,961	SF	\$4.65	\$348,569
247	Tapered insulation	15,294	SF	\$1.50	\$22,941
248	Canopy roof	4,720	SF		
249	PVC membrane roofing system, 60 mil	4,720	SF	\$6.60	\$31,152
250	1/2" cover board	4,720	SF	\$5.00	\$23,600
251	Vapor retarder	4,720	SF	\$1.00	\$4,720
252	Membrane to the parapet	1	LS	\$50,000.00	\$50,000
253					
254	Alum. roof edge/facias roof edge/high performance paint	2,806	LF	\$50.00	\$140,300
255	Roofing Accessories				
256	Walkway pads	1,470	SF	\$8.00	\$11,760
257	Terracotta cladding equipment at roof	521	SF	\$82.00	\$42,722
258	Roof access hatch 36"x36"	3	EA	\$5,500.00	\$16,500
259	Roof access hatch 36"x54"	1	EA	\$5,500.00	\$5,500
260	Expansion joint covers	1	LS	\$10,000.00	\$10,000
261					
262	Mechanical roof top equipment				



**Westwood Hanlon Elementary School**

Westwood, MA

113,141 GSF

**DETAILED ESTIMATE - NEW CONSTRUCTION**

<b>263</b>	Roof ladders	4	EA	\$1,800.00	\$7,200
<b>264</b>					
<b>265</b>	Miscellaneous roof accessories	1	LS	\$25,000.00	\$25,000
<b>266</b>	<b>B3010 ROOF COVERINGS TOTAL</b>				<b>\$2,134,238</b>
<b>267</b>					
<b>268</b>	B 3020 ROOF APPURTENANCES				
<b>269</b>	Roof Drain/ overflow drain w/ insula sump	28	EA	\$750.00	\$21,000
<b>270</b>	EF flashing	7	EA	\$150.00	\$1,050
<b>271</b>	Roof and wall flashing	422	LF	\$18.00	\$7,596
<b>272</b>	Misc. flashing	1	LS	\$50,000.00	\$50,000
<b>273</b>	<b>B 3020 ROOF APPURTENANCES TOTAL</b>				<b>\$79,646</b>
<b>274</b>					
<b>275</b>	B 3060 HORIZONTAL OPENINGS				
<b>276</b>	Skylights	328	SF	\$250.00	\$82,000
<b>277</b>	<b>B 3060 HORIZONTAL OPENINGS TOTAL</b>				<b>\$82,000</b>
<b>278</b>					
<b>279</b>	<b>TOTAL SYSTEM B30 ROOFING</b>				<b>\$2,295,884</b>
<b>280</b>					
<b>281</b>					
<b>282</b>	<b>C10 INTERIOR CONSTRUCTION</b>				
<b>283</b>					
<b>284</b>	<b>C1010 PARTITIONS</b>				
<b>285</b>					
<b>286</b>	Masonry partitions	23,480	SF		
<b>287</b>	Staging, scaffolding, hoists, related equipment	23,480	SF	\$3.50	\$82,180
<b>288</b>	4" CMU	187	SF	\$18.00	\$3,366
<b>289</b>	Type HF8; 6" CMU, 7/8" Hat channel, 5/8" GWB	670	SF	\$24.00	\$16,080
<b>290</b>	Type E, E1; 8" CMU wall	12,965	SF	\$22.00	\$285,219
<b>291</b>	Type E2; 8" CMU wall -2 hr	601	SF	\$24.50	\$14,736
<b>292</b>	8" CMU elevator wall	1,056	SF	\$24.50	\$25,872
<b>293</b>	10" CMU	1,232	SF	\$25.50	\$31,416
<b>294</b>	Type G; 12" CMU	6,769	SF	\$29.00	\$196,301
<b>295</b>	Gypsum board partitions	123,423	SF		
<b>296</b>	Type A; 6" Metal studs, 5/8" GWB both sides, sound insulation	18,619	SF	\$14.50	\$269,976
<b>297</b>	Type A1A; 6" Metal studs, 2 layer 5/8" GWB both sides, sound insulation	697	SF	\$19.50	\$13,592
<b>298</b>	Type A2, 6" Metal studs, 5/8" GWB both sides, sound insulation	779	SF	\$14.50	\$11,296
<b>299</b>	Type A2A; 6" Metal studs, (2) 5/8" GWB both sides, sound insulation	20,532	SF	\$19.50	\$400,374
<b>300</b>	3-5/8" Metal studs, 5/8" GWB both sides	3,808	SF	\$12.00	\$45,696



**Westwood Hanlon Elementary School**

Westwood, MA

113,141 GSF

**DETAILED ESTIMATE - NEW CONSTRUCTION**

<b>301</b>	Type B; 3-5/8" Metal studs, 5/8" GWB both sides, sound insulation	<b>1,799</b>	SF	\$13.50	\$24,287
<b>302</b>	Type C; 8" Metal studs, 5/8" GWB both sides, sound insulation	<b>6,767</b>	SF	\$15.75	\$106,580
<b>303</b>	Type F; 2-1/2" Metal studs, 5/8" GWB, sound insulation	<b>246</b>	SF	\$8.75	\$2,153
<b>304</b>	Type F4; 3-5/8" Metal studs, 5/8" GWB, sound insulation	<b>13,882</b>	SF	\$10.50	\$145,761
<b>305</b>	Type F6; 6" Metal studs, 5/8" GWB, sound insulation	<b>30,785</b>	SF	\$11.75	\$361,724
<b>306</b>	Type F6a; 6" Metal studs, 5/8" GWB, Non-rated acoustic barrier	<b>957</b>	SF	\$12.00	\$11,483
<b>307</b>	Type F8; 7/8" Furring channel, 5/8" GWB	<b>627</b>	SF	\$6.00	\$3,762
<b>308</b>	Type M; 6" Metal studs, (2) 5/8" GWB both sides, sound insulation	<b>2,925</b>	SF	\$19.50	\$57,038
<b>309</b>	Premium for abuse resistant walls	<b>1</b>	LS	\$75,000.00	\$75,000
<b>310</b>	Rough carpentry internal partitions and ceilings	<b>226,609</b>	SF	\$1.50	\$339,914
<b>311</b>	Misc. metals for interior masonry (lintels, restraint)	<b>2,348</b>	LF	\$35.00	\$82,180
<b>312</b>					
<b>313</b>	<i>08 80 00 Glazing</i>				
<b>314</b>	Interior window	<b>119</b>	SF	\$85.00	\$10,115
<b>315</b>	Interior storefront	<b>1,964</b>	SF	\$150.00	\$294,600
<b>316</b>					
<b>317</b>	<i>Operable partition</i>				
<b>318</b>	Paired panel system	<b>1</b>	LS	\$18,000.00	\$18,000
<b>319</b>					
<b>320</b>	<i>Interior penetration firestopping</i>				
<b>321</b>	Interior caulking	<b>114,384</b>	GSF	\$1.25	\$142,980
<b>322</b>	Top-of-partition firestopping	<b>114,384</b>	GSF	\$0.65	\$74,350
<b>323</b>	<b>C1010 PARTITIONS TOTAL</b>				<b>\$3,146,028</b>
<b>324</b>					
<b>325</b>	<b>C1020 INTERIOR DOORS, FRAMES &amp; HARDWARE</b>				
<b>326</b>	<i>08 11 13 Hollow Metal Doors and Frames</i>				
<b>327</b>	Type F HM door; 3'-0"x7'-0"	<b>3</b>	EA	\$300.00	\$900
<b>328</b>	Type F HM door; 5'-0"x7'-0"	<b>1</b>	PR	\$600.00	\$600
<b>329</b>	Type F HM door; 6'-0"x7'-0"	<b>1</b>	PR	\$1,200.00	\$1,200
<b>330</b>	<i>Door Frames</i>				
<b>331</b>	Type 1 HM frame; single	<b>67</b>	EA	\$245.00	\$16,415
<b>332</b>	Type 1 HM frame; double	<b>18</b>	EA	\$299.00	\$5,382
<b>333</b>	Type 2 HM frame; Double	<b>4</b>	EA	\$299.00	\$1,196
<b>334</b>	Type 3 HM frame; single	<b>17</b>	EA	\$961.00	\$16,337
<b>335</b>	Type 4 HM frame; single	<b>25</b>	EA	\$761.00	\$19,025
<b>336</b>	Type 4 HM frame; Double	<b>10</b>	EA	\$1,277.00	\$12,770



**Westwood Hanlon Elementary School**

Westwood, MA

113,141 GSF

**DETAILED ESTIMATE - NEW CONSTRUCTION**

<b>337</b>	Type 5 HM frame; single	<b>27</b>	EA	\$1,889.00	\$51,003
<b>338</b>	Type 5 AL frame; single	<b>3</b>	EA	\$2,077.90	\$6,234
<b>339</b>	Type 7 HM fame; single	<b>8</b>	EA	\$5,172.00	\$41,376
<b>340</b>	45 min fire rate	<b>1</b>	EA	\$75.00	\$75
<b>341</b>	60 min fire rate	<b>7</b>	EA	\$100.00	\$700
<b>342</b>	90 min fire rate	<b>7</b>	EA	\$125.00	\$875
<b>343</b>	<i>08 14 16 Flush Wood Doors</i>				
<b>344</b>	Type F wood door; 3'-0"x7'-0"	<b>131</b>	EA	\$350.00	\$45,850
<b>345</b>	Type F wood door; 3'-6"x7'-0"	<b>1</b>	EA	\$350.00	\$350
<b>346</b>	Type F wood door; 4'-0"x7'-0"	<b>4</b>	PR	\$550.00	\$2,200
<b>347</b>	Type F wood door; 6'-0"x7'-0"	<b>10</b>	PR	\$700.00	\$7,000
<b>348</b>	Type FG wood door; 6'-0"x7'-0"	<b>2</b>	PR	\$1,285.00	\$2,570
<b>349</b>	Type G wood door ; 3'-0"x7'-0"	<b>3</b>	EA	\$496.25	\$1,489
<b>350</b>	Type G wood door ; 6'-0"x7'-0"	<b>2</b>	PR	\$642.50	\$1,285
<b>351</b>	Type G wood door; 7'-0"x7'-0"	<b>1</b>	PR	\$642.50	\$643
<b>352</b>	Type N wood door; 6'-0"x7'-0"	<b>6</b>	PR	\$700.00	\$4,200
<b>353</b>	Type V wood door; 3'-0"x7'-0"	<b>2</b>	EA	\$415.00	\$830
<b>354</b>	Type V wood door; 6'-0"x7'-0"	<b>1</b>	PR	\$830.00	\$830
<b>355</b>	Premium cost for acoustical doors	<b>1</b>	LS	\$5,250.00	\$5,250
<b>356</b>	Premium cost to fully gasketed	<b>1</b>	LS	\$450.00	\$450
<b>357</b>	Premium cost for Bullet resistant glazing	<b>1</b>	LS	\$7,800.00	\$7,800
<b>358</b>	<i>08 41 13 Aluminum Framed Entrances, Storefront</i>				
<b>359</b>	Type G glass door ;3'-0"x7'-0"	<b>5</b>	EA	\$3,500.00	\$17,500
<b>360</b>	Type G glass door ; 6'-0"x7'-0"	<b>5</b>	PR	\$7,000.00	\$35,000
<b>361</b>	Type G glass door ; 7'-0"x7'-0"	<b>1</b>	PR	\$7,000.00	\$7,000
<b>362</b>	Type FG alum door ; 3'- 1 3/4"x7'-2 3/4"	<b>1</b>	EA	\$4,000.00	\$4,000
<b>363</b>	Type FG alum door ; 3'- 0"x7'-0"	<b>4</b>	EA	\$4,000.00	\$16,000
<b>364</b>	Type FG alum door ; 3'-0"x7'-2 3/4"	<b>1</b>	EA	\$4,000.00	\$4,000
<b>365</b>	Type FG alum door ; 3'-6-1/4"x7'-2 3/4"	<b>2</b>	EA	\$4,000.00	\$8,000
<b>366</b>	Type FG alum door ; 6'-0"x7'-0"	<b>2</b>	PR	\$8,000.00	\$16,000
<b>367</b>	Type FG alum door ; 7'-0"x7'-0"	<b>1</b>	PR	\$8,000.00	\$8,000
<b>368</b>	<i>08 33 23 Coiling and Overhead Doors</i>				
<b>369</b>	Overhead door: 10'-0"x10'-0"	<b>1</b>	EA	\$8,500.00	\$8,500
<b>370</b>	Overhead door: 13'-0"x9'-6"	<b>1</b>	EA	\$10,497.50	\$10,498
<b>371</b>	Overhead door: 8'-0"x8'-0"	<b>2</b>	EA	\$5,440.00	\$10,880
<b>372</b>	<i>08 3 1 00 Access Doors &amp; Panels</i>				
<b>373</b>	Access doors	<b>34</b>	EA	\$350.00	\$11,900
<b>374</b>	<i>08 80 00 Glazing</i>				
<b>375</b>	Door sidelights - See door frame				Included
<b>376</b>	Glazing to door - See door				Included
<b>377</b>					
<b>378</b>	Glass pocket door ; 8'-0"x7'-0"	<b>27</b>	EA	\$11,200.00	\$302,400
<b>379</b>	Alum door ; 3' -3-1/2"x6'-11 1/2"	<b>24</b>	EA	\$3,500.00	\$84,000



## Westwood Hanlon Elementary School

Westwood, MA

113,141 GSF

### DETAILED ESTIMATE - NEW CONSTRUCTION

<b>380</b>				
<b>381</b>	<i>08 71 00 Door Hardware</i>			
<b>382</b>	Hardware	223	SET	\$850.00 \$189,550
<b>383</b>	Powered door openers	2	LOC	\$3,000.00 \$6,000
<b>384</b>	Paint door frames	179	EA	\$85.00 \$15,215
<b>385</b>	Paint door	7	EA	\$70.00 \$490
<b>386</b>	Blocking at doors	3,139	LF	\$3.50 \$10,987
<b>387</b>	Door Installation	223	EA	\$250.00 \$55,750
<b>388</b>	<b>C1020 INTERIOR DOORS, FRAMES &amp; HARDWARE TOTAL</b>			<b>\$1,076,503</b>
<b>389</b>				
<b>390</b>	<b>C1030 FITTINGS</b>			
<b>391</b>	<i>Miscellaneous Metals</i>			
<b>392</b>	<i>Miscellaneous metals</i>	114,384	SF	\$1.00 \$114,384
<b>393</b>	Glass infill railing	174	LF	\$445.00 \$77,430
<b>394</b>				
<b>395</b>	<u><i>Finish Carpentry</i></u>			
<b>396</b>	Countertop support work	1	LS	\$15,440.00 \$15,440
<b>397</b>	Misc. millwork standing and running trim	114,384	SF	\$0.25 \$28,596
<b>398</b>	<i>Markerboards and tackboards</i>			
<b>399</b>	MB 14460 at Adaptive PE	1	EA	\$1,200.00 \$1,200
<b>400</b>	MB 14460 at Art Classroom	1	EA	\$1,200.00 \$1,200
<b>401</b>	MB 7260 at Art Classroom	1	EA	\$600.00 \$600
<b>402</b>	MB 12084 at Extended Learning	2	EA	\$1,680.00 \$3,360
<b>403</b>	MB 14484 at Extended Learning	3	EA	\$1,680.00 \$5,040
<b>404</b>	MB 4860 at Extended Learning	1	EA	\$400.00 \$400
<b>405</b>	MB 14460 at Focus Program Room	2	EA	\$1,200.00 \$2,400
<b>406</b>	MB 12060 at General Classroom	20	EA	\$1,000.00 \$20,000
<b>407</b>	MB 4860 at General Classroom	20	EA	\$400.00 \$8,000
<b>408</b>	MB 14460 at Kindergarten Classroom	5	EA	\$1,200.00 \$6,000
<b>409</b>	MB 9660 at Kindergarten Classroom	5	EA	\$800.00 \$4,000
<b>410</b>	MB 12084 at Media Center	2	EA	\$1,680.00 \$3,360
<b>411</b>	MB 14460 at Music classroom	3	EA	\$1,200.00 \$3,600
<b>412</b>	MB 9648 at Music classroom	1	EA	\$640.00 \$640
<b>413</b>	MB 9660 at Resource Room	4	EA	\$800.00 \$3,200
<b>414</b>	MB 14460 at STE Room	1	EA	\$1,200.00 \$1,200
<b>415</b>	MB 14460 at WABA Upper	1	EA	\$1,200.00 \$1,200
<b>416</b>	MB 14460 at WABA lower	0	EA	\$1,200.00 \$0
<b>417</b>	TB 6060 at Extended Learning	2	EA	\$450.00 \$900
<b>418</b>	TB 4848 at General Classroom	20	EA	\$288.00 \$5,760
<b>419</b>	TB 9648 at General Classroom	20	EA	\$576.00 \$11,520
<b>420</b>	TB 3660 at Kindergarten Classroom	5	EA	\$270.00 \$1,350
<b>421</b>	TB 7248 at Kindergarten Classroom	5	EA	\$432.00 \$2,160
<b>422</b>	TB 9648 at Kindergarten Classroom	5	EA	\$576.00 \$2,880





**Westwood Hanlon Elementary School**

Westwood, MA

113,141 GSF

**DETAILED ESTIMATE - NEW CONSTRUCTION**

<b>423</b>	TB 7248 at Music classroom	2	EA	\$432.00	\$864
<b>424</b>	TB 4860 at Resource Room	2	EA	\$360.00	\$720
<b>425</b>	TB 6036 at Speech	2	EA	\$270.00	\$540
<b>426</b>	TB 4848 at STE Room	1	EA	\$288.00	\$288
<b>427</b>	Misc. markerboard/tackboard	1	LS	\$15,000.00	\$15,000
<b>428</b>	<i>Interior guardrails</i>				
<b>429</b>	Handrail at ramp	122	LF	\$250.00	\$30,500
<b>430</b>	<i>Signage</i>				
<b>431</b>	Display case cabinet	6	EA	\$3,500.00	\$21,000
<b>432</b>	Metal top trim	1	LS	\$1,600.00	\$1,600
<b>433</b>	Art display rail	1	LS	\$1,200.00	\$1,200
<b>434</b>	Building wayfinding signage	1	LOC	\$7,500.00	\$7,500
<b>435</b>	Framed signs	1	LS	\$2,500.00	\$2,500
<b>436</b>	Miscellaneous signage	114,384	GSF	\$0.50	\$57,192
<b>437</b>	<i>Wall &amp; corner guards</i>				
<b>438</b>	Stainless steel corner guards	1	LS	\$5,760.00	\$5,760
<b>439</b>	<i>Toilet compartments (Solid Polymer)</i>				
<b>440</b>	Toilet compartments	18	EA	\$1,250.00	\$22,500
<b>441</b>	Toilet compartments - ADA	8	EA	\$1,500.00	\$12,000
<b>442</b>	Urinal screen	9	EA	\$750.00	\$6,750
<b>443</b>	<i>Metal lockers</i>				
<b>444</b>	Kitchen staff lockers	3	EA	\$500.00	\$1,500
<b>445</b>	Locker at Ext. Day stor.	3	EA	\$500.00	\$1,500
<b>446</b>	<i>Toilet accessories</i>				
<b>447</b>	Paper towel dispenser and soap dispenser @ classrooms	31	SET	\$135.00	\$4,185
<b>448</b>	Gang bathroom	6	EA	\$3,500.00	\$21,000
<b>449</b>	Single user bathroom	20	EA	\$750.00	\$15,000
<b>450</b>	Mop holder w/shelf (Janitors)	4	EA	\$200.00	\$800
<b>451</b>	<i>Fire extinguisher cabinets</i>				
<b>452</b>	Fully recessed/non-rated	11	EA	\$550.00	\$6,291
<b>453</b>	Semi-recessed/non-rated	6	EA	\$200.00	\$1,200
<b>454</b>					
<b>455</b>	General office service desk	16	LF	\$1,200.00	\$19,200
<b>456</b>	Sills	1,325	LF	\$55.00	\$72,875
<b>457</b>	Custom window seat-w/storage	200	LF	\$250.00	\$50,000
<b>458</b>					
<b>459</b>	Trash receptacles	26	LF	\$500.00	\$13,000
<b>460</b>					
<b>461</b>	Interior expansion	1	LS	\$15,000.00	\$15,000
<b>462</b>					
<b>463</b>	<i>Miscellaneous</i>				
<b>464</b>	Curtain and track at Nurse office	34	LF	\$120.00	\$4,080
<b>465</b>	Curtain and track at Extended Learning	359	LF	\$120.00	\$43,080



**Westwood Hanlon Elementary School**

Westwood, MA

113,141 GSF

**DETAILED ESTIMATE - NEW CONSTRUCTION**

466	Hoist beam	1	EA	\$5,000.00	\$5,000
467	<b>C1030 FITTINGS TOTAL</b>				<b>\$785,445</b>
468					
469	<b>TOTAL SYSTEM C10 INTERIOR CONSTRUCTION</b>				<b>\$5,007,976</b>
470					
471					
472	<b>C20 STAIRCASES</b>				
473					
474	<b>C2010 STAIRCASES</b>				
475	<i>Interior stairs</i>				
476	Concrete fill egress stairs	5	FLT	\$3,500.00	\$17,500
477	Egress stairs	3	FLT	\$25,000.00	\$75,000
478	Open/monumental stairs	1	FLT	\$75,000.00	\$75,000
479	Media center stairs	1	FLT	\$3,000.00	\$3,000
480	Wood stair at Cafeteria	52	LF	\$150.00	\$7,800
481	Ramp to stage	1	LS	\$12,000.00	\$12,000
482	Paint stairs	1	LS	\$15,000.00	\$15,000
483	<i>Stair finishes</i>				
484	Carpet at stair	116	SF	\$20.00	\$2,320
485	Raised rubber tile	2,391	SF	\$25.00	\$59,783
486	<b>C2010 STAIRCASES TOTAL</b>				<b>\$267,403</b>
487					
488	<b>TOTAL C20 STAIRCASES</b>				<b>\$267,403</b>
489					
490					
491	<b>C30 INTERIOR FINISHES</b>				
492					
493	<b>C3010 WALL FINISHES</b>				
494	Tile walls at bathroom, kitchen and Jan	9,018	SF	\$26.50	\$238,977
495	Tile walls at corrido, cafeteria and water fountain	896	SF	\$26.50	\$23,744
496	Linoleum wall covering at corridor	2,010	SF	\$18.00	\$36,180
497					
498	Acoustic wall panels	5,045	SF	\$28.00	\$141,260
499	Custom graphic wall covering	275	SF	\$15.00	\$8,460
500	DWP-1	472	SF	\$25.00	\$11,800
501	4x4 Custom PEG board system	1	EA	\$448.00	\$448
502	Wall slats	830	SF	\$55.00	\$45,650
503	Finish to Prescinium	50	LF	\$300.00	\$15,000
504	Wall pad at Adaptive PE	268	SF	\$20.00	\$5,360
505	Wall safety pads at Gym	585	SF	\$20.00	\$11,700
506	Removable wall pads	364	SF	\$25.00	\$9,100
507	Acoustical CMU, paint at GYM	2,880	SF	\$1.50	\$4,320
508	Paint CMU Walls	44,612	SF	\$1.15	\$51,304





**Westwood Hanlon Elementary School**

Westwood, MA

113,141 GSF

**DETAILED ESTIMATE - NEW CONSTRUCTION**

<b>509</b>	Paint to GWB	<b>183,771</b>	SF	\$1.00	\$183,771
<b>510</b>	Misc. paint	<b>114,384</b>	GSF	\$0.50	\$57,192
<b>511</b>	<b>C3010 WALL FINISHES TOTAL</b>				<b>\$844,266</b>
<b>512</b>					
<b>513</b>	<b>C3020 FLOOR FINISHES</b>	<b>114,384</b>			
<b>514</b>	<i>Tile:</i>				
<b>515</b>	QT	<b>1,670</b>	SF	\$26.50	\$44,255
<b>516</b>	QT base	<b>212</b>	LF	\$18.00	\$3,816
<b>517</b>	Stone threshold	<b>20</b>	EA	\$175.00	\$3,500
<b>518</b>	Tile at bathroom	<b>2,436</b>	SF	\$24.50	\$59,682
<b>519</b>	Tile base	<b>760</b>	LF	\$16.00	\$12,160
<b>520</b>	<i>Flooring</i>				
<b>521</b>	Wood stage floor	<b>958</b>	SF	\$25.00	\$23,950
<b>522</b>	Wood athletic flooring	<b>11,342</b>	SF	\$25.00	\$283,550
<b>523</b>	Carpet	<b>796</b>	SY	\$54.00	\$42,984
<b>524</b>	FTF; Flocked tile flooring;	<b>27,435</b>	SF	\$8.00	\$219,480
<b>525</b>	Linoleum	<b>20,588</b>	SF	\$7.00	\$144,116
<b>526</b>	Linoleum at corridor, mixer	<b>17,715</b>	SF	\$8.00	\$141,720
<b>527</b>	Lin at bathroom	<b>1,366</b>	SF	\$7.00	\$9,562
<b>528</b>	Rubber athletic	<b>1,698</b>	SF	\$18.00	\$30,564
<b>529</b>	Ramp finish	<b>212</b>	SF	\$10.00	\$2,120
<b>530</b>	Rubber base	<b>1</b>	LS	\$25,525.00	\$25,525
<b>531</b>	<i>Painting</i>				
<b>532</b>	Sealed concrete	<b>6,186</b>	SF	\$2.00	\$12,372
<b>533</b>	<b>C3020 FLOOR FINISHES TOTAL</b>				<b>\$1,059,356</b>
<b>534</b>					
<b>535</b>	<b>C3030 CEILING FINISHES</b>				
<b>536</b>	Acoustical ceilings; ACP 1A, 3A,4A -2x2	<b>44,803</b>	SF	\$8.00	\$358,424
<b>537</b>	Acoustical ceilings; ACP 1A, 2A -2x2 > 10'-0" A.F.F.	<b>21,604</b>	SF	\$9.75	\$210,639
<b>538</b>	Acoustical ceilings ACP 5A at bathroom	<b>3,508</b>	SF	\$9.00	\$31,572
<b>539</b>	Acoustical ceilings; ACP 7A -2x2'	<b>4,562</b>	SF	\$11.00	\$50,182
<b>540</b>	Acoustic ceiling; ACP9 20'-0" AFF	<b>642</b>	SF	\$12.50	\$8,025
<b>541</b>	Absorptive panels	<b>1</b>	LS	\$35,000.00	\$35,000
<b>542</b>	GWB ceilings	<b>8,195</b>	SF	\$15.00	\$122,925
<b>543</b>	GWB soffit	<b>1,238</b>	SF	\$25.00	\$30,950
<b>544</b>	Metal ceiling; MCM	<b>548</b>	SF	\$60.00	\$32,880
<b>545</b>	Acoustic wood baffles; WD-1	<b>882</b>	SF	\$38.00	\$33,516
<b>546</b>	2"x2" Decorative wood fins-wall to ceiling application; WD-1	<b>308</b>	SF	\$48.00	\$14,784
<b>547</b>	Paint exposed ceiling	<b>4,445</b>	SF	\$2.15	\$9,557
<b>548</b>	5'x5' Convex curved panels (kine tics ovations)	<b>142</b>	SF	\$55.00	\$7,810
<b>549</b>	GYM exposed ceiling - see Acoustical deck	<b>11,350</b>	SF	\$2.00	\$22,700
<b>550</b>	Illuminated light panel @ 12'-6" AFF	<b>288</b>	SF		Electrical
<b>551</b>	Paint GWB ceilings	<b>9,433</b>	SF	\$1.75	\$16,508



**Westwood Hanlon Elementary School**

Westwood, MA

113,141 GSF

**DETAILED ESTIMATE - NEW CONSTRUCTION**

<b>552</b>	<b>C3030 CEILING FINISHES TOTAL</b>				<b>\$985,472</b>
<b>553</b>					
<b>554</b>	<b>TOTAL SYSTEM C30 INTERIOR FINISHES</b>				<b>\$2,889,093</b>
<b>555</b>					
<b>556</b>					
<b>557</b>	<b>D10 CONVEYING SYSTEMS</b>				
<b>558</b>					
<b>559</b>	<b>D1010 CONVEYING SYSTEMS</b>				
<b>560</b>	Elevator pit ladder	1	EA	\$1,500.00	\$1,500
<b>561</b>	Sill angles	2	EA	\$175.00	\$350
<b>562</b>	Elevators; 2 stops	1	EA	\$145,000.00	\$145,000
<b>563</b>	<b>D1010 CONVEYING SYSTEMS TOTAL</b>				<b>\$146,850</b>
<b>564</b>					
<b>565</b>	<b>TOTAL SYSTEM D10 CONVEYING SYSTEMS</b>				<b>\$146,850</b>
<b>566</b>					
<b>567</b>					
<b>568</b>	<b>D15 MECHANICAL</b>				
<b>569</b>					
<b>570</b>	<b>D2020 PLUMBING</b>				
<b>571</b>	<u>Storm Piping Under slab</u>				
<b>572</b>	15" Sv Wt Cast Iron Pipe	10	LF	\$352.03	\$3,520
<b>573</b>	12" Sv Wt Cast Iron Pipe	170	LF	\$215.86	\$36,696
<b>574</b>	10" Sv Wt Cast Iron Pipe	260	LF	\$122.17	\$31,764
<b>575</b>	8" Sv Wt Cast Iron Pipe	210	LF	\$93.92	\$19,723
<b>576</b>	6" Sv Wt Cast Iron Pipe	220	LF	\$64.25	\$14,135
<b>577</b>	4" Sv Wt Cast Iron Pipe	110	LF	\$41.43	\$4,557
<b>578</b>	Sv Wt Cast Iron Fittings	123	EA	\$527.13	\$64,574
<b>579</b>	Floor Cleanouts	13	EA	\$334.15	\$4,344
<b>580</b>	Exterior Wall Sleeves	2	EA	\$485.00	\$970
<b>581</b>	Excavation, Bedding, and Backfill	By Others	LF	\$26.40	\$0
<b>582</b>	Gaskets, Lubricants, Etc.	1	LS	\$4,100.00	\$4,100
<b>583</b>					
<b>584</b>	<u>Sanitary Waste and Vent Piping Underslab</u>				
<b>585</b>	6" Sv Wt Cast Iron Pipe	60	LF	\$64.25	\$3,855
<b>586</b>	5" Sv Wt Cast Iron Pipe	310	LF	\$53.18	\$16,486
<b>587</b>	4" Sv Wt Cast Iron Pipe	1,680	LF	\$41.43	\$69,602
<b>588</b>	2" Sv Wt Cast Iron Pipe	440	LF	\$24.26	\$10,674
<b>589</b>	Sv Wt Cast Iron Fittings	311	EA	\$139.33	\$43,366
<b>590</b>	Floor Cleanouts	17	EA	\$334.15	\$5,681
<b>591</b>	FD 1 Floor Drains	4	EA	\$322.90	\$1,292
<b>592</b>	FD 2 Floor Sinks	11	EA	\$775.88	\$8,535
<b>593</b>	Exterior Wall Sleeves	2	EA	\$265.00	\$530
<b>594</b>	Excavation, Bedding, and Backfill	By Others	LF	\$26.40	\$0



**Westwood Hanlon Elementary School**

Westwood, MA  
113,141 GSF

**DETAILED ESTIMATE - NEW CONSTRUCTION**

<b>595</b>	Gaskets, Lubricants, Etc.	<b>1</b>	LS	\$4,100.00	\$4,100
<b>596</b>					
<b>597</b>	<u>Rain Leaders</u>				
<b>598</b>	8": No Hub Cast Iron Pipe	<b>420</b>	LF	\$73.56	\$30,895
<b>599</b>	6" No Hub Cast Iron Pipe	<b>540</b>	LF	\$49.28	\$26,611
<b>600</b>	5" No Hub Cast Iron Pipe	<b>1,040</b>	LF	\$41.16	\$42,806
<b>601</b>	4" No Hub Cast Iron Pipe	<b>650</b>	LF	\$33.39	\$21,704
<b>602</b>	No Hub Cast Iron Fittings	<b>331</b>	EA	\$214.85	\$71,169
<b>603</b>	Hangers	<b>331</b>	EA	\$93.00	\$30,806
<b>604</b>	Roof Drains	<b>29</b>	EA	\$645.06	\$18,707
<b>605</b>	Overflow Drains	<b>27</b>	EA	\$628.45	\$16,968
<b>606</b>	Wall Scuppers	<b>14</b>	EA	\$427.63	\$5,987
<b>607</b>	Floor Sleeves	<b>44</b>	EA	\$136.00	\$5,984
<b>608</b>	Fiberglass Pipe Insulation	<b>2,235</b>	LF	\$16.30	\$36,431
<b>609</b>	Drain Sump Insulation	<b>56</b>	EA	\$275.00	\$15,400
<b>610</b>	Exterior Wall Sleeves	<b>14</b>	EA	\$285.00	\$3,990
<b>611</b>	No Hub Couplings, Etc.	<b>1</b>	LS	\$6,400.00	\$6,400
<b>612</b>					
<b>613</b>	<u>Sanitary Waste and Vent Piping Above Slab</u>				
<b>614</b>	4" No Hub Cast Iron Pipe	<b>2,440</b>	LF	\$33.39	\$81,472
<b>615</b>	3" No Hub Cast Iron Pipe	<b>720</b>	LF	\$25.62	\$18,446
<b>616</b>	2" No Hub Cast Iron Pipe	<b>3,640</b>	LF	\$19.16	\$69,742
<b>617</b>	2" Galvanized Stl Pipe Sch 40 T&C	<b>63</b>	LF	\$28.74	\$1,811
<b>618</b>	No Hub Cast Iron Fittings	<b>850</b>	EA	\$81.63	\$69,386
<b>619</b>	Galvanized Drainage Pattern Fittings	<b>8</b>	EA	\$129.13	\$1,017
<b>620</b>	Hangers	<b>858</b>	EA	\$93.00	\$79,782
<b>621</b>	150# Bronze Gate Valves	<b>1</b>	EA	\$252.06	\$252
<b>622</b>	150# Bronze Check Valves	<b>1</b>	EA	\$350.83	\$351
<b>623</b>	Lavatory Carriers	<b>38</b>	EA	\$392.67	\$14,921
<b>624</b>	Double Water Closet Carriers	<b>10</b>	EA	\$1,185.96	\$11,860
<b>625</b>	Water Closet Carriers	<b>31</b>	EA	\$730.60	\$22,649
<b>626</b>	Urinal Carriers	<b>12</b>	EA	\$392.67	\$4,712
<b>627</b>	FD 1 Floor Drains	<b>4</b>	EA	\$322.90	\$1,292
<b>628</b>	Roof Flashings	<b>4</b>	EA	\$285.00	\$1,140
<b>629</b>	Floor Sleeves	<b>85</b>	EA	\$136.00	\$11,560
<b>630</b>	No Hub Couplings ,Etc.	<b>1</b>	LS	\$7,400.00	\$7,400
<b>631</b>					
<b>632</b>	<u>Domestic Water Piping</u>				
<b>633</b>	6" Ductile Iron Pipe	<b>18</b>	LF	\$31.22	\$562
<b>634</b>	Mech Joint Fittings	<b>1</b>	EA	\$297.05	\$297
<b>635</b>	Excavation, Bedding and Backfill	<b>18</b>	LF	\$21.00	\$378
<b>636</b>	Thrust Block	<b>1</b>	EA	\$512.00	\$512
<b>637</b>	Exterior Wall Sleeve	<b>1</b>	EA	\$196.00	\$196



**Westwood Hanlon Elementary School**

Westwood, MA

113,141 GSF

**DETAILED ESTIMATE - NEW CONSTRUCTION**

<b>638</b>	6" L Copper Tubing	<b>60</b>	LF	\$178.79	\$10,727
<b>639</b>	4" L Copper Tubing	<b>360</b>	LF	\$93.21	\$33,556
<b>640</b>	3" L Copper Tubing	<b>640</b>	LF	\$58.29	\$37,306
<b>641</b>	2 1/2" L Copper Tubing	<b>620</b>	LF	\$40.23	\$24,943
<b>642</b>	2" L Copper Tubing	<b>1,160</b>	LF	\$24.48	\$28,397
<b>643</b>	1 1/2" L Copper Tubing	<b>1,100</b>	LF	\$17.52	\$19,272
<b>644</b>	1 1/4" L Copper Tubing	<b>820</b>	LF	\$15.27	\$12,521
<b>645</b>	1" L Copper Tubing	<b>1,120</b>	LF	\$13.22	\$14,806
<b>646</b>	3/4" L Copper Tubing	<b>2,260</b>	LF	\$9.31	\$21,041
<b>647</b>	1/2" L Copper Tubing	<b>2,180</b>	LF	\$7.33	\$15,979
<b>648</b>	1/2" K Copper Tubing	<b>240</b>	LF	\$8.40	\$2,016
<b>649</b>	Wrought Copper Fittings	<b>1,290</b>	EA	\$125.00	\$161,250
<b>650</b>	Hangers	<b>1,290</b>	EA	\$93.00	\$119,970
<b>651</b>	125# Cast Iron Gate Valves	<b>6</b>	EA	\$945.00	\$5,670
<b>652</b>	150# Bronze Ball Valves	<b>150</b>	EA	\$142.00	\$21,300
<b>653</b>	150# Bronze Drain Valves	<b>20</b>	EA	\$102.02	\$2,040
<b>654</b>	125# Cast Iron Check Valves	<b>4</b>	EA	\$1,064.39	\$4,258
<b>655</b>	150# Bronze Check Valves	<b>10</b>	EA	\$154.60	\$1,546
<b>656</b>	150# Bronze Balancing Valves	<b>28</b>	EA	\$267.45	\$7,489
<b>657</b>	125# Cast Iron Strainers	<b>1</b>	EA	\$1,589.95	\$1,590
<b>658</b>	125# Cast Iron Reduced Pressure Zone Backflow Preventors	<b>1</b>	EA	\$4,580.25	\$4,580
<b>659</b>	150# Bronze Reduced Pressure Zone Backflow Preventors	<b>9</b>	EA	\$388.15	\$3,493
<b>660</b>	Water Meter	<b>1</b>	EA	\$3,145.00	\$3,145
<b>661</b>	Pressure Reducing Valves	<b>1</b>	EA	\$1,975.00	\$1,975
<b>662</b>	Large Water Hammer Arrestors	<b>12</b>	EA	\$361.00	\$4,332
<b>663</b>	Water Hammer Arrestors	<b>24</b>	EA	\$121.81	\$2,923
<b>664</b>	Trap Primers	<b>6</b>	EA	\$214.81	\$1,289
<b>665</b>	Non Freeze Wall Hydrants	<b>2</b>	EA	\$351.77	\$704
<b>666</b>	HB 1 Interior Hosebibbs	<b>11</b>	EA	\$115.71	\$1,273
<b>667</b>	Thermometers	<b>5</b>	EA	\$202.94	\$1,015
<b>668</b>	Pressure Gauges	<b>4</b>	EA	\$167.13	\$669
<b>669</b>	Vacuum Breakers	<b>2</b>	EA	\$197.63	\$395
<b>670</b>	Fiberglass Pipe Insulation	<b>10,320</b>	LF	\$7.10	\$73,272
<b>671</b>	Solder, Flux, Gas, Etc.	<b>1</b>	LS	\$5,600.00	\$5,600
<b>672</b>					
<b>673</b>	<u>Natural Gas Piping</u>				
<b>674</b>	No Work Required		LF		\$0
<b>675</b>					
<b>676</b>	<u>Radon Mitigation</u>				
<b>677</b>	4" Perforated PVC Pipe w/ Ftgs		LF	\$21.60	\$0
<b>678</b>	4" PVC Pipe w/ Ftgs, Hgrs		LF	\$34.90	\$0
<b>679</b>	Radon Fans		EA	\$1,475.00	\$0
<b>680</b>	Geo Textile		SF	\$1.86	\$0



**Westwood Hanlon Elementary School**

Westwood, MA  
113,141 GSF

**DETAILED ESTIMATE - NEW CONSTRUCTION**

<b>681</b>	Crushed Stone		YDS	\$17.52	\$0
<b>682</b>					
<b>683</b>	<u>Plumbing Fixtures and Equipment</u>				
<b>684</b>	Flushometers	46	EA	\$995.46	\$45,791
<b>685</b>	P1 B Child Water Closets	5	EA	\$789.63	\$3,948
<b>686</b>	P2A Wall Hung Lavatories w/ Sensor Operated Faucets	38	EA	\$950.95	\$36,136
<b>687</b>	P3,3A Wall Hung Urinals w/ Sensor Operated Faucets	12	EA	\$1,110.36	\$13,324
<b>688</b>	P4,4 A Classroom Sink	55	EA	\$850.70	\$46,789
<b>689</b>	P5 Hand Sinks	34	EA	\$850.70	\$28,924
<b>690</b>	P6 Bilevel Electric Water Coolers	7	EA	\$2,974.00	\$20,818
<b>691</b>	P7 Mop Receptors	7	EA	\$1,045.00	\$7,315
<b>692</b>	P8,8A Art Room Sink w/ Solids Interceptors	4	EA	\$1,623.69	\$6,495
<b>693</b>	P9 Emergency Eyewash	1	EA	\$1,326.70	\$1,327
<b>694</b>	P10 Refrigerator Condensate Pump	3	EA	\$615.36	\$1,846
<b>695</b>	P11 Shower Module	1	EA	\$2,612.80	\$2,613
<b>696</b>	P12 Washing Machine Box	2	EA	\$425.00	\$850
<b>697</b>	P13 Dishwasher	1	INSTALI	\$285.00	\$285
<b>698</b>	Commercial Kitchen Hand Sinks	1	INSTALI	\$205.00	\$205
<b>699</b>	Commercial Kitchen 3 Bay Sink	1	INSTALI	\$685.00	\$685
<b>700</b>	Commercial Kitchen Prep Sinks	2	INSTALI	\$489.00	\$978
<b>701</b>	Commercial Kitchen Ware Wash	1	INSTALI	\$489.00	\$489
<b>702</b>	Commercial Kitchen Hose Reel	1	INSTALI	\$205.00	\$205
<b>703</b>	DWH 1,2 Electric Water Heaters 36 KW 150 GPH, 119 Gallon	2	EA	\$29,874.00	\$59,748
<b>704</b>	XT 1,2 Expansion Tanks 8 Gallon Acceptance	2	EA	\$1,312.00	\$2,624
<b>705</b>	RCP 1 Hot Water Recirculation Pump 5 GPM @ 20 FT	1	EA	\$684.00	\$684
<b>706</b>	GI 1 Grease Interceptor 127 LBS	1	EA	\$6,845.00	\$6,845
<b>707</b>	GI 2 Grease Interceptor 50 LBS	1	EA	\$3,296.00	\$3,296
<b>708</b>	Solids Interceptors	4	EA	\$425.00	\$1,700
<b>709</b>	Leak Detection	1	EA	\$4,978.00	\$4,978
<b>710</b>	DMV 1 House Antiscald Valve 85 GPM	1	EA	\$11,450.00	\$11,450
<b>711</b>					
<b>712</b>	<u>Miscellaneous</u>				
<b>713</b>	Coordination Drawings, As Builts, Submittals, O&M's	1	LS	\$29,450.00	\$29,450
<b>714</b>	Rigging, Hoisting, and Scaffolding	1	LS	\$3,812.00	\$3,812
<b>715</b>	Flushing and Sanitizing	1	LS	\$4,945.00	\$4,945
<b>716</b>	Concrete Housekeeping Pads	2	EA	\$712.00	\$1,424
<b>717</b>	Drip Pans w/ Leak Detection	2	EA	\$1,574.00	\$3,148
<b>718</b>	Valve Tags, Pipe Identification	1	LS	\$10,450.00	\$10,450
<b>719</b>	<b>D2020 PLUMBING TOTAL</b>				<b>\$2,096,019</b>
<b>720</b>					
<b>721</b>	<b>D3010 HVAC</b>				
<b>722</b>	<u>Sheetmetal</u>				
<b>723</b>	Galvanized Ductwork	77,451	LBS	\$11.80	\$913,922



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Westwood, MA

113,141 GSF

**DETAILED ESTIMATE - NEW CONSTRUCTION**

<b>724</b>				
<b>725</b>	<u>Sheetmetal Accessories</u>			
<b>726</b>	Displacement Diffusers	156	EA	\$225.00 \$35,100
<b>727</b>	Supply Air Grilles	6	EA	\$275.00 \$1,650
<b>728</b>	Supply Air Diffusers	7	EA	\$185.00 \$1,295
<b>729</b>	Return Air Grilles	118	EA	\$319.00 \$37,642
<b>730</b>	Exhaust Air Grilles	36	EA	\$241.00 \$8,676
<b>731</b>	Cafeteria Supply Diffusers	5	EA	\$525.00 \$2,625
<b>732</b>	Gym Supply Air Grilles	24	EA	\$684.00 \$16,416
<b>733</b>	Gym Return Air Grilles	4	EA	\$1,185.00 \$4,740
<b>734</b>	Canvas Flexible Connections	43	EA	\$1,675.00 \$72,025
<b>735</b>	Flexible Duct Preinsulated	163	EA	\$46.00 \$7,498
<b>736</b>	Volume Dampers	381	EA	\$125.00 \$47,625
<b>737</b>	Fire Dampers	ALLOW		\$26,000.00 \$0
<b>738</b>	Fire Smoke Dampers	ALLOW		\$20,000.00 \$0
<b>739</b>				
<b>740</b>	<u>Insulation</u>			
<b>741</b>	2" Thk Fiberglass Duct Wrap	47,662	SF	\$5.30 \$252,609
<b>742</b>				
<b>743</b>	<u>Indoor Geothermal Piping</u>			
<b>744</b>	Hgrs (CS Stan Wt)	126	LF	\$421.38 \$53,094
<b>745</b>	Geothermal Drop Piping to Heat Pumps w/ Ftgs, Hgrs	210	LF	\$230.26 \$48,355
<b>746</b>	Valving, Specialties at Pipe Entrance	1	LS	\$22,450.00 \$22,450
<b>747</b>	Valving, Specialties at Geothermal Circulators	3	EA	\$36,159.00 \$108,477
<b>748</b>	Valving, Specialties at Heat Pumps	5	EA	\$12,850.00 \$64,250
<b>749</b>	Fiberglass Insulation	336	LF	\$25.90 \$8,702
<b>750</b>				
<b>751</b>	<u>Heating Hot/ Dual Temperature Water Piping</u>			
<b>752</b>	Heating Hot Main Piping w/ Ftgs, Hgrs (CS Sch 40)	3,297	LF	\$149.21 \$491,945
<b>753</b>	Heating Hot Water Runout Piping to AHU w/ Ftgs, Hgrs	840	LF	\$77.99 \$65,512
<b>754</b>	Hgrs ( L Copper)	15,700	LF	\$28.22 \$443,054
<b>755</b>	Valving, Specialties at Heat Pumps	6	EA	\$6,059.00 \$36,354
<b>756</b>	Valving, Specialties at Circulators	2	EA	\$16,577.00 \$33,154
<b>757</b>	Valving, Specialties at Air Handling Units	12	EA	\$3,581.00 \$42,972
<b>758</b>	Valving, Specialties at Terminal Units	287	EA	\$826.00 \$237,062
<b>759</b>	Fiberglass Insulation	19,837	EA	\$8.10 \$160,680
<b>760</b>				
<b>761</b>	<u>Chilled Water Piping</u>			
<b>762</b>	Chilled Water Main Piping w/ Ftgs, Hgrs (CS Stan Wt)	3,297	LF	\$318.29 \$1,049,402
<b>763</b>	Chilled Water Runout Piping to AHU's W/ Ftgs, Hgrs	840	LF	\$114.82 \$96,449
<b>764</b>	Valving, Specialties at Heat Pumps	6	EA	\$8,290.00 \$49,740
<b>765</b>	Valving, Specialties at Circulators	2	EA	\$27,862.00 \$55,724
<b>766</b>	Valving, Specialties at AHU	12	EA	\$5,767.00 \$69,204





**Westwood Hanlon Elementary School**

Westwood, MA  
113,141 GSF

**DETAILED ESTIMATE - NEW CONSTRUCTION**

<b>767</b>	Fiberglass Insulation	<b>4,137</b>	LF	\$15.60	\$64,537
<b>768</b>					
<b>769</b>	<u>Geothermal Field</u>				
<b>770</b>	Geothermal Piping to Field w/ Ftgs (HDPE)	<b>900</b>	LF		<b>F10 SPECIAL CONSTRUCTION</b>
<b>771</b>	Geothermal Runout Piping in Field w/ Ftgs	<b>7,440</b>	LF		<b>F10 SPECIAL CONSTRUCTION</b>
<b>772</b>	Geothermal Well Piping	<b>50,120</b>	LF		<b>F10 SPECIAL CONSTRUCTION</b>
<b>773</b>	Geothermal Wells w/ Grouting	<b>80</b>	EA		<b>F10 SPECIAL CONSTRUCTION</b>
<b>774</b>	Geothermal Piping in Vault w/ Ftgs, Hgrs, Valving, Specialties	<b>1</b>	LS		<b>F10 SPECIAL CONSTRUCTION</b>
<b>775</b>	Excavation, Bedding and Backfill	<b>8,340</b>	LF		<b>F10 SPECIAL CONSTRUCTION</b>
<b>776</b>	Machine Rental, Misc.	<b>1</b>	LS		<b>F10 SPECIAL CONSTRUCTION</b>
<b>777</b>					
<b>778</b>	<u>Refrigerant Piping</u>				
<b>779</b>	Refrigerant Suction Piping w/ Ftgs, Hgrs (ACR Tubing)	<b>1,200</b>	LF	\$37.63	\$45,156
<b>780</b>	Refrigerant Liquid Piping w/ Ftgs, Hgrs	<b>1,200</b>	LF	\$26.38	\$31,656
<b>781</b>	Specialties at Condensing Units	<b>12</b>	EA	\$1,171.00	\$14,052
<b>782</b>	Purging and Charging	<b>12</b>	EA	\$900.00	\$10,800
<b>783</b>	Elastomeric Insulation	<b>1,200</b>	LF	\$5.10	\$6,120
<b>784</b>					
<b>785</b>	<u>Air Conditioning Condensate Piping</u>				
<b>786</b>	( L Copper)	<b>240</b>	LF	\$52.64	\$12,634
<b>787</b>	Ftgs, Hgrs	<b>3,680</b>	LF	\$33.30	\$122,544
<b>788</b>	Fiberglass Pipe Insulation	<b>3,680</b>	LF	\$8.30	\$30,544
<b>789</b>					
<b>790</b>	<u>Equipment</u>				
<b>791</b>	Heating	<b>6</b>	EA	\$161,450.00	\$968,700
<b>792</b>	Heating Hot Water Circulators	<b>2</b>	EA	\$4,175.00	\$8,350
<b>793</b>	Air Separators	<b>5</b>	EA	\$4,896.00	\$24,480
<b>794</b>	Expansion Tanks	<b>3</b>	EA	\$4,012.00	\$12,036
<b>795</b>	Chilled Water Circulators	<b>2</b>	EA	\$6,752.00	\$13,504
<b>796</b>	Compensated Chilled Water Circulators	<b>2</b>	EA	\$1,125.00	\$2,250
<b>797</b>	Geothermal Circulators	<b>2</b>	EA	\$9,875.00	\$19,750
<b>798</b>	EF 1,5,9,10,11 Roof Fans 600 CFM @ .8", 1/4 HP	<b>5</b>	EA	\$2,275.00	\$11,375
<b>799</b>	EF 2,12 Roof Fans 680 CFM @ .8" 1/2 HP	<b>2</b>	EA	\$2,612.00	\$5,224
<b>800</b>	EF 3,7 Roof Fans 1,170 CFM @ .8", 3/4 HP	<b>2</b>	EA	\$2,975.00	\$5,950
<b>801</b>	EF 4 ,6 Roof Fans 300 CFM @ .8", 1/6 HP	<b>2</b>	EA	\$2,100.00	\$4,200
<b>802</b>	EF 8,13 Roof Fans 75 CFM @ .8", 1/15 HP	<b>2</b>	EA	\$1,985.00	\$3,970
<b>803</b>	EF 14 Roof Fan 250 CFM @ .3", 1/10 HP	<b>1</b>	EA	\$2,045.00	\$2,045
<b>804</b>	KEF 1 Roof Fan 1,750 CFM @ 1.5", 1 HP	<b>1</b>	EA	\$6,890.00	\$6,890
<b>805</b>	Kiln Exhaust Hood	<b>1</b>	EA	\$3,312.00	\$3,312
<b>806</b>	Kitchen Hood w/ Fire Suppression	<b>1</b>	EA	\$22,150.00	\$22,150
<b>807</b>	Split Air Conditioners w/ Condensing Units 18 MBH	<b>10</b>	EA	\$5,875.00	\$58,750
<b>808</b>	Split Air Conditioners 18 MBH	<b>2</b>	EA	\$2,975.00	\$5,950
<b>809</b>	Split Air Conditioner 24 MBH w/ Condensing Unit	<b>1</b>	EA	\$6,975.00	\$6,975



**Westwood Hanlon Elementary School**

Westwood, MA

113,141 GSF

**DETAILED ESTIMATE - NEW CONSTRUCTION**

<b>810</b>	VRF Condensing Unit 36 MBH	1	EA	\$5,600.00	\$5,600
<b>811</b>	Hydronic Unit Heaters 8.7 MBH	5	EA	\$1,450.00	\$7,250
<b>812</b>	Hydronic Unit Heaters 9.7 MBH	2	EA	\$1,575.00	\$3,150
<b>813</b>	Hydronic Unit Heaters 28.7 MBH	1	EA	\$2,063.00	\$2,063
<b>814</b>	Hydronic Unit Heaters 20.1 MBH	6	EA	\$1,845.00	\$11,070
<b>815</b>	Hydronic Unit Heaters 16.5 MBH	2	EA	\$1,712.00	\$3,424
<b>816</b>	Hydronic Unit Heater 12 MBH	1	EA	\$1,645.00	\$1,645
<b>817</b>	Hydronic Unit Heater 57.5 MBH	1	EA	\$2,975.00	\$2,975
<b>818</b>	Glycol Feed Units 18 GPM @ 70 PSI, 1/2 HP	3	EA	\$5,400.00	\$16,200
<b>819</b>	Buffer Tank 500 Gallon	1	EA	\$20,870.00	\$20,870
<b>820</b>	7,055 CFM	4	EA	\$54,660.00	\$218,640
<b>821</b>	8,025 CFM	2	EA	\$96,450.00	\$192,900
<b>822</b>	6,455 CFM	1	EA	\$75,125.00	\$75,125
<b>823</b>	10,435 CFM	1	EA	\$126,125.00	\$126,125
<b>824</b>	18,935 CFM	2	EA	\$215,630.00	\$431,260
<b>825</b>	3,000 CFM	1	EA	\$31,250.00	\$31,250
<b>826</b>	Makeup Air Unit w/ HW, CHW Coils 1,500 CFM	1	EA	\$9,645.00	\$9,645
<b>827</b>	36" Wide Radiant Ceiling Panels	3,483	LF	\$58.96	\$205,358
<b>828</b>	24" Wide Radiant Ceiling Panels	428	LF	\$36.45	\$15,601
<b>829</b>	Panel Radiation	145	LF	\$198.63	\$28,801
<b>830</b>	Heat Exchanger 2,526 MBH	1	EA	\$16,125.00	\$16,125
<b>831</b>	Heat Exchanger 511 MBH	1	EA	\$6,512.00	\$6,512
<b>832</b>	Air Conditioning Condensate Pumps	12	EA	\$185.00	\$2,220
<b>833</b>	Sound Attenuators	20	EA	\$3,612.00	\$72,240
<b>834</b>	Variable Volume Boxes 16" Inlet	1	EA	\$1,386.00	\$1,386
<b>835</b>	Variable Volume Boxes 14" Inlet	1	EA	\$1,212.00	\$1,212
<b>836</b>	Variable Volume Boxes 12" Inlet	5	EA	\$1,085.00	\$5,425
<b>837</b>	Variable Volume Boxes 10" Inlet	2	EA	\$986.00	\$1,972
<b>838</b>	Variable Volume Boxes 9" Inlet	2	EA	\$945.00	\$1,890
<b>839</b>	Variable Volume Boxes 8" Inlet	2	EA	\$912.00	\$1,824
<b>840</b>	Variable Volume Boxes 7" Inlet	34	EA	\$868.00	\$29,512
<b>841</b>	Variable Volume Boxes 6" Inlet	6	EA	\$845.00	\$5,070
<b>842</b>	Variable Volume Boxes 5" Inlet	15	EA	\$812.00	\$12,180
<b>843</b>	Variable Volume Boxes 4" Inlet	31	EA	\$745.00	\$23,095
<b>844</b>	Variable Frequency Drives	8	EA	\$3,400.00	\$27,200
<b>845</b>	Magnetic Motor Starters	15	EA	\$1,125.00	\$16,875
<b>846</b>					
<b>847</b>	<u>Automatic Temperature Controls</u>				
<b>848</b>	Heating		PTS	\$565.00	\$0
<b>849</b>	Heating Hot Water Circulators		PTS	\$565.00	\$0
<b>850</b>	Chilled Water Circulators		PTS	\$565.00	\$0
<b>851</b>	Compensated Chilled Water Circulators		PTS	\$565.00	\$0
<b>852</b>	Geothermal Circulators		PTS	\$565.00	\$0





**Westwood Hanlon Elementary School**

Westwood, MA

113,141 GSF

**DETAILED ESTIMATE - NEW CONSTRUCTION**

<b>853</b>	EF 1,5,9,10,11 Roof Fans 600 CFM @ .8", 1/4 HP	<b>15</b>	PTS	\$565.00	\$8,475
<b>854</b>	EF 2,12 Roof Fans 680 CFM @ .8" 1/2 HP	<b>6</b>	PTS	\$565.00	\$3,390
<b>855</b>	EF 3,7 Roof Fans 1,170 CFM @ .8", 3/4 HP	<b>6</b>	PTS	\$565.00	\$3,390
<b>856</b>	EF 4 ,6 Roof Fans 300 CFM @ .8", 1/6 HP	<b>6</b>	PTS	\$565.00	\$3,390
<b>857</b>	EF 8,13 Roof Fans 75 CFM @ .8", 1/15 HP	<b>6</b>	PTS	\$565.00	\$3,390
<b>858</b>	EF 14 Roof Fan 250 CFM @ .3", 1/10 HP	<b>3</b>	PTS	\$565.00	\$1,695
<b>859</b>	KEF 1 Roof Fan 1,750 CFM @ 1.5", 1 HP	<b>3</b>	PTS	\$565.00	\$1,695
<b>860</b>	Kiln Exhaust Hood	<b>1</b>	PTS	\$565.00	\$565
<b>861</b>	Kitchen Hood w/ Fire Suppression	<b>1</b>	PTS	\$565.00	\$565
<b>862</b>	Split Air Conditioners w/ Condensing Units 18 MBH	<b>50</b>	PTS	\$565.00	\$28,250
<b>863</b>	Split Air Conditioners 18 MBH	<b>3</b>	PTS	\$565.00	\$1,695
<b>864</b>	Split Air Conditioner 24 MBH w/ Condensing Unit	<b>5</b>	PTS	\$565.00	\$2,825
<b>865</b>	VRF Condensing Unit 36 MBH	<b>2</b>	PTS	\$565.00	\$1,130
<b>866</b>	Hydronic Unit Heaters 8.7 MBH	<b>15</b>	PTS	\$565.00	\$8,475
<b>867</b>	Hydronic Unit Heaters 9.7 MBH	<b>6</b>	PTS	\$565.00	\$3,390
<b>868</b>	Hydronic Unit Heaters 28.7 MBH	<b>3</b>	PTS	\$565.00	\$1,695
<b>869</b>	Hydronic Unit Heaters 20.1 MBH	<b>18</b>	PTS	\$565.00	\$10,170
<b>870</b>	Hydronic Unit Heaters 16.5 MBH	<b>6</b>	PTS	\$565.00	\$3,390
<b>871</b>	Hydronic Unit Heater 12 MBH	<b>3</b>	PTS	\$565.00	\$1,695
<b>872</b>	Hydronic Unit Heater 57.5 MBH	<b>3</b>	PTS	\$565.00	\$1,695
<b>873</b>	Glycol Feed Units 18 GPM @ 70 PSI, 1/2 HP	<b>6</b>	PTS	\$565.00	\$3,390
<b>874</b>	Buffer Tank 500 Gallon	<b>2</b>	PTS	\$565.00	\$1,130
<b>875</b>	7,055 CFM	<b>120</b>	PTS	\$565.00	\$67,800
<b>876</b>	8,025 CFM	<b>60</b>	PTS	\$565.00	\$33,900
<b>877</b>	6,455 CFM	<b>30</b>	PTS	\$565.00	\$16,950
<b>878</b>	10,435 CFM	<b>30</b>	PTS	\$565.00	\$16,950
<b>879</b>	18,935 CFM	<b>60</b>	PTS	\$565.00	\$33,900
<b>880</b>	3,000 CFM	<b>18</b>	PTS	\$565.00	\$10,170
<b>881</b>	Makeup Air Unit w/ HW, CHW Coils 1,500 CFM	<b>18</b>	PTS	\$565.00	\$10,170
<b>882</b>	36" Wide Radiant Ceiling Panels	<b>586</b>	PTS	\$565.00	\$331,090
<b>883</b>	24" Wide Radiant Ceiling Panels	<b>155</b>	PTS	\$565.00	\$87,575
<b>884</b>	Panel Radiation	<b>12</b>	PTS	\$565.00	\$6,780
<b>885</b>	Heat Exchanger 2,526 MBH	<b>4</b>	PTS	\$565.00	\$2,260
<b>886</b>	Heat Exchanger 511 MBH	<b>4</b>	PTS	\$565.00	\$2,260
<b>887</b>	Variable Volume Boxes 16" Inlet	<b>3</b>	PTS	\$565.00	\$1,695
<b>888</b>	Variable Volume Boxes 14" Inlet	<b>3</b>	PTS	\$565.00	\$1,695
<b>889</b>	Variable Volume Boxes 12" Inlet	<b>15</b>	PTS	\$565.00	\$8,475
<b>890</b>	Variable Volume Boxes 10" Inlet	<b>6</b>	PTS	\$565.00	\$3,390
<b>891</b>	Variable Volume Boxes 9" Inlet	<b>6</b>	PTS	\$565.00	\$3,390
<b>892</b>	Variable Volume Boxes 8" Inlet	<b>6</b>	PTS	\$565.00	\$3,390
<b>893</b>	Variable Volume Boxes 7" Inlet	<b>102</b>	PTS	\$565.00	\$57,630
<b>894</b>	Variable Volume Boxes 6" Inlet	<b>18</b>	PTS	\$565.00	\$10,170
<b>895</b>	Variable Volume Boxes 5" Inlet	<b>45</b>	PTS	\$565.00	\$25,425



**Westwood Hanlon Elementary School**

Westwood, MA

113,141 GSF

**DETAILED ESTIMATE - NEW CONSTRUCTION**

<b>896</b>	Variable Volume Boxes 4" Inlet	<b>93</b>	PTS	\$565.00	\$52,545
<b>897</b>	Miscellaneous Monitoring Points	<b>10</b>	PTS	\$565.00	\$5,650
<b>898</b>	Operators Work Station	<b>1</b>	LS	\$26,450.00	\$26,450
<b>899</b>					
<b>900</b>	<u>Miscellaneous</u>				
<b>901</b>	Coordination Drawings, Submittals, As Builts, O&M's	<b>1</b>	LS	\$78,450.00	\$78,450
<b>902</b>	Rigging, Hoisting, and Scaffolding	<b>1</b>	LS	\$94,125.00	\$94,125
<b>903</b>	Valve Tags, Pipe Identification	<b>1</b>	LS	\$23,450.00	\$23,450
<b>904</b>	Seismic Restraint , Certification	<b>1</b>	LS	\$22,560.00	\$22,560
<b>905</b>	Concrete Housekeeping Pads	<b>27</b>	EA	\$1,075.00	\$29,025
<b>906</b>	Testing and Balancing	<b>644</b>	MH	\$145.00	\$93,380
<b>907</b>	<b>D3010 HVAC TOTAL</b>				<b>\$8,952,182</b>
<b>908</b>					
<b>909</b>	<b>D4010 FIRE PROTECTION</b>				
<b>910</b>	<u>Service from Site</u>				
<b>911</b>	6" Ductile Iron Pipe	<b>18</b>	LF	\$60.14	\$1,083
<b>912</b>	Mechanical Joint Fittings	<b>1</b>	EA	\$625.00	\$625
<b>913</b>	Thrust Blocks	<b>1</b>	EA	\$625.00	\$625
<b>914</b>	Exterior Wall Sleeves	<b>1</b>	EA	\$286.00	\$286
<b>915</b>	Excavation, Bedding, and Backfill	<b>18</b>	LF	\$23.00	\$414
<b>916</b>					
<b>917</b>	<u>Bulk Mains and Riser Piping</u>				
<b>918</b>	6" Blk Stl Pipe Stan Wt Grooved	<b>924</b>	LF	\$70.58	\$65,216
<b>919</b>	4" Blk Stl Pipe Sch 40 Grooved	<b>168</b>	LF	\$44.09	\$7,407
<b>920</b>	2 1/2" Blk Stl Pipe Sch 40 Grooved	<b>105</b>	LF	\$27.28	\$2,864
<b>921</b>	2" Blk Stl Pipe Sch 40 T&C	<b>168</b>	LF	\$24.01	\$4,034
<b>922</b>	Grooved Fittings	<b>150</b>	EA	\$430.31	\$64,385
<b>923</b>	125# Cast Iron Fittings	<b>21</b>	EA	\$133.70	\$2,808
<b>924</b>	Hangers	<b>171</b>	EA	\$93.00	\$15,868
<b>925</b>	Valving, Specialties at Service Entrance	<b>1</b>	LS	\$7,799.00	\$7,799
<b>926</b>	Siamese Fire Department Connection w/ Valving	<b>1</b>	EA	\$3,580.00	\$3,580
<b>927</b>	Roof Manifold	<b>3</b>	EA	\$2,075.00	\$6,225
<b>928</b>	Fire Hose Valves	<b>6</b>	EA	\$278.41	\$1,670
<b>929</b>	Riser Control Valves	<b>4</b>	EA	\$1,324.76	\$5,299
<b>930</b>	Floor Control Valves	<b>5</b>	EA	\$3,045.00	\$15,225
<b>931</b>					
<b>932</b>	<u>Sprinkler Heads and Branch Piping</u>				
<b>933</b>	165 Degree Concealed Heads w/ Branch Piping	<b>804</b>	EA	\$520.00	\$418,080
<b>934</b>	165 Degree Upright Heads w/ Branch Piping	<b>129</b>	EA	\$275.00	\$35,475
<b>935</b>					
<b>936</b>	<u>Miscellaneous</u>				
<b>937</b>	Coordination Drawings, Hydraulic Calculations, As Builts, Etc.	<b>1</b>	LS	\$13,750.00	\$13,750
<b>938</b>	Spare Head Cabinets	<b>4</b>	EA	\$526.00	\$2,104



**Westwood Hanlon Elementary School**

Westwood, MA  
113,141 GSF

**DETAILED ESTIMATE - NEW CONSTRUCTION**

<b>939</b>	Valve Tags, Pipe Identification	<b>1</b>	LS	\$3,412.00	\$3,412
<b>940</b>	Seismic Restraints, Certification	<b>1</b>	LS	\$5,945.00	\$5,945
<b>941</b>	<b>D4010 FIRE PROTECTION TOTAL</b>				<b>\$684,179</b>
<b>942</b>					
<b>943</b>	<b>TOTAL SYSTEM D15 MECHANICAL</b>				<b>\$11,732,380</b>
<b>944</b>					
<b>945</b>					
<b>946</b>	<b>D50 ELECTRICAL</b>				
<b>947</b>					
<b>948</b>	<b>D5010 ELECTRICAL</b>				
<b>949</b>	<b>Light Fixtures</b>				
<b>950</b>	Type EL	<b>1</b>	EA	\$248.17	\$248
<b>951</b>	Type LK22	<b>22</b>	EA	\$325.49	\$7,161
<b>952</b>	Type LP4	<b>17</b>	EA	\$444.68	\$7,559
<b>953</b>	Type LP8	<b>216</b>	EA	\$837.93	\$180,992
<b>954</b>	Type LP10	<b>2</b>	EA	\$1,034.55	\$2,069
<b>955</b>	Type LP16	<b>4</b>	EA	\$1,675.85	\$6,703
<b>956</b>	Type LPG Hi-Bay	<b>48</b>	EA	\$471.90	\$22,651
<b>957</b>	Type LR22	<b>57</b>	EA	\$211.27	\$12,042
<b>958</b>	Type LR24	<b>4</b>	EA	\$235.47	\$942
<b>959</b>	Type LR14	<b>22</b>	EA	\$235.47	\$5,180
<b>960</b>	Type LR4	<b>8</b>	EA	\$393.25	\$3,146
<b>961</b>	Type LR10	<b>4</b>	EA	\$983.13	\$3,933
<b>962</b>	Type LS4	<b>38</b>	EA	\$248.05	\$9,426
<b>963</b>	Type LS4B	<b>14</b>	EA	\$248.05	\$3,473
<b>964</b>	Type LS8	<b>30</b>	EA	\$496.10	\$14,883
<b>965</b>	Type PC1	<b>4</b>	EA	\$541.48	\$2,166
<b>966</b>	Type PC2	<b>15</b>	EA	\$541.48	\$8,122
<b>967</b>	Type PC3	<b>5</b>	EA	\$541.48	\$2,707
<b>968</b>	Type PC4	<b>5</b>	EA	\$541.48	\$2,707
<b>969</b>	Type PD1	<b>5</b>	EA	\$638.28	\$3,191
<b>970</b>	Type PD2	<b>5</b>	EA	\$928.68	\$4,643
<b>971</b>	Type PD3	<b>5</b>	EA	\$1,173.70	\$5,869
<b>972</b>	Type PD5	<b>6</b>	EA	\$638.28	\$3,830
<b>973</b>	Type RC1	<b>215</b>	EA	\$296.45	\$63,737
<b>974</b>	Type RC2	<b>170</b>	EA	\$296.45	\$50,397
<b>975</b>	Type RC3	<b>58</b>	EA	\$296.45	\$17,194
<b>976</b>	Type RC4	<b>40</b>	EA	\$296.45	\$11,858
<b>977</b>	Type RCW	<b>9</b>	EA	\$306.13	\$2,755
<b>978</b>	Type RD4	<b>1</b>	EA	\$931.70	\$932
<b>979</b>	Type SD1	<b>46</b>	EA	\$541.48	\$24,908
<b>980</b>	Type SL4	<b>16</b>	EA	\$544.50	\$8,712
<b>981</b>	Type SL5	<b>6</b>	EA	\$544.50	\$3,267



**Westwood Hanlon Elementary School**

Westwood, MA

113,141 GSF

**DETAILED ESTIMATE - NEW CONSTRUCTION**

<b>982</b>	Type Exit	<b>53</b>	EA	\$323.68	\$17,155
<b>983</b>	Type LPS	<b>58</b>	LF	\$122.51	\$7,106
<b>984</b>	Type LRS	<b>838</b>	LF	\$98.31	\$82,386
<b>985</b>	Type LWD	<b>164</b>	LF	\$98.31	\$16,123
<b>986</b>	Type LWS	<b>102</b>	LF	\$98.31	\$10,028
<b>987</b>	Type LWSA	<b>76</b>	LF	\$98.31	\$7,472
<b>988</b>	Type RPS	<b>188</b>	LF	\$83.79	\$15,753
<b>989</b>	Type SL7	<b>134</b>	LF	\$157.00	\$21,038
<b>990</b>	Type TR1 Track	<b>50</b>	LF	\$44.77	\$2,239
<b>991</b>	Type TH1 Track Lt	<b>14</b>	EA	\$170.91	\$2,393
<b>992</b>	Type TH2 Track Lt	<b>6</b>	EA	\$170.91	\$1,025
<b>993</b>	Type TH3 Track Lt	<b>15</b>	EA	\$170.91	\$2,564
<b>994</b>	Type Exterior Canopy Cnlt	<b>6</b>	EA	\$405.35	\$2,432
<b>995</b>					
<b>996</b>	<b>Branch Circuitry</b>				
<b>997</b>	<i>Branch Circuitry</i>				
<b>998</b>	3/4" Emt, 4#12	<b>4,147</b>	LF	\$13.84	\$57,370
<b>999</b>	MC Cable	<b>37,320</b>	LF	\$6.50	\$242,406
<b>1000</b>	3/4" Emt, 4#10	<b>570</b>	LF	\$15.93	\$9,078
<b>1001</b>	1" Emt, 4#8	<b>120</b>	LF	\$23.57	\$2,828
<b>1002</b>	Plenum Cable	<b>12,960</b>	LF	\$1.59	\$20,543
<b>1003</b>					
<b>1004</b>	Switches	<b>14</b>	EA	\$78.65	\$1,101
<b>1005</b>	Momentary Contact Switches	<b>6</b>	EA	\$124.03	\$744
<b>1006</b>	OS, PS Power Pack	<b>81</b>	EA	\$181.50	\$14,702
<b>1007</b>	Local Switch/Dimming Station L	<b>116</b>	EA	\$151.25	\$17,545
<b>1008</b>	Touch Screen LTS	<b>2</b>	EA	\$701.80	\$1,404
<b>1009</b>	Master Station M	<b>2</b>	EA	\$701.80	\$1,404
<b>1010</b>	Occupancy Sensor	<b>192</b>	EA	\$202.68	\$38,914
<b>1011</b>	Photo Sensor	<b>52</b>	EA	\$202.68	\$10,539
<b>1012</b>					
<b>1013</b>	<i>Wiring Devices</i>				
<b>1014</b>	Receptacles	<b>136</b>	EA	\$75.63	\$10,285
<b>1015</b>	Junc Boxes, Misc	<b>39</b>	EA	\$63.53	\$2,477
<b>1016</b>	Receptacles GFI	<b>80</b>	EA	\$93.78	\$7,502
<b>1017</b>	Receptacles Quad	<b>43</b>	EA	\$124.63	\$5,359
<b>1018</b>	Floor Power Outlet	<b>9</b>	EA	\$387.20	\$3,485
<b>1019</b>	Receptacles GFI WP	<b>27</b>	EA	\$245.03	\$6,616
<b>1020</b>	Receptacles w/ I/O Module	<b>266</b>	EA	\$134.31	\$35,726
<b>1021</b>	Receptacles GFI w/ I/O Module	<b>100</b>	EA	\$152.46	\$15,246
<b>1022</b>	Receptacles Quad w/ I/O Module	<b>134</b>	EA	\$193.60	\$25,942
<b>1023</b>	Install Door Controller FBO w/ Disc	<b>6</b>	EA	\$302.50	\$1,815
<b>1024</b>	Door Pushplate	<b>12</b>	EA	\$248.05	\$2,977



**Westwood Hanlon Elementary School**

Westwood, MA  
113,141 GSF

**DETAILED ESTIMATE - NEW CONSTRUCTION**

<b>1025</b>	Key Switch	2	EA	\$107.69	\$215
<b>1026</b>	Install Motor Logic Controller MLC FBO w/ Disc	30	EA	\$302.50	\$9,075
<b>1027</b>	Motorized Shade Conn	109	EA	\$151.25	\$16,486
<b>1028</b>	Motorized Shade Switch	22	EA	\$163.35	\$3,594
<b>1029</b>	EPO Pushbutton	3	EA	\$223.85	\$672
<b>1030</b>	20/2 Amp Receptacle, Kitch	1	EA	\$101.64	\$102
<b>1031</b>	20/3 Amp Receptacle, Kitch	3	EA	\$101.64	\$305
<b>1032</b>	20/2 Amp Receptacle Tw Lk	24	EA	\$101.64	\$2,439
<b>1033</b>	30 Amp Receptacle, misc	3	EA	\$130.08	\$390
<b>1034</b>	30 Amp Receptacle Tw Lk	17	EA	\$130.08	\$2,211
<b>1035</b>	30 Amp Receptacle Kitch	9	EA	\$130.08	\$1,171
<b>1036</b>	40/3 Amp Receptacle Kitch	2	EA	\$257.13	\$514
<b>1037</b>	60 Amp Receptacle		EA	\$257.13	
<b>1038</b>					
<b>1039</b>	Theatrical Lighting and Controls	1	LS	\$98,736.00	\$98,736
<b>1040</b>	Kitchen Hood Wiring	1	LS	\$1,125.30	\$1,125
<b>1041</b>					
<b>1042</b>	<b>Power Circuitry</b>				
<b>1043</b>	MC Cable #12	768	LF	\$6.74	\$5,174
<b>1044</b>	3/4" Emt, 4#12	3,044	LF	\$14.50	\$44,147
<b>1045</b>	3/4" Emt, 4#10	2,100	LF	\$15.93	\$33,445
<b>1046</b>	1" Emt, Controls	600	LF	\$21.78	\$13,068
<b>1047</b>	1" Emt, 4#8	1,200	LF	\$23.57	\$28,285
<b>1048</b>	1" Emt, 4#6	10	LF	\$26.04	\$260
<b>1049</b>	1 1/4" Emt, 4#4	450	LF	\$34.13	\$15,360
<b>1050</b>	1 1/4" Emt, 4#2	2,460	LF	\$40.14	\$98,734
<b>1051</b>	1 1/2" Emt, 4#1	1,240	LF	\$48.16	\$59,722
<b>1052</b>	2" Emt, 3#1, 3/0,2#6	120	LF	\$55.90	\$6,708
<b>1053</b>	2" Emt, 4 1/0	120	LF	\$53.94	\$6,473
<b>1054</b>	2" Emt, 4 2/0	900	LF	\$59.80	\$53,818
<b>1055</b>	2" Emt, 4 3/0	690	LF	\$68.22	\$47,072
<b>1056</b>	2 1/2" Emt, 4 250Mcm	380	LF	\$87.29	\$33,170
<b>1057</b>	3" Emt, 4 350Mcm	840	LF	\$109.57	\$92,035
<b>1058</b>	3 1/2" Emt, 4 500 Mcm	80	LF	\$146.68	\$11,734
<b>1059</b>	4" Emt, 4 600 Mcm	1,740	LF	\$170.83	\$297,240
<b>1060</b>	3" EMT Cdt, PV, empty	200	LF	\$31.75	\$6,350
<b>1061</b>	1" Pvc, EG Ctrls	240	LF	\$16.79	\$4,030
<b>1062</b>	2" Pvc, 4#1	80	LF	\$39.32	\$3,146
<b>1063</b>	2" Pvc, 4 3/0	100	LF	\$60.29	\$6,029
<b>1064</b>					
<b>1065</b>	4C#6 MI Cable	1,200	LF	\$61.60	\$73,921
<b>1066</b>	1C#1 MI Cable	1,760	LF	\$50.20	\$88,357
<b>1067</b>					



**Westwood Hanlon Elementary School**

Westwood, MA

113,141 GSF

**DETAILED ESTIMATE - NEW CONSTRUCTION**

<b>1068</b>	Air Terminal	<b>233</b>	EA	\$142.18	\$33,127
<b>1069</b>	Eqpt Bond/Conn	<b>33</b>	EA	\$169.40	\$5,590
<b>1070</b>	Through-Roof Conn	<b>32</b>	EA	\$568.70	\$18,198
<b>1071</b>	Ground Rod	<b>21</b>	EA	\$338.80	\$7,115
<b>1072</b>	LP Cable Cu	<b>5,230</b>	LF	\$8.98	\$46,961
<b>1073</b>	1" PVC CDT	<b>630</b>	LF	\$7.18	\$4,525
<b>1074</b>	Service Grounding	<b>1</b>	LS	\$5,033.60	\$5,034
<b>1075</b>					
<b>1076</b>	<b>Power Equipment</b>				
<b>1077</b>	<i>Switchgear, Panelboards, Transformers</i>				
<b>1078</b>	3000/2500 Amp Main Switchboard	<b>1</b>	LS	\$95,367.36	\$95,367
<b>1079</b>	Meter Pan	<b>1</b>	EA	\$738.10	\$738
<b>1080</b>	Electronic Submeter	<b>23</b>	EA	\$1,294.70	\$29,778
<b>1081</b>	SPD @ Switchboard	<b>1</b>	EA	\$2,855.60	\$2,856
<b>1082</b>	SPD @ Panelboard	<b>30</b>	EA	\$1,113.20	\$33,396
<b>1083</b>	100 Amp Panel Board	<b>7</b>	EA	\$3,625.16	\$25,376
<b>1084</b>	225 Amp Panel Board	<b>8</b>	EA	\$6,083.88	\$48,671
<b>1085</b>	225 Amp Panel Board, 2-Section	<b>1</b>	EA	\$11,122.32	\$11,122
<b>1086</b>	225 Amp Panel Board, 3-Section	<b>3</b>	EA	\$17,206.20	\$51,619
<b>1087</b>	225 Amp Panel Board, 4-Section	<b>1</b>	EA	\$23,290.08	\$23,290
<b>1088</b>	400 Amp Panel Board, 2-Section	<b>1</b>	EA	\$14,036.00	\$14,036
<b>1089</b>	400 Amp Panel Board, 3-Section	<b>1</b>	EA	\$21,707.40	\$21,707
<b>1090</b>	600 Amp Distr Board	<b>1</b>	EA	\$10,962.60	\$10,963
<b>1091</b>	800 Amp Distr Board	<b>2</b>	EA	\$14,229.60	\$28,459
<b>1092</b>	30 Kva Transformer K13	<b>1</b>	EA	\$9,631.60	\$9,632
<b>1093</b>	45 Kva Transformer K13	<b>12</b>	EA	\$11,737.00	\$140,844
<b>1094</b>	112 Kva Transformer K13	<b>2</b>	EA	\$21,296.00	\$42,592
<b>1095</b>	100 Amp Disconnect @ Xfmr	<b>3</b>	EA	\$1,633.50	\$4,901
<b>1096</b>					
<b>1097</b>	<i>Emergency Generator</i>				
<b>1098</b>	500 Kw Emergency Generator, Gas, Custom Encl	<b>1</b>	EA	\$328,853.80	\$328,854
<b>1099</b>	200 Kw Load Bank	<b>1</b>	EA	\$17,787.00	\$17,787
<b>1100</b>	200 Amp Encl Ckt Brkr	<b>2</b>	EA	\$1,923.90	\$3,848
<b>1101</b>	600 Amp Encl Ckt Brkr	<b>1</b>	EA	\$5,771.70	\$5,772
<b>1102</b>	Autotransfer Sw 200A	<b>1</b>	EA	\$8,639.40	\$8,639
<b>1103</b>	Autotransfer Sw 600A	<b>1</b>	EA	\$17,653.90	\$17,654
<b>1104</b>	Storm Switch 200A	<b>1</b>	EA	\$7,260.00	\$7,260
<b>1105</b>	Generator Annunciator	<b>1</b>	EA	\$1,621.40	\$1,621
<b>1106</b>					
<b>1107</b>	<i>Motors:</i>				
<b>1108</b>	Heat Trace Controller, 30' Cable	<b>2</b>	EA	\$1,468.94	\$2,938
<b>1109</b>	Manual Snap Switch Starter VAV	<b>67</b>	EA	\$181.50	\$12,161
<b>1110</b>	Manual Snap Switch Starter Misc	<b>32</b>	EA	\$181.50	\$5,808





**Westwood Hanlon Elementary School**

Westwood, MA  
113,141 GSF

**DETAILED ESTIMATE - NEW CONSTRUCTION**

<b>1111</b> Manual Snap Switch Starter WP	5	EA	\$338.80	\$1,694
<b>1112</b> 20/2 Amp Disconnect, Motorized Backboard Conns	6	EA	\$907.50	\$5,445
<b>1113</b> 20/2 Amp Disconnect	12	EA	\$580.80	\$6,970
<b>1114</b> 30 Amp Disconnect, Gym Eqpt	5	EA	\$774.40	\$3,872
<b>1115</b> 30/2 Amp Disconnect	12	EA	\$580.80	\$6,970
<b>1116</b> 30 Amp Disconnect	4	EA	\$774.40	\$3,098
<b>1117</b> 60 Amp Disconnect	12	EA	\$1,318.90	\$15,827
<b>1118</b> 100 Amp Disconnect	3	EA	\$1,437.48	\$4,312
<b>1119</b> 100 Amp Disconnect, Elev	1	EA	\$1,437.48	\$1,437
<b>1120</b> 200 Amp Disconnect WP	6	EA	\$2,244.55	\$13,467
<b>1121</b> Elev CP Terms	1	LS	\$774.40	\$774
<b>1122</b> Install <10HP VFD FBO	9	EA	\$1,367.30	\$12,306
<b>1123</b> Install 20-30HP VFD FBO	10	EA	\$2,081.20	\$20,812
<b>1124</b> Chiller Module CP Conn's	6	EA	\$931.70	\$5,590
<b>1125</b>				
<b>1126 Special Systems</b>				
<b>1127</b> Fire Alarm				
<b>1128</b> Teflon MC Cable	16,040	LF	\$7.38	\$118,391
<b>1129</b> 3" Rigid, Riser Cables	60	LF	\$114.95	\$6,897
<b>1130</b> FATC	2	EA	\$798.60	\$1,597
<b>1131</b> Pull Station	22	EA	\$229.90	\$5,058
<b>1132</b> Audible/Visual, MNS	73	EA	\$347.88	\$25,395
<b>1133</b> Smoke Detector	121	EA	\$387.20	\$46,851
<b>1134</b> Heat Detector	1	EA	\$387.20	\$387
<b>1135</b> CO Detector	33	EA	\$387.20	\$12,778
<b>1136</b> Strobe A clg	42	EA	\$229.90	\$9,656
<b>1137</b> Strobe A wall	42	EA	\$229.90	\$9,656
<b>1138</b> Strobe F clg	42	EA	\$229.90	\$9,656
<b>1139</b> Strobe F wall	46	EA	\$229.90	\$10,575
<b>1140</b> WP Beacon, Strobe	2	EA	\$287.38	\$575
<b>1141</b> Duct Detector	9	EA	\$889.35	\$8,004
<b>1142</b> Door Release	6	EA	\$514.25	\$3,086
<b>1143</b> Cent Eqpt FACP, testing, Voice Command DVC	1	LS	\$28,162.75	\$28,163
<b>1144</b> MNS Electronic Message Board	5	EA	\$1,403.60	\$7,018
<b>1145</b> FCPS Booster Power Supply	1	EA	\$3,291.20	\$3,291
<b>1146</b> Ansul Conn's	1	LS	\$895.40	\$895
<b>1147</b> Annunciator Panel	1	EA	\$2,323.20	\$2,323
<b>1148</b> Misc Connections, Relays	18	EA	\$272.25	\$4,901
<b>1149</b> Master Box Radio w/ Antenna, cables	1	LS	\$8,397.40	\$8,397
<b>1150</b> Knox Box	4	EA	\$520.30	\$2,081
<b>1151</b>				
<b>1152</b> Emergency Responder Radio System BDA	1	LS	\$60,000.00	\$60,000
<b>1153</b>				



**Westwood Hanlon Elementary School**

Westwood, MA

113,141 GSF

**DETAILED ESTIMATE - NEW CONSTRUCTION****1154 Communications System**

<b>1155</b> MDF Rack, PP's, Terms	<b>1</b>	EA	\$14,762.00	\$14,762
<b>1156</b> IDF Rack, PP's, Terms	<b>3</b>	EA	\$7,381.00	\$22,143
<b>1157</b> Misc Rack Enclosures	<b>15</b>	EA	\$580.80	\$8,712
<b>1158</b> Voice Demarc	<b>1</b>	LS		
<b>1159</b> CATV Demarc	<b>1</b>	LS		
<b>1160</b> 4" Floor Sleeves	<b>21</b>	EA	\$229.90	\$4,828
<b>1161</b> 4" Wall Sleeves	<b>21</b>	EA	\$229.90	\$4,828
<b>1162</b> Main Ground Bar	<b>1</b>	EA	\$1,476.20	\$1,476
<b>1163</b> Tel Ground Bar	<b>3</b>	EA	\$738.10	\$2,214
<b>1164</b> #3/0G Wire	<b>600</b>	LF	\$9.19	\$5,511
<b>1165</b> 25 Pair CAT 5E Cable	<b>900</b>	LF	\$4.40	\$3,964
<b>1166</b> 12 Strand Multi-Mode Fiber	<b>900</b>	LF	\$6.18	\$5,565
<b>1167</b> 6 Strand Multi-Mode Fiber	<b>900</b>	LF	\$4.30	\$3,866
<b>1168</b> 18" Cable Tray	<b>180</b>	LF	\$39.45	\$7,100
<b>1169</b> 4" EMT Cdt	<b>600</b>	LF	\$34.64	\$20,785
<b>1170</b> Cat 6A Cable	<b>86,700</b>	LF	\$1.71	\$147,919
<b>1171</b> WAP Outlet 2c, Eqpt+D295	<b>49</b>	EA	\$713.90	\$34,981
<b>1172</b> Tel, Data Outlet 1c	<b>53</b>	EA	\$72.60	\$3,848
<b>1173</b> Data FP Outlet 1c	<b>8</b>	EA	\$72.60	\$581
<b>1174</b> Data PC Outlet 1c	<b>2</b>	EA	\$72.60	\$145
<b>1175</b> CB Call Button Outlet 1c	<b>39</b>	EA	\$125.84	\$4,908
<b>1176</b> Tel/Data Outlet 2c	<b>135</b>	EA	\$89.54	\$12,088
<b>1177</b> Tel/Data Outlet Pro 2c	<b>52</b>	EA	\$89.54	\$4,656
<b>1178</b> Tel/Data Outlet 4c	<b>1</b>	EA	\$139.15	\$139
<b>1179</b> CAT 6A Cable	<b>24,600</b>	LF	\$1.65	\$40,631
<b>1180</b> HDMI Cable	<b>9,000</b>	LF	\$1.53	\$13,776
<b>1181</b> Audio Cable	<b>9,000</b>	LF	\$1.41	\$12,687
<b>1182</b> AV FP Low Video Presentation Outlet (1C,H,A)	<b>8</b>	EA	\$211.75	\$1,694
<b>1183</b> AV Pro High Video Presentation Outlet (3C,H,A)	<b>52</b>	EA	\$332.75	\$17,303
<b>1184</b> Network Switches Allowance	<b>1</b>	LS	\$270,000.00	\$270,000
<b>1185</b>				
<b>1186</b> Clock/ Public Address System:				
<b>1187</b> 2 1/2" Emt, Riser Cables	<b>50</b>	LF	\$66.74	\$3,337
<b>1188</b> Comm Cable	<b>9,450</b>	LF	\$1.25	\$11,778
<b>1189</b> Main Sound Rack	<b>1</b>	LS	\$54,934.00	\$54,934
<b>1190</b> Local Sound System Rack	<b>1</b>	EA	\$7,792.40	\$7,792
<b>1191</b> Clock C, LV	<b>72</b>	EA	\$254.10	\$18,295
<b>1192</b> S1 Speaker	<b>2</b>	EA	\$290.40	\$581
<b>1193</b> S2 Speaker	<b>6</b>	EA	\$290.40	\$1,742
<b>1194</b> S3 Speaker	<b>8</b>	EA	\$290.40	\$2,323
<b>1195</b> HS Speaker, horn	<b>4</b>	EA	\$254.10	\$1,016
<b>1196</b> S Speaker, flush	<b>218</b>	EA	\$254.10	\$55,394





**Westwood Hanlon Elementary School**

Westwood, MA  
113,141 GSF

**DETAILED ESTIMATE - NEW CONSTRUCTION**

<b>1197</b>	Microphone	5	EA	\$459.80	\$2,299
<b>1198</b>	Master Clock GPS	1	EA	\$5,711.20	\$5,711
<b>1199</b>	Clock Antenna	1	EA	\$1,863.40	\$1,863
<b>1200</b>					
<b>1201</b>	Security Access Control System				
<b>1202</b>	3/4" Emt, 4#12	90	LF	\$13.84	\$1,245
<b>1203</b>	Signal Cable	14,800	LF	\$1.25	\$18,445
<b>1204</b>	Access Control Panel, PS's	3	LS	\$6,921.20	\$20,764
<b>1205</b>	Card Reader	37	EA	\$810.70	\$29,996
<b>1206</b>	Keypad	7	EA	\$810.70	\$5,675
<b>1207</b>	Panic Button	2	EA	\$199.65	\$399
<b>1208</b>	Door Contact	70	EA	\$187.55	\$13,129
<b>1209</b>	Motion Sensor PIR	52	EA	\$465.85	\$24,224
<b>1210</b>	AI Video Intercom/Door Release	6	EA	\$798.60	\$4,792
<b>1211</b>	Electric Transfer Hinge (Allow), stubup	37	EA	\$66.55	\$2,462
<b>1212</b>	Pushbar w/ REX (FBO), stubup	37	EA	\$66.55	\$2,462
<b>1213</b>					
<b>1214</b>	CCTV Security System:				
<b>1215</b>	Central Monitoring/Recording Eqpt	1	LS	\$37,153.05	\$37,153
<b>1216</b>	CAT 6E Cable	13,800	LF	\$1.75	\$24,212
<b>1217</b>	CCTV Camera , Fixed	45	EA	\$1,276.55	\$57,445
<b>1218</b>	CCTV Camera , WP	24	EA	\$1,863.40	\$44,722
<b>1219</b>					
<b>1220</b>	Audio Visual/ IPTV System				
<b>1221</b>	3/4" Emt, 4#12	60	LF	\$14.50	\$870
<b>1222</b>	AV Rack	2	EA	\$1,040.60	\$2,081
<b>1223</b>	AV Backbox, stubup, misc	56	EA	\$72.60	\$4,066
<b>1224</b>	AV Sound System Eqpt Package, Cafet	1	LS	\$75,000.00	\$75,000
<b>1225</b>	AV Sound System Eqpt Package Gym	1	LS	\$30,000.00	\$30,000
<b>1226</b>					
<b>1227</b>	Intercom Systems:				
<b>1228</b>	1" Emt, Cables	300	LF	\$21.27	\$6,382
<b>1229</b>	3/4" Emt, Cables	300	LF	\$16.01	\$4,802
<b>1230</b>	VMS Video Monitor Handset Master Station	3	EA	\$1,452.00	\$4,356
<b>1231</b>	VES Video Entrance Station	1	EA	\$574.75	\$575
<b>1232</b>	AES Audio Entrance Station	1	EA	\$574.75	\$575
<b>1233</b>	Remote Annunciator	1	EA	\$1,621.40	\$1,621
<b>1234</b>	Power Supply	1	EA	\$459.80	\$460
<b>1235</b>					
<b>1236</b>	Speech Reinforcement System				
<b>1237</b>	Classroom SR System	43	RM	\$2,250.60	\$96,776
<b>1238</b>					
<b>1239</b>	Temp Power and Lighting	114,384	SF	\$0.50	\$57,192



**Westwood Hanlon Elementary School**

Westwood, MA

113,141 GSF

**DETAILED ESTIMATE - NEW CONSTRUCTION**

<b>1240 D50 ELECTRICAL TOTAL</b>				<b>5,412,938</b>
<b>1241</b>				
<b>1242 TOTAL SYSTEM D50 ELECTRICAL</b>				<b>\$5,412,938</b>
<b>1243</b>				
<b>1244</b>				
<b>1245 E10 EQUIPMENT</b>				
<b>1246</b>				
<b>1247 E1020 INSTITUTIONAL EQUIPMENT</b>				
<b>1248</b> Time capsules	1	LS	\$7,800.00	\$7,800
<b>1249</b> Projection screens	8	EA	\$15,000.00	\$120,000
<b>1250</b> Stage Curtains	1	LS	\$50,000.00	\$50,000
<b>1251</b> Gymnasium equipment	1	LS	\$75,000.00	\$75,000
<b>1252</b> Wall pads	1	LS	\$10,000.00	\$10,000
<b>1253</b> Bleacher	350	EA	\$250.00	\$87,500
<b>1254</b> Kiln	1	EA	\$3,500.00	\$3,500
<b>1255</b> Refrigerator/ Freezer	4	EA	\$2,000.00	\$8,000
<b>1256</b> Undercounter refrigerator	4	EA	\$1,500.00	\$6,000
<b>1257</b> Coffee Make	2	EA	\$300.00	\$600
<b>1258</b> Microwave	2	EA	\$800.00	\$1,600
<b>1259</b> Dishwasher	3	EA	\$1,200.00	\$3,600
<b>1260</b> Washer	1	EA	\$1,250.00	\$1,250
<b>1261</b> Dryer	1	EA	\$1,250.00	\$1,250
<b>1262</b> Healthcare equipment	1	LS	\$15,000.00	\$15,000
<b>1263</b> Food service equipment				
<b>1264</b> Kitchen Food Service; budget provided	1	LS	\$590,520.00	\$590,520
<b>1265 E1020 INSTITUTIONAL EQUIPMENT TOTAL</b>				<b>\$981,620</b>
<b>1266</b>				
<b>1267 TOTAL SYSTEM E10 FITTINGS &amp; EQUIPMENT</b>				<b>\$981,620</b>
<b>1268</b>				
<b>1269</b>				
<b>1270 E20 FURNISHINGS</b>				
<b>1271</b>				
<b>1272 E2020 SPECIALTIES / MILLWORK</b>				
<b>1273</b> STE Room	1	EA		
<b>1274</b> Upper cabinet	18	LF	\$200.00	\$3,600
<b>1275</b> Plastic countertop	44	LF	\$225.00	\$9,900
<b>1276</b> ABA / CBA Barrier free knee space cabinet	3	LF	\$250.00	\$750
<b>1277</b> Base cabinet	15	LF	\$240.00	\$3,600
<b>1278</b> Kindergarten	5	EA		
<b>1279</b> Upper cabinet	55	LF	\$200.00	\$11,000
<b>1280</b> ABA / CBA Barrier free knee space cabinet	15	LF	\$250.00	\$3,750
<b>1281</b> Base cabinet	40	LF	\$200.00	\$8,000
<b>1282</b> Open book case	45	LF	\$150.00	\$6,750



**Westwood Hanlon Elementary School**

Westwood, MA

113,141 GSF

**DETAILED ESTIMATE - NEW CONSTRUCTION**

<b>1283</b>	Plastic countertop	<b>60</b>	LF	\$225.00	\$13,500
<b>1284</b>	Custom window seat-w/storage	<b>50</b>	LF	\$250.00	\$12,500
<b>1285</b>	TSO	<b>15</b>	LF	\$180.00	\$2,700
<b>1286</b>	TS-3684-M; Tall storage double door	<b>5</b>	EA	\$1,500.00	\$7,500
<b>1287</b>	General Classroom	<b>20</b>	EA		
<b>1288</b>	Upper cabinet	<b>220</b>	LF	\$200.00	\$44,000
<b>1289</b>	ABA / CBA Barrier free knee space cabinet	<b>60</b>	LF	\$250.00	\$15,000
<b>1290</b>	Base cabinet	<b>160</b>	LF	\$250.00	\$40,000
<b>1291</b>	Plastic countertop	<b>220</b>	LF	\$225.00	\$49,500
<b>1292</b>					
<b>1293</b>	TSO	<b>40</b>	LF	\$180.00	\$7,200
<b>1294</b>	TS-3684-M; Tall storage double door	<b>20</b>	EA	\$1,500.00	\$30,000
<b>1295</b>	BC01 / ABC018 / DBC01 open bookcase unit	<b>120</b>	LF	\$200.00	\$24,000
<b>1296</b>	Open book case	<b>240</b>	LF	\$150.00	\$36,000
<b>1297</b>	Art Classroom	<b>1</b>	EA		
<b>1298</b>	Upper cabinet	<b>8</b>	LF	\$200.00	\$1,600
<b>1299</b>	Plastic countertop	<b>48</b>	LF	\$225.00	\$10,800
<b>1300</b>	ABA / CBA Barrier free knee space cabinet	<b>8</b>	LF	\$250.00	\$2,000
<b>1301</b>	Base cabinet	<b>6</b>	LF	\$240.00	\$1,440
<b>1302</b>	ABC012-54 Cubbies	<b>22</b>	LF	\$360.00	\$7,920
<b>1303</b>	Media Center	<b>1</b>	EA		
<b>1304</b>	BC01 / ABC018 / DBC01 open bookcase unit	<b>140</b>	LF	\$200.00	\$28,000
<b>1305</b>	Service counter	<b>20</b>	LF	\$1,200.00	\$24,000
<b>1306</b>	Plastic countertop	<b>15</b>	LF	\$225.00	\$3,375
<b>1307</b>	TBO-3684 tall book storage open shelves	<b>57</b>	LF	\$180.00	\$10,260
<b>1308</b>	TSC-30 -1 Tall student cubbies	<b>2</b>	EA	\$980.00	\$1,960
<b>1309</b>	TS-3684-M; Tall storage double door	<b>3</b>	EA	\$1,500.00	\$4,500
<b>1310</b>	Extended learning	<b>6</b>	EA		
<b>1311</b>	AB (Base cabinet ,sink)	<b>12</b>	LF	\$240.00	\$2,880
<b>1312</b>	ABA / CBA Barrier free knee space cabinet	<b>36</b>	LF	\$250.00	\$9,000
<b>1313</b>	Solid surface countertop	<b>48</b>	LF	\$340.00	\$16,320
<b>1314</b>	TBO-3684 tall book storage open shelves	<b>6</b>	LF	\$180.00	\$1,080
<b>1315</b>	TSC-36K-1 Tall student cubbies	<b>104</b>	EA	\$980.00	\$101,920
<b>1316</b>	TSO-3384-15	<b>2</b>	EA	\$750.00	\$1,500
<b>1317</b>	Resource room	<b>2</b>	EA		
<b>1318</b>	AB (Base cabinet ,sink)	<b>36</b>	LF	\$240.00	\$8,640
<b>1319</b>	Open book case	<b>12</b>	LF	\$150.00	\$1,800
<b>1320</b>	Plastic countertop	<b>48</b>	LF	\$225.00	\$10,800
<b>1321</b>	TW -3684 Teacher wardrobe unit	<b>2</b>	EA	\$1,500.00	\$3,000
<b>1322</b>	Learning Center	<b>2</b>	EA		
<b>1323</b>	Base cabinet & countertop	<b>12</b>	LF	\$420.00	\$5,040
<b>1324</b>	TW -3684 Teacher wardrobe unit	<b>4</b>	EA	\$1,500.00	\$6,000
<b>1325</b>	Custom window seat-w/storage	<b>24</b>	LF	\$250.00	\$6,000



**Westwood Hanlon Elementary School**

Westwood, MA  
113,141 GSF

**DETAILED ESTIMATE - NEW CONSTRUCTION**

<b>1326</b>	Plastic countertop	7	LF	\$180.00	\$1,260
<b>1327</b>	TS- 3684-M Tall storage cabinet at Coaches Store	11	EA	\$1,500.00	\$16,500
<b>1328</b>	ELL	1	EA		
<b>1329</b>	Plastic countertop	9	LF	\$225.00	\$2,025
<b>1330</b>	Base cabinet	5	LF	\$240.00	\$1,200
<b>1331</b>	Open book case	3	LF	\$150.00	\$450
<b>1332</b>	Nurse Office	1	EA		
<b>1333</b>	Upper cabinet	10	LF	\$200.00	\$2,000
<b>1334</b>	Base cabinet	13	LF	\$240.00	\$3,120
<b>1335</b>	Plastic countertop	37	LF	\$225.00	\$8,325
<b>1336</b>	TS 308418- Tall storage double door cabinet	6	EA	\$1,250.00	\$7,500
<b>1337</b>	TS- 3684-M Tall storage double door cabinet	1	EA	\$1,500.00	\$16,500
<b>1338</b>	Focus program	1	EA		
<b>1339</b>	Plastic countertop	21	LF	\$225.00	\$4,725
<b>1340</b>	AB (Base cabinet ,sink)	3	LF	\$240.00	\$720
<b>1341</b>	ABA / CBA Barrier free knee space cabinet	13	LF	\$200.00	\$2,600
<b>1342</b>	TS 308418- Tall storage double door cabinet	2	EA	\$1,250.00	\$2,500
<b>1343</b>	Staff Lunch workroom	2	EA		
<b>1344</b>	Plastic countertop	24	LF	\$225.00	\$5,400
<b>1345</b>	AB (Base cabinet ,sink)	12	LF	\$240.00	\$2,880
<b>1346</b>	ABA / CBA Barrier free knee space cabinet	6	LF	\$200.00	\$1,200
<b>1347</b>	TS 328418- Tall storage double door cabinet	4	EA	\$1,300.00	\$5,200
<b>1348</b>	Upper cabinet	24	LF	\$200.00	\$4,800
<b>1349</b>	Music classroom	2	EA		
<b>1350</b>	Plastic countertop	12	LF	\$225.00	\$2,700
<b>1351</b>	ABA / CBA Barrier free knee space cabinet	6	LF	\$200.00	\$1,200
<b>1352</b>	Open book case	58	LF	\$150.00	\$8,700
<b>1353</b>	TS 308418- Tall storage double door cabinet	2	EA	\$1,250.00	\$2,500
<b>1354</b>	Upper cabinet	22	LF	\$200.00	\$4,400
<b>1355</b>	Music storage	1	EA		
<b>1356</b>	Standard music storage cabinets	1	EA	\$2,500.00	\$2,500
<b>1357</b>	M15-28x29	9	LF	\$250.00	\$2,250
<b>1358</b>	Mailboxes slot	1	EA	\$4,900.00	\$4,900
<b>1359</b>					
<b>1360</b>	WABA Upper	1	EA		
<b>1361</b>	Plastic countertop	19	LF	\$225.00	\$4,275
<b>1362</b>	AB. Base cabinet	17	LF	\$240.00	\$4,080
<b>1363</b>	Upper cabinet	8	LF	\$200.00	\$1,600
<b>1364</b>	WO2-3036	3	LF	\$180.00	\$540
<b>1365</b>	TS 368418- Tall storage double door cabinet	13	EA	\$1,500.00	\$19,500
<b>1366</b>	TSC-36K-1 Tall student cubbies	3	EA	\$980.00	\$2,940
<b>1367</b>	WABA Lower	1	EA		
<b>1368</b>	Plastic countertop	19	LF	\$225.00	\$4,275



**Westwood Hanlon Elementary School**

Westwood, MA

113,141 GSF

**DETAILED ESTIMATE - NEW CONSTRUCTION**

<b>1369</b>	AB. Base cabinet	<b>17</b>	LF	\$240.00	\$4,080
<b>1370</b>	Upper cabinet	<b>8</b>	LF	\$200.00	\$1,600
<b>1371</b>	WO2-3036	<b>3</b>	LF	\$180.00	\$540
<b>1372</b>	TS 368418- Tall storage double door cabinet	<b>13</b>	EA	\$1,500.00	\$19,500
<b>1373</b>	TSC-36K-1 Tall student cubbies	<b>3</b>	EA	\$980.00	\$2,940
<b>1374</b>	Coaches off/ storage	<b>2</b>	EA	\$3,000.00	\$6,000
<b>1375</b>	<i>Mother's room</i>	<b>2</b>	<i>ea</i>		
<b>1376</b>	Plastic countertop	<b>16</b>	LF	\$225.00	\$3,600
<b>1377</b>	TW3684- Teacher wardrobe unit	<b>2</b>	EA	\$1,800.00	\$3,600
<b>1378</b>	AB. Base cabinet	<b>6</b>	LF	\$240.00	\$1,440
<b>1379</b>	ABA / CBA Barrier free knee space cabinet	<b>6</b>	LF	\$200.00	\$1,200
<b>1380</b>	<i>School Psychology</i>	<b>2</b>	<i>ea</i>		
<b>1381</b>	Plastic countertop	<b>12</b>	LF	\$225.00	\$2,700
<b>1382</b>	AB. Base cabinet	<b>4</b>	LF	\$240.00	\$960
<b>1383</b>	Open book case	<b>6</b>	LF	\$150.00	\$900
<b>1384</b>	TS 308418- Tall storage double door cabinet	<b>2</b>	EA	\$1,250.00	\$2,500
<b>1385</b>	<i>Speech T14/AQ1.52</i>	<b>2</b>	<i>ea</i>		
<b>1386</b>	Plastic countertop	<b>12</b>	LF	\$225.00	\$2,700
<b>1387</b>	Open book case	<b>6</b>	LF	\$150.00	\$900
<b>1388</b>	Base cabinet	<b>6</b>	LF	\$240.00	\$1,440
<b>1389</b>	TS 308418- Tall storage double door cabinet	<b>4</b>	EA	\$1,250.00	\$5,000
<b>1390</b>	CT-SS at Secretary 152A	<b>21</b>	LF	\$1,000.00	\$21,000
<b>1391</b>	CT-PL-1 ( countertop) at Secretary 152A	<b>10</b>	LF	\$180.00	\$1,800
<b>1392</b>	Furnishings miscellaneous metals	<b>114,384</b>	SF	\$0.50	\$57,192
<b>1393</b>	Rough carpentry	<b>114,384</b>	SF	\$0.75	\$85,788
<b>1394</b>	Store Shelving at Art Workroom	<b>48</b>	LF	\$75.00	\$3,600
<b>1395</b>	Store Shelving at GYM	<b>96</b>	LF	\$75.00	\$7,200
<b>1396</b>	Kitchen Dry store Shelf	<b>24</b>	LF	\$75.00	\$1,800
<b>1397</b>	WS2- Adjustable shelves at General Classroom	<b>100</b>	LF	\$150.00	\$15,000
<b>1398</b>	WS2- Adjustable shelves-Adaptive PE	<b>6</b>	LF	\$150.00	\$900
<b>1399</b>	WS2- Adjustable shelves at Art Classroom	<b>19</b>	LF	\$150.00	\$2,850
<b>1400</b>	WS2- Adjustable shelves at Nurse	<b>5</b>	LF	\$150.00	\$750
<b>1401</b>	WS2- Adjustable shelves at Kindergarten Classroom	<b>25</b>	LF	\$150.00	\$3,750
<b>1402</b>					
<b>1403</b>	<i>Entrance mats</i>				
<b>1404</b>	Walk of mat (WOM)	<b>708</b>	SF	\$45.00	\$31,860
<b>1405</b>	Walk of carpet (WOC)	<b>352</b>	SF	\$10.50	\$3,696
<b>1406</b>					
<b>1407</b>	Exterior Window treatment	<b>14,980</b>	SF	\$8.00	\$119,840
<b>1408</b>	Premium for motorized shades	<b>1</b>	LS	\$15,000.00	\$15,000
<b>1409</b>	Interior window treatment	<b>2,083</b>	SF	\$7.00	\$14,581
<b>1410</b>	<b>E2020 SPECIALTIES / MILLWORK TOTAL</b>				<b>\$1,202,557</b>
<b>1411</b>					



**Westwood Hanlon Elementary School**

Westwood, MA

113,141 GSF

**DETAILED ESTIMATE - NEW CONSTRUCTION**

<b>1412 TOTAL SYSTEM E20 FURNISHINGS</b>				<b>\$1,202,557</b>
<b>1413</b>				
<b>1414</b>				
<b>1415 F10 SPECIAL CONSTRUCTION</b>				
<b>1416</b>				
<b>1417 F1010 SPECIAL CONSTRUCTION</b>				
<b>1418 Geothermal Field</b>				
<b>1419</b> Geothermal Piping to Field w/ Ftgs (HDPE)	<b>900</b>	LF	\$29.30	\$26,370
<b>1420</b> Geothermal Runout Piping in Field w/ Ftgs	<b>7,440</b>	LF	\$21.30	\$158,472
<b>1421</b> Geothermal Well Piping	<b>50,120</b>	LF	\$3.96	\$198,475
<b>1422</b> Geothermal Wells w/ Grouting	<b>80</b>	EA	\$15,500.00	\$1,240,000
<b>1423</b> Geothermal Piping in Vault w/ Ftgs, Hgrs, Valving, Specialties	<b>1</b>	LS	\$134,500.00	\$134,500
<b>1424</b> Excavation, Bedding and Backfill	<b>8,340</b>	LF	\$23.00	\$191,820
<b>1425</b> Machine Rental, Misc.	<b>1</b>	LS	\$5,600.00	\$5,600
<b>1426</b> Valving, Specialties at Pipe Entrance	<b>1</b>	LS	\$22,450.00	\$22,450
<b>1427</b> Valving, Specialties at Geothermal Circulators	<b>2</b>	EA	\$36,159.00	\$72,318
<b>1428</b> Valving, Specialties at Heat Pumps	<b>6</b>	EA	\$12,850.00	\$77,100
<b>1429</b> Geothermal Circulators	<b>2</b>	EA	\$9,875.00	\$19,750
<b>1430 F1010 SPECIAL CONSTRUCTION TOTAL</b>				<b>\$2,146,855</b>
<b>1431</b>				
<b>1432 TOTAL SYSTEM F10 SPECIAL CONSTRUCTION</b>				<b>\$2,146,855</b>
<b>1433</b>				
<b>1434</b>				
<b>1435 F30 DEMOLITION</b>				
<b>1436</b>				
<b>1437 F2020 SELECTIVE DEMOLITION</b>				
<b>1438</b> See building demolition				
<b>1439 F2020 SELECTIVE DEMOLITION TOTAL</b>				<b>\$0</b>
<b>1440</b>				
<b>1441 TOTAL SYSTEM F20 DEMOLITION</b>				<b>\$0</b>
<b>1442</b>				
<b>1443</b>				
	<b>TOTAL TO SUMMARY</b>			<b>\$49,006,552</b>



**Westwood Hanlon Elementary School**

Westwood, MA

113,141 GSF

**DIRECT COST SITEWORK SUMMARY**

<b><u>ELEMENT</u></b>	<b><u>TOTAL</u></b>
<b>10</b> F20 FACILITY REMEDIATION	See main Sum.
<b>11</b>	
<b>12</b> F30 DEMOLITION	See main Sum.
<b>13</b>	
<b>14</b> G10 SITE PREPARATION	\$2,123,741
<b>15</b>	
<b>16</b> G20 SITE IMPROVEMENTS	\$4,960,035
<b>17</b>	
<b>18</b> G30 SITE CIVIL/MECHANICAL UTILITIES	\$2,643,201
<b>19</b>	
<b>20</b> G40 SITE ELECTRICAL UTILITIES	\$525,093
<b>21</b>	
<b>22</b>	
<b>23 SITEWORK TOTAL</b>	<b><u>\$10,252,070</u></b>
<b>24</b>	
<b>25</b>	



**Westwood Handlon Elementary School**  
Westwood, MA

**SITEWORK DETAILED ESTIMATE**

	<b><u>DESCRIPTION</u></b>	<b><u>QUANTITY</u></b>	<b><u>UNIT</u></b>	<b><u>UNIT COST</u></b>	<b><u>TOTAL</u></b>
<b>9</b>	<b>F20 FACILITY REMEDIATION</b>				
<b>10</b>					
<b>11</b>	<b>F2010 Hazardous Materials Remediation</b>				
<b>12</b>	Hazmat abatement -Budget provided	1	LS	\$750,000.00	See main Sum.
<b>13</b>	<b>F20 FACILITY REMEDIATION TOTAL</b>				See main Sum.
<b>14</b>					
<b>15</b>					
<b>16</b>	<b>F30 DEMOLITION</b>				
<b>17</b>					
<b>18</b>	<b>F3010 Structure Demolition</b>				
<b>19</b>	Building demolition	506,077	CF	\$0.35	See main Sum.
<b>20</b>	<b>F30 DEMOLITION TOTAL</b>				See main Sum.
<b>21</b>					
<b>22</b>					
<b>23</b>	<b>G10 SITE PREPARATION</b>				
<b>24</b>					
<b>25</b>	<b>G1010 Site Clearing</b>				
<b>26</b>	31 10 00 Site Clearing				
<b>27</b>	Site clearing	6	ACRES	\$3,500.00	\$21,000
<b>28</b>	R & D trees	10	ACRES	\$8,000.00	\$80,000
<b>29</b>	Construction fence Phase I, install, maintain, remove & rein	3,904	LF	\$16.00	\$62,464
<b>30</b>	Construction fence Phase II, install, maintain, remove & rei	1,930	LF	\$16.00	\$30,880
<b>31</b>	Construction fence Phase III, install, maintain, remove & rei	2,257	LF	\$16.00	\$36,112
<b>32</b>	Orange safety fence	1,932	LF	\$18.50	\$35,742
<b>33</b>	Phase 2 & 3 orange safety fence	528	LF	\$10.00	\$5,280
<b>34</b>	Phase 1 & 2 double construction gate	1	PR	\$2,800.00	\$2,800
<b>35</b>	Phase 3. Double construction gate	1	PR	\$2,800.00	\$2,800
<b>36</b>	Phase 1 & 2 Stabilized construction entrance	1,308	SF	\$7.50	\$9,810
<b>37</b>	Phase 3. Stabilized construction entrance	1,222	SF	\$7.50	\$9,165
<b>38</b>	<i>Contractor parking</i>				
<b>39</b>	Phase 1 & 2 temporary staging	2,778	SF	\$3.50	\$9,723
<b>40</b>	Phase 2 stage area	3,495	SF	\$3.50	\$12,233
<b>41</b>	Phase 3 stage area	4,505	SF	\$3.50	\$15,768
<b>42</b>	Temp signs	1	LS	\$3,000.00	\$3,000
<b>43</b>	Wash down/re-fueling/parking allowance	3,000	SF	\$2.00	\$6,000
<b>44</b>	31 23 19 Dewatering and Drainage				
<b>45</b>	Dewatering for sitework excavation; allow	1	LS	\$35,000.00	\$35,000
<b>46</b>	31 25 00 Erosion and Sedimentation Controls				
<b>47</b>	Erosion control	322	LF	\$12.00	\$3,864
<b>48</b>	Perimeter protection barrier B silt fence with wattles	3,512	LF	\$14.00	\$49,168
<b>49</b>	Inlet protection	48	EA	\$275.00	\$13,200
<b>50</b>	Phase 1 & 2. 6' Screened super silt fence	1,218	LF	\$14.00	\$17,052





**Westwood Handlon Elementary School**

Westwood, MA

**SITEWORK DETAILED ESTIMATE**

	<b><u>DESCRIPTION</u></b>	<b><u>QUANTITY</u></b>	<b><u>UNIT</u></b>	<b><u>UNIT COST</u></b>	<b><u>TOTAL</u></b>
51	Erosion control perimeter protection at Phase 2 temporary stockpile area	410	LF	\$12.00	\$4,920
52	Phase 3. 6' Screened super silt fence	2,670	LF	\$14.00	\$37,380
53	Phase 1 & 2 temporary sediment basin	88	CY	\$15.00	\$1,324
54	Stabilize low points and step slope with slope protection	25,395	SF	\$2.75	\$69,836
55					
56	<b>G1020 Site Demolition and Relocation</b>				
57	02 41 00 Demolition				
58	33 05 05 Selective Site Utility Demolition				
59	Saw cut existing pavement	375	LF	\$12.00	\$4,500
60	R & D asphalt pavement	34,636	SF	\$1.00	\$34,636
61	R & D asphalt sidewalk	16,713	SF	\$1.00	\$16,713
62	R & D curbing	433	LF	\$8.00	\$3,464
63	R & D sand playground	5,736	SF	\$1.50	\$8,604
64	R & D sport field	13,219	SF	\$1.50	\$19,829
65	R & D bike packs on bit concrete	358	SF	\$1.50	\$537
66	Existing playground equipment removed and discarded	1	AL	\$3,500.00	\$3,500
67	R & D stone wall	973	LF	\$35.00	\$34,055
68	Cut, cap and remove existing utility	1	AL	\$50,000.00	\$50,000
69	Misc. demolition other than above	1	AL	\$85,000.00	\$85,000
70					
71	<u>G1020.01 Building Demolition</u>				
72	02 30 00 Building Demolition				
73	Building demolition				See Above
74					
75	<b>G1030 Site Earthwork</b>				
76	Soils characterization and disposal; allowance	1	AL	\$75,000.00	\$75,000
77	Remove & stockpile topsoil	2,466	CY	\$10.00	\$24,659
78	Rock excavation; allow	4,366	CY	\$75.00	\$327,431
79	Cut and fill for building				See Building
80	Gravel base to building				See Building
81	Sitework cut and fill	22,215	CY	\$15.00	\$333,225
82	Roadways pavement cut and fill	7,632	CY	\$15.00	\$114,480
83	Pedestrian Paving cut and fill	1,783	CY	\$15.00	\$26,745
84	Stabilized stonedust detail 3/L4.01	2,055	SF	\$5.00	\$10,275
85	Dirt footpath 2' width	2,584	SF	\$8.00	\$20,672
86	10' Wide dirt fire access trail. scope includes brush, tree and	3,740	SF	\$2.75	\$10,285
87	Rough and fine grading	169,336	SF	\$1.50	\$254,004
88	Plumbing excavation, Bedding, and Backfill	3,470	LF	\$26.40	\$91,608
89	<b>G10 SITE PREPARATION TOTAL</b>				<b>\$2,123,741</b>
90					



**Westwood Handlon Elementary School**  
Westwood, MA

**SITEWORK DETAILED ESTIMATE**

	<b><u>DESCRIPTION</u></b>	<b><u>QUANTITY</u></b>	<b><u>UNIT</u></b>	<b><u>UNIT COST</u></b>	<b><u>TOTAL</u></b>
91					
92	<b><u>G20 SITE IMPROVEMENTS</u></b>				
93					
94	<b>G2020 Roadways</b>				
95	32 12 00 Flexible Paving				
96	Bituminous concrete roadway detail 1/L4.01	83,533	SF	\$3.45	\$288,189
97	Bituminous concrete- Fire lane detail 1/L4.01	12,004	SF	\$3.45	\$41,414
98	Bituminous concrete 1/L4.01	10,517	SF	\$3.45	\$36,284
99	Patch existing pavement at street	300	SF	\$8.50	\$2,550
100	Porous pavement; parking lot	26,845	SF	\$6.50	\$174,493
101	Gravel base to roadway & parking lot	5,427	CY	\$38.00	\$206,226
102					
103	32 16 00 Curbs and Gutters				
104	Vertical granite curb detail 4/L4.01	7,162	LF	\$48.00	\$343,776
105	Flush granite curb detail 6/L4.01	170	LF	\$42.00	\$7,140
106	Vertical planter curb	102	LF	\$48.00	Alternate
107	Flush precast concrete curb detail 5/L4.01	373	LF	\$28.00	\$10,444
108					
109	32 17 00 Paving Specialties				
110	Painted crosswalk	1,933	SF	\$2.50	\$4,833
111	Striped pedestrian crossing	2,616	SF	\$2.50	\$6,540
112	Parking stall painting	143	EA	\$35.00	\$5,005
113	Parking stall painting; HC	4	EA	\$200.00	\$800
114	Misc. marking other than above	1	LS	\$3,900.00	\$3,900
115					
116	<b>G2030 Pedestrian Paving</b>				
117	32 13 10 Rigid Paving				
118	Concrete sidewalk detail 2/L4.01	19,568	SF	\$6.50	\$127,192
119	Bituminous concrete walk	3,265	SF	\$3.15	\$10,285
120	Concrete pad detail 2/L4.01	1,455	SF	\$10.00	\$14,550
121	Concrete entrance pavement	8,695	SF	\$8.50	\$73,908
122	Concrete pavement at Steam Porch	2,718	SF	\$10.00	\$27,180
123	Vehicular grade concrete pad for storage shed	82	SF	\$10.00	\$820
124	Curb cut Type 1	12	EA	\$450.00	\$5,400
125	Curb cut Type 2	9	EA	\$480.00	\$4,320
126	Concrete ramp	354	SF	\$15.00	\$5,310
127	Metal rails at concrete ramp	126	LF	\$260.00	\$32,760
128	Gravel base to concrete pavement	993	CY	\$38.00	\$37,734
129					
130	<b>G2040 Site Development</b>				
131	<b><u>G2040.01 Fences and Gates</u></b>				
132	32 31 00 Fences and Gates				
133	4' metal picket fence	767	LF	\$120.00	\$92,040



**Westwood Handlon Elementary School**

Westwood, MA

**SITEWORK DETAILED ESTIMATE**

	<b><u>DESCRIPTION</u></b>	<b><u>QUANTITY</u></b>	<b><u>UNIT</u></b>	<b><u>UNIT COST</u></b>	<b><u>TOTAL</u></b>
<b>134</b>	4' metal picket fence gate	2	EA	\$1,000.00	\$2,000
<b>135</b>	Emergency access gate	1	EA	\$5,500.00	\$5,500
<b>136</b>	Guardrail detail 9/L4.01	536	LF	\$55.00	\$29,480
<b>137</b>	8' Ht. Vinyl coated chain link fence detail 15/L4.01	208	LF	\$90.00	\$18,720
<b>138</b>	4" Black vinyl clad fence at playground	1,420	LF	\$36.00	\$51,120
<b>139</b>	Single gate - 4' Ht.	4	LEAF	\$550.00	\$2,200
<b>140</b>	Backstop at little league baseball field	1,140	SF	\$50.00	\$57,000
<b>141</b>	Sports barrier netting system behind each soccer equal to 20' Barrier	246	LF	\$200.00	\$49,200
<b>142</b>					
<b>143</b>					
<b>144</b>	<u>G2040.02 Site and Street Furnishes</u>				
<b>145</b>	Concrete stairs per riser	106	LFR	\$85.00	\$9,010
<b>146</b>	Concrete cheek wall	22	LF	\$240.00	\$5,280
<b>147</b>	Galvanized steel handrail at stair	42	LF	\$360.00	\$15,120
<b>148</b>	Storage shed	1	LS	\$4,100.00	\$4,100
<b>149</b>	Fence at dumpster pad	32	LF	\$75.00	\$2,400
<b>150</b>	Double gate at dumpster pad	2	EA	\$1,500.00	\$3,000
<b>151</b>	Bike racks	34	EA	\$450.00	\$15,300
<b>152</b>	Bench Type 1	2	EA	\$1,500.00	\$3,000
<b>153</b>	Bench Type 2	1	EA	\$2,500.00	\$2,500
<b>154</b>	Trash receptacle	1	AL	\$4,500.00	\$4,500
<b>155</b>	Concrete filled steel bollards	17	EA	\$750.00	\$12,750
<b>156</b>	Precast concrete bollard	14	EA	\$650.00	\$9,100
<b>157</b>	Raised planter	27	LF	\$150.00	\$4,050
<b>158</b>	Illuminated entry sign	2	EA	\$26,000.00	\$52,000
<b>159</b>	40' Flag pole w/ foundation	1	EA	\$7,500.00	\$7,500
<b>160</b>	Traffic signs	30	EA	\$480.00	\$14,400
<b>161</b>	Picnic table	2	EA	\$1,200.00	\$2,400
<b>162</b>	Square court	3	LS	\$375.00	\$1,125
<b>163</b>	Painted hopscotch	1	LS	\$350.00	\$350
<b>164</b>	Boulders set in lawn	34	EA	\$750.00	\$25,500
<b>165</b>	Colored nonsked coating at crossing	540	SF	\$3.50	\$1,890
<b>166</b>	Sand/Water play tables	2	EA	\$10,000.00	\$20,000
<b>167</b>					
<b>168</b>	<u>Versa-lok retaining wall detail 9/L4.01</u>	480	LF		
<b>169</b>	Excavation	107	CY	\$15.00	\$1,600
<b>170</b>	Gravel base to footing; 12" thick	39	CY	\$38.00	\$1,486
<b>171</b>	Remove of excavation material on site	107	CY	\$4.00	\$427
<b>172</b>	4" sub drain pipe	480	LF	\$18.00	\$8,640
<b>173</b>	3/4" Crushed stone backfill	141	CY	\$30.00	\$4,230
<b>174</b>	Backfill with stockpile soil	32	CY	\$10.00	\$320



**Westwood Handlon Elementary School**

Westwood, MA

**SITEWORK DETAILED ESTIMATE**

	<b><u>DESCRIPTION</u></b>	<b><u>QUANTITY</u></b>	<b><u>UNIT</u></b>	<b><u>UNIT COST</u></b>	<b><u>TOTAL</u></b>
175	Modular concrete units retaining wall	3,456	SF	\$60.00	\$207,360
176	<u>Double side natural stone wall with guardrail detail 8/L4.01</u>	147	LF		
177	Excavation	147	CY	\$15.00	\$2,205
178	Gravel base to footing; 18" thick	37	CY	\$38.00	\$1,406
179	Remove of excavation material on site	147	CY	\$4.00	\$588
180	Footing concrete strip footing CF4'-2"x18"	36	CY	\$155.00	\$5,580
181	Footing formwork	441	SF	\$12.00	\$5,292
182	Re-bar at footing	2,880	LBS	\$2.00	\$5,760
183	Place from truck & vibrate	36	CY	\$110.00	\$3,960
184	Concrete retaining wall	36	CY	\$155.00	\$5,580
185	Retaining wall formwork	1,617	SF	\$18.00	\$29,106
186	Re-bar at retaining wall	4,320	LBS	\$2.00	\$8,640
187	Place from truck & vibrate	36	CY	\$110.00	\$3,960
188	Nature stone face	1,323	SF	\$75.00	\$99,225
189	18" Metal guardrail on top of wall	147	LF	\$140.00	\$20,580
190					
191	32 18 00 Athletic and Recreational Surfacing				
192	<i>Little league baseball</i>	40,383	SF		
193	Rough/fine grading	40,383	SF	\$0.75	\$30,287
194	Cut and fill	1,750	CY	\$15.00	\$26,250
195	8" Stone base	1,097	CY	\$38.00	\$41,686
196	Sand base	274	CY	\$45.00	\$12,330
197	Underdrain	37,550	GSF	\$0.95	\$35,673
198	Infield surfacing; Engineered infield mix, 4" Depth	2,833	SF	\$2.75	\$7,791
199	Irrigation outfield	37,550	SF	\$1.50	\$56,325
200	Sod lawn	37,550	SF	\$2.50	\$93,875
201	5'x15' Aluminum bleacher	2	EA	\$13,650.00	\$27,300
202	Single gate at batting cage	2	EA	\$500.00	\$1,000
203	Removable foul poles	2	EA	\$5,135.00	\$10,270
204	Base plate	4	EA	\$370.00	\$1,480
205	Pitching rubber	1	EA	\$220.00	\$220
206	Team bench	2	EA	\$1,500.00	\$3,000
207	Scoreboard	1	EA		Electrical
208	<i>11 V 11 Soccer Field</i>	86,108	SF		
209	Rough/fine grading	86,108	SF	\$0.75	\$64,581
210	Cut and fill	3,731	CY	\$15.00	\$55,965
211	8" Stone base	2,339	CY	\$38.00	\$88,882
212	Sand base	585	CY	\$45.00	\$26,325
213	Underdrain	86,108	GSF	\$0.95	\$81,803
214	Irrigation at soccer field area only	74,250	SF	\$1.50	\$111,375
215	Sod lawn	74,250	SF	\$2.50	\$185,625
216	lawn	11,858	SF	\$0.50	\$5,929



**Westwood Handlon Elementary School**

Westwood, MA

**SITEWORK DETAILED ESTIMATE**

	<b><u>DESCRIPTION</u></b>	<b><u>QUANTITY</u></b>	<b><u>UNIT</u></b>	<b><u>UNIT COST</u></b>	<b><u>TOTAL</u></b>
217	Soccer goal	1	LS	\$2,500.00	\$2,500
218	Poured in place surfacing playground	10,616	SF		
219	Rough/fine grading	10,616	SF	\$0.75	\$7,962
220	Cut and fill	460	CY	\$15.00	\$6,900
221	Stone base	360	CY	\$38.00	\$13,680
222	Rubber playground safety surface	10,616	SF	\$18.00	\$191,088
223	Swing set	2	EA	\$3,300.00	\$6,600
224	Accessible platform and stairs	1	LS	\$32,000.00	\$32,000
225	Double slide	1	LS	\$5,000.00	\$5,000
226	Activated slope with euroflex spheres and half spheres	1	LS	\$26,400.00	\$26,400
227	Landscape structures "Alpha link tower"	1	LS	\$75,000.00	\$75,000
228	Landscape structures "Crab trap"	1	LS	\$50,000.00	\$50,000
229	Miscellaneous play structures	1	LS	\$30,000.00	\$30,000
230	Flush perimeter concrete curb 6/L4.01	593	LF	\$28.00	\$16,604
231	Asphalt basketball court	2,025	SF		
232	Rough/fine grading	2,025	SF	\$0.75	\$1,519
233	Cut and fill - see earthwork	88	CY	\$15.00	\$1,320
234	12" Stone base	83	CY	\$38.00	\$3,154
235	Asphalt basketball court	2,025	SF	\$3.50	\$7,088
236	Basketball courts marking	2,025	SF	\$2.50	\$5,063
237	Basketball hoops	1	EA	\$2,950.00	\$2,950
238	Elec vehicle charging station				Electrical
239					
240	<b>G2050.02 Lawns and Grasses</b>				
241	32 92 00 Turfs and Grasses				
242	Respread topsoil, amended	2,466	CY	\$12.00	\$29,591
243	Topsoil for lawn	4,089	CY	\$25.00	\$102,225
244	Topsoil for planting beds, shrubs and perennials	2,677	CY	\$28.00	\$74,956
245	Mulch	454	CY	\$45.00	\$20,430
246	Loam and seed	215,421	SF	\$0.25	\$53,855
247	Seed mix #1: New England conservation / wildlife mix	29,963	SF	\$0.35	\$10,487
248	Seed mix #2: New England erosion control/ restoration mix	8,002	SF	\$2.50	\$20,005
249	<b>G2050.03 Trees, Plants and Ground Covers</b>				
250	32 93 00 Plants				
251	Existing tree to remain and be protect	2	EA	\$350.00	\$700
252	Deciduous Trees	151	EA		
253	Red Maple 3" Cal	10	EA	\$1,250.00	\$12,500
254	Green mountain Sugar Maple 3" Cal	1	EA	\$1,250.00	\$1,250
255	Green mountain Sugar Maple 4" Cal	4	EA	\$1,500.00	\$6,000
256	River Birch 3" Cal	7	EA	\$1,250.00	\$8,750
257	Sweet Gum 3" Cal	27	EA	\$1,250.00	\$33,750
258	Black Gum 3" Cal	11	EA	\$1,250.00	\$13,750



**Westwood Handlon Elementary School**

Westwood, MA

**SITEWORK DETAILED ESTIMATE**

	<b><u>DESCRIPTION</u></b>	<b><u>QUANTITY</u></b>	<b><u>UNIT</u></b>	<b><u>UNIT COST</u></b>	<b><u>TOTAL</u></b>
<b>259</b>	American Sycamore 4" Cal	23	EA	\$1,500.00	\$34,500
<b>260</b>	Pin Oak 4" Cal	5	EA	\$1,500.00	\$7,500
<b>261</b>	Red Oak 3" Cal	13	EA	\$1,250.00	\$16,250
<b>262</b>	Princeton Elm 4" Cal	16	EA	\$1,500.00	\$24,000
<b>263</b>	Red Maple 3" Cal	30	EA	\$1,250.00	\$37,500
<b>264</b>	Red Sunset Maple 3" Cal	4	EA	\$1,250.00	\$5,000
<b>265</b>	Ornamental Trees	29	EA		
<b>266</b>	Shadbush 10'Ht.	8	EA	\$950.00	\$7,600
<b>267</b>	Witch Hazel 10 Gal	14	EA	\$1,050.00	\$14,700
<b>268</b>	Sweetbay Magnolia 8'Ht.	7	EA	\$850.00	\$5,950
<b>269</b>	Evergreen Trees	38	EA		
<b>270</b>	White spruce 8' Ht.	16	EA	\$850.00	\$13,600
<b>271</b>	White Pine 8' Ht.	22	EA	\$850.00	\$18,700
<b>272</b>	Shrubs	2,544	EA		
<b>273</b>	Red Chokeberry 3 Gal	22	EA	\$150.00	\$3,300
<b>274</b>	Summersweet 5 Gal	128	EA	\$250.00	\$32,000
<b>275</b>	New Jersey Tea 3 Gal	171	EA	\$150.00	\$25,650
<b>276</b>	Sweet Fern 3 Gal	1,499	EA	\$150.00	\$224,850
<b>277</b>	Red Twig Dogwood 5 Gal	17	EA	\$250.00	\$4,250
<b>278</b>	Bush Honey Suckle 5 Gal	153	EA	\$250.00	\$38,250
<b>279</b>	Dwarf Fothergilla 5 Gal	16	EA	\$250.00	\$4,000
<b>280</b>	Inkberry 5 Gal	65	EA	\$250.00	\$16,250
<b>281</b>	Winterberry 5 Gal	75	EA	\$250.00	\$18,750
<b>282</b>	Spicebush 5 Gal	12	EA	\$250.00	\$3,000
<b>283</b>	Juniper 5 Gal	56	EA	\$250.00	\$14,000
<b>284</b>	Bayberry 5 Gal	9	EA	\$250.00	\$2,250
<b>285</b>	Fragrant Sumac 5 Gal	191	EA	\$250.00	\$47,750
<b>286</b>	Rosebay Rhododendron 3' Ht.	11	EA	\$150.00	\$1,650
<b>287</b>	Highbush Blueberry 5 Gal	48	EA	\$250.00	\$12,000
<b>288</b>	Arrowood Viburnum 5 Gal	9	EA	\$250.00	\$2,250
<b>289</b>	Cranberry Bush Viburnum 5 Gal	48	EA	\$250.00	\$12,000
<b>290</b>	Cranberry Bush 5 Gal	14	EA	\$250.00	\$3,500
<b>291</b>	Perennials	1,435	EA		
<b>292</b>	Coneflower 1 Gal	300	EA	\$12.50	\$3,750
<b>293</b>	Beebalm 1 Gal	25	EA	\$12.50	\$313
<b>294</b>	Narrow Leaf Mountain Mint 1Gal	50	EA	\$12.50	\$625
<b>295</b>	Moss Phlox 1Gal	75	EA	\$12.50	\$938
<b>296</b>	Coneflower 1Gal	385	EA	\$12.50	\$4,813
<b>297</b>	Ral	550	EA	\$12.50	\$6,875
<b>298</b>	Swamp Milkweed 1 Gal	25	EA	\$12.50	\$313
<b>299</b>	New England Aster 1 Gal	25	EA	\$12.50	\$313
<b>300</b>	Grasses and Sedges	2,648	EA		





**Westwood Handlon Elementary School**

Westwood, MA

**SITEWORK DETAILED ESTIMATE**

	<b><u>DESCRIPTION</u></b>	<b><u>QUANTITY</u></b>	<b><u>UNIT</u></b>	<b><u>UNIT COST</u></b>	<b><u>TOTAL</u></b>
301	Pennsylvania Sedge 1 QT	1,400	EA	\$7.00	\$9,800
302	Switch Grass 2 Gal	1,248	EA	\$15.00	\$18,720
303	Plant maintenance and guarantee	1	LS	\$12,000.00	\$12,000
304	<b><u>G20 SITE IMPROVEMENTS TOTAL</u></b>				<b>\$4,960,035</b>
305					
306					
307	<b><u>G30 SITE CIVIL/MECHANICAL UTILITIES</u></b>				
308					
309	<b>G3010 Water Utilities</b>				
310	33 10 00 Water Utilities				
311	8" Ductile Iron Pipe	1,188	LF	\$80.40	\$95,515
312	6" Ductile Iron Pipe	1,188	LF	\$64.33	\$76,426
313	4" Ductile Iron Pipe	54	LF	\$45.84	\$2,475
314	Ductile Iron Fittings	47	EA	\$844.47	\$39,690
315	Wet Taps	1	EA	\$5,382.00	\$5,382
316	Curb Cocks w/ Boxes	18	EA	\$2,412.73	\$43,429
317	Fire Hydrants	4	EA	\$4,696.44	\$18,786
318	Connection to Existing water line	1	AL	\$25,000.00	\$25,000
319	Excavation, Bedding, and Backfill	2,430	LF	\$25.56	\$62,111
320	Gaskets, Lubricants, Etc.	1	LS	\$6,720.00	\$6,720
321	Gate valves	17	EA	\$1,500.00	\$25,500
322	Thrust blocks	19	EA	\$800.00	\$15,200
323	Pressure testing & chlorinate	2,540	LF	\$5.00	\$12,700
324	Concrete encasement	95	SF	\$20.00	\$1,900
325					
326	<b>G3020 Sanitary Sewerage Utilities</b>				
327	33 31 00 Sanitary Sewerage				
328	8" SDR 35 Pipe	1,674	LF	\$20.74	\$34,719
329	Grease Interceptor, 5,000 Gallon	1	EA	\$32,450.00	\$32,450
330	Sanitary Manholes	10	EA	\$4,615.00	\$46,150
331	Connection to Existing Sanitary Manholes	1	EA	\$8,500.00	\$8,500
332	Excavation, Bedding, and Backfill	1,674	LF	\$25.56	\$42,787
333	Lubricant, Etc.	1	LS	\$1,875.00	\$1,875
334	Re-line existing sewer line in Gay St	1	LS	\$25,000.00	\$25,000
335	Pressure testing & video				Included
336	Concrete encasement	300	SF	\$20.00	\$6,000
337					
338	<b>G3030 Storm Drainage Utilities</b>				
339	33 41 00 Storm Utility Drainage				
340	24" Corrugated Polyethylene Pipe	198	LF	\$97.92	\$19,388
341	18" Corrugated Polyethylene Pipe	180	LF	\$67.20	\$12,096
342	15" Corrugated Polyethylene Pipe	882	LF	\$55.60	\$49,039
343	12" Corrugated Polyethylene Pipe	1,962	LF	\$52.45	\$102,907





**Westwood Handlon Elementary School**

Westwood, MA

**SITework DETAILED ESTIMATE**

<b><u>DESCRIPTION</u></b>	<b><u>QUANTITY</u></b>	<b><u>UNIT</u></b>	<b><u>UNIT COST</u></b>	<b><u>TOTAL</u></b>
<b>344</b> 10" Corrugated Polyethylene Pipe	<b>54</b>	LF	\$45.60	\$2,462
<b>345</b> 8" Corrugated Polyethylene Pipe	<b>180</b>	LF	\$32.90	\$5,922
<b>346</b> 6" Corrugated Polyethylene Pipe	<b>252</b>	LF	\$31.70	\$7,988
<b>347</b> 24" Perforated Pipe	<b>198</b>	LF	\$115.60	\$22,889
<b>348</b> 8" Perforated Pipe	<b>324</b>	LF	\$38.90	\$12,604
<b>349</b> 6" Perforated Pipe	<b>3,942</b>	LF	\$34.60	\$136,393
<b>350</b> Catch Basins	<b>16</b>	EA	\$3,412.00	\$54,592
<b>351</b> Drainage Manholes	<b>36</b>	EA	\$4,875.00	\$175,500
<b>352</b> Outlet Control Structures	<b>3</b>	EA	\$30,450.00	\$91,350
<b>353</b> Water Quality Units	<b>11</b>	EA	\$9,175.00	\$100,925
<b>354</b> Collection Chambers	<b>581</b>	EA	\$1,245.00	\$723,345
<b>355</b> Area Drains	<b>12</b>	EA	\$985.00	\$11,820
<b>356</b> Trench Drain	<b>20</b>	LF	\$286.00	\$5,720
<b>357</b> Grade Cleanouts	<b>46</b>	EA	\$625.00	\$28,750
<b>358</b> Flare Ends	<b>3</b>	EA	\$784.00	\$2,352
<b>359</b> 30 MM Membrane	<b>49,500</b>	SF	\$1.26	\$62,370
<b>360</b> Geo Textile	<b>49,500</b>	SF	\$1.95	\$96,525
<b>361</b> Gravel	<b>3,183</b>	YDS	\$17.52	\$55,766
<b>362</b> Excavation, Bedding, and Backfill	<b>8,172</b>	LF	\$25.56	\$208,876
<b>363</b> Miscellaneous	<b>1</b>	LS	\$6,800.00	\$6,800
<b>364</b>				
<b>365</b> <b>G3044 Heating Distribution</b>				
<b>366</b> 4" Ductile Iron Pipe	<b>216</b>	LF	\$43.09	\$9,307
<b>367</b> 4" Mechanical Joint 90	<b>4</b>	EA	\$423.38	\$1,694
<b>368</b> 4" Mechanical Joint 45	<b>4</b>	EA	\$408.75	\$1,635
<b>369</b> Excavation, Bedding, and Backfill	<b>216</b>	LF	\$25.56	\$5,521
<b>370</b> Miscellaneous	<b>1</b>	LS	\$350.00	\$350
<b>371</b>				
<b>372</b> <b>G3040 Gas Utilities</b>				
<b>373</b> 33 50 00 Gas Service				
<b>374</b> No work shown in this section				
<b>375</b>				
<b>376</b> <b>G30 SITE CIVIL/MECHANICAL UTILITIES TOTAL</b>				<b>\$2,643,201</b>
<b>377</b>				
<b>378</b>				
<b>379</b> <b>G40 SITE ELECTRICAL UTILITIES</b>				
<b>380</b>				
<b>381</b> <b>G4010 Site Electrical Utilities</b>				
<b>382</b> Site Lighting:				
<b>383</b> Type SL1/3 Pole w/ 1-Fixt	<b>21</b>	EA	\$2,761.22	\$57,986
<b>384</b> Type SL2/3 Pole w/ 2-Fixt	<b>6</b>	EA	\$4,673.02	\$28,038
<b>385</b> Type SL1/PT Ped Lt Pole	<b>19</b>	EA	\$2,269.96	\$43,129
<b>386</b> Type SL6 Uplight	<b>3</b>	EA	\$1,040.60	\$3,122



**Westwood Handlon Elementary School**

Westwood, MA

**SITEWORK DETAILED ESTIMATE**

<b><u>DESCRIPTION</u></b>	<b><u>QUANTITY</u></b>	<b><u>UNIT</u></b>	<b><u>UNIT COST</u></b>	<b><u>TOTAL</u></b>
<b>387</b> Type SL7 Uplight	4	EA	\$689.70	\$2,759
<b>388</b> WP Junc Box, future signage	2	EA	\$447.70	\$895
<b>389</b> 1" Pvc, 4#8 UG	5,560	LF	\$16.41	\$91,226
<b>390</b> Site Lighting Controls	1	LS	\$4,162.40	\$4,162
<b>391</b> Electric Vehicle Charging Dual Stations	2	EA	\$8,131.20	\$16,262
<b>392</b> 1" Pvc, 4#8 UG	600	LF	\$16.41	\$9,845
<b>393</b> 1" Pvc, CAT 6 UG	600	LF	\$7.53	\$4,521
<b>394</b> Pullbox PB	7	EA	\$2,686.20	\$18,803
<b>395</b>				
<b>396</b> Site Utilities				
<b>397</b> Utility Pole Riser	1	LS	\$4,162.40	\$4,162
<b>398</b> Electric Manhole	1	EA	\$10,744.80	\$10,745
<b>399</b> 4" Pvc UG (Empty, Primary Service By Others)	1,760	LF	\$16.18	\$28,472
<b>400</b> Utility Tranformer Pad (Xfmr by Others)	1	EA	\$4,162.40	\$4,162
<b>401</b> Install Utility Metering Cabinet FBO	1	EA	\$1,984.40	\$1,984
<b>402</b> 4" Pvc, 4 600 Mcm UG (Sec Service)	300	LF	\$105.86	\$31,759
<b>403</b> 4" Pvc UG (Spare)	50	LF	\$16.18	\$809
<b>404</b> Trench, Concrete, Backfill	1,000	LF	\$48.40	\$48,400
<b>405</b> 4" Pvc, (empty, 4x880' Telecom Service)	3,520	LF	\$16.18	\$56,943
<b>406</b> Innderduct	2,640	LF	\$3.99	\$10,542
<b>407</b> Comm Manhole	2	EA	\$7,453.60	\$14,907
<b>408</b>				
<b>409</b> Site CCTV Security (per Engr):	NIC			
<b>410</b>				
<b>411</b> Shed Electric - Feeder only	Shed Electri	1		
<b>412</b>				
<b>413</b> Site Demo & Temp, Miscellaneous:				
<b>414</b> Temp Power and Lighting	1	LS	\$14,520.00	\$14,520
<b>415</b> Misc Site Demo	1	LS	\$10,890.00	\$10,890
<b>416</b> Equipment Rentals	1	LS	\$6,050.00	\$6,050
<b>417</b> <b>G40 SITE ELECTRICAL UTILITIES TOTAL</b>				<b>\$525,093</b>
<b>418</b>				
<b>419</b>	<b>TOTAL SITEWORK SUMMARY</b>			<b><u>\$10,252,070</u></b>
<b>420</b>				





## **60% Construction Document Estimate**

### **Westwood Hanlon Elementary School**

Westwood, MA

**PM&C LLC**  
20 Downer Avenue, Suite 5  
Hingham, MA 02043  
(T) 781-740-8007  
(F) 781-740-1012

Prepared for:

**Dore + Whittier**

January 14, 2022



Westwood Hanlon Elementary School  
Westwood, MA

14-Jan-22

**60% Construction Document Estimate**

**MAIN CONSTRUCTION COST SUMMARY**

	Start Date	Gross Floor Area	\$/sf	Estimated Construction Cost
<b>NEW CONSTRUCTION</b>				
NEW SCHOOL		113,141	\$438.46	\$49,608,275
DEMOLISH EXISTING BUILDINGS		33,500	\$8.00	\$268,000
REMOVE HAZARDOUS MATERIALS (UEC 8/12/21)				\$750,000
SITEWORK				\$10,076,469
SUB-TOTAL	Jul-22	113,141	\$536.52	\$60,702,744
ESCALATION TO START DATE JULY 2022 - (assumed 3.5% PA)	1.46%			\$886,260
DESIGN AND PRICING CONTINGENCY	2.5%			\$1,517,569
SUB-TOTAL		113,141	\$557.77	\$63,106,573
GENERAL CONDITIONS/GR's	6.00%			\$3,786,399
BONDS	1.00%			\$631,066
INSURANCE	1.25%			\$788,832
PERMITS/FEES				waived
OVERHEAD + PROFIT	3.0%			\$2,049,386
<b>TOTAL CONSTRUCTION COST</b>		113,141	\$621.90	<b>\$70,362,256</b>

**ALTERNATES**

Add UV-C to HVAC System	<b>\$93,235</b>
Add Phase 2 Landscape Planting	<b>\$245,456</b>
Add Solid Surface Countertop at Classrooms ILO Plastic Laminate	<b>\$16,843</b>



**Westwood Hanlon Elementary School**  
Westwood, MA

14-Jan-22

### **60% Construction Document Estimate**

This 60% Construction Document cost estimate was produced from drawings and specifications dated December 21, 2021 prepared by Dore + Whittier and their design team.

This estimate includes all direct construction costs, general contractors overhead and profit and design contingency. Cost escalation assumes start dates indicated.

Bidding conditions are expected to be public bidding under 149 of the Massachusetts General Laws to pre-qualified general contractors, and pre-qualified sub-contractors, open specifications for materials and manufacturers.

The estimate is based on prevailing wage rates for construction in this market and represents a reasonable opinion of cost. It is not a prediction of the successful bid from a contractor as bids will vary due to fluctuating market conditions, errors and omissions, proprietary specifications, lack or surplus of bidders, perception of risk, etc. Consequently the estimate is expected to fall within the range of bids from a number of competitive contractors or subcontractors, however we do not warrant that bids or negotiated prices will not vary from the final construction cost estimate.

### **ITEMS NOT CONSIDERED IN THIS ESTIMATE**

Items not included in this estimate are:

- All professional fees and insurance
- Building Permit costs
- Land acquisition, feasibility, and financing costs
- All Furnishings, Fixtures and Equipment
- Items identified in the design as Not In Contract (NIC)
- Items identified in the design as by others
- Owner supplied and/or installed items (e.g. draperies, furniture and equipment)
- Rock excavation; special foundations (unless indicated by design engineers)
- Utility company back charges, including work required off-site
- Work to City streets and sidewalks, (except as noted in this estimate)



Westwood Hanlon Elementary School  
Westwood, MA

14-Jan-22

60% Construction Document Estimate

GFA 113,141

## CONSTRUCTION COST SUMMARY

BUILDING SYSTEM	SubTotal	TOTAL	\$/SF	%
<b>A10 FOUNDATIONS</b>				
A1010 Standard Foundations	\$1,659,099			
A1020 Special Foundations				
A1030 Lowest Floor Construction	\$1,521,948	<b>\$3,181,047</b>	\$28.12	6.4%
<b>B10 SUPERSTRUCTURE</b>				
B1010 Upper Floor Construction	\$2,268,304			
B1020 Roof Construction	\$3,390,175	<b>\$5,658,479</b>	\$50.01	11.4%
<b>B20 EXTERIOR CLOSURE</b>				
B2010 Exterior Walls	\$6,196,915			
B2020 Windows	\$1,907,572			
B2030 Exterior Doors	\$162,100	<b>\$8,266,587</b>	\$73.06	16.7%
<b>B30 ROOFING</b>				
B3010 Roof Coverings	\$2,536,114			
B3020 Roof Openings	\$51,353	<b>\$2,587,467</b>	\$22.87	5.2%
<b>C10 INTERIOR CONSTRUCTION</b>				
C1010 Partitions	\$3,230,761			
C1020 Interior Doors	\$1,080,002			
C1030 Specialties/Millwork	\$951,859	<b>\$5,262,622</b>	\$46.51	10.6%
<b>C20 STAIRCASES</b>				
C2010 Stair Construction	\$244,100			
C2020 Stair Finishes	\$48,322	<b>\$292,422</b>	\$2.58	0.6%
<b>C30 INTERIOR FINISHES</b>				
C3010 Wall Finishes	\$821,332			
C3020 Floor Finishes	\$1,002,947			
C3030 Ceiling Finishes	\$1,093,728	<b>\$2,918,007</b>	\$25.79	5.9%
<b>D10 CONVEYING SYSTEMS</b>				
D1010 Elevator	\$158,200	<b>\$158,200</b>	\$1.40	0.3%
<b>D13 SPECIAL CONSTRUCTION</b>				
D1313 Special Construction (Geothermal Wells)	\$2,400,000	<b>\$2,400,000</b>	\$21.21	4.8%
<b>D20 PLUMBING</b>				
D20 Plumbing	\$1,983,000	<b>\$1,983,000</b>	\$17.53	4.0%
<b>D30 HVAC</b>				
D30 HVAC	\$8,658,501	<b>\$8,658,501</b>	\$76.53	17.5%



Westwood Hanlon Elementary School  
Westwood, MA

14-Jan-22

60% Construction Document Estimate

GFA 113,141

<b>CONSTRUCTION COST SUMMARY</b>					
<i>BUILDING SYSTEM</i>		SubTotal	TOTAL	\$/SF	%
<b>D40 FIRE PROTECTION</b>					
D40	Fire Protection	\$686,283	<b>\$686,283</b>	\$6.07	1.4%
<b>D50 ELECTRICAL</b>					
D5010	Service & Distribution	\$1,758,580			
D5020	Lighting & Power	\$1,357,130			
D5030	Communication & Security Systems	\$1,870,912			
D5040	Other Electrical Systems	\$255,000	<b>\$5,241,622</b>	\$46.33	10.6%
<b>E10 EQUIPMENT</b>					
E10	Equipment	\$975,256	<b>\$975,256</b>	\$8.62	2.0%
<b>E20 FURNISHINGS</b>					
E2010	Fixed Furnishings	\$1,338,782			
E2020	Movable Furnishings	NIC	<b>\$1,338,782</b>	\$11.83	2.7%
<b>F20 HAZMAT REMOVALS</b>					
F2010	Building Elements Demolition	\$0			
F2020	Hazardous Components Abatement	\$0	<b>\$0</b>	\$0.00	0.0%
<b>TOTAL DIRECT COST (Trade Costs)</b>			<b>\$49,608,275</b>	\$438.46	100.0%





Westwood Hanlon Elementary School  
Westwood, MA

14-Jan-22

60% Construction Document Estimate

GFA

113,141

### CONSTRUCTION COST SUMMARY IN CSI FORMAT

		NEW SCHOOL		SITEWORK		TOTAL PROJECT	
		Subtotal	Total	Subtotal	Total	Subtotal	Total
<b>NEW SCHOOL BUILDING</b>							
<b>DIV. 2 EXISTING CONDITIONS</b>							
024100 Site Demolition							
<b>DIV. 3 CONCRETE</b>			<b>\$2,427,381</b>		<b>\$20,000</b>		<b>\$2,447,381</b>
033000 Cast In Place Concrete	\$2,427,381			\$20,000		\$2,447,381	
033500 Concrete Finishes							
<b>DIV. 4 MASONRY</b>			<b>\$3,210,183</b>		<b>\$7,200</b>		<b>\$3,217,383</b>
042000 Unit Masonry	\$3,210,183			\$7,200		\$3,217,383	
<b>DIV. 5 METALS</b>			<b>\$5,786,364</b>		<b>\$10,000</b>		<b>\$5,796,364</b>
051200 Structural Steel Framing	\$5,176,951			\$10,000		\$5,186,951	
055000 Metal Fabrications	\$609,413					\$609,413	
<b>DIV. 6 WOODS, PLASTICS &amp; COMPOSITES</b>			<b>\$774,320</b>				<b>\$774,320</b>
061000 Rough Carpentry	\$466,525					\$466,525	
062000 Finish Carpentry	\$307,795					\$307,795	
<b>DIV. 7 THERMAL &amp; MOISTURE PROTECTION</b>			<b>\$5,592,838</b>		<b>\$11,970</b>		<b>\$5,604,808</b>
070001 Waterproofing, Dampproofing and Caulking	\$842,906					\$842,906	
070002 Roofing	\$2,321,394					\$2,321,394	
072100 Thermal Insulation	\$49,918					\$49,918	
076400 Wall Panels	\$2,358,620			\$11,970		\$2,370,590	
078100 Applied Fireproofing							
078400 Firestopping	\$10,000					\$10,000	
079500 Construction & Expansion Joints	\$10,000					\$10,000	
<b>DIV. 8 DOORS &amp; WINDOWS</b>			<b>\$3,252,790</b>				<b>\$3,252,790</b>
080001 Windows	\$2,314,892					\$2,314,892	
080002 Glazing	\$31,320					\$31,320	
081113 Doors, Frames and Hardware	\$115,600					\$115,600	
081400 Wood Doors	\$213,225					\$213,225	
083100 Access Doors and Panels	\$10,000					\$10,000	
083200 Sliding Glass Doors	\$252,000					\$252,000	
083300 Overhead Doors							
083510 Folding Grilles	\$38,650					\$38,650	
084413 Glazed Aluminum Curtainwall							



Westwood Hanlon Elementary School  
Westwood, MA

14-Jan-22

60% Construction Document Estimate

GFA

113,141

### CONSTRUCTION COST SUMMARY IN CSI FORMAT

		NEW SCHOOL		SITEWORK		TOTAL PROJECT	
		Subtotal	Total	Subtotal	Total	Subtotal	Total
<b>NEW SCHOOL BUILDING</b>							
086300	Metal Framed Skylights	\$39,353				\$39,353	
087100	Door Hardware	\$236,350				\$236,350	
089000	Louvers and Vents	\$1,400				\$1,400	
<b>DIV. 9 FINISHES</b>			<b>\$5,707,450</b>				<b>\$5,707,450</b>
090002	Tile	\$429,876				\$429,876	
090003	Acoustical Tile	\$784,312				\$784,312	
090005	Resilient Flooring	\$585,277				\$585,277	
090007	Painting	\$324,055				\$324,055	
092900	GWB, Lath and Plastering	\$3,065,640				\$3,065,640	
096466	Wood Athletic Flooring	\$287,318				\$287,318	
096625	Precast Terrazzo						
096700	Fluid Applied Floor						
096800	Carpet	\$40,142				\$40,142	
098400	Acoustic Panels	\$190,830				\$190,830	
099500	Wall Covering						
<b>DIV 10 SPECIALTIES</b>			<b>\$407,080</b>		<b>\$20,000</b>		<b>\$427,080</b>
101100	Markerboards	\$102,078				\$102,078	
101200	Display Cases	\$14,801				\$14,801	
101400	Signage	\$97,741		\$20,000		\$117,741	
102113	Toilet Compartments	\$54,700				\$54,700	
102228	Folding Partition	\$15,300				\$15,300	
102600	Wall Protection	\$4,000				\$4,000	
102813	Toilet Accessories	\$101,820				\$101,820	
104400	Fire Protection Specialties	\$14,000				\$14,000	
105113	Metal Lockers	\$2,640				\$2,640	
107113	Sun Control Devices						
<b>DIV. 11 EQUIPMENT</b>			<b>\$975,256</b>				<b>\$975,256</b>
112313	Time Capsule	\$1,000				\$1,000	
111300	Loading Dock Equipment						
114000	Foodservice Equipment	\$590,520				\$590,520	
114500	Appliances	\$28,100				\$28,100	
115200	Projection Screens	\$138,000				\$138,000	
116100	Theatre Equipment	\$50,000				\$50,000	
116623	Gymnasium Equipment	\$167,636				\$167,636	
116800	Playfield Equipment and Structures						
116810	Playground Structures						
119000	Miscellaneous Equipment						



Westwood Hanlon Elementary School  
Westwood, MA

14-Jan-22

60% Construction Document Estimate

GFA

113,141

### CONSTRUCTION COST SUMMARY IN CSI FORMAT

		NEW SCHOOL		SITEWORK		TOTAL PROJECT	
		Subtotal	Total	Subtotal	Total	Subtotal	Total
<b>NEW SCHOOL BUILDING</b>							
<b>DIV. 12 FURNISHINGS</b>			<b>\$1,338,782</b>				<b>\$1,338,782</b>
122400	Window Shades	\$135,682				\$135,682	
123000	Casework	\$1,155,850				\$1,155,850	
124813	Entrance Floor Mats and Frames	\$47,250				\$47,250	
126100	Fixed Audience Seating						
126613	Telescoping Bleachers						
<b>DIV. 13 SPECIAL CONSTRUCTION</b>							
130000	Temporary Work						
<b>DIV. 14 CONVEYING SYSTEMS</b>			<b>\$155,000</b>				<b>\$155,000</b>
142424	Holeless Hydraulic Elevators	\$155,000				\$155,000	
<b>DIV. 21 FIRE SUPPRESSION</b>			<b>\$686,283</b>				<b>\$686,283</b>
210000	Fire Suppression	\$686,283				\$686,283	
<b>DIV.22 PLUMBING</b>			<b>\$1,983,000</b>				<b>\$1,983,000</b>
220000	Plumbing	\$1,983,000				\$1,983,000	
<b>DIV. 23 HVAC</b>			<b>\$8,658,501</b>				<b>\$8,658,501</b>
230000	HVAC	\$8,658,501				\$8,658,501	
<b>DIV.26 ELECTRICAL</b>			<b>\$5,241,622</b>		<b>\$521,910</b>		<b>\$5,763,532</b>
260000	Electrical	\$5,241,622		\$521,910		\$5,763,532	
270000	Communications						
280000	Electronic Safety and Equipment						
<b>DIV. 31 EARTHWORK</b>			<b>\$1,011,425</b>		<b>\$3,220,535</b>		<b>\$4,231,960</b>
311000	Site Preparation & Clearing			\$601,930		\$601,930	
312000	Earthwork	\$1,011,425		\$2,469,830		\$3,481,255	
312500	Erosion Control			\$148,775		\$148,775	
<b>DIV. 32 EXTERIOR IMPROVEMENTS</b>					<b>\$4,383,527</b>		<b>\$4,383,527</b>
320000	Paving, curbing & Edging			\$1,359,910		\$1,359,910	
323119	Site Improvements			\$1,683,728		\$1,683,728	
329900	Landscaping			\$1,339,889		\$1,339,889	
<b>DIV. 33 UTILITIES</b>			<b>\$2,400,000</b>		<b>\$1,881,327</b>		<b>\$4,281,327</b>
331000	Water Distribution			\$402,200		\$402,200	



Westwood Hanlon Elementary School  
Westwood, MA

14-Jan-22

60% Construction Document Estimate

GFA 113,141

CONSTRUCTION COST SUMMARY IN CSI FORMAT							
NEW SCHOOL				SITEWORK		TOTAL PROJECT	
	Subtotal	Total		Subtotal	Total	Subtotal	Total
NEW SCHOOL BUILDING							
332313 Geothermal Wells		\$2,400,000		\$69,600		\$2,469,600	
333000 Sanitary Sewerage				\$176,000		\$176,000	
334000 Storm Drainage Systems				\$1,233,527		\$1,233,527	
SUBTOTAL DIRECT (TRADE) COST		\$49,608,275		\$10,076,469		\$59,684,744	



Westwood Hanlon Elementary School  
Westwood, MA

14-Jan-22

60% Construction Document Estimate

GFA

113,141

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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NEW CONSTRUCTION

**GROSS FLOOR AREA CALCULATION**

First Floor	77,339
Second Floor	36,665

**TOTAL GROSS FLOOR AREA (GFA) 114,004 sf**

**A10 FOUNDATIONS**

**A1010 STANDARD FOUNDATIONS**

**033000 CONCRETE**

Strip Footings	198	CY		
Foundation Walls	443	CY		
Spread Footings	823	CY		
Piers	77	CY		
Total Foundation Concrete		1,541	CY	
<u>Strip footings/Grade Beams</u>				
Formwork	3,930	sf	14.00	55,020
Re-bar	18,890	lbs.	2.00	37,780
Concrete material; 4,500 psi	198	cy	132.00	26,136
Placing concrete	198	cy	90.00	17,820
<u>Foundation walls</u>				
Formwork	18,160	sf	18.00	326,880
Re-bar	40,860	lbs.	2.00	81,720
Concrete material; 4,500 psi	443	cy	132.00	58,476
Placing concrete	443	cy	120.00	53,160
Form shelf	2,275	lf	8.00	18,200
<u>Column Footings</u>				
Formwork	10,666	sf	16.00	170,656
Re-bar	94,914	lbs.	2.00	189,828
Concrete material; 4,500 psi	823	cy	132.00	108,636
Placing concrete	823	cy	120.00	98,760
Set anchor bolts grout plates	166	ea	165.00	27,390
<u>Piers</u>				
Formwork	3,984	sf	22.00	87,648
Re-bar	6,574	lbs	2.00	13,148
Concrete material; 4,500 psi	77	cy	132.00	10,164
Placing concrete	77	cy	120.00	9,240
<u>Miscellaneous</u>				
Elevator pit, complete	1	loc	30,000.00	30,000

**042000 MASONRY**

Insulation, load bearing at brick shelf	2,275	lf	10.00	22,750
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**070001 WATERPROOFING, DAMPPROOFING AND CAULKING**

Bituminous dampproofing at brick shelf	3,413	sf	3.00	10,239
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**072100 THERMAL INSULATION**

Insulation, 2" rigid	9,740	sf	3.50	34,090
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**312000 EARTHWORK**

<u>Strip footings</u>				
Excavation	1,363	cy	14.00	19,082
Reuse excess material on site	1,363	cy	12.00	16,356
Backfill with selected existing material	1,018	cy	16.00	16,288
<u>Spread footings</u>				
Excavation	2,109	cy	14.00	29,526
Reuse excess material on site	2,109	cy	12.00	25,308



Westwood Hanlon Elementary School  
Westwood, MA

14-Jan-22

60% Construction Document Estimate

GFA

113,141

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
-------------	-------------	-----	------	--------------	---------------	--------------	---------------

#### NEW CONSTRUCTION

54	Backfill with selected existing material	1,209	cy	16.00	19,344		
55	<u>Miscellaneous</u>						
56	Foundation drain, per civil plans	1,157	lf	22.00	25,454		
57	Allowance for dewatering for foundation work	1	ls	20,000.00	20,000		
58	SUBTOTAL					1,659,099	

#### A1020 SPECIAL FOUNDATIONS

60	No work in this section						
61	SUBTOTAL					-	

#### A1030 LOWEST FLOOR CONSTRUCTION

65	033000	CONCRETE					
66		<u>Slab on grade, 5" thick</u>	77,339	sf			
67		Vapor barrier, heavy duty, 15 mil	77,339	sf	1.00	77,339	
68		WWF reinforcement	88,940	sf	1.50	133,410	
69		Concrete - 5" thick	1,251	cy	130.00	162,630	
70		Placing concrete	1,251	cy	55.00	68,805	
71		Finishing and curing concrete	77,339	sf	2.75	212,682	
72		Sawcut full depth control joints	77,339	sf	0.22	17,015	
73		<u>Miscellaneous</u>					
74		Moisture mitigation admixture				NIC	
75		Equipment pads	1	ls	10,000.00	10,000	
76	072100	THERMAL INSULATION					
77		Insulation, 2" to 4' at perimeter	4,150	sf	2.00	NIC	
78	312000	EARTHWORK					
79		<u>Slab on grade</u>					
80		<u>Drilling/matting/blasting</u>					
81		Pre-blast survey	1	ls	50,000.00	by owner	
82		At building footprint; assume 4.5' rock removal below FFE incl. 5' offset	4,241	cy	45.00	190,845	
83		To design subgrade of pavement area; 2' of rock removal	1,333	cy	45.00	w/ site	
84		To design subgrade of playground areas; 2' of rock removal	3,815	cy	45.00	w/ site	
85		Trench; for utility lines - allowance	500	cy	65.00	w/ site	
86		To design subgrade of fire road; 3' of rock removal	1,333	cy	45.00	w/ site	
87		Rock excavation/hauling to stockpile location	11,222	cy	7.00	78,554	
88		Process and stockpile for reuse within building footprint incl. 12" of structural below SOG	18,516	tns	7.00	129,612	
89		<u>Building Earthwork</u>					
90		Cut	7,140	cy	8.00	57,120	
91		Gravel layer 12" thick; from processed rock	2,900	cy	10.00	29,000	
92		Fill - (from processed rock to bring up levels, areas outside of rock removal)	3,400	cy	10.00	34,000	
93		Fill - (from processed rock to replace rock removal)	2,700	cy	10.00	27,000	
94		Stockpile processed rock for base materials	2,222	cy	3.50	w/ site	
95		Stockpile cut soils for reuse on site	7,140	cy	3.50	24,990	
96		Load excess soils for disposal	7,140	cy	3.50	NR	
97		Less than RCS-1 site disposal 1.65x	11,781	tn	18.00	NR	
98		Plumbing E&B	4,081	lf	28.00	114,268	
99		Sub-slab ventilation system	77,339	sf	2.00	154,678	
100		SUBTOTAL					1,521,948

#### TOTAL - FOUNDATIONS

\$3,181,047

#### A20 BASEMENT CONSTRUCTION

#### A2010 BASEMENT EXCAVATION



Westwood Hanlon Elementary School  
Westwood, MA

14-Jan-22

60% Construction Document Estimate

GFA

113,141

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
-------------	-------------	-----	------	--------------	---------------	--------------	---------------

**NEW CONSTRUCTION**

No work in this section  
SUBTOTAL

**A2020 BASEMENT WALLS**

No work in this section  
SUBTOTAL

**TOTAL - BASEMENT CONSTRUCTION**

**B10 SUPERSTRUCTURE**

**B1010 FLOOR CONSTRUCTION**

802 tns including canopies  
14.07 lbs/gsf  
6,666 \$/Tn

**033000 CONCRETE**

Concrete on Metal Deck

WWF reinforcement

42,165 sf 1.50 63,248

Concrete fill to metal deck; light weight, 4-1/2" thick

586 cy 175.00 102,550

Moisture mitigation admixture

NIC

Place and finish concrete

36,665 sf 2.50 91,663

Rebar to decks

11,000 lbs 2.00 22,000

**051200 STRUCTURAL STEEL FRAMING**

Beams; W-sections

170 tns 4,800.00 816,000

Brace frames; HSS

23 tns 4,800.00 110,400

Hung lintels at windows

4 tns 4,800.00 19,200

Miscellaneous supports at windows

13 tns 4,800.00 62,400

Columns; HSS

145 tns 4,800.00 696,000

Shear studs

8,148 ea 3.50 28,518

2" Metal galvanized floor deck

36,665 sf 5.00 183,325

Moment connections

126 ea 500.00 63,000

**078100 FIREPROOFING/FIRESTOPPING**

Firestopping

1 ls 10,000.00 10,000

Fireproofing

36,665 sf 2.50 NR

SUBTOTAL

2,268,304

**B1020 ROOF CONSTRUCTION**

**033000 CONCRETE**

WWF reinforcement

3,117 sf 1.50 4,676

Concrete fill to metal deck; light weight, 6" thick

58 cy 175.00 10,150

Place and finish concrete

2,710 sf 2.50 6,775

Rebar to decks

813 lbs 2.00 1,626

**051200 STRUCTURAL STEEL FRAMING**

Beams; W-sections

291 tns 4,800.00 1,396,800

Beams; HSS

36 tns 4,800.00 172,800

Parapet framing at CMU backup, 8lbs/lf

4 tns 4,800.00 19,200

Joists

65 tns 4,800.00 312,000

Misc angles and bent plates at roof edge, allow per note

4,375 lf 75.00 328,125

3" Metal galvanized roof deck

78,290 sf 5.75 450,168

Premium for acoustic deck at gym

12,145 sf 7.00 85,015

Moment connections

125 ea 500.00 62,500

Roof screen support

4 tns 6,500.00 26,000

Canopies





Westwood Hanlon Elementary School  
Westwood, MA

14-Jan-22

60% Construction Document Estimate

GFA

113,141

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
-------------	-------------	-----	------	--------------	---------------	--------------	---------------

**NEW CONSTRUCTION**

167	HSS	31	tns	6,500.00	201,500		
168	HSS, tapered	16	tns	9,000.00	144,000		
169							
170	061000 ROUGH CARPENTRY						
171	T&G laminated deck, 4-1/2"	4,824	sf				
172	Media Center	960	sf	35.00	33,600		
173	Main Entry	1,200	sf	35.00	42,000		
174	Plaza canopy	2,664	sf	35.00	93,240		
175							
176	078100 FIREPROOFING/FIRESTOPPING						
177	Fireproofing - specific locations only, allow	1	ls	25,000.00	NR		
178	SUBTOTAL					3,390,175	
179							
180	<b>TOTAL - SUPERSTRUCTURE</b>						<b>\$5,658,479</b>

**B20 EXTERIOR CLOSURE**

185	B2010 EXTERIOR WALLS	56,894	SF				
186							
187	042000 MASONRY						
188	Brick veneer, utility; including detailing	35,214	sf	34.00	1,197,276		
189	Natural stone veneer; 3-5" bed depth, Buechelstone Barnwood Blue	5,300	sf	75.00	397,500		
190	Cast stone; Custom Cast Stone	250	sf	55.00	13,750		
191	Kingspan Kooltherm, 3" - 2 layers 1-1/2"	40,764	sf	5.50	224,202		
192	CMU back up, 8"	8,670	sf	28.00	242,760		
193	CMU back up, 12"	14,049	sf	33.00	463,617		
194	Premium for engineered masonry ties at sloped walls	470	sf	5.00	2,350		
195	Staging to exterior wall	70,906	sf	3.50	In rates		
196							
197	052000 MISC. METALS						
198	Miscellaneous metals	63,483	sf	1.00	63,483		
199							
200	070001 WATERPROOFING, DAMPPROOFING AND CAULKING						
201	Air and vapor barrier	56,894	sf	7.50	426,705		
202	AVB at window openings	5,241	lf	5.00	26,205		
203	AVB at MCM and Terracotta panel projections	8,758	sf	7.50	65,685		
204	AVB at soffit	545	sf	7.50	4,088		
205	Miscellaneous sealants	70,906	sf	0.50	35,453		
206							
207	076400 CLADDING						
208	Metal composite panels; Alucobond	1,470	sf	80.00	117,600		
209	Metal composite panels; Alucobond projections/Sunshades, all sides, 1, 2/A6.60, A6/A6.65	2,852	sf	80.00	228,160		
210	Terracotta shingle	14,660	sf	90.00	1,319,400		
211	Terracotta sill	100	sf	90.00	9,000		
212	Terracotta shingle Projections - sides and soffits, M10/A6.65	5,906	sf	90.00	531,540		
213	MCM soffits	345	sf	80.00	27,600		
214	Terracotta soffits	200	sf	90.00	18,000		
215	Mockup	1	ls	40,000.00	40,000		
216							
217	072100 THERMAL INSULATION						
218	Insulation, 6" mineral fiber	16,130	sf	5.00	w/ cladding		
219	Fiberglass thermal spacer, 6"	14,660	sf	5.00	w/ cladding		
220	Insulation at window openings	5,241	lf	2.50	13,103		
221	Insulation at MCM panel projections	2,852	sf	3.00	w/ cladding		
222	Insulation at soffit	545	sf	5.00	2,725		



Westwood Hanlon Elementary School  
Westwood, MA

14-Jan-22

60% Construction Document Estimate

GFA

113,141

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
-------------	-------------	-----	------	--------------	---------------	--------------	---------------

**NEW CONSTRUCTION**

223							
224	092900	GYPSON BOARD ASSEMBLIES					
225		Sheathing, 5/8"	34,175	sf	3.00	102,525	
226		6" stud; LGMF	34,175	sf	9.00	307,575	
227		GWB lining	34,175	sf	3.50	119,613	
228		Premium for sloped wall	1,975	sf	10.00	19,750	
229		Framing and sheathing at MCM and Terracotta panel projections	10,308	sf	15.00	154,620	
230		Framing at soffit	545	sf	14.00	7,630	
231							
232	101400	SIGNAGE					
233		Building signage, allow	1	ls	15,000.00	15,000	
234		SUBTOTAL					6,196,915
235							
236	B2020	WINDOWS	14,012	SF			
237							
238	061000	ROUGH CARPENTRY					
239		Wood blocking at openings	5,241	lf	12.00	62,892	
240							
241	070001	WATERPROOFING, DAMPPROOFING AND CAULKING					
242		Backer rod & double sealant	5,241	lf	10.00	52,410	
243							
244	080001	WINDOWS					
245		Aluminum windows, thermally broken heavy commercial extruded aluminum	5,015	sf	100.00	501,500	
246		Premium for architectural subsill	659	lf	50.00	32,950	
247		Premium for awning openings	64	ea	500.00	32,000	
248		Curtainwall, Aluminum; double pane	8,997	sf	125.00	1,124,625	
249		Premium for translucent glass at gym	1,565	sf	5.00	7,825	
250		Premium for tempered glass; IG5	1,476	sf	5.00	7,380	
251		Premium for School Guard glass	1,584	sf	30.00	47,520	
252		Premium for Level 3 ballistic glazing	53	sf	150.00	7,950	
253		Sunscreens					
254		Sunscreens - aluminum fins/outriggers	112	lf	260.00	29,120	
255							
256	089000	LOUVERS					
257		Aluminum louvers - allowance	20	sf	70.00	1,400	
258		SUBTOTAL					1,907,572
259							
260	B2030	EXTERIOR DOORS					
261							
262	061000	ROUGH CARPENTRY					
263		Wood blocking at openings	100	lf	11.00	1,100	
264							
265	079200	JOINT SEALANTS					
266		Backer rod & double sealant	100	lf	10.00	1,000	
267							
268	081110	HOLLOW METAL					
269		<u>Thermally insulated and galvanized</u>					
270		Frames, single	1	ea	450.00	450	
271		Frames, double	5	ea	450.00	2,250	
272		Type F; Flush HM door	11	leaf	500.00	5,500	
273							
274	080001	WINDOWS					
275		Glazed aluminum entrance doors including frame and hardware; single	4	ea	5,000.00	20,000	
276		Glazed aluminum entrance doors including frame and hardware; double	10	pr	10,000.00	100,000	
277							



Westwood Hanlon Elementary School  
Westwood, MA

14-Jan-22

60% Construction Document Estimate

GFA

113,141

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
-------------	-------------	-----	------	--------------	---------------	--------------	---------------

#### NEW CONSTRUCTION

278	087100	DOOR HARDWARE					
279		Hardware	11	leaf	1,600.00	17,600	
280		Auto opener	3	ea	4,000.00	12,000	
281							
282	090007	PAINTING					
283		Finish doors and frames	11	ea	200.00	2,200	
284		SUBTOTAL				162,100	
285							
286		<b>TOTAL - EXTERIOR CLOSURE</b>					<b>\$8,266,587</b>

#### B30 ROOFING

##### B3010 ROOF COVERINGS

292	061000	ROUGH CARPENTRY					
293		Rough blocking	14,740	lf	8.00	117,920	
294							
295	070001	WATERPROOFING, DAMPPROOFING AND CAULKING					
296		AVB at roof perimeter	3,685	lf	8.00	29,480	
297							
298	070002	ROOFING AND FLASHING					
299		<u>Flat Roof</u>					
300		EPDM membrane roofing system, 60 mil - FR deck sheathing, VR/AB, 3 layers insulation; 9", coverboard, membrane	78,290	sf	25.00	1,957,250	
301		Membrane to backside of parapet	5,528	sf	13.00	71,864	
302		Membrane to top of Terracotta sunscreen	1,550	sf	13.00	20,150	
303		Canopies - EPDM membrane roofing system, 60 mil - coverboard, membrane	4,824	sf	15.00	72,360	
304							
305		<u>Miscellaneous Roofing</u>					
306		Roof edge, 8"	3,240	lf	38.00	123,120	
307		Prefinished metal closure, 6"	1,135	lf	30.00	34,050	
308		Walk pads	2,550	sf	12.00	30,600	
309		Roof access ladder	4	ea	3,000.00	12,000	
310							
311	076400	CLADDING					
312		Mechanical roof screens					
313		Terracotta	792	sf	85.00	67,320	
314		SUBTOTAL				2,536,114	

##### B3020 ROOF OPENINGS

317	086300	ROOF SKYLIGHTS + HATCHES					
318		Raised skylights, 5'-8" x 5'-8"	6	ea	3,857.87	23,147	
319		Raised skylights, 5' x 8'	1	ea	4,800.00	4,800	
320		Raised skylights, 4' x 4'	6	ea	1,901.00	11,406	
321		Roof access hatch	4	ea	3,000.00	12,000	
322		SUBTOTAL				51,353	
323							
324		<b>TOTAL - ROOFING</b>					<b>\$2,587,467</b>

#### C10 INTERIOR CONSTRUCTION

##### C1010 PARTITIONS

331	042000	MASONRY	21,050	sf			
332		E1; 8" CMU	13,362	sf	28.00	374,136	
333							



Westwood Hanlon Elementary School  
Westwood, MA

14-Jan-22

60% Construction Document Estimate

GFA

113,141

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
-------------	-------------	-----	------	--------------	---------------	--------------	---------------

**NEW CONSTRUCTION**

334	E2; 8" CMU	734	sf	30.00	22,020		
335	H: 6" CMU	324	sf	23.00	7,452		
336	G: 12" CMU	6,630	sf	30.00	198,900		
337	Premium for acoustic CMU at Gym; AQ1.61	2,898	sf	15.00	43,470		
338	Premium for polished ground faced CMU at enclosed egress stairs	7,535	sf	5.25	NIC		
339							
340	055000 MISCELLANEOUS METALS						
341	Seismic clips	325	ea	150.00	48,750		
342	Misc. metals to CMU	21,050	sf	1.00	21,050		
343	Support at operable partition, sectional doors	45	lf	75.00	3,375		
344	Support at gym curtain, allowance	1	ls	7,500.00	7,500		
345	Support at operable partition	15	lf	120.00	1,800		
346							
347	061000 ROUGH CARPENTRY						
348	Wood blocking at interiors	114,004	gsf	0.50	57,002		
349	Rough blocking	10,393	lf	3.00	31,179		
350							
351	070001 WATERPROOFING, DAMPPROOFING AND CAULKING						
352	Miscellaneous sealants at partitions	114,004	gsf	0.50	57,002		
353							
354	080001 WINDOWS						
355	Aluminum storefront	2,398	sf	84.00	201,432		
356	Transaction window at administration; Level 3 bullet resistance and forced entry resistant per narrative	1	loc	2,500.00	2,500		
357	Premium for school guard glazing	79	sf	30.00	2,370		
358	Premium for Level 3 ballistic glazing	311	sf	150.00	46,650		
359							
360	092900 GYPSUM BOARD ASSEMBLIES	124,715	sf				
361	A; 6" Mtl stud - 1 layer 5/8" GWB e/s, insulation	29,911	sf	17.00	508,487		
362	A1A; 6" Mtl stud - 1 layer 5/8" GWB e/s, insulation (1 hr rated)	5,809	sf	18.00	104,562		
363	A2A; 6" Mtl stud - 2 layer 5/8" GWB e/s, insulation, seal terminations & penetrations w/ acoustic sealant	22,342	sf	21.00	469,182		
364	C; 8" Mtl stud - 1 layer 5/8" GWB e/s, insulation	7,702	sf	15.00	115,530		
365	F4; 3 5/8" Mtl furring stud - 1 layer 5/8" GWB o/s, insulation	22,082	sf	11.00	242,902		
366	F6; 6" Mtl furring stud - 1 layer 5/8" GWB o/s, insulation	30,305	sf	13.00	393,965		
367	M; 6" Mtl stud; 2 layers 5/8 GWB o/s, 2 layers 5/8 GWB o/s with 1/2" resilient channel	6,564	sf	23.00	150,972		
368	Premium for moisture resistant GWB (GYP BD3) at toilet rooms per note on AGO.02	528	sf	1.00	528		
369	Premium for abuse resistant/enhanced core GWB (GYP BD1) up to 10' A.F.F per note on AGO.02	61,905	sf	0.65	40,238		
370	Premium for bullet resistant fiberglass panels (BR)	367	sf	15.00	5,505		
371	Miscellaneous GWB shapes and furring, allowance	114,004	gsf	0.50	57,002		
372	Interior staging	1	ls	30,000.00	Included		
373							
374	102200 OPERABLE PARTITIONS						
375	Paired panel systems at shared wall at Coach's Suite Conference Room with full height marker board surface; STC-50	1	ls	15,300.00	15,300		
376	SUBTOTAL					3,230,761	
377							
378	C1020 INTERIOR DOORS						
379							
380	061000 ROUGH CARPENTRY						
381	Wood blocking at openings	4,398	lf	4.00	17,592		
382							
383	070001 WATERPROOFING, DAMPPROOFING AND CAULKING						



Westwood Hanlon Elementary School  
Westwood, MA

14-Jan-22

60% Construction Document Estimate

GFA

113,141

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>NEW CONSTRUCTION</b>							
384	Backer rod & double sealant	<b>4,398</b>	lf	2.50	10,995		
385							
386	080002 GLASS AND GLAZING						
387	Door glazing/sidelights/transoms; S-3 safety glazing 5/16"	<b>783</b>	sf	40.00	31,320		
388							
389	081113 HM DOORS AND FRAMES						
390	Frames						
391	Frame type 1 - single	<b>139</b>	ea	450.00	62,550		
392	Frame type 2 - double	<b>33</b>	ea	600.00	19,800		
393	Premium for sidelight/transom	<b>783</b>	sf	30.00	23,490		
394	Doors						
395	Type F - Flush HM	<b>4</b>	leaf	390.00	1,560		
396							
397	081400 WOOD DOORS						
398	Type F - Flush	<b>162</b>	ea	450.00	72,900		
399	Type FG - WD with upper and lower vision panels	<b>12</b>	ea	650.00	7,800		
400	Type G - WD with upper glass panel	<b>11</b>	ea	575.00	6,325		
401	Type N - WD with narrow lite	<b>12</b>	ea	550.00	6,600		
402	Type V - WD with view port	<b>4</b>	ea	525.00	2,100		
403	Premium for 90 min fire rated assembly	<b>7</b>	loc	10,000.00	70,000		
404	Premium for acoustical gasketing	<b>1</b>	loc	500.00	500		
405	Premium for STC-45		leaf	1,500.00			
406	Premium for STC-55	<b>16</b>	leaf	2,000.00	32,000		
407	Premium for STC-60	<b>5</b>	leaf	3,000.00	15,000		
408							
409	083100 ACCESS DOORS AND FRAMES						
410	Access doors	<b>1</b>	ls	10,000.00	10,000		
411							
412	080001 WINDOWS						
413	Type FG - Glazed aluminum entrance doors including frame and hardware; single door	<b>6</b>	ea	5,000.00	30,000		
414	Type FG - Glazed aluminum entrance doors including frame and hardware; double door	<b>6</b>	pr	10,000.00	60,000		
415	Type G - Half glazed aluminum entrance doors including frame and hardware; single door	<b>3</b>	ea	4,300.00	12,900		
416	Type G - Half glazed aluminum entrance doors including frame and hardware; double door	<b>5</b>	pr	8,500.00	42,500		
417	Aluminum frame type 5	<b>63</b>	sf	90.00	5,670		
418	Premium for school guard glazing	<b>40</b>	sf	30.00	w/ C1010		
419							
420	083200 SLIDING GLASS DOORS						
421	Sliding glass doors with perimeter gasketing, sweep and laminated double glazing						
422	3'-0" x 7'-0", surface door with aluminum frame	<b>24</b>	ea	2,625.00	63,000		
423	8'-0" x 7'-0", pocket doors (3 leaves) w/ aluminum frame	<b>27</b>	ea	7,000.00	189,000		
424							
425	083510 FOLDING GRILLES						
426	Side folding security grille at reception	<b>310</b>	sf	75.00	23,250		
427	Coiling counter doors -allow	<b>1</b>	ea	5,000.00	5,000		
428	Overhead security grille at kitchen	<b>1</b>	ea	10,400.00	10,400		
429							
430	087100 DOOR HARDWARE						
431	Hardware	<b>205</b>	leaf	950.00	194,750		
432	Auto opener	<b>3</b>	ea	4,000.00	12,000		
433							
434	090007 PAINTING						
435	Finish doors and frames	<b>205</b>	ea	200.00	41,000		
436	SUBTOTAL					1,080,002	
437							



Westwood Hanlon Elementary School  
Westwood, MA

14-Jan-22

60% Construction Document Estimate

GFA

113,141

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**NEW CONSTRUCTION**

438	<b>C1030</b>	<b>SPECIALTIES / MILLWORK</b>					
439							
440	055000	MISCELLANEOUS METALS					
441		Guardrail system with perforated metal infill panels at open to below areas	122	lf	400.00	48,800	
442		Guardrail at platform ramp	10	lf	250.00	2,500	
443		Single handrail at corridor ramps	44	lf	75.00	3,300	
444		Double handrails at platform ramp and steps	77	lf	150.00	11,550	
445		Ships ladder to roof hatch at custodian storage	1	ls	3,000.00	3,000	
446		Miscellaneous metals throughout building	114,004	gsf	1.25	142,505	
447							
448	061000	ROUGH CARPENTRY					
449		Backer panels in electrical closets	1	ls	10,000.00	10,000	
450							
451	064100	INTERIOR ARCHITECTURAL WOODWORK					
452		Admin reception desks	1	ls	19,500.00	19,500	
453		Nurse office/waiting desk/ work counter	1	ls	8,400.00	8,400	
454		Media center circulation desk with book return level 1	1	ls	16,800.00	16,800	
455		Media center circulation desk with book return level 2				FF&E	
456		Trash receptacles at Cafeteria on casters; cabinet doors with false base for three trash cans, stainless steel countertop (3 loc)	26	lf	500.00	13,000	
457		Custodial work bench, allowance	1	ls	3,200.00	3,200	
458		Solid surface cap to low wall	6	lf	45.00	270	
459		Wood sills	1,430	lf	45.00	64,350	
460		Window seat at classrooms with storage below; similar to J12/AQ1.70 (qty per floor plan locations)	20	loc	5,000.00	100,000	
461		Shelf and rod at closets	1	ls	1,200.00	1,200	
462		Art display rail at corridors	60	lf	45.00	2,700	
463							
464	070001	WATERPROOFING, DAMPPROOFING AND CAULKING					
465		Miscellaneous sealants throughout building	114,004	gsf	1.00	114,004	
466							
467	079500	EXPANSION CONTROL					
468		Expansion joint covers, allowance	1	ls	10,000.00	10,000	
469							
470	101100	VISUAL DISPLAY SURFACES					
471		Markerboards	3,657	sf	20.00	73,140	
472		Tackboards	1,401	sf	18.00	25,218	
473		Tackable surface within acoustic wall panel feature wall; per email 1/7	120	sf	20.00	2,400	
474		Peg board panel at extended learning	32	sf	35.00	1,120	
475		Custom storage trough below peg board panels; 5' wide	1	loc	200.00	200	
476		Smart boards				FF&E	
477							
478	101200	DISPLAY CASES					
479		Display cases at corridor with glass shelves and doors; 6'-2" high	30	lf	493.36	14,801	
480							
481	101400	SIGNAGE					
482		Bronze dedication plaque	1	ea	3,000.00	3,000	
483		LEED certification recognition plaque	1	ea	1,500.00	1,500	
484		Wayfinding signage	1	ea	1,500.00	1,500	
485		Room Signs	276	ea	140.00	38,640	
486		Miscellaneous code signage	114,004	gsf	0.15	17,101	
487		Vinyl Applique signage					
488		Exterior door signage	20	ea	250.00	5,000	
489		Locations per drawings, not yet shown (allowance)	1	ls	10,000.00	10,000	



Westwood Hanlon Elementary School  
Westwood, MA

14-Jan-22

60% Construction Document Estimate

GFA

113,141

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
-------------	-------------	-----	------	--------------	---------------	--------------	---------------

**NEW CONSTRUCTION**

490		4' x 12' signage at Gym, Café, Lobby, Media center	4	ea	1,500.00	6,000	
491							
492	102100	TOILET COMPARTMENTS					
493		Plastic partitions					
494		Toilet Partitions; ADA	8	ea	2,000.00	16,000	
495		Toilet Partitions; regular	18	ea	1,800.00	32,400	
496		Toilet Partitions; urinal screens	9	ea	700.00	6,300	
497							
498	102800	TOILET ACCESSORIES					
499		Stainless steel accessories					
500		Semi recessed waste units	23	ea	380.00	8,740	
501		Mirrors	34	ea	200.00	6,800	
502		Wall mounted soap dispensers	34	ea	70.00	2,380	
503		Dual roll toilet paper dispensers	38	ea	150.00	5,700	
504		42" Grab bars	8	set	200.00	1,600	
505		Sanitary napkin disposal	14	ea	100.00	1,400	
506		Hand dryers	23	ea	750.00	NIC	
507		CC-2; curved curtain and track at corridor markerboards; 23' long	3	ea	3,000.00	9,000	
508		CC-3; straight curtain and track at classroom glass sliders; 10' long	29	ea	1,400.00	40,600	
509		Cubicle curtain and track at resting	3	ea	2,000.00	6,000	
510		Janitors closet accessories	4	rms	300.00	1,200	
511		Shower accessories including grab bars, folding seat and curtain	2	ea	1,150.00	2,300	
512		Custodial workshop accessories	1	ea	1,500.00	1,500	
513		Adult changing table	1	ea	1,200.00	1,200	
514		Baby changing table	1	ea	800.00	800	
515		Classrooms					
516		Paper towel dispenser	28	ea	380.00	10,640	
517		Soap dispenser	28	ea	70.00	1,960	
518							
519	104400	FIRE PROTECTION SPECIALTIES					
520		Fire extinguisher cabinets	38	ea	350.00	13,300	
521		Defibrillator cabinets , allow	2	ea	350.00	700	
522							
523	102600	WALL PROTECTION					
524		Corner guards	20	loc	200.00	4,000	
525							
526	105000	LOCKERS					
527		Custodial; single tier metal with sloped top, 18" x 15" x 72"	3	opes	300.00	900	
528		Lockers at ext. day storage, double tier, allowance	6	opes	180.00	1,080	
529		Kitchen; single tier metal with sloped top, 12" x 12" x 72"	3	opes	220.00	660	
530		SUBTOTAL				951,859	
531							

**TOTAL - INTERIOR CONSTRUCTION**

**\$5,262,622**

**C20 STAIRCASES**

**C2010 STAIR CONSTRUCTION**

538							
539	033000	CONCRETE					
540		Concrete to stairs	5	flt	1,500.00	7,500	
541							
542	055000	MISCELLANEOUS METALS					
543		Gallery stair; Ornamental with perforated metal infill guardrail system and wood top caps	1	flt	65,500.00	65,500	





Westwood Hanlon Elementary School  
Westwood, MA

14-Jan-22

60% Construction Document Estimate

GFA

113,141

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
-------------	-------------	-----	------	--------------	---------------	--------------	---------------

**NEW CONSTRUCTION**

544	Media center stair with perforated metal infill guardrail system and wood top caps	1	flt	51,000.00	51,000		
545	Egress stairs with punched metal infill guardrails	3	flt	35,000.00	105,000		
546	Wide platform steps	53	lf	50.00	2,650		
547	Steps to stage including adjacent to ramp	2	loc	1,500.00	3,000		
548	Ramp to stage and music classroom corridor	315	sf	30.00	9,450		
549	SUBTOTAL					244,100	

**C2020 STAIR FINISHES**

**090005 RESILIENT FLOORS**

554	Rubber tile at stairs - intermediate and second floor landings	835	sf	14.00	11,690		
555	Rubber tile at stairs -first floor landings	1,070	sf	14.00	14,980		
556	Rubber tile at stairs - treads & risers	480	lfr	22.00	10,560		

**096560 ATHLETIC FLOORING**

559	Stage flooring to platform steps	53	lfr	44.00	2,332		
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**096800 TILE CARPETING**

562	Carpet tile	90	lfr	14.00	1,260		
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**090007 PAINTING**

565	Paint to stairs	5	flt	1,500.00	7,500		
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566	SUBTOTAL					48,322	
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**TOTAL - STAIRCASES**

**\$292,422**

**C30 INTERIOR FINISHES**

**C3010 WALL FINISHES**

**064100 INTERIOR ARCHITECTURAL WOODWORK**

576	WD-2; wood slats at corridor; Sectis wood fins	830	sf	50.00	41,500		
577	Finish to proscenium - allowance	1	ls	15,000.00	15,000		
578	1/2" thick wood chair rail above linoleum wall covering	515	lf	35.00	18,025		
579	Hardwood trim at perimeter of acoustic panel feature walls	110	lf	35.00	3,850		
580	Maple plywood veneer panels with edge-band to match casework above wall cubbies adjacent to the classroom slider doors	624	sf	65.00	not shown		

**090002 TILE**

583	Kitchen tile; ceramic	1,161	sf	28.00	32,508		
584	Cafeteria tile at east wall	347	sf	28.00	9,716		
585	Corridor tile including service corridor and gallery stair	2,120	sf	24.00	50,880		
586	Janitors closet tile at sink area	99	sf	28.00	2,772		
587	Tile backsplash at staff lunch/workrooms	135	sf	32.00	4,320		
588	Single bathroom ceramic wall tile (full height in select rooms per finish schedule)	3,097	sf	28.00	86,716		
589	Gang bathroom ceramic wall tile	4,403	sf	28.00	123,284		

**090005 RESILIENT FLOORS**

592	Linoleum wall panel with metal trim on bottom edge and outside corners ; V26/AQ1.60	1,725	sf	7.50	12,938		
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**098400 SOUND ABSORBING PANELS**

595	Acoustic wall panel stretch fabric system throughout; 1" thick panels (includes 5,045 SF per finish schedule)	5,229	sf	30.00	156,870		
596	Acoustic wall panel stretch fabric system throughout; 2" thick panels	224	sf	40.00	8,960		



Westwood Hanlon Elementary School  
Westwood, MA

14-Jan-22

60% Construction Document Estimate

GFA

113,141

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**NEW CONSTRUCTION**

597	Acoustic wall panel feature wall at lobby/living room	620	sf	30.00	18,600		
598	Diffuser wall panel at platform; DWP-1	160	sf	40.00	6,400		
599							
600	090007 PAINTING						
601	Paint to GWB	208,096	sf	0.75	156,072		
602	Paint to CMU	58,337	sf	1.25	72,921		
603	SUBTOTAL					821,332	
604							
605	<b>C3020 FLOOR FINISHES</b>						
606							
607	033000 CONCRETE						
608	Sealed concrete	5,860	sf	2.50	14,650		
609							
610	070001 WATERPROOFING, DAMPPROOFING AND CAULKING						
611	Waterproofing membrane to toilet rooms at elevated slabs; Note 18/A1.71	1,205	sf	8.00	9,640		
612							
613	090002 TILE						
614	Quarry tile flooring at kitchen	1,680	sf	26.00	43,680		
615	Quarry tile base	275	lf	18.00	4,950		
616	Ceramic tile at bathrooms	2,615	sf	22.00	57,530		
617	Ceramic tile base	845	lf	16.00	13,520		
618							
619	090005 RESILIENT FLOORS						
620	Marmoleum; Forbo	42,739	sf	6.00	256,434		
621	Flocked tile flooring, Flotex	27,410	sf	5.75	157,608		
622	Premium for patterned flooring in multiple colors at student- occupied and assembly spaces; 3 colors - allowance	16,610	sf	1.00	16,610		
623	Raised rubber flooring at ramp	315	sf	14.00	4,410		
624	Rubber athletic flooring; 6mm	1,705	sf	15.00	25,575		
625	Rubber base	18,618	lf	4.00	74,472		
626							
627	096800 TILE CARPETING						
628	Carpet tile	7,295	sf	5.33	38,882		
629	Area rugs		sf		F,F & E		
630							
631	096560 ATHLETIC FLOORING						
632	Wood athletic flooring at gym (Robbins or equal)	11,340	sf	23.00	260,820		
633	Stage flooring	945	sf	22.00	20,790		
634	Ventilating cove base	422	lf	8.00	3,376		
635	SUBTOTAL					1,002,947	
636							
637	<b>C3030 CEILING FINISHES</b>						
638							
639	090003 ACOUSTICAL TILE						
640	ACP-1a; 2'x2' Armstrong Ultima High NRC	35,330	sf	9.00	317,970		
641	ACP-2a; 2'x2' Armstrong Optima	16,753	sf	13.00	217,789		
642	ACP-3a; 2'x2' Armstrong Canyon	5,310	sf	4.75	25,223		
643	ACP-4a; 2'x2' Armstrong Kitchen zone	1,020	sf	5.00	5,100		
644	ACP-5a; 2'x2' Armstrong Ceramaguard fine fissured	2,970	sf	8.25	24,503		
645	ACP-7a; 2'x2' Armstrong Calla	3,765	sf	11.50	43,298		
646	WD-1; Acoustic wood baffles	890	sf	30.00	26,700		
647	WD-2; Sectis	355	sf	50.00	17,750		
648	Axion/perimeter trim allowance	1	ls	5,000.00	5,000		
649	4x4 Absorptive panels at music room; 2" RPG absorber panel per RCP legend quantities sheet A2.12	1,938	sf	31.80	61,628		
650	ACP-9; Barrel diffusers at music room	676	sf	51.00	34,476		



Westwood Hanlon Elementary School  
Westwood, MA

14-Jan-22

60% Construction Document Estimate

GFA

113,141

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
-------------	-------------	-----	------	--------------	---------------	--------------	---------------

**NEW CONSTRUCTION**

651	5x5 Convex curved panels; Kinetics ovation	125	sf	39.00	4,875		
652							
653	090007 PAINTING						
654	Paint GWB	16,458	sf	0.90	14,812		
655	Paint exposed structure	4,580	sf	1.50	6,870		
656	Paint exposed structure at gym	11,340	sf	2.00	22,680		
657							
658	092900 GYPSUM BOARD ASSEMBLIES						
659	GWB ceilings and horizontal soffits	9,158	sf	13.00	119,054		
660	Vertical soffits including at skylight locations	7,300	sf	20.00	146,000		
661	SUBTOTAL					1,093,728	

**TOTAL - INTERIOR FINISHES**

**\$2,918,007**

**D10 CONVEYING SYSTEMS**

**D1010 ELEVATOR**

055000 MISCELLANEOUS METALS

Pit ladder and sump pit cover	1	ea	3,000.00	3,000
Sill angle	8	lf	25.00	200

142424 ELEVATOR

Hydraulic passenger elevator; 2 stop	1	ea	155,000.00	155,000
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SUBTOTAL 158,200

**TOTAL - CONVEYING SYSTEMS**

**\$158,200**

**D13 SPECIAL CONSTRUCTION**

**D1313 SPECIAL CONSTRUCTION**

332313 GEOTHERMAL WELLS

Geothermal wells, 600' deep double U bend; including piping - non proprietary	80	ea	30,000.00	2,400,000
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SUBTOTAL 2,400,000

**TOTAL - SPECIAL CONSTRUCTION**

**\$2,400,000**

**D20 PLUMBING**

**D20 PLUMBING, GENERALLY**

Plumbing Equipment

DHW 1 & 2: 36kw electric hot water heater w/ 119 GAL Tank	2	ea	19,000.00	38,000
XT-01&2: Expansion tank	2	ea	1,000.00	2,000
Mixing valve, master	1	ea	6,800.00	6,800
RCP-01: Hot water recirculation pump	1	ea	1,200.00	1,200
Water meter assembly	1	ea	3,500.00	3,500
Connection to gas meter (generator)	1	ea	1,400.00	1,400
Reduced pressure backflow preventer, 4"	1	ea	9,000.00	9,000
Reduced pressure backflow preventer, 1-1/2"	1	ea	850.00	850
Reduced pressure backflow preventer, 3/4"	8	ea	500.00	4,000
GI-01: Grease interceptor, 50 GPM	1	ea	3,800.00	3,800
Exterior grease interceptor	1	ea		See civil
SP-1: Elevator pit sump pump	1	ea	5,800.00	5,800



Westwood Hanlon Elementary School  
Westwood, MA

14-Jan-22

60% Construction Document Estimate

GFA

113,141

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
-------------	-------------	-----	------	--------------	---------------	--------------	---------------

NEW CONSTRUCTION

707	OI-1: Elev sump pump oil interceptor	1	ea	1,500.00	1,500		
708	SI-01: Inline interceptors at art sinks	4	ea	750.00	3,000		
709	Roof drain	27	ea	1,200.00	32,400		
710	Overflow roof drain	25	ea	1,200.00	30,000		
711	FD-01: floor drain	8	ea	800.00	6,400		
712	FD-02: floor sink	9	ea	1,050.00	9,450		
713	Trap primer	17	ea	775.00	13,175		
714	Hose bibb	9	ea	375.00	3,375		
715	Freezeproof hose bibb	7	ea	450.00	3,150		
716	Freezeproof roof hydrant	4	ea	450.00	1,800		
717	Rough-in & connection to kitchen equipment	1	ls	45,000.00	45,000		
718	<u>Plumbing Fixtures &amp; Specialties</u>						
719	P-01: Water Closet	22	ea	1,550.00	34,100		
720	P-01 A\B: Water Closet ADA	30	ea	1,550.00	46,500		
721	P-02A: Lavatory, Wall Hung	39	ea	1,450.00	56,550		
722	P-03&03A: Urinal	13	ea	1,600.00	20,800		
723	P-04: Classroom Sink	28	ea	1,450.00	40,600		
724	P-04A: Classroom Sink ADA	26	ea	1,150.00	29,900		
725	P-05: Hand sink , Wall Hung	30	ea	1,450.00	43,500		
726	P-06: Drinking Fountain/Bottle filler ADA	9	ea	2,100.00	18,900		
727	P-07: Service Sink	5	ea	1,225.00	6,125		
728	P-07A: Utility Sink	2	ea	1,450.00	2,900		
729	P-08/08A: Art Sink	4	ea	1,600.00	6,400		
730	P-09: Emergency Eyewash	1	ea	800.00	800		
731	P-10: Ice Maker Connection	3	ea	350.00	1,050		
732	P-11: Shower, ADA	1	ea	4,200.00	4,200		
733	P-12: Laundry Connection	3	ea	600.00	1,800		
734	P-13: Dishwasher Connection	1	ea	450.00	450		
735	<u>Domestic Water Type L Copper Pipe</u>						
736	Domestic water pipe with fittings & hangers						
737	1/2"	842	lf	23.85	20,082		
738	3/4"	3,688	lf	25.45	93,860		
739	1"	1,227	lf	29.15	35,767		
740	1-1/4"	475	lf	30.75	14,606		
741	1-1/2"	320	lf	31.80	10,176		
742	2"	481	lf	37.10	17,845		
743	2-1/2"	187	lf	50.90	9,518		
744	3"	540	lf	56.20	30,348		
745	4"	345	lf	79.50	27,428		
746	6"	273	lf	154.00	42,042		
747	Fixture Connections	209	lf	350.00	73,150		
748	Domestic water pipe insulation	8,378	lf	10.00	83,780		
749	<u>Sanitary Waste And Vent Pipe</u>						
750	UG Sanitary waste pipe						
751	2"	414	lf	37.10	15,359		
752	3"	37	lf	45.60	1,687		
753	4"	2,061	lf	55.65	114,695		
754	5"	330	lf	76.35	25,196		
755	6"	49	lf	79.50	3,896		
756	FCO	18	ea	800.00	14,400		
757	AG Sanitary W&V pipe with fittings & hangers						
758	1-1/2"	1,045	lf	39.75	41,539		
759	2"	994	lf	42.40	42,146		



Westwood Hanlon Elementary School  
Westwood, MA

14-Jan-22

60% Construction Document Estimate

GFA

113,141

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
-------------	-------------	-----	------	--------------	---------------	--------------	---------------

**NEW CONSTRUCTION**

760	3"	428	lf	47.70	20,416		
761	4"	1,957	lf	58.30	114,093		
762	Fixture Connections	209	lf	300.00	62,700		
763	<u>Storm Drainage, Hubless Cast Iron Pipe</u>						
764	UG Storm water pipe						
765	4"	174	lf	55.65	9,683		
766	6"	169	lf	79.50	13,436		
767	8"	334	lf	116.60	38,944		
768	10"	318	lf	132.50	42,135		
769	12"	173	lf	159.00	27,507		
770	15"	22	lf	212.00	4,664		
771	FCO	16	ea	800.00	12,800		
772	AG Storm water pipe (separate primary and secondary)						
773	4"	387	lf	58.30	22,562		
774	5"	686	lf	79.50	54,537		
775	6"	1,206	lf	84.80	102,269		
776	8"	518	lf	121.90	63,144		
777	Pipe insulation on horizontal runs	2,230	lf	18.00	40,140		
778	<u>Gas And Fuel Distribution Pipe</u>						
779	Gas And Fuel Distribution Pipe (emergency generator)	265	lf	55.00	14,575		
780	Equipment gas valves, connections, & access	1	ea	1,100.00	1,100		
781	<u>Miscellaneous</u>						
782	System testing and flushing	1	ls	20,000.00	20,000		
783	Coring, cutting, sleeves & fire stopping	1	ls	12,900.00	12,900		
784	Seismic Restraints and Structural Steel Comp.	1	ls	6,500.00	6,500		
785	Hydraulic lifts/rigging	1	ls	14,800.00	14,800		
786	Shop drawings / BIM / ENG Support / As-Builts	1	ls	24,000.00	24,000		
787	Commissioning Support	1	ls	2,400.00	2,400		
788	Fees & permits				waived		
789	SUBTOTAL					1,983,000	

**TOTAL - PLUMBING**

**\$1,983,000**

**D30 HVAC**

**D30 HVAC, GENERALLY**

796	Geothermal Well Field						
797	Well-field with (80) boreholes 600' deep					w/ Special Construction	
799	Side stream filtration, air elimination, purge pump, valving, etc	1	ea	60,000.00	60,000		
800	Glycol system GF-3	1	ea	12,500.00	12,500		
801	Glycol fill	1	ls	20,000.00	20,000		
802	Chemical treatment system	1	ea	18,000.00	18,000		
803	<u>Heating &amp; cooling equipment</u>						
804	Heat pump chillers HPC-1, 2,3,4,5,6, 78 ton/ea	425	tons	1,425.00	605,625		
805	Expansion tank ET-1,2,3	3	ea	4,500.00	13,500		
806	Buffer tank BT-1	1	ea	7,000.00	7,000		
807	Air separator AS-1,2,3,4,5	5	ea	1,850.00	9,250		
808	Heat exchanger HX-1, 2	2	ea	30,000.00	60,000		
809	Glycol system GF-1,2	2	ea	15,000.00	30,000		
810	Glycol	1	ls	10,000.00	10,000		
811	Cabinet unit heater, HW	14	ea	1,500.00	21,000		
812	Unit heater, HW	4	ea	900.00	3,600		



Westwood Hanlon Elementary School  
Westwood, MA

14-Jan-22

60% Construction Document Estimate

GFA

113,141

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**NEW CONSTRUCTION**

813	Radiant panel, ceiling	<b>4,288</b>	lf	140.00	600,320		
814	Wall radiation unit	<b>172</b>	lf	105.00	18,060		
815	<u>Pumps</u>						
816	Heating hot water pump with VFD P-1,2, 530 gpm	<b>2</b>	ea	24,000.00	48,000		
817	Chilled water pump with VFD, P-3,4, 675 gpm	<b>2</b>	ea	30,450.00	60,900		
818	Geothermal well field pump with VFD P-5,6, 1200 gpm	<b>2</b>	ea	54,250.00	108,500		
819	Compensated water pump with VFD, P-7,8, 200 gpm	<b>2</b>	ea	12,500.00	25,000		
820	Condensate pump CP-1	<b>10</b>	ea	300.00	3,000		
821	<u>Air distribution</u>						
822	Air Handling Unit						
823	RTU-1 with HW/CHW coil, ERW (100% OA)	<b>7,055</b>	cfm	15.50	109,353		
824	RTU-2 with HW/CHW coil, ERW (100% OA)	<b>8,025</b>	cfm	15.50	124,388		
825	RTU-3 with HW/CHW coil, ERW (100% OA)	<b>7,030</b>	cfm	15.50	108,965		
826	RTU-4 with HW/CHW coil, ERW (100% OA)	<b>6,455</b>	cfm	15.50	100,053		
827	RTU-5 with HW/CHW coil, ERW (100% OA)	<b>10,435</b>	cfm	15.50	161,743		
828	RTU-6 with HW/CHW coil, ERW (100% OA)	<b>8,660</b>	cfm	15.50	134,230		
829	RTU-7 with HW/CHW coil, ERW (100% OA)	<b>18,935</b>	cfm	15.50	293,493		
830	RTU-8 with HW/CHW coil, ERW (100% OA)	<b>7,250</b>	cfm	15.50	112,375		
831	RTU-9 with HW/CHW coil, ERW (100% OA)	<b>7,745</b>	cfm	15.50	120,048		
832	RTU-10 with HW/CHW coil, ERW (100% OA)	<b>18,630</b>	cfm	15.50	288,765		
833	MAU-1 with HW/CHW coil	<b>1,500</b>	cfm	13.50	20,250		
834	HV-1 with HW/CHW coil	<b>3,000</b>	cfm	13.50	40,500		
835	Ductless split AC / ACCU unit, 1 ton	<b>15</b>	ea	6,500.00	97,500		
836	<u>Exhaust fan</u>						
837	Exhaust fans	<b>14</b>	ea	3,500.00	49,000		
838	Kitchen exhaust fan	<b>1</b>	ea	13,000.00	13,000		
839	Sheet metal & Accessories						
840	Sheet metal	<b>95,000</b>	lbs	13.50	1,282,500		
841	Kitchen exhaust black steel ductwork	<b>3,500</b>	lbs	20.00	70,000		
842	Dishwasher aluminum ductwork	<b>1,000</b>	lbs	18.00	18,000		
843	Duct insulation	<b>60,000</b>	sf	5.00	300,000		
844	Registers, grilles & diffusers	<b>228</b>	ea	140.00	31,920		
845	Displacement diffuser	<b>165</b>	ea	650.00	107,250		
846	VAV box	<b>95</b>	ea	1,200.00	114,000		
847	Sound attenuators	<b>20</b>	ea	2,500.00	50,000		
848	Miscellaneous Sheetmetal accessories, dampers...	<b>114,004</b>	sf	1.00	114,004		
849	Hydronic Piping						
850	Geothermal Pipe						
851	Geothermal HDPE piping with valves/accs	<b>150</b>	lf	200.00	30,000		
852	Heating Hot Water Piping						
853	3/4"	<b>2,560</b>	lf	27.00	69,120		
854	1"	<b>1,310</b>	lf	33.00	43,230		
855	1-1/4"	<b>496</b>	lf	40.00	19,840		
856	1-1/2"	<b>1,091</b>	lf	44.00	48,004		
857	2"	<b>750</b>	lf	47.00	35,250		
858	2-1/2"	<b>825</b>	lf	50.00	41,250		
859	3"	<b>544</b>	lf	68.00	36,992		
860	4"	<b>468</b>	lf	84.00	39,312		
861	5"	<b>93</b>	lf	110.00	10,230		
862	6"	<b>237</b>	lf	122.00	28,914		
863	8"	<b>835</b>	lf	150.00	125,250		
864	Chilled Water Pipe						
865	3/4"	<b>311</b>	lf	27.00	8,397		



Westwood Hanlon Elementary School  
Westwood, MA

14-Jan-22

60% Construction Document Estimate

GFA

113,141

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**NEW CONSTRUCTION**

866	1"	1,120	lf	33.00	36,960		
867	1-1/4"	374	lf	40.00	14,960		
868	1-1/2"	690	lf	44.00	30,360		
869	2"	877	lf	47.00	41,219		
870	2-1/2"	1,083	lf	50.00	54,150		
871	3"	674	lf	68.00	45,832		
872	4"	787	lf	84.00	66,108		
873	5"	760	lf	110.00	83,600		
874	Dual Temperature Pipe Runouts	6,748	lf	33.00	222,684		
875	Valves & accessories	1	ls	165,000.00	165,000		
876	<u>Condensate Drain Piping</u>						
877	Condensate piping with fittings & hangers	497	lf	38.00	18,886		
878	<u>Refrigerant Piping</u>						
879	Refrigerant piping	1,095	lf	32.00	35,040		
880	<u>Piping Insulation</u>						
881	Hydronic piping	22,504	lf	12.00	270,048		
882	Refrigerant piping	1,095	lf	8.00	8,760		
883	Condensate drain piping	497	lf	8.00	3,976		
884	<u>Controls (DDC)</u>						
885	Automatic temperature controls	114,004	sf	8.00	912,032		
886	<u>Balancing</u>						
887	System testing & balancing	114,004	sf	1.25	142,505		
888	<u>Miscellaneous</u>						
889	System testing and flushing	1	ls	25,000.00	25,000		
890	Coring, cutting, sleeves & fire stopping	1	ls	30,000.00	30,000		
891	Seismic Restraints and Structural Steel Comp.	1	ls	25,000.00	25,000		
892	Hydraulic lifts/rigging	1	ls	60,000.00	60,000		
893	Shop drawings / BIM / ENG Support / As-Builts	1	ls	195,000.00	195,000		
894	Commissioning Support	1	ls	40,000.00	40,000		
895	SUBTOTAL					8,658,501	

**TOTAL - HVAC**

**\$8,658,501**

**D40 FIRE PROTECTION**

**D40 FIRE PROTECTION, GENERALLY**

Fire Protection System

904	Double check valve assembly, 6"	1	ea	12,850.00	12,850		
905	Praection system for Network/Telecomm	1	ls	9,500.00	9,500		
906	Wet alarm valve assembly	1	ea	5,000.00	5,000		
907	Riser check valve assembly	4	ea	3,750.00	15,000		
908	Fire department connection	2	ea	1,200.00	2,400		
909	Electric bell	1	ea	500.00	500		
910	Zone control valve assembly	5	ea	2,500.00	12,500		
911	Fire department hose valve	5	ea	800.00	4,000		
912	Fire department hose valve with cabinet	4	ea	1,200.00	4,800		
913	Sprinkler head, pendant	825	ea	100.00	82,500		
914	Sprinkler head, upright with guard	142	ea	140.00	19,880		
915	Distribution piping with fittings & hangers	10,195	lf	29.50	300,753		
916	Zone/main sprinkler piping with fittings & hangers	1,760	lf	50.00	88,000		
917	Standpipe/main sprinkler piping with fittings & hangers	1,155	lf	80.00	92,400		
918	Additional standpipe	1	ls	2,500.00	2,500		
919	<u>Miscellaneous</u>						





Westwood Hanlon Elementary School  
Westwood, MA

14-Jan-22

60% Construction Document Estimate

GFA

113,141

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**NEW CONSTRUCTION**

920	Kitchen hood extinguishing system					by others	
921	System testing and flushing	1	ls	8,000.00	8,000		
922	Coring, cutting, sleeves & fire stopping	1	ls	4,600.00	4,600		
923	Seismic Restraints and Structural Steel Comp.	1	ls	3,200.00	3,200		
924	Hydraulic lifts/rigging	1	ls	4,300.00	4,300		
925	Shop drawings / BIM / ENG Support / As-Builts	1	ls	12,000.00	12,000		
926	Commissioning Support	1	ls	1,600.00	1,600		
927	Fees & permits				waived		
928	SUBTOTAL					686,283	
929							
930	<b>TOTAL - FIRE PROTECTION</b>						<b>\$686,283</b>

**D50 ELECTRICAL**

**D5010 SERVICE & DISTRIBUTION  
Gear & Distribution**

Normal Power

938	Submetering	1	ls	30,000.00	30,000		
939	3000AT 2500AF 480/277V main switchboard	1	ls	80,000.00	80,000		
940	800A 480/277V distribution panelboard	2	ea	16,000.00	32,000		
941	100A 480/277V panelboard	2	ea	1,600.00	3,200		
942	112.5kVA dry-type transformer K-13	1	ea	15,650.00	15,650		
943	45kVA dry-type transformer K-13	11	ea	6,650.00	73,150		
944	400A 208/120V panelboard double tub	1	ea	12,000.00	12,000		
945	225A 208/120V panelboard double tub	6	ea	5,000.00	30,000		
946	225A 208/120V panelboard	8	ea	2,500.00	20,000		
947	100A 208/120V panelboard	4	ea	1,600.00	6,400		
948	100A disconnect switch	2	ea	900.00	1,800		
949	Meter socket	1	ea	300.00	300		
950	SPD	19	ea	350.00	6,650		
951	Normal power feeders						
952	800A feed	900	lf	255.00	229,500		
953	250A feed	90	lf	93.00	8,370		
954	225A feed	1,020	lf	78.00	79,560		
955	200A feed	500	lf	66.00	33,000		
956	150A feed	120	lf	49.00	5,880		
957	100A feed	1,570	lf	33.50	52,595		
958	60A feed	150	lf	22.50	3,375		
959	<u>Emergency power</u>						
960	500kW natural gas generator 480volt with Level 3 50dba custom cover	1	ea	360,000.00	360,000		
961	200KW load bank	1	ea	25,000.00	25,000		
962	Allow for fuel for testing	1	ls	20,000.00	NR		
963	Quick connect manual transfer switch, WP	1	ea	15,000.00	15,000		
964	600A 480/277V ATS	1	ea	12,220.00	12,220		
965	150A 480/277V ATS	1	ea	4,625.00	4,625		
966	600A 480/277V distribution panelboard	1	ea	12,000.00	12,000		
967	225A 480/277V panelboard	5	ea	2,500.00	12,500		
968	45kVA dry-type transformer K-13	1	ea	6,650.00	6,650		
969	400A 208/120V panelboard	1	ea	12,000.00	12,000		
970	150A 208/120V panelboard	1	ea	2,150.00	2,150		



Westwood Hanlon Elementary School  
Westwood, MA

14-Jan-22

60% Construction Document Estimate

GFA

113,141

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>NEW CONSTRUCTION</b>							
971	100A 208/120V panelboard	3	ea	1,600.00	4,800		
972	100A disconnect switch	1	ea	900.00	900		
973	SPD	9	ea	350.00	3,150		
974	Emergency power feeders						
975	600A feed	60	lf	255.00	15,300		
976	400A feed	30	lf	178.00	5,340		
977	225A feed	780	lf	78.00	60,840		
978	200A feed	30	lf	66.00	1,980		
979	150A feed	430	lf	49.00	21,070		
980	100A feed	550	lf	33.50	18,425		
981	60A feed	780	lf	22.50	17,550		
982	Allow for 225A MI cable (riser not coordinated with plans)	350	lf	125.00	43,750		
983	<u>UPS System</u>						
984	24KW centralized UPS System, (not depicted on plans or specs)					NIC	
985	<u>Photovoltaic system</u>						
986	PV equipment & installation					NIC	
987	Future PV system rough in	1	ls	5,000.00	5,000		
988	<u>Equipment Wiring</u>						
989	Elevator cab feed & connection	1	ea	1,500.00	1,500		
990	Elevator feed & connection	1	ea	3,500.00	3,500		
991	ACCU feed & connection, exterior	15	ea	2,500.00	37,500		
992	ACCU feed & connection, interior	15	ea	850.00	12,750		
993	EF feed & connection	14	ea	1,000.00	14,000		
994	HPC feed & connection (Chiller)	6	ls	10,500.00	63,000		
995	HV feed & connection	1	ea	2,500.00	2,500		
996	MAU feed & connection	1	ea	3,500.00	3,500		
997	RTU feed & connection	10	ea	4,500.00	45,000		
998	Pump feed & connection	18	ea	1,500.00	27,000		
999	Sump pump feed & connection	2	ea	1,500.00	3,000		
1000	EWB feed & connection	2	ea	1,500.00	3,000		
1001	CUH/UH feed & connection	18	ea	900.00	16,200		
1002	VAV feed & connection	95	ea	350.00	33,250		
1003	Radiant panels feed and connection	1	ls	1,500.00	1,500		
1004	DDC system power	1	ls	1,000.00	1,000		
1005	VFD feed & connection only (per spec, furnished and installed)	8	ea	850.00	6,800		
1006	Motorized shades feed and connection	110	ea	350.00	38,500		
1007	Motorized doors feed and connection	4	ea	1,200.00	4,800		
1008	Kiln feed & connection	1	ls	1,500.00	1,500		
1009	<u>Kitchen Equipment Wiring</u>						
1010	Large equipment feed and connection	2	ea	1,200.00	2,400		
1011	Small equipment feed and connection	24	ea	450.00	10,800		
1012	KEF feed & connection	1	ea	1,500.00	1,500		
1013	<u>Gymnasium</u>						
1014	Scoreboard materials & installation (F&I per spec)	2	ea	13,000.00	26,000		
1015	Power & control wiring	2	ea	1,200.00	2,400		
1016	Motorized back stop feed, connection & special purpose receptacle	6	ea	1,200.00	7,200		
1017	Motorized curtain feed, connection & NFSS, allow	2	ea	1,200.00	2,400		



Westwood Hanlon Elementary School  
Westwood, MA

14-Jan-22

60% Construction Document Estimate

GFA

113,141

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**NEW CONSTRUCTION**

1018	Motorized bleacher feed, connection & NFSS	2	ea	1,200.00	2,400		
1019	SUBTOTAL					1,758,580	

**D5020 LIGHTING & POWER**

1022	<u>Lighting Fixtures</u>						
1023	Exit sign	50	ea	180.00	9,000		
1024	Type EL	2	ea	250.00	500		
1025	Type LP4	19	ea	320.00	6,080		
1026	Type LP4B	6	ea	320.00	1,920		
1027	Type LP8	215	ea	600.00	129,000		
1028	Type LPG	48	ea	450.00	21,600		
1029	Type LPS	154	lf	100.00	15,400		
1030	Type LK22	22	ea	450.00	9,900		
1031	Type LR22	56	ea	250.00	14,000		
1032	Type LR24	4	ea	270.00	1,080		
1033	LR4	34	ea	280.00	9,520		
1034	LRS	1,092	lf	90.00	98,280		
1035	LP10	2	ea	900.00	1,800		
1036	LP16	3	ea	1,440.00	4,320		
1037	LR10	4	ea	1,440.00	5,760		
1038	LR14	15	ea	250.00	3,750		
1039	LWD	244	lf	120.00	29,280		
1040	LWD2	24	lf	125.00	3,000		
1041	Type LS4	21	ea	180.00	3,780		
1042	Type LS4B	10	ea	180.00	1,800		
1043	Type LS8	32	ea	280.00	8,960		
1044	Type LWS	85	lf	95.00	8,075		
1045	Type LWSA	100	lf	105.00	10,500		
1046	Type PC1	5	ea	650.00	3,250		
1047	Type PC2	15	ea	650.00	9,750		
1048	Type PC3	2	ea	650.00	1,300		
1049	Type PC4	5	ea	650.00	3,250		
1050	Type PC5	3	ea	650.00	1,950		
1051	Type PD1	5	ea	660.00	3,300		
1052	Type PD2	5	ea	900.00	4,500		
1053	Type PD3	5	ea	1,000.00	5,000		
1054	Type PD5	6	ea	2,000.00	12,000		
1055	Type RC1	201	ea	350.00	70,350		
1056	Type RC2	192	ea	350.00	67,200		
1057	Type RC3	35	ea	350.00	12,250		
1058	Type RC4	51	ea	350.00	17,850		
1059	Type RCW	9	ea	350.00	3,150		
1060	Type RD4	2	ea	250.00	500		
1061	Type RPS	4	ea	200.00	800		
1062	Type SD1	49	ea	650.00	31,850		
1063	Type SL4	16	ea	450.00	7,200		
1064	Type SL5, allow	17	ea	450.00	7,650		
1065	Type SL7	32	lf	125.00	4,000		
1066	Type TR1 (track)	105	lf	50.00	5,250		
1067	Type TH1, TH2, TH3 (track head)	29	ea	250.00	7,250		
1068	Light at RTU, allow	10	ea	150.00	1,500		
1069	Illuminated ceiling panels; Sectis backlit panel (288 SF)	1	ls	59,581.20	59,581		
1070	<u>Lighting controls</u>						



Westwood Hanlon Elementary School  
Westwood, MA

14-Jan-22

60% Construction Document Estimate

GFA

113,141

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>NEW CONSTRUCTION</b>							
1071	Networked lighting control system	113,141	sf	0.85	96,170		
1072	Master control station	1	ea	550.00	550		
1073	Local touch screen	2	ea	250.00	500		
1074	Occupancy/Daylight sensor	264	ea	180.00	47,520		
1075	Single pole LV switch	128	ea	30.00	3,840		
1076	Single pole switch	16	ea	30.00	480		
1077	Single pole switch WP, allow	12	ea	40.00	480		
1078	<u>Lighting circuitry</u>						
1079	Device plate WP	12	ea	16.00	192		
1080	Device plate	144	ea	4.30	619		
1081	Device box	1,780	ea	25.00	44,500		
1082	3/4" EMT	5,000	lf	7.50	37,500		
1083	#12 THHN	25,000	lf	1.00	25,000		
1084	MC cable	30,000	lf	5.00	150,000		
1085	LV cable	12,000	lf	1.50	18,000		
1086	<u>Branch devices</u>						
1087	Duplex receptacles	148	ea	25.00	3,700		
1088	Duplex receptacles (controlled)	218	ea	25.00	5,450		
1089	Double duplex receptacles	17	ea	50.00	850		
1090	Double duplex receptacles (controlled)	218	ea	50.00	10,900		
1091	GFI duplex receptacles	149	ea	32.00	4,768		
1092	Special 30A	3	ea	75.00	225		
1093	Connection to FA/BDA panel	9	ea	90.00	810		
1094	Floor box/poke thru	9	ea	750.00	6,750		
1095	<u>Branch circuitry</u>						
1096	Device plate WP	15	ea	16.00	240		
1097	Device plate	750	ea	4.30	3,225		
1098	Device box	775	ea	25.00	19,375		
1099	3/4" EMT	5,000	lf	7.50	37,500		
1100	#12 THHN	25,000	lf	1.00	25,000		
1101	MC cable	15,000	lf	5.00	75,000		
1102	SUBTOTAL					1,357,130	
1103							
1104	<b>D5030 COMMUNICATION &amp; SECURITY SYSTEMS</b>						
1105	<u>Telephone/Data/CATV</u>						
1106	Telecommunications devices and cabling						
1107	MDF closet fit out	1	ea	12,000.00	12,000		
1108	IDF closet fit out	3	ea	8,500.00	25,500		
1109	1 port data	44	ea	18.00	792		
1110	2 port data	141	ea	36.00	5,076		
1111	3 port data	55	ea	54.00	2,970		
1112	AV device (2-port)	120	ea	36.00	4,320		
1113	WAP	81	ea	750.00	60,750		
1114	Backbone cable (run from each IDF to MDF)	1,400	lf	15.00	21,000		
1115	Cat cable	135,000	lf	1.20	162,000		
1116	Rough-in						
1117	MDF closet rough-in	1	ea	2,500.00	2,500		
1118	IDF closet rough-in	3	ea	1,500.00	4,500		
1119	Closet grounding	4	ea	350.00	1,400		
1120	Backboard	4	ea	350.00	1,400		
1121	Rough-in allow: sleeves, cable tray, 4" EMT	1	ls	25,000.00	25,000		
1122	Device box with 1" conduit stub	300	ea	95.00	28,500		
1123	2 gang device box with 1-1/4" conduit stub	120	ea	110.00	13,200		



Westwood Hanlon Elementary School  
Westwood, MA

14-Jan-22

60% Construction Document Estimate

GFA

113,141

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>NEW CONSTRUCTION</b>							
1124	Network server equipment provide by owner per plan T2.03	1	ls	270,000.00	270,000		
1125	<u>Fire Alarm</u>						
1126	Fire alarm control panel	1	ls	18,000.00	18,000		
1127	Mass notification console	1	ea	3,500.00	3,500		
1128	Fire alarm terminal cabinet	4	ea	1,200.00	4,800		
1129	Remote annunciator	1	ea	1,600.00	1,600		
1130	Graphic map	1	ea	850.00	850		
1131	Plan cabinet	1	ea	650.00	650		
1132	Radio Master Box with antenna, arrestor and grounding kit	1	ls	8,500.00	8,500		
1133	Knox box	2	ea	330.00	660		
1134	Beacon/bell	2	ea	250.00	500		
1135	Drill switch	1	ea	250.00	250		
1136	Initiating device	113	ea	135.00	15,255		
1137	Smoke detector (Classroom)	55	ea	135.00	7,425		
1138	CO detector	33	ea	105.00	3,465		
1139	Duct detector with remote test switch, allow	20	ea	450.00	9,000		
1140	Audio visual device	52	ea	115.00	5,980		
1141	Visual device	47	ea	105.00	4,935		
1142	Speaker/visual Mass Notification device	81	ea	140.00	11,340		
1143	Amber/FA device	84	ea	145.00	12,180		
1144	Magnetic door holder	6	ea	250.00	1,500		
1145	S type device ??	67	ea	200.00	13,400		
1146	FP equipment connection	18	ea	220.00	3,960		
1147	Control/monitor module, allow	60	ea	220.00	13,200		
1148	Elevator recall connection	2	ea	250.00	500		
1149	Kitchen suppression system connection	1	ea	250.00	250		
1150	Interface to Security, PA, AV systems, allow	1	ls	1,500.00	1,500		
1151	MNS mass notification message board	5	ea	1,000.00	5,000		
1152	Wire guard	6	ea	50.00	300		
1153	Testing and programming	1	ls	5,000.00	5,000		
1154	Rough-in:						
1155	Device box	650	ea	25.00	16,250		
1156	3/4" EMT	3,000	lf	7.00	21,000		
1157	FA cable	5,000	lf	1.25	6,250		
1158	FA MC cable	17,000	lf	5.50	93,500		
1159	<u>BAS System</u>						
1160	BAS System	113,141	sf	0.75	84,856		
1161	<u>Two-Way Communication System</u>						
1162	Two-way communication system, allow	1	ls	10,000.00	10,000		
1163	<u>Paging/Public Address</u>						
1164	Head-end	1	ls	12,000.00	12,000		
1165	Speaker, ceiling mount	143	ea	125.00	17,875		
1166	Speaker with volume control, ceiling mount	78	ea	150.00	11,700		
1167	Call box	31	ea	120.00	3,720		
1168	Cabling	13,500	lf	1.25	16,875		
1169	Rough-in						
1170	Speaker back box	220	ea	65.00	14,300		
1171	Device box with conduit stub	31	ea	120.00	3,720		
1172	<u>Master Clock</u>						
1173	Head-end	1	ls	8,000.00	8,000		
1174	Clock, 12" wireless communication	75	ea	120.00	9,000		
1175	MC cable for clock power	2,250	lf	4.25	9,563		



Westwood Hanlon Elementary School  
Westwood, MA

14-Jan-22

60% Construction Document Estimate

GFA

113,141

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**NEW CONSTRUCTION**

1176	<u>Speech Amplification</u>						
1177	Speech amplification equipment	53	ea	2,600.00	137,800		
1178	Rough-in, allow	53	ea	450.00	23,850		
1179	<u>Cafetorium</u>						
1180	Audio/visual equipment, allow	1	ls	75,000.00	75,000		
1181	Audio/visual rough-in & power, allow	1	ls	25,000.00	25,000		
1182	Stage dimming system	1	ls	75,000.00	75,000		
1183	Stage fixture package	1	ls		Included above		
1184	Rough-in, power & installation, allow	1	ls	30,000.00	30,000		
1185	<u>Audio Visual Systems</u>						
1186	AV equipment				By Owner		
1187	Rough-In conduit and backboxes only, allow	113,141	sf	0.25	28,285		
1188	Gymnasium sound system, allow	1	ls	30,000.00	30,000		
1189	Rough-in, allow	1	ls	7,500.00	7,500		
1190	Student Dining sound system, allow	1	ls	25,000.00	25,000		
1191	Rough-in, allow	1	ls	3,500.00	3,500		
1192	AV Pro: device box w/(2) 1.25" conduits stubbed	55	ea	280.00	15,400		
1193	Flat panel display for digital messaging system	5	ea	5,000.00	25,000		
1194	Motorized projection screen & control station, allow	2	ea	1,200.00	2,400		
1195	<u>Video Management System - CCTV System</u>						
1196	Head end	1	ls	25,000.00	25,000		
1197	Camera	13	ea	850.00	11,050		
1198	Camera 180/270/260	36	ea	1,200.00	43,200		
1199	Camera WP 180/270	26	ea	1,800.00	46,800		
1200	Cabling	6,500	lf	1.10	7,150		
1201	Rough-in						
1202	Device box with conduit stub to accessible ceiling	66	ea	90.00	5,940		
1203	<u>Access Control- Intrusion Alarm</u>						
1204	Head end	1	ls	25,000.00	25,000		
1205	Interface to FA, PA, AV systems, allow				Included above		
1206	Card reader	27	ea	350.00	9,450		
1207	Door contact	77	ea	150.00	11,550		
1208	Keypad	5	ea	350.00	1,750		
1209	Panic button, allow	3	ea	150.00	450		
1210	Motion detector	49	ea	150.00	7,350		
1211	Wiring connection to device furnished & installed by Door Hardware Contractor: EH, EL, TS - allow	32	ea	90.00	2,880		
1212	Intercom Master, allow	3	ea	1,500.00	4,500		
1213	Intercom station	5	ea	750.00	3,750		
1214	Cabling	13,000	lf	1.10	14,300		
1215	Rough-in						
1216	3/4" conduit to door junction box	59	ea	90.00	5,310		
1217	4" square box with 3/4" conduit stub to door junction box	36	ea	90.00	3,240		
1218	Device box with conduit stub to accessible ceiling	61	ea	90.00	5,490		
1219	SUBTOTAL					1,870,912	
1220							
1221	<b>D5040 OTHER ELECTRICAL SYSTEMS</b>						
1222	<u>Common Work Results for Electrical</u>						
1223	Lightning Protection System, UL master label	1	ls	60,000.00	60,000		
1224	Grounding and bonding	1	ls	25,000.00	25,000		
1225	Rigging	1	ls	10,000.00	10,000		
1226	Temp power and lights	1	ls	75,000.00	75,000		
1227	Seismic Restraints	1	ls	10,000.00	10,000		



Westwood Hanlon Elementary School  
Westwood, MA

14-Jan-22

60% Construction Document Estimate

GFA

113,141

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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NEW CONSTRUCTION

1228	Coordination/Arc flash study	1	ls	15,000.00	15,000		
1229	Coordination, BIM	1	ls	10,000.00	10,000		
1230	Extra material per spec	1	ls	50,000.00	50,000		
1231	Fees & Permits				See summary		
1232	SUBTOTAL					255,000	

<b>TOTAL - ELECTRICAL</b>							<b>\$5,241,622</b>
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**E10 EQUIPMENT**

**E10 EQUIPMENT, GENERALLY**

1241	112313	TIME CAPSULE					
1242		Time Capsule per specification	1	ea	1,000.00	1,000	
1243	111313	LOADING DOCK					
1244		Loading dock equipment				NR	
1246	111520	PROJECTION SCREENS					
1248		Cafeteria - 12' wide	1	ea	15,000.00	15,000	
1249		Gymnasium - 12' wide	1	ea	15,000.00	15,000	
1250		Extended learning area (ELA) - 16' wide	6	ea	18,000.00	108,000	
1251	114000	FOOD SERVICE EQUIPMENT					
1252		Kitchen equipment per Crabtree McGrath budget, 12/21/21	1	ls	590,520.00	590,520	
1254	114500	APPLIANCES					
1256		Under counter refrigerator	6	ea	1,200.00	7,200	
1257		Refrigerator	5	ea	1,800.00	9,000	
1258		Dishwasher	1	ea	900.00	900	
1259		Microwave ,allow	2	ea	600.00	1,200	
1260		Washer	2	ea	1,200.00	2,400	
1261		Dryer	2	ea	1,200.00	2,400	
1262		Kiln	1	ea	5,000.00	5,000	
1263	116100	THEATRICAL EQUIPMENT					
1264		Stage curtains and rigging	1	ls	50,000.00	50,000	
1266	116600	ATHLETIC EQUIPMENT					
1268		Gym wall pads	564	sf	14.00	7,896	
1269		Adaptive PE wall pads	150	sf	14.00	2,100	
1270		Basketball backstops, glass	6	ea	12,000.00	72,000	
1271		Gymnasium dividing wall, fabric; electrically operated	1	ls	30,000.00	30,000	
1272		Volleyball net and standards	1	ls	5,000.00	5,000	
1273		Digital scoreboards with shot clocks	1	ls	20,000.00	w/ electrical	
1274		Motorized bleachers; 276 seat capacity	1	ls	38,640.00	38,640	
1275		Manual bleachers; 100 seat capacity	1	ls	12,000.00	12,000	
1276		SUBTOTAL				975,256	

<b>TOTAL - EQUIPMENT</b>							<b>\$975,256</b>
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**E20 FURNISHINGS**

**E2010 FIXED FURNISHINGS**

1284	124813	ENTRANCE FLOOR MAT AND FRAMES					
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Westwood Hanlon Elementary School  
Westwood, MA

14-Jan-22

60% Construction Document Estimate

GFA

113,141

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<b>NEW CONSTRUCTION</b>							
1286	Recessed floor grille & mats	700	sf	45.00	31,500		
1287	Walk off mats	350	sf	45.00	15,750		
1288							
1289	123000 CASEWORK						
1290	Education-as-Play installations	1	ls	75,000.00	NIC		
1291	<u>Adaptive PE</u>						
1292	2 tier wall shelving on standards	4	lf	100.00	400		
1293	Wall hung countertop	4	lf	275.00	1,100		
1294	<u>Art Classroom</u>						
1295	2 tier wall shelving on standards	19	lf	100.00	1,900		
1296	Base cabinet with plam countertop	16	lf	435.00	6,960		
1297	Open base cabinet with counters	21	lf	400.00	8,400		
1298	Wall cabinets	8	lf	250.00	2,000		
1299	Wall hung countertop	10	lf	275.00	2,750		
1300	<u>Admin corridor</u>						
1301	Base cabinet with plam countertop	8	lf	435.00	3,480		
1302	<u>Coaches office</u>						
1303	Base cabinet with plam countertop	10	lf	435.00	4,350		
1304	<u>Coaches storage</u>						
1305	TS-36	11	ea	1,875.00	20,625		
1306	<u>ELL</u>						
1307	Base cabinet with plam countertop	10	lf	435.00	4,350		
1308	Open base cabinet with counters	6	lf	400.00	2,400		
1309	<u>Exam</u>						
1310	Base cabinet with plam countertop	10	lf	435.00	4,350		
1311	Wall cabinets	10	lf	250.00	2,500		
1312	<u>Extended learning</u>						
1313	Counter/table; shaped	6	loc	9,000.00	54,000		
1314	Shelving cabinet, 12" x 36" high	72	lf	300.00	21,600		
1315	Student cubbies 36" x 84"	33	ea	1,800.00	59,400		
1316	Student cubbies 36" x 84"	55	ea	1,800.00	99,000		
1317	TSO-3384	2	ea	1,581.25	3,163		
1318	<u>Ext. day storage</u>						
1319	TW-36	3	ea	1,875.00	5,625		
1320	<u>Focus program</u>						
1321	Base cabinet with plam countertop	24	lf	435.00	10,440		
1322	BCo8-36	5	ea	1,125.00	5,625		
1323	TS-30	2	ea	1,562.50	3,125		
1324	<u>General classroom area A</u>	16	rms				
1325	2 tier wall shelving on standards	80	lf	100.00	8,000		
1326	Base cabinet with plam countertop	144	lf	435.00	62,640		
1327	BB02-36	64	ea	960.00	61,440		
1328	BCo12-48	32	ea	1,200.00	38,400		
1329	TS-36	32	ea	1,875.00	60,000		
1330	TSO-3684	16	ea	1,725.00	27,600		
1331	Wall cabinets	144	lf	250.00	36,000		
1332	<u>General classroom area B</u>	4	rms				
1333	2 tier wall shelving on standards	24	lf	100.00	2,400		
1334	Base cabinet with plam countertop	44	lf	435.00	19,140		
1335	BB02-36	20	ea	960.00	19,200		
1336	BCo12-36	8	ea	1,200.00	9,600		
1337	TS-36	4	ea	1,875.00	7,500		
1338	TSO-30	4	ea	1,562.50	6,250		



Westwood Hanlon Elementary School  
Westwood, MA

14-Jan-22

60% Construction Document Estimate

GFA

113,141

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**NEW CONSTRUCTION**

1339	<u>Kindergarten classrooms</u>	5	rms				
1340	2 tier wall shelving on standards	25	lf	100.00	2,500		
1341	Base cabinet with plam countertop	60	lf	435.00	26,100		
1342	BBo2-36	30	ea	960.00	28,800		
1343	BCo12-36	30	ea	1,200.00	36,000		
1344	TS-36	5	ea	1,875.00	9,375		
1345	Wall cabinets	55	lf	250.00	13,750		
1346	<u>Kindergarten 137 - add to main kindergarten line TS-30</u>						
1347	TS-30	1	ea	1,562.50	1,563		
1348	<u>Kindergarten toilets</u>	5	rms				
1349	TS-27	5	ea	1,406.25	7,031		
1350	<u>Learning center</u>						
1351	Base cabinet with plam countertop	6	lf	435.00	2,610		
1352	BBo1-36	2	ea	900.00	1,800		
1353	TW-36	2	ea	1,875.00	3,750		
1354	<u>Mail room</u>						
1355	Mail slots	1	ls	7,500.00	7,500		
1356	Wall hung countertop	23	lf	275.00	6,325		
1357	<u>Media center</u>						
1358	BBo1-36	36	ea	900.00	32,400		
1359	BBo2-26.5-3	3	ea	706.67	2,120		
1360	BBo2-36	12	ea	960.00	11,520		
1361	Student cubbies 30"	2	ea	1,500.00	3,000		
1362	TSO-3684	19	ea	1,725.00	32,775		
1363	Wall hung countertop	29	lf	275.00	7,975		
1364	<u>Mothers</u>						
1365	Base cabinet with solid surface countertop	30	lf	475.00	14,250		
1366	TW-36	2	ea	1,875.00	3,750		
1367	<u>Resource room</u>						
1368	Base cabinet with plam countertop	12	lf	435.00	5,220		
1369	Base cabinet with solid surface countertop	6	lf	475.00	2,850		
1370	BBo1-36	2	ea	900.00	1,800		
1371	TS-36	1	ea	1,875.00	1,875		
1372	TW-36	1	ea	1,875.00	1,875		
1373	Wall hung countertop	6	lf	275.00	1,650		
1374	<u>Music classrooms</u>						
1375	BBo2-36	15	ea	960.00	14,400		
1376	Open base cabinet with counters	24	lf	400.00	9,600		
1377	TS-36	2	ea	1,875.00	3,750		
1378	Wall cabinets	21	lf	250.00	5,250		
1379	<u>Music storage</u>						
1380	Music storage cabinet	14	lf	800.00	11,200		
1381	<u>Nurse</u>						
1382	7 tier wall shelving on standards	5	lf	350.00	1,750		
1383	Base cabinet with solid surface countertop	5	lf	475.00	2,375		
1384	TS-30	7	ea	1,562.50	10,938		
1385	<u>OT</u>						
1386	2 tier wall shelving on standards	13	lf	100.00	1,300		
1387	Base cabinet with plam countertop	8	lf	435.00	3,480		
1388	BBo1-36	2	ea	900.00	1,800		
1389	<u>School psychology</u>	2	rms				
1390	2 tier wall shelving on standards	18	lf	100.00	1,800		
1391	Base cabinet with plam countertop	8	lf	435.00	3,480		



Westwood Hanlon Elementary School  
Westwood, MA

14-Jan-22

60% Construction Document Estimate

GFA

113,141

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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**NEW CONSTRUCTION**

1392	Open base cabinet with counters	12	lf	400.00	4,800		
1393	TS-30	2	ea	1,562.50	3,125		
1394	<u>Secretary</u>						
1395	Wall hung countertop	10	lf	275.00	2,750		
1396	<u>Small group</u>	4	rms				
1397	TS-30	8	ea	1,562.50	12,500		
1398	<u>Speech</u>	2	rms				
1399	Base cabinet with plam countertop	10	lf	435.00	4,350		
1400	Open base cabinet with counters	12	lf	400.00	4,800		
1401	TS-30	2	ea	1,562.50	3,125		
1402	TS-36	2	ea	1,875.00	3,750		
1403	<u>Staff lunch/workroom add to main</u>						
1404	TS-32	3	ea	1,666.67	5,000		
1405	<u>Staff lunch/workroom</u>	2	rms		-		
1406	Base cabinet with solid surface countertop	24	lf	475.00	11,400		
1407	TS-32	4	ea	1,666.67	6,667		
1408	Wall cabinets	12	lf	250.00	3,000		
1409	<u>STE room</u>						
1410	Base cabinet with plam countertop	18	lf	435.00	7,830		
1411	Wall cabinets	18	lf	250.00	4,500		
1412	<u>STE storage</u>						
1413	TS-36	3	ea	1,875.00	5,625		
1414	<u>WABA lower</u>						
1415	Base cabinet with plam countertop	16	lf	435.00	6,960		
1416	BB01-36	4	ea	900.00	3,600		
1417	Open upper cabinets	3	lf	220.00	660		
1418	TS-32	2	ea	1,666.67	3,333		
1419	Student cubbies 36" x 84"	3	ea	1,800.00	5,400		
1420	Wall cabinets	8	lf	250.00	2,000		
1421	<u>WABA upper</u>						
1422	Base cabinet with plam countertop	19	lf	435.00	8,265		
1423	BB01-36	4	ea	900.00	3,600		
1424	Open upper cabinets	3	lf	220.00	660		
1425	TS-36	2	ea	1,875.00	3,750		
1426	Student cubbies	3	ea	1,800.00	5,400		
1427	Wall cabinets	8	lf	250.00	2,000		

**122400 WINDOW TREATMENT**

1430	Roller shades at exterior glazing	14,012	sf	7.00	98,084		
1431	Premium for motorized shades at media center, A27/A6.60	1,135	sf	13.00	14,755		
1432	Premium for motorized shades at cafeteria skylights, per spec	96	sf	13.00	1,248		
1433	Premium for motorized shades at extended learning skylights	193	sf	13.00	2,509		
1434	Roller shades to glazed vision panels at interior doors, sidelights, and transom openings	3,181	sf	6.00	19,086		
1435	SUBTOTAL					1,338,782	

**E2020 MOVABLE FURNISHINGS**

1438	No work in this section						
1439	SUBTOTAL						

NIC

<b>TOTAL - FURNISHINGS</b>	<b>\$1,338,782</b>
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**F20 SELECTIVE BUILDING DEMOLITION**



Westwood Hanlon Elementary School  
Westwood, MA

14-Jan-22

60% Construction Document Estimate

GFA

113,141

<i>CSI CODE</i>	<i>DESCRIPTION</i>	<i>QTY</i>	<i>UNIT</i>	<i>UNIT COST</i>	<i>EST'D COST</i>	<i>SUB TOTAL</i>	<i>TOTAL COST</i>
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NEW CONSTRUCTION

1446  
1447  
1448  
1449  
1450  
1451  
1452  
1453  
1454

**F2010 BUILDING ELEMENTS DEMOLITION**

See main summary for demolition of existing buildings

SUBTOTAL

**F2020 HAZARDOUS COMPONENTS ABATEMENT**

See main summary for HazMat allowance

See Summary

SUBTOTAL

***TOTAL - SELECTIVE BUILDING DEMOLITION***



60% Construction Document Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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SITEWORK

**G SITEWORK**

**G10 SITE PREPARATION & DEMOLITION**

Phase 1

Site construction fence; chain-link (phasing dwgs)	1,855	lf	14.00	Incl. below
Site construction fence; orange snow fence (phasing dwgs)	2,275	lf	5.25	Incl. below
Site construction fence; screened super silt	1,690	lf	22.00	37,180
Site construction fence; orange snow fence	1,950	lf	5.25	10,238
Construction entrance with wheel wash	1	loc	15,000.00	15,000
Clear and grub fire trail; select clearing	7,190	sf	2.50	17,975
Tree Clearing	9	ac	7,500.00	67,500
Stump disposal/grinding	9	ac	3,500.00	31,500
Rock processing and soil staging area	1	ac	15,000.00	15,000
Trail area temp parking	13,140	sf	1.50	NR
Temp stockpile/staging area	2,725	sf	2.50	incl.above

Phase 2

Temp Bus loop through parking area	4,010	sf	3.00	12,030
Line striping and temp signage	1	ls	10,000.00	10,000
Site construction fence; orange snow fence	545	lf	5.25	2,861
Temp stockpile/staging area	7,865	sf	2.50	19,663

Phase 3

Site construction fence; chain-link	1,400	lf	14.00	Incl. below
Site construction fence; chain-link with jersey barrier	775	lf	120.00	93,000
Site construction fence; orange snow fence	455	lf	5.25	2,389
Site construction fence; screened super silt	1,415	lf	22.00	31,130
Construction entrance with wheel wash	1	loc	15,000.00	15,000
Clear and grub	1	ls	25,000.00	25,000
Demolish existing paving & walks	67,400	sf	1.25	84,250
Demolish existing curbing	865	lf	9.00	7,785
Sawcut existing asphalt roadway	215	lf	8.25	1,774
Patching for utilities	375	sf	8.00	3,000
Remove drain lines - allowance	1,000	lf	20.00	20,000
Remove utility structures - allowance	10	loc	500.00	5,000
Remove fencing	291	lf	5.00	1,455
Tree protection fencing; edge of woodland areas	2,500	lf	14.00	35,000
Temp stockpile/staging area	4,515	sf	5.00	22,575

Phase 4

Remove temp access drive	1,429	sy	3.00	4,287
Remove temp bus loop	446	sy	3.00	1,338

Topsoil management

Strip topsoil & forest mat; 6" thick	9,800	cy	6.00	58,800
Stockpile for reuse	9,800	cy	5.00	49,000

SUBTOTAL

699,730

Earthwork

Drilling/matting/blasting

Pre-blast survey	1	ls	50,000.00	by owner
At building footprint; assume 4.5' rock removal below FFE incl. 5' offset	4,241	cy	45.00	w/ building
To design subgrade of pavement area; 2' of rock removal	1,333	cy	45.00	59,985
To design subgrade of playground areas; 2' of rock removal	3,815	cy	45.00	171,675
Trench; for utility lines - allowance	500	cy	65.00	32,500
To design subgrade of fire road; 3' of rock removal	1,333	cy	45.00	59,985
Rock excavation/hauling to stockpile location	11,222	cy	7.00	w/ building
Process and stockpile for reuse within building footprint incl. 12" of structural below SOG x1.65 - 2,900cy structural 3,900cy fill	18,516	tns	7.00	w/ building
Stockpile processed rock for roadway base materials	2,238	cy	3.50	7,833



60% Construction Document Estimate

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**SITEWORK**

57	<u>Site Earthwork</u>						
58	Cut; site rock removal backed out of site cut	30,119	cy	8.00	240,952		
59	Store cut onsite	30,119	cy	3.50	105,417		
60	Process cobbles and boulders; reused as gravels below; 25% of cut	7,530	cy	7.00	52,710		
61	Fill - (from cut)	30,119	cy	10.00	301,190		
62	Fill - (building cut)	7,140	cy	10.00	71,400		
63	Fine/rough grading	32,943	sy	2.25	74,122		
64	<u>Erosion control</u>						
65	Silt fence with straw wattles	3,550	lf	12.00	42,600		
66	Inlet protection	48	ea	350.00	16,800		
67	Slope soil matting	47,500	sf	1.25	59,375		
68	Erosion control monitoring & maintenance	1	ls	30,000.00	30,000		
69	Street sweeping allowance	1	ls	10,000.00	10,000		
70	Hazardous Waste Remediation					NIC	
71	SUBTOTAL						1,336,544

**G20 SITE IMPROVEMENTS**

73	<u>Roadways and Parking Lots</u>						
74	<u>Bituminous concrete paving</u>	102,090	sf				
75	gravel base; 12" thick	3,781	cy	45.00	170,145		
76	credit to reuse remaining rock as gravel	2,238	cy	(27.00)	(60,426)		
77	asphalt top; 1.5" thick	957	tns	150.00	143,550		
78	asphalt binder; 2.5" thick	1,593	tns	130.00	207,090		
79	Non-tabled crosswalk premium; includes markings	2,510	sf	2.00	5,020		
80	<u>Bituminous concrete paving fire access</u>	10,760	sf				
81	gravel base; 12" thick	399	cy	45.00	17,955		
82	asphalt top; 1.5" thick	101	tns	150.00	15,150		
83	asphalt binder; 2.5" thick	168	tns	130.00	21,840		
84	Non-skid coating	10,760	sf	2.00	NR		
85	<u>Porous pavement Areas 1-5</u>	14,090	sf				
86	Porous asphalt paving; 4" thick	352	tns	200.00	70,400		
87	Choker course; 4" thick	130	cy	48.00	6,240		
88	gravel base; 8" thick	350	cy	45.00	15,750		
89	3/8" pea gravel; 3" thick	130	cy	48.00	6,240		
90	3/4" crushed stone; 12" thick	522	cy	45.00	23,490		
91	<u>Porous pavement Areas 6-11</u>	12,060	sf				
92	Porous asphalt paving; 4" thick	301	tns	200.00	60,200		
93	Choker course; 4" thick	112	cy	48.00	5,376		
94	gravel base; 8" thick	299	cy	45.00	13,455		
95	3/8" pea gravel; 3" thick	112	cy	48.00	5,376		
96	3/4" crushed stone; 30" thick	1,117	cy	45.00	50,265		
97	Vertical granite curbing	6,280	lf	44.00	276,320		
98	Mountable curbing	55	lf	42.00	2,310		
99	Precast concrete curbing	250	lf	32.00	8,000		
100	Parking stall	152	spc	85.00	12,920		
101	Parking stall - ADA	7	spc	250.00	1,750		
102	Crosswalk striping	9	ea	2,500.00	22,500		
103	Parking lot markings	1	ls	10,000.00	10,000		
104	Pavement markings for games	1	ls	10,000.00	10,000		
105	ADA Curb cuts	20	loc	850.00	17,000		
106	Emergency access gates	2	loc	15,000.00	30,000		
107	Knox box	4	loc	250.00	1,000		
108	Gay Street crosswalk solar signal and signage	2	ea	20,000.00	40,000		
109	<u>Traffic signs</u>						
110	Signs - new	38	ea	125.00	4,750		
111	Signs - mounting hardware	38	ea	225.00	8,550		
112	Signs - posts	38	ea	487.50	18,525		



Westwood Hanlon Elementary School  
Westwood, MA

12-Jan-22

60% Construction Document Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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SITEWORK

114	SUBTOTAL					1,240,741	
115							
116	<u>Pedestrian paving</u>						
117	<u>Concrete walk</u>	31,520	sf				
118	Gravel base; 8" thick	782	cy	45.00	35,190		
119	Concrete, 4" thick	31,520	sf	9.50	299,440		
120	Concrete, stairs	100	lf	225.00	22,500		
121	Handrails for stairs - stainless steel	40	lf	375.00	15,000		
122	Stair cheek walls	20	lf	350.00	7,000		
123	Concrete ramp premium	660	sf	20.00	13,200		
124	Handrails for ramp - stainless steel	170	lf	375.00	63,750		
125	<u>Concrete pads</u>	1,205	sf				
126	Gravel base; 12" thick	45	cy	45.00	2,025		
127	Concrete, 6" thick	1,205	sf	18.00	21,690		
128	<u>Stabilized stone dust</u>	2,045	sf				
129	Gravel base; 8" thick	51	cy	45.00	2,295		
130	Stone dust; 4" thick	51	tns	200.00	10,200		
131	Geotextile fabrics	2,045	sf	0.75	1,534		
132	<u>Woodland Path</u>	7,835	sf				
133	Woodland trail for fire access including dirt path	1	ls	20,000.00	20,000		
134	<u>Bituminous walkways</u>	3,880	sf				
135	gravel base; 8" thick	96	cy	45.00	4,320		
136	asphalt top; 1.5" thick	36	tns	150.00	5,400		
137	asphalt binder; 1.5" thick	36	tns	130.00	4,680		
138	SUBTOTAL					528,224	
139							
140	<u>Pour-in-Place Surfacing</u>	10,348	sf				
141	crushed stone base; 7" thick	222	cy	48.00	10,656		
142	finishing stone; 1" thick	32	cy	48.00	1,536		
143	Play surfacing, rubber	8,885	sf	26.00	231,010		
144	Play surfacing, sloped	1,463	sf	32.00	46,816		
145	Play surfacing, spheres allowance	1,463	sf	8.00	11,704		
146	Playground equipment	1	ls	220,000.00	220,000		
147	Playground curbing	735	lf	50.00	36,750		
148	Accessible platform w/ stairs for double slide	1	loc	5,000.00	5,000		
149	SUBTOTAL					563,472	
150							
151	<u>Fencing</u>						
152	Metal picket - 4' Ht.	210	lf	100.00	21,000		
153	Metal picket - 4' Ht. single gate	2	ea	2,500.00	5,000		
154	CLF - 4' Ht.	2,055	lf	65.00	133,575		
155	CLF - 4' Ht. single gate	4	ea	1,000.00	4,000		
156	Guardrail with CLF	540	lf	130.00	70,200		
157	CLF - 8' Ht	205	lf	90.00	18,450		
158	Yellow fence topper at little league field	360	lf	6.00	2,160		
159	20' ht. Sports netting	90	lf	180.00	Alternate		
159	Screening at generator	1	ls	5,000.00	5,000		
160	Dumpster enclosure - 7' Ht. fixed louver galv. Steel	55	lf	125.00	6,875		
161	Dumpster enclosure - 7' Ht. fixed louver galv. Steel - double gate	2	ea	10,000.00	20,000		
162	Dumpster enclosure - 7' Ht. fixed louver galv. Steel - single gate	1	ea	2,500.00	2,500		
163	SUBTOTAL					288,760	
164							
165	<u>Little League Field</u>						
166	Rubber edging; allowance	1,000	lf	20.00	20,000		
167	Infield mix; native infield mix	128	tn	175.00	22,400		
168	Gravel base; 6" thick	117	cy	45.00	5,265		





Westwood Hanlon Elementary School  
Westwood, MA

12-Jan-22

60% Construction Document Estimate

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<b>SITEWORK</b>							
169	Fortified mound	1	ea	5,000.00	5,000		
170	Fortified home plate	1	ea	3,500.00	3,500		
171	Foul poles	2	ea	3,600.00	7,200		
172	Backstop	1	ea	35,000.00	35,000		
173	Players benches	2	ea	2,500.00	5,000		
174	5' x 15' Aluminum bleachers	2	ea	7,500.00	15,000		
175	Field painting allowance	1	ls	5,000.00	5,000		
176	Natural Grass Field Mix; outfield only	31,085	sf	0.75	23,314		
177	Sod infield and edges	2,980	sf	2.50	7,450		
178	Imported topsoil; swell 25% 8" thick	1,057	cy	55.00	Incl. below		
179	Irrigation at little league field	34,065	sf	1.25	42,581		
180	SUBTOTAL					196,710	
181							
182	<u>Soccer field</u>	69,235	sf				
183	Field painting allowance	1	ls	5,000.00	5,000		
184	Soccer goals 8' x 24' (movable)	1	sts	12,500.00	12,500		
185	Natural Grass Field Mix	69,235	sf	0.75	51,926		
186	Imported topsoil; swell 25% 8" thick	2,148	cy	55.00	Incl. below		
187	Irrigation at soccer field	69,235	sf	1.25	86,544		
188	SUBTOTAL					155,970	
189							
190	<u>Site Improvements</u>						
191	Basketball hoop	1	loc	5,700.00	5,700		
192	Street Sign	2	loc				
193	Foundation, 6' total depth	20	lf	1,000.00	20,000		
194	Stone veneer	96	sf	75.00	7,200		
195	Steel, allow	1	ls	10,000.00	10,000		
196	Terracotta cladding over CFMF, 3/4" plywood	126	sf	95.00	11,970		
197	Metal lettering	1	ls	20,000.00	20,000		
198	Ring bike rack - per Landscape Forms	10	ea	667.80	6,678		
199	Bike racks - type 2 (Madrax Genesis 6 bike capacity)	20	ea	1,351	27,020		
200	40' Flagpole	1	ea	15,000.00	15,000		
201	Bollard - Type 1 - no detail	7	ea	2,800.00	19,600		
202	Bollard - Type 2 - no detail	7	ea	1,800.00	12,600		
203	Bollards - Steel filled with concrete at transformer and generator	19	ea	900.00	17,100		
204	Trash receptacles - Chase Park by Landscape Forms	4	ea	2,700.88	10,804		
205	Recycling receptacles - Chase Park by Landscape Forms	4	ea	2,938.32	11,753		
206	Birdhouse - Pre-assembled by Chirp Birdhouses	2	ea	294.00	588		
207	Bench - Palisade by Landscape Forms	3	ea	5,090.12	15,270		
208	Bench - Extasi by Landscape Forms	2	ea	3,286.08	6,572		
209	Bench - Binocular by Landscape Forms	1	ea	11,995.20	11,995		
210	Bench - Harvest by Landscape Forms	8	ea	2,656.36	21,251		
211	Dining tables - Harvest by Landscape Forms	4	ea	4,437.16	17,749		
212	SUBTOTAL					268,850	
213							
214	<u>Site Walls</u>						
215	<u>Modular block retaining wall avg. 7.5' ht.</u>	365	lf				
216	Modular blocks	3,103	sf	40.00	124,120		
217	Excavate and prepare wall base	122	cy	100.00	12,200		
218	Backfill wall - crushed stone	216	cy	50.00	10,800		
219	Backfill-controlled placement; above grade - on-site soils no geogrid	324	cy	25.00	8,100		
220	4" perforated wall drain	365	lf	22.00	w_drainage		
221	Wood guardrail	365	lf	65.00	incl. above		
222	CLF on top of guardrail	365	lf	45.00	16,425		
223	<u>Modular block retaining wall avg. 4' ht.</u>	110	lf				
224	Modular blocks	550	sf	40.00	22,000		
225	Excavate and prepare wall base	37	cy	100.00	3,700		



Westwood Hanlon Elementary School  
Westwood, MA

12-Jan-22

60% Construction Document Estimate

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226	Backfill wall - crushed stone	65	cy	50.00	3,250		
227	Backfill-controlled placement; above grade - on-site soils no geogrid	98	cy	25.00	2,450		
228	4" perforated wall drain	110	lf	22.00	w_drainage		
229	Wood guardrail	110	lf	65.00	incl. above		
230	CLF on top of guardrail	110	lf	45.00	4,950		
231	<u>Double sided stone wall - 5.5' ht - stonewall solutions</u>	115	lf				
232	Stone wall solutions; quote	1,575	sf	124.50	196,088		
233	Excavation	68	cy	25.00	1,700		
234	Store on site for reuse	68	cy	8.00	544		
235	Crushed stone leveling pad	34	cy	50.00	1,700		
236	Concrete pad; 18" thick	26	cy	1,000.00	26,000		
237	Concrete anchor; 12" thick	9	cy	1,000.00	9,000		
238	Backfill	467	cy	35.00	16,345		
239	Drainage pipe	115	lf	22.00	w_drainage		
240	Handrail	115	lf	225.00	25,875		
241	SUBTOTAL					485,247	
242							
243	<u>Landscaping &amp; Plantings:</u>						
244	Imported topsoil for seeded areas; swell 25% - 12" thick per detail carried 6" thick	2,920	cy	55.00	160,600		
245	Imported topsoil; swell 25% 8" thick - soccer field	2,148	cy	55.00	118,140		
246	Imported topsoil; swell 25% 8" thick - little league field	1,057	cy	55.00	58,135		
247	Screen topsoil	9,800	cy	7.50	73,500		
248	Export tailings from screening process - assume clean rock	2,940	cy	8.50	24,990		
249	Amend/Place for new seeded areas/ planting areas/ root zone (4,100cy needed)	6,860	cy	20.00	137,200		
250	Planting soils; swell 25%	1,063	cy	65.00	69,095		
251	Boulders at outdoor classroom	12	ea	550.00	6,600		
252	<u>Seed mixes</u>						
253	Lawn areas	369,050	sf	0.35	129,168		
254	Woodland areas; restoration areas	24,265	sf	0.45	10,919		
255	Conservation mix	29,185	sf	0.45	13,133		
256	<u>Trees</u>						
257	Evergreen 8' Ht.	30	ea	850.00	25,500		
258	Deciduous, 3"-3.5" cal	37	ea	1,400.00	51,800		
259	Deciduous, 4"-4.5" cal	21	ea	1,600.00	33,600		
260	Ornamental; 8' Ht.	7	ea	1,200.00	8,400		
261	Ornamental; 10' Ht.	5	ea	1,500.00	7,500		
262	Ornamental; 10' Gal.	14	ea	1,350.00	18,900		
263	<u>Shrubs &amp; Ground covers</u>						
264	Shrubs 3' Ht.	11	ea	75.00	825		
265	Shrubs 3 Gal.	123	ea	25.00	3,075		
266	Shrubs 5 Gal	583	ea	40.00	23,320		
267	<u>Perennials and Grasses</u>						
268	1 Gal. - Perennials	1,110	ea	18.00	19,980		
269	1 Qt. - Grasses	1,400	ea	12.00	16,800		
270	2 Gal. - Grasses	1,213	ea	18.00	21,834		
271	<u>Irrigation</u>						
272	Irrigation - areas surround sports fields	89,700	sf		NIC		
273	SUBTOTAL					1,033,014	
274							
275	<b>G30 CIVIL MECHANICAL UTILITIES</b>						
276	331000 <u>WATER UTILITIES</u>						
277	4" CLDI - domestic	45	lf	95.00	4,275		
278	6" CLDI - fire hydrant	60	lf	105.00	6,300		
279	8" CLDI - fire loop	2,435	lf	115.00	280,025		
280	Connect to existing water line	2	ea	12,500.00	25,000		
281	Fire department connection	1	ea	2,000.00	2,000		



Westwood Hanlon Elementary School  
Westwood, MA

12-Jan-22

60% Construction Document Estimate

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-------------	-------------	-----	------	--------------	---------------	--------------	---------------

SITEWORK

282	Gate valve	18	ea	1,500.00	27,000		
283	Fire hydrant	4	ea	6,500.00	26,000		
284	Thrust blocks	20	ea	850.00	17,000		
285	Pressure testing & chlorinate	2,540	lf	5.00	12,700		
286	Concrete encasement	95	sf	20.00	1,900		
287	SUBTOTAL					402,200	

288							
289	333000	SANITARY SEWERAGE UTILITIES					
290		<u>Sanitary sewer</u>					
291		8" PVC	1,250	lf	65.00	81,250	
292		Re-line existing sewer line in Gay Street; 8" sewer - 260'	1	lf	15,000.00	15,000	
293		Manhole	8	loc	4,500.00	36,000	
294		Connect to existing structure	1	ls	10,000.00	10,000	
295		Grease trap; 5,000 gal.	1	loc	25,000.00	25,000	
296		Pressure testing & video	1,250	lf	3.00	3,750	
297		Concrete encasement	250	sf	20.00	5,000	
298		SUBTOTAL				176,000	

299							
300	334000	STORM DRAINAGE UTILITIES					
301		6" HDPE - Perf pipe in stone	1,157	lf	25.00	w/building	
302		6" HDPE - Perf underdrains	2,272	lf	34.00	77,248	
303		8" HDPE - Perf pipe in stone	387	lf	30.00	11,610	
304		6" perforated CPP	3,400	lf	22.00	74,800	
304		6" CPP	290	lf	55.00	15,950	
305		8" CPP	140	lf	60.00	8,400	
306		10" CPP	40	lf	65.00	2,600	
307		12" CPP	1,950	lf	70.00	136,500	
308		15" CPP	970	lf	80.00	77,600	
309		18" CPP	150	lf	90.00	13,500	
310		24" CPP	170	lf	100.00	17,000	
311		24" RCP	10	lf	125.00	1,250	
312		Area drain	18	loc	3,500.00	63,000	
313		Manhole	29	loc	4,500.00	130,500	
314		Manhole - 5'	1	ea	5,200.00	5,200	
315		Catch basins	17	loc	4,200.00	71,400	
316		Catch basins; deep sump	2	loc	4,800.00	9,600	
317		Curb inlet	1	ea	4,800.00	4,800	
318		Cleanout	38	loc	1,400.00	53,200	
319		FES	7	ea	2,500.00	17,500	
320		OCS	6	loc	8,000.00	48,000	
321		WQI	9	loc	12,000.00	108,000	
322		WQS	2	loc	12,000.00	24,000	
323		Roof drain connection	2	ea	600.00	1,200	
324		Trench drains	35	lf	150.00	5,250	
325		Bio-retention area	14,878	sf			

326		shape basins	14,878	sf	5.00	74,390	
327		mulch	138	cy	50.00	6,900	
328		24" Planting soil mix	1,102	cy	60.00	66,120	
329		12" Sand	551	cy	40.00	22,040	
330		4" Double washed pea stone	182	cy	50.00	9,100	
331		12" Pipe bedding	551	cy	40.00	22,040	
332		Level spreader	960	sf	10.00	9,600	
333		Sediment forebay	160	sf	10.00	1,600	
334		<u>Underground Infiltration system</u>					
335		Underground recharger - C - 1	4,790	sf			
336		SC- 740 chambers and installation - 74.9cuft/per chamber with a 6" stone base	117	ea	200.00	23,400	



Westwood Hanlon Elementary School  
Westwood, MA

12-Jan-22

60% Construction Document Estimate

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<b>SITEWORK</b>							
337	Excavate and dispose of soils	887	cy	50.00	44,350		
338	Install stone base	293	tn	50.00	14,650		
339	Fine grade base	4,790	sf	0.25	1,198		
340	Back-fill infiltration bed with 1-2" crushed stone	772	tn	50.00	38,600		
341	Geotextile fabrics	11,975	sf	0.75	8,981		
342	<i>Underground recharger - C - 2</i>	3,710	sf				
343	SC- 740 chambers and installation - 74.9cuft/per chamber with a 6" stone base	96	ea	200.00	19,200		
344	Excavate and dispose of soils	687	cy	50.00	34,350		
345	Install stone base	227	tn	50.00	11,350		
346	Fine grade base	3,710	sf	0.25	928		
347	Back-fill infiltration bed with 1-2" crushed stone	634	tn	50.00	31,700		
348	Geotextile fabrics	9,275	sf	0.75	6,956		
349	<i>Underground recharger - C - 3</i>	6,875	sf				
350	SC- 740 chambers and installation - 74.9cuft/per chamber with a 6" stone base	184	ea	200.00	36,800		
351	Excavate and dispose of soils	1,273	cy	50.00	63,650		
352	Install stone base	420	tn	50.00	21,000		
353	Fine grade base	6,875	sf	0.25	1,719		
354	Back-fill infiltration bed with 1-2" crushed stone	1,214	tn	50.00	60,700		
355	Geotextile fabrics	17,188	sf	0.75	12,891		
356	<i>Underground recharger - C - 4</i>	4,700	sf				
357	SC- 740 chambers and installation - 74.9cuft/per chamber with a 6" stone base	126	ea	200.00	25,200		
358	Excavate and dispose of soils	870	cy	50.00	43,500		
359	Install stone base	287	tn	50.00	14,350		
360	Fine grade base	4,700	sf	0.25	1,175		
361	Back-fill infiltration bed with 1-2" crushed stone	832	tn	50.00	41,600		
362	Geotextile fabrics	11,750	sf	0.75	8,813		
363	<i>Underground recharger - C - 5</i>	3,125	sf				
364	SC- 740 chambers and installation - 74.9cuft/per chamber with a 6" stone base	77	ea	200.00	15,400		
365	Excavate and dispose of soils	579	cy	50.00	28,950		
366	Install stone base	191	tn	50.00	9,550		
367	Fine grade base	3,125	sf	0.25	781		
368	Back-fill infiltration bed with 1-2" crushed stone	508	tn	50.00	25,400		
369	Geotextile fabrics	7,813	sf	0.75	5,860		
370	<i>Underground recharger- C-6</i>	1,280	sf				
371	MC-3500 chambers and installation - 179.9cuft/per chamber with a 12" stone base (90" long x 77" wide/ea)	24	ea	500.00	12,000		
372	Excavate and dispose of soils; assume 6' depth	284	cy	45.00	12,780		
373	Install stone base; 12" thick	78	tn	50.00	3,900		
374	Fine grade base	1,280	sf	0.25	320		
375	Back-fill infiltration bed with 1-2" crushed stone; 9.1cy/ea	218	cy	45.00	9,810		
376	Geotextile fabrics	3,200	sf	0.75	2,400		
377	<i>Underground recharger- C-7</i>	1,530	sf				
378	MC-3500 chambers and installation - 179.9cuft/per chamber with a 12" stone base (90" long x 77" wide/ea)	28	ea	500.00	14,000		
379	Excavate and dispose of soils; assume 6' depth	340	cy	45.00	15,300		
380	Install stone base; 12" thick	94	tn	50.00	4,700		
381	Fine grade base	1,530	sf	0.25	383		
382	Back-fill infiltration bed with 1-2" crushed stone; 9.1cy/ea	255	cy	45.00	11,475		
383	Geotextile fabrics	3,825	sf	0.75	2,869		
384	SUBTOTAL					1,932,837	
385							
386	<u>Geothermal Wells</u>						
387	Earthwork support for wells	1	ls	200,000.00	in rates w/ building		
388	8" HDPE supply return main lines (four pipes; two supply and two return)	435	lf	160.00	69,600		
389	SUBTOTAL					69,600	



60% Construction Document Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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SITEWORK

Gas service

E&B trench for new lines, pipe and install by utilities

New gas service - not shown on plans

1 ls 20,000.00 20,000

20,000

**G40 ELECTRICAL UTILITIES**

Civil

Concrete:

Primary and telecom combo ductbank

800 lf 35.00 28,000

Primary DB AA 2-4"

200 lf 15.00 3,000

Secondary DB BB 7-4"

30 lf 35.00 1,050

Generator DB

70 lf 20.00 1,400

Telecom DB CC 4-4"

200 lf 20.00 4,000

Transformer & Generator pad

2 ea 1,500.00 3,000

Site lighting Pole base

46 ea 350.00 16,100

EV station base

2 ea 350.00 700

Excavation and backfill:

Primary and telecom combo ductbank

800 lf 22.00 17,600

Primary DB AA 2-4"

200 lf 15.00 3,000

Secondary DB BB 7-4"

30 lf 25.00 750

Generator DB

70 lf 22.00 1,540

Telecom DB CC 4-4"

200 lf 22.00 4,400

Lighting, Security & EV, sign etc.

12,020 lf 6.00 72,120

Power

Pole riser, new

1 ea 1,500.00 1,500

Primary and telecom combo ductbank

800 lf 125.00 100,000

Pull box inc addendums

9 ea 1,000.00 9,000

Primary DB AA 2-4" conduits, empty (feeder by Utility co)

200 lf 50.00 10,000

Manhole

2 ea 8,500.00 17,000

13.8kV-480/277V pad mounted transformer

1 ea By Eversource

Transformer pad

2 ea See Civil

Secondary DB BB 8-4" with 2,400A feeders

50 lf 1,185.00 59,250

Generator DB, with feeders, conduit & control wiring

70 lf 330.00 23,100

Site lighting

Site lighting fixture Type SL1/3

21 ea 2,000.00 42,000

Site lighting fixture Type SL2/3

6 ea 2,700.00 16,200

Site lighting fixture Type SL1/PT

19 ea 1,700.00 32,300

Site lighting fixture Type SL6

3 ea 1,000.00 3,000

Site lighting fixture Type SL7

4 ea 750.00 3,000

Circuitry & pull boxes

6,500 lf 11.00 71,500

Wireless site lighting controls allowance

1 ls 5,000.00 5,000

1" Spare inc

2,000 lf 9.00 18,000

Sign/Scoreboard Power

Handhole (Quazite box with cover)

7 ea 1,500.00 10,500

1" spare conduit

3,000 lf 9.00 27,000

Site Communications

Communication riser pole, new

1 ea 1,200.00 1,200

Communications manhole

4 ea 8,500.00 34,000

Telecom DB CC 4-4" conduits, empty

200 lf 70.00 14,000

Electric Vehicle Stations

Electric Vehicle Stations

2 loc 7,500.00 15,000

40A EVC feeder

520 lf 18.00 9,360

Site Security

Site security, allow (Cameras on Building)

Assumes NIC

SUBTOTAL

678,570

**SUBTOTAL - SITE DEVELOPMENT**

**\$10,076,469**



60% Construction Document Estimate

<i>CSI CODE</i>	<i>DESCRIPTION</i>	<i>QTY</i>	<i>UNIT</i>	<i>UNIT COST</i>	<i>EST'D COST</i>	<i>SUB TOTAL</i>	<i>TOTAL COST</i>
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SITEWORK



Westwood Hanlon Elementary School  
Westwood, MA

14-Jan-22

60% Construction Document Estimate

GFA

113,141

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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#### ALTERNATES

##### **1 Add UV-C to HVAC System**

Add factory mounted Germicidal Ultraviolet Light sections,  
installed adjacent downstream of the cooling coil

**64,300** cfm 1.25 80,375

SUBTOTAL

80,375

Markups

12,860

<b>TOTAL - Add UV-C</b>	<b>ADD</b>	<b>\$93,235</b>
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##### **2 Add Phase 2 Landscape Planting**

Planting soils; swell 25%

**1** ls 10,000.00 10,000

###### Trees

Evergreen 8' Ht.

**8** ea 850.00 6,800

Deciduous, 3"-3.5" cal

**62** ea 1,400.00 86,800

Deciduous, 4"-4.5" cal

**27** ea 1,600.00 43,200

Ornamental; 10' Ht.

**3** ea 1,200.00 3,600

###### Shrubs & Ground covers

Shrubs 3 Gal.

**1,569** ea 25.00 39,225

Shrubs 5 Gal

**248** ea 40.00 9,920

###### Perennials and Groundcovers

1 Gal. - Perennials

**625** ea 18.00 11,250

2 Gal. - Grasses

**35** ea 23.00 805

SUBTOTAL

211,600

Markups

33,856

<b>TOTAL - Additional planting</b>	<b>ADD</b>	<b>\$245,456</b>
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##### **3 Solid surface countertops at classrooms ILO Plam**

Solid surface countertops at classrooms ILO Plam

**1** ls 14,520.00 14,520

SUBTOTAL

14,520

Markups

2,323

<b>Solid surface countertops at classrooms ILO Plam</b>	<b>ADD</b>	<b>\$16,843</b>
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