

<b>Copley Square Improvements</b>		Pink denotes potential Add Alternate			<b>Sasaki Associates</b>
<b>90% Design Value Engineering</b>		Orange denotes Parks Discussion Items			<b>October 20, 2022</b>
<b>Project Number: 08104.00</b>		Blue denotes ongoing study item			
Item No.	Scope	Cost Saving Strategies	Proposed Cost Savings	Approved VE	Notes
1	Landscape	Curb Ramps - Currently three held along St. James and Dartmouth. Eliminate if compliant.	\$45,000	\$45,000	May require up to five additional ramps (added \$75k)
2	Landscape	Study Platform Edge	\$39,315		Consider reducing quantity of wood slats and two level seating
3	Landscape	Reduce platform seating accross from Copley Statue	\$50,255	\$50,255	
4	Landscape	Change to Type A2 block (remove type D) with a 9" width instead of 12" around planter.	\$39,364	\$39,364	
5	Landscape	Main Walkways - Consider CIP Concrete I.L.O Pavers	\$154,800		Also removes 70lf of metal edging
6	Landscape	Public ROW - CIP ILO Brick Paving along St. James	\$28,740	\$28,740	958 SF Brick
7	Landscape	Replace all benches along Boylston St. and St. James with Standard Park Benches	\$128,092	\$128,092	Requires new granite curb and brick paving. See breakout below.
8	Landscape	Modifying South East Grove Corner at Trinity (Add brick as drivable surface I.L.O. resin bound aggregate as corner).	\$12,490	\$12,490	
9	Landscape	Alternate granite color for planter curbs	\$43,878	\$43,878	Utilize Northern Grey Granite ILO Milford Pink
10	Landscape	Consider planter rail as an add/alternate	\$275,800		
11	Civil	Eliminate recharge wells	\$60,000	\$60,000	
12	Soils	Reduce 6" of lawn planting soil	\$10,400	\$10,400	
13	Soils	Reduce ADDITIONAL 6" of lawn planting soil	\$10,400	\$10,400	
14	Fountain	Maintaining existing locations of nozzles at upper pools (still replacing this nozzles, but in the same location)	\$20,000	\$20,000	Fluidity doesn't recommend.
15	Fountain	Optimize selection of stone and patterning for cost savings; Consider larger pavers at fountain	\$79,202	\$79,202	Increase width of granite in water feature from 5" to 7.5"
16	General	Reduce paving scope at east end of the park. Provide new benches per plan	\$45,000	\$45,000	1215 sf of brick, 4 tree grates
17	Fountain	We could look into alternate lighting fixtures, changing colored lighting to white light only. Our estimate is that there would be a 20% savings on lighting costs.	\$16,000		
18	Vault Mechanical	Replace DDC System (Web-based direct digital control) performed with local programmable logic controllers (PLC's) and limited hard-wired logic and basic alarms via SCADA to City of Boston authorities.	\$8,000	\$8,000	What is lost is continual supervision and optimization (learning conditions and response) and relying more on manual adjustments, which means energy-responsive performance will be reduced. Further, alarms may be general versus specific and force a person to investigate in-person to find out the condition and return later with tools and materials needed to correct the conditions. We suggest that this VE be included as a Deduct Alternate as may be desired
19	Vault Plumbing	Refurbishing the existing service sinks instead of buying new ones (P-4)	\$1,500	\$1,500	
20	Vault Plumbing	Removing the hose bibb that is not near the service sinks (P-4).	\$1,500	\$1,500	
21	Electrical	The new distribution could be designed under 1 electrical panel. The current design has one distribution panel that then feeds a "fountain panel" and a "site panel" We could eliminate the 2 additional panels and provide 1 larger panel to feed all circuits (site lighting, site power, vault power, etc.).	\$5,000	\$5,000	
22	Platform Structural	optimize the reinforcing details the reduce material quantity of rebar. For instance, top layer of reinforcing in the foundations below may be locally reduced or eliminated where appropriate			
23	Planting	Reduce two year plant maintenance period?	\$7,000		Parks Discussion
24	Lighting	Consider alternate light pole			Sasaki and HLB following up on this item
25	Streetscape	Public Works funds toward Boylston ROW			Parks Discussion
<b>Total Cost Savings with 13% Markup</b>				<b>\$665,367</b>	