Medford HS - PSR Alternatives Cost Matrix

Medford Comprehensive High School

Preferred Schematic Report - Comparative Cost Analysis

#		Alternate Programs		A	B - Renovation & New Addition	C - Athletics Renovation Only + New Addition		D - New Construction - Multi-Phase					
				Code Upgrade to building and site	Reno Existing w/ some space reconfig. and Addition to meet MSBA and Ed. Vision goals	Retain and Reno Gym and Pool w/ Addition		New Building on Parking Lot and Southern Portion of Existing Bldg				New Building on Edgerly Field, Full existing school remains operational during construction	
				A.1.1	B.1.2	C.2.2A	C.3.4A	D.1.1	D.1.1 - HS Only	D.1.1 - HS + Currently In Bldg Non-HS Programs Only	D.1.1 NP (No Pool)	D.2.1	D.2.1 NP (No Pool)
1		Renovation		$ 252,407,091	$ 115,379,848	$ 60,185,728	$ 35,074,541	*na*	*na*	*na*	*na*	*na*	*na*
2		Addition/New Construction		*na*	$ 206,035,976	$ 268,649,207	$ 293,799,978	$ 303,412,158	$ 303,412,158	$ 303,412,158	$ 303,412,158	$ 310,224,257	$ 310,224,257
3		Sitework (base including all at-grade surface parking and fields)		$ 10,000,000	$ 38,193,507	$ 37,622,096	$ 39,535,139	$ 38,628,745	$ 38,628,745	$ 38,628,745	$ 38,628,745	$ 44,227,916	$ 44,227,916
4		Pool Renovation Scope (for add-reno Alternatives only)		$ 24,908,850	$ 17,116,650	$ 17,116,650	$ 17,116,650	*na*	*na*	*na*	*na*	*na*	*na*
5		Hazmat Removal		$ 3,823,890	$ 3,823,890	$ 3,823,890	$ 3,823,890	$ 3,823,890	$ 3,823,890	$ 3,823,890	$ 3,823,890	$ 3,823,890	$ 3,823,890
6		Misc Hazardous Waste Removal		$ 240,750	$ 240,750	$ 240,750	$ 240,750	$ 240,750	$ 240,750	$ 240,750	$ 240,750	$ 240,750	$ 240,750
7		Demolition			$ 1,161,776	$ 5,691,308	$ 6,138,790	$ 6,788,665	$ 6,788,665	$ 6,788,665	$ 6,788,665	$ 6,788,665	$ 6,788,665
3		**Subtotal Direct Trade Cost**		**$ 291,380,581**	**$ 381,952,397**	**$ 393,329,630**	**$ 395,729,738**	**$ 352,894,208**	**$ 352,894,208**	**$ 352,894,208**	**$ 352,894,208**	**$ 365,305,478**	**$ 365,305,478**
4		Design Contingency (12%)		$ 34,965,670	$ 45,834,288	$ 47,199,556	$ 47,487,569	$ 42,347,305	$ 42,347,305	$ 42,347,305	$ 42,347,305	$ 43,836,657	$ 43,836,657
10		CM Contingency (3%)		$ 9,790,388	$ 12,833,601	$ 13,215,876	$ 13,296,519	$ 11,857,245	$ 11,857,245	$ 11,857,245	$ 11,857,245	$ 12,274,264	$ 12,274,264
11		Escalation (Spring 2028) (12.5%)		$ 40,793,281	$ 53,473,336	$ 55,066,148	$ 55,402,163	$ 49,405,189	$ 49,405,189	$ 49,405,189	$ 49,405,189	$ 51,142,767	$ 51,142,767
12		CM Costs (GCs/GRs/Fee/Ins)		$ 56,621,863	$ 80,244,846	$ 78,084,786	$ 78,414,725	$ 72,898,597	$ 72,898,597	$ 72,898,597	$ 72,898,597	$ 71,253,092	$ 71,253,092
13		SDI (1%)		$ 3,769,299	$ 4,940,936	$ 5,088,112	$ 5,119,160	$ 4,565,039	$ 4,565,039	$ 4,565,039	$ 4,565,039	$ 4,725,592	$ 4,725,592
14		General Conditions		$ 15,240,000	$ 25,440,000	$ 22,040,000	$ 22,040,000	$ 22,380,000	$ 22,380,000	$ 22,380,000	$ 22,380,000	$ 19,320,000	$ 19,320,000
15		General Conditions - main project		$ 12,240,000	$ 22,440,000	$ 19,040,000	$ 19,040,000	$ 19,380,000	$ 19,380,000	$ 19,380,000	$ 19,380,000	$ 16,320,000	$ 16,320,000
16		General Conditions - 1st year		$ 1,200,000	$ 1,200,000	$ 1,200,000	$ 1,200,000	$ 1,200,000	$ 1,200,000	$ 1,200,000	$ 1,200,000	$ 1,200,000	$ 1,200,000
17		General Conditions - last year		$ 1,800,000	$ 1,800,000	$ 1,800,000	$ 1,800,000	$ 1,800,000	$ 1,800,000	$ 1,800,000	$ 1,800,000	$ 1,800,000	$ 1,800,000
18		General Requirements (4%)		$ 15,717,569	$ 20,858,982	$ 21,317,573	$ 21,443,006	$ 19,217,959	$ 19,217,959	$ 19,217,959	$ 19,217,959	$ 19,744,190	$ 19,744,190
19		P&P Bond & GL Insurance (2.75%)		$ 11,320,562	$ 14,996,672	$ 15,324,565	$ 15,414,249	$ 13,823,341	$ 13,823,341	$ 13,823,341	$ 13,823,341	$ 14,199,596	$ 14,199,596
20		Profit (2.5%)		$ 10,574,434	$ 14,008,255	$ 14,314,536	$ 14,398,310	$ 12,912,257	$ 12,912,257	$ 12,912,257	$ 12,912,257	$ 13,263,714	$ 13,263,714
4		Estimated Construction Cost Mark-ups		$ 142,171,201.92	$ 192,386,069.86	$ 193,566,365.39	$ 194,600,975.93	$ 176,508,336.63	$ 176,508,336.63	$ 176,508,336.63	$ 176,508,336.63	$ 178,506,780.01	$ 178,506,780.01
5		**ESTIMATED CONSTRUCTION COSTS (without Alternate Costs)**		**$ 433,551,783**	**$ 574,338,467**	**$ 586,895,995**	**$ 590,330,714**	**$ 529,402,545**	**$ 529,402,545**	**$ 529,402,545**	**$ 529,402,545**	**$ 543,812,258**	**$ 543,812,258**
6		*Cost Per SF*		*$ 830.23*	*$1,059.35*	*$1,057.75*	*$1,084.33*	*$1,064.93*	*$1,064.93*	*$1,064.93*	*$1,064.93*	*$1,093.92*	*$1,093.92*
7		Soft Costs Calculated at 22%		$ 95,381,392	$ 126,354,463	$ 129,117,119	$ 129,872,757	$ 116,468,560	$ 116,468,560	$ 116,468,560	$ 116,468,560	$ 119,638,697	$ 119,638,697
8		Modular Classroom Buildings		$ 23,520,000	$ 23,520,000								
9		**TOTAL ESTIMATED PROJECT COSTS (without Alternate Costs)**		**$ 528,933,175**	**$ 724,212,930**	**$ 716,013,114**	**$ 720,203,471**	**$ 645,871,104**	**$ 645,871,104**	**$ 645,871,104**	**$ 645,871,104**	**$ 663,450,955**	**$ 663,450,955**
10													
11		**Alternates in MCHS Currently**											
12	In Bldg Currently	**PROG2** - Medford Community Media	☑	*na*	$ 2,886,561	$ 2,886,561	$ 2,886,561	$ 2,886,561	*na*	$ 2,886,561	$ 2,886,561	$ 2,886,561	$ 2,886,561
13	In Bldg Currently	**PROG3** - Community Partner Rental Spaces	☑	*na*	$ 4,377,423	$ 4,377,423	$ 4,377,423	$ 4,377,423	*na*	$ 4,377,423	$ 4,377,423	$ 4,377,423	$ 4,377,423
14	In Bldg Currently	**PROG4** - Welcome Center/ Central Offices	☑	*na*	$ 32,506,067	$ 32,506,067	$ 32,506,067	$ 32,506,067	*na*	$ 32,506,067	$ 32,506,067	$ 32,506,067	$ 32,506,067
15	In Bldg Currently	**PROG6A** - Additional area for an 1,000 Seat Auditorium	☑	*na*	$ 4,127,470	$ 4,127,470	$ 4,127,470	$ 4,127,470	*na*	$ 4,127,470	$ 4,127,470	$ 4,127,470	$ 4,127,470
16	In Bldg Currently	**PROG6B** - Additional area for an 800 Seat Auditorium	☐	*na*	$ -	$ -	$ -	$ -	*na*	$ -	$ -	$ -	$ -
17	In Bldg Currently	**PROG6** - Reduced area for a 500 Seat Auditorium	☐	*na*	$ -	$ -	$ -	$ -	*na*	$ -	$ -	$ -	$ -
18	In Bldg Currently	**PROG7B** - Kids' Corner Daycare	☑	*na*	$ 4,465,183	$ 4,465,183	$ 4,465,183	$ 4,465,183	*na*	$ 4,465,183	$ 4,465,183	$ 4,465,183	$ 4,465,183
19	In Bldg Currently	**PROG7C** - Medford Family Network (MFN)	☑	*na*	$ 10,388,449	$ 10,388,449	$ 10,388,449	$ 10,388,449	*na*	$ 10,388,449	$ 10,388,449	$ 10,388,449	$ 10,388,449
20	In Bldg Currently	**POOL2** - For D Alternatives, new pool that replicates the size and features of the current pool	☑	*na*	*na*	*na*	*na*	$ 23,257,470	*na*	$ 23,257,470	*na*	$ 23,257,470	*na*
21		**Total Estimated Cost with Current MCHS Programs**		**$ 528,933,175**	**$ 782,964,083**	**$ 774,764,268**	**$ 778,954,624**	**$ 727,879,728**	**$ 645,871,104**	**$ 727,879,728**	**$ 704,622,258**	**$ 745,459,578**	**$ 722,202,108**

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				Code Upgrade to building and site	Reno Existing w/ some space reconfig. and Addition to meet MSBA and Ed. Vision goals	Retain and Reno Gym and Pool w/ Addition		New Building on Parking Lot and Southern Portion of Existing Bldg				New Building on Edgerly Field, Full existing school remains operational during construction	
				A.1.1	B.1.2	C.2.2A	C.3.4A	D.1.1	D.1.1 - HS Only	D.1.1 - HS + Currently In Bldg Non-HS Programs Only	D.1.1 NP (No Pool)	D.2.1	D.2.1 NP (No Pool)
22		**Other Alternates for Consideration**											
23	Proposed new Programs	**PROG1** - Teen Health Center Space	☑	*na*	$ 2,315,593	$ 2,315,593	$ 2,315,593	$ 2,315,593	*na*	*na*	$ 2,315,593	$ 2,315,593	$ 2,315,593
24	Proposed new Programs	**PROG5** - Community Meeting Space	☑	*na*	$ 8,929,308	$ 8,929,308	$ 8,929,308	$ 8,929,308	*na*	*na*	$ 8,929,308	$ 8,929,308	$ 8,929,308
25	Proposed new Programs	**PROG7A** - MEEP Preschool	☑	*na*	$ 27,240,435	$ 27,240,435	$ 27,240,435	$ 27,240,435	*na*	*na*	$ 27,240,435	$ 27,240,435	$ 27,240,435
26	Pool Alternates	**POOL1** - For B & C Alternatives, addition to the existing pool to promote learn to swim programming	☐	*na*	$ -	$ -	$ -	*na*	*na*	*na*	*na*	*na*	*na*
27	Pool Alternates	**POOL3** - For D Alternatives, new pool that replicates the size and features of the current pool and adds pool features that promote learn to swim programming	☐	*na*	*na*	*na*	*na*	$ -	*na*	*na*	*na*	$ -	*na*
28	Parking Alternates	**PARK1** - Replace at-grade/surface parking with single story deck-over parking with synthetic turf field above (1 Level)	☐	*na*	$ -	$ -	$ -	*na*	*na*	*na*	*na*	$ -	$ -
29	Parking Alternates	**PARK2** - Replace at-grade/surface parking with single story deck-over parking with synthetic turf stadium (bleachers, track and football) above	☐	*na*	$ -	$ -	$ -	$ -	*na*	$ -	$ -	*na*	*na*
30	Parking Alternates	**PARK 3** - Replace at-grade/surface parking with field over decked parking (2.5 levels)	☐	*na*	$ -	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*na*
31	Secondary Site Egress	**ACCESS1** - Add a secondary curb cut west of steve miller drive	☐	*na*	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
32	Secondary Site Egress	**ACCESS2** -Add a second emergency access via lily pond rd	☐	*na*	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
33	Secondary Site Egress	**ACCESS3** -Existing DCR fire road imporvement	☐	*na*	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
34	Life Cycle Cost Impacts	**PV1** - Provide Roof Mounted PV Panels over a fixed % of the Roof Surface (assume City/District owns the panels)	☐	*na*	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
35	Life Cycle Cost Impacts	**PV2** - Purchase Additional Canopy Mounted PV Panels over Parking, Drive Aisles and CTE Yards for NetZero (assume City/District owns the panels)	☐	*na*	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
36	Life Cycle Cost Impacts	**PV3** - Provide Canopy Structures only for PV Panels over Parking, Drive Aisles and CTE Yards for NetZero (assume PPA for panels)	☐	*na*	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
37	Life Cycle Cost Impacts	**HVAC1** - Change GSHP system to an air-source heat pump system (ASHP - Air to water type)	☐	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
38	Life Cycle Cost Impacts	**HVAC2** - Change GSHP system to a hybrid ground source heat pump and air source heat pump system.	☐	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
39	Life Cycle Cost Impacts	**HVAC3** - Change GSHP system to an air-source heat pump VRF system	☐	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
40	Life Cycle Cost Impacts	**TIMB1** - Provide 50% of the new construction/addition structural frame with mass timber members/systems	☐	*na*	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
41	Life Cycle Cost Impacts	**TIMB2** - Provide 100% of the new construction/addition structural frame with mass timber members/systems	☐	*na*	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
42	Phasing	**PHASING-C22MODS** - Revised phasing of Alternative C.2.2 that uses modular classrooms to reduce overall construction duration time/phases	☐	*na*	*na*	$ -	*na*	*na*	*na*	*na*	*na*	*na*	*na*
43	Phasing	**PHASING-C34MODS** - Revised phasing of Alternative C.3.4 that uses modular classrooms to reduce overall construction duration time/phases	☐	*na*	*na*	*na*	$ -	*na*	*na*	*na*	*na*	*na*	*na*
44	Phasing	**PHASING-D11MODS** - Revised phasing of Alternative D.1.1 that uses modular classrooms to reduce overall construction duration time/phases	☐	*na*	*na*	*na*	*na*	$ -	$ -	$ -	$ -	$ -	$ -
45		**Estimated Total Project Cost with Alternates**		**$ 528,933,175**	**$ 821,449,418**	**$ 813,249,603**	**$ 817,439,960**	**$ 766,365,063**	**$ 645,871,104**	**$ 727,879,728**	**$ 743,107,593**	**$ 783,944,914**	**$ 760,687,444**
46		**PDP Estimated Total Project Cost (with all PROG alts + 1000 seat Aud)**		$ 437,180,506	$ 809,425,009	$ 825,094,830	$ 803,334,780	$ 864,876,061	NA	NA	$ 841,763,288	$ 830,692,335	$ 836,356,874
47		**Delta**		$ 91,752,669	$ 12,024,409	$ (11,845,227)	$ 14,105,180	$ (98,510,998)			$ (98,655,695)	$ (46,747,421)	$ (75,669,430)

This is a working draft of the Preferred Schematic Report for the Medford Comprehensive High School project. Values are not final and are being presented for comparative cost analysis only

The total project cost projection for options D.1.1 and D.2.1 include a break out of a new pool facility for the City of Medford's understanding of what the cost impacts of constructing a new pool facility would be. It is understood that a new pool building will need to be approved, procured, managed and constructed as a separate project.