

# FACILITIES MAINTENANCE MANAGEMENT

## Roofing - life cycle cost analysis

Projected Inflation Per Year

3.50% unless noted below

AREA	DESCRIPTION	Yr Completed	SqFt	Est Total Replacement Cost Based on Yr 2020	Life Cycle (yrs)	Est Annual Replacement Cost	Est	Est	Est	Est	Est	Est
							Replacement Cost	Replacement Cost	Replacement Cost	Replacement Cost	Replacement Cost	Replacement Cost
							2022	2023	2024	2025	2026	2027
1	K Wing	2012	12,928	\$229,472	20	\$11,474	\$0	\$0	\$0	\$0	\$0	\$0
1	G Wing	2012	29,049	\$515,620	20	\$25,781	\$0	\$0	\$0	\$0	\$0	\$0
1	M Wing	2012	13,725	\$243,619	20	\$12,181	\$0	\$0	\$0	\$0	\$0	\$0
1	Z Wing - Garage	2012	11,282	\$200,256	20	\$10,013	\$0	\$0	\$0	\$0	\$0	\$0
1	Z Wing - Garage	2012	864	\$15,336	20	\$767	\$0	\$0	\$0	\$0	\$0	\$0
2	C Wing - Mechanical Room	2012	485	\$8,609	20	\$430	\$0	\$0	\$0	\$0	\$0	\$0
3	H/J Hall	2005	15,999	\$283,982	20	\$14,199	\$0	\$0	\$0	\$0	\$337,282	\$0
3	H Wing	2005	7,742	\$137,421	20	\$6,871	\$0	\$0	\$0	\$0	\$163,212	\$0
3	J Wing	2005	16,798	\$298,165	20	\$14,908	\$0	\$0	\$0	\$0	\$354,126	\$0
4	P Wing - Pool	2003	25,674	\$455,714	20	\$22,786	\$0	\$0	\$505,258	\$0	\$0	\$0
4	P Wing Hall	2003	1,376	\$24,424	20	\$1,221	\$0	\$0	\$27,079	\$0	\$0	\$0
4	P Wing - Gym	2003	9,548	\$169,477	20	\$8,474	\$0	\$0	\$187,902	\$0	\$0	\$0
4	P Wing East	2003	5,520	\$97,980	20	\$4,899	\$0	\$0	\$108,632	\$0	\$0	\$0
4	P Wing North	2003	1,137	\$20,182	20	\$1,009	\$0	\$0	\$22,376	\$0	\$0	\$0
4	P Wing West	2003	5,520	\$97,980	20	\$4,899	\$0	\$0	\$108,632	\$0	\$0	\$0
5	N Wing Court Elevator	2003	453	\$8,041	20	\$402	\$0	\$0	\$8,915	\$0	\$0	\$0
5	N Wing - Pioneer Gym	2003	31,074	\$551,564	20	\$27,578	\$0	\$0	\$611,528	\$0	\$0	\$0
5	N Wing Hall	2003	28,657	\$508,662	20	\$25,433	\$0	\$0	\$563,962	\$0	\$0	\$0
6	B Walkway	2007	846	\$15,017	20	\$751	\$0	\$0	\$0	\$0	\$0	\$0
6	C Wing	2007	5,926	\$105,187	20	\$5,259	\$0	\$0	\$0	\$0	\$0	\$0
6	D Wing Hall	2007	7,375	\$130,906	20	\$6,545	\$0	\$0	\$0	\$0	\$0	\$0
6	G Wing	2007	4,647	\$82,484	20	\$4,124	\$0	\$0	\$0	\$0	\$0	\$0
6	B Wing & Hall	2007	14,571	\$258,635	20	\$12,932	\$0	\$0	\$0	\$0	\$0	\$0
6	B Wing West	2007	11,108	\$197,167	20	\$9,858	\$0	\$0	\$0	\$0	\$0	\$0
6	B Wing	2007	3,895	\$69,136	20	\$3,457	\$0	\$0	\$0	\$0	\$0	\$0
6	D/E Connector/East	2007	1,019	\$18,087	20	\$904	\$0	\$0	\$0	\$0	\$0	\$0
6	C/D Connector/East	2007	858	\$15,230	20	\$761	\$0	\$0	\$0	\$0	\$0	\$0
6	C/D Wing Main Hall	2007	4,036	\$71,639	20	\$3,582	\$0	\$0	\$0	\$0	\$0	\$0
7	L Wing	2003	19,441	\$345,078	20	\$17,254	\$0	\$0	\$382,594	\$0	\$0	\$0
7	L & M Wing Addition - Tech Area	2003	56,299	\$999,307	20	\$49,965	\$0	\$0	\$1,107,950	\$0	\$0	\$0
7	S Wing - Fine Arts Bldg	2003	27,572	\$489,403	20	\$24,470	\$0	\$0	\$542,610	\$0	\$0	\$0
8	L Wing - Process Training	2001	4,794	\$85,094	20	\$4,255	\$88,072	\$0	\$0	\$0	\$0	\$0
9	E Wing	2009	19,237	\$341,457	20	\$17,073	\$0	\$0	\$0	\$0	\$0	\$0
9	C Wing High Bay Orig Bldg	2009	2,619	\$46,487	20	\$2,324	\$0	\$0	\$0	\$0	\$0	\$0
9	D Wing High Bay	2009	3,180	\$56,445	20	\$2,822	\$0	\$0	\$0	\$0	\$0	\$0
9	D Wing	2009	13,899	\$246,707	20	\$12,335	\$0	\$0	\$0	\$0	\$0	\$0
9	C Wing High Bay SLTF	2009	1,617	\$28,702	20	\$1,435	\$0	\$0	\$0	\$0	\$0	\$0
12	C Wing West	1999	10,409	\$184,760	20	\$9,238	\$191,226	\$0	\$0	\$0	\$0	\$0
14	F Wing	2020	30,967	\$549,664	20	\$27,483	\$0	\$0	\$0	\$0	\$0	\$0
17	C/D/E Connector/West	1999	19,466	\$345,522	20	\$17,276	\$357,615	\$0	\$0	\$0	\$0	\$0
17	D Wing Penthouse	1999	1,431	\$25,400	20	\$1,270	\$26,289	\$0	\$0	\$0	\$0	\$0
17	C/D Corridor Connector/West	1999	2,399	\$42,582	20	\$2,129	\$44,073	\$0	\$0	\$0	\$0	\$0
17	Library	1999	46,131	\$818,825	20	\$40,941	\$847,484	\$0	\$0	\$0	\$0	\$0

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1M	Midland Center Sloped Roof Area	1989	28,120	\$668,666	20	\$33,433	\$692,069	\$0	\$0	\$0	\$0	\$0
2M	Midland Center Flat Roof Area	1989	3,220	\$45,147	20	\$2,257	\$46,727	\$0	\$0	\$0	\$0	\$0
1P	Planetarium - Main Area	1996	13,163	\$233,643	20	\$11,682	\$241,821	\$0	\$0	\$0	\$0	\$0
2P	Planetarium - Low Area West Wing	1996	567	\$10,064	20	\$503	\$10,416	\$0	\$0	\$0	\$0	\$0
3P	Planetarium - Stair Tower	1996	340	\$6,035	20	\$302	\$6,246	\$0	\$0	\$0	\$0	\$0
4P	Planetarium - Observation Deck and Bridge	1996	1,968	\$83,191	25	\$3,328	\$86,103	\$0	\$0	\$0	\$0	\$0
<b>TOTAL AREA</b>			578,951									
<b>TOTAL REPLACEMENT VALUE</b>				\$10,482,167		\$523,276	\$2,638,141	\$0	\$4,177,439	\$0	\$854,620	\$0

Next three years

\$6,815,580

Main Campus

\$1,554,759

\$0

\$4,177,439

\$0

\$854,620

\$0

Midland Center

\$738,796

\$0

\$0

\$0

\$0

\$0

Bay City Planetarium

\$344,587

\$0

\$0

\$0

\$0

\$0