

Natural Grass versus Synthetic Turf - Crocker / North Fields

Construction	Natural Grass	Synthetic Turf
Unit hard cost per square foot	\$4.00	\$10.00
Estimated Hard Cost of Construction	\$321,600	\$804,000
Annual Maintenance	Natural Grass	Synthetic Turf
Mowing - 157.9K sf @ 0.5 ac/hr x \$50/hr - 50 times per year	\$14,800	\$0
Irrigation Repair	\$2,500	\$0
Annual Turf Repair	\$4,000	\$500
Overseed - one annual application of grass	\$13,000	\$0
Aeration / knife Bermuda - 4 times per year	\$16,000	\$0
Top Dressing - 2 times	\$4,500	\$0
Fertilize & Materials	\$3,500	\$0
Watering natural grass (assume 1,200 units/ ac/ year @ \$3.50/ unit)	\$13,940	
Debris / Trash pick up (labor cost estimate)	\$5,000	\$8,000
Field Grooming (6 x per year)		\$7,500
Estimated Annual Maintenance Cost	\$77,240	\$16,000

Life Cycle Cost Comparison	Natural Grass	Synthetic Turf
Year 1 Construction	\$321,600	\$804,000
Maintenance	\$77,240	\$16,000
Year 2 previous year plus 4%	\$80,330	\$16,640
Year 3 previous year plus 4%	\$83,543	\$17,306
Year 4 previous year plus 4%	\$86,884	\$17,998
Year 5 previous year plus 4%	\$90,360	\$18,718
Minor Field Renovation (at \$0.85/sf for natural turf only)	\$68,340	\$0
Year 6 previous year plus 4%	\$93,974	\$19,466
Year 7 previous year plus 4%	\$97,733	\$20,245
Year 8 previous year plus 4%	\$101,643	\$21,055
Year 9 previous year plus 4%	\$105,708	\$21,897
Year 10 previous year plus 4%	\$109,936	\$22,773
Minor Field Renovation (at \$0.85/sf for natural turf only)	\$68,340	\$0
Synthetic Turf Replacement (\$5.50/sf for turf disposal & replacement)		\$442,200
10 Year life cycle cost	\$1,385,631	\$1,438,298
Year 11 previous year plus 4%	\$114,332	\$23,683
Year 12 previous year plus 4%	\$118,905	\$24,630
Year 13 previous year plus 4%	\$123,662	\$25,615
Year 14 previous year plus 4%	\$128,608	\$26,640
Year 15 previous year plus 4%	\$133,752	\$27,706
Minor Field Renovation (at \$0.90/sf for natural turf only)	\$72,360	\$0
Year 16 previous year plus 4%	\$139,102	\$28,814
Year 17 previous year plus 4%	\$144,666	\$29,966
Year 18 previous year plus 4%	\$150,453	\$31,165
Year 19 previous year plus 4%	\$156,471	\$32,412
Year 20 previous year plus 4%	\$162,729	\$33,708
Minor Field Renovation (at \$1.00/sf for natural turf only)	\$80,400	\$0
Synthetic Turf Replacement (\$6.00/sf for turf disposal & replacement)		\$482,400
20 Year life cycle cost	\$2,911,072	\$2,205,037
Estimated Days of Use Per Year (less 75 rest, 30 avg. rain days, 15 wet days)	245	360
Cost per day of availability based 20 yr life cycle cost	\$594.10	\$199.76
Cost per Hour of Availability to Play		
Hours/day of use for sustained turf growth with Soccer	5	9
Annual hours available	1,225	3,240
Cost per hour of use	\$118.82	\$34.03