

ESTIMATE OF PROBABLE LONG TERM COSTS

Project: Martha's Vineyard Regional High School - Athletic Field Master Plan

Date: February 02, 2019

Project Manager: CCH

Client: Martha's Vineyard Regional High School

By: Huntress Associates, Inc.

Plan Title: **NATURAL GRASS FIELD - 20 YEAR COST ANALYSIS**

17 Tewksbury Street
Andover, MA 01810

ITEM	QUANTITY	UNIT	UNIT COST	TOTAL
NATURAL GRASS FIELD - 20 YEAR COSTS ANALYSIS (Years 1-10)				
NATURAL GRASS FIELD - INSTALLATION				
Natural Grass Field - Subbase & Drainage Construction	98,500	sf	\$1.20	\$118,200.00
Natural Grass Field - Irrigation	98,500	sf	\$0.35	\$34,475.00
Natural Grass Field - Topsoil Installation	3,648	cy	\$24.00	\$87,552.00
Natural Grass Field - Soil Amendments	98,500	sf	\$0.16	\$15,760.00
Natural Grass Field - Slice Seed, Hydroseed & Fertilize	98,500	sf	\$0.19	\$18,715.00
Subtotal				\$ 274,702.00
MAINTENANCE				
Natural Grass Field Maintenance	10	Years	\$25,084.00	\$ 250,840.00
Subtotal				\$ 250,840.00
TOTAL				\$ 525,542.00
FIELD COST PER HOUR				
Field cost by annual use hours (years 1-10)	425	10	4,250	\$ 123.66

ITEM	QUANTITY	UNIT	UNIT COST	TOTAL
NATURAL GRASS FIELD - 20 YEAR COSTS ANALYSIS (years 11-20)				
NATURAL GRASS FIELD - RENOVATION				
Natural Grass Field - 10 Year Renovation	1	allow	\$150,000.00	\$150,000.00
Subtotal				\$ 150,000.00
MAINTENANCE				
Natural Grass Field Maintenance	10	Years	\$ 25,084.00	\$ 250,840.00
Subtotal				\$ 250,840.00
TOTAL				\$ 400,840.00
FIELD COST PER HOUR				
Field cost by annual use hours (years 11-20)	425	10	4,250	\$ 94.32

* Based upon existing use in 2018

* Based upon 2019 costs

ITEM	Hours	Cost/hour	Product Cost	TOTAL
NATURAL GRASS FIELD - ESTIMATED ANNUAL MAINTENANCE COSTS				
Mowing & Trimming (28 cuttings @ 2.25 hours ea)	63	\$42.39	\$0.00	\$2,670.57
Aeration, 5 times per year	40	\$42.39	\$0.00	\$1,695.60
Fertilizer @ 4.9#s N / Year	12	\$42.39	\$2,295.00	\$2,803.68
Soil Amendments	3	\$42.39	\$551.04	\$678.21
Herbicide Applications	3	\$42.39	\$45.32	\$172.49
Pre-emergent	3	\$42.39	\$158.65	\$285.82
Weed Control - spot spray	3	\$42.39	\$40.00	\$167.17
Game Day Prep - Soccer (1.5 hours x 6 games)	9	\$42.39	\$500.00	\$881.51
Game Day Prep - Football (2.5 hours x 6 games)	15	\$42.39	\$750.00	\$1,385.85
Weekly Practice Prep - All Sports (6.0 hours x 28 weeks)	168	\$42.39	\$500.00	\$7,621.52
Overseeding	30	\$42.39	\$1,710.00	\$2,981.70
Insecticide Applications	8	\$42.39	\$623.10	\$962.22
Irrigation (Operation & Repair)	8	\$42.39	\$1,500.00	\$1,839.12
Verti-drain Decompaction	8	\$42.39	\$600.00	\$939.12
TOTAL	373	\$42.39	\$9,273.11	\$25,084.58

* Based upon actual employee cost/hour provided by MVRHS.

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Plan Title: **SYNTHETIC TURF FIELD - 20 YEAR COST ANALYSIS**

17 Tewksbury Street
Andover, MA 01810

ITEM	QUANTITY	UNIT	UNIT COST	TOTAL
SYNTHETIC TURF FIELD - 20 YEAR COSTS ANALYSIS (Years 1-10)				
SYNTHETIC TURF FIELD - MATERIALS				
Synthetic Turf - Subbase & Drainage Construction	98,500	sf	\$ 3.50	\$ 344,750.00
Synthetic Turf - Provide & Install New Multi-Purpose Synthetic Turf	98,500	sf	\$ 4.50	\$ 443,250.00
Synthetic Turf - Resilient Underlayment	98,500	sf	\$ 1.50	\$ 147,750.00
Synthetic Turf - Alternative Infill	98,500	sf	\$ 0.50	\$ 49,250.00
Subtotal				\$ 985,000.00
MAINTENANCE				
Synthetic Turf Field Maintenance	10	Years	\$ 7,454.28	\$ 74,542.80
Subtotal				\$ 74,542.80
TOTAL				\$ 1,059,542.80
FIELD COST PER HOUR				
	Hours	Years	Total Hours	Cost/Hour
Field cost by annual use hours (years 1-10)	1,375	10	13,750	\$ 77.06

ITEM	QUANTITY	UNIT	UNIT COST	TOTAL
SYNTHETIC TURF FIELD - 20 YEAR COSTS ANALYSIS (years 11-20)				
SYNTHETIC TURF FIELD - MATERIALS				
Synthetic Turf - Remove & Dispose of Existing Synthetic Turf	98,500	sf	\$ 0.50	\$ 49,250.00
Synthetic Turf - Provide & Install New Multi-Purpose Synthetic Turf	98,500	sf	\$ 4.50	\$ 443,250.00
Synthetic Turf - Alternative Infill	98,500	sf	\$ 0.50	\$ 49,250.00
Subtotal				\$ 541,750.00
MAINTENANCE				
Synthetic Turf Field Maintenance	10	Years	\$ 7,454.28	\$ 74,542.80
Subtotal				\$ 74,542.80
TOTAL				\$ 616,292.80
FIELD COST PER HOUR				
	Hours	Years	Total Hours	Cost/Hour
Field cost by annual use hours (years 11-20)	1,375	10	13,750	\$ 44.82

* Based upon existing use in 2018

* Based upon 2019 costs

ITEM	Hours	Cost/hour	Product Cost	TOTAL
SYNTHETIC TURF FIELD - ESTIMATED ANNUAL MAINTENANCE COSTS				
Field Grooming & Sweeping (16 time @ 2.25 hours ea)	36	\$42.39	\$0.00	\$1,526.04
Topdressing and leveling Infill	16	\$42.39	\$1,000.00	\$1,678.24
Seam repair and warranty issues (no charge for the first eight years)	-	\$0.00	\$500.00	\$500.00
Gmax Impact Testing (one time annually)	-	\$0.00	\$1,250.00	\$1,250.00
Deep Tine Cleaning (two times annually)	-	\$0.00	\$2,500.00	\$2,500.00
TOTAL	52	\$42.39	\$5,250.00	\$7,454.28

* Based upon actual employee cost/hour provided by MVRHS.