FIELD A: HIGH SCHOOL MULTI-USE SYNTHETIC FIELD AND TRACK















Due to the high level of use of fields in the Town of Medfield and the current condition of the existing field at the High School it is recommended that the existing synthetic turf field with upgraded drainage system and synthetic track be replaced. The synthetic turf fibers are starting to deteriorate, a condition common found in a field with this amount of use and age of the product. The ability of the field to maintain infill in a stable condition will continue to be reduced in turn reducing the overall safety of the field to the athletes. Concerns over rising Gmax will continue to be an issue in the field. Currently there are multiple areas that flood on the field. This is an indication of a failing base/drainage system. It is recommended that a new drainage system replace the existing to alleviate flooding, additionally it is recommended that a trench and slot drain are added to the perimeter of the track to assist with drainage.

The synthetic track has clear base issues at the long-jump triple-jump areas. It is highly recommended that the "D-Zone Areas" are built to include synthetic track surfacing which will also assist in the function of the areas when running track meets. The track has been over-sprayed once to date. The track has reached an age in which it should be sprayed again. This should occur during this process. It should be noted that a track can only be sprayed a minimum of three times which should make the track functional for an additional five to six years.

This page lists a summary of the "Order of Magnitude" costs for upgrading the existing synthetic turf field and track at the high school. Provided are three alternates which the town should consider in making its decision in replacing the field.

- Alternate #1: A higher grade of synthetic turf which is a mixture of a monofilament fiber and a slit film fiber reducing the splash of infill during play. This turf will have a face weight and more fiber which will provide a product which will perform well and stand up to the rigers of use. Additionally, it is recommended that a coated sand infill would be used. The coated sand provides an infill system that creates a firm, fast playing surface. The use of coated sand and the current warranties allow for an infill that can be reused for up to two cycles. Lastly, the alternate includes a shock pad. The shock pad provides absorbency within the field structure. This will reduce the overall Gmax in the field. Current warranties include a maximum Gmax for the life of the warranty which ranges between 20-25 years.
- Alternate #2: A standard 2" turf with SBR Rubber and Sand Infill. Included in this alternate is a shock pad.
- Alternate #3: Includes 5 storage units with concrete pads. An allowance for upgraded athletic field equipment.

TOTAL COSTS FOR MULTI-USE FIELD/TRACK REPLACEMENT

Opinion of Probable Cost - Medfield High School Multi-Use Synthetic Field and Track

ltem		Unit	Unit Price		Total
Base Bid					
Site Preparation					
Trailer and Temporary Utilities	1	LS	\$	8,000.00 \$	8,000.00
Construction Entrances	1	LS	\$	12,000.00 \$	12,000.00
Remove & Dispose Synthetic Turf	75000	SF	\$	0.75 \$	56,300.00
Silt Sock	1,159	LF	\$	3.00 \$	3,500.00
Inlet Protection	2	EA	\$	300.00 \$	600.00
				Subtotal \$	80,400.00
Multi-Use Field					
Concrete Curb	1150	LF	\$	25.00 \$	28.750.00
Trench Drain	1150	LF	\$	50.00 \$	57,500.00
F&I Field Drainage	75000	SF	\$	1.75 \$	131,250.00
F&I Flat Drain	75000	SF	\$	1.20 \$	90,000.00
F&I 8" Base Stone	75000	SF	\$	1.00 \$	75,000.00
F&I 2" Finishing Stone	75000	SF	\$	0.60 \$	45,000.00
Turf Material	75000	SF	\$	3.50 \$	262,500.00
Rubber	75000	SF	\$	0.56 \$	42,000.00
Sand (E+L)	75000	SF	\$	0.17 \$	12,750.00
Football Uprights	1	PR	\$	15,000.00 \$	15,000.00
12' Ball Stopper Netting	400	LF	\$	90.00 \$	36,000.00
				Subtotal \$	795,750.00
Synthetic Track Surfacing					
Gravel Base D-Zone	22000	SF	\$	1.50 \$	33,000.00
Bituminous Concrete Paving D-Zone	22000	SF	\$	2.75 \$	60,500.00
Track Surfacing	22000	SF	\$	5.00 \$	110,000.00
Track Re-Surfacing	32000	SF	\$	1.50 \$	48,000.00
Line Striping	1	LS	\$	4,000.00 \$	4,000.00
				Subtotal \$	255,500.00
SUBTOTAL OF SITE CONSTRUCTION ITEMS		TOTAL		\$	1,131,650.00
GENERAL CONDITIONS, BOND, CONTRACTOR OH&P				\$	113,165.00
CONTINGENCY				\$	56,582.50
SOFT COSTS				\$	84,873.75
TOTAL				\$	1,387,000.00

TOTAL COSTS SAVINGS FOR PHASE I COMBINATION OF MULTI-USE FIELD/TRACK AND PRACTICE FIELD

	Item	Quantity	Unit	Unit Price	Total
Alternate #1: Option A	Base Bid			\$	1,387,000.00
	Deduct SBR Rubber and Sand Upgraded Turf,Coated Sand Infill, and Shock Pad			\$ \$	(336,285.00) 583,912.50
	Opgraded Turi, Coaled Sand Irinii, and Shock Pad			Alternate #1 Total	
Alternate #2: Option B					
	Base Bid Deduct SBR Rubber and Sand			\$ \$	1,387,000.00 (336,285.00)
	SBR Rubber, Sand, and Shock Pad			\$	472,650.00
				Alternate #2 Total \$	1,524,000.00
Alternate #3					
	Equipment & Closeout		LS	\$ 30,000.00 \$	30,000.00
	Storage Units with Pads	5	EA	\$ 12,000.00 \$ Alternate #3 Total	60,000.00 90,000.00

MEDFIELD ATHLETIC FIELDS MASTER PLAN