



Thompson Road Recreation Complex and Avon High School Synthetic Turf Field Feasibility Study

Town of Avon, CT

Joint Board Meeting

December 07, 2015

Thompson Road Recreation Complex



Scope of Services

Main Field

1. A Multi-Purpose All-Weather Turf Field Football
 - a) Soccer
 - b) Lacrosse (men's and women's)
 - c) Field Hockey
 - d) Community Sports and Youth Groups
2. Athletic Field Lighting
3. Field Utilities
4. Home and Away Bleachers with a Press Box
5. Scoreboard

Secondary Field

6. Natural Grass Multi-Purpose Practice Field (alternate for all-weather turf)

Passive & Active Recreation

7. Pedestrian and Vehicular Circulation Around The Site
8. Pedestrian and Vehicular Lighting
9. Access To The Adjacent Trailhead and Bikeway
10. Concourse and Gathering Space With a Playscape If Possible



Scope of Services

Building Amenities

- 11.Public Restroom And Concession Facilities
- 12.Home and Away Locker Rooms
- 13.Ticket Booth
- 14.Storage (equal to or greater than what is currently onsite in the current storage building; salvage all or part of the current building is encouraged).

Site Amenities

- 15.All Appropriate Perimeter and Interior Fencing
- 16.Adequate Parking for Events (the school may be an option for overflow parking)
- 17.Site irrigation
- 18.An appropriate Thompson Road and Neighboring Property Buffer Zones. Buffering Must Be Aesthetically Pleasing.
- 19.Storage (equal to or greater than what is currently onsite in the current storage building; salvage all or part of the current building is encouraged).
- 20.ADA Compliance
- 21.Site Utilities

Site Master Plan



Site Rendering



Conceptual Cost Estimate-Soft Costs

CONCEPTUAL BUDGETARY DESIGN COSTS (SOFT COSTS)		BASE ITEMS	
1. Phase 1 - Pre-Referendum Services		lump sum	\$31,000.00
2. Phase 2 - Post Referendum Services (estimated)		lump sum	\$112,000.00
3. Town Bidding and Contract Expenses (estimated)		lump sum	\$10,000.00
4. Project Financing (estimated)		lump sum	\$60,000.00
	Total		\$213,000.00

Conceptual Cost Estimate-Base Bid

CONCEPTUAL BUDGETARY CONSTRUCTION COSTS (HARD COSTS)		BASE ITEMS
1. Site Preparation, Demolition, and Cut/Fill	lump sum	\$65,000.00
2. Site Drainage, Utilities, and Infrastructure	lump sum	\$185,000.00
3. Off-Site Sanitary Connection & Assessment Fee	lump sum	\$187,000.00
4. All-Weather Turf Multi-Sport Main Field (including maintenance equipment)	lump sum	\$895,000.00
5. Natural Grass Multi-Sport Secondary Field	lump sum	\$425,000.00
6. Sports Field Equipment (Game Field)	lump sum	\$25,000.00
7. Main Field Lighting	lump sum	\$235,000.00
8. Fencing and Gates	lump sum	\$125,000.00
9. Entrance Way and Walkways	lump sum	\$100,000.00
10. Parking and Drives	lump sum	\$375,000.00
11. Site Lighting and Amenities	lump sum	\$125,000.00
12. Scoreboard	lump sum	\$27,500.00
13. Landscaping and Buffers	lump sum	\$150,000.00
14. Passive Recreation Trail	lump sum	\$35,000.00
15. Home Bleachers, Press Box, and Sound System	lump sum	\$245,000.00
16. Visitor Bleachers	lump sum	\$68,750.00
17. Ticket Booth	lump sum	\$25,000.00
18. Building Under Bleachers (Team Rooms)	lump sum	\$409,024.00
19. Butler Building Renovation (Concessions & Public Restroom)	lump sum	\$455,176.00
20. Thompson Road Pedestrian Pathway	lump sum	\$45,000.00
21. Escalation, Contingency, and Allowances	lump sum	\$609,355.25
Total		\$4,811,805.25
Base Bid Project Total		\$5,024,805.25



Conceptual Cost Estimate-Alternates

CONCEPTUAL BUDGETARY CONSTRUCTION COSTS (HARD COSTS)		ADD/ALTERNATE ITEMS	
Alternates			
1. All-Weather Turf Multi-Sport Secondary Field (additional cost from #5)		lump sum	\$425,000.00
2. Sports Field Equipment (Secondary Field)		lump sum	\$25,000.00
3. Decorative Entrance Material Entrance Way and Walkways		lump sum	\$100,000.00
4. Additional Parking Landscaping and Green space		lump sum	\$65,000.00
5. Additional Site and Pathway Lighting and Amenities		lump sum	\$25,000.00
6. Playscape		lump sum	\$85,000.00
7. Additional Landscaping and Buffers		lump sum	\$75,000.00
8. Passive Recreation Trail Amenities		lump sum	\$15,000.00
9. Thompson Road Pedestrian Pathway Lighting		lump sum	\$50,000.00
10. Escalation, Contingency, and Allowances		lump sum	\$125,425.00
Alternates Total			\$990,425.00
Base Bid & Alternates Project Total			\$6,015,230.25

**Conceptual Cost Estimate is based on standard industry pricing and the Conceptual Design scope of work. It will continue to be refined into an Estimate of Probable Construction Costs as the project design develops in further detail.*



Thompson Road Recreation Complex

PROS

- Additional Fields (with lighting)
- Allows for other fields to rest
- Formalize/ additional parking
- Concession/ storage building
- Closer to High School than Fisher Meadows
- Less prone to flooding than Fisher Meadow
- Connection to Rails to Trails
- Nature trail
- Playscape

CONS

- New sewer line required
- Additional fields to maintain
- Sidewalks to school
- Parking for large events
- Absence of utilities
- Potential for increased traffic
- Significant earthwork
- Wetlands adjacent to project area
- Zone change required



Avon High School



Existing Conditions

Scope of Services

A. Expansion of Field in Current Location

1. Effect on Baseball to the East
2. Move Inner Lanes of Track to the Outside
3. Move Bleachers to the East Site of the Field
4. Accommodate Future Sports Field Lighting
5. New Press Box

B. Multi-Purpose Artificial Field within the Existing Track

1. Will the Existing Track Support a Soccer Field?
2. Move Bleachers to the East Site of the Field
3. Accommodate Future Sports Field Lighting
4. New Press Box

C. Multi-Purpose Artificial Field Located on the Current Field Hockey Field

1. Will the Existing Field Support a Soccer Field?
2. Accommodate Future Sports Field Lighting
3. Bleachers and Press Box



Site Master Plan – Concept Plan A



Concept Plan A

Conceptual Cost Estimate – Soft Costs

CONCEPTUAL BUDGETARY DESIGN COSTS (SOFT COSTS)		BASE ITEMS	
1. Phase 1 - Pre-Referendum Services		lump sum	\$9,500.00
2. Phase 2 - Post Referendum Services (estimated)		lump sum	\$112,000.00
3. Town Bidding and Contract Expenses (estimated)		lump sum	\$10,000.00
4. Project Financing (estimated)		lump sum	\$55,000.00
Soft Costs Total			\$186,500.00

Conceptual Cost Estimate – Base Bid

CONCEPTUAL BUDGETARY CONSTRUCTION COSTS (HARD COSTS)		BASE ITEMS	
Base Project Scope			
1. Site Preparation		lump sum	\$50,000.00
2. Site Drainage Improvements (provided by Town Engineering Department)		lump sum	\$25,000.00
3. New All-Weather Main Multi-Use Turf Field (including maintenance equipment)		lump sum	\$917,500.00
4. Sports Field Equipment (compatible for all-weather turf)		lump sum	\$25,000.00
5. New 8-Lane Track		lump sum	\$435,000.00
6. Track & Field Events (Long/Triple Jump, Pole Vault, High Jump, & Shot Put)		lump sum	\$100,000.00
7. Site Improvements (walkways, retaining walls, and landscape buffers)		lump sum	\$150,000.00
8. Home Bleachers & Press Box (750 Seats)		lump sum	\$225,000.00
9. Visitor Bleachers (250 Seats)		lump sum	\$62,500.00
10. Main Field Lighting		lump sum	\$350,000.00
11. Escalation, Contingency, and Allowances (15%)		lump sum	\$351,000.00
Hard Costs Total			\$2,691,000.00
Base Bid Project Total			\$2,877,500.00



Conceptual Cost Estimate – Alternates

CONCEPTUAL BUDGETARY CONSTRUCTION COSTS (HARD COSTS)		ADD/ALTERNATE ITEMS	
Alternates			
1. New All-Weather Secondary Turf Field (Field Hockey)	lump sum		\$656,500.00
2. Secondary Field Lighting	lump sum		\$350,000.00
3. Storage Building	lump sum		\$35,000.00
4. Escalation, Contingency, and Allowances (15%)	lump sum		\$156,225.00
Alternates Total			\$1,197,725.00
Base Bid & Alternates Project Total			\$4,075,225.00

**Conceptual Cost Estimate is based on standard industry pricing and the Schematic Design scope of work. It will continue to be refined into an Estimate of Probable Construction Costs as the project design develops in further detail.*

**We have made certain assumptions about the existing conditions and design of certain components of the project that may have an impact to the overall project cost.*

** We have assumed that the existing topsoil is suitable for reuse with only minor modifications.*



Lifecycle Cost Analysis

Expense	Natural Grass Field (Conventional)	Natural Grass Field (Organic)	All-Weather Turf Field
Initial Costs			
Field Base and Drainage Construction Costs	\$275,000	\$275,000	\$350,000
Surfacing Construction Costs	\$135,000	\$165,000	\$475,000
Maintenance Equipment Cost	\$0	\$0	\$25,000
Total Initial Cost	\$410,000	\$440,000	\$850,000
Annual Costs			
Maintenance Cost	\$24,500	\$35,000	\$4,500
Water (Irrigation) and Repairs Cost	\$5,500	\$5,500	\$0
Atheltic Field Painting	\$9,500	\$9,500	\$500
Total Annual Cost	\$39,500	\$50,000	\$5,000
Total Cost Over 15 Years Lifespan	\$592,500	\$750,000	\$75,000
Surfacing Replacement Costs (over 15 years)			
Decompact, Airate, and Re-Sod (4 times)	\$115,000	\$140,000	\$0
New All-Weather Surface	\$0	\$0	\$450,000
Total Replacement Costs	\$115,000	\$140,000	\$450,000
Total Lifecycle Cost (over a 15 year period)	\$1,117,500	\$1,330,000	\$1,375,000
Total Cost Per Year	\$74,500	\$88,667	\$91,667
Number of Available Field Hours Per Year	300	300	800
Number of Events/Practices Available Per Year (assumed 3 hour per event)	100	100	266.67
Average Cost Per Event	\$745	\$887	\$344

Maintenance

▪ Weekly

1. Review and Sweeping/Raking of Infill at High Use Areas
< 1 Hour

▪ Monthly

1. Static/Drag Behind Brush Grooming
< 4 Hours

▪ Spring & Fall

1. Drag Behind Sweeping
2. Tines Grooming
3. Seam Review
< 8 Hours



▪ Maintenance Training

Benefits of Synthetic Turf Fields

Benefits of Synthetic Turf Fields for the Avon High School Athletic Program



Benefits of Synthetic Turf Fields

- Provides athletic teams a more efficient game and practice space.
- Minimizes game and practice cancellations due to inclement weather.
- Reduces the amount of use to our other natural grass fields.
 - Allows for the natural grass fields to have periods of rest
- Reduced maintenance allows facilities crew more time to tend to natural grass fields.

Benefits of Synthetic Turf Fields

- Provides a consistent and uniform playing surface no matter how much it is used.
- Ability to have more athletic events on school grounds and not spread out all over town.
 - We want the students to come out and support their peers. It's a lot easier to walk out of the building at AHS and sit in the bleachers than it is to get a ride to Fisher meadows or Buckingham
 - The more we can do to keep our athletic teams on campus, the more student involvement we can have.

Usage and Oversight

- The Board of Education Facilities Department is in charge of field maintenance. There may be times that the Department of Public Works would perform maintenance duties in conjunction with the Facilities Department, but that would be minimal.
- BOE and Town of Avon have policies, procedures and ordinances in place that guide how Town facilities and grounds are used by the community.
- There is a long standing agreement between BOE and Recreation, that Recreation manages the scheduling of most of the community's use of BOE fields between 5:30 and 9:00 pm and on weekends. School athletics have priority at all the town and school fields they play on.

Usage and Oversight

- *Avon Public Schools Policy No: 7020: Use of School Facilities, provides guidelines with categories and fee structures.*
- *When youth sports leagues apply for use of BOE fields, through the Recreation Department, we also look at Town of Avon Code, Section 41-26, permit applications and use.*
- *Through the application process, the intensity of use at the site is determined.*
- *The school approves the use based on availability and conflicts such as concerts or conferences. We may also approve with conditions, such as custodian, police officer or parking management plan. These would be paid by the user.*



Usage and Oversight

- ***We are recommending fees related to the use of:***
 - *Athletic lighting (controlled remotely by staff)*
 - *P.A. system use (plus a custodian)*
 - *Press box use (plus a custodian)*
- ***League use managed by Recreation carries a \$5 per person, per season Facility Maintenance fee. This fee covers costs of portable lavatories at the fields and our administrative costs.***
- ***If a sports league wishes the school open for lavatories, there would be custodial fees incurred. This type of request must be done directly through the school.***

Current Community Sports

Day(s)	Times	No. of uses	Estimated Attendees per:
Mon-Fri			
Spring:	5:30pm-8:00pm	2 - practices	40
Fall:	5:30pm-6:30pm		
Sat			
Spring:	8:00am-8:00pm	1 make up	75
Fall:	8:00am-5:00pm		
Sun			
Spring:	11:00am-8:00pm	1 make up	75
Fall:	11:00am-5:00pm		



Projected Community Sports

Day(s)	Times	No. of uses	Estimated Attendees per:
Mon-Fri	5:30pm-9:00pm	4; running 2 practices ½ field	40 Practice 150 Game
Sat	8:00am-8:00pm	6-7 games	25 Practice 150 Game
Sun	11:00am-8:00pm	5-6 games	25 Practice 150 Game

Benefits to Community Use

- **Schedule different sports back to back**
- **Different sports can run 1/2 field practices at the same time**
- **One sport can practice after another by changing out equipment.**
- **Fewer rain outs**
- **Less damage to Fisher Meadows**
- **In the fall, lights will extend the playable hours during week nights from 7.5 playable hours to 17.5 playable hours per week.**
- **A 12 week season goes from 84 playable hours to 210 playable hours on one field.**



Thank You!

