

FELTHAM COMMUNITY COLLEGE

WEST LONDON

Status: Completed 2012

Client: Feltham Community College

Value: £396,000



Eastern 3G pitch

This project involved the resurfacing of two 10-year-old sand-filled artificial grass pitches. The eastern pitch was covered with a third-generation, or 3G, artificial grass carpet, and the western pitch has a new sand-filled fibrillated artificial grass surface.

The facility was constructed by Spadeoak, a Sport England framework contractor who carried out a feasibility report for the client and managed the project throughout including post-completion testing.



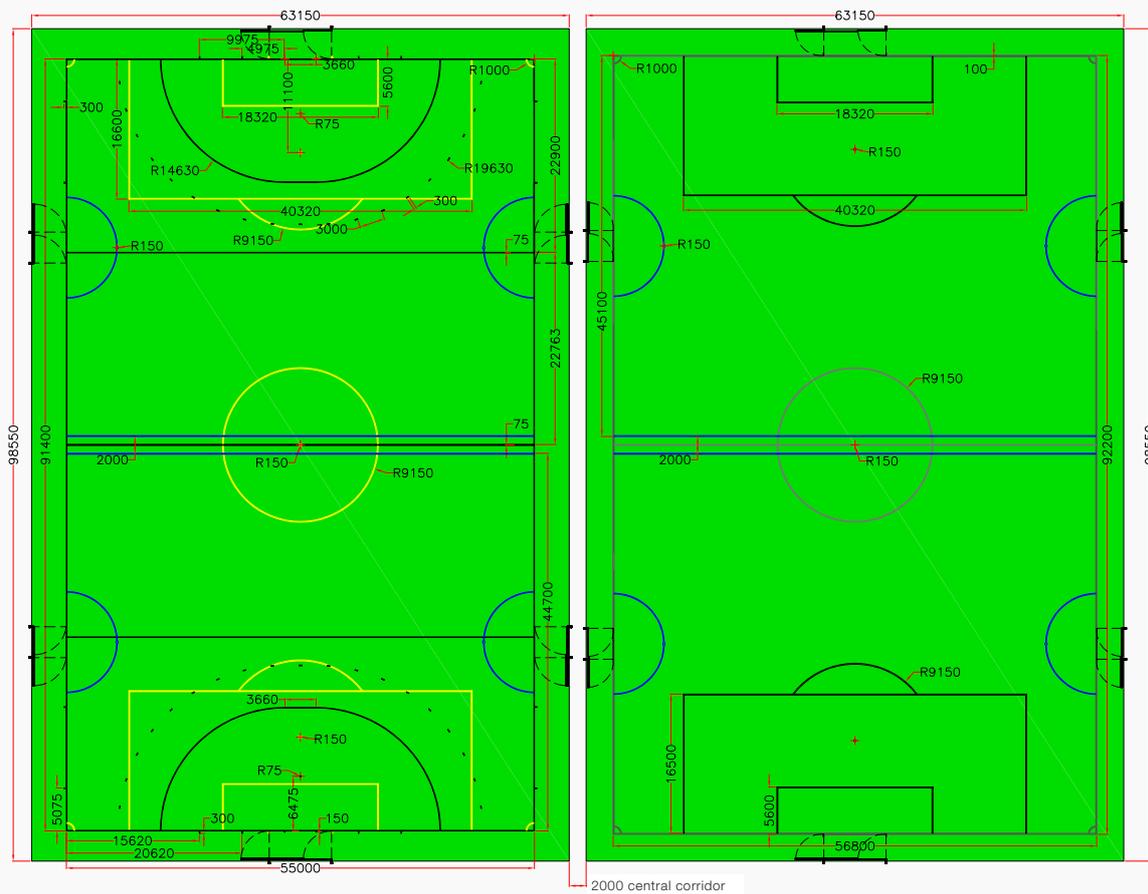
Western sand-filled pitch

The project was jointly funded by Feltham Community College, the Mayor's Fund and Sport England.



3G pitch with sand-filled pitch beyond division fencing

As-built layout of the (eastern) 3G pitch and (western) sand-filled artificial grass pitch, each 63.15 x 98.55 m



Key

- Association football – yellow lines 100 mm wide
- Hockey – white lines 75 mm wide
- Small-sided football (mini-soccer) – blue lines 80 mm wide

Note:

All dimensions are in millimetres





Cross pitch mini-soccer goals in folded-back position



Swing-out 11-a-side football goal

Swing-out goals are fitted to the fence so that the safety run offs surrounding the principal playing areas can be kept clear during matches.

The 3G pitch is marked out longitudinally for 11-a-side football and transversely with two mini-soccer pitches. Although not marked out for rugby, the 3G pitch has been designed to meet the requirements of IRB 22 so that full-contact rugby training can be undertaken on the pitch.

The sand-filled pitch is marked out longitudinally for hockey and football (which use common touchlines) and transversely for mini-soccer.

The 3G pitch will be tested to the performance requirements of FIFA (1 star) and International Rugby Board's IRB 22 and the sand-filled pitch to the performance requirements of the International Hockey Federation and European standard BS EN 15330 for football in December 2013.

The carpet has been installed right up to the fence. The 3G pitch has 3.1 m safety run offs on all sides, meeting FA requirements, and the sand-filled pitch has 3.5 m run offs at the ends and 4.0 m at the sides, meeting FA and England Hockey requirements.

The client will be constructing recesses in the fence on the sand-filled pitch to store the hockey goals, keeping them out of the safety run offs.

General Description of Works

The existing sand-filled artificial grass carpet and prefabricated shockpad systems were removed from each pitch and the porous macadam bases were repaired to improve the surface regularity. A strip of macadam was removed from the perimeter of each pitch so the shockpad and carpet could be feathered down to the existing perimeter kerbs. One pitch was then resurfaced with a 60 mm pile length 3G 'monofilament' artificial grass carpet above a 15 mm in-situ formed shockpad. The other pitch surfaced with a 23 mm pile length sand-filled fibrillated artificial grass carpet above a 15 mm in-situ formed shockpad. The existing hockey ball rebound boards (kickboards) were entirely removed from the 3G pitch fence and used to repair the existing kickboards on the sand-filled pitch fence.

Schedule of Areas

Total area of site (pitches only)	12,448 m ²
Eastern 3G pitch	6,224 m ²
Western sand-filled artificial grass pitch	6,224 m ²

General Accommodation

3G pitch	1 no. association football pitch, 92.20 x 56.80 m
	2 no. mini-soccer pitches, 56.80 x 45.10 m
Sand-filled artificial grass pitch	1 no. association football pitch, 91.40 x 55.00 m
	1 no. hockey pitch, 91.40 x 55.00 m
	2 no. mini-soccer pitches, 55.00 x 47.70 m



Inlaid lines on sand-filled pitch – blue lines denote edges of mini-soccer pitches, with a 2 m safety margin between the two pitches

General Description of Key Specifications and Materials

Shockpad	15 mm in-situ formed polyurethane-bound rubber crumb
Carpet	60 mm pile length polyethylene monofilament carpet and 23 mm pile length sand-filled fibrillated polyethylene monofilament carpet
Carpet seams	Carpet strips adhered to backing tape to form carpet seams
Goals	Swing-out goals, meeting BS 748

Summary of Elemental Costs

	Element	Total cost (£)	Cost (£) per m ²
1	Pitch base works consisting of preparatory work/excavations	68,950	5.54
2	Synthetic surfacing, consisting of shockpad and carpet (3G and sand-filled fibrillated artificial grass)	280,150	22.51
3	Fencing repairs and kickboards	5,250	0.42
4	Equipment (goals)	21,600	1.73
5	Landscaping and reinstatement	1,300	0.11
6	Preliminaries – design work, insurance etc.	1,550	0.12
7	Professional fees, investigation/survey fees, testing	16,900	1.36
	TOTAL CONTRACT SUM	395,700	31.79

Notes:

- Costs stated are rounded and based on third quarter 2012
- Costs stated exclude VAT
- At the start of the project a reserve of £19,000 (not included in above figures) was set aside for contingencies but was not spent
- Caution should be taken when using any sets of figures, and professional advice should be sought regarding current market rates
- The client provided £228,000 towards the cost of the project, the Mayor's Fund (*Play Sport London*) £50,000 and Sport England (*Inspired Facilities*) contributed £118,000.

“
... We are delighted with the new facility, which has created a lot of interest from football and rugby clubs as well as providing top-level facilities for the college...
 ”

[Click here for 'User Guide'](#)

[Click here for current 'Design and Cost Guidance'](#)

Environmental Sustainability

The kickboards that were removed from the 3G pitch fence were used to repair the existing kickboards surrounding the sand-filled pitch

Procurement / Programme

Tender	Framework contractor (Spadeoak) allocated by Sport England under ' <i>Inspired Facilities</i> ' funding
Contract	<i>JCT Minor Works Building Contract 2005 Edition Revision 2:2009</i>
Duration	Construction took eight weeks

Specific Items of Interest

Equipment storage	Swing-out goals are fitted to the fence so that the pitch safety run offs surrounding the principal playing areas can be kept clear during matches
Additional training	Although not marked out for rugby, the 3G pitch has been designed to meet the requirements of IRB 22 so that full-contact rugby training can be undertaken on the pitch
Future plans	The client will be constructing recesses in the fence on the sand-filled pitch to store the hockey goals and keep them out of the safety run offs



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