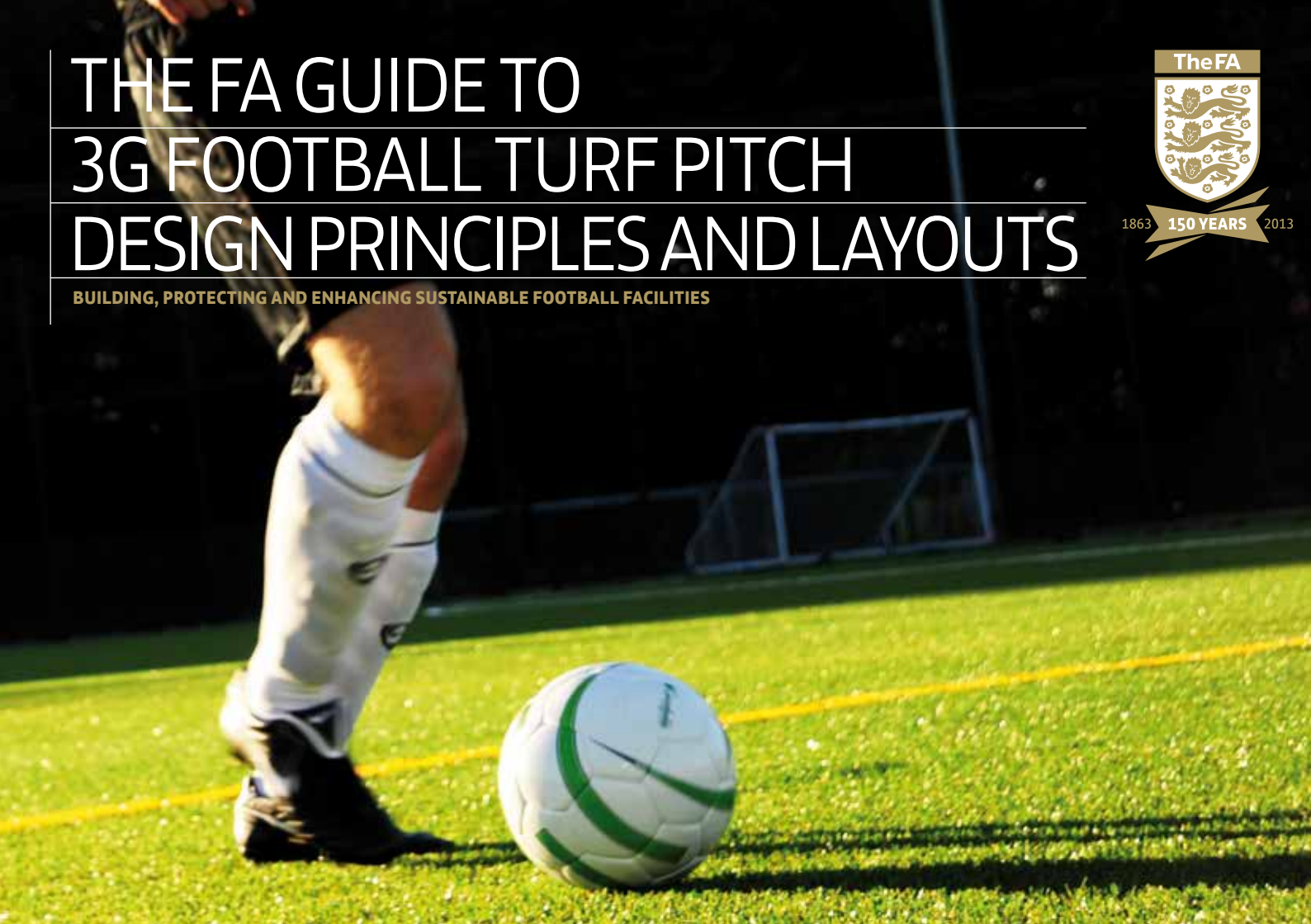


# THE FA GUIDE TO 3G FOOTBALL TURF PITCH DESIGN PRINCIPLES AND LAYOUTS

BUILDING, PROTECTING AND ENHANCING SUSTAINABLE FOOTBALL FACILITIES



1863 150 YEARS 2013





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Whilst every effort has been made to ensure the accuracy of the information contained in this publication any party who makes use of any part of this document in developing Football Turf Pitches shall indemnify The Football Association, its servants, consultants or agents against all claims, proceedings, actions, damages, costs, expenses and any other liabilities for loss or damage to any property, or injury or death to any person that may be made against or incurred by The Football Association arising out of or in connection with such use.

These guidelines are intended to provide recommended technical guidance to potential developers to allow them to make informed choices when building a Football Turf Pitch.

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# Welcome

**This document provides guidance on the quality standards required in order to receive FA support for planning applications and funding submissions, whilst outlining the recommended layouts for the following formats of the game:**

- Mini Soccer 5v5
- Mini Soccer 7v7
- 9v9 football
- 11v11 grassroots football (adult and youth)
- 11v11 National League System.

Sand-dressed, sand-filled and water-based Artificial Grass Pitches (AGPs) can be utilised for basic football training, but are not suitable for mini soccer, youth or adult 11-a-side football league matches. Only 3G Football Turf Pitches (FTPs) that have a valid performance test can be used for league matches and FA competitions where sanctioned.

This document is one of three FA documents relating to 3G FTPs. Additional guidance to clarify some of the myths surrounding the use of FTPs, as well as detailed construction principles, can be downloaded from [TheFA.com/my-football](http://TheFA.com/my-football)

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# Summary of Key FA Technical Standards



- Where football is the primary sport, all new 3G FTPs should be constructed to one of the following FA recommended sizes:

The FA Recommended Pitch Sizes													
Age grouping	Type	Recommended size without runoff (safety area around pitch)				Recommended size including runoff (safety area around pitch)				Recommended size of goal posts			
		Length x width (metres)		Length x width (yards)		Length x width (metres)		Length x width (yards)		Height x width (metres)		Height x width (ft)	
Mini-Soccer U7/U8	5 v 5	37	27	40	30	43	33	46	36	1.83	3.66	6	12
Mini-Soccer U9/U10	7 v 7	55	37	60	40	61	43	66	46	1.83	3.66	6	12
Youth U11/U12	9 v 9	73	46	80	50	79	52	86	56	2.13	4.88	7	16
Youth U13/U14	11 v 11	82	50	90	55	88	56	96	61	2.13	6.40	7	21
Youth U15/U16	11 v 11	91	55	100	60	97	61	106	66	2.44	7.32	8	24
Youth U17/U18	11 v 11	100	64	110	70	106	70	116	76	2.44	7.32	8	24
Over 18 (senior ages)	11 v 11	100	64	110	70	106	70	116	76	2.44	7.32	8	24

- The FA advise organisations solely looking to develop small-sided commercial FTPs to adhere to the design principles within this document; to maximise the associated development outcomes, The FA would recommend a minimum pitch size of 37m x 27m when developing new small-sided football facilities.
- 3m runoffs should be provided on all sides of the main pitch and be free of any obstacle.
- A 300mm mowing strip should be provided to the external perimeter of all 3G FTPs.

## FIFA Quality Concept for Football Turf

- All full size 3G FTPs should meet the FIFA Quality Concept for Football Turf – One Star or the International Artificial Turf Standard (IATS).
- Smaller pitches should be built to this quality standard and tested to BESEN 15330-1 standard.

## Goalposts

- All goal posts must meet the latest versions of BSEN748:2004, BS8461:2005+A1:2009 and BS8462:2005+A2:2012.

## Floodlights

- The floodlights need to be designed in such a way to allow each individual section of the pitch to be individually programmed.
- For full size matches (FIFA Class II):  
Maintained average illuminance: >200lux min  
Uniformity (min/ave): >0.6

## Fencing and access gates

- The FA recommended fence height on all sides of the 3G FTP is 4.5m.
- Viewing areas should be included on all 3G FTP's and have perimeter fencing 1.2m high, rising to 2m behind the goals and 3m away from the touchline.
- Goal recesses should be provided to safely store each goal individually in close proximity to its main usage point.
- At least one pair of double gates should be provided to allow maintenance and emergency vehicle access.
- Single gate access and decontamination grills should be provided to every section of pitch available for cross play use. The furthest section away from the spectator entrance should have an additional single gate to aid ball retrieval.

- The access pathway to the 3G FTP should be fenced to ensure players and spectators don't walk debris onto the pitch. The path must be a minimum of 1.8m in width, unless there are unavoidable pinch points where the width can be reduced to 1.2m for no greater than 6m in length.

## Line Marking

- The largest pitch size should always be white and training lines should always be red. The main pitch and training lines should be tufted in during the manufacturing process.
- Corner right angles can be tufted in during the manufacturing process to act as a guide for over marking, but the over marked pitch should not be cut into the carpet.

# Design Principles



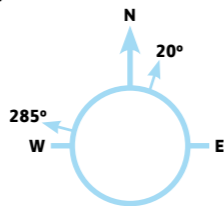
## Pitch Location and Orientation

The design and cost of a new 3G FTP will be greatly influenced by the site on which it is to be built and it should be recognised that some sites are not cost effective to develop.

Ideally a pitch should be located:

- Close to changing accommodation and other support facilities.
- On relatively flat ground in order to reduce construction complexity and costs and to prevent contamination of the playing surface from run-off from adjacent banking, etc.
- In a sheltered location away from exposed terrain.
- Where the installation of services (electricity and drainage) will not be prohibitively expensive.
- Where easy access for maintenance and emergency vehicles is available.

- Away from trees, as roots and leaf litter can cause on-going structural and maintenance issues.
- Where players, spectators and maintenance equipment do not have to cross natural turf areas, as mud, debris and other contaminants will all contribute to the deterioration of the playing surface.
- So that the main playing direction is approximately north (between 285° and 20°) / south, to minimise the effect of a setting sun on the players; the inability to achieve this orientation need not preclude the construction of a pitch.



Early pre-application discussions with the local planning authority are encouraged in order to avoid any restrictions on usage which may influence the location of the FTP.

If the project is not being funded by The FA and not going through The FA/RFU Framework, then we strongly recommend you engage a 3G FTP specialist to help you design the pitch in accordance with this guidance document.

## Surface

The majority of pitches constructed through the FA/FF/RFU Framework used in the National Game have a 60mm monofilament synthetic surface on an engineered macadam base without a shock pad. Other pile lengths may be considered with other sub-base constructions that meet the FIFA Quality Concept for Football Turf – One Star.

## FIFA Quality Concept for Football Turf

All full size 3G FTPs should meet the FIFA Quality Concept for Football Turf – One Star or the International Artificial Turf Standard (IATS). Smaller pitches should be built to this quality standard and tested to BESEN 15330-1 standard.

The objectives of the FIFA and IATS standards are to ensure that pitches are constructed with Football Turf surfaces of the required quality, that the surfaces are installed correctly, and that they provide satisfactory playing environments throughout their service lives. This is achieved by three stage process:

### Stage 1: Product Type Approval

The Football Turf surface is subjected to a comprehensive series of laboratory tests that assesses the performance, durability and material qualities of the surfacing system. Only Football Turf surfaces that have been tested and shown to comply with the relevant standard should be considered for possible selection when designing a Football Turf pitch.

### Stage 2: Initial Facility Testing and Certification

Following installation, the pitch is tested to verify the Football Turf surface has been installed correctly and is providing the anticipated levels of performance. Even the best quality surfaces will not perform acceptably if they are poorly or incorrectly installed.

### Stage 3: Pitch Recertification

3G FTPs do degrade with age and use, it is vital that pitch operators implement an annual maintenance schedule and have their facility tested in line with the level of competition played on it. Failure to regularly maintain and periodically test may invalidate a field operator's public liability insurance, as they may not be able to demonstrate that the pitch is still fit for purpose.

The pitch should be tested either annually for steps 1 to 6 of the National League System (usually required between January and March each year) or every three years for step 7 and below. The pitch should meet the required performance criteria and be registered on The FA register for 3G Football Turf Pitches.

For details of who can carryout the performance test, please email [FacilitiesInfo@TheFA.com](mailto:FacilitiesInfo@TheFA.com).

# Refurbishments, Stadia FTPs, MUGAs and Commercial Designs



## Refurbishment Design Principles

Whilst you should follow the same standards as building new where possible, The FA recommends the following basic principles for refurbishment projects:

- Procure a condition survey of the existing pitch, fencing and floodlighting.
- If you are retaining the floodlight columns, but replacing the light fittings, a structural report for the columns will be required.
- If an existing shockpad is proposed to be retained it must be tested prior to seeking tenders or quotations by a FIFA-accredited test institute to determine its exact properties and suitability for re-use.

- Pitch markings should be agreed in conjunction with FA Regional Facilities and Investment Manager – see page 38 for details.
- An extra 200mm run off should be provided on all sides where folding goals are used.
- Early discussions with your local planning authority are recommended to gain pre-application advice.

For examples of the recommended layouts for converting an existing sand-based AGP please refer to pages 32 and 33.

## Stadia FTP Design Principles

When constructing a stadia 3G FTP, providers should follow the following technical standards:

- The playing surface should be 100m x 64m with a 3m run off on all sides free from obstacles; where an existing natural turf stadia pitch is being converted and space is limited the run off should be agreed with your FA Regional Facilities and Investment Manager.
- Where floodlights are located within the spectator hard standing area they should be padded to offer protection.
- 4.5m high ball stop fencing should be provided behind the two 11-a-side goals; this could be permanent or temporary depending on individual ground layouts and locations.
- Providers should consider introducing additional 3m high ball stop fencing on sides of the ground where the boundary is in close proximity to the pitch.

- Where new lights are being provided, The FA recommends a minimum of 200 lux to comply with the standards set for all FTPs; where existing floodlights in a stadia are being utilised they should comply with the minimum ground grading requirements (a structural report for the columns will be required).
- Storage areas should be provided for maintenance machinery, goalposts and equipment not in use.
- Only 11-a-side pitch markings should be tufted in during the manufacturing process.
- All surfaces within the ground should be a bound surface (not grass) to prevent debris being walked onto the pitch.
- Socketed goals are recommended for 11v11 goals on stadia FTPs, although movable goals are acceptable.
- Socketed corner flags are recommended for use on stadia FTP's rather than free standing corner flags.

For an example of the recommended layout for a new build stadia FTP please refer to page 34.

## MUGAs and Commercial 5-a-side Design Principles

The FA would oppose the building of MUGAs or 5-a-side commercial facilities on playing fields that do not meet one of our recommended sizes as listed on page 4.

The FA advises organisations to adhere to the design principles within this document in order to maximise the football development outcomes from all football facilities.

When not being built on playing fields and where this is not possible, the following amendments to the basic principles should be adopted:

- The pitch should be rectangular and the length of the touchline must be greater than the length of the goal line. The FA recommends that the length to width ratio is 2:1.
- If rebound boards are used they should be at least 1.2m high and the use of mesh fencing behind and above the boards should be 4.5m high. The cost of replacing the rebound boards should be factored into sinking fund projections.
- A maintained average luminance of 120 lux should be provided from floodlighting to comply with The FA's training requirements.
- Specific additional guidance on MUGAs can be found on [www.sportengland.org](http://www.sportengland.org).

# Fencing, Access and Storage



The access pathway to a 3G FTP should be fenced to ensure players and spectators don't walk debris onto the pitch.

## Fencing

The FA recommended fence height on all sides of the 3G FTP is 4.5m.

Perimeter fencing is erected around a pitch to contain balls, to protect the playing surface from contamination and to help prevent unauthorised use and vandalism.

The fencing is normally constructed from twin bar super-rebound panels or rolls that are supported by box section posts. Twin bar super-rebound panels are used, as it is better suited to the repeated impacts of footballs hitting the fence. Steelwork should be galvanised to minimise premature corrosion and may be plastic coated to improve its appearance.

Viewing areas should be included on all 3G FTPs and have perimeter fencing 1.2m high, rising to 2m behind the goals and 3m away from the touchline.

## Access

At least one pair of double gates should be provided to allow maintenance and emergency vehicle access.

Single gate access and decontamination grills should be provided to every section of pitch available for cross play use. The furthest section away from the spectator entrance should have an additional single gate to aid ball retrieval.

Access gates should open outwards away from the playing area to ensure the safety of players.

The access pathway to the 3G FTP should be fenced to ensure players and spectators don't walk debris onto the pitch. The path must be a minimum of 1.8m in width, unless there are unavoidable pinch points where the width can be reduced to 1.2m for no greater than 6m in length.

Ensure a minimum clear height of 2.1m is maintained under trees, canopies etc.

Access routes should be level or have the shallowest gradients possible. Where the route is steeper than 1:60, but not as steep as 1:20, it must have a level landing for each 0.5m rise along the route.

For more details, please refer to Sport England Design Guidance Note - Accessible Sports Facilities (available from [www.sportengland.org](http://www.sportengland.org)).

## Storage

It is important to provide storage facilities in close proximity to the pitch. Weekly maintenance machinery and essential equipment should be safe, secure and stored in a location to allow easy access to the pitch from a tarmac area.

Goalposts not in use should be properly stored in the recess areas.

## Pitch Divider Systems

The FA is developing a preferred system for dividing pitches. For more information, please email [FacilitiesInfo@TheFA.com](mailto:FacilitiesInfo@TheFA.com).

In the meantime, divider netting is optional and consideration should be given to the programme of use when determining the need. However, The FA recommends the use of divider netting on pitches where goals back onto each other – see pages 37 and 38 for examples.

# Floodlighting and Goalposts



## Floodlighting

A floodlight system will be required in order to meet the desired weekly usage levels on a 3G FTP. The FA would not support building a 3G FTP where floodlights are not provided. For a full size pitch specified mainly for football use, they will generally meet FIFA's Class II, which for 11 a side football is a minimum maintained average illuminance of 200lux. For training and cross play use, 120 lux is the minimum requirement.

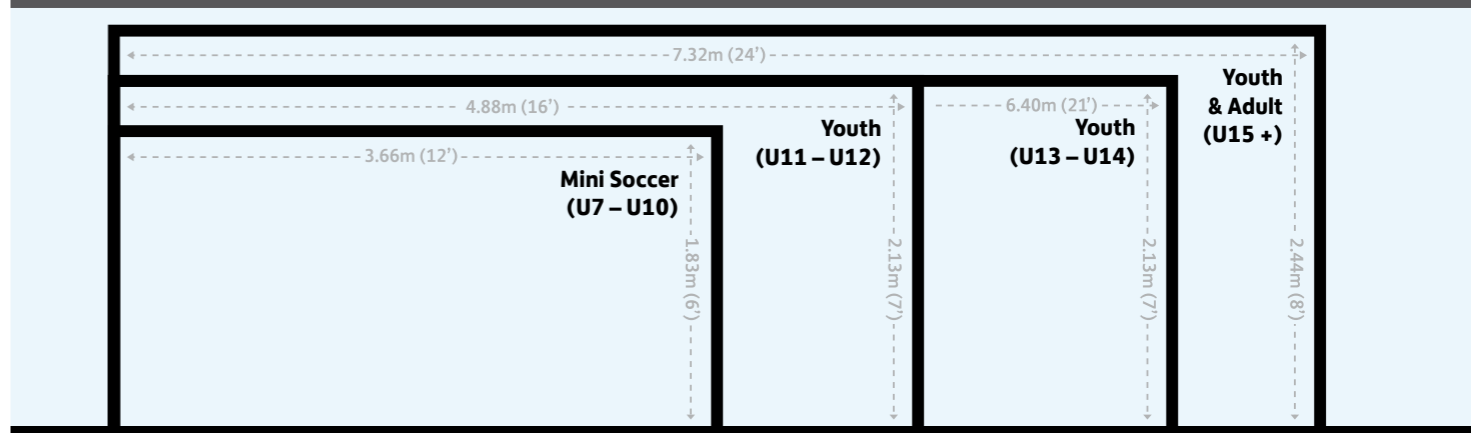
The floodlights need to be designed in such a way to allow each individual section of the pitch to be individually programmed.

For further details linked to community play please refer to The FA Guide to Floodlighting available from [TheFA.com/my-football](http://TheFA.com/my-football).

THE FA FLOODLIGHTING REQUIREMENTS		
Use	Property	Standard
Full size matches (FIFA's Class II)*	Maintained average illuminance	>200 lux
	Uniformity (Min/Ave)	>0.6
Cross play	Maintained average illuminance	>120 lux
	Uniformity (Min/Ave)	>0.6
Training	Maintained average illuminance	>120 lux
	Uniformity (Min/Ave)	No requirement

\*For further details linked to Stadia 3G FTPs, please refer to The FA Guide to Floodlighting and the appropriate FA Ground Grading Document.

## THE FA GOALPOST SIZES



- If a pitch is provided for U13 / U14, 21 x 7 goals are recommended; however, subject to league rules, 24 x 8 would be acceptable, as not all sites are able to provide for this age group.
- The size of goalposts purchased for your FTP should be based on your predicted usage plan and pitch markings.
- All goal posts must meet the latest versions of BSEN748:2004, BS8461:2005+A1:2009 and BS8462:2005+A2:2012.



Several serious injuries and sadly even fatalities have occurred in recent years as a result of unsafe or incorrect use of goalposts. Follow this guidance to minimise the risk of injuries.

#### Goalpost Safety Guidelines

The Football Association, along with the Department for Culture, Media and Sport, the Health and Safety Executive and the British Standards Institution, would like to draw your attention to the following guidelines for the safe use of goalposts.

Several serious injuries and sadly even fatalities have occurred in recent years as a result of unsafe or incorrect use of goalposts. Safety is always of paramount importance and everyone in football must play their part to prevent similar incidents occurring in the future:

- 1 For safety reasons goalposts of any size (including those which are portable and not installed permanently at a pitch or practice field) must always be anchored securely to the ground or have a weighted back bar.

- Portable goalposts must be secured as per the manufacturer's instructions; this is also a requirement for the Laws of the Game;
- Under no circumstances should children or adults be allowed to climb on, swing or play with the structure of the goalposts;
- Particular attention is drawn to the fact that if not properly assembled and secured, portable goalposts may overturn; and
- Regular inspections of goalposts must be carried out to check that they are properly maintained.

- 2 Portable goalposts should not be left in place after use. They should be either dismantled and removed to a place of secure storage, or placed together and suitable fixings applied to prevent unauthorised use at any time.

- 3 The use of metal cup hooks on any part of a goal frame was banned from the commencement of season 2007-08 and match officials have been instructed not to commence matches where such net fixings are evident for safety reasons. Nets may be secured by plastic fixings, arrow head shaped plastic hooks or tape and not by metal cup hooks. Any metal cup hooks should be removed and replaced. New goalposts should not be purchased if they include metal cup hooks.

- 4 Goalposts which are "homemade" or which have been altered from their original size or construction should not be used under any circumstances as they potentially pose a serious safety risk.

- 5 There is no BS/CEN standard for wooden goals and it is unlikely that wooden goals will pass a load or stability test. All wooden goals previously tested by independent consultants have failed strength and stability tests. The FA recommends that wooden goals should be replaced with compliant metal, aluminium or UPVC goalposts (this was updated in March 2012).

For reference, you should note that The FA and BSI, in conjunction with the industry, have developed standards for goalposts – BSEN 748 (2004) and BS 8461:2005+A1:2009. BS 8462:2005+A2:2012 (updated in March 2012). It is strongly recommended that you ensure that all goals purchased comply with the relevant standard. A Code of Practice BS 8461 has also been completed and copies of all of these standards are available from the BSI via their website at [www.bsigroup.com](http://www.bsigroup.com).

Funding for the replacement of unsafe goals is available via the Football Foundation and eligibility criteria and further details can be obtained from their website at [www.footballfoundation.org.uk](http://www.footballfoundation.org.uk).

The FA together with representatives from the industry, sports governing bodies and Government have prepared guidance notes for pitch users and pitch providers, which summarise the key priorities of the BSI's Code of Practice and provide further details on the information included above. These details are featured within the facilities section of The FA's website at [TheFA.com/my-football](http://TheFA.com/my-football).

**REMEMBER TO USE GOALPOSTS SAFELY AT ALL TIMES**



# Maintenance



**The FA encourages facility owners and managers to take the maintenance of their 3G FTPs extremely seriously to ensure longevity and the health and safety of users.**

3G FTPs should be brushed regularly and have a maintenance schedule in line with that recommended by the manufacturer. As a guide, the general rule is for one hour of maintenance is required for every ten hours of use. 3G FTPs should not have any rubber visible on the surface and the carpet pile should stand upright. If rubber lies on the surface or the carpet pile is flat, then it is a sign that the pitch isn't being maintained sufficiently. There are three broad types of surface maintenance:

### Routine / Regular

Drag brushing to redistribute the infill, brushing to lift the pile, localised topping up of infill (eg. penalty spot), and the regular removal of litter, leaves and other debris.

Bins and boot cleaning facilities should be provided in order to keep the pitch tidy, such as foot cleaning mats, boot scrapers and decontamination grills.

### Specialist Maintenance

Surface cleaning, power sweeping and decompaction of the infill with specialised equipment to ensure consistent performance, seam inspection and removal of any moss or weeds.

### Rejuvenation

If a surface is neglected and becomes heavily contaminated it will over compact and the drainage will be affected, reducing the performance characteristics and life of the pitch. In some circumstances the infill may need replacing through a rejuvenation process.

### Floodlight Maintenance

Maintenance will need to extend to the floodlighting system, and it is suggested that following the completion of the defects liability period, a specialist floodlighting contractor is retained to maintain the system.

### Replacement Fund (Sinking Fund)

It is considered that an artificial grass pitch has a life span of approximately seven to ten years depending on factors such as pitch type and quality, usage and maintenance. The FA strongly recommends that a sinking fund is established for the future replacement of the surface. It is estimated that the cost of resurfacing a full sized 3G FTP (including removal and disposal of the existing surface and infill and professional fees) will be between £180,000 and £200,000 at present day prices (as of January 2013).

A cost benefit exercise should be undertaken if a full rejuvenation of the carpet is being considered against the option of an early carpet replacement. It is suggested that an allowance of £25,000 per annum is placed into a 'ring-fenced' sinking fund account to cover these future costs.

### Warranty

Manufacturers and sales people will often refer to a warranty. It is important to clarify if this is a product or performance warranty as the product is often hard wearing and will last some considerable time meeting the product warranty.

However, the product may not meet the performance requirements for match purposes that the pitch is being developed to meet should the usage exceed the manufacturers guidelines. If in doubt you should always seek guidance from the individual manufacturer.

Recommended Footwear for Artificial Surfaces					
Footwear types					
	Trainer (astro turf)	Trainer (general)	Football Boot (moulded stud)	Football Boot (screw-in stud)	Football Boot (blade)
<b>3G Football Turf / Long Pile Carpet</b>	◆	✗	✓	✓	◆

✓ Recommended    ◆ Not ideal    ✗ Not recommended

### Recommended footwear

The above table is a reflection of the views of the carpet manufacturers on The FA's framework and not necessarily the views of all manufacturers and site operators. The FA recommends users of 3G FTP's check with their own site for specific details of which footwear is acceptable.

Site operators should erect a Do's and Don'ts board to advise users of acceptable footwear for their specific surface after discussions with their carpet manufacturer.





# Line Marking



**The largest pitch markings on the 3G FTP should always be white and training lines should always be red. These lines should be tufted in during the manufacturing process. The rest of the lines should be marked on by following these principles:**

- In accordance with Law 1, all lines must be of the same width, which must be not more than 12cm (5in).
- The additional pitch marking should be discussed in advance with your FA Regional Facilities and Investment Manager. Upon agreement, providers may wish to consider having the corner right angles stitched into the carpet to act as a permanent guide for over marking. For an example, please refer to page 24.

- When over marking additional pitches The FA recommends using the following colours for each format of the game:

	<b>White:</b> Main pitch markings
	<b>Red:</b> Training lines & Mini Soccer U7 & U8 (5v5) – 37 x 27m
	<b>Yellow:</b> Mini Soccer U9 & U10 (7v7) – 55 x 37m
	<b>Blue:</b> U11 & U12 (9v9) – 73 x 46m

- It is acceptable to mark pitches for Mini Soccer and 9v9 by using flat cones.
- If technical areas are to be marked they should be on the opposite side of the pitch to the viewing area and marked in accordance with the laws of the game.

## Types of Application

Applying a 2-PAC polyurethane compound (paint) is one option available to providers. A specialist should be considered to carry out these works as mistakes can prove to be costly. Application utilises airless spraying and surrounds or coats the fibre giving a hard wearing painted surface that can last 12-18 months.

Paint “buildup” can become a problem if the correct maintenance practices are not put in place. First application will be more costly as survey and set-out will need to be carried out, but with good maintenance practice the lines have improved longevity.

Water-based aerosols are a short-term solution carried out in-house. These types of paint may only last a matter of weeks but can be a cost effective option for some providers, especially those that have full time ground staff. If your facility requires multiple pitch markings, water-based aerosols may be fit for purpose as the lines can fade when no longer needed..

Always seek advice from a specialist company if you are unsure. Forward planning is essential and please bear in mind that your facility will require some down time.

## Legislation

The main governing factors for marking out white lines are the same as that for other routine tasks in the workplace.

### 1. Duty of Care

Under the Health & Safety at Work Act 1974 every employer has a duty of care to ensure the workplace is safe for their employees, contractors, visitors, players, and spectators.

### 2. The Control of Substances Hazardous to Health Regulations 2002 (COSHH)

Regulations to prevent ill health from exposure to any hazardous substances present in the workplace.

### 3. Risk Assessment

You are required to carry out assessments on all tasks carried out in the workplace in relation to the nature of hazard, worst outcome, person(s) at risk, current precautions, estimated risk and further precautions.

If all three of the above are addressed satisfactorily, this will automatically govern what to use for line marking, ensure best practice and, above all, safety.

It is the duty of all facility providers to ensure that all the regulations are adhered to, as they are ultimately responsible. If line marking is carried out by contractors then a specification should be drawn up to include all the safeguards outlined in these guidance notes. This could also extend to including detailed specifications of all products to be used.

# Appendix 1: Recommended Pitch Layouts

**FTPs can be marked in various ways to gain the maximum football developmental outcomes and economic benefit from a given site footprint.**

The following pages highlight various layouts for sites based on a main pitch at each format of the game. The layouts are deliberately progressive to ultimately show the full capacity at which an FTP could operate at. The FA recommends providers should establish the over-marking requirements of their key partner clubs for match play and training in order to deliver the football development outcomes required.

## Corner Flags

Socketed corner flags are recommended for use on stadia FTPs rather than the free standing options shown below:



THE FA RECOMMENDED PITCH SIZES							
Age grouping	Type	Recommended size without runoff (safety area around pitch)		Recommended size including runoff (safety area around pitch)		Total site footprint	
		Length x width (metres)		Length x width (metres)		Length x width (metres)	
Mini-Soccer U7/U8	5 v 5	37	27	43	33	48	39
Mini-Soccer U9/U10	7 v 7	55	37	61	43	66	49
Youth U11/U12	9 v 9	73	46	79	52	84	58
Youth U17/U18	11 v 11	100	64	106	70	112	76
Over 18 (senior ages)	11 v 11	100	64	106	70	112	76
Sand-based pitch refurb – 1	11 v 11	91	55	101	63	107	96
Sand-based pitch refurb – 2	11 v 11	91	55	101	61.4	101	63
Stadia FTP	11 v 11	100	64	106	70	120*	87*
Football + Rugby Union	11 v 11	100	64	126	75	126	86

\*The size of the spectator areas depend on the League Ground Grading requirements and site specific layouts. Therefore the overall footprint will vary from ground to ground.

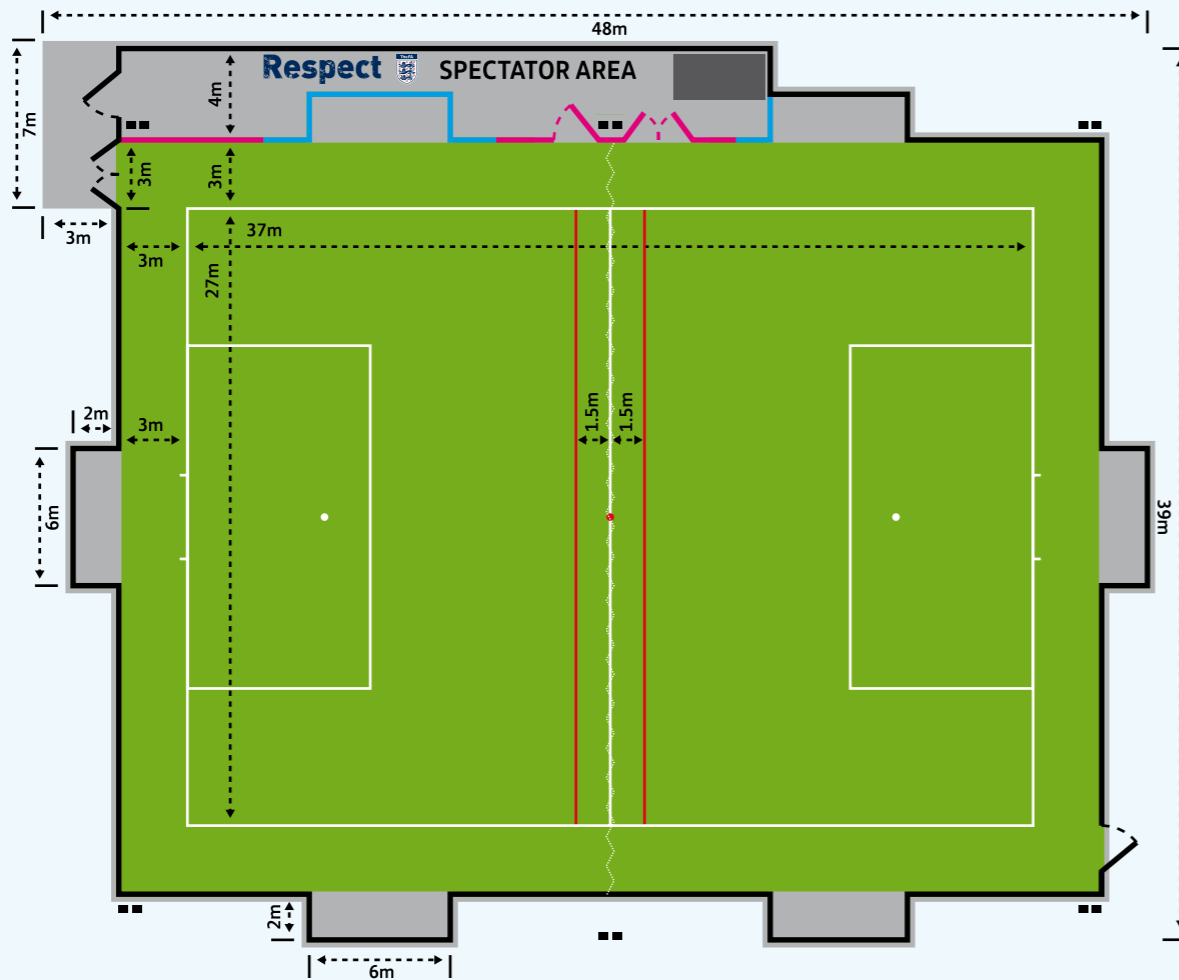
If you are considering developing a FTP to cater for U13 / U14 or U15 / U16 football, please contact your FA Regional Facilities & Investment Manager to discuss the recommend pitch layouts and site footprints.

### Mini Soccer U7 and U8 (5v5)

Site footprint:  
48m x 39m

Main pitch size:  
37m x 27m  
(40yds x 30yds)

Over-markings:  
2 at 27m x 17m  
(training only)



### Fence height key

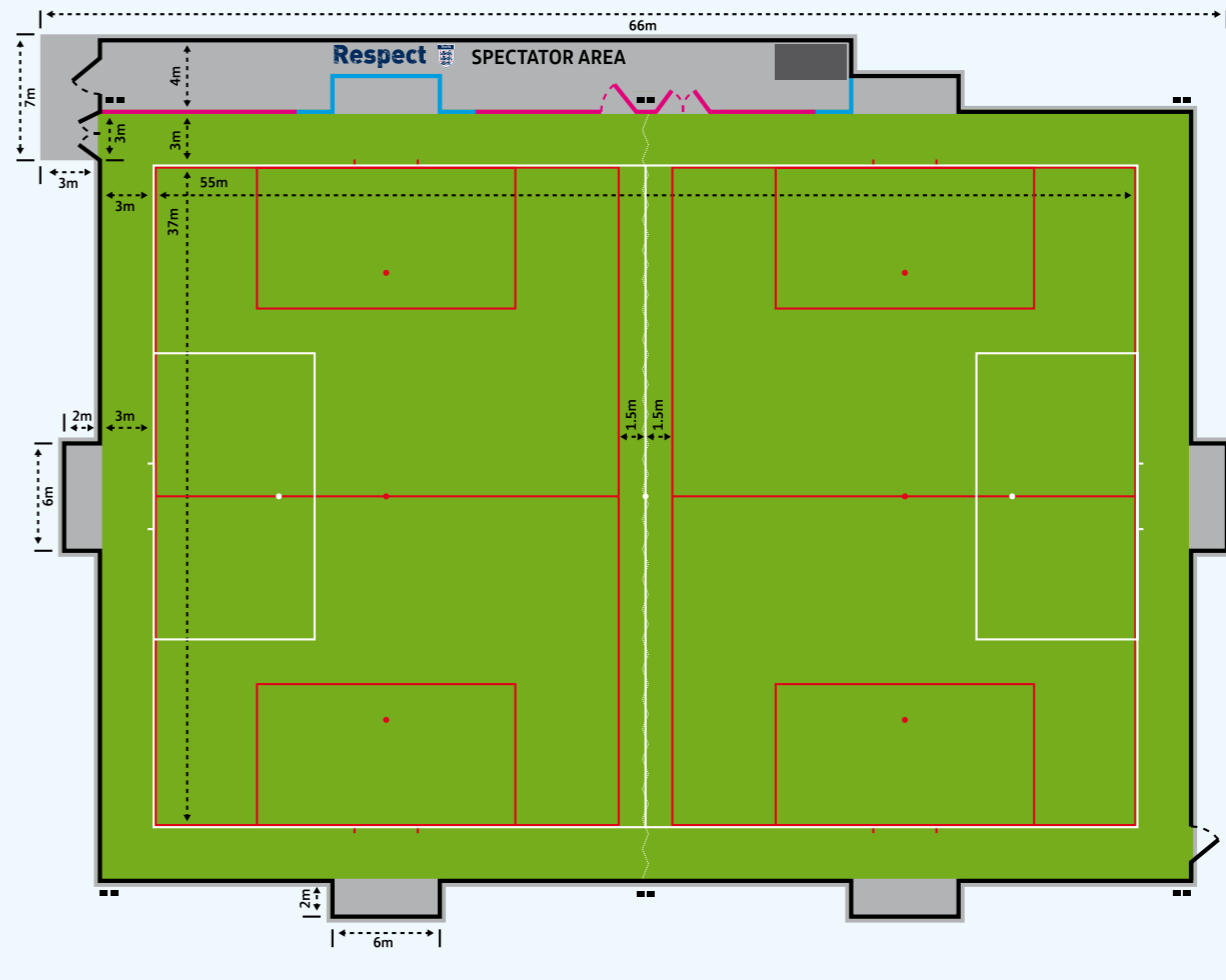
- 4.5m
- 2m
- 1.2m

### Mini Soccer U9 and U10 (7v7)

Site footprint:  
66m x 49m

Main pitch size:  
55m x 37m  
(60yds x 40yds)

Over-markings:  
2 at 26m x 37m  
(U7 / U8, 5v5)



### Fence height key

- 4.5m
- 2m
- 1.2m

**U11 and U12 (9v9)**  
Option 1

**Site footprint:**  
84m x 58m

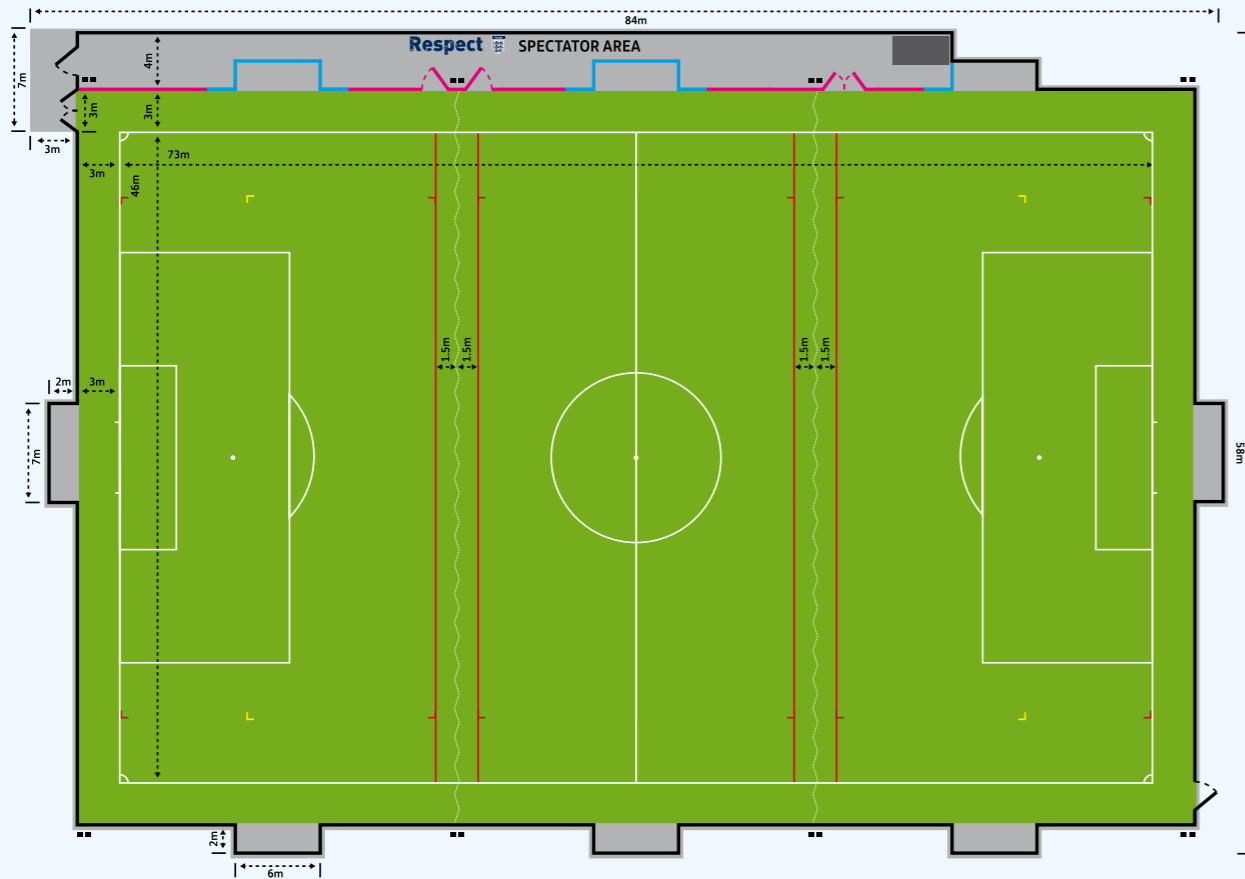
**Main pitch size:**  
73m x 46m  
(80yds x 50yds)

**Over-markings:**  
3 at 46m x 22.3m  
(training only)

**Corner markings:**  
55m x 37m  
(U9 / U10, 7v7)

3 at 37m x 22.3m  
(U7 / U8, 5v5\*)

\*Smaller than recommended size, but acceptable for matchplay use



**Fence height key**

- 4.5m
- 2m
- 1.2m

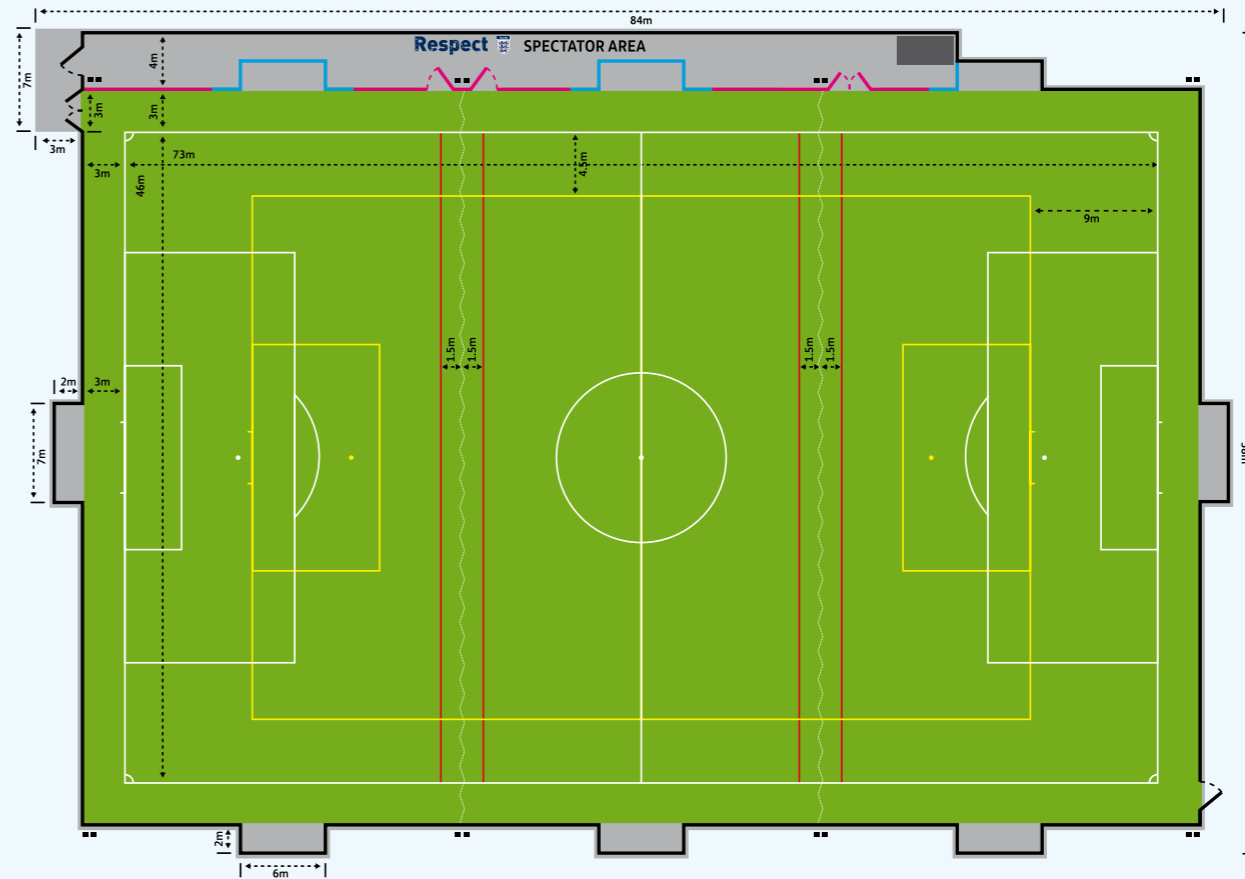
**U11 and U12 (9v9)**  
Option 2

**Site footprint:**  
84m x 58m

**Main pitch size:**  
73m x 46m  
(80yds x 50yds)

**Over-markings:**  
55m x 37m  
(U9 / U10, 7v7)

3 at 46m x 22.3m  
(training only)



**Fence height key**

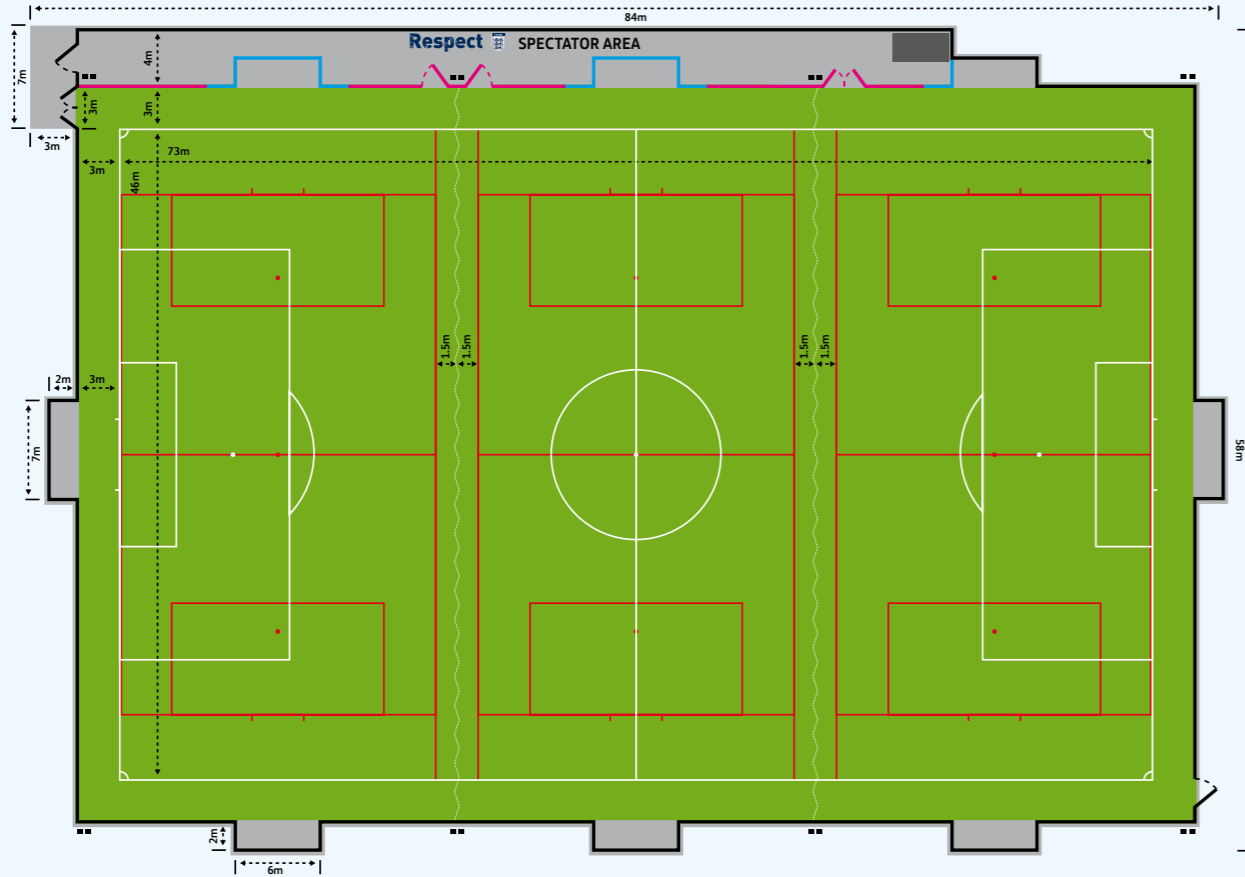
- 4.5m
- 2m
- 1.2m

**U11 and U12 (9v9)**  
Option 3

**Site footprint:**  
84m x 58m

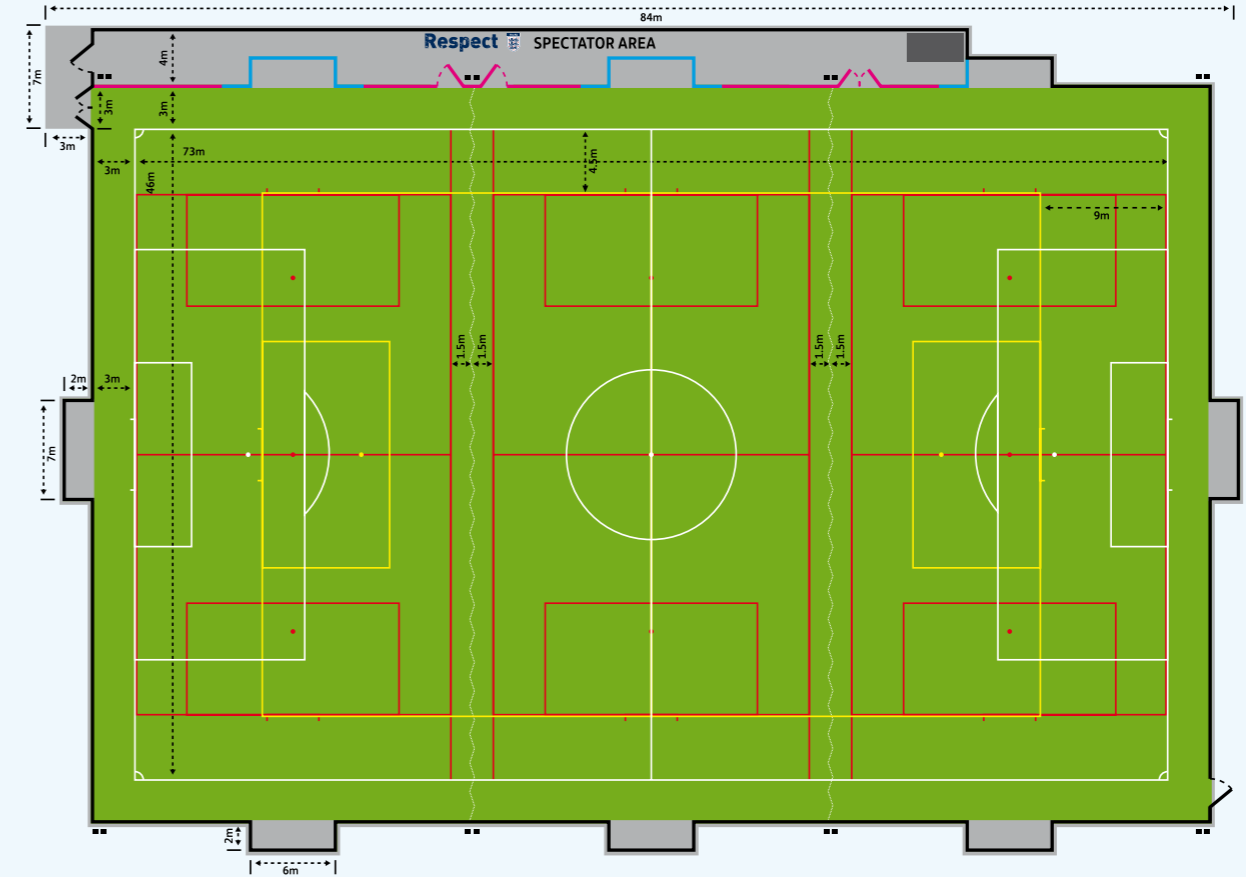
**Main pitch size:**  
73m x 46m  
(80yds x 50yds)

**Over-markings:**  
3 at 37m x 22.3m  
(U7 / U8, 5v5)  
3 at 46m x 22.3m  
(training only)



**Fence height key**

- 4.5m
- 2m
- 1.2m



**U11 and U12 (9v9)**  
Option 4

**Site footprint:**  
84m x 58m

**Main pitch size:**  
73m x 46m  
(80yds x 50yds)

**Over-markings:**  
55m x 37m  
(U9 / U10, 7v7)  
3 at 37m x 22.3m  
(U7 / U8, 5v5)  
3 at 46m x 22.3m  
(training only)

**Fence height key**

- 4.5m
- 2m
- 1.2m

**Over 18 and Adult Football**  
Option 1

**Site footprint:**  
112m x 76m

**Main pitch size:**  
100m x 64m  
(110yds x 70yds)

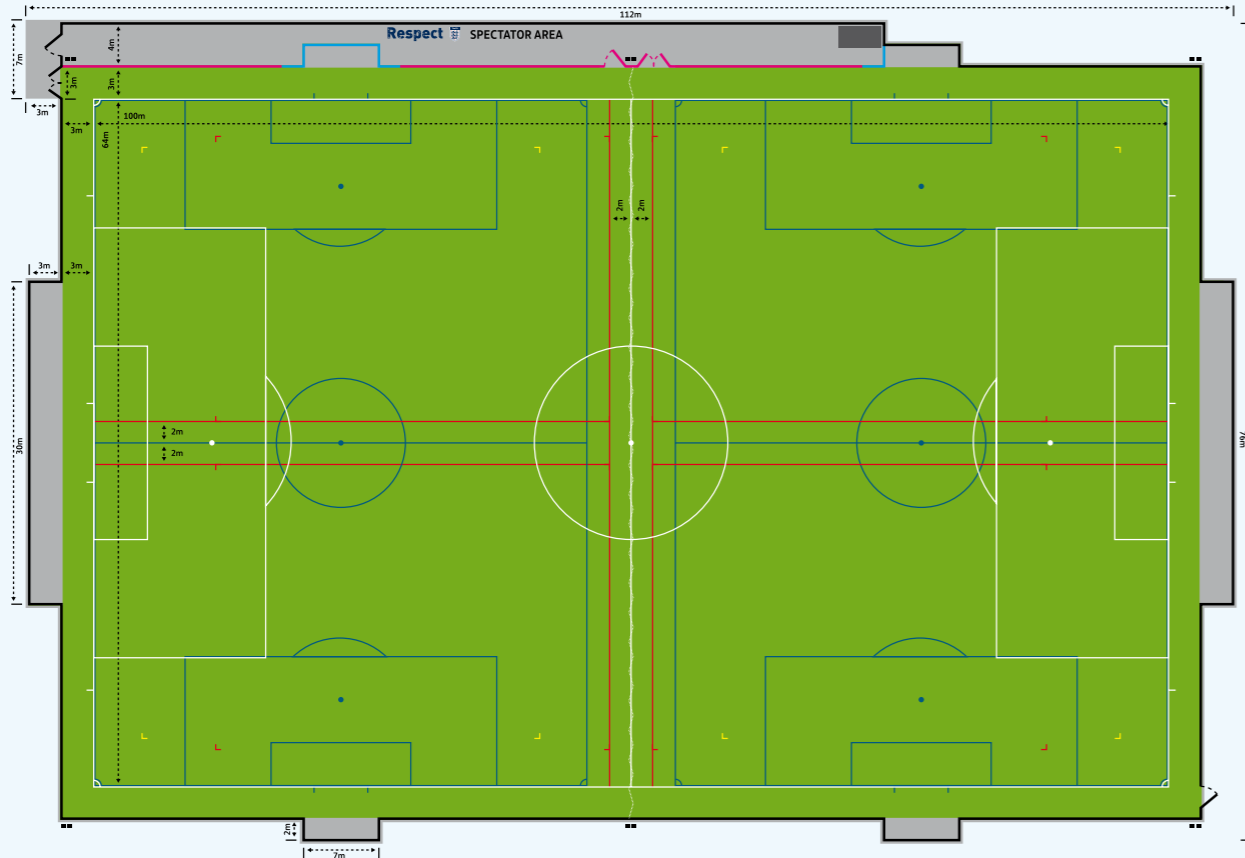
**Over-markings:**  
2 at 64m x 46m  
(U11/U12, 9v9\*)

4 at 48m x 30m  
(training only)

**Corner markings:**  
2 at 55m x 37m  
(U9 / U10, 7v7)

4 at 37m x 27m  
(U7 / U8, 5v5)

\*Smaller than recommended size, but acceptable for matchplay use



**Fence height key**

- 4.5m
- 2m
- 1.2m

**Over 18 and Adult Football**  
Option 2

**Site footprint:**  
112m x 76m

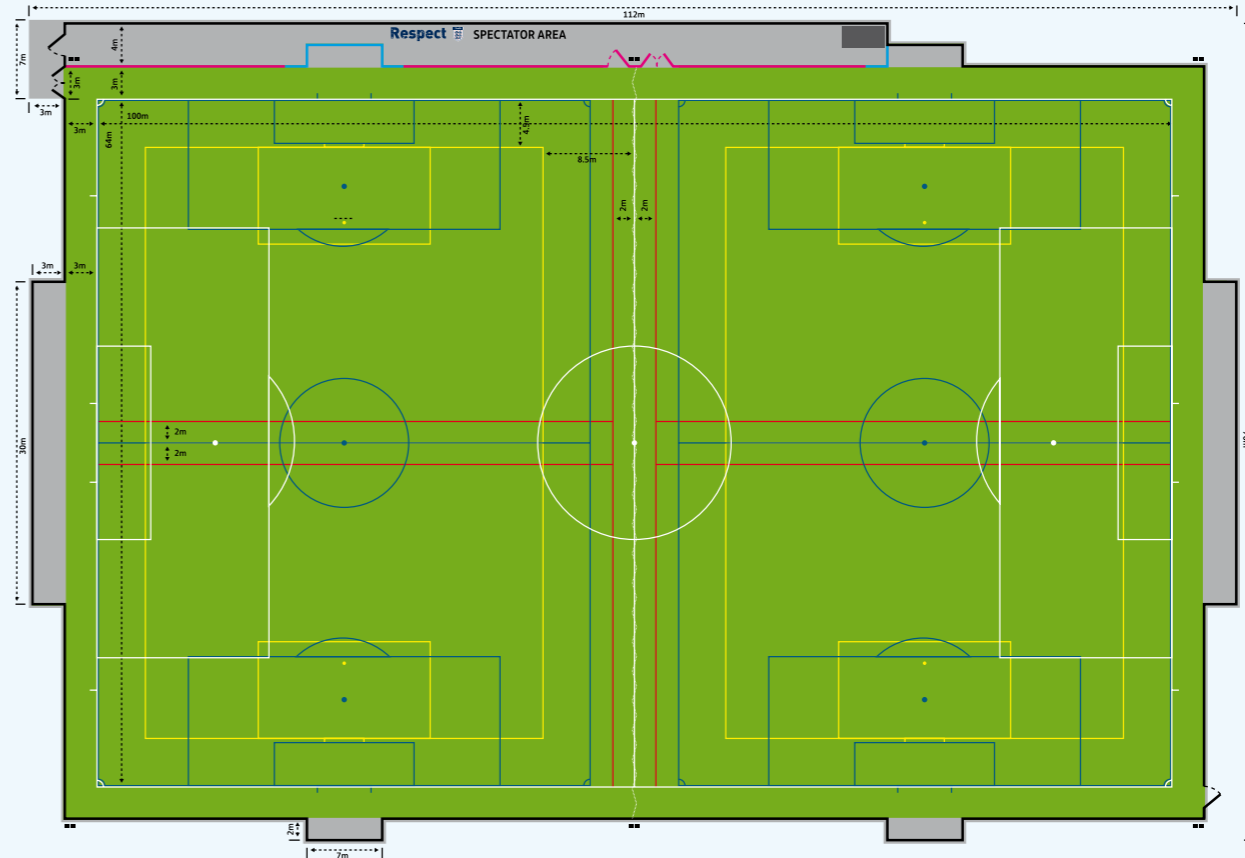
**Main pitch size:**  
100m x 64m  
(110yds x 70yds)

**Over-markings:**  
2 at 64m x 46m  
(U11/U12, 9v9\*)

2 at 55m x 37m  
(U9 / U10, 7v7)

4 at 48m x 30m  
(training only)

\*Smaller than recommended size, but acceptable for matchplay use



**Fence height key**

- 4.5m
- 2m
- 1.2m

**Over 18 and Adult Football**  
Option 3

**Site footprint:**  
112m x 76m

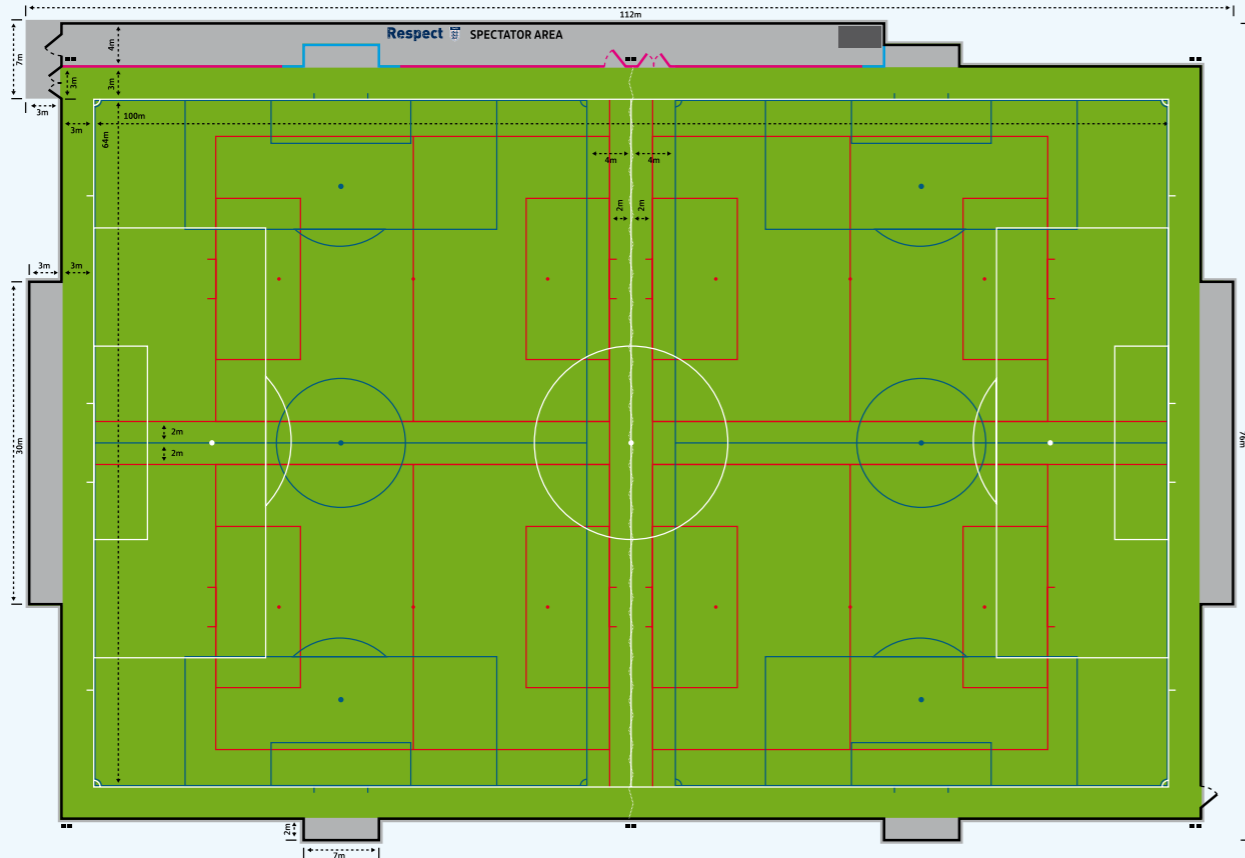
**Main pitch size:**  
100m x 64m  
(110yds x 70yds)

**Over-markings:**  
2 at 64m x 46m  
(U11/U12, 9v9\*)

4 at 37m x 27m  
(U7 / U8, 5v5)

4 at 48m x 30m  
(training only)

\*Smaller than recommended size, but acceptable for matchplay use



**Fence height key**

- 4.5m
- 2m
- 1.2m

**Over 18 and Adult Football**  
Option 4

**Site footprint:**  
112m x 76m

**Main pitch size:**  
100m x 64m  
(110yds x 70yds)

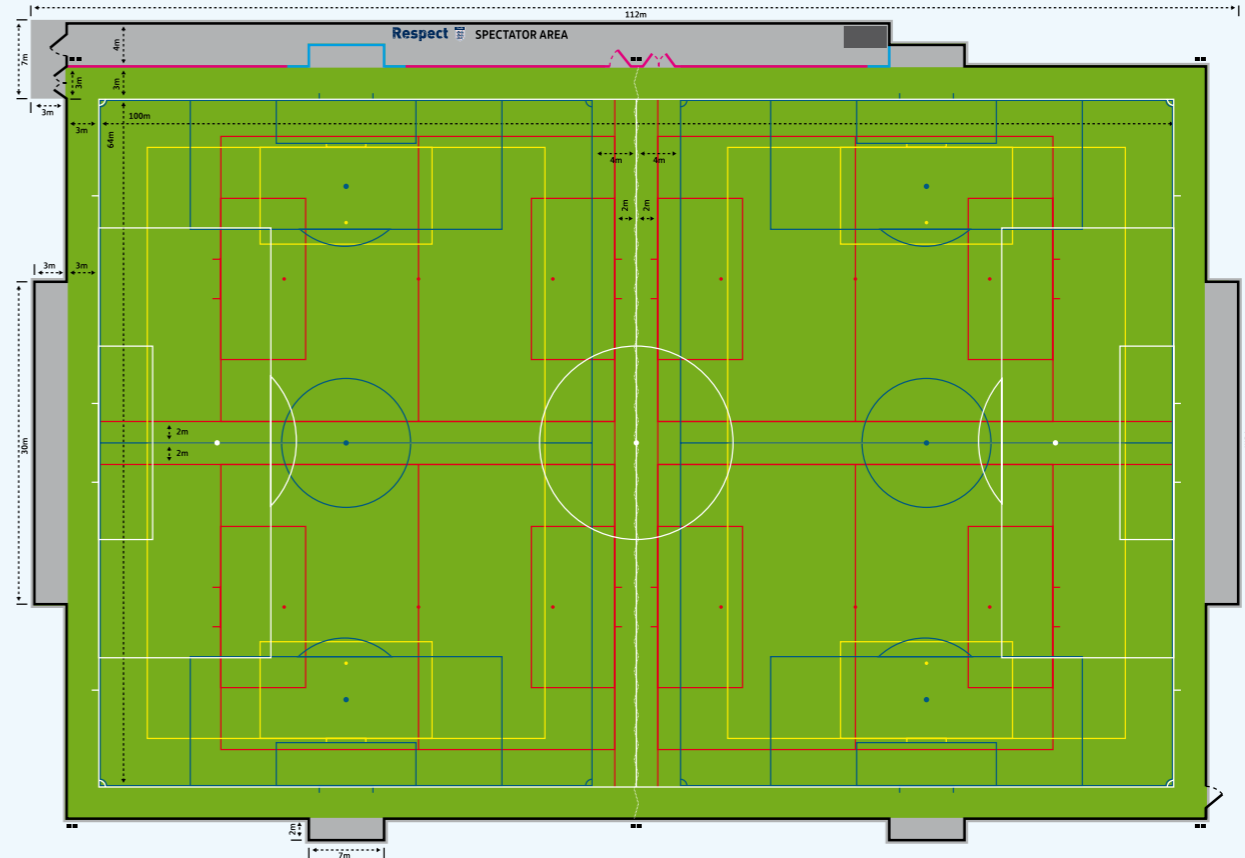
**Over-markings:**  
2 at 64m x 46m  
(U11/U12, 9v9\*)

2 at 55m x 37m  
(U9 / U10, 7v7)

4 at 37m x 27m  
(U7 / U8, 5v5)

4 at 48m x 30m  
(training only)

\*Smaller than recommended size, but acceptable for matchplay use



**Fence height key**

- 4.5m
- 2m
- 1.2m



## Refurbishment of a 101m x 63m Sand-based Pitch Option 1

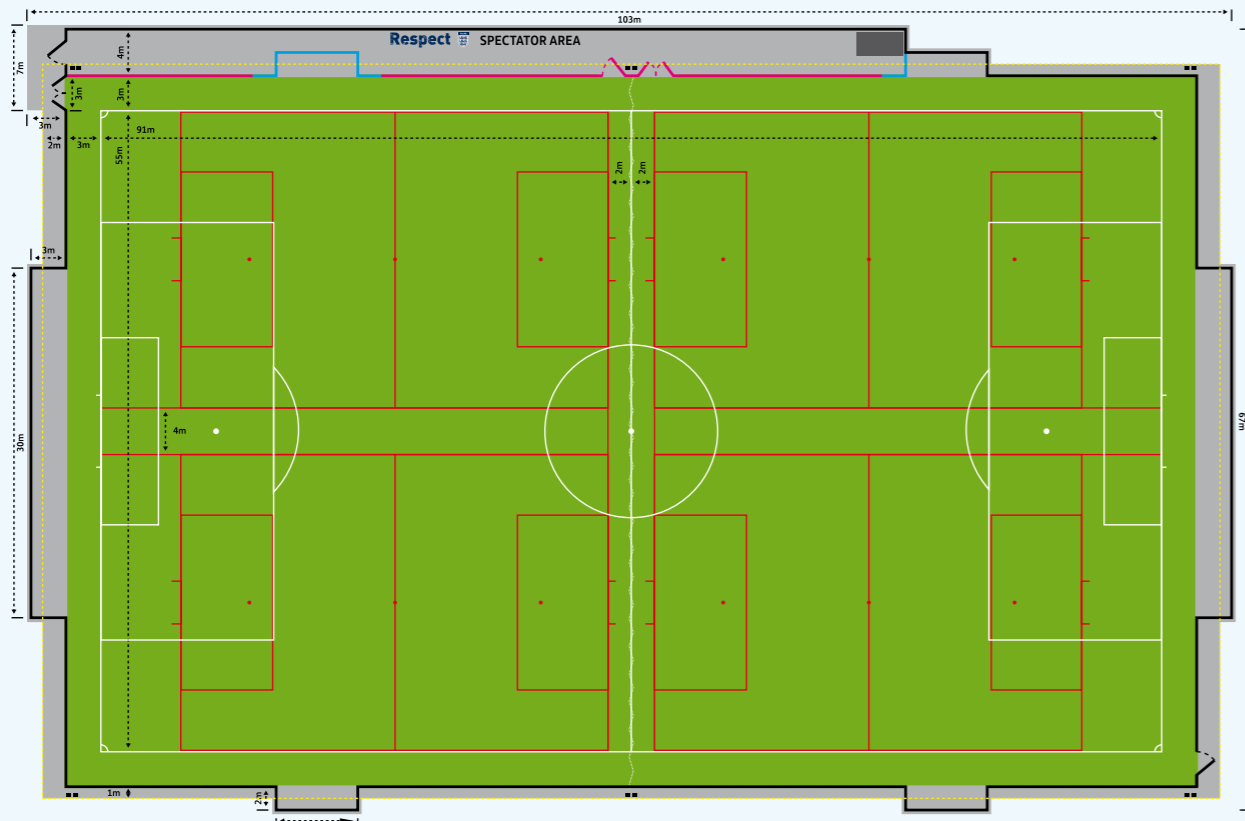
**Site footprint:**  
103m x 67m

**Main pitch size:**  
91m x 55m  
(100yds x 60yds)

**Over-markings:**  
4 at 37m x 25.5m  
(U7 / U8, 5v5\*)

4 at 43.5m x 25.5m  
(training only)

\*Smaller than recommended size, but acceptable for matchplay use



### Fence height key

- 4.5m
- 2m
- 1.2m
- ⋯ Original site boundary

In this example, the existing internal path will remain in situ and the fence line will be moved to the existing inner kerb line. While the existing surrounding path will act as a 1m mowing strip for the majority of the site, the pitch footprint will need to be extended to install goal recesses. The new fence posts will be installed into the macadam surround outside of the pitch kerb; the surrounding path will then be slurry sealed upon completion to provide a suitable finished surface.

## Refurbishment of a 101m x 63m Sand-based Pitch Option 2

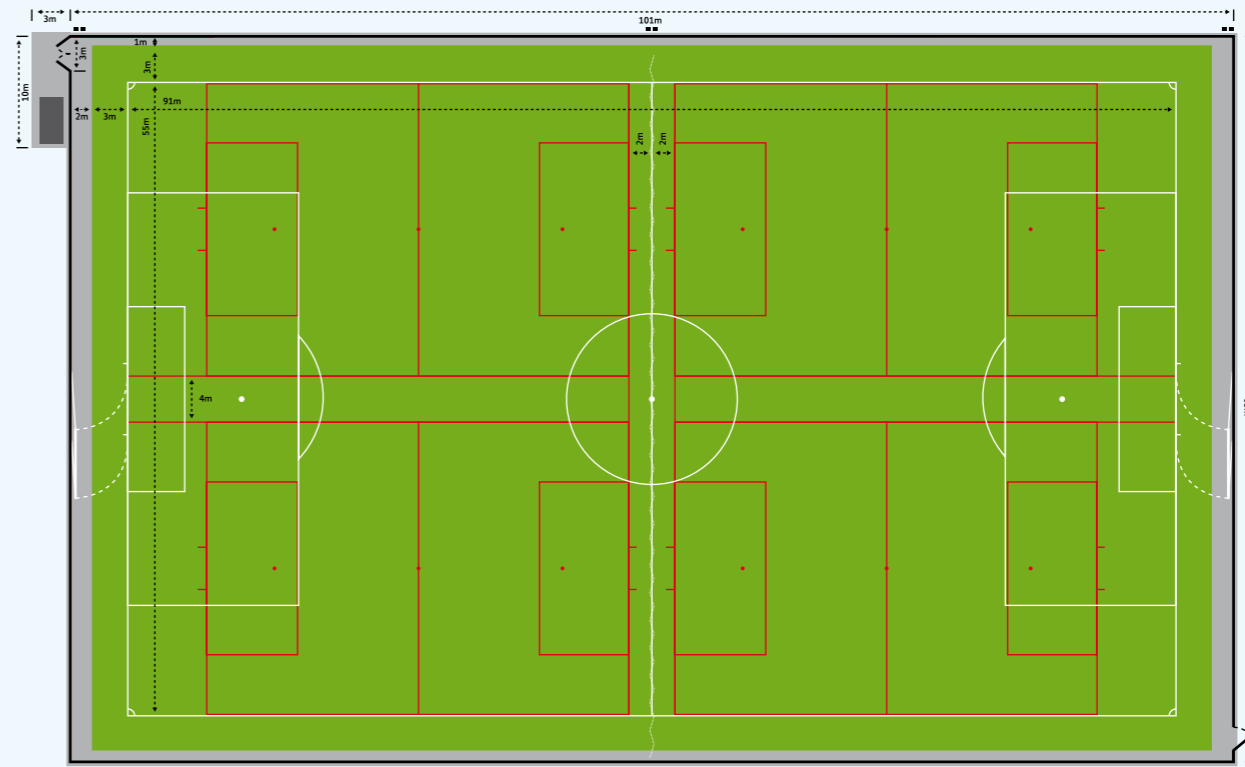
**Site footprint:**  
101m x 63m

**Main pitch size:**  
91m x 55m  
(100yds x 60yds)

**Over-markings:**  
4 at 37m x 25.5m  
(U7 / U8, 5v5\*)

4 at 43.5m x 25.5m  
(training only)

\*Smaller than recommended size, but acceptable for matchplay use.



### Fence height key

- 4.5m
- 2m
- 1.2m

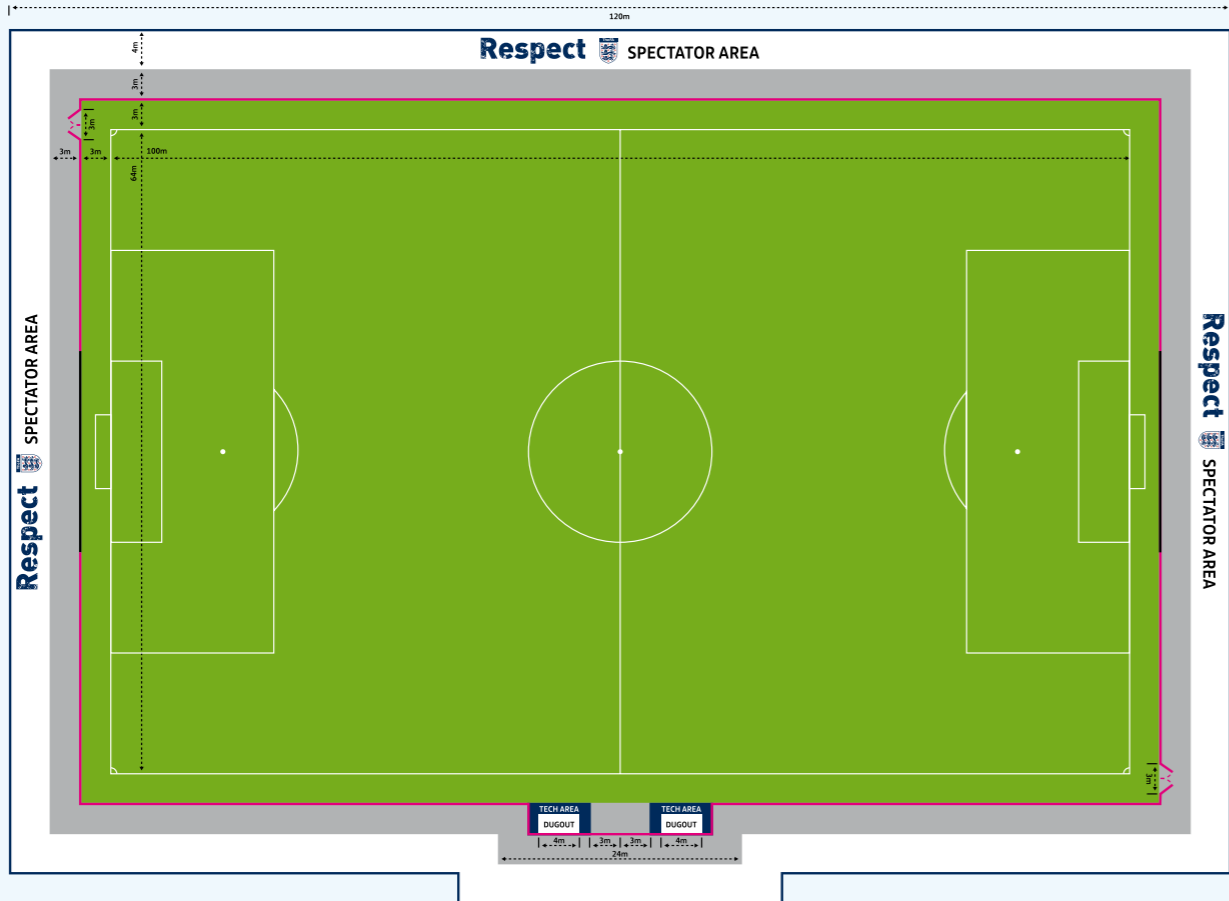
In this example, the existing fencing and tarmac area will remain in situ. Mini soccer goals for cross play and training will need to be stored on the tarmac area when not in use. Swing goals will be used for the 11v11 pitch.

**Stadia FTP**  
New build ground

**Site footprint:**  
120m x 87m

**Main pitch size:**  
100m x 64m  
(110yds x 70yds)

**Over-markings:**  
None – cross-play would need to be marked in flat cones



**Fence height key**

- 4.5m
- 1.1m

The size of the spectator area will differ from ground to ground depending on the League Ground Grading requirements; 4m is shown here purely for illustrative purposes.



**Football and Rugby Union Recommended Layout**

**Site footprint:**  
126m x 86m

**Main pitch size:**  
100m x 64m  
(110yds x 70yds)

**Over-markings:**  
None – cross-play would need to be marked in flat cones

**Fence height key**

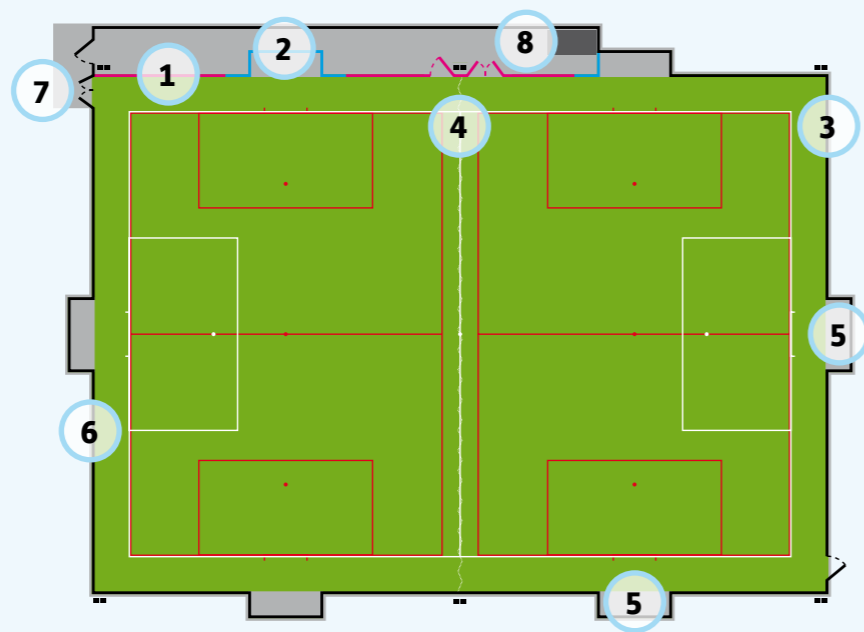
- 4.5m
- 2m
- 1.2m

Although rugby training can be carried out on all of the layouts provided so far, this pitch layout should be used for sites that require club rugby matches to be played on the pitch and an IRB compliant surface.

# Appendix 2: Common Elements of FTP Sites

**While The FA recognises that each facility will be different, and that local factors may affect exact site specifications, there are some elements which are considered essential.**

This diagram highlights certain key areas and provides illustrative photographs to assist in the correct implementation of the most common of these elements.



**1)** 1.2m in-filled pitch perimeter barrier to divide spectator area from FTP surface



**2)** 2m fencing to protect spectators behind goals



**3)** 4.5m high fencing around the edge of the facility



**4)** Curtains used to divide pitch widthways



**5)** Recessed tarmac areas allow safe storage of goalposts when not in use



**6)** A minimum 300mm mowing strip around outside of fencing to protect bounding boards and fence



**7)** Double gate access onto main pitch area for maintenance machinery etc



**8)** Storage boxes located inside compound for extra security

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### County FA Football Development Managers

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