

Dear John (Parish Chairman),

Find general proposal from Aylesford FC for development of a new all-weather sports pitch at Aylesford Recreation. In the document you will find diagrams of current lay, the proposed facility location along with some relevant FA documents that may be of interest to you.

As you are aware we have been lucky enough to be selected as 1 of only 4 priority projects from the local football facility plan from TMBC ([Jump to 3G section](#)) . This has been largely to the successful expansion of the football club in last few years and our current community offer which is now stretching beyond that of just Football. Which has provided us with an opportunity of substantial funding from the Football Foundation. Aylesford FC sees itself as a community-based football club and will continue to offer service to the local and wider community. A 3G would be transformational to the football club and would allow it to build on its current success, allowing more of the community to benefit. Initially in the short term this would see disability football and girls being offered, in addition to our boys sections.

I would like to add that these initial plans are a general guide and the football club are committed to working with the Parish and local partners. As the club want to make sure it has the least disruptive impact on the community. After a few independent surveys and talking to some key partners the below is a list of potential concerns, see in red ideas relating to how we solve these. I am happy for you to add any additional concerns to this list for me to provide further research.

Floodlighting -This is normally raised when building such a facility. The club would look to source the floodlights which cause the least amount of light pollution towards residents. Currently Waitrose has its lights on most the night for security anyway, so I don't see Light pollution being too much of an issue. In addition to this the lights would only be on when the facility was in use and a cut of time will be put in place in the evening 21:30 – 22:00 on consultation with residents and surrounding businesses.

Leaves – One of the main concerns raised by our site 3G survey was the number of trees around would cause a lot of leaves to fall on pitch which can cause damage to the 3G if not cleared regularly. This is more of an issue for the football club and we would look to hire in a caretaker to solve this, which may provide additional opportunities for the football club to work in partnership with the parish in ground maintenance in that area.

Parking – The facility would require some additional parking, which would be requested by the football foundation for a facility such as this. This would be covered in the cost of the build and could be placed on the rest of the waste land left over at front. In addition, we could look to Aylesford industrial estate for use of their car park as we use for the tournament. I know parking will continue to be an issue however this may provide a good opportunity to get some more, which can be managed internally.

Access – We are lucky enough to have great access links via Forstal road. If the facility was acquired users would be advised to access the facility via Forstal road, from motorway junction, rather than through the local village. I appreciate this would be difficult to monitor. However, I do believe Aylesford FC has been very accommodating of the parking restrictions in the current car park which gives me confidence we would achieve support from AFC teams.

Lease Period – The football foundation would require a lease period of at least 50 years for project funding, although I'm sure we could come to an agreement of this alongside the additional increase of lease period for the Pavillion.

I would like to personally thank the Parish Council who have been great since I took over as Chairman of the football club and I hope Aylesford FC has also shown to be community centred. I have received so much good feedback from our

members recently regarding the partnership that has transformed over the last year or so something which seemed to have been lost for several years previous. This would provide a truly transformation opportunity or the Club and one I have no doubt the Club would make a success. The committee is extremely excited of this prospect and proving as much support to make the club dream a reality.

If you have any further questions and or require any additional information, please do not hesitate to contact me, given the current situation I am working from home often.so feel free to contact me on any of the below.

Aylesfordcommittee@gmail.com

07701046089

Kind regards,

James (Chairman AFC)

Current Pitch Plan Aylesford FC



Pitch Sizes A1A = 5v5

A1B = 5v5

A1C = 7v7

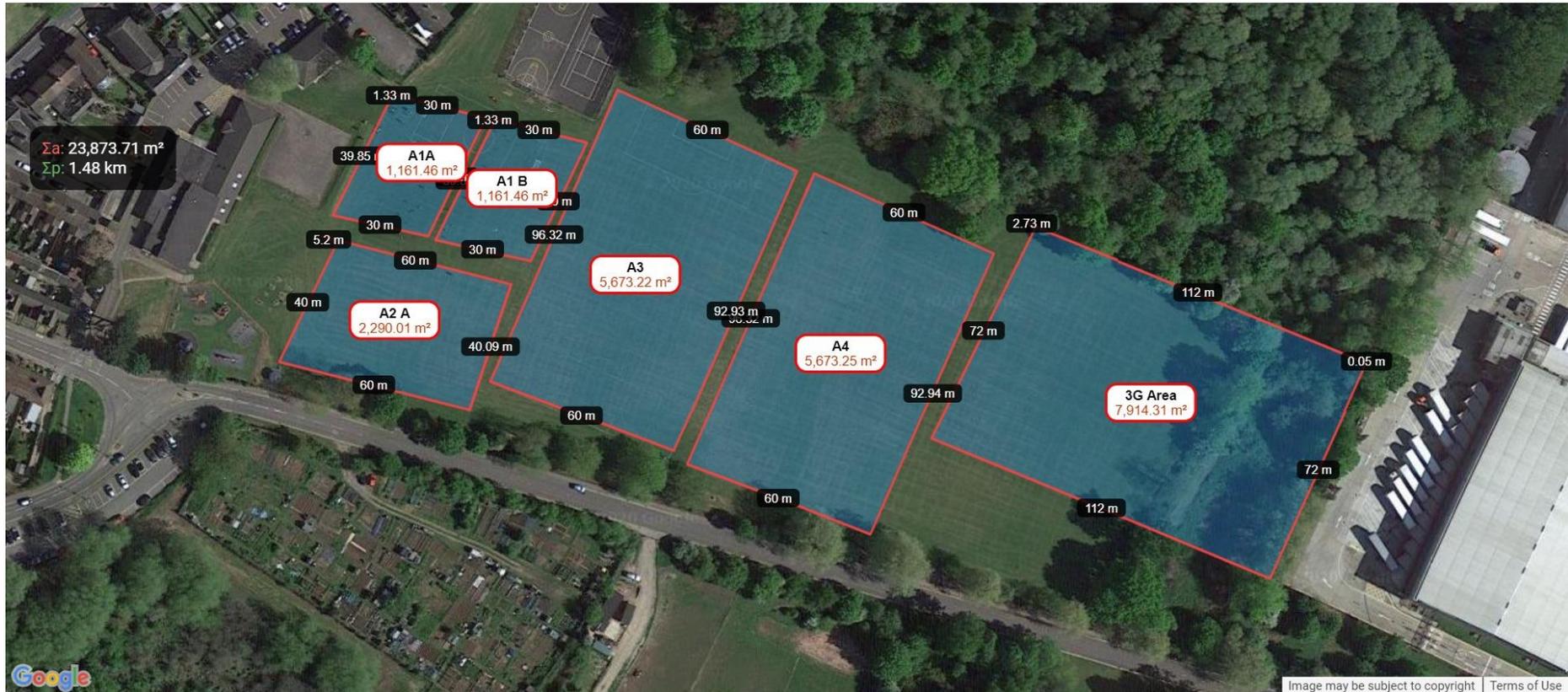
A2 = 11v11

A3 = 11v11

A4 = 11v11

- Currently we have 18 teams playing at Aylesford spread across 6 pitches (3 Teams Per Pitch). This has resulted in Aylesford FC reaching maximal capacity, and are currently not accepting anymore teams, despite a community desire for more girls teams (3 enquires this year)

New Pitch Layout (Including 3G)



Pitch Sizes A1A = 5v5 A1B = 5v5 A2A = 7v7 A3 = 11v11 A4 = 11v11 3G = 11v11

*Pitch A4 has now been rotated to accommodate the additional land. This rotation will not impact on pitch A3 on the current Aylesford pitch map. It would also be preferred by the club to move the pitch as far into the corner as possible, to impact the current recreational space as little as possible.

3G Pitch Map Detail



Points to Note

The 3G site size is specified by the FA (112m x 72m). In order for us to access the football foundations funding and allows for some key structures (See FA 3G Planning Appendix).

We have placed 6 Floodlights in recommended positions, however the positioning and number varies depending on the type of lumen they produce, so treat this as a guide only (4 -6 Floodlights in rectangle or square are most common).

Supplementary Facilities

The football club would like to explore additional facilities to be of benefit not just to us but the wider community and as such additional facilities maybe beneficial more long term see boxed blue area for potential location.

*With Parish approval Aylesford FC would look to develop the site further with the addition of Toilets/Changing Facilities. These could be in the form of portable cabins and or modular builds or converted containers. The Club would look to find funds for these, initially this would be placed on the remain unused waste land at back.

Additionally, we know the scouts put in additional electricity and water supply, if approved the club would look to acknowledge this in some capacity. They currently use pavilion free of charge for their meetings.



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).

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.

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.

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)
3G Football Turf / Long Pile Carpet	◆	✗	✓	✓	◆

✓ 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.

Over 18 and Adult Football
Option 3

Site footprint:
112m x 76m

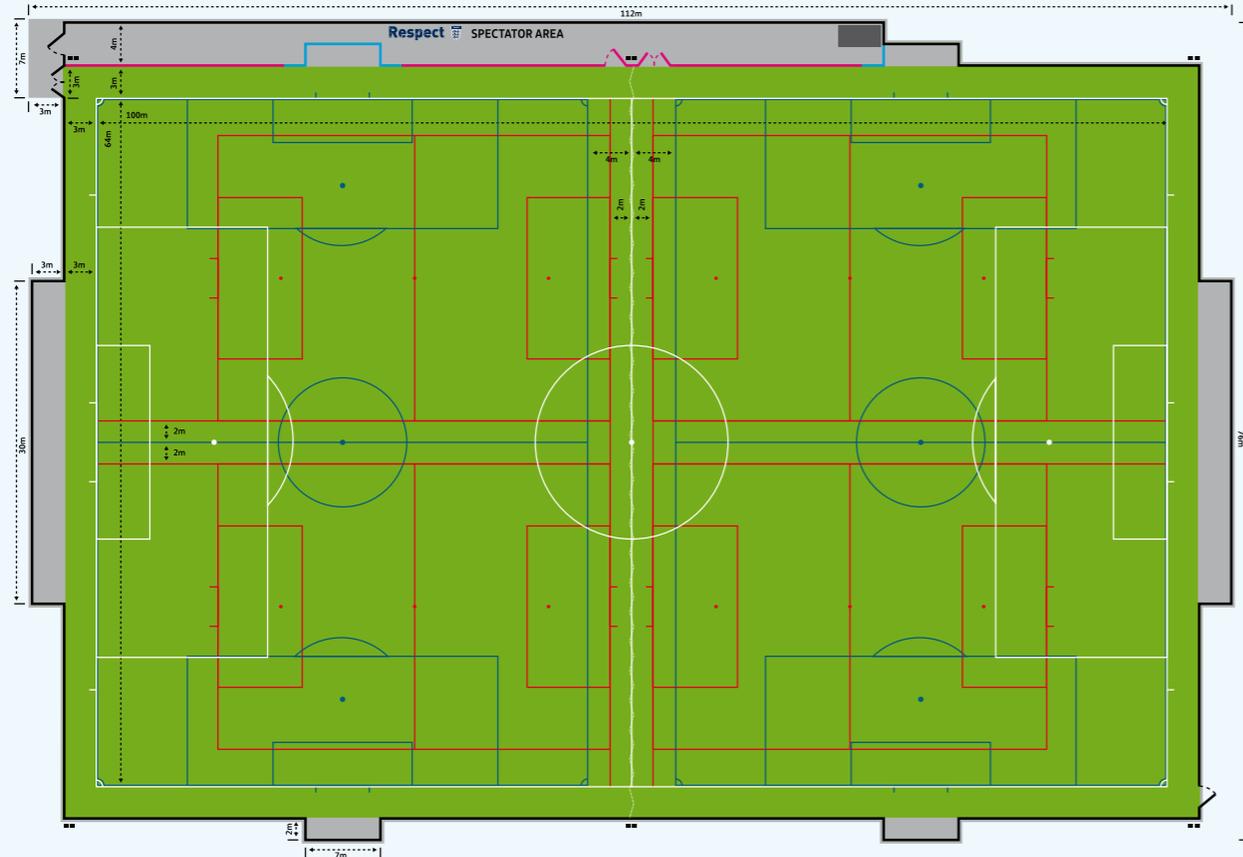
Main pitch size:
100m x 64m
(110yds x 70yds)

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)

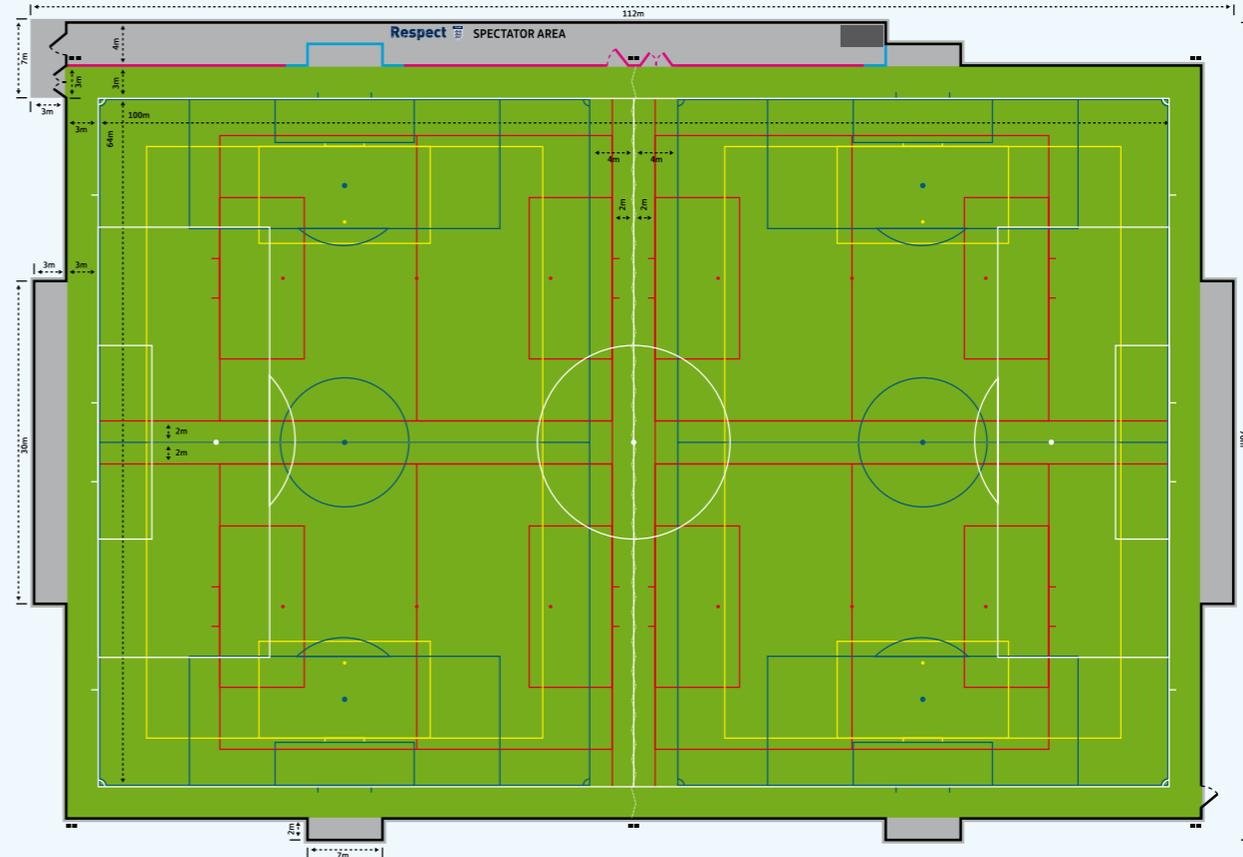
Over-markings:
2 at 64m x 46m
(U11/U12, 9v9*)

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

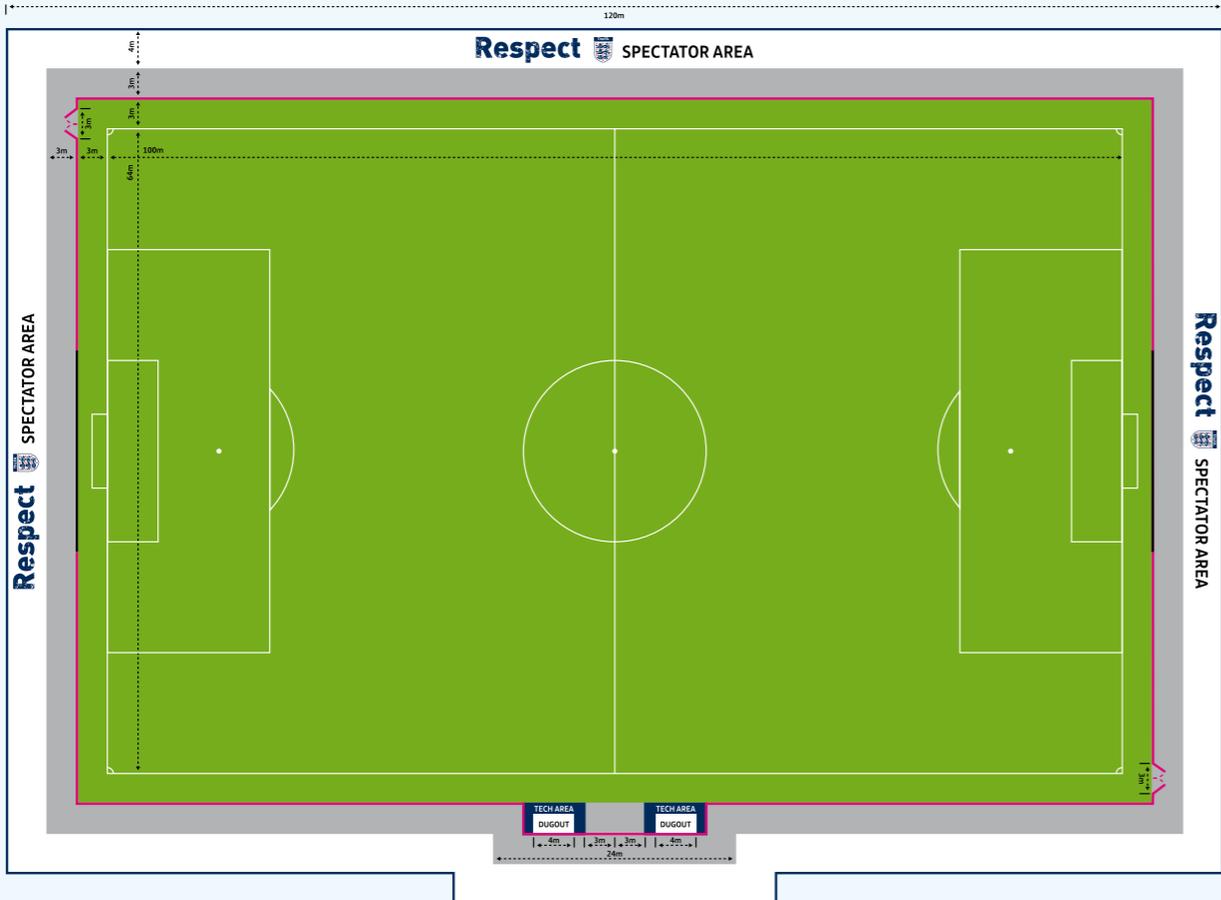
- 4.5m
- 2m
- 1.2m

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

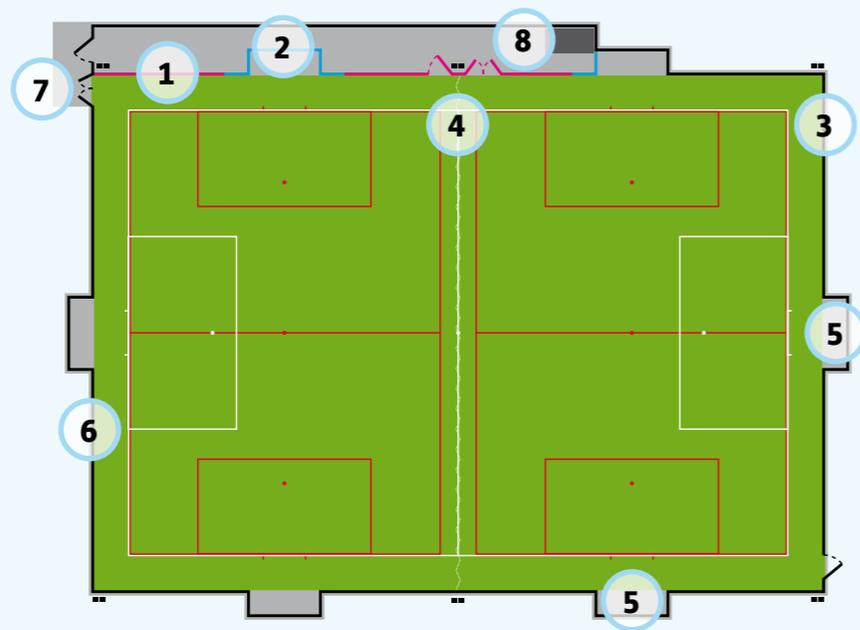
- 4.5m
- 2m
- 1.2m

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

THE FA GUIDE TO FLOODLIGHTING

BUILDING, PROTECTING AND ENHANCING SUSTAINABLE FOOTBALL FACILITIES



1863 150 YEARS 2013



Floodlighting for Grass and Artificial Surfaces



Clubs wishing to compete in FA competitions and in the National League System must achieve the required standard.

Grass Pitches – Competitive matches

Clubs wishing to compete in FA competitions and in the National League System must achieve the required standard relevant to the level of competition. They must obtain an approved Floodlighting Survey Chart and a Floodlighting Inspection Report in order for a club to be accepted for entry into a competition (see the Maintenance and Testing section for further details). Leagues sanctioned by The Football Association or County Football Association may also operate a floodlighting standard. If a League sets a standard below that set by The Football Association, Clubs must still comply with The Football Association's minimum standards if they are to be accepted into FA Competitions. Similarly, if a League sets a standard higher, then the Club must comply with the League requirement.

A club should check the required floodlighting standard with the league and process required for acceptance to play in that league. As a general guide, the table opposite shows the minimum standards that apply to non-league clubs in the pyramid.

COMPARATIVE FLOODLIGHTING CHART

Ground Grade / Step	League Level	Eave	Emin	Emin / Emax	Requires Testing
Grade A (Step 1)	Conference	250 lux	100 lux	0.25	Every two years
Grade B (Step 2)	Conference N & S	180 lux	100 lux	0.25	Every two years
Grade C (Step 3)		120 lux / 180 lux new*	n/a	0.25	Every two years
Grade D (Step 4)		120 lux / 180 lux new*			Every two years
Grade E (Step 5 – 4)		120 lux / 180 lux new*	n/a	0.25	Within 6 months of application
Grade F (Step 5)		120 lux / 180 lux new*	n/a	0.25	Every two years
Grade G (Step 6)		120 lux / 180 lux new*	n/a	0.25	Every two years

*120 lux refers to existing systems, any upgrades or new installations should achieve 180 lux.

Please note that lighting for clubs in the professional game or for televised matches are not covered in this guide.

Glossary of Terms

Term	Symbol	Explanation
Illuminance	E	The quantity of light falling on a surface
	Eave	The average horizontal illuminance as a result of either calculation or measurement
	Emax	Maximum pitch illuminance on a surface at a specific point
	Emin	Minimum pitch illuminance on a surface at a specific point
Illuminance Uniformity	Emin ÷ Emax	
Lux	Lux	The measurement of light; the unit of illuminance lumen per m ² , incident on a pitch surface 1 Lux = 1 Lumen/m ²



Floodlighting is required to maximise the use and improve the economic sustainability of 3G Football Turf Pitches (FTPs).

Grass Community Pitches & Training

Installation of floodlights on community grass pitches tends to result in overuse and subsequently pitches that are not fit for purpose. As such floodlight installations on community grass pitches are not encouraged.

On average, a well maintained grass pitch should have a carrying capacity of about five to six hours of weekly use, depending on local conditions. The implementation of floodlights on such pitches will in most cases have a detrimental affect on the playing qualities of the pitch surface. This will require increased maintenance and therefore additional expense. It is therefore vital that organisations assess the intended use of the proposed pitch and assess the cost of implementing floodlights against any increase in outputs / income from the site when reviewed against available budgets for additional maintenance.

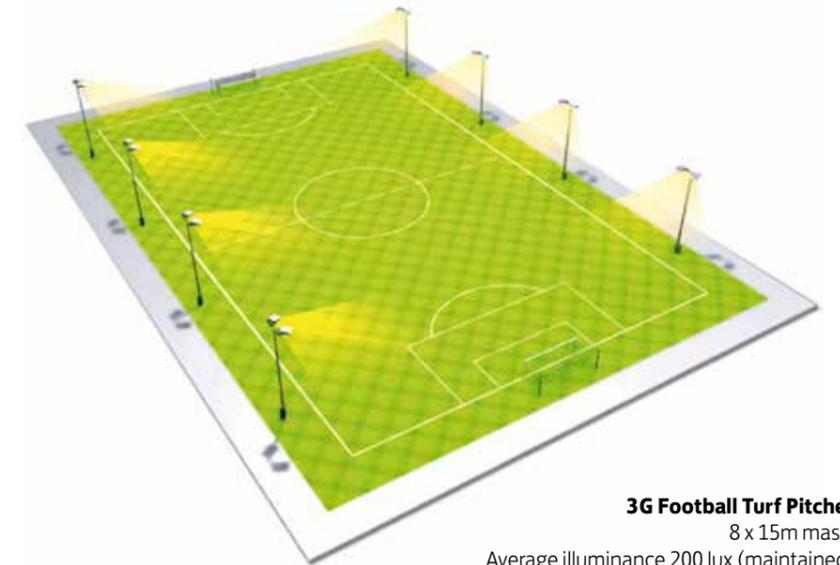
However it is recognised that not all clubs have access to appropriate 3G Football Turf Pitches and that in some cases the use of floodlights for training on separate training areas can help reduce the pressure on the main playing pitches. Thus the recommended lux levels for a training pitch is 120 lux.

3G Football Turf Pitches

Projects involving 3G FTP construction generally incorporate floodlights as part of the design for the overall project since floodlighting is required to maximise the use and improve the economic sustainability of artificial grass pitches. The FA would not support building a 3G FTP where floodlighting is not provided.

Lighting of full size pitches is normally achieved by two or three lamps mounted onto normally an eight-column system which is positioned along the side of the pitch and outside of the fence-line. Typically for 3G FTPs, eight columns, 15 or 16 metres high, are used. These should be switchable so that segments of the pitch can be lit independently.

As many league and cup competitions specify the minimum level of lighting they require, it will be necessary to determine the competitions that the teams using the pitch will compete in and alter the design accordingly. Where no requirements are stated the minimum levels of performance should be in accordance with FIFA's Class II which for 11-a-side football is a minimum maintained average illumination of 200 lux.



3G Football Turf Pitches
8 x 15m masts
Average illuminance 200 lux (maintained)

To minimise running costs and for flexibility of use, the lighting system should allow part illumination of the pitch (half pitch and/or thirds) and a lower level of lighting for training which is a minimum maintained average illumination of 120 lux.

Typically, 3G Football Turf Pitches are designed for multi-sport use and consideration should be given to the specific lighting requirements of all anticipated users.

Image courtesy of Abacus

Design and Technical Considerations



A lighting specialist will guide you through all aspects of your project.

Appointment of Lighting Consultants

The early appointment of an accredited lighting consultant (see Design and Technical Considerations section) is critical to the success of your project.

Clubs must seek the expertise of an 'approved' electrical or lighting engineering contractor. An 'approved' contractor is one which is in possession of the NICEIC (National Inspection Council for Electrical Installation Contracting) Approved Contractor's award; ISO 9000/BS5750 (International Standards Organisation / British Standard) or a qualified lighting engineer and member of the Institute of Lighting Professionals. A lighting specialist will guide you through all aspects of your project including feasibility, design, planning, installation and maintenance.

Before appointing lighting consultant / companies it is important to scope out the project brief, establishing clear requirements and identifying any known constraints. Some of the key requirements to consider are:

- Outline project objectives
- Justification of need – existing and planned weekly hours of use; when and level of play; required floodlighting criteria in your league
- Site / pitch details including site map with boundaries if available
- Critical date for completion (if known)
- Budget – capital and revenue secured and unsecured
- Risks: insurance, planning
- Site access / car parking / public transport.

A template project brief is attached as appendix A and programme of use template as appendix B of this guide.

Design and Technical Requirements

Ensuring that an appropriate feasibility study and design specification is prepared by a suitable specialist in line with the club and league requirements will limit any issues and unnecessary expense. Floodlights must be designed and installed by qualified professionals as already highlighted.

When designing a floodlighting system, it is important that an assessment of the available power supply is made to determine if adequate capacity is on hand, as bringing a new supply to site can increase costs dramatically (see Costs section for further information). The total installed power requirements for an eleven-a-side pitch is likely to be in the order of 35 to 40 kilowatts. Equally it is important to consider that long term power supply needs not only include playing areas, but also other ancillary facilities on site, as this may dictate the capacity of incoming power and the installation plan.

Annual energy costs should be evaluated from one supplier to the next and budgeted in the clubs business plan so that the long term annual costs are achievable from the outset.

Lighting Requirements

Lighting should provide uniform illumination over the pitch appropriate for the proposed grade of play. Lighting requirements are dictated by good, safe and stable visual conditions for players and viewing requirements of spectators.

Particular attention should be paid to providing low glare and uniform lighting within goalmouth areas to ensure good viewing conditions for goalkeepers. Equally consideration needs to be taken to limit the visual obstruction of the match for spectators wherever possible.

Access for installation, maintenance, budget (capital and ongoing maintenance and energy costs) and potential planning challenges are among, but not limited to, the additional considerations when designing floodlighting installations that meet a clubs needs.

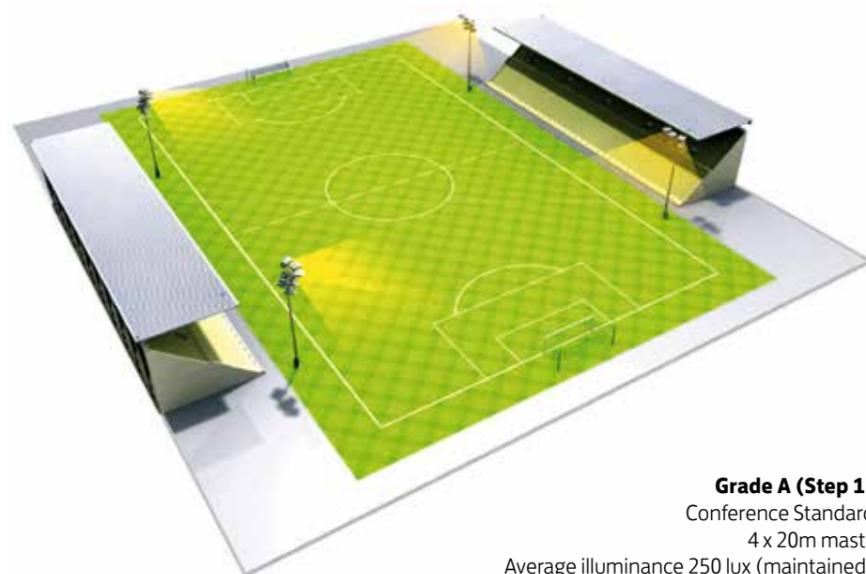
Columns

The number of columns is dictated by your needs and the site conditions. The required and future lighting levels, the visual impact of columns, minimising light spillage, clubhouse and spectator locations are part of the consideration when designing the right model for your club.

Particular attention should be taken to ensure player safety and therefore no lighting structures should be placed within 5m of the side lines or goal lines. Furthermore, care should be taken to ensure that the structures do not obstruct the sightlines of spectators and spectator walkways.

Specialist sports lighting manufacturers have developed a range of products to meet the needs of football clubs. These include fixed masts, raising and lowering of masts and telescopic masts designed to meet different needs and budgets. Telescopic masts whilst more expensive, are often used in sensitive locations and can solve planning issues where the visual intrusion of columns is a concern, however the operator must take into account the extra time required to raise and lower the columns.

Other factors may also include supply costs and access both installation and on going maintenance. We would advise clubs to conduct a simply analysis of the pro's and cons of the solution options available to them.



Grade A (Step 1)
Conference Standard
4 x 20m masts
Average illuminance 250 lux (maintained)



Grade B – G (Steps 2-7)
Minimum FA standard for new installations
6 x 15m masts
Average illuminance 180 lux (maintained)

Images courtesy of Abacus

Design Solutions

Typically eight, six or four columns of between 15m to 18m in height are used for grass pitches suitable for FA competitions and National League System.

Modern lamp technology and designs have significantly improved the efficiency of lighting systems by as much as 30% when compared with older installations and helping to reduce light pollution as result. The FIFA Guide to the Artificial Lighting of Football Pitches and Sport England's Artificial Sports Lighting guidance documents contain more detailed information about the design and technology used for artificial sports lighting.

It is vitally important the club thinks about how and when they plan to use the lights. This will influence the designs. For example, remote switches will allow the club to switch the lights on / off from an accessible source usually the club house particularly useful on dark winter evenings. Variable switches will allow the club to illuminate parts of the pitch they wish to use, particularly useful for training and managing / rotating pitch use.

Furthermore there are often practical solutions to other site issues. For example the columns can provide electrical sockets to parts of the ground that previously been unable to reach, brackets can be mounted for tannoy's / public address systems, lights for spectator areas / footpaths or training areas.



Planning Permission

Before submitting a planning application for floodlights, consultation with the local planning department is recommended. Planners will also advise of other organisations to consult with (eg, Environmental Health) so that the level of information can be confirmed before an application is made. An accurate assessment of the proposed usage is useful when discussing floodlighting plans (See appendix B).

When submitting a planning application for floodlights, the planning authority is likely to require a lighting spillage drawing showing the levels of light pollution and their impact on the surrounding neighbourhood and their properties. Lighting engineers or specialist lighting contractors can provide such plots and in many cases handle the planning application.

Consideration needs to be given to the visibility of the lighting columns and pitch location in relation to nearby residential properties. The use of soil bunding and tree-planting can significantly reduce noise levels and visual impact of columns.

When constructing new pitches consideration should be given to its orientation and site location avoiding sensitive planning issues wherever possible. It is advisable to research the impact of other similar local floodlit facilities so that a strong justification can be put forward to outweigh any concerns.

Consideration also needs to be taken regarding the hours and pattern of use. Failure to consider these issues may lead to planning challenges, therefore early consultation with Local Authority planning departments are strongly recommended to discuss the issues you may face.

Furthermore, engage residents that might be affected by your scheme early on and actively respond to their views and concerns. It might be possible to negotiate longer winter evening use in return for shorter summer use when residents will be using their gardens.

On receiving planning consent, often conditions are attached it is therefore vital that the club fully understand the impact of these conditions on your ability to deliver your activities and strictly adhere to these conditions to protect future use. For example a planning authority might limit the number of floodlit matches for a grass pitch per week due to the impact on neighbouring properties. A facility operator must be careful to ensure that the business case for the floodlights takes into account these restrictions.

Construction Programming and Payment Schedules

The optimal time to complete works is outside of the winter playing season usually in the spring and summer periods (March to Sept). The winter months are usually avoided due to the trench and reinstatement work required around the pitch.

Typically, for a new installation, the construction period is five to six weeks. This consists of up to two weeks to complete the trench, cabling and foundation works. Then a period of two weeks to allow the foundations to cure and then a further two weeks for installation and final certification of use. Appendix C shows an example on site checklist that a contractor would carry out prior to starting works. The checklist also includes the client's responsibility.

Clubs should discuss and agree the payment schedule up front and on appointment of the contractor. Usually a lighting contractor will expect an up front deposit payment, payment on part completion and further payment on certificated completion / handover. Often contractors are open to negotiating depending upon your cash flow situation. The club needs to be fully appraised of all the costs relating to the scheme and your responsibilities and commitments. See the Costs section for further information.