CYMRU FOOTBALL FOUNDATION

ARTIFICIAL GRASS PITCH (3G) GUIDANCE

ISSUE 1: FEBRUARY 2023

CONTENTS

ARTIFICIAL GRASS PITCHES (AGPS) OVERVIEW 2

THE DIFFERENT TYPES OF SURFACE 2

PITCH DIMENSIONS 4

FUTURE PITCH DESIGNS 4

ADVANTAGES AND DISADVANTAGES THAT RESULT FROM 3G PITCH INSTALLATIONS 5

THE REQUIREMENTS FOR A DETAILED FEASIBILITY STUDY 7

FACILITY COSTS AND DEVELOPMENT IMPLICATIONS 10

LIFECYCLE AND ANNUAL MAINTENANCE COSTS 11

ANNEX A: FOOTBALL FOUNDATION MICROPLASTICS UPDATE JANUARY 2023 13

ANNEX B: INDICATIVE GUIDANCE ON WORLD RUGBY 3G STANDARDS 15

ANNEX C: PITCH DIMENSIONS 16

ANNEX D: A GUIDE TO CURRENT 3G PRICES 17

ARTIFICIAL GRASS PITCHES (AGPS) OVERVIEW

Second and Third Generation (2G and 3G) Artificial Grass Pitches (AGPs) have been in use, by the team sports of football, rugby and hockey, for a number of years. The shorter pile, 2G carpets are suitable for competitive hockey, together with general multi-sport, non-contact training.

Without doubt, a large number of leisure and education institutions, together with clubs, have experienced the advantages of 2G and 3G AGP installations, providing the opportunity to play sport throughout the year and without interruption as a result of poor weather conditions.

However, because of the significant capital and revenue costs, viability, as well as sustainability challenges and their impact on other facilities, the provision of full sized AGPS must be viewed in the same way as other large, built, strategic sports facilities.

Financial planning is a significant consideration for all organisations who are thinking of making the enormous investment that artificial pitches demand. Any organisation considering such a development should already be multi-purpose, have a significant infrastructure, management capability, income generating capacity and funds in place to demonstrate financial viability and be serving a wide catchment area/significant population base.

The plans required to deliver a successful project are referred to throughout this guidance and in particular there is a section covering feasibility studies, market testing and other pre-project considerations on pages 5 to 8.

THE DIFFERENT TYPES OF SURFACE

Depending on the user requirements demanded by sports clubs, leisure providers or education institutions, there are a number of options when considering the type of pitch surface to select ranging from short pile to longer pile 3G carpets to even considering non-turf, polymeric surfaces for netball, tennis, basketball, for wheelchair users or general open access sites.

Second Generation (2G) artificial grass surfaces consist of two elements: synthetic turf and infill. They have a short pile carpet, infilled with sand and normally installed over a shockpad. The carpet is typically between 13mm-24mm in pile height. Generally, these surfaces are either sand-dressed or sand-filled.

Such facilities are the most popular choice to serve hockey needs and general sports training.

'Gen 2' is a new Second Generation 'multi-sport' surface developed by the FIH which is designed to provide sustainable facilities with a dynamic surface for multiple sports. These surfaces have been developed by hockey in collaboration with tennis and netball and are suitable for both full-sized hockey and with rebound boards, Hockey-5s, the official short form version of Hockey. The surface is also suitable for recreational tennis and netball.

Third Generation (3G) AGP installations differ in their development as the surface is generally supported by a sand and rubber infill. The infill is important to support the carpet pile, recreate the performance qualities of real grass and reduce the risk of injury. These pitches are typically used for the playing of football as the longer pile and rubber infill attempts to replicate the ball roll and bounce, together with the traction properties of natural turf pitches.

Other natural infill materials instead of rubber are available in different artificial grass installations and may secure FIFA accreditation. However, rubber crumb infill is currently, still the most commonly used for reasons of cost, stability of infill and longevity. Cork for example is being used in a few cases as an alternative and more environmentally acceptable infill, particularly in hotter climates where temperature is a consideration. However, it is more expensive, needs more maintenance, the infill migrates more easily and performance deteriorates more quickly. Examples of other infills being developed include coconut husk mixes and blended walnut shells. This is a constantly evolving, specialist area of design development and guidance is always under review. **ANNEX A provides a summary of latest guidance on the 3G pitch infills.**

For football played under competition rules, the facility must also satisfy FIFA Quality certification (testing every 3 Years) or FIFA Quality Pro certification, with testing required annually.

3G pitches with additional design requirements needed to support specialist rugby i.e. with the associated head-level impact activities - involving tackling, scrummaging and lineouts will be more expensive to construct, maintain and replace. See **ANNEX B**.

AGP systems can be manufactured and installed to the meet the requirements of World Rugby, Rugby Football League (RFL) and International Football (FIFA). But if a pitch is certified by RFL/FIFA, this does not necessarily mean it meets World Rugby regulations.

AGPs used for competitive football at a senior level must be FIFA **certified, both in their in-situ characteristics (installation) and their manufacturing/factory standards.**

The FIFA quality assurance testing includes:

- How the player and surface interact;
- How the ball and surface interact - bounce and roll;
- How the surface reacts to all weather conditions;
- The length of pile – its vertical nature;
- The integrity of the surface and its life cycle;
- The overall constitution and manufacturing integrity;
- Evidence of the maintenance regime to be employed together with an on-site inspection of the equipment that has been recommended to undertake regular maintenance works;
- Monitoring and recording of maintenance activities.

PITCH DIMENSIONS

There are no set dimensions required for AGP teaching or training areas.

However, where there is a business case for a full -sized competition pitch to host senior football matches in recognised competitions, the AGP should be designed with a 'field of play' to meet the dimensions for 11v11 football at the required levels as shown in **ANNEX C.**

As well as meeting the required competition dimensions for the field of play allowance should be made to meet **the industry standard of 3m run-offs for player safety**, measured from the edge of the field of play to the nearest obstructions i.e. floodlights, pitch rails or dug outs.

FUTURE PITCH DESIGNS

Many people refer to the development of '4G' pitches. But do they exist?

4G pitches and synthetic turf

Currently there are 4G pitch options available, although these have not been recognised as competitive sport compliant by the National Governing Bodies.

These AGP options stem from the development of 2G and 3G technology and include a mixture of the two pile types. The pitch system is created using a short pile on the bottom, with a long pile sown through, removing the need for any infill material.

Such an artificial surface is more expensive and currently lacks the playing characteristics necessary to receive FIFA accreditation and licensing.

4G surfaces are therefore not recommended for consideration at this time. However, the term continues to be widely but incorrectly used, so don't be confused!

All contractors and manufacturers understand that AGP surfaces and systems must be approved by NGBs, including any new generation sports pitches.

ADVANTAGES AND DISADVANTAGES THAT RESULT FROM 3G PITCH INSTALLATIONS

Undoubtedly there are a number of benefits that arise from having 3G pitch facilities – making them a popular choice of AGP amongst clubs and education institutions.

Users can expect to experience:

- An all-year-round playing surface, in all weather conditions, although snow and frost can be an issue affecting use;
- Reduced maintenance costs when compared with high quality natural turf and hybrid pitches. **However, they are more expensive to maintain** when compared to basic, club standard, grass pitches;
- Environmental benefits include savings in respect of pitch irrigation;
- Set against these benefits are:
    - the high costs of installation;
    - having to spend up no less than £200k between Years 6-10 to replace the carpet and perhaps up to £80k in the 2nd replacement cycle to replace any shockpad;
    - additional maintenance obligations and costs;
    - environmentally detrimental impacts, which include:
        - the potential for the pollution of water ways and drainage systems through the migration of rubber crumb and microplastics – spilling off the pitch, via footwear and clothes[1];
        - travel time – grass pitches tend to be 'closer to home' and within a reasonable walking and cycling distance, whereas 3G pitches tend to demand no less than a 20minute drive time, with the associated negative carbon footprint implications;
        - ongoing concerns with regard to the safety of infill materials;
        - recycling challenges – the spent materials cannot be landfilled and have to be removed from site, deconstructed via expensive technology or transported and cleansed for re-use in other settings.

A useful update on 3G AGP design considerations that has recently been shared by the Football Foundation in England is summarised in **ANNEX A.**

This guidance recommends that the development of 3G AGPs are generally only considered as a shared club hub facility, for example on an education site, where a number of clubs can

[1] It should be noted that the EU are proposing to ban rubber crumb for 3G pitches. The proposal is that from 2029 it will not be possible to buy rubber crumb, but pitches with rubber crumb can remain. Therefore, for a pitch lasting 10 years the last use would be in 2039. (The European Parliament is expected to vote on this in 2023.) The main rubber crumb producers are in the UK and Denmark and it is hard to say if the UK will follow the EU. If it does, and suitable alternative infill/s cannot be found, then 3G carpet manufacturing may decline and there may be a shift to hybrid turf pitches.

share a quality facility, where maximum use can be made of the pitch in the day time, as well as evenings and where the riparian responsibility for maintenance and replacement falls to the Local Authority.

However, even the shared club hub development can only be considered a good approach if it is supported by the necessary feasibility and business planning process - the early preparation of pre-construction plans and establishment of the hub management group, along with access protocols to benefit all hub catchment clubs.

Current evidence in Wales, shows that it is unlikely that single voluntary sector organisations i.e. individual clubs, will be in a position to establish the necessary cash balances to cover the necessary lifecycle costs and thereby secure the sustainability of the facility through the funding of the replacement carpet between Years 6-10.

Therefore, the full potential of artificial surfaces, for most organisations, will only be realised on shared sites and developed through a local authority, education and club partnership.

FAW is preparing facilities plans in partnership with all LAs, and this approach will identify strategic priority areas for the development of future full-sized AGPS.

THE REQUIREMENTS FOR A DETAILED FEASIBILITY STUDY

It is becoming increasingly apparent that early AGP projects have accumulated insufficient sinking funds to replace the surface when needed. Therefore, it is essential to evidence that the facility will generate enough money to cover the running costs and a sinking fund to replace the facility in 8-10 years' time. A recent Football Foundation review of AGP operators in England has identified significant shortfalls in replacement carpet sinking funds i.e. shortfalls in the set aside funds of 41%.

Full business and development plans for new full sized AGPs are therefore required to evidence that they are sustainable. The feasibility process must also include a public consultation and gap analysis and demonstrate that the new facility will not negatively impact on the sustainability of an existing facility within proximity (i.e. displace users and revenue).

The importance of feasibility studies cannot be overstated. It is vitally important to get the design of facilities right. With regards to AGPS, because of the significant capital and revenue costs we recommend the early preparation of a detailed investigation and options appraisal informing a feasibility study. This is essential to inform a grant application and to safeguard the long-term sustainability of the facility. We have to be satisfied of enough planned use and income to establish the necessary cash balances to cover the annual maintenance and refurbishment costs and the required set aside fund of c£30k pa, for a replacement carpet every 10 years.

Feasibility studies should include:

- **Local market testing** involving the assessment of:
    - size of catchment population within 20 minutes travel time;
    - other facilities and options appraisals;
    - evidence of sports demand via valid surveys;
    - confirmation of no other full sized AGPs within a 20-minute travel time;
    - the impact of any new facility on the use of existing pitches, avoiding user displacement affecting the sustainability of other facilities. Key points to be investigated include:
        - the current occupancy levels of existing facilities and waiting lists;
        - the comparable prices charged per hour for seniors and juniors;
        - annual income from the main user group which is usually football
        - any existing income generated from your own customer base that would be displaced
    - identification of different sports performance needs, informing the design brief and best choice of surface/system as well as user requirements informing usage and management plans;
    - adjacent schools will also have an important stake and say in the choice of future surface to best serve student needs. However, the choice of surface should also be informed by the number and size of clubs in the surrounding area;

- In terms of demand for hockey, rugby and football we refer to the latest Sport Wales School Sport Survey (2022) and a summary of the key figures are shown in the table below.

Sport Wales Latest School Sport Survey (2022)	Boys % of school aged Young People Yr 3-11	Girls % of school aged Young People Yr 3-11
Any participation Football	77	53
Any participation Hockey	11	14
Any participation Rugby	49	25
Community club participation Football	33	14
Community club participation Hockey	2	3
Community club participation Rugby	19	6
Extra-Curricular participation Football	26	15
Extra-Curricular participation Hockey	4	6
Extra-Curricular participation Rugby	17	9
Latent Demand Football	55	31
Latent Demand Hockey	9	12
Latent Demand Rugby	29	14

The feasibility study should also inform:

- the management/operational plan to include staffing arrangements, marketing and usage plans, to show how the new facility will generate more activity and by whom, with an accessible pricing policy;
- business planning addressing:
  - detailed income and expenditure forecasts;
  - management and maintenance;
  - outline cost plan;
- an assessment of pricing, including a sensitivity and affordability analysis and income set to secure sustainability. Sensitivity analysis to take account of the Local Authority already charging a subsidised rate for public use of their 3Gs and in some cases free use of grass pitches; the preparedness of clubs to pay the 'going rate' to cover lifecycle costs i.e. up to £120 per hour is unlikely to be an easy option for most potential customers See **ANNEX D** for guidance on 3G prices;
- analysis of the organisation's capability through a strength and weaknesses assessment. 3G facilities must **generate net profits of no less than £30k pa to secure sustainability**. The organisation contemplating such a facility must be well established and financially robust, with a healthy current turnover/generating annual surpluses; strong paying membership and a number of working partnerships;

Specialist ground condition surveys and technical feasibility studies should include:

- environmental investigations and feasibility to include ground soak-away capacity testing, water discharge, flood risk assessments, surveys examining the impact on the ecology, and flora, particularly location of trees and avoiding impact on root zones as well as assessments in respect of how floodlights may have an adverse effect on bat movement;
- historic land use i.e. former mining and landfill checks impacting surface stability; discharges; as well as archaeological interests etc.;
- the topography of the area, ground stability, levels, soil profile and condition etc.;
- overhead and underground services;
- best options for pitch orientation;

Feasibility surveys should also assess the pros and cons of the location i.e.:

- check covenants and restrictions on the location i.e. the feasibility of introducing ball catch fencing around the pitch perimeter;
- make sure there is good highways access for a large growth in business footfalls
- avoid an area with overhanging trees to prevent leaf drop
- is it suitable for floodlighting and fencing – not close to housing
- the 3G should be located close to changing rooms, with engineered pathways to enable access without walking over grass, that would lead to grass cuttings and mud migration contaminating the pitch;

Finally, statutory approvals will need to be sought i.e:

- planning consent requirements, with considerations to include access, suitability of local highways, parking, noise and the general impact of floodlighting on the local environment and neighbours;
- all construction work in Wales with drainage implications, of 100m² or more i.e. 3G pitches, is required to have Sustainable Drainage Systems (SuDS) to manage on-site surface water (whether they require planning permission or not) Anything that covers land is classed as a structure for the purposes of the SuDs Approving Body (the SAB) approval.

A full feasibility investigation into all of the above will help inform the preparation of detailed designs informing the choice of pitch design, construction and method/management of procurement and Health and Safety provision.

FACILITY COSTS AND DEVELOPMENT IMPLICATIONS

The following costs are set out in respect of the development of Artificial Grass Pitches (AGPs) at the first Quarter 2022 (1Q22) – CFF will update market costs at 2Q23. These rounded costs are based on an analysis of recent schemes funded throughout the UK through the Lottery and other grant bodies.

Indicative Capital Costs for the Development of AGPs

Training areas with 40mm-50mm pile 3G pitch; fenced; sports lighting – overall dimensions 61mx43m, playing area 55mx40m. Indicative capital costs £445,000 (exclusive of VAT).

Full sized 40mm pile 3G pitch, fenced, with sports lighting – overall dimensions 106mx70m with a playing area of 100mx64m with 3m run-offs to all sides up to the first obstruction.
Indicative capital cost up to £1,020,000 (exclusive of VAT).

Design considerations to reduce the facility capital costs will include:

- Removal of macadam layer and the introduction of an appropriate shockpad;
- The use of existing floodlighting system;
- No perimeter fencing.

In all cases the AGP must have a minimum 3m wide run-off to all first obstructions.

Tender Cost Inflation

Tender prices increased by 7% in the year to 4Q22. Price inflation is expected to continue throughout 2022/23 as input pressure remain across the sector as a result of world events.

Material prices rose by 20% in the year to 4Q22 and likely to continue to rise to at least the middle of 2022 due to worldwide supply issues energy prices tariffs on imports and exchange rates.: process may stabilise in the second half of 2022 and into 1Q23

Recent increases lead-in times from material supply may continue to put upward pressure on tender prices and the ongoing labour shortages may continue to increase labour costs.

Tender prices are forecast to continue to rise in 2022/23 albeit with some notable UK regional variations.

LIFECYCLE AND ANNUAL MAINTENANCE COSTS

The current costs of replacing a 3G carpet or sand filled/short pile AGP with a 3G AGP (assuming the underlying shockpad is in a fit state for re-use) is c£210,000 (exclusive of VAT) to include recycling costs

Sustainable business plans

The following guidance has been prepared to assist organisations with their development of business plans for future developments. What follows are indicative costs associated with long-term maintenance and the replacement of major components over the life of the facility.

Typical annual allowances are expressed as percentages of the overall estimated total project costs based on a 25-year cost model. Noting however, that for FIFA Quality Certified facilities, carpet replacements may be required between years 6 and 9, depending on intensity and type of use, correct use of footwear, appropriate maintenance – regular brushing and renovation works in accordance with the manufacturer and contractor's post completion instructions and conditions of warranty.

Training areas with 40mm-50mm pile 3G pitch; fenced; sports lighting – overall dimensions 61mx43m - sinking fund 2.8% pa maintenance 0.4% pa.

Full sized 40mm pile 3G pitch, fenced, with sports lighting – overall dimensions 106mx70m with – sinking fund 2.9% pa maintenance 0.5% pa.

The annual sinking fund and maintenance costs for a full-sized pitch are therefore c£30,000 pa sinking fund and no less than £5,000 pa maintenance.

A summary analysis of the base operational costs for 3G pitches (excluding management, marketing and staff costs) are summarised below[2]:

Floodlighting		Per Annum
	Utilities (floodlights)	£6,273
	Lamp replacement	£600
	Maintenance	£500
Repair & Maintenance		
	Annual maintenance contract	£4,500
	Regular maintenance	£3,800
	Rubber crumb top up	£2,000
	Pitch testing	£433
	Equipment replacement	£2,000
Sinking Fund		
	Carpet replacement	£30,000
Total		**£50,106**

[2] DCMS Grassroots Needs Assessment June 2022. 4Global.

Maintenance Requirements

Regular maintenance will be required - a ratio of 1 hour's maintenance to 8-10 hours' use, together with quarterly inspections and maintenance by an approved company to reduce the compaction of the infill material ensuring consistent ball bounce, will be a certification requirement.

For informal community use, litter bins will be required and attention should be given to the route from any changing rooms to the 3G pitch – grass and soil will quickly migrate to contaminate the infill material.

Leaves, moss and weeds must be removed from around the edges of the pitch where the mechanical brushes find it difficult to work.

Rejuvenation will be required at some point in the lifetime of the carpet, to maintain the integrity of the pitch and in particular its porosity – this work could cost up to £35,000 plus vat.

Maintenance logs must be kept to avoid any future disputes and these should include an analysis of usage over the same period.

Definitions

Sinking Fund - major replacement costs, typically to include replacement of the carpet shockpad, fencing and floodlighting, redecoration of fencing and relining of the pitch.

Maintenance – day to day repairs and planned maintenance, to include the application of herbicide sprays and moss killers, infill top-up/redress where required, drag brushing to comply with manufacturers guidance.

For a FIFA Quality pitch, an inspection report and certification is required every 3 years.

Exclusions

All operating costs and end of life costs together with the management and marketing of the facility have been excluded. These costs will include cleaning, utilities, loan repayments, taxes and other overhead costs.

Occupation costs may also include security, telephones, furniture, fixtures and fittings.

End of life costs will include disposals, demolition and reinstatement to satisfy any contractual requirements – returning the facility to a natural turf pitch.

ANNEX A: FOOTBALL FOUNDATION MICROPLASTICS UPDATE JANUARY 2023

The Football Foundation (FF) produced an update on 3G Pitch Microplastic Infill Materials in January 2023. The following is a summary of the key facts arising.

Health considerations

Studies completed by ECHA (European Chemicals Agency) have continued to prove that playing on AGPS is safe, provided the levels of 'Poly-Aromatic Hydrocarbons (PAHs) – the microplastic/rubber crumb infill levels are within set criteria.

SAPCA (Sport and Play Construction Association) 'Quality Control Protocol for Sports Performance infill' which places restrictions on the levels of PAHs within infill systems will be a mandatory requirement for any 3G AGPs funded by CFF.

Environmental considerations

In September 2022 - EC (European Commission) proposed introducing a ban on future sale of polymeric infills. This is likely to be approved by EU Members and introduced in Quarter3, 2023. There will be a six-year transition after which, from 2029, it will not be possible to purchase rubber crumb infill for use in 3G pitches.

It should be noted that this is not a ban on the use of these pitches and the UK Government will also be making its own decision on this matter – it may not adopt the same approach as the EU.

Like the FF, the Cymru Football Foundation (CFF) will not make any immediate change to the provision or funding of pitches without rubber crumb infill – the systems are currently unproven and the industry is as not as yet ready to deliver new facilities at the required scale.

It will however require the design of 3G AGPs to comply with the SAPCA Quality Control Protocol for Sports Performance Infill as well as to include measures to help contain and minimise the migration of rubber crumb infill.

It should also be noted that alternative systems are likely to be much higher cost.

The FF in England has also agreed to fund a live test hub to research alternative systems and CFF will work closely with FF to benefit from the learning. Non-fill AGPs i.e. 4G pitch designs are improving but there remain concerns about meeting FIFA criteria re longevity and cost.

Going forward, CFF will also consider:

- requiring a change to specifications to include a shock-pad to help future proof pitches and reduce rubber crumb infill. This will demand an additional cost of £50-70k per pitch

- encouraging the use of alternative organic infills
- when it will no longer fund AGPs with Micro-plastics – based on advice from the Football Foundation
- approaches to mitigate cost increases due to high levels of inflation i.e. 20% increases since Q1 2022 and the additional costs of new AGP designs ie use of shock pads. These approaches may include measures such as:
    - reduced pitch sizes to 91 x 55m playing areas and removal of nice to have features
    - stricter regimes re maintenance and management of use i.e. with regards use of correct footwear – many 3Gs now have effective boot banks
    - ensuring provision of LED lights particularly given concerns of the cost of utilities
    - stricter controls with regards to sinking funds i.e. evidence in Wales as well as a recent Football Foundation review of AGP operators has also noted significant shortfalls in replacement carpet sinking funds (41% of operators in England).

ANNEX B: INDICATIVE GUIDANCE ON WORLD RUGBY 3G STANDARDS

Artificial Rugby Turf is the term used by World Rugby to describe artificial surfaces used in the game of Rugby Union. The cross section of the facilities construction is described as follows:

- Artificial Rugby Turf Pile;
- Performance infill (rubber);
- Stabilising infill (sand);
- Primary and secondary backing;
- Shockpad;
- Porous macadam layer;
- Constructed over stone base with appropriate drainage system below.

A 3G pitch can only be suitable for contact Rugby Union matches or training where the pitch has an up-to-date test certificate that demonstrates compliance with World Rugby Regulation 22. This test must be carried out by an accredited World Rugby test institute.

World Rugby Regulation 22 relates to the performance standard of the pitch and measures criteria such as head impact, skin friction, joint strengths and energy restitution. These tests reflect the characteristics of a good quality natural turf rugby pitch. The facility must past Regulation 22 on completion and the certificate must be renewed every 2 years.

AGP systems can be manufactured and installed to the meet the requirements of World Rugby, Rugby Football League (RFL) and International Football (FIFA). **But if a pitch is certified by RFL/FIFA, this does not necessarily mean it meets World Rugby regulations.**

ANNEX C: PITCH DIMENSIONS

11v11 Senior/Youth Matches	Different Levels of Football	Minimum Dimensions	Maximum Dimensions
Field of Play Width To the touch lines	Seniors Juniors Youth	45m	90m
	Tier 2&3 Senior Men Tier 1 Senior Women	62m	
	Tier 1 Senior Men	68m (required) 64m (in exceptions)	
Field of Play Length To the goal lines	Senior Junior, Youth	90m	120m
	Tier 2&3 Senior Men Tier 1 Senior Women	98m	
	Tier 1 Senior Men	105m(required) 100m (in exceptions)	
Run-offs from field of play i.e. touch lines/goal lines to obstructions		Industry standard 3m	

Junior Mini Age Group Matches	Different Levels of Football	Dimensions
Field of Play Width To the touch lines	U6 & U7 4v4	20 yds
	U8 & U9 5v5	25 yds
	U10 & U11 7v7	40 yds
	U12 & U13 9v9	44 yds (54 yds max)
Field of Play Length To the goal lines	U6 & U7 4v4	28 yds
	U8 & U9 5v5	35 yds
	U10 & U11 7v7	44 yds
	U12 & U13 9v9	64 yds

ANNEX D: A GUIDE TO CURRENT 3G PRICES

Income generated needs to cover the cost of any staffing and management plus maintenance at over £50k pa (allowing for cost of replacement carpets @ £200k every c8 years)

3G pitch hire charges range depending on the use and provider and their capacity to subsidise ie:

- From full sized pitch to half size to 1/3 size
- From members to non-members
- From Seniors to Juniors
- Plus, different for match rates
- Plus, some don't advertise and do negotiated rates

Those that are cheaper – are generally Local Authority subsidised membership rates and/or those not setting aside a sinking fund or paying enough for maintenance and rejuvenation. Or maybe the pitch is just poor quality or not a venue of choice.

There are many reasons for variables, but as a guide - here is a sample of full-sized pitch prices per hour (Only the Full-Sized pitch price is provided to give a simple benchmark):

- **LA subsidised rates** £55-£65 e.g.**:**
  - Seniors £75 – £100 members/non members
  - Juniors £45-£60 members/non members
- **Club operator rates**
  - £65 -£75 seniors
  - £52 juniors
- **Independent or commercial operator rates**
  - £115- £125 seniors