

WESTOE CROWN PRIMARY SCHOOL

PLANNING, DESIGN & ACCESS STATEMENT

CONCERNING THE PROPOSED

SYNTHETIC MULTI USE GAMES AREA (MUGA)

Reference: NSWCPS

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1 Introduction

Notts Sport® has been instructed to produce technical details to supplement the planning application for the proposed multi use games area (MUGA) at Westoe Crown Primary School.

To aid the planning application, in accordance with Circular 01/06, this document aims to compliment the drawing package and elaborate on the proposed scheme. This document provides a detailed description of the site and proposals, before outlining the relevant planning policy framework as context for assessment of the proposal's planning merits. The report should be read in conjunction with all other accompanying submission documents and includes the Design & Access Statement.

1.1 Description of the proposed development

The construction of a 18.50m x 37.00m sand filled synthetic turf MUGA with perimeter fencing and pedestrian access pathway within the existing grass school playing field.

The location of the development is Westoe Crown Primary School,

This development is of paramount importance to the School as the existing natural turf playing field is currently unusable during the majority of the year due to poor drainage and access arrangements.

1.2 Existing Site

The proposed site forms part of a larger grass field within the School. Therefore, currently the area of the field is not used for sport and the project team believe that converting a relatively small section of the overall grassed area into a high quality multi use synthetic pitch will provide improved and enhanced playing and sports provision for the School, pupils and teachers throughout the academic year, and a facility that is available for use even in the majority of inclement weather conditions.



Fig A. Proposed location of development within the school grassed field (not to scale)

The location was chosen in full consultation with Westoe Crown Primary School and is positioned to maximize currently underutilized space without compromising on the existing sports field provision.

The proposed location form part of the schools grassed fields, and is currently natural turf and is note marked out for any sport currently. By converting this area into a MUGA, it will be available throughout the year for a wide variety of school activities and lessons (including football, tennis, hockey, netball) and as an overspill playground if necessary during periods of inclement weather. Therefore, the proposed facility does not adversely affect the quantity or quality of existing provision within the site, indeed, it improves the quality of the provision particularly in inclement weather when grass pitches areas would not necessarily be usable.

1.3 Access

Construction access to the footprint is available from existing maintenance gates via sea winnings way, leading along the existing hard standing from which there is an existing vehicular access gate leading to hard standing courts and grassed field (within the school site boundary) to the proposed development site.

This is an ideal access route as it minimizes disturbance to local residents by utilizing the existing School access drives and roads rather than public highways on residential roads.

1.4 Flood Risk

With regards to the proposed site in relation to drainage, when designing synthetic multi use games areas we aim to design outfalls to BRE 365 and to meet a 1 in 10 year return unless otherwise instructed by the local planning authority or where the facility is highlighted as being at risk on the Environment Agency's flood risk map (see below). The Environment Agency show no risk of flooding on their flood risk mapping service therefore we are proposing to build to current standards based on a 1 in 10 year storm return.

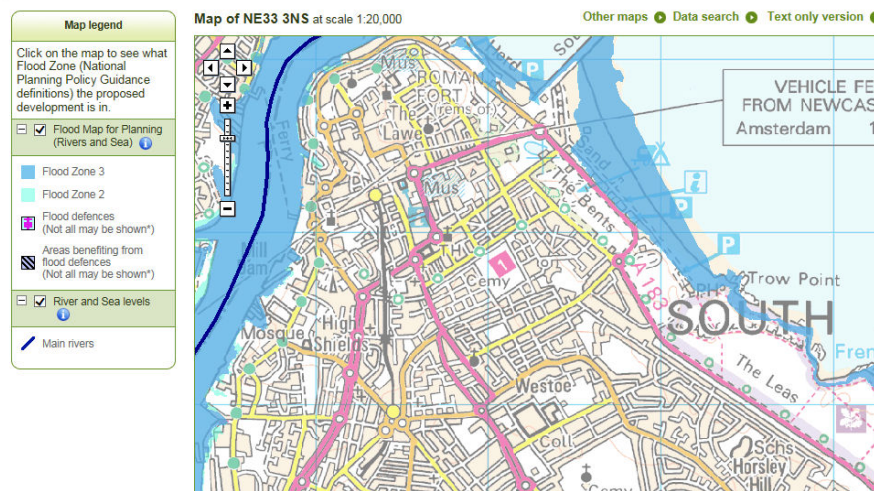


Fig B. Flood Map from Environment Agency Flood Planning

2 Application Proposal

2.1 Design Guidance

The application proposal relates to the construction of a 18.50m x 37.00m synthetic grass MUGA for Westoe Crown Primary School to use for educational, sporting and playtime.

The synthetic grass surface currently proposed complies with BSEN:15330 (part 2) for football, hockey and general play and has been tested and is compliant for tennis and netball to ensure the facility is as “multi-use” as possible.

Further, it is important to note that no existing activities supported on the area will be lost as the area proposed for development is not used for sport due to it being fairly poorly draining and boggy for large periods of the year. This naturally eliminates any negative impact on the current capacity or quantity of grass sports fields. Therefore, the MUGA would have no negative effect on the provision of sport.

We are confident that all considerations have been made and that the proposed location of the facility ensures that the quality and quantity of existing sports pitches is not affected and therefore complies with details on the Sport Wales exemption criteria for developing on existing sports fields.

We are confident that all considerations have been made and that the proposed location of the facility ensures that the quality and quantity of existing sports pitches is not affected.

We believe that the project is consistent with the following Planning Policy Objective 7 of Sport England’s *“Planning for Sport & Active Recreation: Objectives and Opportunities”* document which states the aim:

To support the development of new facilities, the enhancement of existing facilities and the provision and/or improvement of access to the natural environment which will secure opportunities to take part in sport and which can be achieved in a way which meets sustainable objectives.

In addition, we believe that the scheme also complies with exemption criteria as given in Sport England’s Planning Policy Statement – *“A Sporting Future for the Playing Fields of England”*, in particular exemption E4

The playing field or playing fields, which would be lost as a result of the proposed development, would be replaced by a playing field or playing fields of an equivalent or better quality and of equivalent or greater quantity, in a suitable location and subject to equivalent or better management arrangements, prior to the commencement of development.

In summary we believe the MUGA will have no negative impact upon the surrounding area and/or community. By upgrading the existing disused grass area into a modern, new & compliant synthetic turf MUGA facility, sports such as hockey, football, tennis and aerobic training can be diverted to the new facility, allowing the School to maximize the potential for sports development and recreational play that are currently unavailable on the existing grass field footprint.

3 The Development Process

3.1 Assessment of need

Westoe Crown Primary School has identified the necessity for a compliant, durable and safe external synthetic grass MUGA to help deliver the sporting curriculum & provide a safe external playing area within the School boundary throughout the year. A modern synthetic sports pitch, containing a synthetic grass playing surface, will enable a wide variety of sports to be played for practice, coaching and play. A key need is the locality of the MUGA in relation to the School building, allowing easy access and all year round uninterrupted availability.

3.2 External Use/ Floodlighting

Westoe Crown Primary School intends to restrict use for internal school activities only during the school day and there is no intention for the inclusion of community users in evenings and the facility will not be floodlit.

The proposed 3m height fencing system will greatly reduce the amount of balls lost from the pitch footprint and the location being a significant distance from any public highway will any potential risk of disruption to local traffic and reducing risk of unsupervised ball retrieval.

3.3 Travel arrangements

The project team believe that the MUGA development will not create any further requirement nor should it affect any highways or properties outside of the School.

3.4 Consultation

Consultation has been made with various stakeholders at Westoe Crown Primary School via the main school representative Mr S Price (Head Teacher). All parties have seen the proposal and initial set of plans and have expressed no objections in principle.

The School naturally supports the proposals and recognises that works are likely to take place during the summer holiday period resulting in the construction & associated working site can be managed easily to ensure that there is minimal disruption. All current CDM protocols will be agreed and enforced accordingly as part of the contract.

4 Design & Access Statement

4.1 Appearance

Appendix A shows a typical synthetic sports pitch.

4.2 Access

Access into the fenced enclosure shall be provided via single-leaf gates (1.20m wide x 2.40m high) and a double-leaf gate (3.0m wide x 2.40m high) for both able and wheel-chair bound players / spectators.

The surface itself is a variation of a synthetic grass that is the only one we are aware of that has the ASTM F1951-09b Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment.

Whilst this is a North American standard, there isn't a comparable European standard but it does reflect that the surface proposed is accessible for all potential users regardless of ability.

4.3 Use

The proposed facility is for sporting and play purposes during normal school operating hours.

4.4 Amount of development

The synthetic grass sports pitch shall be sized:

Total playing area (the fenced enclosure)	18.50m x 37.00m
TOTAL DEVELOPMENT AREA	684.50sqm

4.6 Scale parameters

The playing surface shall be built to the following levels to ensure compliance with performance standards guidelines:

'Calculated levels must produce gradients no steeper than 1:100 in any direction (longitudinally, diagonally and across the pitch width). The maximum slope to the pitch should not exceed 1:100 (1%) to the longest single plan (i.e. the diagonal fall). All gradients must be of an even and consistent fall in all directions'

By following these instructions, the playing surface will have to remodel the existing ground topography through minor landscaping to the perimeter of the pitch to marry into the existing grassed field surrounds.

4.7 Perimeter fencing

Appendix B shows the typical perimeter fencing elevation.

Perimeter ridged panel fencing is proposed to be 3.00m overall height to all sides, common for synthetic sports pitches where the design team wish to minimise stray balls leaving the footprint and thereby minimising disruption to surrounding activities.

It is normal for a synthetic sports facility to be enclosed by perimeter fencing, primarily to retain the ball during play and prevent any surface contamination from the surrounding natural grass areas. Fencing also offers security to the playing surface and internal features.

Fencing typically features a kickboard feature positioned to the foot of the elevation. This allows hockey balls to bounce from the fence without damaging the mesh. The kickboard feature would then be surmounted with steel mesh fixed to a durable post system (rectangular hollow steel – RHS). Mesh and posts are galvanised steel and then powder coated in green to allow the fence system to blend into the natural surroundings. The perimeter fencing would then be completed with gates for player access and maintenance activities.

In addition to what we believe is minimal visual impact, the project team has been keen to minimise the effect of balls hitting the fencing creating a new audible effect. As a result, we are proposing the highest quality rigid panel sports fencing with sound dampening features such as rubber washers to minimise both the visual impact (in comparison to a fencing style with a closer, denser mesh aperture) and the noise of balls rebounding from it.

By locating the pitch as far from residential properties as possible, it is unlikely that any balls lost over the perimeter fencing will reach residential land, minimising the risk of trespass for ball retrieval.

4.8 Playing surface construction

4.8.1 Compliance

The synthetic grass sports pitch is designed to adhere to current performance standards stipulated by relevant National and Sports Governing Bodies. The standards considered include:

- Sport England: Guide to the Design, Specification & Construction of Multi Sport Synthetic Turf Pitches (STPs)
- The International Hockey Federation: Handbook of Performance Requirements
- British & European Standards: BSEN 15330 (1 & 2)
- ITF Classified Court Surfaces & associated Design Guidance

4.8.2 Design features

The proposed pitch system (construction make-up) comprises the following features:

Formation Level ↻

Existing stone foundation (underlying stone base exposed during the stripping of redgra top surface) which is then trimmed and compacted to stringent qualities produces the formation level. This ensures that the new construction make-up is appropriately supported throughout the pitch life.

Landscaping / Reinstatement ↻

Re-claimed and recycled turf and top soils re-laid around the external perimeter of the fenced enclosure in the form of banking and mounds sympathetic to the surrounding areas. Soils cultivated and seeded to marry the pitch into surrounding ground.

Geotextile Layer ↻

A man made fibre made into semi-permeable textile sheets and laid over the formation level to ensure separation of base stone aggregates from underlying materials whilst allowing water to pass and also offering load-bearing strength to support overlaying construction. Geotextile membrane also fitted to line all drainage trenches and soak-away pit to minimise 'silting-up' of pipes, thus promoting long-term drainage efficiency.

Positive Drainage ↻

Network of underground perimeter drains and lateral drains, comprising perforated UPVC piping laid within gravel filled trenches. Will quickly collect moisture percolating downwards through the overlaying construction and then discharge water into an outfall designed against the BRE 365 standards and based on a 1 in 10 year storm return.

Perimeter Edgings ↻

Pitch footprint retained by single-line PCC (pre-cast concrete) kerb edgings fixed within concrete supports. Produces long-lasting and durable perimeter detail to contain the construction.

Granular Unbound Base ↻

A base comprising multiple layers of selected granular stone aggregates installed to strict tolerances. The construction is porous and capable of quickly absorbing precipitation through every part of the surface area and structure depth. This provides a great holding capacity for moisture even during heavy rainfall. Moisture percolates downwards through the new construction into new piped drains.

Specialist Shockpad ↻

A specialist shockpad layer designed to offer compliant performance standards for multi-sport performance designed to support a wide variety of sports to recognised standards. In addition, its specialist design also offers increased load bearing & structural stability to the underlying dynamic base.

Synthetic Grass Surface ↻

VHAF® NottsSward® is a sand-filled synthetic grass surface capable of supporting a wide range of sporting activities. All edges of surface rolls trimmed for invisible seams. Joints formed with specialist adhesive and tapes to produce strong, durable bond.

The principal advantages of the surface are:

- ✓ Randomly orientated surface fibres (VHAF®) ensures effective sand stabilisation
- ✓ Less movement of sand infill, so less maintenance to redistribute sand
- ✓ Less prone to clogging which adversely affects drainage and life cycle
- ✓ Overall surface consistency, improving long-term playability
- ✓ Less horizontal movement of sand across surface, giving increased slip resistance
- ✓ Integral backing produces a superior seam strength

Line markings to the playing surface are formed with high quality polyurethane-based sports paints or permanently inlaid into the surface. Produces vivid playing lines for visual impact and long term use. Avoid excessive joints within synthetic grass; thereby minimising risk of joint failure.

Equipment and Associated Features ➡

To complete the facility freestanding, self-weighted goals, nets will be provided for easy management and no-fuss play.

Access Arrangements ➡

Access is to be provided via new macadam surfaced access path from the existing pathway near to School building to ensure there is minimal transgress of dirt, grass and mud onto the pitch. Moreover, it increases and enhances the current access arrangements at the School to the natural grass field & new MUGA.

This offers a high quality, hard wearing DDA compliant pathway to ensure that users do not travel across muddy fields and take dirt/detritus onto the surface which would adversely affect the performance of the pitch, especially towards the end of its life.

4.9 Safety

Whilst difficult to contextualise entirely being a synthetic MUGA in an existing site rather than something completely new & large such a housing development, it is key to the school to ensure that the proposed facility is secure when unused and also managed carefully within the normal school day.

The facility itself is being designed against National Governing Body (NGB) requirements and design guidelines and in itself will be constructed to ensure the facility can be enjoyed safely by the users as a result. This extends from the surface design to the high quality fencing system for the various sports and play to be supported by the MUGA.

By being located at a school it is hoped that current pupils will enjoy the pitch as part of the school's facility portfolio, creating a sense of ownership and in turn encourage participation within sport from a young age.

5. Planning Policy Framework & Planning Merits of the Proposal

5.1 NATIONAL PLANNING POLICY

Planning Policy Guidance Note 17: Planning for Open Space, Sport & Recreation (PPG17) provides significant support for the provision of sport & leisure facilities with a focus on supporting health & wellbeing along with community & social inclusion. The document sets out general principles relating to the location of new facilities, the most relevant being:

- ✓ Promote accessibility by walking cycling & public transport, and ensure that facilities are accessible for people with disabilities
- ✓ Avoid any significant loss of amenity to residents, neighbouring uses or biodiversity
- ✓ Add to and enhance the range & quality of existing facilities

We believe that the standards we are designing against will ensure that the new MUGA adds to the existing range of facilities in the area and will support the local requirement for additional facilities for the School.

5.4 SUMMARY

By upgrading the existing disused grass area into a modern, new & compliant synthetic turf MUGA facility, sports such as hockey, football, tennis and aerobic training can be diverted to the new facility, allowing the School to maximize the potential for sports development and recreational play that are currently unavailable on the existing grass field footprint.

Naturally, during inclement weather, the existing grass pitches will also be used less as coaching can be diverted to the upgraded synthetic pitch to maximize the performance of the grassed pitches throughout the year.

We are confident that all considerations have been made and that the proposed location of the facility ensures that the quality and quantity of existing sports pitches is not affected and therefore complies with various items on the Sport England exemption criteria for developing on existing sports fields.

We believe that the project is consistent with the following Planning Policy Objective 7 of Sport England's *"Planning for Sport & Active Recreation: Objectives and Opportunities"* document which states the aim:

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or better quality and of equivalent or greater quantity, in a suitable location and subject to equivalent or better management arrangements, prior to the commencement of development.

6 Design Rationale/Summary

Westoe Crown Primary School and the project team wish to extend the current external sports provision and playground space available to pupils by delivering a modern, compliant synthetic grass surfaced MUGA within the school grounds. We believe that the scheme has been developed with appropriate design considerations and will ensure that the School can offer the best facilities to its pupils for coaching, teaching, play and practice.

6.1 LOCATION, LANDSCAPE, VISUAL IMPACT

The MUGA has been situated in order to minimise the effect and loss of natural turf on the schools fields. The design has been developed so that there is no net loss of natural turf pitches as the proposed footprint is not currently a formal sports area.

The design team has chosen a high quality fencing system which will be installed with a green coating to ensure that the facility blends into the surroundings as much as possible. The presence of the school provides an existing built form presence which dominates the local area and contains the development, and any views from other vistas would be seen in the context of the school complex, creating no unduly harmful impact.

We believe that the design of the pitch has been such that the it will largely be two-dimensional in appearance, with the pitch being enclosed by a mesh fence which from short & long range views does not create the same visual appearance that a solid fence or building might, reducing its visual impact. The green coating will also mean that the facility blends into the surroundings as much as possible. Furthermore, the MUGA will not have any floodlights and has been situated as far from residential housing as possible in order to minimise disturbance and disruption to local residential properties.

6.2 PLANNING POLICY

As per section 5, we believe that the existing local planning policies offer support for such a scheme and the completed facility will comply with & fulfil strategic aims for sports development.

6.3 BENEFITS OF SYNTHETIC SPORTS PITCHES

Developing the amenity can provide a variety of benefits:

- ✓ Increased enthusiasm for sport
- ✓ Versatile space for development coaching and matches
- ✓ Availability for sports teams
- ✓ Improved standard of sporting provision
- ✓ Significantly less maintenance and down-time than natural grass
- ✓ All year use thanks to efficient drainage and dynamic base and surface layer technologies
- ✓ Raised profile of sports and leisure amenities
- ✓ Supports healthy lifestyle culture

6.4 DESIGN CONSIDERATIONS/CONSULTATION

We strongly believe that the project team has made a full and in depth assessment of the need for a synthetic MUGA facility and that the proposed location minimises disruption to Westoe Crown Primary School and neighbouring properties during construction, as well as increasing the amount of sporting provision the School can offer their pupils.

By positioning the pitch as far from residential housing as is practicable, the effect on any nearby properties is minimal. The proposed high quality fence system with noise & vibration reducing EPDM rubber inserts at the panel mounting means that the visual impact is further negated, whilst retaining the existing grass sports field provision complies with Sport England recommendations on new developments. Furthermore, as noted the MUGA will have no environmental lighting spill impact as there is no floodlights, the MUGA will be used solely by the School during normal School operating hours.

The design of the drainage system and soakaway will be completed against BRE 365 standards and ensure that the pitch outfall can be catered for and not affect surrounding areas (up to the proposed 1 in 10 year storm return as the site & surrounding area is not at flood risk according to the Environment Agency).

The proposed MUGA will allow the School the opportunity to offer their pupils a high quality sporting curriculum improving the facility for the existing & future users.

Appendix A – Typical MUGA



Appendix B – Typical Fencing Elevation

