

Goodwin Academy

Artificial Turf Pitch (ATP) Refurbishment.

Contract Specification

Client	The Thinking Schools Trust			
Site Address	Goodwin Academy Hamilton Road Deal Kent CT14 9BD			
Project	Refurbishment of the existing artificial turf pitch			
SSL project code	SSL3176			
Document title	Contract Specification			
Document control	Revision	By	Chk	Date
	First Issue	WLS		28-03-2023

Surfacing Standards Ltd . Office 2, Empingham House, Ayston Road, Uppingham, Rutland LE15 9NY
 T. 01536 400 012
 E. info@surfacingstandards.co.uk

www.surfacingstandards.co.uk

International Organization for Standardization (ISO) Quality Management System (QMS) ISO 9001:2008. Registration number GB18982
 Member of Sports and Play Construction Association Professional Services Group
 Registered in England and Wales under registration number 05154061
 VAT number GB 687834179

Contents

Section	Title	Page No
1	Introduction	3
2	Constructional Specification and Work Schedules	5

Surfacing Standards Ltd . Office 2, Empingham House, Ayston Road, Uppingham, Rutland LE15 9NY
T. 01536 400 012
E. info@surfacingstandards.co.uk

www.surfacingstandards.co.uk

International Organization for Standardization (ISO) Quality Management System (QMS) ISO 9001:2008. Registration number GB18982
Member of Sports and Play Construction Association Professional Services Group
Registered in England and Wales under registration number 05154061
VAT number GB 687834179

1 Introduction

1.1 Document Context

The Thinking Schools Trust (hereafter referred to as the Employer) invites tenders for the Refurbishment of the existing Artificial Turf Pitch at:

The Goodwin Academy,
Hamilton Road,
Deal,
Kent.
CT14 9BD

This document describes the proposals for constructional work necessary to implement the works and facilitate tenders from bona fide contracting organisations.

1.2 Associated Documents

Please refer to SSL3176 - Part 1_Invitation to Tender.

1.3 Main Contract Preliminaries and Conditions of Contract

Refer to SSL3176 - Part 1_Invitation to Tender.

1.4 Construction (Design & Management) Regulations 2015 (CDM)

Refer to issued tender documents.

1.5 Design Criteria and Performance Quality Standards (PQS)

It is a requirement that bidders must be a SAPCA registered company and should provide proof of this as part of their submission. Any organisation that puts forward a bid and is not a SAPCA registered company will be disqualified.

The Contractor must ensure the proposed works are designed in accordance with and constructed in full compliance with the following sources of technical guidance applicable to the proposal:

Artificial Grass Pitch (AGP) & Facility Certification Requirements

- Federation Internationale de Football Association (FIFA) Quality Programme for football turf – Handbook of requirements - FIFA Quality – October 2015*
- International Artificial Turf Standard (IATS)

(* it is noted that due to the size of the area, the completed facility will not qualify to receive a FIFA or World Rugby 'field test' certification)

Generally

- Works must comply with current Building Regulations and British / European Standards applicable to the proposal
- The provision of proprietary materials and components and systems supplied or supplied and installed throughout this contract is binding upon the Contractor, unless express permission is sought from the Employer. The Contractor may submit alternatives for approval from other sources if he can prove that such supplies are of equal quality, performance and fitness for purpose, subject to agreement with the Employer.
- The Contractor shall obtain the manufacturers' printed instructions relating to all proprietary materials and systems employed in the works and he shall take strict precautions to ensure that their recommendations are followed. Copies of such instructions shall always be to hand where relevant work is in progress and shall be made available to the Employer if requested.

1.5 Work Requirements Preamble

Work requirements are to be read in conjunction with the all-other tender documentation and associated drawings.

All rates and prices shall be expressed to two places of decimals.

All items in these work requirements should include individual rates or prices provided by the Contractor and should not be grouped together.

If any item contained in these work requirements is not priced, it will be deemed that the cost has been included elsewhere in these work requirements and the rate payable against that item will be zero. On request from the Employer, the Contractor must provide details of where this cost has been included, to the Employer's satisfaction.

Surfacing Standards Ltd . Office 2, Empingham House, Ayston Road, Uppingham, Rutland LE15 9NY
T. 01536 400 012
E. info@surfacingstandards.co.uk

www.surfacingstandards.co.uk

International Organization for Standardization (ISO) Quality Management System (QMS) ISO 9001:2008. Registration number GB18982
Member of Sports and Play Construction Association Professional Services Group
Registered in England and Wales under registration number 05154061
VAT number GB 687834179

Where there is a discrepancy between the rate and the associated amount tendered in these work requirements, the rate shall apply and the amount shall be adjusted accordingly.

Unless stated otherwise the cost of complying with Main Contract Preliminaries and Conditions of Contract shall be covered by the rates and prices inserted against the items in these work requirements.

In these work requirements, sub-headings and item descriptions identify the work covered by the respective items, but the exact nature and extent of the work to be performed is ascertained by reference to all other tender documentation and associated drawings and Main Contract Preliminaries and Conditions of Contract.

The rates and prices entered in these all-other tender documentation and associated drawings shall be deemed to be the full inclusive value of the work covered by the respective items, including but not limited to the following unless expressly stated otherwise:

- A. Labour and costs associated therewith including all site allowances.
- B. Plant and costs associated therewith including transport to and from site.
- C. The supply, loading, transporting and delivery to site, unloading, handling and storage of materials and goods.
- D. Taking delivery of materials and goods supplied by others, loading, transporting and delivery to site, unloading, handling, storage and returning any surplus.
- E. Assembling, mixing, fixing, erecting, lifting, hoisting, handling, spreading, installing and placing of materials and goods in position.
- F. Waste, bulking and shrinkage of materials. All items have been measured net and no allowance has been made for laps, cutting, bulking, shrinkage or waste, unless expressly stated otherwise.
- G. Removal and disposal off site of surplus or spoil materials and costs in connection therewith including tip fees.
- H. Temporary works.
- I. Provision of working space and upholding sides of excavations.
- J. Notifying, making arrangements and liaising with all relevant statutory bodies, authorities and clients to obtain all licences and permits necessary for the execution of the Works, and costs in connection therewith.
- K. Taking precautions and measures as far as is reasonable and practical to prevent interference with or damage to existing structures, services, utilities, roads, footpaths, paved areas, watercourses, drainage systems, public and private vehicular and pedestrian accesses, trees, graves, burial urns, including the provision of alternative access, if necessary.
- L. The effect of phasing of the works or of alteration or additions to existing services and supplies to the extent that such work is set forth or reasonably implied in the Contract.
- M. Keeping the works where necessary, and as near as may be practical, free from water and protected from damage due to water and from weather conditions which may adversely affect the Works including dewatering of excavations, and taking measures to prevent flotation of new or existing structures.
- N. Submitting to the Employer all drawings, details of procedures and methods of construction to be used, calculations, technical literature, test certificates and any other documents or information required to be submitted in accordance with these work requirements.
- O. All costs for quality assurance systems including carrying out all tests and providing certificates of conformity.
- P. Attendance and transport for sampling and testing carried out by the Employer and supplying results of tests carried out by the Contractor.
- Q. Establishment charges, overhead charges, profit and all preliminary costs.
- R. General obligations, liabilities and risks involved in the execution of the works set forth or reasonably implied in the Contract.
- S. Adjustment for rise and fall in costs.

The following abbreviations will be used for units of measurement:

Unit	Abbreviation	Unit	Abbreviation
Millimetre	MM	Item	Item
Metre	M	Millilitre	ML
Square Metre	M2	Litre	L
Linear Metre	MLin	Hour	HR
Cubic Metre	M3	Day	Day
Kilogram	KG	Man Day	M/Day
Tonne	T	Week	Wk

Surfacing Standards Ltd . Office 2, Empingham House, Ayston Road, Uppingham, Rutland LE15 9NY
T. 01536 400 012
E. info@surfacingstandards.co.uk

www.surfacingstandards.co.uk

International Organization for Standardization (ISO) Quality Management System (QMS) ISO 9001:2008. Registration number GB18982
Member of Sports and Play Construction Association Professional Services Group
Registered in England and Wales under registration number 05154061
VAT number GB 687834179

Number of	No	Provisional Sum	PS
Set	Set	Provisional Quantity	PQ

1 Work Requirements

Reference	Minimum Work Requirements	Quantity	Unit
1.0	Contract Compliance		
1.01	Allow for full compliance with contractual obligations, works and requirements as stipulated within the issued Invitation to Tender (ITT) package and accompanying appendices forming the complete tender package.	1	Item
1.02	Allow for the provision of necessary management, supervision and administration of the works in compliance with Construction (Design & Management) Regulations 2015.	1	Item
1.03	Provision of Building Manuals (incorporating the Health and Safety Files) in bound hard copy and electronic copy formats to be offered to the client prior to Practical Completion. To include relevant end-user warranties, guarantees and operating and maintenance (O&M) manuals.	1	Item
1.04	Allowance for sufficient resources in which to prepare, mobilise and install the scheduled works to ensure Practical Completion on the contracted due date.	1	Item
1.05	Allowance for developing the necessary design works and requested supplementary information to be able to provide full detailed construction drawings to satisfy requests where necessary relating to contractor design proportioned works.	1	Item
1.06	Adherence of traffic regulations.	1	Item
1.07	Allowance for cleaning of roads, pavements and footpaths during the construction period as necessary.	1	Item
1.08	Provision of dilapidations including photographs of existing condition of hard standings, soft landscaping etc.	1	Item
1.09	Allowance for operation and maintenance procedures and requirements (incorporating the Health and Safety Files), including full warranties, guarantees and a record of drawings in bound hard copy and electronic copy formats.	1	Item
1.10	Allowance for a full and detailed demonstration of the operational requirements for the completed facility to the Employer. This demonstration shall include details of the maintenance regime. It shall detail procedures to ensure the specified parameters are maintained, the appropriate climatic conditions in which work can be carried out, the appropriate health and safety requirements and training the personnel may require. The Contractor will allow an appropriate cost to cover the training and advising of the Employer's maintenance staff.	1	Item
1.11	The Contractor is to identify any further additional preliminaries items required to complete the construction works.	1	Item
	Carry forward to Contract Sum Analysis		
2.0	Design and Testing		
2.01	Allow for all responsibility for the Contractor to satisfy themselves as to the nature of the existing site and grounds to allow them to fully design and construct works as required under this Contract. Inspections to the grounds with permission for undertaking any / all required boreholes, samples, testing or surveys to any location of the development area is acceptable and permitted. On the award of the Contract the successful Contractor has been deemed to have read all documents and to have fully understood the contents.	1	Item

Surfacing Standards Ltd . Office 2, Empingham House, Ayston Road, Uppingham, Rutland LE15 9NY
 T. 01536 400 012
 E. info@surfacingstandards.co.uk

www.surfacingstandards.co.uk

International Organization for Standardization (ISO) Quality Management System (QMS) ISO 9001:2008. Registration number GB18982
 Member of Sports and Play Construction Association Professional Services Group
 Registered in England and Wales under registration number 05154061
 VAT number GB 687834179

	No claims will be accepted for lack of information or inaccuracies in this respect.		
2.02	<p>Allow for all responsibility for the preparation of the design, and for the construction of applicable elements of the project as described in the requirements.</p> <p>The Contractor shall use the tender stage scheme indicated within tender documents as a basis for the development of the works.</p> <p>Technical documents, calculations and reports to be provided by the Contractor to validate the tendered proposal will include that which is requested within all ITT submitted documents.</p> <p>Any materials, fixings, foundations or drainage detail and associated technical calculations indicated in tender documents are typical only and shall not relieve the Contractor in any way of any of their other responsibilities.</p>	1	Item
2.03	<p>Inspection / Testing procedures (ITPs)</p> <p>Allocation for the undertaking of Inspection / Testing procedures (ITPs) for works and materials, to be completed at each critical stage of construction and throughout the sequential programme of works as detailed in the ITT.</p> <p>Allow for undertaking of key stage inspections / inspection test plans for works and materials, to be completed and reported at each critical stage of construction and throughout the sequential programme of works.</p> <p>SSL are to be informed with 72 hours' notice prior to any finished key stage of works and any planned specific testing requirement stipulated within this contract specification to ensure attendance during the inspection is possible to overview and then ensure sign off can be readily approved to progress works.</p> <p>The absolute requirement of sequential inspections is to ensure that the completed works may be accepted by the Employer with the assurance that at the point of handover, the works contain no significant faults or omissions, which would require the Contractor to re-enter the site to carry out further works.</p> <p>The Contractor shall report immediately to SSL / the Employer test results upon completion of each successive inspection including:</p> <p><u>Artificial Grass Surface –</u></p> <ul style="list-style-type: none"> ✓ Information sent to SSL for the spec/certificates of quantity/quality of any/all materials with necessary technical detail for review and sign off. ✓ Cost to include and allow for allocated time for SSL to inspect the finished installation of the surfacing seams to include but not be limited to: <ul style="list-style-type: none"> • Material Quality • Setting Out (As Producer Cutting Plan) • Joint Quality • Line Markings Position / Width / Straightness • Infill Application • Finished Consistency • Smoothness / Surface Regularity • Surface and Infill Technical Characteristics ✓ allowance for retention of necessary materials and samples for FIH testing ✓ Any visual discrepancies, patched seam repairs or other visual defects in the surfacing installation will result in the area being removed and replaced with a new roll of surfacing. <p>General visual inspections of the site and other components will take place as and when chosen or needed.</p> <p>Please Note: The satisfactory provision of ITP reporting shall be linked to the acceptance of the sequential works and appropriately reflected within interim valuation certificates.</p>	1	Item
	Carry forward to Contract Sum Analysis		

3.0	Site Establishment		
3.01	<p>Supply and erect temporary security fencing, consisting of 2.0m high open steel weld mesh fencing to the compound & storage areas. (Heras or similar approved).</p> <p>Security fencing shall be retained intact and at full height and extent until the works are completed.</p> <ul style="list-style-type: none"> The fencing should include security entrance gates as required. The fencing should be checked twice daily. 	1	Item
3.02	<p>Carry out appraisal of site area approach, entry and movements whilst tendering for the works and make all necessary allowances as required, including:</p> <ul style="list-style-type: none"> Banks person for all deliveries and removals as necessary. Road cleaning during the construction period as necessary Wheel wash facility for vehicles exiting site as necessary. Maintaining an emergency access. Haul road, as required, to facilitate vehicle movements, all deliveries and removal of materials for the duration of the works 	1	Item
3.03	<p>Establish the area to be used as the site compound and site access with measures to ensure that the surface and areas withstand all trafficking and haulage for the duration of the works or provide necessary additional protection where required.</p> <p>The site compound and access must accommodate all construction activities and movements, which must be contained within the site curtilage for site office and welfare, storage of plant and materials, parking and manoeuvring of site operatives and visitors' vehicles together with the loading and un-loading of goods vehicles.</p>	1	Item
3.04	Supply and erect public health and safety / warning signage around the temporary security fencing perimeter at regular intervals and throughout the entire construction period to comply with Construction (Design & Management) Regulations 2015 as required.	1	Item
3.05	Supply a site office and appropriate welfare facilities throughout the entire construction period to comply with Construction (Design & Management) Regulations 2015.	1	Item
3.06	Supply temporary storage facilities for any and all fragile / vulnerable building materials throughout the entire construction period as deemed necessary by the Contractor.	1	Item
3.07	Provide onsite security during the construction period to protect the works and all building materials throughout the entire construction period as deemed necessary by the Contractor.	1	Item
3.08	Deliver construction machinery and plant to site and allow for removal upon completion of the works.	1	Item
3.09	<p>Provide adequate protection of the entire works against any form of damage or deterioration throughout the entire construction period as deemed necessary by the Contractor.</p> <p>This shall include protective tapes, casings, guard rails etc... which shall be removed and disposed of offsite on completion.</p> <p>Tarpaulins and/or temporary heating shall be provided if necessary.</p> <p>Particular care shall be taken to mask self-finished surfaces.</p>		Item
3.10	Allow for the provision on completion of construction work and before handover of full instructions to the Employer in the operation of the maintenance procedures and requirements (incorporating the Health and Safety Files), including relevant end-user warranties, guarantees and a record of drawings in bound hard copy and electronic copy formats.	1	Item
3.11	Allow for the provision on completion of construction work and before handover a full and detailed demonstration of the operational requirements for the completed facility to the Employer.	1	Item
3.12	Carry out a comprehensive underground services detection survey of the entire working area and transport routes prior to the commencement of excavation works and provide suitable temporary protection as necessary to any and all vulnerable utilities, services, manholes and inspection chambers, etc...; capable of withstanding all trafficking and haulage during the works; to avoid damage for the duration of the works.	1	Item

	Carry forward to Contract Sum Analysis		
4.0	Site Clearance, Excavations and Groundworks to Pitch Area		
4.01	Dismantle / break out necessary areas of fencing in order to access the development footprint throughout the works and allow for reinstating the damaged areas upon completion.	1	Item
4.02	Remove the existing sports equipment, hockey goals, football goals, dividing nets & posts and any other features as required and safely store for the duration of the works. Prior to handover reinstate all goals, dividing nets and other features moved during the works.	1	Item
4.03	Dispose of all arisings generated during the above works responsibly at a registered tipping site or similar. Allow for reinstatement of any exposed / damaged areas to be repaired with twin course macadam (65mm depth) to tie into the surrounding areas.	1	Item
4.04	<p>Liaise with SPORTEX Group (Incorporating Sportex and Technical Surfaces Ltd.) for appropriate costings for a full lift, strip and remove the existing 3G artificial grass surface and infill and strip and lift the existing insitu shock pad carefully and sequentially using vehicles with low-flotation tyres to not damage the underlying tarmacadam base and for the material to be transported to Grangemouth as a working closed loop recycling method recovering the sand, rubber and plastic into new products.</p> <p>Luke McGeechan Group Commercial Director</p> <p>A: 13-17 Abbotsinch Road Grangemouth Scotland FK3 9UX T: 0131 333 3030 M: 07917 725611 E: luke.mcgeechn@sportexgroup.co.uk W: sportexgroup.co.uk W: technicalsurfaces.co.uk</p> <p><i>Note SSL have been given a direct quote and rate for this section of works to enable an appropriate review</i></p>	5948	M2
4.05	Brush debris from the exposed base and power wash the pitch and surrounding macadam areas prior to item 4.06 taking place.	1	Item
4.06	<p>Contractor and SSL to undertake surface regularity testing of the existing base using a 3m straightedge and graduated wedge as described in EN 13036-7.</p> <p>The works and costs shall reflect and account for the timings of the testing along with the need for the results to be obtained and certified before works are to continue and commence with the installation of the surfacing system.</p>	1	Item
4.07	<p>Apply a proprietary residual herbicide treatment over the entire formation level to be occupied by the pitch. During this process, protect surrounding grassed and vegetation areas from damage by the herbicide treatment.</p> <p>Please Note: The use of pesticides (inc. Herbicide treatments) is covered by various pieces of legislation primarily The Food and Environment Protection Act 1985 (FEPA), Control of Pesticides Regulations 1986 (COPR) and The Control of Substances Hazardous to Health Regulations 1988(COSHH).</p> <p>Only approved products may be used and a Certificate of Competence must be held for all persons applying pesticides (e.g. National Proficiency Test Council (NPTC) PA1, PA2, etc...) and those advising on pesticide use should be registered with BASIS (British Agrochemical Standards Inspection Scheme).</p>	1	Item
	Carry forward to Contract Sum Analysis		
5.0	Synthetic Turf Surfacing System		
5.01	<p>Please note:</p> <p>This is a Contractor's Design Proportion (CDP) item.</p>	5948	M2

Surfacing Standards Ltd . Office 2, Empingham House, Ayston Road, Uppingham, Rutland LE15 9NY
 T. 01536 400 012
 E. info@surfacingstandards.co.uk

www.surfacingstandards.co.uk

International Organization for Standardization (ISO) Quality Management System (QMS) ISO 9001:2008. Registration number GB18982
 Member of Sports and Play Construction Association Professional Services Group
 Registered in England and Wales under registration number 05154061
 VAT number GB 687834179

Supply and install minimum 60mm 3G artificial turf playing surface with sand and rubber infill onto the completed base.

- Cost for supply of surfacing as per below requirements
- Cost for supply of sand infill
Declaration of quantity required to be provided:
Silica sand
Manufacturer:_____ [enter here](#)
Material type:_____ [enter here](#)
Thickness Layer:
Particle size range:
Infill rate:
- Cost for supply of rubber infill
Granulate rubber
Manufacturer:_____ [enter here](#)
Material type:_____ [enter here](#)
Thickness Layer:
Particle size range:
Infill rate:
- Cost for workmanship and materials

Materials generally

The artificial grass shall be a:

- Federation Internationale de Football Association (FIFA) Quality Programme for football turf - Handbook of requirements – FIFA Quality – October 2015

Minimum 3G Turf Requirements:

- 60mm pile height 3G synthetic turf
- Monofilament polyethylene or polyolefin non-fibrillating fibres. (Secondary fibrillating fibres will be permitted but should not form part of the abovementioned characteristics).
- 60mm carpet – Minimum **1500g/m2** face weight and minimum **2300g/m2** total weight with no tolerance allowance.
- Pile component to be coloured dark green, containing two tone shades
- To have a permeable backing of UV stabilised heavy woven polypropylene with needle-punch fleece (or fibrelocked fleece) and a secondary backing of SBR latex coating.
- The backing shall be punctured at regular intervals to facilitate drainage of percolating rainwater if necessary to allow satisfactory permeability of ≥180mm/hr in accordance with EN 12616 and greater than 75% of laboratory results.
- Minimum pile anchorage (water aged tuft withdrawal) of >40N in accordance with EN 13744 and ISO 4919.
- To be compatible to the required performance standards (FIFA Quality) laid direct to a bound base with no shockpad

Other performance qualities

Characteristic	Quality
Life span	To offer a life expectancy at least 8 years based on 50hrs use per week
Applications	100% football
Anticipated weekly usage	50 hours

Installation generally

The artificial grass shall be laid out across the width of the pitch in full rolls with the exception of any rolls incorporating tufted sidelines, which may be laid longitudinally over the Total Playing Area.

	<p>All bonded joints must be installed with 400mm wide carrier tapes with specialist adhesive applied evenly to a minimum 300mm width.</p> <p>During the installation process, fine silica sand and granulate rubber shall be filled into the grass pile in order to produce the desired performance characteristics for football in accordance with infill material specification/s and spread rates declared within the FIFA / IATS accreditation for the artificial turf.</p> <p><u>Please note</u></p> <p>Where alternative suppliers of infill materials to those detailed in the original laboratory test report are to be used, samples of the infill should also be submitted in advance of construction so that compliance of these materials with the requirements of the FIFA Handbook / IATS can be determined prior to installation.</p> <p><u>Accuracy</u></p> <p>Seams must be perfectly cut neat and straight and no significant height difference and no discernable gaps or separation at joints and seams.</p> <p>Joints should be tight so the maximum gap at the top of the pile is equal to or less than the carpet's stitch gauge plus 2mm.</p> <p>Bonded carpet joints should not have adhesive beads within the pile of the carpet that may cause a ball to lift or deviate as it passes over the joint.</p> <p>Stitched joints should not cause a ball to lift or deviate as it passes over the joint.</p> <p>The pile of the carpet immediately either side of the joint should be consistent with the remainder of the pitch. In particular, the carpet pile should not be trapped within the joint nor should adhesive layers and backing films beneath the carpet cause ridges outside surface evenness tolerances.</p> <p>The jointing method shall produce no ridges, grooves, creases or adhesive stains / splatter.</p> <p>There must be no surface textural variations which might cause a ball to be deflected from its true path.</p> <p>There must be no loops in the tufts, nor random tuft lengths, tears, holes (other than drainage pores) or melted areas. Should the replacement of any area of defective artificial grass be necessary, then this shall involve the full replacement of an entire carpet roll.</p> <p>No patching shall be allowed whatsoever.</p> <p>Abutting surface rolls together shall be jointed together as per manufacturer's recommendations and trimmed neatly against the pitch perimeter restraint.</p> <p><i>Should the replacement of any area of defective artificial grass be necessary, then this shall involve, at minimum, the full replacement of an entire carpet roll.</i></p>		
5.02	<p>Supply / install permanent markings as shown on the plan SSL3176 02 - Proposed Plan</p> <p>Permanent Inlaid Markings for 1 Nr '11 v 11' pitch in white, including nib markers for the goal locations.</p> <p><u>Cost to include for 4no. corner arches to be manufactured in 1.2sqm areas so that one single arch can be cut out and installed. Cut offs and slithers to form the arch shape for these areas is not acceptable</u></p> <p>Permanent Inlaid Markings for 3 Nr cross field play (Blue), including nib markers for the goal locations as shown (80mm).</p> <p><u>Laying generally</u></p> <ul style="list-style-type: none"> Line markings shall, where possible, should be constructed within the rolls of artificial grass at fabrication stage. All other lines will be cut and glued into the playing surface during the installation process to produce permanent lines. 	1	Item

	<ul style="list-style-type: none"> The maximum tolerance for both height and gaps of joints is 3mm and the maximum separation between tufts of adjoining carpets is 20mm. <p><u>Accuracy</u></p> <ul style="list-style-type: none"> All line markings measured with a calibrated steel tape shall be within 20mm of their true position as specified in the appropriate rule. Markings shall not deviate by more than 10mm from a line joining their ends, nor include any sudden steps. Line edges shall be parallel and uniform. For a period of five years following Practical Completion each straight-line marking shall remain straight to within + 100mm of a tensioned string line joining its ends and all lines shall remain within ± 150mm of their original position as measured at Practical Completion. Furthermore, no line shall exhibit any sudden irregularity or deviation greater than 75mm over a distance of one metre. 		
5.03	Supply 5no. 20kg bags of sand infill to match the type and colour installed into the playing surface. The sand is to be used by the client to periodically top up the high wear areas of the pitch.	5	No
	Carry forward to Contract Sum Analysis		
6.0	Infill Mitigation Method		
6.01	<p>Supply and install around the immediate perimeter of the pitch.</p> <ul style="list-style-type: none"> 2no. height kickboards fitted to internal ball stop fencing, pitch perimeter barrier and gates. <p>Note this is needed to mitigate rubber crumb infill migration.</p> <p><u>Typical material quality</u></p> <p>Dark brown pre-stained and pre-weather resistant treated (Tanalith E) timber soft wood kickboards sized 250mm high x 50mm wide.</p> <p>All boards shall be sawn and soft planned to all edges and shall include a chamfered edge to the top internal face.</p> <p>The maximum length of all boards shall be 2.515m such that can be fixed to the intermediate fence post system and flanged sides.</p> <p>Fixings shall consist of M8 x 70mm counter-sunk stainless steel pin hex security screws with steel washers and fixing bolts. (4no. screws, washers and bolts per board).</p>	332	Lin M
	Carry forward to Contract Sum Analysis		
7.0	Reinstatement and Landscaping		
7.01	Make good / reinstate / clean / clear any hard-standing surfaces affected by the works to their original condition, using similar materials as existing.	1	Item
7.02	<p>Allow for:</p> <ul style="list-style-type: none"> Dismantling and removing from site the temporary security fencing. Dismantling and removing from site the tree protection fencing. Remove from site, storage facilities, site office, welfare facilities etc... Clean / clear any hard standing surfaces affected by the works. 	1	Item

	<ul style="list-style-type: none"> Leave site in a tidy condition acceptable to the Employer. 		
	Carry forward to Contract Sum Analysis		

	FURTHER COST OPTIONS		
A1	<p>Performance Testing</p> <p>Immediately prior to Practical Completion, carry out formal testing and issue compliance reports and certification to prove the quality of installation in accordance with the following quality standards:</p> <p>3G Artificial Turf Pitch</p> <ul style="list-style-type: none"> EN15330-1 for inclusion on The FA Register of 3G Pitches 	1	Item
A2	<p>Supply and install 2-person fixed angle boot wiper – BWP-048</p> <p>Supplied by Harrod UK Ltd.</p>	1	Nr.
A3	<p>Maintenance Equipment</p> <p>The equipment shall enable the client to carry out the 'regular' maintenance activities in-house</p> <p>Equipment to at least include the following;</p> <ul style="list-style-type: none"> Mechanical and motorised sit-down maintenance vehicle complete with integral foldout brushes (RTC unit or similar) Drag mat <p>The selection of the equipment shall be proposed by contractor during tender stage of the project and the equipment shall be consistent with recommendations offered by the artificial grass manufacturer. Contractor's cost to include provision for training of client's on-site staff prior to handover.</p>	1	Item

End of document.

Published by	Wayne Sexton, Consultant
Signature	<i>WLSexton</i>
Issued	30-03-2023

This report has been prepared with all reasonable care, skill and diligence by Surfacing Standards Ltd and is confidential to our Client. Surfacing Standards Ltd accepts no responsibility whatsoever to third parties to whom this report, or any part thereof, is made known. Any such party relies upon the report at their own risk.

© Copyright Surfacing Standards Limited 2023

Surfacing Standards Ltd . Office 2, Empingham House, Ayston Road, Uppingham, Rutland LE15 9NY
T. 01536 400 012
E. info@surfacingstandards.co.uk

www.surfacingstandards.co.uk

International Organization for Standardization (ISO) Quality Management System (QMS) ISO 9001:2008. Registration number GB18982
Member of Sports and Play Construction Association Professional Services Group
Registered in England and Wales under registration number 05154061
VAT number GB 687834179