MAY 2015

### HIGGINS BROOK LAND EAST OF CHIPPING LANE LONGRIDGE

DELIVERY REPORT RELOCATION OF LONGRIDGE CRICKET CLUB



All plans are reproduced from the Ordnance Survey Map with the permission of the Controller of HMSO. Crown copyright Reserved. Licence No. AR152684.

#### BARTON WILLMORE LLP

Tower 12, 18/22 Bridge St, Spinningfields, Manchester M3 3BZ

T: 0161 817 4900 E: vincent.ryan@bartonwillmore.co.uk

#### DESK TOP PUBLISHING AND GRAPHIC DESIGN BY BARTON WILLMORE

This artwork was printed on paper using fibre sourced from sustainable plantation wood from suppliers who practice sustainable management of forests in line with strict international standards. Pulp used in its manufacture is also Elemental Chlorine Free (ECF).

#### BARTON WILLMORE

#### COPYRIGHT

The contents of this document must not be copied or reproduced in whole of in part without the written consent of Barton Willmore.

J:\23000 - 23999\23200 - 23299\23210 North Longridge, Ribble Valley\A5 - Reports & Graphics\ Graphic Design\Documents\Cricket Ground Delivery Report

Project Ref:	23210/A3/VR/CGDR
Status:	Final
Issue/Rev:	03
Prepared by:	Vincent Ryan
Checked by:	Vincent Ryan
Issue Date:	May 2015



With inputs from Nortoft Planning and Land Development

### BARTON WILLMORE

# CONTENTS

1. INTRODUCTION	1
2. EXISTING LONGRIDGE CRICKET CLUB FACILITIES	2
3. PROPOSED NEW CRICKET GROUND	3
4. FEASIBILITY	5
5. DEVELOPER COMMITMENTS AND DELIVERY	6
6. PLANNING POLICY	7
7. CONCLUSIONS	9

#### APPENDICES

APPENDIX 1: AGRONOMIC APPRAISAL, PSD AGRONOMY 10 APPENDIX 2: CRICKET CLUB DELIVERY PHASING PLAN

# 1. INTRODUCTION

### BACKGROUND

1.1 This Report has been prepared by Barton Willmore on behalf of BDW Trading Ltd ("Barratt Homes") in support of outline planning application 3/2014/0764 ("the Application"), which is under consideration by Ribble Valley Borough Council ("the Council"). The planning application, as amended, proposes:

Development of up to 363 homes including affordable housing and housing for the elderly, relocation of Longridge Cricket Club to provide a new cricket ground, pavilion, car park and associated facilities, (land for) new primary school, vehicular and pedestrian access landscaping and public open space, with all matters reserved except for access.

1.2 A key community benefit of the proposed development will be the delivery of a new and significantly improved replacement cricket ground for Longridge Cricket Club ("LCC"), prior to the development of the existing ground for housing.

### PURPOSE

1.3 The purpose of this report is to provide additional supporting information to assist in the assessment of the outline proposals and in particular to respond to the information request of Sport England, which in its consultation response to the Application, dated 21 April 2015, stated that is was necessary for details relating to the following to be provided:

- The existing cricket ground area and ancillary facilities, and proposed cricket ground area and ancillary facilities;
- 2. Feasibility Study of the site to ensure that it is capable of accommodating a cricket ground;
- 3. A commitment to replace the cricket ground prior to commencement of the housing development on the existing cricket ground. Either by condition or included in the s106 agreement; and
- 4. The s106 agreement should be redrafted to include details of the replacement cricket ground, including:
  - a. Timescales for implementation cricket ground to be developed and ready for use prior to development commencing on the existing cricket ground; and
  - b. Design principles based on the findings of the Feasibility Study and ECB standards for pitch and built facility construction.

1.4 This Report responds to the above points with further appended information as appropriate.





## 2. EXISTING LONGRIDGE CRICKET CLUB FACILITIES

2.1 The extent of the existing LCC pitch and associated ancillary facilities measures approximately 1.18ha (11,800m2), which includes the playing wicket, outfield and small run-off area to the site boundary, practice nets, scoreboard, pavilion, car park and ancillary external storage areas.

2.2 The playing wicket includes approximately twelve strips, including one artificial strip. The physical extent of the cricket ground limits the distance between the playing wicket and the boundary. For example, the boundary distance is limited at its shortest extent (west of the wicket) to only approximately 27m, which is below the Sport England minimum design guidance of 37m for Junior level cricket and 45.7m for Senior level.

2.3 The existing pavilion, to the north east of the pitch, is approximately 297m2 in area and comprises of:

- Club room and bar
- Kitchen
- Ladies WC
- Gents WC
- 1 x umpire's changing room
- Store
- Shower room
- 2 x changing rooms
- Scorer's room
- Small covered terrace

2.4 The existing car park is loosely surfaced and can accommodate approximately 20 cars. An external storage area is to the rear of the pavilion, which includes a storage container. Two mobile practice nets are stored to the south west of the ground



Figure 2.1 Aerial image of existing Longridge Cricket Ground

### 3. PROPOSED NEW CRICKET GROUND

3.1 The proposed replacement cricket ground will be located on an area of approximately 3.5ha (35,000m2) immediately to the north of the existing cricket ground, as shown below on the illustrative masterplan for the wider development.

3.2 The specification and extent of facilities for the replacement cricket ground were agreed in principle with LCC and can be summarised as follows:

- A playing field, pitch, square of 12 wickets, pavilion and ancillary facilities that meet ECB requirements, where applicable, for the level at which the club is playing, being at Premier Division or better;
- 4 x bay permanent practice nets;
- Car park with 20 x surfaced spaces plus lighting, plus up to 20 x overspill spaces;
- The pavilion will be a minimum of 297m2 in area, meet ECB standards and should accommodate:
  - » 2 x senior changing rooms each with 1 x WC and 2 x showers;
  - » 1 x umpire' changing room with 1 x WC and 1 x shower;
  - » 1 x small changing room for female/junior use with 1 x WC and 1 x shower and 3 x changing spaces;
  - » 1 x female WC (3 x stalls) and 1 x male WC (3 x stalls and 4 x urinals) for spectators/bar users;
  - » 1 x social area (160m2) with trophy cupboard;
  - » 1 x bar with 1 x bar store and 1 x gas store;
  - » 1 x kitchen with 1 x store and 1 x servery;
  - » 1 x cleaners cupboard;

- » 1 x small office/reception;
- » 1 x external refuse/bin area;
- » 1 x plant room;
- » 1 x scorers base;
- » 1 x veranda;
- » 1 x smaller kit store;
- » 1 x larger machinery store;
- Separate, standalone score board/ facility.

3.3 Minor changes to these specifications may be made with the agreement of LCC and the Council, where these still meet ECB/Sport England standards.

3.4 For the avoidance of doubt, the3.5ha area referred to above, according to the submitted illustrative masterplan, takes in the following:

- Cricket pitch, including wicket, outfield and a 5m run-off area around the boundary;
- Pavilion and grassed areas immediately surrounding it;
- Car park; and
- Practice net area.

3.5 Excluded from the 3.5ha figure is the wider landscaping, public footpath, ponds and tree groups. These elements of the masterplan will provide an enhanced parkland setting for the cricket ground.

3.6 In addition to considering the minimum needs of LCC in the design of the proposed cricket ground, the outline planning application should also be in accordance with applicable planning policy. This matter is addressed later in Section 6.0 of the Report.





Figure 3.1 Proposed Illustrative Masterplan (planning application 3/2014/0764)

# 4. FEASIBILITY

4.1 A detailed Agronomic Appraisal of the proposed new site for LCC has been carried out by PSD Agronomy Ltd, instructed by Nortoft on behalf of Barratt Homes. A copy of the Agronomic Appraisal is contained at Appendix 1 to this Report.

4.2 The key conclusions of the Appraisal are as follows:

- A suitable pitch can be developed in the proposed location;
- It is feasible to achieve a facility of the required dimensions to meet at least minimum ECB/Sport England requirements, and improve upon the size of LCC's existing pitch;
- The main complications of developing the site relate to the heavy clay ground condition and the requirement for earthworks/drainage, but these can be overcome; and
- An eighteen month period is likely to be required for the playing square to established following initial earthworks and seeding.

4.3 The Appraisal indicates the construction type required for the square and the drainage for the outfield. The original Appraisal provided budget costs for the associated works; however, these are omitted from the version enclosed at Appendix 1 because this information is commercially sensitive at this time.





### 5. DEVELOPER COMMITMENTS AND DELIVERY

5.1 Enclosed at Appendix 2 is a Cricket Pitch Delivery Phasing Plan, which identifies the two phases of the proposed development affected by the cricket ground proposals. The existing LCC ground and additional no-build buffer to the remaining residential phase of development is shaded red and is identified as Phase B. The area of the proposed new cricket ground, ancillary landscaping and additional related parkland is shaded green and is identified as Phase A.

5.2 Barratt Homes' phasing proposal is to ensure that the new cricket ground (Phase A) is completed and ready for use prior to any development of the existing cricket club site and the surrounding no-build buffer (Phase B). This will allow for an uninterrupted transition between the two facilities by LCC's so that the club's operations and playing schedule are unaffected.

5.3 Sport England, in its letter of 21 April 2015, has specifically requested that Barratt Homes commits, by either planning condition or s106 agreement, to delivering the new cricket facility prior to the commencement of the housing development on the existing cricket ground. Barratt Homes readily agrees that this matter should be the subject of an appropriately worded planning condition.

5.4 Sport England has further requested that timescales and implementation of the new cricket ground, together with its design principles and standards for construction, be included within the s106 agreement linked to the wider proposed development.

5.5 The NPPF advises that planning obligations should only be used where it is not possible to address unacceptable impacts of development through a planning condition<sup>1</sup>.

5.6 An unacceptable consequence of the proposed development would be the conflict with planning policy that would emerge from the existing cricket club being developed without the replacement facility having been delivered in full. A further potentially unacceptable impact of development would be that the replacement cricket ground is not developed to satisfactory standards. We therefore consider it reasonable for such matters to be controlled by suitably worded planning conditions as proposed below:

#### Condition X:

No development, with the exception of demolition, site clearance, or other such remedial works, shall commence pursuant to the delivery of the proposed new cricket ground (Phase A on the approved Cricket Pitch Delivery Phasing Plan) until a scheme for its development, including full details of the pavilion, machinery store and practice nets, the cricket pitch design, layout, construction, associated earthworks, drainage, landscaping and timescales for implementation, has been submitted to and approved by the local planning authority. The scheme shall be implemented in accordance with the approved details.

#### Condition Y:

No development shall commence on the existing Longridge Cricket Club site, marked Phase B on the approved Cricket Pitch Delivery Phasing Plan, until development of the replacement cricket ground in Phase A is completed and is available for use.

#### Condition Z:

The entirety of Phase B as shown on the approved Cricket Pitch Delivery Phasing Plan, shall be kept free of construction material, traffic, construction workers and otherwise left undeveloped until the replacement cricket ground in Phase A has been completed and is fully operational.

5.7 Barratt Homes is open to further dialogue with the Council in relation to the detailed wording of the above proposed conditions. However, as drafted the conditions would ensure that the existing cricket ground would not be prejudiced by surrounding development, that it would not be developed until the replacement cricket ground is completed and ready for use and that full details of the proposed replacement cricket ground must be approved by the Council prior to the commencement its development. On this basis, it is not necessary for these measures to be secured by a \$106 planning obligation.

<sup>&</sup>lt;sup>1</sup> NPPF, paragraph 203

# 6. PLANNING POLICY

### NATIONAL PLANNING POLICY

6.1 The National Planning Policy Framework ("NPPF") states:

"Access to high quality open spaces and opportunities for sport and recreation can make an important contribution to the health and well-being of communities<sup>2.</sup>"

6.2 In relation to development affecting existing facilities, the NPPF goes on to state:

"Existing open space, sports and recreation buildings and land, including playing fields, should not be built on unless:

- An assessment has been undertaken which has clearly shown the open space, buildings or land to be surplus to requirements; or
- The loss resulting from the proposed development would be replaced by an equivalent or better provision in terms of quantity and quality in a suitable location; or
- The development is for alternative sports and recreational provision, the needs for which clearly outweigh the loss<sup>3</sup>."

6.3 The applicable test in relation to the application proposals in this instance, therefore, is that set out under the second bullet of the above extract, namely whether the loss of the existing LCC ground to housing development will involve its replacement with an equivalent or better facility. 6.4 The replacement cricket ground will feature a wicket of equivalent size to the existing (12 strips) to the required ECB dimensions. The outfield will be significantly larger than the existing, meeting or exceeding minimum ECB requirements for boundary distances, together with improved drainage. There will be an increase in the number of practice nets provided, which will be new, appropriately surfaced and permanent. The proposed pavilion will be no smaller than the existing and will be a modern, efficient building with improved internal accommodation to suit the needs of LCC and its associated functions. The development will include a permanent, purpose built machinery store, which will represent a significant improvement on the existing. The proposed car park will be at least the equivalent of the existing, but laid out and drained to current standards.

6.5 On this basis, and on the basis of information contained within this planning application, the preceding sections of this Report and the information appended to this report, the test of the NPPF in this regard is unequivocally satisfied.

### THE DEVELOPMENT PLAN

6.6 Policy DMB4: *Open Space Provision* of the Ribble Valley Core Strategy states the following:

"The Borough Council will refuse development proposals which involve the loss of existing public open space, including private playing fields which are in recreational use. In exceptional circumstances and following a robust assessment where the loss of a site is justifiable because of the social and economic benefits a proposed development would bring to the community, consent may be granted where replacement facilities are provided, or where existing facilities elsewhere in the vicinity are substantially upgraded<sup>4</sup>."

<sup>&</sup>lt;sup>2</sup> NPPF, paragraph 73

<sup>&</sup>lt;sup>3</sup> NPPF, paragraph 74

 <sup>&</sup>lt;sup>4</sup> Ribble Valley Borough Council Core Strategy 2008-2028:
 A Local Plan for Ribble Valley, Adoption Version, Policy
 DMB4: Open Space Provision

6.7 We have already established that the proposed replacement cricket ground will be a significant improvement on the existing facility, thereby satisfying the latter element of policy DMB4. With respect to the need to justify the proposal by demonstrating its social and economic benefits we highlight the following:

#### **SOCIAL BENEFITS:**

- Access to high quality sports and recreation facilities, such as that proposed, make an important contribution to the health and well-being of the community; and
- The enhanced parkland setting of the new facility will not only improve access to public open space for the local community, but will also create improved interaction between the sport and the public, providing opportunities for spectators that will no doubt encourage more people to take up cricket and support their local club.

#### **ECONOMIC BENEFITS:**

- The proposed development will provide the mechanism for LCC to acquire an all new, significantly improved facility without the need to raise the funding to do so itself;
- The improved facility is likely to attract greater interest in cricket club membership, adding to the financial stability of the club; and
- Development of new housing on the existing LCC ground, and on the wider proposed development, will provide an increased local membership base, not only in a playing capacity, but also for the social function of the club.

6.8 The social and economic benefits of the proposed replacement cricket gournd are therefore considerable and there are only positive implications for LCC and the recreational use being assessed for replacement under policy DMB4.

6.9 The proposed development is therefore in full compliance with the NPPF and policy DMB4 of the Ribble Valley Core Strategy.

#### **SPORT ENGLAND POLICY**

6.10 Whilst not a planning policy consideration, Sport England's own policy relating to the protection of playing fields, A *Sporting Future for the Playing Fields of England*, opposes the granting of planning permission for any development which would lead to the loss of, or would prejudice the use of, all or part of a playing field, unless one of the following five exceptions applies:

E1 – An assessment has demonstrated that there is an excess of playing fields in the catchment and the site has no special significance for sport; or

E2 – The Development is ancillary to the principal use of the playing field and does not affect the quantity/quality of pitches; or

E3 – The Development only affects land incapable of forming part of a playing pitch and would lead to no loss of ability to use/size of playing pitch; or

E4 – Playing field lost would be replaced with equivalent or better playing field in terms of quantity, quality and accessibility; or

E5 – The proposed development is for an indoor/outdoor sports facility of sufficient benefit to sport to outweigh the detriment caused by the loss of playing fields.

6.11 For completeness, therefore, the proposed development clearly falls under exception E4 of Sport England's policy, as already concluded in this Report.

# 7. CONCLUSIONS

7.1 The purpose of this Report is to respond to the additional information request of Sport England, set out in its consultation response of 21 April 2015.

7.2 Section 2.0 of this Report illustrates and describes in detail the site area and facilities of the existing LCC site. Section 3.0 of this Report illustrates and describes the proposed site area and facilities of the proposed replacement cricket ground. This exercise clearly demonstrates that the replacement cricket ground and ancillary facilities will be of greater quality and quantity when compared to the existing.

7.3 Section 4.0 summarises the findings of the Agronomic Appraisal, which is enclosed at Appendix 1. The Appraisal confirms that it is feasible to deliver the proposed replacement cricket ground.

7.4 Section 5.0 of this Report confirms Barratt Homes' commitment to the delivery of the proposed replacement cricket ground, to relevant standards, prior to any development taking place on the existing LCC site. Appropriately worded conditions are proposed to deal with this matter, which are linked to the Cricket Pitch Delivery Phasing Plan enclosed at Appendix 2. The affect of the Grampian style wording of the conditions is such that there is no requirement for these matters to be dealt with via a s106 agreement.

7.5 Section 6.0 of this Report confirms that the approach to the delivery of the proposed replacement cricket ground, and subsequent development of the existing cricket ground, conforms entirely with national and local planning policy, as well as the policies of Sport England. The development will deliver significant and longlasting social and economic benefits for LCC and the community of Longridge.







#### LONGRIDGE CRICKET CLUB

#### AGRONOMIC APPRAISAL OF AGRICULTURAL FIELD

FOR

DEVELOPMENT OF A NEW CRICKET GROUND

ISSUE STATUS: Client (C1) ISSUE DATE: 10/10/2014

Professional Sportsturf Design (NW) Ltd 42 Garstang Road Preston PR1 1NA

Tel: 01772 884450 Fax: 01772 884445 Email: <u>consultants@psdagronomy.plus.com</u>

#### LONGRIDGE CRICKET CLUB

#### AGRONOMIC APPRAISAL OF AGRICULTURAL FIELD

#### FOR

#### **DEVELOPMENT OF A NEW CRICKET GROUND**

#### 1. Introduction

- 1.1 Professional Sportsturf Design (NW) Ltd were instructed by Nortoft Partnership Ltd to undertake an Agronomic Appraisal of the proposed site for the relocation of Longridge Cricket Club and provide recommendations for the construction type required for the square and outfield.
- 1.2 The components of the study were:
  - An agronomic appraisal of the site including a review of site condition and capabilities.
  - Arranging for a topographical survey.
  - Review of the proposed layout of the square/outfield (Appendix1).
  - Provide recommendations and budget costs in terms of cricket pitch layout, drainage and construction.
- 1.3 The agronomic appraisal of the playing field was undertaken on 12 September 2014.

#### 2. Agronomic Appraisal

#### 2.1 Site location and description

- 2.1.1 The site is located immediately to the northeast of the Club's main ground (Appendix 2) and to the east of Chipping Lane, Longridge.
- 2.1.2 The majority of the site is bounded by agricultural grassland apart from the southwest corner which is adjacent to the Club's pavilion and car park.
- 2.1.3 It is an agricultural field under permanent grassland used primarily for grazing. Sheep were grazing the field during the visit.
- 2.1.4 A hedge including trees forms the boundary with the surrounding agricultural land and a number of gates facilitate access for animals and agricultural vehicles.
- 2.1.5 An overgrown ditch linking two ponds on the eastern boundary then flows along the southern boundary and enters a 600mm diameter pipe which is located below the Club's car park. It is assumed this pipe discharges into a surface water drainage system in Chipping Lane.

- 2.1.6 The only other ditch is located outwith the hedgerow for a short distance along the northwest boundary and again appears to discharge into a surface water system in Chipping Lane. Approximate location of ditches and ponds are indicated in Appendix 2.
- 2.1.7 A water trough on the eastern boundary indicated a water pipe will probably be present within the site.

#### 2.2 Site Levels

- 2.2.1 A topographical survey (Appendix 3) was undertaken on 12 September 2014 and this confirmed the initial visual assessment that the land is undulating with abrupt changes in level in specific areas. It generally falls towards the midpoint of the northwest boundary where a dry pond is situated in the adjacent agricultural field.
- 2.2.2 The level differences could also be inferred from the Google plan and suggested some type of historic activity within the field possibly involving earth movement and/or excavation. Further investigations should be made to establish what, if any, historical activities occurred on the site. In particular, archaeological investigations may be required.

#### 2.3. Sward Assessment

- 2.3.1 The sward was of poor quality comprising of a mixture of grasses including Yorkshire fog and bent plus varying proportions of broadleaved weeds (Buttercups and clover). It was matted and tufted in growth habit.
- 2.3.2 Sward colour was variable ranging from mid green to yellow. Vigour was poor but not surprising given the presence of a high proportion of undesirable grass species.
- 2.3.3 The existing sward is not of any significance since it will be completely replaced during any future works.

#### 2.4 Soil Assessment

#### Published Soil Survey Information

- 2.4.1 Reference to the published information by the Soil Survey of England and Wales (Bulletin No. 12) indicated the presence of the Salop Association.
- 2.4.2 The Salop Association is described as comprising of stagnogley soils with slowly permeably subsoils developed in reddish drift. They are generally fine loamy over clayey and characterised by seasonal waterlogging. When undrained they remain waterlogged for long periods and are classed in Wetness Class IV. The soils can remain poorly drained following installation of pipe drainage.
- 2.4.3 The soil map indicated this Soil Association also extended into the Cricket Club's existing grounds either side of Chipping Lane.

#### Site Investigation

- 2.4.4 The soil profiles excavated on site generally confirmed the presence of the Salop Association. Descriptions of the 4 no. profiles excavated with a spade and hand auger to a maximum depth of 1m are recorded in Appendix 4.
- 2.4.5 The topsoil was on average 200mm thick although in localised areas it increased to 300mm. It was greyish brown with distinct rusty mottling evident indicating periodic waterlogging. The mottling increased with depth indicating a subsoil of low permeability.
- 2.4.6 The topsoil was dense in-situ but did break into sub angular blocky units when excavated indicating a reasonable structural condition. Occasional small pebbles were observed. A mass of fine fibrous roots were presence to depths of around 100-150mm.
- 2.4.7 The matted condition of the sward and absence of cultivations in recent years had resulted in development of thatch at the soils surface.
- 2.4.8 A greyish, stiff clay was present immediately below the topsoil and this merged into a reddish brown clay at depths of 400-650mm below ground level. The greyish colourations indicated prolonged periods of wetness.
- 2.4.9 The soil profiles to depths of @ 1m contained very few stones.

#### Soil Analysis Results

- 2.4.10 A representative sample of topsoil was collected from the field and forwarded for laboratory analysis. The results are recorded and discussed below with the full textural analysis results provided in Appendix 5.
- 2.4.11 The topsoil textural analysis results are summarised in Table 1.

#### **TABLE 1: Textural Analysis Results**

% Sand	%Silt	% Clay	% Medium/Fine	% Fines *
			Sand	
37	42	21	17.3	70.5

\* Particles < 0.125mm diameter

- 2.4.12 The topsoil is classed as a loam with the silt fraction being the most dominant.
- 2.4.13 The soil is fine textured and it's physical properties will be dominated by the silt and clay content. Total fines content is above 70% and therefore it will be water retentive and very susceptible to structural deterioration and compaction when in a moist and wet condition. The topsoil will be required to be in well structured condition (i.e. particles aggregated into structural units) for the drainage rates to be satisfactory.

- 2.4.14 A topsoil of this texture would benefit from sand amelioration of the immediate surface to improve its physical characteristics both in terms of increasing water infiltration rates and providing resilience when used as a cricket outfield especially in moist conditions in late spring and late summer. A comprehensive pipe drainage system preferably supplemented by slit drains/sand grooves will be required to achieve appropriate standards for a cricket outfield on a soil of this type.
- 2.4.15 The pH and nutrient status of the topsoil is given in Table 2 below. The recommended pH range for perennial ryegrass dominant swards is 6.0-7.0. The extractable nutrients are given in terms of concentration (ppm) and index. The index for perennial ryegrass dominant swards should be maintained in the range 2.0–4.0.

#### **TABLE 2: pH and Nutrient Status**

	phorus		Potassium		Magnesium	
ppm	Index	ppm	Index	ppm	Index	рН
27	3.0	140	2.1	195	4.2	5.6

- 2.4.16 The pH is low and lime will require adding during any future development works.
- 2.4.17 The phosphorous (P) and magnesium (Mg) levels are satisfactory but Potassium (K) is low. A balanced pre-seed fertiliser will be required taking these levels into account during any future development works.

#### **Photographic Record**

2.4.18 A photographic record is provided in Appendix 6.

#### 2.5 Climatic Assessment

2.5.1 The Agricultural Climate of England and Wales publication (Technical Bullitin35) provides details of the climate in various areas of England and Wales for the period 1941-70. The following climatic data was extracted for this area.

#### 2.5.2 Average Rainfall and Potential Transpiration

The average rainfall for this area is 1133mm per year, whilst the Potential Transpiration is recorded as being 484mm per year.

#### 2.5.3 Grass Drought Factor

The grass drought factor gives an indication of the number of days when the soil moisture deficit exceeds 50mm within the main rootzone. Such a soil moisture deficit is likely to lead to the growth of grass being impeded due to a lack of regularly available soil moisture. In this area the grass drought factor is estimated to be under 5 days.

- 2.6.2 The boundary of minimum 60m is appropriate for the standard of cricket played. It is noted that the Sport England recommended boundary lengths for seniors are 45.72m minimum to 82.30m maximum. The safety margin outwith the boundary is normally 2.74m wide but the current proposed layout provides 5.0m. The latter would be favoured especially given the slopes/embankments at certain sides of the ground which will be produced following earthworks.
- 2.6.3 It is noted that the proposed square/outfield layout fits tightly into the site and results in no room available for a pathway on the southern boundary between the outfield and the ditch that will be retained.
- 2.6.4 The orientation of the square falls within the recommended guidelines of the ECB and Sport England.

#### Site Levels/Earthworks

- 2.6.5 Existing site levels require complete remodelling to provide suitable gradients for the cricket square and outfield. This will comprise of topsoil stripping/stockpiling, cut/fill of subsoil, trimming of the formation level and re-spreading of topsoil. The site is dominated by clay soils and therefore these earthworks must be undertaken during the summer period. Excavations will be deeper than the 1m auger used during the agronomic appraisal and therefore boreholes should be drilled to ascertain ground conditions in some areas.
- 2.6.6 In terms of the square this ideally should be completely level along the line of play although a slight fall of around 1:100 is preferred to assist surface run-off of water. A slight crossfall of between 1:80 and 1:100 is also acceptable to assist surface run-off. Proposed gradients are illustrated on the proposed layout (Appendix 7).
- 2.6.7 The outfield must comprise of smooth and even levels that permit balls to run freely across the surface. Gradients of up to 1:50 are acceptable on the outfield which will be of assistance in shedding surface water. A gradient of 1:100 is proposed for this site (Appendix 7).
- 2.6.8 Sections through the proposed layout are illustrated in Appendix 7 and it is recommended the Client looks closely at the relationship between the proposed outfield and existing ponds/ditches. The earthworks required result in the water level of the existing pond being similar to the outfield level. A raised area of ground divides them.
- 2.6.9 It is noted the earthwork calculations indicate 461m<sup>3</sup> of fill required. During the design stage a balanced cut/fill will be achieved by slight adjustment (<10mm) of the proposed levels.

#### Outfield Construction/Drainage

2.6.10 The fine textured topsoil and clay subsoil dictates that a combination of pipe and slit drainage will be required to the outfield. It would be appropriate to install pipe drains at 3m centres and these be supplemented with sand grooves. The latter being

narrow bands of sand at 260mm centres installed at right angles to the lateral drains which link the surface to the drain backfill. They overcome the natural impermeability of the topsoil and hence increase discharge of surface water. This approach is consistent with Sport England guidelines on specifications for cricket (Appendix 8).

2.6.11 The fine textured topsoil will be susceptible to compaction and hence reduced water infiltration rates. The proposed pipe drainage supplemented by sand grooves will go a long way to offsetting this reduced permeability but sand amelioration of the immediate surface during the outfield construction would also be of significant benefit in counteracting the soft consistency of the fine textured soil on site and ensuring the longevity of the sand groove system.

#### **Cricket Square**

- 2.6.12 The cricket square will need to be constructed with imported material. The clay subsoil and fine textured topsoil are not suitable for use in the squares construction profile.
- 2.6.13 The squares construction profile will need to comprise:
  - Pipe drainage system including perimeter drain.
    - Grit drainage layer.
    - Sandy loam layer above the grit drainage layer.
    - Playing surface comprising of 100mm thick cricket wicket loam.
    - Square to be established from seed.
- 2.6.14 An irrigation system comprising of a tank, including pump, should be provided to ensure the square can be appropriately maintained.

#### **Construction Period**

- 2.6.15 It is envisaged the works to the outfield and square, including bulk earthworks, would be completed during the period May August and all areas seeded during September.
- 2.6.16 The sward on both the square and outfield then being established over an eighteen month period.

Т

#### LONGRIDGE CRICKET CLUB

#### CURRENT PROPOSED LAYOUT



#### LONGRIDGE CRICKET CLUB

#### SITE PLAN AND DITCH LOCATIONS



#### LONGRIDGE CRICKET CLUB

TOPOGRAPHICAL SURVEY



LONGRIDGE CRICKET CLUB

SOIL PROFILE DESCRIPTION

25

.

#### SOIL PROFILE DESCRIPTIONS

Profile No.	Depth (mm)	Description
1	0-200	Greyish brown loam; dense but breaking to sub-angular blocky; occasional worm; strong rusty mottling on root channels; strong mottling >100mm depth; occasional pebbles; fibrous roots.
	200-400	Stiff greyish clay; stoneless.
	400-450	Gritty clay; greyish orange; sandstone fragments.
	450-900	Stiff reddish brown clay.
2	0-200	Greyish brown loam; dense; strong rusty mottling throughout; occasional pebbles; mass fine fibrous roots.
	200-650	Grey clay; massive; sticky towards base; stoneless.
	650-900	Reddish brown clay; stoneless.
3	0-200	Greyish brown loam; dense but breaking to sub-angular blocky; occasional worm; rusty mottling throughout; occasional pebble; mass fine fibrous roots.
	200-300	Reddish brown clay; crumbly; stoneless.
	300-700	Reddish brown clay; stiff/massive; stoneless.
4	0-300	Greyish brown loam; dense; strong rusty mottling; occasional pebble; fibrous roots.
	300-400	Stiff, massive grey clay.
	400-700	Stiff reddish brown clay; stoneless.

#### LONGRIDGE CRICKET CLUB

SOIL ANALYSIS RESULTS



Unit 58 Stirling Enterprise Park Stirling, FK7 7RP, Scotland Tel: +44 (0) 1786 449195 Fax: +44 (0) 1786 449688 <u>europeanturf@aol.com</u> <u>www.etl-ltd.com</u>

11887/5	PARTICLE SIZE DISTRIBUTION SAND / SILT / CLAY Test Report Number 11887/F Page 1 of 2
100%	Project 1175 Sample LONG/7512
11/00/14	
14/09/14 moist	Sample Received Date Sample Moisture (very wet, wet, moist, dry, n/a)
friable	Sample Kolsture (Very Wet, wet, moist, dry, h/a) Sample Consistency (hard, friable, plastic, n/a)
high	Sample Homogeniety (high, medium, low, n/a)
	Particle Size Distribution – Not Covered by A2LA Accreditation
SA	Angularity (VA, A, SA, SR, R, WR, n/a)
M	Sphericity (H, M, L, n/a)
0.9	% Coarse Gravel > 3.4 mm
0.5	% Fine Gravel 2 to 3.4 mm
3.9	% Very Coarse Sand 1 to 2 mm
6.9	% Coarse Sand 0.5 to 1 mm
7.8	% Medium Sand 0.25 to 0.5 mm
9.5	% Fine Sand 0.125 to 0.25 mm
8.2	% Very Fine Sand 0.05 to 0.125 mm
41.5	% Silt 0.002 to 0.05 mm
20.8	% Clay less than 0.002 mm
5.3	% greater than 1mm
14.7	% Coarse + Medium Sand
9.5	% Fine Sand
70.5	% Fines less than 0.125 mm

28

\*\* Test Not Covered by A2LA Accreditation

Continued on Page 2

Master Document No.053



Soil Sample: PSD (NW) Ltd

Project Ref. 1175

Sample		After removal of gravel			
	% Gravel	% Sand	% Silt	% Clay	Soil Texture Classification
Sample LONG/7512	1.4	37.0	42.0	21.0	Loam

29

Shara Bruce Signed:

Date: 18th September 2014 for European Turfgrass Laboratories Ltd

#### LONGRIDGE CRICKET CLUB

#### PHOTOGRAHIC RECORD



Fig (i) : View from Club's car park.



Fig (ii) : Pond on eastern boundary.



Fig (iii) : Overgrown ditch on eastern boundary.



Fig (iv) : Abrupt changes in level are evident across the site.



Fig (v) : Typical soil profile - 200mm loam overlying clay.



Fig (vi) : Loam topsoil with strong mottling indicative of long periods of waterlogging.
#### APPENDIX 7

#### LONGRIDGE CRICKET CLUB

#### PROPOSED EARTHWORKS AND SECTIONS



Bill Children - same the state of the s 100 mm and the second 1111 1114 1 [ ] • 111





Construction of starting characterized from the starting



L. Refer to written specification and draw Island therein,	MENT
	<ol> <li>Refer to written specification and draw load therein.</li> </ol>

Image: Second	1		Notes: 1. Barlier Ib weltere specification and drawings Babel Servers. 2. Do not scale incer this drawing. All disservations to be checked in value. Do not review assumptions.

#### APPENDIX 8

#### LONGRIDGE CRICKET CLUB

#### SPORT ENGLAND CRICKET PITCH STANDARD LAYOUT

WITH SAND GROOVES



## **Natural Turf for Sport**

### Design Guidance Note



Playing area for Senior Cricket (8 wicket pitch) - standard layout with sand grooves

May Revision 002

62





# Longridge, Higgins Brook

