



Adderbury
Parish Council

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ADDERBURY PARISH COUNCIL

Milton Road – Proposed natural turf pitch

Key Stage Inspection

Report Date: 12th June 2020
Consultant: Michael Boyes



Date of Visit:	12 th June 2020
Visit Objective:	To undertake an inspect the surface preparations and initial levels following pitch upgrade works (by others).
Present:	Diane Bratt – Adderbury Parish Council Michael Boyes – Turfgrass Agronomist, STRI Ltd
Weather:	Warm with sunny spells (18°C).

Headlines

- The visit represented the first to the site at Milton Road since the STRI were engaged to submit a feasibility report in August 2017. The purpose of this visit was to assess the works undertaken by the appointed drainage contractor (DW Clark Drainage Ltd) to carry out appropriate cultivation of the inherent soils and the establishment of initial surface levels for the installation of the proposed plastic pipe primary drainage network.
- Site consolidation and general surface levels were noted to be acceptable across the vast majority of the site allocated for establishment of a natural turf area for recreational use and amateur sport pitches. A slight depression was evident to the naked eye through the centre of the field from West to East. Sport England tolerances for final surface levels (i.e. +/- 20mm across a 3m straight edge) are not currently being met but are not required at this point to carry out installation of the drainage and will become more pertinent in the preparation of final levels and seedbed.
- A natural gradient is evident towards the north eastern corner of the field.
- Soil pit inspection revealed that soil cultivation was marginally inconsistent across the area with a more friable profile evident towards the eastern side of the field with a finer soil tilth whereas larger soil aggregates were apparent within the profile and at the surface on the western boundary of the area.
- Vegetative debris and some large stones were apparent across the site and will require removal prior to the establishment of final surface levels but will not impede drainage installation.

Key Actions

- Undertake final rotovator operation to ensure appropriate cultivation of sub-soils across the area of the site designated for natural sports pitches and recreational use.
- Conduct final rough grading operation with tractor-mounted levelling bar to redistribute cultivated soils, disperse larger aggregates at the surface, correct the identified low areas, achieve appropriate consolidation and establish suitable surface levels for drainage installation.
- Install plastic pipe primary drainage network as outlined in the STRI 2017 feasibility study.
- Upon completion of the drainage installation, make provision for cultivation of soil profile between individual pipelines to a depth of approximately 150mm to alleviate surface compaction from installation vehicular operations.
- Assess the possible need for further, shallower cultivation (i.e. $\leq 100\text{mm}$), at right angles to drain lines to ensure connectivity of the surface to the drainage network, taking extreme care not to disrupt drainage medium employed.
- Plan for stone and vegetative debris removal ahead of generation of finished levels.
- Make provision for final grading operations to establish desired surface levels and a fine soil tilth for over-seeding operations. Sport England tolerances for surface levels is 20mm over a 3m straight edge.

Photo Observations and Comments

	
<p>Figure 1: General cultivation and rough levelling is acceptable across the vast majority of the section of the site which has been allocated for the establishment of natural turf pitches (North to South orientation shown above).</p>	<p>Figure 2: Sub surface cultivation on the east boundary of the site revealed the extent of recent satisfactory rotovation operations.</p>
	
<p>Figure 3: The east side of the site also illustrated the finer tilth achieved through appropriate levels of cultivation.</p>	<p>Figure 4: The west boundary was less positive with large aggregates still evident, fairly shallow within the soil profile. A further final cultivation operation is highly recommended.</p>
	
<p>Figure 5: Larger aggregates were also apparent at the surface in the NW corner of the area allocated for pitch development emphasising the need for further rotation and levelling works prior to drainage installation.</p>	<p>Figure 6: A natural fall was apparent from South to North as shown on the eastern boundary above which will aid drainage of the site.</p>

Photo Observations and Comments (continued)



Figure 7: A slight was evident through the centre of the site for pitches from West to East, particularly towards the eastern boundary. Final cultivation and levelling should aim to correct this prior to drainage installation.



Figure 8: Some stone picking will be required prior to seed bed preparation and final grading of levels for overseeding operations.



Figure 9: Vegetative debris will also need to be removed to ensure successful seed strike and sward establishment.



Figure 10: A section of the site immediately adjacent to the road at the south end of the field has been stripped, roughly graded and compacted in preparation for the construction of facilities and car-parking.



Figure 11: The drainage contractor has a number of key pieces of equipment on site to carry out final cultivation operations to break up the larger soil aggregates to promote a more friable profile and finer surface soil tilth.



Figure 12: A final rough grading with the levelling bar will eradicate any surface imperfections and iron out the minor mounds and depressions detailed above.

Signed

A handwritten signature in black ink, appearing to read "M. Boyes".

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