

**University of Long Sutton – Natural Turf Sports Field Design & Construction Considerations –
East Playing Field 04 02 2026. (for internal use only).**

Labosport 26-0124-1

1. **Specification** – The proposed pitch construction contains a primary drainage system (@3m centres) and secondary bypass scheme (sand grooves installed into an established sward) to remove surface water and is based on findings from the initial feasibility report. This drainage scheme is based on a 'Type 4' pitch as per Sport England's Design Guidance Notes for Natural Turf and its installation is essential if cut and fill earthworks or material handling are implemented. It is prudent to note that this drainage system incorporates high levels of sand and aggregates within the drainage to aid with water movement and to maintain good hydraulic conductivity between the surface and the drainage infrastructure below. During periods of drought, especially during summer, grass cover may suffer along the drain lines in the absence of irrigation as sand has minimal moisture holding capacity. There are construction methodologies to minimise this.
2. **Usage** – As per Sport England's Design Guidance Notes for Natural Turf a 'Type 4' pitch will provide between 3 and 5 hours of usage per week with a 50% increase for players under 15 depending on weather conditions before pitch conditions begin to deteriorate. Overuse of the pitch, particularly in poor weather and ground conditions will contribute to poor surface conditions manifest as mud and loss of grass cover which can irreversibly damage the efficacy of the in-situ drainage scheme. Annual sand topdressing is considered a necessity to protect the secondary drainage scheme. **Please note: If secondary drainage is removed then usage levels will decrease to approximately 2-3 hours of usage per week as per Sport England guidance.**
3. **Irrigation** – The construction of natural turf pitches relies on optimal weather conditions to aid germination and grass plant establishment. In some cases, when construction is carried out in summer and during drought conditions, supplementary irrigation may be required, the costs of which should be factored into the budget. Normally irrigation is not included within a construction project as it is cost prohibitive which is why Labosport normally advocates construction in spring or autumn with higher rainfall and lower temperatures. Bowmer and Kirkland need to be aware that good germination is weather dependent and therefore Labosport will assume no responsibility for poor germination during drought conditions. All our specifications do contain an over-seed in the maintenance schedule as a contingency against less-than-ideal growing conditions in the first instance. It is the responsibility of **Bowmer and Kirkland** to implement or instruct any irrigation during periods of drought (if required).
4. **Outfall** – Labosport will accept no responsibility for outfall deemed unsuitable or inefficient to discharge drainage water for the proposed scheme. This drainage scheme does not include any restricted outfall rates from the pitches. Any subsequent restrictions and impact these restrictions may have on the efficiency of the pitch's drainage will be the responsibility of the client. Labosport will accept no responsibility or liability from any issues arising from using outfall provided by others including the outfall's efficacy. The client has sole

responsibility for ensuring that all permissions are obtained from either the Environment Agency, local authority or drainage board. These permissions should be in place prior to construction starting.

5. **Settlement of drain lines** – Land drainage is prone to differential settlement, particularly in clayey soils or soils with a high groundwater table due to shrink swell characteristics. The specification includes the following: ‘Contractors must be aware: allowance shall be made for topping up trench lines following settlement occurring during the 12-month period following drainage installation, including as a result of natural soil shrinkage in dry weather’. It is also worth noting that settlement can occur for 2-3 years and further topping up of drain lines may be necessary outside of the contract period and will be the responsibility of the recipient.
6. **Services** – It is recommended that the Client obtains up to date service plans of the site prior to any development works. It is important to note that the presence of services may inhibit the scope of works.
7. **Maintenance scheme** – With any development, it is imperative that a well-structured intensive maintenance programme is implemented to maintain the development area following large scale investment. Failure to implement the recommended maintenance operations will result in a deterioration of pitch conditions and subsequent availability for use.
8. **On-going maintenance and irrigation** – It is imperative that the recipient understand the long-term maintenance of the pitches and has sufficient budget to implement operations deemed good husbandry and aligned to the Operations and Maintenance Manual provided by the contractor. Should drought conditions persist as per the Summers of 2022 and 2025, then supplementary irrigation may be required to assist plant development and mitigate the risk of differential settlement of the drainage lines, more common during dry weather conditions due to the risk of soil shrinkage.

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