Surface Water Drainage Strategy Summary

1. An indicative falling head infiltration tests were undertaken and infiltration rates of between 3 x 10^{-7} m/s to 5 x 10^{-7} m/s were recorded and used as basis in evaluating the proposed infiltration systems.

2. Multiple infiltration trenches were proposed to improve the site drainage and accommodate the runoff from the playgrounds, footpaths, and the adjacent grassed areas within the community park during major storm events.

3. Two basins were proposed to collect the runoff from the playgrounds with outflow discharging to a proposed swale.

4. Permeable footpath (System B) was proposed to discharge the surface water runoff by partial infiltration and to the adjacent infiltration trenches.

5. Based on the in-situ testing and TRRL report, a CBR value of 6% was recommended and used as basis in estimating the structural depth of the proposed permeable footpath.

6. Verti-Drain was proposed to improve the pitch's surface to allow the soil and greens to drain properly.

Carrier Pipe
IL 141.28

Carrier Pipe
IL 141.27

Carrier Pipe
IL 141.14

Filter Drain
150ø Perforated Pipe
in Trench laid at
0.6m average depth

Carrier Pipe
IL 140.95

Carrier Pipe
IL 140.90

Carrier Pipe
IL 140.85

Carrier Pipe
IL 140.70

Carrier Pipe
IL 140.70

Carrier Pipe
IL 140.70

Overflow Pipe
IL: 140.65

Overflow Pipe
IL: 140.85

Overflow Pipe
IL: 140.75

Overflow Pipe
IL: 140.65

141.41

141.45

140.65

Base: IL140.65

141.36

50ø

Outfall

Infiltration Basin 2
Exceedance Level: 141.19
Base Level: 140.65
Depth: 540mm
Total Volume: 372m³

Maximum water Level
1 in 100 Yr + 40%CC: 140.860
(Max. Water Depth: 210mm)

Half Drain Time
1 in 30 Yr: Less than 24 hours

Swale
Exceedance Level: 140.90
Base Level: 140.30
Base Width: 1.0m
Top width: 4.60m
Side Slope: 1:3
Depth: 600mm

Maximum water Level
1 in 100 Yr + 40%CC: 140.599
(Max. Water Depth: 299mm)

Half Drain Time
Not applicable for storm events up to and including 1:30 year as it acts as an overflow for storm events above this.

Note: For Footpath arrangement in this area please refer to Allen Scott General Arrangement drawing 739-103

Verti Drain to be supplied and installed by others

CDM 2015 RESIDUAL RISKS

1.Tree root protection zones.to be confirmed.
2. Working on or by existing utilities.

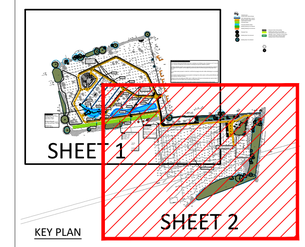
The above residual risks are for non-standard hazards. It is assumed that a competent contractor familiar with the construction of this type of work will be appointed who will be aware of the standard hazards.

5m 10m 15m 20m 30m 40m 50m
SCALE 1-500

INDICATIVE ONLY

NOTES

1. DO NOT SCALE THIS DRAWING. WORK TO FIGURED DIMENSIONS ONLY. ALL DIMENSIONS ARE IN Metres (m) UNLESS NOTED OTHERWISE.
2. This drawing is to be read in conjunction with all relevant Architect's, Engineer's and Specialist's drawings and their respective Specifications.
3. All work to comply with the relevant British Standards, Codes of Practice and the Building Regulations.
4. Any discrepancies between all working drawings, specifications and schedules of all disciplines to be immediately notified to CTP for clarification/correction prior to construction of relevant structure.



KEY PLAN

KEY

- xx.xx+ Finished Level
- Surface Water Drain (Private)
- S.W. Perforated Pipe in Trench
- Breedon Golden Amber Gravel - Impermeable Footpath
- Proposed Swale
- Proposed Infiltration Basin
- Existing Planting to be retained
- Existing Planting to be removed
- Proposed Tree
- Existing trees to be removed
- Existing trees to be retained

FOR CONSTRUCTION

Revision	Amendments	Date	Rev'd	Chk'd
C1	Construction Issue	21.07.25	SV	LB
P12	Calculations Amended	17.07.25	SV	LB
P11	Maximum Water Levels Amended	16.06.25	SV	SM
P10	Swale Information Amended	13.06.25	SV	SM
P09	Levels and section marks added	06.06.25	AM	SM
P08	GA Updated	24.05.24	SV	AK
P07	Drawing Revised to Allen Scott Comments	08.05.24	SV	AK
P06	Drawing Revised to Allen Scott Comments	20.02.24	NSV	AK
P05	Title Revised	05.01.24	NSV	SM
P04	Drainage Revised	29.11.23	SF	AR
P03	Drawing Revised to Allen Scott Comments	24.11.23	SF	AR
P02	Preliminary Issue	10.11.23	SF	AR
P01	Preliminary Issue	10.07.23	SF	AR

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consulting engineers
Suffolk House 154 High Street
Sevenoaks Kent TN13 1XE UK
UK: +44 (0)1732 740195
www.ctp-llp.com

Project Title:
HEMSLEYS MEADOWS AND FINCHES FIELD

Drawing Title:
DRAINAGE LAYOUT SHEET 2 OF 2

Drawing Number: A9307-1501
Scale: 1:500 @A1 Unless Noted Otherwise
Revision: C1