POND NOTES
POND TO BE ENCOMPASSED IN A FENCE TO PREVENT INGRESS. GATED ACCESS WITH COMBINATION LOCK FOR MAINTENANCE ACCESS TO BE PROVIDED.
4 No SIGNS TO BE AFFIXED AROUND FENCING EVENLY SPACED STATING "DANGER DEEP WATER"

PHASE 2 FLOOR LEVELS ARE INDICATIVE AND SUBJECT TO REVIEW

Cemetery

CEMETERY

Ecology Area

Life preserver / buoyancy aid locations

Base Area = 625m2
Permanent Water Level = 4.05m
100Yr+40%CC Storage Level = 4.05m to 5.108m
Base Level = 3.25m

AREA= 1508
VOLUME= 2626.5

Bank above pipe invert to be 1 in 3 slope

Bank below pipe invert to be 1 in 1.5 slope

FENCE TO BE MOVED BACK. EXACT POSITION TO BE CONFIRMED

PHASE 1 & 2 FLOW CONTROL FITTED TO OUTFALL HEADWALL,(ALTHON H50C) FLOW RESTRICTED TO 7.1l/s

BRICKOUTFALL HEADWALL with a Flap Valve

ALTHON H10C A HEADWALL WITH KEY KLAMP HAND RAILS AND A SAFETY GRILL. BAFFEL BLOCK FINNISH TO SPILLWAY TH BAGWORK REVETMENT TO REDUCE SCOUR

2m gap

WOODLAND ENHANCEMENT

L25PGE

L24FCE

L23FCE

RD1

EXHD1

UNIT 01 Phase 2 Unit 01 FFL 6.5
UNIT 02 Phase 2 Unit 02 FFL 6.25
UNIT 03 Phase 2 Unit 03 FFL 6.00
UNIT 04 Phase 2 Unit 04 FFL 6.00
UNIT 05 Phase 2 Unit 05 FFL 6.00
UNIT 06 Phase 2 Unit 06 FFL 6.00
UNIT 07 Phase 2 Unit 07 FFL 6.00
UNIT 08 Phase 2 Unit 08 FFL 6.0
UNIT 09 Phase 2 Unit 09
UNIT 10 Phase 2 Unit 10
UNIT 11 Phase 2 Unit 11 FFL 6.5
UNIT 12 Phase 2 Unit 12 FFL 6.5
UNIT 14 FFL 6.5
UNIT 15 FFL 6.5
UNIT 16 FFL 6.5
UNIT 17 FFL 6.5
UNIT 18 FFL 6.5
UNIT 19 FFL 6.5
UNIT 20 FFL 6.5
UNIT 21 FFL 6.5
UNIT 22 FFL 6.5
UNIT 23
UNIT 24 FFL 6.9
UNIT 25 FFL 7.35
UNIT 26 FFL 7.35
UNIT 27 FFL 7.35
UNIT 28 FFL 7.05
UNIT 29

FFL 7.0
Spirotech Sawtry Phase 1 Warehouse and Office Building FFL 7.000

Service Yard Area

New Electric Substation

T-T PUMPS PACKAGE PUMP STATION
MODEL = SATURN
DIAMETER = 1.5m
DEPTH = 4.5m
DUNO FLOW 4.31L/SEC

450mm Pipe for Phase Two

STEEL SHEET PILE
6m LONG PENETRATIN
4.4m BELOW BED (FLF
6 ASSUMED)

PHASE 2 FLOOR LEVELS ARE INDICATIVE AND SUBJECT TO REVIEW

LANDSCAPED BUND

DRAIN NOT SURVEYED

60
58

St Andrew's Nurseries

CONNECTION TO EXISTING PUBLIC SEWER AS APPROVED UNDER SECTION 106 AND SECTION 106 WITH ANGLIAN WATER

F13 IL7.445
F14 IL7.335
F15 IL6.249
F16 IL4.636
150mm 1/40.000

North Arrow

NOTES

1. The contractor shall check all tie-ins for line and level with existing before commencing any works. The Engineer shall be notified immediately, in writing, should any errors be found.
2. Any discrepancies, of whatever nature, must be reported to the Engineer prior to the commencement or continuance of any further works.
3. All private drainage works to be in accordance with the requirements of Building Regulations 2010, Part H, "Drainage and waste disposal", (01st October 2015).
4. All pipes to be bedded and backfilled in accordance with Part H, Diagram 10. Shallow pipes shall be protected in accordance with Part H, Diagram 11.
5. Unless otherwise stated, all private drainage to be 100mm diameter. Gradients have been shown where there are pipe capacity issues and these should be regarded as minimums. Unless there are constraints dictating otherwise, gradients shall generally be 1 in 60. 100mm diameter pipes shall not be laid flatter than 1 in 80, 150mm diameter pipes shall not be laid flatter than 1 in 150.
6. All pipes, chambers and fittings to be installed strictly in accordance with the manufacturers instructions.
7. Pipes which run adjacent to buildings shall be installed in strict accordance with Part H, Clauses 2.23 to 2.25 and Diagram 8.
8. All private manholes, inspection chambers and drainage channels to comply with BS EN124. Cover strengths to be:
   Class D400 in heavy trafficked areas (access roads, service yards etc.)
   Class C250 in lightly trafficked areas (car parks, driveways etc)
   Class B125 in Non trafficked areas
   Class A15 in landscaping areas
9. All drains in the vicinity of existing or proposed trees to be constructed in accordance with the requirements of NHBC Practice Note 3.
10. Private drainage frames must be tied to manhole risers by use of manufacturers ties (e.g. Polypipe ref. FRK500 fixing kit and FRK501 black ties.) The ground works contractor will be held fully responsible for any accidents due to incorrect fitting or failure to use the correct manufacturers fixing equipment.
11. All existing land drains encountered on site during construction to be re-connected.
12. Should any departure from the slab level be considered, agreement shall be sought from the Engineer immediately and prior to commencement or continuance of any works, and should take full account of all restrictions to the slab level.
13. Garage slabs relate to the finished level of the concrete at the front entrance of the garage.
14. Where a drive slopes towards a garage there is to be a 75mm ramp up to the garage slab.
15. Maximum gradients of gardens to be 1 in 6 (unless stated otherwise), except for designed banking works.
16. All dimensions in metres unless otherwise stated.
17. As underlying ground conditions may be variable across the site the Contractor shall undertake onsite porosity tests at the location and depth of each soakaway. Tests should be undertaken in accordance with BRE365 and results forwarded to the Engineers to allow verification of designs.
18. All existing services, sewers and drains indicated on this drawing and any other related drawings are shown only indicatively, and shall have their positions and level confirmed on site by the Contractor.
19. The invert levels of all existing sewers, drains, ditches, tanks or other features and apparatus where a new connection is to be made shall have their precise position and level confirmed on site by the Contractor prior to commencement of any construction work. The results of the investigations shall be confirmed to MTC Engineering (Cambridge) Ltd so that the design can be verified.

STORM WATER

20. All run-off from roof and hardstanding areas shall drain via a series of surface drainage systems with attenuation provided via a dual purpose storage pond and wildlife habitat. Outfall will be restricted via a hydrobrake flow control device with spigot fitting to the outfall headwall. Flow restricted to 7.1 L/s storage has been designed to accommodate all storms up to and including the 100yr + 40% event.
21. All private carparking and shared accesses shall drain via permeable paving. The paving shall be designed based on CBR results and to accommodate the required loading.
22. Discharge from pond to IDB drain subject to consent and approval from the local internal drainage board.

PHASE 2 FLOOR LEVELS ARE INDICATIVE AND WILL BE REVISED ONCE THE FINAL LAYOUT HAS BEEN PROVIDED

NOTE:
At the location of the proposed lateral connection the contractor shall establish the position and depth of any existing services to prevent any clash in level and abortive costs.

FOR APPROVAL

REV	DATE	DESCRIPTION/REASON FOR ISSUE	APPR

MTC ENGINEERING
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TITLE
GREAT NORTH ROAD, SAWTRY, CAMBRIDGESHIRE.
PROPOSED SWS
PHASE 2 DRAINAGE PLAN

ORIG	DATE
M.R.F	SEPTEMBER 2022
CHKD	SCALE 1:500 @ A1
APPR	DRAWING NO 2070-28 REV

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Private Drainage Key

- Foul Inspection Chamber (Depth <0.6m [1 side connection])
- Foul Inspection Chamber (Depth <1.2m [2 side connections])
- Foul BR manhole PCC Ring (1.2-1.5m)
- Foul BR manhole PCC Ring (1.50-2.7m)
- Backdrop on FW Chamber
- Storm Inspection Chamber (Depth <0.6m [1 side connection])
- Storm Inspection Chamber (Depth <1.2m [2 side connections])
- Storm BR manhole PCC Ring (1.2-1.5m)
- Storm BR manhole PCC Ring (1.50-2.7m)
- Backdrop on SW Chamber
- Rodding eye with Invert Level
- 150Ø French drain / Filter trench
- QMAX ACO channel or similar with gully and rodding point.
- Gully (1050mm X 450mm)
- Road Gully
- Low Point
- High Point
- FFL 12.50 FFL Level
- Bullnosed dropped kerb

Shared Sewer Key

- 150@83 F1(1.80) Foul sewer with pipe dia. & gradient incl. adoptable FWMH with reference & Invert.
- 225@156 S1(2.25) Storm sewer with pipe dia. & gradient incl. adoptable SWMH with reference & Invert.

Adoptable Sewer Key

- 150@83 F1(1.80) Foul sewer with pipe dia. & gradient incl. adoptable FWMH with reference & Invert.

Surface Water Attenuation

Permeable Block Paving
Load Category 4 permeable paving (infiltration) on subgrade 5% soaked CBR. 80mm Permeable Block, 50mm laying course material comprising mostly passing 6.3mm sieve and mostly retained on a 3mm sieve. 70mm dense bitumen macadam hole punched with 75mm Dia holes at 750mm centres. 300mm Hydraulically bound coarse graded aggregate laid in layers not exceeding 100mm thick, each layer to be well compacted.