



Notes

- GENERAL**
- This drawing is to be read in conjunction with all relevant Engineers, Architects and Specialists drawings, models and specifications.
 - No dimensions are to be scaled from this drawing.
 - All dimensions are in millimetres and levels are in metres unless noted otherwise.
 - The Engineer is not responsible for dimensional information except where shown on the drawings. All setting out information, dimensions etc. shall be calculated from the Architects drawings.
 - All drawings issued in CAD/Revit format are provided solely as a supplement to the information shown on the equivalent PDF drawing only.
 - The contractor shall verify all site dimensions and existing details, setting out dimensions and levels with the Architect. Engineer to be informed of any discrepancies before proceeding with work.
 - Existing details are assumed and are to be confirmed on site with any discrepancies recorded and reported to the Engineer so that any adjustments required to the scheme can be considered.
 - The contractor is responsible and liable for ensuring the stability of the works, adjoining structures and services at all stages of construction. Any temporary works are to be designed and detailed by the contractor.
 - All existing services are to be located prior to commencement of the work on site. Unless shown we have no knowledge of any underground obstructions or services. These are to be determined prior to the commencement of the works on site.
 - Refer to the Architect's/Fire Consultant's drawings and specifications for the overall fire strategy and protection requirements of the building and structure.

DRAINAGE

- Any information given on this drawing regarding existing services is believed to be correct. The contractor must check this information and determine the nature and location of any existing services from the various statutory authorities before commencing excavation works.
- Drainage works to be constructed in accordance with BS EN 752 and Approved Document H
- Drainage works to be constructed in accordance with Water Authorities Association Specification 'Sewers for Adoption' 7th Edition.
- Prior to undertaking any construction the invert level of the outfall connection must be confirmed.
- All soft spots and unacceptable material encountered in drainage excavations is to be removed and replaced with granular material to the requirements of the building control officer.
- Pipes to be installed to manufacturers recommendations.
- Pipes under buildings to be laid to a fall of 1:40 minimum unless noted otherwise. Elsewhere pipes are to be laid at minimum fall of 1:80 for foul and 1:100 for surface water unless noted otherwise.
- Plastic plain wall pipes to be PVC-U to BS EN 1401-1, class min SN4, with flexible joints, Kitemark certified. Structured wall plastic pipes to be to WIS 04-35-01, Kitemark certified. *NOTE: Use S8 if sewer is to be adopted.*
- Clay pipes to be vitrified clay to BS EN 295-1, with flexible joints, Kitemark certified. Crushing strength of clayware pipes above 150mm dia to be class 120.
- Concrete pipes to be precast concrete to BS 5911-1 and BS EN 1916, with flexible joints. Crushing strength of concrete pipes above 150mm dia to be class 120 (Class M)
- Bedding of pipes to be in accordance with approved document H1.
- Rocker pipes with flexible joints are to be provided at a distance of 150mm and 750mm from the face of construction to manholes, where pipes pass above, below or through ground beams or foundations; at gully connections and soil stack ends.
- Manhole access covers are to be located at the outgoing side of manholes.
- Cover levels are to be fixed on site to suit finished levels. Covers and frames to BS EN124, Grade D400 to be used in areas subject to heavy vehicular loading, Grade C250 in areas subject to light vehicular loading and Grade B125 to be used elsewhere.

KEY: (Statutory Services)

- Reference should be made to individual statutory services drawings for additional services information including pipe sizes and manhole levels etc.
- BT Cables (s)
 - Water Services
 - Gas Services - Low Pressure
 - Electricity Cable(s) - 11kV HV High Voltage

KEY:

- Proposed SW manhole, Plastic Inspection Chamber or Shallow Inspection Chamber
- Proposed FW manhole, Plastic Inspection Chamber or Shallow Inspection Chamber
- Existing SW manhole, Plastic Inspection Chamber or Shallow Inspection Chamber
- Existing FW manhole, Plastic Inspection Chamber or Shallow Inspection Chamber
- Existing SW sewer
- Existing FW sewer
- Existing SW sewer abandoned
- Existing FW sewer abandoned
- Proposed SW sewer
- Proposed FW sewer
- Proposed SW connection
- Proposed FW connection
- Proposed SW 1000 perforated pipe
- Proposed FW rising main
- Proposed FW connection
- Proposed FW rising main
- Proposed FW connection
- rwp Rainwater downpipe
- svp/ssp Soil Vent Pipe / Stub Stack
- g gully
- g Internal gully in service room
- RE Rodding eye
- D Diffuser Unit
- Linear drainage channel
- Attenuation Tanks for Proposed Buildings (Crate size 1m x 0.5m x 0.5m)
- Finished Floor Level
- Proposed Impermeable asphalt to main access roads
- Proposed Permeable paving with lined open graded 10-63mm stone sub-base to be used as attenuation under proposed car park roads. Discharge via diffuser units and hydrobrake control to existing off-site connection
- Proposed Permeable paving with lined open graded 10-63mm stone sub-base to be used as attenuation under proposed parking spaces. Discharge via diffuser units and hydrobrake control to existing off-site connection
- Proposed Public paved footpath Birdworld
- Proposed Buildings paved footpath Haskins
- Proposed Soft Landscaping / Hedgerows / Grassed areas
- Existing Trees (Refer to Landscape Architects Drgs)
- Proposed Trees (Refer to Landscape Architects Drgs)
- PHASE 1 Construction Phase of Play Barn and surrounding infrastructure
- PHASE 2 Construction Phase of Haskins Garden centre and surrounding infrastructure including parking areas
- PHASE 3 Construction Phase of Birdworld entrance centre and surrounding infrastructure including parking areas
- Swale
- Staggered Drainage Kerbs
- Bagwall
- Sub-base Baffles to control drainage flows
- Phase 2 Retaining Wall
- Phase 2 Acoustic Fence
- Phase 2 Armo Barrier

HAZARDS LEADING TO UNUSUAL OR SIGNIFICANT RISKS DURING THE CONSTRUCTION PROCESS ARE IDENTIFIED ON THIS DRAWING AS:

NOTE: THE LIST BELOW IDENTIFIES CERTAIN RISKS WHICH ARE DEEMED TO BE UNUSUAL, ABNORMAL OR UNEXPECTED TO A COMPETENT CONTRACTOR CARRYING OUT WORK OF THIS NATURE BUT DOES NOT COVER ALL POSSIBLE SITUATIONS WHICH MAY BE ENCOUNTERED DURING THE CONSTRUCTION PROCESS. IT IS THEREFORE THE MAIN CONTRACTOR'S RESPONSIBILITY TO IDENTIFY ANY FURTHER RISKS/HAZARDS AND TAKE APPROPRIATE ACTION.

RISKS/HAZARDS SPECIFIC TO THIS DRAWING:

- Existing tree routes
- Existing buried utilities and drainage
- Existing overhead electrical cables

PRELIMINARY - NOT FOR CONSTRUCTION

| Rev. | Amendment | Drn. | Chkd. | Appd. | Date |
|------|-------------------|------|-------|-------|----------|
| P03 | Preliminary Issue | RD | TK | RH | 19.01.24 |
| P02 | Preliminary Issue | RD | TK | RH | 21.12.23 |
| P01 | Preliminary Issue | RD | TK | RH | 12.12.23 |

Birdworld and Haskins Garden Centre Farnham

Drainage Strategy Layout PHASE 2 Sheet 3 of 3

Client: Birdworld and Haskins Garden Centre

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Project | Originator | Zone | Level | Type | Role | Number | Rev.

DO NOT SCALE FROM THIS DRAWING