

NOTES

- This drawing is to be read in conjunction with drawing Nos. FC2780/01-25.
- Existing on-site drainage is shown on drawing FG2780/04.
- All adopted drainage and connections to the sewer system are to be constructed in accordance with 'Sewers for Adoption' 67th Edition or as stipulated in the Southern Water Addendum.
- Connections to the adopted drainage system are subject to the approval of Southern Water the Drainage Authority. Diverted, divested, built close to/over sewers, and new sewers are subject to SW approval. All other drainage is to remain private.
- All pipes to be adopted, or connecting to adopted sewers, and/or situated under highway to be vitrified clay to BS EN 295 & BS55 (SWIS only), or Concrete pipes to BS EN 1916 & BS5911:Part 1, or Thermoplastic Structured wall sewer pipes to WIS 4-35-01 (class 8kN/sqm) and be capable of withstanding 4000 PSI jetting pressure.
- Cover levels shown are approximate. Covers and frames shall be set to finished ground levels and falls.
- All drainage to be constructed to BS EN 752:1999 and subject to the approval of Building Control/LPA and the Environment Agency.
- Gully and channel drain positions are liable to amendment when the design levels have been determined.
- All downpipes are to be sealed, ie connected directly to the stormwater drain. Access points to be provided 1m above ground level for external RVP's and 1m above FFL for internal RVP's.
- All below ground concrete to accord with ACEC site classification of AC-1 lbc, as per Geotechnical Report.
- Aco channel drain to be K100S with grade C250 Quicklock 'Heelguard' cast iron grating or equivalent, where adjacent to kerbing or within pedestrian areas. Elsewhere Aco channel drain to be Road Drain 100 Class F. All channel drain outlets to have oil traps.
- The Contractor should construct works in accordance with the Local Authority specification for the works they are to undertake.
- Road gully pipes are to be 150mm dia. with concrete surround and flexible joints. All other un-referenced pipes are assumed to be 100mm dia.
FW min gradient - 1 in 40 (100 dia) no WC's connected
FW min gradient - 1 in 80 (100 dia) min 1 WC connected
FW min gradient - 1 in 150 (150 dia) min 5WC's
SW min gradient - 1 in 100 (100/150 dia)
- If any sub soil drainage systems are uncovered during the Works contact the Engineer for instructions. Generally sub soil drains affected are to be diverted around new Works and connected into the surface water drainage system. Pipe diameters and gradients are to be maintained.
- Before commencing construction the Contractor must check the invert levels of existing sewers to which connections are made. In addition the Contractor must locate and determine invert levels of the existing spurs to which connections are proposed. Additional spur/manhole connections are to be agreed with the relevant adopting authority. Any discrepancies are to be notified to the Engineer immediately, prior to construction.
- Road reinstatements are to be to the Highway Authority approval.
- No private areas are to drain onto adoptable areas and vice versa.
- All redundant drainage to be abandoned once the Contractor and Client have satisfied themselves that no connections remain live. Drains and sewers less than 1.5m deep which are in open ground should as far as is practicable be removed. Other pipes should be sealed at both ends and at any other point of connection and solidly filled at intervals not exceeding 25m with Class G3 or G4).

SUBJECT TO CONFIRMATION OF:
Proposed Ext levels
RWP/CD positions
Landscaping
ESS Design
HRD Spec
ACEC site classification
BRE365 Testing and GW monitoring in Dec to LPA approval

SUBJECT TO THE APPROVAL OF:
LPAL/LFA
BUILDING CONTROL/NHBC

BUDGET ONLY

REV	DESCRIPTION	DATE
-	Issued For BUDGET/APPROVAL ONLY	17/10/18

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PROJECT	MIDDLETON HOUSE YAPTON ROAD MIDDLETON PO22 6DU
DRAWING	PROPOSED DRAFT SW DRAINAGE LAYOUT OPTION 3 - ATTENUATION TANK - CONNECTED TO CS
SCALE	FC2780/2.3
DATE	1:100
DATE	OCT 18
INITIAL	MH
CHKD	-
REV	-

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Levels as shown are draft and subject to confirmation on site.
Levels Based on Ordinary Datum using Sewer Records

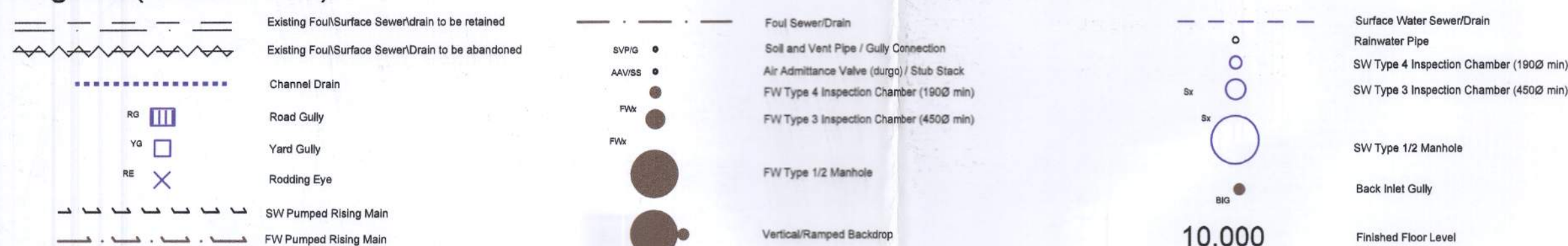
Middleton House

GF
FFL 5.55

Veg Garden

Little Hazels

Legend (Scale 1:100)



NOTE THE FOLLOWING:

- SW Attenuation tank**
 - Refer to ESS Design & Details dated xxx
 - Eng Ref: xxx
- HRD Flow Control**
 - Refer to HRD Spec & Quote dated xxx

SW DRAINAGE DESIGN BASED ON:

- Soakaways not viable due to low SW and/or High Ground water levels
- ESS attenuation tank
- Restricted discharge to FWS acting as CS
- Existing SW flows from roof to CD/CS/FWS based on existing roof area circa 70m² equates to 1l/s @ 50mm/hr rainfall intensity
- If flows restricted to existing SW flow rate of circa 1l/s using HRD Hydrobrake, subject to SW/LPA/LFA approval and blockage check with HRD, then this results in no increase in peak flows to sewer system. However, flow control office is 54mm which is less than 75mm HRD recommended, and thus has a higher risk of blockages occurring.
- To address blockage risk HRD would recommend min flow control office of 75mm which results in a min SW flow of 2l/s, which is higher than existing flow rates into the sewer system
- Area Drained = 300m² (Roof and Rear patio)
- SRP = 100yr + 40%CC