



FIRECREST DRIV

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Note
Tanked cellular storage is oversized to accommodate rain water harvesting. This is achieved by lowering the sump level of the tank but keeping the outfall higher (as noted) so that there is a permanent "wet" storage area. Captured water is redistributed through a second stage filtration and pump assembly. Pump to be submersible rain water tank pump - electronically controlled, pressure sensitive with built in non return valve eg Hydroforce Rainwater Harvesting Clean Water Pump Series 3 by Rain Water Harvesting tel 0800 074 7234 or similar. Pump requires power supply and surface enclosure to accommodate pipe/hose outlet (by others).

Tanked cellular storage/rain water harvesting
4.0m (l) x 3.5m (w) x 1.2m (dp).
Sized to contain a 1:100 year storm with an additional allowance of 40% for climate change.
GL = 117.280
Top of Cellular = 116.500
Invert of Cellular = 115.380
Outlet of Cellular = 115.780

Inspection tunnel through cellular storage and access tunnel to maintenance and to accommodate sump pump for rainwater harvesting. See adjacent note.

Flow control chamber with discharge rate limited to 5/s. e.g. RigiStorm check office plate flow control chamber by Polypipe (tel 01509 615100) or similar.
CL = 117.20
IL = 115.772

Foul pumping station to discharge into new chamber.

SVP from kitchen floor level Mini access chamber to located in stair landing

RWP & SVP from east higher building level. Level approx 118.965 under proposed stair and accessible with rodding eye.

Gully & SVP to pass beneath services trench
SSL = 115.775
Bottom service trench = 114.775

Rainwater from lightwell to discharge into surface water pumped system. To pass under service trench

External backdrop down face of wall into inspection chamber

SSL 113.850

SSL 113.850

Manholes positioned at opening to undercroft for ease of access

Existing adopted sewer abandoned under a section 185 Agreement

Ex MH CL = 116.85 IL = 115.78

Rainwaterpipe from roof and Juliette balcony to discharge directly into public sewer via existing manhole.

DESIGN RISK ITEM
NOTE THAT SHALLOW DRAINAGE EXISTS AS A RESULT OF LOWERING THE GROUND LEVELS. THE CONTRACTOR MUST ENSURE THAT THE EXISTING FOUL SEWER AND ANY NEW DRAINAGE CROSSING THE SITE IS PROTECTED FROM LOADS AND IS PROVIDED WITH A SUITABLE CONCRETE BED AND SURROUND

CDM RESIDUAL RISK ITEM
CONTACT WITH FOUL DRAINAGE REQUIRED TO MAKE NEW CONNECTION. SUITABLE P.P.E. TO BE WORN

Note
All abandoned drainage to be broken out and backfilled to avoid future connections to redundant pipes occurring

Foul Water (FW) Manhole Schedule					GRADE 1 in	PIPE Ø (mm)	LENGTH
MANHOLE REF	INVERT LEVEL	COVER LEVEL	CHAMBER TYPE	COVER TYPE			
F1	115.390	115.920	Existing	Existing	40.0	150	2.5
F2	115.457	115.920	Type D 900 x 675	B125 900 x 675	40.0	150	9.0
F3	115.690	116.840	Existing	Existing			
F4	115.390	115.920	Existing	Existing	40	100	1.5
F4	115.428	115.920	600 x 450	B125 600 x 450	18	100	10.5
F5	116.013	117.280	PPIC	B125 4800	40	100	2.5
F6	116.080	117.280	PPIC	B125 4800			
F5	116.013	117.280	600 x 450	B125 600 x 450	Rising Main	Rising Main	5.0
PS1	113.025	114.105	FW Pumping Station	B125	40.0	100	9.0
F7	113.500	114.105	600 x 450	Recessed 600 x 450	5.6	100	6.0
F8	114.575	115.775	600 x 450	Recessed 600 x 450			

Surface Water (SW) Manhole Schedule					GRADE 1 in	PIPE Ø (mm)	LENGTH
MANHOLE REF	INVERT LEVEL	COVER LEVEL	CHAMBER TYPE	COVER TYPE			
F4	115.428	115.92	600 x 450	B125 600 x 450	60.0	100	1.5
S1	115.503	115.92	600 x 450	B125 600 x 450	18.0	100	5.0
S2	115.772	117.20	Flow Control Chamber	T.B.A.	60.0	100	0.5
S3	115.780	117.20	Tanked Cellular Storage	N/A	-	Cellular Storage	-
S4	115.780	117.20	Tanked Cellular Storage	N/A	60	100	1.0
S5	116.000	117.20	4800 silk trap	B125 4800	Rising Main	Rising Main 80mm	4.0
PS2	113.450	114.105	SW Pumping Station	T.B.A.	40.0	100	1.0
S6	113.475	114.105	600 x 450	Recessed 600 x 450	40.0	100	9.5
S7	113.713	114.105	600 x 450	Recessed 600 x 450			

NOTE:
1.DO NOT SCALE, IF IN DOUBT ASK.
2.THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT STRUCTURAL ENGINEER'S DRAWINGS AND DETAILS. THE SPECIFICATION FOR THE WORKS, THE RELEVANT ARCHITECT'S DRAWINGS AND ANY OTHER SPECIALIST'S DRAWINGS.

Drainage Key	
Sewers	
	Foul water drain (private/non adaptable)
	Surface water drain (private/non adaptable)
	Foul water sewer (Adaptable)
	Surface water sewer (Adaptable)
	Foul rising main
	Existing combined water sewer (Adapted)
Chamber Key	
	Mini access chamber (mac) - 300mmØ *
	PPIC - 475mmØ *
	P.C.C. units/brick *
	Manhole Depth 1.25 to 1.5m *
	Manhole Depth 1.55 to 3.0m *
* General note (Refer to standard details & long sections for chamber sizes. Size may need to increase dependant on number of incoming pipes/size of incoming pipes)	
	Rain water down pipe (roddable access)
	Soil vent pipe/soil stack
	Linear drainage channel
	Cellular storage (refer to drawing for sizes)
	Finished Floor Level (FFL)
	Building Access - Primary

T02	16/01/2016	Drainage updated	NJ	DJ
T01	03/11/2016	Drainage updated to tender issue	DJ	-
P03	19/10/2016	Sewer diversion and cavity sump pump detailed	DJ	-
P02	21/09/2016	Invert levels to existing foul added	DJ	-
P01	20/01/17	Initial issue	ATD	DJ
Rev.	Date	Amendments	By	Chk'd

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Project:
17 Branch Hill,
Hampstead

Drawing title:
Proposed Drainage Plan
Lower Ground Floor

Scale at A1:
1:100

Drawn by:
ATD

Date:
20/01/2017

Chk'd by:
DJ

TENDER

Project Number:
1281

Drawing Type:
DR

Drawing No:
050

Revision:
T02