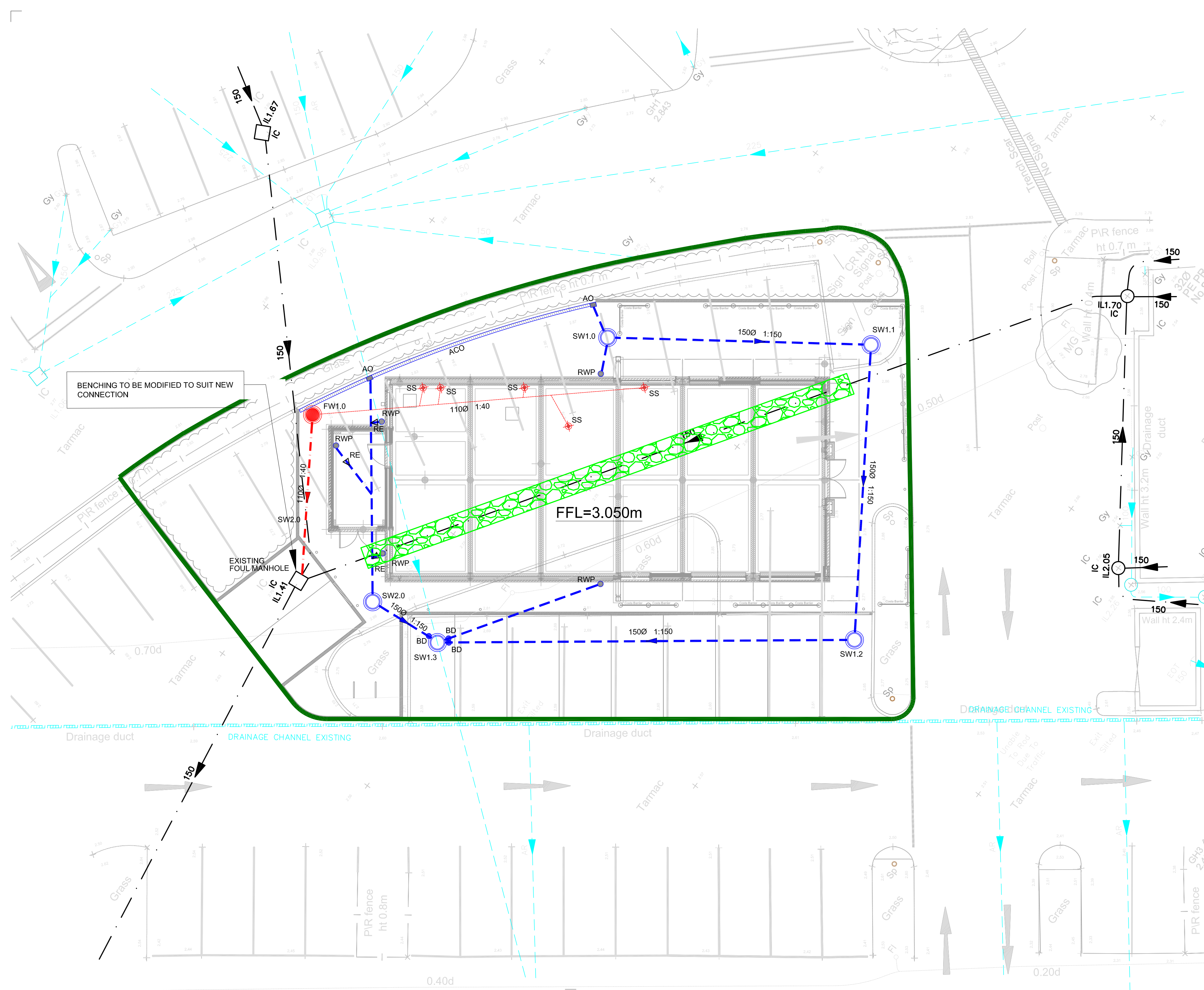




Manhole Schedule - Surface Water												
MH Ref	MH Type	MH Internal Diameter (mm)	Cover Type	Cover Level (m)	Invert Level (m)	Outgoing Pipe Size (mm)	Depth to Invert (m)	Depth to Soffit (m)	Bedding Class	Comments	Eastings (m)	Northings (m)
SW1.0	UIC	500	MD	2.885	2.000	150	0.885	0.735	CLASS S	RECESSED COVER REQUIRED SUITABLE FOR PAVING FINISHES	494081.474	100849.557
SW1.1	UIC	500	MD	2.955	1.920	150	1.035	0.885	CLASS S	RECESSED COVER REQUIRED SUITABLE FOR PAVING FINISHES	494088.406	100839.613
SW1.2	UIC	500	HD	2.620	1.830	150	0.790	0.640	CLASS Z		494077.029	100832.158
SW1.3	B	1200	HD	2.620	0.850	300	1.770	1.470	EXISTING	INVERT LEVEL ASSUMED	494065.530	100847.520
SW2.0	UIC	500	MD	2.845	2.045	150	0.800	0.650	CLASS Z	RECESSED COVER REQUIRED SUITABLE FOR PAVING FINISHES	494065.268	100851.031

Manhole Schedule - Foul Water												
MH Ref	MH Type	MH Internal Diameter (mm)	Cover Type	Cover Level (m)	Invert Level (m)	Outgoing Pipe Size (mm)	Depth to Invert (m)	Depth to Soffit (m)	Bedding Class	Comments	Eastings (m)	Northings (m)
FW 1.0	NIC	500	MD	2.870	1.594	110	1.276	1.166	CLASS S	RECESSED COVER REQUIRED SUITABLE FOR PAVING FINISHES	494070.548	100858.370
EX FOUL MANHOLE	EXISTING	EXISTING	EXISTING	2.700	1.410	150	1.290	1.140	EXISTING		494064.001	100854.311

- NOTES:**
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER ENGINEER'S AND ARCHITECT'S DRAWINGS, DETAILS & SPECIFICATIONS.
 - THE DRAINAGE DESIGN IS BASED UPON URBAN EDGE ARCHITECT'S LAYOUT URB-PU [90] 00 01 REV A02 DATED APRIL 2015.
 - TOPOGRAPHICAL SURVEY DRAWING 18378A_OGL_REV1 DATED 21/08/14 BY GREEN HATCH GROUP HAS ALSO BEEN USED IN THE DESIGN.
 - REFER TO CLANCY DRAWING C210 FOR DRAINAGE CONSTRUCTION DETAILS.
 - REFER TO CLANCY DRAWING C400 FOR EXTERNAL WORKS DETAILS.
 - SECTION 106 APPLICATION REQUIRED FOR THE CONNECTION OF THE NEW DRAINAGE SYSTEMS TO THE PUBLIC SEWER.
 - REFER TO THE ARCHITECT FOR SETTING OUT OF THE BUILDING, INTERNAL SOIL WASTE PIPES & RWP'S.
 - REFER TO BUILDING SERVICE ENGINEERS DRAWINGS FOR DESIGN OF ABOVE GROUND PUBLIC HEALTH (FOUL DRAINAGE) AND ROOF DRAINAGE SYSTEMS.
 - NO FLOODING OF THE SYSTEM WILL OCCUR DUE TO RAINWATER ENTERING THE NEW BELOW GROUND SYSTEM FOR EVENTS UP TO AND INCLUDING THE 1 IN 30 YEAR STORM EVENT.
 - DUE TO THE SITE BEING LOCATED ON A CAR PARK, OUTSIDE OF FLOOD ZONE 1 AND NOT IN A CRITICAL DRAINAGE AREA, SURFACE WATER DISCHARGE HAS BEEN ASSUMED TO BE UNRESTRICTED INTO THE EXISTING PRIVATE SURFACE WATER SYSTEM I.E. REPLICATING THE EXISTING CONDITIONS.
 - REFER TO BUILDING SERVICE ENGINEERS DRAWINGS FOR ABOVE GROUND PLUMBING ROUTES FROM APPLIANCES TO STUB STACKS ETC.
 - ALL EXISTING BELOW GROUND DRAINAGE ON THE SITE IS TO BE RETAINED. REFER TO CLANCY STRUCTURAL DRAWINGS FOR MORE DETAILS OF FOUNDATION SOLUTIONS.
 - PIPES TO PRIVATE AREAS: VITRIFIED CLAY TO BSEN 295 OR PVC-U TO BSEN 1404-1:1998
 - ALL EXISTING SERVICES TO BE LOCATED AND CLEARLY MARKED PRIOR TO EXCAVATIONS.
 - ALL LEVELS ARE TO BE CONFIRMED BY THE CONTRACTOR ON SITE PRIOR TO CONSTRUCTION.
 - MANHOLE COVERS TO BE LAID FLUSH WITH PROPOSED SURFACING I.E. LAID TO FALLS AND LEVELS.
 - CONTRACTOR TO AVOID UNDERMINING ANY EXISTING FOOTPATHS/ BUILDINGS DURING WORKS BY ALLOWING ADEQUATE PROTECTION ADJACENT TO THESE AREAS.
 - MANHOLE COVER TYPES:
LD : LIGHT DUTY COVER & FRAME
MD : MEDIUM DUTY COVER AND FRAME (B125 TO BS EN 124 i.e. PEDESTRIAN AREAS)
HD : HEAVY DUTY COVER AND FRAME (D400 TO BS EN 124 i.e. TRAFFIC AREAS)
 - THE PROPOSED PRIVATE FOUL AND SURFACE WATER NETWORKS HAVE NOT BEEN DESIGNED TO MEET WITH SEWERS FOR ADOPTION 7TH EDITION STANDARDS AND ANY SUBSEQUENT ADOPTION REQUIREMENTS IN THE FUTURE COMPLIANCE WITH SECTION 42 OF THE FLOOD AND WATER MANAGEMENT ACT 2010 MAY BE REQUIRED.
 - COVER SLAB OVER FOUL WATER SEWER TO PROTECT AGAINST ANY LOADING ENCOUNTERED FROM THE GROUND BEAMS / DURING CONSTRUCTION. SEE C210 FOR CONSTRUCTION DETAIL.

LEGEND - PROJECT BELOW GROUND DRAINAGE

	NEW EXTERNAL SURFACE WATER SEWER & MANHOLE		WORKS BOUNDARY
	NEW EXTERNAL FOUL WATER SEWER & MANHOLE		RAINWATER DOWNPIPE WITH BRAKE CHAMBER TO SPECIALIST DESIGN & DETAILS
	NEW BELOW SLAB FOUL WATER SEWER (100mm Ø UNO)		SURFACE WATER EXTERNAL BACKDROP
	EXISTING PRIVATE FOUL WATER DRAINAGE		COVER SLAB ON EXISTING FOUL SEWER. SEE NOTE 20.
	EXISTING PRIVATE SURFACE WATER DRAINAGE		SOIL VENT PIPE / STUB STACK ETC. - FOR SET OUT AND DETAILS PLEASE REFER TO ARCHITECT AND M&E DRAWINGS.
	NEW ACO DRAINAGE CHANNEL		RODDING EYE
	NEW ACO DRAIN OUTLET		

HEALTH SAFETY AND ENVIRONMENTAL RISKS BOX

CONSTRUCTION RISKS	MAINTENANCE RISKS	DEMOLITION/ ADAPTATION RISKS
1. ADJACENT PROPERTIES & HIGHWAYS REMAIN IN OPERATION DURING THE WORKS. 2. REFER TO EXISTING SERVICES DRAWING FOR DETAILS & LOCATION OF EXTG DRAINAGE & SERVICES. 3. DRAINAGE CONNECTION REQUIRES DEEP EXCAVATION TEMP WORKS REQUIRED.	1. SILT TRAP, GULLIES, CHANNELS AND CHAMBERS REQUIRE THE STANDARD PERIODIC INSPECTION REGIME AND CLEANING ROUTINE TO ENSURE CONTINUED PERFORMANCE. 2. THE SURFACE WATER DRAINAGE APPARATUS HAS BEEN DESIGNED TO ACCOMMODATE THE DESIGNED CATCHMENT AREA. NO ADDITIONAL AREAS OF HARDSTANDING CAN BE CONNECTION INTO THE SYSTEM WITHOUT RISK OF LOCALIZED FLOODING ON SITE.	1. APPARATUS LOCATED IN LANDSCAPED AREAS WILL NOT SUPPORT VEHICULAR LOADING OF ANY NATURE. 2. THE SURFACE WATER DRAINAGE APPARATUS HAS BEEN DESIGNED TO ACCOMMODATE THE DESIGNED CATCHMENT AREA. NO ADDITIONAL AREAS OF HARDSTANDING CAN BE CONNECTION INTO THE SYSTEM WITHOUT RISK OF LOCALIZED FLOODING ON SITE.
IN ADDITION TO THE HAZARDS & RISKS NORMALLY ASSOCIATED WITH THE TYPE OF WORK DETAILED ON THIS DRAWING, TAKE NOTE OF THE ABOVE. IT IS ASSUMED THAT ALL WORKS WILL BE CARRIED OUT BY A COMPETENT CONTRACTOR, WORKING WHERE APPROPRIATE, TO AN APPROVED METHOD STATEMENT.		

C1	29/04/15	CONSTRUCTION ISSUE	MO	PP	PP
T2	09/12/14	TENDER UPDATE	PP	PP	PP
T1	05/12/14	TENDER ISSUE	PP	GS	PP
Rev	Date	Description	By	Check	App.

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Client	PEP PROJECT MANAGEMENT		
Project	ARUN RETAIL PARK BOGNOR REGIS PROPOSED POD UNIT		
Office	LONDON		
Discipline	CIVIL ENGINEERING		
Title	BELOW GROUND DRAINAGE GA		
Drawn	PP	Date	APRIL 2015
Checked	GS	Scale @ A1	1:100
Approved	PP	Status	CONSTRUCTION



Job number	Drawing number	Revision
2/6500	C200	C1