



- DESIGN ASSUMPTIONS AND LOADINGS**
- SITE LAYOUT TAKEN FROM DAVID JARVIS ASSOCIATES DRAWING 'LANDSCAPE MASTERPLAN - 2523-5-2-DR-001-D2-P1'
 - EXISTING TOPOGRAPHICAL SURVEY TAKEN FROM NATIONWIDE SURVEYS DRAWING 'SOUTH WEST BICESTER - WSP0503'
 - AS BUILT ROAD LEVELS TAKEN FROM BREHENY CIVIL ENGINEERING DRAWING 'PHASE 1A SPINE ROADS A&B GENERAL ARRANGEMENT - JBC/4300/AB/09'
 - AS BUILT DRAINAGE TAKEN FROM BREHENY CIVIL ENGINEERING DRAWING 'PHASE 1A SPINE ROADS A&B FOUL & STORM DRAINAGE - JBC/4300/AB/11'

- LEGEND**
- EXISTING DRAINAGE**
- EXISTING FOUL SEWER
 - EXISTING SURFACE WATER SEWER
- PROPOSED PRIVATE DRAINAGE**
- FOUL DRAINAGE
 - FOUL DRAINAGE 4500 POLYPROP CHAMBER (PIC)
 - STORM DRAINAGE
 - RODDING EYE
 - PC RING SW MANHOLE
 - STORM DRAINAGE 4500 POLYPROP CHAMBER (PIC)
 - WAVIN AQUACELL PLUS CELLULAR STORAGE TANK
 - AREA OF PERMEABLE STONE SUB-BASE (LEVEL SHOWN DENOTES APPROXIMATE SUB-BASE IL LEVEL)
 - PERMEABLE PAVING COLLECTOR DRAIN
 - ACO MULTIDRAIN M150PPD

FWS MANHOLE SCHEDULE

MANHOLE REF	MANHOLE MATERIAL	COVER LEVEL	OUTLET INVERT LEVEL	DEPTH	INTERNAL SIZE	COVER TYPE CLEAR OPENING	COVER LOAD CLASS	REMARKS
F1								
F2								
F3								
F4	PIC	73.400	72.499	0.901	450	430	B125	RECESSED COVER
F5	PIC	73.400	72.469	0.931	450	430	B125	RECESSED COVER
F6	PIC	73.400	72.718	0.682	450	430	B125	RECESSED COVER
F7	PIC	73.400	72.430	0.970	450	430	B125	RECESSED COVER
F8	PIC	73.400	72.404	0.996	450	430	B125	RECESSED COVER
F9	PIC	73.400	72.387	1.013	450	430	B125	RECESSED COVER
F10	RAC	73.400	72.042	1.358	450	350	B125	RECESSED COVER
F11	PIC	73.400	72.375	1.025	450	430	B125	RECESSED COVER
F12	RAC	73.400	71.774	1.626	450	350	B125	RECESSED COVER
F14	RAC	73.400	71.560	1.840	450	350	B125	RECESSED COVER
F15	PIC	73.400	72.758	0.642	450	430	B125	
F16	PIC	73.400	72.676	0.724	450	430	B125	
F17	PIC	73.400	72.544	0.856	450	430	B125	
F18	PIC	73.400	72.458	0.942	450	430	B125	
F19	PIC	73.400	72.379	1.021	450	430	B125	RECESSED COVER
F20	RAC	73.400	71.070	2.330	450	350	B125	RECESSED COVER

SWS MANHOLE SCHEDULE

MANHOLE REF	MANHOLE MATERIAL	COVER LEVEL	OUTLET INVERT LEVEL	DEPTH	INTERNAL SIZE	COVER TYPE CLEAR OPENING	COVER LOAD CLASS	REMARKS
S1								
S2	PIC	73.400	72.743	0.657	450	430	B125	
S3	PIC	73.400	72.965	0.435	450	430	B125	RECESSED COVER
S4	PIC	73.300	72.771	0.529	450	430	B125	RECESSED COVER
S5	PIC	73.400	71.813	1.587	450	430	B125	CPRAC RECESSED COVER
S7	RAC	73.400	71.758	1.642	450	350	B125	CPRAC RECESSED COVER
S8	RAC	73.400	71.933	1.467	450	350	B125	RECESSED COVER
S9	RAC	73.400	71.814	1.586	450	350	B125	RECESSED COVER
S10	RAC	73.900	71.451	2.449	450	430	B125	RECESSED COVER
S11	PC RING	73.400	71.391	2.009	1200	675	B125	HYDROBRAKE (MAX 6l/s) WEIR
S12	PIC	73.530	72.065	1.465	600	350	B125	CPRAC RECESSED COVER
S13	PIC	73.510	72.040	1.470	600	350	B125	RECESSED COVER
S14	PC RING	73.517	72.004	1.513	1200	675	B125	RECESSED COVER
S15	PC RING	73.800	70.811	2.989	1200	675	B125	FC (Max 5l/s) RECESSED COVER
S16	RAC	73.676	72.300	1.376	450	350	B125	CPRAC
S17	PIC	73.657	72.726	0.931	450	430	B125	
S18	RAC	73.629	72.226	1.403	450	350	B125	CPRAC
S19	RAC	73.685	72.350	1.335	450	350	B125	CPRAC
S20	PIC	73.656	72.751	0.905	450	430	B125	
S21	RAC	73.625	72.251	1.374	450	350	B125	CPRAC

- DOWNSTREAM DRAINAGE ASSUMES:**
- OFFSITE SW DRAINAGE RESTRICTED TO 5.0l/s
 - ATTENUATION STRUCTURES SOFFIT NO HIGHER THAN THE LOWEST DOWNSTREAM MANHOLE COVER LEVEL
 - REFER TO PEP FUTURE DRAINAGE STRATEGY DRAWING SW DRAINAGE RUNS OUTSIDE OF SITE BOUNDARY ARE SHOWN INDICATIVELY ONLY. DETAILED DESIGN BY OTHERS.

- CPMH - CATCHPIT MANHOLE
- FC - FLOW CONTROL CHAMBER
- PC RING - PRECAST RECTANGULAR MANHOLE
- RECT - RECTANGULAR MANHOLE (PRECAST OR BRICK PENDING PRECAST AVAILABILITY)
- CPVIC - 450 DIA POLYPROP CHAMBER WITH 300MM CATCHPIT
- CPRAC - 450 DIA POLYPROP CHAMBER WITH 300MM CATCHPIT AND 350MM DIA RESTRICTED ACCESS.
- ALL MANHOLES SERVING PIPE DIAMETERS >600MM DIA TO BE FITTED WITH SAFETY CHAINS.

CDM REGULATIONS 2015: DESIGNERS NOTES ON SIGNIFICANT RESIDUAL RISKS

- SURFACE WATER SYSTEM TO BE MAINTAINED REGULARLY IN LINE WITH CIRIA C753 GUIDELINES.
- MANHOLES LARGER THAN 450mm DIAMETER SHOULD BE TREATED AS A CONFINED SPACE AND ADEQUATE PROTECTION PROVIDED FOR MAINTENANCE ACCESS
- APPROPRIATE TOOLS, LIFTING EQUIPMENT AND TRAINING SHOULD BE PROVIDED FOR LIFTING MANHOLE COVERS FOR AUTHORISED ACCESS FOR MAINTENANCE AS COVERS EXCEED 30kg.

THESE NOTES RELATE SOLELY TO INFORMATION SHOWN ON THIS DRAWING. ONLY SIGNIFICANT RISKS WHICH ARE CONSIDERED TO BE UNUSUAL, OR UNLIKELY TO BE OBVIOUS TO A COMPETENT CONTRACTOR OR OTHER DESIGNER WILL BE HIGHLIGHTED. THIS INFORMATION MAY BE SUBJECT TO REVISION AS THE DESIGN DEVELOPS.

- PRIVATE DRAINAGE NOTES:**
- ALL PRIVATE DRAINAGE WORKS TO BE IN ACCORDANCE WITH PART H OF THE CURRENT BUILDING REGULATIONS AND BS 8301 / BS EN 752.
 - ALL PRIVATE DRAINAGE TO BE EITHER:- PVCU TO BS EN 1401-1 (BS 4660/5481) CARADON, MARLEY OR SIMILAR. OR VITRIFIED CLAYWARE TO BS 65 AND BS EN 295. OR CONCRETE TO BS 5911-1 & BS EN 1916 FLEXIBLY JOINTED.
 - THE DRAINAGE DESIGN SHOWN ON THIS DRAWING HAS BEEN BASED UPON A PVCU DRAINAGE SYSTEM. RWP LATERAL CONNECTIONS ARE TO BE SIZED TO SUIT RWP SIZE. GULLY LATERALS TO BE SIZED TO SUIT GULLY OUTLETS.
 - FOUNDATIONS ADJACENT TO DRAIN RUNS ARE TO BE CONSTRUCTED SO THAT THE DIFFERENCE BETWEEN THE FORMATION LEVEL OF THE FOUNDATION AND INVERT LEVEL OF ANY DRAIN MUST NOT EXCEED THE HORIZONTAL DISTANCE MINUS 500mm.
 - WHERE FOUL AND SURFACE WATER SEWERS CROSS AND THERE IS LESS THAN 100MM CLEARANCE SHORT LENGTHS OF BOTH RUNS ARE TO BE ENCASED IN CONCRETE.
 - ALL RWP, SVP AND FOUL DRAINAGE POSITIONS ARE TO BE CONFIRMED BY THE ARCHITECT.
 - WHERE RWPS ARE CONNECTED DIRECT TO DRAIN, RODDING ACCESS PLATES ARE TO BE PROVIDED INTERNALLY.
 - ALL FOUL GULLIES TO BE TRAPPED & RODDABLE (USE LIFT OUT TRAPS FOR GROUND FLOOR SHOWER GULLIES).
 - ALL SVP'S AND STUB STACKS TO BE RODDABLE AT GROUND FLOOR LEVEL.
 - MANHOLES COVERS WITHIN VEHICULAR AREAS TO BE TREATED WITH PRIMARK OR SIMILAR APPROVED ANTI-SKID COATING.
 - KITCHEN DRAINAGE HAS NOT BEEN DESIGN WITH THE INCLUSION OF A GREASE TRAP. IT IS THEREFORE ASSUME THAT CHEMICAL DOSING WILL TAKE PLACE.
 - ALL MANHOLES LARGER THAN 450mm DIA TO HAVE WARNING SIGN FIXED TO BRICKWORK RAISING TO FRAME COVER STATING "WARNING, CONFINED SPACE/NO UNAUTHORISED ENTRY"

REV	BY	CHK	AMENDMENTS	DATE
P05	JL	CPR	PIPE NETWORK RESIZED UPON CONFIRMATION FROM WSP OF UNATTENUATED OUTFALL	06.02.17
P04	JL	CPR	CELLULAR TANK LOCATION REVISED. DRAINAGE UPDATED TO REDUCE DEPTH AND SIZE OF RUNS.	19.01.17
P03	JL	CPR	LAYOUT UPDATED FOLLOWING MANHOLE REMOVAL FROM SPORTS AREA.	08.12.16



PROJECT: KINGSMERE COMMUNITY CENTRE BICESTER

TITLE: PROPOSED DRAINAGE AND MANHOLE SCHEDULE

DRAWN: JL
CHECKED: CPR
APPROVED: NM
SCALE: 1:200
ORIGINAL PAPER SIZE: A1
FIRST ISSUE DATE: 18/11/2016

PROJECT	ORIGINATOR	VOLUME	LEVEL	TYPE	ROLE	NUMBER
455316	PEP	00	ZZ	DR	D	1200

STATUS: SUITABLE FOR COSTING
REVISION: REVISION DESCRIPTION
P05: PRELIMINARY

PEP PROJECT REF: 455316
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