

PROJECT NO: PB8301-RHD-DE-H1-DR-D-0500 DO NOT SCALE

Outfall	Land use	Pollution hazard index	Total Suspended Solids (TSS)	Metals	Hydro-carbons	SuDS Index			
						SuDS Treatment (1 to n)	TSS	Metals	Hydro-carbons
1	Individual property driveways, residential car parks, low traffic roads and non-residential car parking with infrequent change.	Low	0.5	0.4	0.4	Sluice (1)	1.1	1.15	1.15
2	Commercial yard and delivery areas, non-residential car parking with frequent change, all roads except low traffic roads and trunk roads/motorways.	Medium	0.7	0.8	0.7	Sluice (1)	0.75	0.85	1.15
						Detention Basin (2)			
3	Individual property driveways, residential car parks, low traffic roads and non-residential car parking with infrequent change.	Low	0.5	0.4	0.4	Sluice (1)	0.85	0.95	0.85
4	Commercial yard and delivery areas, non-residential car parking with frequent change, all roads except low traffic roads and trunk roads/motorways.	Medium	0.7	0.8	0.7	Detention Basin (2)	0.75	0.8	0.8
						Sluice (2)			
5	Commercial yard and delivery areas, non-residential car parking with frequent change, all roads except low traffic roads and trunk roads/motorways.	Medium	0.7	0.8	0.7	Detention Basin (1)	0.75	0.8	0.8

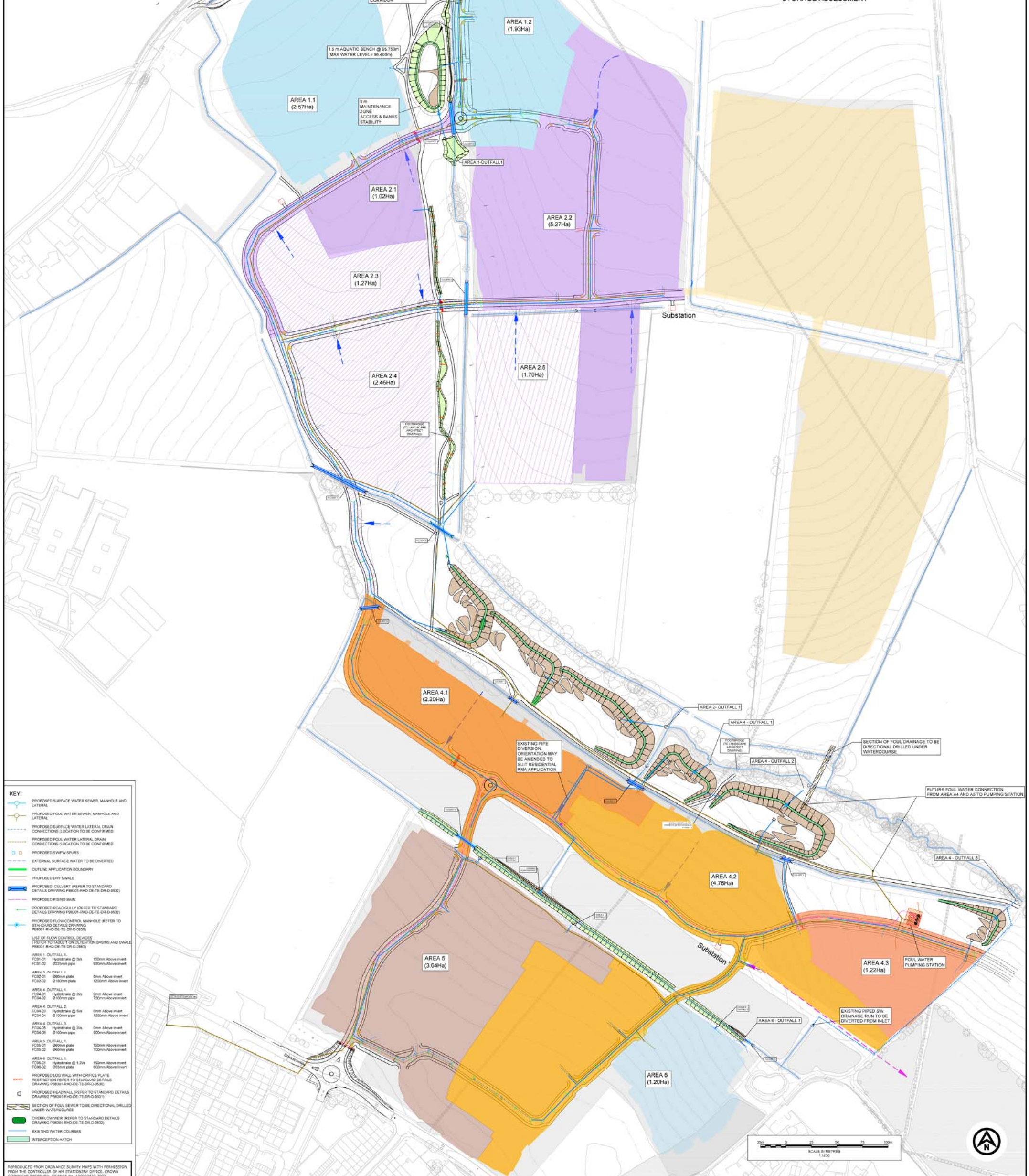
  

SuDS treatment (treatment train position 1 to n)			
	TSS	Metals	Hydro-carbons
Sluice	0.5	0.8	0.8
Detention Basin	0.7	0.7	0.5

TABLE 2. SuDS WATER TREATMENT

Catchment	Site Area (Ha)	Open Space Area (Ha)	Area Perviously Drained (m <sup>2</sup> )	Impermeable Area (m <sup>2</sup> )			Discharge Rate (m <sup>3</sup> /s) (Q <sub>10</sub> = 100mm)			Storage Required		Storage Provided on SuDS			
				Ratio	Value	Total	1 in 10 Q (20% AEP) = 2.08	1 in 30 Q (20% AEP) = 3.31	1 in 100 Q (20% AEP) = 7.27	Retention Volume (m <sup>3</sup> ) (SuDS) (SuDS) (SuDS)	Interception Volume (m <sup>3</sup> ) (SuDS) (SuDS) (SuDS)	Total Volume Provided (m <sup>3</sup> )	LTS Available (m <sup>3</sup> )	Interception % Available	
Outfall 1			Area 1.1 Area 1.2 Area 2.1 Area 2.2	2.57 1.93 1.02 5.27	0.00 0.00 0.00 0.00	4.47 3.31 1.02 14.57	9.14 16.65 16.65 36.80	18.00 18.00 18.00 53.10	204 302	302	158	234	480	152	
Outfall 2			Area 2.3 (Local Centre) Area 2.4 (Care Home) Area 2.5 (Care Home)	1.27 3.46 1.70	0.00 0.00 0.00	1.02 3.46 1.02	14.57 36.80 53.10	36.80 53.10 53.10	302 302 302	302	364	1420	1500	152	
Outfall 3			Area 3	0.51	0.00	0.00	9.14	28.00	36.80	302	302	244	348	480	152
Outfall 4			Area 4.1 Area 4.2 Area 4.3	2.15 4.76 1.02	0.00 0.00 0.00	1.20 2.87 1.02	9.14 26.51 36.80	23.00 33.00 33.00	100 152	152	85	420	500	400	
Outfall 5			Area 5	3.64	0.00	0.00	9.14	28.00	36.80	302	302	143	420	1200	400
Outfall 6			Area 6	1.20	0.00	0.00	1.44	3.82	5.31	368	40	36	528	86	16
TOTAL	71.05	15.36		17.33		22.53			1647	2880	1127	3823	4447	1810	

TABLE 1. CATCHMENT AREAS, FLOWS AND STORAGE ASSESSMENT



**KEY:**

- PROPOSED SURFACE WATER SEWER, MANHOLE AND LATERAL
- PROPOSED FOUL WATER SEWER, MANHOLE AND LATERAL
- PROPOSED SURFACE WATER LATERAL DRAIN CONNECTIONS (LOCATION TO BE CONFIRMED)
- PROPOSED FOUL WATER LATERAL DRAIN CONNECTIONS (LOCATION TO BE CONFIRMED)
- PROPOSED SWFW SPLURS
- EXTERNAL SURFACE WATER TO BE DIVERTED
- OUTLINE APPLICATION BOUNDARY
- PROPOSED DRY SWALE
- PROPOSED CULVERT (REFER TO STANDARD DETAILS DRAWING PB8301-RHD-DE-TE-OR-D-0502)
- PROPOSED RISING MAIN
- PROPOSED ROAD GULLY (REFER TO STANDARD DETAILS DRAWING PB8301-RHD-DE-TE-OR-D-0503)
- PROPOSED FLOW CONTROL MANHOLE (REFER TO STANDARD DETAILS DRAWING PB8301-RHD-DE-TE-OR-D-0504)
- LIST OF FLOW CONTROL DEVICES (REFER TO TABLE 1 ON DETENTION BASINS AND SMALL PIPES (RHD-DE-TE-OR-D-0505))
- AREA 1 - OUTFALL 1  
FC01-01 Hydro-rake @ 50mm 150mm Above invert  
FC01-02 200mm pipe 900mm Above invert
- AREA 2 - OUTFALL 1  
FC02-01 200mm pipe 0mm Above invert  
FC02-02 200mm pipe 1200mm Above invert
- AREA 4 - OUTFALL 1  
FC04-01 Hydro-rake @ 20mm 0mm Above invert  
FC04-02 200mm pipe 750mm Above invert
- AREA 4 - OUTFALL 2  
FC04-03 Hydro-rake @ 50mm 0mm Above invert  
FC04-04 200mm pipe 1000mm Above invert
- AREA 4 - OUTFALL 3  
FC04-05 Hydro-rake @ 20mm 0mm Above invert  
FC04-06 200mm pipe 900mm Above invert
- AREA 5 - OUTFALL 1  
FC05-01 200mm pipe 150mm Above invert  
FC05-02 200mm pipe 700mm Above invert
- AREA 6 - OUTFALL 1  
FC06-01 Hydro-rake @ 1.2m 150mm Above invert  
FC06-02 200mm pipe 800mm Above invert
- PROPOSED LOG WALL WITH ORIFICE PLATE RESTRICTION REFER TO STANDARD DETAILS DRAWING PB8301-RHD-DE-TE-OR-D-0501
- PROPOSED HEADWALL REFER TO STANDARD DETAILS DRAWING PB8301-RHD-DE-TE-OR-D-0501
- SECTION OF FOUL SEWER TO BE DIRECTIONAL DRILLED UNDER WATERCOURSE
- OVERFLOW WEIR REFER TO STANDARD DETAILS DRAWING PB8301-RHD-DE-TE-OR-D-0502
- EXISTING WATER COURSES
- INTERCEPTION HATCH

**GENERAL NOTES**

- DO NOT SCALE FROM THIS DRAWING.
- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
- ALL LEVELS ARE IN METRES RELATIVE TO ORDNANCE DATUM UNLESS NOTED OTHERWISE.
- THIS DRAWING HAS BEEN BASED UPON SURVEY / DS INFORMATION SUPPLIED BY INTERLOCKS SURVEYS LIMITED, ROYAL HASKONING DHV SHALL NOT BE LIABLE FOR ANY INACCURACY OR DEFICIENCIES ARISING FROM IT.
- THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DRAWINGS.
- ALL MATERIALS AND WORKMANSHIP WILL BE AS SPECIFIED IN THE SPECIFICATION UNLESS NOTED OTHERWISE.
- ALL LEVELS, DIMENSIONS AND LOCATIONS ARE TO BE CHECKED BY THE MAIN CONTRACTOR PRIOR TO COMMENCEMENT OF ANY WORK ON SITE.

REV	DATE	DESCRIPTION	BY	CHKD	APPD
110	28/12/19	REVISED AS PER LPA COMMENTS	RMV	PV	DJ
100	20/08/19	ISSUED FOR LAND OWNER COMMENTS	RMV	PV	DJ
98	20/08/19	EXISTING WATER COURSES ADDED	RMV	PV	DJ
97	14/04/19	LATERAL DRAINS ADDED FOR LOCAL CENTRE	RMV	PV	DJ
96	22/03/19	ISSUED FOR RESERVED MATTERS APPROVAL	RMV	PV	DJ
95	15/03/19	ISSUED FOR LAND OWNER COMMENTS	RMV	PV	DJ
94	28/02/19	ISSUED FOR PRE-APP MEETING	JBN	PV	DJ
93	27/01/19	TABLE 2 ADDED - AREA 5 ADJUSTED	RMV	PV	DJ
92	23/11/18	LAYOUT AMENDED	RMV	PV	DJ

REPRODUCED FROM ORDNANCE SURVEY MAPS WITH PERMISSION FROM THE CONTROLLER OF HM STATISTICAL OFFICE. CROWN COPYRIGHT RESERVED. LICENCE NO. 100023422 2007.

SCALE IN METRES 1:1000

REDROW

UHVHUYHG #P DWWHUV  
GUDI QDJH #WUDWHJ \

DATE	CHECKED	APPROVED
DATE	UPY	SY
DATE	R PW04	4-4583
DATE	DATE	PROJ NUMBER
DATE	DATE	SE: 634

REDROW

UHVHUYHG #P DWWHUV  
GUDI QDJH #WUDWHJ \

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