Features	Benefits
Reduced storage needs compared to MBR systems.	Ideal for builds with spatial restrictions in the plant room.
Compatible with above- or below- ground tank installations.	Suitable for use in all building types (subject to max distances).
Various tank sizes and shapes available.	Provides maximum flexibility of application.
Recommended for partnering with SDS-supplied water tanks.	A back-up mains water supply in the treated water tank ensures seamless water delivery. SDS supplies and installs the complete system.
Conforms to BS and Water Supplies (Water Fittings) Regulations (when partnered with SDS- supplied tanks).	Provides legislative compliance.
High efficiency disc filtration removes all grey water particulates >100 microns.	Extends Ultrafiltration Membrane life, whilst allowing high treatment rates.
Integral pressure monitoring and self-clean cycle.	Ensures system operation is maintained at maximum efficiency and is uninterrupted between service visits.
Intelligent chlorine dosing of both collection tank and supplied water.	Ensures treated grey water is maintained in a sanitary condition obviating the need for further UV treatment.
Variable speed pump standard.	Specified bespoke to each application.
Water meter and remote production monitoring as standard.	Provides client access 24/7 to accurate information on grey water production, mains water usage and savings.
Variable time control for operation and automatic shut-down.	Perfect for variable demand situations and shut-down periods such as over weekends and holidays. System does not require rebooting or recommissioning following shut-down.
Standardised start-up and shut-down procedure.	Suitable for periods when usage demand is low e.g. Christmas and holidays.
Includes capacity for IoT / real time control via GSM signal.	Link to a SDS SYMBiotIC <sup>TM</sup> web-based client portal provides viewing of operating data and reports.

## SYMBiotIC<sup>™</sup>

SPECIFICATIONS	GWR LS2	GWR LS5	GWR LS9				
Maximum flow rate (m³/hour)	2	5	9				
Motor output (kW)	6.5	7.9	13.5				
Power		1 x 3 phase 400v, 32A					
Width* (mm)	1500	1700	1700				
Height* (mm)	2400	2400	2400				
Length* (mm)	2500	3200	4500				
Grey water inlet connection	1" (adjustable)	11/4" (adjustable)	1 1/2" (adjustable)				
Outlet connection	1" (adjustable)	11/4" (adjustable)	1 1/2" (adjustable)				
Overflow connection		1" (adjustable)					
Remote monitoring	GSM production monitoring via SDS SYMBiotIC™ (optional extra)						
Noise	95dbl (a) 1 metre (1 min/hour) (option to reduce to 45db)						
Chemical additive		Sodium hypochlorite					

\*Excludes clearances, exact dimensions provided on order

#### GWR(LS) DS/0821

## sdslimited.com



## Appendix H Design BREEAM WAT01 Calculator Outputs

## Building S4 - BREEAM Wat 01 calculation with Greywater harvesting

Name Name Name Name Name Name Name NameName Name Name Name Name Name Name Name Name Name Name Name Name Name NameName Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name		BREEAM 2018/Version 6 Wat 0	1 Water consumption: Wate	r efficiency calculator for n	ew office buildings			
		Building type	Description of building type TCP Classification B1: Offices and work	ishop business (including those with a	Default occupancy	Default annual days/operation	Default daily hours of operation	
		CHL.	basic (category 1) laboratory area)					Note: the activity areas defined opposite are used to estimate the assessed buildine's default occupancy and therefore water consumption benchmark. These areas are chosen as they are deemed, by in
Name No No No 		Main building activity areas Office - Office areas	Description of activity area Cellular or open plan office space, incl meeting rooms, visitor waiting or circu	uding staff litchen where present/adj lation areas.	icent and reception areas. Exicude	Activity area present in building? Yes	Net Floor Area (m <sup>3</sup> ) 10732	page to represent the permeanity accepted space in the building and therefore which the water of building accepted parts and the second it is not necessary to include all areas of the building that may be present, as the areas not defined are assumed to be used by the occeptants of the building sharedy accounted for by those areas that are listed.
image: set of the set o		Office - Small workshop / laboratory space	Small scale workshop or category 1 lal	poratory area		No		
		Office - Staff canteen dining area	Seated dining areas that accompany a premises (excludes small un-staffed ki	permanently staffed kitchen preparin tchen's used by office staff to re-heat f	g food for consumption on the lood, make tea etc.)	No		Note: Only solect this activity if there is a permanently staffield litchen that will prepare hot and cold meals for the baileing's staff (and visitors). Enter the area of the seated diving was any (not litchen/servery aread, this is used to estimate the number of covers per day for the restaurant and subsequently the number of litchen staff and water consumption from food preparation activity area.
		Office - Fitness suite/gym (with changing facility and showers)	A fitness suite or gym that is part of th The gym will have its own changing far	e office building/development and us sility with showers.	ed by the building's employees only.	No		
		Water consumption - building microc	omponent					
		WC component - all activity areas WC - male (urinals installed) WC - female	units Effective flush volume (Litres) Effective flush volume (Litres)	Specification 3.50 3.50	Usage/person/day 1.00 4.00	Usage factor 1.00 1.00	Consumption (L/person/day) 1.75 7.00	Note: Where the WC facilities are non-gender specific, please still enter the WC specification against both WC mule and WC famile categories i.e. If there are two WCs with a 6 fitre effective fluxh, then
		Urinal component - all activity areas Automatically operated flushing cistern	units Cistern capacity (Litres)	Specification 0.75	No. of cisterns 20.00	Flushing frequency (flushes/hour) 6.00	Consumption (L/person/day) 0.76	enter 6 Three against both make and female categories. The calculation will not double court water consumption in this instance as the consumption figure calculated for each WC component is adjusted by the ratio of make to female users for this building type.
		Manual/automatic operated pressure	No. of urinal bowls units Flush volume (litres)	Specification	Usage/person/day 3.00	Usage factor 1.00	Consumption (L/person/day) 0.00	Note: This consumption total accounts for the ratio of male users for this building type i.e. the ratio of building users who will operate the fluid. Where more than one type of urinal fluiding control is
		flushing valve (all activity areas)	No. of urinal bowls units Flush volume (litres)	0.00 Specification Waterless urinals - not specified	Usage/person/day 3.00	Usage factor 1.00	Consumption (L/person/day) 0.00	specified in the building, this consumption figure is adjusted by a ratio of use, the ratio is determined according to the proportion of unitab bowls in the building operated using this type of control.
		wateries or mas (an access y areas)	No. of urinal bowls	Far of Fart an	11		Communica II forman (das)	
		Taps components (personal hygiene) - all act Wash hand basin taps	tivity areas Flow rate (itres/min)	4.00	4.00	0.25	2.71	
		Shower use Fixed use - vessel filling Tap components (cleaning) - staff kitchenette	How rate (stres/min) Litres/person/day	-	-	-	0.84	
		Kitchen taps - kitchenette Dishwasher Tan components (rieaning and food greenarat	Flow rate (litres/min) Litres/cycle	5.00	1.00 0.04	0.67	2.27 0.00	
							11	
						Total	(L/oerson/dav) 16.90	Note: In the train includes the domination that here use, including where applicative vectors thing, another does preparations, behavior that use to take an excluded were the calculations to provide a more accurate infection of the building of the does preparation to build on the does and the calculations to provide a more accurate infection of the building. The third use to take an other takes in the calculation to provide a more accurate in the accurate were there are accurate were the calculations to provide a more accurate to the take in the takes and the take accurate the takes and the take accurate the takes and
		Non potable water yield - greywater	system					
			Has, or will, the greywate	er system be specified and installed in r	compliance with BSB525-1:2010 Grey	water Systems - Part 1 Code of Practice	Yes Greuwater vield	
			Greywater source (building componen Wash hand basin taps Showers	ts)	Greywater collected Yes Yes	from (%) 100% 100%	(L/person/day) 2.71 0.84	
			Kitchen taps - kitchenette Dishwasher - staff kitchenette		No			
			Greywater source (other components) Other source of greywater	Typical greywater yield (litres)	Frequency of yield (days)	Greywater yield (litres/day)	Greywater yield (L/person/day) 0.00	Note: If greywater is collected from a component/jource not accounted for above i.e. their consumption is not estimated, then the amount of greywater collected can be added here so that it may be accounted for. This can include watewater from active higher fluching. i.e. a regular higher fluching programma to minimize poor water quality in a potable cold or hot water system.
						Total	Greywater yield (L/person/day) 3.55	
Image: Second Secon	Number of the structure structur	Non potable water yield - rainwater :	system					
			Has, or will, the rainwater system	be specified and installed in complianc	x with BS EN 16941-1:2018 Rainwate	r Harvesting Systems - Code of practice	System not specified	
		Rainwater yield if basic approach:			How has the storage capacity for	the proposed system been calculated?		
	Andreidending       Mandreidending         Andreidending       Mandreidending         Andreidending       Mandreidending         Start       Mandreidending         Mandreidending       Mandreidending         Ma	Collection area (m2)	Rainfall (average mm/yr)	Hydraulic filter efficiency (%)	Yield co-efficient (%)	Annual rainwater yield (Litres)	Rainwater yield (L/person/day)	
And Potable Water Demand - Building Camponents         Law						Roiswater yield if detailed: Daily rainfall collection (litres)	Rainwater yield (L/person/dav)	
Concount     Concount     Proportion of composention of the composentio		Non Potable Water Demand - Buildin	g Components					
Lindenderid         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12         12							Greywater and/or rainwater yield	
Circulate radius for runsering in control in the runsering in the runsering in control in the runsering in control in the runsering i	Original and optimized indication of proportional constrained indicational diversities of the proportional din diversit din diversities of the proportional diversit					Total	(L/person/dav) 3.55	
Under Looking     Ne     Looking     Annual of a privile discovery of the pri	United integrit       Via       United integrit         Integrit       Via       United integrit         Integrit       Via       Via         Integrit       Via       <			Component WC flushing	Greywater and/or rainwater utilised for component Yes	Proportion of components using erevwater and/or rainwater vield 1950 100%	Maximum permissible demand (L/cerson/dav) 8.75	
Maximum premissible components greatert which flamoust greguester and/or reinsulter version                  Maximum premissible demaid at law by dre premissible demaid at law                 Maximum premissible demaid at law                 Total                 Total                 Maximum premissible demaid at law                 Total                 Total                 Total                 Total                 Maximum premissible demaid                 Maximum premissible demaid                 Maximum premissible demaid                 Total                 Maximum premissible demaid                 Maximum premissible demaid                 Maximum premiss	Are there are used for permutable components procent which demude gravatile and provide and and rainwater (with the permutable components) which demude definition (with the permutable demude) (with the permutable components) which demude definition (with the permutable demude) (with the permutable demutable definition (with the permutable definition (with the p			unnai tiushing	Yes	Total	0.76 Demand met by yield (L/berson/dav) 3.55	
Negretion of Automum permittable densed utilized by other permittable components (s)     One and et by yeld (durande utilized by deter permittable components (s))       Table     One and et by yeld (durande utilized by deter permittable components (s))       Table     One and et by yeld (durande utilized by deter permittable components (s))       Table     One and et by yeld (durande utilized by deter permittable components (s))       Table     Table	Negretie di reasing persistilità tannel della la persistilità tannel della persistilità tannel della della persistilità tannel della la persistilità tannel della della persistilità tannel della della persistilità tannel della della della della persistilità della della della della persistilità della dell		>	Other permissible components Are there other permi	ssible components present which den	nand greywater and/or rainwater yield?	Please select Maximum permissible demand	
Water consumption calculation results     Linex/press/star     Image: Star       Water consumption calculation results     Linex/press/star     Image: Star       Water consumption calculation results     Star     Image: Star       Mater consumption calculation results     Star     Image: Star	Subject of a starting sta			Proportion of	maximum permissible demand utilise	d by other permissible components (%)	(L/dav)	
Water consumption calculation results     Interviewed may be prioritied may be pri	Subjects in dispute language       Neter consumption calculation results       Neter consumption calculation results       Subject in dispute language					Total	Demand met by yield IL/person/dav)	
Water consumption calculation results       Water consumption calculation results       Water consumption results	Water consumption calculation results         Water consumption calculation results         Interconnectory       n/promoter         Vitate consumption modulat baseling performance baselings (packdas fing calculation results)       n/promoter         Vitate consumption modulat baseling performance baselings (packdas fing calculation results)       1.00         Microcomponent water consumption - modulate performance (packdas fing calculation results)       0.00         If provide/rainedar rystems generate and grownast					Tarol	Greywater and/or rainwater demand met by yield (L/person/day) 3 cc	
Wder consumption:         noblefs baseling gehamistics baselining gehamistics baselining gehamistics baselining gehamistics baselining gehamistics baselining gehamistics baselining gehamistics generation of the state of	Video concumption - modelled businitie purformance benchmeik (produkts Head und 23.3.4     Im/Sensority 23.3.4       Microcomposent water consumption - modelled performance (ancludes their und Microcomposent water consumption) - modelled performance (ancludes their und Microcomposent values and microcomposent (paulication been met Microcomposent values)       If pryvaider/ownater splants space/led bate homourn is efficiency supposent to composent (paulication been met Microcomposent values)     Net modelled water consumption (ancludes their und Microcomposent values)       Net modelled water consumption (ancludes their und Microcomposent values)     11.177     2.38	Water consumption calculation result	ts			Total		
Water comunitation - incoduled banchinads (anciduatis final curve)         Deter spennodity         Im/genoidy/m           23.5         23.6         24.8           Microcomponent water consumptions - modelled partomacies (seculate final curve)         35.52         3.68	Water consumption     Machine performance     Machine performance       1110     110     10       1110     100     100       1110     100     100       1110     100     100       1110     100     100       1110     100     100       1110     100     100       1110     100     100       1110     1117     100       1110     1117     100       1110     1014     100							
	Image: Comparison of the standard media group of the standard media g		Water cor	isumption - modelled baseline perform	iance benchmark (excludes fixed uses	Litres/person/day 29.58	m//person/yr 7.48	
Modele wizer damate met via grywater and zawater courses 1.55 0.50	If grouwdar/canwadar spatemis gae/chef bias the minimum % efficiency improvement for component gae/chef bias the minimum % efficiency improvement for component gae/chef bias the minimum % efficiency improvement for component gae/chef bias the minimum % efficiency improvement for component gae/chef bias the minimum % efficiency improvement for component gae/chef bias the minimum % efficiency improvement for component gae/chef bias the minimum % efficiency improvement for component gae/chef bias the minimum % efficiency improvement for component gae/chef bias the minimum % efficiency improvement for component gae/chef bias the minimum % efficiency improvement for component gae/chef bias the minimum % efficiency improvement for component gae/chef bias the minimum % efficiency improvement for component gae/chef bias the minimum % efficiency improvement for component gae/chef bias the minimum % efficiency improvement for component gae/chef bias the minimum % efficiency improvement for component gae/chef bias the minimum % efficiency improvement for component gae/chef bias the minimum % efficiency improvement for component gae/chef bias the minimum % efficiency improvement for component gae/chef bias the minimum % efficiency improvement for component gae/chef bias the minimum % efficiency improvement for component gae/chef bias the minimum % efficiency improvement for component gae/chef bias the minimum % efficiency improvement for component gae/chef bias the minimum % efficiency improvement for component gae/chef bias the minimum % efficiency improvement gae/chef bi		Microc	Modelled water demand me	neo-performatice (excludes fixed uses it via greywater and rainwater source	3.55	0.90	
If groupsite/samulae systems specified has the minimum Stafficiency improvement for component specifications been more Yes	Net modelid water contamption (actual)         11.7         2.9           Percentage improvement         60.19%	lf greyw	ater/rainwater systems specified has the	minimum % efficiency improvement f	or component specifications been me	Yes	]	
Institutionand busiter constantigional gives         11.77         2.58           Percentagi improvement         60.19%				Net modelled wa	eer consumption (excludes fixed uses Percentage improvemen	11.77 60.19%	2.98	
Transition of AMP/ELE and Annual Francescond	Total Word (§ BREAM Constituationed Total Word (§ BREAM Sumplay counts achieved Total Word (§ BREAM Sumplay counts achieved			Total Wat 0	otal Wat 01 BREEAM credits achieves	5 credits	1	
1004 WAIDLEBACEAN OFOIDERNINANDE SORBATE Total Waid Die BREEAM Exemplany creditor behaved Total Waid Die BREEAM Exemplany creditor behaved				Key performance indicator - use of fre	shwater resource (includes fixed uses	13.35	3.38	
Idae Work (1) Social Andrews)         3 Credit           Total Work (2) BREAM Longing receives a shreed         Longing I year loss of the Received				Key performance indicator - use of fre	shwater resource (includes fixed uses	13.35	3.38	

## Building S5 - BREEAM Wat 01 calculation with Greywater harvesting

BREEAM 2018/Version 6 Wat 01 Water consum	ption: Water efficiency calculator for new retail t	ouildings		BREEAM <sup>®</sup> Uk delivered by bre	
Building type	Description of building type		Default annual davs/operation	Default daily hours of coaration	l
Retail - Shop / retail unit(s) / retail warehouse	TCP Classification A1 Shops: shop/retail unit(s)/retail warehouse(s).		362	85	Note: If this retail development contains one of or a combination of restaurants/cafes (for customer use), gym or cinema then please ensure you undertake separate water consumption calculations for such building functions using the appropriate building type calculator. You must then determine the number of BREEAM credits achieved for the
<u> </u>		Does the retail development contain sanitary	facilities for use by visiting customers?	Yes	development as a whole in accordance with the guidance given in the compliance note: "Building is a minture of different types", contained within the Wat 01 issue in the BREEAM New Construction technical guide.
			Default daily occupancy visiting customers	563	
			Default daily occupancy staff	10	
Main building activity areas	Description of activity area		Activity area present in building?	Net Floor Area (m <sup>2</sup> )	Note: the activity areas defined opposite are used to estimate the assessed building's default occupancy and therefore water consumption benchmark. These areas are chosen as they are deemed, by in large, to represent the permanently
Petail - sales areas for display of bulky items	domestic appliances or other bulky goods, or trading on a wholesah	a self-selection basis.	No		occupies spaces in the acutang and therefore react the number of sourcing occupants, users, As a result it is not necessary to include all areas of the building that may be present, as the reason of defined are assumed to be used by the occupants of the building already accounted for by those areas that are listed.
Retail - sales areas for display of non bulky items and/or customer service area.	A general sale/utiplay areas in department stores, supermarkets, si collection areas e.g. in banks, post office, bookmakers etc.	tops and/or customer service waiting and/or	Yes	165.6	
Retail - concourse/shopping mall	one or more of benches, cafes, escalators etc.)	y snoppers (typicary a covered area containing	No		
Retail - Staff office area and staffroom	Staff office space and staffroom, often located in 'back of house' are	us.	No		
Retail - Staff canteen dining area	Seated areas in a staff canteen that accompany a food preparation a staff on the premises.	areas where food and drink is consumed by	No		Nete: Only unlet: this activity if there is a permanently tatfield kitchen that will prepare here and cald meak for the building's staff. Enter the area of the staff design area only foot kitchen/laveway areas, this is used to extensible the number of covers per day and subsequently the default number of kitchen staff and water consumption from food preparation activity area.
Retail - Goods-in and storage area	Internal areas for receiving and storing goods.		Yes	41.4	
Retail - Workshop	A workshop / vehicle servicing area within a car showroom or gener development.	al workshop in other type of retail	No		
	•				
Water consumption - building microcomponent					
WC component - all activity areas	units Specification	Usare/serson/dav	Usane factor	Consumption (L/person/day)	
WC - Semale	Effective flush volume (Litres) 3.75 Effective flush volume (Litres) 3.75	0.86	1.00	2.08	Note: Where the WC facilities are non-gender specific, please still enter the WC specification against both WC make and WC female categories i.e. if there are two WCs with a 6 itre effective flush, then enter 6 itres against both male and
Urinal component - all activity areas	units Specification	No. of cisterns	Flushine frequency (flushes/hour)	Consumption (L/person/day)	female categories. The calculation will not double count water consumption in this instance as the consumption figure calculated for each WC component is adjusted by the ratio of male to female users for this building type.
	unita Specification	Usere/cerson/day	Usame factor	Consumption (L/person/day)	
	units	Usige/person/day	Usage factor	Consumption (L/person/day)	
Taps components (personal hygiene) - all activity areas	units Specification	Usiare/cerson/day	Usane factor	Consumption (L/person/day)	
Wash hand basin taps Shower use	Flow rate (litres/min) 5.00 Flow rate (litres/min) Litres/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mines/mi	0.86	0.25 5.60	Requires building information	
Tep components (cleaning) - staff kitchenette		-		0.05	
Tap components (cleaning and food preparation) - staff canteen foo	d preparation area				
				Microcomponent Consumption	a Note: This total includes the contributions from fixed uses, including where applicable vessel filling, kitchen cleaning
			Total	(L/banon/dav) 3.26	and food proparation. Default fixed use totals are included with the calculations to provide a more accurate reflection of the buildings total water consumption. The fixed use totals are not however included in the water consumption total used to determine the assessed buildings percentage improvement and the number of BREAM credits achieved. The
Non potable water yield - greywater system					percentage improvement is based only on the consumption of water from uses that can be heavily influenced by the microcomponent specification e.g. WC flushing.
	Has, or will, the greywater system be specified and ins	talled in compliance with BSB525-1:2010 Greyv	vater Systems - Part 1 Code of Practice	Yes	1
	Greywater source (building components)	Greywater collected	Proportion of components collected from (%)	Greywater yield (L/person/day)	
	Wash hand basin taps Showers	Yes	100%	Requires building information	
	Bath Washing machine	_		0.00	
	Greywater source (other components) Tvoical prevwater vield () Other source of greywater	itres) Frequence of vield (days)	Grevwater vield (litres/dav)	Greywater yield (L/person/dav) 0.00	Note: If greywater is collected from a component/source not accounted for above i.e. their consumption is not estimated, then the amount of greywater collected can be added here so that it may be accounted for. This can include unartemater from artist toreisme finder is a caracter brainen finderarement to minimize more water enablity in a
				Greywater yield (L/person/day)	
			Total	0.00	
Non potable water yield - rainwater system					
	Has, or will, the rainwater system be specified and installed in c	ompliance with BS EN 16941-1:2018 Rainwater	Harvesting Systems - Code of practice	System not specified	]
		How has the storage capacity for	the proposed system been calculated?		1
Rainwater yield if basic approach: Collection area (m2)	Rainfall (average mm/vr) Hydraulic filter efficiency	r (%) Yield co-efficient (%)	Annual rainwater vield (Litnes)	Rainwater yield (L/person/dav)	
			Animenter vield if detailed:		
			Daily rainfall collection (litres)	Rainwater yield (L/person/dav)	
Non notable water demand i bullding or was and					I
Non pocable water demand - bolioing components					
			Total	Greywater and/or rainwater yield (L/oerson/dav) 0.00	
		downster under nimiter officed	Branatics of concentration	Madeuro econiciilde donated	
	Component WC flushing	for component Yes	enerwater and/or rainwater vield INI 100%	(L/person/dav) 3.21	
				Demand met by yield (L/person/dav)	
	_Other permissible componen	3	Total	0.00	
	> Are there oth	ser permissible components present which demi	ind greywater and/or rainwater yield?	Please select Miximum permissible demand (L/dav)	
	Prop	ortion of maximum permissible demand utilised	by other permissible components (%)	Demand met be vield	
			Total	(L/person/day)	
				Greywater and/or rainwater demand met by yield	
			Total	0.00	1
Water consumption calculation results					
					1
	Water consumption - modelled baselin	e performance benchmark (excludes fixed uses)	Litres/oerson/day Requires building information	m'/oerson/vr Requires building information	
	Microcomponent water consumptio	n - modelled performance (excludes fixed uses) mand met via greywater and raimeater sources	3.23	0.00	1
if grøyw	mounter water or ater/rainwater systems specified has the minimum % efficiency impro	wment for component specifications been met	Requires building information		-
	Net mo	delled water consumption (excludes fixed uses)	Requires building information	Requires building information	]
		Percentage improvement	Requires building information		
		Total Wat 01 REFEAM condits achieved	Requires building information		
		tal Wat 01 BREEAM Exemplary credits achieved	Requires building information		

### Building S6 - BREEAM Wat 01 calculation with Greywater harvesting

BREEAM 2018/Version 6 Wat 01	Water consumption: Water efficiency cal	culator for new	office buildings			
Building type	Description of building type TCP Classification B1: Offices and workshop business (in	including those	Default occupancy 655.367	Default annual days/operation	Default daily hours of operation	
	with a basic (category 1) laboratory area)					Note: the activity areas defined opposite are used to estimate the assessed building's default occupancy and therefore water consumption benchmark. These areas are chosen as they are deemed, building's default occupancy and therefore water consumption benchmark.
Main building activity areas Office - Office areas	Description of activity area Cellular or open plan office space, including staff kitche meeting rooms, visitor waiting or circulation areas.	en where present/ad	jacent and reception areas. Exicude	Activity area present in building? Yes	Net Floor Area (m <sup>4</sup> ) 3077	In large, to represent the permanently occupied spaces in the building and therefore reflect the number of building occupant/users. As a result it is not necessary to include all areas of the building that may be present, as the areas not defined are assumed to be used by the occupants of the building already accounted for by those areas that are listed.
Office - Small workshop / laboratory space	Small scale workshop or category 1 laboratory area			Yes	4615	
> Office - Staff canteen dining area	Seated dining areas that accompany a permanently sta	iffed kitchen preparir	ng food for consumption on the	Please select		Noto: Only select this activity if there is a permanently staffed bitchen that will prepare hot and cold meals for the building's staff (and visitors). Enter the area of the seated dining area only (not hitchen/servery areas), this is used to estimate the number of covers per day for the restaurant and subsequently the number of kitchen staff and water consumption from food preparation activity
Office - Fitness suite/gym (with changing	A fitness suite or gym that is part of the office building/	/development and u	sed by the building's employees	Piease celer#		area.
facility and showers)	only. The gym will have its own changing facility with sh	towers.				
Water consumption - building microc	omponent					
WC component - all activity areas	units Speci	ification	Usage/person/day	Usage factor	Consumption (L/person/day)	
WC - female	Effective flush volume (Litres) 3	3.75	4.00	1.00	7.50	Note: Where the WC facilities are non-gender specific please still enter the WC specification against both WC male and WC female categories i.e. if there are two WCs with a 6 litre effective fluch, then enter 6 litres against both male and female categories. The calculation will not double count water consumption in this instance as the consumption figure calculated for each WC component is adjusted by the article of male to female users for this building type.
Urinal component - all activity areas Automatically operated flushing cistern	urits Sceri Cistern capacity (Litres) 1 No. of urinal bowls 21	fication 1.50 0.00	No. of cisterns 20.00	Flushing frequency (flushes/hour) 1.00	Consumption (L/person/dav) 0.46	
Manual/automatic operated pressure flushing valve (all activity areas)	units Speci Flush volume (litres)	ification	Usage/person/day 3.00	Usage factor 1.00	Consumption (L/person/day) 0.00	Note: This consumption total accounts for the ratio of male users for this building type i.e. the ratio of building users who will operate the fluck. Where more than one type of union flucking control is the action of use the ratio of building users who will operate the fluck. Where more than one type of union flucking control is the ratio of building users who will operate the fluck. Where more than one type of union flucking control is the ratio of building users who will operate the fluck. Where more than one type of union flucking control is the ratio of building users who will operate the flucking extension of union flucking the ratio of building users who will operate the flucking extension of union flucking extens
Waterlass urinals (all articles areas)	units Soord Flush volume (Itres) Waterless urin	ification als - not specified	Usage/person/dav 3.00	Usage factor 1.00	Consumption (L/person/dav) 0.00	
services of constraints and an arctical and and	No. of urinal bowls					
Taos components (personal hysiene) - all as	units Speci ctivity areas	ification	Usage/person/day	Usage factor	Consumption (L/person/day)	
Shower use Fixed use - vessel filling	Flow rate (litres/min) 6 Litres/person/day	5.00	0.154	5.60	5.17 1.58	
Tap components (cleaning) - staff kitchenett listchen taps - kitchenette Dishwasher	Flow rate (litres/min) 6 Litres/cycle	5.00	1.00	0.67	2.72	
Tao components (cleanine and food prepara Kitchen taps - pre-rinse nozzle	ation) - staff canteen food oreoaration area Flow rate (litres/min)			60.00	0.00	
Dishwasher Waste disposal unit Fixed use - food preparation	Elfres/rack 55 Flow rate (litres/min) Litres/person/day	-	-	30.00	0.00	
Proed use - lotchen cleaning	utres/person/day				Microcomponent consumption	Note: This total includes the contributions from fixed uses, including where applicable vessel filing kitchen classing and food preparation. Default fixed use totals are included with the calculations to an included with the calculations to an included with the calculations to an included with the calculations.
				Total	22.69	period a machine sectors in the control of the cont
Non potable water yield - greywater :	system					
	Has, or will, the greywater system be specifie	ed and installed in co	empliance with BS8525-1:2010 Greyw	ater Systems - Part 1 Code of Practice Proportion of components collected	Yes Greywater yield	
	Greywater source (building components) Wash hand basin taps Showers		Greywater collected Yes Yes	from (%) 30% 100%	1.02 5.17	
	Kitchen taps - kitchenette Dishwasher - staff kitchenette Kitchen taps - pre-rinse nozzle		No No			
	Dishwasher - food preparation area Greywaser source (other components) Typical greywa Other source of armoster	ater yield (litres)	No Frequency of yield (days)	Greywater yield (litres/day)	Greywater yield (L/person/day)	Note: If grywater is collected from a component/lource not accounted for above i.e. their consumption is not estimated, then the amount of grywater collected can be added here so that it may be accounted for. This can include watewater from active hygiene flushing, i.e. a regular hygiene flushing programme to minimize poor water quality in a potable colls or hot water system.
	Dinie source of greywater				Greywater yield (L/person/dav)	
				Total	6.19	
Non potable water yield - rainwater s	rystem					
	Has, or will, the rainwater system be specified and ins	stalled in compliance	with BS EN 16941-1:2018 Rainwater I How has the storage capacity for th	Harvesting Systems - Code of practice he proposed system been calculated?	System not specified	
Animater wield if basic approach: Collection area (m2)	Rainfall (average mm/vr) Hydraulic filte	er efficience (%)	Yield co-efficient (%)	Annual rainwater vield (Litres)	Rainwater yield (L/person/dav)	
				Rainwater vield if detailed:		
				Daily rainfall collection (litres)	Rainwater yield IL/person/davi	
Non Potable Water Demand - Buildin	ig Components					
					Greywater and/or rainwater yield	
				Total Proportion of components using	6.19	
	Come WC flushing	ponent	Greywater and/or rainwater utilised for component Yes	greywater and/or rainwater yield (%) 100%	Maximum permissible demand (L/person/dav) 9.38	
	Unnal Rushing		res	100%	0.46 Demand met by yield (L/person/day) 6.19	
	Other permissible Are t	e components there other permissib	ole components present which dema	nd greywater and/or rainwater yield?	No	
		Properties of ma	wimum narmiscible damand utilicad i	hy other nermissible romanants (%)	Maximum permissible demand (L/dav) 0	
		roportion of the		Total	Demand met by yield (L/gerson/dav) 0.00	
					Greywater and/or rainwater demand met by yield	
				Total	6.19	1
Water consumption calculation result	8					
	Where constant and the	rl hateline porferen	nre henrhmark (excluder fixed	Litres/cerson/dav	m <sup>1</sup> /oerson/vr	
	Microcomponent water con	nsumption - modelle	d performance (excludes fixed uses)	21.11	5.34	
Ifgreywate	Modelled	I water demand met	via greywater and rainwater sources component specifications bee <u>n met</u>	6.19 Yes	1.57	1
		Net modelled wate	er consumption (excludes fixed uses)	14.92	3.78	1
			Percentage improvement	61.67% 5 creaties	1	
		Total Wat 01	BREEAM Exemplary credits achieved	Exemplary level not achieved	1	
	Key performance in	dicator - use of fresh	water resource (includes fixed uses)	16.50	4.18	1

### Building S7 - BREEAM Wat 01 calculation with Greywater harvesting

BREEAM 2018/Version 6 Wat 01	Water consumption: Water e	fficiency calculator for new	v office buildings			
Building type Office	Description of building type TCP Classification B1: Offices and work with a basic (category 1) laboratory are	shop business (including those ea)	Default occupancy 680.39	Default annual days/operation 253	Default daily hours of operation 10	
Main building activity areas Office - Office areas	Description of activity area Cellular or open plan office space, indu meeting rooms, visitor waiting or circul	ading staff kitchen where present/ad	jacent and reception areas. Exicude	Activity area present in buildine? Yes	Net Floor Area (m <sup>2</sup> ) 3194	Note the a which years defined opposite on sorted to referred the balance building default accessed on 40 building which we have building a building default accessed on 40 building which we have building a building default accessed on 40 building which we have building that we have bui
Office - Small workshop / laboratory space	Small scale workshop or category 1 lab	oratory area		Yes	4792	
> Office - Staff canteen dining area	Seated dining areas that accompany a premises (excludes small un-staffed kit	permanently staffed kitchen preparin tchen's used by office staff to re-heat	ng food for consumption on the food, make tea etc.)	Please select		Note: Only select this activity if there is a permanently staffed litchen that will prepare hot and cold meaks for the building's staff (and visitors). Enter the area of the seated diving area only (not hitcher/(normal areas), this is used to estimate the number of covers per day for the restaurant and subsequently the number of litcher staff and water consumption from flood preparation activity area.
> Office - Fitness suite/gym (with changing facility and showers)	A fitness suite or gym that is part of the only. The gym will have its own changing other than the second	e office building/development and u ng facility with showers.	sed by the building's employees	Please select		
Water consumption - building microc	omponent			•		l
WC component - all activity areas	units Effertive fluck witume (Litres)	Specification	Usage/person/day	Usage factor	Consumption (L/person/day)	
WC - female	Effective flush volume (Litres)	3.75	4.00	1.00	7.50	Note: Where the WC facilities are non-gender specific please still enter the WC specification against both WC male and WC female categories i.e. if here are two WCs with a 6 litre effective flush, then enter 6 litres against both male and female categories. The calculation will not couble count water consumption in this instance as the consumption figure calculated for each WC component is adjusted by the archite of male to final exact for this building type.
Urinal component - all activity areas Automatically operated flushing cistern	Units Cistern capacity (Litres) No. of urinal bowls	Specification 1.50 20.00	No. of cisterns 20.00	Flushing frequency (flushes/hour) 1.00	Consumption (L/person/dav) 0.44	
Manual/automatic operated pressure flushing valve (all activity areas)	Units Flush volume (litres) No. of uninal bowls	Specification 0.00	Usage/person/day 3.00	Usage factor 1.00	Consumption (Uperson/day) 0.00	Note: This consumption total accounts for the ratio of male users for this building type i.e. the ratio of building users who will operate the flush. Where more than one type of urinal flushing control is secified in the building, this consumption figure is adjusted by a ratio of user. the ratio is determined according to the proportion of urinal books in the building operated using this type of control.
Waterless urinals (all activity areas)	units Flush volume (litres) No. of urinal bowls	Specification Waterless urinals - not specified	Usage/oerson/day 3.00	Usare factor 1.00	Consumption (L/person/dav) 0.00	
	units	Specification	Usage/person/day	Usage factor	Consumption (L/person/day)	
Taos components (personal hysiene) - all ar Wash hand basin taps Showne yro	ctivity areas Flow rate (litres/min)	5.00	4.00	0.25	3.39	
Fixed use - vessel filling Tap components (cleaning) - staff kitchenett	Litres/person/day	-	-		158	
Kitchen taps - kitchenette Dishwasher	Flow rate (litres/min) Litres/cycle	6.00	1.00 0.04	0.67	2.72	
Broconroomeretering and too broome Stohen taps - pre-rene nozzle Dishwasher Waste disposal unit	Flow rate (litres/min) Litres/rack	5.00		60.00 0.217 30.00	0.00	
Fixed use - food preparation Fixed use - kitchen cleaning	Litres/person/day Litres/person/day			-	0.00	
				Tota	Microcomponent consumption (L/derson/dav) 22.68	Note: This total includes the contributions from find use, including where applicable vessel filling, ktohn claving and food preparation. Drive filling the size included with the calculations to provide a none accurate refection of the busing total water composition. The find use total are not however included in the water composition total acute to determine the assessed building percentage improvement and the number of BREFAR credits achieved. The percentage improvement is based only on the companyton for water from uses that can be heavely influenced by the microregonese tracement.
Non potable water yield - greywater :	system					monocomponent spectral and the monomore
	Has, or will, the greywater s	ystem be specified and installed in co	ompliance with BS8525-1:2010 Grey	water Systems - Part 1 Code of Practice	Yes	1
	Greywater source (building componen Wash hand basin taps	ts)	Greywater collected Yes	Proportion of components collected from (%) 28%	d Greywater yield IL/person/davi 0.95	
	Showers Kitchen taps - kitchenette Dishwasher - staff kitchenette		Yes No No	100%	5.17	
	Kitchen taps - pre-rinse nozzle Dishwasher - food preparation area Greywater source (other components)	Tunical aressuator vield (litrac)	No No Fremmency of vield (days)	Gravwater vield (Direc/day)	Greywater yield	Note: If grywater is collected from a component/jource not accounted for above i.e. their consumption is not estimated, then the amount of grywater collected can be added here so that it may be movement of for. The run include extrements from some function is a control transformation accounted in a settide roller is a settide roller.
	Other source of greywater				0.00 Greywater yield	жиостно ос. то си посот излички поп жили удине полод, съ въдове турне полод рефилите со попече ростике саму на рожен со о то чике удине.
				Tota	(L/gerson/dav) 6.12	
Non potable water yield - rainwater s	system					
	Has, or will, the rainwater system be	specified and installed in compliance	with BS EN 16941-1:2018 Rainwater How has the storage capacity for	r Harvesting Systems - Code of practice	System not specified	
Painwater yield if basic approach:	Rainfall	Andrea d'a Phone a Malance - Mal	Maldan afficiant MA	A second selection and a late for large d	Rainwater yield	
Conection and Thir2		Propagic liner emparicy (%)	THID CO-HITCHIT (%)	Rainwater yield if detailed:	ic/bensbr/davi	
				Daily rainfall collection (litres)	Rainwater yield (L/cerson/dav)	
Non Potable Water Demand - Buildin	ig Components					
					Greywater and/or rainwater yield (L/person/dav)	
	ſ			Tota Proportion of components using	6.12	
		Component WC flushing Arinal flushing	Greywater and/or rainwater utilise for component Yes Yes	d greywater and/or rainwater yield (%) 100%	Maximum permissible demand (L/person/dav) 9.38 0.44	
	-			Tota	Demand met by yield (L/person/day) 6.12	
	> 🖞	Other permissible components Are there other permissib	ale components present which dem	and greywater and/or rainwater yield	Please select Maximum permissible demand	
	E	Proportion of ma	ximum permissible demand utilised	d by other permissible components [%]	(L/dav)	
				Tota	Demand met by yield (L/derson/dav)	
				Total	Greywater and/or rainwater demand met by yield (L/derson/dav) 6.12	
Water consumption calculation result	ts					
if greywate	Water consum Microscomp (frainwater systems specified has the mi	sption - modelled baseline performan ponent water consumption - modelle Modelled water demand met nimum % efficiency improvement for	nce benchmark (excludes fixed uses d performance (excludes fixed uses via greywater and rainwater source component specifications been me	Utres/person/day           3         38.86           3         21.10           5         6.12           12         Yes	m <sup>1</sup> /derson/vr 9.83 5.34 1.55	
		Net modelled wate	er consumption (excludes fixed uses	14.97	3.79	1
		T	Percentage improvement	t 61.46%	1	
		Total Wat 01	BREEAM Exemplary credits achieves	d Exemplary level not achieved	1	
		performance indicator - use of fresh	water resource (includes fixed uses	16.55	4.19	1

### Building S8 - BREEAM Wat 01 calculations with Greywater harvesting

BREEAM 2018/Version 6 Wat 01	Water consumption: Water	efficiency calculator for ne	ew office buildings		BREEAM" UK
Bullion tuon	Decedenties of the Title		Defe h	Default sound du	pervened by bre
Office	TCP Classification B1: Offices and wor with a basic (category 1) laboratory and	rkshop business (including those rea)	955.044	253	Denault daty fidurs of operation 10
Main building activity areas	Description of activity area			Activity area present in building?	Net Floor Area (m <sup>2</sup> )
Office - Office areas	Cellular or open plan office space, ind meeting rooms, visitor waiting or circu	luding staff kitchen where present/a ulation areas.	adjacent and reception areas. Exicude	Yes	8604
Office - Small workshop / laboratory space	Small scale workshop or category 1 la	iboratory area		No	
Office - Staff canteen dining area	Seated dining areas that accompany a premises (excludes small un-staffed k	a permanently staffed kitchen prepa kitchen's used by office staff to re-he	aring food for consumption on the eat food, make tea etc.)	No	
Office - Fitness suite/gym (with changing facility and showers)	A fitness suite or gym that is part of th only. The gym will have its own chang	he office building/development and ging facility with showers.	d used by the building's employees	No	
Water consumption - building microc	omponent				
WC component - all activity areas WC - male (no urinals installed)	units Effective flush volume (Litres)	Specification 3.50	Usage/person/day 4.00	Usage factor 1.00	Consumption (L/person/day) 7.00
WC - temale	Effective flush volume (Litres)	3.50	4.00	1.00	7.00
ormarcomponent - all activity areas	2110	Specification	NO. Of cisterns	riushing frequency (flushes/hour)	Consumption (L/person/day)
	units	Specification	Usaga/person/day	Usage factor	Consumption (L/person/day)
	units	Specification	Usage/person/day	Usage factor	Consumption (L/person/day)
Taps components (personal humano) all as	urits tivity areas	Specification	Usaga/parson/day	Usage factor	Consumption (L/person/day)
Wash hand basin taps Shower use Fixed use - vessel filling	Flow rate (litres/min) Flow rate (litres/min) Litres/person/day	4.00 5.00	4.00	0.25 5.60	2.71 0.84
Tap components (cleaning) - staff kitchenett Kitchen tags - kitchenette	Flow rate //inoc/min1		100	0,57	1.28
Dishwasher Tap components (risoning and foodor	Litres/cycle	area	0.04	1.00	0.00
	ran canten rood preparation a				
				Tana	Microcomponent consumption (L/oerson/dav) 19.49
				ICA	15:13
won potable water yield - greywater s					
	Has, or will, the greywater	system be specified and installed in	compliance with BS8525-1:2010 Greyw	ater Systems - Part 1 Code of Practice Proportion of components collected	Yes Greywater yield
	Wash hand basin taps Showers	noj	Greywater collected Yes Yes	100% 100%	2.71 0.84
>	Nuchen taps - kitchenette Dishwasher - staff kitchenette		No		
>	Greywater source (other components)	Typical greywater yield (litres)	Frequency of yield (days)	Greywater yield (litres/day)	Greywater yield (L/person/day)
	onner source or greywater	<u> </u>	1		Greywater yield B /nersee/dawl
				Total	3.55
Non potable water yield - rainwater s	ystem				
	Has, or will, the rainwater system be	e specified and installed in complian	nce with BS EN 16941-1:2018 Rainwater I	Harvesting Systems - Code of practice	System not specified
Rainwater vield if basic approach:	Raiofal		now has the storage capacity for th	w yr cytown system been carculated?	Rainwater vield
Collection area (m2)	(averaze mm/vr)	Hydraulic filter efficiency (%)	Yield co-efficient (%)	Annual rainwater vield (Litres)	lL/oerson/davi
				Roinwoter yield if detailed: Daily rainfall collection (litres)	Rainwater yield IL/oerson/davl
Non Potable Water Demand - Buildin	g Components				
				Tana	Greywater and/or rainwater yield IL/oerson/davl
	1		Greywater and/or rainwater utilised	Proportion of components using greywater and/or rainwater vield	Maximum permissible demand
		Component WC flushing	for component Yes	(%) 100%	IL/oerson/dav) 14.00
				Total	Demand met by yield (L/person/day) 3.55
	ſ	Other permissible components Are there other permis	ssible components present which dema	nd greywater and/or rainwater yield?	No
					Maximum permissible demand (L/dav) 0
	[	Proportion of r	maximum permissible demand utilised i	by other permissible components (%)	Demand met by yield IL/oerson/davl
				Total	0.00 Greywater and/or rainwater
				Total	demand met by yield (L/person/dav) 3.55
Water consumption calculation result	s				
	Water consu	mption - modelled baseline perform	nance benchmark (excludes fixed uses)	Litres/berson/dav 32.79	m <sup>1</sup> /oerson/vr 8.29
	Microcom	nponent water consumption - model	elled performance (excludes fixed uses) et via erevwater and rainwater courser	3,55	4.44
If greywate:	/rainwater systems specified has the m	inimum % efficiency improvement f	for component specifications been met	Yes	0.30
		Net modelled wa	ater consumption (excludes fixed uses)	14.00	3.54
			Percentage improvement Total Wat 01 BREEAM credits achieved	57.29% 5 credits	
		Total Wat 0	01 BREEAM Exemplary credits achieved	Exemplary level not achieved	
	Ke	ey performance indicator - use of fre	eshwater resource (includes fixed uses)	15.58	3.94

#### Building S9 - BREEAM Wat 01 calculation with Greywater harvesting

BREEAM 2018/Version 6 Wat 0	D1 Water consumption: Water	efficiency calculator for ne	w office buildings		BREEAM <sup>®</sup> UK	
Building type Office	Description of building type TCP Classification 81: Offices and wo with a basic (category 1) laboratory a	rkshop business (including those area)	Default occupancy 1303.56	Default annual days/operation 253	Default daily hours of operation 10	
Main building activity areas	Description of activity area			Activity area present in building?	Net Floor Area (m <sup>2</sup> )	Note the activity areas defined opposite are used to estimate the assessed building's default accupancy and therefore water consumption benchmark. These areas are doese as they are deemed, in large, to response the permanenty occupancy access in the building the diversion of the building and therefore inflat does not the or areas for an extension of the building the diversion of the building and therefore inflat does and the areas for defined are asseed to be used by a compared to the areas that are not excession to building the diversion of the the diversi
Office - Office areas	Central of open pain once space, m meeting rooms, visitor waiting or dro	couling start internet where present/a culation areas.	ojacent and reception areas. Excube	Yes	9180	
Office - Straff canteen dining area	Seated dining areas that accompany	a permanently staffed kitchen prepar	ing food for consumption on the	Please select	2400	Note: Only select this activity if there is a permanently staffed kitchen that will propare hot and cold masks for the building's staff (and visitors). Enter the area of the seated diring area only (not Kitchen/servery areas), this is used to asimale the number of covers per day for the restaurant and subsequently the number of kitchen staff and water consumption from food preparation additivy
<ul> <li>Office - Fitness suite/gym (with changing facility and showers)</li> </ul>	A fitness suite or gym that is part of t only. The gym will have its own chan	the office building/development and ging facility with showers.	used by the building's employees	Please select		#P2.
Water consumption - building micro	ocomponent					
WC component - all activity areas	units	Specification	Usage/person/day	Usage factor	Consumption (L/person/day)	
WC - male (no urinals installed) WC - female	Effective flush volume (Litres) Effective flush volume (Litres)	3.75 3.75	4.00	1.00	7.50 7.50	Note: Where Vie WC facilities are non-gender specific, please still enter the WC specification against both WC male and WC female categories i.e. if there are two WCs with a 5 litre effective fluck, the enter 6 litre sagainst both male and female categories. The calculation will not double count water consumption in this instance as the consumption figure calculated for each WC component is adjusted by the ratio of the lot benefits used.
Urinal component - all activity areas	units	Specification	No. of cisterns	Flushing frequency (flushes/hour)	Consumption (L/person/day)	
	unts	Specification	Usage/person/day	Usage factor	Consumption (L/person/day)	
		Specification	Ostager ben solev a sy	osage factor	Consumpson (Disensorrazy)	
Tassi components (personal hypiene) - all Wash hand basin taps	units lactivity areas Flow rate (litres/min)	Specification 5.00	Usage/person/day	Usage factor	Consumption (L/person/day)	
Shower use Fixed use - vessel filling Tap components (cleaning) - staff kitchen	Flow rate (litres/min) Litres/person/day	6.00	0.154	5.60	5.17 1.58	
Kitchen taps - kitchenette Dishwasher Tap components (cleaning and food prepa	Flow rate (litres/min) Litres/cycle aration) - staff canteen food preparation -	area	1.00 0.04	0.67	0.00	
Kitchen taps - pre-rinse nozzle Dishwasher Waste disposal unit Fixed use - food preparation	Flow rate (litres/min) Litres/rack Flow rate (litres/min) Litres/person/day	7.30 5.00	-	60.00 0.217 30.00	0.34 0.00 0.00 0.00	
Fixed use - kitchen cleaning	Litres/person/day	-			0.00 Microcomponent consumption (L/gerson/dav)	Nex: This total includes the contributions from fixed uses, including where applicable versel filling, likelihen classing and food preparation. Dafault fixed use totals are included with the calculations provide a more accurate reflection of the builtings total water consumption. The fixed use totals are not however included in the water consumption total acids to determine the assessed builtings.
Non potable water yield - greywate	r system			1054	5.8	Jpercentage improvement and the number of BREAM credits achieved. The percentage improvement is based only on the consumption of water from uses that can be heavily influenced by the microcomponent specification e.g. WC flushing.
	Has, or wil, the greywater	r system be specified and installed in	compliance with BS8525-1:2010 Greyw	vater Systems - Part 1 Code of Practice	8 Yes	1
	Greywater source (building compone Wash hand basin taps Showers	ents)	Greywater collected Yes Yes	Proportion of components collected from (%) 28% 100%	d Greywater yield (L/oerson/dav) 0.95 5.17	
	Kitchen taps - kitchenette Dishwasher - staff kitchenette Kitchen taps - pre-rinse nozzle Dishwasher - food preparation area		No No No No			
	Greywater source (other components) Other source of greywater	Typical greywater yield (litres)	Frequency of yield (days)	Greywater yield (litres/day)	Greywater yield (L/person/day) 0.00	Nate: If growwater is collected from a component/Jource net accounted for above i.e. their consumption is not estimated, then the a mount of growwater collected can be added here so that it may be accounted for. This can include watewater from acche hygiene fluching , i.e. a regular hygiene fluching regramme to minimia poor water quality is a potable cold or hot water system.
				Tota	(L/oerson/dav) 6-12	
Non potable water yield - rainwater	r system					
	Has, or will, the rainwater system b	e specified and installed in complianc	e with BS EN 16941-1:2018 Rainwater How has the storage capacity for t	Harvesting Systems - Code of practice he proposed system been calculated	8 System not specified	J I
Collection area (m2)	Rainfall (averaze mm/vr)	Hvdraulic filter efficiency (%)	Yield co-efficient (%)	Annual rainwater vield (Litres)	Rainwater yield It/derson/davi	
				Roinwoter yield if detailed: Daily rainfall collection (litres)	Rainwater yield It./oerson/davi	
Non Potable Water Demand - Build	ling Components					
				Tota	Greywater and/or rainwater yield (L/derson/dav) 6:12	
		Component	Greywater and/or rainwater utilised for component	Proportion of components using greywater and/or rainwater yield (35)	Maximum permissible demand (L/person/dav)	
		WC flushing	Yes	100%	15.00 Demand met by yield (L/person/day)	
		Other permissible components Are there other permiss	ible components present which dema	Tota nd greywater and/or rainwater yield	b.12	
		Proportion of m	aximum permissible demand utilised	by other permissible components (%)	(L/dav) 0 Demand met by yield	
				Tota	IL/oerson/davi 0.00 Greywater and/or rainwater	
				Total	demand met by yield IL/derson/davi 6.12	ļ
Water consumption calculation res	ults					
	Water consu	umption - modelled baseline perform	ance benchmark (excludes fixed uses)	Litres/berson/dav 41.59	m <sup>1</sup> /oerson/vr 10.52	
	Microcor	mponent water consumption - model Modelled water demand me	led performance (excludes fixed uses) t via greywater and rainwater sources	23.90 6.12	6.05	1 1
Ifgreywa	ter/rainwater systems specified has the n	minimum % efficiency improvement fo	or component specifications been met ter consumption (excludes fixed uses)	Yes 17.77	4.50	1
			Percentage improvement fotal Wat 01 BREEAM credits achieved	57.26% 5 credits		
	X	Total Wat 0	1 BREEAM Exemplary credits achieved shwater resource (includes fixed uses)	Exemplary level not achieved	4.90	1



## Appendix I Proposed Water Management Strategy Plan





## Appendix J Phasing Plan

# CAMBRIDGE NORTH DEVELOPMENT OVERVIEW - PHASING

## PHASING

S08 . OFFICE (LEFT) S09 . LABORATORY (RIGHT)

 	COMPLETION	ACCOMMODATION SCHEDULE (* APPROX NIA AREAS)	POTENTIAL FULL OCCUPATION	
 PHASE 1 S 02 : HOTEL	2021	217 BEDROOMS		
PHASE 2 S 03 : OFFICE	2023	100,000 FT <sup>2</sup>		S11-S21 . RESIDENTIAL QUARTER
PHASE 3 S05: MOBILITY HUB S 06: LABORATORY S 07: LABORATORY	2026 2027 2027	- 100 DEVELOPMENT CAR \$ - 600 RAIL CAR SPACES 87,000 FT <sup>2</sup> 92,000 FT <sup>2</sup>	SPACES S06: 2028 S07: 2028	S17-21 509 507
PHASE 4 S 04: OFFICE	2027	120,000 FT <sup>2</sup>	S04: 2028	S04.OFFICE S13-16 S11-12 S08 S06
PHASE 5 RESIDENTIAL QUARTER S17 - S21: S11 - S16:	2028 2029 —	192 UNITS (BTR) – 78 UNITS (BTR) – 61 UNITS (AFFORDABLE) – 94 UNITS (PRIVATE)	S17-S21: 2029 S11-S16: 2030	
PHASE 6 S 09: LABORATORY	2028	160,000 FT <sup>2</sup>	S09: 2030	S03 . ONE CAMBRIDGE SQUARE
PHASE 7 S 08 : OFFICE	2029	90,000 FT <sup>2</sup>	S08: 2030	
TEMPORARY LOGISTICS AREA:	2024			

S06/S07 . LABORATORY

