Technical Note 1: Water Neutrality Statement

Site: Duckmoor, Billingshurst
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Date: 13th September 2024

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1.0 Introduction

1.1 This Water Neutrality Statement (WNS) has been prepared on behalf of Bellway Homes Ltd. to demonstrate how the proposed development will achieve water neutrality.

1.2 Following the issue of Natural England's (NE's) Position Statement on Water Neutrality within the Sussex North Water Supply Zone (SNWSZ) it is understood that Horsham District Council (HDC) require all new and reserved matter planning applications to demonstrate that the development is water neutral and/or that they do not result in a significant effect. NE's Position Statement can be found in full within Appendix A.

1.3 The SNWSZ covers most of the Horsham District, as well as parts of the neighbouring Chichester, Arun and Crawley Districts. A plan showing the supply area can be found in Appendix B.

1.4 This statement sets out the following:

- Baseline calculations for the existing development;
- Additional demand as a result of the proposed development;
- Water reduction measures, such as water efficient fixtures and fittings and rainwater harvesting; and
- Measures to offset any remaining deficit following the above.

2.0 Background

2.1 The proposed development is located to the east of Hilland Road and Dadswell Drive, and west of Wooddale Lane, in Billingshurst.

2.2 The existing site consists of three fields which are bordered by trees, hedgerows and ditches.

2.3 The site proposals include the construction of 83 dwellings, comprising a housing mix of 9no. 1-bedroom, 33no. 2-bed, 22no. 3-bed, 13no. 4-bed and 6no. 5-bed houses. A schedule of accommodation can be found in Appendix C and a copy of the proposed site layout can be found in Appendix D.

3.0 Baseline Calculations

3.1 The existing site comprises of an open field.

3.2 Water bills provided by the existing landowner confirm that water is supplied to troughs on the site and during the period from 11th September 2020 to 8th September 2021 it is estimated that 468m^3 of water was used on site. This equates to an average of 1,292.82 litres per day. However, the water bills are estimated and not based on meter readings, therefore on a precautionary basis no baseline data will be taken forward in the water neutrality calculations. A copy of the water bills can be found in Appendix E.

4.0 Onsite Proposals

Additional Demand

4.1 Part G of the current Building Regulations recommends that all developments achieve a water consumption of 125 litres per person per day.

4.2 The average occupancy levels for each dwelling size have been based on local census data (agreed by Horsham District Council) and it is summarised in Table 4.1 below.

1-bedroom	2-bedroom	3-bedroom	4-bedroom
1.32	1.88	2.47	2.86

Table 4.1 – Occupancy Level per dwelling size

4.3 Using the above census data, the population of the proposed development is estimated to be 184.

4.4 Using the Building Regulations water consumption figure of 125 litres per person per day and population size of 184 it is estimated that the total water usage per day for the proposed development would be 23,000 litres per day (125x184).

Water Reduction Measures

4.5 To minimise the water use of the development water efficient fixtures and fittings will be incorporated, which will reduce water consumption to less than is required by Building Regulations (limit of 125 litres per person per day).

4.6 A water calculation in accordance with Building Regulations Part G has been carried out and confirms that the proposed development will achieve a water consumption of 92 litres per person per day, which includes an allowance of 5 litres per person per day for external water usage. A copy of the Part G calculation can be found in Appendix F.

4.7 A copy of the proposed fixtures and fittings to achieve the above water consumption can be found in Appendix G.

4.8 Using the Part G water consumption figure of 92 litres per person per day and a population size of 184 it is estimated that the total water usage per day for the proposed development would be reduced to 16,928 litres per day (184 x 92).

4.9 To help mitigate the increase in water demand it is proposed to incorporate rainwater harvesting into the proposed development. A rainwater harvesting tank will be included on each house and a shared tank will be used for the maisonettes.

4.10 The water collected by the rainwater harvesting units will be utilised for flushing toilets and in washing machines, and all other uses will be mains water fed.

4.11 The following table sets out the water uses, as detailed in the Part G calculation and shows the split between the mains water usage and water supplied by the rainwater water harvesting systems:

	Total Water Usage (l/p/day)	Mains Water Usage (l/p/day)	RWH System Usage (l/p/day)
WC (full flush)	6.57		6.57
WC (part flush)	8.88		8.88
Taps (Excluding Kitchen)	5.85	5.85	
Bath	14.30	14.30	
Shower	26.22	26.22	
Kitchen Taps	12.12	12.12	
Washing Machine	17.16		17.16
Dishwasher	4.50	4.50	
Total	95.60	62.99	32.61
Normalisation Factor	0.91	0.91	0.91
Total	86.99	57.32	29.67
External Water Use	5		5
Total	92.0	57.32	34.67

Table 4.2 – Water Usage

4.12 The above table confirms that 34.67 litres per person per day will be supplied by the rainwater harvesting systems, which equates to 6,379.28 litres per day (34.67 x 184).

4.13 Once rainwater harvesting has been incorporated into the proposals there will be a deficit of 10,548.72 litres per day (16,928 per day minus 6,379.28 litres per day), which will require further offsetting to ensure that the proposals are water neutral. The proposed offsetting for the development is discussed further in section 5 below.

4.14 The tanks for each of the plots have been sized using the calculations set out in BS EN 16941-1:2018 and allow for 18 days of storage. The proposed tank sizes are summarised in Table 4.3. The calculations also confirm that in all cases the yield is sufficient to meet the demand. The calculations are summarised in Table 4.3 on the next page and can be found in full in Appendix H.

Unit	Census	No. Units	Total Unit Population	Combined Roof Area of Units (m^2)	5% Annual Rainwater Yield (litres)	5% Annual Water Demand (litres)	Tank Sizes for Units (litres)
1B2P	1.32	5	6.6				
2B3P, 2B4P, CH	1.88	3	5.64	268.15			
		8	12.24	268.15	8,289.37	7,744.58	8,400
SG (SO)	1.32	3	3.96				
SG (GV)	1.88	3	5.64	67.35			
		6	9.6	67.35	6,246.10	6,074.18	6,800
SA	1.88	1	1.88	73.73	2,279.09	1,189.53	1,800
BM	1.88	1	1.88	55.28	1,708.90	1,189.53	1,800
HA	1.88	1	1.88	55.28	1,708.90	1,189.53	1,800
FM	1.88	1	1.88	58.82	1,818.31	1,189.53	1,800
SR	2.47	1	2.47	70.02	2,164.55	1,562.84	1,800
RE	2.47	1	2.47	70.80	2,188.65	1,562.84	1,800
AR	2.47	1	2.47	80.86	2,499.49	1,562.84	1,800
JE	2.86	1	2.86	93.21	2,881.42	1,809.60	2,600
WL	3.09	1	3.09	80.86	2,499.49	1,955.13	2,600
TI	2.47	1	2.47	55.28	1,708.90	1,562.84	1,800
CT	2.86	1	2.86	58.74	1,815.84	1,809.60	2,600
PW + TI	4.94	1	4.94	109.01	3,369.85	3,125.67	3,400
BM + HA	4.35	1	4.35	110.6	3,419.00	2,752.36	3,400
PW + CT	5.33	1	5.33	114.02	3,524.72	3,372.44	4,400
SG (SO) / SG (GV) + CT	6.06	1	6.06	126.04	3,896.30	3,834.33	4,400
PW + BA	4.35	1	4.35	103.16	3,189.01	2,752.36	3,400
BA + TI	4.35	1	4.35	101.61	3,141.09	2,752.36	3,400
Totals		83	183.98		16,520.01	11,640.92	

Table 4.3 – Rainwater Harvesting Sizing Calculations

4.15 The rainwater harvesting systems will be managed and maintained by a management company and this will be secured in the s.106 agreement. A Management and Maintenance Plan is included in Appendix I.

4.16 Following discussions with manufacturers of rainwater harvesting systems, they have concerns with providing additional storage over and above the requirements of BS EN 16941-1:2018. Their concerns relate to potential stagnation in the tanks due to water being stored for long periods and the tanks will not overflow regularly enough, which is needed to maintain the water quality. Therefore, they would not be able to guarantee the water quality that the system supplies to the properties.

4.17 It is therefore proposed that the tanks are sized to provide 18 days of storage and additional offsetting is undertaken to offset the difference between providing 18 days of actual storage and the 35 days storage requested by the council.

4.18 In order to understand the level of drought beyond 18 days storage, the Met Office has provided a dataset for the rain gauge at the Kirdford Water Works, which covers the past ten years completely. It should be

noted that there are other datasets closer to the site, but the Met office has confirmed that these are not complete and therefore would not provide a complete picture of the rainfall over the past ten years. A copy of the rainfall data can be found in Appendix J.

4.19 The dataset has been analysed to determine the total number of days of 'absolute drought'. In UK Climatology, 'absolute drought' is defined as periods of rainfall of less than 0.2mm for fifteen or more days. This definition was first introduced by British meteorologist G. J. Symons in 1887. The following table sets out the number of occurrences of 'absolute drought', when they occurred and the number of days.

Drought	Start Date	End Date	Number of Days
1	04/04/2017	25/04/2017	21
2	18/06/2018	12/07/2018	24
3	25/12/2018	11/01/2019	17
4	12/05/2019	27/05/2019	15
5	19/03/2020	04/04/2020	16
6	04/05/2020	22/05/2020	18
7	28/07/2020	12/08/2020	15
8	05/09/2020	21/09/2020	16
9	12/04/2021	27/04/2021	15
10	22/08/2021	07/09/2021	16
11	13/04/2022	30/04/2022	17

Table 4.4 – Periods of Absolute Drought

4.20 The above table shows that there were only two periods of 'absolute drought' over the past 10 years which were greater than 18 days, these occurred in 2017 and 2018. The average is 17.2 days.

4.21 Notwithstanding the above analysis, it is proposed that additional offsetting is undertaken to offset the difference between providing 18 days of storage and 35 days (as requested by the council). This is discussed further in section 5 below.

4.22 To ensure the development can demonstrate water neutrality in accordance with the NE Position Statement 10,548.72 litres per day will need to be offset.

4.23 To take account of the difference in the on-site storage volume between 18 days and 35 days, it is proposed to increase the offsetting provided. The total annual storage volume across the development for 18 days and 35 days is 117,395.86 litres and 211,566.26 litres, respectively. This is a difference of 94,170.4 litres and when averaged over the year this equates to 258 litres per day. Therefore, the scheme's total offsetting volume required would be 10,806.72 litres per day (10,548.72 plus 258 litres per day).

5.0 Offsite Offsetting Measures

5.1 To ensure the development can demonstrate water neutrality in accordance with the NE Position Statement 10,806.72 litres per day will need to offset. This follows a precautionary approach to assessment, with the offsetting value being increased in lieu of providing the additional on-site rainwater storage for drought conditions requested by the Council.

5.2 The NE Position Statement states that offsetting can be carried out by retrofitting existing properties with grey water recycling systems, rainwater harvesting and/or water reduction fittings.

5.3 Bellway Homes Ltd. are proposing to offset their development against a scheme to incorporate a rainwater harvesting system at Dedisham Farm, a dairy farm located in Horsham district and located within the SNWSZ.

The water collected in the rainwater harvesting system will then be used to supply drinking water for the cows.

5.4 Dedisham Farm is located off Guildford Road near Rudgwick, within the Horsham District and the SNWSZ. See extract below from the SNWSZ map showing the approximate site location and the map can be found in full in Appendix B.

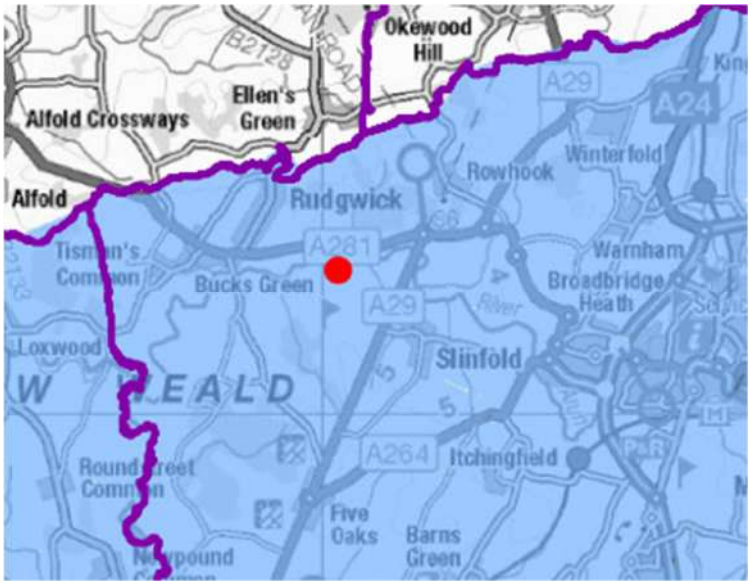


Figure 5.1 – Farm Location on SNWSZ Map

Existing Demand

5.5 According to the Defra Report WU0132 Sustainable Water for Livestock it is estimated that the water use of dairy cows, heifers, and calves are as follows:

Animal	Drinking Water Requirement (l/day)
Dairy Cow - Lactating	104.5
Dairy Cow – Dry period	20
Calves	5
Heifer	20

Table 5.1 – Drinking Water Requirements for Cows

5.6 During the year the dairy cows will be lactating for 330 days and then they will be dry for 35 days. In 2022 the farm shut down on 20th July 2022 and milking restarted on 24th August 2022.

5.7 The following table sets out the stock numbers at the farm over the past six years. All cattle records are held with the British Cattle Movement Services (BCMS), under the holding number (42/080/0064).

Animal	2016	2017	2018	2019	2020	2021	Average
Cows	411	425	429	453	449	431	433
Heifers	111	132	147	115	148	99	125
Calves	133	150	119	149	100	126	130
Bulls	2	2	2	2	2	2	2
Totals	655	707	697	719	699	658	690

Table 5.2 – Stock Numbers

5.8 Table 5.2 above shows that overall stock numbers have remained relatively constant over the past six years, with the number of cows generally increasing since 2016. Using a precautionary approach, the average number of animals have been used in the calculations and Bulls have not been included in the calculation. Using the water usage requirements set out in Table 5.1 and the average stock numbers this equates to a daily water consumption of 42,365.01 litres per day. A copy of the water usage calculation can be found in Appendix K.

5.9 There is limited data from meter readings at the farm, because the Southern Water meter had not been working, however a new meter was installed on 27th July 2022. During the period from 27th July 2022 to 21st September 2022, 1,339m^3 of water was used on the farm, which equates to 23,910.71 litres per day, a copy of the meter readings and associated calculations can be found in Appendix L.

5.10 Prior to the Southern Water meter being installed, the farm had their own meter installed and meter readings were recorded from 12th April 2022 to 28th July 2022. During this period 3,047m^3 of water was used, which equates to 28,477.76 litres per day. A copy of the meter readings and associated calculations can be found in Appendix L.

Water Reduction Measures

5.11 Due to the suitable available roof catchment area available (4,245m^2), it is proposed that rainwater harvesting will be primarily from the existing roof areas and a new barn with a roof area of 2,926.08m^2 which will be constructed over the existing silage clamps, totalling 7,171.08m^2, to meet the demand to offset the proposed development and provide a daily yield of 13,654.13 litres. Drawing 2111011-SK-01, which can be found in Appendix M, show the existing barn roof areas and the plan area of the silage clamps. Also, in Appendix N, Omega Architects drawing [3162-A-1005-PR] shows the proposed barn over the silage clamps, with a roof area of 2,926.08m^2. The new barn has received planning permission and is currently in the process of being constructed.

5.12 An additional roof area of only 755m^2 is required to demonstrate that the proposal is required to offset the residential development, however the whole silage area will be covered, and this will be providing a greater environmental benefit.

5.13 The rainwater harvesting system has been sized using the calculations set out in BS EN 16941-1:2018, which can be found in Appendix O, and are summarised below in Table 5.3.

Roof Area ($m^{2)}$	9.6% Annual Rainwater Yield (litres)	9.6% Annual Water Demand (litres)	Average Daily Yield (litres)	Daily Demand (litres)	Tank Size (litres)
7,105	478,440.69	1,484,470.08	13,654.13	42,365.01	513,000

Table 5.3 – Rainwater Harvesting Sizing Calculations

5.14 The rainwater harvesting systems will be managed and maintained by a management company and this will be secured in the s.106 agreement. A Management and Maintenance Plan is included in Appendix I.

5.15 The rainwater harvesting system will comprise of three tanks, two 11,500 litre below ground tanks and an above ground 490,000 litre tank. In total the tanks will provide 513,000 litres of storage, which will provide in excess of 35 days of drought protection, as required by HDC. The three tanks will be linked to the pump house, where the water will then be pumped around the farm to supply drinking water for the cows. A copy of the specification for the proposed tank can be found in Appendix P.

5.16 Although the yield will not be sufficient to fully meet the demand of the farm, the daily yield and the tank will be large enough to offset the deficit associated with the proposed development. The remaining demand for the farm will continue to be met by the existing mains water supply to the farm.

5.17 This demonstrates that the offsetting scheme can fully offset the remaining water demand for the development with an excess of 2,920.10 litres per day (13,654.13 minus 10,734.03). The headroom helps to provide certainty that the proposals will remain water neutral. For example, if all of the shower heads across the site at Duckmoor were changed from 6 litres per minute to 9 litres per minute the development would still be water neutral.

5.18 The calculations and meter readings referred to paras 5.8 and 5.9 above are greater than the daily yield from the rainwater harvesting scheme and therefore this demonstrates certainty that the proposed offsetting scheme can deliver the necessary reduction in water use at the farm to offset the water use at the proposed development and therefore demonstrate water neutrality.

5.19 In February 2023, planning permission had been secured for the delivery of an offsite enhancement to facilities on the Dedisham Farm site as part of the Water Neutrality strategy for the Duckmoor site. The works comprised the erection of an agricultural barn, associated storage tank and infrastructure. (DC/22/1947).

5.20 Following on from this a prior notification application had been submitted in September 2023, for the installation of 1 no. water tank, pump house and 2 no. underground water tanks (LPA ref. DC/23/1764). In October 2023, Horsham District Council had resolved that prior notification was not required and the affected works could commence. The works had been secured as part of the rainwater harvesting measures as part of the offsite strategy for the Duckmoor Farm development.

5.21 A variation of Condition 1 of the previously approved application DC/22/1947 was submitted in June 2024 and permitted in August 2024. The variation related to the design of the barn and slight increase in roof area, which has been reflected in this latest WNS.

6.0 Summary and Conclusions

6.1 This Technical Note sets out the water usage strategy for the proposed development at Duckmoor, Billingshurst.

6.2 The proposal is to incorporate on-site water efficient fixtures and fittings, as well as a rainwater harvesting system to the proposed development scheme.

6.3 Following incorporation of the on-site measures identified above the remaining increase in water demand will be offset off-site against the proposed offsetting scheme at Dedisham Farm (dairy farm).

6.4 This strategy will minimise the impact of the new development on the Sussex North Water Supply Zone. The Water Usage Strategy confirms proposal will be water neutral once complete and therefore satisfying Natural England's requirements.

Appendix A

Natural England's Position Statement

Natural England's Position Statement for Applications within the Sussex North Water Supply Zone

September 2021 – Interim Approach

Please take the following as Natural England's substantive advice for all applications which fall within Sussex North's Water Supply Zone.

Sussex North Water Supply Zone

Arun Valley SPA, SAC and Ramsar Site- Sussex North Water Supply Zone

The Sussex North Water Supply Zone includes supplies from a groundwater abstraction which cannot, with certainty, conclude no adverse effect on the integrity of;

- Arun Valley Special Area Conservation (SAC)
- Arun Valley Special Protection Area (SPA)
- Arun Valley Ramsar Site.

As it cannot be concluded that the existing abstraction within Sussex North Water Supply Zone is not having an impact on the Arun Valley site, we advise that developments within this zone must not add to this impact. This is required by recent caselaw, Case C-323/17 People over wind and Sweetman. Ruling of CJEU (often referred to as sweetman II) and Coöperatie Mobilisation for the Environment and Vereniging Leefmilieu Case C-293/17 (often referred to as the Dutch Nitrogen cases).

Between them these cases require Plans and Projects affecting sites where an existing adverse effect is known (i.e. the site is failing its conservation objectives), to demonstrate certainty that they will not contribute further to the existing adverse effect or go through to the latter stages of the Regulations (no alternatives IROPI etc).

Developments within Sussex North must therefore must not add to this impact and one way of achieving this is to demonstrate water neutrality.

In addition, the Gatwick Sub regional Water Cycle Study concluded that water neutrality is required for Sussex North to enable sufficient water to be available to the region.

The definition of water neutrality is the use of water in the supply area before the development is the same or lower after the development is in place.

Strategic approach

Natural England has advised that this matter should be resolved in partnership through Local Plans across the affected authorities, where policy and assessment can be agreed and secured to ensure water use is offset for all new developments within Sussex North. To achieve this Natural England is working in partnership with all the relevant authorities to secure water neutrality collectively through a water neutrality strategy.

Whilst the strategy is evolving, Natural England advises that decisions on planning applications should await its completion. However, if there are applications which a planning authority deems critical to proceed in the absence of the strategy, then Natural England advises that any application needs to demonstrate water neutrality. We have provided the following agreed interim approach for demonstrating water neutrality;

Minimising water use of new builds.

- Complete a water budget (based on occupancy)
- All new builds to demonstrate that they can achieve strict water targets (e.g., 85L/pp/day*)

  This can be achieved by measures such as:

- Grey water recycling (advantage of being reliable in hot dry weather);
- Rainwater harvesting;
- Water efficient fixings (such as shower aerators) to demonstrably reduce demand-this would need to be suitably certain.

In addition, water offsetting is required

- One way to achieve this is retrofitting of council owned properties/commercial buildings-located within Sussex North. Examples include:

- Grey water recycling- (for example there are clear opportunities for commercial properties).
- Rainwater harvesting of commercial settings;
- Installation of water reduction fittings in Council-owned buildings.

These measures need to be implemented until such time as a more sustainable water supply has been secured.

It will also need to be ensured that measures are not already proposed (for example in Southern Water's Management Plan) to avoid double-counting.

Any mitigation must be suitably certain in order to comply with the Habitats Regulations and Caselaw.

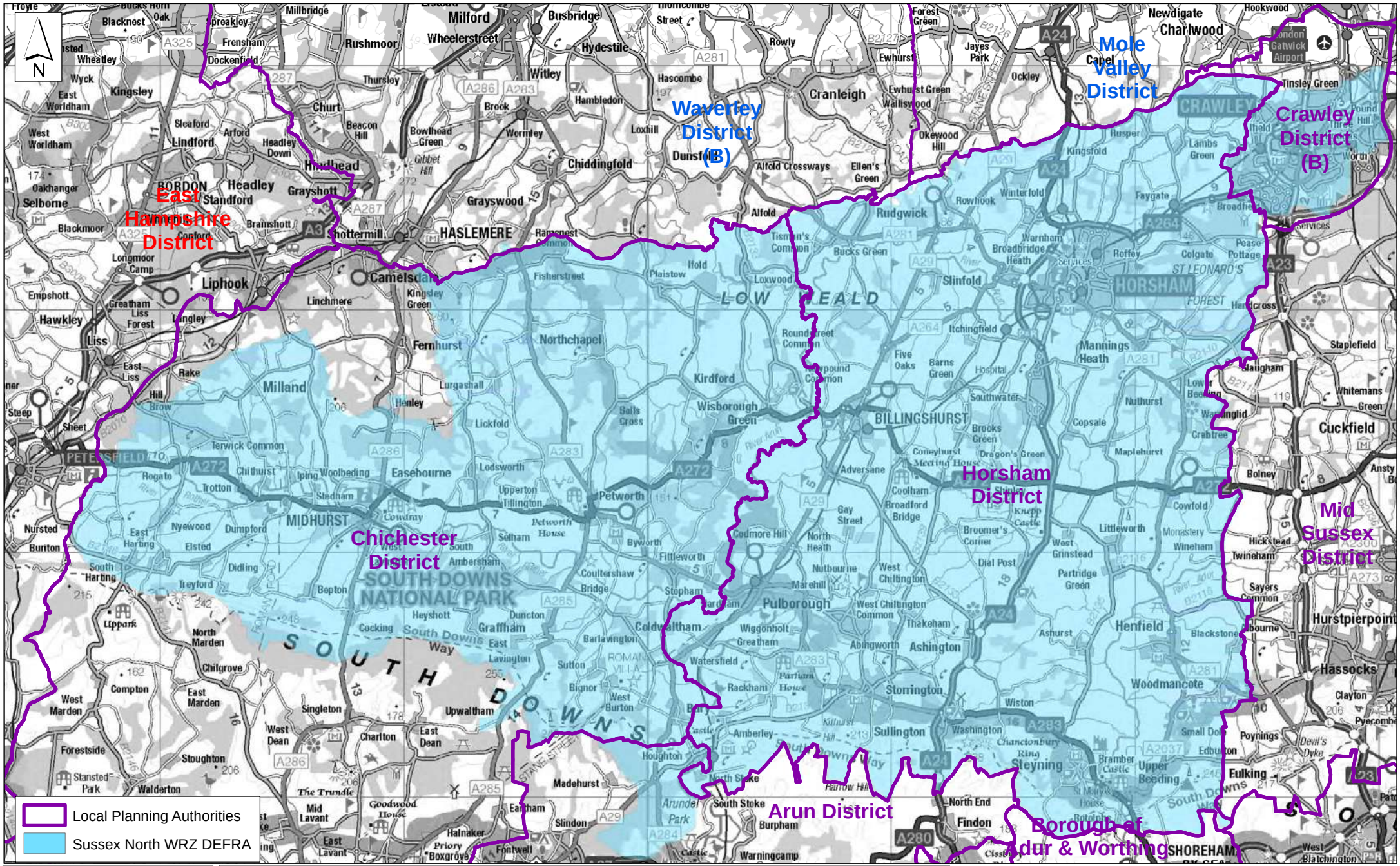
If the application cannot demonstrate, through an appropriate assessment, the required water neutrality, we advise that it is either revised to achieve this in line with the above or awaits completion of the strategic approach.

The securing of water neutrality is a matter which needs to be resolved at a strategic level and Natural England is working with the relevant authorities and the water company to achieve this. In light of this, Natural England will not be engaging with individual planning applications whilst the strategy is evolving.

***This this is the reasonably achievable figure with the above measures based on the early data from the strategic solution and may be subject to change as the strategic solution evolves.**

Appendix B

Sussex North Water Supply Zone Map



Horsham District Council

Parkside, Chart Way, Horsham
West Sussex RH12 1RL.
Barbara Childs : Director of Place

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Sussex North Water Resource Zone

Chichester Horsham Crawley

Reference No :		Date : 23 November 2021	Scale : 1:3,000 at A2
Drawing No:	Drawn :	Checked :	Revisions :

Appendix C

Accommodation Schedule

DUCKMOOR, BILLINGSHURST

SCHEDULE OF ACCOMMODATION

Housetype	Description	Qty	Floor Area - structure *		Floor Area - finish #	
Private Houses			Sq FT	Total	Sq FT	Total
BM	The Blemmere -2 Bed House + Study - 2B4P - M4(2)	6	1026	6156	1010	6060
HA	The Harper- 2 Bed House + Study - 2B4P - M4(2)	5	1026	5130	1010	5050
FM	The Framer - 2 Bed House + Study - 2B3P - M4(2)	12	1053	12636	1037	12444
SR	The Sculptor - 3 Bed House + Study - 3B5P - M4(2)	4	1289	5156	1271	5084
RE	The Reedmaker - 3 Bed House + Study - 3B4P - M4(2)	2	1309	2618	1292	2584
AR	The Arkwright- 3 Bed House + Study - 3B5P - M4(2)	9	1507	13563	1489	13401
JE	The Jeweller - 4 Bed House - 4B5P	10	1736	17360	1714	17140
WL	The Walker - 5 Bed 2.5 Storey House - 5B9P - M4(2)	6	2051	12306	2030	12180
Private Total		54		74925		73943
			Floor Area - structure *		Floor Area - finish #	
Affordable Houses			Sq FT	Total	Sq FT	Total
1B2P	Bespoke - 1 Bed Apartment - 1B2P	5	573	2865	564	2820
2B3P	Bespoke - 2 Bed Apartment - 2B3P	1	773	773	763	763
2B4P	Bespoke - 2 Bed Apartment - 2B4P	1	562	562	554	554
CH	Bespoke - 2 Bed Coachouse - 2B3P	1	872	872	859	859
SA	The Saddler - 2 Bed Coachouse - 2B3P	1	774	774	761	761
SG (SO)	The Souter - 1 Bed Ground Floor Maisonette - 1B2P - M4(2)	4	549	2196	541	2164
SG (GV)	The Glover - 2 Bed First Floor Maisonette - 2B3P	4	699	2796	687	2748
BA	The Baker - 2 Bed House - 2B4P - M4(2)	2	876	1752	861	1722
PW	The Ploughwright - 3 Bed House - 3B5P - M4(2)	3	1026	3078	1010	3030
TI	The Tillman - 3 Bed House - 3B5P - M4(2)	4	1026	4104	1010	4040
CT	The Cartographer - 4 Bed House - 4B5P - M4(2)	3	1096	3288	1081	3243
Affordable Total		29		23060		22704
Overall Total		83		97985		96647

022207-BEL.SL-LINKED-83 UNITS-05.02.24-SP

* Floor Areas measured from structure to structure

\# Floor Areas measured from notional plaster to plaster

Appendix D

Proposed Site Layout



dha architecture ltd
Brooklands Farm Business Park
Bottle Lane
Binfield
Berkshire
RG42 5QX
t. 0118 934 9666
e. surname@dhaarchitecture.co.uk
w. www.dhaarchitecture.co.uk

duckmoor, billingshurst

Planning Presentation Layout

11.03.2024 created
1:500 @ A0 scaling
- contact

reference 022207-BEL-SL-01 - revision

Bellway

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Do not scale other than for Local Authority Planning purposes.

LEGEND - PARKING ALLOCATION

The parking provision has been designed in accordance with West Sussex County Council's - Guidance on Parking at New Developments (September 2020)

Cycle Parking

Houses

Secure cycle parking will be provided on the curtilage of each dwelling, in either private cycle sheds or garages.

Apartments

Secure cycle parking will be provided in shared communal cycle stores.

Car Parking

Required car parking, from Table 2 Residential Parking Demand - PBZ2 5.2

1 Bed	1.4 spaces			
2 Bed	1.7 spaces			
3 Bed	2.1 spaces			
4+ Bed	2.7 spaces			

In addition, 0.2 visitors' spaces are required per dwelling. 5.8

	Per Unit		Units	Total
1 Bed	1.4	x	9	12.6
2 Bed	1.7	x	33	56.1
3 Bed	2.1	x	22	46.2
4+ Bed	2.7	x	19	51.3
Total			83	166.2
Visitor spaces	0.2	x	83	16.6

Provided car parking

149 car parking spaces

19 visitors' spaces

Provided parking broken down as follows;

- Allocated car parking spaces - for use by plot number quoted
- Unallocated car parking spaces - for use by apartment residents
- Unallocated car parking spaces - for use by visitors
- OTHER Parking

REFUSE STRATEGY:

The refuse strategy and provision has been designed in accordance with 'Waste storage and wheeled bins for housing developments policy - HORSHAM gov website

Private Refuse storage for houses is generally located in rear gardens, and moved by residents on collection day, to kerbside (on curtilage) or communal refuse collection points.

Private Refuse collection is from kerbside, adjacent to the dwelling boundary or from communal refuse collection points.

Communal Refuse storage is provided for apartments.

- Communal refuse storage point.

Refuse Capacities

Houses One 140L wheelie bin (refuse)
One 240L wheelie bin (recycling)

Apartments 180L per apartment (refuse)
240L per apartment (recycling)

Apartment refuse and recycling to be stored in 1100L Eurobins

Travel Distances (in accordance with Approved Document H6)

Operatives	generally 15m, maximum	25m
Residents	Carry / wheeled	30m

- Residents' carry/wheeled distance from garden gate to kerbside collection
- Residents' carry/wheeled distance from garden gate to Refuse Collection Point
- Operative travel distance from Refuse Collection Point or communal bin store to carriageway (max. 25m).

EMERGENCY ACCESS:

Maximum 20m Fire Appliance reversing distance and 45m hose length to furthest point within dwelling.
Only dwellings furthest from Fire Appliance stopping point and apartments indicated.

- Max 20m Fire Appliance reversing distance from end of turning manoeuvre
- Max 45m hose length to furthest point within dwelling

LEGEND

- Root protection areas of retained trees refer to Arboricultural details
- Existing trees to be removed refer to Arboricultural details
- Proposed trees and landscaping - shown indicatively - refer to Landscape Architects' details
- Bin store/Cycle store
- Cycle Stores: 1 cycle (2.0x1.25m), 2 cycles (2.0x2.0m) 4 cycles (2.0x3.0m)
- Vehicle turning - refuse vehicle and fire appliance
- Vehicle turning - refuse vehicle
- Vehicle turning - fire appliance

Generic turning and subject to Highways Consultants' swept path analysis



planning supporting layout

dha architecture ltd
Brooklands Farm Business Park
Bottle Lane
Binfield
Berkshire
RG42 5QX
t. 0118 934 9666
e. surname@dhaarchitecture.co.uk
w. www.dhaarchitecture.co.uk

duckmoor, billingshurst

Planning Supporting Layout

11.03.2024 created
1:500 @ A0 scaling
SM/SP initials

reference 022207-BEL-SL-02 revision

Appendix E

Water Bills

usiness stream
SCOTTISH WATER COMPANY

business-stream.co.uk
0330 123 2000
If you have an emergency, please contact your:
Water wholesaler: Southern Water
Visit **business-stream.co.uk/wholesaler**

[redacted]

Customer reference / invoice no [redacted]

Invoice / tax point date: 13 March 2020

Supply address: TROUGH DUCKMOORE, WOODDALE LANE, BILLINGSHURST, RH20 1DF

Supply point ID: [redacted]

Our VAT number: 945 8508 85

Your water services invoice

12 September 2019 - 12 March 2020 (182 days, average £[redacted] per day)

YOUR ACCOUNT SUMMARY

Your previous balance	[redacted]
Payments received	CREDIT
Your balance brought forward	

YOUR CHARGES THIS PERIOD (see page 2 for details)

Water services charges	[redacted]
VAT	
Total charges this period	

We look forward to receiving your payment of £150.85

For ways to pay see page 3

Price increase

Due to an increase in wholesale prices some of your charges may have increased from 1 April 2018.

Visit business-stream.co.uk/prices

How much water are you using?

If you'd like to reduce the volume of water you're using, check out our water saving tips on our website. You'll also be able to find advice on our website **business-stream.co.uk**

Estimated invoice

This invoice is based on an estimated read. If we receive an actual read, we will use it to calculate your next bill. You can submit your own readings, as long as it's safe to access your meter, on **business-stream.co.uk/meter-reading**. If your water is not provided by us, we will receive reads from your other supplier.

The water experts

Unless otherwise agreed, Scottish Water Business Stream Ltd provides services to you in accordance with our standard terms and conditions, a copy of which is available here: www.business-stream.co.uk/EnglandWalesTerms. Copies are also available on request. Through your continued receipt and acceptance of our services, you are deemed to have accepted our standard terms and conditions.

07320L00_BSM-NEW | 000739 | Page 1 of 4 | BILLS
NNYNNNJ400/MQC/SME/0/22

Customer reference / invoice no: [redacted] Invoice / tax point date: 21 November 2020

Your charges in detail

Based on this period your annu
consumption is **33.84 kgCO2e/yr**
on National Government statistics.

Meter number / meter size: 000008318321 ARAD 15mm

Water charges			Units	Rate	VAT	Charge
Fixed water charge						
Yearly fee £47.60	11 Sep 20 - 19 Nov 20		70 days	[redacted]	Z	[redacted]
Volumetric water charge						
Estimated reading	20 Nov 20	1127				
Estimated reading	11 Sep 20	1091				
=Volume used this period			36.00 m³			
Charges	11 Sep 20 - 20 Nov 20		36.00 m³	[redacted]	Z	
Total water charges						
Subtotal						
VAT						
Total charges this period						

A yearly fee for the upkeep of external pipes and pumps that supply water to your property.

The charge for the recorded amount of water you've used, measured by your meter.

VAT on our charges
Most of our services are zero-rated (Z) but some are standard rate (S) or outside scope (O).
See **business-stream.co.uk/vat** for more information.

Your charges in detail

Based on this period your annual carbon consumption is **173.12 kgCO2e/yr**, based on National Government statistics.

Meter number / meter size: 00000318321 ARAD 15mm

Water charges			Units	Rate	VAT	Charge
Fixed water charge						
Yearly fee £47.60	20 Nov 20 - 10 Mar 21		111 days	[redacted]	Z	
Volumetric water charge						
Estimated reading	11 Mar 21	1419				
Estimated reading	20 Nov 20	1127				
=Volume used this period			292.00 m³			
Charges	20 Nov 20 - 11 Mar 21		292.00 m³	[redacted]	Z	
Total water charges						

A yearly fee for the upkeep of external pipes and pumps that supply water to your property.

The charge for the recorded amount of water you've used, measured by your meter.

Subtotal

VAT

Total charges this period

VAT on our charges
Most of our services are zero-rated (Z) but some are standard rate (S) or outside scope (O).
See **business-stream.co.uk/vat** for more information.

Your charges in detail

Based on this period your annual ca
consumption is **50.45 kgCO2e/yr** , ba
on National Government statistics.

Meter number / meter size: 000008318321 ARAD 15mm

Water charges			Units	Rate	VAT	Charge
Fixed water charge						
Yearly fee £47.60	11 Mar 21 - 31 Mar 21		21 days	[redacted]	Z	[redacted]
Yearly fee £49.15	1 Apr 21 - 9 May 21		39 days		Z	
Volumetric water charge						
Estimated reading	10 May 21	1465				
Estimated reading	11 Mar 21	1419				
=Volume used this period			46.00 m³			
Charges	11 Mar 21 - 31 Mar 21		16.00 m³	[redacted]	Z	
Charges	1 Apr 21 - 10 May 21		30.00 m³		Z	
Total water charges						
Subtotal						
VAT						
Total charges this period						£

A yearly fee for the upkeep of external pipes and pumps that supply water to your property.

The charge for the recorded amount of water you've used, measured by your meter.

VAT on our charges
Most of our services are zero-rated (Z) but some are standard rate (S) or outside scope (O).
See **business-stream.co.uk/vat** for more information.

Based on this period your annual carbo consumption is **50.71 kgCO2e/yr** , based on National Government statistics.

Your charges in detail

Meter number / meter size: 000008318321 ARAD 15mm

Water charges			Units	Rate	VAT	Charge
Fixed water charge						
Yearly fee £49.15	10 May 21 - 8 Sep 21		122 days	[redacted]	Z	[redacted]
Volumetric water charge						
Estimated reading	9 Sep 21	1559				
Estimated reading	10 May 21	1465				
=Volume used this period			94.00 m³			
Charges	10 May 21 - 9 Sep 21		94.00 m³	[redacted]	Z	
Total water charges						
Subtotal						
VAT						
Total charges this period						£[redacted]

A yearly fee for the upkeep of external pipes and pumps that supply water to your property.

The charge for the recorded amount of water you've used, measured by your meter.

VAT on our charges
Most of our services are zero-rated (Z) but some are standard rate (S) or outside scope (O).
See **business-stream.co.uk/vat** for more information.

Appendix F

Part G Calculation

Installation Type	Units of measure	Capacity/flow rate	Use factor	Fixed use (litres/person/ day)	Litres/person/ day
WC (single flush)	Flush volume (litres)	**0.00**	4.42	0.00	0.00
WC (dual flush)	Full flush volume (litres)	**4.50**	1.46	0.00	6.57
WC (dual flush)	Part flush volume (litres)	**3.00**	2.96	0.00	8.88
WC (multiple fittings)	Flush volume (litres)	**0.00**	4.42	0.00	0.00
Taps (excluding kitchen taps)	Flow rate (litres/minute)	**2.70**	1.58	1.58	5.85
Bath where shower also present	Capacity to overflow (litres)	**130.00**	0.11	0.00	14.30
Shower where shower also present	Flow rate (litres/minute)	**6.00**	4.37	0.00	26.22
Bath only	Capacity to overflow (litres)	**0.00**	0.50	0.00	0.00
Shower only	Flow rate (litres/minute)	**0.00**	5.60	0.00	0.00
Kitchen/Utility sink taps	Flow rate (litres/minute)	**4.00**	0.44	10.36	12.12
Washing machine	Litres/kg dry load	**8.17**	2.10	0.00	17.16
Dishwasher	Litres/place setting	**1.25**	3.60	0.00	4.50
Waste disposal unit	Present/absent	**0**	3.08	0.00	0.00
Water softener	Litres/person/day	0.00	1.00	0.00	0.00
		Total calculated use (litres/person/day)			95.60
Contribution from greywater	Litres/person/day				0.00
Contribution from rainwater	Litres/person/day				0.00
Normalisation factor					0.91
	Total water consumption CSH (litres/person/day)				**87.0**
External water use	Litres/person/day				5.0
	Total water consumption Part G (litres/person/day)				**92.0**

Appendix G

Proposed Fixtures and Fittings

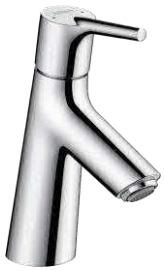
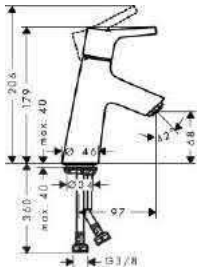
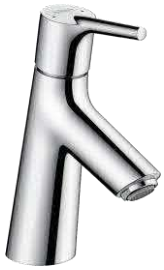
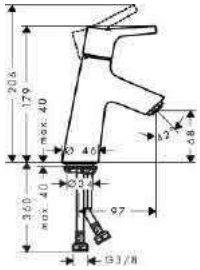
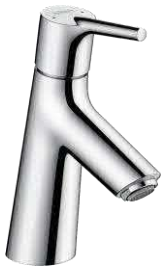
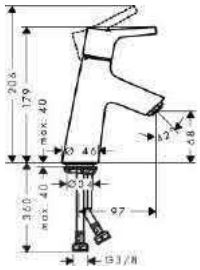
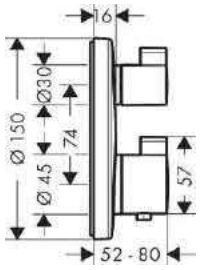
Hansgrohe Limited - Units D1 and D2 - Sandown Industrial Park - Esher - Surrey - KT10 8BL - Telephone +44(0)1372 465655

Project Specification Proposal

Project name: **Reside Developments** Project number(PRN): **C4C 211420**

Prepared by: **Leach Alan** on **12/10/2021**

Products and prices valid from **01/08/2021** until **30/09/2022**

Material	Description	Qty	Image	Spec Drawing
Basin mixer options				
72011000	**HG Talis S 80 basin mixer Push-open chr.** **• Consists of: single lever basin mixer, waste set** **• ComfortZone 80 provides space for greater freedom of movement** **• free-standing installation** **• spout 97 mm long** **• Spray pattern: normal spray** **• Maximum flow rate (at 3 bar): 5 l/min** **• ceramic cartridge** **• Material waste set: metal** **• QuickClean technology for easy limescale removal** **• push-open waste set G 1¼** **WRAS Certificate Number 1609018**	1		
72012000	**HG Talis S 80 basin mixer w/o waste** **• ComfortZone 80 provides space for greater freedom of movement** **• free-standing installation** **• spout 97 mm long** **• Spray pattern: normal spray** **• Maximum flow rate (at 3 bar): 5 l/min** **• ceramic cartridge** **• QuickClean technology for easy limescale removal** **WRAS Certificate Number 1609018**	1		
72018000	**HG Talis S 80 basin mix.LowFlow w/o wast** **• ComfortZone 80 provides space for greater freedom of movement** **• free-standing installation** **• spout 97 mm long** **• Maximum flow rate (at 3 bar): 2,7 l/min** **• ceramic cartridge** **• QuickClean technology for easy limescale removal** **WRAS Certificate Number 1609018**	1		
Bathrooms				
15758000	**HG Ecostat S therm.conc.2 outlets** **• designed to run 2 outlets** **• volume control and diverter for 2 outlets** **• wall-mounted** **• Maximum flow rate (at 3 bar): 29 l/min** **• flow rate upper outlet 28 l/min at 3 bar** **• flow rate lower outlet 25 l/min at 3 bar** **• thermostat cartridge, shut-off/ diverter valve** **• safety stop at 40°C** **• Maximum temperature can be adjusted on installation** **• Min. operating pressure: 1 bar** **• Max. operating pressure: 10 bar** **• Noise class: I** **• operating pressure: min 1 bar / max 10 bar** **WRAS Certificate Number 1807026**	1		

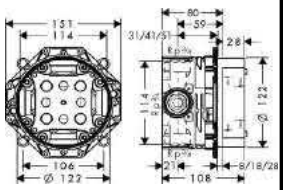
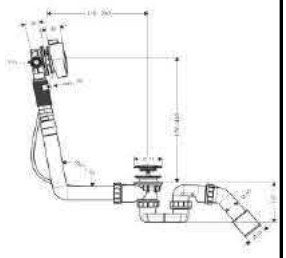
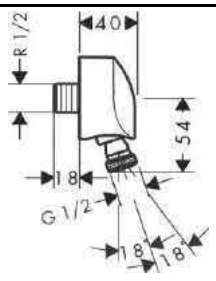
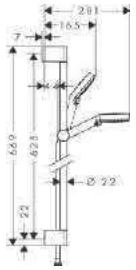
Hansgrohe Limited - Units D1 and D2 - Sandown Industrial Park - Esher - Surrey - KT10 8BL - Telephone +44(0)1372 465655

Project Specification Proposal

Project name: **Hawthorn, Loxwood - Reside Developments** Project number(PRN): **C4C 211420**

Prepared by: **Leach Alan** on **12/10/2021**

Products and prices valid from **01/08/2021** until **30/09/2022**

Material	Description	Qty	Image	Spec Drawing
01800180	**HG iBox universal concealed part only HA** **• suitable for all shower, bath and thermostat finish sets for concealed installation** **• Connection thread Rp ¾** **• Operating pressure: min. 1 bar/max. 10 bar** **• rotationally-symmetrical installation** **• installation depth: from 80 to 108 mm** **WRAS Certificate Number 1907026**	1		
58113000	**HG Exafill S compl.set new chrome** **• Consists of: bath tub trap, basic set, finish set** **• suitable for standard bath tubs, baths with slanted rim** **• bowden cable length 520 mm** **• supply hose water connection left 3/4"** **WRAS Certificate Number Application No (201563)**	1		
07002501	**McALPINE T25 FITTING FOR BATH WASTES**	1		
27505000	**HG Fixfit E w/ball joint non return v.** **• shower hose connection with ball joint** **• plastic connection angle with metal ball joint** **• non-return valve** **• connection thread ½"** **KIWA Certificate Number 1812785**	1		
26555400	**HG Crometta Vario 6l Unica Set 650mm** **• Consists of: hand shower, shower bar, shower hose, slider** **• Shower head size: 100 mm** **• Spray pattern: Rain, IntenseRain** **• spray type adjustment by turning** **• pivot connector prevent hose from tangling** **• hand shower holder inclination angle can be adjusted by 45°** **• maximum flow rate 6 l/min at 3 bar** **• Shower bar diameter: 22 mm** **• Profile shower bar: round** **• Wall supports: plastic**	1		

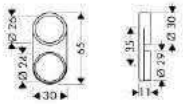
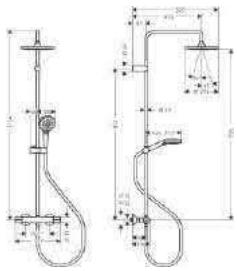
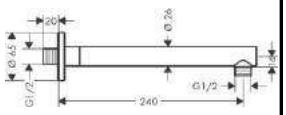
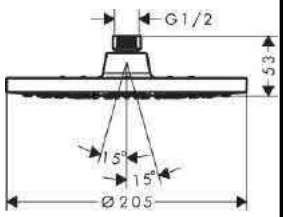
Hansgrohe Limited - Units D1 and D2 - Sandown Industrial Park - Esher - Surrey - KT10 8BL - Telephone +44(0)1372 465655

Project Specification Proposal

Project name: **Hawthorn, Loxwood - Reside Developments** Project number(PRN): **C4C 211420**

Prepared by: **Leach Alan** on **12/10/2021**

Products and prices valid from **01/08/2021** until **30/09/2022**

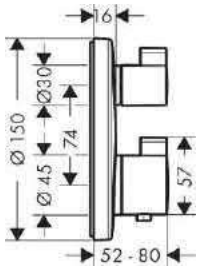
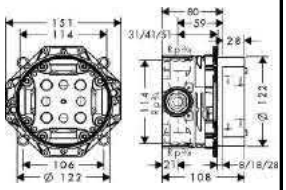
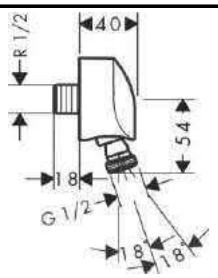
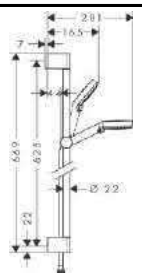
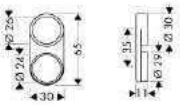
Material	Description	Qty	Image	Spec Drawing
28072000	**HG Hose Retaining Ring D22/D25** **• Material: transparent plastic**	1		
Ensuite				
26318000	**HG Vernis Blend SHP200 1j sh.TH Green** **• Consists of: overhead shower, hand shower, Thermostatic shower mixer, shower hose, slider** **• overhead shower Vernis Blend 200 1jet** **• shower head size overhead shower: 205 mm** **• spray type overhead shower: Rain** **• overhead shower angle adjustable** **• spray type hand shower: Rain, IntenseRain** **• height-adjustable slider with locking push-button slider** **• Shower bar diameter: 19 mm** **• shower arm length overhead shower: 426 mm** **• Maximum flow rate (at 3 bar): 5,7 l/min** **• Operating pressure: min. 1 bar/max. 10 bar** **• thermostat Vernis** **• safety stop at 40°C** **• adjustable hot water limitation** **• outlets controlled via volume control/diverter and may not be used simultaneously** **• will not run two outlets at same time** **• exposed design allows easy installation, all working parts are outside of the wall** **• Connection dimension 1/2"** **• Connection thread ½"** **• Centre distance 150 mm ± 12 mm**	1		
27809000	**HG Vernis Blend shower arm 240 chr** **• Length: 240 mm** **• wall-mounted** **• Installation type: exposed design allows easy installation, all working parts are outside of the wall** **• Version: 90° angle** **• Connection thread ½"**	1		
26093000	**HG Vernis Blend OHS 200 1j Green chr** **• Shower head size: 205 mm** **• Spray pattern: Rain** **• Ball-joint: overhead shower angle adjustable** **• maximum flow rate 5,4 l/min at 3 bar** **• Operating pressure: min. 1 bar/max. 6 bar** **• Spray face: plastic** **• overhead shower removable for cleaning** **• Installation: ceiling or wall** **• Connection thread ½"** **WRAS Certificate Number Application No. (201051)**	1		

Project Specification Proposal

Project name: **Hawthorn, Loxwood - Reside Developments** Project number(PRN): **C4C 211420**

Prepared by: **Leach Alan** on **12/10/2021**

Products and prices valid from **01/08/2021** until **30/09/2022**

Material	Description	Qty	Image	Spec Drawing
15757000	**HG Ecostat S therm.conc.1 outlet** **• designed to run 1 function** **• wall-mounted** **• Maximum flow rate (at 3 bar): 26,5 l/min** **• thermostat cartridge, ceramic valves 90°** **• safety stop at 40°C** **• Maximum temperature can be adjusted on installation** **• volume control** **• Min. operating pressure: 1 bar** **• Max. operating pressure: 10 bar** **• Noise class: I** **• operating pressure: min 1 bar / max 10 bar** **WRAS Certificate Number 1907027**	1		
01800180	**HG iBox universal concealed part only HA** **• suitable for all shower, bath and thermostat finish sets for concealed installation** **• Connection thread Rp ¾** **• Operating pressure: min. 1 bar/max. 10 bar** **• rotationally-symmetrical installation** **• installation depth: from 80 to 108 mm** **WRAS Certificate Number 1907026**	1		
27505000	**HG Fixfit E w/ball joint non return v.** **• shower hose connection with ball joint** **• plastic connection angle with metal ball joint** **• non-return valve** **• connection thread ½"** **KIWA Certificate Number 1812785**	1		
26555400	**HG Crometta Vario 6l Unica Set 650mm** **• Consists of: hand shower, shower bar, shower hose, slider** **• Shower head size: 100 mm** **• Spray pattern: Rain, IntenseRain** **• spray type adjustment by turning** **• pivot connector prevent hose from tangling** **• hand shower holder inclination angle can be adjusted by 45°** **• maximum flow rate 6 l/min at 3 bar** **• Shower bar diameter: 22 mm** **• Profile shower bar: round** **• Wall supports: plastic**	1		
28072000	**HG Hose Retaining Ring D22/D25** **• Material: transparent plastic**	1		

Hansgrohe Limited - Units D1 and D2 - Sandown Industrial Park - Esher - Surrey - KT10 8BL - Telephone +44(0)1372 465655

Project Specification Proposal

Project name: **Hawthorn, Loxwood - Reside Developments** Project number(PRN): **C4C 211420**

Prepared by: **Leach Alan** on **12/10/2021**

Products and prices valid from **01/08/2021** until **30/09/2022**

This specification contains not an offer to sell but information about our products which can be acquired at wholesalers, to such prices as the wholesaler may offer.

Please note that all prices shown are excluding VAT, and maybe subject to any major currency fluctuation

Recommended hot and cold water pressure three bar.

Please ensure that you quote our project reference number (PRN) with all correspondence.

Unless otherwise stated, a lead time of two to three weeks may be required for initial bulk deliveries.

Appendix H

Development Rainwater Harvesting Calculations

Rainwater Harvesting System (BS EN 16941-1:2018 - Intermediate Approach)

AAR	858.7
e	0.8
h	0.9
P_d	34.67

Unit	Type	No. Units	Census	Population	Roof Area	5% Annual Rainwater Yield (litres)	5% Annual Water Demand (litres)	Tank Size (litres)
1B2P	1-bed Apartment	5	1.32	6.6				
2B3P, 2B4P, CH	2-bed Apartments/Coachhouses	3	1.88	5.64	268.15			
		8		12.24	268.15	8,289.37	7,744.58	8,400
SG (SO)	1-bed Ground Floor Maisonette	3	1.32	3.96				
SG (GV)	2-bed First Floor Maisonette	3	1.88	5.64	67.35			
		6		9.6	67.35	6,246.10	6,074.18	6,800
Per dwelling								
SA	2-bed Coachhouse	1	1.88	1.88	73.73	2,279.09	1,189.53	1,800
BM	2-bed House	1	1.88	1.88	55.28	1,708.90	1,189.53	1,800
HA	2-bed House	1	1.88	1.88	55.28	1,708.90	1,189.53	1,800
FM	2-bed House	1	1.88	1.88	58.82	1,818.31	1,189.53	1,800
SR	3-bed House	1	2.47	2.47	70.02	2,164.55	1,562.84	1,800
RE	3-bed House	1	2.47	2.47	70.80	2,188.65	1,562.84	1,800
AR	3-bed House	1	2.47	2.47	80.86	2,499.49	1,562.84	1,800
JE	4-bed House	1	2.86	2.86	93.21	2,881.42	1,809.60	2,600
WL	5-bed House	1	3.09	3.09	80.86	2,499.49	1,955.13	2,600
BA	2-bed House	1	1.88					
PW	3-bed House	1	2.47					
TI	3-bed House	1	2.47	2.47	55.28	1,708.90	1,562.84	1,800
CT	4-bed House	1	2.86	2.86	58.74	1,815.84	1,809.60	2,600
PW + TI	2 x 3-bed House	1	4.94	4.94	109.01	3,369.85	3,125.67	3,400
BM + HA	2-bed and 3-bed House	1	4.35	4.35	110.6	3,419.00	2,752.36	3,400
PW + CT	3-bed + 4-bed House	1	5.33	5.33	114.02	3,524.72	3,372.44	4,400
SG (SO) /SG (GV) + CT	1-bed/2-bed Maisonettes + 4-bed House	1	6.06	6.06	126.04	3,896.30	3,834.33	4,400
PW + BA	2-bed and 3-bed House	1	4.35	4.35	103.16	3,189.01	2,752.36	3,400
BA + TI	2-bed and 3-bed House	1	4.35	4.35	101.61	3,141.09	2,752.36	3,400

Number of buildings	Total No. Dwellings
1	1
5	6
4	5
12	12
4	4
2	2
9	9
10	10
6	6
0	2
0	3
2	4
1	3
1	
1	
1	
1	
1	
1	

Appendix I

Management and Maintenance Plan

84 North Street
Guildford
GU1 4AU

Tel: 01483 531300
www.motion.co.uk

1.0 Introduction

1.1 This document sets out the principles for the long-term management and maintenance of the proposed rainwater harvesting systems at the proposed residential development at Duckmoor and at Dedisham Farm.

1.2 The purpose of this document is to ensure that the management company and farm has a robust inspection and maintenance plan for the lifetime of the development. This ensures the optimum operation of the rainwater harvesting systems and that it will be continually maintained. This will ensure that the proposed development at Duckmoor will remain water neutrality.

1.3 All those responsible for maintenance should follow relevant health and safety legislation for all activities listed within this report (including lone working, if relevant). Method statements and risk assessments should always be undertaken and made available, if requested.

1.4 This document has been produced by Motion on behalf of their client, Bellway Homes Ltd. This document describes the typical management and maintenance tasks that are known at the design stage (maintenance frequencies and typical tasks). These have been drawn from industry guidance such as CIRIA C753 - The SuDS Manual – and manufacturer's own guidance.

1.5 Maintenance is considered as a construction activity under the CDM Regulations 2015. Under the CDM Regulations, it is a requirement that a competent person be appointed to carry out a required role. CDM defines a competent person as an individual with sufficient knowledge of the specific tasks to be undertaken, as well as sufficient experience and ability to carry out their duties in relation to the task in a way that secures health and safety on site.

1.6 In recognition of the requirements of the CDM Regulations 2015, this surface water management and maintenance plan expects that the maintenance work will be carried out by a competent person who must have prior knowledge of the rainwater harvesting systems onsite.

2.0 Maintenance Categories

2.1 There are three categories of maintenance activities referred to in this report. These are:

Inspection and Monitoring

- Inspection and monitoring tasks should be carried out frequently, nominally once a month, and should include a visual inspection of all components including all inlets and outlets.

Regular Maintenance (Monthly)

- Regular maintenance consists of basic tasks done on a frequent and predictable schedule.

Seasonal Maintenance (Quarterly)

- Seasonal maintenance comprises tasks that are likely to be required periodically, but on a much less frequent and predictable basis than the routine tasks.

Remedial Maintenance

- Remedial maintenance comprises of intermittent tasks that may be required to rectify faults associated with the system that have been identified through visual inspections. The likelihood of faults can be minimised by correct installation, regular inspection and timely maintenance. Where remedial work is found to be necessary.

3.0 The Rainwater Harvesting System

3.1 The proposed rainwater harvesting systems are made up of a number of components. These include:

- Roofs
- Gutters
- Filters;
- Pumps;
- Overflows; and
- Storage tanks.

3.2 All components should be installed in accordance with the manufacturer's instructions and to the levels/arrangement as defined on the designer's drawings.

3.3 This document should be read in conjunction with the design drawings of the drainage system, so that the location and type of each feature can be recognised and understood.

3.4 Manufacturer's instructions are to be added to this document once specific products have been selected and installed as part of the detailed design. This document will subsequently form the basis for a maintenance regime for the rainwater harvesting systems.

4.0 General Maintenance Principles

4.1 All rainwater harvesting systems require regular maintenance to keep them working at optimum efficiency and capacity. The maintenance of the rainwater harvesting systems should be carried out alongside other regular maintenance tasks on site.

4.2 Timely and adequate maintenance will increase the lifespan of all the systems. Inadequate maintenance will do the reverse.

4.3 The management company and farm are responsible for the monitoring and maintenance of the rainwater harvesting systems for the lifetime of the development.

5.0 Inspection and Maintenance Frequency of Components

5.1 Table 5.1 below lists each of the components used within the site's rainwater harvesting systems. It suggests an indicative maintenance frequency for each component and ascribes typical maintenance tasks to them.

5.2 It is the responsibility of the management company and farm to ensure that all necessary maintenance activities are carried out in a timely manner and that the design performance of each drainage component is preserved.

5.3 If there is any uncertainty regarding the correct and safe methods of cleaning, or what equipment should be used, the manufacturer should be consulted.

Maintenance Schedule	Required Action	Frequency
Regular Maintenance	Inspection of the tank for debris and sediment build-up	Annually
	Inspection of inlets/outlets and withdrawal devices	Annually
	Inspection of filters	Annually
	Inspection of Pumps	Annually
	Inspection of overflow areas	Annually
	Inspection of gutters	Annually
	Cleaning of tank	Annually
	Cleaning of inlets and outlets and withdrawal devices	Annually
	Cleaning of gutters and roof drain filters	Annually
	Check pump operation	Annually
Occasional Maintenance	Cleaning and/or replacement of any filters	Quarterly
Remedial Actions	Repair of overflow erosion damage or damage to tank	As required
	Pump repairs	As required

Table 5.1 – Maintenance tasks and frequencies

5.4 Upon completion of maintenance activities, a record should be kept of the work carried out. This should be retained and an annual maintenance report should be compiled, which should include the following:

- Observations resulting from inspections;
- Maintenance and operation activities undertaken during the year; and
- Recommendations for inspections and maintenance programmes for the following year.

5.5 On the next page is a table with suggested information that should be recorded and included with the maintenance plan. As mentioned in the introduction to this document, this should be a living document and regularly updated, as required and should be kept for the lifetime of the development.

Date	Component requiring maintenance	Issues prompting maintenance	Scheduled maintenance (Y/N)	Maintenance carried out	Additional works required (Y/N). If yes, please detail	Next scheduled date of inspection and maintenance

Appendix J

Met Office Rainfall Data

KIRDFORD W WKS
NGR = 5016E 1258N
Altitude = 21 metres
Latitude = 51:02N Longitude = 00:55W

Date	Daily Total Rainfall (0900-0900)(mm)
01/02/2015	0.0
02/02/2015	0.0
03/02/2015	0.4
04/02/2015	0.2
05/02/2015	0.4
06/02/2015	0.0
07/02/2015	0.0
08/02/2015	0.0
09/02/2015	0.0
10/02/2015	0.0
11/02/2015	0.0
12/02/2015	0.4
13/02/2015	11.8
14/02/2015	0.4
15/02/2015	0.0
16/02/2015	6.0
17/02/2015	0.0
18/02/2015	0.0
19/02/2015	10.8
20/02/2015	0.4
21/02/2015	0.4
22/02/2015	8.6
23/02/2015	0.4
24/02/2015	1.0
25/02/2015	0.2
26/02/2015	2.6
27/02/2015	0.6
28/02/2015	3.0
01/03/2015	4.2
02/03/2015	3.4
03/03/2015	0.0
04/03/2015	0.0
05/03/2015	0.0
06/03/2015	0.0
07/03/2015	0.0
08/03/2015	0.0
09/03/2015	0.0
10/03/2015	0.0
11/03/2015	0.0
12/03/2015	0.0
13/03/2015	0.0
14/03/2015	0.0
15/03/2015	1.0
16/03/2015	0.4
17/03/2015	0.0
18/03/2015	0.0
19/03/2015	0.0
20/03/2015	0.0
21/03/2015	0.0
22/03/2015	0.0
23/03/2015	0.2
24/03/2015	0.0
25/03/2015	1.6
26/03/2015	0.0
27/03/2015	0.0
28/03/2015	0.2
29/03/2015	0.4
30/03/2015	0.4
31/03/2015	0.4
01/04/2015	0.8
02/04/2015	0.2
03/04/2015	2.2
04/04/2015	0.0
05/04/2015	0.0
06/04/2015	0.0
07/04/2015	0.0
08/04/2015	0.0
09/04/2015	0.0
10/04/2015	0.8
11/04/2015	0.0
12/04/2015	0.0
13/04/2015	0.0
14/04/2015	0.0
15/04/2015	0.0
16/04/2015	0.0
17/04/2015	0.0
18/04/2015	0.0
19/04/2015	0.0
20/04/2015	0.0
21/04/2015	0.0
22/04/2015	0.0
23/04/2015	0.0
24/04/2015	1.8
25/04/2015	2.2
26/04/2015	0.0
27/04/2015	0.0
28/04/2015	0.0
29/04/2015	6.2
30/04/2015	0.0
01/05/2015	0.0
02/05/2015	6.6
03/05/2015	0.2
04/05/2015	10.4
05/05/2015	3.0
06/05/2015	0.2
07/05/2015	0.0
08/05/2015	0.8
09/05/2015	0.2
10/05/2015	0.0
11/05/2015	0.0
12/05/2015	0.0
13/05/2015	0.0
14/05/2015	22.0
15/05/2015	0.0
16/05/2015	0.0
17/05/2015	0.8
18/05/2015	1.0
19/05/2015	1.2
20/05/2015	0.0
21/05/2015	0.0
22/05/2015	0.2
23/05/2015	0.0
24/05/2015	0.0
25/05/2015	0.0
26/05/2015	0.0
27/05/2015	0.0
28/05/2015	0.0
29/05/2015	7.6
30/05/2015	3.0
31/05/2015	0.8
01/06/2015	6.8
02/06/2015	0.2
03/06/2015	0.0
04/06/2015	1.4
05/06/2015	0.4
06/06/2015	0.0
07/06/2015	0.0
08/06/2015	0.0
09/06/2015	0.0
10/06/2015	0.0
11/06/2015	0.8
12/06/2015	18.6
13/06/2015	0.0
14/06/2015	0.0
15/06/2015	0.0
16/06/2015	0.0
17/06/2015	0.2
18/06/2015	0.0
19/06/2015	0.0
20/06/2015	0.0
21/06/2015	6.8
22/06/2015	1.6
23/06/2015	0.0
24/06/2015	0.0
25/06/2015	0.0
26/06/2015	0.0
27/06/2015	0.0
28/06/2015	0.0
29/06/2015	0.0
30/06/2015	0.0
01/07/2015	0.0
02/07/2015	0.0
03/07/2015	0.0
04/07/2015	0.4
05/07/2015	0.0
06/07/2015	0.0
07/07/2015	0.8
08/07/2015	0.2
09/07/2015	0.0
10/07/2015	0.0
11/07/2015	0.0
12/07/2015	0.8
13/07/2015	0.0
14/07/2015	0.0
15/07/2015	0.0
16/07/2015	0.0
17/07/2015	0.0
18/07/2015	0.8
19/07/2015	0.2
20/07/2015	0.4
21/07/2015	0.0
22/07/2015	3.2
23/07/2015	1.4
24/07/2015	19.4
25/07/2015	2.2
26/07/2015	7.6
27/07/2015	0.2
28/07/2015	0.0
29/07/2015	0.0
30/07/2015	0.0
31/07/2015	0.0
01/08/2015	0.0
02/08/2015	0.0
03/08/2015	0.0
04/08/2015	0.0
05/08/2015	0.0
06/08/2015	0.0
07/08/2015	0.0
08/08/2015	0.0
09/08/2015	0.0
10/08/2015	5.4
11/08/2015	2.4
12/08/2015	7.0
13/08/2015	13.4
14/08/2015	1.6
15/08/2015	0.0
16/08/2015	0.0
17/08/2015	0.0
18/08/2015	0.0
19/08/2015	10.2
20/08/2015	0.4
21/08/2015	0.0
22/08/2015	0.0
23/08/2015	10.8
24/08/2015	5.4
25/08/2015	12.6
26/08/2015	6.8
27/08/2015	1.2
28/08/2015	0.6
29/08/2015	5.0
30/08/2015	5.4
31/08/2015	2.6
01/09/2015	0.0
02/09/2015	0.0
03/09/2015	0.0
04/09/2015	0.0
05/09/2015	0.0
06/09/2015	0.0
07/09/2015	0.0
08/09/2015	0.0
09/09/2015	0.0
10/09/2015	0.0
11/09/2015	0.2
12/09/2015	0.0
13/09/2015	17.0
14/09/2015	3.6
15/09/2015	1.8
16/09/2015	13.6
17/09/2015	0.6
18/09/2015	0.0
19/09/2015	0.0
20/09/2015	0.0
21/09/2015	13.8
22/09/2015	0.8
23/09/2015	2.0
24/09/2015	0.0
25/09/2015	0.0
26/09/2015	0.0
27/09/2015	0.0
28/09/2015	0.0
29/09/2015	0.0
30/09/2015	0.0
01/10/2015	0.0
02/10/2015	0.0
03/10/2015	0.0
04/10/2015	3.0
05/10/2015	14.8
06/10/2015	7.0
07/10/2015	0.0
08/10/2015	0.0
09/10/2015	0.0
10/10/2015	0.0
11/10/2015	0.0
12/10/2015	0.0
13/10/2015	0.0
14/10/2015	0.4
15/10/2015	0.0
16/10/2015	0.0
17/10/2015	0.0
18/10/2015	0.0
19/10/2015	0.0
20/10/2015	3.2
21/10/2015	3.6
22/10/2015	0.0
23/10/2015	0.0
24/10/2015	2.4
25/10/2015	0.2
26/10/2015	0.0
27/10/2015	2.0
28/10/2015	0.0
29/10/2015	15.4
30/10/2015	2.0
31/10/2015	0.0
01/11/2015	0.6
02/11/2015	0.0
03/11/2015	4.2
04/11/2015	2.0
05/11/2015	10.2
06/11/2015	5.2
07/11/2015	5.2
08/11/2015	0.0
09/11/2015	0.0
10/11/2015	0.0
11/11/2015	0.2
12/11/2015	0.4
13/11/2015	1.2
14/11/2015	7.2
15/11/2015	0.8
16/11/2015	6.2
17/11/2015	4.0
18/11/2015	0.0
19/11/2015	2.4
20/11/2015	1.4
21/11/2015	0.0
22/11/2015	0.0
23/11/2015	4.2
24/11/2015	1.4
25/11/2015	2.6
26/11/2015	0.4
27/11/2015	2.0
28/11/2015	1.8
29/11/2015	0.8
30/11/2015	0.4
01/12/2015	0.2
02/12/2015	0.2
03/12/2015	6.2
04/12/2015	0.0
05/12/2015	1.0
06/12/2015	2.0
07/12/2015	4.6
08/12/2015	0.6
09/12/2015	0.0
10/12/2015	6.8
11/12/2015	0.6
12/12/2015	0.2
13/12/2015	0.0
14/12/2015	2.2
15/12/2015	6.8
16/12/2015	0.2
17/12/2015	1.4
18/12/2015	0.2
19/12/2015	0.0
20/12/2015	5.4
21/12/2015	6.2
22/12/2015	3.8
23/12/2015	0.0
24/12/2015	3.6
25/12/2015	1.8
26/12/2015	0.4
27/12/2015	0.2
28/12/2015	2.0
29/12/2015	1.2
30/12/2015	11.6
31/12/2015	4.4
01/01/2016	8.2
02/01/2016	7.8
03/01/2016	20.2
04/01/2016	8.6
05/01/2016	0.6
06/01/2016	13.6
07/01/2016	0.0
08/01/2016	7.6
09/01/2016	12.2
10/01/2016	7.6
11/01/2016	1.4
12/01/2016	0.0
13/01/2016	5.8
14/01/2016	0.0
15/01/2016	0.0
16/01/2016	2.5
17/01/2016	1.7
18/01/2016	0.0
19/01/2016	0.0
20/01/2016	0.2
21/01/2016	1.0
22/01/2016	3.4
23/01/2016	2.6
24/01/2016	0.2
25/01/2016	0.2
26/01/2016	15.6
27/01/2016	12.0
28/01/2016	0.0
29/01/2016	10.0
30/01/2016	0.0
31/01/2016	0.6
01/02/2016	0.0
02/02/2016	0.0
03/02/2016	0.0
04/02/2016	0.0
05/02/2016	0.6
06/02/2016	7.2
07/02/2016	9.6
08/02/2016	1.4
09/02/2016	0.2
10/02/2016	0.0
11/02/2016	0.2
12/02/2016	1.8
13/02/2016	7.0
14/02/2016	0.0
15/02/2016	0.0
16/02/2016	0.0
17/02/2016	10.2
18/02/2016	0.0
19/02/2016	2.2
20/02/2016	0.2
21/02/2016	0.2
22/02/2016	2.0
23/02/2016	0.0
24/02/2016	0.0
25/02/2016	0.0
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27/02/2016	0.0
28/02/2016	0.0
29/02/2016	0.6
01/03/2016	3.2
02/03/2016	4.2
03/03/2016	3.4
04/03/2016	0.2
05/03/2016	0.4
06/03/2016	0.0
07/03/2016	0.0
08/03/2016	18.2
09/03/2016	6.0
10/03/2016	0.0
11/03/2016	0.0
12/03/2016	0.0
13/03/2016	0.0
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17/03/2016	0.0
18/03/2016	0.0
19/03/2016	0.0
20/03/2016	0.0
21/03/2016	0.0
22/03/2016	0.0
23/03/2016	0.0
24/03/2016	1.8
25/03/2016	0.0
26/03/2016	12.6
27/03/2016	18.0
28/03/2016	1.6
29/03/2016	9.0
30/03/2016	0.4
31/03/2016	0.0
01/04/2016	0.0
02/04/2016	3.4

03/04/2016	1.2	30/04/2016	0.0	27/05/2016	0.0	23/06/2016	2.8
04/04/2016	0.0	01/05/2016	0.2	28/05/2016	0.0	24/06/2016	0.0
05/04/2016	2.0	02/05/2016	0.2	29/05/2016	0.0	25/06/2016	8.6
06/04/2016	1.0	03/05/2016	0.0	30/05/2016	1.0	26/06/2016	0.2
07/04/2016	4.2	04/05/2016	0.0	31/05/2016	6.4	27/06/2016	0.0
08/04/2016	2.8	05/05/2016	0.0	01/06/2016	1.4	28/06/2016	3.6
09/04/2016	0.6	06/05/2016	0.0	02/06/2016	0.0	29/06/2016	5.4
10/04/2016	4.8	07/05/2016	0.0	03/06/2016	0.0	30/06/2016	0.8
11/04/2016	3.8	08/05/2016	0.0	04/06/2016	0.0	01/07/2016	0.2
12/04/2016	0.0	09/05/2016	3.8	05/06/2016	0.0	02/07/2016	1.0
13/04/2016	0.0	10/05/2016	10.0	06/06/2016	0.0	03/07/2016	0.0
14/04/2016	4.4	11/05/2016	1.0	07/06/2016	3.0	04/07/2016	0.0
15/04/2016	14.0	12/05/2016	0.0	08/06/2016	0.0	05/07/2016	0.0
16/04/2016	0.8	13/05/2016	0.0	09/06/2016	0.0	06/07/2016	0.0
17/04/2016	0.0	14/05/2016	0.0	10/06/2016	0.2	07/07/2016	0.0
18/04/2016	0.0	15/05/2016	0.0	11/06/2016	1.6	08/07/2016	0.0
19/04/2016	0.0	16/05/2016	0.0	12/06/2016	2.2	09/07/2016	0.0
20/04/2016	0.0	17/05/2016	0.8	13/06/2016	2.0	10/07/2016	0.8
21/04/2016	0.0	18/05/2016	5.4	14/06/2016	0.2	11/07/2016	2.0
22/04/2016	1.2	19/05/2016	0.2	15/06/2016	7.6	12/07/2016	20.8
23/04/2016	0.0	20/05/2016	0.0	16/06/2016	9.8	13/07/2016	0.2
24/04/2016	0.0	21/05/2016	1.4	17/06/2016	10.8	14/07/2016	0.0
25/04/2016	0.2	22/05/2016	0.0	18/06/2016	0.0	15/07/2016	0.0
26/04/2016	1.0	23/05/2016	0.0	19/06/2016	7.8	16/07/2016	0.0
27/04/2016	0.4	24/05/2016	0.0	20/06/2016	2.4	17/07/2016	0.0
28/04/2016	2.6	25/05/2016	0.0	21/06/2016	0.0	18/07/2016	0.0
29/04/2016	0.8	26/05/2016	0.6	22/06/2016	12.6	19/07/2016	0.0
20/07/2016	0.0	16/08/2016	0.0	12/09/2016	0.0	09/10/2016	0.0
21/07/2016	0.0	17/08/2016	0.2	13/09/2016	0.0	10/10/2016	0.2
22/07/2016	0.0	18/08/2016	0.2	14/09/2016	0.0	11/10/2016	0.0
23/07/2016	0.0	19/08/2016	5.6	15/09/2016	14.6	12/10/2016	0.0
24/07/2016	0.0	20/08/2016	0.6	16/09/2016	0.6	13/10/2016	0.6
25/07/2016	0.0	21/08/2016	0.6	17/09/2016	0.0	14/10/2016	0.0
26/07/2016	1.6	22/08/2016	0.0	18/09/2016	0.0	15/10/2016	18.0
27/07/2016	0.2	23/08/2016	0.0	19/09/2016	4.6	16/10/2016	1.6
28/07/2016	0.0	24/08/2016	0.2	20/09/2016	0.0	17/10/2016	3.2
29/07/2016	0.0	25/08/2016	0.2	21/09/2016	0.0	18/10/2016	0.0
30/07/2016	0.0	26/08/2016	0.0	22/09/2016	0.0	19/10/2016	0.0
31/07/2016	0.0	27/08/2016	0.0	23/09/2016	0.0	20/10/2016	0.0
01/08/2016	23.0	28/08/2016	0.6	24/09/2016	0.8	21/10/2016	0.0
02/08/2016	1.0	29/08/2016	0.0	25/09/2016	2.6	22/10/2016	0.0
03/08/2016	0.0	30/08/2016	0.0	26/09/2016	0.0	23/10/2016	0.8
04/08/2016	0.2	31/08/2016	0.0	27/09/2016	0.2	24/10/2016	0.2
05/08/2016	0.0	01/09/2016	0.0	28/09/2016	0.2	25/10/2016	0.8
06/08/2016	0.0	02/09/2016	1.2	29/09/2016	1.0	26/10/2016	0.0
07/08/2016	0.0	03/09/2016	5.8	30/09/2016	8.0	27/10/2016	0.0
08/08/2016	0.0	04/09/2016	3.2	01/10/2016	4.4	28/10/2016	0.0
09/08/2016	0.0	05/09/2016	0.0	02/10/2016	0.0	29/10/2016	0.0
10/08/2016	0.0	06/09/2016	0.0	03/10/2016	0.0	30/10/2016	0.0
11/08/2016	0.0	07/09/2016	0.0	04/10/2016	0.0	31/10/2016	0.0
12/08/2016	0.0	08/09/2016	0.2	05/10/2016	0.0	01/11/2016	0.0
13/08/2016	0.0	09/09/2016	0.0	06/10/2016	0.0	02/11/2016	0.0
14/08/2016	0.0	10/09/2016	6.2	07/10/2016	0.0	03/11/2016	0.6
15/08/2016	0.0	11/09/2016	0.0	08/10/2016	1.0	04/11/2016	5.4
05/11/2016	0.2	02/12/2016	0.0	29/12/2016	0.2	25/01/2017	0.2
06/11/2016	1.0	03/12/2016	0.0	30/12/2016	0.2	26/01/2017	0.0
07/11/2016	0.0	04/12/2016	0.2	31/12/2016	0.4	27/01/2017	0.8
08/11/2016	14.8	05/12/2016	0.0	01/01/2017	10.4	28/01/2017	0.4
09/11/2016	0.2	06/12/2016	0.0	02/01/2017	0.0	29/01/2017	11.0
10/11/2016	0.4	07/12/2016	0.0	03/01/2017	0.2	30/01/2017	1.6
11/11/2016	5.6	08/12/2016	0.2	04/01/2017	0.0	31/01/2017	12.0
12/11/2016	5.8	09/12/2016	0.0	05/01/2017	0.0	01/02/2017	3.6
13/11/2016	0.2	10/12/2016	1.6	06/01/2017	9.0	02/02/2017	4.6
14/11/2016	0.2	11/12/2016	0.0	07/01/2017	0.0	03/02/2017	8.0
15/11/2016	1.6	12/12/2016	1.8	08/01/2017	0.0	04/02/2017	4.4
16/11/2016	0.4	13/12/2016	0.6	09/01/2017	1.4	05/02/2017	0.0
17/11/2016	1.8	14/12/2016	0.0	10/01/2017	0.2	06/02/2017	5.4
18/11/2016	0.2	15/12/2016	0.0	11/01/2017	0.0	07/02/2017	0.2
19/11/2016	32.2	16/12/2016	0.0	12/01/2017	19.4	08/02/2017	0.0
20/11/2016	10.4	17/12/2016	0.2	13/01/2017	1.0	09/02/2017	0.0
21/11/2016	13.8	18/12/2016	0.0	14/01/2017	2.6	10/02/2017	0.8
22/11/2016	0.2	19/12/2016	0.4	15/01/2017	7.8	11/02/2017	1.4
23/11/2016	0.0	20/12/2016	1.2	16/01/2017	1.6	12/02/2017	0.0
24/11/2016	0.0	21/12/2016	2.0	17/01/2017	0.0	13/02/2017	0.0
25/11/2016	0.0	22/12/2016	0.0	18/01/2017	0.0	14/02/2017	0.0
26/11/2016	0.0	23/12/2016	2.8	19/01/2017	0.2	15/02/2017	4.0
27/11/2016	0.0	24/12/2016	0.2	20/01/2017	0.0	16/02/2017	0.0
28/11/2016	0.0	25/12/2016	0.2	21/01/2017	0.0	17/02/2017	0.0
29/11/2016	0.0	26/12/2016	0.0	22/01/2017	0.0	18/02/2017	0.0
30/11/2016	0.0	27/12/2016	0.0	23/01/2017	0.2	19/02/2017	0.0
01/12/2016	0.0	28/12/2016	0.2	24/01/2017	0.0	20/02/2017	0.0
21/02/2017	0.0	20/03/2017	0.6	16/04/2017	0.0	13/05/2017	1.8
22/02/2017	1.8	21/03/2017	4.6	17/04/2017	0.0	14/05/2017	1.6
23/02/2017	0.0	22/03/2017	8.0	18/04/2017	0.0	15/05/2017	0.6
24/02/2017	0.0	23/03/2017	0.0	19/04/2017	0.0	16/05/2017	12.0
25/02/2017	1.0	24/03/2017	0.0	20/04/2017	0.0	17/05/2017	14.5
26/02/2017	14.0	25/03/2017	0.0	21/04/2017	0.0	18/05/2017	8.5
27/02/2017	5.0	26/03/2017	0.0	22/04/2017	0.0	19/05/2017	6.8
28/02/2017	1.2	27/03/2017	0.0	23/04/2017	0.0	20/05/2017	0.0
01/03/2017	1.0	28/03/2017	0.2	24/04/2017	0.0	21/05/2017	0.0
02/03/2017	5.4	29/03/2017	0.4	25/04/2017	0.0	22/05/2017	0.0
03/03/2017	5.4	30/03/2017	0.0	26/04/2017	2.0	23/05/2017	0.0
04/03/2017	7.6	31/03/2017	0.0	27/04/2017	0.4	24/05/2017	0.0
05/03/2017	1.6	01/04/2017	0.0	28/04/2017	0.0	25/05/2017	0.0
06/03/2017	0.0	02/04/2017	0.0	29/04/2017	0.0	26/05/2017	2.6
07/03/2017	2.8	03/04/2017	2.4	30/04/2017	5.2	27/05/2017	0.2
08/03/2017	0.4	04/04/2017	0.0	01/05/2017	7.0	28/05/2017	16.2
09/03/2017	0.0	05/04/2017	0.0	02/05/2017	0.0	29/05/2017	0.4
10/03/2017	0.2	06/04/2017	0.0	03/05/2017	0.0	30/05/2017	0.0
11/03/2017	0.0	07/04/2017	0.0	04/05/2017	0.0	31/05/2017	0.0
12/03/2017	0.8	08/04/2017	0.0	05/05/2017	0.0	01/06/2017	0.0
13/03/2017	0.0	09/04/2017	0.0	06/05/2017	0.0	02/06/2017	0.0
14/03/2017	0.0	10/04/2017	0.0	07/05/2017	0.0	03/06/2017	0.0
15/03/2017	0.2	11/04/2017	0.0	08/05/2017	0.0	04/06/2017	0.0
16/03/2017	0.0	12/04/2017	0.0	09/05/2017	0.0	05/06/2017	31.8
17/03/2017	0.2	13/04/2017	0.0	10/05/2017	0.0	06/06/2017	0.0
18/03/2017	0.0	14/04/2017	0.0	11/05/2017	7.0	07/06/2017	0.2
19/03/2017	1.0	15/04/2017	0.0	12/05/2017	0.6	08/06/2017	2.2

09/06/2017	0.2	06/07/2017	0.0	02/08/2017	20.0	29/08/2017	0.8
10/06/2017	0.0	07/07/2017	0.0	03/08/2017	0.2	30/08/2017	4.0
11/06/2017	0.0	08/07/2017	0.0	04/08/2017	0.0	31/08/2017	0.2
12/06/2017	0.0	09/07/2017	0.0	05/08/2017	4.4	01/09/2017	0.0
13/06/2017	0.0	10/07/2017	1.0	06/08/2017	0.0	02/09/2017	0.0
14/06/2017	0.0	11/07/2017	25.8	07/08/2017	0.0	03/09/2017	8.6
15/06/2017	0.0	12/07/2017	0.0	08/08/2017	0.0	04/09/2017	0.0
16/06/2017	0.0	13/07/2017	0.0	09/08/2017	24.6	05/09/2017	1.6
17/06/2017	0.0	14/07/2017	0.0	10/08/2017	0.0	06/09/2017	0.4
18/06/2017	0.0	15/07/2017	0.0	11/08/2017	0.2	07/09/2017	0.4
19/06/2017	0.0	16/07/2017	0.0	12/08/2017	0.0	08/09/2017	20.4
20/06/2017	0.0	17/07/2017	0.0	13/08/2017	0.0	09/09/2017	2.2
21/06/2017	0.8	18/07/2017	8.3	14/08/2017	0.0	10/09/2017	3.8
22/06/2017	0.0	19/07/2017	2.7	15/08/2017	0.0	11/09/2017	3.6
23/06/2017	0.0	20/07/2017	0.0	16/08/2017	4.6	12/09/2017	6.0
24/06/2017	0.0	21/07/2017	19.0	17/08/2017	0.0	13/09/2017	3.0
25/06/2017	0.0	22/07/2017	9.2	18/08/2017	0.0	14/09/2017	0.0
26/06/2017	0.0	23/07/2017	2.8	19/08/2017	0.0	15/09/2017	0.4
27/06/2017	13.6	24/07/2017	0.0	20/08/2017	13.6	16/09/2017	4.6
28/06/2017	0.0	25/07/2017	0.6	21/08/2017	0.0	17/09/2017	0.0
29/06/2017	0.0	26/07/2017	0.8	22/08/2017	0.2	18/09/2017	3.8
30/06/2017	0.0	27/07/2017	0.0	23/08/2017	0.0	19/09/2017	0.0
01/07/2017	0.2	28/07/2017	3.6	24/08/2017	0.0	20/09/2017	0.0
02/07/2017	0.0	29/07/2017	7.6	25/08/2017	0.0	21/09/2017	1.8
03/07/2017	0.0	30/07/2017	0.0	26/08/2017	0.0	22/09/2017	0.0
04/07/2017	0.0	31/07/2017	0.6	27/08/2017	0.0	23/09/2017	0.0
05/07/2017	0.0	01/08/2017	0.0	28/08/2017	0.0	24/09/2017	8.6
25/09/2017	0.0	22/10/2017	0.6	18/11/2017	2.4	15/12/2017	0.0
26/09/2017	0.4	23/10/2017	0.6	19/11/2017	0.4	16/12/2017	0.0
27/09/2017	15.2	24/10/2017	0.4	20/11/2017	0.2	17/12/2017	2.2
28/09/2017	6.2	25/10/2017	0.0	21/11/2017	0.0	18/12/2017	0.0
29/09/2017	0.2	26/10/2017	0.0	22/11/2017	7.8	19/12/2017	0.0
30/09/2017	8.0	27/10/2017	0.0	23/11/2017	0.2	20/12/2017	0.0
01/10/2017	0.4	28/10/2017	0.4	24/11/2017	0.0	21/12/2017	0.8
02/10/2017	0.6	29/10/2017	0.0	25/11/2017	0.0	22/12/2017	0.0
03/10/2017	0.0	30/10/2017	0.0	26/11/2017	1.4	23/12/2017	0.0
04/10/2017	0.8	31/10/2017	0.0	27/11/2017	0.8	24/12/2017	1.0
05/10/2017	0.0	01/11/2017	0.0	28/11/2017	0.0	25/12/2017	2.8
06/10/2017	0.0	02/11/2017	0.2	29/11/2017	0.0	26/12/2017	23.8
07/10/2017	0.0	03/11/2017	4.4	30/11/2017	0.0	27/12/2017	2.8
08/10/2017	0.0	04/11/2017	0.6	01/12/2017	0.0	28/12/2017	11.2
09/10/2017	0.0	05/11/2017	0.0	02/12/2017	0.2	29/12/2017	4.8
10/10/2017	0.6	06/11/2017	0.2	03/12/2017	0.0	30/12/2017	8.4
11/10/2017	0.8	07/11/2017	6.8	04/12/2017	0.0	31/12/2017	4.6
12/10/2017	0.0	08/11/2017	0.0	05/12/2017	0.0	01/01/2018	3.8
13/10/2017	0.2	09/11/2017	0.2	06/12/2017	2.2	02/01/2018	7.8
14/10/2017	0.0	10/11/2017	8.2	07/12/2017	2.8	03/01/2018	6.2
15/10/2017	0.0	11/11/2017	5.2	08/12/2017	0.0	04/01/2018	10.8
16/10/2017	0.0	12/11/2017	0.0	09/12/2017	17.0	05/01/2018	0.4
17/10/2017	1.2	13/11/2017	0.0	10/12/2017	6.2	06/01/2018	0.0
18/10/2017	0.8	14/11/2017	1.2	11/12/2017	3.4	07/01/2018	0.0
19/10/2017	11.6	15/11/2017	0.0	12/12/2017	5.8	08/01/2018	0.0
20/10/2017	11.8	16/11/2017	0.6	13/12/2017	2.4	09/01/2018	1.2
21/10/2017	1.2	17/11/2017	0.0	14/12/2017	1.4	10/01/2018	0.0
11/01/2018	0.0	07/02/2018	0.0	06/03/2018	5.8	02/04/2018	8.8
12/01/2018	0.0	08/02/2018	4.0	07/03/2018	5.8	03/04/2018	1.4
13/01/2018	0.0	09/02/2018	0.0	08/03/2018	0.0	04/04/2018	0.8
14/01/2018	5.2	10/02/2018	3.0	09/03/2018	8.2	05/04/2018	0.0
15/01/2018	9.8	11/02/2018	0.0	10/03/2018	2.4	06/04/2018	0.0
16/01/2018	0.4	12/02/2018	0.8	11/03/2018	4.2	07/04/2018	2.0
17/01/2018	2.6	13/02/2018	9.2	12/03/2018	0.8	08/04/2018	6.6
18/01/2018	0.0	14/02/2018	9.8	13/03/2018	0.2	09/04/2018	7.0
19/01/2018	3.4	15/02/2018	0.0	14/03/2018	13.2	10/04/2018	4.2
20/01/2018	1.8	16/02/2018	0.0	15/03/2018	3.8	11/04/2018	0.0
21/01/2018	9.8	17/02/2018	0.2	16/03/2018	0.0	12/04/2018	0.2
22/01/2018	0.2	18/02/2018	1.2	17/03/2018	2.2	13/04/2018	0.0
23/01/2018	2.4	19/02/2018	0.8	18/03/2018	1.0	14/04/2018	0.0
24/01/2018	12.0	20/02/2018	0.6	19/03/2018	0.0	15/04/2018	2.6
25/01/2018	0.4	21/02/2018	0.0	20/03/2018	0.0	16/04/2018	0.0
26/01/2018	0.0	22/02/2018	0.0	21/03/2018	0.0	17/04/2018	0.0
27/01/2018	2.0	23/02/2018	0.0	22/03/2018	0.4	18/04/2018	0.0
28/01/2018	0.0	24/02/2018	0.0	23/03/2018	2.4	19/04/2018	0.0
29/01/2018	0.4	25/02/2018	0.0	24/03/2018	0.2	20/04/2018	0.0
30/01/2018	2.0	26/02/2018	0.2	25/03/2018	0.0	21/04/2018	10.0
31/01/2018	0.0	27/02/2018	0.2	26/03/2018	4.4	22/04/2018	0.0
01/02/2018	0.0	28/02/2018	0.2	27/03/2018	7.6	23/04/2018	0.0
02/02/2018	0.6	01/03/2018	2.0	28/03/2018	5.2	24/04/2018	0.4
03/02/2018	1.8	02/03/2018	1.2	29/03/2018	5.8	25/04/2018	4.8
04/02/2018	0.0	03/03/2018	4.6	30/03/2018	6.4	26/04/2018	3.4
05/02/2018	0.0	04/03/2018	2.0	31/03/2018	1.4	27/04/2018	10.2
06/02/2018	0.0	05/03/2018	2.8	01/04/2018	8.6	28/04/2018	0.0
29/04/2018	8.0	26/05/2018	1.4	22/06/2018	0.0	19/07/2018	0.0
30/04/2018	7.0	27/05/2018	0.0	23/06/2018	0.0	20/07/2018	0.0
01/05/2018	2.0	28/05/2018	0.4	24/06/2018	0.0	21/07/2018	0.0
02/05/2018	6.0	29/05/2018	23.8	25/06/2018	0.0	22/07/2018	0.0
03/05/2018	0.0	30/05/2018	3.8	26/06/2018	0.0	23/07/2018	0.0
04/05/2018	0.0	31/05/2018	12.6	27/06/2018	0.0	24/07/2018	0.0
05/05/2018	0.0	01/06/2018	0.0	28/06/2018	0.0	25/07/2018	0.0
06/05/2018	0.0	02/06/2018	0.0	29/06/2018	0.0	26/07/2018	0.0
07/05/2018	0.0	03/06/2018	0.0	30/06/2018	0.0	27/07/2018	5.6
08/05/2018	0.0	04/06/2018	0.0	01/07/2018	0.0	28/07/2018	8.8
09/05/2018	1.0	05/06/2018	0.0	02/07/2018	0.0	29/07/2018	16.6
10/05/2018	0.0	06/06/2018	0.0	03/07/2018	0.0	30/07/2018	6.2
11/05/2018	0.0	07/06/2018	0.8	04/07/2018	0.0	31/07/2018	0.0
12/05/2018	7.6	08/06/2018	0.0	05/07/2018	0.0	01/08/2018	0.0
13/05/2018	0.0	09/06/2018	0.0	06/07/2018	0.0	02/08/2018	0.0
14/05/2018	0.0	10/06/2018	0.0	07/07/2018	0.0	03/08/2018	0.0
15/05/2018	0.0	11/06/2018	0.0	08/07/2018	0.0	04/08/2018	0.0
16/05/2018	0.0	12/06/2018	0.0	09/07/2018	0.0	05/08/2018	0.0
17/05/2018	0.0	13/06/2018	0.0	10/07/2018	0.0	06/08/2018	0.0
18/05/2018	0.0	14/06/2018	0.0	11/07/2018	0.0	07/08/2018	2.2
19/05/2018	0.0	15/06/2018	0.0	12/07/2018	0.0	08/08/2018	2.6
20/05/2018	0.0	16/06/2018	0.2	13/07/2018	2.2	09/08/2018	5.2
21/05/2018	2.6	17/06/2018	0.2	14/07/2018	0.0	10/08/2018	9.4
22/05/2018	0.0	18/06/2018	0.0	15/07/2018	0.0	11/08/2018	0.4
23/05/2018	1.2	19/06/2018	0.0	16/07/2018	0.0	12/08/2018	3.8
24/05/2018	10.0	20/06/2018	0.0	17/07/2018	0.0	13/08/2018	6.6
25/05/2018	0.0	21/06/2018	0.0	18/07/2018	0.0	14/08/2018	0.0

15/08/2018	0.2	11/09/2018	2.0	08/10/2018	0.0	04/11/2018	0.0
16/08/2018	13.4	12/09/2018	1.2	09/10/2018	0.0	05/11/2018	0.0
17/08/2018	0.0	13/09/2018	0.0	10/10/2018	0.0	06/11/2018	20.0
18/08/2018	0.0	14/09/2018	0.0	11/10/2018	3.6	07/11/2018	10.4
19/08/2018	0.0	15/09/2018	0.0	12/10/2018	0.0	08/11/2018	0.0
20/08/2018	0.0	16/09/2018	0.0	13/10/2018	6.0	09/11/2018	28.4
21/08/2018	0.0	17/09/2018	0.0	14/10/2018	32.8	10/11/2018	20.8
22/08/2018	0.0	18/09/2018	0.0	15/10/2018	0.0	11/11/2018	1.8
23/08/2018	1.4	19/09/2018	0.6	16/10/2018	0.0	12/11/2018	5.0
24/08/2018	2.4	20/09/2018	6.2	17/10/2018	1.2	13/11/2018	0.0
25/08/2018	0.0	21/09/2018	0.0	18/10/2018	0.0	14/11/2018	0.0
26/08/2018	20.0	22/09/2018	19.8	19/10/2018	0.0	15/11/2018	0.2
27/08/2018	0.0	23/09/2018	1.6	20/10/2018	0.0	16/11/2018	0.2
28/08/2018	6.6	24/09/2018	0.0	21/10/2018	0.0	17/11/2018	0.2
29/08/2018	0.0	25/09/2018	0.0	22/10/2018	0.0	18/11/2018	0.0
30/08/2018	0.0	26/09/2018	0.2	23/10/2018	0.0	19/11/2018	2.2
31/08/2018	0.0	27/09/2018	0.0	24/10/2018	0.0	20/11/2018	1.6
01/09/2018	0.0	28/09/2018	0.0	25/10/2018	0.0	21/11/2018	0.6
02/09/2018	0.0	29/09/2018	0.0	26/10/2018	0.0	22/11/2018	0.0
03/09/2018	0.0	30/09/2018	0.0	27/10/2018	0.0	23/11/2018	1.0
04/09/2018	0.0	01/10/2018	0.0	28/10/2018	0.2	24/11/2018	3.4
05/09/2018	0.0	02/10/2018	0.0	29/10/2018	0.0	25/11/2018	0.0
06/09/2018	0.2	03/10/2018	0.0	30/10/2018	0.0	26/11/2018	0.2
07/09/2018	0.0	04/10/2018	0.2	31/10/2018	9.4	27/11/2018	16.0
08/09/2018	0.0	05/10/2018	0.0	01/11/2018	4.4	28/11/2018	8.6
09/09/2018	0.0	06/10/2018	11.2	02/11/2018	0.0	29/11/2018	4.6
10/09/2018	0.0	07/10/2018	0.0	03/11/2018	0.0	30/11/2018	6.8
01/12/2018	7.4	28/12/2018	0.0	24/01/2019	0.8	20/02/2019	0.0
02/12/2018	0.8	29/12/2018	0.0	25/01/2019	0.0	21/02/2019	0.2
03/12/2018	0.4	30/12/2018	0.0	26/01/2019	4.0	22/02/2019	0.0
04/12/2018	3.6	31/12/2018	0.0	27/01/2019	0.0	23/02/2019	0.0
05/12/2018	3.6	01/01/2019	0.0	28/01/2019	0.0	24/02/2019	0.0
06/12/2018	7.4	02/01/2019	0.0	29/01/2019	5.2	25/02/2019	0.0
07/12/2018	4.4	03/01/2019	0.0	30/01/2019	0.0	26/02/2019	0.0
08/12/2018	3.0	04/01/2019	0.0	31/01/2019	2.1	27/02/2019	0.0
09/12/2018	0.2	05/01/2019	0.0	01/02/2019	3.7	28/02/2019	2.0
10/12/2018	0.0	06/01/2019	0.0	02/02/2019	0.0	01/03/2019	0.6
11/12/2018	0.0	07/01/2019	0.0	03/02/2019	6.4	02/03/2019	5.6
12/12/2018	0.0	08/01/2019	0.0	04/02/2019	1.0	03/03/2019	21.0
13/12/2018	0.0	09/01/2019	0.0	05/02/2019	5.4	04/03/2019	2.0
14/12/2018	0.0	10/01/2019	0.0	06/02/2019	8.8	05/03/2019	11.0
15/12/2018	14.6	11/01/2019	0.0	07/02/2019	2.8	06/03/2019	2.8
16/12/2018	8.8	12/01/2019	0.2	08/02/2019	18.4	07/03/2019	0.4
17/12/2018	0.0	13/01/2019	0.0	09/02/2019	4.6	08/03/2019	1.6
18/12/2018	16.4	14/01/2019	0.0	10/02/2019	0.4	09/03/2019	6.4
19/12/2018	4.2	15/01/2019	0.2	11/02/2019	0.0	10/03/2019	0.0
20/12/2018	5.8	16/01/2019	2.4	12/02/2019	0.0	11/03/2019	0.6
21/12/2018	0.0	17/01/2019	0.2	13/02/2019	0.0	12/03/2019	9.4
22/12/2018	7.2	18/01/2019	1.2	14/02/2019	0.2	13/03/2019	0.8
23/12/2018	2.0	19/01/2019	1.2	15/02/2019	0.2	14/03/2019	0.4
24/12/2018	0.2	20/01/2019	0.0	16/02/2019	0.0	15/03/2019	1.8
25/12/2018	0.0	21/01/2019	7.4	17/02/2019	0.0	16/03/2019	3.2
26/12/2018	0.0	22/01/2019	0.6	18/02/2019	3.0	17/03/2019	0.0
27/12/2018	0.0	23/01/2019	0.0	19/02/2019	0.0	18/03/2019	0.6
19/03/2019	0.0	15/04/2019	0.0	12/05/2019	0.0	08/06/2019	3.2
20/03/2019	0.0	16/04/2019	0.0	13/05/2019	0.0	09/06/2019	2.6
21/03/2019	0.0	17/04/2019	0.0	14/05/2019	0.0	10/06/2019	28.6
22/03/2019	0.0	18/04/2019	0.0	15/05/2019	0.0	11/06/2019	2.6
23/03/2019	0.0	19/04/2019	0.0	16/05/2019	0.0	12/06/2019	8.8
24/03/2019	0.0	20/04/2019	0.0	17/05/2019	0.0	13/06/2019	0.4
25/03/2019	0.0	21/04/2019	0.0	18/05/2019	0.0	14/06/2019	0.0
26/03/2019	0.0	22/04/2019	0.0	19/05/2019	0.0	15/06/2019	6.4
27/03/2019	0.0	23/04/2019	0.0	20/05/2019	0.0	16/06/2019	2.0
28/03/2019	0.0	24/04/2019	1.2	21/05/2019	0.0	17/06/2019	0.0
29/03/2019	0.0	25/04/2019	0.0	22/05/2019	0.0	18/06/2019	3.6
30/03/2019	0.0	26/04/2019	1.8	23/05/2019	0.0	19/06/2019	2.8
31/03/2019	0.0	27/04/2019	0.0	24/05/2019	0.0	20/06/2019	1.2
01/04/2019	0.0	28/04/2019	0.0	25/05/2019	0.0	21/06/2019	0.0
02/04/2019	1.2	29/04/2019	0.0	26/05/2019	0.0	22/06/2019	0.0
03/04/2019	6.2	30/04/2019	0.0	27/05/2019	0.0	23/06/2019	0.0
04/04/2019	1.4	01/05/2019	0.0	28/05/2019	0.6	24/06/2019	4.8
05/04/2019	0.0	02/05/2019	0.4	29/05/2019	2.4	25/06/2019	0.0
06/04/2019	0.0	03/05/2019	2.0	30/05/2019	0.0	26/06/2019	0.0
07/04/2019	0.6	04/05/2019	0.2	31/05/2019	0.0	27/06/2019	0.0
08/04/2019	2.2	05/05/2019	0.0	01/06/2019	0.0	28/06/2019	0.0
09/04/2019	5.0	06/05/2019	0.0	02/06/2019	0.0	29/06/2019	0.0
10/04/2019	0.0	07/05/2019	10.0	03/06/2019	0.0	30/06/2019	0.0
11/04/2019	0.0	08/05/2019	1.6	04/06/2019	2.2	01/07/2019	0.0
12/04/2019	0.0	09/05/2019	3.0	05/06/2019	0.0	02/07/2019	0.0
13/04/2019	0.0	10/05/2019	0.0	06/06/2019	5.2	03/07/2019	0.0
14/04/2019	0.0	11/05/2019	0.6	07/06/2019	17.0	04/07/2019	0.0
05/07/2019	0.0	01/08/2019	0.0	28/08/2019	0.0	24/09/2019	14.4
06/07/2019	2.0	02/08/2019	0.0	29/08/2019	0.0	25/09/2019	4.6
07/07/2019	0.4	03/08/2019	0.0	30/08/2019	0.0	26/09/2019	4.0
08/07/2019	0.0	04/08/2019	2.0	31/08/2019	0.2	27/09/2019	5.0
09/07/2019	0.0	05/08/2019	0.0	01/09/2019	0.0	28/09/2019	19.2
10/07/2019	0.0	06/08/2019	0.0	02/09/2019	0.0	29/09/2019	0.6
11/07/2019	0.0	07/08/2019	1.4	03/09/2019	5.2	30/09/2019	5.6
12/07/2019	0.0	08/08/2019	4.6	04/09/2019	0.0	01/10/2019	6.0
13/07/2019	0.8	09/08/2019	12.0	05/09/2019	0.0	02/10/2019	0.0
14/07/2019	0.0	10/08/2019	1.4	06/09/2019	0.2	03/10/2019	4.6
15/07/2019	0.0	11/08/2019	0.8	07/09/2019	0.0	04/10/2019	1.4
16/07/2019	0.0	12/08/2019	23.2	08/09/2019	3.8	05/10/2019	10.6
17/07/2019	1.2	13/08/2019	1.8	09/09/2019	3.0	06/10/2019	0.2
18/07/2019	1.8	14/08/2019	3.8	10/09/2019	0.0	07/10/2019	3.4
19/07/2019	35.4	15/08/2019	0.0	11/09/2019	0.2	08/10/2019	0.8
20/07/2019	0.0	16/08/2019	9.8	12/09/2019	0.0	09/10/2019	2.0
21/07/2019	0.0	17/08/2019	2.2	13/09/2019	0.0	10/10/2019	3.6
22/07/2019	0.0	18/08/2019	1.4	14/09/2019	0.0	11/10/2019	11.8
23/07/2019	0.4	19/08/2019	4.4	15/09/2019	0.0	12/10/2019	11.0
24/07/2019	0.0	20/08/2019	0.0	16/09/2019	0.0	13/10/2019	4.6
25/07/2019	0.4	21/08/2019	0.0	17/09/2019	0.0	14/10/2019	11.4
26/07/2019	9.6	22/08/2019	0.0	18/09/2019	0.0	15/10/2019	3.6
27/07/2019	0.8	23/08/2019	0.0	19/09/2019	0.0	16/10/2019	1.0
28/07/2019	0.0	24/08/2019	0.0	20/09/2019	0.0	17/10/2019	25.2
29/07/2019	0.0	25/08/2019	0.0	21/09/2019	1.8	18/10/2019	0.8
30/07/2019	5.2	26/08/2019	0.0	22/09/2019	2.0	19/10/2019	0.0
31/07/2019	0.0	27/08/2019	0.8	23/09/2019	30.6	20/10/2019	2.0

21/10/2019	0.0	17/11/2019	0.2	14/12/2019	5.0	10/01/2020	0.0
22/10/2019	0.0	18/11/2019	0.0	15/12/2019	8.8	11/01/2020	2.2
23/10/2019	0.6	19/11/2019	0.0	16/12/2019	8.0	12/01/2020	0.2
24/10/2019	12.4	20/11/2019	0.0	17/12/2019	1.2	13/01/2020	9.0
25/10/2019	1.2	21/11/2019	15.2	18/12/2019	26.0	14/01/2020	19.0
26/10/2019	8.2	22/11/2019	0.4	19/12/2019	24.0	15/01/2020	1.6
27/10/2019	0.0	23/11/2019	6.8	20/12/2019	8.2	16/01/2020	7.8
28/10/2019	0.2	24/11/2019	2.6	21/12/2019	19.6	17/01/2020	0.0
29/10/2019	0.0	25/11/2019	9.0	22/12/2019	0.0	18/01/2020	0.0
30/10/2019	0.0	26/11/2019	4.8	23/12/2019	1.4	19/01/2020	0.2
31/10/2019	3.0	27/11/2019	3.0	24/12/2019	0.4	20/01/2020	0.0
01/11/2019	3.8	28/11/2019	2.6	25/12/2019	2.8	21/01/2020	0.2
02/11/2019	8.0	29/11/2019	0.0	26/12/2019	8.0	22/01/2020	0.0
03/11/2019	4.6	30/11/2019	0.0	27/12/2019	0.0	23/01/2020	0.8
04/11/2019	5.6	01/12/2019	0.2	28/12/2019	0.0	24/01/2020	0.0
05/11/2019	0.8	02/12/2019	0.0	29/12/2019	0.0	25/01/2020	0.0
06/11/2019	9.0	03/12/2019	0.0	30/12/2019	0.0	26/01/2020	4.6
07/11/2019	0.0	04/12/2019	0.0	31/12/2019	0.2	27/01/2020	8.2
08/11/2019	0.2	05/12/2019	1.0	01/01/2020	0.2	28/01/2020	0.0
09/11/2019	11.6	06/12/2019	2.2	02/01/2020	1.0	29/01/2020	0.4
10/11/2019	4.4	07/12/2019	4.6	03/01/2020	0.0	30/01/2020	2.2
11/11/2019	0.0	08/12/2019	2.0	04/01/2020	0.0	31/01/2020	3.4
12/11/2019	1.0	09/12/2019	0.0	05/01/2020	0.0	01/02/2020	9.4
13/11/2019	18.4	10/12/2019	6.4	06/01/2020	2.8	02/02/2020	0.0
14/11/2019	0.4	11/12/2019	2.6	07/01/2020	0.6	03/02/2020	0.8
15/11/2019	8.0	12/12/2019	16.4	08/01/2020	5.4	04/02/2020	0.0
16/11/2019	0.2	13/12/2019	2.0	09/01/2020	10.2	05/02/2020	0.0
06/02/2020	0.2	04/03/2020	9.4	31/03/2020	0.0	27/04/2020	16.4
07/02/2020	2.4	05/03/2020	17.4	01/04/2020	0.0	28/04/2020	5.8
08/02/2020	3.0	06/03/2020	0.0	02/04/2020	0.0	29/04/2020	10.6
09/02/2020	20.4	07/03/2020	1.8	03/04/2020	0.0	30/04/2020	5.8
10/02/2020	0.2	08/03/2020	1.2	04/04/2020	0.0	01/05/2020	1.8
11/02/2020	1.0	09/03/2020	6.0	05/04/2020	0.2	02/05/2020	0.0
12/02/2020	21.0	10/03/2020	1.2	06/04/2020	0.0	03/05/2020	0.2
13/02/2020	4.6	11/03/2020	0.0	07/04/2020	0.0	04/05/2020	0.0
14/02/2020	1.0	12/03/2020	0.6	08/04/2020	0.0	05/05/2020	0.0
15/02/2020	32.6	13/03/2020	4.8	09/04/2020	0.0	06/05/2020	0.0
16/02/2020	13.6	14/03/2020	0.4	10/04/2020	0.0	07/05/2020	0.0
17/02/2020	0.6	15/03/2020	0.0	11/04/2020	0.0	08/05/2020	0.0
18/02/2020	2.8	16/03/2020	0.0	12/04/2020	0.0	09/05/2020	0.0
19/02/2020	2.4	17/03/2020	0.0	13/04/2020	0.0	10/05/2020	0.0
20/02/2020	6.2	18/03/2020	1.8	14/04/2020	0.0	11/05/2020	0.0
21/02/2020	0.0	19/03/2020	0.0	15/04/2020	0.0	12/05/2020	0.0
22/02/2020	1.2	20/03/2020	0.0	16/04/2020	0.2	13/05/2020	0.0
23/02/2020	3.0	21/03/2020	0.0	17/04/2020	13.6	14/05/2020	0.0
24/02/2020	4.0	22/03/2020	0.0	18/04/2020	0.0	15/05/2020	0.0
25/02/2020	2.2	23/03/2020	0.0	19/04/2020	0.0	16/05/2020	0.0
26/02/2020	9.8	24/03/2020	0.0	20/04/2020	0.0	17/05/2020	0.0
27/02/2020	1.6	25/03/2020	0.0	21/04/2020	0.0	18/05/2020	0.0
28/02/2020	14.6	26/03/2020	0.0	22/04/2020	0.0	19/05/2020	0.0
29/02/2020	0.4	27/03/2020	0.0	23/04/2020	0.0	20/05/2020	0.0
01/03/2020	2.4	28/03/2020	0.0	24/04/2020	0.0	21/05/2020	0.0
02/03/2020	0.0	29/03/2020	0.0	25/04/2020	0.0	22/05/2020	0.0
03/03/2020	0.0	30/03/2020	0.0	26/04/2020	0.0	23/05/2020	4.4
24/05/2020	0.0	20/06/2020	4.0	17/07/2020	0.0	13/08/2020	0.2
25/05/2020	0.0	21/06/2020	0.0	18/07/2020	0.0	14/08/2020	0.2
26/05/2020	0.0	22/06/2020	0.0	19/07/2020	0.2	15/08/2020	0.0
27/05/2020	0.0	23/06/2020	0.0	20/07/2020	0.0	16/08/2020	2.2
28/05/2020	0.0	24/06/2020	0.0	21/07/2020	0.0	17/08/2020	1.0
29/05/2020	0.0	25/06/2020	0.0	22/07/2020	0.0	18/08/2020	11.2
30/05/2020	0.0	26/06/2020	4.8	23/07/2020	0.0	19/08/2020	21.6
31/05/2020	0.0	27/06/2020	2.2	24/07/2020	0.6	20/08/2020	0.0
01/06/2020	0.0	28/06/2020	0.0	25/07/2020	4.8	21/08/2020	0.8
02/06/2020	0.0	29/06/2020	0.4	26/07/2020	0.8	22/08/2020	0.0
03/06/2020	1.6	30/06/2020	2.4	27/07/2020	2.4	23/08/2020	0.8
04/06/2020	0.0	01/07/2020	0.2	28/07/2020	0.0	24/08/2020	18.6
05/06/2020	0.0	02/07/2020	1.6	29/07/2020	0.0	25/08/2020	2.2
06/06/2020	0.8	03/07/2020	0.6	30/07/2020	0.0	26/08/2020	0.0
07/06/2020	0.0	04/07/2020	0.4	31/07/2020	0.0	27/08/2020	8.0
08/06/2020	0.0	05/07/2020	0.0	01/08/2020	0.0	28/08/2020	4.0
09/06/2020	0.0	06/07/2020	0.0	02/08/2020	0.0	29/08/2020	0.2
10/06/2020	5.6	07/07/2020	3.2	03/08/2020	0.0	30/08/2020	0.0
11/06/2020	0.0	08/07/2020	0.6	04/08/2020	0.0	31/08/2020	0.0
12/06/2020	0.4	09/07/2020	0.0	05/08/2020	0.0	01/09/2020	0.0
13/06/2020	1.2	10/07/2020	0.0	06/08/2020	0.0	02/09/2020	0.2
14/06/2020	0.0	11/07/2020	0.0	07/08/2020	0.0	03/09/2020	0.0
15/06/2020	0.0	12/07/2020	0.0	08/08/2020	0.0	04/09/2020	0.8
16/06/2020	0.0	13/07/2020	9.0	09/08/2020	0.0	05/09/2020	0.0
17/06/2020	4.0	14/07/2020	0.8	10/08/2020	0.0	06/09/2020	0.0
18/06/2020	3.0	15/07/2020	0.0	11/08/2020	0.0	07/09/2020	0.0
19/06/2020	0.0	16/07/2020	0.0	12/08/2020	0.0	08/09/2020	0.0
09/09/2020	0.0	06/10/2020	4.0	02/11/2020	5.2	29/11/2020	0.0
10/09/2020	0.0	07/10/2020	3.0	03/11/2020	0.0	30/11/2020	0.0
11/09/2020	0.0	08/10/2020	0.8	04/11/2020	0.0	01/12/2020	0.0
12/09/2020	0.0	09/10/2020	0.4	05/11/2020	0.0	02/12/2020	3.8
13/09/2020	0.0	10/10/2020	2.6	06/11/2020	0.2	03/12/2020	15.4
14/09/2020	0.0	11/10/2020	0.0	07/11/2020	0.0	04/12/2020	2.4
15/09/2020	0.0	12/10/2020	5.6	08/11/2020	0.2	05/12/2020	1.2
16/09/2020	0.0	13/10/2020	1.6	09/11/2020	11.6	06/12/2020	0.2
17/09/2020	0.0	14/10/2020	0.0	10/11/2020	0.2	07/12/2020	1.6
18/09/2020	0.0	15/10/2020	0.0	11/11/2020	9.2	08/12/2020	0.4
19/09/2020	0.0	16/10/2020	0.0	12/11/2020	0.0	09/12/2020	0.0
20/09/2020	0.0	17/10/2020	0.0	13/11/2020	1.2	10/12/2020	9.4
21/09/2020	0.0	18/10/2020	0.0	14/11/2020	30.8	11/12/2020	0.4
22/09/2020	1.4	19/10/2020	2.4	15/11/2020	6.0	12/12/2020	1.0
23/09/2020	8.4	20/10/2020	11.6	16/11/2020	0.2	13/12/2020	13.4
24/09/2020	5.4	21/10/2020	3.8	17/11/2020	0.0	14/12/2020	9.2
25/09/2020	0.0	22/10/2020	0.0	18/11/2020	0.8	15/12/2020	0.0
26/09/2020	0.0	23/10/2020	1.4	19/11/2020	0.0	16/12/2020	3.6
27/09/2020	0.0	24/10/2020	24.0	20/11/2020	1.6	17/12/2020	1.6
28/09/2020	0.2	25/10/2020	6.2	21/11/2020	0.2	18/12/2020	8.0
29/09/2020	0.0	26/10/2020	1.2	22/11/2020	0.0	19/12/2020	9.2
30/09/2020	9.2	27/10/2020	7.4	23/11/2020	0.0	20/12/2020	10.2
01/10/2020	24.6	28/10/2020	3.6	24/11/2020	0.0	21/12/2020	2.4
02/10/2020	36.6	29/10/2020	3.0	25/11/2020	0.6	22/12/2020	7.8
03/10/2020	23.2	30/10/2020	1.2	26/11/2020	0.6	23/12/2020	5.4
04/10/2020	4.2	31/10/2020	16.4	27/11/2020	0.4	24/12/2020	0.0
05/10/2020	3.4	01/11/2020	6.2	28/11/2020	0.0	25/12/2020	0.0

26/12/2020	21.8	22/01/2021	0.2	18/02/2021	6.0	17/03/2021	0.4
27/12/2020	0.0	23/01/2021	0.0	19/02/2021	2.4	18/03/2021	0.4
28/12/2020	9.6	24/01/2021	7.8	20/02/2021	0.6	19/03/2021	0.0
29/12/2020	0.0	25/01/2021	0.0	21/02/2021	0.0	20/03/2021	0.0
30/12/2020	0.0	26/01/2021	2.6	22/02/2021	1.2	21/03/2021	0.0
31/12/2020	0.0	27/01/2021	9.8	23/02/2021	0.0	22/03/2021	0.0
01/01/2021	0.6	28/01/2021	8.8	24/02/2021	0.0	23/03/2021	0.0
02/01/2021	0.0	29/01/2021	5.2	25/02/2021	0.6	24/03/2021	0.0
03/01/2021	0.2	30/01/2021	1.2	26/02/2021	0.0	25/03/2021	1.4
04/01/2021	0.2	31/01/2021	4.2	27/02/2021	0.0	26/03/2021	1.8
05/01/2021	1.0	01/02/2021	4.8	28/02/2021	0.0	27/03/2021	0.0
06/01/2021	0.4	02/02/2021	5.0	01/03/2021	0.0	28/03/2021	0.0
07/01/2021	0.0	03/02/2021	4.6	02/03/2021	0.4	29/03/2021	0.0
08/01/2021	0.2	04/02/2021	14.6	03/03/2021	3.8	30/03/2021	0.0
09/01/2021	0.0	05/02/2021	1.2	04/03/2021	0.0	31/03/2021	0.0
10/01/2021	0.0	06/02/2021	2.0	05/03/2021	0.0	01/04/2021	0.0
11/01/2021	3.6	07/02/2021	0.6	06/03/2021	0.0	02/04/2021	0.0
12/01/2021	2.6	08/02/2021	0.0	07/03/2021	0.0	03/04/2021	0.0
13/01/2021	3.6	09/02/2021	0.2	08/03/2021	0.0	04/04/2021	0.0
14/01/2021	3.6	10/02/2021	0.4	09/03/2021	0.0	05/04/2021	0.0
15/01/2021	7.2	11/02/2021	0.0	10/03/2021	8.2	06/04/2021	0.2
16/01/2021	1.2	12/02/2021	0.0	11/03/2021	1.2	07/04/2021	0.0
17/01/2021	0.0	13/02/2021	0.0	12/03/2021	12.6	08/04/2021	0.0
18/01/2021	5.0	14/02/2021	10.0	13/03/2021	0.0	09/04/2021	0.0
19/01/2021	6.4	15/02/2021	1.8	14/03/2021	0.4	10/04/2021	0.0
20/01/2021	14.4	16/02/2021	3.4	15/03/2021	0.0	11/04/2021	0.4
21/01/2021	0.0	17/02/2021	3.4	16/03/2021	0.0	12/04/2021	0.0
13/04/2021	0.0	10/05/2021	0.0	06/06/2021	0.0	03/07/2021	10.6
14/04/2021	0.0	11/05/2021	0.2	07/06/2021	0.0	04/07/2021	1.6
15/04/2021	0.0	12/05/2021	1.6	08/06/2021	0.0	05/07/2021	17.0
16/04/2021	0.0	13/05/2021	0.0	09/06/2021	0.0	06/07/2021	1.4
17/04/2021	0.0	14/05/2021	1.8	10/06/2021	0.0	07/07/2021	1.2
18/04/2021	0.0	15/05/2021	8.6	11/06/2021	0.0	08/07/2021	0.2
19/04/2021	0.0	16/05/2021	14.4	12/06/2021	0.0	09/07/2021	1.2
20/04/2021	0.0	17/05/2021	25.8	13/06/2021	0.0	10/07/2021	0.4
21/04/2021	0.0	18/05/2021	1.6	14/06/2021	0.0	11/07/2021	6.0
22/04/2021	0.0	19/05/2021	0.0	15/06/2021	0.0	12/07/2021	8.8
23/04/2021	0.0	20/05/2021	2.6	16/06/2021	6.2	13/07/2021	0.0
24/04/2021	0.0	21/05/2021	1.8	17/06/2021	36.0	14/07/2021	0.0
25/04/2021	0.0	22/05/2021	4.0	18/06/2021	30.4	15/07/2021	0.0
26/04/2021	0.0	23/05/2021	12.0	19/06/2021	0.8	16/07/2021	0.0
27/04/2021	0.0	24/05/2021	1.4	20/06/2021	3.8	17/07/2021	0.0
28/04/2021	2.6	25/05/2021	2.8	21/06/2021	8.2	18/07/2021	0.0
29/04/2021	0.0	26/05/2021	0.0	22/06/2021	0.8	19/07/2021	0.0
30/04/2021	0.0	27/05/2021	0.0	23/06/2021	0.0	20/07/2021	0.0
01/05/2021	0.4	28/05/2021	0.0	24/06/2021	1.2	21/07/2021	0.0
02/05/2021	0.0	29/05/2021	0.0	25/06/2021	0.2	22/07/2021	0.0
03/05/2021	8.4	30/05/2021	0.0	26/06/2021	0.0	23/07/2021	3.2
04/05/2021	0.2	31/05/2021	0.0	27/06/2021	24.0	24/07/2021	5.4
05/05/2021	7.2	01/06/2021	0.0	28/06/2021	24.6	25/07/2021	9.2
06/05/2021	0.0	02/06/2021	0.0	29/06/2021	0.8	26/07/2021	4.6
07/05/2021	10.6	03/06/2021	1.6	30/06/2021	0.0	27/07/2021	3.4
08/05/2021	0.2	04/06/2021	6.4	01/07/2021	6.2	28/07/2021	2.8
09/05/2021	0.2	05/06/2021	0.0	02/07/2021	0.6	29/07/2021	4.2
30/07/2021	1.4	26/08/2021	0.0	22/09/2021	0.0	19/10/2021	23.2
31/07/2021	6.6	27/08/2021	0.0	23/09/2021	0.0	20/10/2021	23.4
01/08/2021	8.0	28/08/2021	0.0	24/09/2021	0.2	21/10/2021	0.0
02/08/2021	0.0	29/08/2021	0.0	25/09/2021	0.0	22/10/2021	0.0
03/08/2021	0.0	30/08/2021	0.0	26/09/2021	11.8	23/10/2021	0.0
04/08/2021	0.0	31/08/2021	0.0	27/09/2021	2.4	24/10/2021	0.6
05/08/2021	8.4	01/09/2021	0.0	28/09/2021	19.6	25/10/2021	2.0
06/08/2021	25.8	02/09/2021	0.0	29/09/2021	0.0	26/10/2021	0.0
07/08/2021	6.8	03/09/2021	0.0	30/09/2021	15.2	27/10/2021	0.0
08/08/2021	16.8	04/09/2021	0.0	01/10/2021	1.4	28/10/2021	7.0
09/08/2021	0.8	05/09/2021	0.0	02/10/2021	41.0	29/10/2021	8.0
10/08/2021	0.0	06/09/2021	0.0	03/10/2021	8.6	30/10/2021	13.3
11/08/2021	0.0	07/09/2021	0.0	04/10/2021	30.2	31/10/2021	4.8
12/08/2021	0.0	08/09/2021	2.2	05/10/2021	0.0	01/11/2021	0.0
13/08/2021	0.0	09/09/2021	2.2	06/10/2021	0.0	02/11/2021	0.0
14/08/2021	0.0	10/09/2021	0.0	07/10/2021	0.0	03/11/2021	0.2
15/08/2021	0.0	11/09/2021	0.0	08/10/2021	0.0	04/11/2021	0.0
16/08/2021	0.0	12/09/2021	0.0	09/10/2021	0.2	05/11/2021	0.0
17/08/2021	0.0	13/09/2021	5.4	10/10/2021	0.0	06/11/2021	0.2
18/08/2021	0.0	14/09/2021	5.8	11/10/2021	0.0	07/11/2021	0.0
19/08/2021	0.0	15/09/2021	0.0	12/10/2021	0.0	08/11/2021	0.0
20/08/2021	0.0	16/09/2021	0.0	13/10/2021	0.0	09/11/2021	0.2
21/08/2021	0.6	17/09/2021	0.0	14/10/2021	0.0	10/11/2021	0.4
22/08/2021	0.0	18/09/2021	0.0	15/10/2021	0.0	11/11/2021	0.8
23/08/2021	0.0	19/09/2021	9.4	16/10/2021	0.2	12/11/2021	1.0
24/08/2021	0.0	20/09/2021	0.0	17/10/2021	0.0	13/11/2021	0.0
25/08/2021	0.0	21/09/2021	0.0	18/10/2021	3.2	14/11/2021	0.0
15/11/2021	0.0	12/12/2021	0.8	08/01/2022	9.4	04/02/2022	1.2
16/11/2021	0.0	13/12/2021	0.0	09/01/2022	0.0	05/02/2022	1.4
17/11/2021	0.2	14/12/2021	0.0	10/01/2022	0.2	06/02/2022	1.0
18/11/2021	0.0	15/12/2021	0.0	11/01/2022	0.4	07/02/2022	0.0
19/11/2021	0.0	16/12/2021	0.0	12/01/2022	0.0	08/02/2022	0.0
20/11/2021	0.0	17/12/2021	0.0	13/01/2022	0.0	09/02/2022	1.2
21/11/2021	0.0	18/12/2021	0.0	14/01/2022	0.2	10/02/2022	0.0
22/11/2021	0.0	19/12/2021	0.0	15/01/2022	0.2	11/02/2022	0.0
23/11/2021	0.0	20/12/2021	0.0	16/01/2022	0.0	12/02/2022	0.0
24/11/2021	0.0	21/12/2021	0.0	17/01/2022	0.0	13/02/2022	25.4
25/11/2021	0.0	22/12/2021	0.0	18/01/2022	0.0	14/02/2022	0.0
26/11/2021	5.0	23/12/2021	0.4	19/01/2022	0.2	15/02/2022	6.4
27/11/2021	0.0	24/12/2021	9.8	20/01/2022	0.0	16/02/2022	0.2
28/11/2021	0.2	25/12/2021	19.0	21/01/2022	0.0	17/02/2022	5.0
29/11/2021	0.0	26/12/2021	2.8	22/01/2022	0.0	18/02/2022	0.2
30/11/2021	1.4	27/12/2021	10.6	23/01/2022	0.0	19/02/2022	6.4
01/12/2021	1.0	28/12/2021	5.0	24/01/2022	0.0	20/02/2022	1.2
02/12/2021	0.4	29/12/2021	2.0	25/01/2022	0.0	21/02/2022	0.0
03/12/2021	2.6	30/12/2021	2.0	26/01/2022	0.0	22/02/2022	0.0
04/12/2021	0.8	31/12/2021	0.4	27/01/2022	0.0	23/02/2022	1.8
05/12/2021	0.0	01/01/2022	5.2	28/01/2022	0.4	24/02/2022	0.6
06/12/2021	9.8	02/01/2022	3.2	29/01/2022	0.0	25/02/2022	0.0
07/12/2021	19.6	03/01/2022	0.0	30/01/2022	0.4	26/02/2022	0.0
08/12/2021	0.0	04/01/2022	0.4	31/01/2022	0.0	27/02/2022	0.0
09/12/2021	9.8	05/01/2022	0.0	01/02/2022	0.0	28/02/2022	4.6
10/12/2021	0.0	06/01/2022	2.4	02/02/2022	0.2	01/03/2022	18.0
11/12/2021	0.8	07/01/2022	2.8	03/02/2022	0.6	02/03/2022	1.6

03/03/2022	0.6	30/03/2022	1.0	26/04/2022	0.0
04/03/2022	0.0	31/03/2022	0.0	27/04/2022	0.0
05/03/2022	0.0	01/04/2022	0.0	28/04/2022	0.0
06/03/2022	0.0	02/04/2022	0.0	29/04/2022	0.0
07/03/2022	0.0	03/04/2022	1.4	30/04/2022	0.0
08/03/2022	0.0	04/04/2022	0.6		
09/03/2022	0.2	05/04/2022	0.2		
10/03/2022	0.0	06/04/2022	6.2		
11/03/2022	11.8	07/04/2022	0.2		
12/03/2022	2.8	08/04/2022	0.0		
13/03/2022	0.8	09/04/2022	0.0		
14/03/2022	0.4	10/04/2022	0.0		
15/03/2022	0.2	11/04/2022	0.0		
16/03/2022	6.2	12/04/2022	0.8		
17/03/2022	0.2	13/04/2022	0.0		
18/03/2022	0.0	14/04/2022	0.0		
19/03/2022	0.0	15/04/2022	0.0		
20/03/2022	0.0	16/04/2022	0.0		
21/03/2022	0.0	17/04/2022	0.0		
22/03/2022	0.0	18/04/2022	0.0		
23/03/2022	0.0	19/04/2022	0.0		
24/03/2022	0.0	20/04/2022	0.0		
25/03/2022	0.0	21/04/2022	0.0		
26/03/2022	0.0	22/04/2022	0.0		
27/03/2022	0.0	23/04/2022	0.0		
28/03/2022	0.0	24/04/2022	0.0		
29/03/2022	0.0	25/04/2022	0.0		

Appendix K

Farm Water Usage Calculation

Dedisham Farm

Lactating Cow	104.5	l/day
Dry Dairy Cow	20	l/day
Calves	5	l/day
Heifer	20	l/day

	No.	Lactating Water Use Per Year	Dry Water Use Per Year	Calves Water Use Per Year	Heifer Water Use Per Year	Total Water Use per Year	
No. Dairy Cows	433	14,932,005.00	303,100.00			15,235,105.00	
No. Calves	125			228,125.00		228,125.00	
No. of Heifers	130				949,000.00	949,000.00	
					Total	15,463,230.00	per year
						42,365.01	per day

Appendix L

Farm Meter Readings

Southern Water Meter Readings

Date	No of Days	Days Accumulated	SW Meter	Water use	Daily Ave	Water use accumulated (Site meter)
27 July 2022	0	0	0	0	0	0
05 August 2022	9	9	138	138	15	138
15 August 2022	10	19	457	319	32	457
09 September 2022	25	44	1052	596	24	1052
21 September 2022	12	56	1339	287	24	1339

Southern Water Meter Readings



27th July 2022



5th August 2022



15th August 2022



21st September 2022



21st September 2022

Onsite Meter Readings

Date	No of Days	Days Accumulated	On site meter	Water use	Daily Ave	Water use accumulated (Site meter)
12 April 2022	0	0	1003.00	0	0	0
20 April 2022	8	8	1234.19	231	29	231
26 April 2022	6	14	1400.34	166	28	397
10 May 2022	14	28	1438.70	38	3	436
11 May 2022	1	29	1487.15	48	48	484
13 May 2022	2	31	1543.41	56	28	540
16 May 2022	3	34	1633.93	91	30	631
23 May 2022	7	41	2006.27	372	53	1003
04 June 2022	12	53	2384.92	379	32	1382
13 June 2022	9	62	2633.94	249	28	1631
20 June 2022	7	69	2885.43	251	36	1882
04 July 2022	14	83	3352.06	467	33	2349
14 July 2022	10	93	3690.02	338	34	2687
28 July 2022	14	107	4050.31	360	26	3047

Onsite Meter Readings



20th April 2022



26th April 2022



10th May 2022



11th May 2022



13th May 2022



16th May 2022



23rd May 2022



4th June 2022



13th June 2022



20th June 2022



4th July 2022



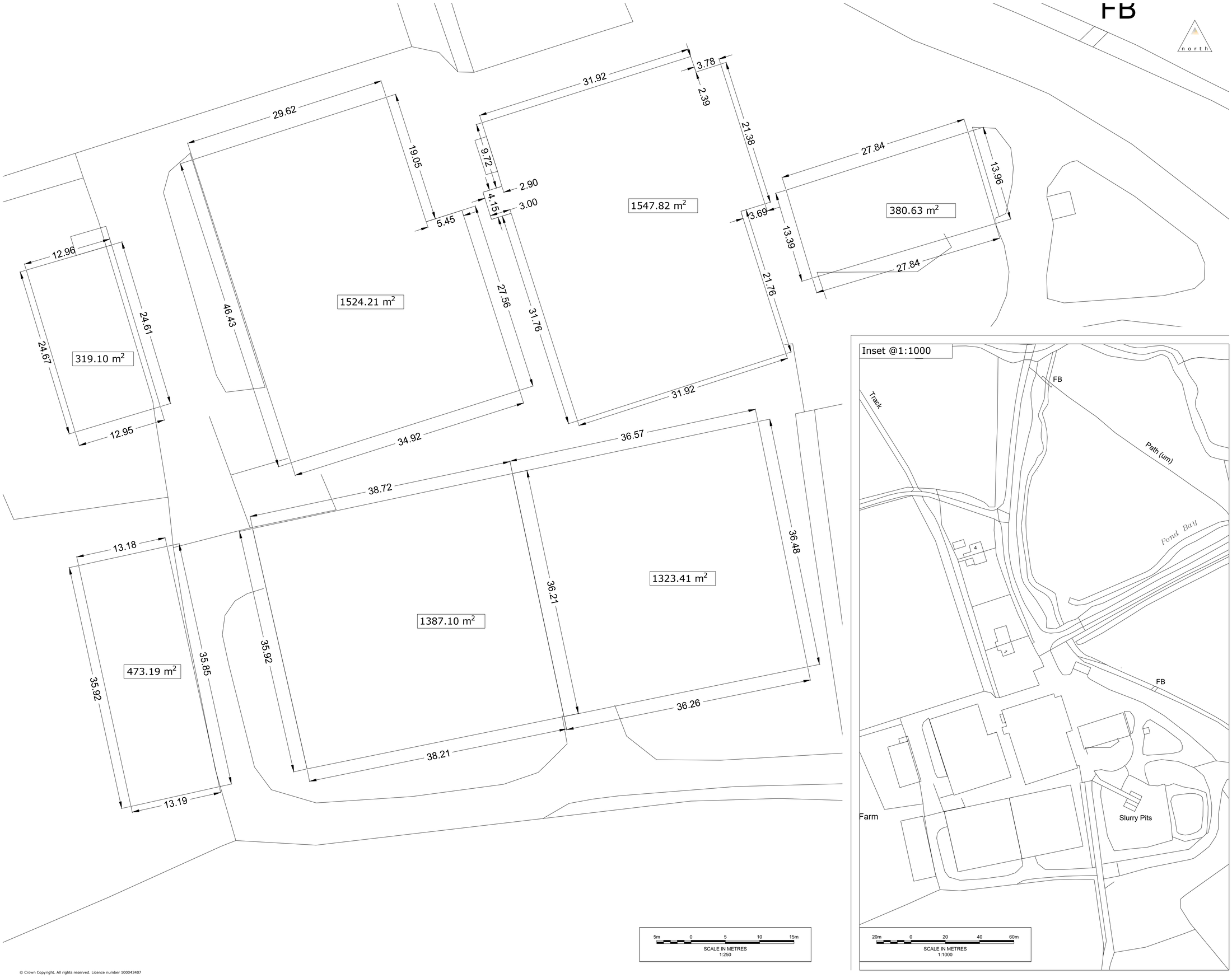
14th July 2022



28th July 2022

Appendix M

Drawing 2111011-SK-01



C	Updated to exclude containers and tanks from area calculations, barn locations updated	MHi	MHi	NJ	10/10/2022
B	Updated to include OS base	MHi	MHi	NJ	04/08/2022
A	First Issue	MHi	MHi	NJ	19/07/2022
Revision Notes:		Drn	Chk	App	Date

Drawing Status:

DRAFT
NOT FOR CONSTRUCTION

motion

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0118 206 2930

Golden Cross House
8 Duncannon Street
London
WC2N 4JF
020 7031 8141

www.motion.co.uk

Client:
Reside

Project:
Horsham, Water Neutrality

Title:
Site Layout Dimensions

Scale: Varies	Size: A1	Project No: 2111011

Drawing:	Revision:
2111011-SK-01	C

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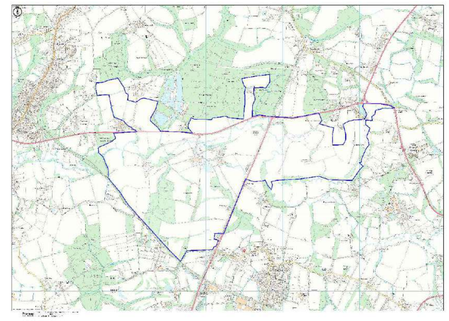
C:\Users\mhighate\Motion\Staff\Site - Irewat 2111011\Drawings\2111011-SK-01C.dwg

Appendix N

Drawing 3162-A-1005-PR



Extract of full site ownership – NTS

KEY

- SITE BOUNDARY
- SITE OWNERSHIP
- TOTAL ROOF SURFACE AREA 2930.99m²
- EXISTING EXTERNAL WALL
- RAIN WATER HARVESTING TANK

Dedisham Farm

Slurry Pits

Pond

FB

PUMP HOUSE

N

0 m 10 m 20 m 30 m 40 m 50 m 100 m

Scale

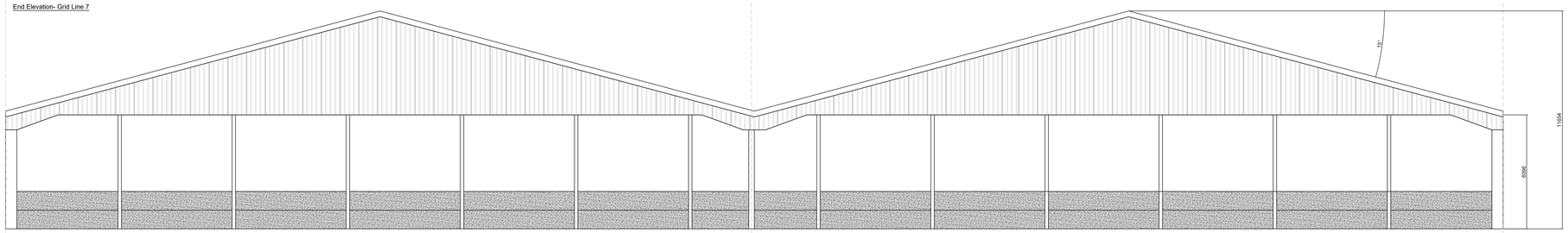
reside.

Project: Land East of Dedisham Farm, Horsham					
Drawing Title: Site Plan					
Scale	Revision	Drawn	Check	Date	
1:500 @ A1	E F G1	FH FH PRB	TJ TJ	05.10.22 11.10.22 18.09.23	
Project No	Class	Dwg No		Status	Rev
	A	1005		PR	G

CLASS: C – COLOURED, A – BLACK & WHITE
STATUS: SK – SKETCH; PR – PRELIMINARY; PC – PLANNING; WD – WORKING DRAWING

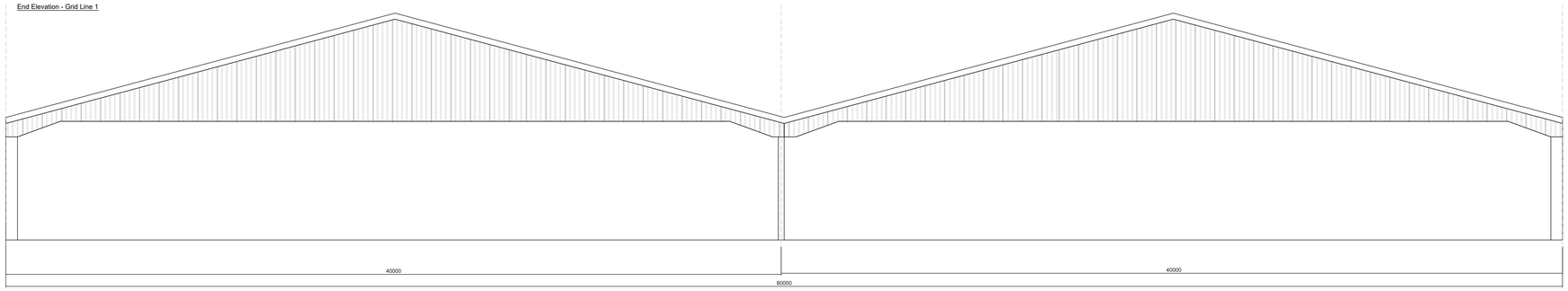
C B A

End Elevation- Grid Line 7



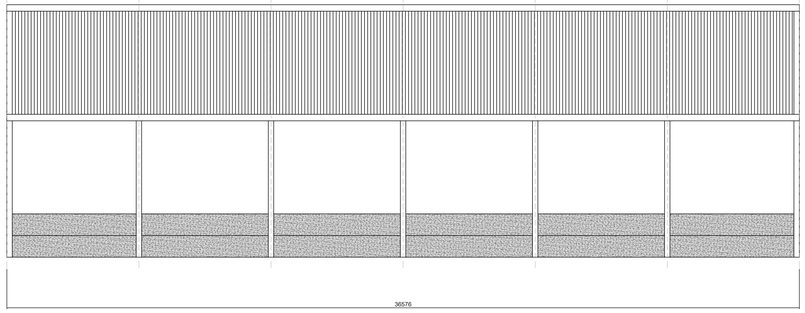
A B C

End Elevation - Grid Line 1



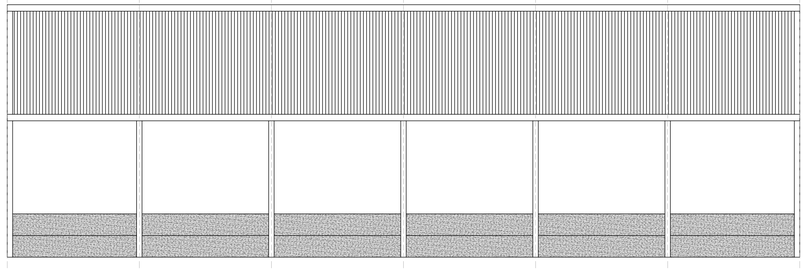
7 6 5 4 3 2 1

Side Elevation - Grid Line A



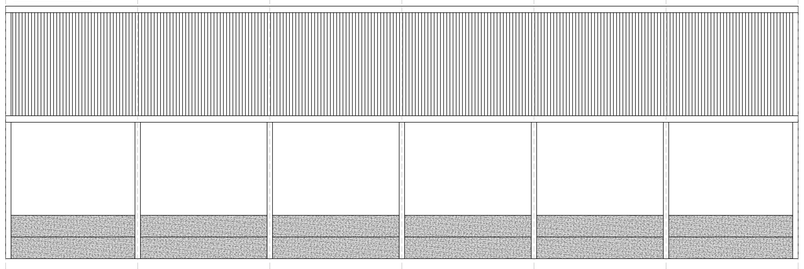
1 2 3 4 5 6 7

Side Elevation - Grid Line C



1 2 3 4 5 6 7

Inner Elevation - Grid Line B
Looking through Line C



Roofing:

Fibre Cerment - Natural Grey

Side & end cladding:

Side - 2m Concrete panels

End - Box Profile Sheeting

Scale Bar (Metres)

0 1 2 3 4 5 10

*Note: Wind bracings are not shown - Drawing for planning purposes only

Revision	Date	Description

Elevations

FOWLER&GILBERT
Agricultural & Industrial Buildings

Client Name:	Phillips
Drawing number:	ST-23630-02
Drawn by:	FLA

SCALE

1:100 @ A1



Roofing:

Fibre Cerment - Natural Grey

Side & end cladding:

Side - 2m Concrete panels

End - Box Profile Sheeting

Scale Bar (Metres)

0 1 2 3 4 5 10

*Note: Wind bracings are not shown - Drawing for planning purposes only

Revision	Date	Description

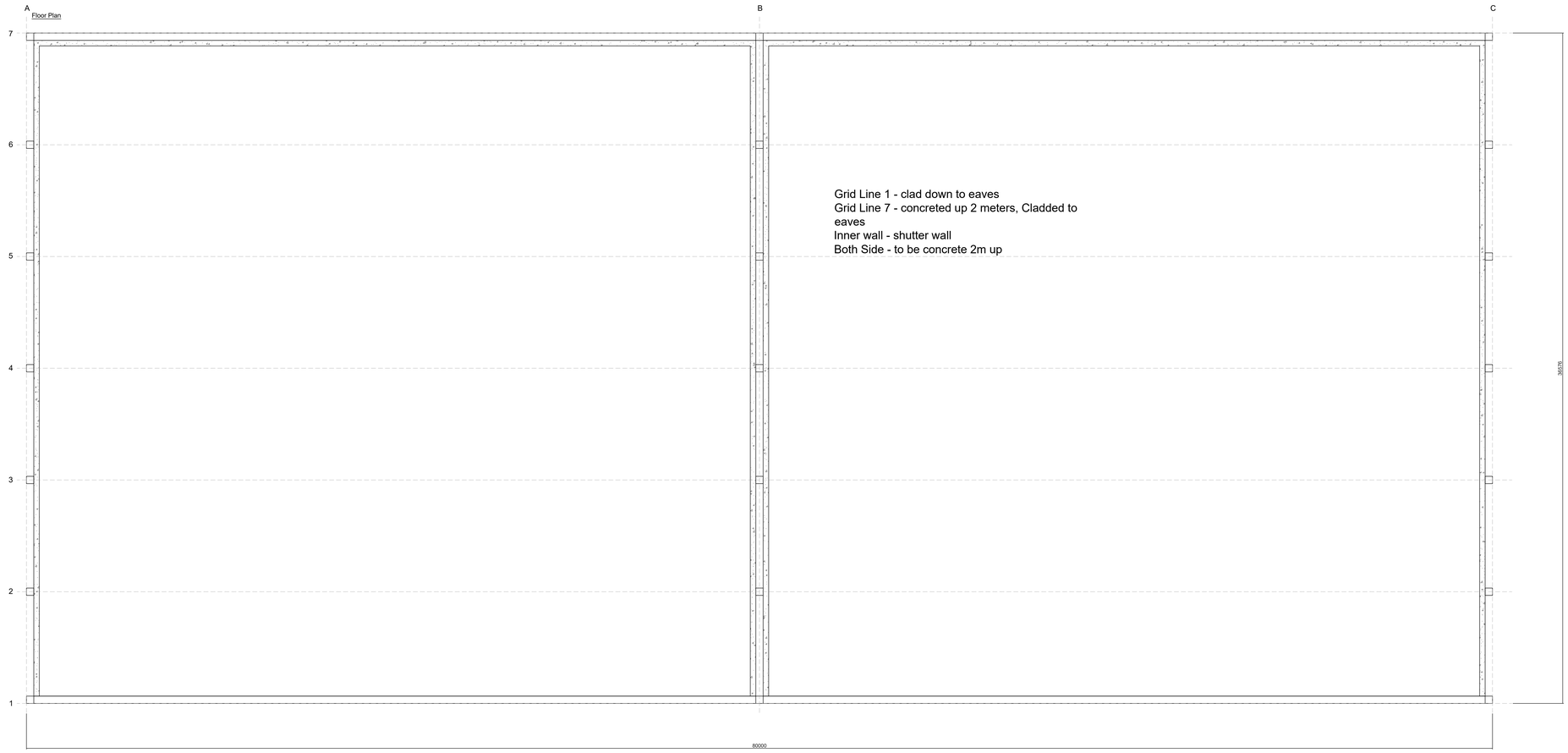
Site Plan

FOWLER&GILBERT
Agricultural & Industrial Buildings

Client Name:	Phillips
Drawing number:	ST-23630-01
Drawn by:	FLA

SCALE

1:100 @ A1



Roofing:

Fibre Cerment - Natural Grey

Side & end cladding:

Side - 2m Concrete panels

End - Box Profile Sheeting

Scale Bar (Metres)

0 1 2 3 4 5 10

*Note: Wind bracings are not shown - Drawing for planning purposes only

Revision	Date	Description

Floor Plan

FOWLER&GILBERT
Agricultural & Industrial Buildings

Client Name:	Phillips
Drawing number:	ST-23630-03
Drawn by:	FLA

SCALE

1:100 @ A1

Appendix O

Farm Rainwater Harvesting Calculations

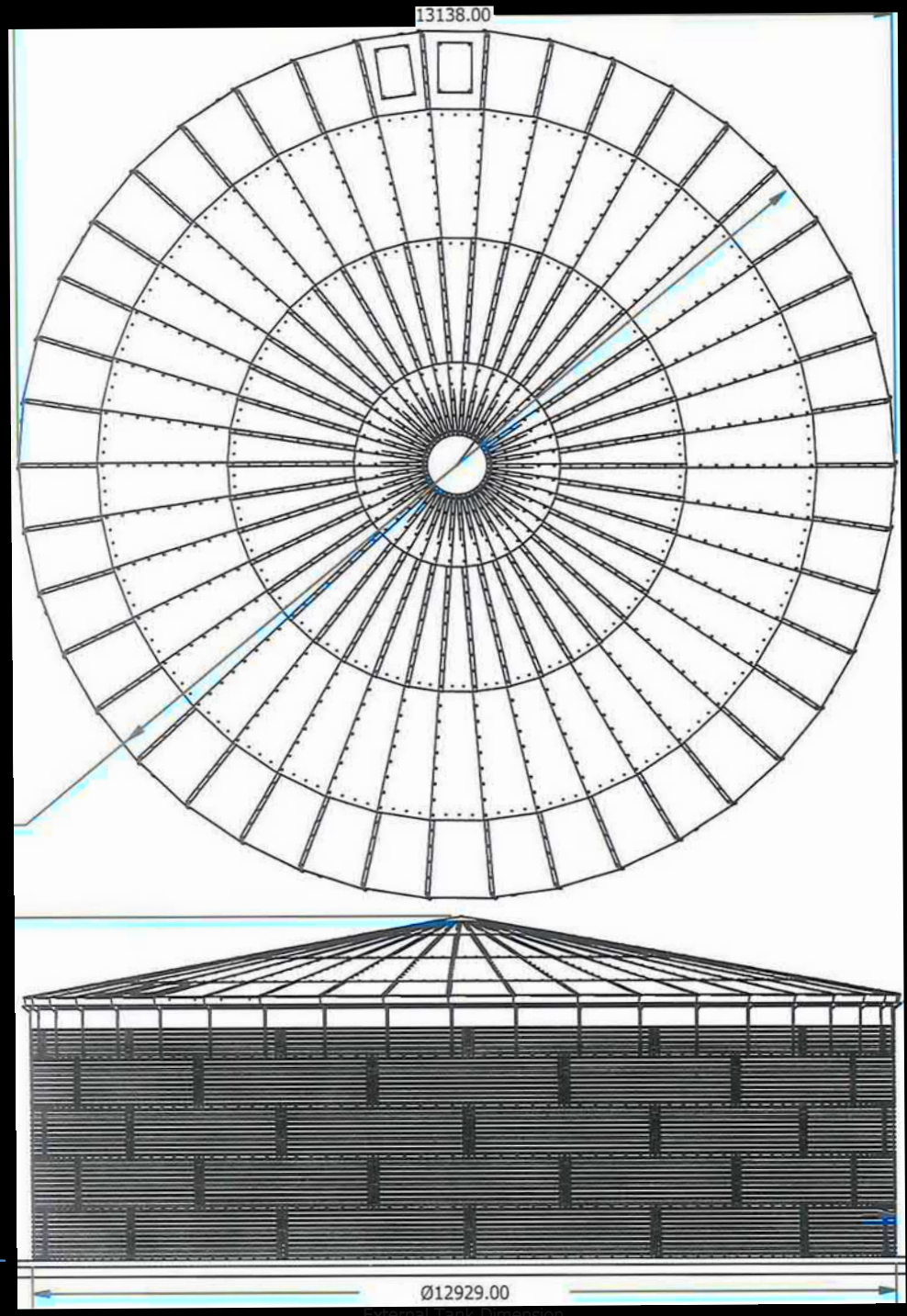
Rainwater Harvesting System (BS8515 - Intermediate Approach)

AAR	858	Average Annual Rainfall
e	0.9	Yield Coefficient
h	0.9	Hydraulic Filter Efficiency

Plot No.	Roof Area ($m^{2)}$	9.6% Annual Rainwater Yield (litres)	9.6% Annual Water Demand (litres)	Tank Size (litres)	Daily Yield	Daily Demand
Farm	7,105.00	474,031.96	1,484,470.08	513,000	13,528.31	42,365.01

Appendix P

Rainwater Harvesting Tank Specification



Evenproducts

Customer:
Evenproducts Standard Specification

Project:
42ft Tank 5 High with Steel Roo

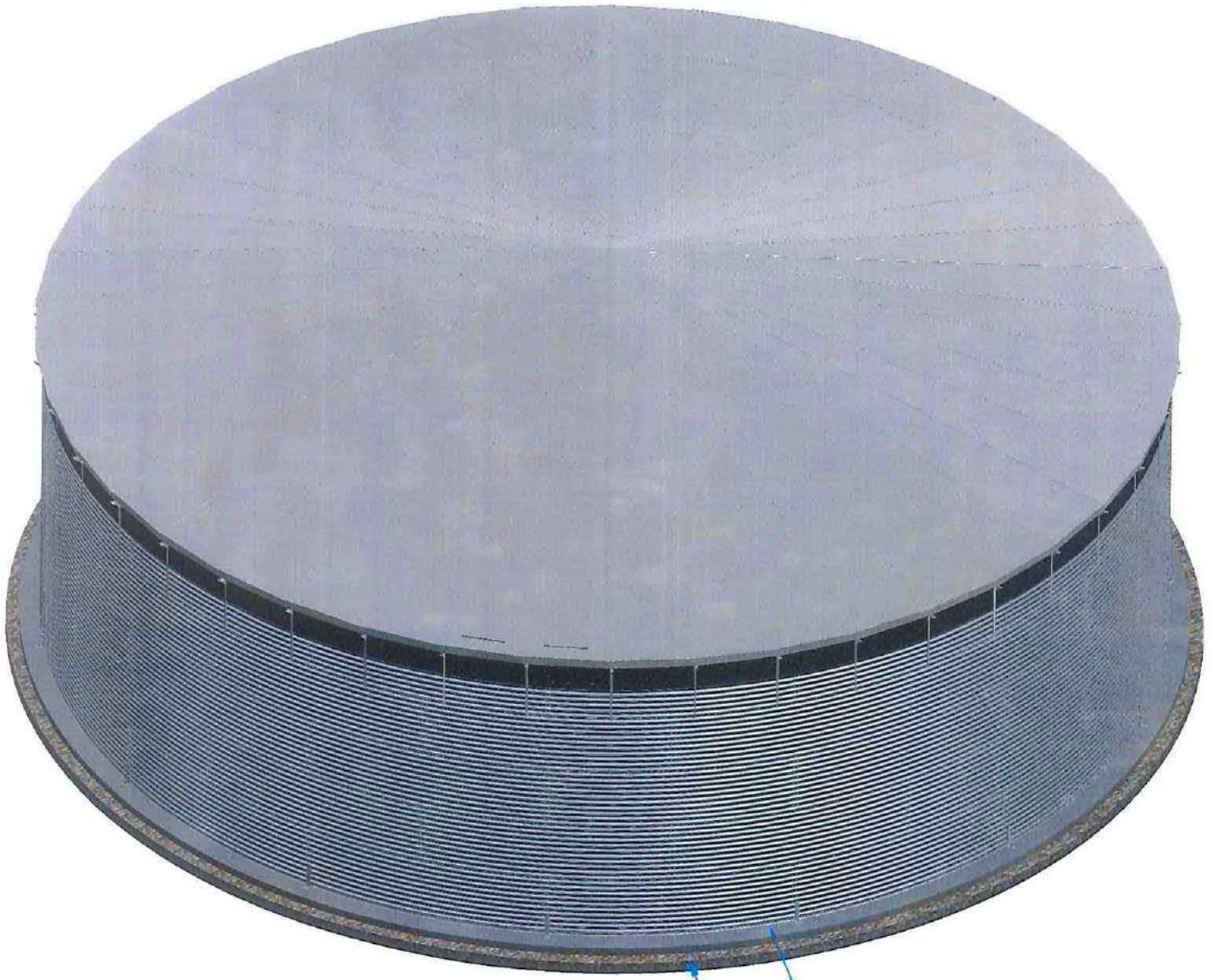
Date:	Scale:	Drawn By:
19/07/17	1/100	CP

Drawing Reference:	Drawing Number:
102	2021-3

19/07/17

Notes:
All dimensions in mm
All tank and roof dimensions are estimated
To be read in conjunction with drawing No: 102/2021-3:1

Assembled Tank and Roof



42ft x 5 High Tank Volume
Nominal Total Capacity m3 - 490.46
Capacity Litres - 490460

EVENPRODUCTS
water for life
Evenproducts Limited
The Oxstalls Evesham Worcestershire
WR11 4TU United Kingdom
Tel: 01386 760950 Fax: 01386 423769
e-mail: sales@evenproducts.com

Customer:

Evenproducts Standard Specification

Project:

42ft Tank 5 High with Steel Roof

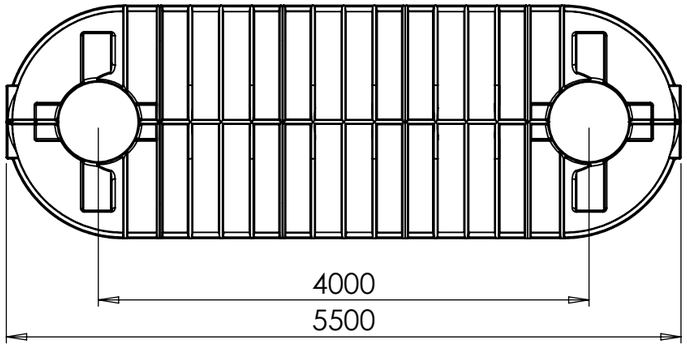
Date:	Scale:	Drawn By:
19/07/17	1/68	CP

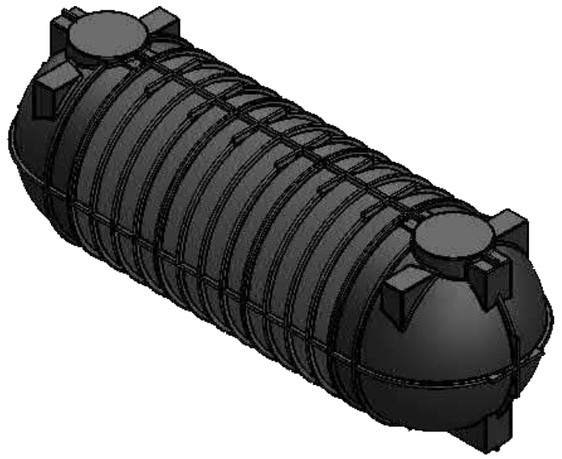
Drawing Reference:	Drawing Number:
102	2021-3:1

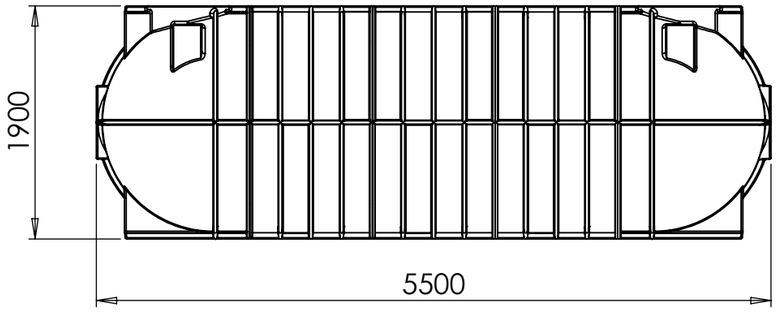
Date:	Amendment:	Revision:
19/07/17	First Drawing	A

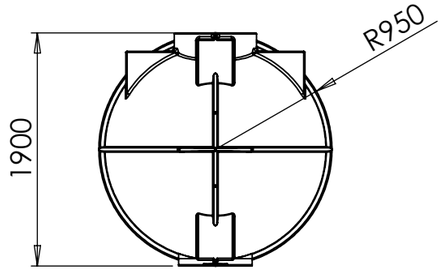
Notes:

- All dimensions in mm
- All tank and roof dimensions are estimated
- To be read in conjunction with drawing No: 102/2021-3









Rev	Date	Approver	Change Comment
01	21 Jun 2016	AGL	Released
A	21 Jun 2016	AGL	Initial release

Customer Approval Signature:

Date

NOTES

THERE MAY BE SLIGHT VARIATIONS IN MANIFOLD CENTRES DUE TO MANUFACTURING AND ASSEMBLY TOLERANCES

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETRES

ANGLES ±X.X°
2PL ±X.XX 3 PL ±X.XXX

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Scale:	Date:	Drawn:
1:50	21/06/2016	AGL

Title:
R Harrison

Drawing Number:

Internal Ref:

Client: Tim Harrison