



**PERSIMMON HOMES THAMES VALLEY
HAMPTON PARK
LITTLEHAMPTON**

**PHASE 4 - SURFACE WATER DRAINAGE
(LU/184/21/DOC - DISCHARGE OF
CONDITION 10)**

SEPTEMBER 2021



the journey is the reward

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Persimmon Homes Thames Valley

Hampton Park

Littlehampton

Phase 4 - Surface Water Drainage (LU/184/21/DOC - Discharge of Condition 10)

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1 Introduction

- 1.1 Mayer Brown Ltd (MBL) has been commissioned by Persimmon Homes Thames Valley (PHTV) to compile this report to facilitate the discharge of planning Condition 10 for their outlined approved development (**Arun DC reference LU/47/11/**) for up to 1,260 residential dwellings, B1 employment use, Class A facilities, a 100 bed hotel, 60 bed care home, primary school, plus many other facilities and improvements to the local infrastructure. Refer to Appendix A for the Site Location.

Planning Background

- 1.2 Outline Planning Consent was granted in 2011, under Arun District Council planning reference LU/47/11, which includes Condition 10 that relates to surface water drainage.
- 1.3 Conditional planning approval was granted for a reserved matters scheme on 7th May 2021 for 46 new dwellings under Arun District Council planning reference **LU/178/20/RES**. The approved layout, external works layout and planting scheme are contained in Appendix B of this report.
- 1.4 On the back of the conditional approval an application was submitted by PHTV to Arun DC to discharge a total of 10 number outline planning conditions under reference number **LU/184/21/DOC**, which includes:

- Condition 10 - Surface water drainage,

(Note: PHTV refer to the application reserved matters area as Phase 2B, MBL refer to the reserved matters area as Phase 4)

Purpose of this Drainage Report

- 1.5 The purpose of this report is to provide sufficient information to discharge outline planning conditions 10 and to demonstrate the reserved matters application for 46 new dwellings can be safely drained of surface water run-off and will not cause flooding to itself or increase the risk of flooding to adjacent / downstream areas.

Proposed Development

- 1.6 The proposed Phase 4 application site for **46 new dwellings** covers approximately **1.47 hectares** over a long relatively narrow area that stretches along the western boundary of the central wetland area. Refer to the approved coloured plan, external works plan and planting plan in Appendix B.

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- 1.7 The shape and position of the development is such that it requires a number of different outfall locations so has been subdivided into three drainage catchments, which are shown in Appendix E:
- » **Catchment 01:** 0.359 Hectares, Discharges to Phase 2 Existing Drainage Network
 - » **Catchment 02:** 0.254 Hectares, Discharges to Phase 2 Existing Drainage Network
 - » **Catchment 03:** 0.857 Hectares, Discharges to a new outfall into Central Wetland
- 1.8 These specific catchments are discussed in more detail within the report.

2 Outline Planning Conditions 10

2.1 Outline Planning Consent was granted in 2011, under Arun District Council planning reference LU/47/11, which includes Condition 10 that relates to surface water drainage. See below

Condition 10: *No development shall begin until a fully detailed surface water drainage scheme for that phase of the development, based on sustainable drainage principles and designed in accordance with the SUDS strategy for the whole development, has been submitted to and approved in writing by the Local Planning Authority. It should be demonstrated how each detailed scheme will contribute to delivering, and link into, the surface water drainage strategy for the site as a whole.*

- *The SUDS shall be designed to attenuate the 1 in 100 year storm event (plus climate change allowance of 30% in accordance with DEFRA's National Standards for Sustainable Drainage Systems).*
- *No infiltration of surface water drainage shall occur within ground affected by contamination unless suitable remediation is undertaken.*
- *Each detailed scheme should include a timetable for its implementation; and provide a management and maintenance plan in the form of a site specific Maintenance Manual for the SUDS system for the lifetime of the development. This shall include the arrangements for adoption by any public authority or statutory undertaker or details of the financial management of the scheme throughout its lifetime.*

Elements of the scheme serving any particular phase shall subsequently be implemented in accordance with the approved details (unless otherwise agreed with the Local Planning Authority) prior to the occupation of any dwellings in that phase and no building in that phase of the development shall be occupied until the surface water drainage scheme has been fully implemented in accordance with the approved details.

Reason: To ensure that the proposed development is satisfactorily drained to prevent the increased risk of flooding, and improve and protect water quality, habitat and amenity, and ensure future maintenance of these in accordance with national guidance and policies GEN7, GEN9 of the Arun District Local Plan.

3 Surface Water Catchments 01 & 02

3.1 As explained in the introduction the shape and position of the development is such that it requires a number of different outfall locations and, as such, it has been subdivided into three drainage catchments that which are shown in Appendix E and listed below:

- ✦ **Catchment 01**: 0.359 Hectares, Discharges to Phase 2 Existing Drainage Network
- ✦ **Catchment 02**: 0.254 Hectares, Discharges to Phase 2 Existing Drainage Network
- ✦ Catchment 03: 0.857 Hectares, Discharges to a new Phase 4 outfall into Central Wetland

3.2 Catchments 01 & 02 are positioned immediately to the west of Phase 2 (an application for 126 new dwellings) that has almost been completed. Appendix C shows the location of Phase 2 in relation to Phase 4.

West of Wetlands Drainage Strategy & Approval

3.3 The above is relevant because Phase 4 will drain catchments 01 and 02 into the existing Phase 2 drainage network. Phase 2 is located within the greater West of Wetlands (WW) drainage strategy.

- ✦ Following lengthy discussions and iterations with Laura Gibbons from Arun DC the WW strategy was considered technically acceptable in January 2018, and subsequently was approved by Arun DC in February 2019. Refer to the decision notice in Appendix H.
- ✦ S104 Technical Approval has also been obtained from ICOSA Water to enable them to adopt the WW surface water sewers (Including Phase 2)

3.4 The WW Drainage includes a development area of approximately 19.0 hectares. There are a total of 18 land parcels and associated road infrastructure within this catchment at varying states of progress (at least 11 parcels have yet to be commenced).

3.5 The WW report describes the design philosophy behind the main surface sewers within the road network that will eventually drain the existing and future development parcels within this area. It also specifies the proposed connection points and peak allowable surface water discharge from each of the parcels. This is quite a lengthy document and can be provided separately if required, or alternatively it can be viewed on the Arun DC planning portal under planning reference **LU/17/19/DOC**

- 3.6 In this instance approximately 40% of Phase 4 (catchments 01 & 02) has already been designed as one of the 18 land parcels within the West of Wetlands Area.

Surface Water Strategy (Catchments 01 & 02)

- 3.1 With the above in mind the surface water strategy for approximately 40% of Phase 4 (Catchments 01 & 02) is for a positive piped drainage network to discharge at an **unrestricted rate** into the already constructed and approved West of Wetlands drainage network.
- 3.2 The Phase 4 proposed drainage plans and longitudinal sections are contained in Appendix D.

Infiltration

- 3.3 Intrusive ground investigations and soakage testing undertaken by Merebrook confirmed that infiltration methods for the disposal of surface water runoff are unlikely to be practical across the majority of the site as the underlying material is generally found to comprise of Clay or the water table is too high. Review of these investigative reports appears to indicate only two areas where infiltration drainage was feasible but none of them are in the area of Phase 4.
- 3.4 Phase 4 will essentially be constructed an entirely new bulk earthworks platform that will extend into the central wetland area where the standing groundwater level is high. It's the lowest point of the entire Development and the proposed levels are high enough to achieve a gravity drainage network and protect it from flooding from the existing Black Ditch. Therefore, the drainage network will be just above the high water table so it rules out the ability to use infiltration drainage.

Discharge Rate & Calculations

- 3.5 The approved West of Wetlands strategy has already agreed a peak rate of surface water discharge for up to the **1 in 100 year return period + 30% climate change** will be restricted to **15 litres / second / hectare**. The only outfall from the 19 hectare west of wetlands area is positioned within the already constructed area of Phase 2 which is restricted to a rate of **285 litres / second**.
- 3.6 A large Micro Drainage model was created of the drainage network covering the overall catchment area of 19.0 hectares. The pipes were sized to convey the surface water runoff from each area, and the proposed peak allowable discharge has been specified from each future development plot. This large Micro Drainage already includes the

impermeable areas from Catchments 01 and 02 of the Phase 4 application. This micro drainage model has been updated to include an accurate representation of the proposed catchment 01 & 02 and the results are contained in Appendix I.

- 3.7 The approved west of wetlands report lists the peak allowable discharge rate from each of the individual land parcels (paragraph 2.30 & 2.31). It has been agreed that **Phase 4** can have a **free unrestricted discharge** into Phase 2 drainage network.

Exceedence Flows

- 3.8 The approved west of wetland drainage network is designed to cope with flooding up to the **1in100yr+30%CC** flood event and this water will be contained on site within the developed areas (not the wetlands).
- 3.9 The proposed Phase 4 drainage plans in Appendix D show the proposed levels and the route of overland flow in the event of system failure, blockage or overload.
- 3.10 Phase 4 is located on the edge of the central wetland area, and the road levels have been designed so they fall outwards away from the new dwellings. In the event of a system failure the surface water off will eventually flow over the western road kerbs and into the wetland area leaving properties unaffected.

Adoption and Maintenance

- 3.11 The proposed surface water drainage system for Phase 4 will be offered for adoption to ICOSA Water under a S104 agreement, which will ensure they are maintained in perpetuity.
- 3.12 Technical Approval has already obtained for the receiving Phase 2 drainage network and this will extend into Phase 4. See Appendix F for ICOSA Water technical approval. The same technical approval will be obtained for the drainage networks in Phase 4.

4 Surface Water Catchment 03

- 4.1 As explained in the introduction the shape and position of the development is such that it requires a number of different outfall locations and, as such, it has been subdivided into three drainage catchments that which are shown in Appendix E and listed below:
- Catchment 01: 0.359 Hectares, Discharges to Phase 2 Existing Drainage Network
 - Catchment 02: 0.254 Hectares, Discharges to Phase 2 Existing Drainage Network
 - **Catchment 03**: 0.857 Hectares, Discharges to a new Phase 4 outfall into Central Wetland
- 4.2 Catchments 03 is positioned immediately to the southwest of Phase 2 and requires a stand-alone surface water drainage network that discharges into the central wetland area via a new surface water outfall. Appendix C shows the location of Phase 2 in relation to Phase 4.
- 4.3 The central wetland area, shown in Appendix K, will undergo considerable amount of re-shaping and landscaping that includes a new shallow ditch that meanders through the centre of the wetland area and eventually connects into the Black Ditch to the north. The proposed Phase 4 outfall will connect into this new ditch. These proposals for the central wetland still need some minor adjustment but the planning application will be submitted imminently.

Surface Water Strategy (Catchments 03)

- 4.4 With the above in mind the surface water strategy for approximately 60% of Phase 4 (Catchments 03) is for a positive piped drainage network to discharge at a **restricted rate** into the new central wetland ditch. (The rate of restriction is discussed below)

Infiltration

- 4.5 As discussed in section 3.0 of this report Phase 4 will essentially be constructed an entirely new bulk earthworks platform that will extend into the central wetland area where the standing groundwater level is high. It is the lowest point of the entire Development and the proposed levels are just high enough to achieve a gravity drainage network and protect from flooding from the existing Black Ditch. Therefore, the drainage network will be just above the high water table so it rules out the ability to use infiltration drainage.

Discharge Rate & Calculations

- 4.6 The approved West of Wetlands strategy has already agreed a peak rate of surface water discharge for up to the **1 in 100 year return period + 30% climate change** will be restricted to **15 litres / second / hectare**. The new outfall from the **0.857 hectare** area of Catchment 03 will also use this figure which works out a peak rate of **13 litres / second**.
- 4.7 Restricting the rate of run-off to 13 litres / second will require an attenuation volume of **214m³** that will be achieved using a buried proprietary attenuation as shown on the drainage plans. There are several manufacturers of these systems in the marketplace but it needs to be adopted by ICOSA Water who we know will provide technical approval the Geolight system supplied by SDS Ltd. Their product specific information is contained in Appendix O.
- 4.8 A new Micro Drainage model has been created for the Catchment 03 drainage network covering and the results are contained in Appendix J.

Overflow from Phase 2 into Phase 4

- 4.9 When designing the 19-hectare West of Wetland model there was a requirement to add an overflow from the Phase 2 drainage network at the south west corner of the catchment (by SW01). The drainage is shallow in this location so there was no scope to add surface water attenuation under the road or adjacent parking areas.
- 4.10 The Phase 2 network will fill up entirely and water will eventually back-up out of the two existing gullies and flow benignly in the road channel line into the Phase 4 drainage network. This overflow only occurs for the extreme 1in100yr+30% climate change event and will not activate at all for the 1in100yr event. The principle of using this overflow has already been discussed and approved with Arun DC.
- 4.11 The critical storm for Catchment 03 has been modelled as the 120-minute duration event. Therefore, the Phase 2 overflow volume coincides with this and the corresponding spill volume from the gullies has been simulated as **66.4m³**.
- 4.12 Therefore, the volume of attenuation Catchment 03 has been increased so it will store an additional 66.4m³ and release it into the central wetland via the new outfall. A dedicated separate attenuation tank has been specified just for this overflow volume (The proposed peak outfall rate of 13 litres / second has not been increased to account for this additional flow from Phase 2)

Surface Water Treatment

- 4.13 Table 26.2 of the SuDS Manual identifies the pollution hazard level associated with the land uses within the Proposed Development as being 'Low'. On a scale from 0-1 a 'Low' pollution hazard level relates to the following pollution hazard indices (See table 26.2 of the SuDS Manual) This is applicable to runoff from residential roofs, driveways, paths, residential parking areas and low traffic roads:

- Total Suspended Solids = 0.5
- Metals = 0.4
- Hydrocarbons = 0.4

- 4.14 Table 26.3 of the SuDS Manual sets out the indicative mitigation indices provided by different SuDS features for discharges to surface water.

Permeable Paving

- 4.15 The visitor parking lay-bys on the western side of the central road will be constructed using permeable paving allowing the rainwater falling onto permeable paved areas to be treated by the microorganisms as it passes through drainage medium, see Figure 4.1 below.
- 4.16 Permeable paving provides sufficient pollution mitigation for runoff from low hazard land uses and provides mitigation indices of 0.7, 0.6 and 0.7, which are in excess of the requirement set out in paragraph 2.25.

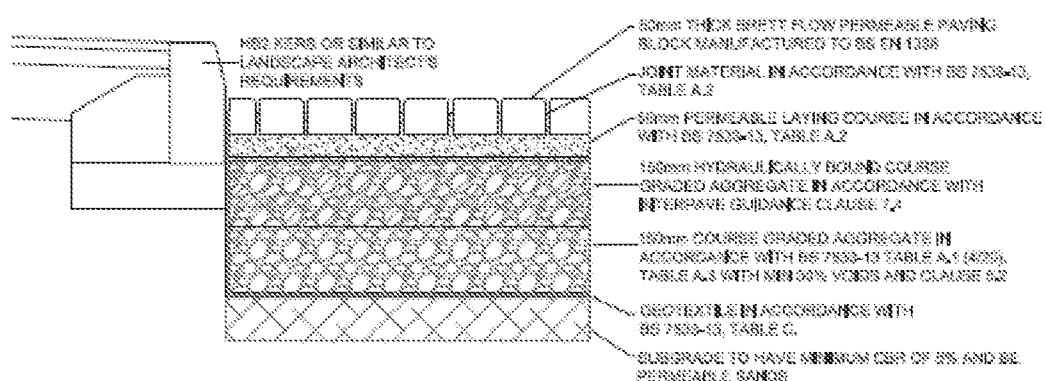


Figure 4.1: Typical Permeable Block Paving Construction

Swale (& Ditch in Central Wetland Area)

- 4.17 The new catchment 03 outfall into the central wetland area will flow through a swale before it connects into the new ditch passing through the central wetland area and eventually into the Black Ditch. This new ditch will be entirely flat (similar to the local

existing ditch network) so the water will be extremely slow moving allowing pollutants to drop out before it reaches the Black Ditch. Swales can remove coarse to medium sediments and associated pollutants by filtration through surface vegetation and groundcover, providing mitigation indices of 0.5, 0.6 and 0.6, which exceed the requirement set out in paragraph 4.14.

Traditional Gullies

- 4.18 Full size precast concrete gully pots draining the asphalt roads that will act as the first line of defence to trap silt and sediments in the drainage network.

Exceedence Flows

- 4.19 The Catchment 03 drainage network is designed to cope with flooding up to the **1in100yr+30%CC** flood event and this water will be contained on site within the developed area (not the wetlands).
- 4.20 The proposed Phase 4 drainage plans in Appendix D show the proposed levels and the route of overland flow in the event of system failure, blockage or overload.
- 4.21 Phase 4 is located on the edge of the central wetland area, and the main road level has been designed so it falls outwards away from the new dwellings. In the event of a system failure the surface water off will eventually flow over the western road kerb and into the wetland area leaving properties unaffected.

Surcharged Outfall

- 4.22 Similar to the main outfall to the north, it is important to ascertain what would happen if the central wetland area flooded and the new outfall becomes surcharged. The EA supplied 1in100yr+20%CC modelled flood level within the floodplain ranges from 1.72m AOD to 1.83m AOD. A flood level in the wetlands of 1.8m AOD by the outfall will result in the outfall (@ 1.0m AOD) being surcharged by approximately 0.8m.
- 4.23 The chance of the critical 1in100yr+CC flood level in the wetlands (which is tidal) coinciding with the peak 1in100yr+CC storm event on the site is very small. However, a fully surcharged outfall is incorporated into the drainage model simulated and the volume of attention required has been determined with this in mind.

Adoption and Maintenance

- 4.24 The proposed surface water drainage system for Catchment 02 will be offered for adoption to ICOSA Water under a S104 agreement, which will ensure they are maintained in perpetuity.
- 4.25 Technical Approval has already obtained for the receiving Phase 2 drainage network and this will extend into Phase 4. See Appendix F for ICOSA Water technical approval. The same technical approval will be obtained for the drainage networks in Phase 4.

Attenuation Tank Maintenance

- 4.26 The primary purpose of the attenuation tanks is to attenuate surface water run-off during extreme rainfall events.
- 4.27 Regular inspection and maintenance are required to ensure the effective long-term operation of the below ground storage tanks, see table 2.1 below for details:

Maintenance Schedule	Required Action	Recommended Frequency
Regular Maintenance	Inspect and identify any areas that are not operating correctly. If required, take remedial action.	Monthly for 3 months, then annually
	Debris removal from catchment surface (where may cause risk to performance).	Monthly.
	Remove sediment from pre-treatment structures.	Annually, or as required.
Remedial Actions	Repair/rehabilitation of inlets, outlets, overflows and vents.	As required.
Monitoring	Inspect/check all inlets, outlets, vents and overflows to ensure that they are in good condition and operating as designed.	Annually and after large storms.
	Survey inside of tank for sediment build-up and remove if necessary.	Annually until evidence this is too regular, every 5 years thereafter.

Table 4.1: Attenuation Tank Maintenance Requirements

Pervious Pavement Maintenance

- 4.28 Pervious pavements are pavements that allow for pedestrian and/or vehicular traffic while allowing rainwater to infiltrate through the surface and into underlying structural foundation layers.

4.29 Regular inspection and maintenance are important for the effective operation of pervious pavements as designed, these are described below in table 2.2:

Maintenance Schedule	Required Action	Recommended Frequency
Regular Maintenance	Brushing and vacuuming (standard cosmetic sweep over whole surface).	Once a year, after autumn leaf fall, or reduced frequency as required, based on site-specific observations of clogging or manufacturer's recommendations – pay particular attention to areas where water runs onto pervious surface from adjacent impermeable areas as this area is most likely to collect the most sediment.
Occasional Maintenance	Stabilise and mow contributing and adjacent areas.	As required.
	Removal of weeds or management using glyphosphate applied directly into weeds by an applicator rather than spraying.	As required – once per year on less frequently used pavements.
Remedial Actions	Remediate any landscaping which, through vegetation maintenance or soil slip, has been raised to within 50mm of the level of the paving.	As required.
	Remedial work to any depressions, rutting and cracked or broken blocks considered detrimental to the structural performance or a hazard to users, and replace lost joining material.	As required.
	Rehabilitation of surface and upper substructure by remedial sweeping.	Every 10 to 15 years or as required (if infiltration performance is reduced due to significant clogging).
Monitoring	Initial inspection.	Monthly for three months after installation.
	Inspect for evidence of poor operation and/or weed growth – if required, take remedial action.	Three-monthly, 48h after large storms in first six months.
	Inspect silt accumulation rates and establish appropriate brushing frequencies.	Annually.
	Monitor inspections chambers.	Annually.

Table 4.2: Pervious Pavement Maintenance Requirements

Drainage Network Design Criteria

- 4.30 The positive drainage will be designed in accordance with Sewers for Adoption, and BS EN 752 – Drain and sewer systems outside buildings and the Building Regulations - part H (2002).
- 4.31 The surface water network design and rate of surface water runoff would be based on the Modified Rational method and designed in accordance with the Wallingford Procedure. In order to carry out the design of the networks, a number of Global Variables are used. These Global Variables / parameters are related to the location of the site in the UK and have been obtained from the **Flood Estimation Handbook (FEH)**.
- 4.32 The exact total impermeable area has been measured as 0.435 hectares that has been fed into the model. Therefore, the proposed simulations have been run with a **Cv** value of **1.0**
- 4.33 The positive surface water system would be designed such that:
- ✦ The pipes remain unsurcharged during the 1 in 2 year design storm;
 - ✦ The system should not flood during the worst case 1 in 30 year storm with a free outfall;
 - ✦ The surface water run-off from the proposed development would be safely contained on site for up to and including the worst case 1 in 100 year storm event, plus an additional 30% for climate change;
 - ✦ The pipe velocities are such that self-cleansing is achieved at lesser more moderate storm intensities:
 - Pipe roughness (ks) = 0.6
 - Minimum pipe velocity at full flow = 1.0 m/s
 - Cv Value of 1.0
 - Percentage Impermeable areas
 - Buildings = 100%
 - Carriageways and footpaths = 100%
 - Private and Communal Parking = 100%

Micro Drainage Software

- 4.34 The proposed network has been designed and analysed using the Micro drainage software package that is recognised as one of the industry standard design suites. There are two separate programmes used within the package to firstly generate and then analyse the completed model. These are 'System 1' and 'Simulation'.

- ✦ **Network:** The surface water computer model has been generated in “System 1” in using proposed data, such as the cover levels, invert levels and catchment areas. This is used to size the pipes in the proposed network based on the global variable outlined above.
- ✦ **Simulation:** Once the proposed drainage system has been generated it was analysed using ‘Simulation’. This is a full hydrograph method for the determination of flood risk and system failure under extreme conditions. It can be used to analyse system overloads, storage, reverse flow characteristics, surcharging and backwater effects. It can also analyse against a wide variety of critical variables.

Return Periods & Critical Duration Storms

- 4.35 To determine the hydraulic requirements for an element of a drainage system, one must first consider the consequences of that capacity being exceeded, and then identify an acceptable frequency for this to occur. This acceptable frequency is termed the return period, the period of time during which the stated rainfall can be expected to be exceeded on average once. That element is then designed to accommodate a storm / flood with this return period.
- 4.36 Once the design return period is established, the most critical storm duration for each of the elements is determined. These range in duration from 15 to 1440 minutes. For example;
- ✦ A 1 in 30 year, 30 minute duration storm has an average intensity of 62mm/hr (figure taken from simulated result). This intensity storm would be used to size the pipes and other drainage elements for conveyance purposes.
 - ✦ A 480 minute duration storm has an average intensity of only 8mm/hr. However, the 480 minute storm lasts 16 times longer, therefore generating a much greater volume of water, and would be used to size the attenuation devices.

5 Condition 10 Conclusion

- 5.1 This surface water drainage strategy report, with accompanying drawings, calculations and details demonstrate that the reserved matters planning application for Phase 4 of the greater outline approved Hampton Park development can be drained satisfactorily without increasing flood risk elsewhere.
- 5.2 Intrusive ground investigations and ground water monitoring have determined that infiltration drainage is not feasible on the Phase 4 application because of the high groundwater levels.
- 5.3 The Surface water runoff will be discharged to the Black Ditch at a peak allowable discharge of 15 litres / second / hectares for up to the 1 in 100-year return period, plus 30% allowance.
- ✦ Catchment 01 will discharge at an unrestricted rate into the approved Phase 2 drainage network.
 - ✦ Catchment 02 will discharge at an unrestricted rate into the approved Phase 2 drainage network.
 - ✦ Catchment 03 will discharge a a peak allowable discharge of 13 litres / second via a new outfall into the central wetland areas.
- 5.4 It has already been agreed that this proposed rate of discharge will provide considerable betterment when compared to the pre-demolition brownfield arrangement (as established in the west of wetland report). The provision of SuDS and attenuation features will store the balance of surface water runoff.
- 5.5 Phase 4 is located on the edge of the central wetland area, and the main road level has been designed so it falls outwards away from the new dwellings. In the event of a system failure the surface water off will mostly flow over the western road kerb and into the wetland area leaving properties unaffected.
- 5.6 It is considered that the proposed civil and drainage design accompanying this DOC is sufficiently progressed to enable the discharge of planning condition 10, which contains:
- ✦ Appendix D - Drainage GA plans and longitudinal sections showing manholes locations, cover level and invert, pipe diameter and gradients, pipe bedding, gully cover and invert levels, exceedance flows, catchpits upstream of attenuation tank.

- » Appendix L – Engineering plans for the approved layout that contains GA's, proposed levels, construction treatments and road longitudinal sections. The drainage designs in appendix D are based upon the engineering plans
- » Appendix I & J – Microdrainage calculations that align with drainage plans in Appendix D, which also show a surcharged outfall
- » Appendix K – Shows where catchment 3 outfall into the proposed swale in the Central Wetland that forms part of a future planning application to be submitted imminently.
- » Appendices – M, N & O contain GTA drainage construction details and proprietary information for the permeable paving and attenuation tank. This will be progressed by GTA Civils as part of their S104 submission to ICOSA water and the construction package to enable it to be constructed

5.7 Therefore, it is considered that this evidence base, when read in conjunction with the approved West of Wetlands drainage strategy, provides sufficient information to discharge the outline planning Condition 10 for the Phase 4 reserved matters application.

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