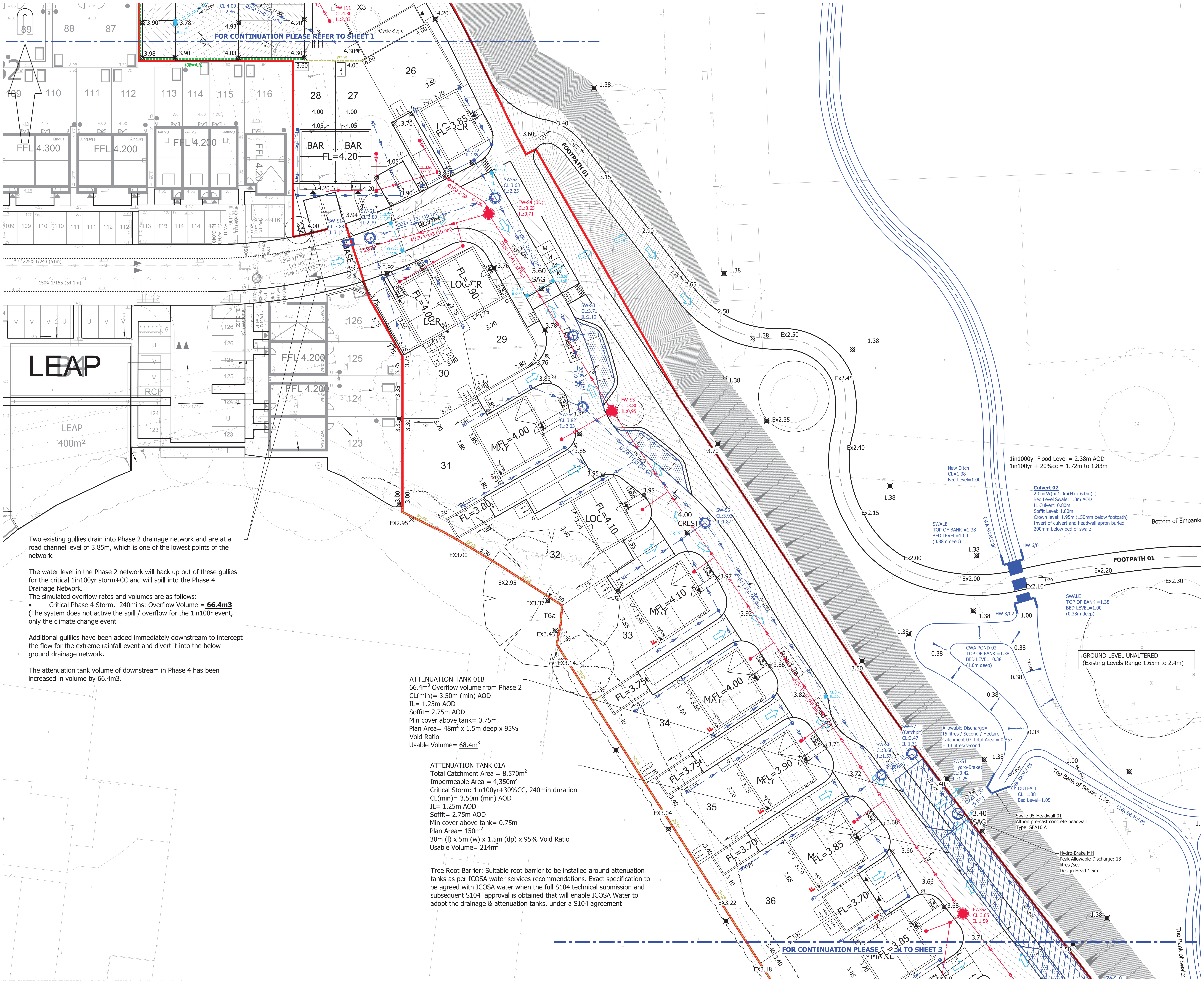

Two existing gullies drain into Phase 2 drainage network and are at a road channel level of 3.85m, which is one of the lowest points of the network.

The water level in the Phase 2 network will back up out of these gullies for the critical 1in100yr storm+CC and will spill into the Phase 4 Drainage Network.
The simulated overflow rates and volumes are as follows:

- Critical Phase 4 Storm, 240mins: Overflow Volume = **66.4m3**

(The system does not active the spill / overflow for the 1in100r event, only the climate change event

Additional gulllies have been added immediately downstream to intercept the flow for the extreme rainfall event and divert it into the below ground drainage network.

The attenuation tank volume of downstream in Phase 4 has been increased in volume by 66.4m3.

ATTENUATION TANK 01B
66.4m^3 Overflow volume from Phase 2
CL(min)= 3.50m (min) AOD
IL= 1.25m AOD
Soffit= 2.75m AOD
Min cover above tank= 0.75m
Plan Area= 48m^2 x 1.5m deep x 95% Void Ratio
Usable Volume= 68.4m^3

ATTENUATION TANK 01A
Total Catchment Area = 8,570m^2
Impermeable Area = 4,350m^2
Critical Storm: 1in100yr+30%CC, 240min duration
CL(min)= 3.50m (min) AOD
IL= 1.25m AOD
Soffit= 2.75m AOD
Min cover above tank= 0.75m
Plan Area= 150m^2
30m (l) x 5m (w) x 1.5m (dp) x 95% Void Ratio
Usable Volume= 214m^3

Tree Root Barrier: Suitable root barrier to be installed around attenuation tanks as per ICOSA water services recommendations. Exact specification to be agreed with ICOSA water when the full S104 technical submission and subsequent S104 approval is obtained that will enable ICOSA Water to adopt the drainage & attenuation tanks, under a S104 agreement

© Mayer Brown Limited Copyright. The drawings, information and data recorded in this document ("the information") is the property of Mayer Brown. This document and the information are solely for the use of the authorised recipient and this document may not be used, copied or reproduced in whole or part for any purposes other than which it was supplied by Mayer Brown. Mayer Brown makes no representation, undertakes no duty and accepts no responsibilities to any third party who may use or rely upon this document or the information.

A1 ORIGINAL

© Crown copyright and database rights 2020. Ordnance Survey 0100031673.

DRAINAGE KEY:

- PROPOSED SURFACE WATER SEWER AND MANHOLE
- PROPOSED FOUL WATER SEWER AND MANHOLE
- PROPOSED FOUL WATER BACKDROP
- PROPOSED SURFACE WATER SEWER AND INSPECTION CHAMBER
- PROPOSED FOUL WATER SEWER AND INSPECTION CHAMBER
- PROPOSED ROAD GULLY
- PROPOSED RODDING EYE
- PROPOSED SURFACE WATER OUTFALL
- PROPOSED ATTENUATION TANK
- PROPOSED PERMEABLE PAVING & FIN DRAIN
- EXCEEDENCE FLOW ARROWS
- PROPOSED CONTOURS
- PROPOSED FOUL RISING MAIN
- SITE BOUNDARY

LEVELS KEY:

- FL=1.45 PROPOSED FLOOR LEVEL
- 1/200 PROPOSED GRADIENT
- 150 GB PROPOSED GRAVEL BOARD RETENTION
- TOW=3.85 PROPOSED RETAINING WALL

NOTES:

1. This drawing is not to be scaled.
2. Drawing based on Persimmon Homes Thames Valley Architect's 'Site Layout' drawing reference 545_PL_101, received on 04/06/2020.

FOR INFORMATION
NOT FOR CONSTRUCTION

rev.	amendment	checked	date
P11	Pipe gradients and manhole reference numbers updated. Gully's cover and invert levels added. (IC)	SF	01/09/21
P10	Surface water pipe from SW-S2 to SW-S7 (approx. 110m) increased from 225dia to 300dia in order to remove simulated flooding for the 1in100yr climate change event. (Clouded) (TC)	SF	20/04/21
P9	Note added about the Tree Root Barrier around the attenuation tank. (Clouded) (TC)	SF	13/04/21
P8	Footpath in clouded area amended to match revised Architect's layout received on 26/03/2021. Red line boundary amended. (IC)	SF	30/03/21
P7	Surface water manhole reference SW-S6 moved in order to reduce length of pipe in the verge and facilitate positioning of proposed trees. (SF)	SF	07/01/21
P6	Attenuation tank 01A and 01B lowered and depth increased. (SF)	SF	05/01/21
P5	Microdrainage pipe labels added. (TC)	SF	22/12/20
P4	Drawing updated following revised layout. Key Updated (TC)	SF	02/10/20
P3	Surface Water Attenuation updated, note about Phase 2 overflow added, outfall swale and CWA ditch added, Exceedence flows arrows added. (SF)	SF	06/07/20
P2	Drawing updated following revised layout. (TC)	SF	05/06/2020
P1	Initial Issue. (TC)	SF	04/06/2020

mayer brown
Mayer Brown Limited
Lion House Oriental Road Woking Surrey GU22 8AR
Telephone 01483 750 508 Fax 01483 750 437
wokingoffice@mayerbrown.co.uk www.mayerbrown.co.uk

client: PERSIMMON HOMES THAMES VALLEY

project: PHASE 4 LITTLEHAMPTON

scale	drawn by	checked by
1:250	TC	SF

date	cad file
FEBRUARY 2020	20.DWG

title: DRAINAGE AND LEVELS GENERAL ARRANGEMENT DRAWING (SHEET 2 OF 3)

Mayer Brown Limited jobcode	suitability	revision
	-	P11

drawing number: PHLITTLE P4-20-2

ARUN DISTRICT COUNCIL LU/388/21/DOC