

***PADEL USE, UNIT A, CONSORT WAY,
BURGESS HILL, RH15 9TJ***

FLOOD RISK ASSESSMENT

SL08556-HBPW-XX-XX-RP-C-0003

MARCH 2026

FLOOD RISK ASSESSMENT

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REPORT DETAILS

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CONTENTS

1	INTRODUCTION.....	1
1.1	GENERAL.....	1
2	EXISTING SITE.....	1
2.1	SITE LOCATION.....	1
2.2	SITE DESCRIPTION.....	2
2.3	PLANNING HISTORY.....	2
2.4	TOPOGRAPHICAL SURVEY.....	2
2.5	EXISTING HYDROLOGOY AND GEOLOGY.....	2
2.6	EXISTING DRAINAGE INFRASTRUCTURE.....	3
2.7	SURFACE WATER.....	3
3	EXISTING FLOOD RISK.....	3
3.1	RISK OF FLOODING FROM RIVERS & SEA.....	4
3.2	RISK OF FLOODING FROM SURFACE WATER.....	5
3.3	RISK OF FLOODING FROM OVERLAND RUNOFF.....	5
3.4	RISK OF FLOODING FROM GROUNDWATER.....	6
3.5	RISK OF FLOODING FROM EXISTING DRAINAGE.....	6
3.6	RISK OF FLOODING FROM RESERVOIRS.....	6
3.7	RISK OF FLOODING FROM OTHER SOURCES.....	6
3.8	RISK OF FLOODING FROM CRITICAL DRAINAGE AREA (CDA).....	6
4	PROPOSED DEVELOPMENT.....	6
4.1	PROPOSALS.....	6
4.2	VULNERABILITY.....	7
4.3	SEQUENTIAL & EXCEPTION TEST.....	7
4.4	DEVELOPMENT LIFESPAN & CLIMATE CHANGE.....	7
4.5	DESIGN FLOOD LEVEL & SAFE ACCESS/EGRESS.....	8
5	PROPOSED DRAINAGE STRATEGY.....	8
5.1	EXISTING DRAINAGE.....	8

5.2	SYSTEM OPERATION AND MAINTENANCE	9
5.3	EXCEEDANCE FLOW ROUTES	9
6	CONCLUSIONS AND RECOMMENDATIONS	9
6.1	CONCLUSIONS	9
6.2	RECOMMENDATIONS	9

APPENDIX A – 2024 Topographical Survey

APPENDIX B – Public Sewer asset maps

APPENDIX C – Proposed Development drawings

APPENDIX C – Existing Drainage drawing

1 INTRODUCTION

1.1 GENERAL

HBPW LLP has produced this site-specific Flood Risk Assessment (FRA) on behalf of PGQ Property to support a planning application for the proposed change of use from industrial use (B2/B8) to an indoor sports facility (E(d)) on land situated within Victoria Business Park off Consort Way, Burgess Hill, West Sussex.

The proposals comprise the change of use of the existing 1346 sq.m B2/B8 building and internal alterations to provide an indoor sports facility with four padel courts, while retaining the existing structure.

This FRA has been prepared to identify and assess the risk of all forms of flooding to and from the development and demonstrate how these flood risks will be managed so that the development remains safe throughout its lifetime, taking climate change into account, as required by the National Planning Policy Framework (NPPF).

2 EXISTING SITE

2.1 SITE LOCATION

The application site is located on Consort Way, Burgess Hill, West Sussex. The site is centred on National Grid Reference TQ 30202 18742, as shown in the below image:



2.2 SITE DESCRIPTION

The planning application red line boundary is irregular in shape, approximately 0.29ha in area, and located within a commercial/industrial setting.

The site is immediately bordered to the north by Consort Way carriageway and grass verge, to the west by Jubilee Road carriageway and grass verge, and to the east and south by a mixture of small to large commercial/industrial warehouses and offices, with associated hard paved car parking areas. The northern and western boundaries are defined by the public highway which forms the curve in the red line boundary, whilst the eastern and southern boundaries are defined by existing building and fences.

There is a single shared un gated vehicular access on the northern boundary onto Consort Way which provides 24/7 vehicular/pedestrian access. In addition, the grass verge forming the northern and western boundaries is easily traversable by foot and so provides an emergency pedestrian access from the site if the vehicular access is ever blocked.

2.3 PLANNING HISTORY

A planning application (planning ref: DM/24/2970) was submitted in December 2024 for the construction of a new commercial building. This building was to replace the previous industrial unit which was destroyed in a fire.

The planning application was approved in April 2025, and the site is now built.

2.4 TOPOGRAPHICAL SURVEY

A topographical survey was undertaken by Landmark Surveys Wales dated October 2024 as part of the 2024 planning application, this shows a relatively flat site but with ground levels falling both north to south, and south to north, which results in a shallow valley feature bisecting the red line boundary within the tarmac car park. The site levels vary between 28.97m above ordnance datum (AOD) on the northern boundary near to the site access, and 28.66m AOD in the south-east corner, to a low point of 28.24m AOD within the central valley feature. See enclosed topographical survey.

A copy of the topographical survey is included in Appendix A.

Surface levels of the recently completed commercial building and external levels remain the same as shown on the 2024 topographical survey

2.5 EXISTING HYDROLOGY AND GEOLOGY

The site lies within the natural drainage catchment of the Herrings Stream Watercourse, which continues flowing in a north west direction as an open channel. The culverted section is comprised of twin 1500mm diameter pipes and designated an 'Ordinary Watercourse' under the authority of West Sussex Flood Risk Management Team, whilst the open channel section is designated a 'Main River' and therefore under the jurisdiction of the Environment Agency (EA).

There are no ditches or other 'Ordinary' watercourses within the site boundary.

No onsite intrusive ground investigation works have been undertaken, however, the BGS Geology Viewer records the bedrock geology as the 'Weald Clay Formation – Mudstone'. The site is also located close to superficial clay, silt and gravel deposits attributed to the Herrings Stream watercourse.

2.6 EXISTING DRAINAGE INFRASTRUCTURE

Southern Water's (SW) asset maps show there are no public water or sewerage apparatus within the red line boundary.

There lies a 300mm diameter public surface sewer within Jubilee Road, that flows south to north and discharges into the Herrings Stream watercourse, which is located due to west of the site.

There lies a 150mm diameter public foul sewer within Jubilee Road, that runs parallel to the surface water sewer, whilst to the north lies a 450mm diameter public foul sewer that flows westwards, both foul sewers discharge into a combined sewer network.

Mid Sussex District Council (MSDC) drainage records identify a twin piped culvert, each 1.5m diameter, crossing the site from east to west. This twin culvert forms part of the Herrings Stream watercourse which transforms to an open channel 20m due west of the site.

SW and MSDC asset map and manhole records are included in Appendix B.

As part of the 2024 planning application for the commercial building, new drainage infrastructure was constructed within the site boundary.

2.7 SURFACE WATER

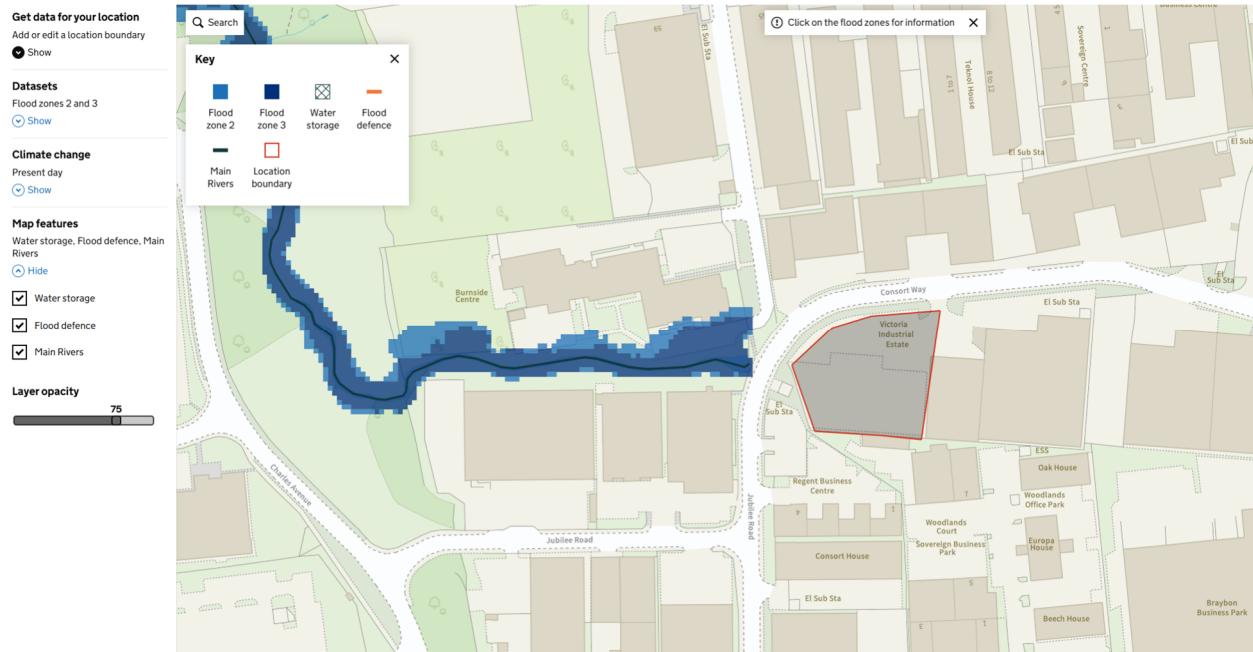
Surface water on the site is currently connected into the surface water system on site which connects to local surface water sewer in turn connecting into Herrings Stream Culvert.

Surface water attenuation for high-intensity surface water and rain events. A combination of below ground attenuation measures have been provided to cater for all storm events up to and including the 1in100 year event + 40% climate change + 10% urban creep, with the use of a rainwater collection tank and attenuation tank formed by Hydrocell crates.

3 EXISTING FLOOD RISK

3.1 RISK OF FLOODING FROM RIVERS & SEA

An extract of the Environment Agency's (EA's) 'Flood Map for Planning' covering the site and the surrounding area has been reproduced below:



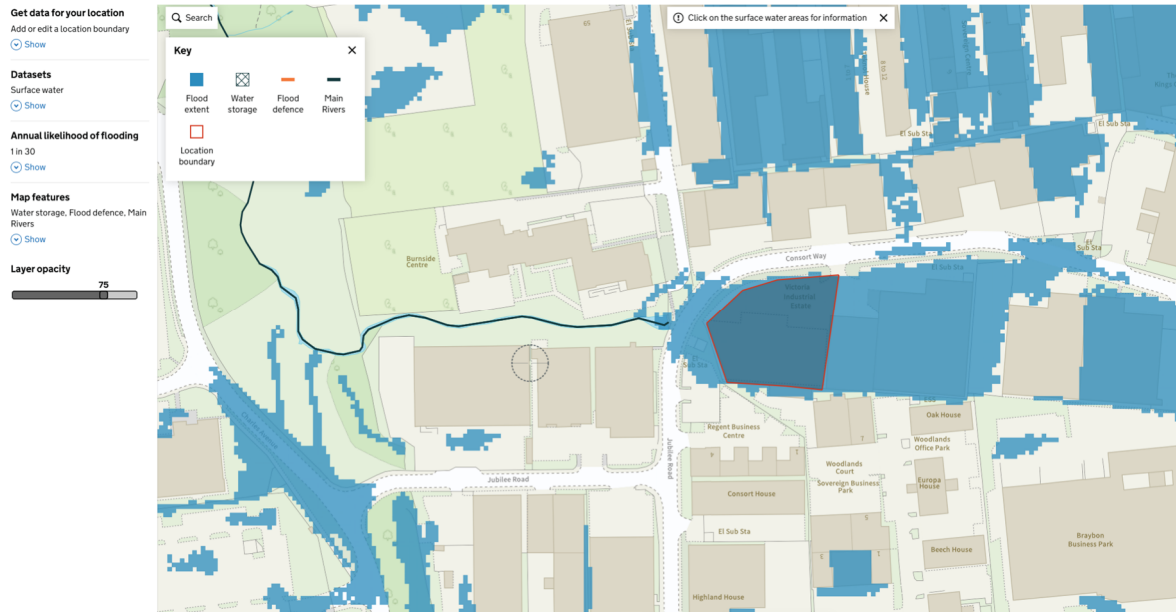
This mapping shows the site, red boundary, is wholly within Flood Zone 1 'Low Risk'. Beyond the site boundary, to the west lies a strip of Flood Zone 3 'High Risk', which is associated with the Herrings Stream. The site itself is therefore free from river and sea flooding for up to a 1 in 1000 (0.1%) probability storm event each year.

The above EA 'Flood Map for Planning' extents does not consider existing flood defences.

The GOV.uk, '@Flood risks from rivers and sea; Extent of flooding' mapping does not consider flood defences, there are no defences in the area that change the flood extents and so the EA Flood Map for Planning above remains current.

3.2 RISK OF FLOODING FROM SURFACE WATER

An extract of the GOV.UK, 'Flood risk from surface water: Extent of flooding' mapping has been reproduced below:



This mapping shows the tarmac car park area in the northern half of the site lies within a 'High Risk' area, and therefore has more than a 1 in 30 (3.3%) probability of flooding from surface water each year. In contrast, the existing building footprint in the southern half of the site lies within a 'Low Risk' area, and therefore has between a 1 in 1000 (0.1%) and 1 in 100 (1%) probability of flooding from surface water each year.

The GOV.UK, 'Flood risk from surface water: Depth of flooding' mapping shows the expected flood depth within the tarmac car park is between 300mm and 900mm. This results in a maximum flood level of between 28.6m AOD and 29.2m AOD, based on an average car park level of 28.3m AOD.

Section 6.47 of the Mid Sussex District Council Level 1 Strategic Flood Risk Assessment (SFRA) states, 'The risk of surface water flooding in the district is generally concentrated around the urban areas. The highest risk areas are located within Haywards Heath, Burgess Hill, East Grinstead and Hassocks. Haywards Heath has been identified to be the area at highest risk within the District'. There is therefore a risk of surface water flooding affecting the site proposals.

3.3 RISK OF FLOODING FROM OVERLAND RUNOFF

There are no known instances of overland runoff posing a flood risk to the building footprint of the site, some overland flows from upstream will be contained and conveyed within the carriageway and kerbing of Consort Way. Excess overland runoff will flow through the site from the east and exit in the west, following the valley feature through the site. The risk of overland runoff to the building footprint is deemed low.

3.4 RISK OF FLOODING FROM GROUNDWATER

Section 6.66 of the Level 1 SFRA states, 'The settlements of Burgess Hill, Haywards Heath, Hurstpierpoint, Albourne and Sayers Common, as well as countryside areas to the west are considered to be in an area of low potential for groundwater flooding'. The risk of groundwater flooding is therefore deemed low.

3.5 RISK OF FLOODING FROM EXISTING DRAINAGE

There are no known instances of existing drainage flooding posing a flood risk to the building footprint, but some flooding of the tarmac car park has previously occurred due to blockages in the downstream surface water pipework or Herrings Stream culverts.

3.6 RISK OF FLOODING FROM RESERVOIRS

The GOV.UK, 'Flood risk from reservoirs: Extent of flooding' mapping shows the site is not at risk from reservoir flooding.

3.7 RISK OF FLOODING FROM OTHER SOURCES

There are no other known sources of flooding that pose a risk to the site.

3.8 RISK OF FLOODING FROM CRITICAL DRAINAGE AREA (CDA)

A Critical Drainage Area (CDA) is an area that has critical drainage problems, and which has been notified to the local planning authority as such, by the Environment Agency, in line with the National Planning Policy Framework (NPPF). In these locations, there is a need for surface water to be managed to a higher standard than normal to ensure any new development will contribute to a reduction in flooding risks, in line with NPPF. These higher standards are determined by the Environment Agency.

The site is not located within any CDA and so no higher standard of surface water management is required.

4 PROPOSED DEVELOPMENT

4.1 PROPOSALS

The proposals comprise the change of use of the existing 1346 sq.m B2/B8 building and internal alterations to provide an indoor sports facility with four padel courts, while retaining the existing structure.

The proposed development will neither increase or decrease the amount of impermeable areas as the proposals do not include any changes to the structure or external areas.

The proposed development will not change the drainage infrastructure on the site.

4.2 VULNERABILITY

Table 3, within the NPPG, stipulates all developments should be located within their corresponding flood risk vulnerability classification. The proposed development is classed as “Less Vulnerable” in a site wholly within Flood Zone 1 and therefore ‘Development is appropriate’. Reproduced below.

Flood Zones	Flood Risk Vulnerability Classification				
	Essential infrastructure	Highly vulnerable	More vulnerable	Less vulnerable	Water compatible
Zone 1	✓	✓	✓	✓	✓
Zone 2	✓	Exception Test required	✓	✓	✓
Zone 3a †	Exception Test required †	✗	Exception Test required	✓	✓
Zone 3b *	Exception Test required *	✗	✗	✗	✓*

Key:

✓ Development is appropriate

✗ Development should not be permitted.

4.3 SEQUENTIAL & EXCEPTION TEST

As the scheme is already located in Flood Zone 1, and classed as ‘Development is appropriate’, no sequential test is needed. An exception test is however needed due to the varying surface water flood risk that is present within the site boundary, which will require flood resistant and resilience construction methods.

4.4 DEVELOPMENT LIFESPAN & CLIMATE CHANGE

The NPPF requires that the impact of climate change on a development be considered. The NPPG states that “making an allowance for climate change in your flood risk assessment will help to minimise vulnerability and provide resilience to flooding and coastal change in the future”.

It is expected the development lifespan is 75 years which is appropriate for non-residential properties, as recommended by the NPPG ‘Flood Risk & Coastal Change Guidance’.

The EA peak rainfall allowances map shows anticipated changes in extreme rainfall intensity in small and urban catchments across England. The site lies within the ‘Adur & Ouse Management Catchment’ and the development lifespan of 75 years requires the ‘Central allowance’ to be applied which expects peak rainfall to increase by 25% during the next 100 years.

4.5 DESIGN FLOOD LEVEL & SAFE ACCESS/EGRESS

The 'Design Flood Level' is a flood event of a given annual flood probability, which is generally taken as:

- fluvial (river) flooding likely to occur with a 1% annual probability (a 1 in 100 chance each year), or;
- tidal flooding with a 0.5% annual probability (a 1 in 200 chance each year), against which the suitability of a proposed development is assessed and mitigation measures, if any, are designed.

As stated above, the application site is free from river and tidal flooding but susceptible to surface water flooding, and so the 'Design Flood Level' will be based on the expected surface water flood depths.

As the tarmac car park will be subject to fluvial flood risk over the design lifetime, this will also affect the northern building face only. A waterproof treatment has been applied to the building construction for the first 300mm above proposed FFL, temporary flood boards/gates on all northern accesses, and all electrical/gas fittings on the northern face are raised 600mm above the proposed FFL.

Consort Way, which is the sole offsite access road away from the site is mostly situated within a 'Low Risk' area for surface water flooding, and so no hinderance to 24/7 safe access/egress. The only hinderance is the onsite 'High Risk' area of surface water flooding attributed with the valley feature within the tarmac car park.

A first floor with stair access is proposed internally which can be used as a safe space for the building's users in the event of a sudden flood. Drawings showing the proposed building layout are included in Appendix C.

5 PROPOSED DRAINAGE STRATEGY

The development does not include any proposals to undertake changes to the existing drainage system on the development site.

5.1 EXISTING DRAINAGE

As part of the 2024 planning application development for this site a drainage strategy to intercept and attenuate run off through the implementation of sustainable drainage techniques was incorporated into the construction of the development.

Details of the drainage system installed on the site are included in Appendix D, and summarised below:

- Surface water run-off from the roof of the building is attenuated, by means of a flow control device and underground attenuation tank, before discharging off site and ultimately to the Herrings Stream Culvert.
- Surface water run-off from the car park area is not attenuated and is collected and conveyed via underground pipework, before discharging off site and ultimately to the Herrings Stream Culvert.
- Surface water run-off from an area of the roof is collected and stored in an underground tank, to be used as grey water within the building for the flushing of toilets etc.

- Foul water drainage serving the building (domestic type flows) is conveyed via underground pipework to a connection into the public sewer on Consort Way.

5.2 SYSTEM OPERATION AND MAINTENANCE

All on site surface and foul water drainage works will remain privately owned and maintained by the property owner.

5.3 EXCEEDANCE FLOW ROUTES

The proposed development will not modify the existing ground profile and so the existing flood exceedance flow routes will remain current.

During exceedance events, surface water runoff from the roof and external hard standing areas will gravitate towards the front tarmac car park, and pond within the existing valley feature before flowing offsite to the west to Jubilee Road

6 CONCLUSIONS AND RECOMMENDATIONS

6.1 CONCLUSIONS

This FRA has been assessed in line with the NPPF. It is concluded that the development does not increase the flood risk to the site or nearby settlements.

6.2 RECOMMENDATIONS

The site proposals comprise a change of use of the building, and so there is neither an increase nor decrease in flood risk.

The building footprint will be safe from all forms of flooding for the entirety of the development lifespan, whilst the front tarmac car park will be subject to surface water flooding only. The proposals will not increase the flood risk to downstream properties, and the existing drainage strategy will accord with the NPPF drainage hierarchy.

It is recommended that the Lead Local Flood Authority advise the local planning authority that they have no objections to the proposed development.

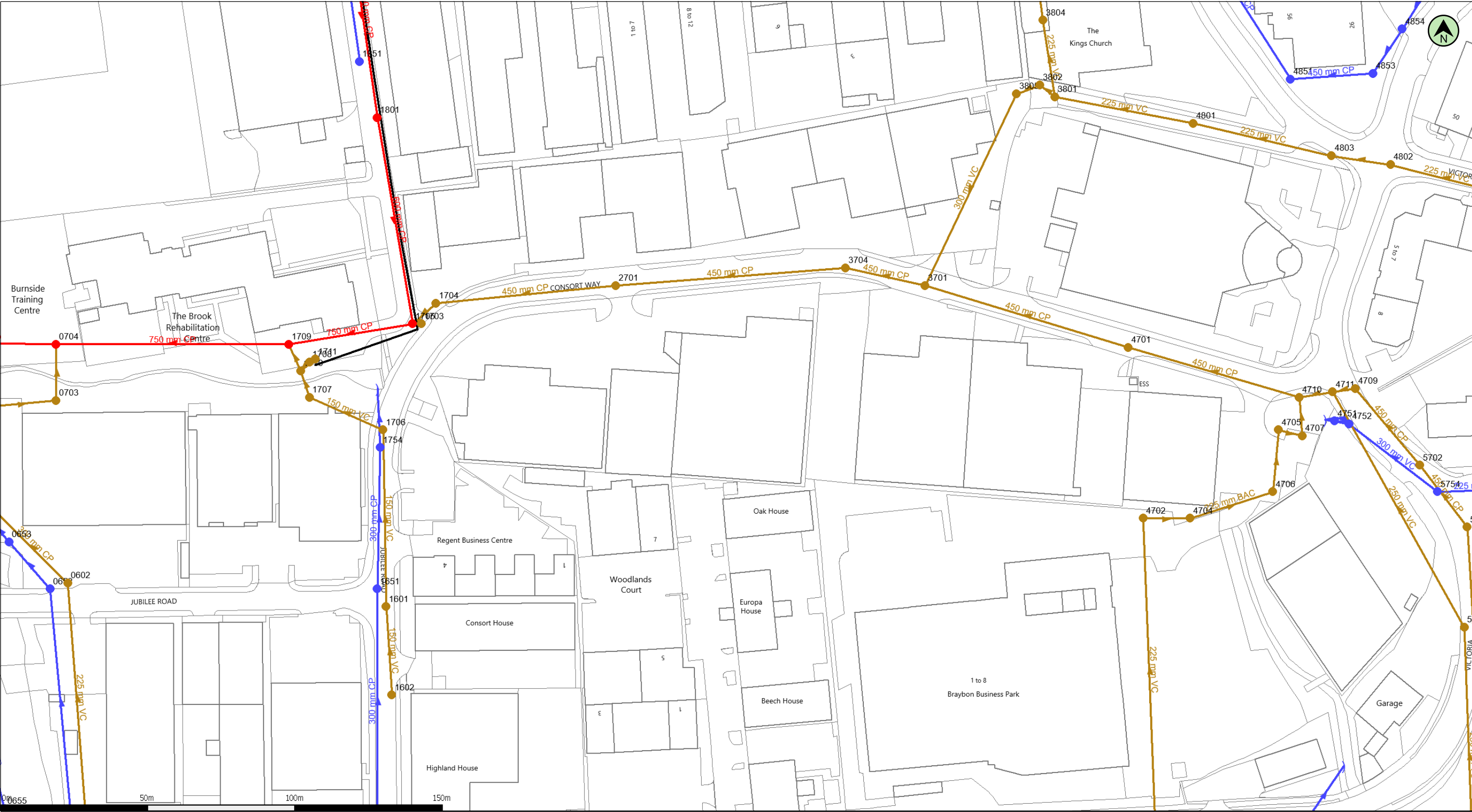
APPENDIX A – 2024 TOPOGRAPHICAL SURVEY








APPENDIX B – PUBLIC SEWER ASSET MAPS



(c) Crown copyright and database rights 2025 Ordnance Survey AC0000808122 Date: 10/09/25 Scale: 1:1250 Map Centre: 530269,118744 Data updated: 21/08/25 Our Ref: 1875226 - 1 Wastewater Plan A3 Powered by digdat

The positions of pipes shown on this plan are believed to be correct, but Southern Water Services Ltd accept no responsibility in the event of inaccuracy. The actual positions should be determined on site. This plan is produced by Southern Water Services Ltd (c) Crown copyright and database rights 2025 Ordnance Survey AC0000808122. This map is to be used for the purposes of viewing the location of Southern Water plant only. Any other uses of the map data or further copies is not permitted.

WARNING: BAC pipes are constructed of Bonded Asbestos Cement.

WARNING: Unknown (UNK) materials may include Bonded Asbestos Cement.

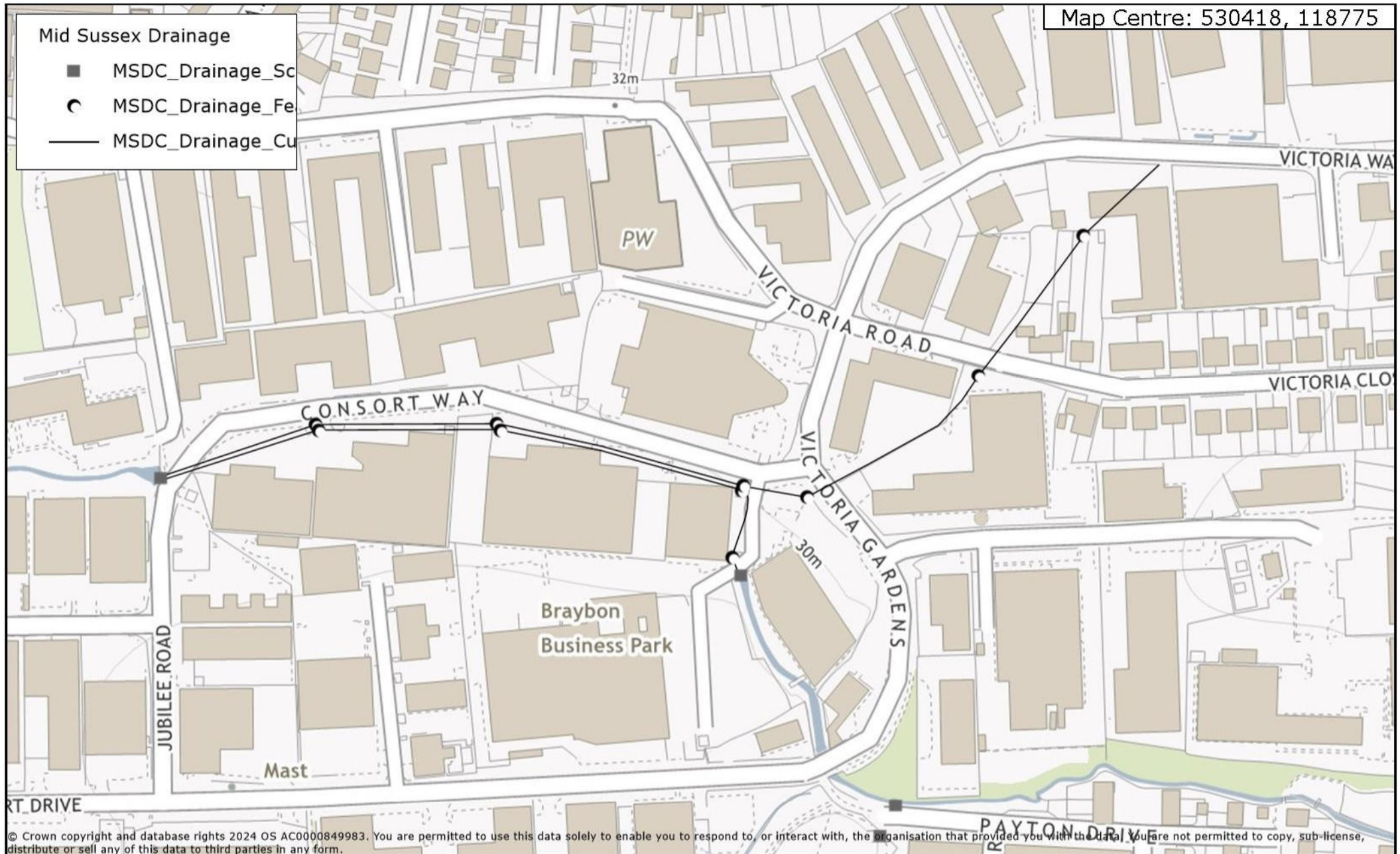
e.parry@hbpwconsulting.co.uk

site



Mid Sussex Drainage

- MSDC_Drainage_Sc
- MSDC_Drainage_Fe
- MSDC_Drainage_Cu



Unit A, Burgess Hill, RH15 9TL



APPENDIX C – PROPOSED DEVELOPMENT DRAWINGS

Contractors to check all dimensions on drawings.
Any discrepancies must be reported to KTA Architects Ltd or the contract administrator before proceeding.
Do not scale except for planning purposes, work to figured dimensions.
A Fire Consultant must be appointed for this project. KTA drawings & schedules to be read in conjunction with the Fire Consultant Fire Strategy Report.
The Fire Strategy Report takes precedence over any KTA drawing or schedule & any discrepancy should be brought to KTA's attention.
This drawing must be read in conjunction with all relevant consultants drawings.
This drawing is © KTA Architects Ltd.

Revision Schedule			
Revision Number	Revision Date	Revision Description	Issued/ Authorised by

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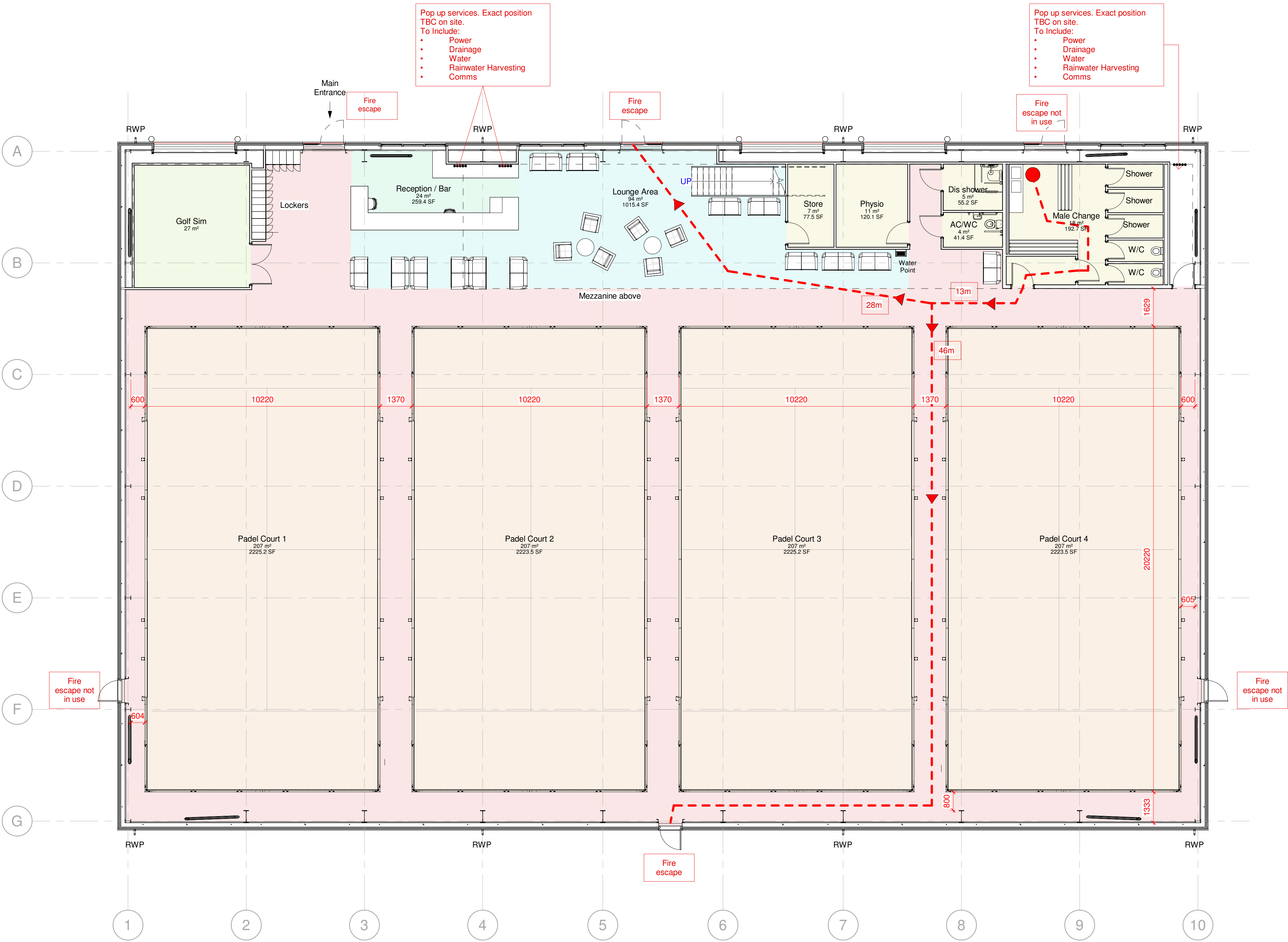
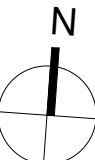
Project
Proposed Padel Centre UNITS
A1, A2 and A3 CONSORT WAY,
BURGESS HILL

Title
Proposed Ground Floor Plan

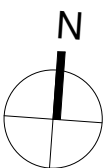
Author SC	Chkd by RN	Scale 1 : 100 @ A1
Project 2625	Status Preliminary	
Drawing number 2625-KTA-XX-00-D-A-0201		

OMP 128 V12.0 14/11/2022

Layout & Fire
escapes TBC by
fire engineer



This drawing is © KTA Architects Ltd.

128 v1.0 - 24/11/2022

APPENDIX D – EXISTING DRAINAGE DRAWING

KEY

SW

SW

SW

Proposed 'clean' surface water drainage

SW

SW

SW

Proposed 'dirty' surface water drainage

SW

SW

SW

Proposed perforated surface water drainage

SW

SW

SW

Existing surface water drainage

FW

FW

FW

Proposed foul water drainage

FW

FW

FW

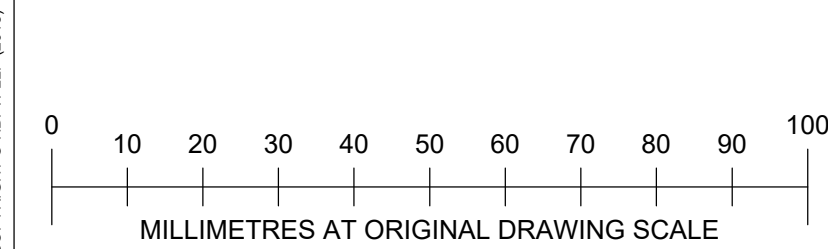
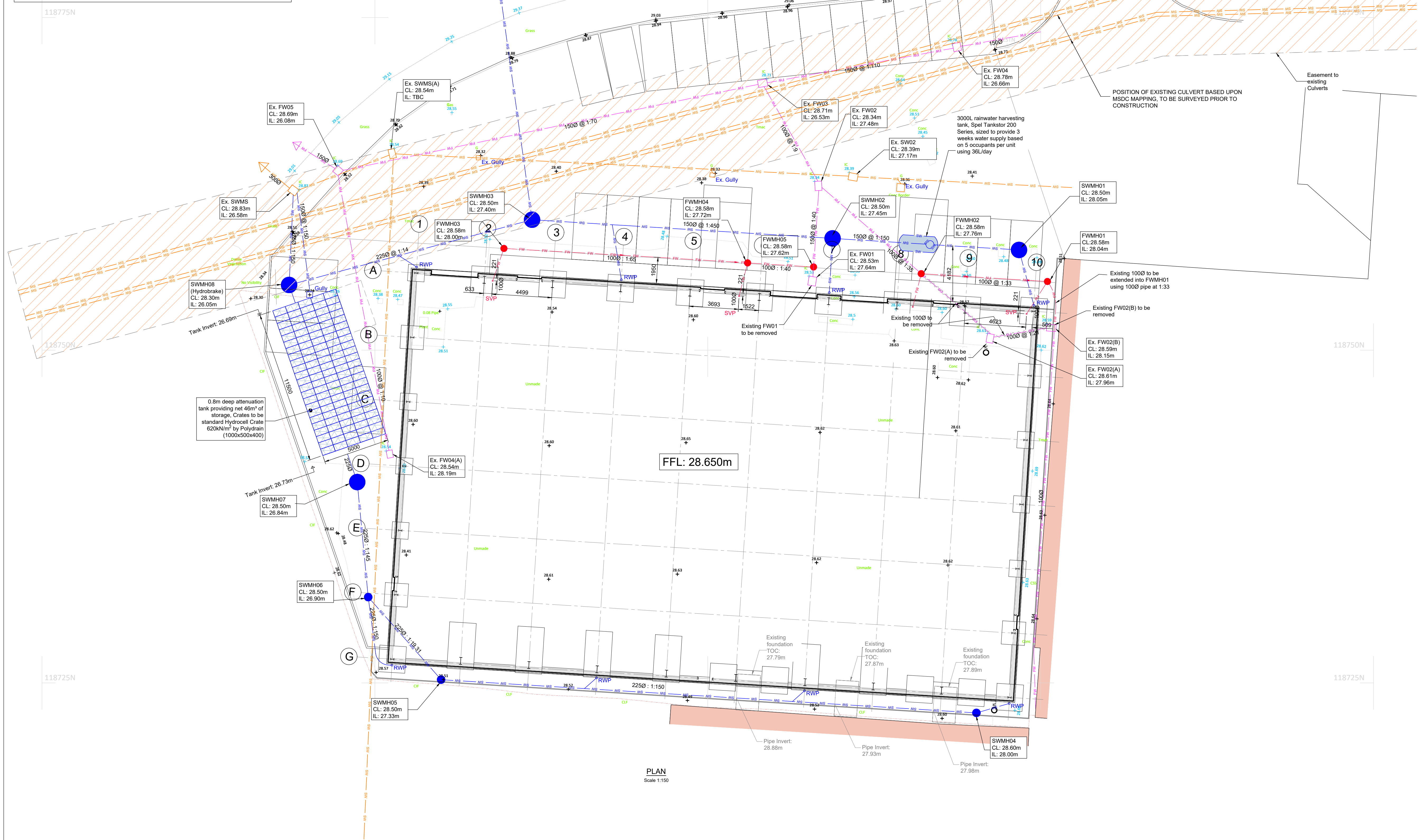
Existing foul water drainage

RWP

Rain water downpipe

PU

Foul water pop-up



- Notes
1.

Do not scale off this drawing.
2.

Should there be any conflict between the details indicated on this drawing and those indicated on other drawings the engineer should be informed prior to construction on site.
3.

All drawings are in millimetres unless otherwise stated.
4.

It is the responsibility of the contractor to execute the works at all times in strict accordance with the requirements of the health and safety at work act 1974 and cdm regulations 2015.
5.

All drainage is to be constructed in accordance with the building regulations.
6.

Drainage on site is considered as private, and is not subject to being adopted.
7.

All manhole cover levels are approximate.
8.

All rainwater downpipes to be fitted with a rodding facility located above ground level.

DRAINAGE STRATEGY SUMMARY

Existing Discharge Rates

- Rainfall = FEH22
- Climate Change = 0
- CV = 1
- 2 Year = 50.9 L/s
- 30 Year = 126.7 L/s
- 100 Year = 154.5 L/s

Proposed Discharge Rates

- Rainfall = FEH22
- Climate Change = 45%
- CV = 1
- 2 Year = 40.7 L/s
- 30 Year = 99.9 L/s
- 100 Year = 123.4 L/s

a proposed betterment of 20% has been made on the existing discharge rates across all storm events for the development.

AS BUILT

C3	AS BUILT ISSUE	NH	EP	EP	12.03.28
C2	ATTENUATION CRATE SIZE CHANGED AND SWMH08 OUT PIPE DIAMETER CHANGED	NH	EP	EP	14.11.25
C1	CONSTRUCTION ISSUE	NH	EP	EP	01.10.25
P3	DIAMETER OF SWMH08 AND INVERT LEVEL OF SWMH04 CHANGED	NH	EP	EP	30.09.25
P2	FW POP UPS ALTERED	NH	EP	EP	15.09.25
P1	FIRST ISSUE	EP	PM	EP	10.09.25
REV	DESCRIPTION	BY	CHK	APP	DATE

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HBPW PROJECT NUMBER: SL08556

PROJECT: UNIT A, CONSORT WAY
BURGESS HILL

DRAWING: DRAINAGE LAYOUT

PROJECT ENGINEER:
E. PARRY

CHECKED:
P. MONAGHAN

DATE:
10.09.2025

DRAWN:
E. PARRY

APPROVED:
E. PARRY

SCALE:
AS SHOWN

SIZE:
A1

SUITABILITY:
CR

REVISION:
C03

DOCUMENT REFERENCE NUMBER:
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