



Flood Risk Assessment – New Boat Maintenance Building

**Deacons Marina, Deacons House, Bridge Road,
Bursledon, Southampton, SO31 8AZ**

Boatfolk Marinas Limited

May 2023

Preface

Site Address: Deacons Marina, Deacons House, Bridge Road, Bursledon, Southampton, SO31 8AZ

NGR: E: 449052 N: 109659

Site Use: Marina and Boatyard

Proposed Use New boat maintenance building with a small staff room and storage area

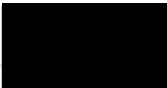
Application Site Area: 431m²

Date of Inspection: 15th June 2021

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Instruction Number: 01C300498

Report Control:	Status:		Date:	
	Version 1		May 2023	
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	<i>For and on behalf of Avison Young (UK) Limited</i>			
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1. Scope of Instruction and Brief

Objectives

- 1.1 Instructions were received from Boatfolk Marinas Limited (the Client) to undertake a Flood Risk Assessment to support a planning application for a new boat maintenance building at Deacons Marina.

Proposed Development

- 1.2 The proposed development consists of a new boat maintenance building with a small staffroom and storage area, with a gross internal footprint of 300m².
- 1.3 The building is accessed via self-propelled boat movers from the neighbouring hoist on the waters edge, with the primary boat maintenance area set at ground level to enable boat movers to freely enter and exit.
- 1.4 The proposed building is clad in black profiled metal cladding to the roof and walls which reflect the older, black painted commercial buildings found on site.
- 1.5 The boatyard has a site-wide flood mitigation strategy in place and the new building is designed so any perishable elements are set above the flood risk datum, discussed further within this report.
- 1.6 A copy of the proposed site layout can be found in **Appendix I**.

Data Sources

- 1.7 This report is based upon a detailed review of the following readily available documentation:
- Ambiantal Flood Risk Report, May 2021;
 - Boatfolk Project Flak Jacket Deacons Marina Inspection Reports, 01 – 06, April 2021;
 - Environment Agency Product 4 (Ref. SSD/21709);
 - Eastleigh Surface Water Management Plan, (no date);
 - Landmark Envirocheck Report (Ref. 106694972_1_1);
 - PUSH Strategic Flood Risk Assessment Final Report, December 2007;
 - PUSH Strategic Flood Risk Assessment Update, February 2016; and
 - Southern Water sewer map.

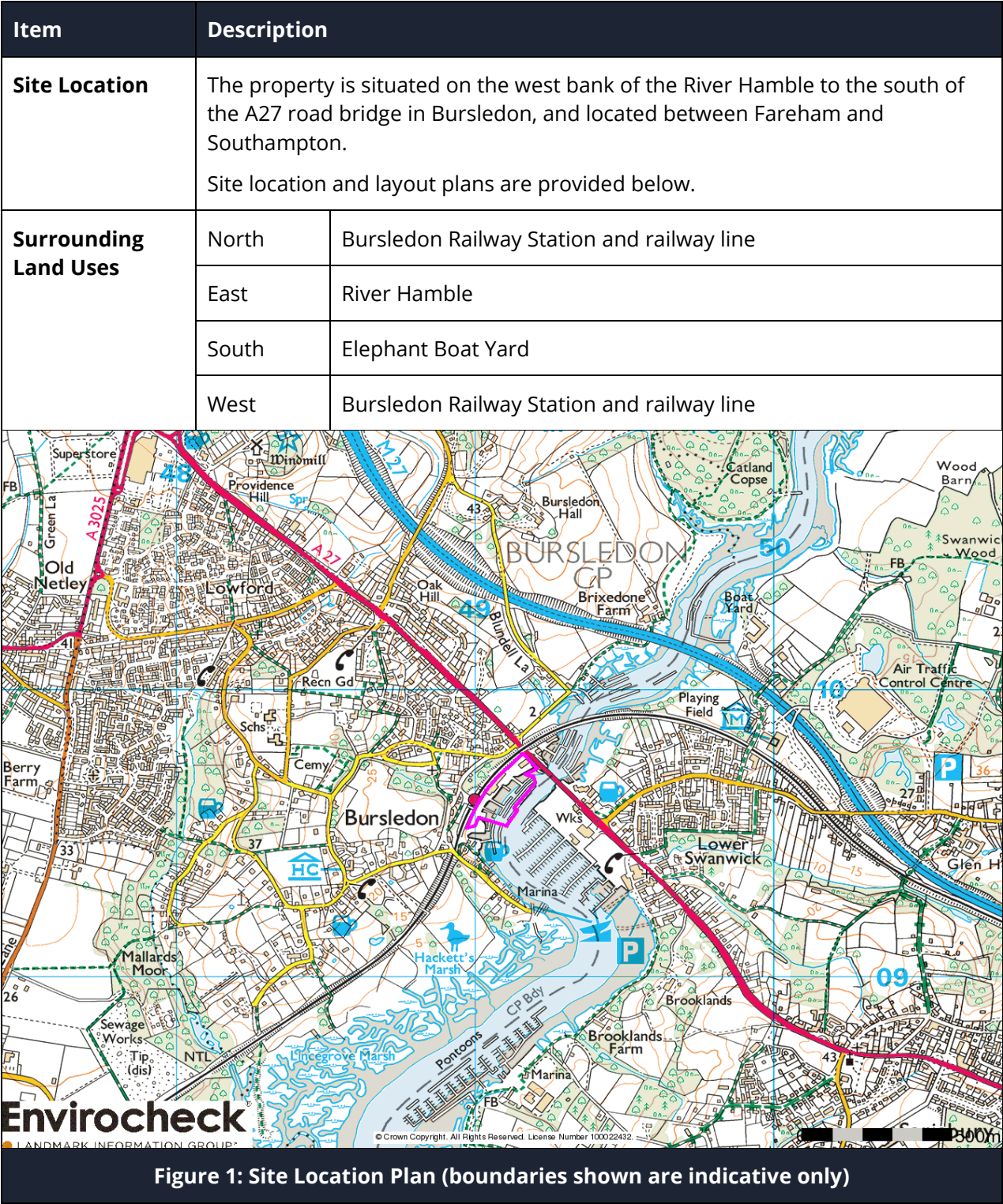
- 1.8 Regulatory enquiries with the Environment Agency, Hampshire County Council (Lead Local Flood Authority) and Southern Water have been undertaken to obtain historic flood records and an understanding of the local flood risk (if any).
- 1.9 The findings and opinions conveyed in this report are based on information obtained from a variety of sources as detailed in the report and which Avison Young assumes to be reliable but has not been independently confirmed. Therefore, Avison Young cannot and does not guarantee the authenticity or reliability of third-party information it has relied upon.
- 1.10 All Ordnance Survey Mapping contained within this report is © Crown Copyright. All rights reserved, licence number 100000795.

Report Preparation

- 1.11 Local Planning Authorities are advised by the Government's National Planning Policy Framework, July 2021 (NPPF) to consult the Environment Agency on development proposals in areas at risk of flooding and/or for sites greater than 1 hectare in area. In such circumstances the Environment Agency would require a Flood Risk Assessment to be submitted in support of the planning application for the proposed development.
- 1.12 In order to satisfy any potential concerns, the Environment Agency may have with the proposed development at the site; this report has been prepared to assess the requirements of NPPF through:
- Assessing whether the proposed development is likely to be affected by flooding;
 - Assessing whether the proposed development is appropriate in the suggested location; and
 - Presenting measures necessary to mitigate any flood risk identified, to confirm that the proposed development and occupants would be safe, whilst ensuring that flood risk would not be increased elsewhere.

2. Site Location

2.1 The following site location plan and table provides a summary of the site's location and surrounding land uses.



3. Site Setting

3.1 The following site layout plan and table provides a summary of the site's condition and setting.

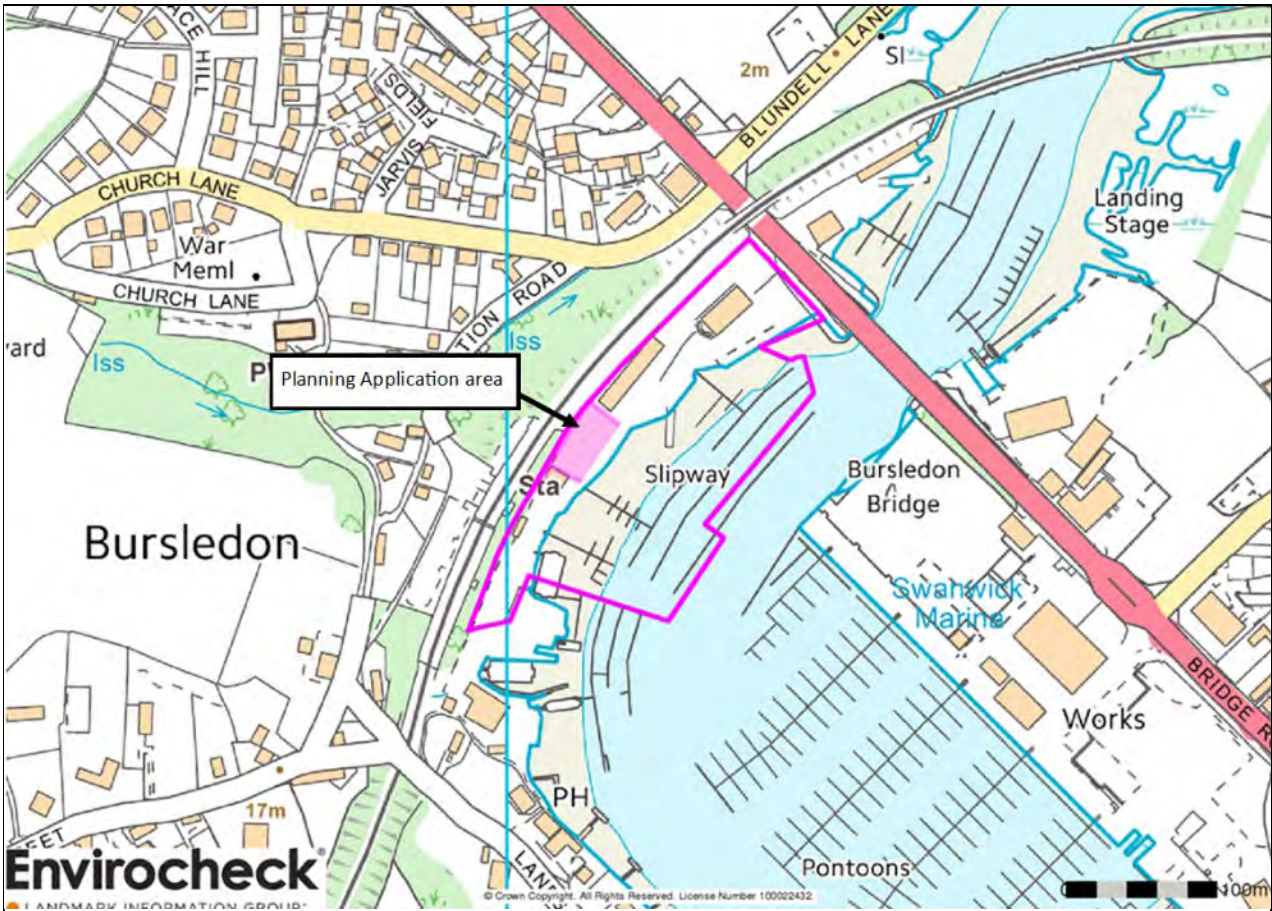


Figure 2: Site Layout Plan (boundaries shown are indicative only)

Item	Description
General Description	Deacons Marina and Boatyard have operated from the site for nearly a century. The property is situated on the lower reaches of the River Hamble between Southampton and Fareham and can accommodate 135no. berths afloat and space for around 180no. boats ashore with craneage facilities for boats up to 20 tonnes and 45 feet in length. The marina area is roughly rectangular in shape and extends along the bank of the River Hamble with pontoons that extend into the river channel. The application site area is located within the north west portion of the site, located between an existing spray booth and the main marina industrial and office buildings. The site is bound to the north by a railway embankment, to the east by a marina building, to the west by a boat spray booth and approximately 13m to the south, gabion walls denoting the water edge. The ground cover is surfaced with stone chippings.

Item	Description												
Topographical Survey	A topographical survey of the site has been carried out by P Stubbington Land Surveys Ltd, June 2017 (Ref 6214/01). The survey shows that the site generally falls in a north to south east direction towards the River Hamble. Site levels vary between 2.75m AOD in the north-eastern corner of the site to 2.05m AOD in the south east area by the gabion wall. The average site level where the building is proposed is approximately 2.50m AOD. A copy of the topographical survey can be found in Appendix II.												
Geological Conditions	From a review of the British Geological Survey (BGS) Solid & Drift Sheet 315, Southampton at a scale of 1:50,000 the following geological succession has been identified at the site. <table><tr><th>Strata</th><th>Description</th><th>Approx. Thickness</th></tr><tr><td>Artificial Ground</td><td>Variable composition. Man-made superficial deposit.</td><td><5m</td></tr><tr><td>Tidal Flat Deposits</td><td>Normally consolidated soft silty clay, with layers of sand, gravel and peat.</td><td><5m</td></tr><tr><td>London Clay Formation</td><td>Comprises bioturbated or poorly laminated, blue-grey or grey-brown, slightly calcareous, silty to very silty clay, clayey silt and sometimes silt, with some layers of sandy clay.</td><td>>50m</td></tr></table> The BGS map does not indicate the presence of any geological faults within a 1km radius of the site. From a review of the Eastleigh Borough Council Planning Portal, we have reviewed the following ground investigation that was undertaken to support the construction of a detached building to provide 10no. industrial units (ref.09/65283): Geo-Environmental Site Investigation Report, Deacons Boat Yard, Bursledon Hampshire, REC Report 50822/report 1.1, dated April 2009 undertaken on behalf of SGC Projects Ltd. The report presents the findings of a combined geotechnical and geo-environmental investigation at Deacons Boatyard, Bursledon, Hampshire. This report confirmed the anticipated geology tabulated above. Groundwater was encountered between 10.4m to 11.4m bgl in a gravel layer that appeared to be constrained within the clays. It was considered that the groundwater was unlikely to be in direct hydraulic continuity with the river due to the depth at which it was encountered and the presence of the sheet pile dock wall. A copy of the exploration records are provided in Appendix III.	Strata	Description	Approx. Thickness	Artificial Ground	Variable composition. Man-made superficial deposit.	<5m	Tidal Flat Deposits	Normally consolidated soft silty clay, with layers of sand, gravel and peat.	<5m	London Clay Formation	Comprises bioturbated or poorly laminated, blue-grey or grey-brown, slightly calcareous, silty to very silty clay, clayey silt and sometimes silt, with some layers of sandy clay.	>50m
Strata	Description	Approx. Thickness											
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London Clay Formation	Comprises bioturbated or poorly laminated, blue-grey or grey-brown, slightly calcareous, silty to very silty clay, clayey silt and sometimes silt, with some layers of sandy clay.	>50m											

Item	Description
Catchment Hydrology	The closest surface watercourse is the tidally influenced River Hamble which is located immediately south east of the marina. A small watercourse runs approximately 80m to the north of the application site. This watercourse is a tributary of the River Hamble and is partially culverted. The watercourse discharges into another culverted watercourse, located approximately 20m to the north east of the marina. This culverted watercourse flows in a south easterly direction, under the marinas north-eastern boundary, where it eventually discharges into the River Hamble. According to Environment Agency data, these watercourses are classed as Main Rivers.
Catchment Hydrogeology	According to the Envirocheck Report, the underlying superficial deposits and deeper bedrock geology are both classified as Unproductive Strata with low permeability and have negligible significance for water supply or for the supply of base flow to streams and rivers. The Envirocheck Report does not identify any groundwater abstractions authorised by the Environment Agency on site or within 500m of the property
Existing Site Drainage	Sewer records obtained from Southern Water shows that there are no public sewers located within the marina. However, the records show a 225mm public foul water sewer running in a south-westerly direction in parallel to the marina from Bridge Road (A27). There are no public surface sewers in the vicinity of the marina. A CCTV drainage survey was carried out in May 2017 to establish the onsite drainage arrangements. According to this survey, there are two separate networks which receive surface water from private yard gullies, ACO channel drains and French drains which all ultimately discharge into the River Hamble via two separate outfall pipes. A copy of the Southern Water Asset Plans and Existing Arrangements can be found in Appendix IV.

Site Photographs

3.2 A selection of site photographs taken on 15 June 2021 is presented below.



Photo 1: View of the Marina, photo taken from Bridge Road



Photo 2: View of application site looking in a north-easterly direction



Photo 3: View of the application site looking in an easterly direction



Photo 4: View of the spray booth to the south of the application site



Photo 5: Application site ground surface



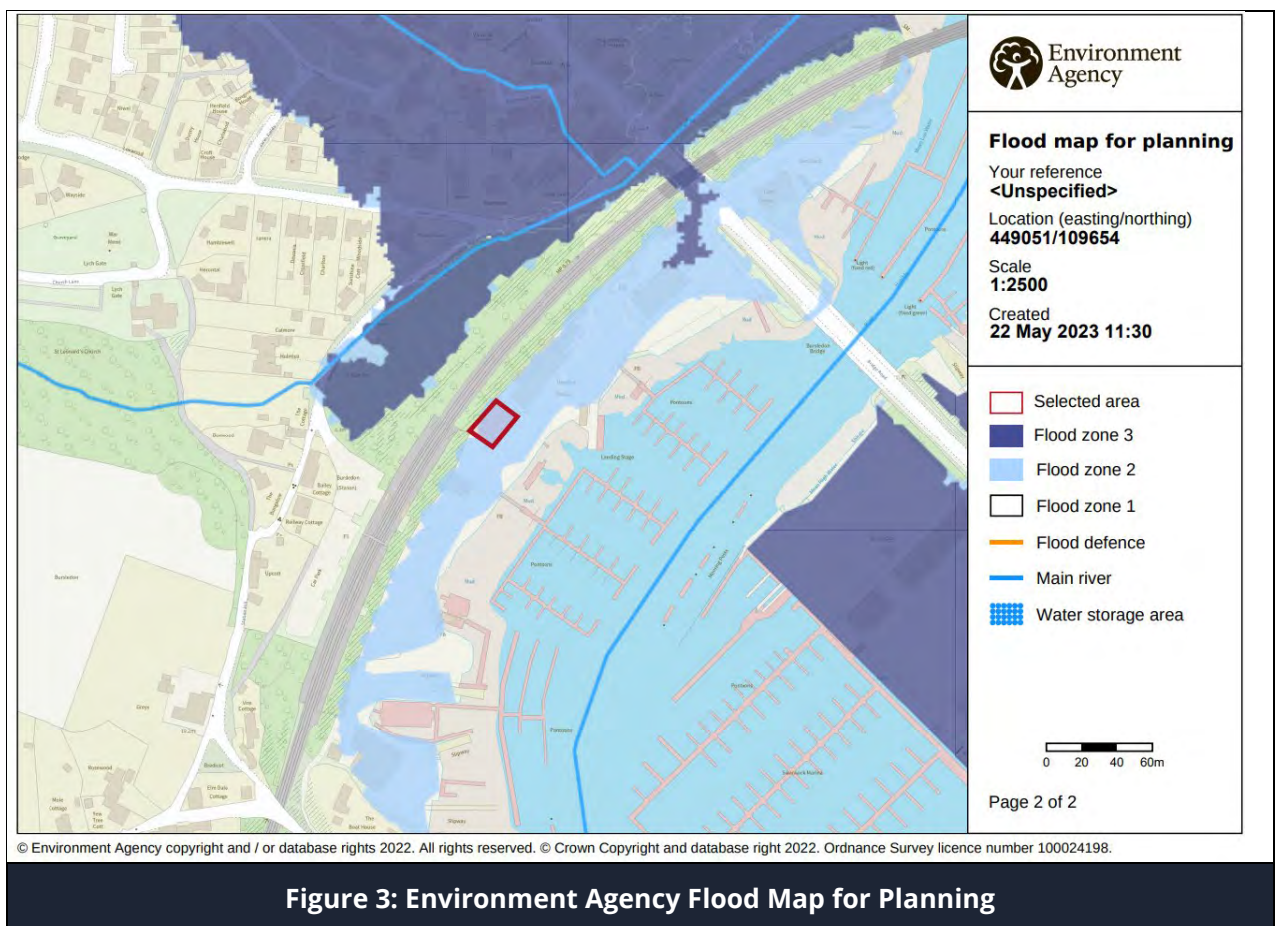
Photo 6: Gabion Wall located along the central southern boundary. Note: these are not flood defences, they were installed to slow erosion

4. Flood Risk

- 4.1 This section identifies what potential sources of flooding could affect the site and includes further details on how flooding might occur.

Environment Agency Flood Maps

- 4.2 According to the publicly available Environment Agency Flood Map for Planning (Figure 3 below), the majority of the application site is located within Environment Agency Flood Zone 2 (land assessed as having a between 1 in 1,000 and 1 in 100 chance of flooding from rivers in any year or between 1 in 1,000 and 1 in 200 chance of flooding from the sea in any year).



- 4.3 Upon review of the Environment Agency's Long-Term Flood Risk Map (Figure 4 below), the application site is at 'Low' risk of flooding, with an annual probability of river or sea flooding of between 1 in 1,000 and 1 in 100.

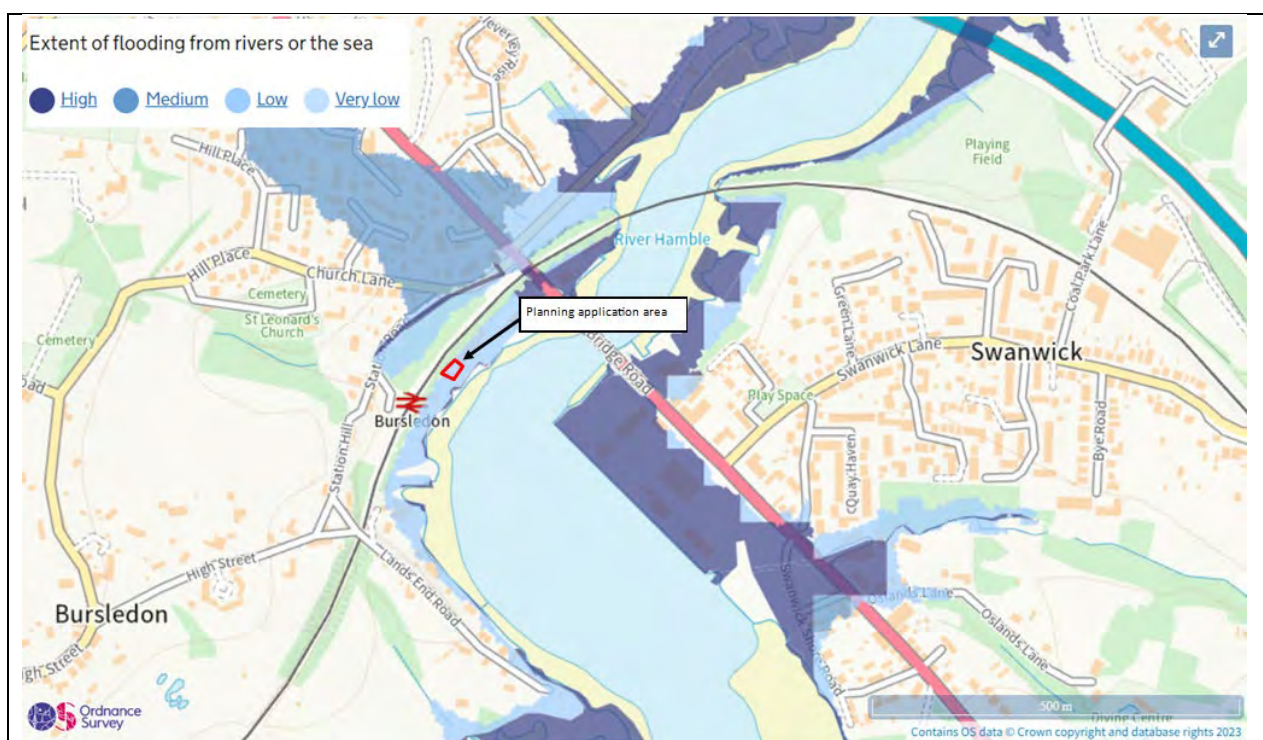


Figure 4: Environment Agency Long Term Flood Risk Map

Tidal

Tidal Influences and Meteorology

- 4.4 An unusual phenomenon of a 'double high water' is experienced each day in the Southampton and Solent tidal areas, including the River Hamble. This double high-water tide provides a high tide, which lasts over 2 hours which is then followed by a short ebb tide which is then followed by a long flood tide.
- 4.5 Historically, the highest tidal levels recorded within the River Hamble occur when high fluvial flows combine with Spring Tides and deep low pressure systems. It is during these conditions that the risk of flooding to the site is at its greatest.
- 4.6 When tide charts forecast levels exceeding 4.8m above Chart Datum (chart datum being 2.74m below Ordnance Datum at this location) there is a risk of flooding.

Environment Agency Product 4

- 4.7 We have obtained Environment Agency Product 4 data for the site (Reference SSD/21709). This included the modelling data taken from the Southampton Water Coastal Model, which was produced in 2014 by JBA, information on flood defences within the area and historic flood mapping. The data did not include any fluvial data for the small watercourse which runs approximately 100m from the north-western boundary of the site.
- 4.8 A copy of the Environment Agency Product 4 can be found in **Appendix V**.

Southampton Water Coastal Model

- 4.9 The tidal flood levels for the 1 in 200-year and 1 in 1,000-year flood event are provided in the table below. These levels have been taken from the Southampton Water Coastal Model.

Year	Tidal Level (m AOD)	
	1 in 200 Year (Flood Zone 3)	1 in 1,000 Year (Flood Zone 2)
2015	3.2m AOD	3.3m AOD
2070	3.7m AOD	3.8m AOD
2115	4.3m AOD	4.5m AOD

- 4.11 In summary, during a 1 in 200-year event, today's level is 3.2m AOD rising to 4.3m AOD in the next 100 years. During a 1 in 1,000-year extreme flood event, today's level is 3.3m AOD, however, this level will rise to 4.5m AOD in the next 100 years.

Climate Change

- 4.12 Climate change data is continually being revised. The flood data shown above is based on the climate allowance applicable in 2014. The Environment Agency has since published new Climate Change Guidance which provides insight into how flood levels will rise in the next 100 years, taking into account today's projections¹.
- 4.13 The rate of sea level rise for South East England is shown below. The projections vary based on the vulnerability of the end development. A more cautious approach is applied to developments of a Highly Vulnerable nature i.e. Residential Caravan Sites. For Marina Developments, including Office

¹ <https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances>

Use and Restaurants, we have applied the High Central allowance which is a more conservative approach.

Area of England	Allowance	Predicted Increase in Sea Level Over the next 100 years				
		2000 to 2035 (mm)	2036 to 2065 (mm)	2066 to 2095 (mm)	2096 to 2125 (mm)	Cumulative rise 2000 to 2125 (m)
South East	Higher Central (for more vulnerable development)	203mm	264mm	351mm	393mm	1.21m



Figure 5: Sea Level Rise (Higher Central)

- 4.14 As discussed above the current 2015, 1 in 200-year modelled level is 3.2m AOD. We can add the latest climate change allowances (1.21m) to get a finished floor level of 4.41m AOD. This is for development with a design life of 100 years.
- 4.15 However, if the development has a design life of 50 years, we can calculate the allowance based on increments. The Environment Agency has calculated the increments based on which part of the country you are in. These figures are summarised below and show that in 50 years' time the predicted flood level is **3.69m AOD**. For further information on how these were calculated please see: <https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances#table-3>

South East	0.5%	2000 to 2035 (mm)	2036 to 2065 (mm)	2066 to 2073 (mm)	Cumulative rise 2014 to 2073 (m)	2073 Finished Floor Level
Higher Central	3.2m AOD	125.4mm	261mm	101.2mm	$0.1254 + 0.261 + 0.1012 = \mathbf{0.488m}$	$3.2 + 0.49 = \mathbf{3.69m AOD}$

Environment Agency Climate Change Summary

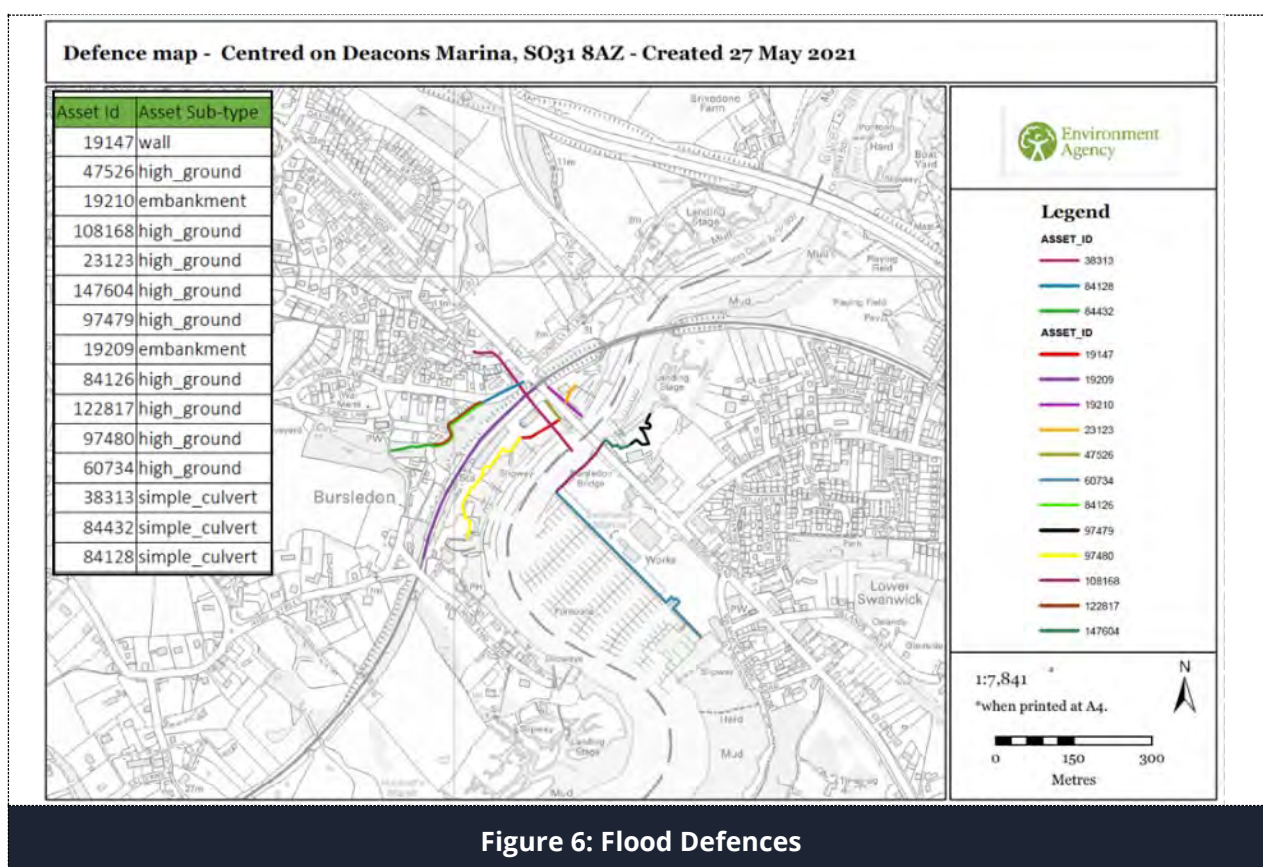
4.16 In summary, for development with a design life of:

- **50 years**, we recommended finished floor levels are set above **3.69m AOD**; and
- **100 years**, we recommended finished floor levels are set above **4.41m AOD**.

Flood Defences

4.17 According to the Product 4 data, the site and surrounding area benefit from a number of natural flood defences together with engineered defences, including a steel pile wall, a steel wall, a concrete seawall, a shingle embankment and a stone filled gabion (which was implemented to prevent further erosion). The location of the defences is presented in Figure 6 below.

4.18 According to Environment Agency data, these defences provide the subject site with a design standard of protection of 100 years. The defences were last inspected in 2020 and were found to be in a 'Fair' condition and are privately owned (assumed to be owned by Boatfolk).



Flood History

- 4.19 We understand that the River Hamble, at this locality, overtops its banks annually during the high Spring Tide and results in flooding of the yard areas in the central and southern portion of the site to a depth of approximately 400mm. During these events, water reaches the development area. We understand that the high tide is experienced for a period of no longer than two hours and can be predicted by reference to Admiralty Tide Charts.
- 4.20 We understand that a Spring Tide that occurred on 14 February 2014 coincided with a low pressure system and onshore wind that resulted in a storm surge in the Solent/English Channel. During this event, water reached the southern boundary of Deacons House. The Deacons House building benefits from raised floor levels that are raised to 3.52m AOD and therefore water did not ingress into the building. During this event, water reached the application site area.
- 4.21 The risk of tidal flooding to the site is considered as **'high'**.

Fluvial

Fluvial flooding is the term used to describe flooding which occurs when rivers experience large flows causing them to exceed their capacity. In the natural environment open spaces near the river act as storage areas or 'flood plains' for out-of-channel flow, alleviating downstream flood risk.

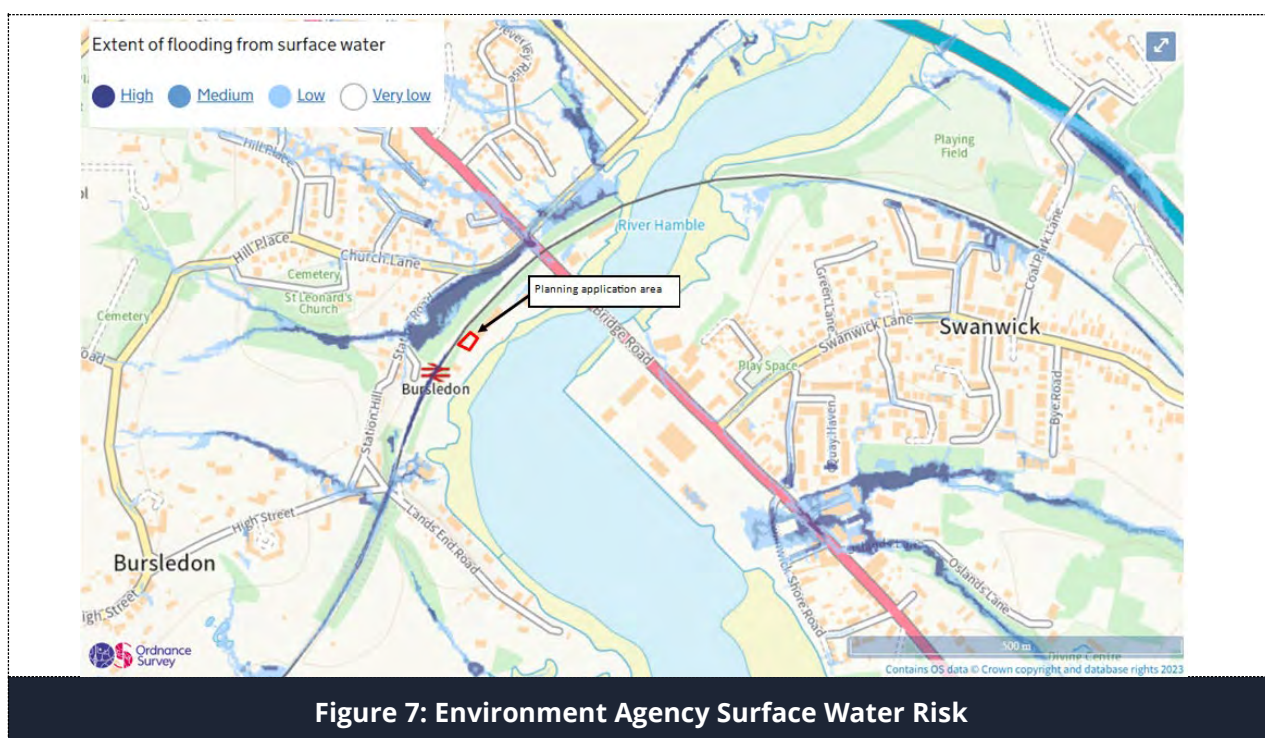
- 4.22 A small watercourse runs approximately 80m to the north west of the application site. This watercourse is a tributary of the River Hamble and is partially culverted.
- 4.23 Fluvial flood modelling data was not provided as part of the Product 4. We have made further enquiries with the Environment Agency to establish if there is any model data available for the watercourse. However, we consider that the tidal depths summarised within this report will be deeper than any potential fluvial depths from the watercourse.
- 4.24 The risk of fluvial flooding to the site is considered as **'low'**.

Surface Water

Surface water flooding (otherwise known as pluvial) is the term used to describe flooding which occurs when intense, often short duration rainfall is unable to be conveyed either into the ground or a drainage network, and as a consequence flows over ground on the surface causing flooding.

- 4.25 According to the Environment Agency Surface Water Flood Map, the majority of the application site is at 'very low' risk of surface water flooding, with an annual chance of flooding of less than 1 in 1,000.

- 4.26 No records of surface water flooding are held by the Environment Agency or contained within the Council's Strategic Flood Risk Assessment. Site management have no records of the site having been affected by surface water flooding.



- 4.27 The risk of surface water flooding to the site is considered as **'very low'**.

Groundwater

Groundwater flooding is the term used to describe the emergence at surface level of water originating from a permeable sub surface stratum where the groundwater level rises above the local ground level.

- 4.28 From a review of the British Geological Survey 'Groundwater Flooding Susceptibility Map', the site is located in an area where there is potential for groundwater flooding of property situated at the surface and below ground level. However, during the 2009 site investigation groundwater was encountered between 10.4m - 11.4m bgl in the gravel layer and appeared to be constrained within the clay. Therefore, we consider that the site is at low to medium risk of Groundwater flooding, however, there are no proposed basement or below ground structures that would potentially be at risk.
- 4.29 The risk of groundwater flooding is considered to be **'low to medium'**.

Sewer

Sewer flooding is the term used to describe flooding which occurs when local drainage systems (foul or surface water or combined) become overwhelmed by run off or foul water due to either lack of capacity or to maintenance issues such as blockages.

- 4.30 There are no public sewers located within the marina. The nearest sewer is a 225mm public foul water sewer running in a south-westerly direction in parallel to the site from Bridge Road (A27). There are no public surface water sewers in the vicinity of the site.
- 4.31 The risk of sewer flooding to the site is considered to be '**low**'.

Reservoirs

Reservoir flooding is the term used to describe an area that could be flooded if a large reservoir were to fail and release the water it holds. Reservoir flooding is extremely unlikely to happen. However, in the unlikely event that a reservoir dam failed, a large volume of water would escape at once and flooding could happen with little or no warning.

- 4.32 The Environment Agency Reservoir Flood Map shows that the site is not at risk from reservoir flooding.
- 4.33 The risk of flooding from reservoirs is considered to be '**negligible**'.

Artificial Sources

Artificial Sources of flooding is the term used to describe flooding caused by manmade waterways such as canals or water storage areas.

- 4.34 There are no canals in close proximity (1km) to the subject site.
- 4.35 The risk of flooding from artificial sources is considered to be '**negligible**'.

5. Flood Risk Classification

- 5.1 This section identifies if the site is suitable for development in line with the National Planning Policy Framework, revised in July 2021.

Sequential Test

- 5.2 The risk based sequential test is a planning tool found within the National Planning Policy Framework. It is used to steer new development to areas at the lowest probability of flooding, known as Flood Zone 1 (1 in 1,000 annual probability of river or sea flooding). The Flood Zones are the starting point for the sequential test is summarised below.

Flood Zone	Associated Flood Risk
Zone 1	This zone comprises land assessed as having a less than 1 in 1,000 annual probability of river or sea flooding in any year.
Zone 2	This zone comprises land assessed as having between a 1 in 100 and 1 in 1000 annual probability of river flooding or between 1 in 200 and 1 in 1,000 annual probability of sea flooding in any year.
Zone 3a	This zone comprises land assessed as having a 1 in 100 or greater probability of river flooding or a 1 in 200 or greater probability of flooding from the sea in any year.
Zone 3b	This zone comprises of the functional floodplain. This land comprises land where water has to flow or be stored in times of flood.

- 5.3 According to the Environment Agency flood maps the site is located within **Flood Zone 2**.

Vulnerability Table

- 5.4 National Planning Policy Framework groups development types into different vulnerability classifications:
- Essential Infrastructure such as essential utility infrastructure;
 - Highly Vulnerable such as residential caravans and basement dwellings;
 - More Vulnerable such as dwelling houses, short stay holiday caravans and educational establishments;
 - Less Vulnerable such as offices, shops, restaurants and cafes; and
 - Water Compatible such as water treatment plants and amenity open space.
- 5.5 Boat maintenance buildings are classed as '**Less Vulnerable**'.

- 5.6 For each Flood Zone within the Technical Guidance, the table below sets out whether development of the various different vulnerability classifications is appropriate.

Flood Zone	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	✗	✗	✗	✓
✓ Development is appropriate ✗ Development is not appropriate					

- 5.7 The site is located within Flood Zone 2 and in accordance with the National Planning Policy, development is deemed appropriate.

Exception Test

- 5.8 The Exception Test, as set out in paragraph 160 of the National Planning Policy Framework, is a method to demonstrate and help ensure that flood risk to people and property will be managed satisfactorily, while allowing necessary development to go ahead in situations where suitable sites at lower risk of flooding are not available.
- 5.9 In accordance with National Planning Policy Framework, an Exception Test is not required for the proposed site.
- 5.10 However, we have recommended a number of developer recommendations which are discussed within Section 6 below.

6. Developer Recommendations

Flood Risk

- 6.1 The marina has a history of flooding which impacts the majority of the site and the application site. The Client is aware of the flood risk and acknowledges the proposed boat shed building will flood in the future. It has been agreed that the building will be flood compatible which is discussed further below.

Finished Floor Levels

- 6.2 The main boat space within the building will be set at the surrounding site level to enable hoist movement and access. Therefore, it is not feasible to raise the finished floor level above the design flood event.
- 6.3 However, we recommend that all equipment and electrics are set above the 1 in 200-year plus 50 years climate change level of 3.69m AOD. Based on an average ground level of the application site is approximately 2.50m AOD, this will involve raising equipment by approximately 1.19m.

Flood Resilience

- 6.4 We recommend that the following flood resilience measures are incorporated into the building:
- Building materials with good resistance to water penetration and good drying ability;
 - Ceramic or concrete based floor tiles;
 - An internal / external water resistant (cement) plaster / render with lime content;
 - Periscopic air vents; and
 - Electrical and gas applications elevated adequately above design flood level.

Building Fixtures

- 6.5 The building will be securely fixed to its concrete footprint. Therefore, in the unlikely event of a flood, the building would not be displaced by flood water.

Flood Warning and Evacuation Plan

- 6.6 The Marina benefits from an existing Flood Warning Plan. This should be revised to incorporate changes associated with this planning application.

Flood Activity Permit

- 6.7 In accordance with The Environmental Permitting (England and Wales) (Amendment) (No.2) Regulation 2016, Schedule 25, Part 1, we recommend that an Environmental Permit for Flood Risk Activities is submitted to the Environment Agency for works which take place within 16m of the flood defence.
- 6.8 The proposed development will include works close to an Environment Agency flood defence, therefore we consider that the Permit will need to be written alongside the appointed building contractor who will be able to provide sufficient construction information to support the application.
- 6.9 We therefore recommend that the permit is submitted once planning has been secured.

7. Conclusions

- 7.1 Instructions were received from Boatfolk Marinas Limited (the Client) to undertake a Flood Risk Assessment to support a planning application for a new boat maintenance building at Deacons Marina.
- 7.2 The Flood Risk Assessment has been prepared in accordance with the National Planning Policy Framework in respect of the proposed scheme of development.

Flood Risk

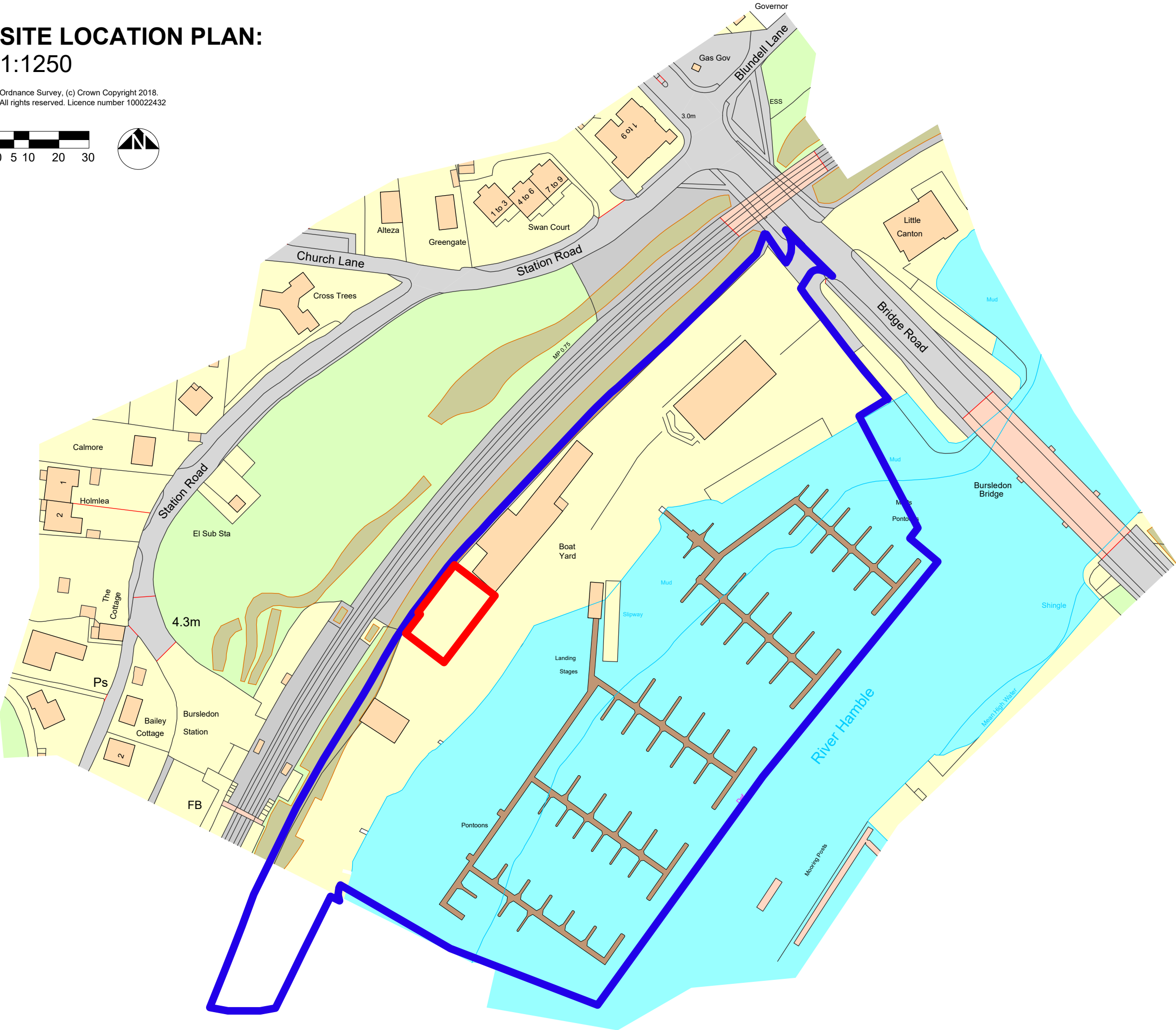
- 7.3 Following the completion of this assessment, the following conclusions can be drawn:
- The Environment Agency Flood Maps show that the application site is located within Flood Zone 2.
 - In accordance with National Planning Policy Framework 'less vulnerable' development types which include boat maintenance buildings are deemed appropriate within Flood Zone 2.
 - The main boat space within the building will be set at the surrounding site level (approximately 2.5m AOD) to enable hoist movement and access. Therefore, it is not feasible to raise the finished floor level above the 1 in 200 year plus 50 years climate change flood event level (3.69m AOD). Therefore, given the low vulnerability of the end use we recommend the ground floor is designed to be flood resilient to minimise the damage caused by floodwater should it enter the building and enable quick reoccupation, and water sensitive equipment and plant raised by approximately 1.19m.
 - In terms of other forms of flooding, we consider that there is a low to medium risk of groundwater flooding and that there is a negligible or low flood risk to the whole site from surface water, sewer, reservoirs and artificial sources of flooding.

Appendix I

Site Layout Plan

SITE LOCATION PLAN:
1:1250

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Rev:	Date:	Amendment:
A	26 April 2023	Red line revision

Project		
Revised Boat Shed Deacons Marina and Boatyard, Southampton, Hants., SO31 8AZ		
Client		
Dean and Reddyhoff		
Drawing:		
Site Location Plan		
Scale:	Date:	Drawn:
1:1250 @ A3	Apr 2023	RMB
Drawing no:	Rev:	
PA23-105:01	B	
A: 8 Westcliff Lee-on-the-Solent Hants PO13 9JS T: 02392 55 66 40 E: studio@plumarchitects.co.uk		
plum architects		



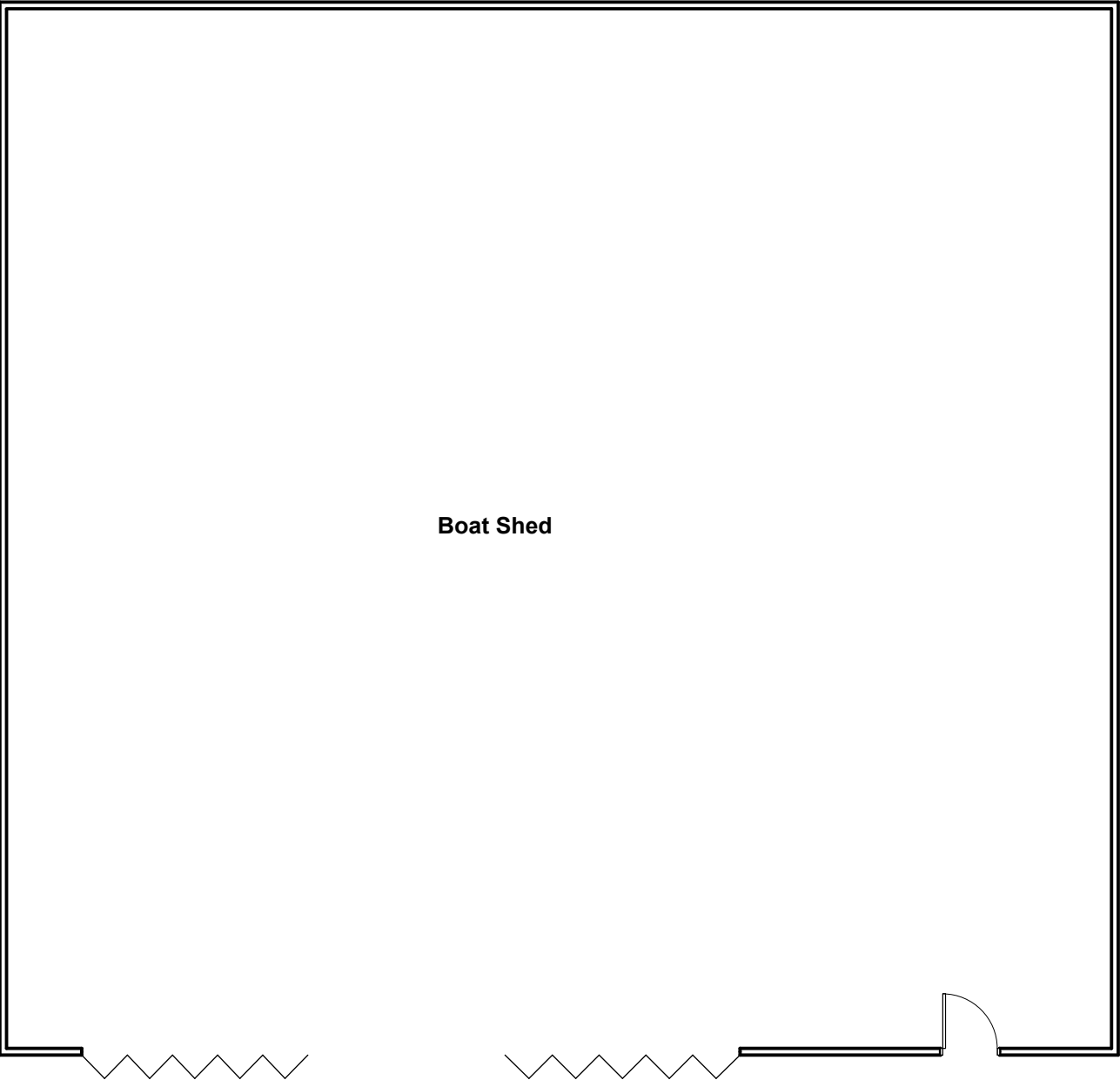
SITE LAYOUT PLAN: as proposed
1:500



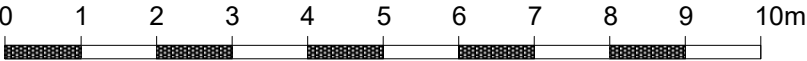
boatfolk

Rev:	Date:

Amendment:



Plan as Proposed
1:100 @ A3

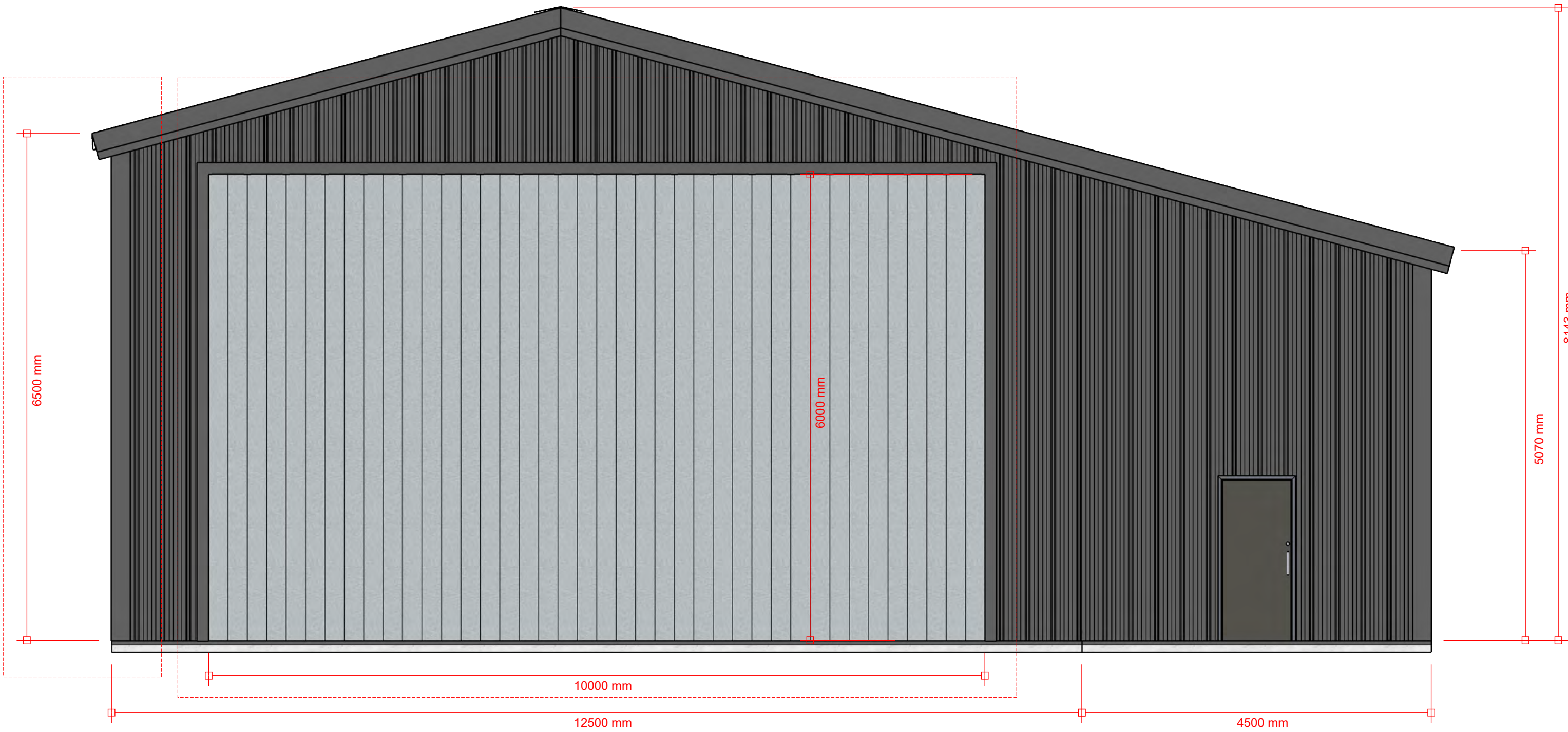


Project			
New Boat Shed Deacons Marina and Boatyard, Southampton, Hants. SO31 8AZ			
Client			
Boatfolk			
Drawing:			
Boat Shed Plan as Proposed			
			
Scale:	Date:	Drawn:	
1:100 @ A3	May 2023	MJR	
Drawing no:	Rev:		
PA23-105:04			
A: 8 Westcliff Lee-on-the-Solent Hants PO13 9JS T: 02392 55 66 40 E: studio@plumarchitects.co.uk			

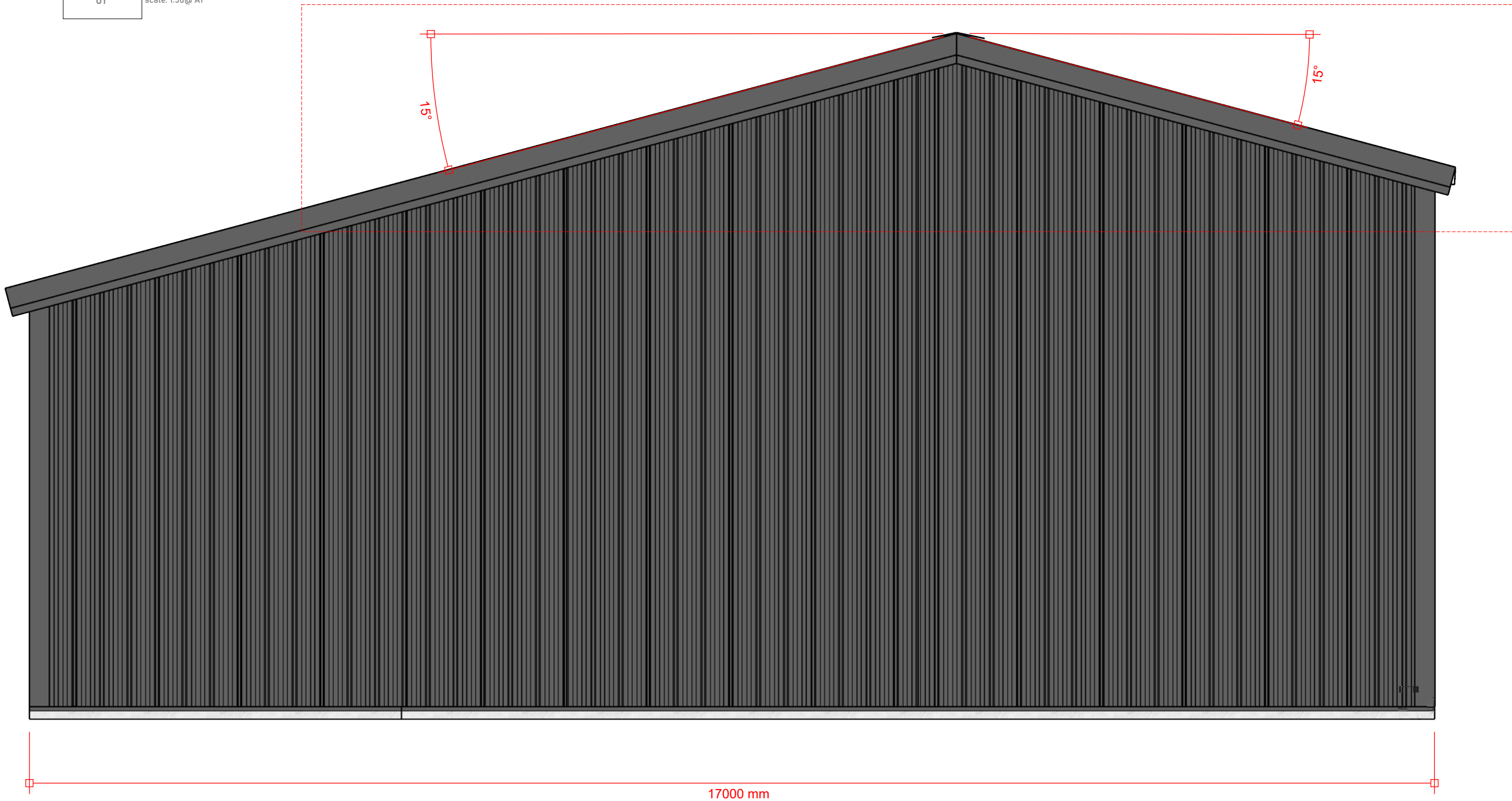


TEL. 01452 473047
EMAIL. sales @rymansteelbuildings.co.uk

Mezzanine level in engineers store
accessed through double doors from
boat shed.
Double doors to link buildings at ground level.



A1	FRONT
01	scale: 1:50@ A1



A3	BACK
01	scale: 1:50@ A1

Revision log:

A_29.03.2022_ Roof line of boat shed carried into engineers store

B_14.04.2022_ Pitch changed to 15 degrees, eaves to boat shed raised by 500mm to fit 10m wide door, notes added on internal doorways, stairs and mezzanine level

General Notes

All dimensions in millimeters unless marked otherwise.

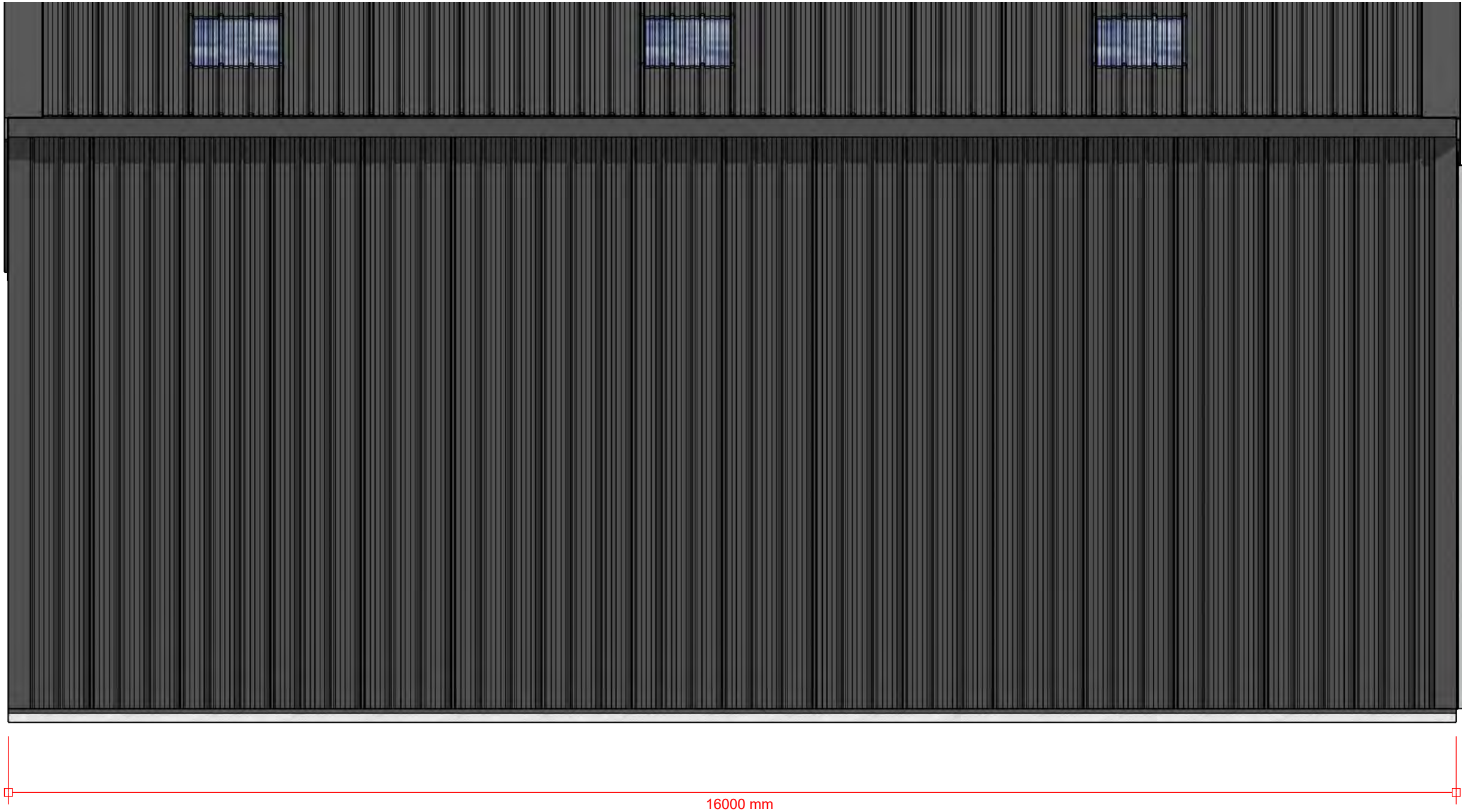
Please report any potential design or construction issues at the earliest opportunity to RYMAN STEEL BUILDINGS via the contact details shown in the top left hand side of this drawing.

First issue of drawing will be marked as - in revision field .

Subsequent revisions shall start with A and will progress in alphabetical order.



A2	RIGHT
01	scale: 1:50@ A1



A4	LEFT
01	scale: 1:50@ A1

Drawings / Design by
PMD DT LTD
Mobile: 07443 413039
email: pmdsigntechology@outlook.com



TEL. 01452 473047
EMAIL. sales @rymansteelbuildings.co.uk



B1	ROOF PLAN
02	scale: 150@ A1

Mezzanine level in engineers store
accessed through double doors from
boat shed.
Double doors to link buildings at ground level.

Revision log:

- A_29.03.2022_ Roof line of boat shed carried into engineers store
- B_14.04.2022_ Pitch changed to 15 degrees, eaves to boat shed raised by 500mm to fit 10m wide door, notes added on internal doorways, stairs and mezzanine level

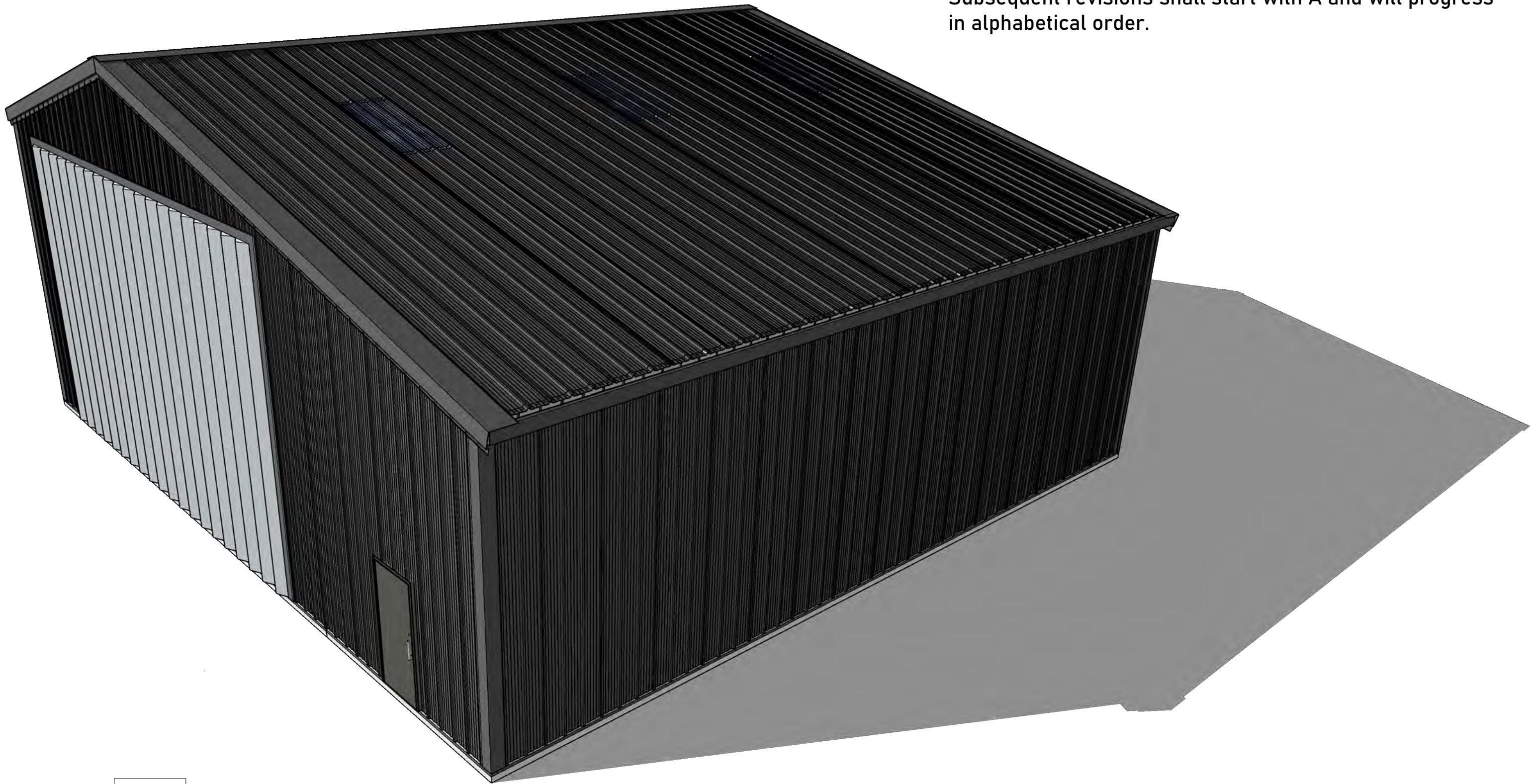
General Notes

All dimensions in millimeters unless marked otherwise.

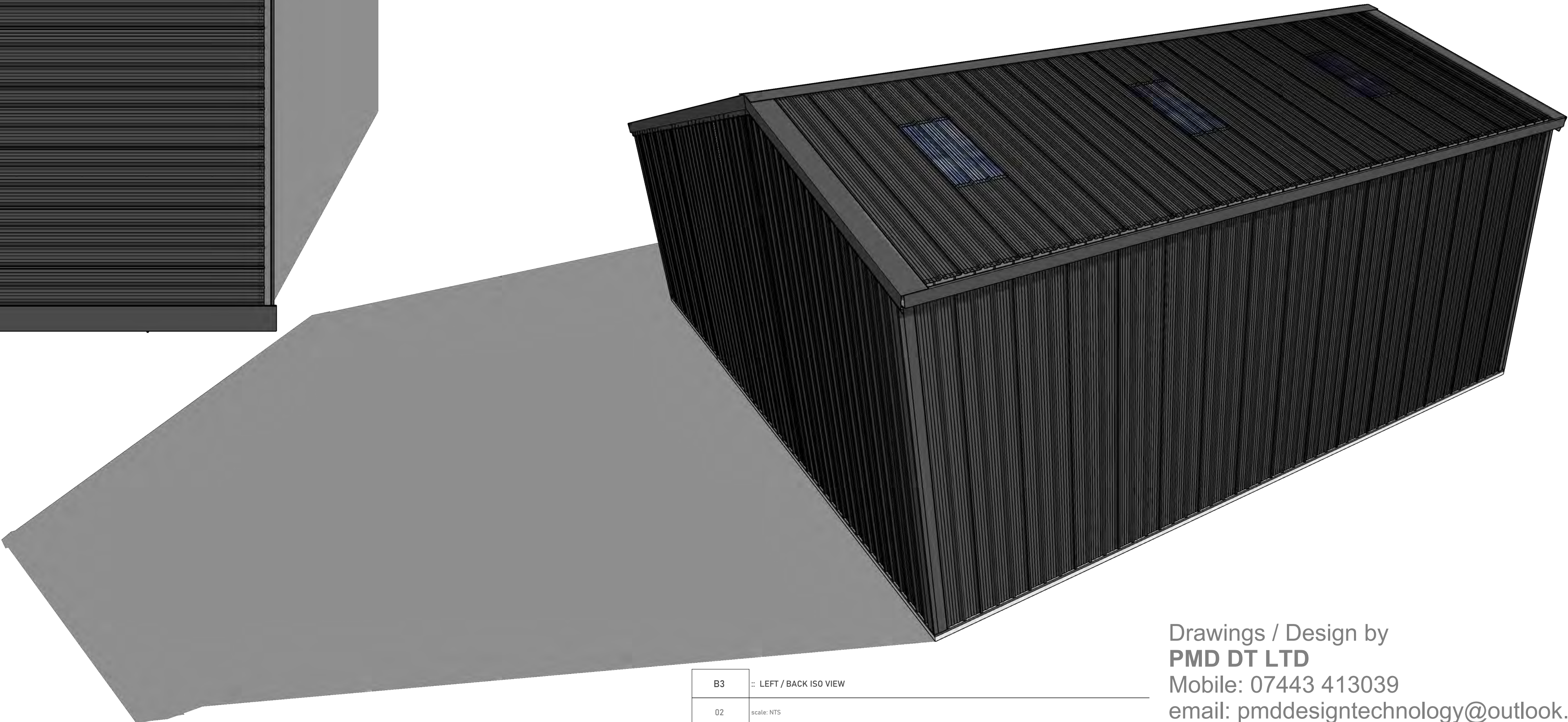
Please report any potential design or construction issues at the earliest opportunity to RYMAN STEEL BUILDINGS via the contact details shown in the top left hand side of this drawing.

First issue of drawing will be marked as - in revision field .

Subsequent revisions shall start with A and will progress in alphabetical order.



B2	RIGHT / FRONT ISO VIEW
02	scale: NTS



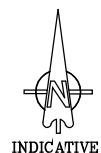
B3	LEFT / BACK ISO VIEW
02	scale: NTS

Drawings / Design by
PMD DT LTD
Mobile: 07443 413039
email: pmdsigntechology@outlook.com

Appendix II

Topographical Survey

- KEY:
- bt British Telecom
 - cb Control Box
 - cl Cover Level
 - ctv Cable Television
 - dk Drop Kerb
 - el Electric
 - ep Electricity Pole
 - fh Fire Hydrant
 - gu Gully
 - gs Gas Stop Valve
 - ht Height
 - ic Inspection Cover
 - il Invert Level
 - lp Lamp Post
 - mk Marker
 - o/h Overhead
 - pb Post Box
 - pg Pin Crossing
 - np Name Plate
 - rs Road Sign
 - sv Stop Valve
 - tb Telephone Box
 - tl Traffic Light
 - tt Top of Tree
 - th Threshold
 - tw Top of Wall
 - utl Unable to Lift
 - vp Vent pipe
 - wm Water Meter
 - esv Water Stop Valve



449050E

449100E

449150E

449200E

109750N

109700N

RIVER HAMBLE

NOTES:
LEVELS RELATE TO D.S. DATUM

**P STUBBINGTON
LAND SURVEYS LTD**

THE MEAD
DURLEY BROOK ROAD
DURLEY
SOUTHAMPTON
HAMPSHIRE
SO32 2AR

TEL : 023 8060 1876

MOBILE :
07979 348165

EMAIL :
PAUL@PSLANDSURVEYS.COM

CLIENT: - DEACONS MARINA & BOATYARD

CONTRACT: - DEACONS MARINA & BOATYARD
BURSLEDON BRIDGE,
PARK GATE

TITLE: - TOPOGRAPHIC SURVEY

SCALE: - 1: 250 @A1

DRAWING NO. 6214/01

DATE: - AUGUST 2017

SURVEYOR: - PS



KEY:	
bt	British Telecom
cb	Control Box
cl	Cover Level
ctv	Cable Television
dk	Drop Kerb
el	Electric
ep	Electricity Pole
fh	Fire Hydrant
gu	Gully
gsv	Gas Stop Valve
ht	Height
ic	Inspection Cover
il	Invert Level
lp	Lamp Post
mkr	Marker
o/h	Overhead
pb	Post Box
pkg	Pitman Crossing
np	Name Plate
rs	Road Sign
sv	Stop Valve
tb	Telephone Box
tl	Traffic Light
tt	Top of Tree
th	Threshold
tw	Top of Wall
utl	Unable to Lift
vp	Vent pipe
wm	Water Meter
esv	Water Stop Valve

NOTES: LEVELS RELATE TO D.S. DATUM	
P STUBBINGTON LAND SURVEYS LTD	
THE MEAD DURLEY BROOK ROAD DURLEY SOUTHAMPTON HAMPSHIRE SO32 2AR TEL : 023 8060 1876 MOBILE : 07979 348165 EMAIL : PAUL@PSTLANDSURVEYS.COM	
CLIENT: -	DEACONS MARINA & BOATYARD
CONTRACT: -	DEACONS MARINA & BOATYARD BURSLEDON BRIDGE, PARK GATE
TITLE: -	TOPOGRAPHIC SURVEY
SCALE: -	1: 250 @A1
DRAWING NO:	6214/02
DATE: -	AUGUST 2017
SURVEYOR: -	PS

Appendix III

BGS Borehole Logs

Contains British Geological Survey Materials © UKRI 2020



**British
Geological Survey**

NATURAL ENVIRONMENT RESEARCH COUNCIL

BGS ID: 408274 : BGS Reference: SU40NE8
British National Grid (27700) : 449190,109820

[Report an issue with this borehole](#)

<<

< Prev

Page 1 of 1 ▼

Next >

>>

U 1050, U. 1051
U. 1052
U. 1053.

SU 40 NE/8-11

British Geological Survey

British Geological Survey

Bursledon.

SU 40 NE/8
NGR 449190.09820

Geol. Map 315, new ser.

boreholes along the centre-line of the Netley and Fareham Railway.

Communicated by Mr. J. DRAGE (L. S. W. Co.'s District Engineer), 1886.

A. On the mud-land on the right side of the Hamble River, a little eastward of the cross-roads (high-road).

U. 1050

		Thickness. Feet.	Depth. Feet.
[Alluvium.]	Soft dark alluvial soil ...	1	5
	Dark gravel, dirty ...	7	12
	Soft yellow clay ...	8	20
	Dark blue clay ...	6	26
[London Clay.]	Hard dark blue clay ...	1	27
	Light-coloured compact sandstone [? septaria] ...		

British Geological Survey

B. At the right edge of the Hamble River, a little E. of S. of the house named Maidenstone Heath.

U 1051

		Thickness. Feet.	Depth. Feet.
[Alluvium.]	Soft dark alluvial soil ...	4	4
	Soft yellow clay ...	7	11
[London Clay.]	Dark blue clay ...	10	21
	Hard dark blue clay ...	20	41

British Geological Survey

British Geological Survey

C. Eastward of the middle of the river, S.E. of Maidenstone Heath.

U. 1052

		Thickness. Feet.	Depth. Feet.
[Alluvium.]	Soft dark alluvial soil ...	11	11
	Soft yellow clay ...	6	17
	Gravel mixed with clay ...	5	22
	Dark blue clay ...	6	28
[London Clay.]	Hard dark blue clay ...	4	32

British Geological Survey

D. Near edge of mud-land on the left side of the River Hamble eastward of C. (about a quarter of a mile W. of N. from Lower Swanwick).

U. 1053.

		Thickness. Feet.	Depth. Feet.
[Alluvium.]	Mud ...	3	3
	Light-yellow clay ...	5	8
[London Clay.]	Dark blue clay ...	14	22
	Hard dark blue clay ...	13	35

British Geological Survey

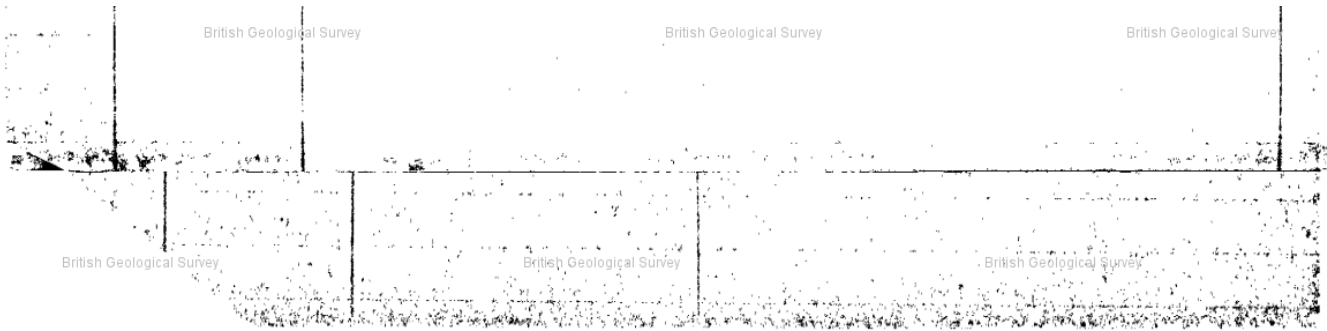
British Geological Survey

In a geological section across the River Hamble, on the tracing from which the above were taken, Mr. Drage regards all the yellow clay as a continuous mass, above the gravel of boring C. I am inclined to think, however, that except in that boring, it is merely the discoloured top of the London Clay.

British Geological Survey

British Geological Survey

British Geological Survey

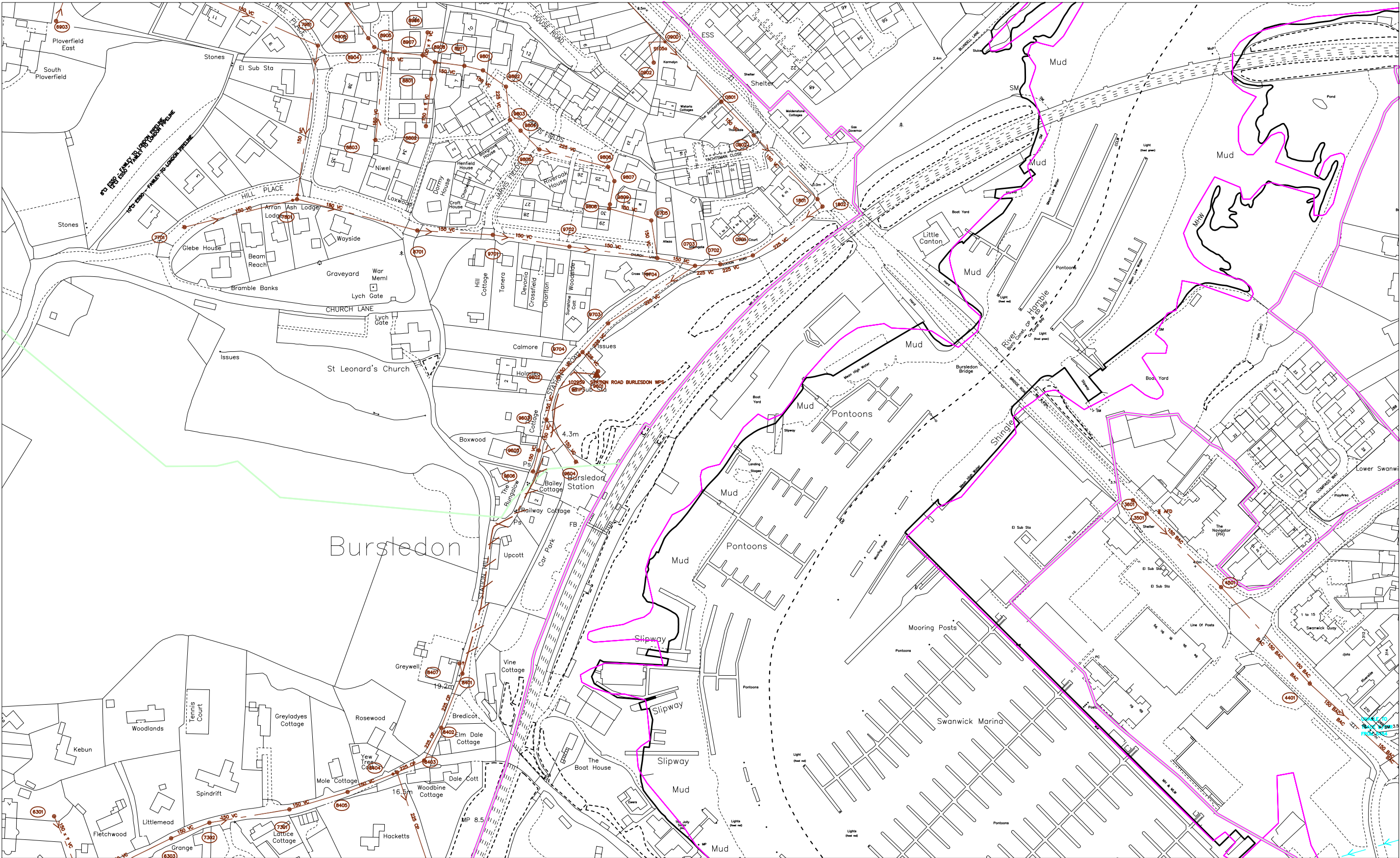


Appendix IV

Southern Water Asset Maps

SEWER RECORDS PAGE 1 OF 2

109944



109366

448583

O.S. REF.

SU4909NW

Title: 348405 Deacons Boat Yard, Swan

Drawn by: rohandas

Scale: 1:2500

Date: 15/08/2019

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.

WARNING: BAC pipes are constructed of Bonded Asbestos Cement
WARNING: Unknown (UNK) materials may include Bonded Asbestos Cemen

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449527

SEWER RECORDS PAGE 2 OF 2

Node	Cover	Invert	Size	Material	Shape	Node	Cover	Invert	Size	Material	Shape	Node	Cover	Invert	Size	Material	Shape	Node	Cover	Invert	Size	Material	Shape
0701X	2.86	1.42	225	VC	CIRC																		
0702X	3.11	1.31	225	VC	CIRC																		
0703X	3.76	1.27	225	VC	CIRC																		
0704X	5.29	3.24	150	VC	CIRC																		
0705X	7.54	4.317	150	VC	CIRC																		
0801X	5.65	4.1	150	VC	CIRC																		
0802X	4.8	2.93	150	VC	CIRC																		
0902X			UNK	UNK	CIRC																		
090DX			150	VC	CIRC																		
1801X			150	VC	UNK																		
1802X	2.88	1.6	225	VC	CIRC																		
3501X			150	BAC	CIRC																		
3601X	3.66		150	BAC	CIRC																		
4401X	3.87	0.53	150	BAC	CIRC																		
4501X	4.12		150	BAC	CIRC																		
6301X			150	VC	UNK																		
6303X	23.85	22.09	150	VC	CIRC																		
6903X			150	VC	UNK																		
7301X	21.14	19.6	150	VC	CIRC																		
7302X	23.38	21.43	150	VC	CIRC																		
7701X	25.26	23.92	150	VC	CIRC																		
7801X	20.97	16.46	150	VC	CIRC																		
7901X	20.52	18.26	150	VC	CIRC																		
8401X	19.31	17.63	225	CP	CIRC																		
8402X	16.32	14.54	225	CP	CIRC																		
8403X	15.67	14.11	225	CP	CIRC																		
8404X	16.24	14	225	CP	CIRC																		
8405X	18.69	16.82	150	VC	CIRC																		
8407X			150	VC	CIRC																		
8701X	15.71	14.26	150	VC	CIRC																		
8801X	14.87	13.48	150	VC	CIRC																		
8802X			150	VC	UNK																		
8803X	16.68	15.7	150	VC	CIRC																		
8903X			150	VC	UNK																		
8904X			150	VC	CIRC																		
8905X	16.65	15.02	150	VC	CIRC																		
8906X			100	VC	UNK																		
8907X	15.23	13.79	150	VC	CIRC																		
8908X			150	VC	CIRC																		
8911X			150	VC	CIRC																		
9601X	3.48	0.75	225	VC	CIRC																		
9602X	3.31	1.74	150	VC	CIRC																		
9603X	3.6	2.05	150	VC	CIRC																		
9604X	5.81	3.77	150	VC	CIRC																		
9605X	5.91	4.55	150	VC	CIRC																		
9606X	7.94	6.57	150	VC	CIRC																		
961PX	3.45		125	CI	UNK																		
9701X	12.44	10.43	150	VC	CIRC																		
9702X	8.94	7.11	150	VC	CIRC																		
9703X	3.47	0.98	225	VC	CIRC																		
9704X	3.48	0.79	225	VC	CIRC																		
9801X		11.15	150	VC	CIRC																		
9802X		9.5	225	VC	CIRC																		
9803X		9.404	225	VC	CIRC																		
9804X		8.827	225	VC	CIRC																		
9805X		8.755	225	VC	CIRC																		
9806X		6.394	225	VC	CIRC																		
9807X		6.066	225	VC	CIRC																		
9808X	7.54	5.578	150	VC	CIRC																		
9809X		5.769	225	VC	CIRC																		

LINE STYLES / COLOURS	
Brown	Foul
	Foul Syphon Sewer
	Foul Vacuum Main
	Foul Rising Main
Red	Combined
	Combined Syphon Sewer
	Combined Rising Main
	Lateral Drain
Orange	Building Over Agreement Area
Dark Blue	Treated Effluent
Purple	Sludge
	Sewer Catchment
	Section 104 Area
Light Blue	Surface Water
	Surface Water Rising Main
Yellow	Private
Green	Access Shaft
	Decommissioned

MATERIALS	
AK	Alkathene
BAC	Bonded Asbestos Cement
BRC	Brick (Common)
BRE	Brick (Engineering)
CC	Concrete Box Culvert
CI	Cast Iron
CO	Concrete (In-Situ)
CP	Concrete (Pre-Cast)
CSB	Concrete Segments (bolted)
CSU	Concrete Segments (unbolted)
DI	Ductile Iron
GRC	Glass Reinforced Concrete
GRP	Glass Reinforced Plastic
MAC	Masonry in regular Courses
MAR	Masonry in random Courses
PE	Polyethylene
PF	Pitch Fibre
PP	Polypropylene
PVC	Polyvinyl Chloride
RPM	Reinforced Plastic Matrix
SI	Spun Iron
ST	Steel
VC	Verified Clay
XXX	Other
ZZZ	Unknown

LEGEND - SEWERS	
Washout (SW)	Other (s)
Washout (F&C)	Other
Rodding Eye (SW)	Change in sewer (s)
Rodding Eye (F&C)	Reflex valve
Gauging point (SW)	Flap valve
Gauging point (F&C)	Cascade
Intercept chamber (SW)	Anode
Intercept chamber (F&C)	Valve
Storm Tank (SW)	Closed Valve
Storm Tank (F&C)	Air Valve
Vortex chamber (SW)	Hatch box (SW)
Vortex chamber (F&C)	Hatch box (F&C)
Label ellipse	Direction arrow
Dummy/S24 manhole	Emptying valve
Outfall	Catchpit
Penstock chamber	Soakaway
Damboards	Inlet
Storm Overflow	Balancing Pond
Backdrop manhole	

SHAPES (S)	
A	Arched
B	Barrel
C	Circular
E	Egg
H	Horseshoe
R	Rectangular
S	Square
T	Trapezoidal
U	U Shape
X	Other

NODE REFERENCING SYSTEM	
1st digit:	hundred metre easting identifier
2nd digit:	hundred metre northing identifier
3rd digit:	sewer type identifier
4th digit:	next sequential node

Drawn by:

rohandas

Title:

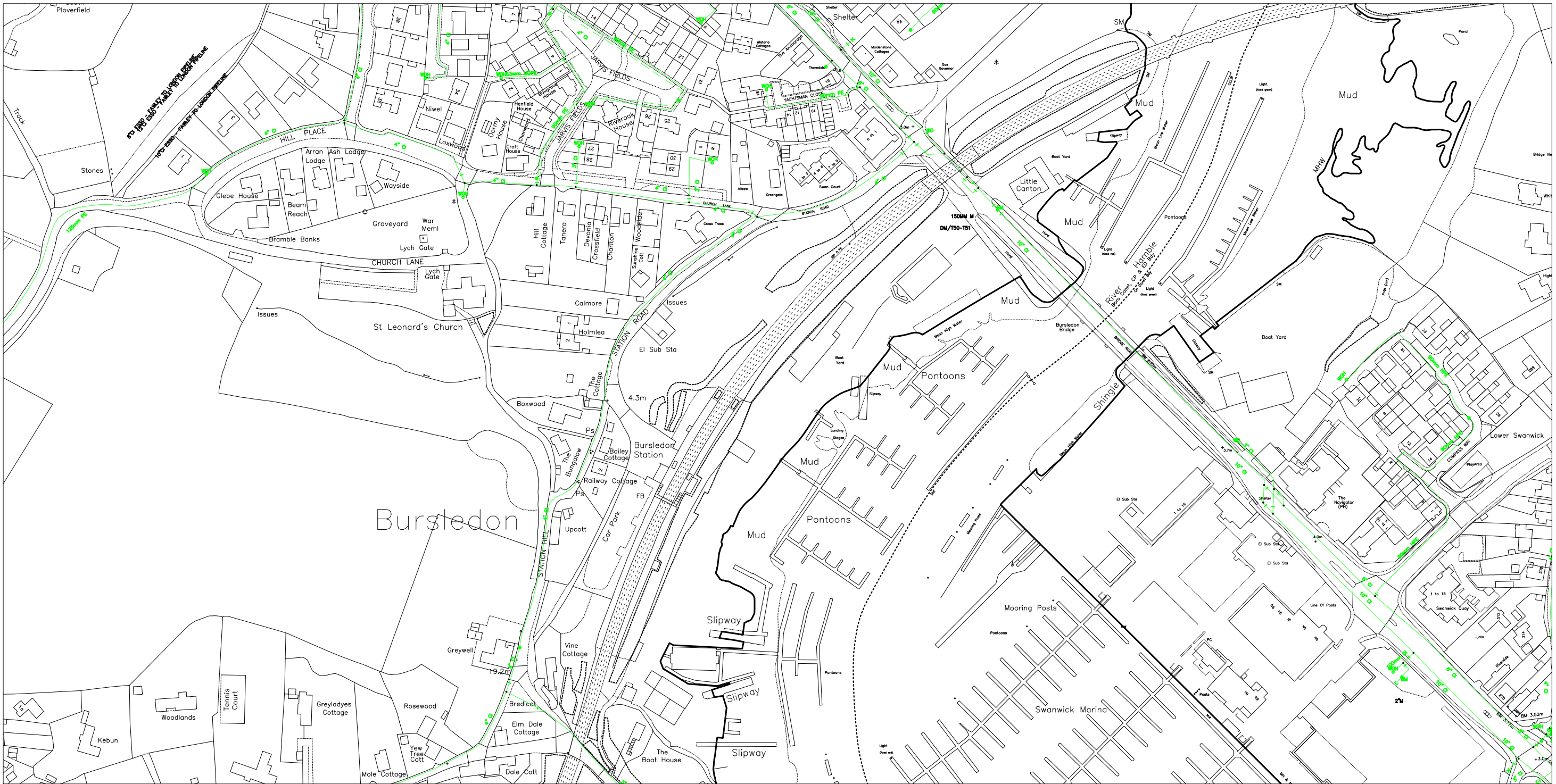
348405_Deacons Boat Yard, Swan

Date:

15/08/2019



109898



109412

448572

LEGEND - MAINS

	Distribution Main / Communication pipe		Clockwise closing valve
	Trunk Main		Fire Hydrant
	Raw water main		Washout
	Non potable		Washout hydrant
	Abandoned main		Meter
	Proposed Main		Capped end
	Fire main		Emptying plug
	Non SWS		Stopcock
	Sluice valve		Leak Noise Correlator Survey Point
	Closed valve		Anode
	Air valve		Telemetry cable
	Butterfly valve		Access point / hatchbox
	Pressure reducing valve		
	Reflux valve		
	Motorised valve		

MATERIALS

	Dialysis machine		Alkathene
	Break pressure tank		Cast iron
	Change node		Spun (grey) iron
	Pumping station		Concrete
	Booster station		Ductile iron
	Insertion Flow Meter Point		Bonded Asbestos Cement
	Water tower		Glass reinforced plastic
	Service reservoir		Glass reinforced epoxy
	Water Supply Works		(Unplasticised) Polyvinyl chloride
	Bore hole / Well		Polyethylene
	Intake		Steel
	Customer site		Concrete segments bolted
	Swab insertion point		Concrete segments unbolted
			Galvanised iron
			Ductile sleeve
			Concrete pre-stressed
			High performance polyethelene
			Unknown

AK	
CI	
SI	
CO	
DI	
BAC	
GRP	
GRE	
PVC	
PE	
ST	
CSB	
CSU	
GI	
DS	
CPS	
HPE	
??	

Drawn by: rohandas	O.S.Ref: SU4909NW	
Scale: 1:2500		
Date: 15/08/2019	TITLE: 348405_Deacons Boat Yard, Swan	
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 of pipes should be determined on site. Based upon Ordnance Survey Digital Data with the permission of the controller of H.M.S.O. Crown Copyright Reserved Licence No. WU 298530.		

WARNING: BAC pipes are constructed of Bonded Asbestos Cement

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

449537

Appendix V

Environment Agency Product 4

From: [Partnership and Strategic Overview team, HIOW](#)
To: [Hoppe, David \(Avison Young - UK\)](#)
Cc: [SSD Enquiries](#)
Subject: Flood Risk Information (Product 4) for Deacons Marina, SO31 8AZ - Ref: SSD/21709
Date: 27 May 2021 14:24:01
Attachments: [Defence Map.pdf](#)
[Flood Map for Planning \(Rivers and Sea\).pdf](#)
[Risk of Flooding from Surface Water.pdf](#)
[Open Government Licence.pdf](#)
[Use of EA Information for FRAs.pdf](#)

External Sender

Dear David Hoppe,

Enquiry regarding Product 4 for site at Deacons Marina, Bursledon Bridge, Bridge Road, Southampton, SO31 8AZ.

Deacons Marina, Bursledon Bridge, Bridge Road, Southampton SO31 8AZ

Thank you for your enquiry which was received on 28 April 2021.

We respond to requests under the Freedom of Information Act 2000 and Environmental Information Regulations 2004. The information is attached.

The site may be affected by an extreme flood. According to our published flood map, which provides a general estimate of the likelihood of flooding across England & Wales, the property is shown to be within Flood Zone 3 - an area which may have a 1% chance of flooding annually (1 in 100), **ignoring** the presence and effect of any flood defences.

The Environment Agency has no record of flooding to this property/area, please note our records are not comprehensive and may not include all events. I recommend contacting the Lead Local Flooding Authority, "Hampshire County Council", or the Local Authority, Eastleigh Borough Council" for a more comprehensive flood history check.

Defences – See attached map.

Information on any nearby sea defences is available from Eastleigh Borough Council.

Tidal flood levels for the 0.5% (1:200) and the 0.1% (1:1000) annual exceedance probabilities relevant to your site are provided in the table below. These levels have been taken from the Southampton Water Coastal Model which was produced in 2014 by JBA.

Chainage point: 184	Easting: 449139.376	Northing: 109592.915
Year	Tide Level (mAOD*)	
	0.5% annual exceedance probability/1 in 200 Year (Flood Zone 3)	0.1% annual exceedance probability/1 in 1000 Year (Flood Zone 2)

2015	3.2	3.3
2070	3.7	3.8
2115	4.3	4.5

* Levels in metres above Ordnance Datum Newlyn.

These values are based on 2012 base data.

- Please note the climate change allowances provided are not up to date. These were updated on 17 December 2019. You should refer to '[Flood risk assessments: climate change allowances](#)' for the most up to date allowances. You will need to undertake further assessment of future flood risk using different allowances to ensure your assessment of future flood risk is based on best available evidence.

[FRA advisory text](#)

Name	Product 4
Description	Basic / Detailed Flood Risk Assessment Map for Deacons Marina, Bursledon Bridge, Bridge Road, Southampton, SO31 8AZ
Licence	Open Government Licence
Information Warnings	The majority of our models will not have the new climate change allowances. +20% is not suitable for the majority of planning purposes and the new allowances to use should be checked here: https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances
Information Warning - OS background mapping	<i>The mapping of features provided as a background in this product is © Ordnance Survey. It is provided to give context to this product. The Open Government Licence does not apply to this background mapping. You are granted a non-exclusive, royalty free, revocable licence solely to view the Licensed Data for non-commercial purposes for the period during which the Environment Agency makes it available. You are not permitted to copy, sub-license, distribute, sell or otherwise make available the Licensed Data to third parties in any form. Third party rights to enforce the terms of this licence shall be reserved to OS.</i>
Attribution	Contains Environment Agency information © Environment Agency and/or database rights. Contains Ordnance Survey data © Crown copyright 2017 Ordnance Survey 100024198.

Data Available Online

Many of our flood datasets are available online:

- Flood Map For Planning ([Flood Zone 2](#), [Flood Zone 3](#), [Flood Storage](#)

[Areas, Flood Defences, Areas Benefiting from Defences](#))

- [Risk of Flooding from Rivers and Sea](#)
- [Historic Flood Map](#)
- [Current Flood Warnings](#)

Does Your Proposal Have Environmental Issues or Opportunities? Speak To Us Early!

If you are planning a new project or development, we want to work with you to make the process as smooth as possible. Early engagement can improve subsequent planning applications to you and your clients' benefit and deliver environmental outcomes. For a cost recovery fee of £100 per hour plus VAT we will provide you with a project manager who will coordinate all meetings and reviews in order to give you detailed specialist advice with guaranteed delivery dates. More information can be found on our website [here](#).

Please get in touch if you have any further queries or contact us within two months if you'd like us to review the information we have sent.

Yours sincerely,

Callum Robins
Partnership and Strategic Overview team, Hampshire and Isle of Wight
Environment Agency

Direct dial 020 7714 0418

Email psohiow@environment-agency.gov.uk

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Use of Environment Agency Information for Flood Risk Assessments

Important

The Environment Agency are keen to work with partners to enable development which is resilient to flooding for its lifetime and provides wider benefits to communities. If you have requested this information to help inform a development proposal, then we recommend engaging with us as early as possible by using the pre-application form available from our website:

<https://www.gov.uk/government/publications/pre-planning-application-enquiry-form-preliminary-opinion>

We recognise the value of early engagement in development planning decisions. This allows complex issues to be discussed, innovative solutions to be developed that both enables new development and protects existing communities. Such engagement can often avoid delays in the planning process following planning application submission, by reaching agreements up-front. We offer a charged pre-application advice service for applicants who wish to discuss a development proposal.

We can also provide a preliminary opinion for free which will identify environmental constraints related to our responsibilities including flooding, waste, land contamination, water quality, biodiversity, navigation, pollution, water resources, foul drainage or Environmental Impact Assessment.

In preparing your planning application submission, you should refer to the Environment Agency's Flood Risk Standing Advice and the Planning Practice Guidance for information about what flood risk assessment is needed for new development in the different Flood Zones. This information can be accessed via:

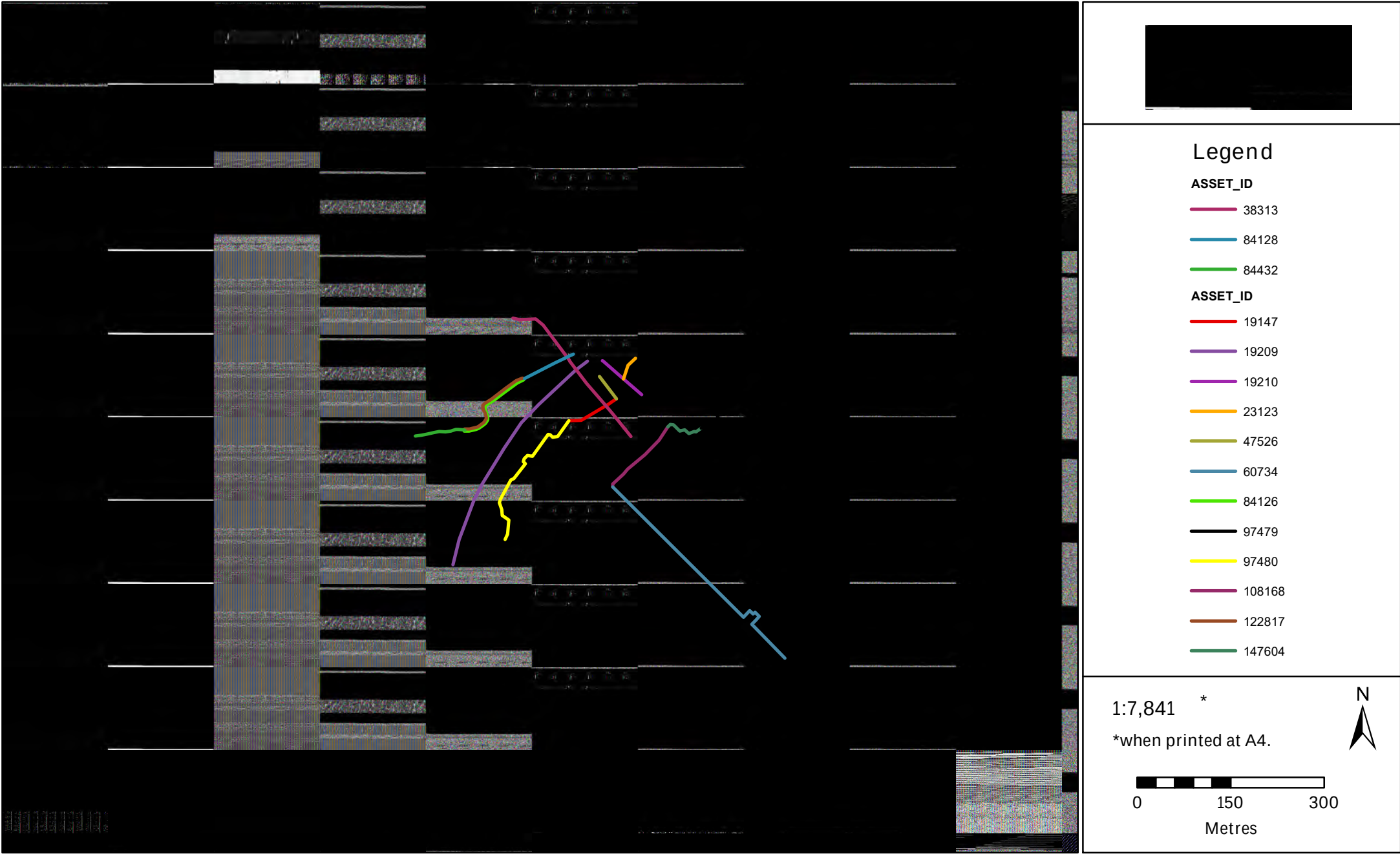
<https://www.gov.uk/flood-risk-assessment-standing-advice>
<http://planningguidance.planningportal.gov.uk/>

You should also consult the Strategic Flood Risk Assessment or other relevant materials produced by your local planning authority.

You should note that:

1. Information supplied by the Environment Agency may be used to assist in producing a Flood Risk Assessment (FRA) where one is required, but does not constitute such an assessment on its own.
2. This information covers flood risk from main rivers and the sea, and you will need to consider other potential sources of flooding, such as groundwater or surface water runoff. Information produced by the local planning authority referred to above may assist here.
3. Where a planning application requires an FRA and this is not submitted or is deficient, the Environment Agency may raise an objection.

Defence map - Centred on Deacons Marina, SO31 8AZ - Created 27 May 2021



Asset Id	Asset Sub-type	Length (m)	Asset Maintainer	Actual Condition	Standard of Protect (Years)	Last Inspection Date
19147	wall	86.31	private	Good	100	15/06/2020
47526	high_ground	45.05	private	Fair	100	15/06/2020
19210	embankment	83.42	private	Fair	100	28/02/2017
108168	high_ground	132.38	private	Fair	No Data	15/06/2020
23123	high_ground	39.47	private	Fair	100	15/06/2020
147604	high_ground	64.5	private	Good	100	15/06/2020
97479	high_ground	129.81	private	Good	100	15/06/2020
19209	embankment	400.07	private	Fair	100	28/02/2017
84126	high_ground	142.33	private	Fair	20	08/06/2020
122817	high_ground	141.01	private	Fair	20	08/06/2020
97480	high_ground	259.13	private	Fair	100	15/06/2020
60734	high_ground	424.96	private	Fair	5	09/06/2020
38313	simple_culvert	279.6	private	Poor	100	09/06/2020
84432	simple_culvert	81.44	private	Poor	20	09/06/2020
84128	simple_culvert	87.79	private	Fair	20	09/06/2020

Flood Map for Planning (Rivers and Sea) - Centred on Deacons Marina, SO31 8AZ - Created 27 May 2021



1: 10,000

0 Metres 250



Flood Map for Planning (Rivers & Sea)

- Defences
- Flood Storage Areas
- Areas benefiting from flood defences
- Flood Zone 3
- Flood Zone 2

Flood Map Areas (assuming no defences)

Flood Zone 3 shows the area that could be affected by flooding:

- from the sea with a 1 in 200 or greater chance of happening each year
- or from a river with a 1 in 100 or greater chance of happening each year.

Flood Zone 2 shows the extent of an extreme flood from rivers or the sea with up to a 1 in 1000 chance of occurring each year.

Contact Details

Enquiries

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