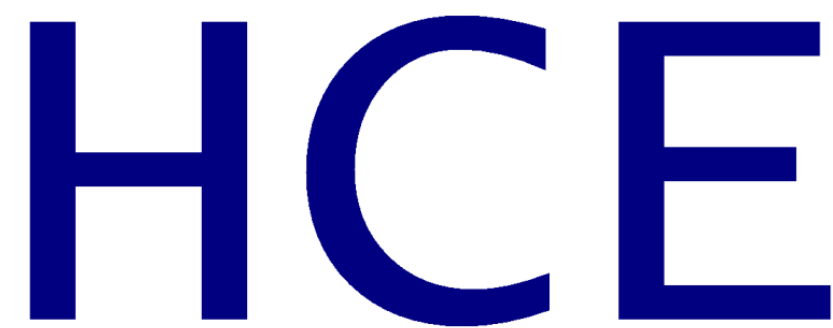


Superseded



Civil Structural Surveys Project Management

Report Title: **Flood Consequence Assessment**

Address: **Residential Development At 3 & 5 High Street
Pontardawe**

Client: **John Penquet**

Project Reference: **1469**

Our Reference: **1469-FCA-001**

Date of Issue	26 Jul 2021		
Revision Number:	R01		
Reason For Issue:	For Information		
Prepared By:	I Howells		
Checked By:	J Angelone		
Approved By:	I Howells		

Registered Office
Canolfan Gorseinon Centre
Millers Drive
Gorseinon
SA4 4QN

Telephone: 01792 805010
Email: info@hcelimited.com
Web: www.hcelimited.com

Report Index

1.0 INTRODUCTION.....4

2.0 SCOPE OF REPORT4

3.0 TAN 15 - FCA REQUIREMENTS.....5

4.0 TAN 15 DESCRIPTION OF DEVELOPMENT ZONES5

5.0 DESCRIPTION OF SITE & PROPOSED DEVELOPMENT7

6.0 FLOOD RISK ASSESSMENT9

6.1 Potential Sources of Flooding9

6.2 Fluvial Food Level Model Results Summary13

7.0 ASSESSMENT OF FLOODING CONSEQUENCES.....16

7.1 Proximity To Swansea Canal, River Tawe, Clydach River16

7.2 River & Catchment Area Response To Rainfall16

7.3 Flood Level Assessment & Flooding Acceptability Criteria16

7.4 TAN 15 – 1% Fluvial Flooding Acceptability Criteria17

7.5 Impact From Development Upon Others.....18

7.6 Proposed Site Use18

7.7 Flood Warning.....18

7.8 Residual Risk19

7.9 Flood Proof Measures.....19

8.0 CONCLUSIONS & DEVELOPMENT RECOMMENDATIONS20

9.0 REFERENCES.....21

Appendix A – Site Location Plan22

Appendix B – Existing Plans & Elevations.....23

Appendix C – Proposed Plans & Elevations.....24

Appendix D – Topographical Survey.....25

Table of Figures

Figure 1:NRW Development Advice Map.....4

Figure 2: TAN 15 Description of Development Zones6

Figure 3: TAN 15 Description of Development Category.....6

Figure 4: OS Site Location Plan7

Figure 4: Site Plot Plan.....8

Figure 5: Flood Risk From Rivers.....9

Figure 6: Flood Risk From Rivers – Satellite View10

Figure 6: Flood Risk From Surface Water & Small Watercourses.....10

Figure 8: Superficial Geology11

Figure 9: Bedrock Geology.....11

Figure 10: Areas of Historic/Recorded Flooding.....	12
Figure 11: Areas Benefitting From Flood Defences	13
Figure 10:Flood Depths For 'HIGH' Risk Events	14
Figure 11:Flood Depths For 'MEDIUM' Risk Events.....	14
Figure 12:Flood Depths For 'LOW' Risk Events.....	15
Figure 13: Flood Velocities & Flow Direction 'LOW' Risk Events	15
Figure 14: TAN15 - 1% Fluvial Flooding Acceptability Criteria Guidance.....	17
Figure 13: Flood Warning & Flood Alert Areas.....	18

Table of Photographs

Photograph 1: Satellite View Of Proposed Development	8
--	---

1.0 INTRODUCTION

HCE Ltd were commissioned to prepare a level 2 flood consequence assessment report to support a proposed residential conversion development of an existing building used for retail use. The building consists of a consisting of a four-storey building and ancillary car parking to the rear.

The proposed building will be constructed over part of the former building’s footprint.

It is understood that NRW have updated all flood risk level modelling generally for all Wales during 2019 and the latest information available online is considered the best available data and follows the latest technical guidance.

2.0 SCOPE OF REPORT

The existing site proposed for development is shown as being C1 on the NRW Flood Mapping For Planning as shown in Figure 1 below. As such the NRW have requested that the development be justified with a robust demonstration that flood risk can be managed in accordance with TAN15 through hydraulic modelling and a detailed Flood Consequence Assessment (FCA).



Figure 1:NRW Development Advice Map

The prime objective of a flood consequence assessment is to develop a full appreciation of:

- The consequences of flooding on the development

- The consequences (i.e. the overall impacts) of the development on flood risk elsewhere within the catchment for a range of potential flooding scenarios up to that flood having a probability of 0.1%.
- Establish whether appropriate mitigation measures can be incorporated within the design of the development to ensure that development minimises risk to life, damage to property and disruption to people living and working on the site or elsewhere in the floodplain.

3.0 TAN 15 - FCA REQUIREMENTS

The technical requirements for a Flood Consequences Report are set out in section E of TAN 15. All reports should include the following as a minimum:

1. location plan [Ref. Appendix A]
2. site levels to OD [Ref. Appendix D]
3. Existing information on river risk and any historic events [Ref. Section 6]
4. site cross sections and levels [Ref. Appendix C & D]
5. new runoff volumes [Ref. Section 6 & 7]
6. offsite impacts [Ref. Section 6 & 7]
7. residual risks [Ref. Section 6 & 7]
8. summary of any potential flood risks and how they would develop, catchment impacts [Ref. Section 6, 7 & 8]
9. emergency plans [Ref. Section 7 & 8]

4.0 TAN 15 DESCRIPTION OF DEVELOPMENT ZONES

The development advice maps are based on the best available information considered sufficient to determine when flood risk issues need to be taken into account in planning future development. Three development advice zones are described on the maps, to which are attributed different planning actions. The description of each development zone is shown Figure 2 which is extracted from Section 4, TAN 15 [Ref. 1].

Description of Zone		Use within the precautionary framework
Considered to be at little or no risk of fluvial or tidal/coastal flooding.	A	Used to indicate that justification test is not applicable and no need to consider flood risk further.
Areas known to have been flooded in the past evidenced by sedimentary deposits.	B	Used as part of a precautionary approach to indicate where site levels should be checked against the extreme (0.1%) flood level. If site levels are greater than the flood levels used to define adjacent extreme flood outline there is no need to consider flood risk further.
Based on Environment Agency extreme flood outline, equal to or greater than 0.1% (river, tidal or coastal)	C	Used to indicate that flooding issues should be considered as an integral part of decision making by the application of the justification test including assessment of consequences.
Areas of the floodplain which are developed and served by significant infrastructure, including flood defences.	C1	Used to indicate that development can take place subject to application of justification test, including acceptability of consequences.
Areas of the floodplain without significant flood defence infrastructure.	C2	Used to indicate that only less vulnerable development should be considered subject to application of justification test, including acceptability of consequences. Emergency services and highly vulnerable development should not be considered.

Figure 2: TAN 15 Description of Development Zones

The description of the development category is shown in Figure 3 below;

Development category	Types
Emergency services	hospitals, ambulance stations, fire stations, police stations, coastguard stations, command centres, emergency depots and buildings used to provide emergency shelter in time of flood
Highly vulnerable development	all residential premises (including hotels and caravan parks), public buildings (e.g. schools, libraries, leisure centres), especially vulnerable industrial development (e.g. power stations, chemical plants, incinerators), and waste disposal sites
Less vulnerable development	General industrial, employment, commercial and retail development, transport and utilities infrastructure, car parks, mineral extraction sites and associated processing facilities, excluding waste disposal sites

Figure 3: TAN 15 Description of Development Category

5.0 DESCRIPTION OF SITE & PROPOSED DEVELOPMENT

The site is located within the town centre of Pontardawe as shown in Figure 4 below. The 1:1250 site location plan is included in Appendix A.

There are three watercourses of interest that potentially could affect the site. The existing building (3&5 High Street) is approximately 35m from the Swansea Canal located directly behind the rear boundary fence of the rear car parking area, circa 58m from the Clydach river which is located to the South & West of the building and approximately 500m to the River Tawe located to the South East.

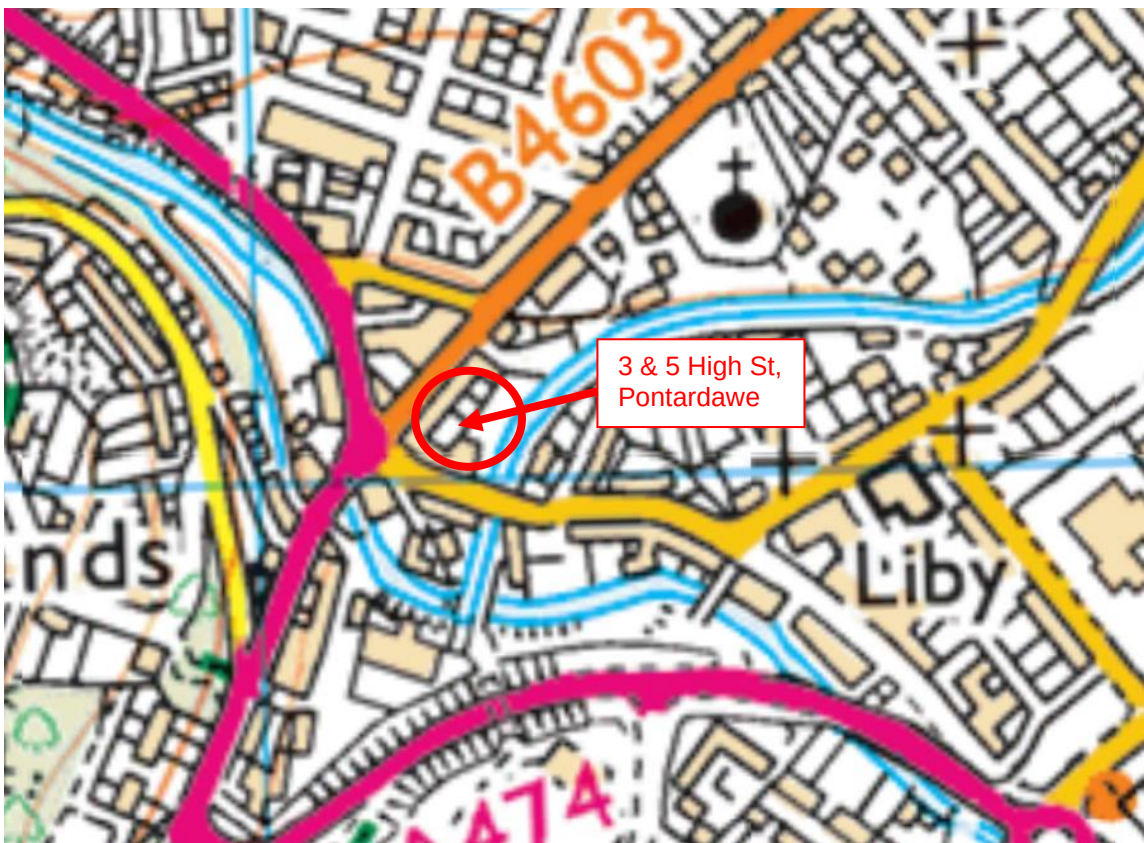


Figure 4: OS Site Location Plan

The existing external levels are +36.67mAOD at the rear boundary and there is a gentle fall from the rear boundary of the car parking located at the rear towards the existing building of circa 300mm giving an external level of +36.37mAOD. The topographical survey is included in Appendix D. The external ground level of the at the front of the building on High street is circa 2.4m higher than the external ground levels at the rear of the building.

The existing and proposed plans, elevations and sections are included in Appendices B & C.

Superseded

Project No: 1469

Residential Development At
3 & 5 High Street, Pontardawe
Flood Consequence Assessment Report



LIGHT LETTINGS, 5 HIGH STREET, PONTARDAWE, NEATH PORT TALBOT, SA8 4HU



6.0 FLOOD RISK ASSESSMENT

It is understood that the FRAW hydraulic modelling maps for Wales have been recently updated by NRW in 2020 which should include the River Tawe, River Clydach and Swansea canal. However, this would need to be confirmed.

6.1 Potential Sources of Flooding

Flood zone maps are intended for general guidance on flood risk and it is also necessary to consider other, more detailed, sources in relation to local factors.

6.1.1 Fluvial Flooding

A review of the NRW flood risk hazard map data indicates that the site has a low risk of fluvial flooding as shown in Figure 6 below.

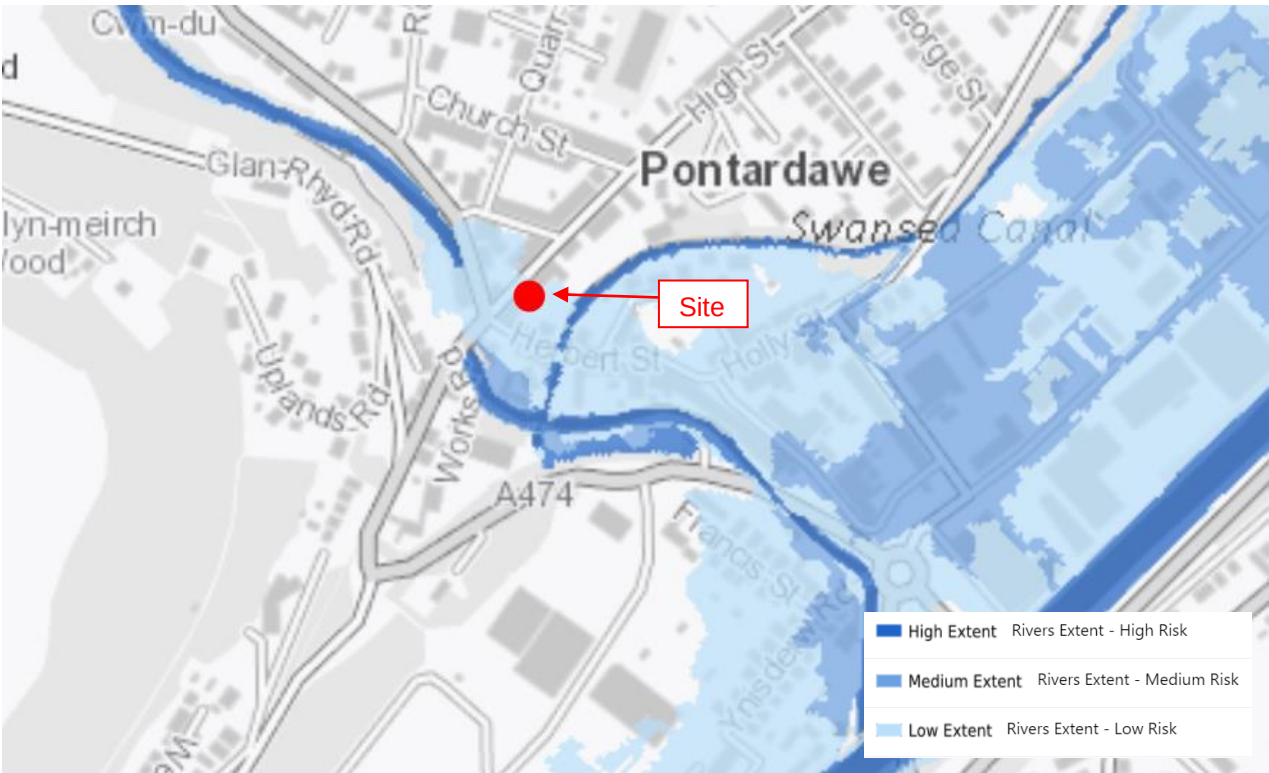


Figure 6: Flood Risk From Rivers

NRW have categorized Low to mean that each year, this area has a chance of flooding of between 1 in 1000 (0.1%) and 1 in 100 (1%). This takes into account the effect of any flood defences that may be in this area.

A more detailed review of the flood risk and flood level assessment is discussed in section 6.3 below.



Figure 7: Flood Risk From Rivers – Satellite View

6.1.2 Surface Water

Review of the NRW online mapping data confirms that the building remains flood free from surface water flooding, however the rear car parking area and high street fronting the building has a LOW risk of flooding from surface water. The extent and depth from the ‘LOW’ risk flooding event are shown in Figure 8 below.



Figure 8: Flood Risk From Surface Water & Small Watercourses

6.1.3 Groundwater

Review of the NRW online mapping data confirms that the site is not at risk from groundwater. The superficial geology for the area consists of Glaciofluvial Deposits (Sand And Gravel) overlying a bedrock geology of Rhondda Member Measures (Sandstone). When taking the terrain into account and the site's position relative the adjacent land the risk of groundwater flooding is considered to be low.

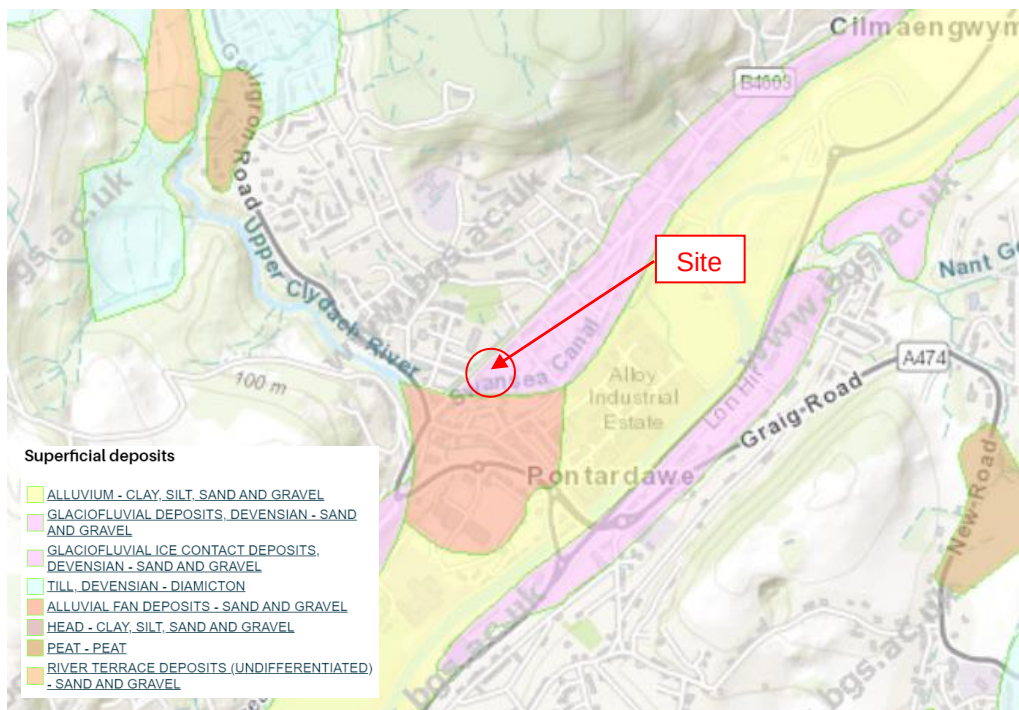


Figure 9: Superficial Geology

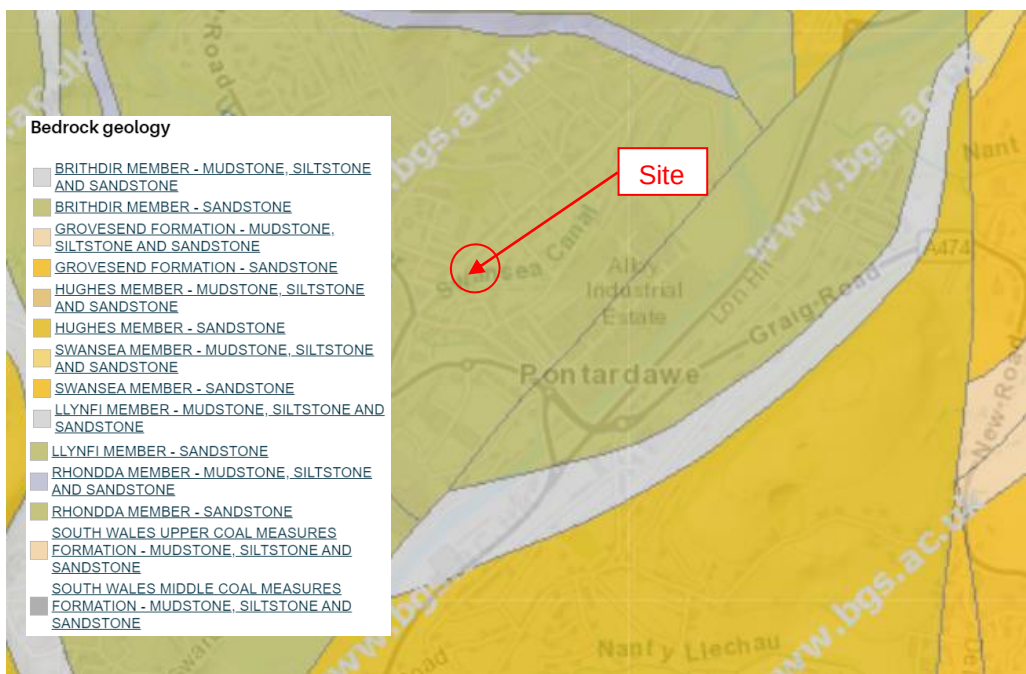


Figure 10: Bedrock Geology

6.1.4 Reservoirs & Sea

Review of the NRW online mapping data confirms that the site is considered not to be at risk from tidal and reservoir failure/flooding.

6.1.5 Recorded Historic Flood Events

Review of the NRW online mapping data confirms that the site remain has not suffered from historic flooding. Areas of central Pontardawe that have suffered from historic flooding is shown in Figure 11 below.



Figure 11: Areas of Historic/Recorded Flooding

6.1.6 Areas Benefitting From Flood Defence

Review of the NRW online mapping data confirms that the site does not benefit from flood defence works.

The location of the nearest flood defences along the bank of the river Tawe is shown in red and the areas benefitting from such defences are shown in hatch.



Figure 12: Areas Benefitting From Flood Defences

6.2 Fluvial Flood Level Model Results Summary

For the level 2 FCA report we have reviewed the existing NRW flood risk maps to provide further insight to the flood level risks present on site. It is acknowledged however that whilst the NRW flood risk maps are not used to inform the planning process they do offer additional insight to the flood risk present on site without carrying out bespoke flood risk modelling for the proposed development i.e. Level 3 FCA.

The maximum depth, velocity and hazard mapping available from NRW for the pre-developed site are shown below.

Review of the NRW's flood level modelling maps indicate the following;

The existing site is at LOW RISK from fluvial flooding.

The more detailed flood level risk modelling data provided by NRW shows that the site remains flood free for the HIGH risk and MEDIUM Risk categories as shown in Figure 13 and Figure 14 below.

The majority of the site is at LOW risk of flooding i.e. events that have a risk of flooding between 1 in 1000 year (0.1%) and 1 in 100 year return period (1%) as shown in Figure 15 below. The extent of flooding and depth of flooding for the 'LOW' risk events varies considerably across site from depths of 150-300mm at the rear car parking area.

Review of the NRW flood level velocities map indicate that the maximum flood velocities for 'LOW' risk events will be less than 1.0 m/s for the majority of the site as shown in **Figure 16** below.



Figure 13:Flood Depths For ‘HIGH’ Risk Events

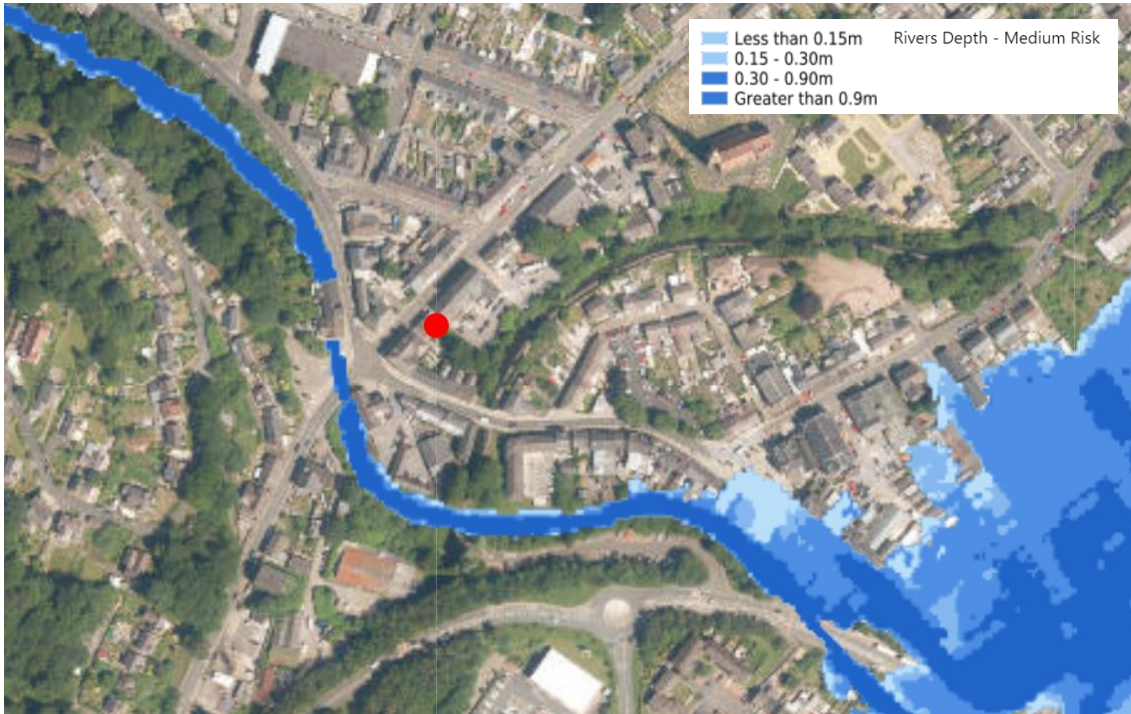


Figure 14:Flood Depths For ‘MEDIUM’ Risk Events

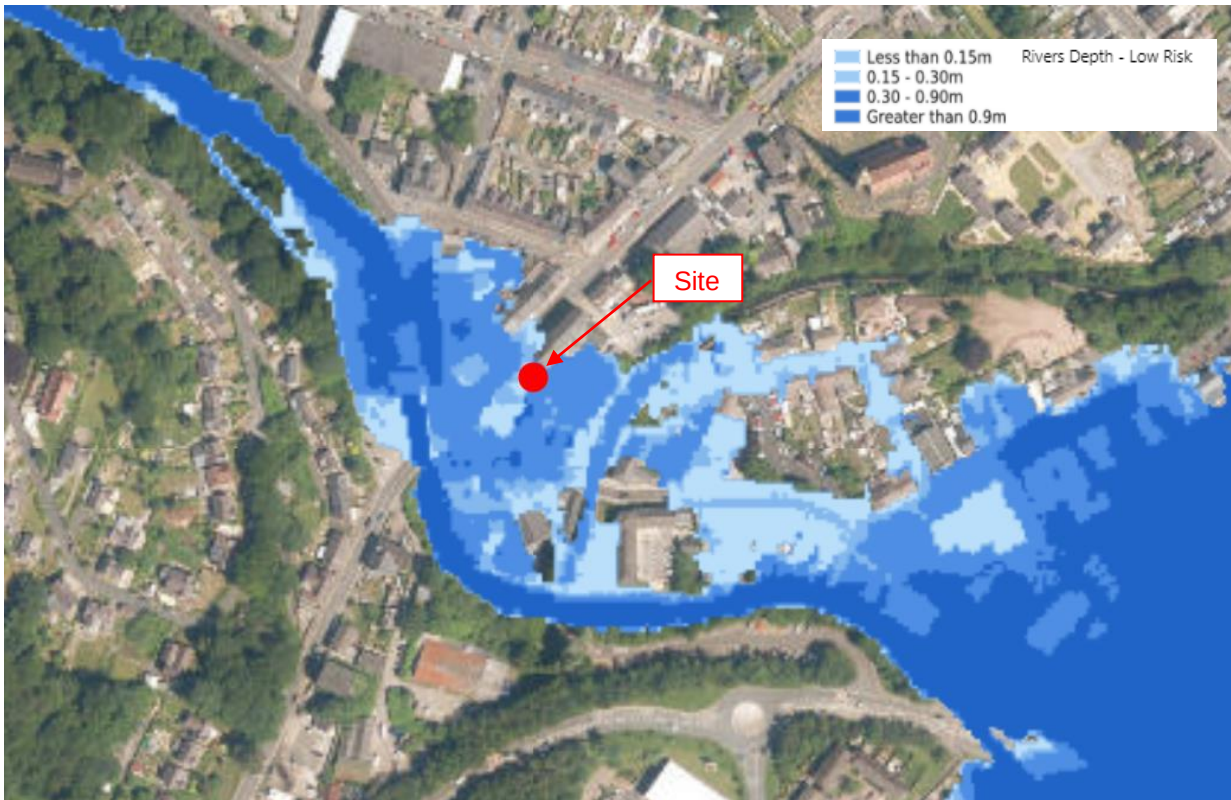


Figure 15:Flood Depths For ‘LOW’ Risk Events

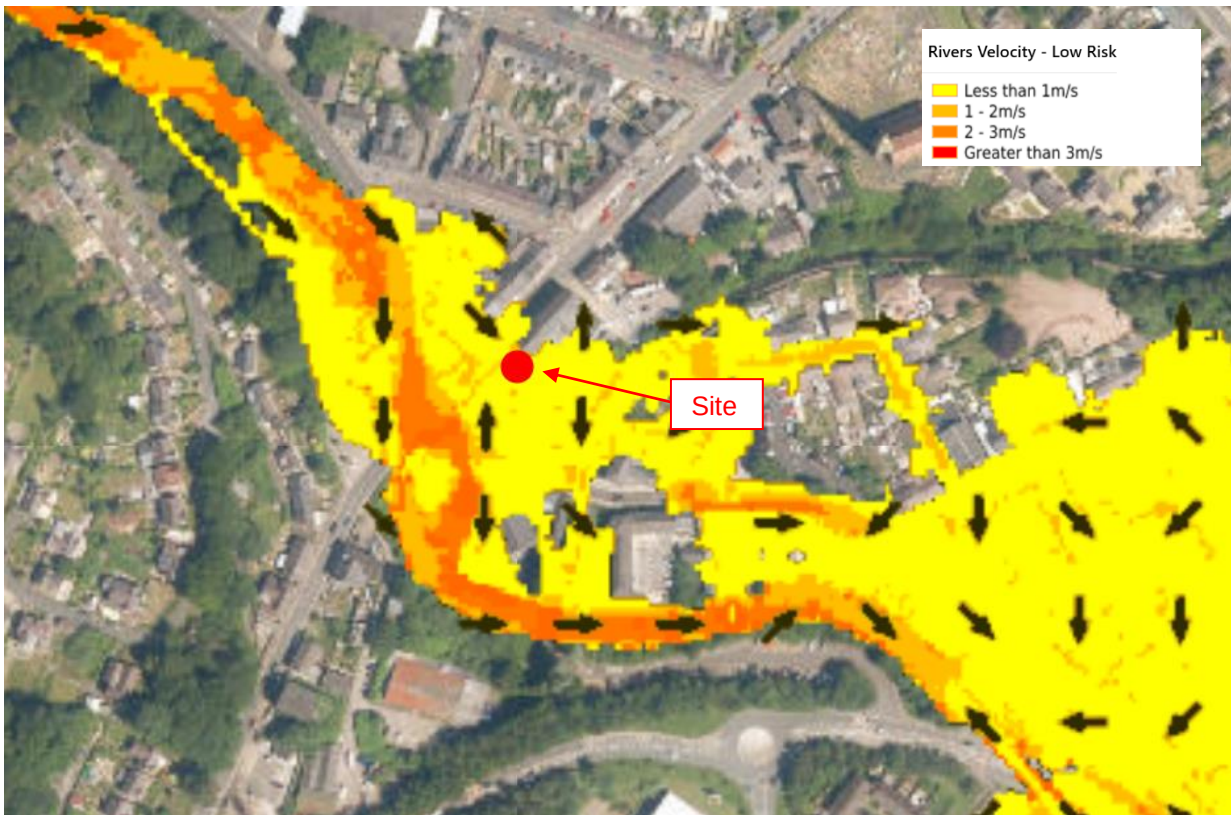


Figure 16: Flood Velocities & Flow Direction ‘LOW’ Risk Events

7.0 ASSESSMENT OF FLOODING CONSEQUENCES

7.1 Proximity To Swansea Canal, River Tawe, Clydach River

The existing building (3&5 High Street) is approximately 35m from the Swansea Canal located behind the rear boundary fence of the rear car parking area, circa 58m from the Clydach river which is located to the West of the building and approximately 500m to the River Tawe and is considered to be at sufficient distance from fast flowing water and submerged debris. During extreme flood events (high flow and flood) the river Clydach and Tawe would be considered dangerous. Also, during such events there would be a high probability of objects existing within the water column being carried downstream e.g. logs, debris etc.

7.2 River & Catchment Area Response To Rainfall

The Pontardawe catchment has an area of approximately 88km² from the downstream study extent (TAWEO1). The watercourse starts up in the Brecon Beacons National Park, from multiple small steep channels. The landscape continues to be mountainous and rural until it flows through the town of Ystradgynlais. The river becomes more modified with bridges and culverts along the watercourse, which constrict flow. Approximately 16km downstream of Pontardawe, the River Tawe discharges into Swansea Bay. A natural lake (Llyn y Fan Fawr) is located at the upstream portion of the catchment. However, this is unlikely to cause much attenuation at the study site, due to its limited catchment area and distance away from the area of interest.

The British Geological Survey (BGS) website 1:625,000 scale mapping shows that the geology of the catchment comprises sandstone and conglomerates at the headwaters, then limestone with subordinate sandstone and argillaceous rocks further downstream, around Penycae, with mudstone, siltstone and sandstone located around the town of Pontardawe. The superficial geology is composed glaciofluvial deposits (Sand & Gravel).

Much of the catchment (~70%) is composed of slowly permeable wet very acid upland soils with peaty surface. The rest has a mixture of very acid loamy soils with a wet peaty surface and freely draining very acid sandy and loamy soils. The River Tawe at Pontardawe is likely to have a moderate to high response time to rainfall based on the size of the catchment and the predominance of impermeable ground.

7.3 Flood Level Assessment & Flooding Acceptability Criteria

TAN 15 states that the development should be located only in an area of flood risk which is developed and served by significant infrastructure, including flood defences (Zone C1 of the DAM) **AND**

- Its location is necessary to assist a local authority regeneration initiative or strategy¹, or contribute to key employment objectives, necessary to sustain an existing settlement or region **AND**
- The site meets the definition of previously developed land (i.e. it is not a Greenfield site) and concurs with the aims of Planning Policy Wales (i.e. the presumption in favour of sustainable development). **AND**

A Flood Consequence Assessment has been produced to demonstrate that the potential consequences of a flood event up to the extreme flood event (1 in 1000 chance of occurring in any year) have been considered and meet the 'acceptability criteria'.

NRW historical flood maps indicate that the site has not been subject to historical flooding within this area.

Review of the NRW DAM Map shows that the site is located within Zone C1. In accordance with TAN 15 we have reviewed the NRW flood risk maps available to assess flood level risks at the proposed site.

TAN 15 states that for development within Zone C1 that highly vulnerable development (residential development) should be considered subject to application of justification test, including acceptability of consequences.

Review of the NRW flood risk maps indicate that the **entire site remains flood free** for the **HIGH and MEDIUM risk flood events**.

However, the site is shown to be at LOW risk of fluvial flooding which results in varying depths of flood water expected across site i.e. the site has a risk of flooding between 1 in 1000 year (0.1%) and 1 in 100 year return period (1%). The expected flood depths vary from 150-300mm depths. The expected flood velocities for all depths are expected to be below 1m/s.

7.4 TAN 15 – 1% Fluvial Flooding Acceptability Criteria

The acceptability criteria guidance for extreme flooding events is given within Appendix 1, Section C of the TAN 15. An extract of this is shown in Figure 17 below.

Type of development	Maximum depth of flooding (mm)	Maximum rate of rise of floodwaters (m/hr)	Maximum speed of inundation of flood risk area (hrs)	Maximum velocity of floodwaters (metres/sec)
	Property Access			Property Access
Residential (habitable rooms)	600 600	0.1	4	0.15 0.3
Commercial & Retail	600 600	0.3	2	0.15 0.3
Industrial	1000 1000	0.3	2	0.3 0.45
Emergency Services	450 600	0.1	4	0.15 0.3
General Infrastructure	600 600	0.3	2	0.3 0.3

Figure 17: TAN15 - 1% Fluvial Flooding Acceptability Criteria Guidance

A review of the TAN 15 acceptability criteria shows that for the 1% flood event that the maximum water depths at site range from 150mm to 300mm. This is below theTAN15 guidance shown in Figure 17 above. The floodwater velocities are above the recommended TAN 15 guidance values. Bespoke modelling would be required to demonstrate specific site flood velocity values.

7.5 Impact From Development Upon Others

Since the site does flood during ‘LOW’ risk events any development will likely require bespoke flood risk level modelling to review the impact upon others as discussed above.

7.6 Proposed Site Use

The site meets the definition of previously developed land i.e. it is not a Greenfield site and is considered to concur with the aims of Planning Policy Wales. The proposed use of the development is for mixed use office and residential purposes which is classed as ‘highly vulnerable’ within TAN 15.

Whilst development within C1 zoned areas is discouraged the overall impact of the proposed development needs to be considered. The existing site and immediate area has a history of mixed use (retail & residential), along with the immediate adjacent neighbour. The site having been vacant for some time and in danger of falling into disrepair and dereliction presents an ideal opportunity for regeneration as a brownfield site with good local transport links.

It is considered that the proposal will aid in the regeneration of the local area whilst providing additional local employment opportunities.

7.7 Flood Warning

Review of the NRW flood mapping confirms that the site and surrounding area benefit from a flood warning and alert system being in place, although due to the moderate/high response of the river Clydach and Tawe, the NRW is only able to give short flood warning periods.



Figure 18: Flood Warning & Flood Alert Areas

As part of TAN15 justification criteria the developer will be required to prepare Flood emergency plans and procedures together with demonstrating escape/evacuation routes are operational under all conditions.

7.8 Residual Risk

Review of the NRW flood risk maps confirms that the site remains flood free for fluvial events up to the 1% AEP i.e. 1 in 100 chance (fluvial) flood event and meets the TAN15 justification criteria for residential development in C1 flood zones.

Review of the NRW flood risk maps confirm that the site for extreme (1 in 1000 chance) events has less than 600mm of water on access roads and within properties (maximum expected depths range from 150-300mm for the 0.1% AEP flood events). The NRW mapping indicates that flood velocities will be less than 1m/s. Bespoke modelling will be required to demonstrate that the flood velocities would be below the 0.3m/s for access roads and 0.15m/s (dwellings) required under TAN 15 justification criteria.

Residual risks

- No new defences will be constructed or needed and the residual risk from development is discussed in section 8.0.

All sources of flood risk are detailed in within this document

- From rivers – Clydach and Tawe catchment areas have been considered.
- From the sea - no tidal influence
- From land – there is a LOW risk of surface water flooding to the rear and front external areas.
- From groundwater - there are no springs or weep areas on site
- From sewers - there are no local reports of sewer surcharge
- From reservoirs - none nearby

7.9 Flood Proof Measures

It is intended that the development will be within the Q1000 plane and although the risk from flooding is considered LOW, the risk of flooding cannot be completely eliminated. Flooding can result in the need for expensive repairs. As well as the direct damage to buildings, flooding can impact in many other, and possibly more stressful, ways. The inconvenience of cleaning up a building and the loss of valuables can be immeasurable. There are methods, however, to limit and mitigate against the consequence of flood damage. Some of these are discussed in this section and should be considered during the refurbishment.

Water can enter a building:

- Around the edges of closed doors;
- Through airbricks;
- Backflow through overloaded sewers;
- Seepage through walls especially cracks;
- Seepage through the ground;
- Around cable / services entrance into the building.

Dryproofing - Preventing the water from entering the building.

In the first instance it is possible to take measures to prevent the ingress of water (dryproof).

- There are several propriety barriers available, however, these can be expensive. If desirable, it might be more appropriate to ensure that the walls of the building are able to act as a barrier themselves. Care should be taken to ensure that the pointing and any external plastering are kept in good order and that all cracks and gaps around cables and ducts entering the building are sealed;
- Providing temporary covers to any low air vents. These covers should be removed once the risk of flooding is over. Alternatively, the air vents can be installed at a high level;
- Erecting a temporary barrier in front of any external doors or installing flood protection doors;
- Installing a valve allowing the sewer system to be shut preventing any back flow.

Raising the levels locally above the flood depths is considered feasible, it is possible to limit the damage that the water can cause once in the building (wetproof). Where appropriate the following could be considered for the ground floor:

- Move valuable items to a higher level;
- Have solid concrete floors. Suspended floors are more difficult to clean and dry underneath;
- Use water resistant render for walls;
- Use non water absorbing insulation;
- Use corrosion resistant fittings such as galvanised or stainless steel;
- Ensure that the ground floor electrics is on a separate circuit to the rest of the building and that the electric cables are fed from above with the ground floor sockets kept high;
- Use an appropriate damp proof course;
- Consider freestanding movable equipment;
- Install equipment with motors high up from the floor;
- Install solid internal and external doors effectively sealed;
- Avoid storage heaters on the ground floor;
- Ensure boilers are off the ground.

8.0 CONCLUSIONS & DEVELOPMENT RECOMMENDATIONS

It is concluded that the proposed development lies within Zone C1 as defined on the NRW DAM Map.

It is acknowledged that whilst the NRW flood risk maps are not used to inform the planning process they do provide insight to the risk of site flooding without the need to carry out site specific flood level modelling.

Based upon our review of the NRW FRAW and hazard flood risk maps it is concluded that the site remains flood free for the HIGH and MEDIUM risk flood events.

Based upon our review of the NRW FRAW and hazard flood risk maps it is concluded that the site is at LOW risk of fluvial flooding which results in varying depths of flood water expected across site i.e. the site has a risk of flooding between 1 in 1000 year (0.1%) and 1 in 100 year return period (1%).

It is concluded that the site remains flood free for fluvial events up to the 1% AEP i.e. 1 in 100 chance (fluvial) flood event and meets the TAN15 justification criteria for residential development in C1 flood zones.

It is concluded that the site for extreme (1 in 1000 chance) events has less than 600mm of water on access roads and within properties (maximum expected depths range from 150-300mm for the 0.1% AEP flood events) and meets the TAN15 justification criteria for residential development in C1 flood zones. The NRW mapping indicates that flood velocities will be less than 1m/s. Bespoke modelling will be required to demonstrate that the flood velocities would be below the 0.3m/s for access roads and 0.15m/s (dwellings) required under TAN 15 justification criteria.

Since the site does flood during 'LOW' risk events any development will likely require bespoke flood risk level modelling to review the impact upon others. However, a qualitative assessment of the proposed plans and flood risk maps indicate that impact upon adjacent property is likely to be minimal.

It is concluded that the site meets the definition of previously developed land i.e. it is not a Greenfield site and is considered to concur with the aims of Planning Policy Wales. It is recommended that prior to any further development discussions are held with the local authority planning department to consider whether such development would be viewed. Pontardawe is an area within Wales and has been earmarked as an area for economic regeneration. Such socio-economic arguments could be used as justification for future development of the site.

The river Clydach and Tawe due to size of catchment and underlying geology is considered to have a moderate response to rainfall it is understood that local authority automatic flood alert systems are in place for properties located within this area in addition to the normal weather warning systems via the national news and media. As such it is considered that both property owners and visitors to the development would be made well aware of any risk from flooding at least 12hours before any such event would take place. As such the residual risk to personnel from the proposed development is considered low and manageable.

As part of TAN15 justification criteria it is recommended that the developer shall prepare Flood emergency plans and procedures together to demonstrate that escape/evacuation routes are operational under all conditions.

It is recommended that any risks to the development from future flooding can be mitigated against by incorporating flood resistant design details such as tanking of the walls at ground floor, providing flood resistant doors and raising of electrical power sockets above the 1% flood level and incorporation of measures detailed in section 7.9.

9.0 REFERENCES

1. Technical Advice Note 15: (TAN 15) Development and Flood Risk, July 2004
2. NRW Flood Risk Level Map Data

Superseded

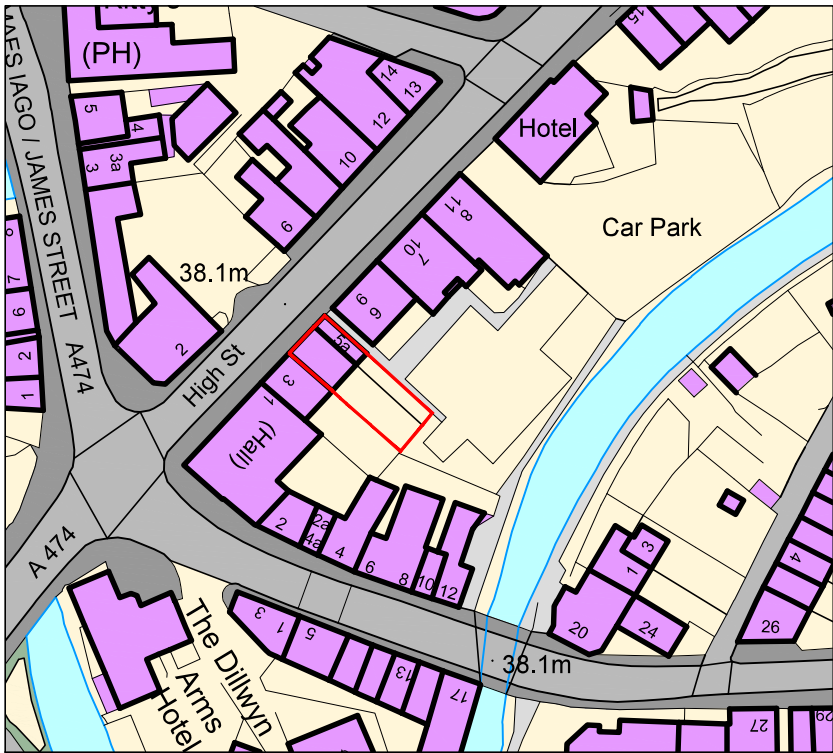
Project No: 1469

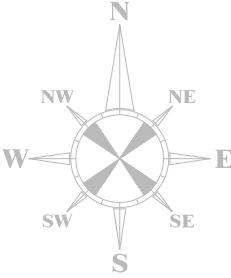
Residential Development At
3 & 5 High Street, Pontardawe
Flood Consequence Assessment Report

HCE

Appendix A – Site Location Plan

Superseded



NOTES Ordnance Survey, (c) Crown Copyright 2020. All rights reserved. Licence number 100022432 	REVISIONS				CLIENT: John Penquet					
	Rev	Comment	By	Date	PROJECT TITLE: Commercial Refurbishment					
					PROJECT ADDRESS 1: 3 & 5 High Street				A4	
					PROJECT ADDRESS 2: Pontardawe, SA8 4HU				CHECKED BY: DLD	
					DRAWING TITLE: Site Location Plan				APPROVED BY: DLD	
-					DATE: 23.11.2019	SCALE: 1:1250	DRAWN BY: SJC	REF: RC213	DRAWING NO: 001	REV: -
THIS DRAWING IS THE COPYRIGHT OF DARKIN ARCHITECTS AND MAY NOT BE COPIED, ALTERED OR REPRODUCED IN ANY FORM OR PASSED TO A THIRD PARTY WITHOUT THEIR CONSENT. DIMENSIONS MUST BE CHECKED AND VERIFIED ON SITE AND ANY DISCREPANCIES SHOULD BE REPORTED TO THE ARCHITECT. THIS DRAWING MUST NOT BE SCALED AND SHOULD BE READ IN CONJUNCTION WITH ALL OTHER CONSULTANT'S DRAWINGS. IF IN DOUBT ASK FOR CONFIRMATION.					CARDIFF 02921 197 196 LLANELLI 01554 778 730 NEATH 01639 368 000 info@darkinarchitects.com © Copyright Darkin Architects 2020 RIBA  Chartered Practice					

Superseded

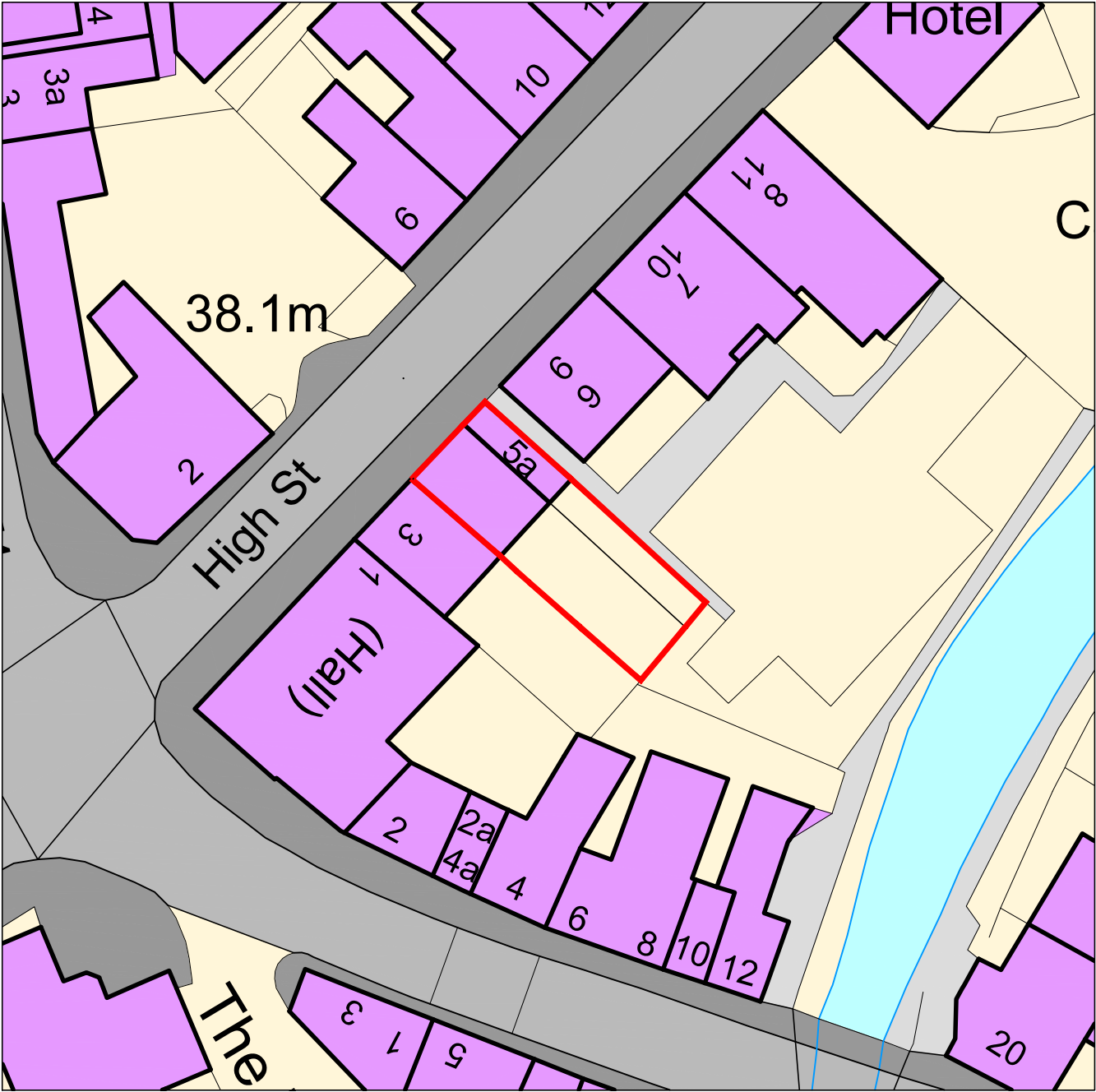
Project No: 1469

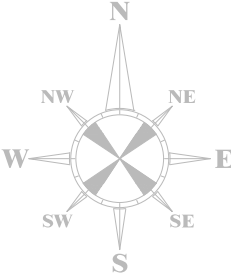
Residential Development At
3 & 5 High Street, Pontardawe
Flood Consequence Assessment Report

HCE

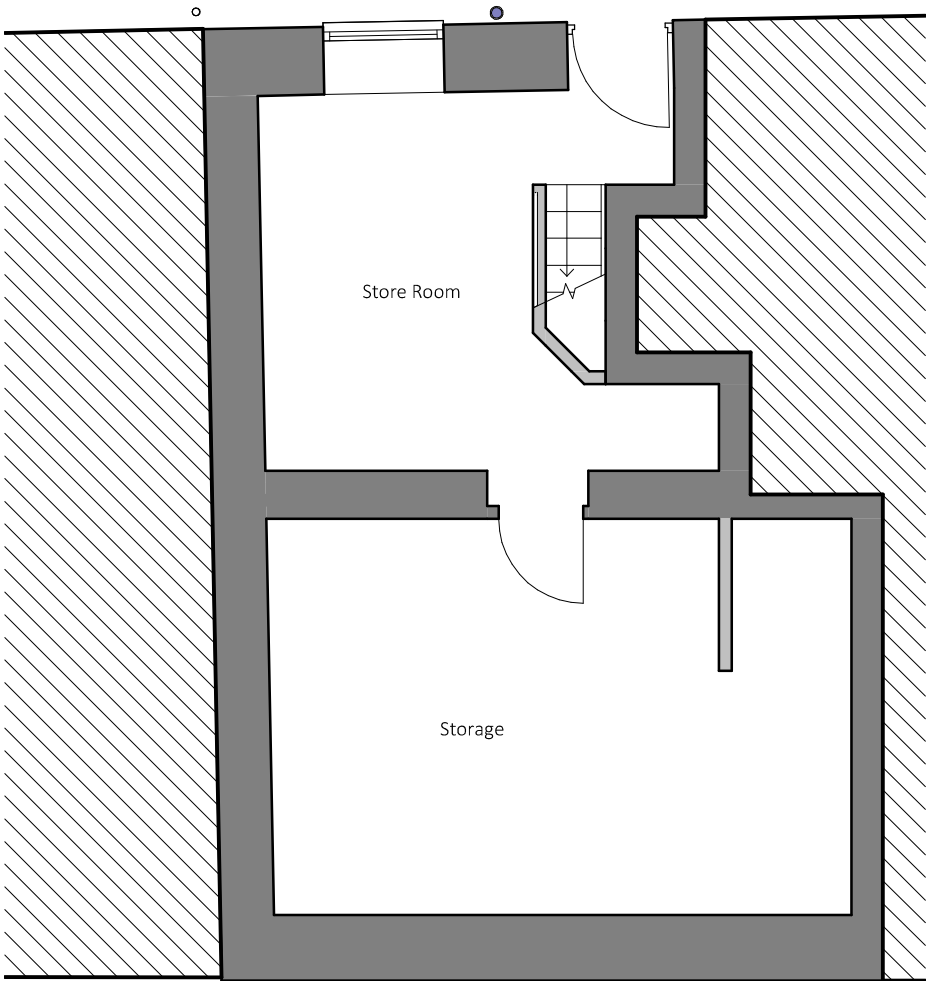
Appendix B – Existing Plans & Elevations

Superseded



NOTES Ordnance Survey, (c) Crown Copyright 2020. All rights reserved. Licence number 100022432 	REVISIONS				CLIENT: John Penquet					
	Rev	Comment	By	Date	PROJECT TITLE: Commercial Refurbishment					
					PROJECT ADDRESS 1: 3 & 5 High Street				A4	
					PROJECT ADDRESS 2: Pontardawe, SA8 4HU				CHECKED BY: DLD	
					DRAWING TITLE: Site Block Plan				APPROVED BY: DLD	
	-				DATE: 23.11.2019	SCALE: 1:500	DRAWN BY: SJC	REF: RC213	DRAWING NO: 002	REV: -
THIS DRAWING IS THE COPYRIGHT OF DARKIN ARCHITECTS AND MAY NOT BE COPIED, ALTERED OR REPRODUCED IN ANY FORM OR PASSED TO A THIRD PARTY WITHOUT THEIR CONSENT. DIMENSIONS MUST BE CHECKED AND VERIFIED ON SITE AND ANY DISCREPANCIES SHOULD BE REPORTED TO THE ARCHITECT. THIS DRAWING MUST NOT BE SCALED AND SHOULD BE READ IN CONJUNCTION WITH ALL OTHER CONSULTANT'S DRAWINGS. IF IN DOUBT ASK FOR CONFIRMATION.					CARDIFF 02921 197 196 LLANELLI 01554 778 730 NEATH 01639 368 000 info@darkinarchitects.com © Copyright Darkin Architects 2020 RIBA  Chartered Practice					

Superseded



darkin architects drawing on experience www.darkinarchitects.com CARDIFF 02921 197 196 LLANELLI 01554 778 730 NEATH 01639 383 000 info@darkinarchitects.com RIBAChartered Practice	NOTES				CLIENT: John Penquet		
					PROJECT: Commercial Refurbishment		
					PROJECT ADDRESS: 3 & 5 High Street Pontardawe SA8 4HU		
					DRAWING TITLE: Existing Basement Plan		
					DRAWN BY	CHECKED BY	© Copyright Darkin Architects 2020
					SJC	DLD	
					PROJECT REF	SCALE	PAPER SIZE
					RC213	1 : 50	A3
					DRAWING	REVISION	DATE
					101		23/11/20

Superseded

darkin
architects

drawing on
experience

www.darkinarchitects.com
CARDIFF 02921 197 196
LLANELLI 01554 778 730
NEATH 01639 383 000
info@darkinarchitects.com

RIBA

Chartered Practice

THIS DRAWING IS THE COPYRIGHT OF DARKIN ARCHITECTS AND MAY NOT BE COPIED, ALTERED OR REPRODUCED IN ANY FORM OR PASSED TO A THIRD PARTY WITHOUT THE WRITTEN CONSENT OF DARKIN ARCHITECTS. DIMENSIONS MUST BE CHECKED AND VERIFIED ON SITE AND ANY DISCREPANCIES SHOULD BE REPORTED TO THE ARCHITECT. THIS DRAWING MUST NOT BE SCALED AND SHOULD BE READ IN CONJUNCTION WITH ALL OTHER DOCUMENTS AND DRAWINGS. IF IN DOUBT, ASK FOR CONFIRMATION.

NOTES

Rev	Description	By	Date

CLIENT:

John Penquet

PROJECT:

Commercial Refurbishment

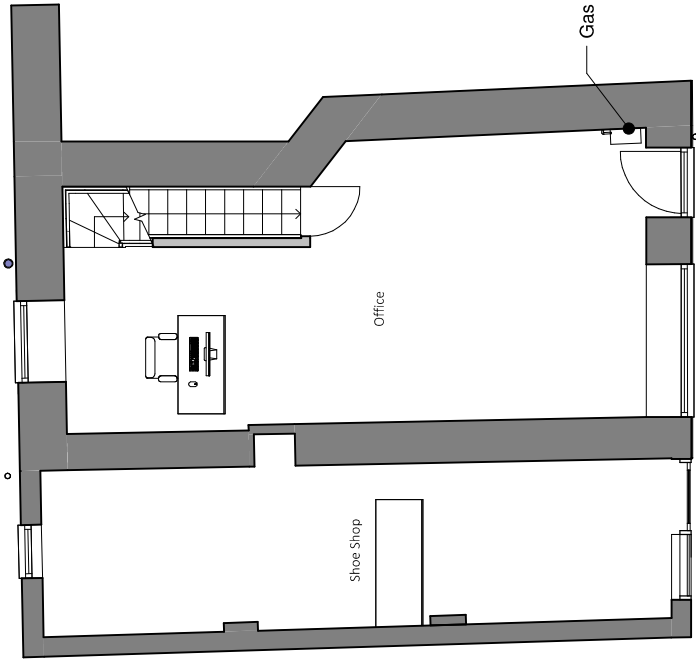
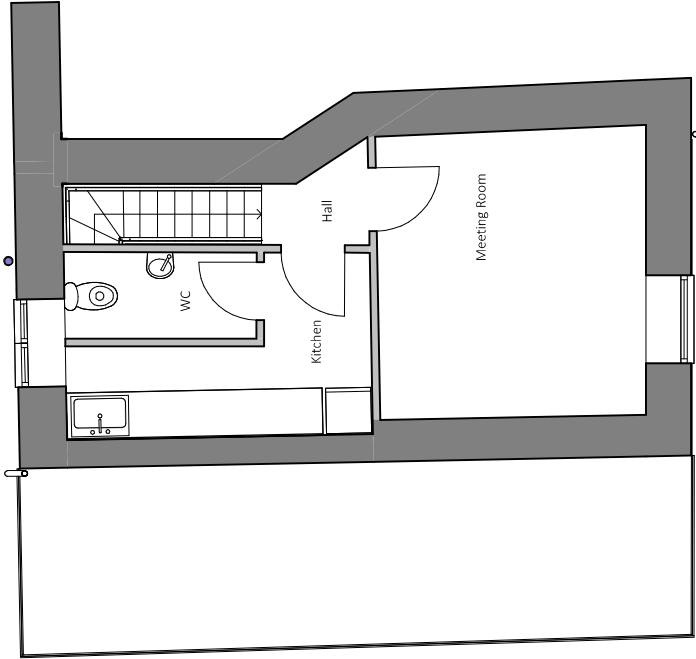
PROJECT ADDRESS:

3 & 5 High Street
Pontardawe
SA8 4HU

DRAWING TITLE

Existing Ground & First Floor Plan

DRAWN BY	CHECKED BY	© Copyright Darkin Architects 2020	
SJC	DLD	SCALE	PAPER SIZE
PROJECT REF	SCALE	1:50	A2
FC2713	REVISION	DATE	
DRAWING	102	23/1/20	



Superseded

darkin
architects

drawing on
experience

www.darkinarchitects.com

CARDIFF 02921 197 196
LLANELLI 01554 778 730
NEATH 01639 383 000

info@darkinarchitects.com

RIBA

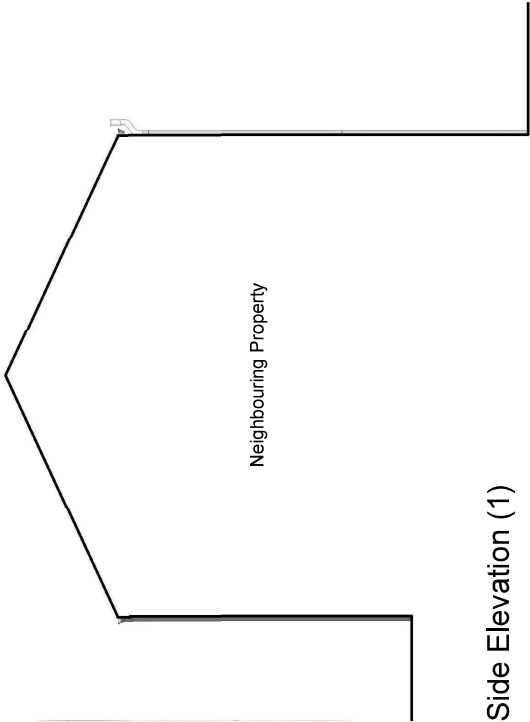
Chartered Practice

THIS DRAWING IS THE COPYRIGHT OF DARKIN ARCHITECTS AND MAY NOT BE COPIED, ALTERED OR REPRODUCED IN ANY FORM OR PASSED TO A THIRD PARTY WITHOUT THEIR CONSENT. DIMENSIONS MUST BE CHECKED AND VERIFIED ON SITE. THE DRAWING IS THE PROPERTY OF DARKIN ARCHITECTS AND WILL REMAIN THEIR PROPERTY WHETHER OR NOT THE WORK HAS BEEN COMPLETED. THE ARCHITECT ACCEPTS NO LIABILITY FOR ANY LOSS OR DAMAGE OF ANY KIND, INCLUDING CONSEQUENTIAL LOSS OR DAMAGE, ARISING FROM THE USE OF THIS DRAWING. THIS DRAWING MUST NOT BE SCALED AND SHOULD BE READ IN CONJUNCTION WITH ALL OTHER CONSULTANT'S DRAWINGS, IF IN DOUBT ASK FOR CONFIRMATION.

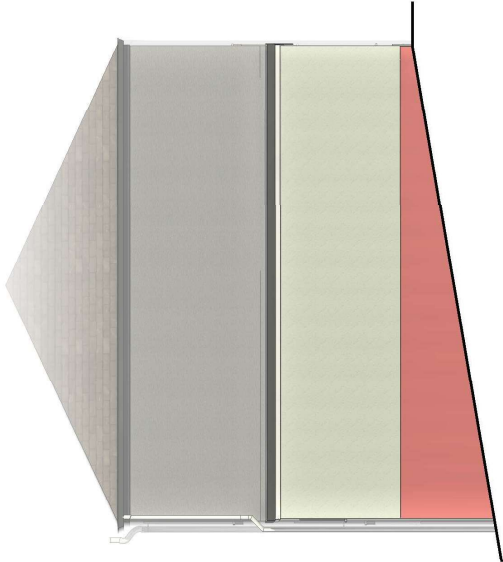
No.	Description	By	Date

CLIENT
John Penquet
PROJECT
Commercial Refurbishment
PROJECT ADDRESS
3 & 5 High Street Pontardawe SA8 4HU

DRAWING TITLE		
Existing Elevations		
DRAWN BY	CHECKED BY	© Copyright Darkin Architects 2020
SJC	DLD	
PROJECT REF	SCALE	PAPER SIZE
RC213	1 : 100	A3
DRAWING	REVISION	DATE
301		23/11/20



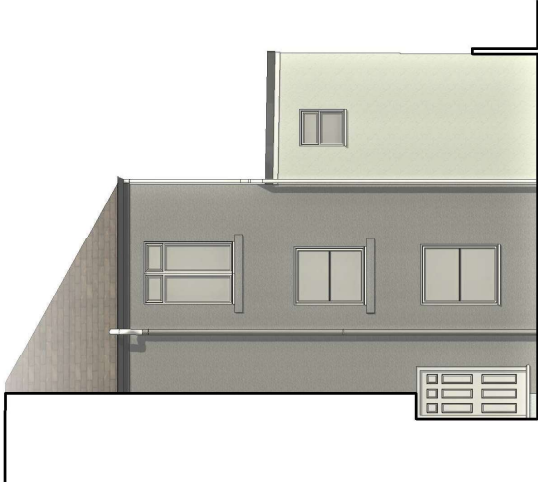
Side Elevation (1)



Side Elevation (2)



Front Elevation



Rear Elevation

Superseded

Project No: 1469

Residential Development At
3 & 5 High Street, Pontardawe
Flood Consequence Assessment Report

HCE

Appendix C – Proposed Plans & Elevations

Superseded

darkin
architects

drawing on
experience

www.darkinarchitects.com

CARDIFF 02921 197 196
LLANELLI 01554 778 730
NEATH 01639 383 000

info@darkinarchitects.com



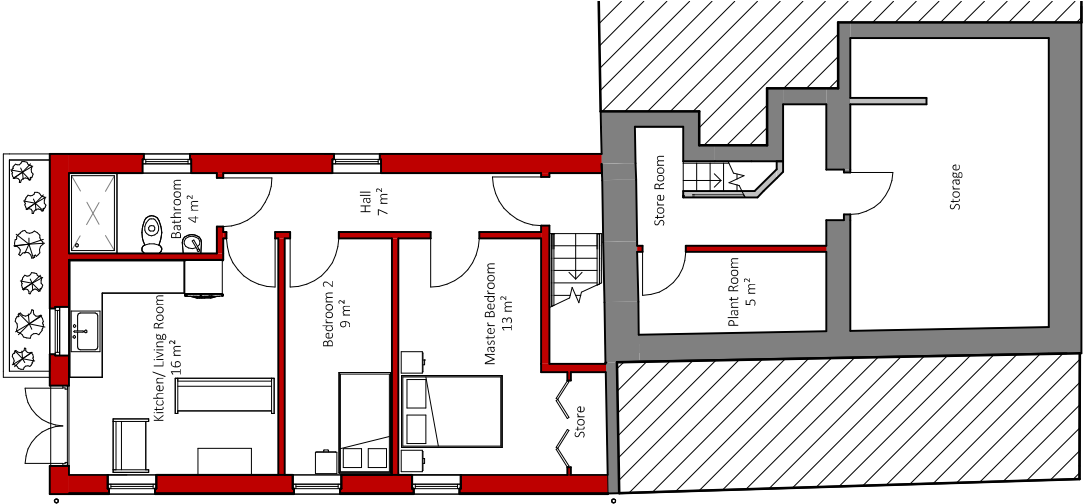
Chartered Practice

THIS DRAWING IS THE COPYRIGHT OF DARKIN ARCHITECTS AND MAY NOT BE COPIED, ALTERED OR REPRODUCED IN ANY FORM OR PASSED TO A THIRD PARTY WITHOUT THEIR CONSENT. DIMENSIONS MUST BE CHECKED AND VERIFIED ON SITE. THIS DRAWING MUST NOT BE SCALED AND SHOULD BE READ IN CONJUNCTION WITH ALL OTHER CONSULTANT'S DRAWINGS, IF IN DOUBT ASK FOR CONFIRMATION.

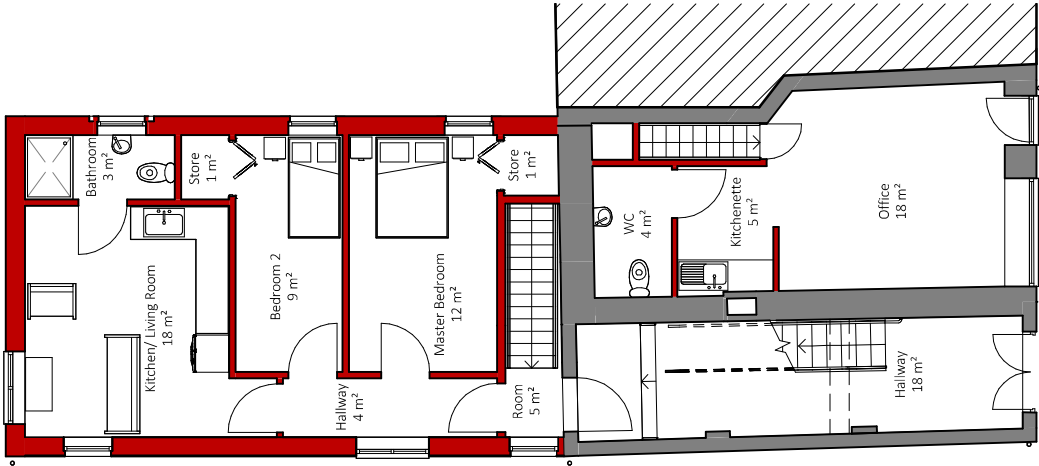
No.	Description	By	Date
A	Kitchenette Added	SJC	07.01.2021

CLIENT
John Perquet
PROJECT
Commercial Refurbishment
PROJECT ADDRESS
3 & 5 High Street Pontardawe SA8 4HU

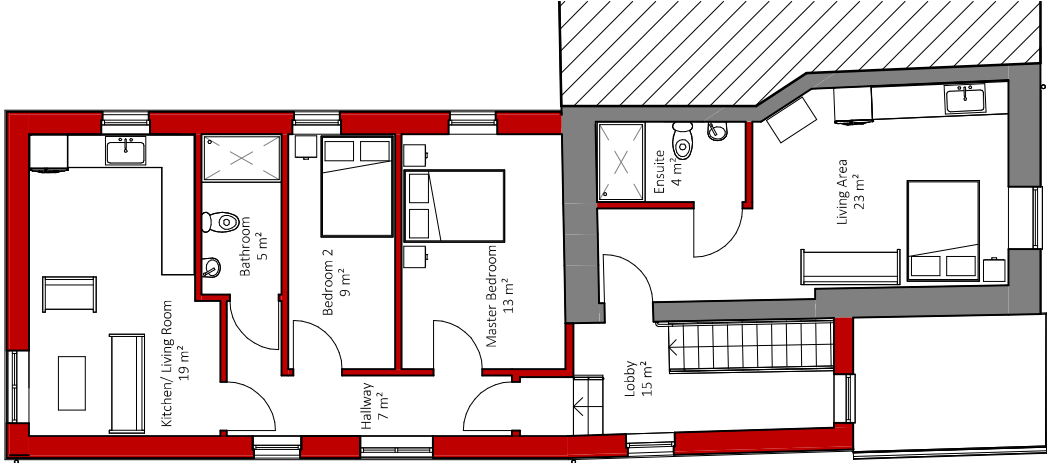
DRAWING TITLE		
Proposed Floor Plans		
DRAWN BY	CHECKED BY	© Copyright Darkin Architects 2020
SJC	DLD	
PROJECT REF	SCALE	PAPER SIZE
RC213	1 : 100	A3
DRAWING	REVISION	DATE
103	A	11/12/20



Basement



Ground Floor



First Floor

Superseded

darkin
architects

drawing on
experience

www.darkinarchitects.com

CARDIFF 02921 197 196
LLANELLI 01554 778 730
NEATH 01639 383 000

info@darkinarchitects.com

RIBA



Chartered Practice

THIS DRAWING IS THE COPYRIGHT OF DARKIN ARCHITECTS AND MAY NOT BE
COPIED, ALTERED OR REPRODUCED IN ANY FORM OR PASSED TO A THIRD
PARTY WITHOUT THEIR CONSENT. DIMENSIONS MUST BE CHECKED AND
VERIFIED ON SITE. THE DRAWING IS THE PROPERTY OF DARKIN ARCHITECTS
AND WILL BE RETURNED TO THEM ON COMPLETION OF THE PROJECT. THE
ARCHITECT, THIS DRAWING MUST NOT BE SCALED AND SHOULD BE READ IN
CONJUNCTION WITH ALL OTHER CONSULTANT'S DRAWINGS, IF IN DOUBT
ASK FOR CONFIRMATION.

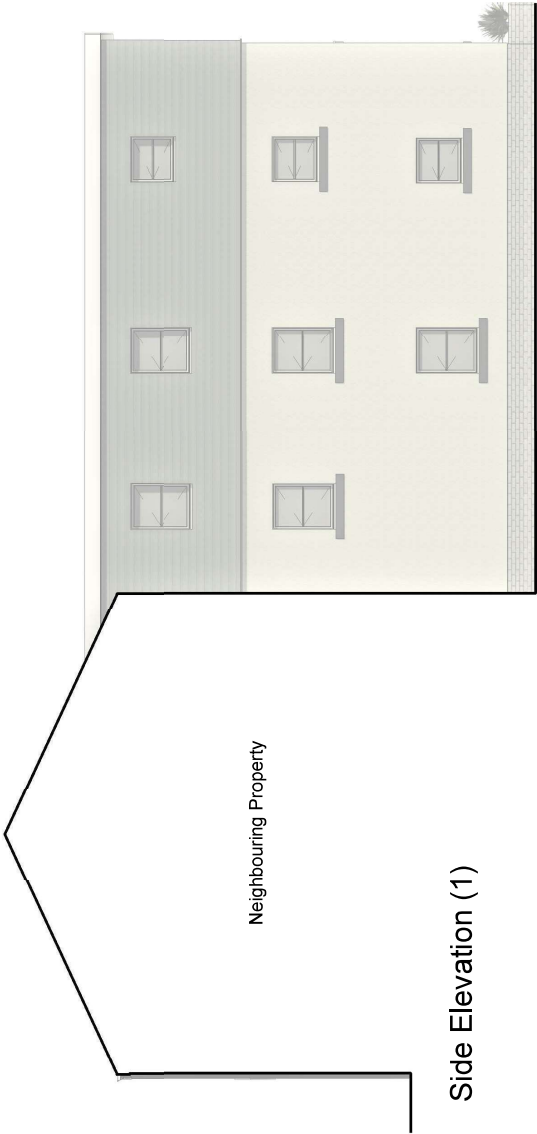
No.	Description	By	Date

CLIENT
John Perquet
PROJECT
Commercial Refurbishment
PROJECT ADDRESS
3 & 5 High Street Pontardawe SA8 4HU

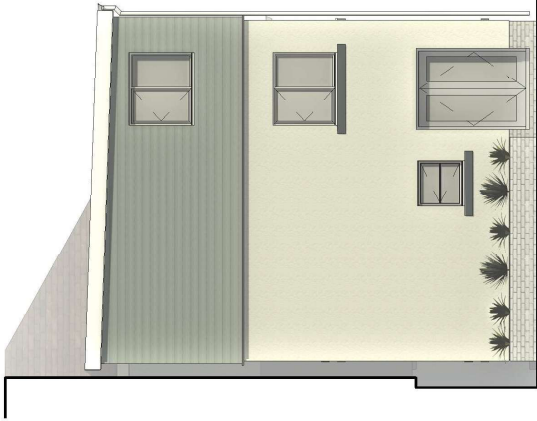
DRAWING TITLE		
Proposed Elevations		
DRAWN BY	CHECKED BY	© Copyright Darkin Architects 2020
SJC	DLD	
PROJECT REF	SCALE	PAPER SIZE
RC213	1 : 100	A3
DRAWING	REVISION	DATE
302		11/12/20



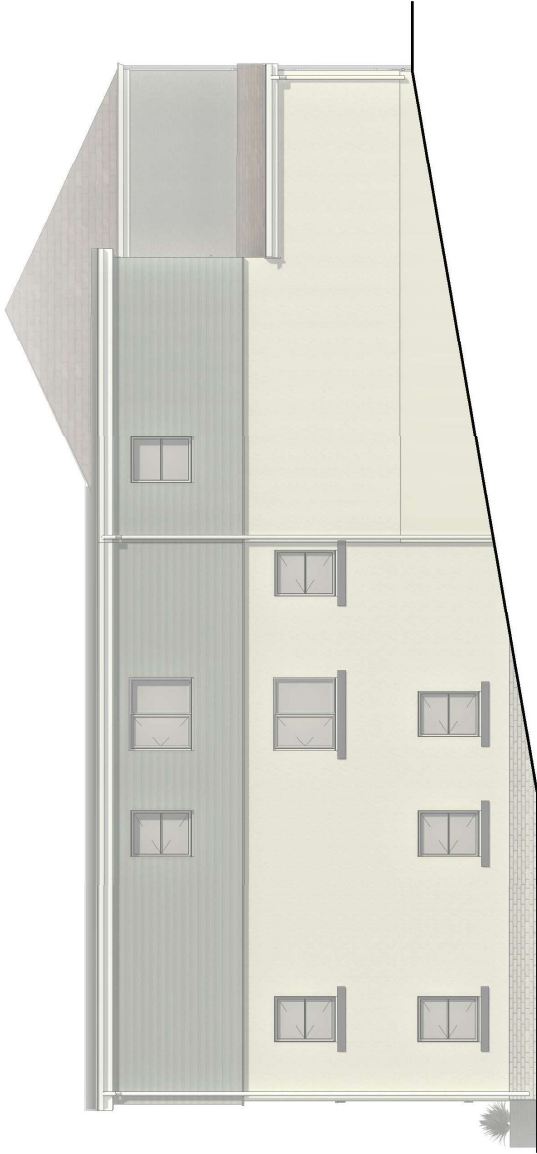
Front Elevation



Side Elevation (1)



Rear Elevation



Side Elevation (2)

Superseded

Project No: 1469

Residential Development At
3 & 5 High Street, Pontardawe
Flood Consequence Assessment Report

HCE

Appendix D – Topographical Survey

Superseded

