

**Toll House, 6 Church Street,
Littleborough OL15 9AF**

Reference: 776 FRA-v1

Mar-25

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FLOOD RISK ASSESSMENT

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All Environment Agency mapping data used under special licence. Data is current as the data on the correspondence given by the Environment Agency and is subject to change.

The information presented and conclusions drawn are based on statistical data and are for guidance purposes only. The study provides no guarantee against flooding of the study site or elsewhere, nor of the absolute accuracy of water levels, flow rates and associated probabilities.

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Purpose of this report

- 1.1 RIDA Reports Ltd has been appointed to undertake a Level 2 – Scoping Study Flood Risk Assessment for a development located at OL15 9AF.

Objectives

- 1.2 The objectives of this FRA are to demonstrate the following:
 - Whether the proposed development will likely be affected by current or future flooding.
 - Whether the proposed development will increase flood risk elsewhere.
 - Whether the flood risks associated with the proposed development can be satisfactorily managed.
 - Whether the measures proposed to deal with the flood risk are sustainable.

Documents Consulted

- 1.3 To achieve these objectives, the following documents have been consulted and referenced:

The National Planning Policy Framework (NPPF)
CIRIA C753 document The SuDS Manual, 2015
Local Flood Risk Management Strategy (LFRMS)
Level 1 Strategic Flood Risk Assessment (SFRA)
Aerial photographs and topographical survey of the site
British Geological Society Records
Local Council flood Maps
Environment Agency flood maps
The CIRIA publication 'C635 Designing for exceedance in urban drainage Good practice'



Development Site and Location

- 2.1 The site is located at Church Street, Littleborough. The nearest postcode is OL15 9AF. Refer to appendix A for site location plan.
- 2.2 The current use of the site is an existing 2-storey residential dwelling, with a basement used as storage. The current user vulnerability classification of the site is More vulnerable . The site is located in the River Flood Zone 3. Refer to Appendix B for more details.

Development Proposals

- 2.3 The proposed development includes the conversion of the ground floor into commercial space with a minor extension to include a raised terrace, and the conversion of the first floor into an apartment. No changes are proposed to the basement. . Refer to Appendix B for the layout of the proposed development.
- 2.4 The vulnerability classification of the proposed development is Less vulnerable, due to commercial space being located on the ground floor most affected by flooding, with residential accommodation located on the first floor. The estimated lifetime between 50 and 100 years.

Site Hydrology and Hydrogeology

Hydrology	2.5	The River Roch is located approximately 6 m away from the development.
	2.6	The development is located within a secondary aquifer type A. Aquifers type A consist of permeable layers capable of supporting water supplies at a local rather than strategic scale. They are generally aquifers formerly classified as minor aquifers.
Aquifer		
Source Protection Zone	2.7	The site is not located within a Source Protection Zone.
Groundwater Levels	2.8	The ground water levels for this site are unknown.

Site Geology

- 2.9 The British Geological Survey records of the site show that it is located within the Pennine Lower Coal Measures Formation - Mudstone, Siltstone and Sandstone.
- Bedrock



Superficial Deposits 2.10 The British Geological Survey records show that the superficial deposits are Alluvium - Clay, Silt, Sand and Gravel.



National Planning Policy Framework (NPPF)

- 3.1 The NPPF and its technical guidance is a set of planning policies with the key objective of contributing to sustainable development. As part of it, they ensure that flood risk and sustainability are considered during the planning process. This ensures that developments are not located in flood risk areas and directs developments to lower risk areas. The NPPF applies a sequential risk-based approach to determining land suitability for development in flood risk areas. The NPPF also encourages developers to seek opportunities to reduce the overall level of flood risk through the development layout and the application of Sustainable Drainage Systems (SuDS).

The Flood and Water Management Act (2010)

- 3.2 The Flood and Water Management Act aims to reduce the flood risk associated with extreme weather events. It provides robust flood risk management for people, homes and businesses and encourages using SuDS for developments. A robust SuDS strategy should consider the recommendations in this Flood Risk Assessment.

Strategic Flood Risk Assessment (SFRA)

- 3.3 Planning policy with regard to development and flood risk in the area is detailed in the Strategic Flood Risk Assessment for Greater Manchester (SFRA) which was published in 2014. The proposed development site is located within the administrative boundary of the Rochdale Metropolitan Borough Council.
- 3.4 The SFRA commits to direct new development to locations at the lowest flood risk. The SFRA provides information on the levels and flood hazards that could result from flooding. The Environment Agency flood zone maps and the SFRA ignore the presence of existing flood defences when defining the potential extent of flooding.
- 3.5 This report follows the guidance given in the Strategic Flood Risk Assessment for Greater Manchester by evaluating the flood risk and providing relevant flood mitigation.



- 4.1 The NPPF guidance states that the sequential test "is designed to ensure that areas at little or no risk of flooding from any source are developed in preference to areas at higher risk. This means avoiding, so far as possible, development in current and future medium and high flood risk areas considering all sources of flooding including areas at risk of surface water flooding."

Applicability of the Sequential Test

- 4.2 The flood risks were determined by identifying all the sources of flooding and assessing their possible impact and likelihood to development. It is confirmed that the development is:

- In Flood Zone 3, based on the Planning Flood Risk Map
- In Flood Zone 3, based on the Flood Level information Provided by the Environment Agency
- At Low risk of surface flooding
- At high risk of groundwater flooding
- Outside of a critical drainage area
- Outside of an area with sewer flooding

- 4.3 This type of development is exempt from applying the sequential test as per the National Planning Policy Framework paragraph 174, footnote 60. The development has been made safe and has not increased the risk to other properties. See copy of note below "(60) This includes householder development, small non-residential extensions (with a footprint of less than 250m²) and changes of use; except for changes of use to a caravan, camping or chalet site, or to a mobile home or park home site, where the sequential and exception tests should be applied as appropriate."

Exception Test

- 4.4 Fluvial flood risk for this change of use was assessed using the Environment Agency Flood Zone Maps and the standing advice approach recommended in the NPPF guidelines. The standing advice considers the development's size and the flood risk vulnerability of land use.

- Step 1** 4.5 The proposed development falls within The Environment Agency (EA) Flood Flood Zone



The Sequential and Exception Test 4

categorisation

Zone 3. The Flood Zone 3 is considered to have a high probability of flooding with a 100 years or greater annual probability or >1%AEP.

Step 2 4.6

The Exception Test is not required for this development.

The Exception Test



- 5.1 The development has been assessed for the following potential flood risks, river and tidal flood risk, surface water flooding, flooding from groundwater, reservoir flood risk and drainage systems.

Flood Defence and Historic Flooding

- 5.2 The Environment Agency records show that the site benefits from flood defences. The average level of the flood defence for this site is Yes mAOD. They also show that the area around the site has potentially been flooded in the past. This data does not indicate if a property has been flooded internally. See Appendix C for details.

Flooding from river and sea

- 5.3 The site is affected by River Flooding. The proposed development falls within The Environment Agency (EA) Flood Zone 3. The Flood Zone 3 is considered to have a high probability of flooding with a 100 years or greater annual probability or >1%AEP.
- 5.4 The climate change allowance has been taken from the EA peak river flow map. The vulnerability of the development, the design life of the building, and the flood zone classification were used to determine it. The climate change allowance for this site is 35%. The nearest climate change allowance of 35% provided by the EA was used as the most representative to complete this assessment.
- 5.5 It is to be noted that a new hydraulic model is in development, taking into account the EA Roch schemes, however the results have not been formally published. Whilst it is anticipated these may alleviate flood risk in the overall area, it is unlikely that the development would benefit from significant flood level reductions. As such, the published levels provided by the Environment Agency are shown in table 1 below. These are for the defended scenario as the water levels are greater than the undefended scenario, potentially due to water being trapped behind the flood defence wall. Further details are provided in Appendix D.



Flood levels in channel		Flood levels at Site	
Return Period	Flood Level (m AOD)	Return Period	Flood Level (m AOD)
1 in 20 (5%)	NIL	1 in 20 (5%)	NIL
1 in 30 (3.3%)	NIL	1 in 30 (3.3%)	NIL
1 in 100 (1%)	NIL	1 in 100 (1%)	NIL
1 in 100 + 35%(CC)	NIL	1 in 100 + 35%(CC)	145.1
1 in 1000 (0.1%)	NIL	1 in 1000 (0.1%)	NIL

5.6 The river flood risk level is 145.1m AOD. The external depth of water is 0.9m.

Surface water (overland flows) flood risk

5.7 The Environment Agency maps show that the flood risk from surface water is low. A residual risk of localised shallow ponding remains likely. The Environment Agency surface water flood risk maps are defined by applying a specific procedure based on digital terrain models and assumptions regarding infiltration and urban drainage losses. The surface water flood maps are determined by the Environment Agency as follows:

5.8 *"The nationally produced surface water flood mapping only indicates where surface water flooding could occur due to local rainfall. It does not fully represent flooding that occurs from:*

- Ordinary watercourses
- Drainage systems or public sewers caused by catchment-wide rainfall events
- Rivers
- Groundwater

Due to the modelling techniques, the mapping picks out depressions in the ground surface. It simulates some flow along natural drainage channels, rivers, low areas in floodplains, and flow paths between buildings. Although the maps appear to show flooding from ordinary watercourses, they should not be taken as definitive mapping of flood risk from these as the conveyance effect of ordinary watercourses or drainage channels is not explicitly modelled. Also, structures (such as bridges, culverts and weirs) and flood risk management infrastructure (such as defences) are not represented.

The nationally produced surface water flood mapping does not consider the effect of pumping stations in catchments with pumped drainage. No allowance is made for tide locking, high tidal or fluvial levels where sewers cannot discharge into rivers or the sea."



- 5.9 The strategic flood risk for the Rochdale Metropolitan Borough Council confirms that the flood risk for the site is Low. The surface water flood data has not been produced to determine the flood levels at individual properties. This data does not contain the climate change allowances for depth levels. Therefore, the Design flood level given below is an assumption. The new development may have greater or lower surface water flood depths.
- 5.10 Based on the Environment Agency and the Strategic flood risk assessment's surface water mapping, together with the presence of surface water drainage systems at the site and surrounding area, it is concluded that the site is at Low risk of flooding from surface water sources. The depth of water including climate change allowance is potentially below 300mm. For this assessment, a depth of water of 0.2m has been taken as the most appropriate depth to the site. The average ground level at the site is 142.96m AOD. The surface water flood level on this site could be in the region of 143.16m AOD.

Flooding from drainage systems in adjacent areas

- 5.11 The council records have been reviewed. The flooding from drainage incidents maps were not found in the Strategic Flood Risk Assessment. Therefore, for the purpose of this report, it has been assumed that the risk of flooding from drainage systems is low.

Reservoirs Risks

- 5.12 The Reservoir Flood Map (RFM) produced by the Environment Agency do not show the risk to individual properties of dam breach flooding. The maps do not indicate or relate to any particular probability of dam breach flooding. The maps were prepared for emergency planning purposes. They can be used to help reservoir owners produce on-site plans, and the Local Resilience Forum produce off-site plans and to prioritise areas for evacuation/early warning in the event of a potential dam failure. The RFM shows that the development could be within the possible dam breach flooding path. See Appendix C.



Groundwater flood risk

- 5.13 The British Geological Survey's flood risk susceptibility maps show that the development has the potential for groundwater flooding above ground level. Groundwater levels vary seasonally and are influenced by ground and meteorological conditions and proximity to water features. The groundwater flooding risk for this site is considered to be high. The groundwater flood depth could potentially be 0.15m. The average external level at the site is 142.96m AOD. The potential groundwater flood level is 143.11m AOD. This level has been given as a precautionary measure. It is recommended that monitoring of groundwater is undertaken should this measure be reviewed. Refer to Appendix C for record drawings.

Critical Drainage Areas

- 5.14 The Strategic Flood Risk Assessment was reviewed as part of this assessment. However, it does not show the critical drainage areas within the council. For this report, it has been assumed that the site is outside of a notified critical drainage area.



6.1 The Flood hazard assessment has demonstrated that the site is:

- In Flood Zone 3, based on the Planning Flood Risk Map
- In Flood Zone 3, based on the Flood Level information Provided by the Environment Agency
- At Low risk of surface flooding
- At high risk of groundwater flooding
- Outside of a critical drainage area
- Outside of an area with sewer flooding

6.2 Under the NPPF it is necessary to demonstrate that, for any new development on the site, it is possible to provide an adequate level of flood protection for personnel working or living at the development.

Design Flood Level

6.3 The design flood level is the maximum estimated water level during the design storm event including an allowance for climate change in line with current best practice and the national planning policy guidance.

6.4 The Design Flood Level for this development has been determined by evaluating the levels from the Fluvial/Sea, Surface Water and Groundwater flood levels.

6.5 For this site, the Design Flood Level is 145.1m AOD. This is the highest level and corresponds to the River/Sea Flood Level.

Flood Protection

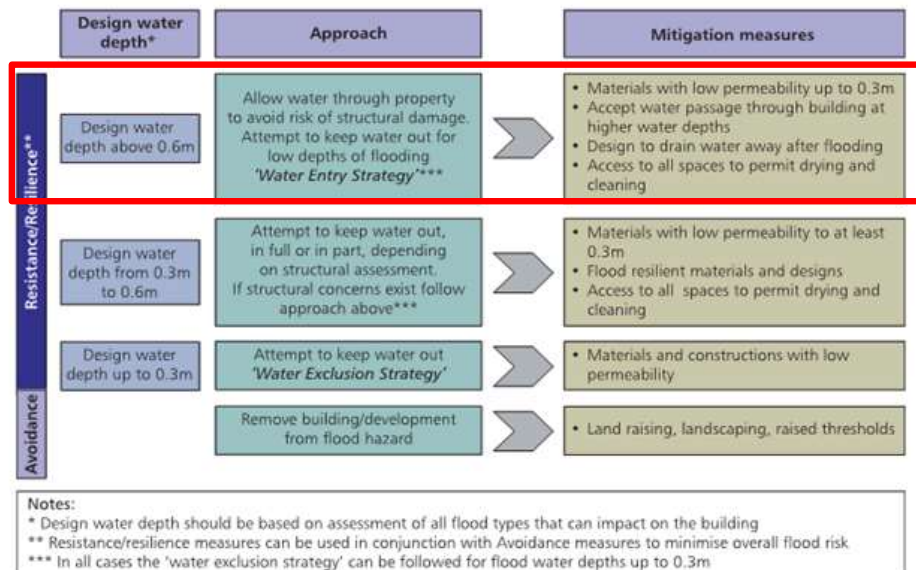
6.6 The National Planning Guidance standing advice and Environment Agency recommends that where possible, flood avoidance is provided by establishing the development's finished floor level 600mm above (freeboard) the design flood level. However, this level can be reduced if there is a high level of certainty about the estimated flood level. For this site the estimated free board has been determined to be 0.3m above the Design Flood Level due to the quality of the flood risk information available and the type of risk. The finished floor should be 145.4m AOD. It would involve a height differential of 1.2m. This is the distance between the average external level (144.2m AOD)



and the potential Finished Floor Level.

- 6.7 As this proposal is for a change of use, it is not possible to achieve this FFL due to access and site constraints. A level of 144.35m AOD is achieved. Therefore, the following flood mitigation interventions should be provided.
- 6.8 The flood mitigation strategies for the development has been based on the CLG 2007 Improving the Flood Performance of New Buildings. See the figure below for the strategy highlighted in red. The strategy is based on the water level within the proximity to the building.

Rationale for flood resilient and/or resistant design strategies



- 6.9 The design water depth for this site is 0.9m. The development should utilise building materials that are suitable for a 'water exclusion strategy'. Materials classified as "Good" (highlighted in red) in the Figure below shall be used for new construction up to 145.7m AOD.



Flood resilience characteristics of building materials (based on laboratory testing)

Material	Resilience characteristics*		
	Water penetration	Drying ability	Retention of pre-flood dimensions, integrity
Bricks			
Engineering bricks (Classes A and B)	Good	Good	Good
Facing bricks (pressed)	Medium	Medium	Good
Facing bricks (handmade)	Poor	Poor	Poor
Blocks			
Concrete (3.5N, 7N)	Poor	Medium	Good
Aircrete	Medium	Poor	Good
Timber board			
OSB2, 11mm thick	Medium	Poor	Poor
OSB3, 18mm thick	Medium	Poor	Poor
Gypsum plasterboard			
Gypsum Plasterboard, 9mm thick	Poor	Not assessed	Poor
Mortars			
Below d.p.c. 1:3(cement:sand)	Good	Good	Good
Above d.p.c. 1:6(cement:sand)	Good	Good	Good

*Resilience characteristics are related to the testing carried out and exclude aspects such as ability to withstand freeze/thaw cycles, cleanability and mould growth

- 6.10 There are no changes to the fabric of the building. The new services and fittings (communications wiring, heating systems, electrical services, water, electricity and gas meters) should be placed at above the level of 145.7 m AOD. All service entries should be sealed (e.g. with expanding foam or similar closed cell material).
- 6.11 Closed-cell insulation should be used for pipes. Sealed PVC external framed doors or good fit and sealed wooden frames should be used. Hollow core timber internal doors should not be used unless sufficient flood warning is given, butt hinges, can be used to allow internal doors to be easily removed and stored. Carpets are to be avoided and use of tiles recommended in floor below the predicted design flood level.
- 6.12 Fittings should be designed to be replaced after a flood, it is advisable to specify durable fittings that are not appreciably affected by water and can be easily cleaned (e.g. use of plastic materials, or stainless steel). The cost of these units may need to be balanced against the predicted frequency of flooding. Avoid wood fiber based carcasses and use easily removable solid wood doors and drawers.
- 6.13 On new foundations or where they are being replaced: Suspended concrete floor slab at least 150mm thick is preferred. Beam and Block slabs with



geomembrane and 75mm min screed can also be used. There should be a minimum space of 150mm ventilated void between the ground level and the bottom of the floor slab. Damp-proof membranes should be included in the design. Floor insulation should be of the closed-cell type. Underfloor services using ferrous materials should be avoided. Ceramic/concrete-based floor tiles, sitting on a bed of sand, cement render and water-resistant grout can be used. Ground bearing slabs are also an option. See the figures below.

- 6.14 In new walls use extended periscope subfloor ventilators or fit removable airbrick covers; fix plasterboard sheets horizontally rather than vertically, or split sheets mid-height with a dado rail, to reduce the extent of replacement; specify lime- or cement-based renovating plasters or renders rather than gypsum-based, with water-resistant paint finishes. The use of water-proof, water-resistant or micro-porous surface coatings on masonry should be avoided as they can inhibit the drying-out of the building fabric.
- 6.15 The new terrace is to allow water to flow freely beneath, so as not to have an impact on existing flood volume storage. This can be achieved by raising the terrace on stilts as opposed to a solid infilled base or foundation.
- 6.16 There is potential for groundwater flooding above ground level within the development. The general precautionary measures to mitigate the risk of groundwater flooding in this development are:
- Provide flow paths around the proposed development, which groundwater will take in the event of groundwater emergence.
 - For the new basement, provide a 3-barrier tanking to the basement building to prevent groundwater ingress. This includes Type A (Barrier Protection), Type B (Structurally Integral Protection) and Type C (Drained Protection) with gravity drain membrane and sump/pump system.
 - The concrete basement wall must extend 0.3 m above ground level and should provide continuous and complete flood protection for the basement.
 - Ground floor threshold levels are proposed to be raised a minimum of 0.3 m above ground level as freeboard to allow for uncertainty.



- 6.17 The Strategic Flood Risk Assessment shows that the site is outside of an area of sewer flooding, therefore no mitigation on sewer flood is required.
- 6.18 The Development Management Procedure Order (2015) requires that the Environment Agency is consulted on developments within Areas with Critical Drainage Problems (ACDPs). The Strategic Flood Risk Assessment does not show the development within a Critical Drainage Area.



7.1

The NPPF specifically stipulates that consideration should be given to potential off-site flood impacts of any proposed development. These off-site impacts are in relation to the following:

- Surface water management
- Flood flow conveyance, storage and climate change

Surface Water Management

7.2

The development is not increasing the surface water run-off as this is a change of use in which no extensions or changes to the external areas are proposed. It is concluded that the proposed development does not increase the off-site impact.

Flood Flow conveyance and storage

7.5

Due to the nature of the development being a change of use, flood compensation for this development is not required.

7.6

The proposed development will not affect flood flow conveyance through the site or the surrounding area. It is concluded that there will be no impact on flood risk in the surrounding area.



- 8.1 This flood risk assessment has identified the potential flooding mechanisms that could affect the site. As part of this, the following residual risks have been evaluated.

Public safety and Site Access

- 8.2 This assessment has demonstrated that the proposed development will have no adverse impact on flood risk in the area surrounding the site. Available evidence indicates that the development would not change surface water generation. Therefore, there is no basis to indicate that, with respect to flood risk, the proposed development would adversely impact public safety.
- 8.3 It will be necessary to ensure that all building users are fully informed of procedures to be implemented during the threat of imminent flooding.

Flood Warning and evacuation

- 8.4 The site is located within an area covered by the Environment Agency Flood Alert service. It is recommended that the users of the proposed development are registered with this service to receive early warning of imminent flooding.
- 8.5 The occupants of the site are encouraged to sign up for the alerts. An appropriate Flood Management and Evacuation Plan tailored to the use of the site should be in place before the site occupation. Table 4 below shows the actions that will be taken for each flood warning.
- 8.6 Action to be taken in the event of an Alarm being Raised or a Flood Warning Received:
- Raise the alarm and evacuate the site following the established Fire Drill procedures. The main assembly is as per the main house fire drill assembly point.
 - Contact Emergency Fire Services (999) if necessary and Environment Agency Floodline: (0845 988 1188) if the event is unexpected.
 - If safe to do so, locate and turn off critical services, e.g. water, gas & electricity.
 - Follow the routes below to evacuate the site altogether.



Actions that will be taken for each flood warning

Warning	Message	Timing	Action
 FLOOD ALERT	Flooding is possible. Be prepared.	2 hours to 2 days in advance of flooding.	- Be prepared for flooding. - Prepare a flood kit.
 FLOOD WARNING	Flooding is expected. Immediate action required.	Half an hour to 1 day in advance of flooding.	- Act now to protect your property. - Block doors with flood boards or sandbags and cover airbricks and other ventilation holes. - Move pets and valuables to a safe place. - Keep a flood kit ready. - Move any critical equipment and information to a safe location
 SEVERE FLOOD WARNING	Severe flooding. Danger to life.	When flooding poses a significant threat to life and different actions are required.	- Be ready should you need to evacuate from the property. - Co-operate with the emergency services and call 999 if you are in immediate danger.
Warning Removed	No further flooding is currently expected for your area.	Issued when a flood warning is no longer in force.	- Flood water may still be around and could be contaminated. - If you've been flooded, ring your buildings and contents insurance company as soon as possible.

Useful local phone numbers

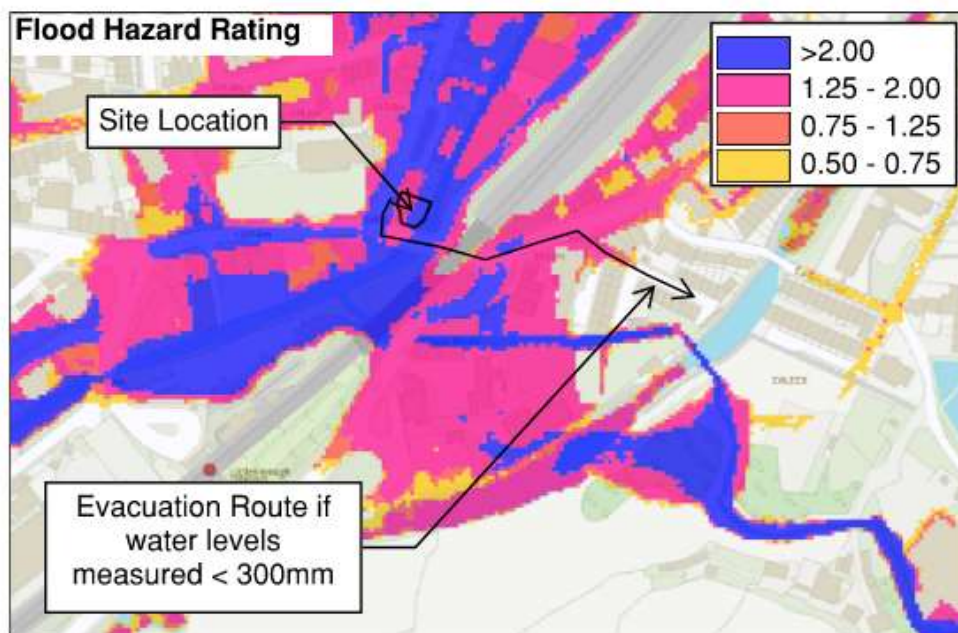
Please write your local phone numbers in the space provided below. Make sure they are easy to find in the event of a flood.

	Local authority:
	Local police:
	Gas and electricity company:
	Insurance company and policy details:
	Doctor:
	Pharmacy:
	Electrician:
	Gas safe engineer:
	Plumber:
	Builder:



- 8.7 It is recommended that a water level monitoring or telemetry is installed on both sides of the flood wall. Safe egress may be achievable when water depths are lower than 300mm, with low velocity. This would be achievable by exiting the property on Halifax Road towards East St.
- 8.8 Beyond a depth of 300mm, the Flood Hazard rating of the area tends to be greater than 2, therefore considered “Significant” or “Extreme”. In this case, a temporary refuge is proposed for this development. It is located on the first floor of the building. It needs to be accessible to all the occupants of the building in a sudden flood event.

Flood Hazard Rating and Flood Evacuation



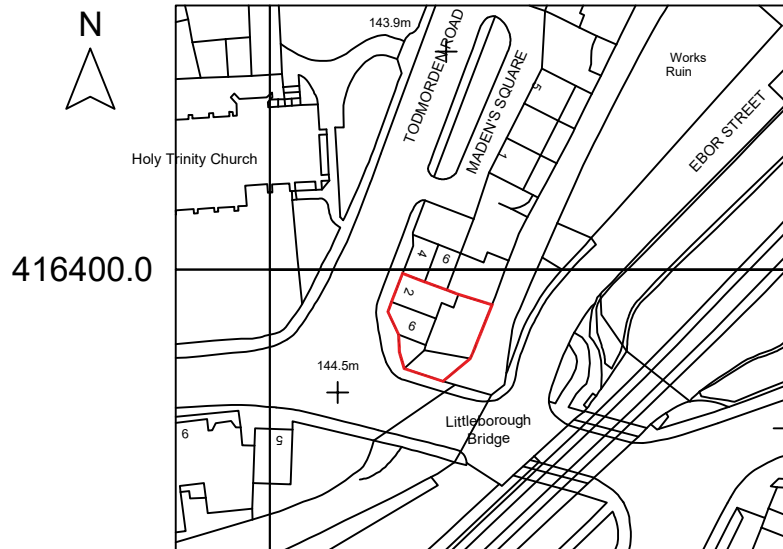
Thresholds for Flood Hazard Rating $H = d \times (v + 0.5) + DF$		Degree of Flood Hazard	Description
FD2321	FD2320		
<0.75	<0.75	Low	Caution - “Flood zone with shallow flowing water or deep standing water”
0.75 - 1.25	0.75 - 1.25	Moderate	Dangerous for some (i.e. children) - “Danger: Flood zone with deep or fast flowing water”
1.25 - 2.5	1.25 - 2.0	Significant	Dangerous for most people - “Danger: flood zone with deep fast flowing water”
>2.5	>2.0	Extreme	Dangerous for all - “Extreme danger: flood zone with deep fast flowing water”



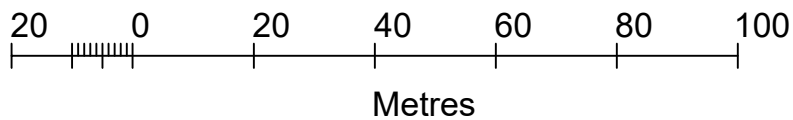
- 9.1 It is concluded that subject to the proposed mitigation measures, the site can be developed in accordance with the provisions of the NPPF and the requirements of the Environment Agency and the local planning authority.
- 9.2 This report demonstrates that the proposal will be safe, in terms of flood risk, for its design life and will not increase the flood risk elsewhere.
- 9.3 It is proposed that a formal Flood Warning and Emergency Response Plan is developed for the proposed development to communicate flood emergency response procedures to all the occupants of the site.



Appendix A



Location Plan
Scale @ 1 : 1250



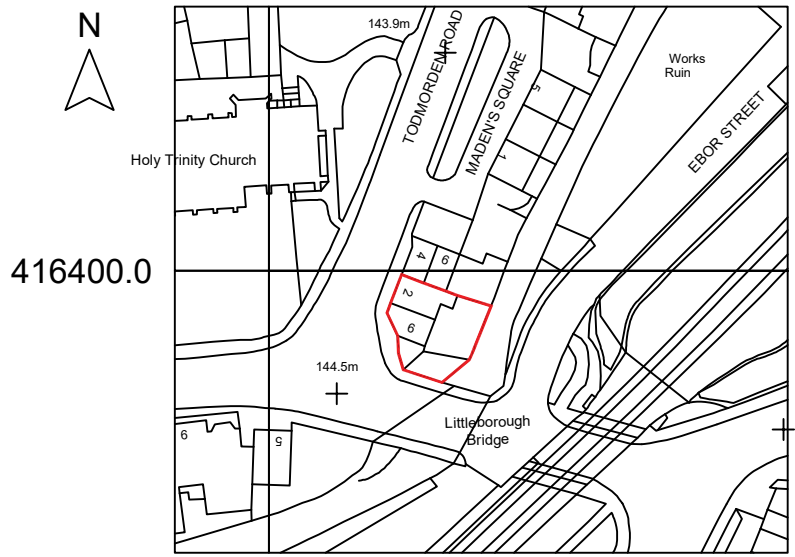
Production Date: 09 May 2024

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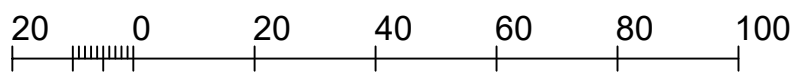
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Appendix B



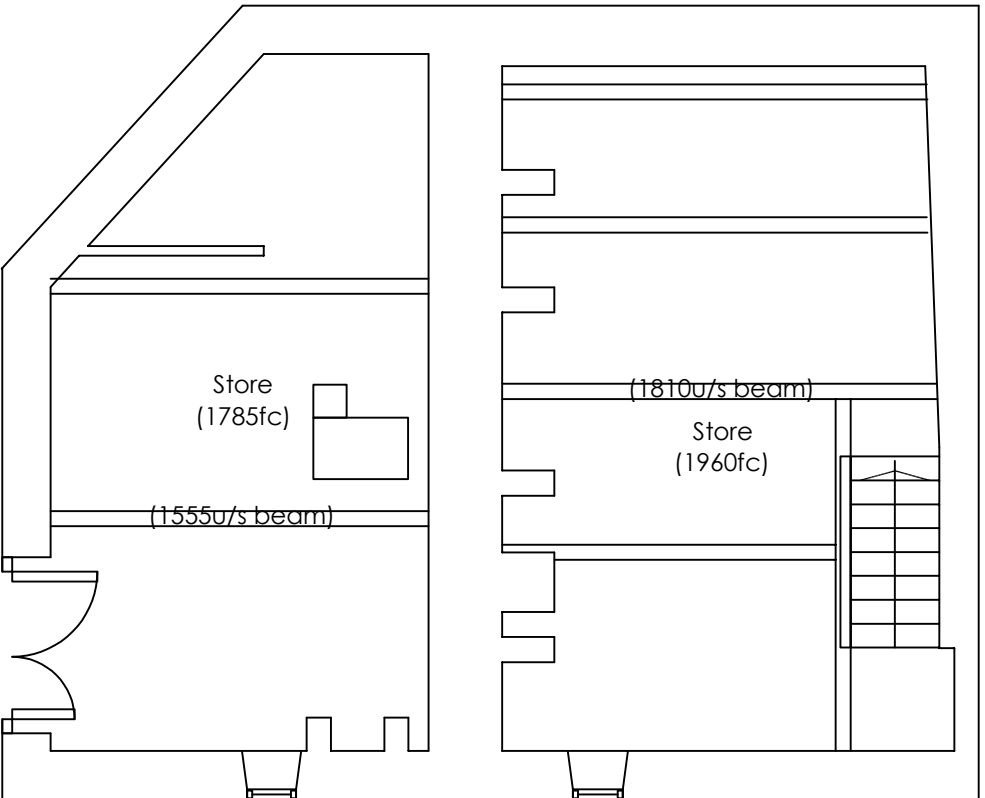
Location Plan
Scale @ 1 : 1250



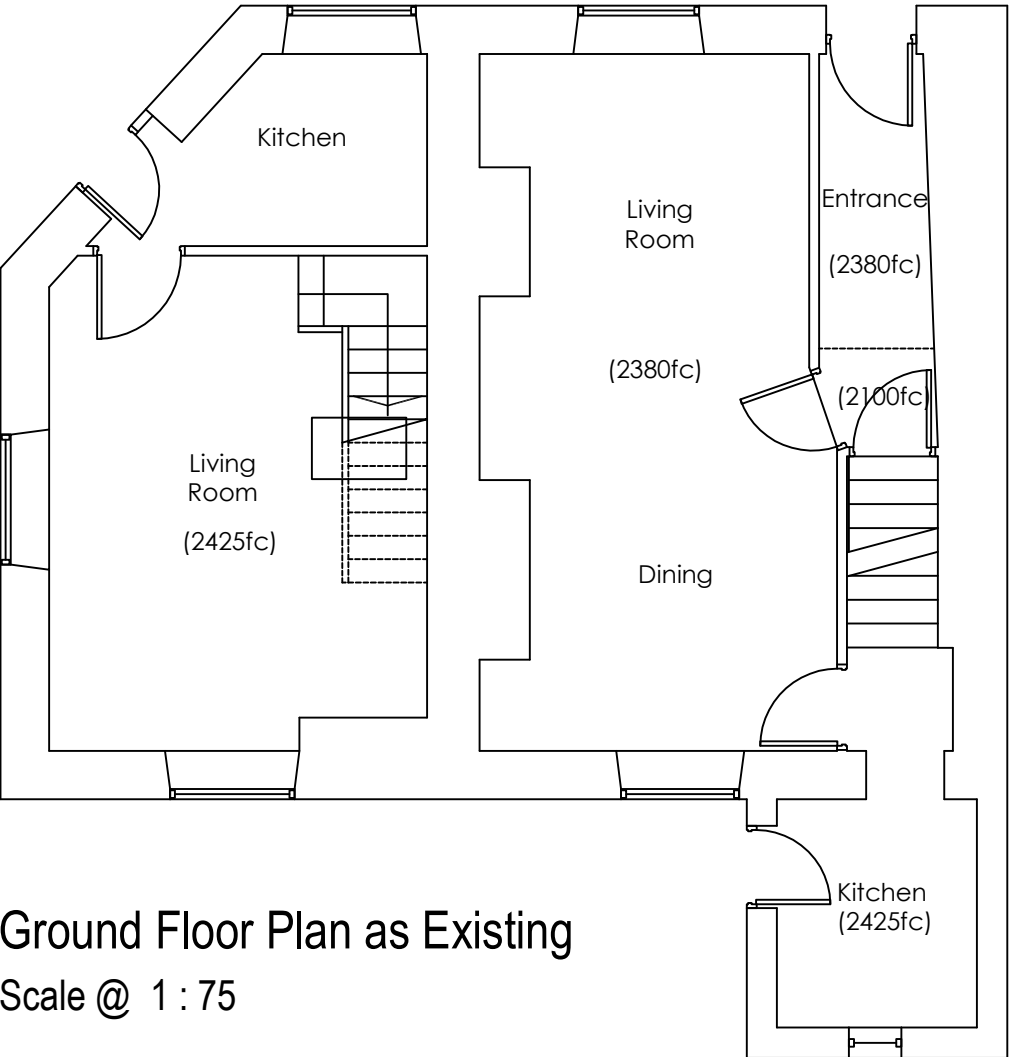
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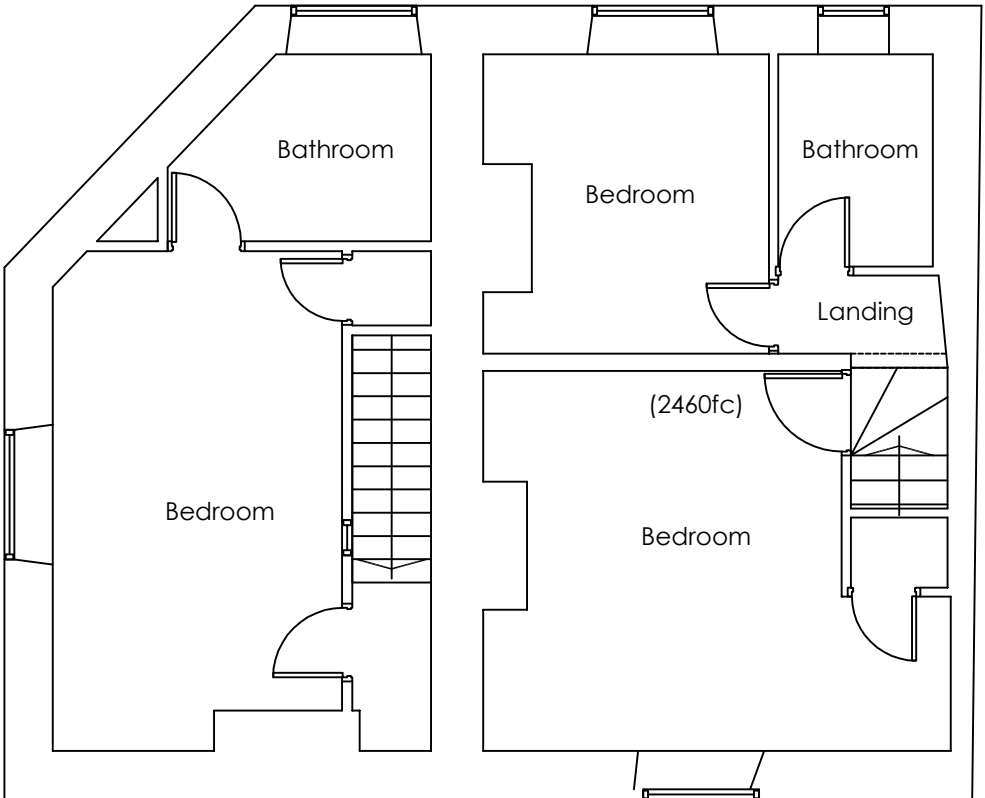
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Basement as Existing
Scale @ 1 : 75



Ground Floor Plan as Existing
Scale @ 1 : 75



First Floor Plan as Existing
Scale @ 1 : 75

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No2. Front Elevation as Existing
Scale @ 1 : 100



No6. Front Elevation as Existing
Scale @ 1 : 100



Side Elevation as Existing
Scale @ 1 : 100



Rear Elevation as Existing
Scale @ 1 : 100

Client

TOLL HOUSE,
6 CHURCH STREET,
TODMORDEN ROAD,
LITTLEBOROUGH
OL15 9AF

Project

PROPOSED COMMERCIAL SPACE
AND FIRST FLOOR CONVERSION
TO APARTMENT

DrawingTitle

ELEVATIONS AS
EXISTING

Project number

995

Date

27.03.22

Drawn by

CD

Checked by

OL3

Scale @ A3

1:100

Drawing Number

SS-02

Current Revision

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ARCHITECTURAL DESIGN

Unit 7 Whitegate Bussiness Centre, Jardine Way, Chadderton, OL9 9JT

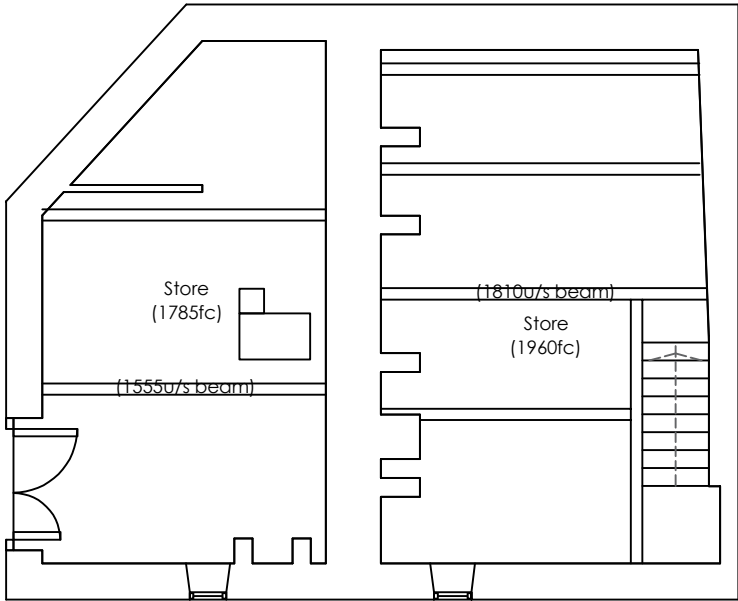
Email - design@studio-ol3.co.uk - Web - www.studio-ol3.co.uk

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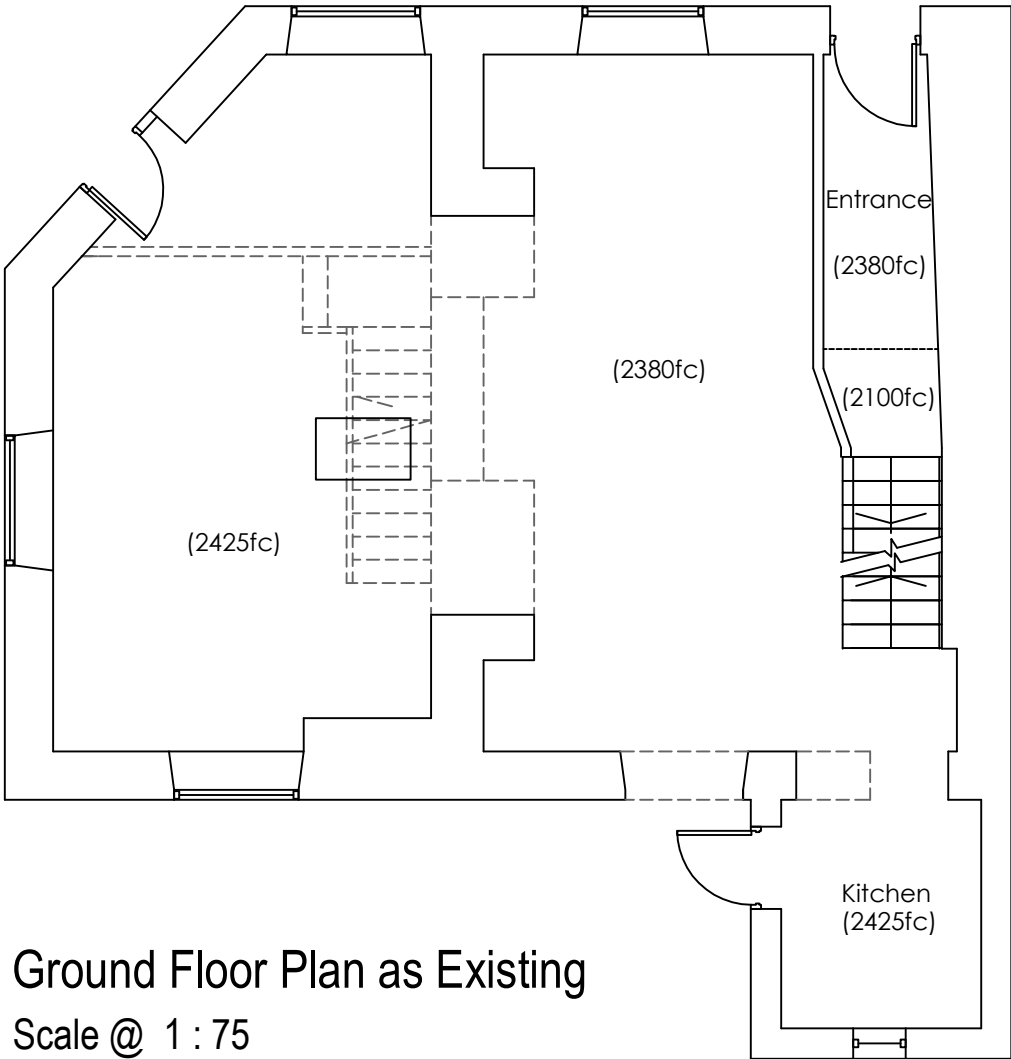
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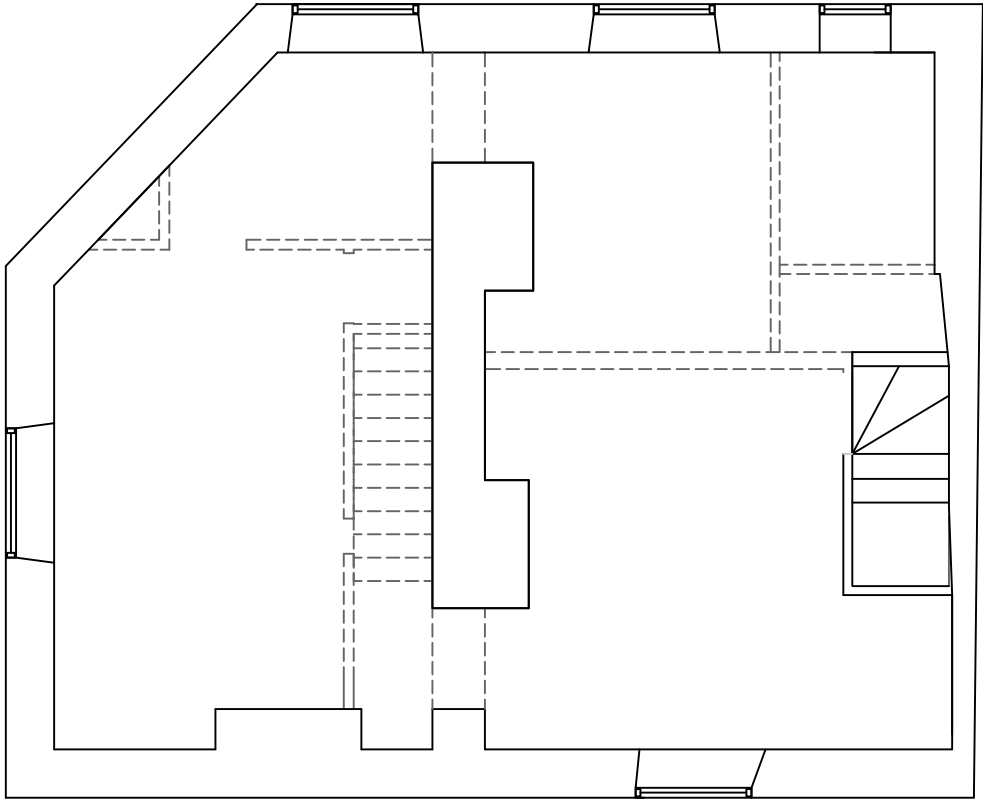
No.	Date	Description	Issued by
-----	------	-------------	-----------



Basement as Existing
Scale @ 1 : 75



Ground Floor Plan as Existing
Scale @ 1 : 75



First Floor Plan as Existing
Scale @ 1 : 75

Client

TOLL HOUSE,
6 CHURCH STREET,
TODMORDEN ROAD,
LITTLEBOROUGH
OL15 9AF

Project

PROPOSED COMMERCIAL SPACE
AND FIRST FLOOR CONVERSION
TO APARTMENT

DrawingTitle

STRIP OUT AS
PROPOSED

Project number

995

Date

27.03.22

Drawn by

CD

Checked by

OL3

Scale @ A3

1:75

Drawing Number

D-01

Current Revision



Unit 7 Whitegate Bussiness Centre, Jardine Way, Chadderton, OL9 9JT
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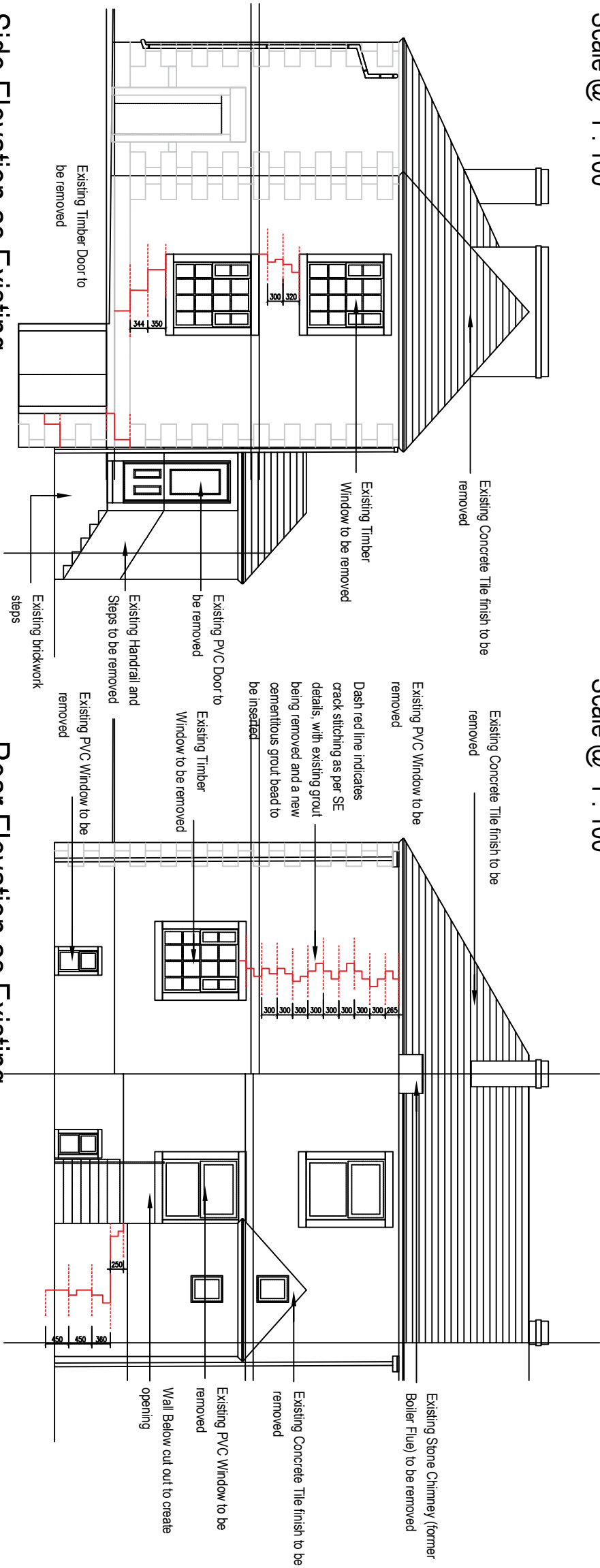
[illegible]

No2. Front Elevation as Existing

Scale @ 1 : 100

No6. Front Elevation as Existing

Scale @ 1 : 100



Side Elevation as Existing

Scale @ 1 : 100

Rear Elevation as Existing

Scale @ 1 : 100

Client

TOLL HOUSE,
6 CHURCH STREET,
TODMORDEN ROAD,
LITTLEBOROUGH
OL15 9AF

Project

PROPOSED COMMERCIAL SPACE
AND FIRST FLOOR CONVERSION
TO APARTMENT

Drawing Title

ELEVATIONS AS
EXISTING STRIP OUT
AND CRACKING
REPAIRS

Project number

Date	27.03.22
Drawn by	CD
Checked by	OL3
Scale @ A3	1:100

Drawing Number

D-02

Current Revision

Unit 7 Whitegate Bussiness Centre, Jardine Way, Chadderton, OL9 9JT

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No.	Date	Description	Issued by
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AREA SCHEDULE

- BASEMENT STORAGE - 52 m² / 559 ft² - LOW CEILING
HEIGHT UNDER 2000mm
- GROUND FLOOR COMMERCIAL SPACE - 51 m² / 549 ft²
- FIRST FLOOR APARTMENT - 57.5 m² / 619 ft²

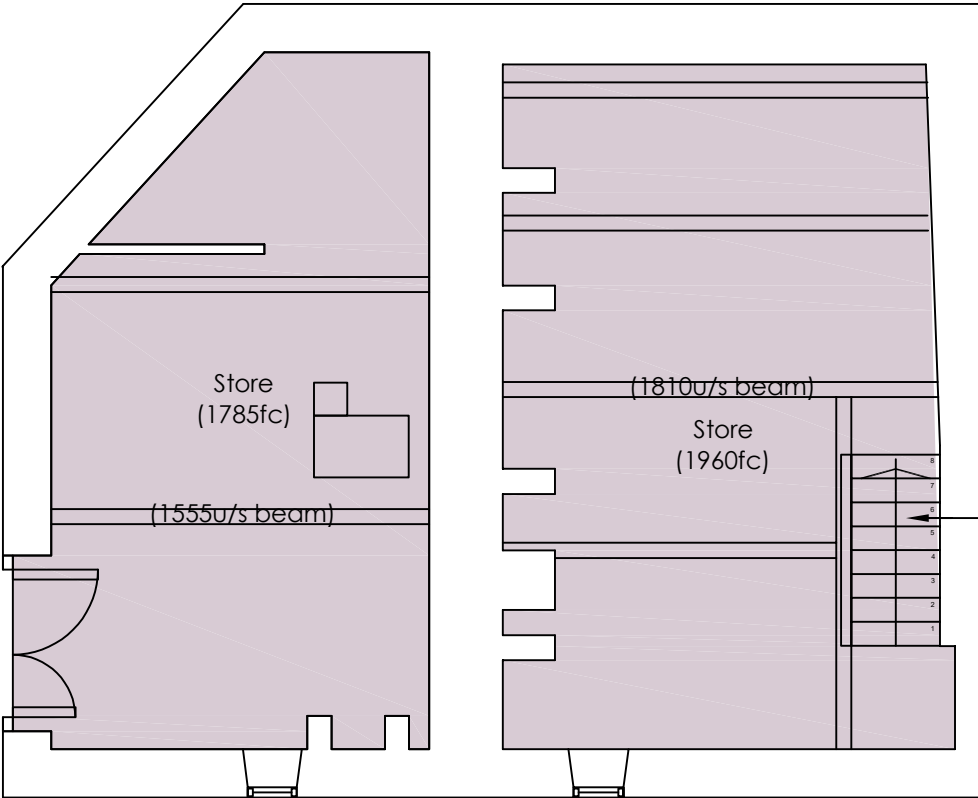
TOTAL INTERNAL FLOOR AREA

160 m² / 1724 ft²

NATIONALLY DESCRIBED SPACE STANDARDS

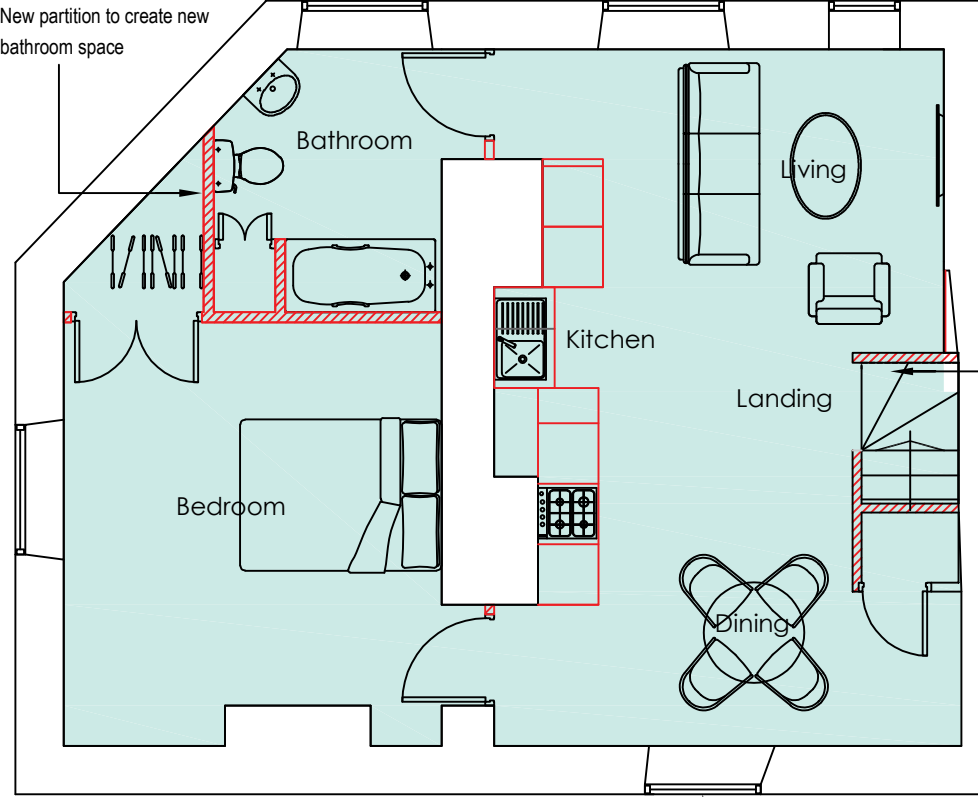
- 1 BED 2 PERSON - 50M² MIN
2 BED 2 PERSON - 61M² MIN

SO TO COMPLY THE AVAILABLE AREA WILL ONLY ALLOW
A 1 BED UNIT TO THE FIRST FLOOR OF THIS PROPERTY



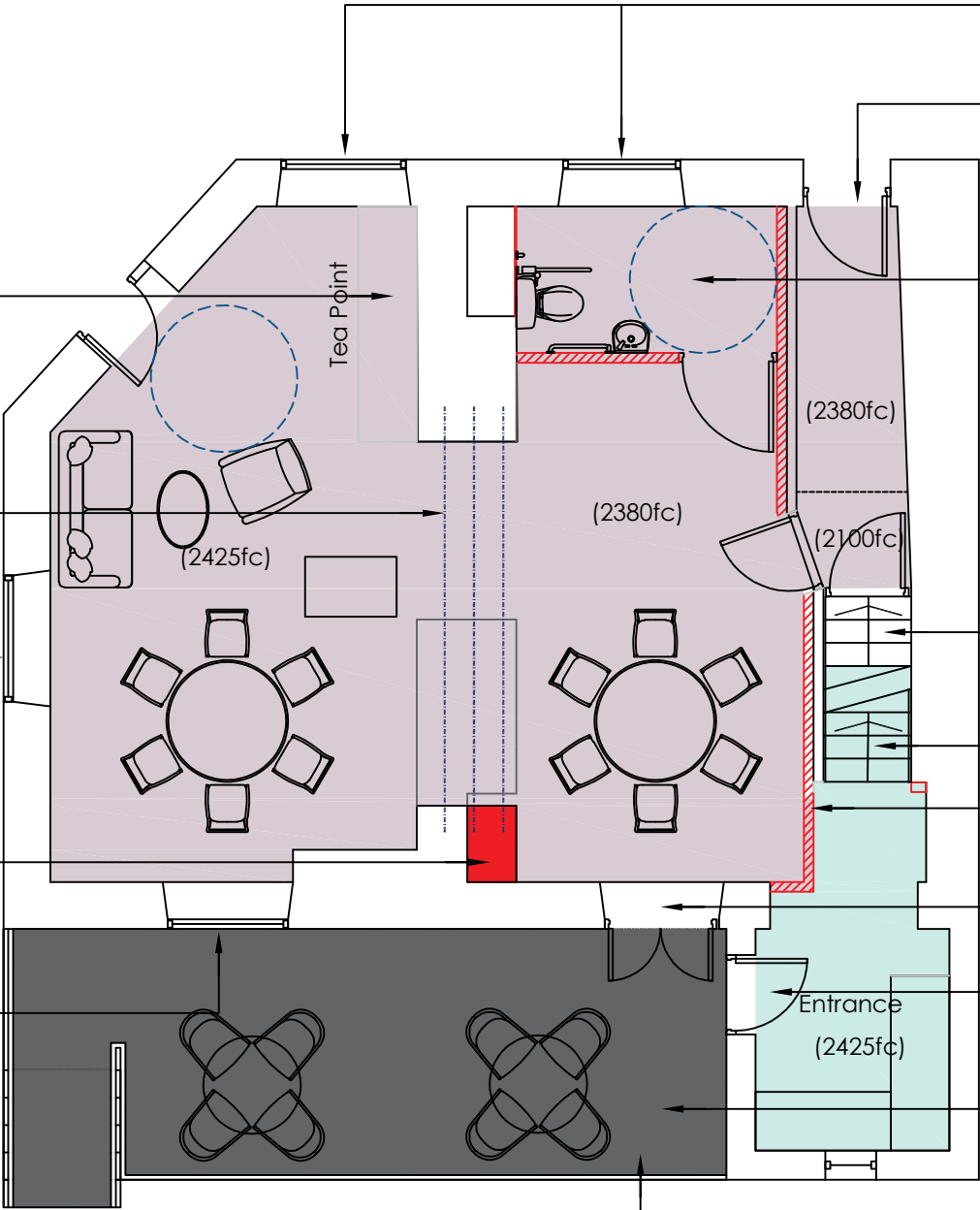
Basement as Proposed

Scale @ 1 : 75



First Floor Plan as Proposed

Scale @ 1 : 75



Ground Floor Plan as Proposed

Scale @ 1 : 75

NOTE

- Allow for insulated Lime Plaster to be used
- Repair surviving lath and plaster ceilings where possible
- All wall paint finishes applied to walls to be breathable paint - eg. Casein Distemper or Clay Paint
- Allow for flood resistant skirting and architraves, painted Accoya

Client	Project
TOLL HOUSE, 6 CHURCH STREET, TODMORDEN ROAD,LITTLEBOROUGH OL15 9AF	PROPOSED COMMERCIAL SPACE AND FIRST FLOOR CONVERSION TO APARTMENT

DrawingTitle
FLOOR PLANS AS PROPOSED

Project number	995
Date	27.03.22
Drawn by	CD
Checked by	OL3
Scale @ A3	1:75

Drawing Number	P-01
Current Revision	-



Unit 7 Whitegate Bussiness Centre, Jardine Way, Chadderton, OL9 9JT
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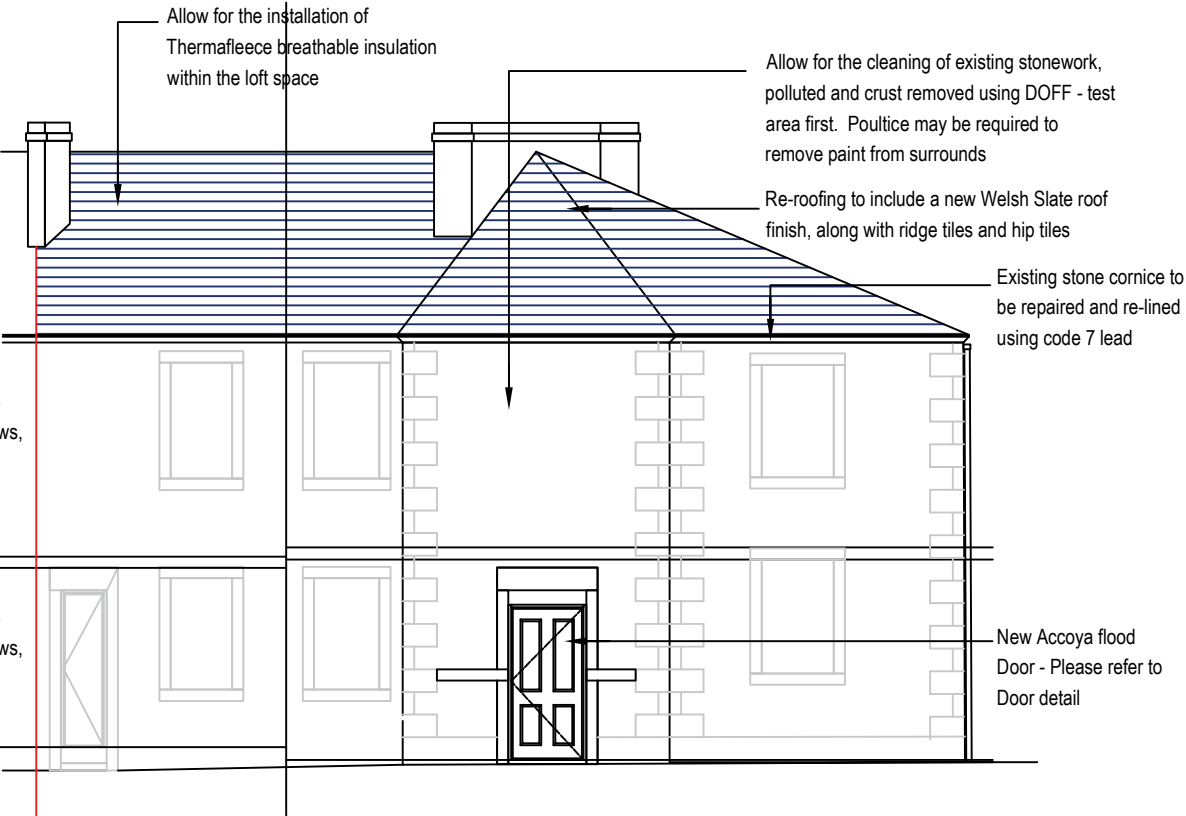
Note:

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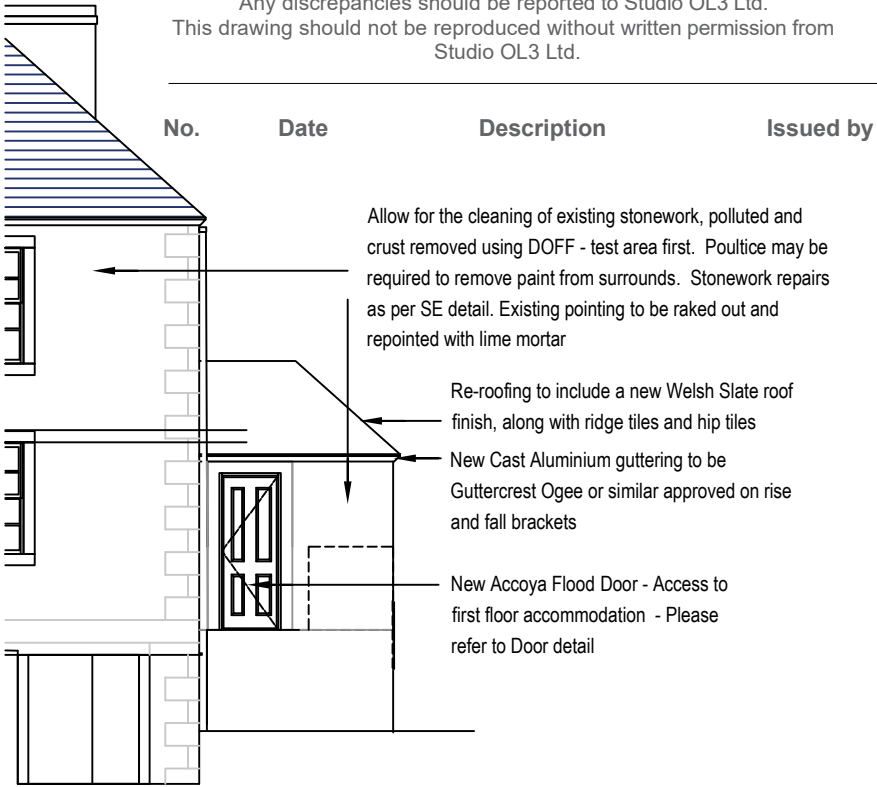
No2. Front Elevation as Proposed

Scale @ 1 : 100



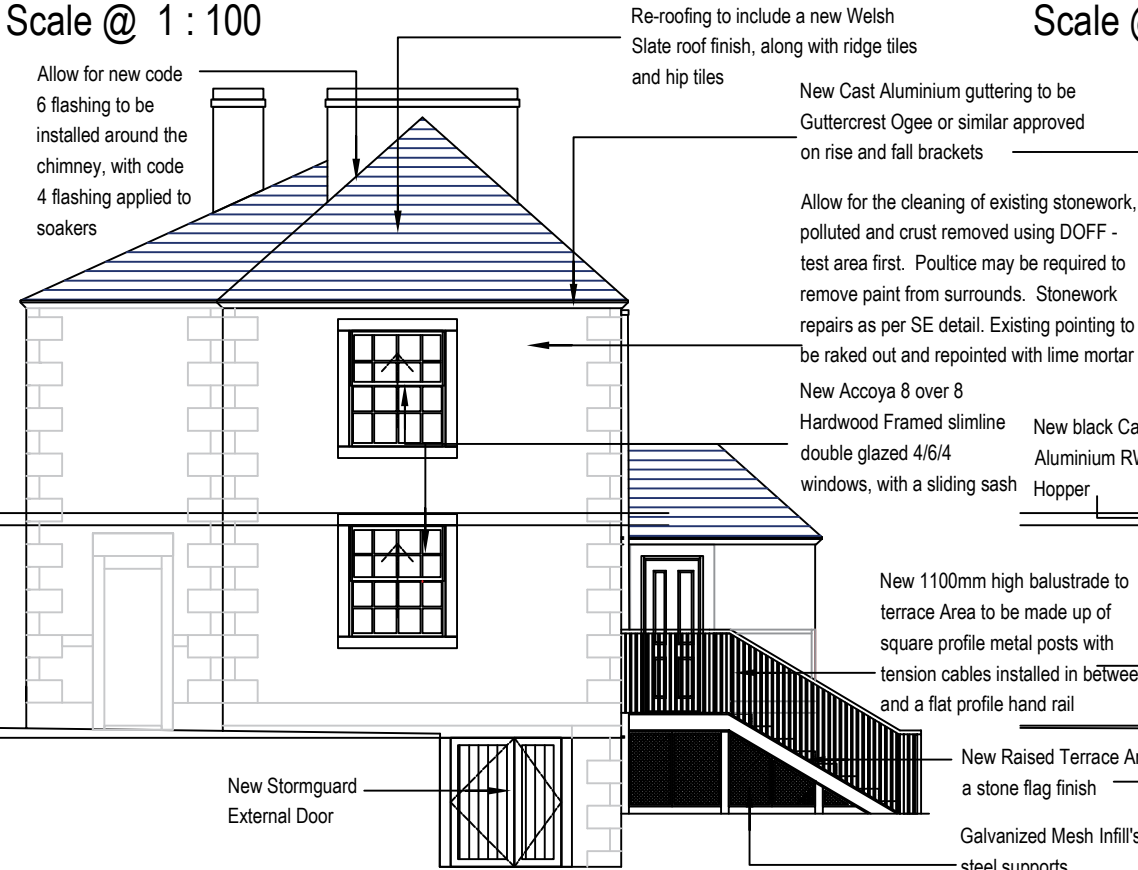
No6. Front Elevation as Proposed

Scale @ 1 : 100



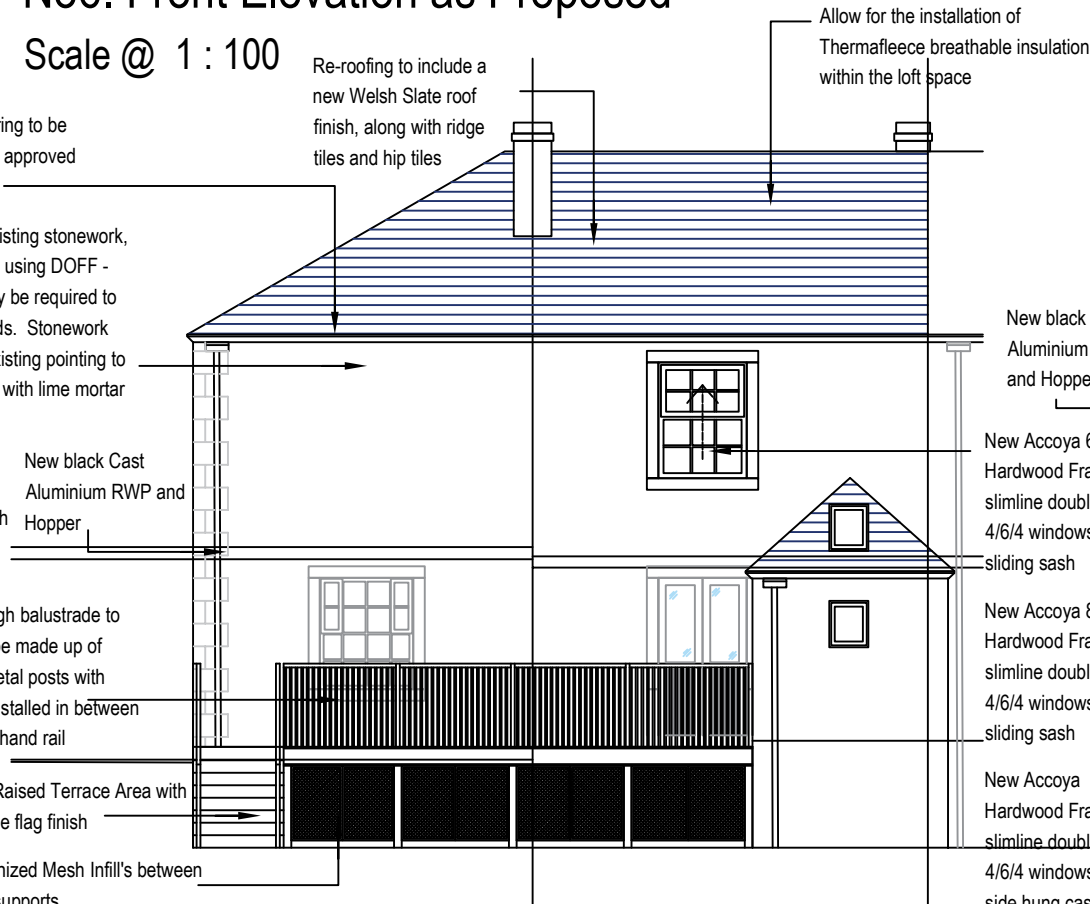
Side Elevation as Proposed

Scale @ 1 : 100



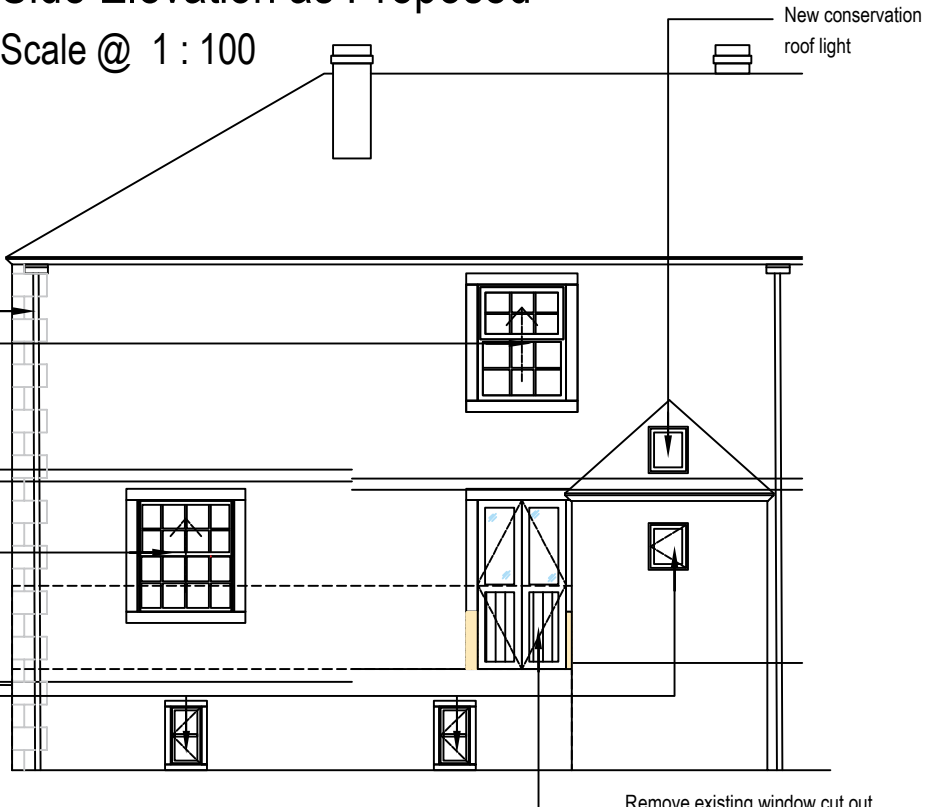
Side Elevation as Proposed

Scale @ 1 : 100



Rear Elevation as Proposed

Scale @ 1 : 100



Rear Elevation as Proposed

Scale @ 1 : 100

Client

TOLL HOUSE,
6 CHURCH STREET,
TODMORDEN ROAD,
LITTLEBOROUGH
OL15 9AF

Project

PROPOSED COMMERCIAL SPACE
AND FIRST FLOOR CONVERSION
TO APARTMENT

DrawingTitle

ELEVATIONS AS
PROPOSED

Project number

995

Date

27.03.22

Drawn by

CD

Checked by

OL3

Scale @ A3

1:100

Drawing Number

P-02

Current Revision

-

STUDIO OL3
ARCHITECTURAL DESIGN

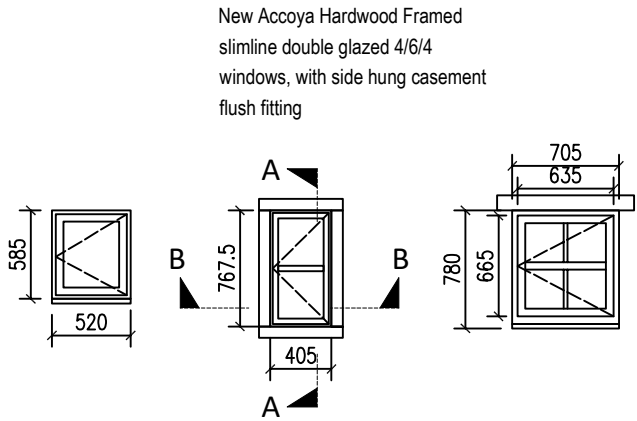
Unit 7 Whitegate Bussiness Centre, Jardine Way, Chadderton, OL9 9JT

Email - design@studio-ol3.co.uk - Web - www.studio-ol3.co.uk

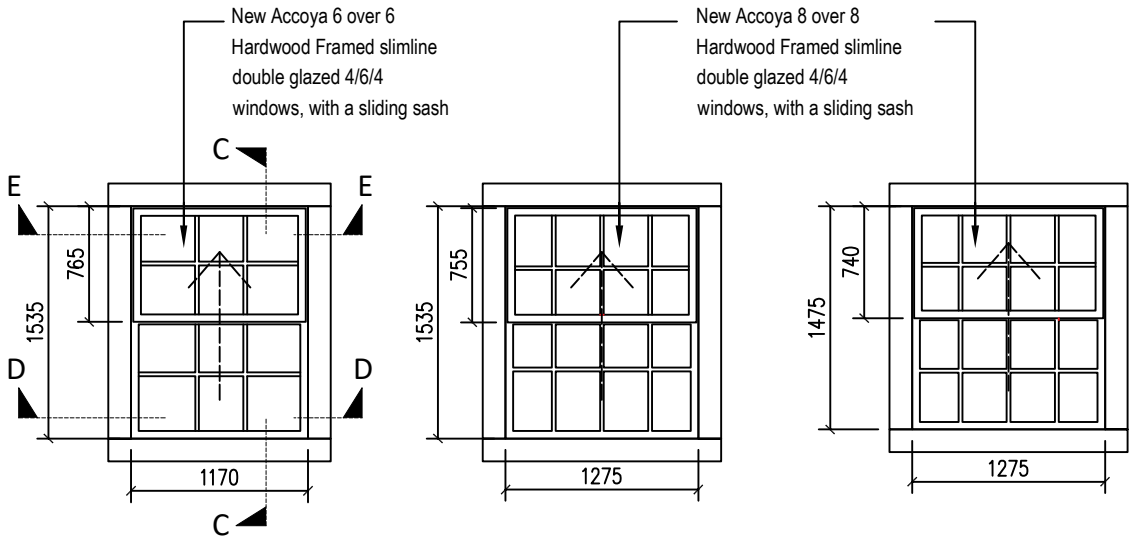
Note:

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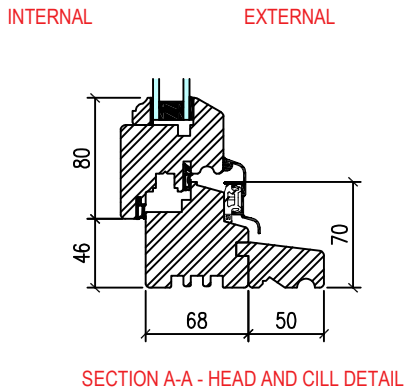
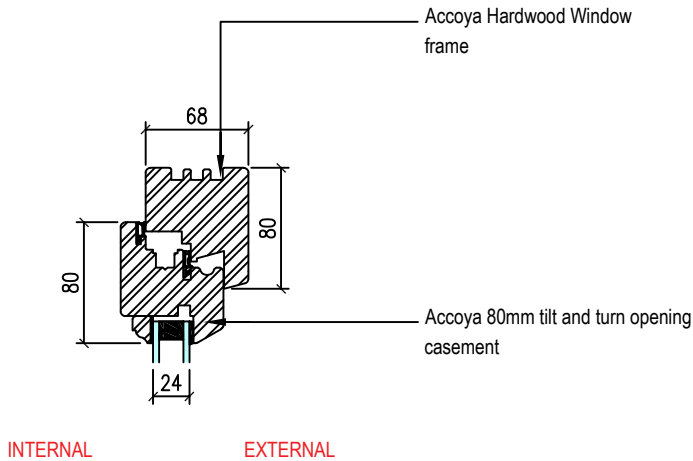
No.	Date	Description	Issued by
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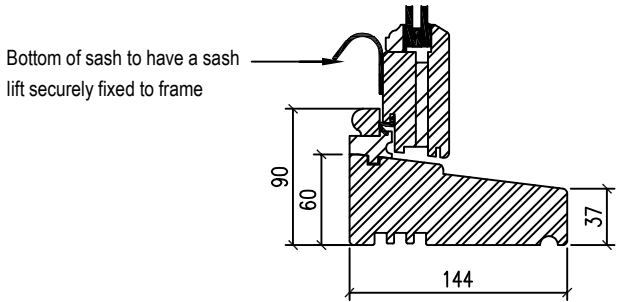
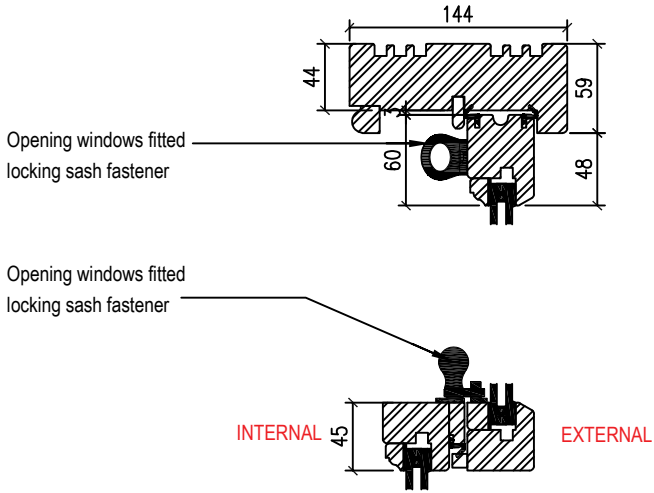
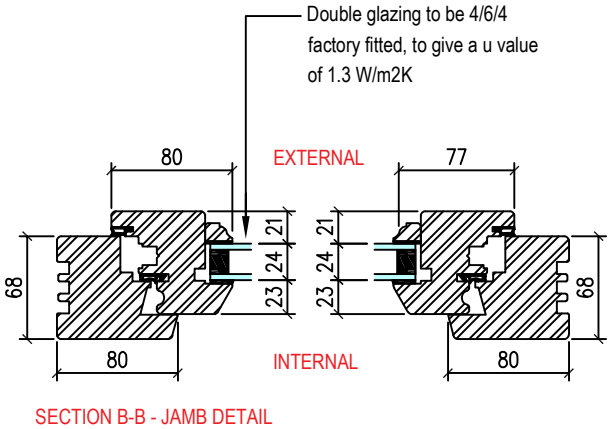
Tilt and Turn Window Styles
Scale @ 1 : 50



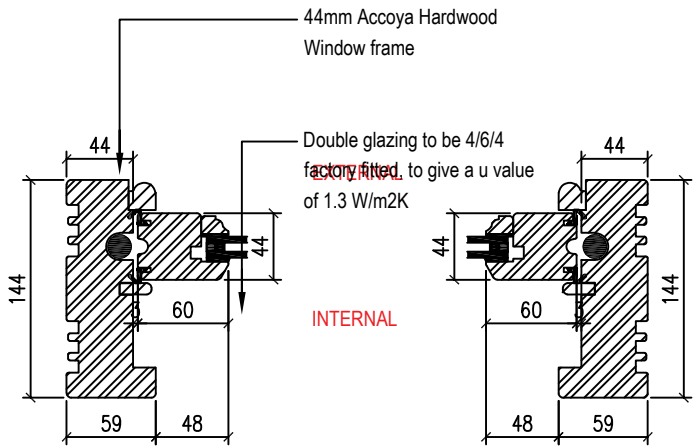
Sash Window Styles
Scale @ 1 : 50



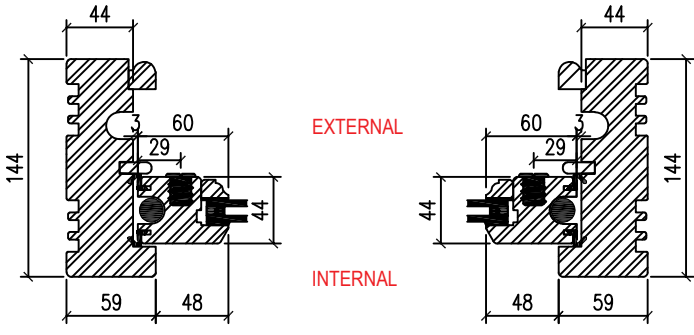
Tilt and Turn Window Details
Scale @ 1 : 5



Sash Window Details
Scale @ 1 : 5



SECTION E-E - HIGHER CASEMENT JAMB DETAIL



SECTION D-D - LOWER CASEMENT JAMB DETAIL

Client
TOLL HOUSE,
6 CHURCH
STREET,
TODMORDEN
ROAD,LITTLEBOROUGH
OL15 9AF

Project
PROPOSED COMMERCIAL SPACE AND FIRST
FLOOR CONVERSION TO APARTMENT

DrawingTitle
PROPOSED WINDOW DETAILS

Project number 995
Date 27.03.22
Drawn by CD
Checked by OL3
Scale @ A3 A/N

Drawing Number
P-03
Current Revision
-



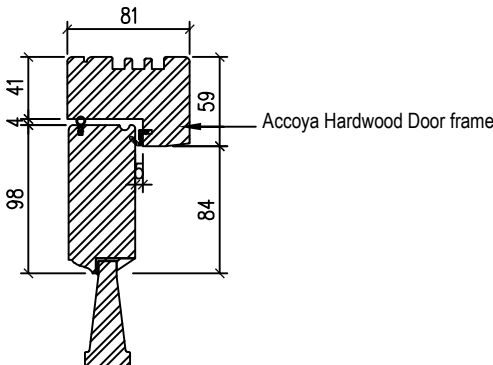
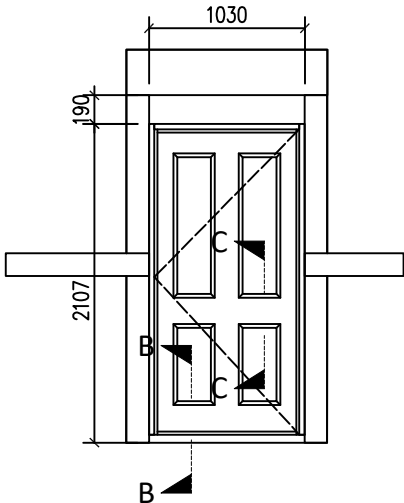
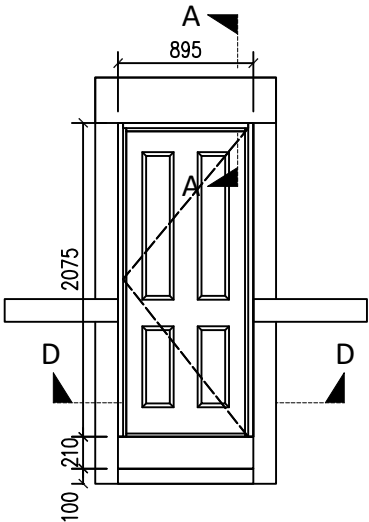
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Email - design@studio-ol3.co.uk - Web - www.studio-ol3.co.uk

Note:

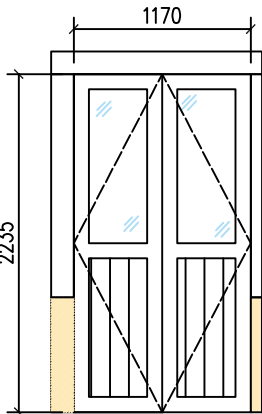
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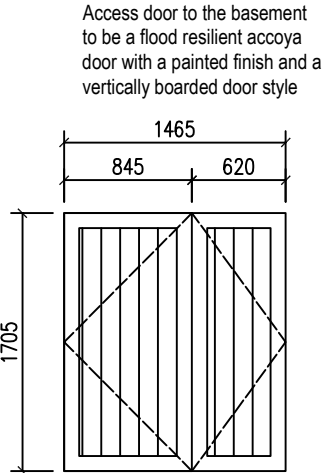
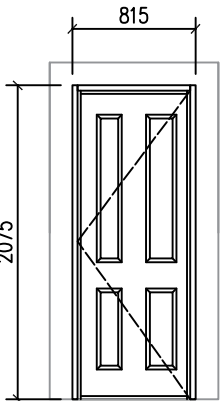
All proposed doors to be accoya flood resilient doors, with a 4 panel moulded front door style and a painted accoya finish



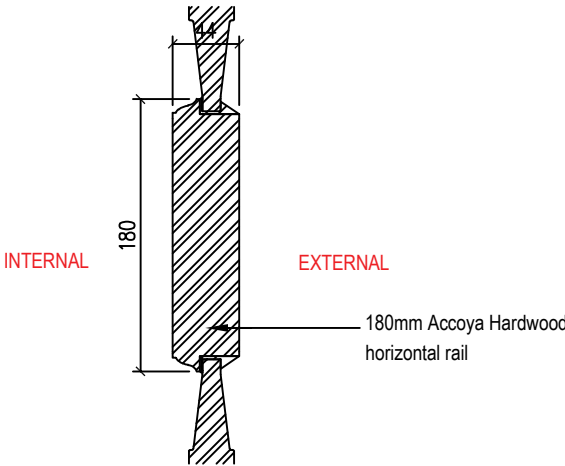
SECTION A-A - HEAD DETAIL



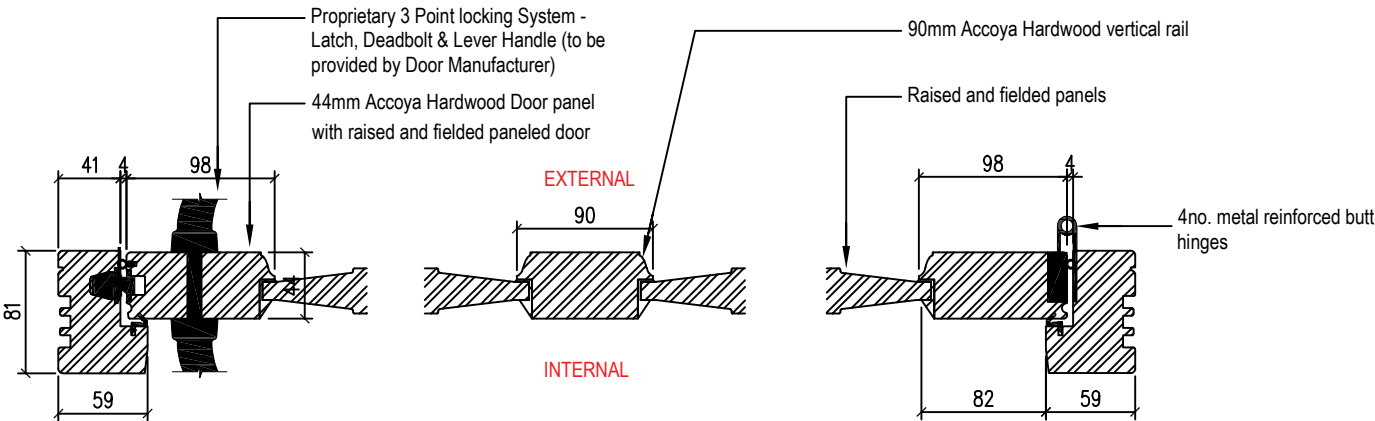
Timber Door Styles
Scale @ 1 : 50



Access door to the basement to be a flood resilient accoya door with a painted finish and a vertically boarded door style

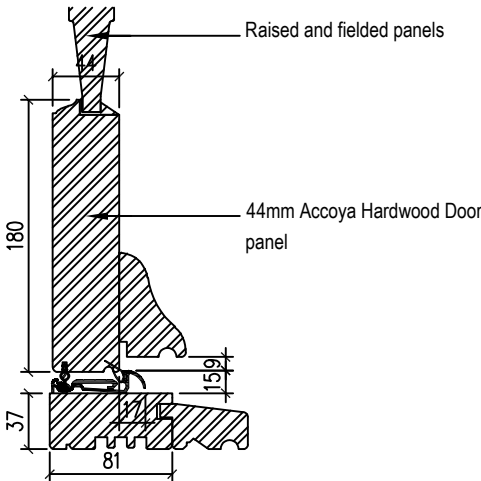


SECTION C-C - MIDRAIL DETAIL



SECTION D-D - JAMB AND VERTICAL RAIL DETAIL

Timber Door Details
Scale @ 1 : 5



SECTION B-B - CILL DETAIL

Client
TOLL HOUSE,
6 CHURCH
STREET,
TODMORDEN
ROAD,LITTLEBOROUGH
OL15 9AF

Project
PROPOSED COMMERCIAL SPACE AND FIRST
FLOOR CONVERSION TO APARTMENT

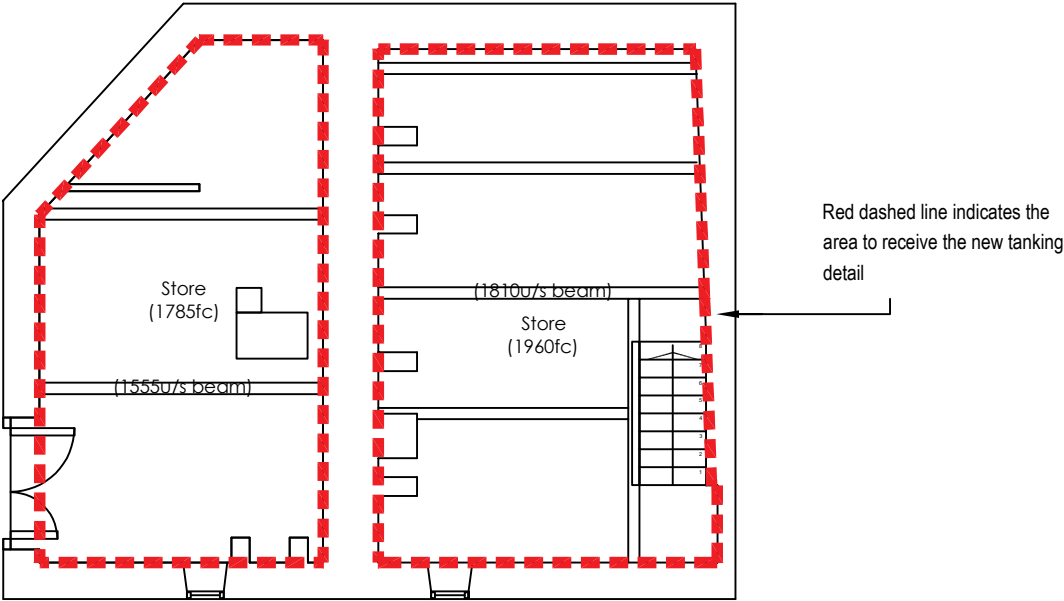
DrawingTitle
PROPOSED DOOR DETAILS

Project number	995
Date	27.03.22
Drawn by	CD
Checked by	OL3
Scale @ A3	A/N

Drawing Number	P-04
Current Revision	-



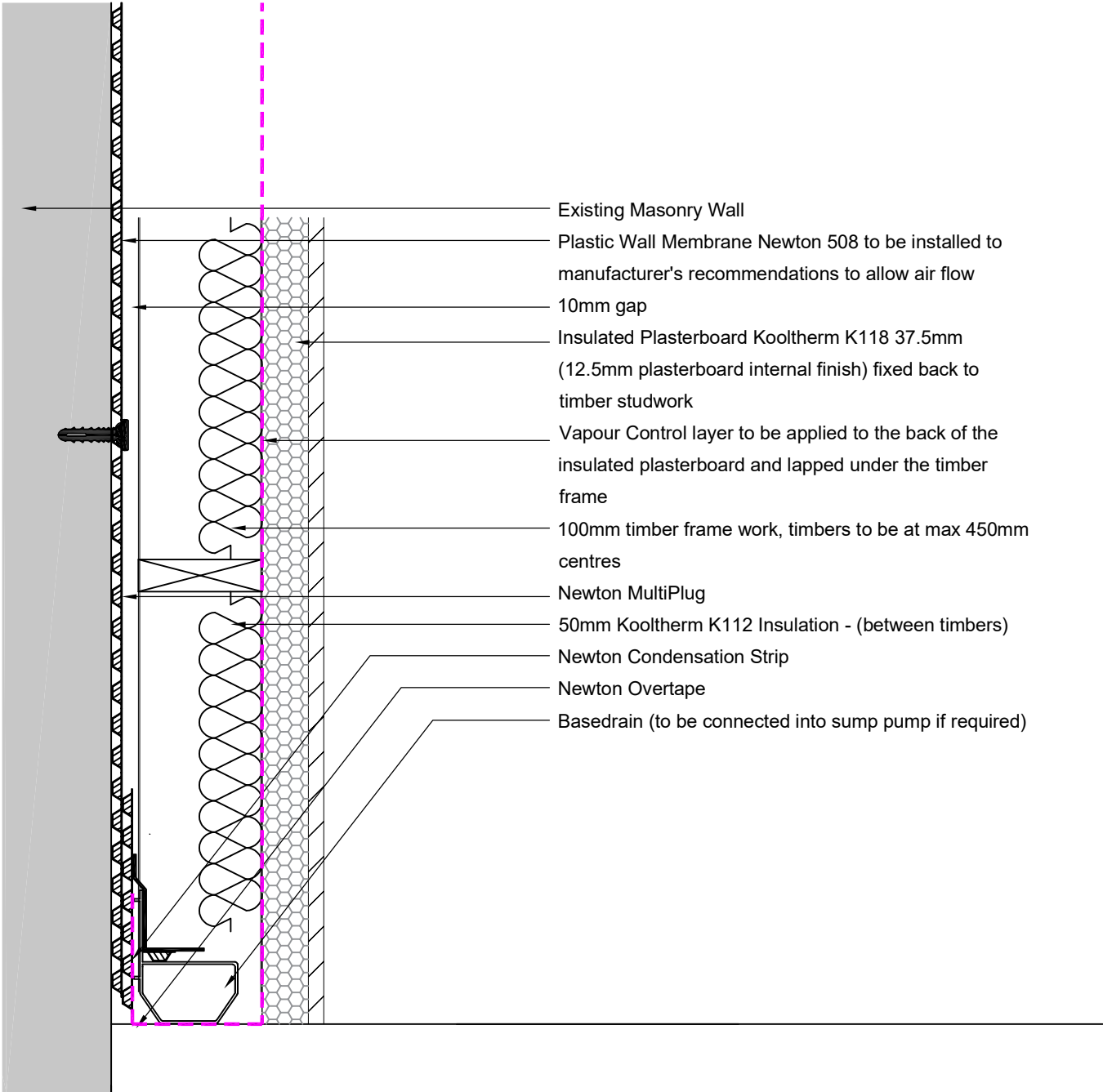
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Newton Mesh and Basedrain Installation -
Floor Plan Key
Scale @ 1 : 100

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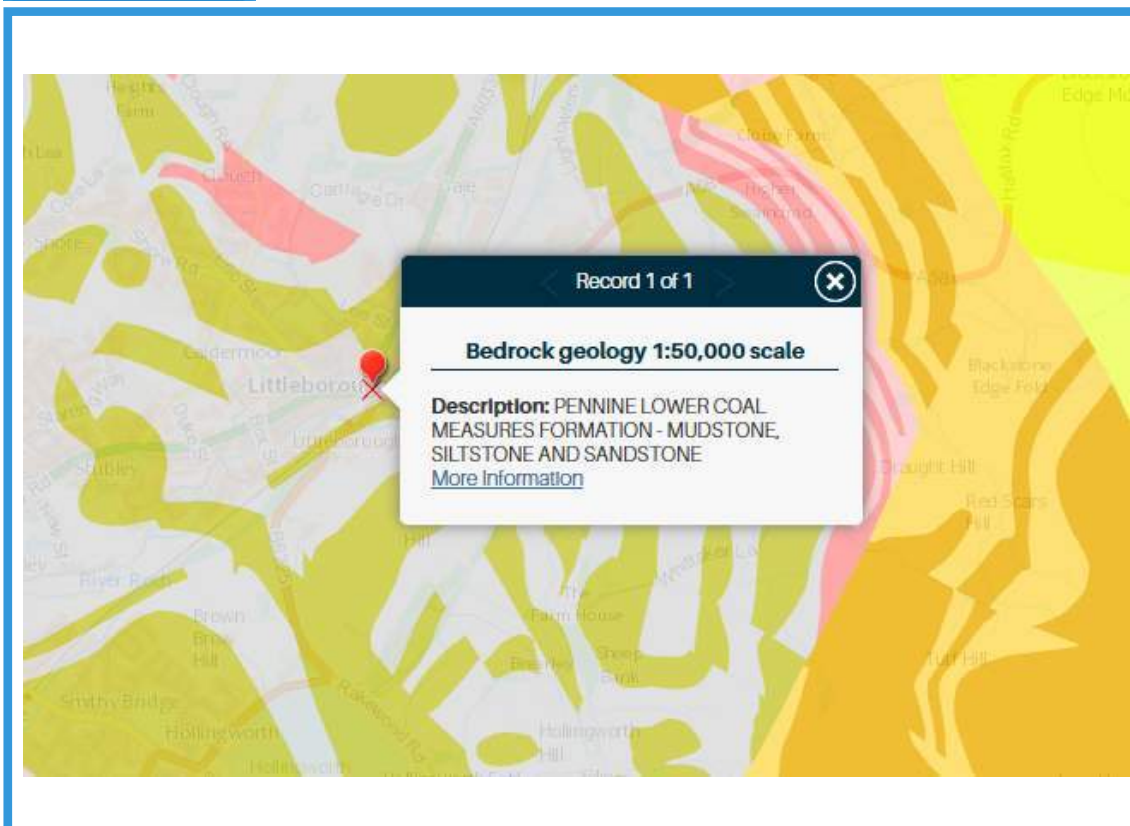


Newton Mesh and Basedrain Installation Detail
Scale @ 1 : 5

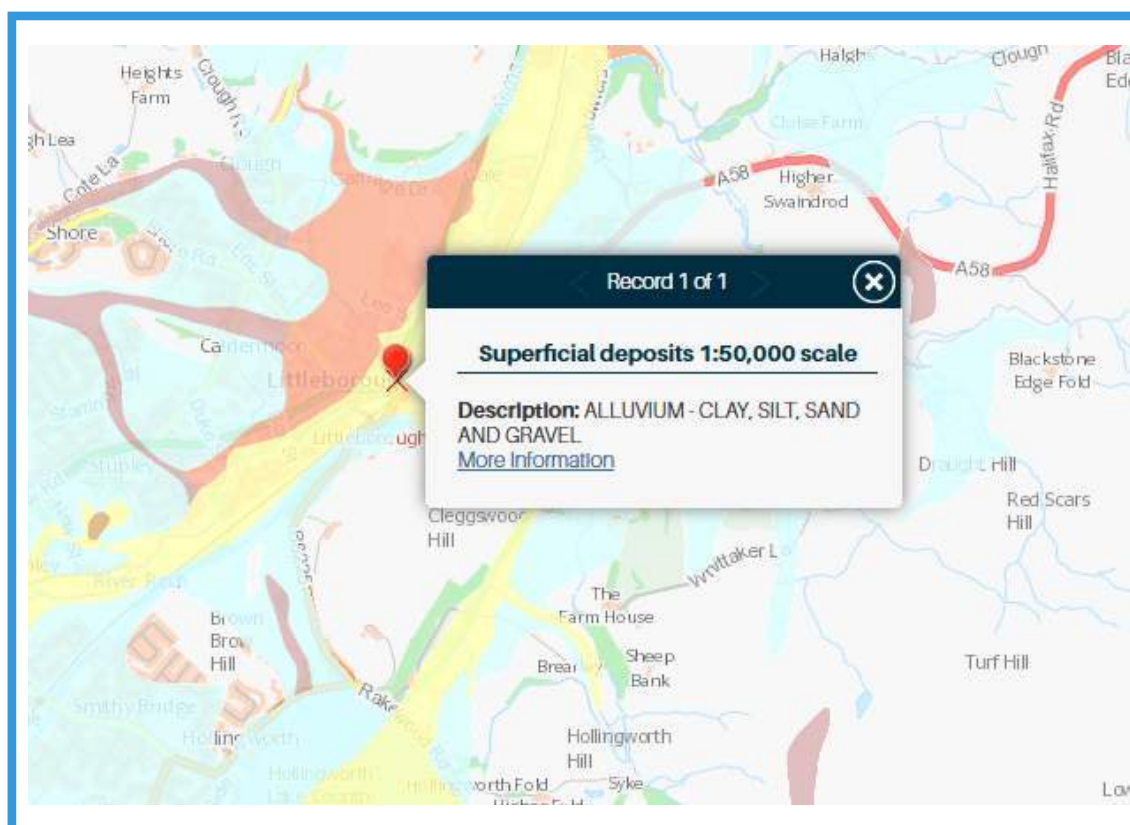
Appendix C

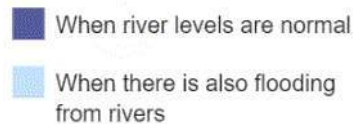
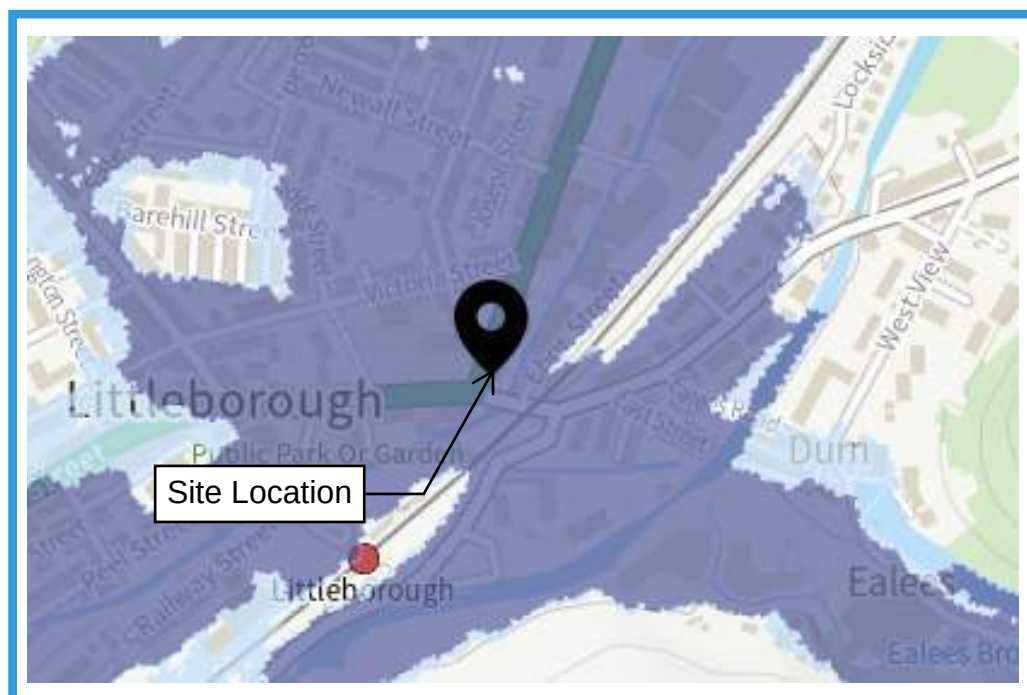
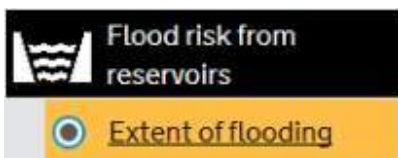


GEOLOGY - BEDROCK - PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE



GEOLOGY - SUPERFICIAL DEPOSITS - ALLUVIUM - CLAY, SILT, SAND AND GRAVEL





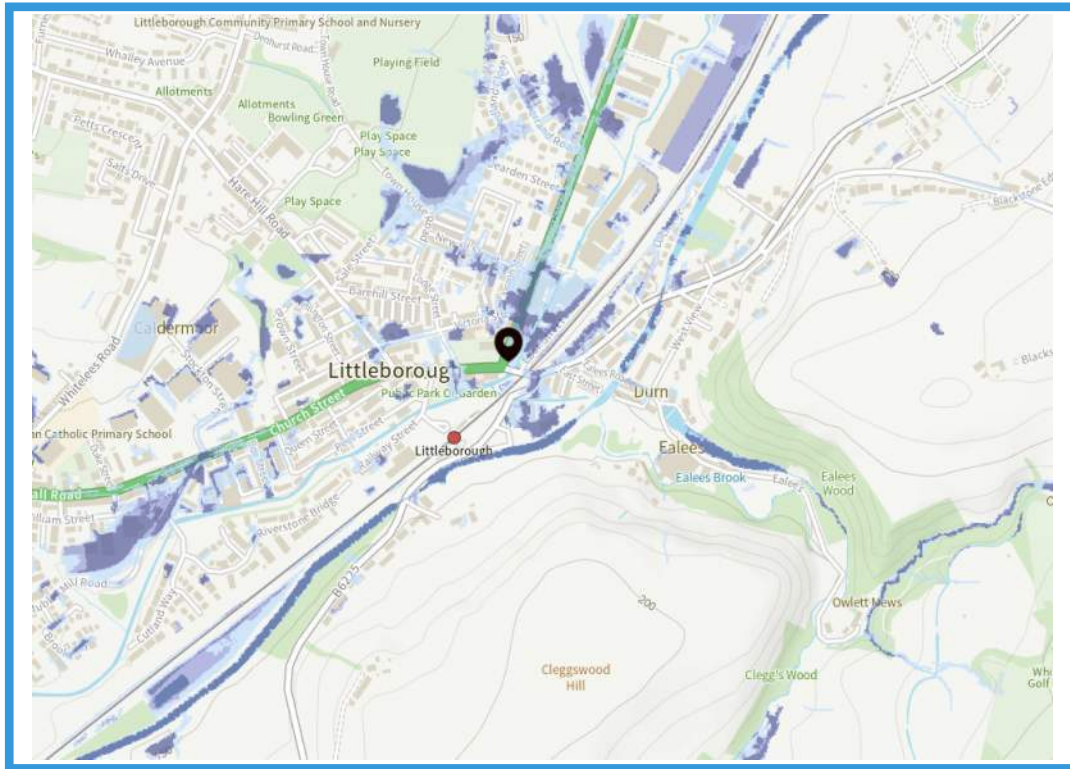
SITE SURFACE WATER FLOOD RISK

High risk means a chance of flooding greater than 3.3% (1:30)

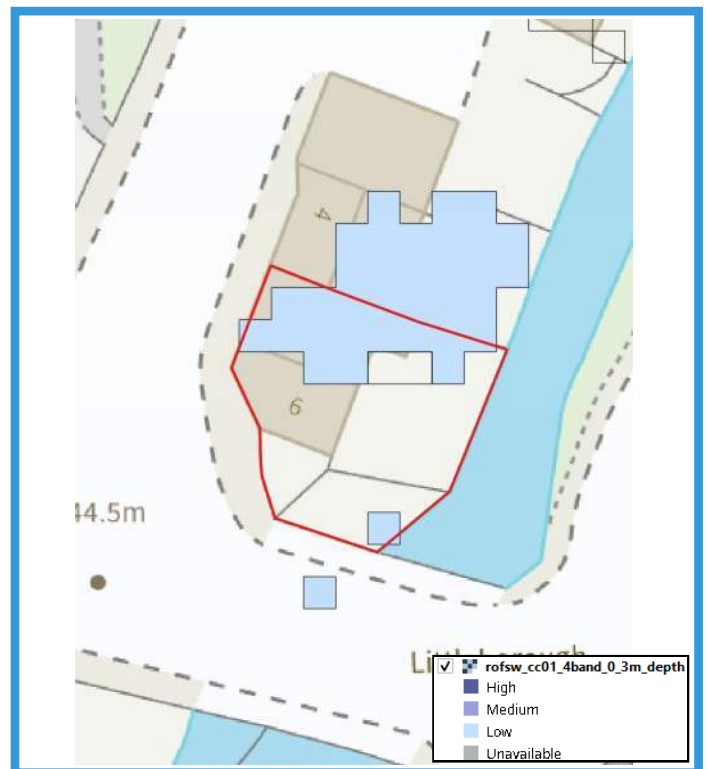
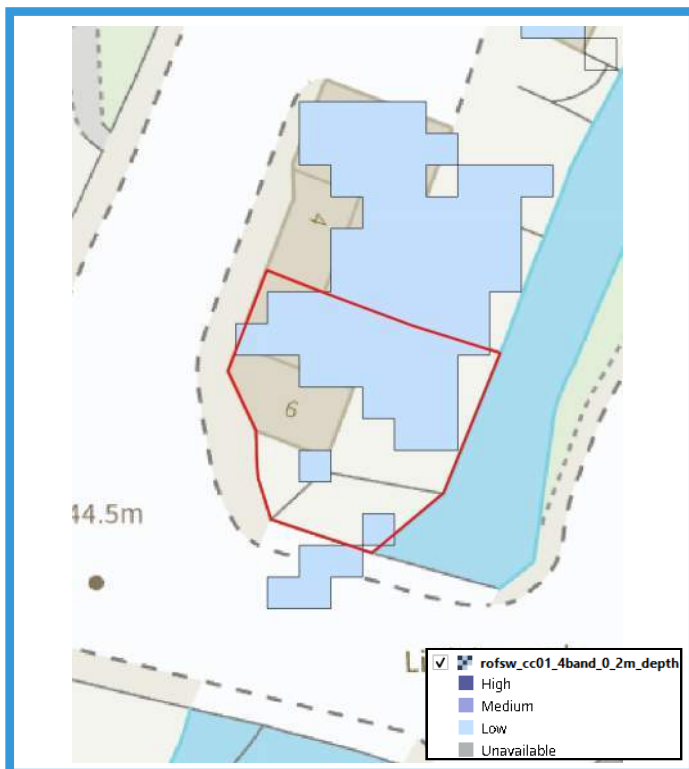
Medium risk means a chance of flooding of btw 1% (1:100) and 3.3%

Low risk means a chance of flooding of btw 0.1% (1:1000) and 1%

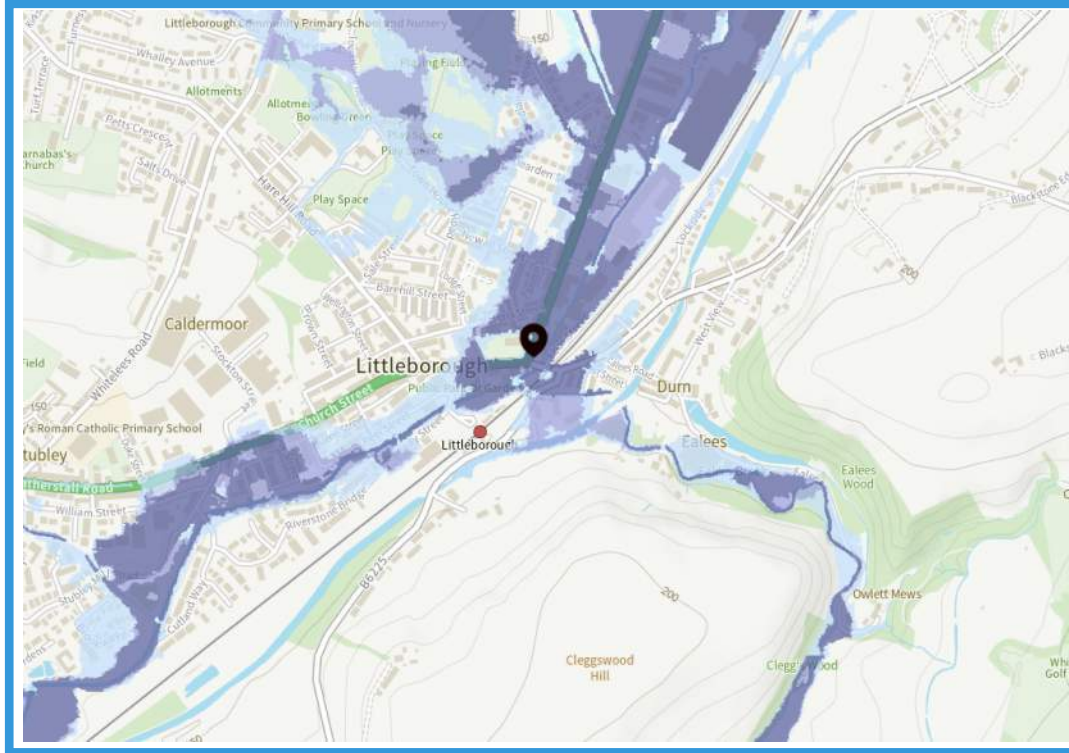
Flooding from surface water is difficult to predict as rainfall location and volume are difficult to forecast. In addition, local features can greatly affect the chance and severity of flooding



DEPTH



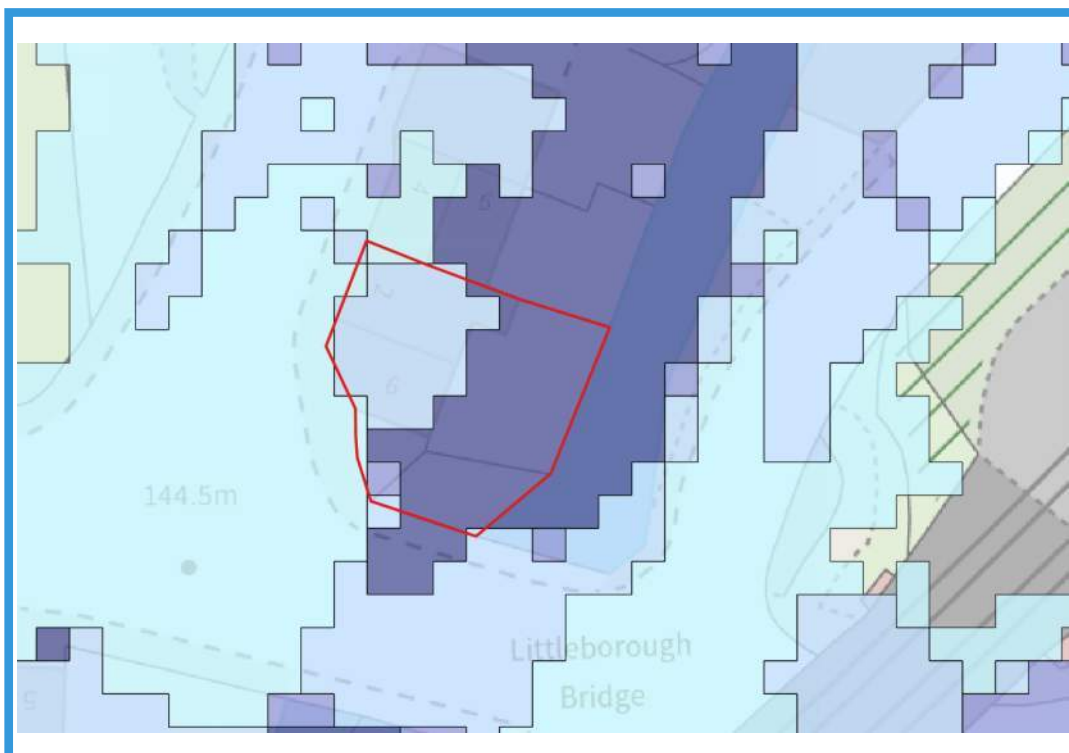
- High - greater than or equal to 1 in 30 (3.3%) chance of flooding in any year
- Medium - Less than 1 in 30 (3.3%) but greater than or equal to 1 in 100 (1%) chance of flooding in any given year
- Low - Less than 1 in 100 (1%) but greater than or equal to 1 in 1000 (0.1%) chance of flooding in any given year
- Very low - less than 1 in 1000 (0.1%) chance of flooding in any given year



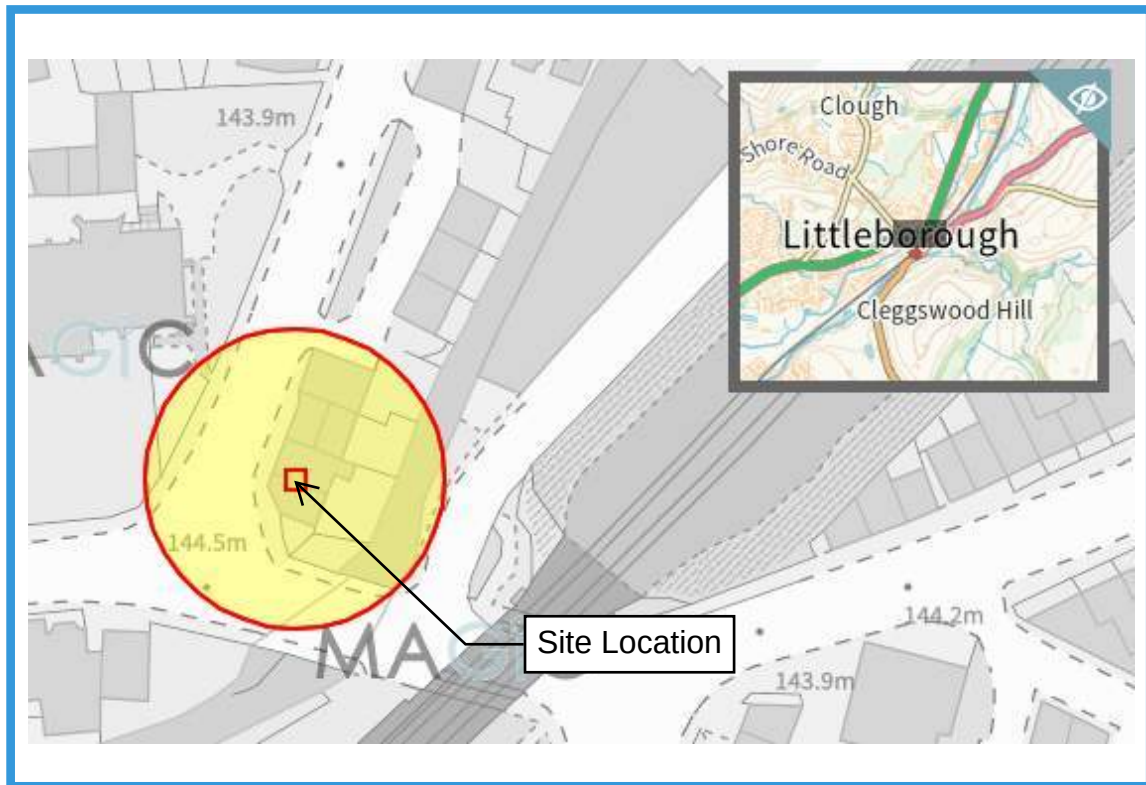
Yearly chance of flooding between 2036 and 2069

-  Flood area (extent)
-  High chance
-  Medium chance
-  Low chance
-  Very low chance
-  No data available

DEPTH



-  rofrs cc01 4band 1 2m depth
-  High
-  Medium
-  Low
-  Very low
-  Unavailable



Site Check Results

Site Check Report generated on Tue Jan 14 2025

You selected the location: Centroid Grid Ref: SD93921639

The following features have been found in your search area:

Aquifer Designation Map (Bedrock) (England)

Typology

Secondary A

Aquifer Designation Map (Superficial Drift) (England)

Typology

Secondary A

Source Protection Zones merged (England)

No Features found

OK

Cancel

Export to CSV

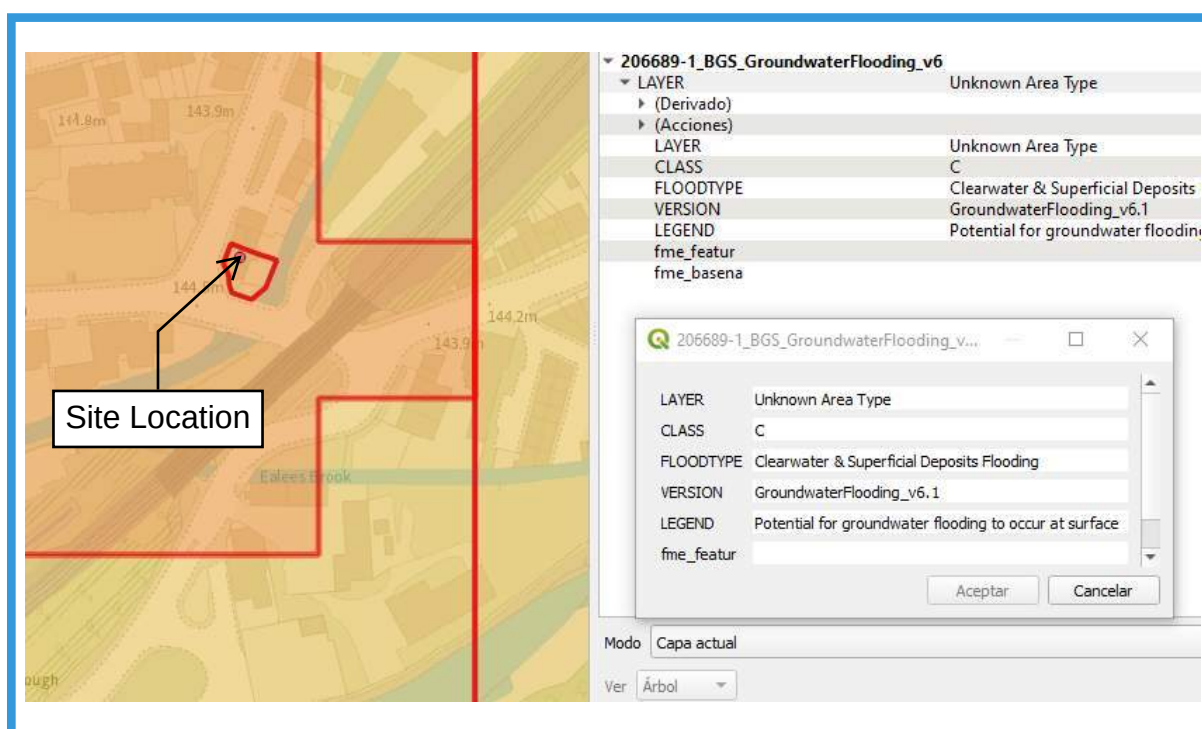
Print

HISTORIC FLOOD MAP

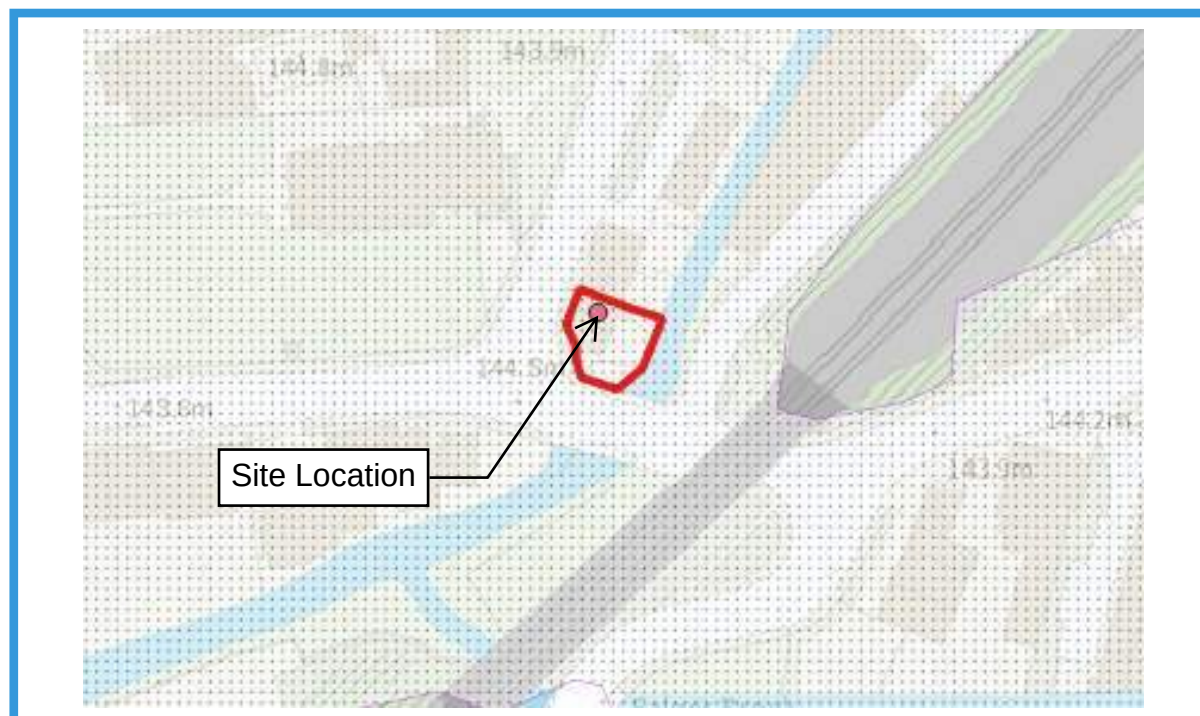


 Historic Flood Outline

GROUND WATER FLOOD RISK



FLOOD WARNING AREA



 Flood Warning areas

Flood map for planning

Your reference
Unspecified

Location (easting/northing)
393926/416391

Created
26 March 2025 12:27

Your selected location is in flood zone 3, an area with a high probability of flooding.

This means:

- you must complete a flood risk assessment for development in this area
- you should follow the Environment Agency's standing advice for carrying out a flood risk assessment (see <https://www.gov.uk/guidance/flood-risk-assessment-standing-advice>)

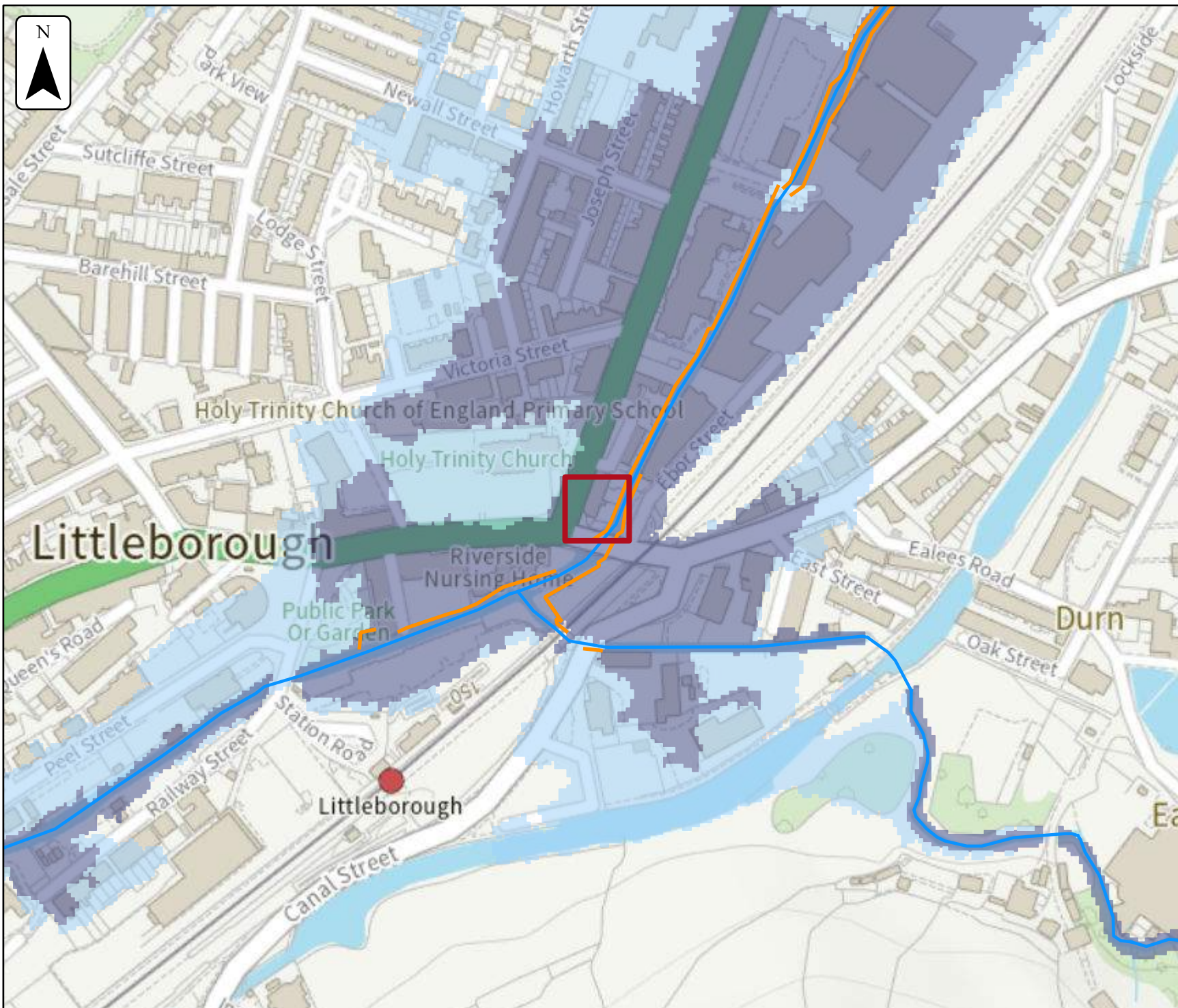
Notes

The flood map for planning shows river and sea flooding data only. It doesn't include other sources of flooding. It is for use in development planning and flood risk assessments.

This information relates to the selected location and is not specific to any property within it. The map is updated regularly and is correct at the time of printing.

Flood risk data is covered by the Open Government Licence which sets out the terms and conditions for using government data. <https://www.nationalarchives.gov.uk/doc/open-government-licence/version/3>

Use of the address and mapping data is subject to Ordnance Survey public viewing terms under Crown copyright and database rights 2025 AC0000807064. <https://flood-map-for-planning.service.gov.uk/os-terms>



Flood map for planning

Your reference

Unspecified

Location (easting/northing)
393926/416391

Scale
1:2,500

Created
26 Mar 2025 12:27

-  Selected area
-  Flood zone 3
-  Flood zone 2
-  Flood zone 1
-  Flood defence
-  Main river
-  Water storage area

0 20 40 60m

Appendix D

FLOOD LEVELS

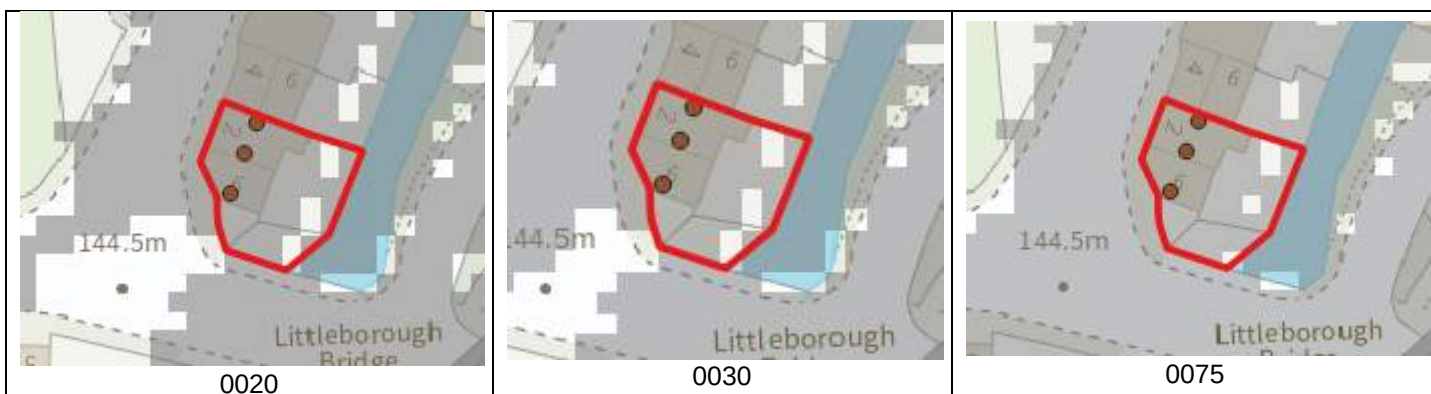
Rochdale and Littleborough 2013



The water levels for the site are as follow

- Defended

Node	Easting	Northing	0020	0030	0075	0100CC35	0100CC70
1	393925.66	416397.08	144.47	144.53	144.72	145.09	145.54
2	393924.34	416393.83	144.47	144.53	144.72	145.09	145.59
3	393922.73	416383.63	144.47	144.53	144.69	145.10	145.65





- Undefended

Node	Easting	Northing	0020	0030	0075	0100CC35	0100CC70
1	393925.66	416397.08	Nil	Nil	144.27	144.98	145.34
2	393924.34	416393.83	Nil	Nil	144.28	144.98	145.34
3	393922.73	416383.63	Nil	Nil	144.29	144.98	145.34

