



10 JULY 2025

Flood Risk Activity Permit

Waterside Hotel

Prepared for:

Your Hospitality Group
Waterside Hotel
Didsbury
Greater Manchester



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Document Control



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Client Your Hospitality Group

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Glossary of Terms

- 1 in 100 year return period: A flow event with a 1% chance of occurring in any one year.
- 1 in 200 year return period: A flow event with a 0.5% chance of occurring in any one year.
- Flood Hazard: A measure of the danger of flooding to pedestrians which takes into account the: the depth flooding; velocity of flood water and presence of debris. There are four categories of flood hazard including:
 - Very low hazard – Low depth and velocity.
 - Dangerous to some (i.e. children, the elderly and the infirm).
 - Dangerous to most (i.e. the general public).
 - Dangerous to all (including the emergency services).
- Flood Zone 1 (Low Probability) A planning boundary defined on the Environment Agency's (EA) flood risk maps (rivers and seas) which is not subject to flooding in a 1 in 1000 year flood event.
- Flood Zone 2 (Medium Probability) A planning boundary on the EA's flood risk maps (rivers and seas) which shows an area which will flood in a 1 in 1000 year flood event (undefended and unblocked).
- Flood Zone 3 (High Probability) A planning boundary on the EA's flood risk maps (rivers and seas) which shows an area which will flood in a 1 in 100 year flood event (undefended and unblocked).
- Hydraulic Model The representation of a river and its flood-plains.
- Hydrology The calculation of catchment based flow rates over time (i.e. 1 in 100 and 1 in 1000 year return period events).

WATERSIDE HOTEL

1. Introduction



Figure 1.1: Sheet Piled Wall



Figure 1.2: Sheet Piled Wall

1.1 Background

Edenvale Young Associates was commissioned by Your Hospitality Group to provide consultancy support for the Waterside Hotel. The Waterside Hotel is on the banks of the River Mersey in Didsbury. The site is within Flood Zone 3 and on the 1 January 2025 the hotel including swimming pool, gyms and much of the ground floor of the hotel was inundated. High water levels in the River Mersey overtopped the sheet piled wall which currently mitigates the risk of flooding to the hotel buildings. It is understood that peak water levels reached the underside of the balcony as shown in Figure 1.1. The damage to the hotel was estimated to be approximately £2.5 million.

The aim of the works presented in this report is the construction of a new flood defence, comprising a reinforced concrete retaining wall behind the hotel and an embankment to the car park in order to mitigate the risks of flooding to the hotel. Appendix A includes a number of photographs and images relating to the scheme. The extent of the works is illustrated in Figure 1.6 with detailed drawings given in Appendix C.



Figure 1.3: Sheet Piled Wall

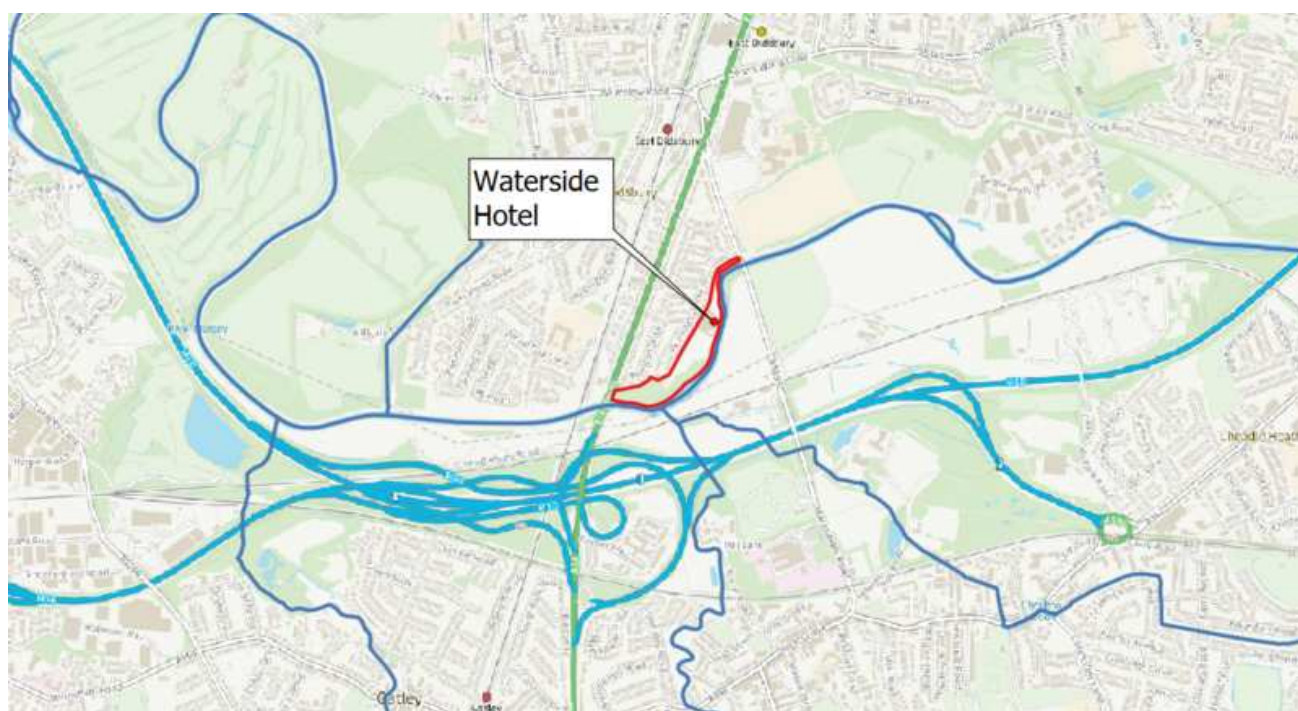


Figure 1.4: Location of site



Figure 1.5: Location (Grid Reference 385489, 389660: Post Code M20 5WZ)



Figure 1.6: *Extent of the Works*

2. Site Context



Figure 2.1: *Fractured Sandstone*



Figure 2.2: *Sheet pile 2025*

2.1 Geotechnical Site Investigation

The British Geological (BGS) survey shows the presence of the Wilmeslow Sandstone bedrock overlaid by Alluvium. A geotechnical site investigation was carried out comprising two trial holes excavated to a depth of 2m (northern trial pit) and 2.3m (southern trial pit). Fractured sandstone was encountered in the northern trial pit at approximately 1.75m depth as shown in Figure 2.1. The trial hole at the southern end comprised sand to depth. This is commensurate with the British Geological Survey. It should also be noted that borehole data contained on the BGS Map viewer confirms the outcropping of sandstone at comparatively shallow depths.

2.2 Existing Sheet Piled Wall

A visual condition assessment of the piled wall in April 2025 confirmed that there were a number of serious issues associated with the stability and condition of the existing sheet piles wall. This included:

- Deflection of the wall outwards associated with lateral earth pressures acting towards the river (see Figure 2.2)
- Distortion of the pile clutches along the length of the wall (see Figure 2.3).
- Failure of the waling.

In places, the top of the piled wall is supported by a steel beam spanning from existing columns supporting the canopy to the building. This suggests that the original designer was unable to prove the geotechnical or structural stability of the piles without transferring loading on the piles to the building structure. Accordingly there is some concern relating to the structural stability of the piles.



Figure 2.4: *Sheet pile 2025*



Figure 2.3: Sheet pile 2025

Trial pits (2m and 3m deep) were excavated adjacent to the wall which revealed the presence of sandstone at shallow depth to the north of the site and sand to the south. However, it was not possible to establish the embedment depth of the piles into the river bank in order to back calculate the structural integrity of the piles.

In addition, a structural assessment of the proposed reinforced concrete retaining wall, suggests that a less substantial solution (i.e. welding a plate to the top of the wall to increase its height) would result in structural failure of the piled wall under hydrostatic loading from high levels in the river Mersey. Indeed, it is highly likely that the piled wall only survived the 2024 / 2025 event because water levels and therefore pressures equalised on both sides of the wall.

Due to the uncertainty associated with the length of embedment and deformation of the piles, it is considered that the piles cannot be relied on to provide geotechnical or structural stability and a separate stand alone solution should be required.



Figure 2.5: Sheet pile 2025

WATERSIDE HOTEL

3. Flood Risk

Return Period	Max Water Level
1 in 30	32.00 m AOD
1 in 50	33.57 m AOD
1 in 75	33.57 m AOD
1 in 100	33.97 m AOD
1 in 100 cc 22%	34.37 m AOD
1 in 100 cc 30%	34.61 m AOD

Table 3.1: *Hydraulic Model Results River Mersey at the Waterside Hotel.*

The proposed design crest level for the defence is based on the central climate change allowance (22%) with a 0.3m freeboard giving a design crest level of 34.67 m AOD (34.37 m AOD + 0.3m freeboard).

Top of Pile Level	Standard
33.99 m AOD	> 1 in 100
33.97 m AOD	1 in 100
33.92 m AOD	1 in 75 to 100
32.42 m AOD	1 in 30 to 50
33.67 m AOD	1 in 75 to 100
33.86 m AOD	1 in 75 to 100
33.82 m AOD	1 in 75 to 100
33.85 m AOD	1 in 75 to 100
34.10 m AOD	> 1 in 100
34.06 m AOD	> 1 in 100
34.00 m AOD	> 1 in 100

Table 3.2: *Top of Pile from Topographic Survey.*

Edenvale Young has obtained the FMP-TUFLOW model hydraulic model of the River Mersey from the Environment Agency to evaluate the flood risk to the site and establish the design level for the works. No changes have been made to the model or inflows. Table 3.1 shows the results of the modelling at the site for a 1 in 100 year event. It should be noted that there is comparatively little difference in peak water level between a 1 in 75 year event and 1 in 100 year event. This is due to the width of the floodplains adjacent to the site which provide a buffer to water levels.

The standard of protection provided by the existing sheet piled wall has been assessed using the Environment Agency's hydraulic model of the River Mersey which indicated that overtopping would occur in a 1 in 30 year to a 1 in 50 event (present day). Table 3.1 shown the peak water levels derived from the Environment Agency's hydraulic model. The December / January event of 2024 / 2025 has been assessed as approximately a 1 in 50 year event. Figure 3.1 shows the extent of flooding for a 1 in 100 year event. The modelling does not take account of the protection afforded by the sheet piles but does show inundation of the hotel and car park to the south of the hotel.

The Environment Agency's Guidance on climate change indicates that the Central Climate change allowance is appropriate for non-residential development such as the hotel. The appropriate climate change allowance for the 2050s (2040-2069), based on the Environment Agency's guidance, is 22%. This assumes that the residual lifespan of the hotel is in the order of 30 to 40 years falling and within the 2040 to 2069 epoch. Table 3.1 indicates that the peak water level for this event is 34.37 m AOD with the extent of flooding is shown in Figure 3.2.

It should be noted that the results of the modelling for a 1 in 100 climate change with an allowance of 30% for climate change show extensive flooding to the site and the housing estate behind the hotel (see Figure 3.3). Mitigating this risk would require a much wider scheme than that proposed herein. This could include a dwarf wall along the entrance to the site and a flood gate across the road. These elements are not included within this proposal but may be implemented at a later date in consultation with residents, the Environment Agency and the Lead Local Flood Authority.

3.1 Topographic Survey

A topographic survey of the site was undertaken by Site Surveying Services of Clitheroe. The extent of the survey is shown in Figure 3.4 and is given in Appendix B. Table 3.2 shows the surveyed top of the sheet piled wall along its length with the crest of the wall varying in level from 32.42 to 34.10m AOD.

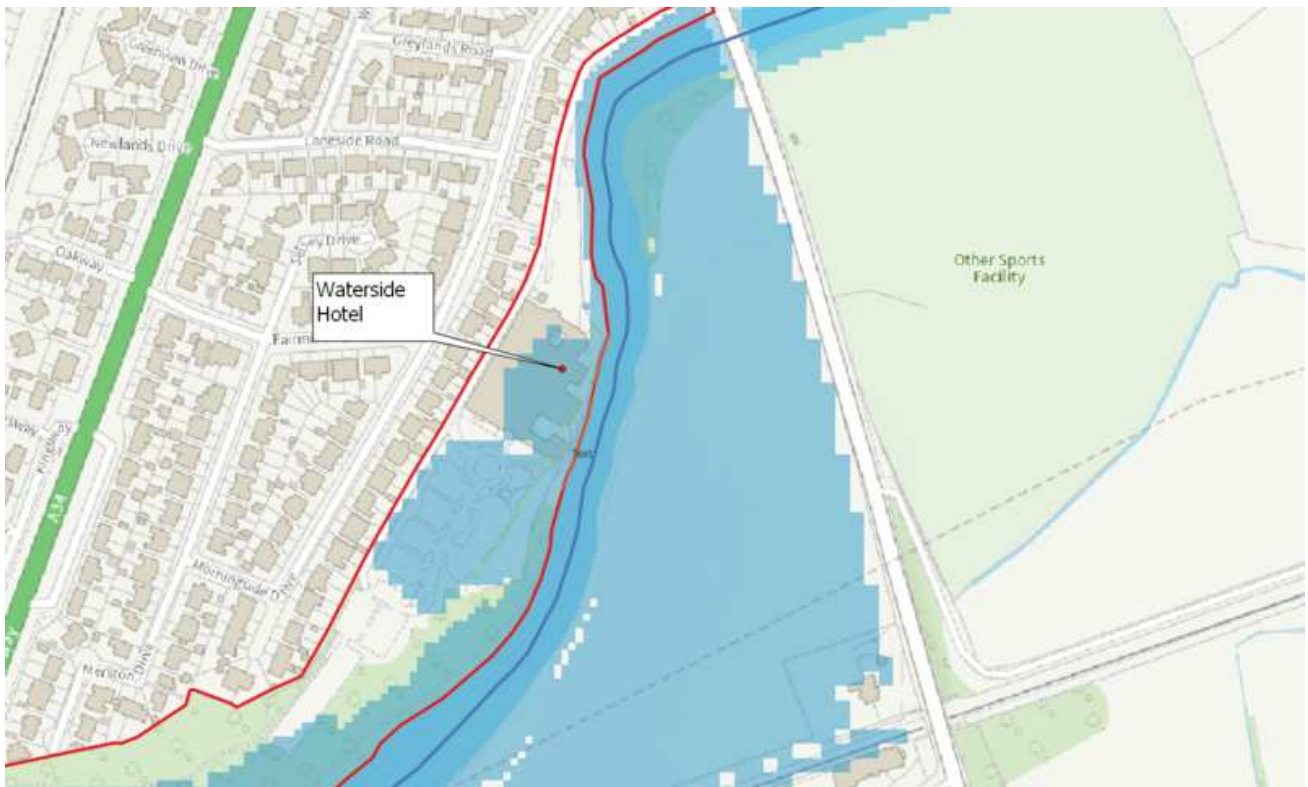


Figure 3.1: Hydraulic Modelling Results - 1 in 100 year flood levels



Figure 3.2: Hydraulic Modelling Results - 1 in 100 year flood levels

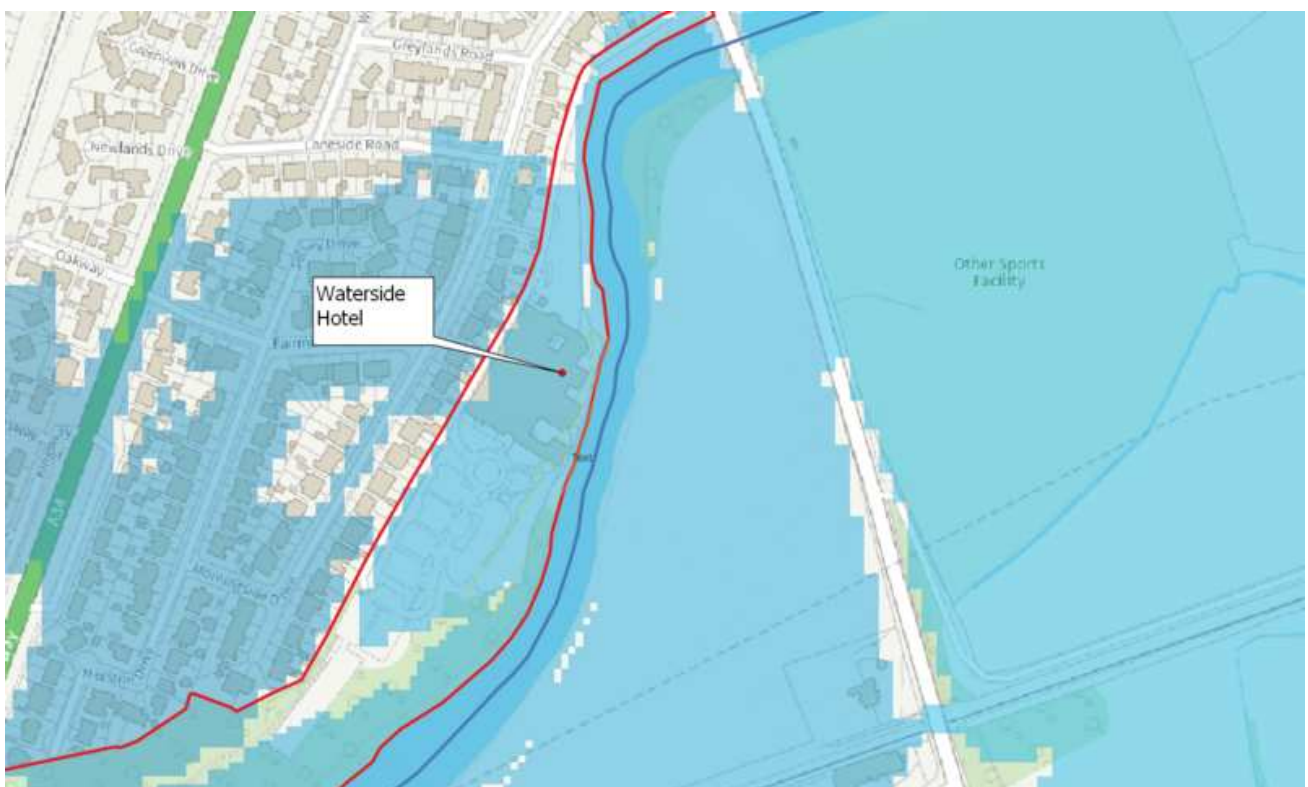


Figure 3.3: Hydraulic Modelling Results - 1 in 100 year flood levels

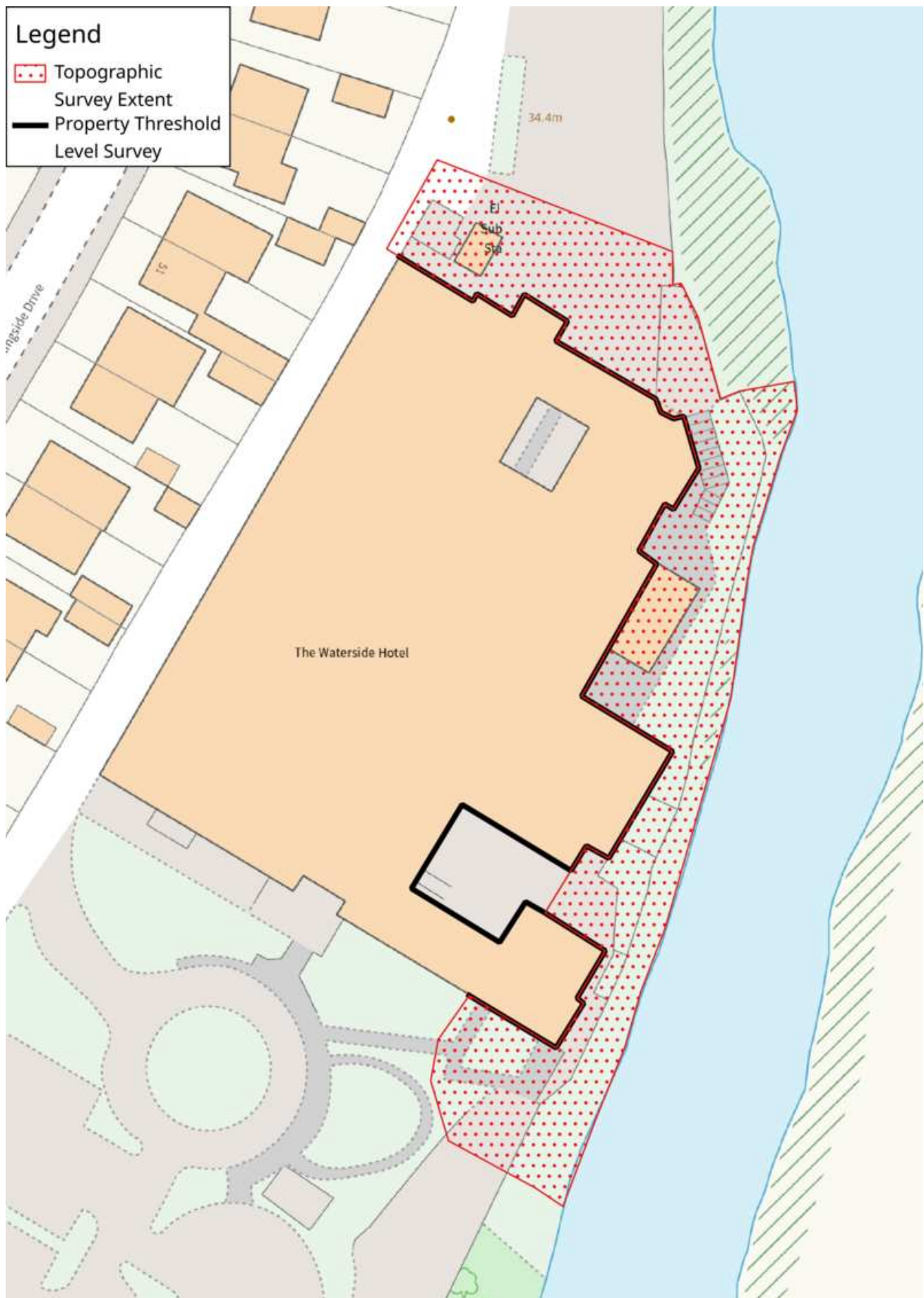


Figure 3.4: Extent of Topographic Survey
Flood Risk Activity Permit

4. Design Proposals

Design Constraints:

- Access for construction.
- The presence of pinch points and limitations of space for the wall.
- The presence of foundations for the building and canopy.
- Bearing capacity of the soils and slope stability.
- Flooding during construction.

Design Drawings for the retaining wall are given in Appendix C

4.1 Existing Sheet Piled Wall

It is considered that the existing sheet piled wall must remain in place for the duration of the construction of the retaining wall. Cutting down or removing the piles to facilitate the construction of the wall would expose the site to the risk of flooding during the works period. The high level financial damages to the hotel which could occur due to flooding is considered to be an unacceptable risk. It should also be noted that the sheet piled wall will isolate the works from the River Mersey mitigating the risks of environmental impacts to the watercourse.

The sheet piles could be removed or burnt-off following completion of the wall. Removing the piles through a vibratory technique could damage the soil substrate. Given the fact that the riverside embankment is steep, damage to the substrate could adversely affect the stability of the channel side / embankment. This risk is also considered to be unacceptable. The sheet piles could be burnt-off following completion of the retaining wall but access to the exposed base of the piles on the riverside of the wall would require the erection of complex scaffolding overhanging the flood defence wall. This remains a possibility but would increase the cost of the works.

Accordingly, the design is based on minimising the impact on the existing sheet piles by leaving them in place to provide protection to the hotel from flooding and mitigate the environmental risks to the River Mersey. However, it should also be recognised that there remains a risk of flooding during construction if water levels in the Mersey exceed the current level of the defences (say a 1 in 30 years event).

4.2 Proposed Configuration

The proposed wall is an 'L' shaped reinforced concrete wall. The base level for the majority of the wall is based on the existing ground level which is approximately 32.00m AOD. This gives a maximum wall height of approximately 2m. The wall includes a shear key below the foundation to resist a sliding failure. The geotechnical assessment indicates that adequate factors of safety for floatation, sliding, overturning and bearing capacity can be achieved with the dimensions shown on the design drawings.

The retaining wall has been set-back from the sheet piled wall by a distance of 0.75m (on average) to give 'man-access' between the sheet piles and wall to facilitate the erection and dismantling of formwork. The void between the new retaining wall and existing piled wall will be filled with a light aggregate and capped with mass concrete to deflect water.

The design also incorporates under-slab drainage through a porous concrete pipe which drains to the four existing pumping chambers to remove water seeping under the sheet piled wall. A flap valve (non return valve) will allow water accumulating behind the wall to drain rapidly into the river should the wall be overtopped by an exceedance event (e.g. a 1 in 1000 year event).

It should be noted that the geotechnical / structural design is based on the removal of overburden on the hotel side of the existing sheet piled wall. This area **must not be subject to additional loading / surcharge following the completion of construction**. This includes landscaping works, gabion baskets, waste or the use of heavy plant and machinery adjacent to the wall.

5. Construction Methodology

Primary construction activities.

- Removal, Supply and Storage of Materials for the Works
- Enabling Works – Site Set-Up and Site Clearance
- Retaining Wall Works
- Landscaping and Completion

5.1 Construction Methodology Overview

The proposed methodology is describe in detail in the following sections but it should be noted that the site will be isolated from the River Mersey by the existing sheet piled wall which will remain in place throughout the construction of the works minimising the environmental risk to the River Mersey and mitigating the risk of flooding during construction.

5.2 Removal, Supply and Storage of Materials for the Works

In relation to movement of material within the site:

1. All vegetation, arisings, timber, etc requiring removal from the site shall be excavated using an appropriate excavator and removed to the works compound by dumper and removed from site by truck.
2. Concrete slabs, block paving and other material to be re-used in the works will be moved by dumper and stored in the contractor's compound.
3. All materials imported to the works, with the exception of concrete for the base slab and walls, shall be moved from the Contractor's compound to the appropriate section of the site by dumper and lifted / placed by excavator.
4. All temporary works materials (formwork) shall be moved from the Contractor's compound to the appropriate section of the site by dumper and lifted into and out by excavator.
5. A concrete pump will be positioned either at the north end of the site or the south end of the wall to deliver concrete to the works site as shown in Figure ??.

5.3 Enabling Works – Site Establishment and Clearance

The following works relate to the mobilisation of the Contractor and site clearance works required to prepare the site for the construction of the retaining wall. The location of the works compounds and extent of the site area is shown in Figure 5.2.

1. Establish site welfare facilities and erect fencing.
2. Establish safe access to the works area via existing bin store.
3. Secure site to general public and hotel staff.
4. Mobilise excavator, dumper and equipment to site.

5. Fell trees within works area using a qualified tree surgeon and dispose off site – **Dumper**.
6. Break up / remove and dispose gabion baskets, fences etc – **Excavator & Dumper**.
7. Excavate and remove vegetation, fill, paving and other pavement surfacing – **Excavator & Dumper**.
8. Excavate small trial pits around foundations to steel columns and building foundations to determine extent of foundations and potential clashes with permanent works – **Excavator & Dumper**.
9. Erect flood barriers to building entrances (flood barriers to be supplied by the hotel) – **Hand tools**.
10. Protect windows, door etc to hotel – **Hand tools**.

5.4 Retaining Wall Works

The general methodology for the construction of the retaining wall will be as follows:

1. Excavate for base slab and shear key behind the piles – **Excavator and dumper**.
2. Place terram filter membrane for drainage – **Dumper and hand placed**.



Figure 5.1: Location of Concrete Pump

3. Place 150 mm diameter porous concrete drainage pipe in excavation – **Dumper and hand tools.**
4. Fill with singular sized granular fill – **Dumper and hand tools.**
5. Place blinding for concrete works – **Dumper and excavator.**
6. Erect formwork for base slab – **Dumper and excavator.**
7. Install reinforcement cage for shear key and base slab – **Excavator and dumper.**
8. Pump concrete into base slab and shea key and allow to cure – **Concrete Pump and hand tools.**
9. Erect formwork for wall – **Excavator and dumper.**
10. Install reinforcement cage for wall – **Excavator and dumper.**
11. Pump concrete into wall – **Concrete Pump and hand tools.**
12. Remove and relocate formwork – **Excavator.**

The retaining wall is divided into discrete panels of approximately 3m to 5m long. The construction methodology will be to complete sections of the base and wall at the centre of the works and gradually work towards the north and south installing further sections until the full length of the wall has been completed.



Figure 5.2: Works Compound and Site Area

The process is explained as follows:

1. Erect formwork for base slab A.
2. Install reinforcement cage for base slab including starter bars for the wall for base slab A.
3. Pump concrete into base slab A.
4. Erect formwork for base slab B.
5. Install reinforcement cage for base slab including starter bars for the wall for base slab B.
6. Erect formwork for wall A.
7. Install reinforcement cage for wall A.
8. Pump concrete into base slab B and wall A.
9. Repeat procedure for subsequent sections.

Reinforcement for will be brought to the appropriate base slab / wall section by dumper and fixed by hand. Formwork for the wall will be lifted into place and moved using an excavator. It is envisaged that the formwork will be reused by gradually moving the formwork as sections of the wall are completed. The void between the new retaining wall and the existing sheet piled wall with lightweight fill using a dumper to transport materials and excavator to place.

5.5 Completion, Landscaping and Exiting the Works Area

The final phase of the works relates to the construction of the low embankment adjacent to the car park, landscaping and the exit from the works.

1. Connect under-slab drainage to pump chambers- **Excavator and dumper.**
2. Install delivery pipe from pumping chambers - **Dumper and hand tools.**
3. Install / reinstate surfacing within the works area (e.g block pavements, concrete slabs, asphalt etc) - **Dumper and hand tools.**
4. Install landscaping works to rear of hotel including, topsoil / seeding and replacement trees - **Dumper and hand tools.**
5. Remove barriers and protection works to hotel - **Dumper to transport material.**
6. Break- up surfacing in car park and remove from site - **Excavator and dumper**
7. Excavate for low embankment - **Excavator and dumper.**
8. Place fill material for embankment - **Excavator and dumper.**

9. Topsoil and seed embankment – Excavator and dumper.
10. Exit the works area and remove fencing and welfare facilities.
11. Exit the works area.

6. Environmental Risk Assessment

The Environmental Risk Assessment shown shows that environmental risk associated with the construction of the works can be satisfactorily mitigated. The primary risk reduction measures comprise the:

- Construction of the works during summer.
- Isolation of the works by the existing sheet piled wall.
- Storage of construction and excavated materials out of the floodplain.
- Construction protocols associated with plant.

The isolation of the works is particularly important as it means that processes such as concrete pouring and the placing of fill material will be remote from the river. The assessment indicates that with mitigation environmental risks can be satisfactorily mitigated during construction.

Environmental Risk Assessment

Revision A



Project Waterside Hotel
Made by LJY
Date 05-Jul-25

Checked by JRY
Date 05-Jul-25

Ref	Source of Risk	Risk Description	Assessment	Risk Factor P x S	Control Measures/Mitigation	Mitigated Impact P x S
During Construction						
D1	During construction of permanent works	Felling of trees to clear the area	Loss of trees will have a negative impact on the general environment	Low + Serious = 4 - Undesirable	Reinstatement of trees in the area post construction due to planned landscaping	Very Low + Marginal = 1 - Acceptable
D2	During construction of permanent works	Impact to Water Framework Directive Ecological Status including physio-chemical biological and hydro-geomorphological status	The works will present a risk to bio-security.	Medium + Serious = 6 - Undesirable	The following measures will be implemented to mitigate the risks to bio-security: a) A barrier downstream of the works will be installed to mitigate the release of sediments. The barrier will be erected before construction commences within the dewatered area and removed on substantial completion. b) All plant and machinery will use bio-oils. c) All plant and machinery will be cleaned prior to arriving on site to prevent cross contamination of site. d) All plant will have regular plant maintenance and checks. e) All tools, boots and wellies to be either new or cleaned prior to arriving on site. f) Toolbox talks on invasive species and pollution control will be given to all site operatives. g) Spill kits and booms will be placed at strategic locations.	Very Low + Serious = 2 - Acceptable

Environmental Risk Assessment

Revision A



Project Waterside Hotel
Made by LJY
Date 05-Jul-25

Checked by JRY
Date 05-Jul-25

Ref	Source of Risk	Risk Description	Assessment	Risk Factor P x S	Control Measures/Mitigation	Mitigated Impact P x S
D3	During construction of permanent works	Impact to Water Framework Directive Ecological Status including physio-chemical biological and hydro-geomorphological status	There is a risk associated with the use of plant in close proximity to a watercourse, that there will be a spillage of diesel or other hazardous material into the watercourse.	Medium + Critical = 9 - Unacceptable	High risk activities will be undertaken away from water features where practicable (e.g.re-fuelling area). Any drainage within a refuelling area will incorporate an isolation facility such that the outlet could be sealed in the event of a spill. An emergency spillage response plan will be produced, including location and types of spill kits and will also provide a full list of protocols and communications channels with the Environment Agency in the event of an accidental pollution incident. The works area will be regularly inspected for spills / contamination and cleaned on completion of the works.	Very Low + Critical = 3 - Acceptable
D4	During construction of permanent works	Use of plant and equipment in the dewatered section of the works which is at risk of flooding during high flows with the risk that inundation of the works will result in pollution from plant and equipment (i.e. diesel spillage).	Use of plant and equipment which is at risk of flooding during high flows with the risk that inundation of the works will result in pollution from plant and equipment (i.e. diesel spillage).	Medium + Critical = 9 - Unacceptable	The contractor will monitor the weather forecast, weather and flood warnings associated with the river and ensure that plant is moved out of the channel in advance of a rainfall which could result in the overtopping to the upstream barrier and inundation of the works. All plant and machinery will be moved out of the dewatered to high ground when the site is not operational including at night and during the weekend.	Very Low + Critical = 3 - Acceptable

Environmental Risk Assessment

Revision A



Project Waterside Hotel
Made by LJY
Date 05-Jul-25

Checked by JRY
Date 05-Jul-25

Ref	Source of Risk	Risk Description	Assessment	Risk Factor P x S	Control Measures/Mitigation	Mitigated Impact P x S
D5	During construction of permanent works	Impact to Water Framework Directive Ecological Status including physio-chemical biological and hydro-geomorphological status	There is a risk associated with in-situ concrete works in close proximity to a watercourse (in this case in-channel). The concrete pour carries a risk of hazardous material being discharged into the watercourse.	Low + Serious = 4 - Undesirable	The existing sheet piled wall will remain in place throughout construction thereby isolating the construction works from the River Mersey.	Very Low + Critical = 3 - Acceptable
D5	During construction of permanent works	Release of fine sediments during construction	There is a risk that fine sediments disturbed during excavation will have a negative impact on water quality including fish, through increased turbidity within the water column.	Low + Serious = 4 - Undesirable	The existing sheet piled wall will remain in place throughout construction thereby isolating the construction works from the River Mersey.	Very Low + Serious = 2 - Acceptable

WATERSIDE HOTEL

A. Photographs



Waterside Hotel Didsbury

8 April 2025 2023

Location



The Environment Agency has records of flooding to the site in 1997, 2004 and 2008.

The December 2024 Event was the highest on record

A review of the EA flow gauge for the Mersey suggests that it was the equivalent of a 1 in 75 year event.

Hydraulic Modelling Results



1 in 50 year return period
Peak Level = 33.76m AOD



1 in 75 year return period
Peak Level = 33.88m AOD

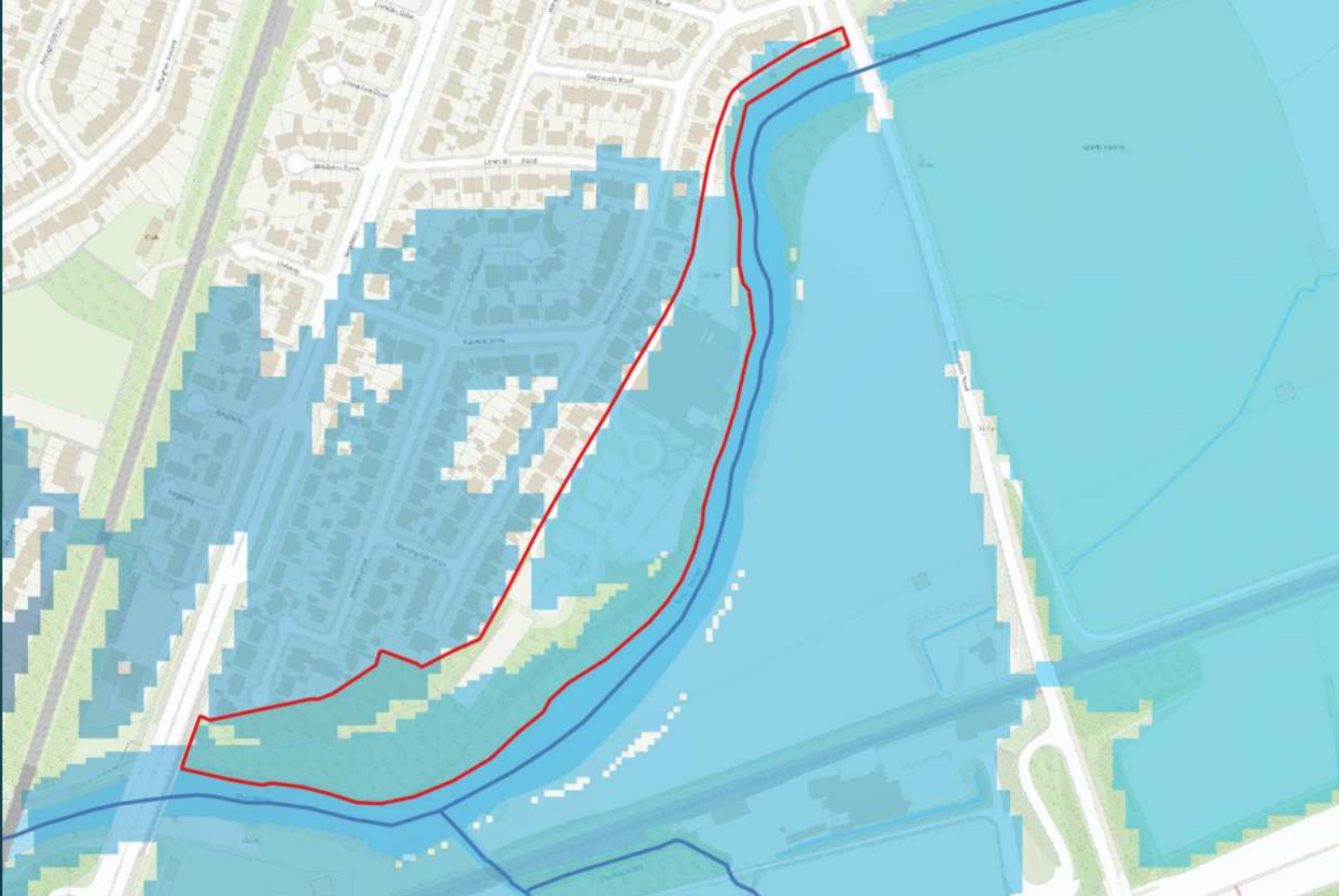


1 in 100 year return period
Peak Level = 33.97m AOD

There is comparatively little difference in flood level between a 1 in 75 year event and a 1 in 100 year event at the site. This is due to the fact that there is a relatively wide floodplain.

N.B The modelling results do not take into account the beneficial impact of the piled wall.

Hydraulic Modelling Results



1 in 100 year return period with an allowance of 30% increase in flow for climate change.

This is the expected flood outline in 2125.

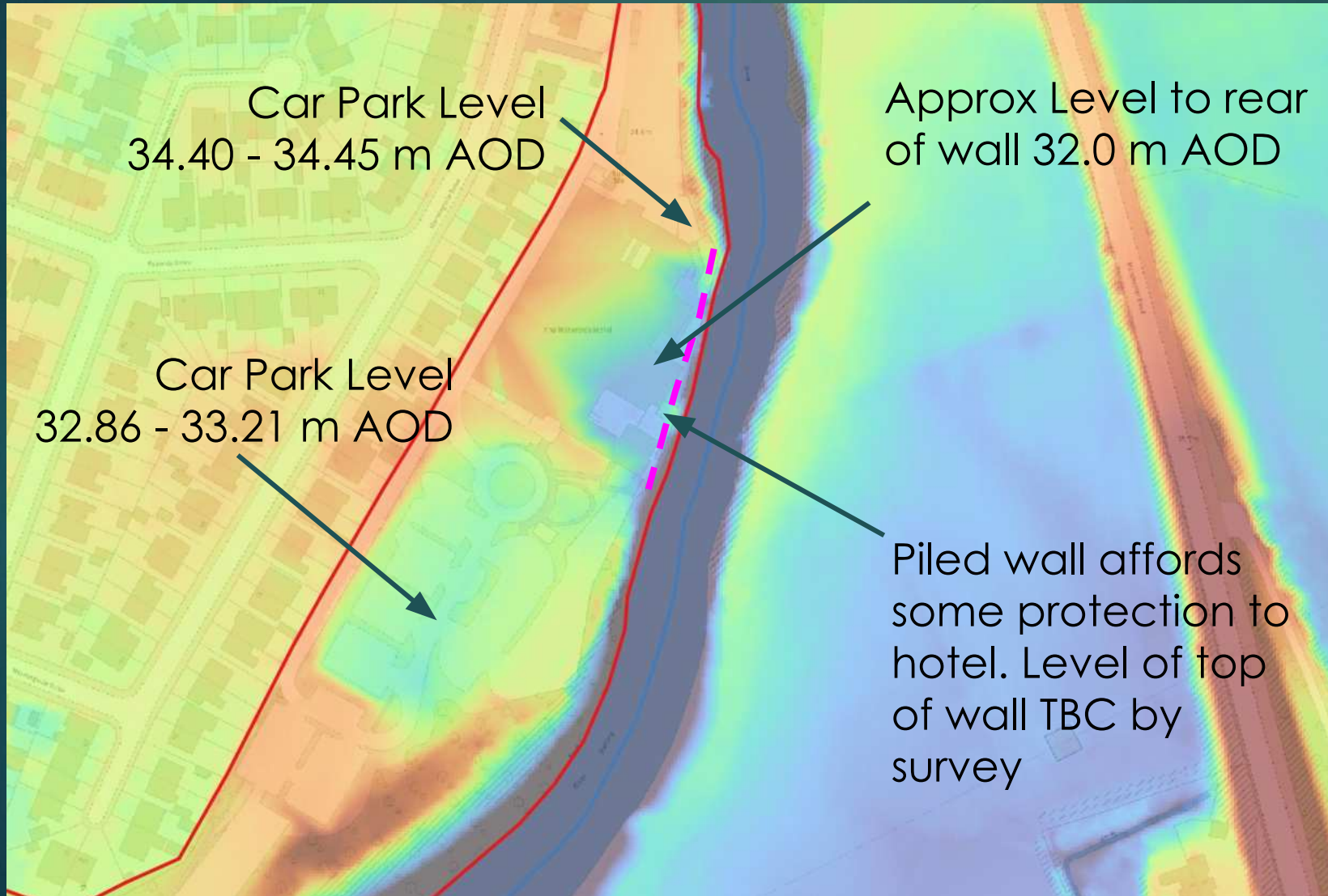
The peak Level at the site is predicted to be 34.61m AOD

Site Photography



Anecdotal
reported level of
flooding in
December 2024.

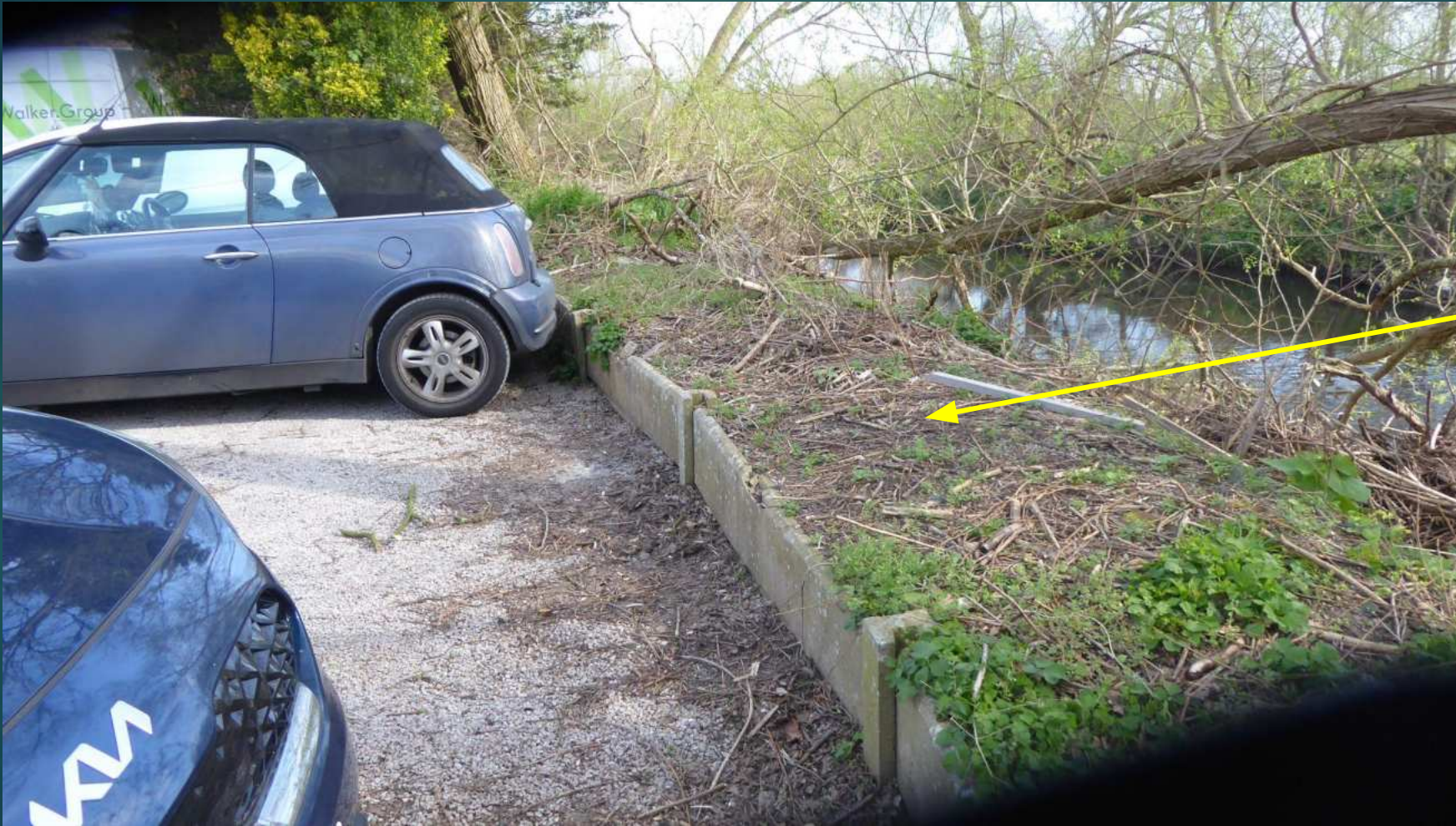
LiDAR



The car park and areas to the north are flood free in a 1 in 100 year event.

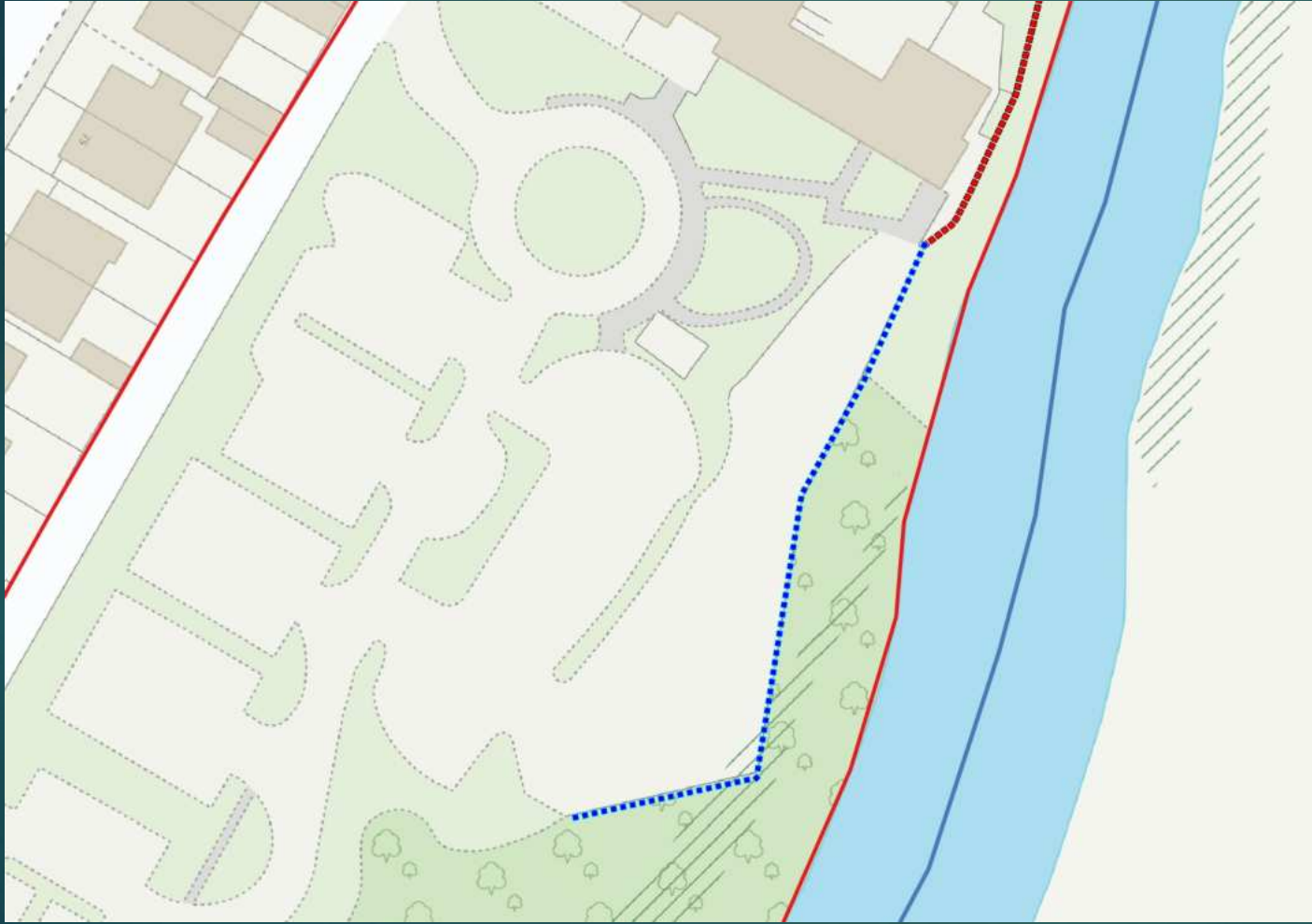
The depth of flooding behind the wall experienced in December / January 2024 /25 was approximately 2m.

Site photography



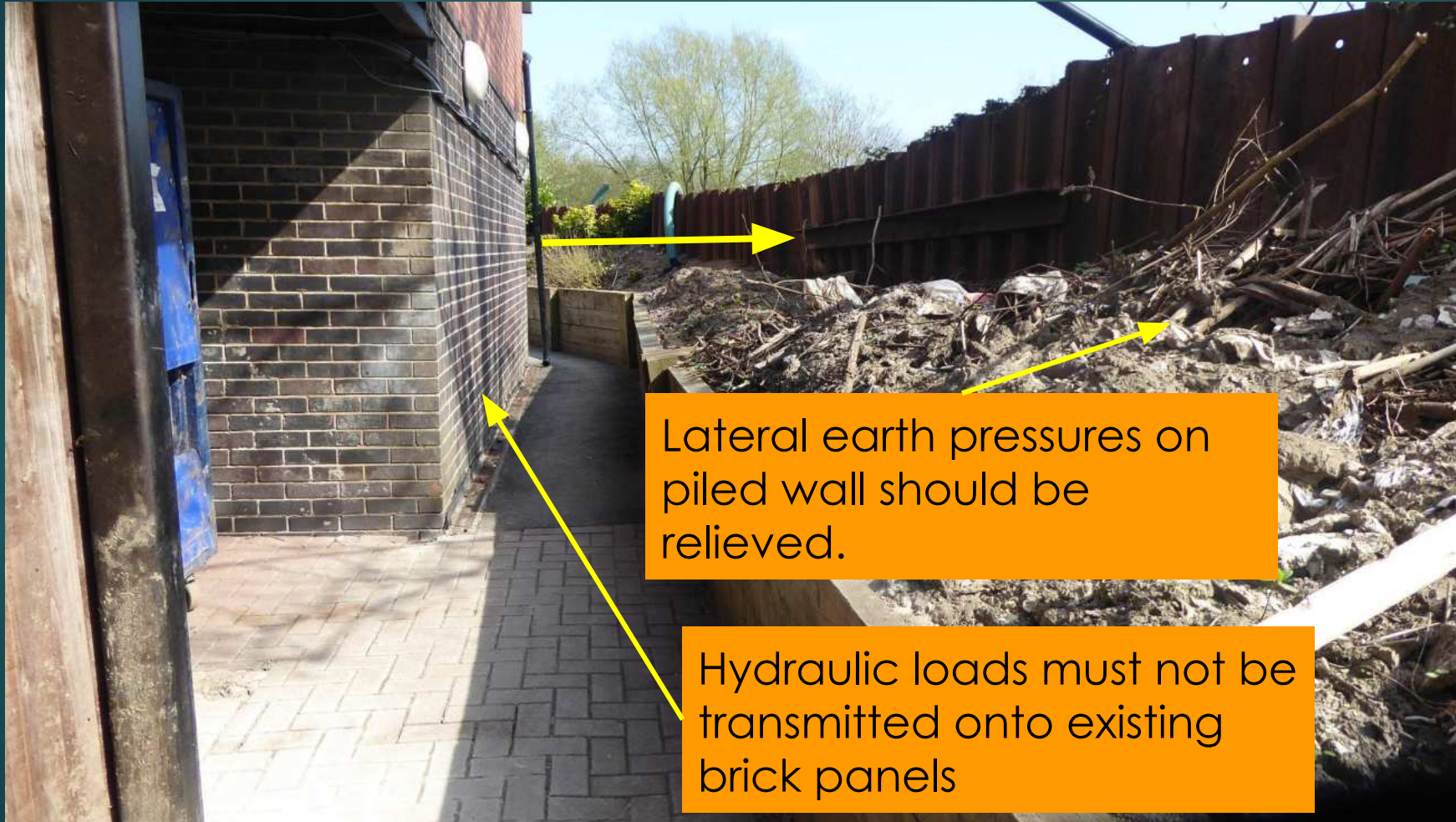
Bund in southern car park should be raised to give an adequate freeboard to the design event.

Raised Embankment



Possible extent of raised embankment to mitigate risk of flooding to the car park and hotel

Site Photography



Constraint on
Construction

Narrow width for
access for
construction plant

Narrow width to
accommodate
an independent
retaining wall
setback from the
existing piled wall

Lateral earth pressures on
piled wall should be
relieved.

Hydraulic loads must not be
transmitted onto existing
brick panels

Site Photography



Site Photography



Constraint on
Construction

Narrow width for
access for
construction plant

Narrow width to
accommodate
an independent
retaining wall
setback from the
existing piled wall

Site Photography



Lateral earth
loading to wall
to be relieved

Wall has deflected
outwards which is a
sign of progressive
failure.

Site Photo



Pile clutches in the wall have deflected outwards which is a sign of progressive failure.

Site Photography



Internal areas of the development are currently being refurbished.

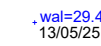
Flood resilient construction would reduce the cost and time taken to recover from future flooding.

WATERSIDE HOTEL

B. Topographic Survey

This drawing is not to be used in whole or part other than for the intended purpose and project as defined on this drawing. Refer to the contract for full terms and conditions.

2024



Layout

Surveyed by		Initials - MR, JF, JB		Dates Surveyed - 13/05/25 - 20/05/25	
D					
C					
B					
A	02/06/25	Original Issue			JF
Rev	Rev. Date	Purpose of revision			Drawn



Project 1A

Drawing title

Scale

Rev
A

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WATERSIDE HOTEL

C. Drawings

- General notes
- All dimensions in mm unless otherwise stated
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 - The setting out for the strip foundation is shown as indicative and is to be determined on site.
- Concrete notes
- concrete cover to reinforcement = 50mm
 - 25mm chamfer to all concrete edges
 - vertical finish to exposed walls to be rough
 - all concrete to be grade rc30/37 sulphate resisting portland cement unless stated
 - minimum aggregate size = 20mm

CDM RESIDUAL DESIGN RISKS

Risks listed here are not exhaustive. Refer to Designer's Risk Assessment and pre-construction phase plan.

CONSTRUCTION

- Excavation**
- Operation of plant and machinery in accordance with method statement

HEALTH & SAFETY AND ENVIRONMENTAL INFORMATION

The design presented on this drawing has been developed in accordance with the construction management regulations 2015. Any construction limitations arising from the design and significant residual risk not usually associated with the proposed type of work are identified on the drawing or within the notes.

It is assumed the all works will be carried out by a competent contractor working to an approved method statement

FOR CONSTRUCTION

Rev	FOR CONSTRUCTION	17/04/25

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Project

WATERSIDE HOTEL

Drawing Title

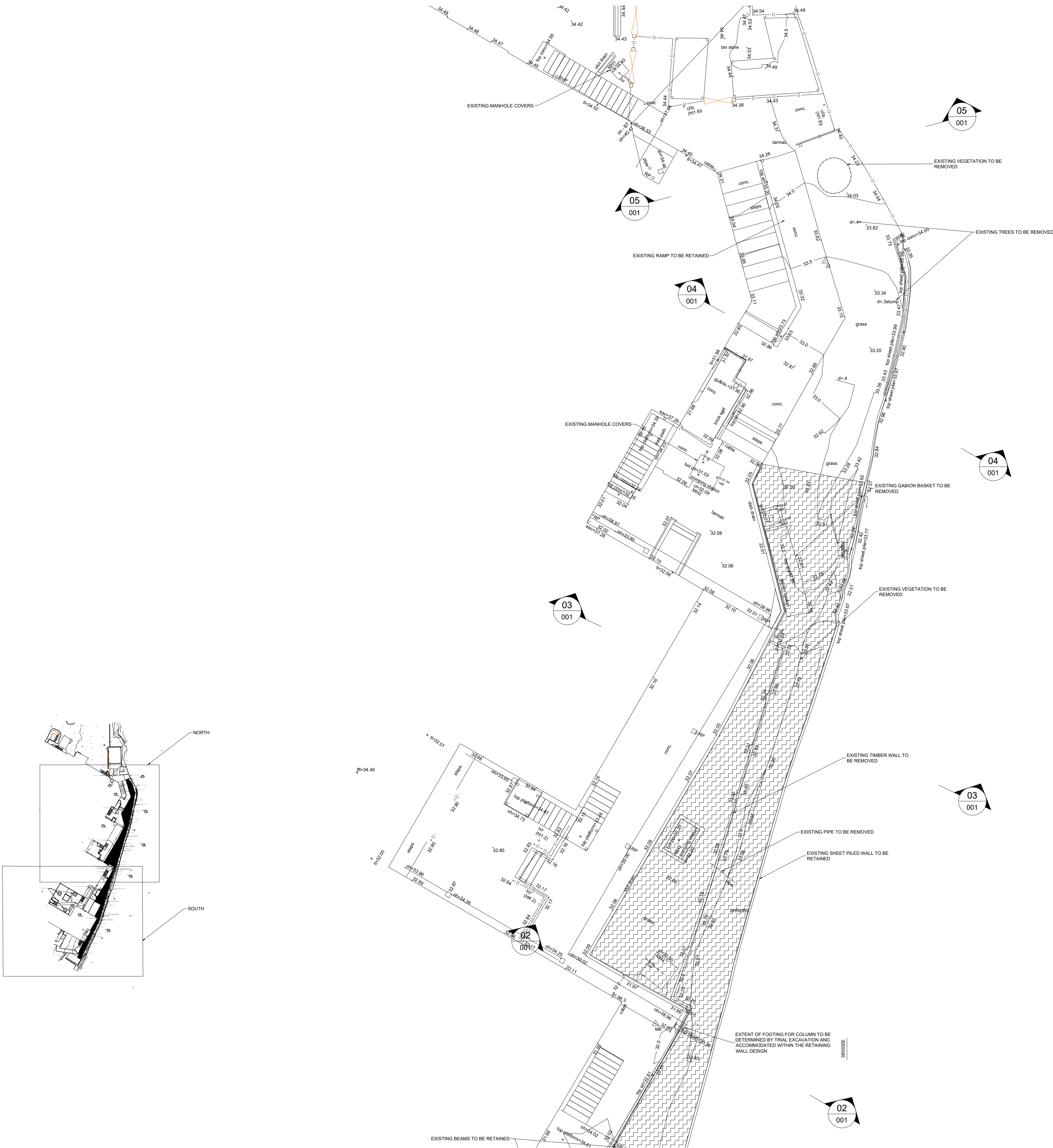
ENABLING WORKS - NORTH

Drawn	Date	Scale
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Checked	Date	Plot size
JRY		A1

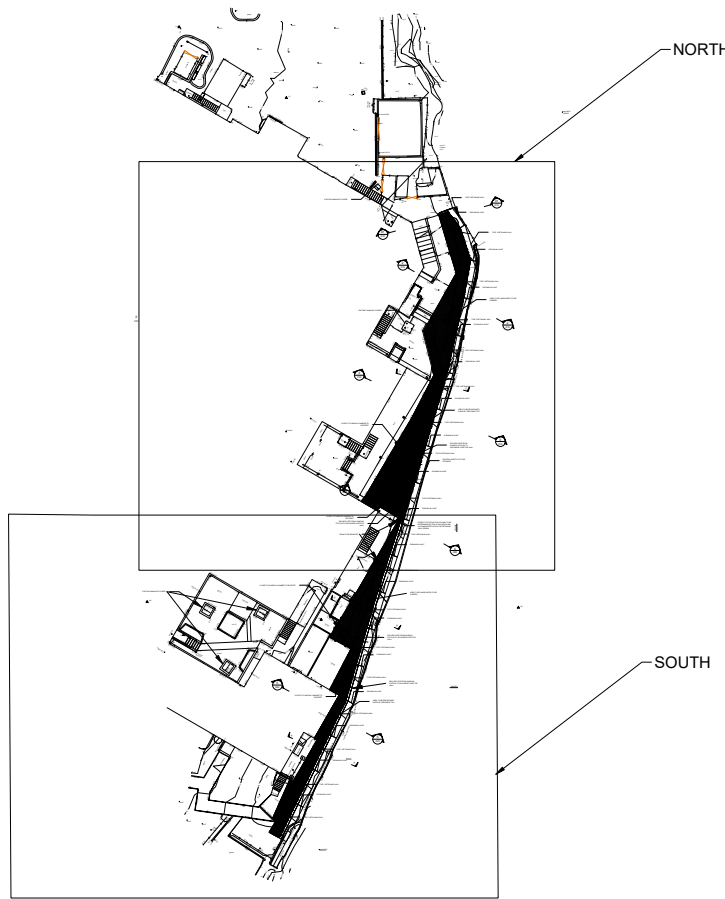
Project No Drawing No Rev

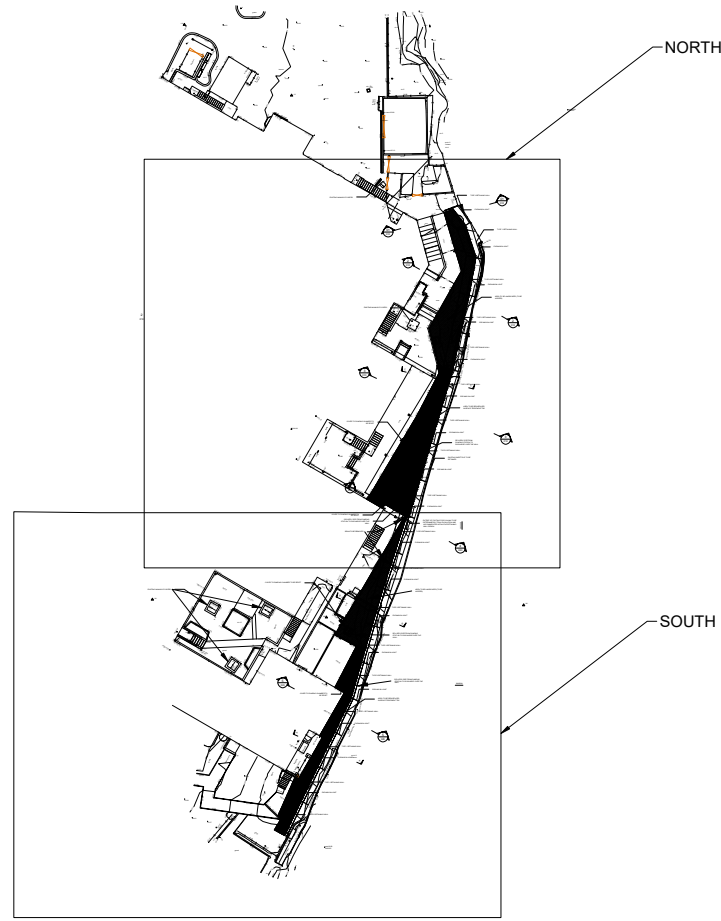
EVY1238-001 A

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2
010





- General notes
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CDM RESIDUAL DESIGN RISKS

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CONSTRUCTION

- Excavation**
- Operation of plant and machinery in accordance with method statement

HEALTH & SAFETY AND ENVIRONMENTAL INFORMATION

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Project

WATERSIDE HOTEL

Drawing Title

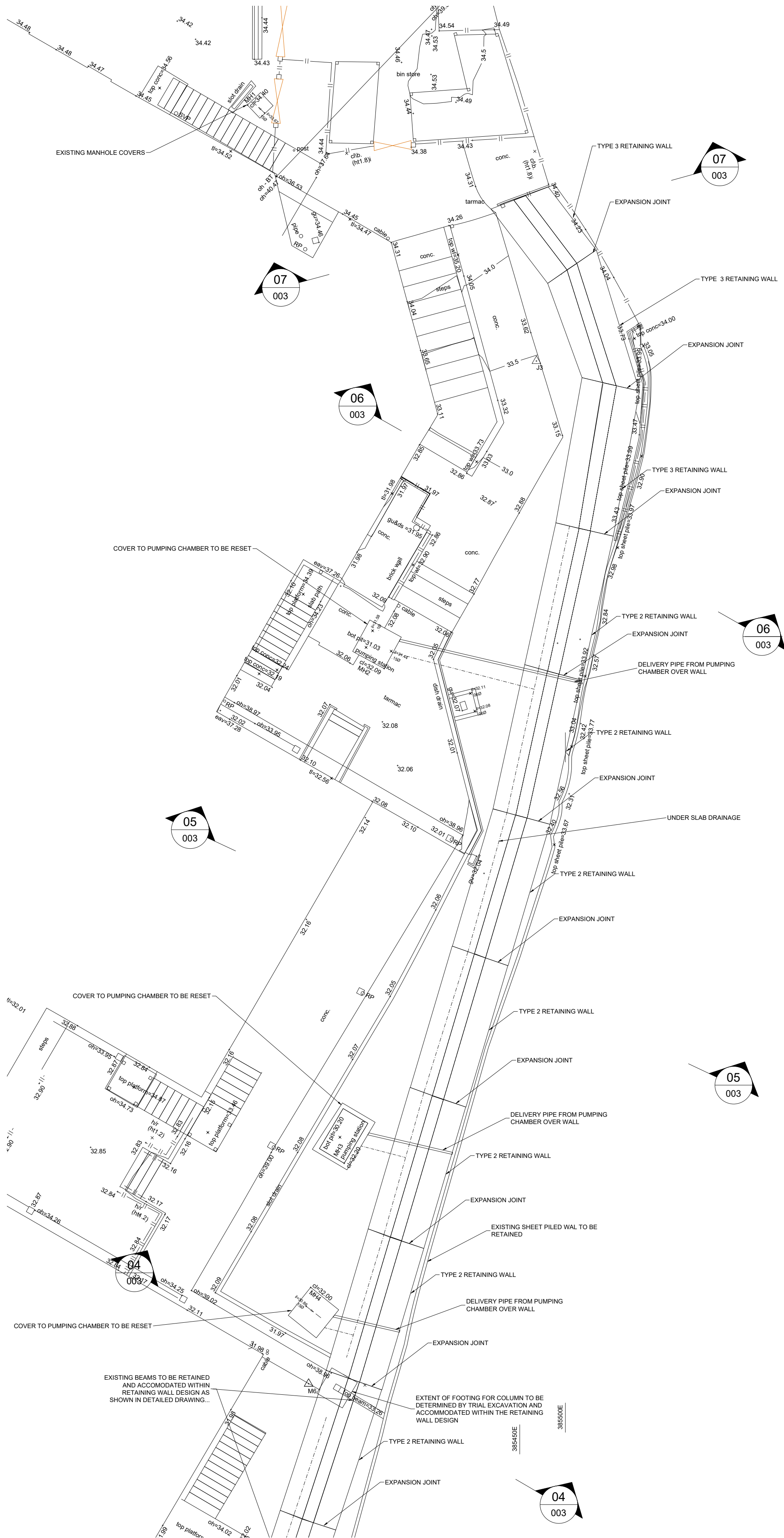
ENABLING WORKS - SOUTH

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Checked	Date	Plot size
JRY		A1

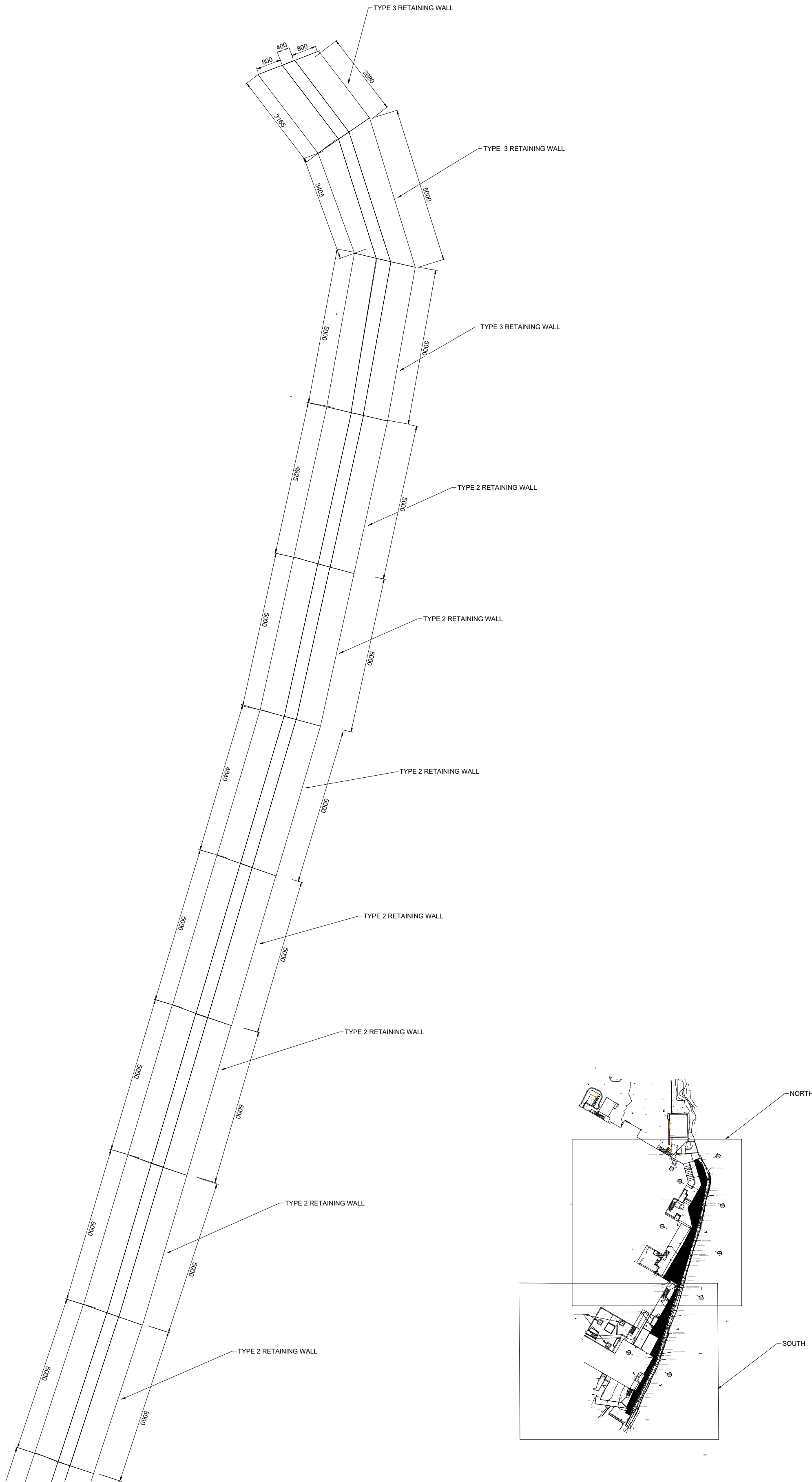
Project No	Drawing No	Rev
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EVY1238-002 A

FOR CONSTRUCTION



PLAN



SETTING OUT

- General notes
- All dimensions in mm unless otherwise stated
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CDM RESIDUAL DESIGN RISKS

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CONSTRUCTION

Excavation

- Operation of plant and machinery in accordance with method statement

HEALTH & SAFETY AND ENVIRONMENTAL INFORMATION

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B
A
Rev

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Date

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Project

WATERSIDE HOTEL

Drawing Title

GENERAL ARRANGEMENT & SETTING OUT - NORTH

Drawn
SJ

Date
30/06/25

Scale
1:100

Checked
JRY

Date

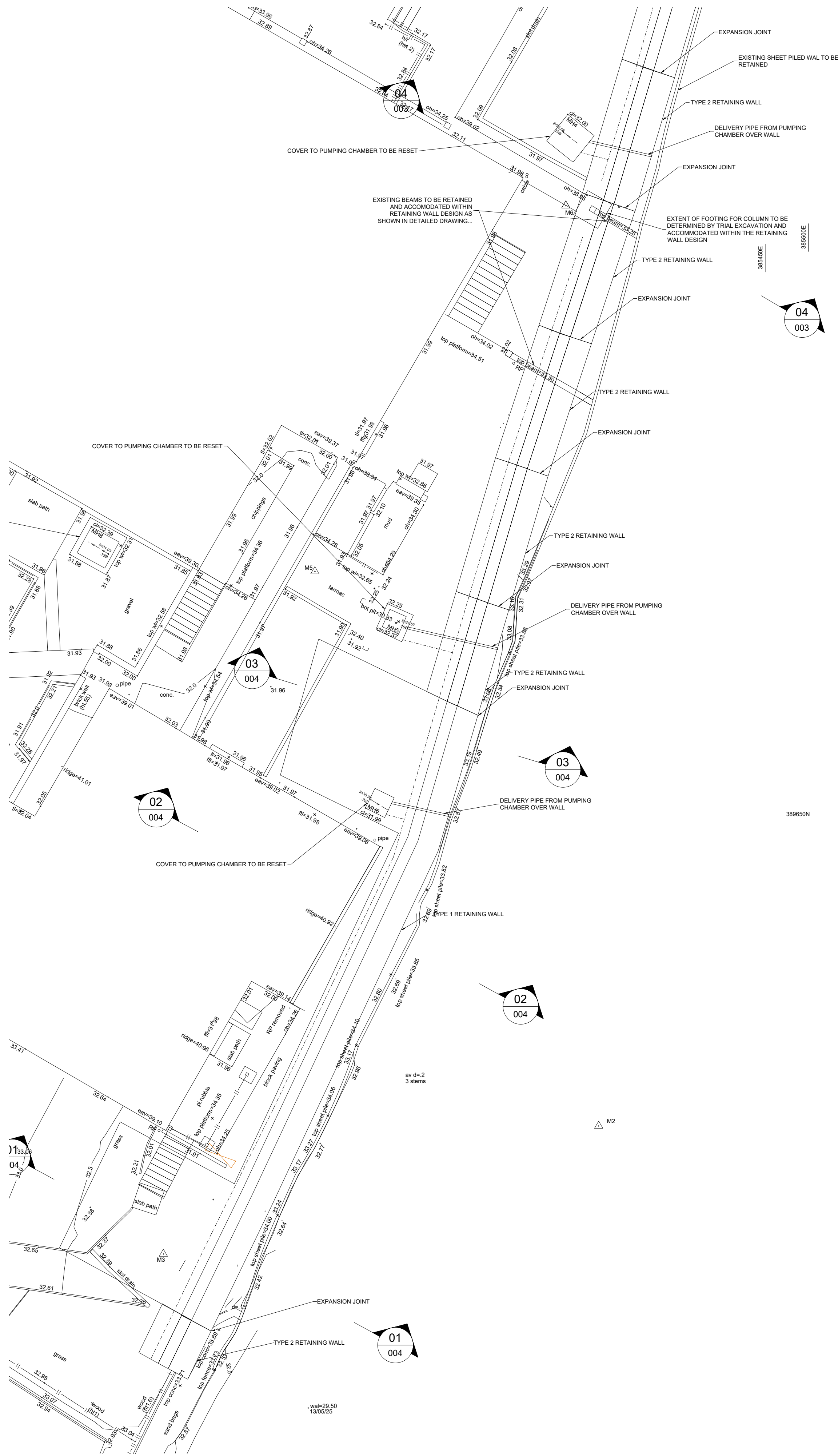
Plot size
A1

Project No
EVY1238-003

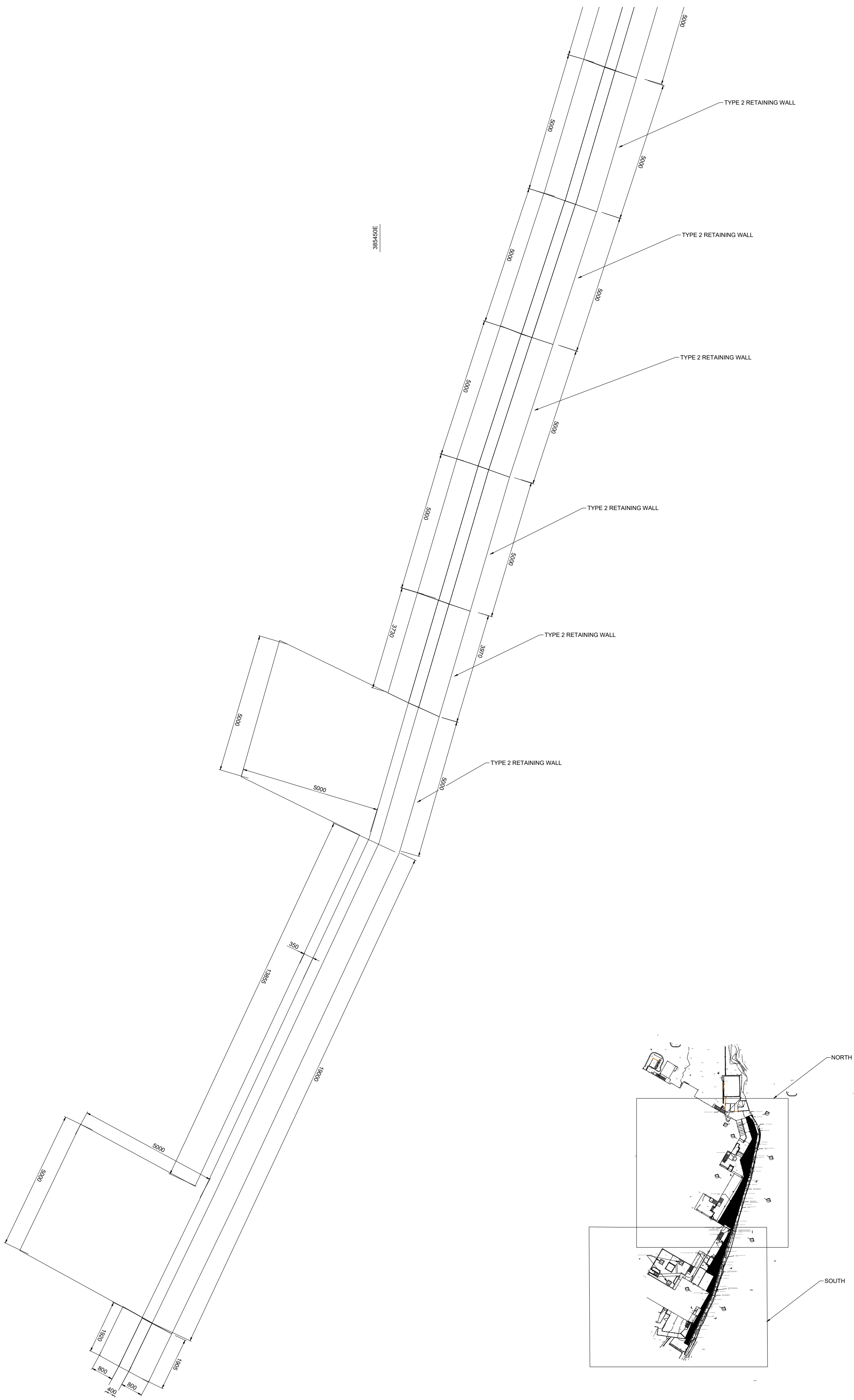
Drawing No
A

Rev

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PLAN



SETTING OUT

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CDM RESIDUAL
DESIGN RISKS

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CONSTRUCTION

Excavation

- Operation of plant and machinery in accordance with method statement

HEALTH & SAFETY AND
ENVIRONMENTAL
INFORMATION

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Project

WATERSIDE HOTEL

Drawing Title

GENERAL
ARRANGEMENT &
SETTING OUT - SOUTH

Drawn
SJ

Date
30/06/25

Scale
1:100

Checked
JRY

Date

Plot size
A1

Project No

Drawing No

Rev

EVY1238-004

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PLAN

LANDSCAPING

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CDM RESIDUAL
DESIGN RISKS

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CONSTRUCTION

- Excavation
- Operation of plant and machinery in accordance with method statement

HEALTH & SAFETY AND
ENVIRONMENTAL
INFORMATION

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WATERSIDE HOTEL
Drawing Title
LANDSCAPING
- NORTH

Drawn	Date	Scale
SJ	30/06/25	1:100
Checked	Date	Plot size
JRY		A1

Project No	Drawing No	Rev
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EVY1238-005 A

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PLAN

LANDSCAPING

- General notes
1. All dimensions in mm unless otherwise stated
 2. All elevations are in metres relative to ordnance datum newlyn unless otherwise stated.
 3. The setting out for the strip foundation is shown as indicative and is to be determined on site.
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 2. 25mm chamfer to all concrete edges
 3. vertical finish to exposed walls to be rough
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 5. minimum aggregate size = 20mm

CDM RESIDUAL
DESIGN RISKS

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CONSTRUCTION

Excavation

- Operation of plant and machinery in accordance with method statement

HEALTH & SAFETY AND
ENVIRONMENTAL
INFORMATION

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Project

WATERSIDE HOTEL

Drawing Title

LANDSCAPING

-SOUTH

Drawn

SJ

Checked

JRY

Project No

EVY1238-006

Date

30/06/25

Date

Drawing No

Scale

1:100

Plot size

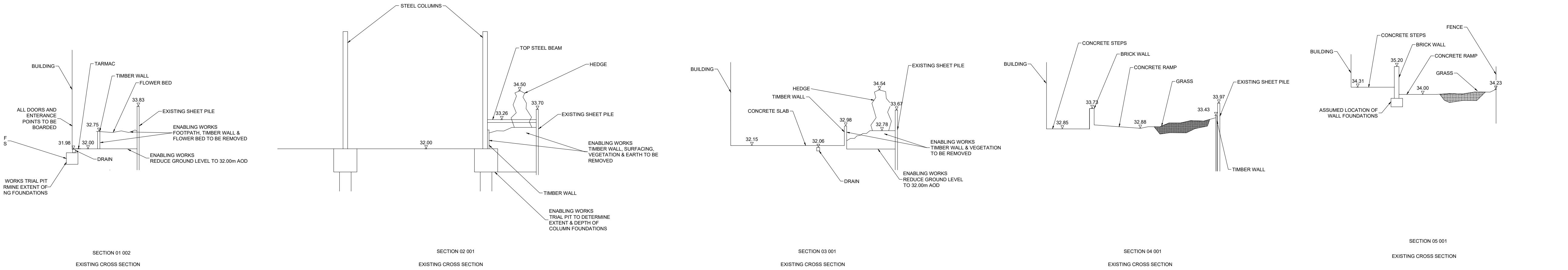
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Rev

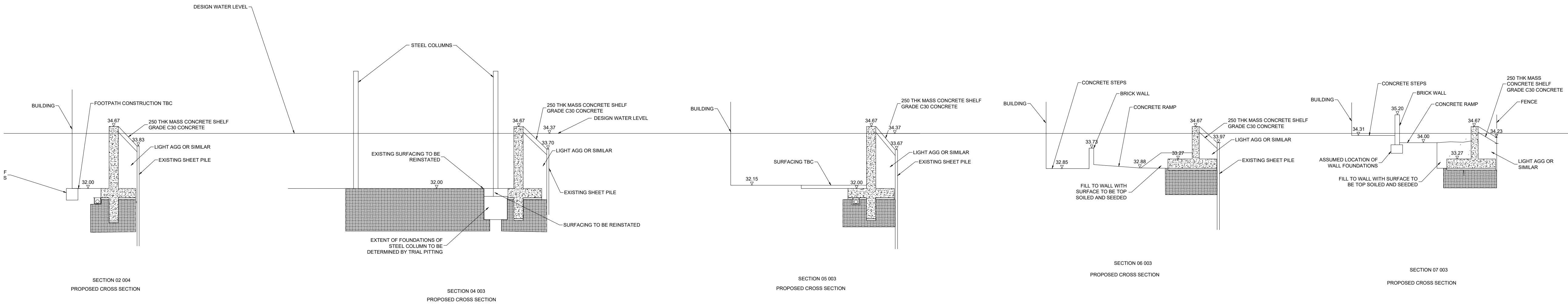
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ENABLING WORKS



PERMANENT WORKS

- General notes
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CDM RESIDUAL
DESIGN RISKS

Risks listed here are not exhaustive. Refer to Designer's Risk Assessment and pre-construction phase plan.

CONSTRUCTION

C10

Excavation
- Operation of plant and machinery in accordance with method statement

HEALTH & SAFETY AND
ENVIRONMENTAL
INFORMATION

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Project

WATERSIDE HOTEL

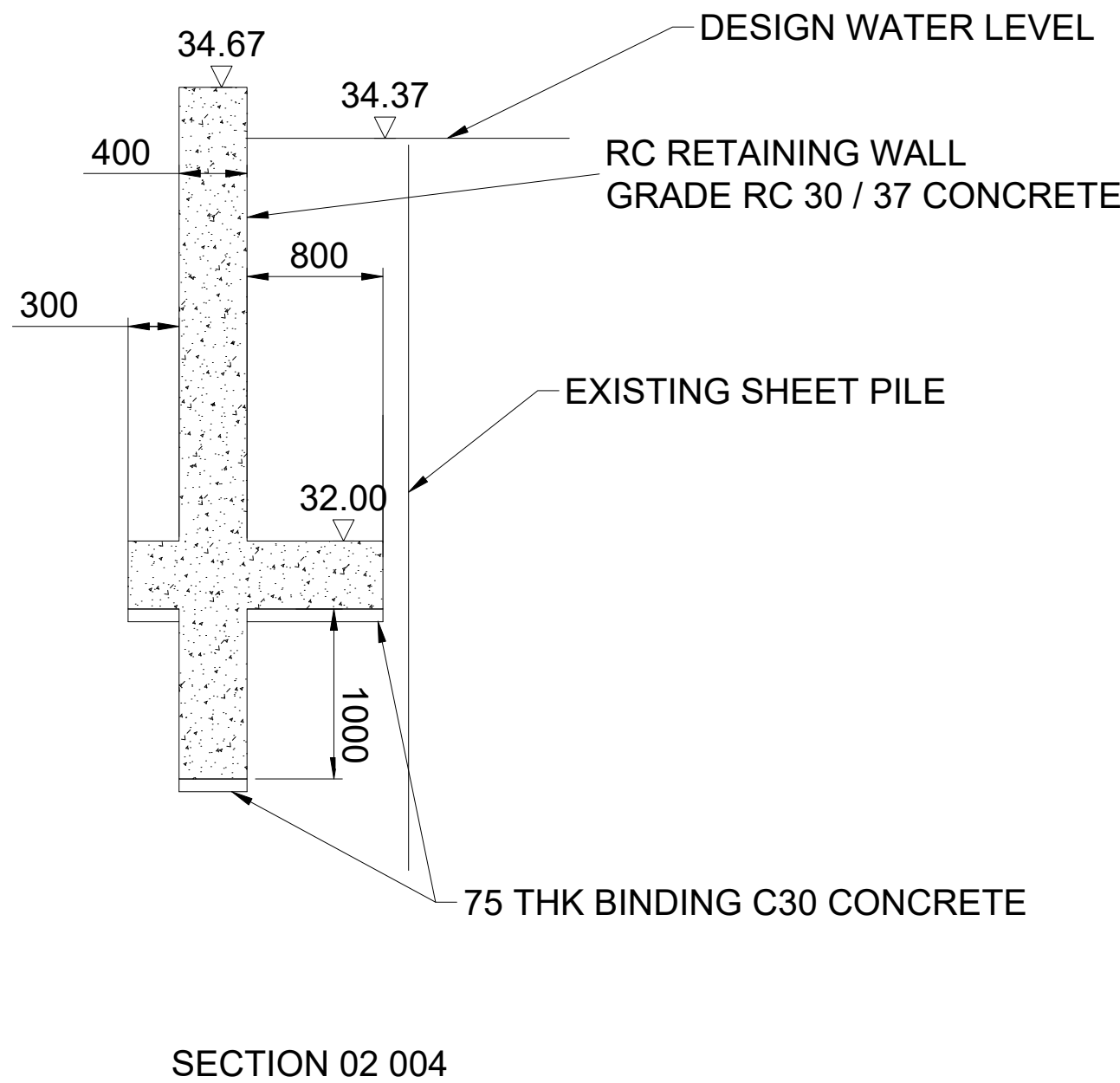
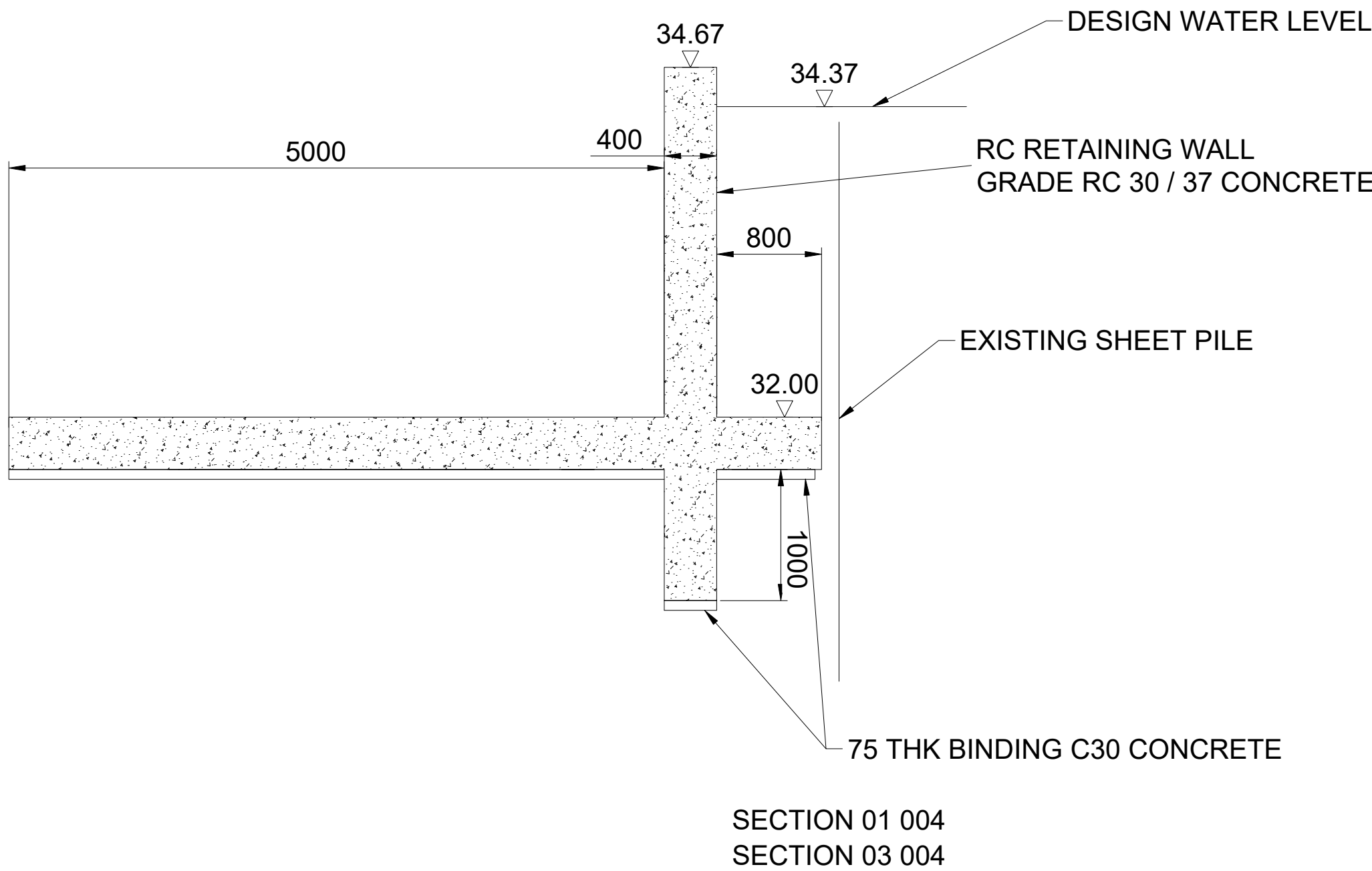
Drawing Title
ENABLING &
PERMANENT
WORKS SECTIONS

Drawn	Date	Scale
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Checked	Date	Plot size
JRY		A1

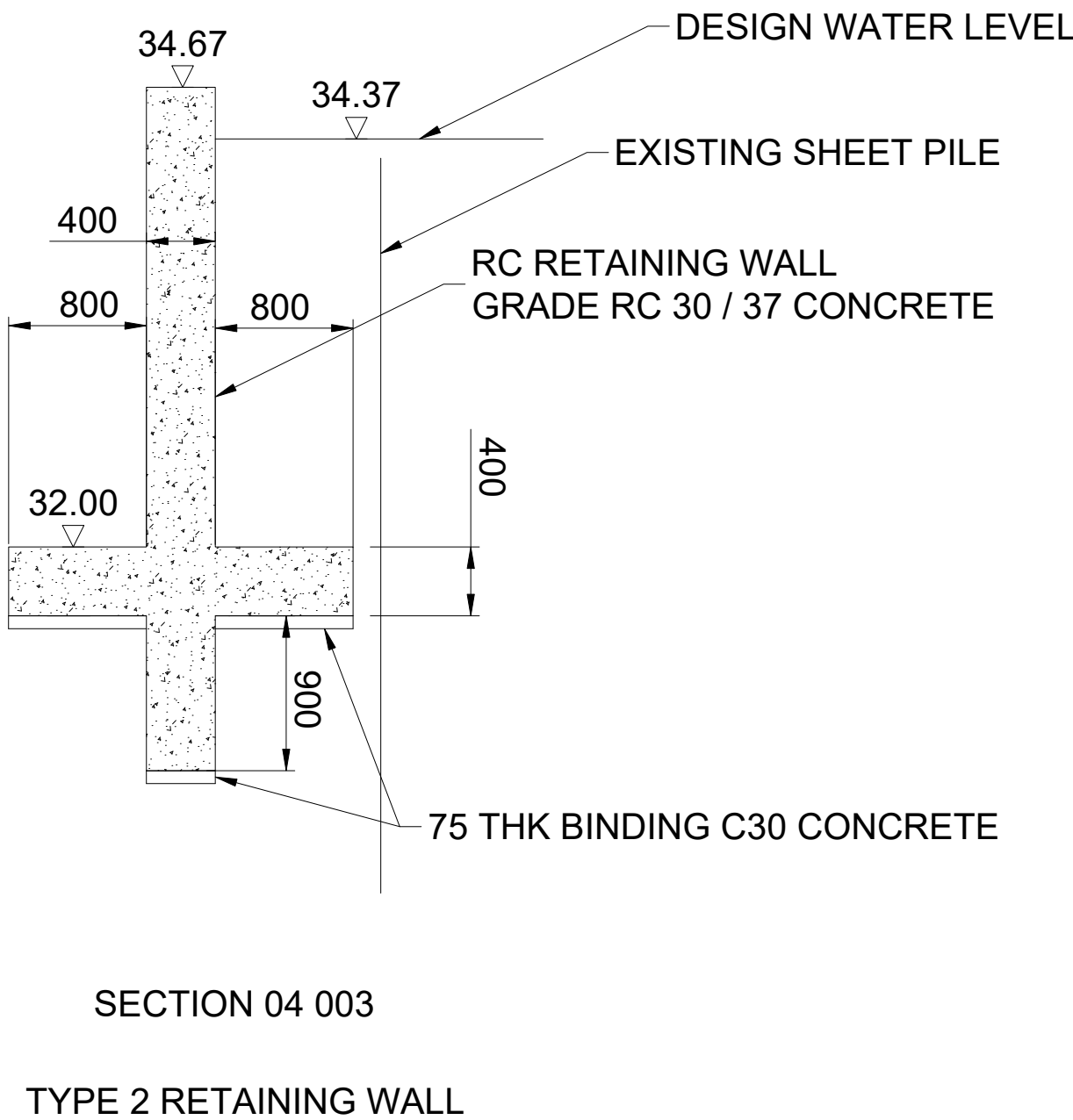
Project No	Drawing No	Rev
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EVY1238-010 A

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TYPE 1 RETAINING WALL



TYPE 2 RETAINING WALL

- General notes
- All dimensions in mm unless otherwise stated
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CDM RESIDUAL DESIGN RISKS	
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CONSTRUCTION	
	Excavation - Operation of plant and machinery in accordance with method statement

HEALTH & SAFETY AND ENVIRONMENTAL INFORMATION
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FOR CONSTRUCTION

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A		17/04/25



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Project

WATERSIDE HOTEL

Drawing Title

TYPE 1 & 2
RETAINING
WALL

Drawn	Date	Scale
LJY	30/06/25	1:100
Checked	Date	Plot size
JRY		A1

Project No	Drawing No	Rev
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