

Shaping places that
make a positive impact
for local communities



Fourteen Locks Visitor Centre

Design and
Access Statement

FLVC-AHR-XX-XX-RP-A-08700

Newport City Council
February 2025

This Design and Access Statement sets out the design process and principles we have used when we have designed the “Fourteen Locks Visitor Centre”

Newport City Council commissioned the team for the design and construction of an innovative ecological visitor centre to replace the previously utilised Fourteen Locks Canal Centre.

Newport City Council are expecting a high-quality visitor facility providing information, volunteering and recreation opportunities for both residents and visitors to the region within a building of architectural merit. A vibrant mixed-use development, which compliments and enhances the surrounding area, and the adjacent canal.

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Project team

Architect	AHR
Landscape Architect	AHR
Structural and Civil Engineer	Craddys
Flood Risk and Drainage Consultant	Craddys
Building Services Engineer	SDS
Cost Consultant	TC Consult
Planning Consultant	Kew

Version	Issue Status	Version date	Dr By	App By	Comment
P01	S1	25.09.2024	HT	HT	Issued for Planning Pre-Application
P02	S4	28 February 2025	TW	HT	Issued for Planning Application

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Project Context & Brief

This project has involved the design of an innovative, ecological visitor centre where we have aimed to achieve a balance between a building with architectural merit, environmental impact and visitor engagement, all through a net-zero impact approach.

1.1 Project Introduction

Newport City Council have commissioned the design and construction of a innovative ecological visitor centre to replace the previously utilised Fourteen Locks Canal Centre.

Newport City Council are expecting a high-quality visitor facility providing information, volunteering and recreation opportunities for both residents and visitors to the region within a building of architectural merit. A vibrant mixed-use development, which compliments and enhances the surrounding area, and the adjacent canal.

Key Objectives

- Deliver a project of architectural merit, with net zero principles and a design which improves the appearance of the site and compliments its surroundings.
- Deliver an active public space which is attractive to the market, creates an environment which benefit of the local community and visitors to the region.
- Deliver a community/visitor Hub, a public infrastructure which meet the Council's requirements and delivery timetable:
 - Visitor Information Centre
 - Commercial Space/Museum
 - Café
 - Flexible Community/Meeting Space
 - Site Manager Office
 - Accessible toilets
 - Secure Storage facilities

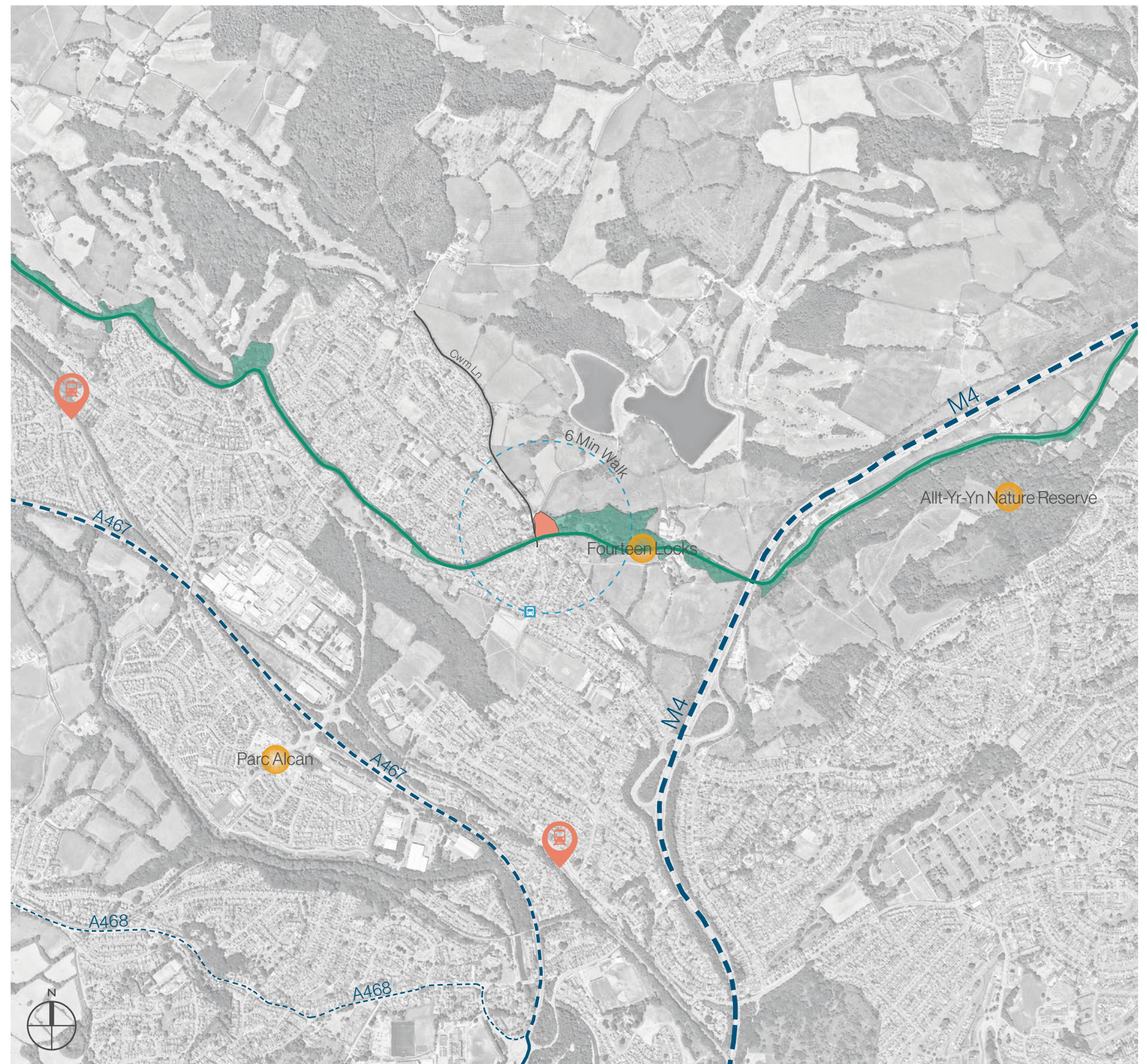
1.2 Site Context - Wider Area

The site can be found off Cwm Lane, Rogerstone NP10 9GN.

Situated within Newport, Wales, the Fourteen Locks Canal Centre site stands at the crossroads of A467 and A468, strategically positioned to serve as a pivotal entry point to this captivating locale. Its prime location along these major roadways facilitates seamless accessibility, ensuring a smooth transition for visitors arriving from adjacent regions. The proximate M4 motorway further enhances connectivity, establishing the Canal Centre as a focal point within Newport's comprehensive transportation network.

The site is intricately linked to various modes of transportation, boasting well-connected bus routes and proximity to a nearby railway network.

-  Site
-  Monmouthshire & Brecon Canal
-  Conservation Area - Policy number CE7
-  Landmarks
-  Cwm Ln
-  Major Road
-  Bus Transportation
-  Train



Heritage

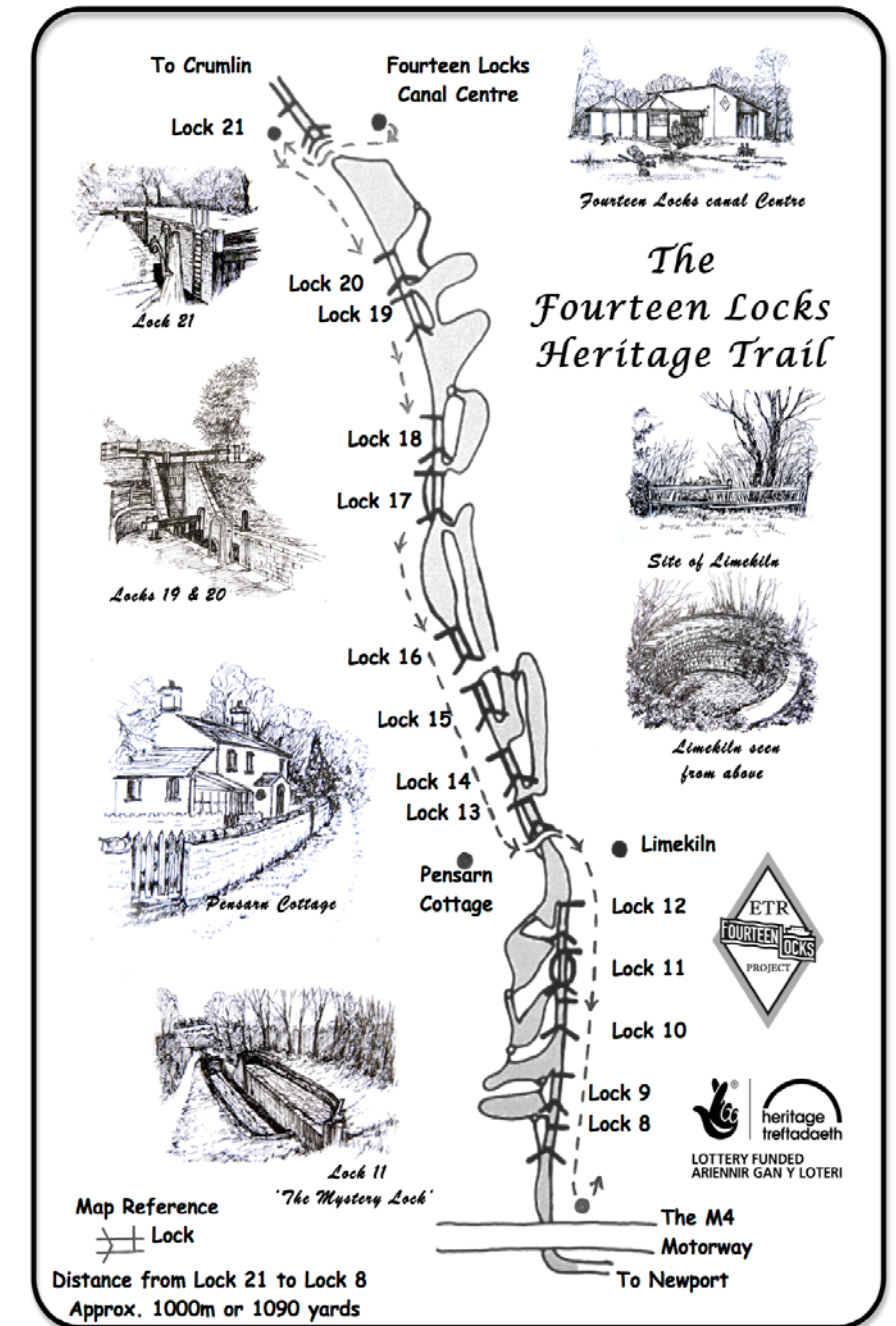
2.1 Heritage Preservation

Newport, Wales, is renowned for its unwavering commitment to heritage preservation, a dedication that is notably evident in the meticulous conservation of its historical landmarks, cultural institutions, and particularly, its canal locks.

Beyond specific landmarks, Newport's commitment extends to the conservation of historic neighbourhoods and sites. The community actively participates in maintaining the authenticity of these areas, fostering a collective sense of pride and connection to Newport's unique character.

In conclusion, Newport, Wales, stands as an exemplar of a city that upholds its heritage with diligence and precision. Through the vigilant preservation of architectural treasures, educational initiatives, and the protection of vital features such as canal locks, Newport ensures that its rich history remains a vital and enduring aspect of its present and future.

The Fourteen Locks are very much part of this heritage.



2.2 Heritage - Scheduled Ancient Monument

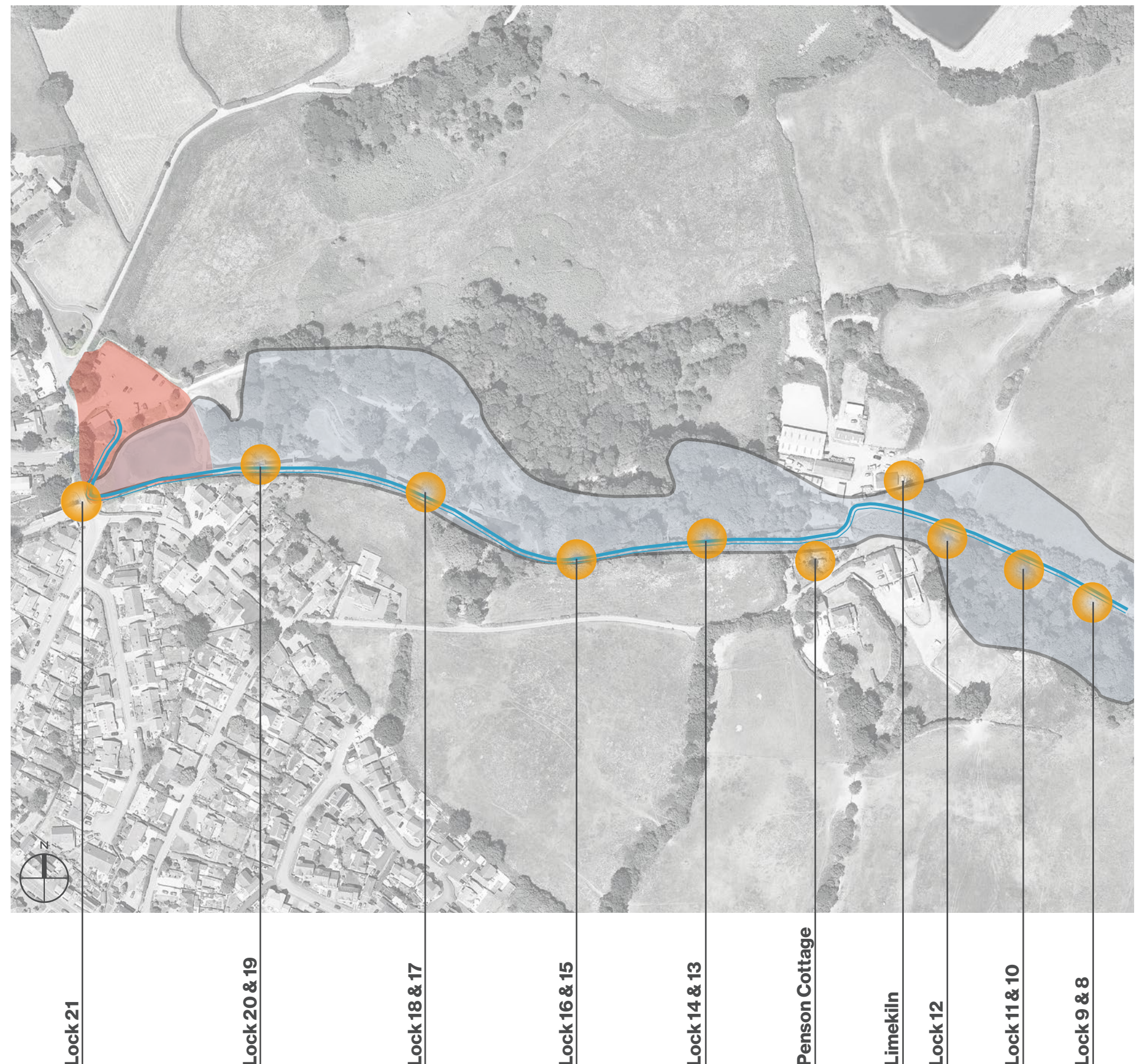
The Fourteen Locks Heritage Trail is a scheduled ancient monument located in Newport, Wales. This historic canal site features a flight of locks on the Crumlin Arm of the Monmouthshire and Brecon Canal.

The historical locks are no longer actively used for their industrial and modern purposes.

The trail offers a picturesque walk along the canal, showcasing the impressive engineering of the locks, which were essential for transporting goods during the Industrial Revolution. Visitors can explore the heritage centre, learn about the canal's history, and enjoy the scenic surroundings. The site provides insights into the region's industrial past and is a popular destination for both history enthusiasts and nature lovers.

"An idyllic place where time stands still, and history overwhelms!"

- Site
- Heritage Trail
- Historical Landmark
- Scheduled Ancient Monument, No: MM184



2.3 Heritage - Monmouthshire & Brecon Canal

Integral to Newport's heritage landscape are the canal locks. These locks, meticulously maintained, were pivotal in facilitating the transportation of goods during the industrial era. The preservation of these intricate mechanisms underscores the city's commitment to safeguarding not only individual structures but also the broader historical infrastructure that shaped Newport's economic and social development.

The Monmouthshire & Brecon Canal which passes through the site is generally considered partially navigable (Approx 36 miles). The canal has undergone significant restoration and maintenance efforts to ensure its continued usability for recreational purposes. However, specific conditions and navigability may vary at different points along the canal.

-  Site
-  Monmouthshire & Brecon Canal
-  Conservation Area - Policy number CE7



Site Analysis



3.1 Site Analysis - Constraints

The primary pedestrian access point is not evidently clear due to worn-out and lacking wayfinding signage, and the visibility of the canal centre only becomes apparent when approached from the designated on-site parking area, where signage is prominently displayed.

The site's numerous large trees demand careful planning to protect their extensive root systems, crucial for site development. The buildings position must consider tree locations and root structures to harmonise development goals with vegetation preservation.

Respecting the privacy of adjacent residents across the pond is a paramount constraint in the development process. Careful consideration in architectural design, landscaping, and spatial planning is necessary to mitigate intrusions and meet privacy expectations.

- Site Boundary Line
- - - Primary Pedestrian Route
- Primary Pedestrian Access point
- - - Primary Vehicle Route
- Primary Vehicle Access point
- Existing Greenery
- Significant Tree
- On Site Parking Facility
- Existing Boat Ramp
- ||||| Adjacent Residential



3.2 Site Analysis - Surveys

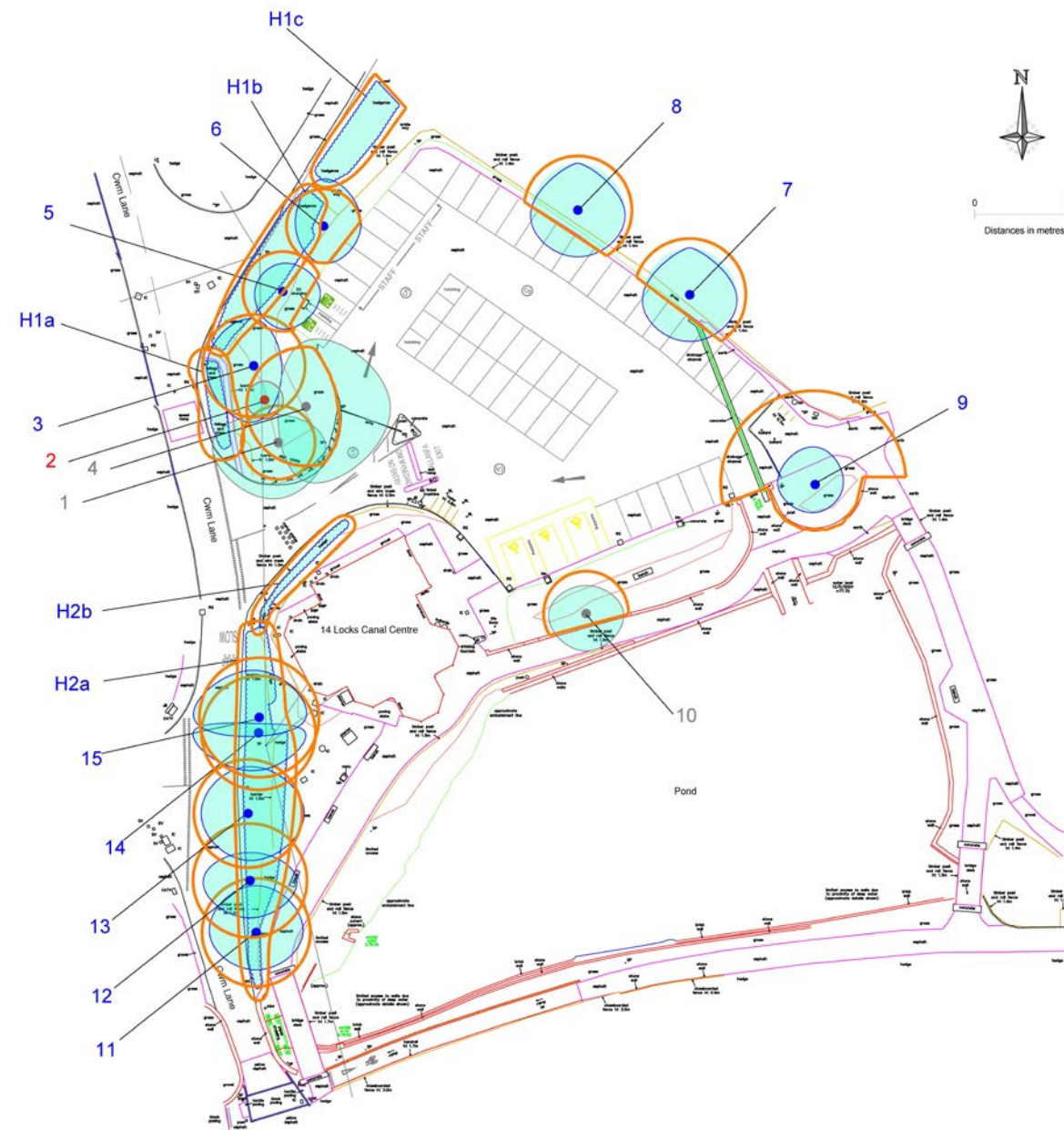
Due to the rural nature of the site numerous surveys were commissioned to understand all the site conditions, before further work commenced on the design of the building and its services.

These surveys have included but not limited to:

- Topographical survey
- Full utility survey
- Geoenvironmental and Geotechnical report
- Arboricultural
- Drainage CCTV survey
- Transport, parking survey
- Preliminary Ecology Appraisal

Shown here is the Arboricultural survey we received highlighting the tree species and condition.

The location of the trees has had a huge impact on the building position, and the buildings location and size has been designed to avoid all trees and roots.



Tree Number	Tree Tag	Species	Height (m)	Effective Diameter (mm)	Remaining Contribution (years)	Retention Category	Root Protection Area (m²)	Root Protection Radius (m)
1	1641	Goat willow	12	325	20-40	C 2.3	47.8	3.9
2	1642	Goat willow			/	U	0	0
3	1639	Grey alder	17	450	40+	B 2.3	91.6	5.4
4	1644	Goat willow	11	525	20-40	C 2.3	128	6.3
H1 a,b,c	NA	Hazel, holly, common dogwood, sycamore, hawthorn	2	200	40+	B 2.3	18.1	2.4
5	1645	Grey alder	12	350	40+	B 2.3	56.4	4.2
6	1646	Grey alder	11	325	40+	B 2.3	47.8	3.9
7	NA	Ash	16	475	40+	B 2.3	102	5.7
8	739	Ash	13	425	40+	B 2.3	81.7	5.1
9	1647	White willow	10	825	20-40	B 2.3	308	9.9
10	1648	Common alder	10	375	40+	C 2.3	63.6	4.5
H2a	NA	Hazel hawthorn, field maple, ash	6	200	40+	B 2.3	18.1	2.4
H2b	NA	Hawthorn	2	200	40+	C 2.3	18.1	2.4
11	1649	Sycamore	16	475	40+	B 2	102	5.7
12	NA	Field Maple	14	500	40+	B 2.3	113	6
13	NA	Field Maple	14	475	40+	B 2.3	102	5.7
14	1650	Sycamore	16	500	40+	B 2	113	6
15	NA	Sycamore	16	525	40+	B 2	128	6.3

Key	
● A - High	Trees to be considered for retention.
● B - Moderate	
● C - Low	
○ Root Protection Area	
Trees unsuitable for retention.	
● U - Fell	

Tree Key	
○ Crown Spread	Measured in North, South, East and West side of tree.
● T - Individual Tree, G - Group, A - Tree area, W - Woodland, H - Hedgerow	
Root Protection Area (RPA)	
A layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority.	

NOTES

This plan should be read in conjunction with the 24-075 Fourteen Locks, Rogerstone Tree Survey & Categorisation Report Dec 2024 (Amber SJ.)

The root protection area and crown spread as shown, are a constraint to development and both should form part of the construction exclusion zone (Construction Exclusion Zone)

The original of this drawing was produced in colour. A monochrome copy should not be relied upon.

Steve Ambler & Sons Tree Specialists Ltd
 Tec Arbor A., Dip Arb (RFS), F ARBOR A.
 Mob: 07961 322908
 Email: vaughan@steveamblerstrees.com

Client	Newport City Council
Surveyed by	VL
Date surveyed	Dec 2024
Drawn by	LP
Scale	1:250 when printed at A3
OS Grid Ref	327912 (E), 188606 (N)

INDICATIVE ONLY.
 PLEASE REFER TO ROOT PROTECTION TABLE.
 DO NOT SCALE FROM THIS DRAWING.
 CHECK ALL DIMENSIONS ON SITE.

REF. DRAWINGS	Topographical Survey
ASP2131-1	

TITLE

Tree Constraints Plan
 14 Locks Canal Centre, Rogerstone

DRAWING No: 24-075



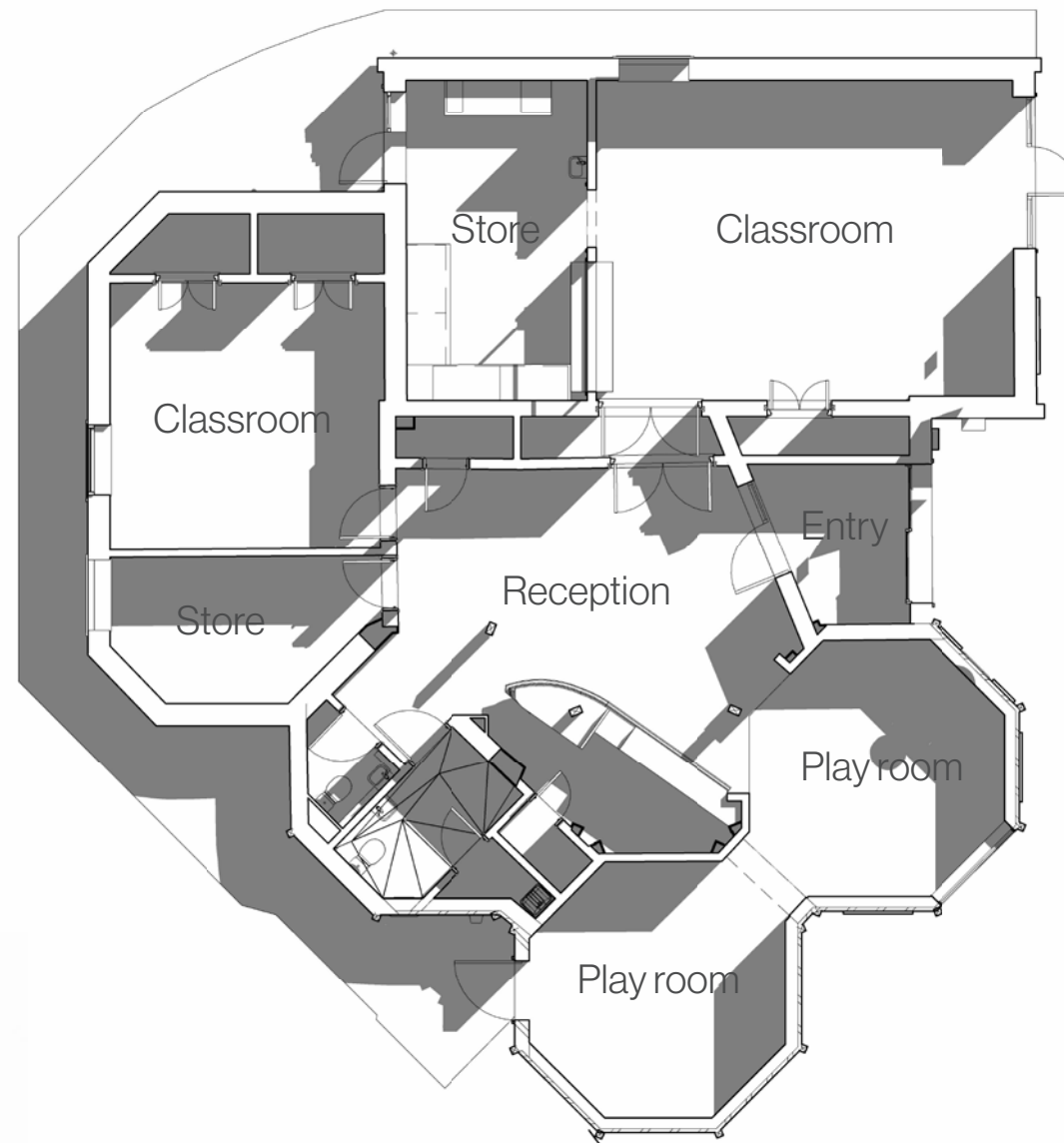
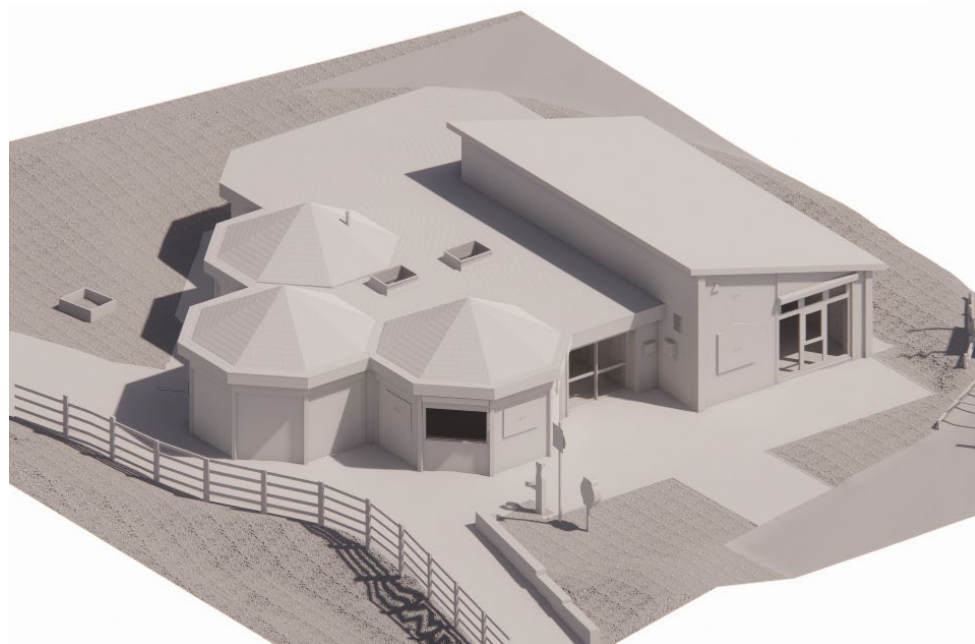
3.3 Site Analysis - Existing Building

The visitor centre is leased and operated by the Monmouthshire, Brecon and Abergavenny Canals Trust (MBACT). The Fourteen Locks Canal Centre, Shop, Museum and Dadford Tea Room is open 7 days a week 10am to 4pm

The existing visitor centre is suffering high maintenance costs and high running costs.

To support NCC de-carbonisation intent, the design team investigated re-development of the existing centre to reduce embodied carbon, however there is significant design limitation as to how the existing building can be utilised.

By demolishing the existing building, it provides opportunity to create a new visitor centre that is flexible in use, implements sustainability where proven to be cost effective, and reduce the long term cost of operating and maintaining the building.



3.4 Site Analysis - Opportunities

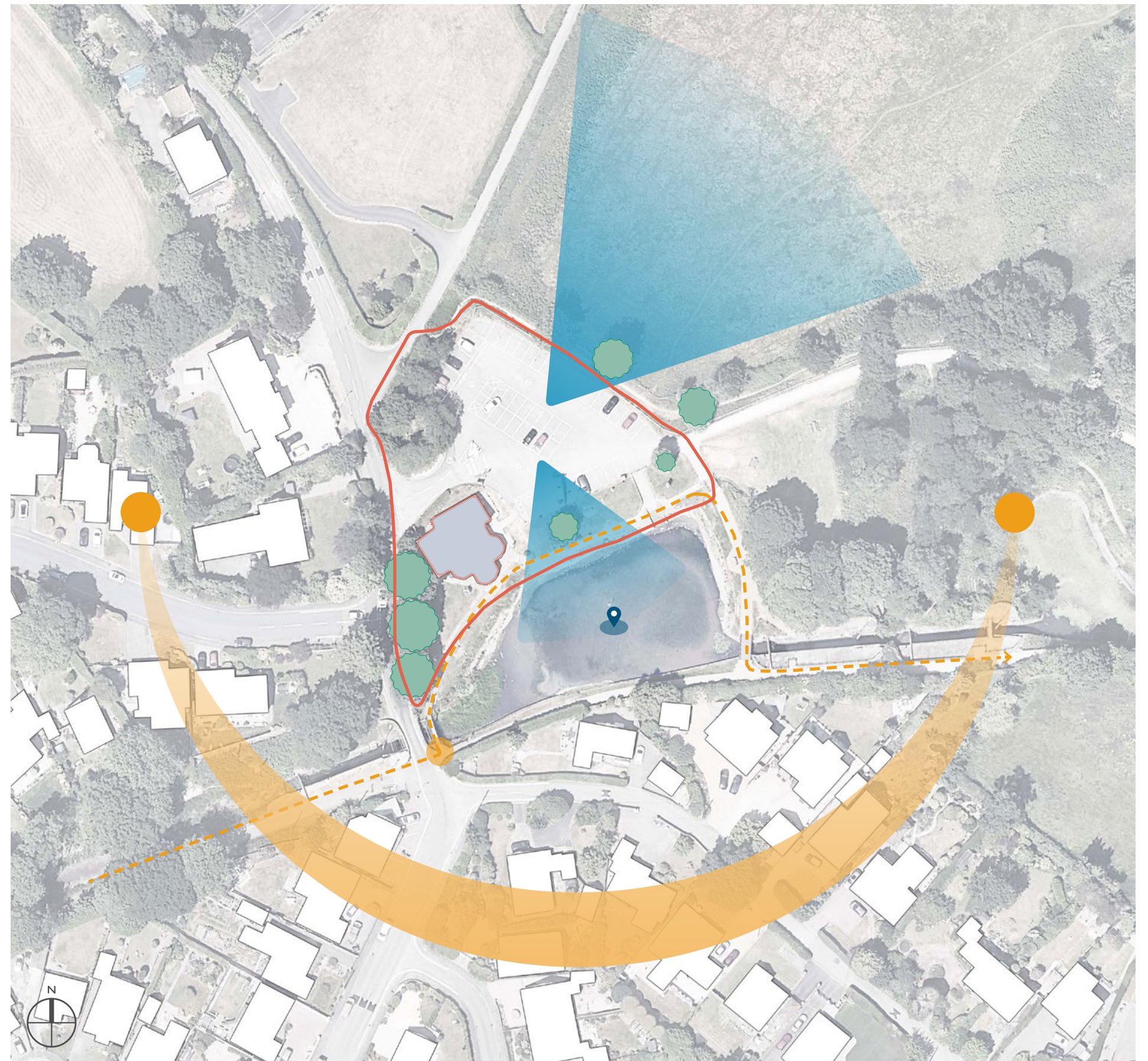
The site presents breathtaking views that should be leveraged to their full potential. To the south, a pond is seamlessly connected to The Monmouthshire & Brecon Canal system, while the northern east side unfolds an expansive downward sloping country field.

The existing canal centre suffers from high maintenance costs and physical limitations. There are opportunities to demolish and replace with a modern visitor centre that aims to utilise net zero principles, with a design that elevate and preserve the natural beauty of existing site.

Clear and visible signage is essential for ensuring effective guidance and reducing potential confusion.

Replacing the existing visitor centre presents opportunities to maximise the use of natural light to enhance the environment and energy efficiency of the space, creating a well-lit and inviting atmosphere.

- Site Boundary Line
- ▶ Key Views
- 📍 Points of Interest
- - - Key Pedestrian Route
- Key Pedestrian Access point
- Significant Tree
- ⬭ Fourteen Locks Canal Centre Demolished



Design Development



4.1 Community Consultation

We developed four presentation boards which were displayed in the current visitor centre for a month. The building users were then asked to fill in a comment form on each board.

Board One -

“What do you want from your Community Building”

Board Two

Building Place and Setting

Board Three

Building Materials

We then compiled a report from the results, met with NCC and amended the design to reflect the building users comments. These were mainly around the building materials, using timber, creating a bigger cafe than present and changing the view of the current cafe,

Fourteen Locks Visitor Centre
Newport

Public Consultation Comments

Board One: What do you want from this Community building?

Comments:

Cafe with more seating inside + out.
Slate shingles - roof
Walls - multi coloured stone
Meeting place for groups - Possible book swap area.

Board Two: Building Place & Setting?

Comments:

similar to that of Board 2 Plan.
View to lake and greenery
Next to small shop / history of 14 locks etc.

Board Three: Building Materials?

Comments:

As above - requiring less maintenance perhaps than timber (in longer term).

Many Thanks

Fourteen Locks Visitor Centre
Newport

Public Consultation Comments

Board One: What do you want from this Community building?

Comments:

GROUP ROOM FOR COMMUNITY ACTIVITIES
LARGER SPACE IN 14 LOCKS CAFE

Board Two: Building Place & Setting?

Comments:

6

Board Three: Building Materials?

Comments:

TIMBER SHINGLES

Many Thanks

Fourteen Locks Visitor Centre
Newport

Public Consultation Comments

Board One: What do you want from this Community building?

Comments:

A usable meeting / cafe space.
Retail area is too small + not as approachable space.
Extend seating is a worthwhile way to happen - not good looking.

Board Two: Building Place & Setting?

Comments:

Points as above!!

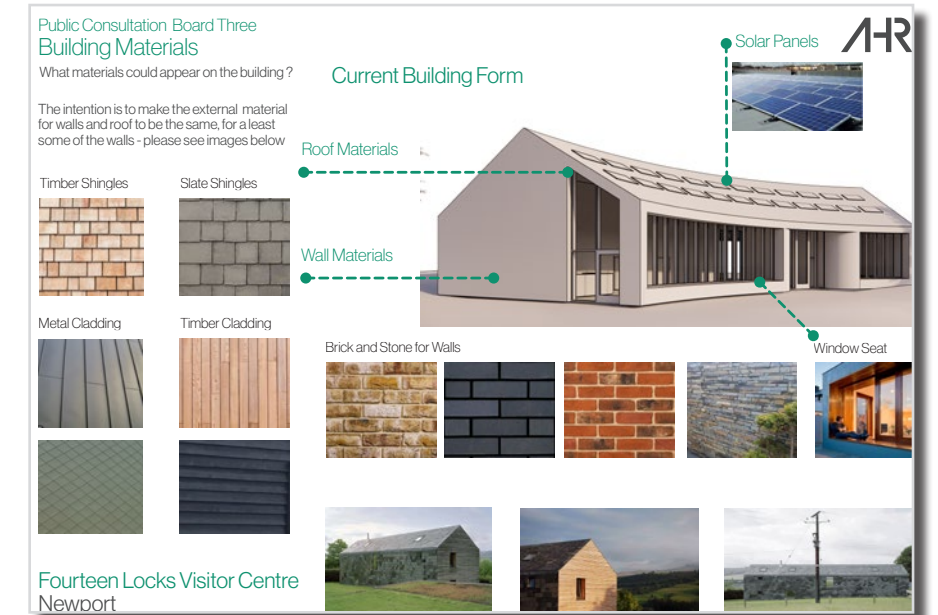
Board Three: Building Materials?

Comments:

Preferred Brickwork + timber, more in keeping with surroundings!!

Many Thanks

Selection of responses to consultation



Consultation Boards

4.2 Planning Pre-app

KEW the planning consultants for this project submitted a Planning Pre Application in September 2024.

We received the results November 2024.

The results were generally in favour of the proposal with many positives.

We had a number of actions which we have addressed in this proposal. A brief summary below :

- Parking survey completed
- New Cycle parking has been proposed including a new secure lockable unit
- No tree felling proposed– bat boxes have been added to building elevations and bird boxes for the trees on Cwn Lane
- PV panels are flush recessed in the roof shingles
- Green Infrastructure completed



Fourteen Locks Visitor Centre

Pre- Application Planning Statement
September 2024



Fourteen Locks Visitor Centre Pre-application Summary

Positives

- The nature and location of these buildings and the works proposed to them do not suggest there is a reasonable likelihood of an impact upon roosting bats, application is not required to be supported by a bat survey.
- No justification for a preliminary ecological appraisal (PEA) to be required.
- Conservation Officer is open to the demolition of existing visitor centre; however, conservation area consent will be required at full application stage.
- Conservation Officer suggests the proposal will blend in well with the surrounding environment and Welsh and natural slate is supported.
- Conservation Officer is supportive of the scheme.
- Planning Officer is generally supportive of the design.
- In relation to the conservation area the design and visual impact of the proposal is considered to result in significant betterment when compared with the existing structure.
- The proposed design would not prejudice the special character of the countryside nor that of the Conservation Area.

Risks

- Highways/Planning Officer require an assessment/survey of parking to be able to support the proposals (surveys of busy days, to establish how the facilities currently operate).
- Cycle parking is not proposed of an appropriate standard.
- Cycle use and storage should include "long stay" (enclosed and secure) parking for staff or activities on site.
- Tree felling may impact roosting bats which may require further surveys.
- Intensification of use needs to be full justified outside settlement boundary.
- Impact of proposal on local centres needs to be considered.
- SAB requirements and process.

Actions

- Review parking provision in line with NCC parking standards.
- Notice of 8 weeks to PROW officer if right of way needs to be closed.
- Full tree/woodland edge /hedge and boundary tree information should be submitted in accordance with BS 5837:2012 by a bona fide Tree Consultant.
- Tree/hedge information including Root Protection Area(RPAs) must be consistent across all layout plans .
- Construction Environmental Management Plan (CEMP) condition, to require the applicant to set out how contaminated surface-water run-off, pollution from plant and machinery, dust, noise and lighting etc. would be prevented from impacting the SINC and the species it supports (submit as part of application).
- Green Infrastructure Statement required.
- Further PV details required - panels should be flush with the roof tiles, and preferably matte black with no silver lining – Planning officer asks for them to be recessed.
- Check that 10% of all parking spaces provide electric vehicle charging points.
- Details of any/all external lighting will need to be provided for consideration by the LPA.



4.3 Security Consultation

Following discussions with the building staff around the anti social behaviour they were experiencing at night we had an early consultation meeting with the Gwent Police “Design Out Crime Officers” . With the intention to mitigate any further anti social behaviour on the site.

They recommended a number of items which we have included in our design:

- Bollards around the perimeter of the building.
- Cycle hoops to be added near outside cafe area.
- CCTV locations
- Ensuring the alarm covers all windows and doors.
- The cycle store to be low level to reduce the chance of people congregating under cover in bad weather at night.
- Space under the benching is solid to limit sleeping under the bench at night.

At the next stage they also recommended that during construction the buildings demolition will have to be carefully monitored and any temporary facilities will also have to be secure . AHR to include in any contractor tender pack.

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AHR

Notes

Issue date

28.01.25

Project

2023 00612.000
Fourteen Locks Visitor Centre
Security meeting

Date

28th January 2025

Place

TEAMS

Time

11:00

Notes by

Victoria Shepherdson - AHR

Present

Victoria Shepherdson (VS)

John Williams (JW)

Anthony Moore (AM)

Natalie Lang (NL)

John McDonnell (JM)

AHR

Newport City Council

DOCO Gwent Police

DOCO Gwent Police

DOCO Gwent Police

Distribution:

As above

Wojciech Zawislanski

David King

Hira Tierney

Iwan Evans

Callum Melrose

Ellis Mullane

SDS

AHR

AHR

KEW planning

Craddys

TC Consult

Numbers

Notes

Action

1.0

Police figures for the 14 locks area (not specifically the visitor centre) are 57 calls for the last few years varying from road bikes – cars parked up and people in the reservoir. Generally, not a high crime area and is in an affluent part of Newport.

2.0

Main concern for the police is around the demolition of the building and the construction.

- Stripping out of the existing building of all copper and wiring by travellers etc.
- Building being empty.
- Storing of materials during construction

#AHRCompany#

These minutes are a record of events.
Acceptance is assumed unless we are informed immediately upon receipt.

Page

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7.0

Following the guidance of Secured by Design the police would always recommend the use of PAS 68 bollards to protect against vehicle mitigation. These do come at an increased cost compared to alternative no security rated measures such as planters and fencing. Due to this careful consideration should be made regarding the overall threat, risk, and harm levels of a incident occurring with a vehicle and the requirement and specification level of preventative measures.

8.0

Bike storage – needs to fit for purpose – people would probably only be leaving bike for 20mins to 30mins. Perhaps could locate some benching around the cycle shelter so people can sit by the bikes and self-police or potentially move so nearer to the café, so people



9.0

There will need to be signage around the centre – CCTV, alarm and for the bikes left on the premises "not NCC responsibilities etc."

10.0

The alarm for the property will have to be agreed between the NCC and the Canal Trust. There may need to be specific alarm required by insurers or by the Canal Trust. Important to note is where the alarm goes back to, as this needs to be somewhere they will provide support and action. JW to start dialogue.

JW

11.0

The alarm will need to cover all doors and windows and there will also need to be signage to advertise this.

12.0

Need to ensure that we do not promote loitering out of hours, minimise comfortable places under shelter/roof soffit to sit. This will be around the main entrance doors and exit to the pond where the roof overhangs. Also need careful selection of bike storage to limit coverings. AHR to investigate this.

AHR

13.0

The space under the benching will also need to be solid to limit sleeping rough under the bench.

14.0

The Pump housing and bin storage need to be designed so that people cannot climb from these onto the roof. Maybe move away from the building.

15.0

Accessing the WC's from the meeting rooms out of hours will need to be considered as currently remote. Post meeting note, JW did not consider this an issue.

Page

Page 2 of 4

- High valuable items need to be secure away including machinery and diggers etc.

This would have to be highlighted in any tenders we sent to the contractors, and to ensure they have a dialogue with Newport police.

3.0

In the Newport area contractors have successfully used the PID CCTV dalek, PIDS, Perimeter Intrusion Detection System like units which record once they detect movements – usually 2 or 3 with crossovers in the compound area. DOCO to send over details.

JM

4.0

The placing and choice of CCTV cameras needs to be considered carefully.

As a minimum they need to be located as highlighted below including all external doors – entrance / exits. Sound is not important.

5.0

External lighting – discussed the need of the lighting requirements and the needs of the ecological assessment. Following the PEA the location does not have onerous implications for Bats and Birds . The police suggested that the lighting should be:

- From dusk to dawn
- All walkways
- Entrances & exits

Bollard lighting can be used for wayfinding but cannot be used for security

6.0

Bollards would be needed to protect the external façade of the building from cars crashing into the building, either from terrorism (very low level) or accidentally. Locations as drawn below:

Page

Page 4 of 4

16.0

The current situation with the barrier over the car park entrance and crocodile teeth for exit only – seems acceptable for going forward.

4.4 Sustainability Consultation

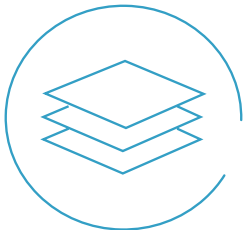
Newport City Council have a target to reach net zero carbon as an organisation by 2030. The NCC have defined ‘net zero carbon’ in construction to be: “the amount of carbon emissions associated with a building’s product and construction stages up to practical completion should be zero or negative”.

The NCC Built Environment Decarbonisation Standards Policy and the NCC Organisation Climate Change Plan 2022-2027 include a number of requirements that have informed the design of the Fourteen Locks Visitor Centre through stages 2 and 3.

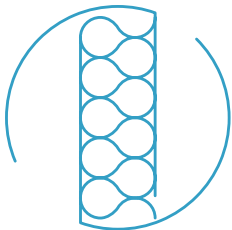
Due to the small scale nature of this building and the funding constraints and following consultation with the NCC Carbon Reduction team we are aiming for Net Zero sustainability principals without the certification.

We are also looking to better the NCC current U targets with the table below.

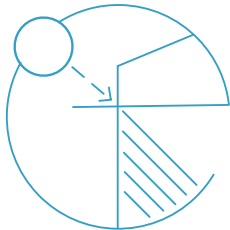
	Building RegsPart L	LETI Climate Emergency Guide - Commercial Offices	NCC Built enviroment Decarb Standards	Our Proposal
Roof U value - W/m2K	0.18	0.10-0.12	as LETI	0.12
Wall U value - W/m2K	0.26	0.12 - 0.15	as LETI	0.15
Glazing U Value - W/m2K	1.6	1.2 (double glazing)	as LETI	1.2
Floor U value - W/m2K	0.18	0.10-0.12	as LETI	0.12
Air Tightness - m3 /h/m2 @50Pa	8	<1	<3	<3
G value of Glass	0.48	0.4 - 0.3	as LETI	0.4



Embodied Carbon
Low embodied carbon materials are proposed for the largest usages.



Building Fabric
The building fabric minimises heat loss to lower heating and cooling system demand, lowering the centres operational energy demand.



Orientation
The building is orientated to maximise benefits of passive solar gain to minimise heating loads, and adequately shaded to the south to mitigate overheating and minimise cooling loads.



Ventilation
Passive ventilation to be employed as far as practically possible. Where mechanical ventilation is required, LETI targets will be adhered to.



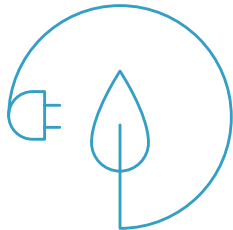
Monitoring
Metering and monitoring strategy to be designed to ensure accurate readings for all necessary energy uses can be taken hourly.



Nature-based solutions
Nature-based solutions have been employed, such as SuDs. Biodiversity to be improved as far as possible.



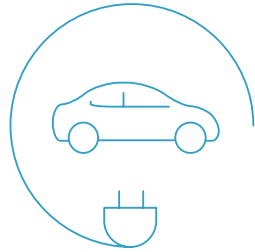
Fourteen Locks Visitor Centre
Sustainability Objectives



Operational Energy
Renewable energy production maximised on site with the installation of PV panels on the centre’s south facing roof. No fossil fuels are to be used on site, unless where exceptions are made by NCC. All electrical and water capacity to be analysed and capped at the required usage of the site.



Equipment
All equipment used in the centre to meet the relevant energy efficiency standards.

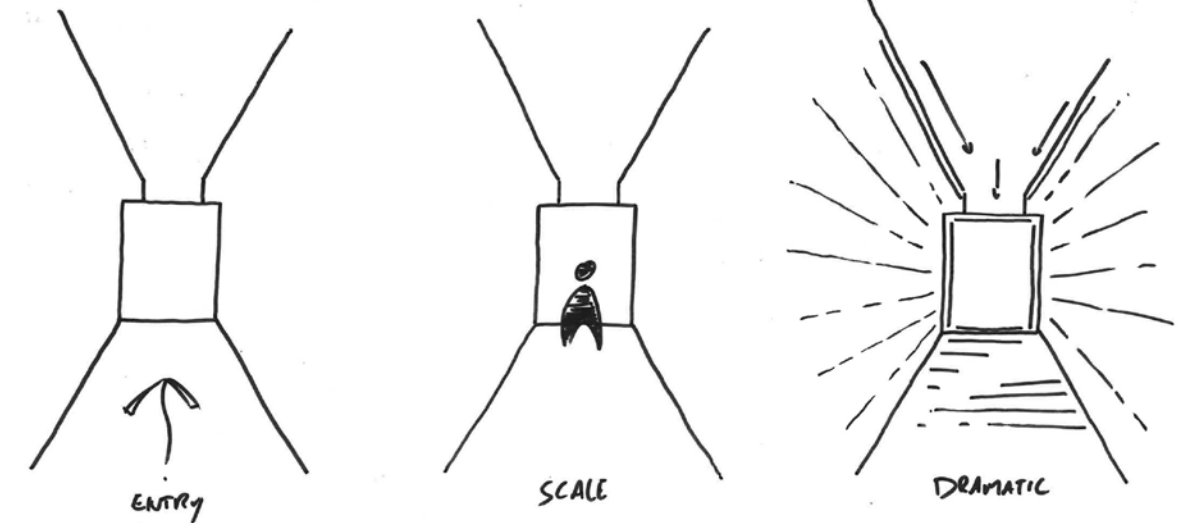


EV Charging Provision
There will be no net loss of EV charging provision at the site.

4.5 Building Form Concept

The new visitor centre entrance is arranged to create a connection with the canal. Inspiration has been taken from the repeating locks which form a strong design aesthetic. The narrowing of the canal, directing the view towards the lock gate. Height and scale of the lock gate and structure provides a contrast with the canal water level

The entrance hall will evoke the experience of travelling along the canal and through the locks between high sided and heavy weight walls, framing the view out to the canal and creating a dramatic experience for visitors.



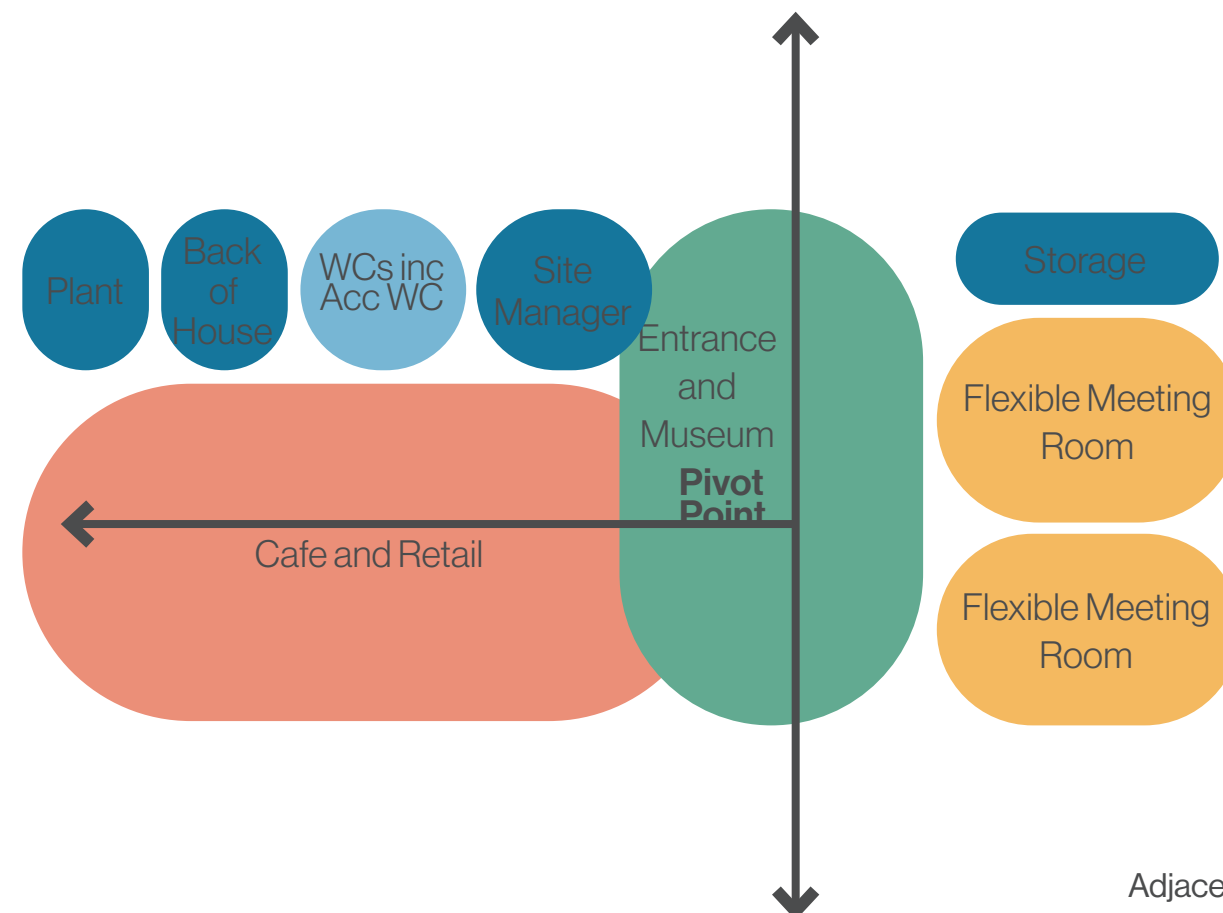
4.6 Area and Adjacencies

The building has been designed maximising the lake and canal views. Your entrance into the building gives an unobstructed view through to the lake and nature. Then we have located the cafe with a panoramic view from your seat.

The back of house (BOH) rooms have then been located immediately adjacent to this main space to maximise efficiencies with the circulation. The site managers office has been positioned so central to the building to ensure all visitors can be seen entering the building, and people viewing the museum exhibits in the entrance and museum space.

To ensure flexibility with the meetings we have provided the two rooms with a separating acoustic screen so can be opened up into one large space again with views of the lake.

Concept sketches



Adjacencies diagram

4.7 Concept Adjacency Diagram



Architectural Design

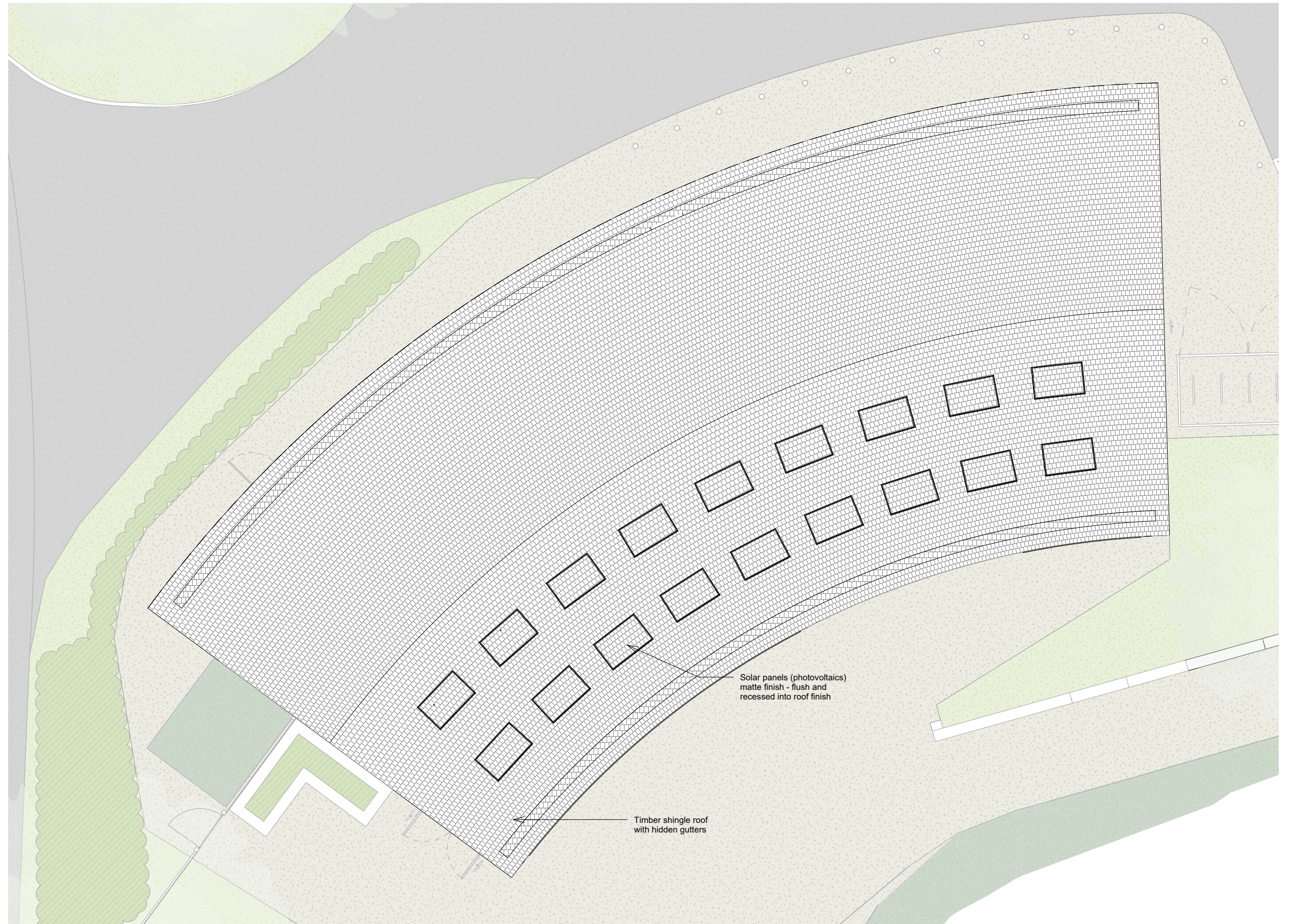


5.1 Proposed Plans

Ground Floor Plan



Roof Plan



5.2 Proposed Elevations



1 Proposed North Elevation

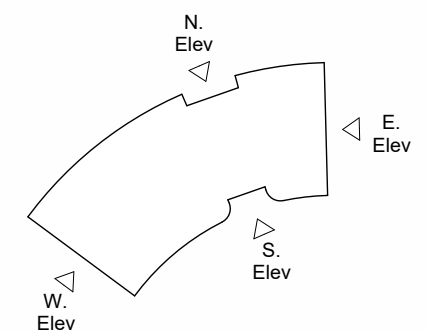
Signage size, text and font to be confirmed



2 Proposed East Elevation

Key

1. Walls - timber shingles
2. Roofs - timber shingles
3. Walls to entrance - timber battens
4. Windows and curtain walling - double glazed composite timber / aluminium
5. Brise soleil - timber to match cladding
6. Engineering grey brick soldier course below DPC
7. Bike store - timber clad with mesh doors
8. Bin Store
9. Bat box (recessed into cladding, only slot visible)
10. Solar panels (photovoltaic) - flush and recessed into roof, matt finish
11. M&E vents - size and position tbc. Colour to complement timber shingles





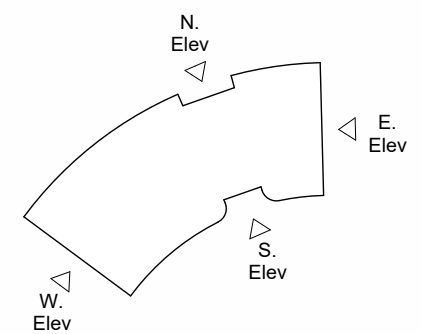
1 Proposed South Elevation



2 Proposed West Elevation

Key

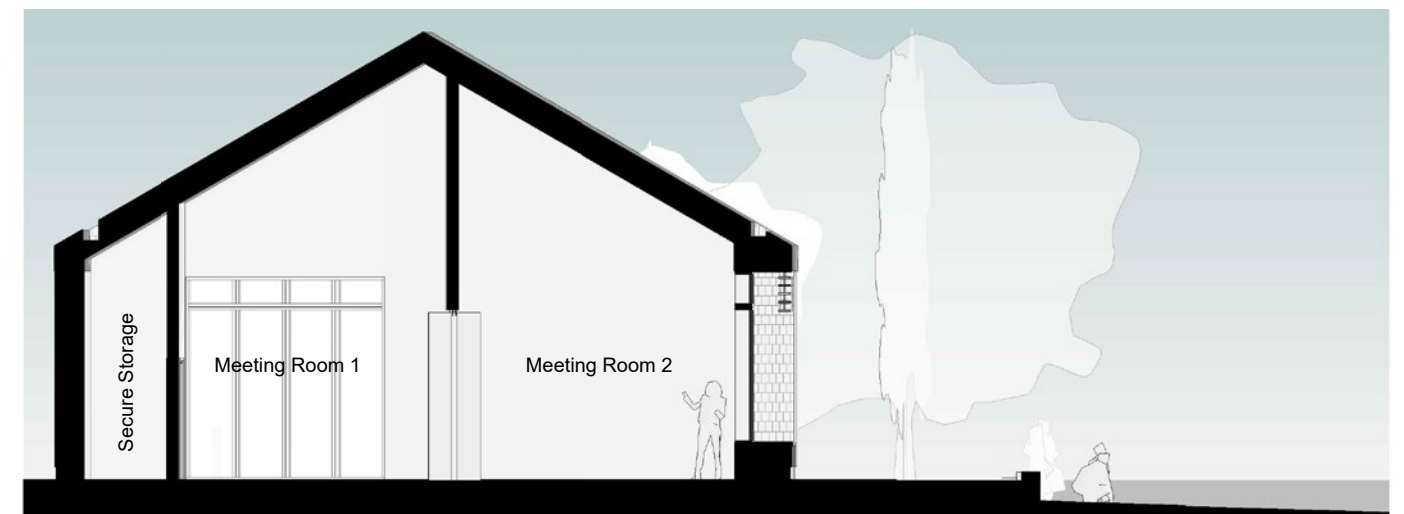
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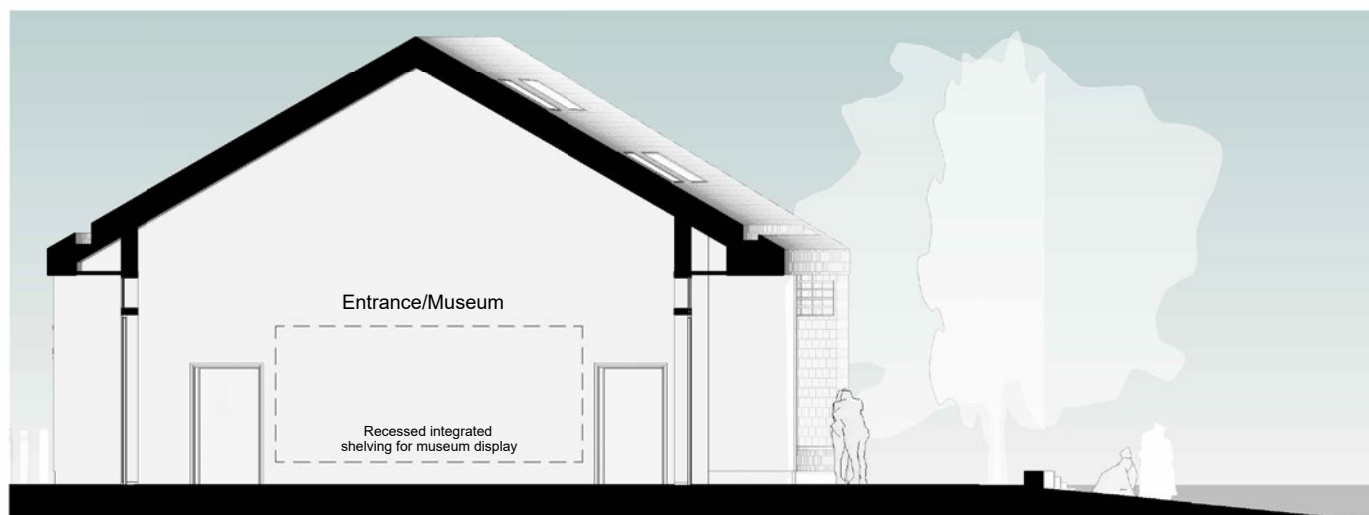
5.3 Proposed Sections



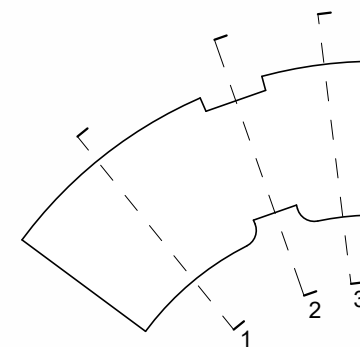
1 Proposed Planning Section 1



3 Proposed Planning Section 3



2 Proposed Planning Section 2



5.4 External Materials

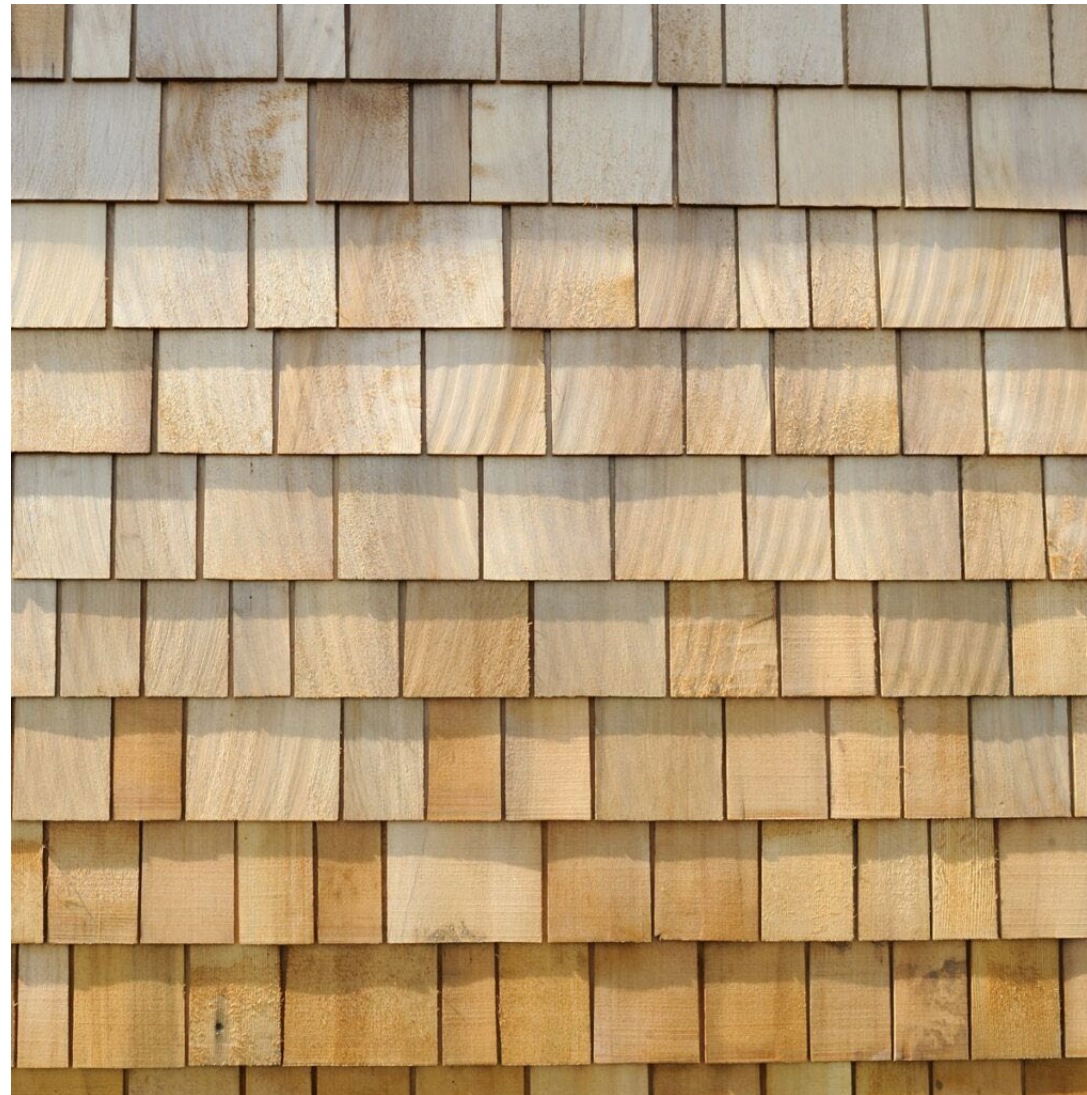
The external materials have been carefully considered for this project too not only be sustainable and embrace net zero principles but also to provide the aesthetic look we wanted for our design vision from our precedent studies.

The building is in a rural setting and the materials we used for the walls and roof had to blend into this environment. The timber not only looks attractive but has a warm welcoming feel, enticing visitors to come in. We chose to do the one material on the roof and walls to create one seamless looking building of architectural merit

We have used the vertical slatted timber of the same material as the roof and walls to mark the buildings entrances, the intention is to carry this material inside the building.

The double glazed composite timber / aluminium windows have been chosen to compliment the shingles and provide continuity in the buildings materials.

A grey soldier course at the bottom of the building provides a robust base to the building and the shingles.



Timber shingles for walls and roof



Vertical timber Slats



Grey brick base

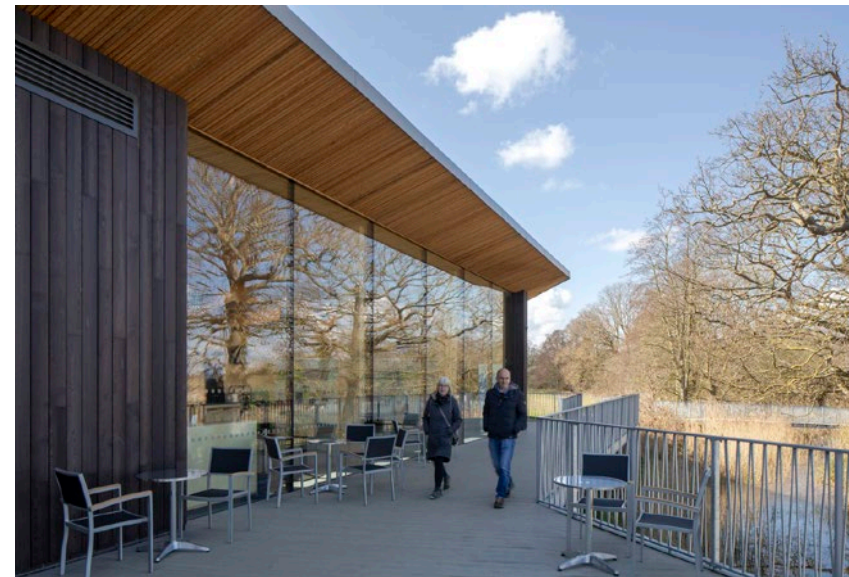


Composite windows

Building Precedents**Ty Pren by Feilden Fowles****Carlton Marshes Visitor Centre by Cowper Griffith Architects**

The expansive glazing and structural timber columns framing the external views, capturing the natural beauty of the site.

Timber materials - both timber structure and visible timber finish.
Provides warmth of natural material







View from footpath looking north-west



Interior view of the cafe

Landscape Design



6.1 Landscape Design

The landscape strategy has been prepared and informed by findings provided by Fenton & Reece who provided the applications Green Infrastructure Statement. Setting out baseline conditions and proposed Green Infrastructure (GI) mitigation.

Ultimately, the landscape proposals at Fourteen Locks have primarily focussed on a light touch approach. This has been to ensure proposals complement the localities natural countryside character and distinctiveness.

Recent improvements at Fourteen Locks have been acknowledged during the design process but if during construction existing elements are impacted matching materials etc. have been proposed. Meaning where proposed elements meet with existing interfaces these should be quite seamless.

No tree felling is required to build the new centre. However, where construction encroaches on existing mature tree planting appropriate protection of root zones in line with findings from the arboricultural report will be implemented. Additional tree planting enhances the existing tree line and along with the proposed ornamental shrub and rain garden species these plantings will consist primarily of native species. The strategy has been to enhance known ecological benefits at site.

A SUDS basin forming part of the wider surface water strategy has been positioned within an existing earth bank. The swale and wider area will be seeded with an appropriate seed mix for the environment. Additional shrub planting will be planted to the edges of the basin.

Finally, a series of bat boxes will be required to comply with the Wildlife and Countryside Act 1981 ensuring no net loss of biodiversity. These will be implemented with one being constructed as part of the architecture itself with several further boxes suitably attached to elements within the wider landscape.







Retained landscape materials.



Secure bike storage

Visitor bike parking

Examples of SUDS planting palette

Tree Planting Palette

Access

7.1 Accessible Design Approach

The building's design adopts a holistic approach to accessibility, ensuring that all users can navigate the site with ease and comfort.

By providing step-free access throughout, the design accommodates diverse needs and promotes an inclusive environment. This comprehensive approach extends beyond pedestrian access to include vehicle and cycle considerations.

Accessible vehicle parking is positioned to facilitate easy entry and exit, while ample cycle parking and facilities support sustainable transportation options.

The design also integrates essential infrastructure, such as refuse and utility areas in a manner that minimizes visual impact and maximizes functional efficiency.

Overall, the focus on accessibility enhances usability and ensures that the landscape design supports both functionality and ease of access for all individuals, creating a welcoming and practical environment.

The following pages provide additional details on the following:

- Pedestrian Access
- Inclusive Design
- Cycle and Vehicle Access
- Refuse Access



7.2 Vehicle & Cycle Access Strategy

Vehicles can access the site from an existing entry point on Cwm Lane. Accessible parking is provided for the public to the east of the building along with standard car parking spaces. Please refer to the accompanying transport statement for car parking considerations.

Cycle parking provisions:

- 10 no cycle spaces adjacent to building. Covered, secured & lockable (for staff/ long stay use)
- 3no. new Sheffield hoops for visitor use (6 bike spaces), located on the canal side of the building with good visibility to the cafe and entrance
- Retain 3no. sheffield hoops on the east of the car park site

Car parking provisions:

- 38 standard spaces
- 2 EV spaces
- 3 disabled bays
- Total = 43 spaces

7.3 Refuse Strategy

The external bin store is located adjacent to the cafe to the west of the building, near to the site entrance for vehicles.

The bin store is enclosed and screened on both canal and road elevations with both fencing and ornamental tree and shrub planting that reduces any visual impact.



7.4 Pedestrian Access Strategy

The key pedestrian access points are designed to be fully DDA & ADM compliant.

Sloped access within the landscape and level access entrances are provided to ensure step-free pedestrian access to all areas.

7.5 Inclusive Access Strategy

The design has been developed with inclusivity in mind and includes the following features:

The site provides multiple step-free entrance and exit locations.

Accessible parking is provided for the public to the east of the building. With step free access into the lower level.

Publicly accessible toilets will be provided at ground floor. Toilets cater to all and the building provides accessible and individual WCs.

The building finishes consider a variety of users requirements such as colour contrast for visual impairment, while also reducing overstimulation and providing a calm and welcoming environment.

-  Level Access Point
-  Level Access Point (deliveries)
-  Level Access Point (cafe)
-  Publicly accessible WCs
-  Accessible parking spaces



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