RIBA STAGE 2 REPORT

343 - INCHREE BARN



Revision / October 2024



RIBA STAGE 1 REPORT

SIGN-OFF DOCUMENT

Project - Inchree Barn

Project Number - 343

Address - Inchree Barn

Righ Crescent

Inchree Onich PH33 6SG

Client - Nether Lochaber Community Association

Issue date - 07.10.2024

Prepared by -

Andy Milne
INCH Architecture

Signed by -

Alisdair Clements INCH Architecture

The following people will be required to sign-off this report

1)

Name: ___

Lucy Cooke

Nether Lochaber Community Association

*Refer to 1.3 for meaning and relevance of sign-off

CONTACT INFORMATION

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- 1.1 INTRODUCTION
- 1.2 BRIEF
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1.1 INTRODUCTION

The Nether Lochaber Community Association (NLCA) have instructed INCH Architecture and the design team to progress to the Stage 2 of the proposals for Inchree Barn. The Stage 2 proposals are a development of the work undertaken during the Stage 1 study completed in 2022 and as such should be read in conjunction with the Stage 1 Report.

The purpose of the 'Stage 2 Report' is to;

- Develop the Stage 1 proposals to further interrogate the layout to meet the NLCA's briefing requirements.
- Establish initial structural and mechanical + electrical engineering requirements for the project.
- Develop a Description of Works to reflect the developing design proposals.
- Develop the cost plan to reflect the developing proposals and detail included.
- Undertake initial surveys to support a future planning application.
- Set out the risks and opportunities of the project to permit NLCA to take informed decisions.

Regular correspondence and meetings were held between members of the Design Team along with meetings with the NLCA to enable the preparation of this report.

1.2 BRIEF

This project is led by the Nether Lochaber Community Association (NLCA), a registered Scottish Charity (SC047546).

Within the last year the association have taken ownership of the derelict barn at the head of Inchree. The barn is to proposed to become a new community hub for the villages encompassed by the Nether Lochaber area. The community hub is to provide flexible space offering new opportunities to the community.

INCH Architecture have been asked to develop these proposals in a manner which will support the NLCA in submitting future funding applications.

1.3 MEANING & RELEVANCE OF SIGN-OFF

The meaning of sign-off in this context is that all parties sign-up to the project in terms of the general project scope and direction, on which it will be developed and progressed, and that all parties requirements are appropriately recorded to ensure they can be incorporated. The relevance of sign-off is that if fundamental parts of the report are changed then control procedures will be put in place to register the changes.

Establishing change control procedures will enable the design to be developed on a secure footing while alterations to the brief are made. Change control mechanisms are essential because of the pressing need to work as closely as possible to the project milestones, programme dates and cost plan. Please note where change control procedures are required, additional fees may be required for any time associated with abortive work or development beyond that agreed at appointment.

Before sign-off, the opportunity for comments from all parties will be provided to ensure the content is a robust and meaningful basis for going forward.

In signing off this document the NLCA indicate their approval to the detail in the document submitted but recognise that this is just the latest sign-off report in an ongoing design process. Future reports will be produced by the Design Team as the design is developed allowing all parties the opportunity to comment prior to sign off. It is the intention for staged sign-off reports to be issued at following work stages:

- Stage 3 Spatial Coordination
- Stage 4 Technical Design
- Stage 5 Manufacturing and Construction

1.4 ITEMS OF FIXITY

With reference to the project, the following items require to be agreed & fixed at the end of this stage:

- Agreement in principle of the site arrangement and building massing.
- Agreement in principle of the layout for the new building.
- Agreement in principle on the description of works required for the building.

Items under consideration but not fixed at this stage are:

- Outline architectural specifications
- Outline landscaping specifications
- · General appearance / building concept
- · General material specification
- Outline budget

Matters Yet to be developed

- Consultation with Building Control.
- · Consultation with Utility Providers.

The nature of building design is that it is a fluid process and subject to change but it is important to arrive at points of fixity throughout the process so that decisions can be advanced on an agreed basis. As the design progresses and as more detail becomes available, the Design Team will consult further with the NLCA in order to ensure that the Client's requirements are always fully incorporated into the scheme

1.5 THE DESIGN TEAM

The design team for the project is as follows:

Lead Consultant / Architect - INCH Architecture & Design Quantity Surveyor - Samuel and Partners Mechanical and Electrical Engineer - Butler Consulting Structural Engineer - Narro Associates

Further Consultee's
Bat Survey - David Dodd's Associates Ltd
Rot Survey - Peter Cox
Parking Survey - MTS McGregor Traffic Solutions

1.6 LIMITATIONS

The scope of both the Services Engineer and Structural Engineer were limited to fit within available budgetary restrictions. Their input, whilst limited at this stage, is sufficient to inform the planning process. The detail of their proposals will now be developed as part of the Stage 4 works.

The cost plan has been prepared to reflect the developed Stage 2 proposal along with initial engineer's mark-ups and comments. It has not been through a value engineering exercise or alignment with any budgetary requirements to date, which will feed into the Stage 3 and Stage 4 development.

1.7 KEY RISKS

The close proximity of the feature tree in front of the new entrance to the barn means that detailed tree survey information from an arboriculturist will be important to obtain and review in relation to the proposals set out in this report.

Whilst the pre-application feedback was positive, further information is required to submit with a full planning application as detailed in section 4.14.

Site observations and local knowledge of existing utilities would suggest the site local is relatively well served. However, a full utilities search will be required at Stage 4 to understand the full extent of new connections required.

The deteriorating condition of the existing barn is a key risk with NLCA having taken ownership of the building. NLCA should maintain security of their asset and look to prevent its deteriorating condition any further where possible.

1.8 EXECUTIVE SUMMARY

Architecturally, the detailed proposals demonstrate the vision of NLCA and that the building could support future redevelopment with the agreement of the relevant authorities through the normal consents process.

The investigations and design proposals demonstrate that the building:

- could accommodate remodelling and extending to create a new community hub, redeveloped public provision and increased footfall
- could support of the future plans of the organisation as have been briefed/ demonstrated in this report.

A cost plan has been prepared for construction costs only. The Cost Report is based on a range of typical build costs for similar developments with adjustments for assumed specification where required. Therefore these costs should be viewed as indicative pending more detailed design development.

Total construction cost = £1,080,000.

The estimated construction costs outlined in this report include for a contingency of 10% and inflation relevant to the programme set out in Appendix B of this report. The inflation is assumed up to Quarter 4 2025 and the contingency noted takes into account the potential risks.

The design team look forward to continuing our collaboration with NLCA as the project develops.

1.9 PROJECT INTRODUCTION

The Nether Lochaber Community Association is a local, voluntary association set up with the aim of improving the local area for the benefit of those who live there. A Steering Group was formed to focus on redeveloping the old barn at Inchree.

Inchree is a small hamlet which forms part of a bigger village settlement with Onich, Corran and North Ballachulish. The barn stands at the head of Inchree next to existing parking for the woodland walks.

INCH have been tasked with developing the brief prepared by Community Links Scotland to form a new community hub building which will offer opportunities for the community to gather and meet, and facilities for a greater range of activities.

The brief states the need for flexible space which can be utilised in a variety of ways for a range of different activities. The scale of the existing building and site dictate that the resultant building will be small in nature with a single key community space.

The brief looks for the building to be able to act as a cafe space at various time of the day, whilst at the same time offering community facilities.

Features of the existing building should be retained where possible and sustainable approaches adopted to reduce the energy use and therefore running cost of the new facility.









- 2.1 SITE HISTORY
- 2.2 INCHREE ANALYSIS
- 2.3 PHOTOGRAPHIC ANALYSIS
- 2.4 OPPORTUNITIES



2.1 SITE HISTORY

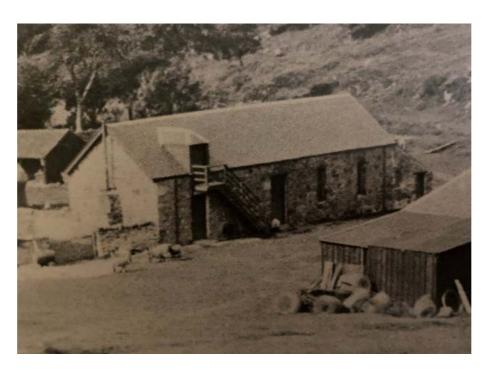
The barn dates back to the eighteenth century when Nether Lochaber was divided into three large farms at Inchree, North Ballachulish and Callart. The historic maps and photos adjacent show the barn sitting amongst a cluster of agricultural buildings alongside the main house. The more permanent stone buildings shown in these images still exist.

The Barn proposed for redevelopment is a traditional stone building with strong gable forms and a locally sourced slate roof. The area of Ballachulish was one of the major slate quarrying areas in Scotland with slate from the local areas used on roofs all over Scotland.

The original barn featured an external stair with dormer access to a first floor area, this has since been removed with a first floor area currently accessed internally.



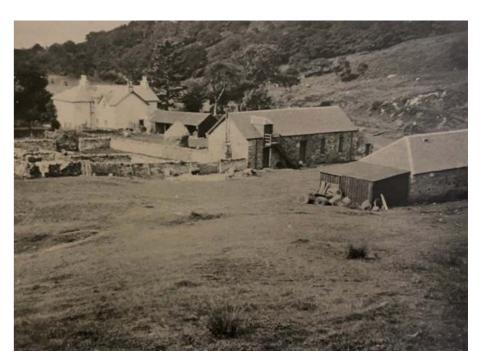
1888-1913 MAP
NATIONAL LIBRARY OF SCOTLAND



HISTORICAL IMAGE CLIENT SUPPLIED PHOTO



1885-1900 MAP
NATIONAL LIBRARY OF SCOTLAND



HISTORICAL IMAGE CLIENT SUPPLIED PHOTO

2.2 INCHREE ANALYSIS

Inchree is located on the west coast of Scotland and forms part of a linear cluster of villages with Corran, Onich and North Ballachulish along the shore of Loch Linnhe.

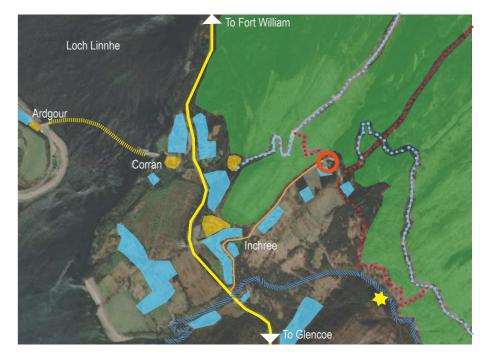
Inchree is well known for its waterfall and forestry walks attracting locals and visitors to the area. Land use locally is primarily forestry and residential. Adjacent to the site in the sister barn building is a commercial adventure sports venture which also attracts people to the site.

The barn is sited on the north edge of the site, opening up the land of the site to the south. There are two trees on the site, one greatly more prominent than the other. The site is primarily accessed from two points; along the road from the village and through the trees from the adjacent car park.

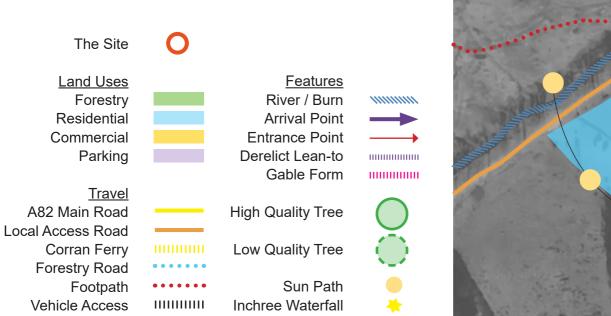
The barn itself is currently entered from the north edge. There is a derelict lean-to on one end of the building. The building is a traditional gable formed stone barn with a local slate roof.

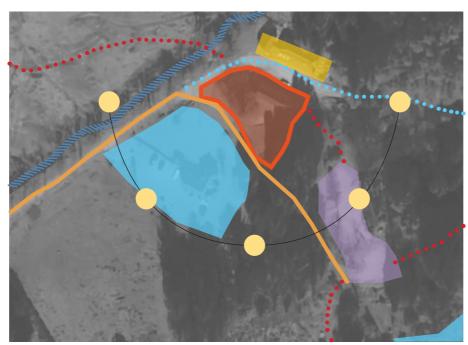


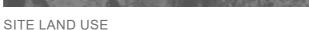
SITE LOCATION

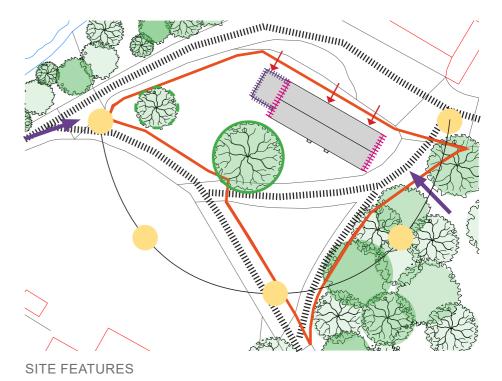


VILLAGE LAND USE









INCHREE BARN | OCT 2024

2.3 PHOTOGRAPHIC ANALYSIS









VIEW ALONG APPROACH ROAD

APPROACH FROM THE CAR PARK FOOTPATH

SITE IN FRONT OF THE BARN







DILAPIDATED LEAN-TO



VIEW OF REAR OF THE BARN FROM FORESTRY ROAD



DOMINATING TREE ON SITE

2.3 PHOTOGRAPHIC ANALYSIS







EXISTING STAIR ACCESS





INTERIOR WORKSHOP SPACE



EXISTING ROOF LIGHT













CORNER STONES

STRUCTURAL BUTTRESSES

2.4 OPPORTUNITIES

The existing barn is in a dilapidated state as the photos on the previous pages illustrate. It has been out of use for many years and lies in a state of disrepair.

The site and the redevelopment of the barn offers a number of opportunities architecturally which could be developed:

The opportunity to redevelop a dilapidated building, bringing a disused, deteriorating piece of architectural heritage back to life for the benefit of the community.



The opportunity to extend and increase the facilities available at the barn.



The opportunity to utilise the land adjacent to the site to create useable landscaped space which functions with the building use.



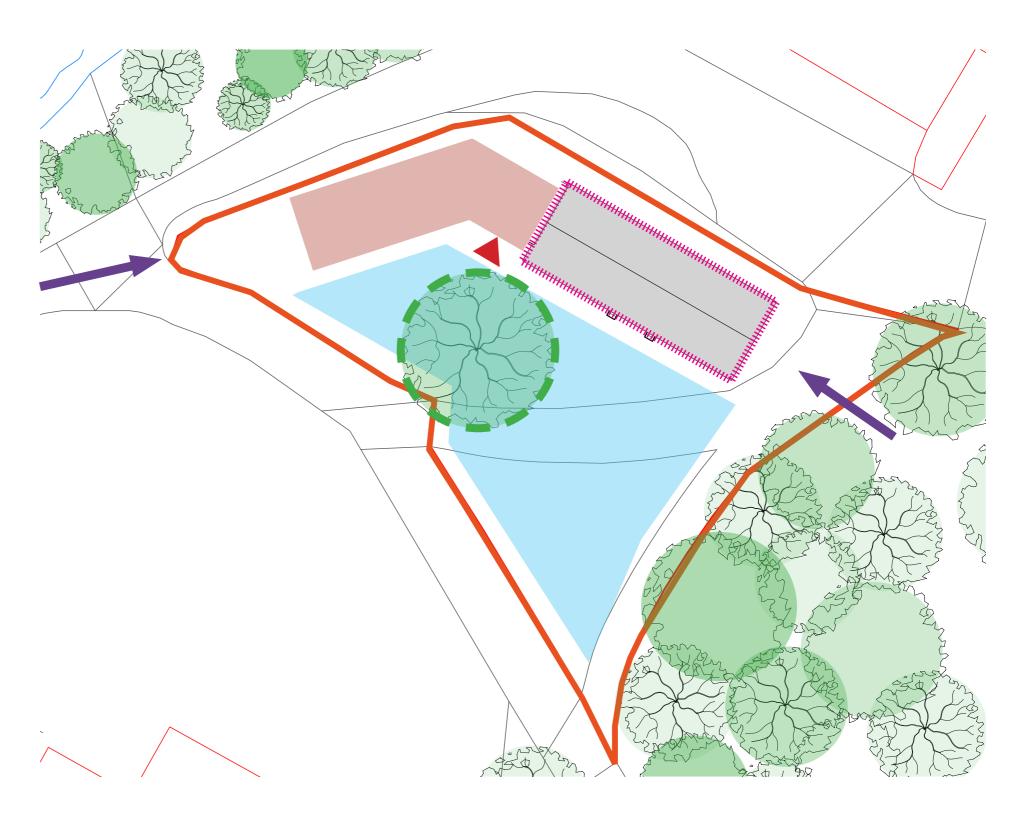
The opportunity to create a focal point of the arrival points to the building.



The opportunity to form a new entrance relating to the new public space.



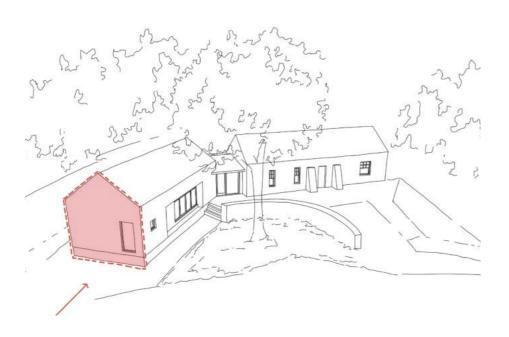
The opportunity to retain and make a feature of the large existing beech tree on site.

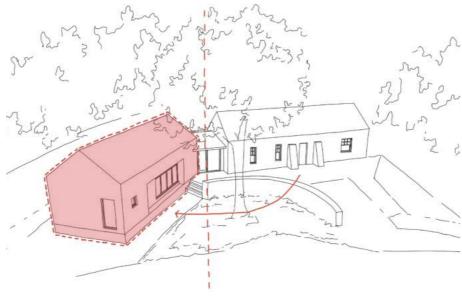


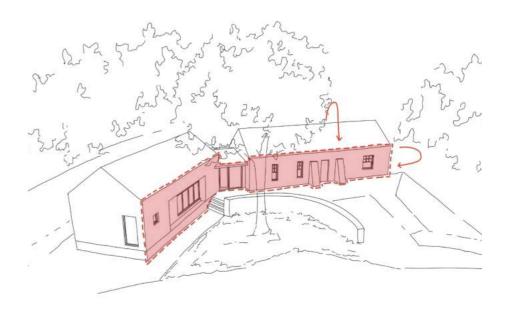
- 3.1 BUILDING APPROACH
- 3.2 BUILDING FORM STUDIES
- 3.3 CLUSTER BUILDINGS
- 3.4 MATERIAL STUDIES
- 3.5 EXTERNAL STAIR MASSING STUDY



3.1 BUILDING APPROACH







ARRIVAL

Creating a clear sense of arrival is important to give the building a welcome and a presence. An arrival feature helps orientate visitors upon reaching the building and signifies a public space.

In the case of the Inchree Barn this is done by a strong gable feature which addresses all arrivals (walkers, cyclists or drivers) as you approach along Righ Crescent. The gable is largely blank as a result of the ancillary function of the extension, however a single feature window has been introduced into the office and helps articulate this elevation. The blank gable offers the opportunity to incorporate signage and/or public artwork to address visitors upon arrival.

FORM

Once the lean-to addition is removed the original barn is a simple, traditional form which reflects the local vernacular. To increase the footprint it is proposed to replicate this form using the same proportions, roof pitches and heights. In doing so this ensures the extension is proportionate in scale, reflects it's immediate and wider context and is suitable for the site.

Reading the two barns as separate forms is important for the clarity of the building and allows the original barn to stand out and read as the main focal point. The smaller less significant structure forms a link between the two forms and creates a natural entrance point.

FRONTAGE

The key move to opening up the barn as a public building is to flip the entrance from the North to the South. This allows the frontage of the barn/s to now address the landscaped green space and the focal point tree which dominates the site. Changing the frontage to this facade means on arrival to the site the entrance and public space is more visible helping with natural orientation.

The southerly aspect of the newly orientated entrance offers the opportunity for the cafe / barn activities to open out into the site and for the landscaped space will take advantage of southerly daylight.

3.2 BUILDING FORM STUDIES

With the site being restricted by the existing tree the layout of the building is somewhat dictated to follow the cranked "L" shaped plan form.

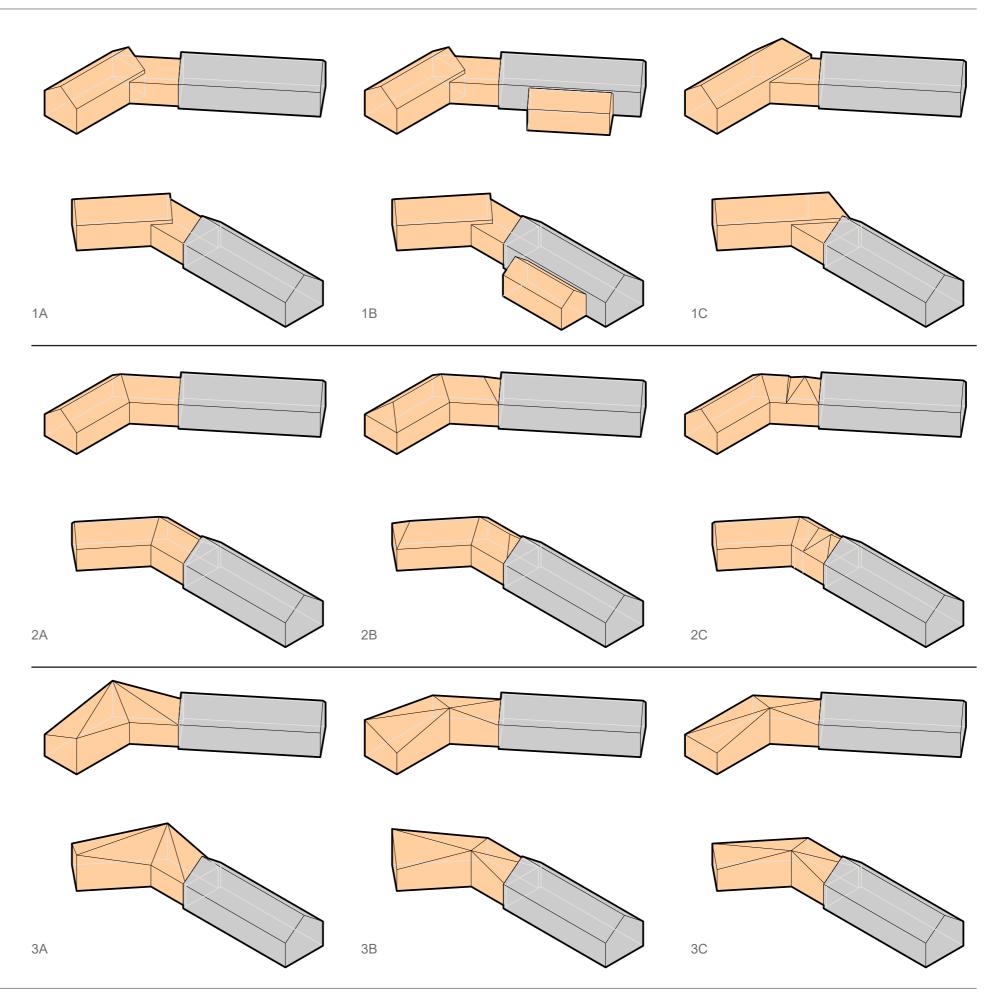
Diagrammatic massing studies were used to explore potential form options for the building. Looking, primarily at how the roof scape and massing could be manipulated to offer different solutions.

Options 1a, b + c look to develop the idea of two separate buildings linked with a connecting piece. Option 1b explores the idea of an extension to the front of the barn. The existing tree restricts how large this could be and whilst offering additional floor space in reality due to multiple arrival points it becomes more circulation than useable space. An extension to the front would also lose the existing barn facade which the project is looking to celebrate.

Options 2a, b + c work slightly differently and explore the idea of elongating the existing form rather than creating a break in the massing. 2b + c do propose a break in the roof as the extension meets the existing barn however the overall mass still reads very much as a larger form.

Options 3a, b + c look at a more complex roof driven by exploring options for the new feature gable addressing you on arrival to the building along Righ Crescent. These options still form pitched roofs and present varying elevation shapes.

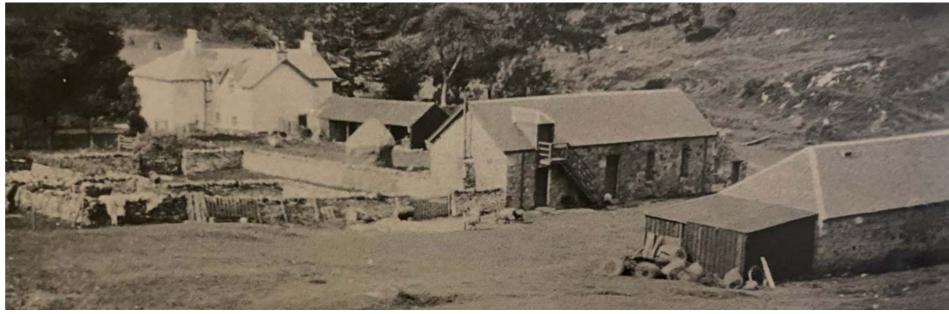
Whilst the option 3's offer interesting forms, they begin to dominate and detract from the existing barn which is intended to be the focal point of the development. The option 2's make the massing of the building appear longer and larger as there is minimal break in the form. The idea of a cluster or pair of buildings explored through the option 1's help shrink the massing of the extension and feels the most appropriate approach in the context of the site.



3.3 CLUSTER BUILDINGS

The idea of a cluster of buildings draws parallels with the historic context of the barn as illustrated by the top image. Using smaller forms to make up a larger building helps to break down scale, allows views through and can bring emphasis to certain parts of the building.

The examples below begin to look at these ideas and talk the same language of form and massing that is proposed for the Inchree barn. They each breakdown what could be a bigger space to into smaller elements clustered together. They offer variety within the roofscape, different approaches to materiality and help address the geometry of the building.



INCHREE BARN



CUDDYMOSS - ANN NISBET STUDIO



HOUSE LESSENS - McGONIGLE McGRATH



EGGSHED - OLIVER CHAPMAN ARCHITECTS



LOCHSIDE HOUSE - HAYSOM WARD MILLER

3.4 MATERIAL STUDIES

As illustrated previously, the concept is that the extension building replicates the existing barn in terms of form and scale. Materially the idea is to take a different approach to allow the quality of the historic barn to stand out. The following pages explore different material approaches to the new barn.

The proposal is for the new barn to be timber clad to reflect the woodland setting. Timber as a rich, natural product which is well suited to the environment of the barn and shall sit well alongside the stone barn.

Option 1

This option explores timber shingles as a cladding material. The shingles create a layered, textured finish through a variety of widths. The tiled nature of the shingle builds on the traditional slate tiling of the area. Larch cladding would be proposed within the recessed seat area, this would offer a smoother surface to sit against.

Option 2

Option 2 looks at Scottish larch cladding which will silver over time. It offers a variety of options to create texture and variation in cladding direction and detailing.









CHEUVREUX MARINOT COUTINE LITTLE PEEK - BERMAN HORN STUDIO WAW ARCHITECTES



KINGSGATE SCHOOL SARAH WIGGLESWORTH ARCHITECTS



HEN HOUSE - RURAL DESIGN

3.4 MATERIAL STUDIES

Option 3

This represents the simplest option with vertical larch cladding to illustrate how a crisp, clean finish could be used to contrast the textured stone finish of the existing barn.

Option 4

Option 4 explores a more contemporary cladding finish, again using the larch cladding but introducing a diagonal finish. This results in a dynamic, modern aesthetic which again would offer contrast to the existing barn.









MONACHYLE BEAG - LINE ARCHITECTURE









HEIMSPIEL - FRANZ ARCHITEKTEN

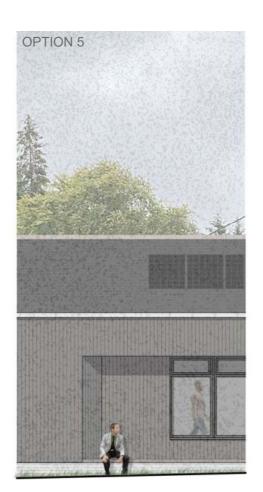
3.4 MATERIAL STUDIES

Option 5

Black timber cladding would create a strong bold form to sit alongside the existing stone form. As the precedent image illustrates this can work well and complement the quality of the stone.

Option 6

Again playing with textures and orientation of timber cladding to create a detailed and fun facade. Strong protruding verticals break the facade into panels which can then be used to set out openings and recesses.













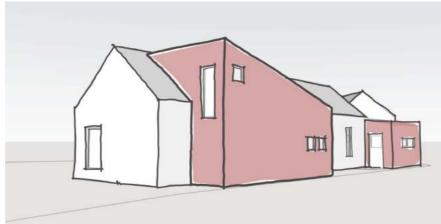


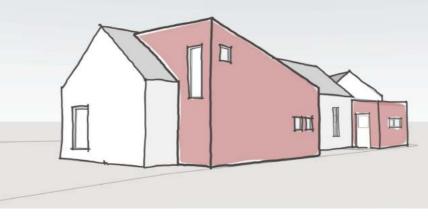
WENDOVER WOODS FACILITIES - RE-FORMAT

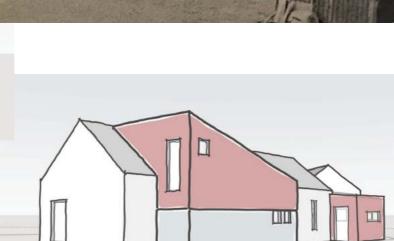
3.5 EXTERNAL STAIR MASSING STUDY

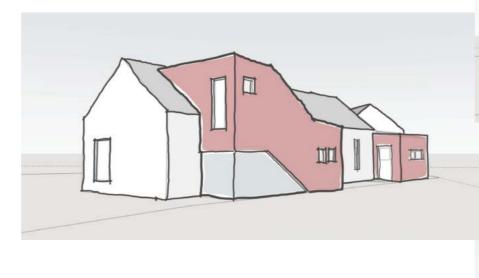
Reintroducing the rear stair to the barn allows the mezzanine to be utilised and offers greater floorspace internally. An external stair isn't practical for the use of the mezzanine space and would be difficult to make compliant with the building regulations.

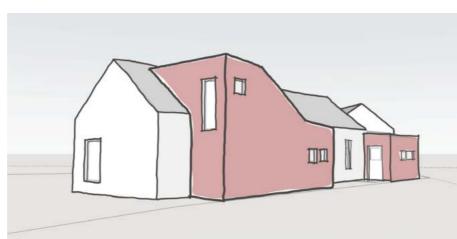
Enclosing this stair introduces a large form on the rear of the barn. The adjacent sketches explore various forms of how this could be articulated.

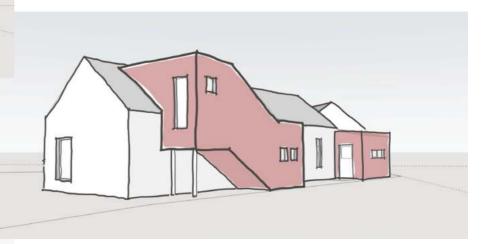












3.5 EXTERNAL STAIR MASSING STUDY

Further development looking at breaking down the mass of the extension stair. The sketch also looks at introducing different textures of cladding to help bring detail subtlety to the form. Due to it's proximity to the site boundary this element of the building has to be constructed from non-combustible materials, the sketch illustrates both standing seam vertical zinc alongside a square zinc tile cladding. The same materiality is also reflected in the link piece which also has a close proximity to the site boundary.



- 4.1 PROPOSED SITE PLAN
- 4.2 PROPOSED GROUND FLOOR PLAN
- 4.3 PROPOSED MEZZANINE FLOOR PLAN
- 4.4 SCHEDULE OF ACCOMMODATION
- 4.5 SUSTAINABILITY STRATEGY
- 4.6 SKETCH DETAILS EXISTING BARN
- 4.7 SKETCH DETAILS NEW EXTENSION
- 4.8 SKETCH DETAILS NEW ENTRANCE
- 4.9 EXTERIOR MATERIAL PALETTE
- 4.10 ELEVATION DEVELOPMENT
- 4.11 CAFE / COMMUNITY SPACE OPTIONS
- 4.12 INTERNAL PRECEDENTS

- 4.13 INTERNAL MATERIAL PALETTE
- 4.14 DESCRIPTION OF WORKS
- 4.15 STATUTORY CONSENTS
- 4.16 INCLUSIVE DESIGN STRATEGY
- 4.17 TOILET PROVISION
- 4.18 PARKING
- **4.19 BIKES**
- 4,20 BINS
- 4.21 BATS
- 4.22 DESIGN TEAM & FEES
- 4.23 NEXT STAGES



4.1 PROPOSED SITE PLAN

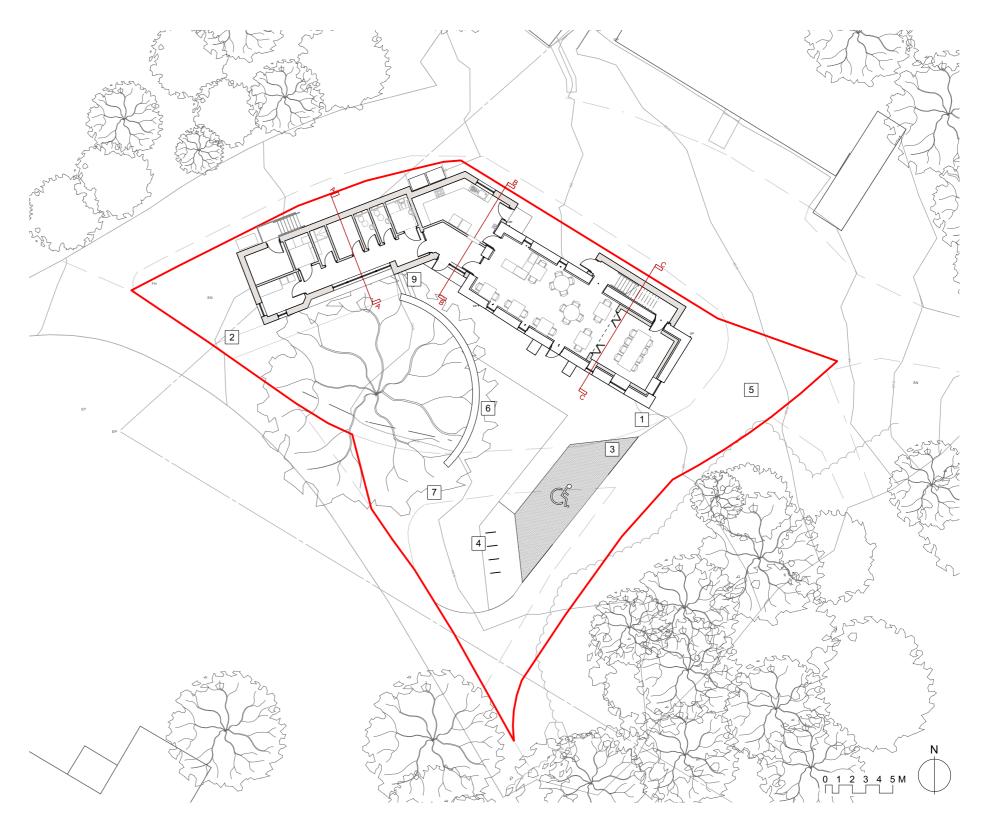
CHANGES FROM STAGE 1:

• The building massing has been adjusted to factor in the amendments to the ground floor plan as detailed on the next page.

The form of the extension block continues to mirror that of the existing barn.

- 1. Resin bound gravel permeable surface.
 2. Compacted type 1 gravel path.
 3. Permeable block paving accessible parking

- bay.
 4. 4no. cycle stands.
 5. Compacted type 1 gravel surface access road with suitable road build-up.
 6. Feature landscape curved bench gabion basket bench filled with stone and slate from
- existing barn building.
 7. Existing access road to be grubbed up, grass landscaping finish.
 8. Existing feature mature tree.
- Precast concrete stair treads to form landscape stair.

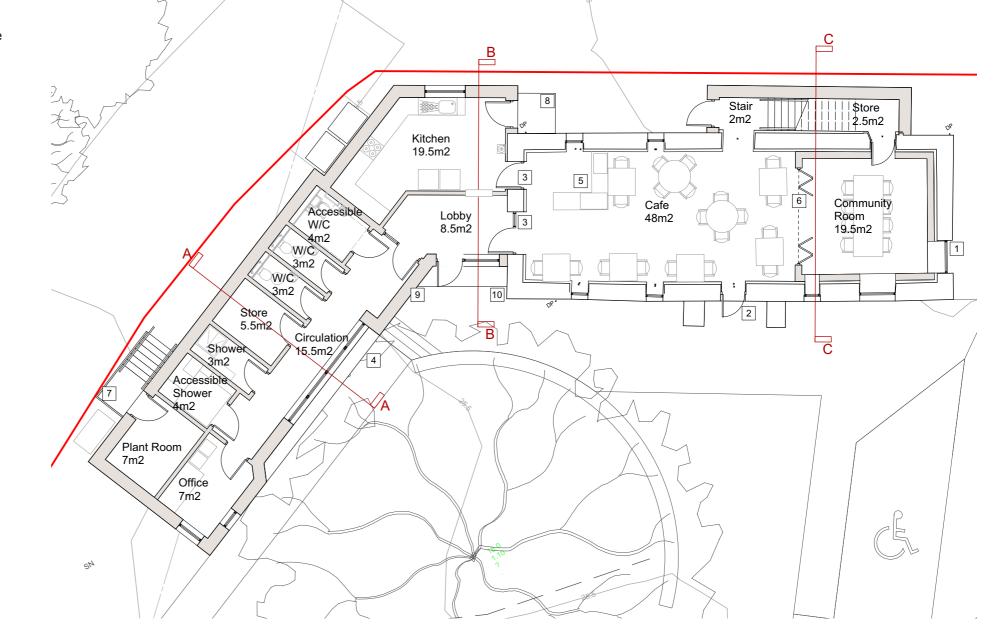


PROPOSED SITE PLAN

4.2 PROPOSED GROUND FLOOR PLAN

CHANGES FROM STAGE 1 PROPOSALS:

- New entrance point to building, at the junction between the existing barn and the new extension.
- Larger plant room provision to support the services strategy
- Inclusion of an office, to service the administrative needs of the building. Located to bring activity and articulation to the end gable of the new extension block.
- An addition shower to support the brief requirements.
- Larger kitchen provision.
- Addition of a new feature window to the community room, which will double as a bench seat internally.



1. New window formed in existing gable wall with integrated internal window seat. 2. Cill dropped within existing window to form

door opening. 3. New openings formed in existing existing

gable wall.

4. Timber built in bench seat.

5. Fixed position servery counter.6. Sliding partition with integrated escape door.

7. Plant room access stair.

8. Kitchen access step.

9. Feature entrance signage.

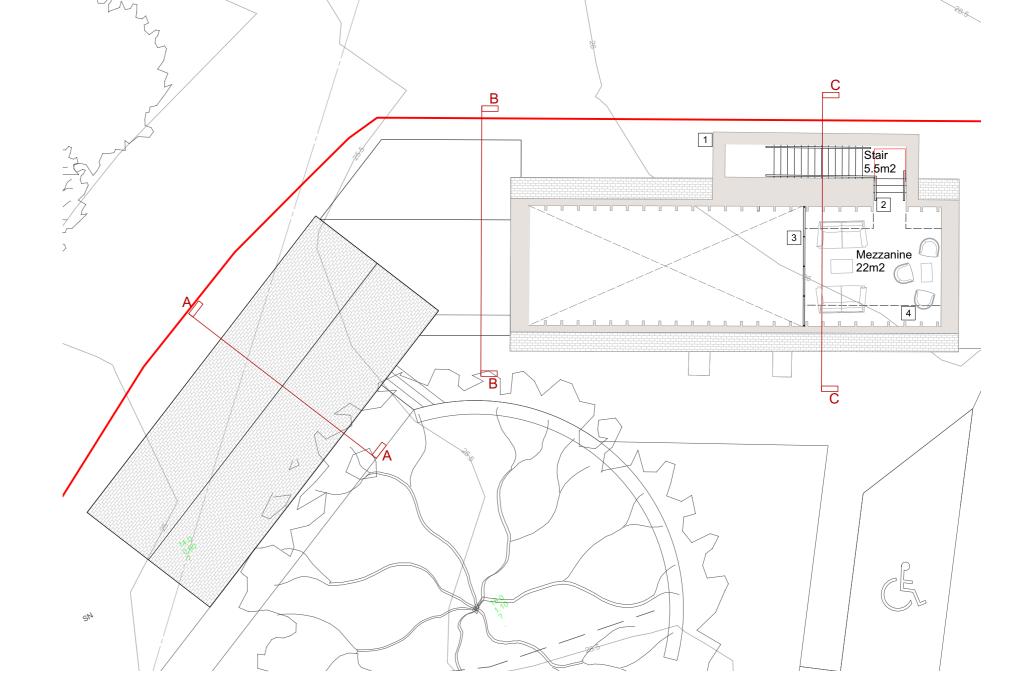
10. Covered entrance.

PROPOSED GROUND FLOOR PLAN

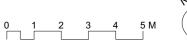
4.3 PROPOSED MEZZANINE FLOOR PLAN

CHANGES FROM STAGE 1 PROPOSALS:

• Stair configuration has been adjusted to make it more compressed to reduce the scale of the additional massing to the existing barn.



PROPOSED MEZZANINE FLOOR PLAN





New build stair core.
 Dormer formed into new roof structure.
 Handrail overlooking void into main barn

space.
4. Dashed line indicates restricted head room (less than 1.5m)

4.4 SCHEDULE OF ACCOMMODATION

The adjacent schedule of accommodation reflects the proposals as set out on the previous pages. The occupancy capacity is set out at 53 people, this reflects the day to day occupancy of the barn as a cafe space and is reflected in the toilet provision provided.



SCHEDULE OF ACCOMMODATION

Project:	Inchree
No:	343
Client:	Nether Lochaber Community Association
Date:	Oct 24
Issue:	

ROOM ID	ROOM NAME	N.I.F.A (sqm)	DESIGNED OCCUPANT CAPACITY	NOTES
	Café	48	40	Seating illustrated shows capacity at 27 inc. mezzanine
	Community Room	19.5	10	Seating illustrated shows capacity at 8.
	Kitchen	19.5	2	
	Lobby	8.5	n/a	
	Store 1	2.5	n/a	
	Accessible W/C	4	n/a	Fully fitted Doc M compliant accessible toilet
	W/C 1	3	n/a	
	W/C 2	3	n/a	
	Store 2	5.5	n/a	
	Shower	3	n/a	
	Accessible Shower	4	n/a	Fully fitted accessible shower, to double as baby change facility
	Plant Room	7	n/a	
	Office	7	1	
	Circulation	15.5	n/a	
	Stair	9m	n/a	
	Mezzanine	22	n/a	Included within café capacity
	Accommodation N.I.F.A (sqm)	172	<u>53</u>	

4.5 SUSTAINABILITY STRATEGY

The sustainability strategy sets out the key principles for the project and looks forward to the future use. In the next stages of the project, the sustainability outcomes along with indoor environmental, functionality and wellbeing outcomes will be fully integrated into the design and delivery of the project.

The initial detailing studies for this project look at a fabric first approach, to upgrade the existing barn's thermal envelope and make repairs so that as much of the existing fabric can be retained as practically possible. There needs to be a balance between retention and repair versus the project brief and aesthetic quality aspirations for the project.

Where possible, the Stage 2 design has looked to employ natural materials in both the new build elements and upgrade to the existing barn such as timber structural elements and wood fibre insulation. Where technical requirements means that timber cannot be used, for example, in close proximity to moisture and for fire safety, there has been consideration to reducing carbon content, for example, in the concrete specification.

Furthermore, the sustainability strategy includes the ambition to use renewable technologies such as an air source heat pump to decarbonise the heating strategy for the building.

Also, solar panels could provide electrical supply to offset the additional electricity required to run the air source heat pump and surplus energy could be used to support general electrical use or charge storage batteries.

Setting out a maintenance strategy for the building in use has been discussed to date and will be developed with the rest of the design team in later stages.

Reuse of existing site materials is proposed to minimise waste from the site. It is proposed that stone from the lean-to to be removed and slates from the roof are retained and reused within the landscaping proposals.



REDUCED CARBON CONCRETE SPECIFICATION By using GGBS addition to the concrete mix



SOLAR PANELS
Integrated into the design of the new slate roof.



WOOD FIBRE INSULATION
A natural fibre product which has lower carbon impact than PIR products.



AIR SOURCE HEAT PUMP
As part of the decarbonisation heating strategy.

4.6 SKETCH DETAILS - EXISTING BARN

The fabric first sustainability strategy for the barn, looks to insulate all the external walls internally, with careful consideration to ensure that the stone is allowed to maintain its natural properties such as breathability and moisture movement. This ensures that any proposed works are not causing any increased risks such as condensation build up.

Internally, the walls are to be covered with an insulating lime plaster, then wood fibre insulated is mechanically fixed back to the stone, and finished with a lime plaster finish.

Following the rot survey carried out by Peter Cox in July 2024 (Appendix F), it was found that many rafter ends and wallplates were decayed and need replacing. The temporary propping and repairs required along with the need to raise the roof finish level to ensure that the slates are correctly overhanging the eaves, means that the proposals look to entirely replace the barn roof with new structure, insulation above the rafters and slates. The rafters are proposed to be

exposed, linking back to the existing character of the barn.

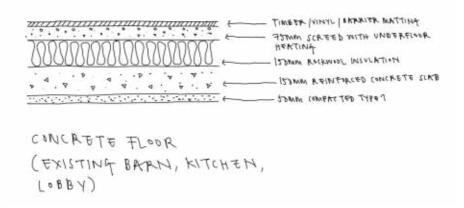
The approach to the floor is to remove the existing concrete and replace this with insulation and a new concrete floor which can support the mezzanine level structure. Underfloor heating pipes will be laid in a screed and heated by the air source heat pump.

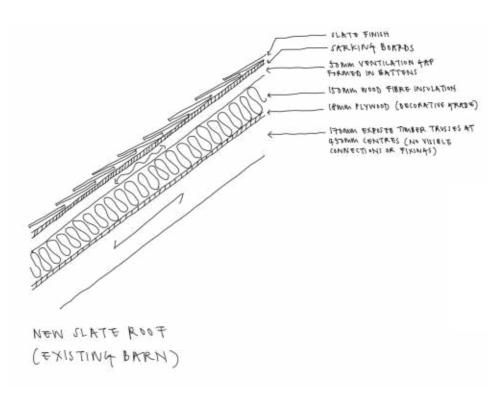
The sketch details below show the construction build up proposals for the external walls, floor and roof.



RETAINING EXISTING STONE
Used to create texture and reflect traditional techniques.
(Croft 3, Fardaa)







4.7 SKETCH DETAILS - NEW EXTENSION

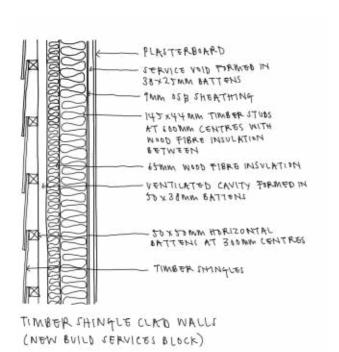
The new build extension to the barn looks to exclude the use of steel, as part of the carbon reduction measures proposed in the sustainability strategy. The structure for all main building elements, walls, roof and floor are timber, which is insulated with wood fibre insulation.

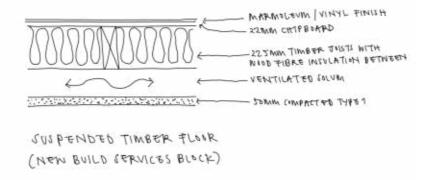
The substructure will be formed in masonry due to proximity to the ground and potential for moisture ingress.

The floor is a suspended timber floor and the slope in ground topography allows for this to be easily ventilated.

The roof has the same visual appearance as the barn, but internally the ceiling will be flat due to the service function below (toilets, showers, store cupboard etc), therefore the roof will be insulated between the rafters.

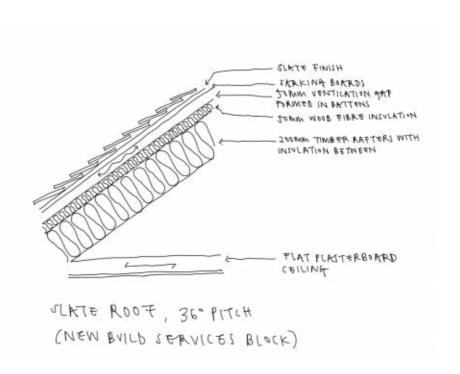
The sketch details below show the construction build up proposals for the external walls, floor and roof of the extension barn.







TIMBER SHINGLES
Used to create texture and reflect traditional techniques.
(Berman Horn Studio)



4.8 SKETCH DETAILS - NEW ENTRANCE

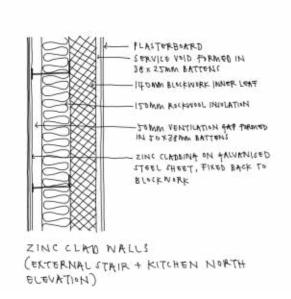
The new build link between the existing barn and the new extension, serves as the main entrance to the building but also creates a connection piece between new and existing.

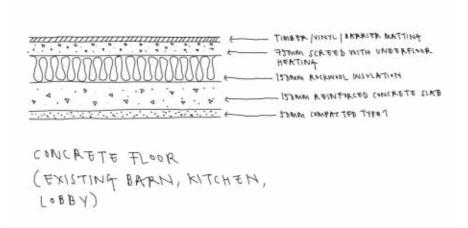
Due to the proximity to the boundary of the external walls to the kitchen and mezzanine stair, fire regulations dictate that both the cladding and structure cannot be formed in timber. Therefore, the proposed walls are blockwork structure with a potential zinc clad finish.

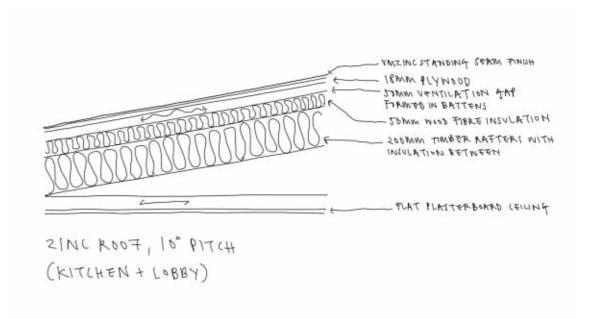


LINK BETWEEN NEW AND EXISTING
To create the main entrance to the building and also form the connection between the two parts.

(Moxon)







4.9 EXTERIOR MATERIAL PALETTE

The initial proposals for material selection for the new build external elements draw on the existing character of the barn. The materials chosen look to tonally compliment the barn and ensure that it remains the focus of the cluster of buildings formed. It is proposed that natural materials are used as much as possible, to follow the sustainability strategy as noted on the previous pages and to reflect its rural location.



- B Timber Shingles
- C Existing Stone Barn
- D Pigmento Rouge Zinc Cladding
- E Slate Roof Tiles



4.10 ELEVATIONAL DEVELOPMENT

The adjacent sketch elevation illustrates many of the key design and materiality moves outlined in previous pages. The scale of the two adjacent barns complement each other. The lower form of the link building allows the building to be read as two and for views through to the woodland beyond. The central beech tree becomes the focus of the site and the buildings are sited to respect this.

The choice of materiality reads as appropriate to the woodland setting and complements the natural stone of the existing barn. By expressing the new barn in timber over a replica stone approach it allows the original barn to stand out and be the focus of the redevelopment.

Simple landscape interventions help to deal with level changes across the site and leads visitors towards the main entrance. The gabion wall is proposed to reuse stone and slate from the existing barn and will double as a bench seat in fine weather.



SKETCH SOUTH ELEVATION

4.11 CAFE / COMMUNITY SPACE LAYOUT OPTIONS

The following pages show furniture layout options for the ground floor barn space, to explore the flexibility of the space to accommodate for different activities and events.

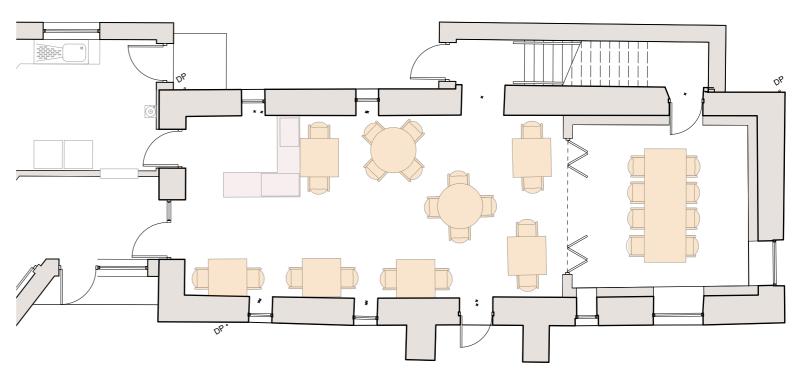
The layouts also look at options for the servery counter in relation to the potential usage of the main space. The two layouts shown on this page, show the servery counter in a fixed L-shaped position.

Layout 1

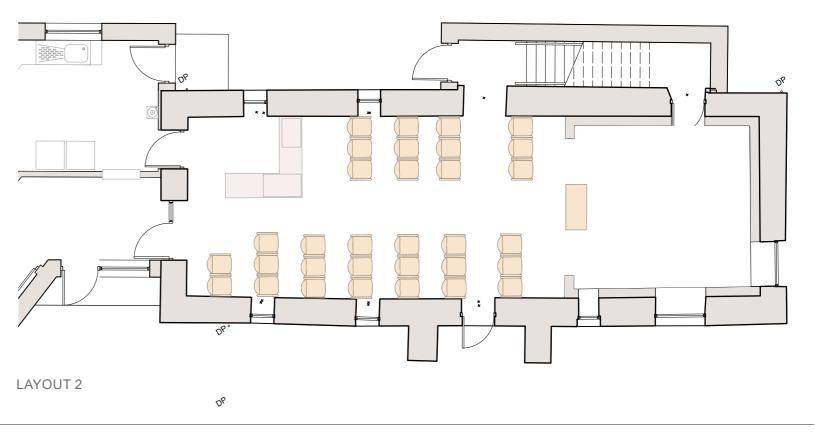
Cafe seating option with separate function in the community room.

Layout 2

Shows a seated arrangement for talks, presentations or small concerts.



LAYOUT 1

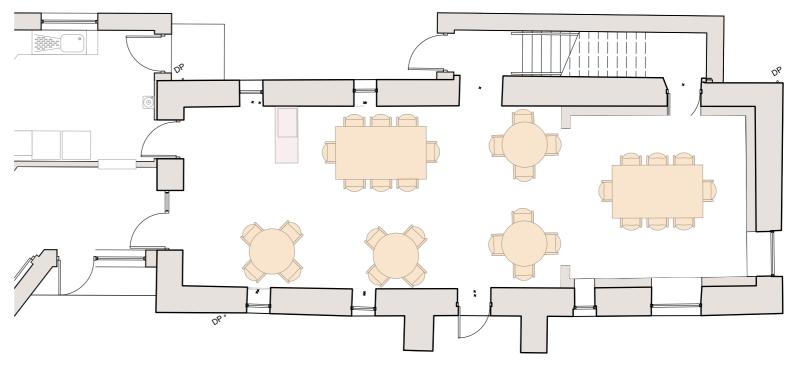


4.11 CAFE / COMMUNITY SPACE LAYOUT OPTIONS

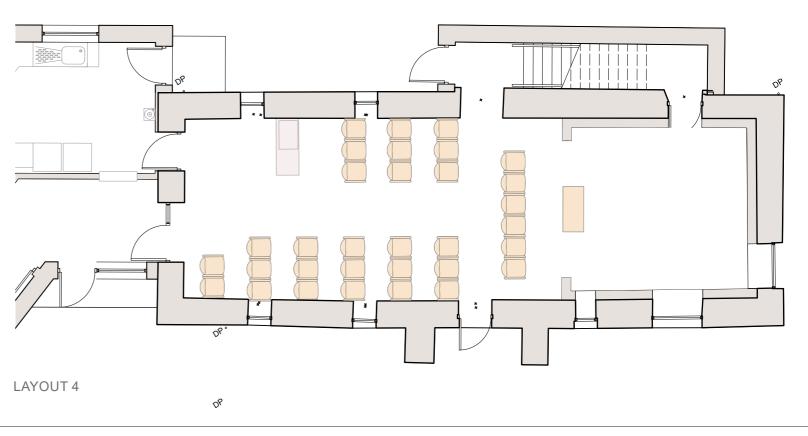
The two layouts shown on this page, show the servery counter has a fixed section for the coffee machine to be operated from, but the other part of the counter could be moveable and stored away to suit the event.

Layout 3 Wedding / event layout option.

Layout 4
Seated talk or presentation layout.



LAYOUT 3



4.11 CAFE / COMMUNITY SPACE LAYOUT OPTIONS

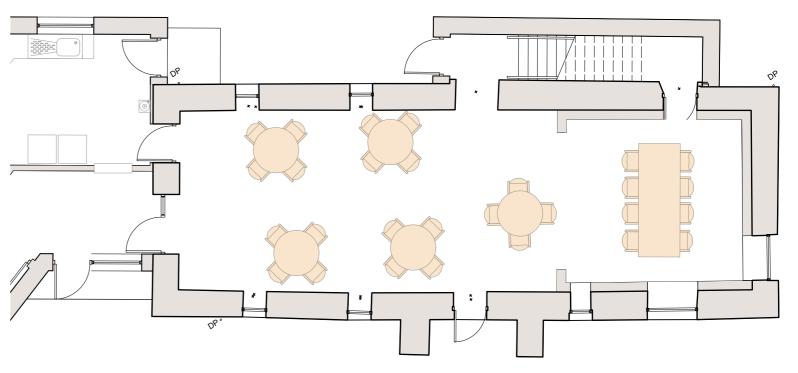
In the two layouts shown on this page, show the servery counter is completely moveable. The coffee machine is operated from the kitchen, located close to the hatch and this allows the main space to have optimum flexibility.

Layout 5 Wedding / event layout option.

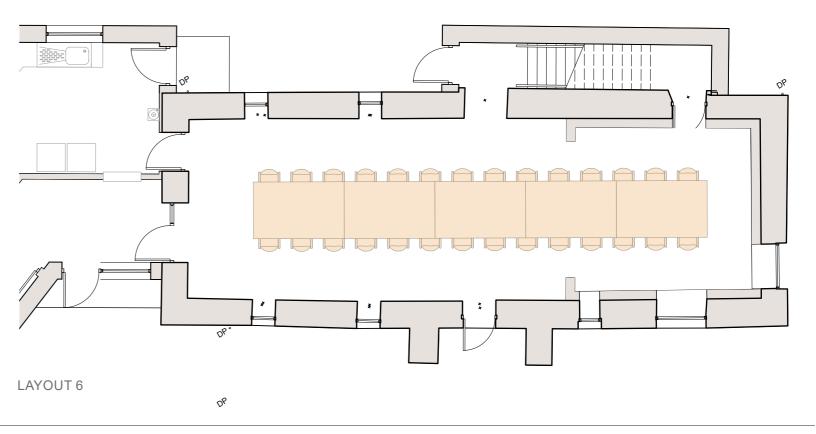
Layout 6
Banquet dining option.

It's important to recognise that the location of the coffee machine becomes a dictating factor in how the space functions. As the coffee machine required fixed plumbing and drainage, if located front of house it will require a fixed position and reduce flexibility of the space. It may also limit offerings from the hatch in the arrival lobby which was introduced to serve visitors during such times as the barn was booked out for alternative uses. However, a front of house location may be a preferred option for the operation of the cafe.

A back of house location for the coffee machine allows the front of house servery to be on casters and become flexible, either fully moved out or positioned against a wall to allow an alternative style service to cater for a function etc. Coffee could still be served to casual visitors via the lobby hatch from the kitchen. However the introduction of a coffee machine will reduce available kitchen worktop space.



LAYOUT 5



4.12 INTERNAL PRECEDENTS



BARN CHARACTER
Celebrated to retain the local history.



FLEXIBLE SEATING ARRANGEMENTS
Where possible retain and celebrate existing features.



GRAPHIC SIGNAGE
Used to define rooms and assist with wayfinding.



NEUTRAL PALETTE

To compliment the natural materials used within the internal spaces.



FORM WITHIN A VOLUME
Option to insert a contemporary form within the volume of the barn



NATURAL MATERIALS

To create a warm and comfortable atmosphere.

4.13 INTERIOR MATERIAL PALETTE

The initial proposals for material selection for the internal finishes aim to continue to celebrate natural materials, taking inspiration from the surrounding natural landscape. The colour palette is neutral with the potential to add some colour accents to bring warmth to the space.



B - Natural Tones Vinyl Flooring

C - Entrance Barrier Matting

D - Lime Render Wall Finish

E - Birch Faced Plywood Timber F- Oak Flooring



4.14 DESCRIPTION OF WORKS

This section looks to detail the proposed works for the renovation of the Inchree Barn. It sets out principles which have been developed since the Stage 1 proposals.

Whilst the design at this stage is more developed, it is still subject to greater design development with the design team as the project progresses but allows for a more developed cost plan to be prepared.

The report looks to itemise works required for the renovation and extension of the existing building to meet the requirements of the brief as set out by the Nether Lochaber Community Association following consultation with the community and user groups.

This description of works is to be read in conjunction with the proposed drawings and design team information.

The description of works is a document which will be developed through the next stages as the project progresses.



Description of Works

INCH Architecture & Design

Issue:	Stage 2 Costing
Date:	16/09/2024
Client:	Nether Lochaber Community Association
No:	DOW_001
Project:	343 - Inchree

Introduction

The aim of this description of works is to outline the proposed works for the conversion of an existing barn and new build extension to form a café, community room, kitchen and toilet facilities.

This document should be read in conjunction with the architect's and structural engineer's drawings, services engineer's report and condition report.

All work noted below should be carried out in accordance with manufacturers' instructions and relevant applicable standards. Size all fixings and fastenings as per manufacturers' printed guidance.

Architectural Works

The following items look at the proposed works for the existing barn and the new build extension, which is broken down into demolition, fabric works, internal works and by each of the key spaces thereafter. Works relating to services and external works are outlined at the end of the document.

Demolition Works

Existing lean-to extension to be demolished and all existing internal walls, mezzanine level and linings to be stripped out. Stone and slates to be retained on site for potential landscaping use.

All existing windows and doors to be removed.

Existing roof to be removed including slates, sarking boards and timber rafters. Slates to be retained on site for potential landscaping use.

All existing internal linings to be stripped out including existing mezzanine level.

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Existing Barn

Fabric Works

Roof

New roof to barn to be formed as follows: feature timber trusses (assumed 170x44mm timbers at 450mm centres with no visible connections or fixings), 18mm plywood (decorative grade for ceiling finish between trusses), 150mm wood fibre insulation, 50mm ventilation gap formed with battens, sarking boards, Cupa Pizarras Heavy 3 slates, random sizes laid in diminishing courses.

New roof to mezzanine stair to be formed as follows: plasterboard, 200 timber rafters with 250mm wood fibre insulation between and above rafters, battens to form ventilation gap, 18mm plywood, VMZinc standing seam roof

All structural works proposed are subject to Structural Engineer's review and detailed design.

Rainwater Goods

New rainwater goods, Lindab galvanised steel. Allow for all surface water drainage connections and soakaway as per engineer's details.

Floor

Existing ground floor concrete floor to be broken out and ground to be levelled and compacted. Floor build up as follows: 150mm reinforced concrete slab to engineer's specification, 150mm rockwool insulation, 75mm screed with underfloor heating, timber flooring.

Mezzanine floor to be formed in 250 x 44mm C24 joists at 250mm centres, with chipboard deck and timber floor finish. Allow for Isover APR acoustic insulation between joists.

All structural works proposed are subject to Structural Engineer's review and detailed design.

Walls

Stonework to be surveyed by specialist to advise on necessary stonework repairs. All cement mortar to be scraped out and replaced with lime mortar, allow for re-pointing of entire retained structure.

Existing external barn walls to be internally insulated as follows : 30mm Baumit NHL thermo, insulating and levelling plaster coat to internal face of stonework, 40mm wood fibre insulation, lime plaster finish.

Cill height to 1no. existing window on south-west elevation to be dropped to form door opening. New openings to be made for new windows and internal doors as per drawings.

External wall to mezzanine stair to be formed in plasterboard, blockwork inner leaf, 150mm rockwool insulation, 50mm ventilated cavity, galvanised steel sheet fixed to brackets back to blockwork, VMZinc cladding.

Walls supporting mezzanine level to be formed in 145 x 44mm timber studs with 9mm OSB sheathing as per structural engineer's design. Wall between cafe and community room to have OSB finish to both sides and allow for 50mm Isover APR acoustic insulation between studs. Moveable wall between main cafe space and community room.

All structural works proposed are subject to Structural Engineer's review and detailed design.

Windows + External Doors

New double glazed timber sash and case windows to all existing openings (with exception of new door formed in to the south-west elevation).

1no. New external doors to be solid timber (south-west elevation of barn) and 1no. External doors to be half double glazed timber framed, aluminium clad.

New rooflights to be double glazed.

Internal Works

Ceilings

Underside of mezzanine level to be lined in OSB, allow for lining to be installed on resilient bars.

Lighting

Feature lighting to main café space and first floor mezzanine level.

Standard commercial space LED lighting elsewhere throughout.

Cafe

Allowance for bespoke joinery for servery counter and furniture (café tables and chairs) for 22no. People.

Community Meeting Room

Furniture allowance for a table and chairs for 8no. People.

Mezzanine Level

Stair formed in pre-cast concrete with timber treads. Timber handrail and balustrade to mezzanine level.

All structural works proposed are subject to Structural Engineer's review and detailed design.

Furniture allowance for 2no. Coffee tables, 3no. Armchairs and 2no. Sofas as drawn.

New Build Extension

Fabric Works

Roof

New roof to extension to be formed as follows: 170 x 45mm timber trusses at 450mm centres, wood fibre insulation between rafters, wood fibre above rafters, 50mm ventilation gap formed in battens, sarking boards, Cupa Pizarras Heavy 3 slates.

New roof to entrance link building to be formed as follows: timber rafters, plywood deck, mineral board insulation, zinc standing seam roof.

All structural works proposed are subject to Structural Engineer's review and detailed design.

Rainwater Goods

New rainwater goods, Lindab galvanised steel. Allow for all surface water drainage connections and soakaway as per civil engineer's details.

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Floor

New floor construction to lobby and kitchen to match existing barn: 150mm reinforced concrete slab to engineer's specification, 150mm insulation, 75mm screed with underfloor heating. Barrier matting to lobby and safety vinyl to kitchen.

New floor construction elsewhere as follows: 22mm chipboard, underfloor heating, 200mm wood fibre insulation between joists, 225mm timber joists, ventilated solum. Marmoleum floor finish to all areas except safety vinyl to plant room.

All structural works proposed are subject to Structural Engineer's review and detailed design.

Walls

New external walls as follows: plasterboard, service void, 9mm OSB sheathing, 145mm timber frame with wood fibre insulation between studs, 65mm wood fibre insulation, 25mm battens, 25mm counter battens, timber shingle cladding.

External wall to north elevation of kitchen to be formed in plasterboard, blockwork inner leaf, 150mm rockwool insulation, 50mm ventilated cavity, galvanised steel sheet fixed to brackets back to blockwork, VMZinc cladding.

All structural works proposed are subject to Structural Engineer's review and detailed design.

Windows + External Doors

All new windows and external doors to be double glazed timber framed aluminium clad, except plant room door, to be a steel security door. Kitchen door to be half height glazed only.

Internal Works

Ceilings

Flat plasterboard ceilings throughout. Access hatch to services above ceiling in corridor.

Internal Walls

Internal partition walls to be formed in 75x50mm timber stud, isover insulation between studs, plasterboard to both sides. Moisture resistant plasterboard to wet areas. Opening for service hatch between kitchen and lobby.

Internal Doors

Allow for glazed doors to corridors and all main spaces. Solid core timber doors elsewhere.

Lighting

Make allowance for feature lighting in the entrance lobby space.

Standard commercial space LED lighting elsewhere throughout.

Kitchen

Small scale café kitchen with stainless steel splashbacks to rear of cooking appliances. Full height whiterock wall coverings to remainder of kitchen.

Lobby

Hatch between kitchen and lobby - opening to be lined with plywood and plywood doors to hatch to be lockable.

Toilets

All toilets shown as individual cubicles, each to be fully fitted with IPS, WC, sink, toilet roll holder and electric hand dryer.

1no. Doc. M compliant, fully fitted accessible WC.

Showers

All showers shown as individual cubicles, each to be fully fitted with electric shower. 1no. Accessible shower provision.

Office

Desk and chair for 1no. Person.

Store

Allowance for timber shelving.

Services

Fire Alarm

L2 fire alarm system to be installed throughout.

Security System

Make allowance for new security system including CCTV. Details to be provided by specialist consultant at the appropriate stage of works.

Small Power

Floor sockets to main café space (no wall mounted electrics). Further details included in M&E report.

Low Carbon Technologies

ASHP and solar panels to south facing new build extension roof proposed.

See M&E report for further details on services and utilities.

External

Landscaping

External landscaping to parking bay to be permeable block paving. Resin bound paving to form path between parking bay to main entrance door. Allow for concrete curbing edges to all external hard landscaping.

Stair to Plant Room to be formed in brick with pre-cast concrete treads, galvanised and powder coated steel balustrade and handrail. Stair to kitchen to be formed in in-situ concrete.

Landscape stair to be formed with pre-cast concrete treads.

Allowance for making good of soft landscaping following construction works.

New access road and footpath to landscape steps from Righ Crescent to parking bay to be formed in compacted type 1.

Signage

Allow for metal signage adjacent to entrance.

Structures / Furniture

External lighting allowance for external wall lighting and bollard lighting.

Gabion wall / landscape feature wall re-using slate/stone from demolition works.

Allowance for external seat to be formed below main window of extension building, as indicated on drawings.

Allow for cycle hoops as shown on site plan.

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4.15 STATUTORY CONSENTS

Pre-Application advice was received in January 2023 (ref. 22/05594/ PREAPP), based on the Stage 1 proposals and the feedback obtained is summarised as follows:

- The principle of redevelopment, extension and conversion of the barn to provide a community hub would likely be supported.
- No objection in principle to the proposal from the Transport Planning Team, subject to full details of the proposed scheme and information outlined below.
- No objection in principle to the proposal from the Transport Scotland, subject to full details of the proposed scheme and information outlined below.
- Consideration should be given to how public access will be accommodated during and post construction.
- The proposed alterations to the existing barn appear to be sympathetic to the character and former function of the building.
- The single storey side extension with link corridor appear of appropriate scale and massing.
- The use of timber cladding, natural slate roof and green roof flat link section with feature slate cladding and aluminium framed windows are considered to respond well to the character of the barn and surrounds.

The following information was noted as required for a planning application submission:

- Contaminated Land information
- Bat survey (Appendix G)
- Landscaping/Planting/Maintenance Plan
- Parking survey (Appendix E)
- Transport Statement
- Tree/Woodland Survey/Tree Constraints Plan/Management Plan
- Waste/Recycling Management Proposals

4.16 INCLUSIVE DESIGN STRATEGY

The proposals outlined in this report aim to meet accessibility requirements, following an early stage review of the Building Standards. This will include barrier free access throughout the ground floor, the relevant required activity spaces have and accessible parking and access routes to the building. Due to the size and function of the mezzanine a lift has not been included to this space, therefore this floor is not fully accessible.

INCH specialise in dementia friendly design, and the principles of this will be included in the finishes and wayfinding within the finished building.

As well as meeting building control standards, the building must comply with the Equality Act, so that there is no discrimination against protected characteristics which include gender, race and religion. This will be implemented over the building's life in use.

Any inclusive design needs from project stakeholders/users will need to be incorporated following consultation, and requirements included within the project as needed.

4.17 TOILET PROVISION

There are 3no. toilets in total proposed, one of which is an accessible toilet. These proposals are based on a maximum capacity of 20 people per gender neutral toilet, giving a total maximum normal operating building capacity of 60 people.

4.18 PARKING

There is one accessible parking bay proposed within the site boundary and the proposed parking strategy is to use the existing forestry walks car park. There was a parking survey carried out in August 2024, which concluded that the proposed strategy would unlikely compromise the existing car park. Furthermore, following Table 6.2 in the Council's Parking Standards, for community centre use the maximum parking levels are specified as 20 spaces per 100m².

This initial stage will be followed up by a Transport Statement for submission as part of the planning application.

4.19 BIKES

To encourage active travel to the building and to support its location on the National Cycle Network Route 78, 8no. cycle parking positions are included within the landscaping proposals for the site. These are located out in the open at the front of the site and over looked by users of the barn to promote passive surveillance.

4.20 BINS

2no. 1100l eurobins have been included for reference. Proposals shall need to reflect the anticipated usage of the building and comply with local authority recycling policies.

4.21 BATS

A bat survey was undertaken and found the presence of bats within the vicinity of the barn. The full report can be found within Appendix G. The report recommend the safe and proper removal of the roost from within the barn and the introduction of a new bat box within a 100m vicinity of the existing barn. All works are to be carried out / observed / inspected by a licensed operative.

4.22 DESIGN TEAM & FEES

The cost plan gives a construction cost but does not include for design team fees, VAT, survey costs or statutory consent fees.

The current appointment concludes at the end of RIBA Stage 3, assuming a design team is appointed to deliver the project from Stage 4 through to completion, the design team will provide a fee for their work which shall include installment payments through the duration of the project. The following values are indicative and are subject to project developments.

Statutory Fees; Planning and building warrant fees will relate to the scale and cost of the proposed project. An allowance of c. £5k-£8k would be advisable for statutory applications.

VAT requires to be considered, and may be applicable on this project. VAT specialist guidance is strongly recommended. VAT registration can be beneficial but comes with its own obligations and risks. VAT may therefore be required on top of construction costs and fees up to 20%, but not application fees.

INCH will prepare and present indicative design team fees for RIBA Stage 4 through to completion during the Stage 3 works to assist with funding applications and project budgets

4.23 NEXT STAGES

The next steps for the project are covered by The RIBA Plan of Work which organises the process of briefing, designing, delivering, maintaining, operating and using a building into stages. The stages to construction are outlined below:

Stage 0 : Strategic Definition (Works completed)

Covers client requirements and investigates if a building is required.

Stage 1: Preparation and Brief (Works completed)

Project brief to be approved by the client and confirmed that it can be accommodated on the site.

<u>Stage 2 : Concept Design (Works covered within this report)</u>
Architectural concept approved by the client and aligned to the project brief.

<u>Stage 3 : Spatial Co-ordination (Works started within this report)</u>
Architectural and engineering information spatially coordinated and at the conclusion of this stage a planning application will be submitted.

Stage 4: Technical Design

Design information required to manufacture and construct the project shall be prepared during Stage 4. At this stage a building warrant application will be submitted. At this time the works will also be tendered to appoint a main contractor.

Stage 5-6: Construction and Handover

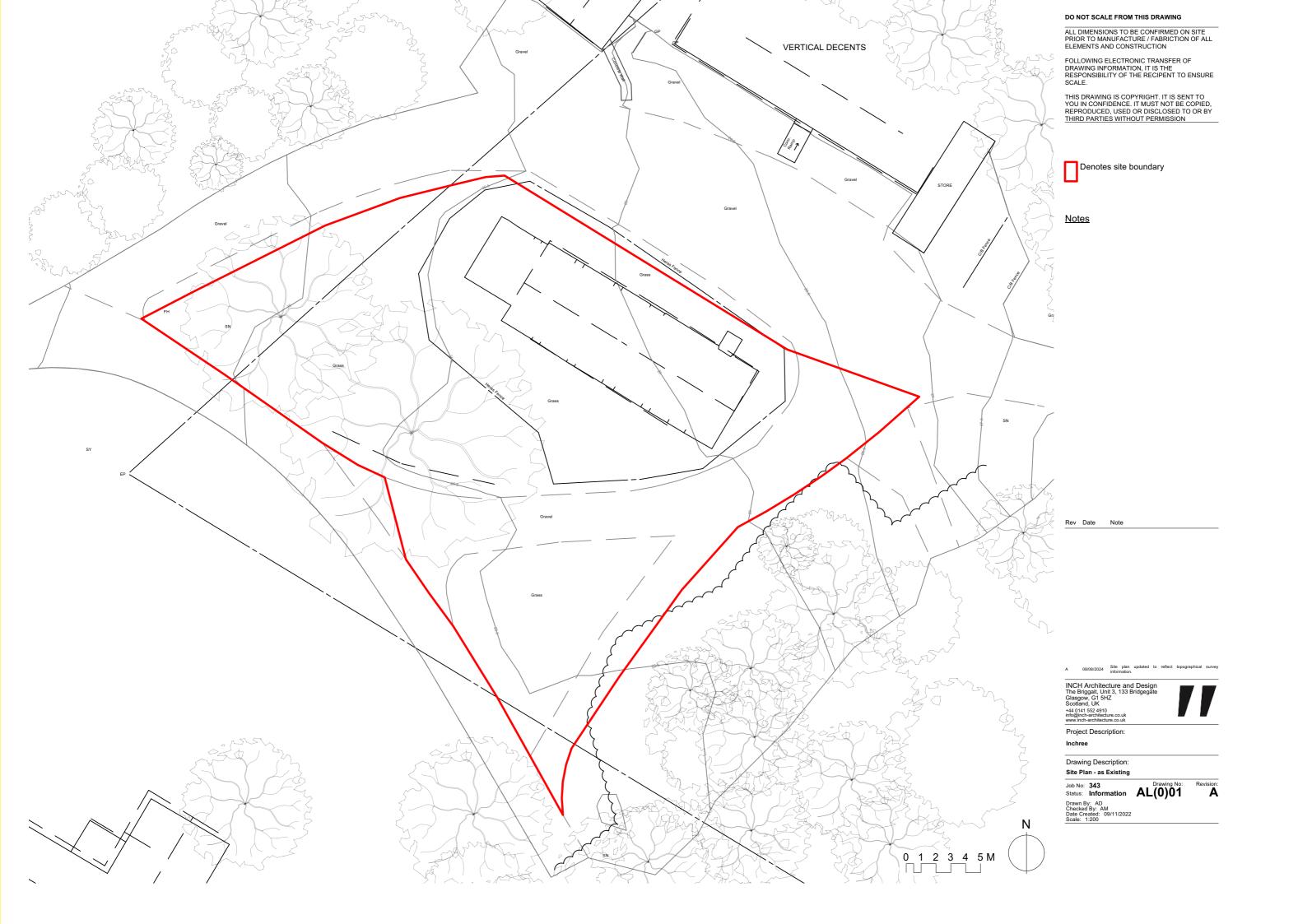
Appointed main contractor to construct proposed works on site. At the conclusion of the works all checks, certification, statutory and contractual requirements will be completed.

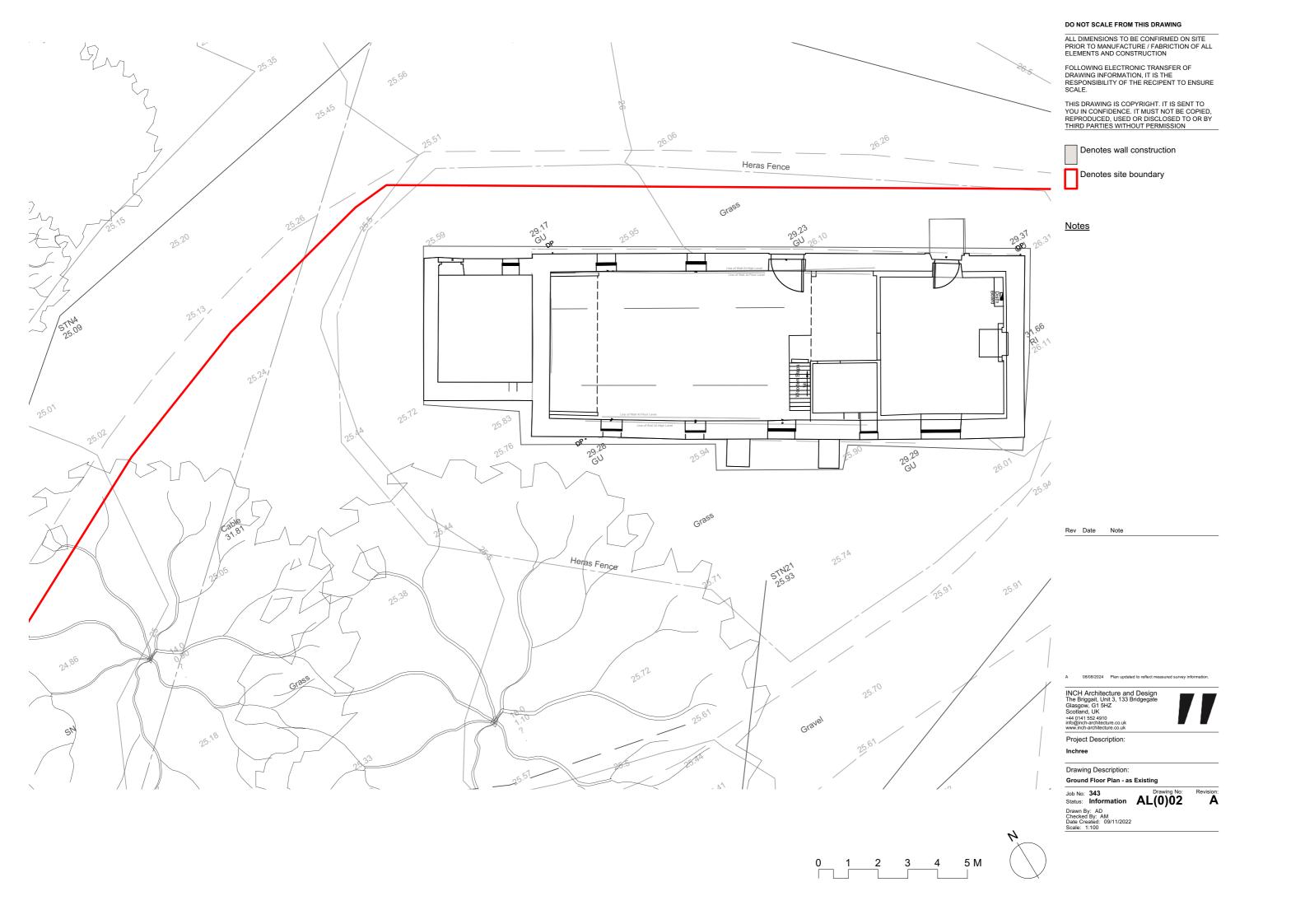
At the conclusion of each stage a report will be produced which will require sign off from the NLCA before moving forward with the project. Each pre-procurement stage shall be accompanied by a costing exercising to ensure budgetary control over the project.

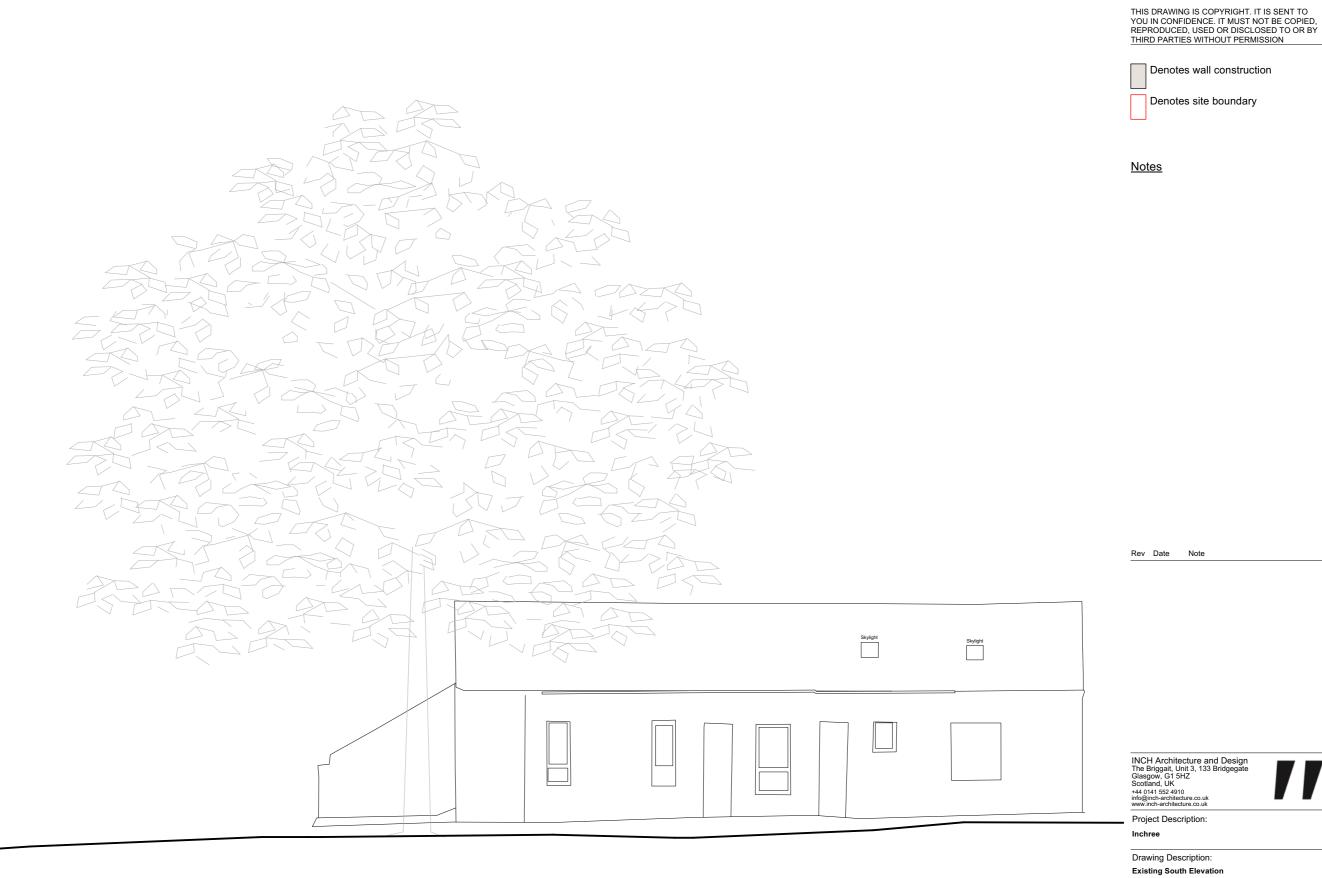
More information about the RIBA stages is available online at; https://www.architecture.com/knowledge-and-resources/resources-landing-page/riba-plan-of-work

APPENDIX A

ARCHITECTURAL DRAWINGS







Existing South Elevation

0 1 2 3 4 5 M

DO NOT SCALE FROM THIS DRAWING

Job No: 343 Drawing No: Status: Information AL(0)30

Drawn By: AM Checked By: --Date Created: 16/09/2024 Scale: 1:100

ALL DIMENSIONS TO BE CONFIRMED ON SITE PRIOR TO MANUFACTURE / FABRICTION OF ALL ELEMENTS AND CONSTRUCTION

FOLLOWING ELECTRONIC TRANSFER OF DRAWING INFORMATION, IT IS THE RESPONSIBILITY OF THE RECIPENT TO ENSURE SCALE.



Existing West Elevation

DO NOT SCALE FROM THIS DRAWING

ALL DIMENSIONS TO BE CONFIRMED ON SITE PRIOR TO MANUFACTURE / FABRICTION OF ALL ELEMENTS AND CONSTRUCTION

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Denotes wall construction

Denotes site boundary

<u>Notes</u>

Rev Date Note

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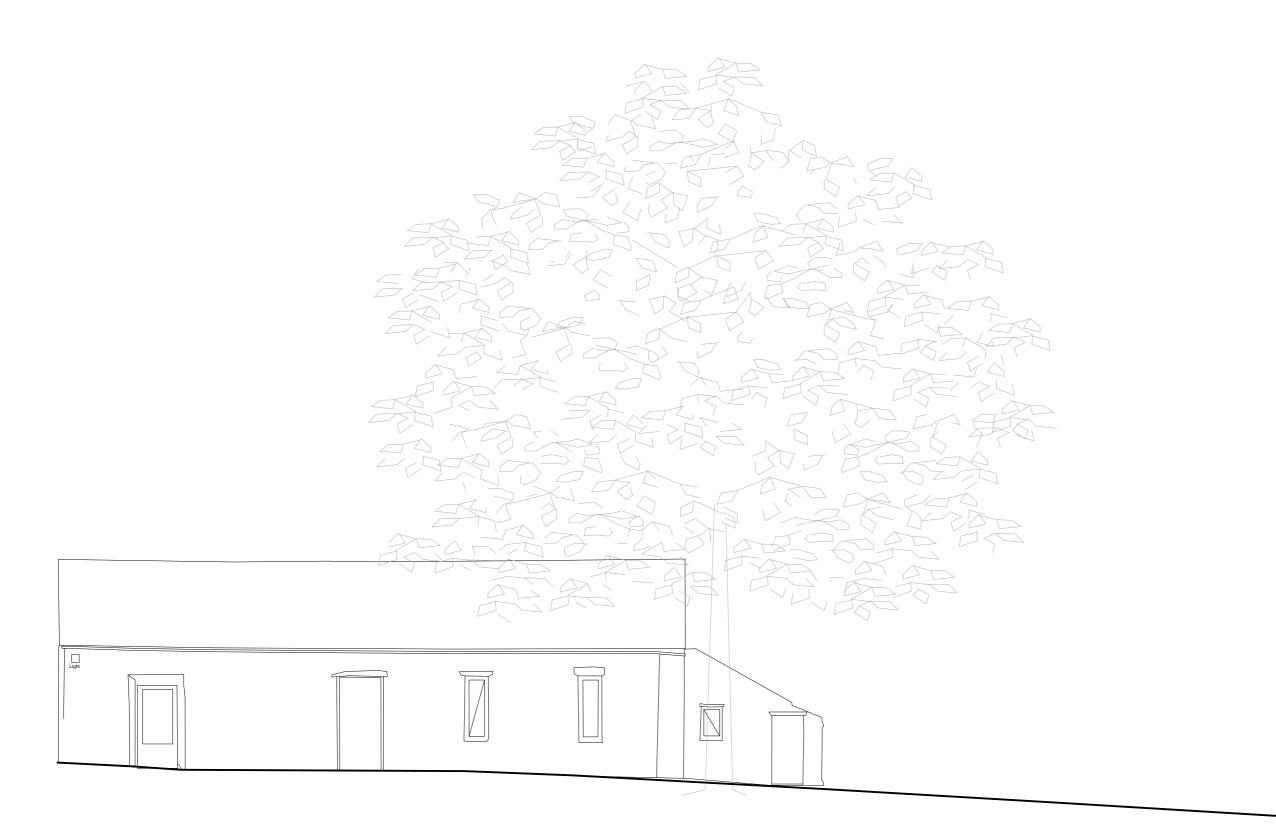
Project Description:

Inchree

Drawing Description: **Existing West Elevation**

Job No: 343 Drawing No: AL(0)32

Drawn By: AM Checked By: --Date Created: 16/09/2024 Scale: 1:100



Existing North Elevation

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Project Description:

Inchree

Drawing Description:

Job No: 343

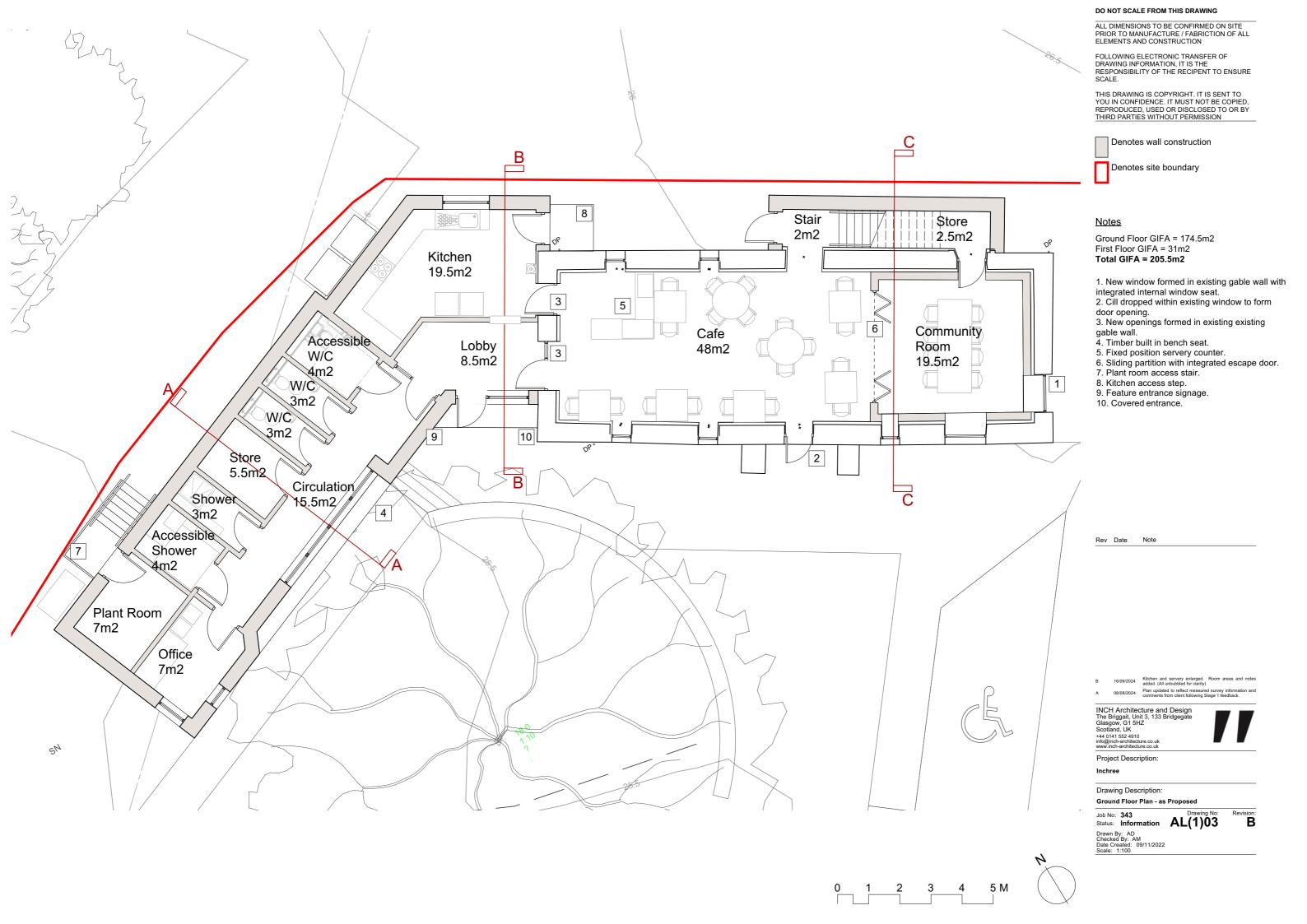
Job No: 343 Drawing No: Status: Information AL(0)31

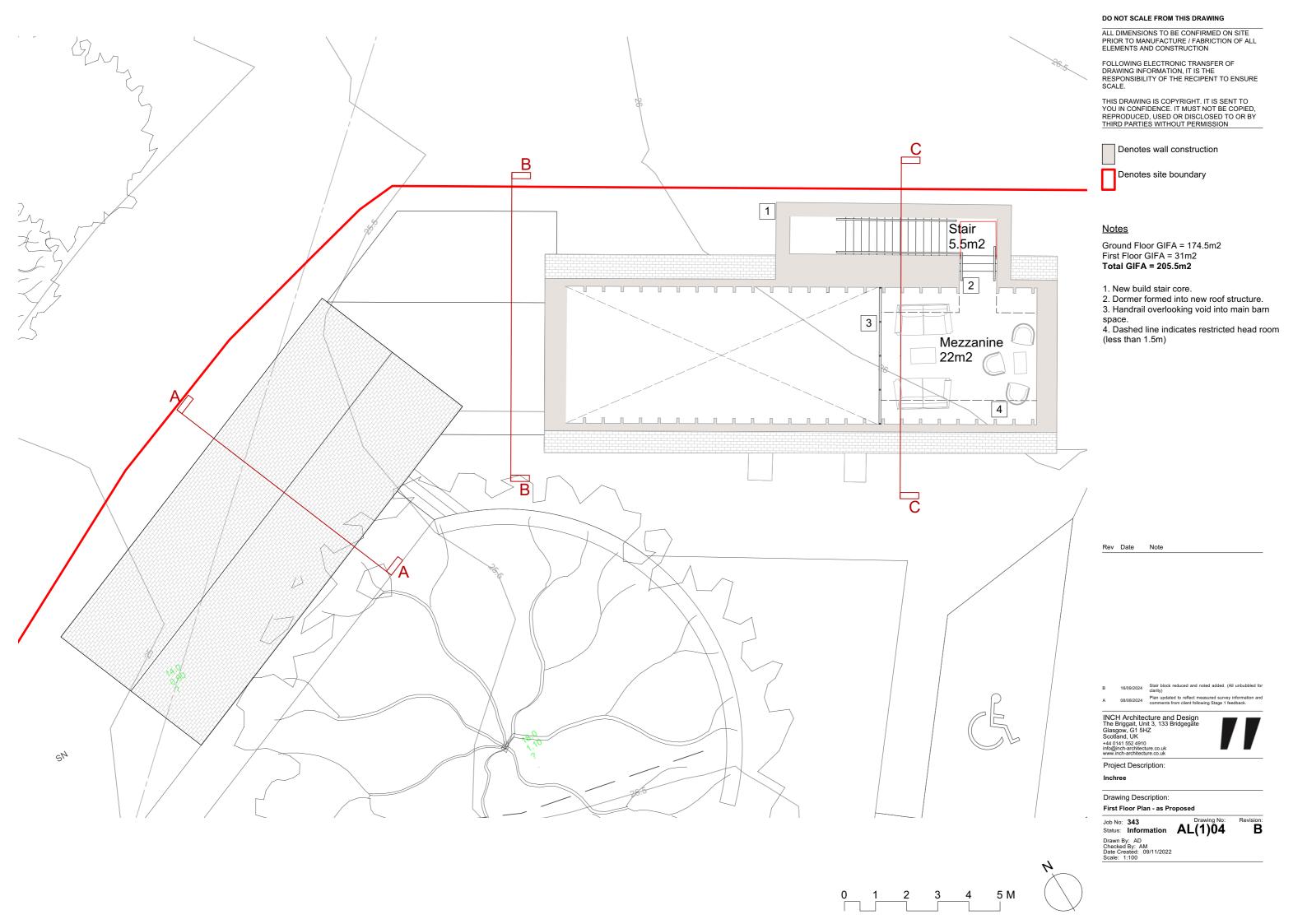
Drawing No: Revision

Drawn By: AM Checked By: --Date Created: 16/09/2024 Scale: 1:100

0 1 2 3 4 5 M









Proposed South Elevation

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Denotes wall construction

Denotes site boundary

<u>Notes</u>

- 1. Existing barn stone walls to be retained and repointed with lime mortar.
- 2. New slate roof including leadwork flashings.
- 3. New timber framed double glazed sash and case windows within existing openings.
- 4. New solid core external timber door within existing opening with lowered cill.
- 5. Replacement steel rainwater goods.
- 6. Feature gabion landscaped bench seat filled with stone from demolished lean-to.
- 7. Low pitch zinc roof over link building
- 8. Glazed entrance
- 9. Timber shingle cladding to new barn form building.
- 10. Slate roof including leadwork flashings.
- 11. Double glazed aluminium composite windows.
- 12. Brickwork base to building.
- 13. Entrance signage.
- 14. Potential area for community artwork or further signage.
 15. Fully integrated PV provision - subject to
- detailed M&E design.
- 16. Built in timber bench seat.
- 17. Precast concrete stair treads to form landscape stair.

Rev Date Note

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Project Description:

Inchree

Drawing Description:

Proposed South Elevation

Job No: 343 Drawing No: AL(1)30

Revision:

Drawn By: AM Checked By: --Date Created: 16/09/2024 Scale: 1:100



Proposed North Elevation

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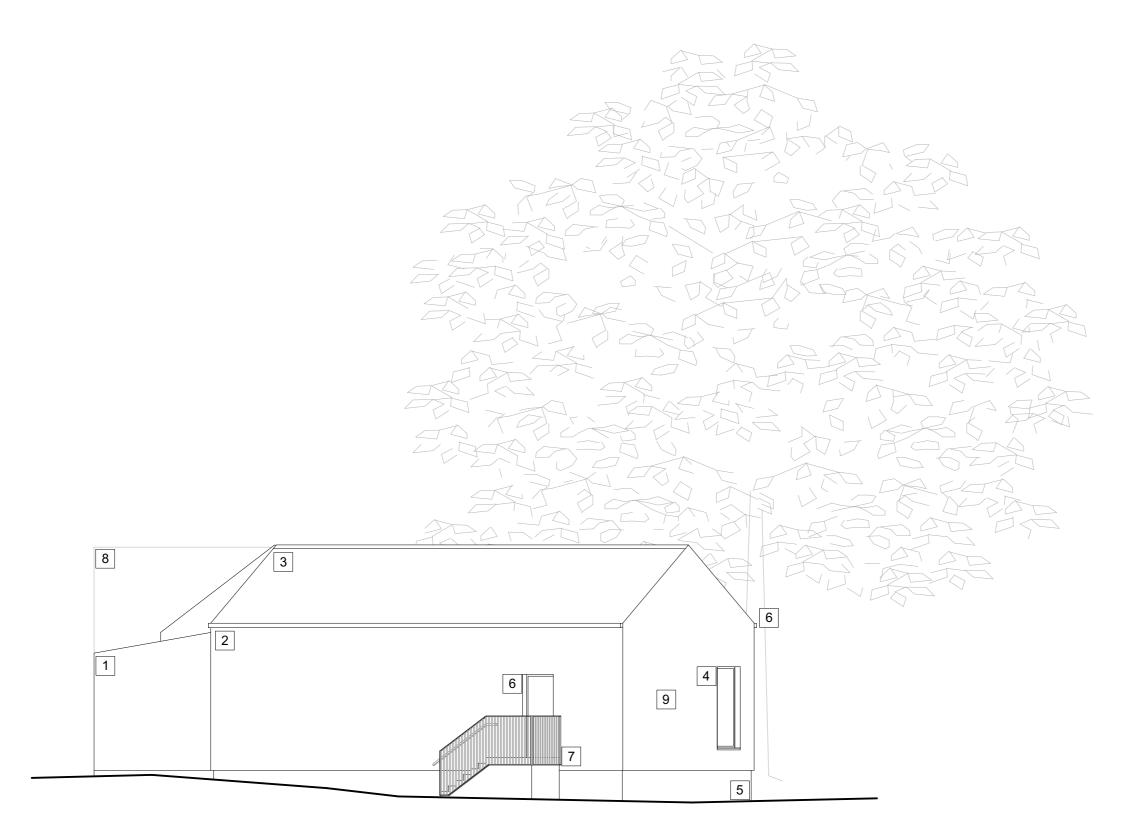
Denotes wall construction

- 9. Double glazed aluminium composite windows.
- concrete treads and landing. Metal railings with



Status: Information AL(1)31

Drawn By: AM Checked By: --Date Created: 16/09/2024 Scale: 1:100



Proposed West Elevation

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Denotes wall construction

Denotes site boundary

Notes

- 1. Zinc clad link building
- 2. Timber shingle cladding to new barn form building.
- 3. Slate roof including leadwork flashings.
- 4. Double glazed aluminium composite windows.
- 5. Brickwork base to building.
- 6. Steel door to plant room.
- 7. Brickwork formed access stair with pre-cast concrete treads and landing. Metal railings with integrated handrail.
- 8. Zinc clad stair enclosure.
- 9. Potential area for community artwork or further signage.

Rev Date Note

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Project Description:

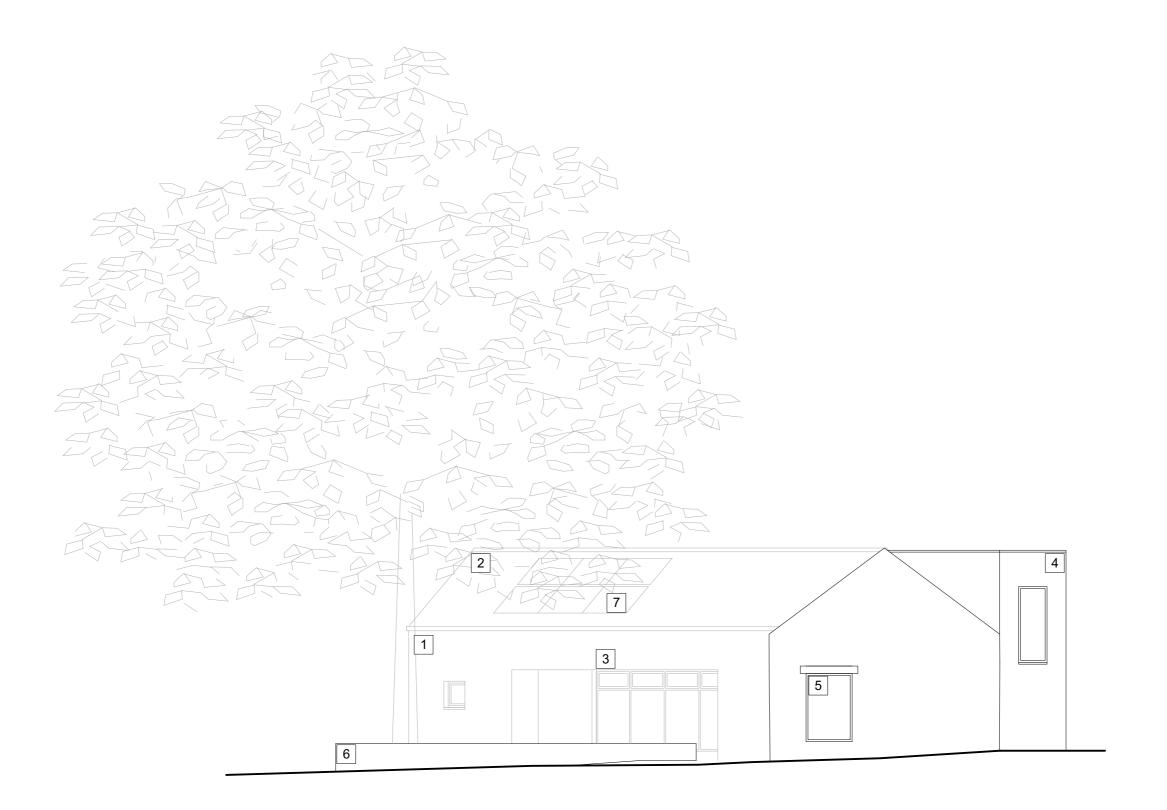
Inchree

Drawing Description: Proposed West Elevation

Job No: 343
Status: Information AL(1)32

Drawn By: AM Checked By: --Date Created: 16/09/2024 Scale: 1:100

0 1 2 3 4 5 M



Proposed East Elevation

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Denotes wall construction

Denotes site boundary

<u>Notes</u>

- 1. Timber shingle cladding to new barn form building.
- 2. Slate roof including leadwork flashings.
- 3. Double glazed aluminium composite windows.
- 4. Zinc clad stair enclosure.
- 5. New double glazed aluminium composite window with integrated internal window seat within newly formed opening.
- 6. Feature gabion landscaped bench seat filled with stone from demolished lean-to.
 7. Fully integrated PV provision - subject
- to detailed M&E design.

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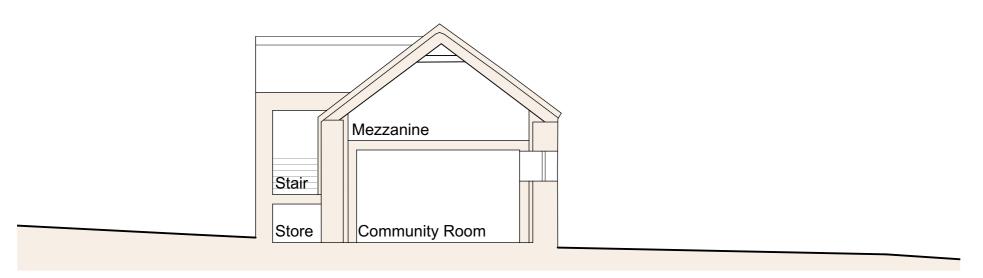
Project Description:

Inchree

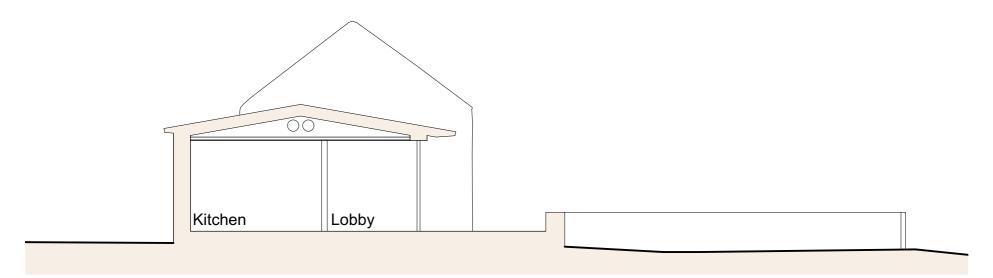
Drawing Description: Proposed East Elevation

Job No: 343 Drawing No: Status: Information AL(1)33

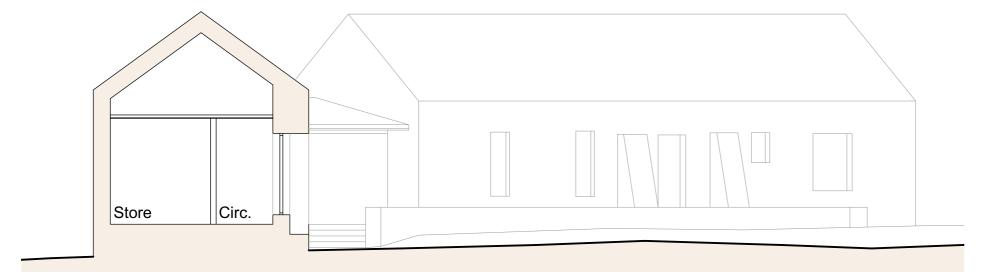
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Section C - C



Section B - B



Section A - A

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<u>Notes</u>

Rev Date Note

A 16/09/2024 Room names added. (Unbubbled for clarity)

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Α

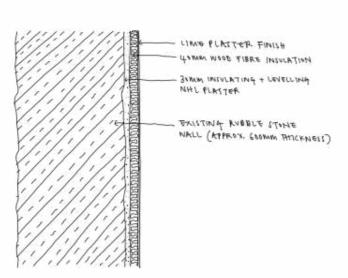
Project Description:

Inchree

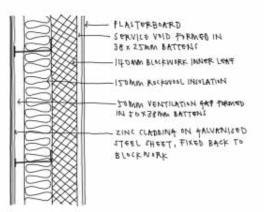
Drawing Description: Sections - Proposed

Job No: 343
Status: Information AL(1)20

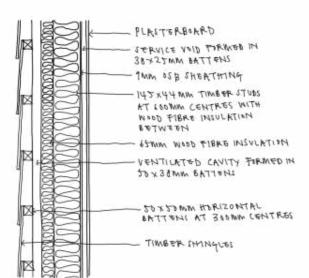
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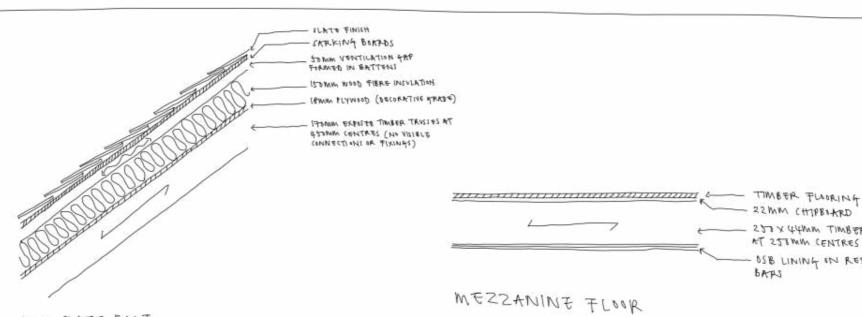
SUJAW SHOTE THITSIXE (EXISTING BARN)



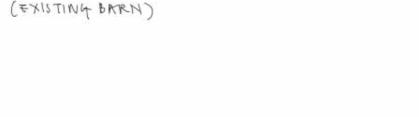
ZINC CLATO NALLS (EXTERNAL STAIR + KITCHEN NORTH (HOITAVEJE

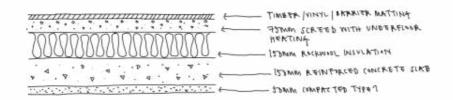


TIMBER SHINGLE CLAD WALLS (NEW BUILD SERVICES BLOCK)

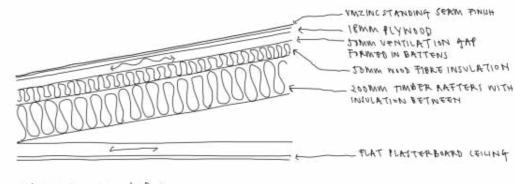


NEW SLATE ROOF





CONCRETE FLOOR (EXISTING BARN, KITCHEN, (OBBY)



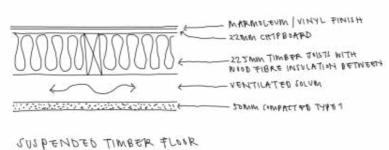
22 MM CHIPBSARD

BATUS

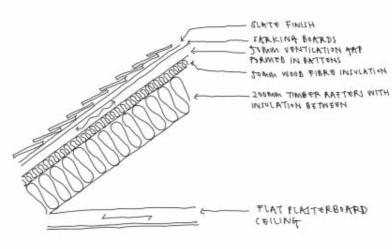
521 X CHWW TIMBER 2012L2 AT 258 MW CENTRES

OSB LINING ON RESILIENT

2/NC K007, 10° PITCH (KITCHEN + LOBBY)



(NEW BUILD SERVICES BLOCK)



JLATE ROOF, 36° PITCH (NEM BAILD REKAICE? BLOCK)

INCHREE STAGE 2 JKET'CH DETAILS 16,09,2024

APPENDIX B

COST REPORT

PROPOSED COMMU <u>NIT</u> Y HUR	
NEHREE BARN, ONICH, FORT WILLIAM -	

0et-24

COST	DI	ANI	DDE	VD	AVA/D
11131	\mathbf{r}	HIM	DREA	ARIJI	

Screed

] £ 60

Oct-24

BUDGET COSTIPIAN	510GF 2														
V <u> 2 2 2 2 2 2 2 2 2 2 </u>						Bill 2	Downtakings, etc.								
Page MINANCS	in Monarchy's overheads, we lare, Hant, travely 660	B	12%	₫	99,930		Soft strip and clear out fittings, etc.			£ 20	76 sqm	£	1,520		
	see Table, regioning management, et al.						Asbestos removal			£ 500	1 sum	£	500		
							Remove electrical			£ 500	1 sum	£	500		
MAIN WORKS		•					Remove external doors and windows			£ 80	9 No	£	720		
Skitting Scholing	Downtakings, alterations, etc	F	22,100 2222				Strip out ceiling linings			£ 20	40 sqm	£	800		
	Jemolibar of excession	l,	6.300 Salassa				Ditto wall linings			£ 15	115 sqm	£	1,722		
	Salum and Ground floor	ı.	21,500				Dito partition linings			£ 15	48 sqm	£	720		
	Su derwork stone repart, somting, of the		56, 600				Remove partitions			£ 18	48 sqm	£	864		
	Rooffing, skylights, rail ywater peces	Ľ	49,940				Remove raised floor, etc.			£ 12	40 sqm	£	480		
	Froming, insulation & plostbid community Aborn	Ľ	7,300				Remove first floor structure			£ 30	30 sqm	£	900		
	Meeting more / messal to	Ľ	19,500				Break up concrete floors and dispose			£ 50	76 sqm	£	3,800		
	77	io total		÷	101,700		Remove roof slates			£ 30	134 sqm	£	4,032		
Listenniisu	Ed. a none s	E	34,550				Skylights			£ 40	2 No	£	80		
i dendini	Builderwurk sier hes n	-	6.500				Sarking board			£ 10	134 sqm	£	1,344		
	External walls, was following, 4-16.	-	67.100				Roof structure, wallplates, etc.			£ 30	134 sqm	£	4,032		
	Booting to other, rainwater gor to, etc.	E													
	-	ianaral	22.20-0	=	125,333									£	22,014
	.			_	—-,										
Gerera!	Edgrae dogrs, windows, sweens et	f	45,900				Demolish side extension			£ 200	34 cum	£	6,800	£	6,800
	Cernigs, partitions and internal costs	F	23,700												
	Noor and wall finishes	ſ	43,300			Bill 3	Sub Structures								
	Plumbing, son tary fittings, etc.	ſ	257,000				Solum (existing)								
	ASI P heating & not water system	1	40,330				lower level of solum & remove] £	50						
	Blocarical Installation, fire and security systems		at,000				level and ram] £	3						
	Rittenen hittings, servery, shelving, etc.	L	71,200				Filling 150mm thick hardcore] £	15		1000	020		02	20.122
	Palitting and cocorating	_	24,900				sand blinding] £	12	£ 282.00	76 sqm	£	21,432	£	21,432
	SU	ibnoti		L	540,700		damp proof membrane] £	5						
							Insulation] £	40						
DOCUMENT WORKS	Smps, leespaths, building, mad widening, ctd.	≟	64,690				Seperating layer] £	4						
	Water and occurriate substitution and contracts, also	Ē	10,750				Concrete slab 150mm] £	60						
	Orsinage sastem, biza ment, outlot, etc.	=	38,670				thickening at edges] £	8						
	Ceneral and caping, see ing. Fig. age, 200	<u>-</u>	24,600	_			reinforcement] ±	10						
	MI	d: 16-al		E	144,620		mesh reinforcement] £	15						
	Comingercy sum for a Consseen work, engineers	1					Screed] £	60						
	stablishing requirements, design charges, rish, etc.		43%	e	88,800		City and another for extensions								
	State to tyle come herett ats girthes gest is a, eve		.1.1	•	11 4.		Site preparation for extensions			c 100	152	_	1 516		
	mistion to GA 2025		6%	r	61,000		Excavate topsoil and lay aside			£ 10.0	152		1,516		
			-				Excavate to reduce levels and dispose			£ 25.0	152	Ľ	3,790		
		TOTAL			1.075.581		Salum autonoion kitchen / John								
		01.112		-	2.0.00.00		Solum - extension - kitchen / lobby level and ram	1 £	3						
		SAY		£	1,080.000] E	15						
Notes:							Filling 150mm thick hardcore sand blinding] [£ 214.00	31 sqm	, f	6 568		
	Architer, mellan I Devig: It al, Stage Prinformation issu	ard 15d: Sat	stember 20 3	£.) t	12	1214.00	31 3qii	L	0,308		
	georgy of 51,140 (150, 86706 % butter to a string Bui						damp proof membrane Insulation) t	40						
	en når en renn og 1920 million i millione million 🐔 🔐						Seperating layer] t	40						
Ekdusions:							Concrete slab 150mm] t	60						
Cost excludes VA i, p	professional pristabutory fees						mesh reinforcement) t	15						
Prepared by:							Screed) r	13						

Samuel and Partners, Chartered Surveyors, $|\cos(W)|$ in a William Territor 300-76.2688.

Prepared by:

	Solum - extension - toilets, etc											Bill 5	Steel work				
	level and ram]	£	3									203x102x23Ub lintel				£ 500
	Filling 300mm thick hardcore]	£	30													
	sand blinding]	£	12	£ 13	35.00	70 sqm	£	9,500			Bill 6	Woodwork				
	damp proof membrane]	£	5									Existing building (community room)				
	concrete oversite]	£	10									50 x 150 framing]	£	25	
	Insulation between joists]	£	30									Plywood sheeting]	£	20	
	225mm timber joists]	£	25									Insulation]	£	40	
	22mm chipboard]	£	20									Plasterboard	1	£	15	£ 138.00
													Battens	1	£	8	
	External walls												Plasterboard	1	£	15	
	excavate trenches - 0.625 wide]	£	8									Skirtings	1	£	15	
	earthwork support]	£	2										•			
	surface water disposal]	£	2									Chipboard flooring		£	25	
	excavated material]	£	6									joists		£	80	£ 150
	level and ram]	£	3	£ 22	29.50	44 m	£	9,994				OSB board on resilient bars		£	45	-
	formwork	1	£	8									OSD BOUTH OF TESMETT DUTS		_		
	concrete	i	£	40									Folding door				£ 12,000
	Reinforcement, mesh	í	£	12									Edge protection, 1st floor				£ 4,500
	150mm blockwork	i	£	80									Eage protection, 1st noon				1 4,500
	cavity	1	f	5									Extension - stairs & kitchen north wall				
	100mm facing brick	1	f	60													
	Damp proof course	i	f	4									External walls	1	r	0	
	Damp proof course	1	_	-									Battens	1	£	8	C 441 00
	Internal dwarf wall												zinc cladding]	£		£ 441.00
	excavate trenches - 0.45 wide	1	£	6									Galvanised steel sheet]	£	120	
		1	£										Insulation]	£	40	
	earthwork support	J	r.	2									Blockwork (Incl Bill 4)				
	surface water disposal	J	£	2									Service void]	£	8	
	excavated material]	£	6			24	_	2 4 40				Skirtings]	£	15	
	level and ram	1	£	3		52.50	21 m	£	3,149								
	formwork]	£	8									Extension - service block				
	concrete]	£	30									External walls				
	Reinforcement, mesh]	£	12									Counter battens]	£	6	
	150mm blockwork]	£	80									Battens]	£	8	
	Damp proof course]	£	4									Timber shingles]	£	150	£ 295.00
	Sub Total									£	34,517		mesh]	£	1	
													Beather membrane]	£	7	
Bill 4	Builderwork												Plywood]	£	25	
	Works to existing building												50 x 150 framing]	£	20	
	Replace defective timber lintols				£	600	12 No	£	7,200				Insulation]	£	40	
			widt	th									Plasterboard]	£	15	
	Form new openings		1.0 n	n	£	1,500	1 No	£	1,500				Service void	1	£	8	
			1.1	m	£	1,650	1 No	£	1,650				Skirtings	1	£	15	
			1.5n	n	£	2,000	1 No	£	2,000								
													Sundries, metal work, etc.				
	40mm wood fibre insulation				£	40	146 sqm	£	5,833				Sunaries, metal worn, etc.				
	30mm NHL plaster				£	150	146 sqm	£	21,900				Windows (existing)				
	*												0.8 x 1.7m (sash and case)				£ 1,800
	Repoint stone walls - externally				£	95	167 sqm	£	15,880	£	55,963		1.2 x 1.7m ditto				£ 2,000
											5		window board and apron				£ 40
	Works to extensions												willdow board alld aproff				1 40
	140mm blockwork walls				£	80	61 sqm	f	4,890				External doors				
	140mm support wall				£	90	12 sqm										£ 2.200
	2-30mm support wan				_	30	TE SHIII	_	2,030	£	5,986		1.0 x 2.1				£ 2,200
											3,300						

1 No £ 500 £

51 sqm f 6,988 f

20 sqm £ 3,000 £

1 sum £ 4,500 £ 16,500

61 sqm f 26,954 f 26,954

129 sqm £ 38,099 £ 40,099

£ 2,000

2 No £ 4,400 £ 17,680

5 No £ 9,000 2 No £ 4,000 7 m £ 280

1 sum £ 12,000

500

6,988

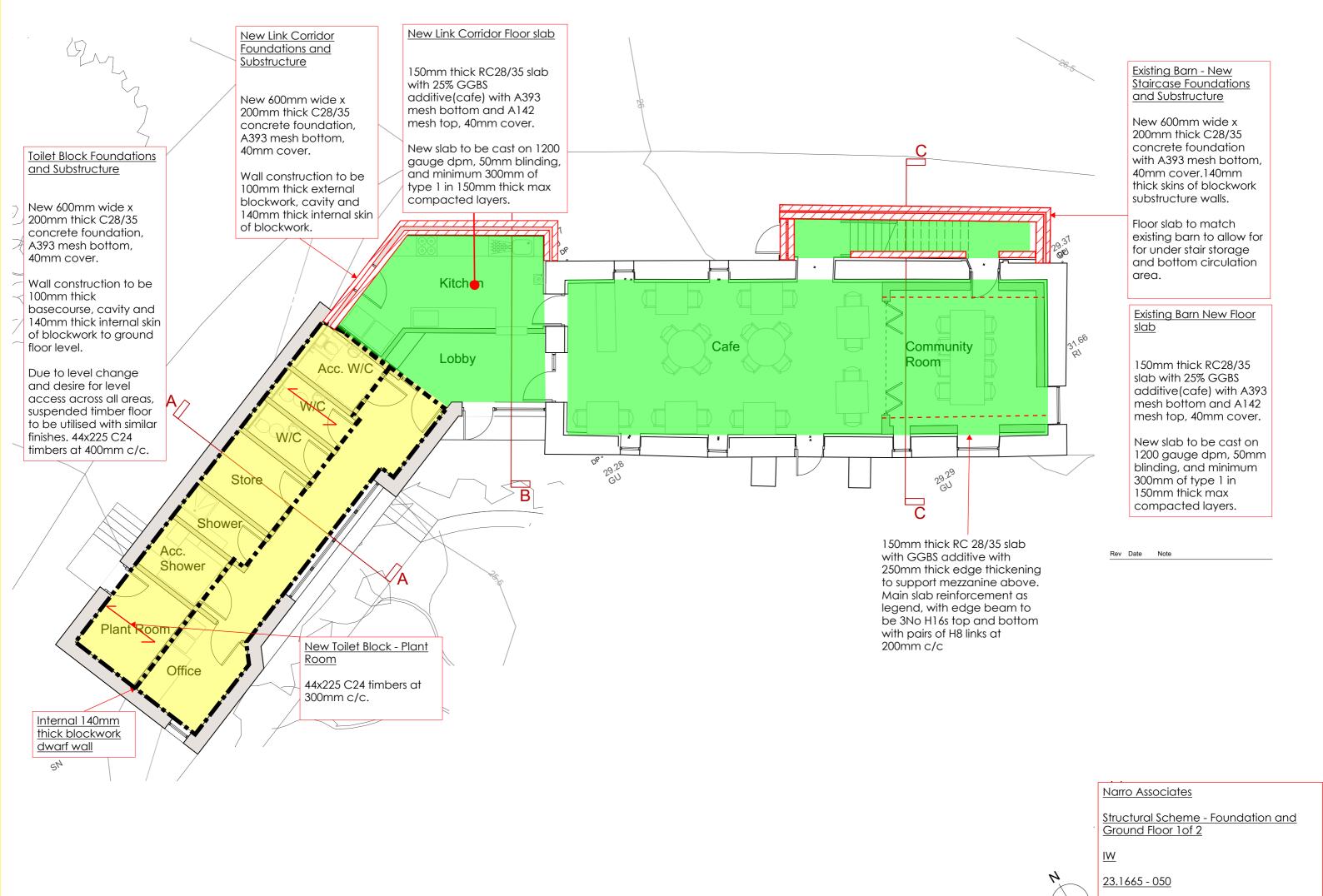
3,000

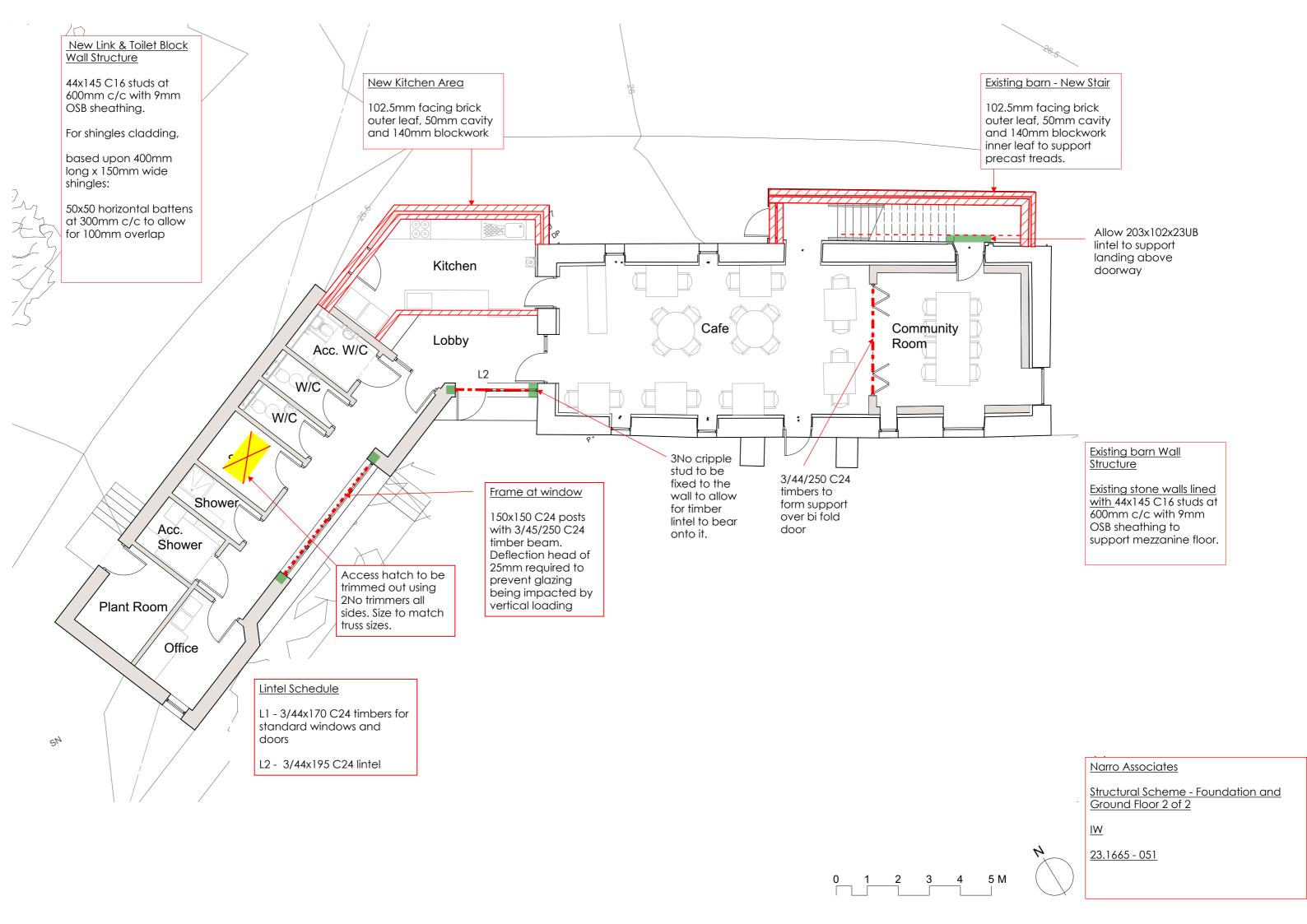
	Windows (extension)											Sürim wasa wool		<u>:</u>	20					
	0.7 x 0.7m (Alucad)				£ 900	5 No	£	4,500				50mm waters		Ė	10					
	1.5 x 0.9m				£ 1,200	1 No	£	1,200				Sarking heard		Ė	25					
	window board and apron				£ 40	5 m	£	200				university dog fact		=	2					
												Natural a at o		= 1	2Ľ					
	Feature Glazing screen				£ 10,000	1 su	m £	10,000												
												km lest, thinly one area stabil								
	External doors											Revolutions	:	=	ΞC					
	1.0 x 2.1				£ 2,200	2 No	f	4,400				18hora gryonad			?E					
	ditto with side screen				£ 3,000	1 No						150 may restated	•			428,00	E6 // -	€ 22,286		
	aitto with side screen				1 3,000	1 IVO		3,000					:		a. T	*** T/A.	22 24	E 12,200		
	Parala.				c 200	16		4 020		20 120		Start =codward	ļ	,	11.					
	Lintols				£ 300	16 m	£	4,830	£	28,130		50mm batteris	ļ							
	- w											Sar:Ing board	,		!5					
	Ceilings											Underslabing felt.	=	<u>-</u>	į.					
	Dwangs	7.	£	8								Zindistanoing seam)		U					
	plasterboard]	£	15	£ 23.00	121 sq	m £	2,784												
												Gumamand downs as			T	99.60	50 =	4,600	ſ	51,038
	Internal partitions																			
	Plasterboard]	£	15																
	50 x 100 framing]	£	20							isi a	Coefficies / Finishes								
	Plasterboard	1	£	15	£ 100.00	89 sq	m £	8,879				Mayer Tital in atom walls			E	120	95 oc =.	1 11,422		
	Insulation	i	£	20				- 6										•		
	Skirtings * 2	1	£	30								Accing considerate moise			F	100	157 (200)	€ 15,000		
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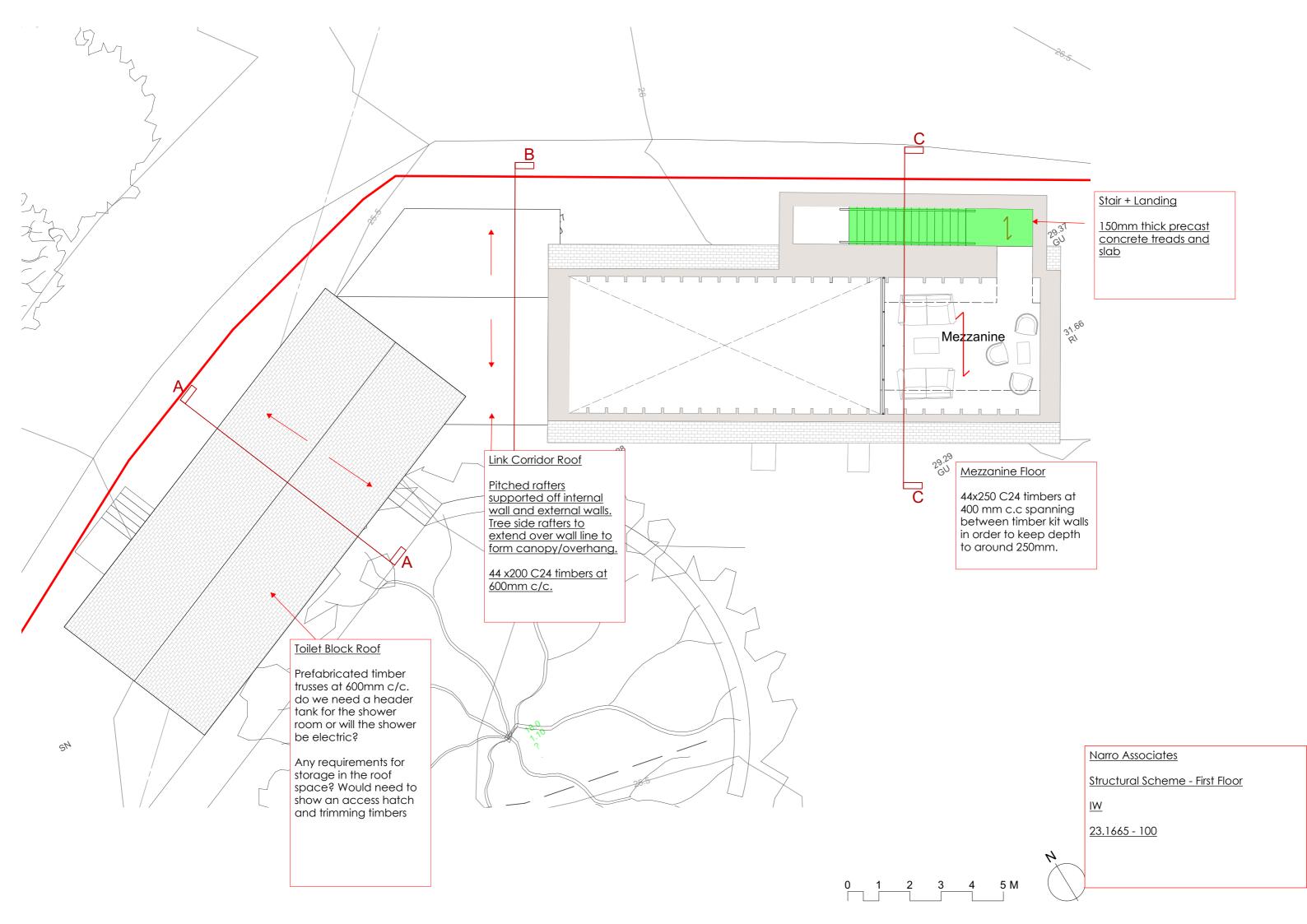
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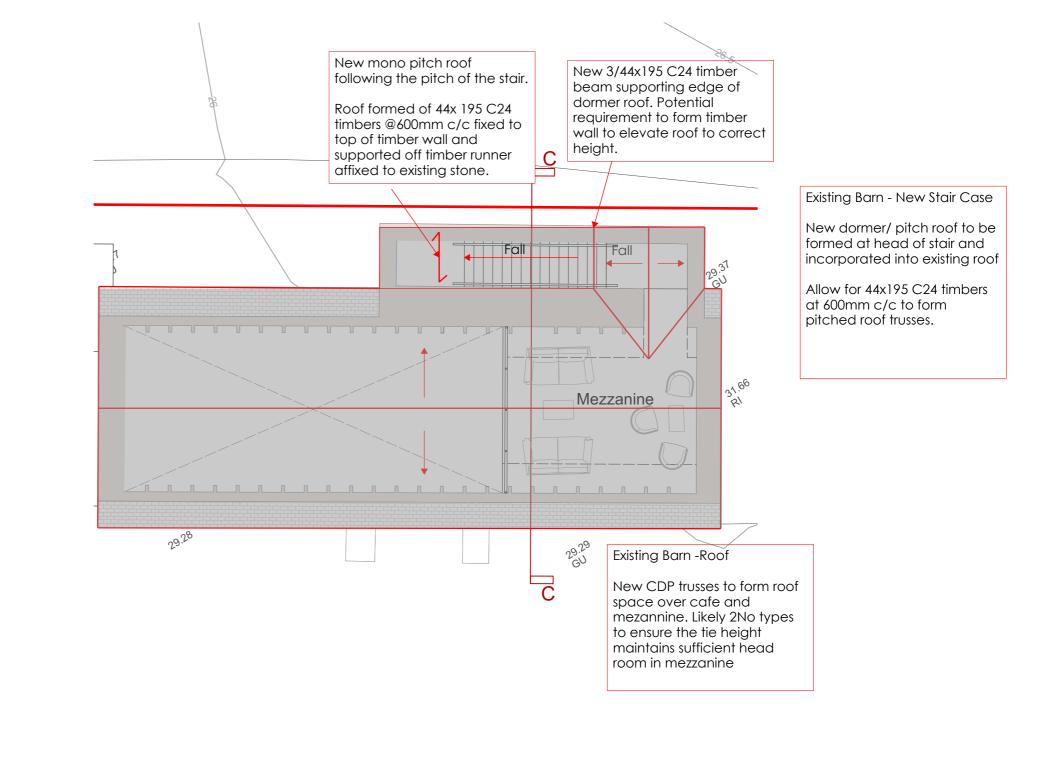
APPENDIX C

STRUCTURAL / CIVIL ENGINEER INFORMATION









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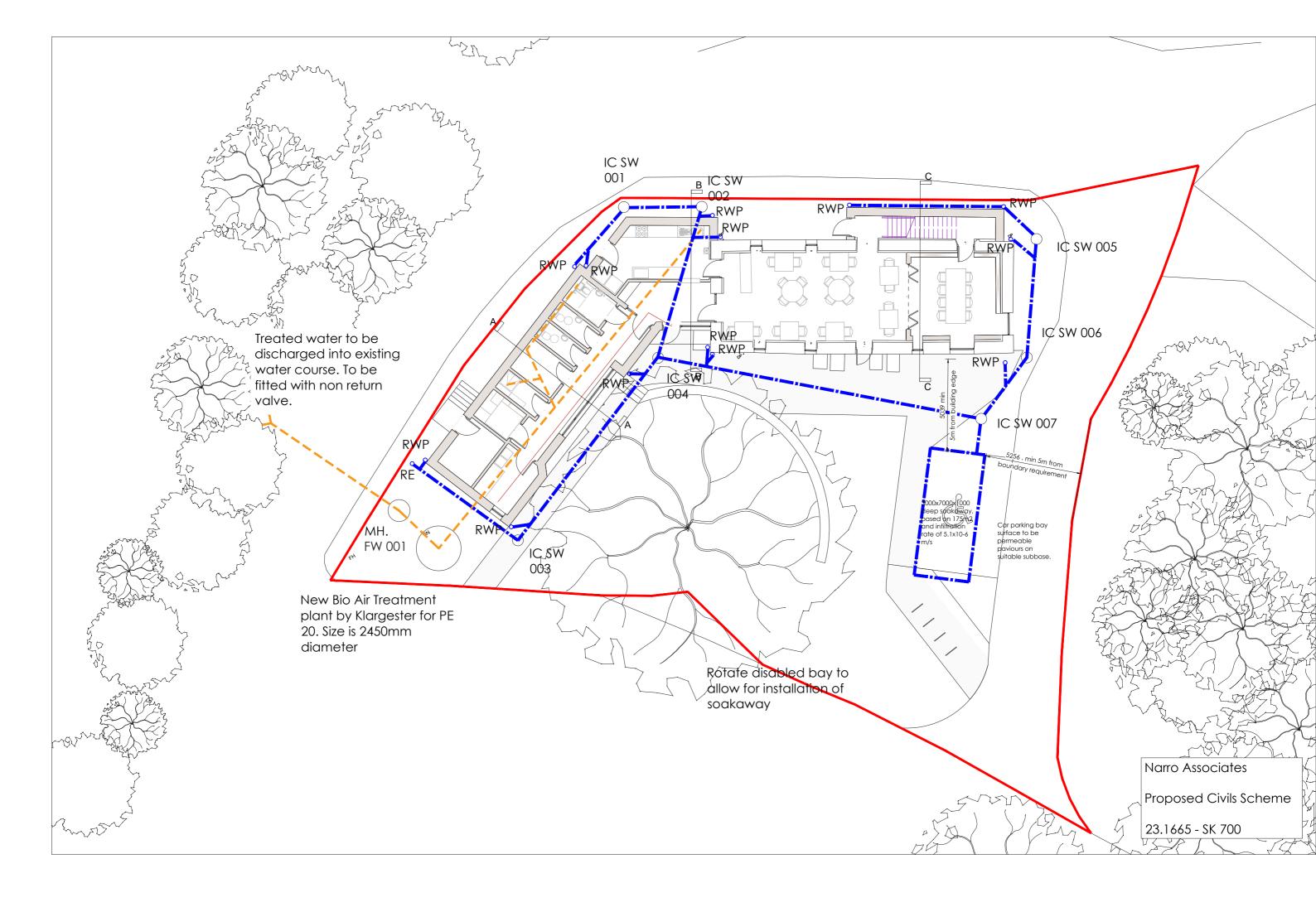
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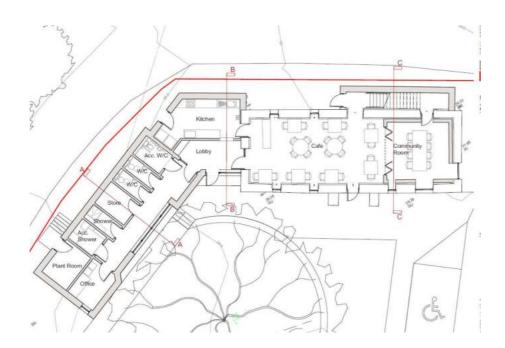




APPENDIX D

SERVICES ENGINEER REPORT





Inchree Community Centre

Building Services Stage 2 Report

Rev 03



Oxford House 71 Oxford Street Glasgow G5 9EP

Tel: 0141 370 3009

w: www.butler-consult.co.uk

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DOCUMENT CONTROL

Issue	Date	Status	Author	Review	Notes
01	27/08/24	For Review	AA/NP	PT	Issued for design team information.
02	10/09/24	For Issue	AA/NP	PT	Updated to reflect architects comments.
03	16/09/2024	For Issue	AA/NP	JB	Add PV panels

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2.0	INCOMING UTILITIES & DISTRIBUTION	
2.1 2.2 2.3 2.4	POWER SUPPLY BT OPENREACH SCOTTISH WATER ADOPTABLE LIGHTING & STREET LIGHTING	(
3.0	PROJECT RISK AND OBSERVATIONS	
4.0	BUILDING STANDARDS ENERGY COMPLIANCE	
5.0	BUILDING SERVICES DESCRIPTION	
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Introduction 1.0

Butler Consulting are acting as the mechanical & electrical engineers and energy assessors on the new build/refurbishment community building at Inchree, which is a small hamlet south of Fort William. This new facility internal design is being developed by Inch Architecture, this Stage 2 report focuses on the proposed new mechanical and electrical services required to service the project.

We have worked closely with the client and project design team to develop the services strategies described in this report.

This report focuses on the mechanical and electrical building services, covering the following key elements;

- Incoming Utilities and Distribution
- Risk and Observations
- **Building Services System Description**

These elements have been discussed and co-ordinated with the wider design team.

The new build is standalone as a project and services strategy and will need to comply with the Non-Domestic Scottish Building Standards.

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2.0 **Incoming Utilities & Distribution**

The site is relatively remote some 15miles south of Fort William, there are a number of private residential dwellings close by, plus local small business - the site could be considered `remote` from a utilities point of view.

Given the state of the existing building for the purposes of this Stage 2 report we will assume the new building requires new dedicated utility supplies.

2.1 **Power Supply**

It has been confirmed by a local neighbour, their house is fed from a local 3phase (TPN) supply – which indicated that we may be able to tie this development into an existing TPN supply.

There is no obvious local sub-station, however, there is evidence of Scottish & Southern Energy building on Righ Crescent (as noted below), further investigation will be required when we engage with the utility providers directly.



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2.2 **BT Openreach**

We have completed a service check on the local post code of PH33 6SE, which returned the following;



The search results suggest local Ultrafast Full Fibre Broadband is 'Not Yet Available', A new connection would be required, this can either by fed overhead via poles or included in the multi-service trench.

2.3 **Scottish Water**

A new metered Scottish Water mains water supply will be required to service the new development. At the appropriate stage of the project a Pre-Development Enquiry (PDE) will be submitted via the Scottish Water portal. The PDE results will confirm if there is sufficient water supply in the local water treatment plant. The results may require a flow and pressure test to be carried out on the local infrastructure, which if required, the project will need to complete in advance of any new application.

Upon receipt of a positive PDE, a new water application will be made. Part of this process we will determine if a new fire hydrant is required – the requirements are set out in Scottish Technical Standards and verification will be obtained from Scottish Fire & Rescue on a suitable location.

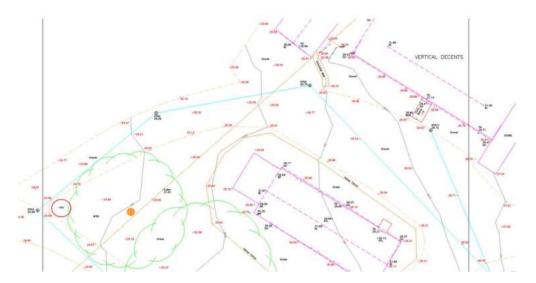
The following information is required by Scottish Water to make the formal application;

- Site location plan
- Design Proposal (site connection details and internal water services design drawings
- Internal plumbing schematic
- Fire Authority approval (if applicable)
- Soil investigation report (if applicable)
- PDE Ref Number
- Meter Size Data Sheet

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There is evidence of an exiting fire hydrant, see the red circle below taken from the record survey information.



The location of the existing fire hydrant would provide sufficient cover for this new development and should provide a suitable local connection for the building new water supply.

2.4 Adoptable Lighting & Street Lighting

There is no existing street lighting on Righ Cresent. The Pre-Application Advice from the Highland Council does not make any specific reference to new street lighting; however, this also notes Transport Scotland as a future consultee.

The new car parking will require new lighting – this could be catered for by off building lighting or bollards – detailed lighting strategy to be developed in the future.

Should it be required, the lighting design will follow these design standards to ensure minimal or no upward light emission and limit light trespass out with the boundaries of the site.

- CIBSE Guide No. 4 The Outdoor Lighting Guide
- ILP GN01
- SSL LG6 The External Environment
- SSL Guide to Limiting Obtrusive Light
- ILP Guidance Note 01/20 Reduction of Obtrusive Light
- Scottish Executive Control Light Pollution & Reducing Lighting Consumption
- British Standard BS:5489 Code of Practice for the Design of Road Lighting

Where adoptable roads are required, the design will need to comply with the Councils requirements – the design will follow suit.

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3.0 Project Risk and Observations

With every project there are risks, it is worth listing these risks with all members of the design team, schedule them and track their development through the project phase – hopefully as the project develops the known risks may be reduced and/or a design developed to take cognisance of them.

At this early Stage 2 design there are numerous unknowns, which hopefully will become known, however, until that stage they should be considered a risk. The list below is our initial assessment.

Utilities – given the remote nature of the site, getting utility connections shall be difficult from a technical stance and with added financial cost.

Project Budget – always a risk, as the project design develops to allow budgets to be prepared and presented.

Statutory Approval – this is planning approval and then building warrant. The mechanical and electrical services design will need to comply with both, which we do not envisage being an issue, however, there needs to be a balance between clients wishes vs compliance vs project budget.

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Building Standards Energy Compliance 4.0

Given the state of the existing building and the extend of new build element, we would assume this project would be considered as a new build non-domestic project. This would therefore need to comply with the Scottish Building Standards. A key part being its compliance with Section 7 of the standard which is the required inclusion of Low Zero Carbon Technologies (LZCT). Our assumptions below have already factored in these requirements. At the appropriate time in the project design, we will complete an initial energy modelling exercise to demonstrate the building compliance with the standard. This will inform the project team the decisions made were correct or need to be adjusted to suit.

We will use the SBEM (Simplified Building Energy Model) to assess and compare the energy and environmental performance of building. Its purpose is to ensure accurate assessment of a building's energy performance against the governing standards.

SBEM works by assessing how much energy a building will use, when delivering a pre-defined level of comfort and service provision. The assessment is based on standard assumptions for occupancy and behaviour. This enables a comparison of the building performance. Related factors, such as fuel costs and emissions of carbon dioxide (CO2) can be determined from the assessment.

SBEM defines a buildings performance in relation to energy use per unit floor area, a fuel-cost-based energy efficiency rating (the EPC Rating) and emissions of CO2 (the Environmental Impact Rating). These gauges of performance are based on estimates of annual energy consumption for the provision of space heating, domestic hot water, lighting and ventilation. Other SBEM outputs include estimate of appliance energy use, the potential for overheating in summer and the resultant cooling load.

Only as the project moves into the detailed design phase for Building Warrant, more defined SBEM calculations will be conducted to ensure the project goals and objectives are being achieved. This critical piece of work at the Stage 3 design stage ensures the goals and objectives set out in this report are being upheld and that the building can achieve the required energy saving and accreditation.

To ensure the delivery of a sustainable development, the 'Lean, Mean, Green' energy hierarchy will be developed. This fabric-first approach is used to reduce energy demand before considering the introduction of low and zero carbon generating technologies (LZCT) as described below:

- · Lean reducing energy demand through passive measures such as improving thermal properties, adopting a natural ventilation philosophy where suitable and improving air tightness.
- Mean increasing the efficiency of building services such as boilers, reduced specific fan powers and incorporating daylight and occupancy sensing controls in lighting system.
- Green Only when the above steps have been completed are LZCT's evaluated. During early stages, where designs are still flexible, more than one 'Green' technology may be viable.

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5.0 **Building Services Description**

The following section gives a high-level description of the mechanical and electrical services and their application. While the architectural designs are unique, the services strategies are common throughout. The description and table below highlights the mechanical and electrical services for each room type. If not specifically noted, these systems will be building wide solutions.

These assumptions form the basis of the design, however, they can and will be developed with the project design team being refined at detailed design stage and beyond.

5.1 **Mechanical Services**

The following sections give a short description of the proposed mechanical services. The table below also highlights the solutions on a room by room basis.

Heating/Air Conditioning

To comply with the Scottish Building Standards Energy Section, all new buildings must include some Low Zero Carbon Technologies. These could be solar panel, air source heat pumps (ASHP), ground source heat pump, gas/oil fired boilers have been banned in the new 2024 regulations.

To this end, we are proposing an ASHP system which will provide heating. An ASHP does not provide heating water at the same high temperature as a gas fired boiler (55C vs 80C), however, the lower heating temperature is perfect for underfloor heating. The co-ordination of the underfloor heating and floor construction needs to be developed with the project team, however, should this not be possible, low temperatures radiators are available.

The ASHP would be located externally adjacent to the plant room. The plantroom would contain the system buffer vessels and distribution pumps.

This type of system is becoming common place, with many manufacturers providing proven technologies, Contractor are also well aware of this type of technology.

Above Ground Drainage

Local above ground drainage will be required to service the outlets as required.

Based on BS EN 12056, the above ground foul (soil and waste) drainage installations will accommodate all foul drainage discharges from the buildings. Generally installed in PVC stacks and MUPVC waste pipework, the drainage will utilise a ventilated single stack / modified single stack system incorporating ventilation pipes at roof level with gravity discharge to underground pop-ups.

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ButlerConsulting

Drainage from the WHB's, sinks and toilets will be installed horizontally and connect to the drainage stacks. The drainage stacks will be mostly confined to within the rooms they serve or behind the IPS unit. These stacks will connect to the below ground drainage and all pipework will be accessible for maintenance.

The Accessible Showers will have a locally trapped drainage point connected to the below ground drainage system.

The Kitchen and Plantroom will have a locally trapped floor gulley for washdown purposes and connect to the below ground drainage system.

Water Services

A new mains cold waters supply will be taken to the building - process noted above. Scottish Water will only guarantee 1bar water pressure at point of connection, to ensure we can regulate our own pressure and to ensure the building can operate for a fixed period of time should the connection fail, we would propose a small cold water storage tank is provided. The size of the tank will be determined during the detailed design stage. With this pumped solution, we can control the water pressure in the system, this suits the design process, as many of the points of use water heater require an inlet pressure of 1bar. The cold water tank will be located in the plantroom.

Should an external water outlet be required, for wash down purposes, for compliance with Scottish Water Bylaws, a CAT5 break tank and pump arrangement would be proposed. These package units can be wall mounted, internally or externally.

Given the infrequency of the hot water usage, we would propose electric point of use water heaters. These could be a single point of use heater for a single wash hand basin or a larger water heaters which includes storage.

The inclusion of electric point of use water heaters will need to be assessed in the building energy modelling exercise to determine if they are suitable – hot water generation is one of the key energy modelling factors.

Mechanical Ventilation

Where possible natural ventilation via openable windows is the default position, however, this is not always possible either due to limited openable windows area and/or room use requires mechanical ventilation for Scottish Building Standards compliance.

The WCs/Shower/Store/Kitchen will require mechanical ventilation to comply with the technical standards. The WCs/Shower/Store can either be supplied with a combined mechanical extract

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ventilation system or independent systems. At this time, we would recommend local, independent mechanical extract ventilation, either wall or roof mounted extract fans are adopted. The control of these systems will be linked to the local light circuit/PIR detection to ensure their operation is linked to the rooms use and therefore limited. This saves on energy costs and equipment operation times.

The 'domestic' style kitchen will have a dedicated mechanical ventilation system to suit the equipment within and/or the building standards - the final solution will be developed during the detailed design development.

The Café, Community Room and Mezzanine spaces will require a mechanical ventilation system - this is due to the limited openable window area and the occupancy figures. A dedicate mechanical ventilation and heat recovery unit will be installed at high level above the Lobby providing filtered/tempered air into the spaces via ductwork system.

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5.2 **Electrical Services**

The following sections give a short description of the proposed electrical services. The table below also

highlights the solutions on a room-by-room basis.

Small Power

A new 3Phase power supply - supply size to be based on electrical load analysis which can be

completed once the general power, heating and hot water generation systems are known.

Lighting

The luminaires for the building shall be selected both for their aesthetic appearance but also their

technical and visual performance for the given area and proposed use, energy efficiency shall also be

carefully considered to provide the most efficient solution.

External Lighting

External lighting to be off building and local bollards – again these shall be chosen to suit the local

environment and shall be designed to limit impact on the local eco-system.

Fire Alarm

A fire alarm system shall be designed to an L2 category – this will provide a high level of occupant and

building protection for the intended use.

Lightning Protection

A lightning protection system may be required to comply with the requirements BS EN 62305. An initial

risk assessment will be carried out at detailed design stage, due to the height of the building and location

we do not believe it is likely to be required.

The principal design parameters for the lightning protection system design will be BS EN 62305, BS7430

and BS7671 IET Wiring Regulations, 18th Edition. All equipment supplied and installed will meet the

relevant British Standards, ASTA and UK Electricity Association Approvals, IEC, ENA and CENELEC

Standards. Cast Iron / metallic soil vent stacks and gullies will be bonded to the roof termination network

across the roofs. Conductor tapes shall be installed at top inside edge of parapet walls as required.

Structured Cabling System

A structured cabling system shall be provided for data and telephony requirements of the building, we

anticipate this would be a single patch cabinet which would allow connection of data points around the

building to serve office space, EPOS equipment, WIFI points, CCTV cameras.

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The structured Cabling System installation design shall be based on a star wired topology, incorporating TIA/EIA-568-B wired, four pair, balanced twisted pair, with 23 AWG plain annealed copper conductors.

Category 6 cables running from patch panels on each floor to the work area RJ45 datacomm outlets. Horizontal cabling shall be individual 4 pair cables, home run from the communication frame direct to each RJ45 UTP user information outlet without any transition points or joints. All cables shall be run on cable basket, which will be installed prior to the structured cable being laid, and terminated in wall, ceiling and floor box outlets.

Wi-Fi System

A property wide Wi-Fi distribution system shall be designed. Access points will be located subject to a specialist wireless survey and a computer model will be produced to determine the Wi-Fi router locations.

Power shall be provided to the wireless access points through the use of POE (IEEE standard 802.3af). The system shall provide 100% wireless coverage with a minimum signal strength of -65 throughout the building - contractor shall site measure to confirm adequate coverage.

Electric Vehicle Charging (EVC)

The current planning does not specifically mention the need for electrical vehicle charging points, however, from our experience their inclusion is becoming common place. Unless directed otherwise by the client body, we will provide the minimum requirements as set out by the planning policy. The charging points will be:

Off street, private, workplace, shared & open access.

It is proposed to provide twin outlet posts with 32A, EN 62196 (mode 3, type 2) socket outlets. The posts will be located to serve the car charging positions. The proposed charging post locations will be established during the detail design stage.

Due to the size of the load which is required to provide EV car charging provision it is proposed that a proprietary energy management system will be installed. This system supervises the total energy consumption of the building and automatically reduces the charge current to the EV's to ensure that the incoming supply rating is not exceeded. Alternatively we shall limit the number of EVC's to what the buildings power capacity can support.

Each EVC shall be a 7.2kW unit.

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Assistance Alarm Systems

An assistance alarm system shall be designed to serve the accessible WC & Shower.

Each local system shall consist of:

- Call point / pull cord
- Ceiling mounted reassurance light
- Manual reset/reassurance button within the room and Over door indicator/tone unit.

The pull cord shall be ceiling mounted located within reach of the toilet and wash hand basin/shower with the manual reset unit located adjacent the door into the room. The reset unit shall be a flat metal plate with reset button incorporating an amber reassurance lamp.

The over door indicator to the corridor shall be flat metal plate finish with an amber polycarbonate lens C/W integral tone unit.

The central panel shall have a dedicated indicator for each disabled alarm call point, fault indicator and single combined tone unit.

On activation of a call the reassurance light shall illuminate together with the over door indicator and respective lamp on the main central panel. The activation shall also trigger the tone units over the door and on the main panel.

The system shall only be reset by manually operating the reset unit within the room(s) at the point of call. If any of the call points fail the respective failure indicator shall illuminate.

The assistance alarm system shall be manufactured by Baldwin.

Intruder Detection & Alarm System

Subject to client requirements, we would expect to design a microprocessor-based intruder detection and alarm system to provide building coverage.

Magnetic door contacts, dual technology detectors (PIR/Microwave) and passive infra-red detectors will be employed to facilitate intruder detection. Alarm confirmation technology will be used to reduce the potential for false alarms.

Control and indication equipment will be provided at the reception/lobby area. Keypads complete with fob/token reader will provide the user interface. These keypads will be located at each final exit point and within each lift lobby.

Access Control

At this stage we are unclear how the building will operate and therefore how it shall be secured, however we would initially propose some sort of access control system to all or some of the building.

A digital controlled access control system would be proposed with fob/keypad entry.

The system would be designed to automatically disable in the event of a fire alarm leaving all doors free to swing free.

The access control system will have inherent flexibility to enable future system reconfiguration and expansion.

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A card/ fob management system will be provided to allow on site programming and deletion of cards/fobs.

Photovoltaic Panels

We would propose to add PV panels to the roof of the new build section of the building, we would maximise the PV generation capacity by covering as much of the roof as is possible. This would provide electrical energy into the buildings electrical distribution system for general consumption, to ensure PV energy was used effectively when the building may have a low electrical load, we would look to use surplus energy to heat water cylinders or charge storage batteries. This would be investigated further once the building services have been developed further.

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Stage 2 MEP Report



Room Name	Area m² (approx.)	Above Ground Drainage	Water Services	Heating	Mechanical Ventilation	Small Power & Data	Lighting (inc. emergency)	Fire Alarm
Entrance Lobby	9.9	n/a	n/a	Underfloor heating via ASHP	Not required transient space	Local socket outlets.	LED Lighting switched by PIR.	L2 Fire Alarm
Accessible WC	4.2	As required to suit outlets.	Electric Point of Use	Underfloor heating via ASHP	Wall/Ceiling mounted extract fan linked to light with run on timer.	Local outlets for mechanical services – not for public use.	LED Lighting switched by local PIR.	L2 Fire Alarm
WC(s)	6.5	As required to suit outlets.	Electric Point of Use	Underfloor heating via ASHP	Wall/Ceiling mounted extract fan linked to light with run on timer.	Local outlets for mechanical services – not for public use.	LED Lighting switched by local PIR.	L2 Fire Alarm
Store	5.5	n/a	n/a	Underfloor heating via ASHP	Wall/Ceiling mounted extract fan linked to light with run on timer.	Local outlets for mechanical services – not for public use.	LED Lighting switched by local PIR.	L2 Fire Alarm
ccessible Shower	3.3	As required to suit outlets – floor gulley required.	Electric Point of Use	Underfloor heating via ASHP	Wall/Ceiling mounted extract fan linked to light with run on timer.	Local outlets for mechanical services – not for public use.	LED Lighting switched by local PIR.	L2 Fire Alarm
WC Corridor	15.8	n/a	n/a	Underfloor heating via ASHP	Not required transient space	Local outlets for mechanical services, cleaners socket – not for public use.	LED Lighting switched by local PIR.	L2 Fire Alarm
Plantroom	7.0	Floor gulley	Incoming cold water point c/w isolation valves etc. Small tank/pump arrangement to allow control of water pressure.	No heating, however, underfloor heating cylinder and tie into ASHP plant items.	Via louvred door.	Local outlets for mechanical services – not for public use.	LED Lighting switched locally.	L2 Fire Alarm
Office	7.3	n/a	n/a	Underfloor heating via ASHP	Natural Ventilation via openable window.	Local socket outlets.	LED Lighting switched locally.	L2 Fire Alarm
Kitchen	16.9	As required to suit outlets, plus floor gulley.	Electric Point of Use	n/a	Mechanical supply and extract to suit equipment.	Local socket outlets, appliance connections.	LED Lighting switched locally.	L2 Fire Alarm
Cafe	47	n/a	n/a	Underfloor heating via ASHP	Mechanical supply/extract via heat recovery unit.	Local outlets for mechanical services, plus some outlets for public use (i.e. charging)	LED Lighting switched locally.	L2 Fire Alarm
Community Room	20	n/a	n/a	Underfloor heating via ASHP	Mechanical supply/extract via heat recovery unit.	Local outlets for mechanical services, plus some outlets for public use (i.e. charging)	LED Lighting switched locally.	L2 Fire Alarm
Mezzanine Space	17	n/a	n/a	Electric Heating (matt or panel heater)	Mechanical supply/extract via heat recovery unit.	Local outlets for mechanical services, plus some outlets for public use (i.e. charging)	LED Lighting switched locally.	L2 Fire Alarm

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Stage 2 MEP Report
Date: 16092/4
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APPENDIX E

PARKING SURVEY

McGregor Traffic Solutions Ltd Geddes House, Kirkton North Road, Livingston. EH54 6GU www.mcgregortraffic.com

Project Ref: 24008

Issue Date: 06 September 2024

Client: South Lochaber Community Group

Address: C/o INCH Architecture, 133 Bridgegate, The Briggait, Glasgow G1 5HZ

Site Address: Inchree Falls, Near Onich, Fort William, Scottish Highlands

NEW COMMUNITY HUB, NEAR ONICH, FORT WILLIAM, HIGHLANDS

FAO Katherine Tynan

Dear Katherine,

Following our phone call and recent email communication regarding this site, I have pleasure in providing you with an initial report on the site visit, access and car park.

1. THE BRIEF

The client, a South Lochaber Community Group, is looking at the feasibility to convert an historic barn at Inchree to the north of Onich in the Scottish Highlands into a community facility. As part of the planning requirement there is need for Traffic and Transportation input. Initial pre app discussions with Highland Council indicated that a Transport Statement will be appropriate to demonstrate that the proposed development access will operate safely and efficiently on completion. Further details about the existing car park usage have also been requested by the council.



Aerial view of site location.

The proposed development is adjacent to the Inchree Falls car park which is located around 2km north of Onich near Fort William in the Scottish Highlands.

McGregor Traffic Solutions Ltd

24008 New Community Hub, near Onich, Fort William, Highlands

2. SITE VISIT

Following a desktop review of the site a site visit was undertaken on 24 August 2024. The site location and adjacent car park were observed with relevant photographs taken to assist in the appraisal and input to the ongoing design.

Access to A82

There is an existing junction to the A82 which serves various properties and leads eventually to the Inchree Barn, Vertical Descents, the Inchree Falls car park and a private residential property beyond the car park.

The A82 is the main connecting road between Crianlarich and Fort William. It is a popular tourist route as it passes through Glen Coe and continues its journey north to Inverness along the banks of Loch Ness to the north of Fort William. The section of the A82 in this location is subject to a 50 mph speed limit.

The main trunk road also carries delivery traffic heading to the various towns and villages across the Highlands. There is also a significant amount of timber traffic along this road.

There are frequent facilities for cyclists and other non motorised users. These facilities are currently being upgraded all along the route.

A review of the accident statistics revealed there were no recorded incidents in the vicinity of the access in the last 5 years suggesting there is no historical safety issues with the junction.



Figure 1 - Priority Access junction with A82

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Figure 2 - Access to A82



Figure 3 - Passing Places on access road

The access road is well maintained with appropriate provision of passing places.

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24008 New Community Hub, near Onich, Fort William, Highlands



Figure 4 - Visibility to south showing segregated cycle provision



Figure 5 - Visibility to north

Visibility is good but could be significantly improved if the roads authorities maintained the overgrowing vegetation encroaching on the road.



24008 New Community Hub, near Onich, Fort William, Highlands

Barn

The barn is located around 950m along the access road which for the majority of its length is known as Righ Crescent. The access road is tarmacked with appropriate provision of passing places. Street lighting is present on the first 550m of the road which is mainly accessing residential properties.



Figure 6 - Inchree Barn



Figure 7 - road from the Barn to the Car Park

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24008 New Community Hub, near Onich, Fort William, Highlands

Car Park and Survey

The car park is operated by the Forestry Commission with charges for parking as shown in Figure 8.



Figure 8 - Car Park Charges



Figure 9 - Access to Car Park



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24008 New Community Hub, near Onich, Fort William, Highlands



Figure 10- Reverse view of Car Park

The car park has approximately 20 to 24 spaces, nothing formally marked. There is no lighting in the car park.

A survey was conducted over two days to clarify the occupancy of the car park. The survey was conducted by video to capture the number of vehicles every 5 minutes during the hours of daylight.

The weather over the Bank Holiday weekend was a mixture of cloud and rain so results for the survey are potentially lower than could be expected.

The maximum occupancy was observed to be 8 on the Saturday (shown on figure 11) and 10 on the Sunday (shown on Figure 12).

	CAR PARK ACCUMULATION COUNT					
Project:	Inchree Falls, Onich					
Client:	McGregor Traffic Solutions					
Project Ref:	TS-24-080					
Date:	Saturday 24 August 2024					
Weather:	AM: Wet / Overcast; PM: Dry / Overcast					
Location:	Inchree Falls Car Park					
	NO. OF VEHICLES / LOCATION					
TIME	NORTH / WEST CAR PARK	SOUTH / EAST CAR PARK	TOTAL			
MINIMUM	0	0	0			
AVERAGE	1	0	2			
85th%ILE	3	1	4			
MAXIMUM	6	2	7			

Figure 11 - Saturday Summary of Car Park Occupancy

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24008 New Community Hub, near Onich, Fort William, Highlands

	CAR PARK ACCUMULATION COUNT						
Project:	Inchree Falls, Onich						
Client:	McGregor Traffic Solutions						
Project Ref:	TS-24-080						
Date:	Sunday 25 August 2024						
Weather:	r: AM: Wet / Overcast, PM: Dry / Overcast						
Location:	Inchree Falls Car Park						
NO. OF VEHICLES / LOCATION							
TIME	NORTH / WEST CAR PARK	SOUTH / EAST CAR PARK	TOTAL				
MINIMUM	0	0	0				
AVERAGE	3	0	4				
85th%ILE	7	1	8				
MAXIMUM	9	2	10				

Figure 12 - Sunday Summary of Car Park Occupancy

The historical information from the Forestry Commission suggested that the number of movements peaked at around 21 at around 10 / 11 am. It is unclear from the data where the vehicles were counted and how long vehicles parked for. There are other facilities available (Vertical Descents and a private residence) that use the access road so data may be skewed.

Summary

There were no significant issues observed at the existing access junction in terms of visibility or safety concerns. The visibility will be confirmed with relevant drawings in the Transport Statement.

The existing access road is subject to a 30mph speed limit and has appropriate passing places provided.

A review of the car park data collected suggests that it is unlikely that the proposed community hub would comprise the existing parking. This will be fully explored and set out in the Transport Statement.

I trust the above provides appropriate input to the design process. The next stage is to develop the Transport Statement for submission in support of the Planning Application

Yours sincerely,

Myles McGregor

Director

McGregor Traffic Solutions Ltd



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APPENDIX F

ROT SURVEY





Survey Report & Proposal



Reference No: ENQ776407 INCH Architecture 133 Bridgegate GLASGOW Lanarkshire G1 5HZ

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29th July 2024

PROPERTY ADDRESS

Inchtree Steading,Righ Crescent Onich FORT WILLIAM Inverness Shire PH33 6SG

Dear Ms Tynan

Following my survey of the above property on 29th July 2024, I am pleased to enclose our Survey Report.

In accordance with your instructions, we have confined our inspection to the areas as indicated by you. If there are any omissions or if you believe that we have misinterpreted your survey instructions we apologise and if so we would be obliged if you could inform us as soon as possible so we can rectify any problems.

As soon as we receive your signed acceptance form, arrangements will be made to undertake the work

This Survey Report has been sub-divided into convenient sections so that you may easily find details of the survey, our recommendations and any quotations as applicable as well as other useful information.

In the meantime, if there are any points that you wish to discuss, you can contact me using the details below.

Yours sincerely

Mervyn Paterson CSRT

Senior Area Surveyor 07775702852 mervyn.paterson@petercox.com

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PROPERTY DESCRIPTION

The property is a Proposed Steading Conversion.

THE SURVEY

In accordance with your specific instructions, we carried out a survey of the undermentioned parts of Inchtree Steading, Righ Crescent, Onich, FORT WILLIAM, Inverness Shire, PH33 6SG on the 29th July 2024. Our findings and recommendations are set out below and should be read in conjunction with the enclosed General Notes for clients and Health and Safety precautions.

We must draw to your attention that this survey was conducted only in those areas that we were requested to inspect. Solely to identify evidence of Fungal Decay, Woodboring Insects.

NOTE: The terms left, right, front and rear are used as if facing the front elevation of the building from outside.

SURVEY

External Survey

- The property was a stone built agricultural building to be the subject of a proposed steading conversion.
- Numerous external defects were noted and it assumed these will be dealt with under seperate contract as part of the conversion.
- At the time of inspection it was dry and breezy.







Internal Survey

ROOF

Roof Timbers

Exposed Beams / Framing Timbers

- Inspection of Roof Timbers was undertaken where safe access was possible.
- Water penetration was evident to various areas of sarking which has led to wet rot decay.
- Due to the aforementioned wet rot decay was evident to the following rafters working from Right to Left-

Nos 5 and 13 decay to rafter ends at front elevation.

Nos 18, 20, 21,22, 23,24,25,26,27 & 28 decay to rafter ends at rear elevation.

No 19 decay to rafter full length.

- Woodworm infestation was evident to timbers throughout.
- Severe woodworm and wet rot decay was evident to wallplates at front and rear elevations.











Recommendations

- · Erect working scaffold/platform as required.
- Cut out affected wallplate sections and dispose of all debris.
- Install new treated timber wallplates duly wrapped in a damp proof membrane.
- Cut back affected rafter ends to sound timber and replace in similar treated timber with wall bearing ends dipped in fungicidal fluid and wrapped in a damp proof membrane and fixed to remaining sections with bolt on connectors.
- Cut out full length rafter and replace in similar treated with wall bearing end dipped in fungicidal fluid and wrapped in a damp proof membrane.
- All accessible exposed roof timber surfaces of remaining timbers are to be prepared and insecticidal / fungicidal fluid applied to all such exposed surfaces.
 This is a dual purpose application insecticide to deal with woodworm eradication and fungicidal fluid to preserve the timbers.
- Leave site clean and tidy.

Customer Instructions

We have not allowed for replacement of decayed sarking timbers as we would expect this to be dealt with by your roofing contractor but would expect approximately 20% to be require replacement.

NOTES

- For specialist work a certificate of guarantee will be provided when the work has been completed and the account paid in full
- IMPORTANT

The extent of this report is limited to the areas of the property which the surveyor was instructed to view on the day of the visit. No responsibility or liability whatsoever is accepted for issues which were unobservable on the day of the visit or for areas of the property not made available for observation.

Please note that this report is confidential. The report has been produced by the surveyor on behalf of Peter Cox Ltd, specifically for the stated recipient of this report (the Customer), for their sole use alone. The contents must not be disclosed to any other party without the express permission of Peter Cox Ltd which must be obtained in writing.

Peter Cox Ltd shall have no duty of care beyond that owing to the Customer. Under no circumstances shall Peter Cox Ltd be liable for any reliance by any party, other than the Customer, on the information contained within this report.

This report is provided strictly subject to the Peter Cox Ltd standard terms and conditions.

This report is based on professional opinion. It is not a guarantee or warranty.

• Extent of Survey: The areas we have reported upon are those inspected in accordance with your instructions. If there are any omissions or if you believe that we have misinterpreted your survey instruction, please let us know at once. Where treatment has been recommended, unless otherwise stated above, this is on the understanding that the specified area has not previously been treated and guaranteed.

You should be aware that we have reported upon problems evident to us at the time of our visit. We are not commenting in any general sense on the risks of fungal decay or any other defect not evident at this time or that may develop in the future.

Where we have drawn to your attention items that are outside the scope of our survey as defined earlier, these items should be regarded as helpful suggestions and not a full and complete assessment of any problems that may exist.

Please read carefully the content of this report and all of its enclosures.

This survey must not be regarded as a substitute for a structural survey

APPENDIX G

BAT SURVEY

INCHREE, FORT WILLIAM

BAT SURVEY



JULY - SEPTEMBER 2024



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1. INTRODUCTION

This report refers to a barn in Inchree, Onich, approximately 11km to the southwest of Fort William. It is proposed to convert the barn into a community space and a bat survey was requested to determine bat presence in support of a planning application.

David Dodds Associates Ltd. (DDAL) was commissioned by Inch Architecture on behalf of the owners to carry out the necessary survey, and this report details the methods and results, together with conclusions drawn and recommendations for further action.

Further information may be obtained from:

Charlotte Meyer-Wilson BA BSc MSc

Senior Ecologist at David Dodds Associates Ltd. (NatureScot Bat Roost licence 164702)

David Dodds Associates Ltd, 2 Caley Cottages, Caledonian Road, Peebles EH45 9DW

Email: <u>Charlotte@daviddoddsassociates.com</u> Tel: 0131 608 0012

Report version	1.0	
Issue date	03 rd October 2024	
Expiry date	12 th March 2026	



2. SUMMARY

A stage 1 bat survey and stage 2 bat absence/presence survey were conducted at this site, as well as a thorough desk study of the site and surrounding habitat in line with current national guidelines and local planning policy. The stage 1 bat survey investigated the roost potential of the building and potential of the surrounding habitat to support bats. The stage 2 bat absence/presence survey consisted of one sunset emergence survey and one dawn return survey based on the findings of the stage 1.

During the surveys the following observations were made:

- Two species of bats were recorded in flight at the site during the stage 2 bat activity surveys: Common Pipistrelle and Soprano Pipistrelle.
- One non-breeding Soprano Pipistrelle bat roost was identified within the structure of the building.

Destruction or disturbance of this roost is likely to constitute a criminal offence, unless carried out with a NatureScot license in place.

Recommendations are provided that outline a suggested approach to bat licensing.

This survey report is valid until 12th March 2026.

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3. LEGAL PROTECTION

3.1. Protection of bats under Scots law

All bat species were designated as European Protected Species (EPS) by Article 12 of **The European Habitats Directive 92/43/EEC (1992)**. This was enshrined in Scots Law by **The Conservation (Natural Habitats etc) Regulations (1994)**.

3.2. Possible offences

The following actions constitute criminal offences:

- Capturing or killing bats. This is an absolute offence there is no need for the prosecution to demonstrate an intention to commit the offence to secure conviction.
- Harassing bats.
- Disturbing bats:
 - a. Affecting their ability to survive, breed or rear young.
 - b. Affecting their local distribution or abundance.
 - c. Whilst rearing or caring for their young.
 - d. Whilst occupying a structure or place used for shelter or protection.
- Obstructing bats from accessing a breeding site or resting place.
- Damaging or destroying a breeding site or resting place used by bats.
- Possessing any live bat, dead bat or part of a dead bat.

In addition, the following are also offences:

- Attempting to commit one of the above offences.
- Knowingly causing or permitting someone else to commit one of the above offences.

Maximum fines for committing one of the above offences are £5,000 per animal.

3.3. Avoiding committing and offence

Most of these offences (excluding 1) can be committed recklessly as well as deliberately, meaning that ignorance of the presence of bats is not a defence: you are expected to do all you can to find out whether bats (or other protected species) are present and whether you are at risk of committing an offence. In practice this means instructing a consultant ecologist to carry out surveys and taking account of their professional advice.

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3.4. Licensing

Development Licence:

In certain circumstances, a Scottish Government (issued by NatureScot) development licence may be obtained, permitting an offence to be committed without prosecution. For a licence to be issued, three legal tests must be met:

- The reason for committing the offence must fall within certain narrow parameters, including:
 - a. The proposal is in the public interest, e.g., the construction of a school or community centre.
 - b. The proposal is necessary on grounds of safety.
 - c. The proposal is necessary to safeguard property.
 - d. The proposal is necessary to safeguard livestock.
- All reasonable alternatives must have been considered.
- The favourable conservation status of the bat species must be undiminished.

This usually requires a mitigating work programme to minimise disturbance/harm and usually compensation measures to ensure the bats are not disadvantaged, e.g., the creation of a replacement roost.

Applications for development licences can take up to 8 weeks to be processed and often require strict timetables for action. Early action can therefore reduce delays caused by licencing, mitigation, and compensation.

Bat Low Impact Licencing (BLIMP):

In certain circumstances, a Scottish Government (issued by NatureScot) BLIMP licence may be obtained, permitting an offence to be committed without prosecution. For a BLIMP licence to be issued, the following criteria must be met:

- 1. The proposal affects non-breeding soprano pipistrelle or common pipistrelle roosts.
- 2. Bat surveys have been overseen by licenced bat worker.
- 3. Works on site affecting bats will commence within 18 months of the date bat surveys were completed.
- 4. A site-specific bat protection plan written by a licenced bat worker is in place, detailing how to minimise impacts on bats and bat roosts.
- 5. There is no alternative to the proposal will avoid the impact to bats.
- 6. The proposal has any needed statutory permissions in place.
- 7. The site has been registered with NatureScot licensing team.
- 8. Prior to works commencing on each site mitigation must be in place, i.e., woodcrete/woodstone bat boxes.
- 9. Prior to works commencing on site, all workers have been briefed by a licence holder.



10. A copy of the site-specific bat protection plan is displayed on site for the duration of all works covered by the BLIMP licence.

A BLIMP licence will permit the following actions:

- damage or destruction of non-breeding soprano pipistrelle or common pipistrelle bat roosts.
- temporary disturbance of those species in those roosts.
- obstructing access to those roosts.
- temporary handling of any bats of those species found during the course of works.

The BLIMP licence will not cover activities affecting other bat species or other types of roost. However, this will not preclude working under the BLIMP licence at a site where other species or roost types are present providing that the works will not affect them.

3.5. Disclaimer

DDAL are not lawyers and cannot offer a legal opinion. It is strongly recommended that legal advice be sought before taking any action which might expose you to a risk of prosecution. DDAL can recommend a specialist environmental lawyer.



4. BAT SPECIES IN SCOTLAND

4.1. Bat Ecology

There are 17 species of bat currently resident in the UK. Nine species are known from Scotland. All are believed to have declined as they face many threats to their highly developed and specialised life cycles. In general, their dependence on insects has left them vulnerable to habitat destruction, land drainage, habitat fragmentation, agricultural intensification, and increased use of pesticides. Their reliance on buildings and decaying trees has also made them vulnerable to felling, repairs, and the use of timber treatment chemicals.

In the UK, bats are generally active from late March to mid-October, hibernating from late October to mid-March. In early summer, females gather in maternity roosts to give birth, normally producing a single offspring per year. This slow rate of reproduction inhibits repopulation in areas of rapid decline. Bats are generally born in June/ July and are dependent on their mothers for about six weeks. In autumn and winter, male and females gather for mating. The females are able to store sperm until spring when an egg may be fertilized. In winter, bats hibernate in sites that have a cool, humid, and stable climate.

Bats generally return to the same roost sites every year which makes them particularly vulnerable to disturbance or destruction of these sites. Some species of bat move roost frequently and use a number of different roost sites.

4.2. Bat Species



Figure 1 - Soprano pipistrelle

Soprano Pipistrelle (Pipistrellus pygmaeus) is the most frequently encountered species in Central Scotland. They roost mostly in modern buildings, but occasionally in trees or other crevices. They range up to 4km from their roosts, using hedgerows and woodland edges to provide commuting routes to foraging sites and eat small flying insects and midges, with an affinity for habitats with a riparian element.

Common Pipistrelle (*Pipistrellus pipistrellus*) is less common in Scotland than further south, but still frequently encountered. Its habits are very similar to the Soprano Pipistrelle, but uses more generalised habitats.

Nathusius' Pipistrelle (*Pipistrellus nathusii*) is one of Britain's rarest bat species, with only a handful of records in Scotland. They tend to roost in tree-

holes or buildings and are most commonly associated with large water bodies, such as reservoirs.

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Brown Long-eared Bat (Plecotus auritus) is a relatively common, but rarely seen woodland bat. Primarily gleaners, they pick larger insects and arachnids off shrubs and trees, mostly in dense woodland. They roost in hollow trees or in the roof spaces of older buildings or barns, always very close to woodland.

Natterer's Bat (Myotis nattereri) is primarily a woodland bat, catching insects in flight and occasionally gleaned from trees and shrubs, though they also forage low over pasture. They most commonly roost in hollow trees, occasionally also in buildings near to woodland.



Figure 2 - Brown Long-eared Bat



Figure 3 - Cluster of Daubenton's bats

Whiskered Bat (Myotis mystacinus) is known in Central Scotland from a small number of records, though it is easily confused with Natterer's Bat and may be under-recorded. They forage in a variety of habitats, including hedgerows, woodland, and parkland. They roost in old stone buildings, and in tree crevices.

Daubenton's Bat (Myotis daubentonii) forages almost exclusively over water, eating insects and other arthropods

gaffed from the water surface or caught in flight just above it. Their roosts tend to be close to water, usually in hollow trees or cavities in bridges or other waterside structures.

Noctule (Nyctalus noctula) is the largest bat in Scotland and only rarely found north of the Borders. They mostly roost in hollow trees and emerge, often before dark to forage high over parkland, woodland and pasture on large flying insects.



Figure 4 - Noctule bat

NB: All images of bats are for illustrative purposes only, including image on front cover.



5. SURVEY METHODS

5.1. Desk study

Records of bats within a 5km radius were obtained from DDAL biological records. 1:25 000 and 1:10 000 Ordnance Survey maps, together with satellite pictures drawn from Google Earth (www.earth.google.co.uk) and Bing (www.bing.com/maps) were consulted to assess the site habitat. Understanding of this was validated with the project architect.

The DEFRA Magic Map and NatureScot websites were consulted, to establish whether the site lay within or close to any designated sites.

5.2. Daytime bat walkover survey

The building was systematically examined for signs of bats and for structures with suitability for roosting bats. A high-power spotlight, close-focusing binoculars, ladders, and an endoscope were used where necessary, to understand the structure.

Structures with suitability could include sarked slate or tile roofs, wall-heads, cavity walls, masonry crevices, rubble-filled walls, etc.

Signs of bat roosts could include droppings, urine spots, smear marks, corpses, ectoparasites, odour and social calls or scrabbling noises.

Upper stories, attics etc. were examined where they were accessible, and it was judged safe to do so.

5.3. Stage 2 (absence/presence) bat survey

The sunset emergence survey commenced 30 minutes before sunset and finished 90 minutes after sunset, the dawn survey commenced 90 minutes before dawn and finished 30 minutes after dawn. Surveyors surrounded the building, in the locations marked in figure 5, which allowed all relevant faces of the buildings to be monitored for signs of emerging or returning bats. Contact was maintained with all surveyors by radio. In the absence of surveyors, infra-red cameras were set up to record through the survey, and the footage reviewed at a later time.

The supervising ecologist was equipped with a Titley Electronics Anabat Walkabout detector or Wildlife Acoustics Echo Meter Touch 2 Pro and accompanying tablet. This records bat calls to a memory card, whilst displaying them as a real time sonogram, allowing immediate identification and subsequent analysis if required.

Each surveyor was equipped with a Peersonic RPA2 heterodyne/full spectrum bat detector with integral digital recorder or EMT Touch Pro. The audio output

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was monitored for bat activity and the full spectrum output was recorded to a Secure Digital memory card. This allowed for further analysis using Anabat Insight software, where necessary. Each survey implemented the use of Nightfox Red infrared cameras to view all elevations of the building.

A log of bat activity was maintained, paying particular attention to locations where bats may have emerged from and to, and to behaviour that could indicate commuting or hunting activity.

Weather conditions (ambient temperature in degrees Celsius, cloud cover in Oktas, wind speed using the Beaufort Scale and precipitation notes) were recorded at the start and end of the survey. Significant changes in weather during the survey were noted. Light conditions (measured in Lux) were recorded at the start and end of the survey.

5.4. Survey team

The survey program was planned by the director, David Dodds, a licensed bat specialist who has worked with bats for over fifteen years and who holds NatureScot bat scientific, conservation and training license number 135635. The stage 1 survey was carried out by consultant ecologist Claire McCluskey, who has extensive experience carrying out bat surveys, and holds a N.S. bat license number 24482. Or/ assistant ecologist Sam Hughes, who has extensive experience carrying out bat surveys, and holds a N.S. bat license number 252286.

Stage 2 surveys were conducted by senior ecologist Charlotte Meyer-Wilson and assisted by members of our bat survey team, all of whom are undergraduates or graduates in ecology or biological sciences and have undergone an intensive training program. The training program includes bat ecology, use of bat detectors, bat call identification, bat survey methods, health and safety and professional standards. Their individual experience is given in the table below.

Survey	Surveyor	Experience
15 th August 2024	Abi Worthington	4 months
15 th August 2024	Hannah Gordon	4 months
15 th August 2024	Ruaridh Nicolson	4 months
15 th August 2024	Catriona Montgomery	4 months
12 th September 2024	Charlotte Meyer-Wilson	8 years
12 th September 2024	Euan Meyer-Wilson	5 years



5.5. Survey limitations

All British bats are peripatetic and move between different roosting sites through the seasons and sometimes within seasons. The absence of bats on a particular occasion does not necessarily rule out their presence at other times. An absence of physical signs does not always indicate the absence of a roost.

Physical surveys were carried out where it was safe to do so. Where unstable structures rendered it unsafe to enter a structure survey effort was increased.

5.6. Site plan



Fig. 5 – Satellite picture of the site, showing the subject building and surveyors'/cameras' locations during the stage 2 surveys.

KEY

- Location of surveyors during the sunset emergence survey
- Location of surveyors during the dawn re-entry survey



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6. RESULTS

6.1. Desk study

6.1.1 Designated sites

The survey site does not lie within or adjacent to any designated site.

The nearest designated site is Onich to North Ballachulish Site of Special Scientific Interest (SSSI) and Special Area of Conservation (SAC). This is a 620ha area located approximately 500m south of the site. It was designated as an SAC in 2005 and as an SSSI in 2008, both to protect its alkaline fen and upland mixed ask and oak woodland habitats as well as to preserve its Dalradian geological record.

Also close to the site are the Geological Conservation Review Sites (GCRS) or Onich Dry River Gorge located 1km to the southeast, Onich Shore located 2km to the south, and Tom Meadhoin located 5km to the southeast. These are all protected as examples of the. Dalradian geological record. Also nearby is Moidart and Ardgour Special Protection Area (SPA), a large area located 3km to the west that was designated to protect its breeding population of Golden Eagle (Aquila chrysaetos).

There are also numerous patches of ancient semi-natural woodland to the south of the site, within the Onich SSSI.

6.1.2 Biological records

DDAL holds flight records for three species which have been recorded within 5km of the site: Common and Soprano Pipistrelle, and Brown long-eared bat.

DDAL does not hold any roost records within 5km of the site.

6.1.3 Surrounding habitat

The site lies approximately 11km southwest of the residential town of Fort William. The subject building is immediately surrounded by mixed broadleaf woodland and forestry plantation.

This large inter-connected mixed woodland near to the site is likely to provide foraging opportunities for woodland specialists, such as Brown long-eared bats. Older buildings close to the site and in and around the surrounding area provide roosting opportunities, as do mature deciduous trees.

Nearby coniferous plantations are less likely to be used by foraging bats, but the edge habitat surrounding them is likely to be used by foraging Pipistrelle species, as are woodland edges, gardens etc. Houses and buildings in the area are likely to provide roosting opportunity for these crevice-roosting species.

The nearest large waterbody is the Abhainn Righ, approximately 1km south-east of the site which runs out to Loch Linnhe, both of which may be suitable to



support Daubenton's bats which are riparian specialists, as well as a number of other bat species that may use river edges for foraging and commuting.

6.2. Daytime bat walkover survey

Date of survey	4 th July 2024	
Weather conditions	Raining	
Light conditions	Dull	

The subject building is a traditional stone barn, constructed of rubble stone with a single pitched roof constructed of slate on sarking. The exterior masonry is in poor condition with a number of crevices in the masonry and crumbling mortar throughout. The barn is empty throughout and most recently used to store climbing equipment.

The barn is rectangular shaped with a single storey lean-to extension on the west side, the roof of which has been mostly removed. The walls of the extension remain as well as a few sarking beams and a few slates. There are a number of crevices and gaps in the masonry walls of the extension, particularly around the door and window frames, however the majority are too shallow for roosting bats and exposed to the elements. No evidence of bats found within the extension.

The west half of the main barn is single storey, with the roof structure visible from the ground level. There is also a wooden platform on the far west side wall, with no access up to it so couldn't be fully assessed for evidence of bats. There are a number of large holes and gaps visible in the sarked slate roof which are letting water into the barn, leaving the interior damp throughout. No evidence of bats found in this section.

There are no attics or roof voids within the building; however, the east half of the main barn is double storey, with a timber staircase leading up to a hayloft and upper rooms. There is a large hole directly above the staircase, continually letting water in, causing the timber to rot. As a result of this, it was not possible to safely access the upper level of the barn to fully assess for evidence of bats. The ceiling of the lower room was extremely warped with water damage, further indicating the upper level was not safe to access. No evidence of bats was identified within the lower room and no evidence of bats could be seen from ladder level at the top of the timber staircase.

The building exterior contains a number of potential roost features including holes in the roof, slipped, missing, hanging and raising slates, raised areas of flashing, gaps at the wall heads and gaps and crevices within the masonry. There are no soffits or bargeboards covering the wall-heads, allowing bats to potentially access the interior. Some of the windows have been boarded up but leave crevices around the window frames, creating potential roosting features for bats. The doors and one of the windows also remain open, allowing further access to the building for foraging and roosting bats.

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Based on the surrounding habitat and the number of potential roosting features, the building has been assessed as having moderate suitability to be used by roosting bats.

6.3. Photographs



Fig. 6 – The south elevation of the subject building.





Fig. 7 – The south and east elevations of the subject building.



Fig. 8 – The north elevation of the subject building.







Fig. 9 – The north and west elevations of the subject building.



Fig. 10 – The open west extension.



Fig. 11 – The upper storey as seen from the staircase.



Fig. 12 – Example of the sarking and roof joists.







Fig. 13 – The interior of the subject building.

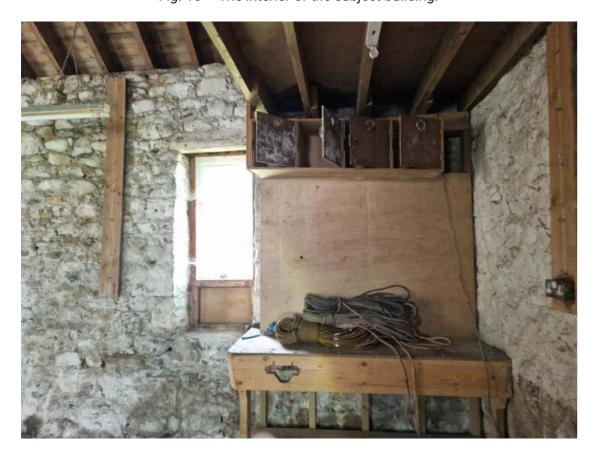


Fig. 14 – The interior, below the upper storey.



Fig. 15 – An example of the interior structure of the subject building.



Fig. 16 – An example of the interior roof structure.







Fig. 17 – The inaccessible staircase.



Fig. 18 – An example of the interior water damage.



Fig.19 – An example of the surrounding habitat



Fig. 20 - An example of the surrounding habitat.





Fig. 21 – Potential roost features.

6.4. Stage 2 survey for bats

6.4.1 Table 1 – Activity survey data

Date	Survey Timing	Weather conditions (Temp, Relative humidity, Cloud cover, Beaufort wind, Lux, Precipitation)	Bat activity
15/08/24	Start time: 20:29 Sunset: 20:59 End time: 22:29	Start: 12°C, 85%, 6 Oktas, F1, 1672 Lux, Dry End: 11°C, 99%, 8 Oktas, F0, 0 Lux, Dry	Infrequent commuting and foraging from Common and Soprano Pipistrelles were recorded on site. No bat roosts were identified on this occasion. Low levels of bat activity were recorded from 21:01 onwards.
12/09/24	Start time: 05:18 Dawn: 06:48 End time: 06:50	Start: 11°C, 97%, 8 Oktas, F0, 0 Lux, Dry End: 9°C, 88%, 4 Oktas, F0, 150 Lux, Dry	Infrequent commuting and foraging from Common and Soprano Pipistrelles were recorded on site. One Soprano Pipistrelle roost was identified, A. Low levels of bat activity were recorded between 05:40 and 06:25.



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6.4.2 Table 2 – Bat roost

Roost ID	Species	Roost Type	Roost Location	Number of Bats	Photo of roost location
A	Soprano Pipistrelle	Non- breeding	Roost A is located under a loose slate on the south elevation of the building, at the rightmost corner.	Sunset: 0 Dawn:	



Fig. 22 – The south and west elevations of the building, denoting roost A.

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7. DISCUSSION AND CONCLUSIONS

This survey has been carried out to a suitable standard, using methods which comply with current guidelines.

No designated sites are relevant to this site with regard to bats.

Two species of bat have been recorded within 5km of the site: Common and Soprano Pipistrelles, and Brown Long-eared bats.

One Soprano Pipistrelle roost was identified and is detailed in table 3 below and figure 23 below. The roost is located under a loose slate on the southwestern corner of the building.

Given that a single Pipistrelle was found to be using the roost, and given the time of year, it can be concluded that this is a non-breeding roost.

Destruction or disturbance to the identified bat roosts is likely to constitute a criminal offence unless carried out with an NatureScot license in place.

Recommendations are given below.



Fig. 23 – Satellite image of site denoting roost locations.

7.1.1 Table 3 – Roost identified during the surveys

Roost		Number of bats seen		
Identification Species		Sunset	Dawn	
Α	Soprano Pipistrelle	0	1	

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8. RECOMMENDATIONS

The author understands that proposals for development of the site will involve the repair and conversion of the building, resulting in the destruction of the bat roost found.

It will be appropriate to register the site on a bat low impact license (BLIMP) from NatureScot (formerly Scottish Natural Heritage). **Proceeding with works on the building without such a license in place is likely to constitute a criminal offence.**

Several requirements must be met for this site to be registered on a BLIMP license:

- Works on site affecting bats are due to commence within 18 months of the date the bat surveys were completed.
- There must be a licensable purpose. As the renovation of the building forms
 part of an upgrade project for the site, to allow for a communal space, the
 licensable purpose of "imperative reasons of over-riding public interest"
 (social) will apply.
- There must be no viable alternative to the proposed action. As the roosts are
 located at the wall-heads in crevices that will likely be repaired, it will likely not
 be possible to retain the roosts. The only alternative would be to not
 undertake the work, which given the species involved would be
 disproportionate.
- The proposal has statutory consents in place if these are required.
- Mitigation in the form of a purpose-built woodstone/woodcrete bat box should be erected in a suitable location within 100m of the site.
- The favourable conservation status of the bat species involved must remain undiminished. In practice this requires a robust method statement and compensation measures. A suggested method statement is given below.

Proposed method statement

- All workers on site should be briefed about the possibility of encountering bats during work and the appropriate actions to take. This briefing should be included in the site induction and signed for, to ensure compliance.
- Work impacting on the bat roost should be carried out under the direction of a licensed bat worker.
- The removal of slates/roof materials should be carried out under supervision
 of a licensed bat specialist within 5m of identified roost or until a licensed bat
 worker is satisfied.
- A single woodstone/woodcrete bat box should be affixed to a nearby tree as compensation for the lost non-breeding Pipistrelle roost.
- Alternatively, a similar number of bat slates should be incorporated into the repaired roof of the building.
- There must be no artificial light on the replacement bat box.

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9. REFERENCES

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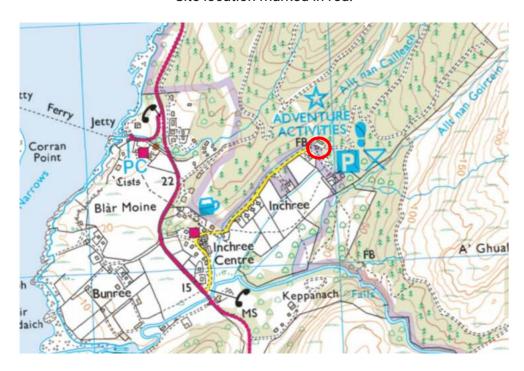
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10. APPENDIX I – LOCATION MAP

National Grid Reference (NGR): NN029634.

Site location marked in red.



(Ordnance Survey cartography reproduced under licence number AC0000823066)



11. APPENDIX II – SATELLITE VIEW OF THE SITE

The subject building is highlighted in red.





12. APPENDIX III – SATELLITE VIEW OF THE SURROUNDING HABITAT

The subject building is highlighted in red.





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