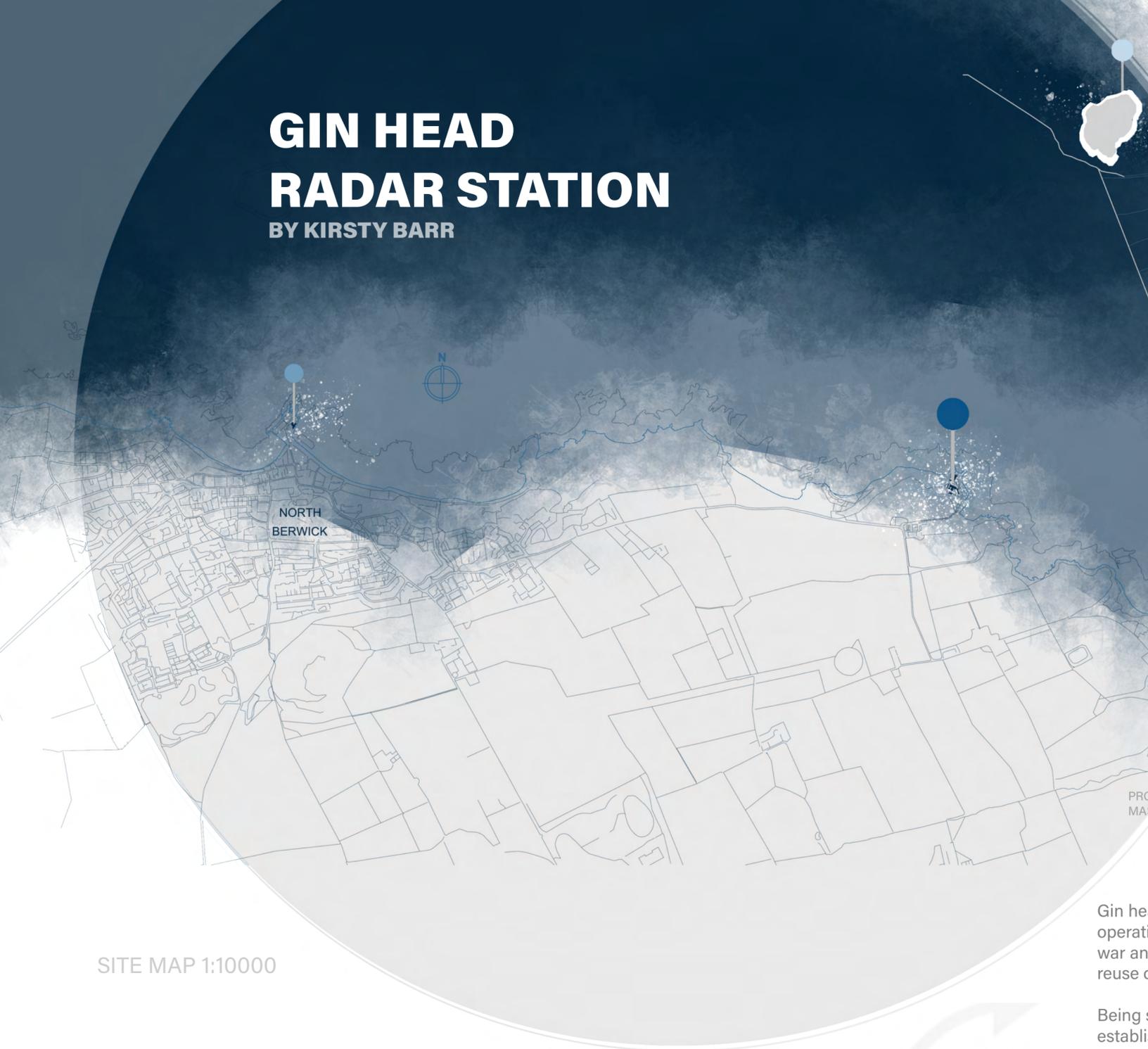
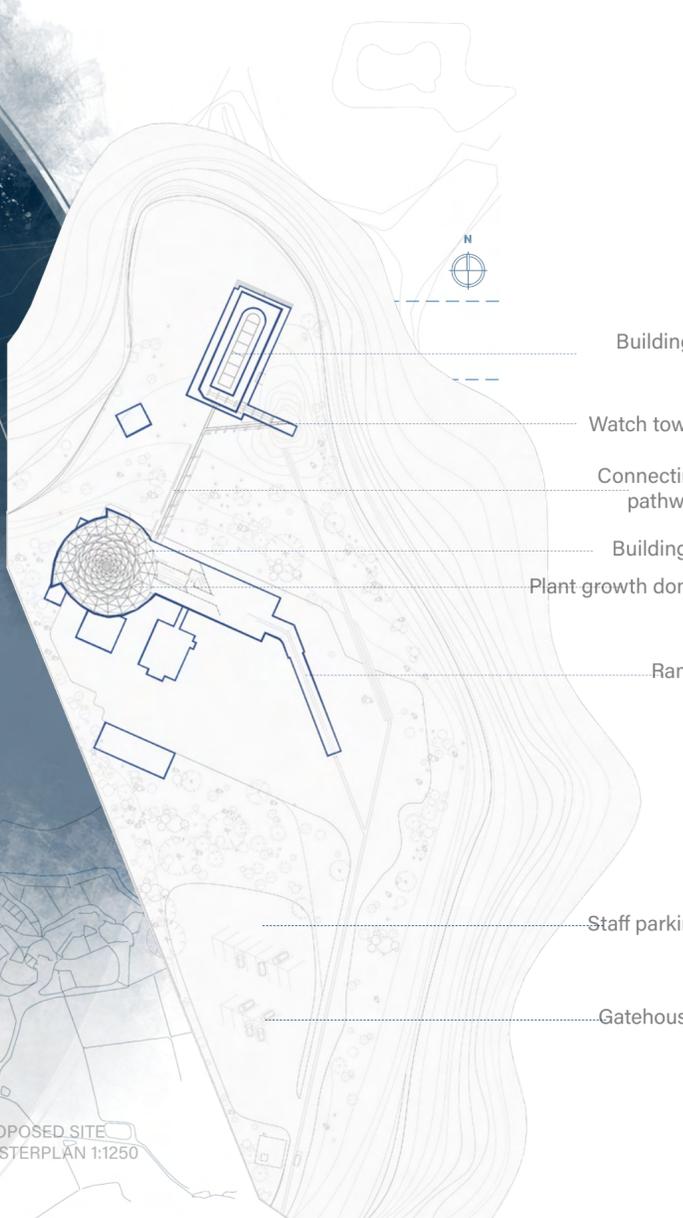


GIN HEAD RADAR STATION

BY KIRSTY BARR



SITE MAP 1:10000



PROPOSED SITE
MASTERPLAN 1:1250

- Building 1
- Watch tower
- Connecting pathway
- Building 3
- Plant growth dome
- Ramp
- Staff parking
- Gatehouse

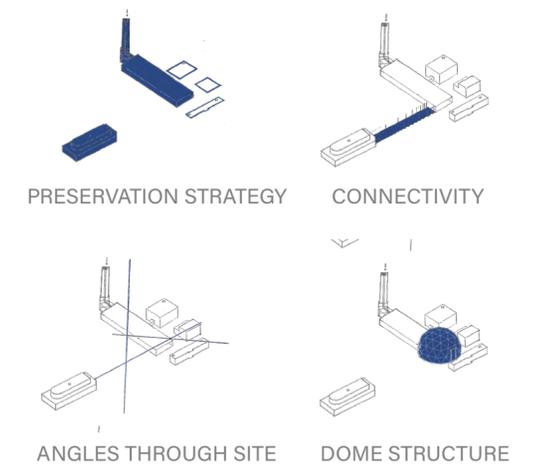
Gin head radar station is a disused World War II (WW2) radar base. It's operations from construction in 1943 have had major contributions to war and therefore associated trauma and loss of life - the sites adaptive reuse can be used to repay for this.

Being so rich in nature, the site lends itself to being the door to the re-establishment of the natural world in the corridor of southern Scotland. The overurbanisation of southern Scotland has led to a 24% decrease of wildlife species abundance over the past 50 years. The Scottish Seabird Centre in partnership with East Lothian council need to reintegrate nature into this area for the stability of local ecosystems, especially those of Northern Gannets situated on Bass Rock.

Proposal:
Engineered ecosystem for the survival of Northern Gannets and their role in the biosphere through the rewilding of overurbanised southern Scotland, facilitated through the adaptive reuse of a conflict heritage structure.



DESIGN DEVELOPMENT



PRESERVATION STRATEGY

CONNECTIVITY

ANGLES THROUGH SITE

DOME STRUCTURE

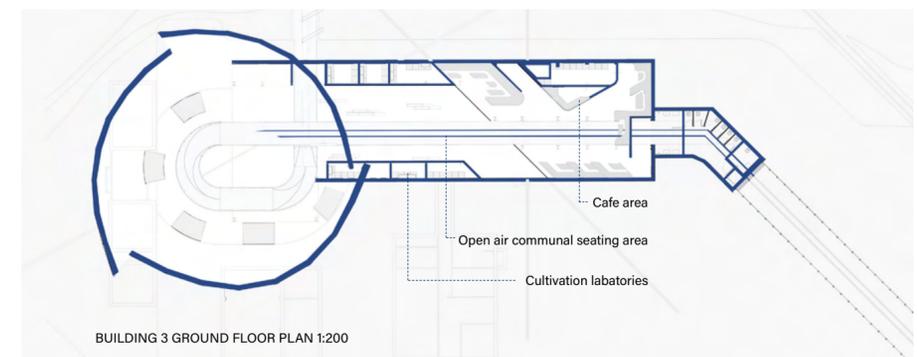
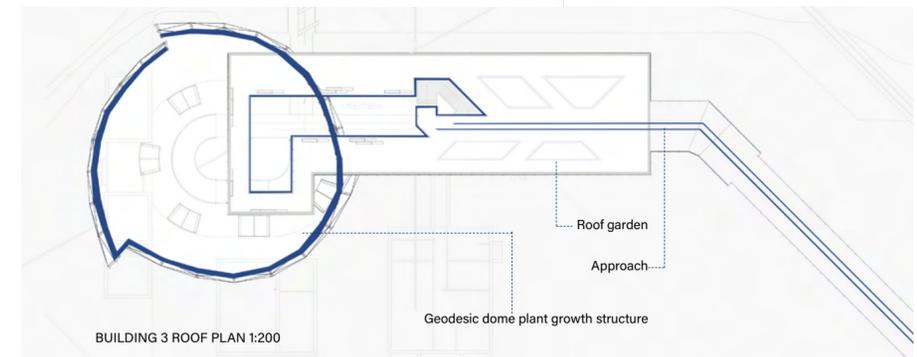
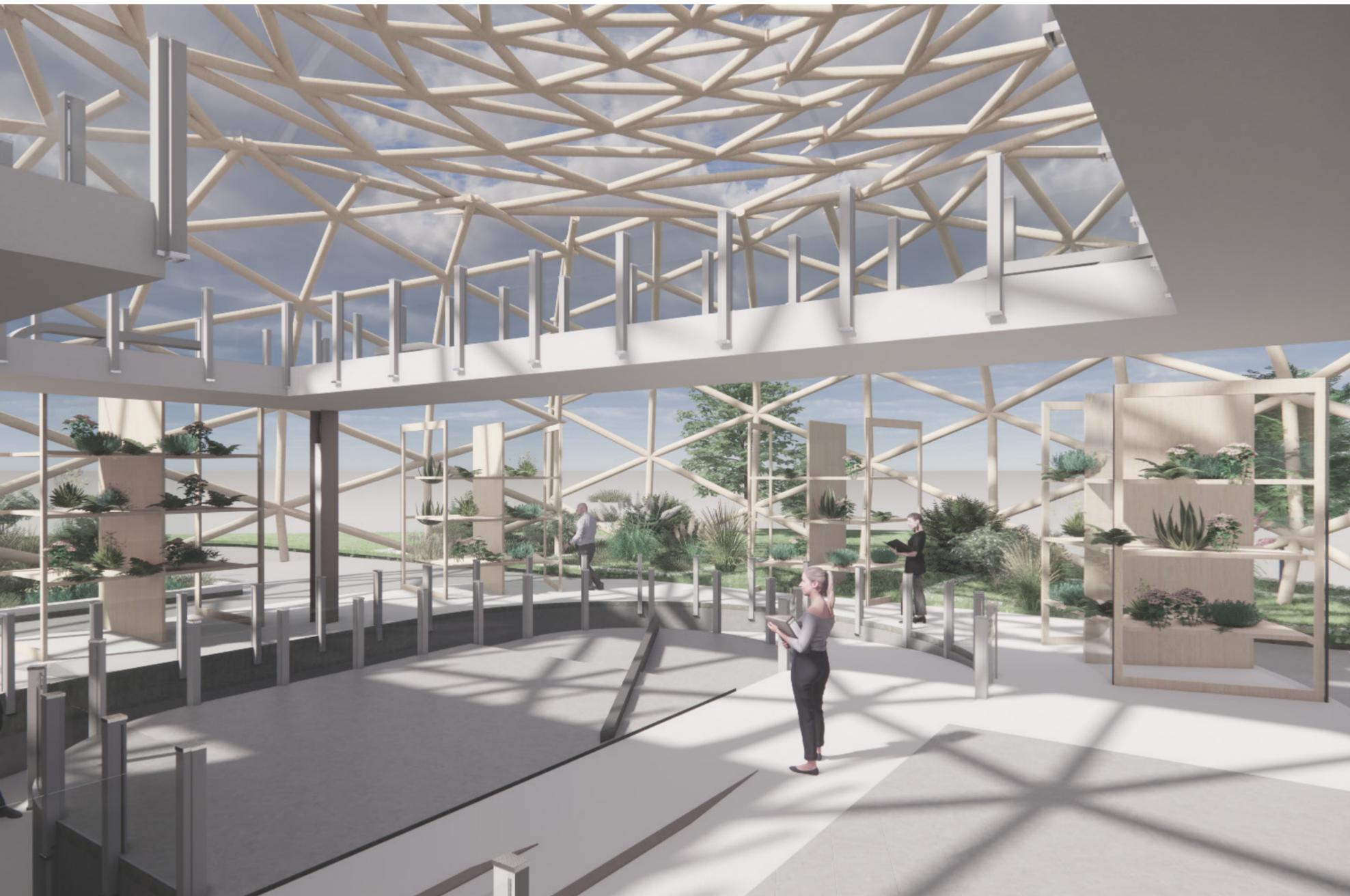
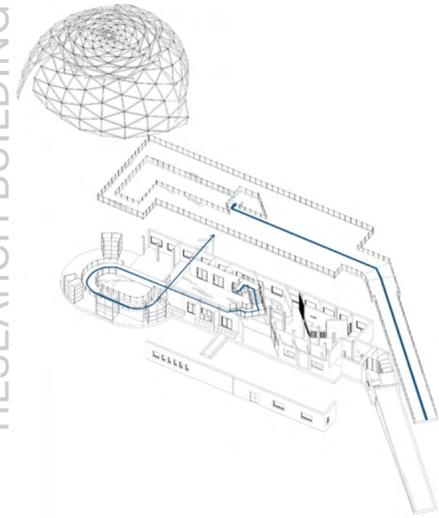
RESEARCH FACILITY FOR SEED GERMINATION AND PLANT GROWTH

Walk up ramp following the same pathway of the reinstated narrow gauge railway that once ran through site, onto roof of Building 3 with the pathway defined by walled planters with integrated benches

The descend down a staircase into central circulation space with communal cafeteria area behind and then laboratories for seed germination with the dome structure ahead.

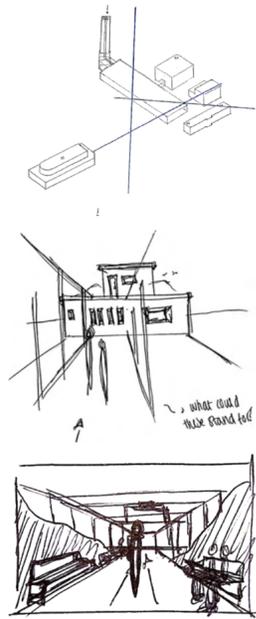


EXPLODED ISOMETRIC OF RESEARCH BUILDING



This is where seed growth take place, with a central ramp in same radius curve as the form of building 1 transcends down to level pathway to building 1. Earth removal allows for the creation of a level pathway, again with integrated benches with the extension of the original railway tracks serving as a method of way finding.

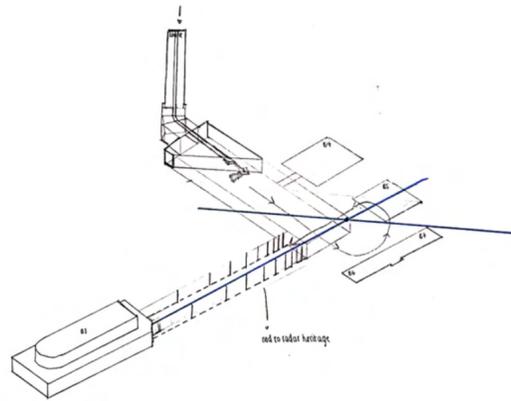
The design has been heavily influenced by the sites context through a preservation strategy, connectivity between buildings, angles through site and a domed structure for plant growth. There are three pillars of the scheme - nature, conficlt heritage and the intervention. These work in harmony to be a skef-supporting system where nature eventually outgrows the structure for a scheme of planned obsolescence and the harmony of the natural and man made world.



CONNECTING PATHWAY

Earth removal creates a level pathway along the line of nature through site for a semi-covered space that is inherently biophilic, creating a hybrid between the interior and exterior through site as floorplan ideology.

Railway track reinstatement runs the length of this walkway, nodding to site heritage.

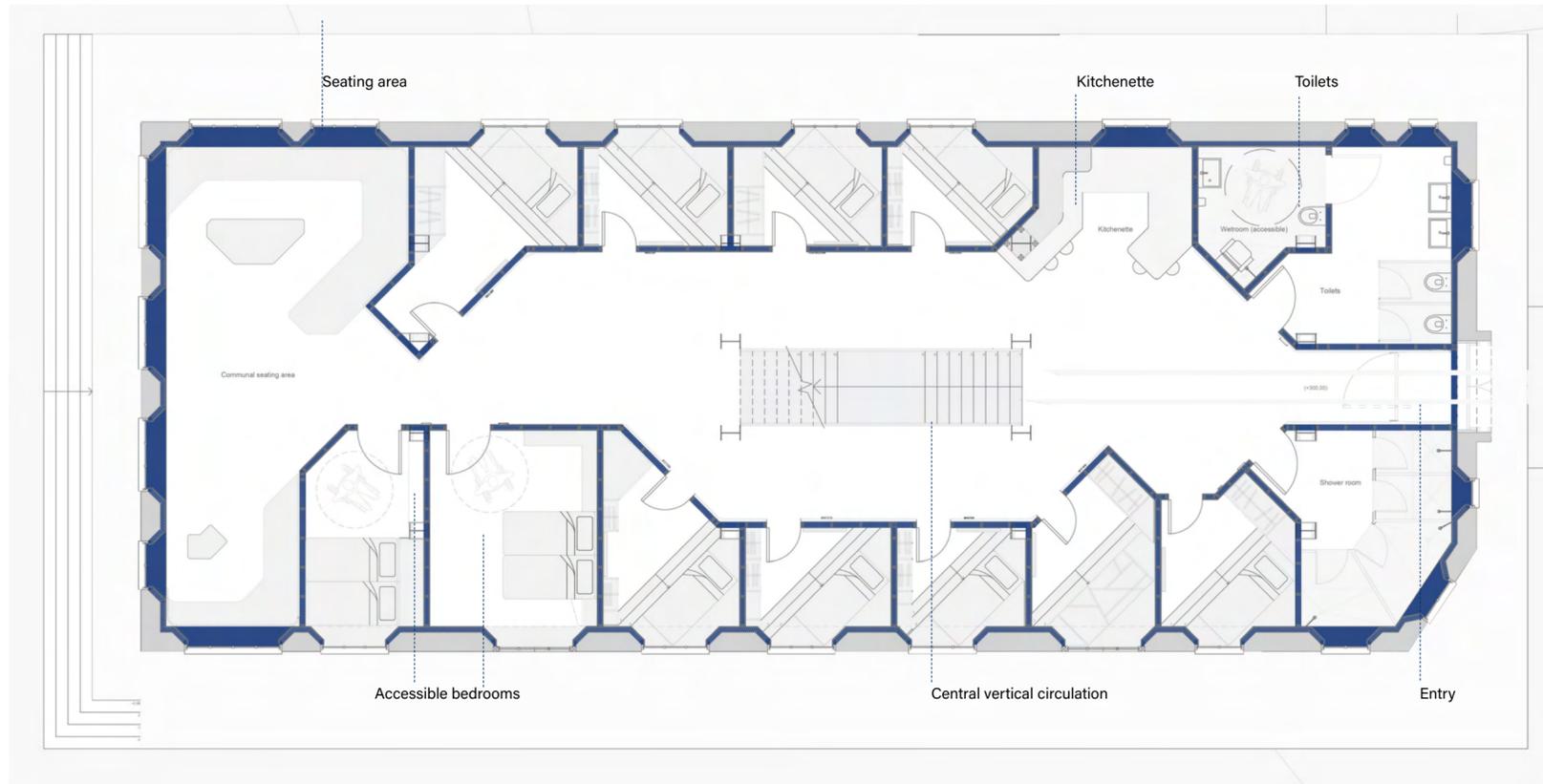


Informed by site derived angles of site, the line from site to southern scotland intersects with the line from Bass Rock, creating the pivot point of the scheme at the plant growth facility, housing a cafeteria for workers and germination laboratories where seed dispersal then takes place from the dome structure. This is connected to the residential and observatory facility along the Bass rock line - where nature feeds into site.

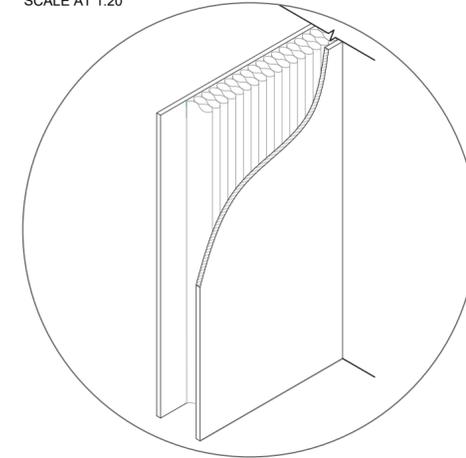
The remaining buildings are to be demolished, leaving a 200mm building footprint outline to become garden perimeters as a nod to their existence, yet embody the new concept of the scheme.



BUILDING 1 GROUND FLOOR PLAN 1:100

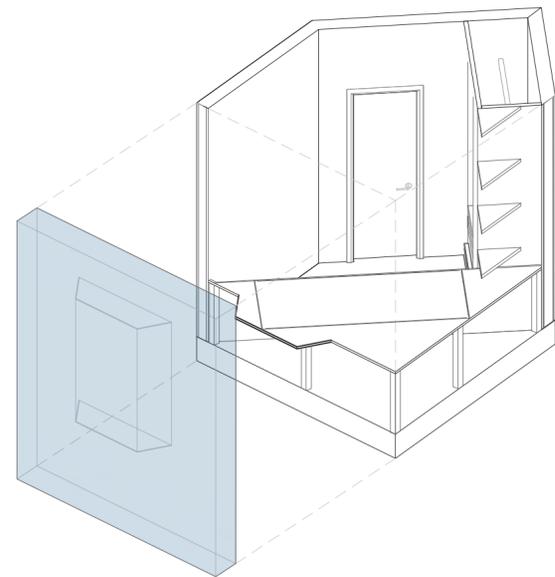


INTERNAL PARTITION WALL CONSTRUCTION
SEE DRAWING B1 B
SCALE AT 1:20



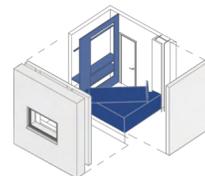
Cork and play sheeting internal stud walls for sustainability as well as thermal and acoustic insulation

Integrated furniture to form an extension of the window ledge that becomes a bed and seating area, with larger rooms for those residing for a prolonged period. Steps up to the bed elevate the user to utilise viewpoints off shore.



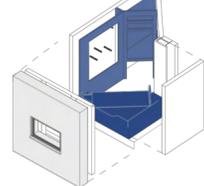
Bedroom detail at 1:50

Bedroom three



Residential and observatory space holds the architectural identity of the site, so the external facade is sanctified, with alteration as an insertion. Scottish larch plywood skin inserted within envelopes around the user, clearly differentiating the old from the new.

Bedroom five

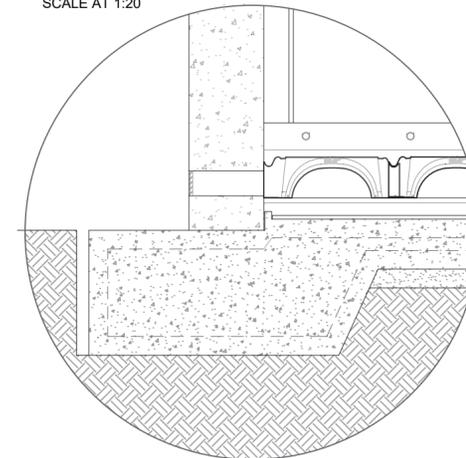


Residential and observatory space holds the architectural identity of the site, so the external facade is sanctified, with alteration as an insertion. Scottish larch plywood skin inserted within envelopes around the user, clearly differentiating the old from the new.

Bedroom eight

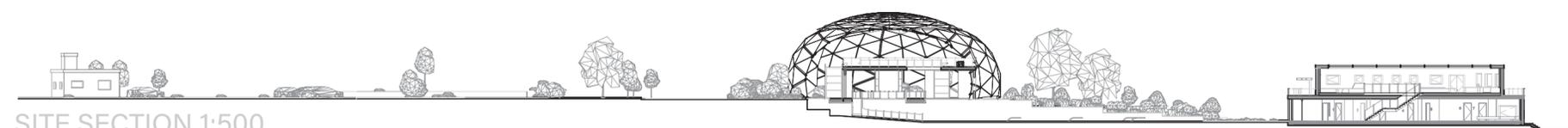


IGLU FLOOR SYSTEM SECTION
SEE DRAWING B1 E
SCALE AT 1:20



Iglu flooring system installed over existing finished floor level to house utilities, air source heat pumped underfloor heating as well as reduce thermal bridging.

SITE SECTION 1:500



OBSERVATORY AND RESIDENTIAL SPACE



Building 1 upper floor observatory.

Preservation strategy:
Architectural identity of site retained through the preservation of ship-like form with central circulation, where Scottish Larch combined with cork insulation sits within existing shell.

Seating areas are created as an extension of the skin, for both recreational and professional observation of Northern Gannets on Bass rock with access to exterior balcony.



Building 1 ground floor residential living.

A natural light flooded central staircase with open risers allows for user to see through to Bass rock upon building entry – emphasising its importance and significance of this angle through site.

9 bedrooms (2 accessible) provided for the live-in workers of the site, each with an outward facing, encouraged view, service by shared bathroom facilities.

Kitchenette area and communal seating allows for interaction of professions that are using the site.

Building skin is a standalone structure, insulating acoustically and thermally for enriched user experience.

EXPLODED ISOMETRIC NOT TO SCALE

