

Item: 16

Policy and Resources Committee: 20 June 2023.

Airfield Terminal Building Programme.

Stage 2 Capital Project Appraisal.

Report by Corporate Director for Enterprise and Sustainable Regeneration.

1. Purpose of Report

To consider a Stage 2 Capital Project Appraisal in respect of the proposed replacement airfield buildings at Eday, Papa Westray, Stronsay and Westray.

2. Recommendations

The Committee is invited to note:

2.1.

That, on 15 February 2022, when considering a Stage 1 Capital Project Appraisal in respect of the provision of new airfield terminal buildings, the Development and Infrastructure Committee recommended:

- That, as an exception to the Capital Project Appraisal process, in order to ensure the safe and resilient operation of the airfield infrastructure, the Interim Executive Director of Finance, Regulatory, Marine and Transportation Services should submit, to the Policy and Resources Committee, a Stage 2 Capital Project Appraisal in respect of proposed new airfield terminal buildings at Westray, Stronsay, Papa Westray and Eday.

2.2.

That, as the project appeared to be a good fit with the target outcomes of the Islands Infrastructure Fund, on 21 April 2023, a funding bid was submitted to the Islands Infrastructure Fund for 2023/24 for replacement terminal buildings in the islands of Eday, Papa Westray, Stronsay and Westray with improvements to car parking facilities and electric vehicle infrastructure for vehicles and bikes.

2.3.

That the application to the Island Infrastructure Fund for 2023/24 was unsuccessful.

2.4.

That, as a result of the unsuccessful funding bid for 2023/24, it is proposed to carry out the terminal building replacement programme over two years, with a further application being submitted to the Islands Infrastructure Fund for the 2024/25 Islands Programme.

2.5.

That, as work is ongoing across directorates within the Corporate Leadership Team to present a draft capital programme to the Policy and Resources Committee in due course, approving this project to replace airfield terminal buildings will reduce the level of capital funding available for other projects to be added to the capital programme for 2023/24 and 2024/25.

It is recommended:

2.6.

That the Stage 2 Capital Project Appraisal in respect of the proposed new airfield terminal buildings at Eday, Papa Westray, Stronsay and Westray, attached as Appendix 1 to this report, be approved.

2.7.

That, as an exception to the Capital Project Appraisal process, in order to ensure the safe and resilient operation of the airfield infrastructure, new airfield terminal buildings at Papa Westray and Stronsay be added to the capital programme for 2023/24 onwards, at an estimated gross capital cost of £915,000, to be funded by the Council with borrowings from the Loans Fund.

2.8.

That the Corporate Director for Enterprise and Sustainable Regeneration should submit a further application to the Islands Infrastructure Fund for the 2024/25 Islands Programme, in respect of new airfield terminal buildings at Westray and Eday.

2.9.

That, subject to a successful award of funding from the Islands Infrastructure Fund, as an exception to the Capital Project Appraisal process, to ensure the safe and resilient operation of the airfield infrastructure, new airfield terminal buildings at Westray and Eday be added to the capital programme for 2024/25 onwards, at an estimated gross capital cost of £915,000, to be funded as follows:

- Cost to the Council - £366,000.
- Islands Infrastructure Fund - £549,000.

3. Background

3.1.

On 15 February 2022, the Development and Infrastructure Committee considered the Stage 1 Capital Project Appraisal for the provision of new airfield terminal buildings at Eday, Papa Westray, Stronsay and Westray as the existing infrastructure is over 30 years old and does not conform to modern day standards for accessibility or airfield operations.

3.2.

The Council has made a commitment to the Civil Aviation Authority (CAA) as part of the airfield operating licence to continuously improve and update the airfields. An integral part of this improvement is the commitment in the North Isles Airfields Strategy to update the terminal buildings. Delays or failure to deliver an improvement programme jeopardises the operating licence with the risk of subsequent loss of the critical lifeline air services for island communities, that the terminals and CAA licence supports.

3.3.

Replacement airfield terminal buildings with integral garages have been built in North Ronaldsay and Sanday, creating separate watch room, waiting room and fit for purpose toilet and wash facilities. New garages have also been provided in Eday, Papa Westray, Stronsay and Westray however the terminal buildings on these islands are still in need of replacement.

3.4.

The Stage 1 Capital Project Appraisal outlined three options from which the Development and Infrastructure Committee selected its preferred option, namely to provide new airfield terminal buildings at each location. The costs at this time were estimated at £190,000 per terminal building. It was proposed to replace the terminal buildings in Papa Westray and Stronsay during 2022/23 followed by Eday and Westray in the 2023/24 financial year.

3.5.

The Development and Infrastructure Committee thereafter recommended that, as an exception to the Capital Project Appraisal process, to ensure the safe and resilient operation of the airfield infrastructure, the Interim Executive Director of Finance, Regulatory, Marine and Transportation Services should submit, to the Policy and Resources Committee, a Stage 2 Capital Project Appraisal in respect of proposed new airfield terminal buildings at Westray, Stronsay, Papa Westray and Eday.

3.6.

During 2022, officers carried out site visits to determine the most suitable location for replacement airfield terminal buildings and additional car parking facilities. The precise location of the new airfield terminal buildings may be subject to change following discussions with the local Airfield Co-ordinators and the CAA.

4. Funding

4.1.

Building works tender submissions have increased significantly over the past year, particularly so in the Outer North Isles where competition has been limited and prices reflect an extremely strong construction market on the Orkney mainland. The building works, professional fees, and electric vehicle charge points/installation are estimated to cost a total of £1,830,000 for the four terminal buildings, therefore an estimated cost of £457,500 per terminal building. The estimated price allows for a contingency on each project and it is anticipated that costs should not exceed the estimated amount.

4.2.

A bid was submitted to the Scottish Government Islands Infrastructure Fund for 2023/24 with a request of funding of £1,098,000 and match funding of £732,000 to be met from the Council. The submitted bid included improvements to car parking facilities and the addition of electric vehicle infrastructure for vehicles and bikes to promote sustainable onwards travel. Unfortunately, the bid was not successful during the 2023/24 round.

4.3.

Given the condition and suitability of the existing infrastructure, it is proposed that the terminal replacement programme is progressed during financial year 2023/24, with new airfield terminal buildings to be completed in Papa Westray and Stronsay in the first instance. The capital cost is therefore estimated at £915,000 during 2023/24.

4.4.

If possible, it is proposed that a further application is submitted to the Islands Infrastructure Fund during 2024/25 to support the replacement of terminal buildings in Westray and Eday.

5. Airfield Terminal Building Programme

5.1.

The proposed new terminal building plan has been based on the Sanday terminal building, with a slightly wider waiting area and the addition of a small kitchen area for staff. The terminal buildings will all have raised watch rooms for improved visibility of the runway, Wi-Fi for staff and passengers and accessible toilet facilities. Air source heating and solar panels are proposed to sustainably heat the building. The proposed plans have been discussed in advance with the Airfield Co-ordinators, Community Development Officers and Community Councils.

5.2.

The Stage 2 Capital Project Appraisal, attached as Appendix 1 to this report, outlines the key project tasks/milestones for the two new airfield terminal buildings during 2023/24, with the view to submit a further application for funding during 2024/25 for the remaining two new terminal buildings.

5.3.

A detailed pre-works project programme has been developed by the construction design delivery team which should be achievable. The programme covers the core delivery activities from completing the detailed design, currently in progress, planning and building warrant approvals, construction procurement, contract award and construction duration.

5.4.

In line with the construction programme the planning application will be submitted in June 2023 and the outcome is expected by August 2023. There has been informal discussion with the Planning Authority and the design solution reflects the feedback received.

5.5.

The long-term management and maintenance of the building will be undertaken by the Council's Estates Team and Property Maintenance regimes.

6. Corporate Governance

This report relates to the Council complying with its financial processes and procedures and therefore does not directly support and contribute to improved outcomes for communities as outlined in the Council Plan and the Local Outcomes Improvement Plan.

7. Financial Implications

7.1.

Work is ongoing across directorates within the Corporate Leadership Team to present a draft capital programme to this committee for consideration in due course. Approving this project will reduce the level of capital funding available for other projects to be added to the capital programme for 2023/24 and 2024/25.

7.2.

This report outlines estimated total costs for the four airfield terminal buildings and associated works of £1,830,000. As the Islands Infrastructure Fund application during 2023/24 was unsuccessful, the capital cost expected is £915,000 for the completion of two new terminal buildings, to be located in Papa Westray and Stronsay. Approving the recommendations to this report will commit circa £915,000 of the capital programme during 2023/24 towards this project.

7.3.

The report also seeks to provisionally commit up to £915,000 for the replacement of terminal buildings in Westray and Eday, subject to a further application to the Islands Infrastructure Fund 2024/25 with a funding ask of £549,000, with the remaining estimated spend of £366,000 to be met from Council with borrowing from the Loans Fund.

7.4.

The Islands Infrastructure Fund will not fund projects that have funding already approved. It is therefore recommended in this report that the Council approves the project subject to the successful outcome of the application to the Islands Infrastructure Fund.

8. Legal Aspects

8.1.

Section 95 of the Local Government (Scotland) Act 1973 requires the Council to make arrangements for the proper administration of its financial affairs. As part of that, the Council is expected to have regard to economy, efficiency and effectiveness in its use of resources.

8.2.

In terms of Section 35 of the Local Government in Scotland Act 2003 the Council must determine and keep under review the maximum amount which it can afford to allocate to capital expenditure. In so doing, the Council must comply with regulations made by Scottish Ministers

9. Contact Officers

Gareth Waterson, Corporate Director for Enterprise and Sustainable Regeneration, extension 2521, Email: gareth.waterson@orkney.gov.uk

James Buck, Head of Marine Services, Transportation and Harbour Master, extension 3600, Email: james.buck@orkney.gov.uk

Laura Cromarty, Service Manager (Transportation), extension 3638, Email: laura.cromarty@orkney.gov.uk

10. Appendix

Appendix 1: Stage 2 Capital Project Appraisal – Proposed Airfield Terminal Building Programme.

ORKNEY ISLANDS COUNCIL - CAPITAL PROJECT APPRAISAL PROCESS

Capital Project Appraisal – Stage 2

Capital Programme:	General Fund – Airfield Terminal Building Replacement Programme
Client Service:	Marine Services and Transportation
Project Name:	Airfield Terminal Building Replacement

1. Background

- 1.1. Orkney Islands Council owns and operates six airfields on the Outer North Isles of Eday, North Ronaldsay, Papa Westray, Sanday, Stronsay and Westray. The Council has a commitment to the Civil Aviation Authority (CAA) as part of the airfield operating licence to continuously improve and update the airfields. An integral part of this improvement is the commitment in the North Isles Airfields Strategy to update the terminal buildings. Delays or failure to deliver an improvement programme jeopardises the operating licence with the risk of subsequent loss of the critical lifeline air service for island communities, that the terminals and CAA licence supports.
- 1.2. A report was presented to the Development and Infrastructure Committee on 15 February 2022 to consider a Stage 1 Capital Project Appraisal in respect of the proposal to provide new airfield terminal buildings at Eday, Papa Westray, Stronsay and Westray. Approval was given to submit a Stage 2 Capital Project Appraisal to the Policy and Resources Committee.
- 1.3. Engineering officers have carried out site visits, considered the required location and orientation of each new terminal building and have completed revised plans of the terminal building as well as external infrastructure requirements such as new parking and EV charge points. The draft airfield terminal plan, specification and layout by island are attached at Annex 1.

2. Options Available

- 2.1. The improvement programme in recent years has seen the Council provide new airfield terminal buildings meeting CAA requirements at North Ronaldsay and Sanday. The terminal buildings at Eday, Papa Westray, Stronsay and Westray are 30 plus years old and do not meet current guidelines, with building fabric beyond its life expectancy, mixing passengers with operations and inadequate toilet facilities. These are critical pieces of island transport infrastructure which support the lifeline air services for residents, the local economy and are main gateways and orientation points for visitors to the islands.

- 2.2. Refurbishing the existing infrastructure has been considered but there are several disadvantages and limiting factors, such as limited scope for improving the passenger experience and future proofing. In addition, the location of some of the buildings do not meet current CAA standards as the end of the runway cannot be viewed from the terminal building in some locations. There is also a need to segregate the operational activity of the Airfield Rescue and Fire Fighting Service from the public area.
- 2.3. The improvement programme needs to be progressed to bring the buildings up to current standards from the poor condition of the existing infrastructure. External grant funding has been applied for, with a match funding requirement from the Council. The bid submitted during 2023/24 to the Islands Infrastructure Fund was unsuccessful however it is proposed that a further bid be submitted during 2024/25.
- 2.4. Doing nothing is not a long-term option as this risks the operational certification for the airfields which have older terminal buildings. The preferred option is therefore to replace the old buildings with compliant new buildings.

3. Delivery

- 3.1. The scale, nature and simple construction methodology of the new airfield terminal buildings will ensure that the contract can be delivered by a wide range of contractors. With the islands location of the airfield buildings there may however be procurement challenges in securing a contractor. As well as programme contingencies, cost contingencies have been factored into the estimates to account for the increase cost of isles working, the bouyant local construction market and the recent tender price inflation.
- 3.2. A detailed pre-works project programme has been developed by the construction design delivery team which has time contingency built in. The programme covers the core delivery activities from completing the detailed design, currently in progress, planning and building warrant approvals, construction procurement, contract award and construction duration. A late November 2023 date for contract signature should be achievable.
- 3.3. In line with the construction programme the target for submitting the planning application is June 2023 and the outcome is expected by August 2023. There has been informal discussion with the Planning Authority and the design solution reflects the Planner's comments.

4. Islands Programme 2023/24

- 4.1. A funding bid was submitted to the Islands Programme 2023/24 on 21 April 2023 for four new terminal buildings. As well as new terminal buildings which will be sustainably powered, the application included improved car parking facilities, EV

charging infrastructure and e-bike storage, therefore promoting sustainable onwards travel.

4.2. Unfortunately, the funding bid to the Islands Programme 2023/24 was not successful, however the terminal buildings are still in need of replacement. It is therefore proposed to proceed with the programme during 2023/24 where the terminal buildings in Papa Westray and Stronsay are undertaken. A further application would then be submitted during 2024/25 for funding support to undertake the programme of works required in Westray and Eday.

4.3. The key tasks and milestones for the two airfield terminal buildings during 2023/24 are as follows:

Key Project Tasks/Milestones	Date Expected
Stage 2 Capital Project Appraisal - Council funding decision	July 2023
Islands Programme 2023/24 - IP funding decision	July 2023
Statutory Approval - Planning Permissions	August 2023
Statutory Approval - Building Warrants	August 2023
Procurement – Tender(s) issued	September 2023
Procurement - Construction Contract award(s)	November 2023
Construction - Commencement on sites	March 2024
Construction - Practical Completions	October 2024
Construction – Final Completion	November 2024

5. Land Purchase Requirement

There are no land purchase requirements for this project as the land is already in Council ownership.

6. Project Appraisal

	Criteria	Response
1.	Protects Existing Statutory Provision	The inter-island air service is carried out under a Public Service Obligation (PSO) designation. The Airfield Buildings are integral to the delivery of the air service.
2.	Meets Corporate Priority / Community Planning Goal	As outlined in the Council Plan 2023 - 2028, one of the top Council priorities includes 'We will remove barriers to digital connectivity and vital transport' with an intended outcome of "Our transport

	Criteria	Response
		infrastructure meets the needs of our communities and visitors.”
3.	Protects Existing Assets	By improving a key transportation asset on the islands of Papa Westray and Stronsay during 2023/24 and Eday and Westray during 2024/25, this is investing in the future of the islands, improving public transport connectivity and connecting communities for work, leisure and education purposes.
4.	Minimises Capital Cost	The airfield terminal building improvement programme is a requirement to meet CAA requirements and improve accessibility. The design of the building is modest and materials have been carefully considered to minimise costs given the logistics of the infrastructure.
5.	Maximises Investment from External Sources	A funding bid was submitted to the Islands Programme 2023/24 however the bid was unsuccessful. A further application will be submitted during 2024/25 with the view to fund new airfield terminal buildings in Eday and Westray.
6.	Beneficial Impact on Revenue Expenditure	The new buildings will be more efficient, using air source heating and solar panels to operate the building. Revenue costs should also be less due to a reduction in maintenance costs for a new building.
7.	Linked to Other Council Provision	Lifeline service to community through Public Service Obligation Contract (PSO).
(a)	Enhances Statutory Provision	Conformity with the CAA. Provides a suitable check in point for lifeline inter island air service with suitably accessible facilities. The new terminal buildings will support the operation of the lifeline inter island air service which is operated under a Public Service Obligation (PSO) Contract.
(b)	Protects or Enhances Discretionary Provision	
8.	Re-use of Derelict Land or Building	N/A

	Criteria	Response
9.	Promote or Enhance Orkney's Environment	The improvement of key transport infrastructure in the Outer North Isles, using materials which are more sustainable will enhance the environment and benefit the community in general.
10.	Promote or Enhance Orkney's Heritage	N/A
11.	Economic Prosperity or Sustainable Communities	<p>Transport is an enabler, connecting communities to key services, allowing people to access jobs, services and education.</p> <p>Transport is especially an enabler in the isles, with the inter-island air service providing a fast, reliable and efficient service for the community, key services and to promote and encourage tourism to the islands.</p>
12.	Enhances Council operations or Improves Health and Safety	The provision of new airfield terminal buildings will improve the existing operation by creating a separate watch room for day-to-day operational activity from the waiting area. The current operation is not suitable or supported by the CAA. The relocation of some airfield terminal buildings will also comply with CAA requirements so that the airfield team

7. Financial Implications

- 7.1. The cost for two new airfield terminal buildings during 2023/24 has been estimated at a cost of £915,000 which will only be confirmed after the contract has been subject to a competitive tender exercise. EV charge points and other equipment for each location have been estimated at £15,000. The full Financial Assessment of Capital and Revenue Expenditure is attached at Annex 2 and 3.
- 7.2. The cost of the project has increased on account of the general rapid rise in construction costs that has occurred recently, with an estimated capital cost of £1.83 million to complete the terminal replacement programme, broken down over a 2-year period. The estimated airfield terminal buildings and EV charging costs during 2023/24 are outlined below (costs are exclusive of VAT): -

Project Delivery Costs – Expenditure Headings	2023/24
Statutory and Professional Fees	100,000
Main Contract Works	800,000
Electrical Chargers (EV and E-bikes)	15,000
Total costs	915,000

- 7.3. The Islands Infrastructure Fund will not fund projects that have funding already approved. It is therefore recommended that the Council approves the inclusion of the project in the Capital Programme conditional upon the success of an application to the Islands Infrastructure Fund during 2024/25. The estimated cost of the project as outlined in the Islands Application is as follows:

Funding	2023/24	2024/25	Total
Orkney Islands Council	915,000	366,000	1,281,000
Total Islands Programme Funding		549,000	549,000
Total Project Funding	915,000	915,000	1,830,000

- 7.4. The Financial Assessment of Capital Expenditure is attached at Annex 2 and the Financial Assessment of Revenue Expenditure is attached at Annex 3 which shows a slight reduction in revenue expenditure is anticipated as an old asset is being replaced for new.

8. Risk Assessment

The programme of works proposed during 2023/24 includes two new airfield terminal buildings on the islands of Papa Westray and Stronsay. Subject to appointing a suitable contractor following the necessary procurement and tendering process, it is anticipated that the works will be carried out by the timescales outlined and budget as outlined in this report.

The risk to the continuation of the service is low given the airfield operations will continue from the existing terminal building until the works on the new terminal building are complete.

9. Conclusion/Recommendations

It is recommended that the airfield terminal building replacement programme is progressed during 2023/24 financial year, with the terminal buildings in Papa Westray and Stronsay to be replaced, and a bid to the Islands Infrastructure Fund during 2024/25 to part fund new terminal buildings in Westray and Eday.

10. Accountable Officers

Gareth Waterson, Corporate Director, Enterprise and Sustainable Regeneration, extension 2103, Email gareth.waterson@orkney.gov.uk.

James Buck, Head of Marine Services and Transportation, extension 2703, Email james.buck@orkney.gov.uk

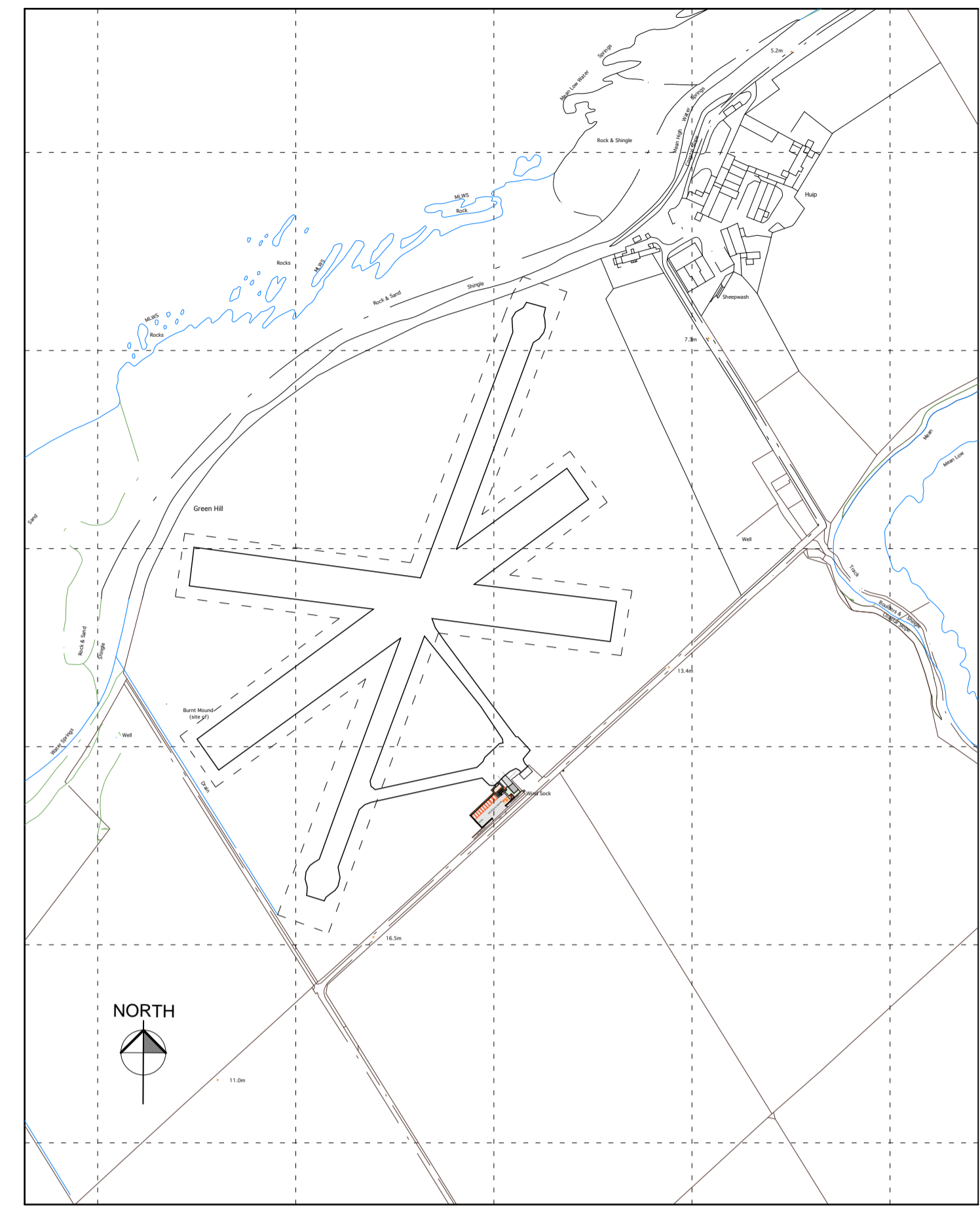
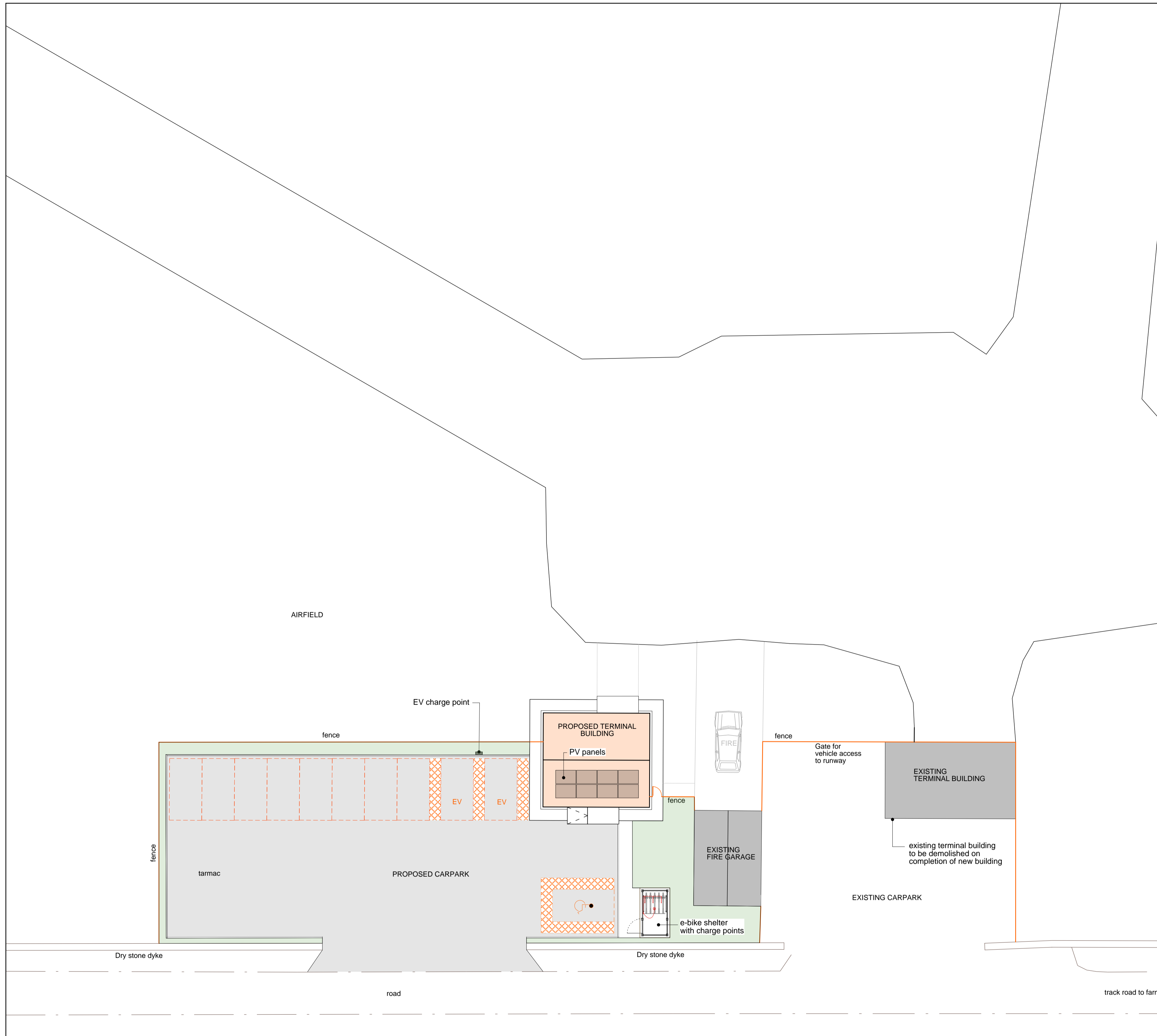
Laura Cromarty, Service Manager (Transportation), extension 2535, Email laura.cromarty@orkney.gov.uk

11. Annexes

Annex 1 - Terminal Building Plan, Specification and Proposed Site Locations.

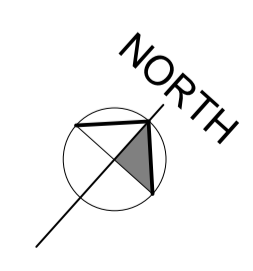
Annex 2 - Financial Assessment of Capital Expenditure.

Annex 3 - Financial Assessment of Revenue Expenditure.



LOCATION PLAN Scale 1:5000

SITE PLAN Scale 1:200



REVISIONS

Project
**STRONSAY AIRFIELD
 NEW TERMINAL
 BUILDING**

Title
**SITE PLAN &
 LOCATION PLAN**

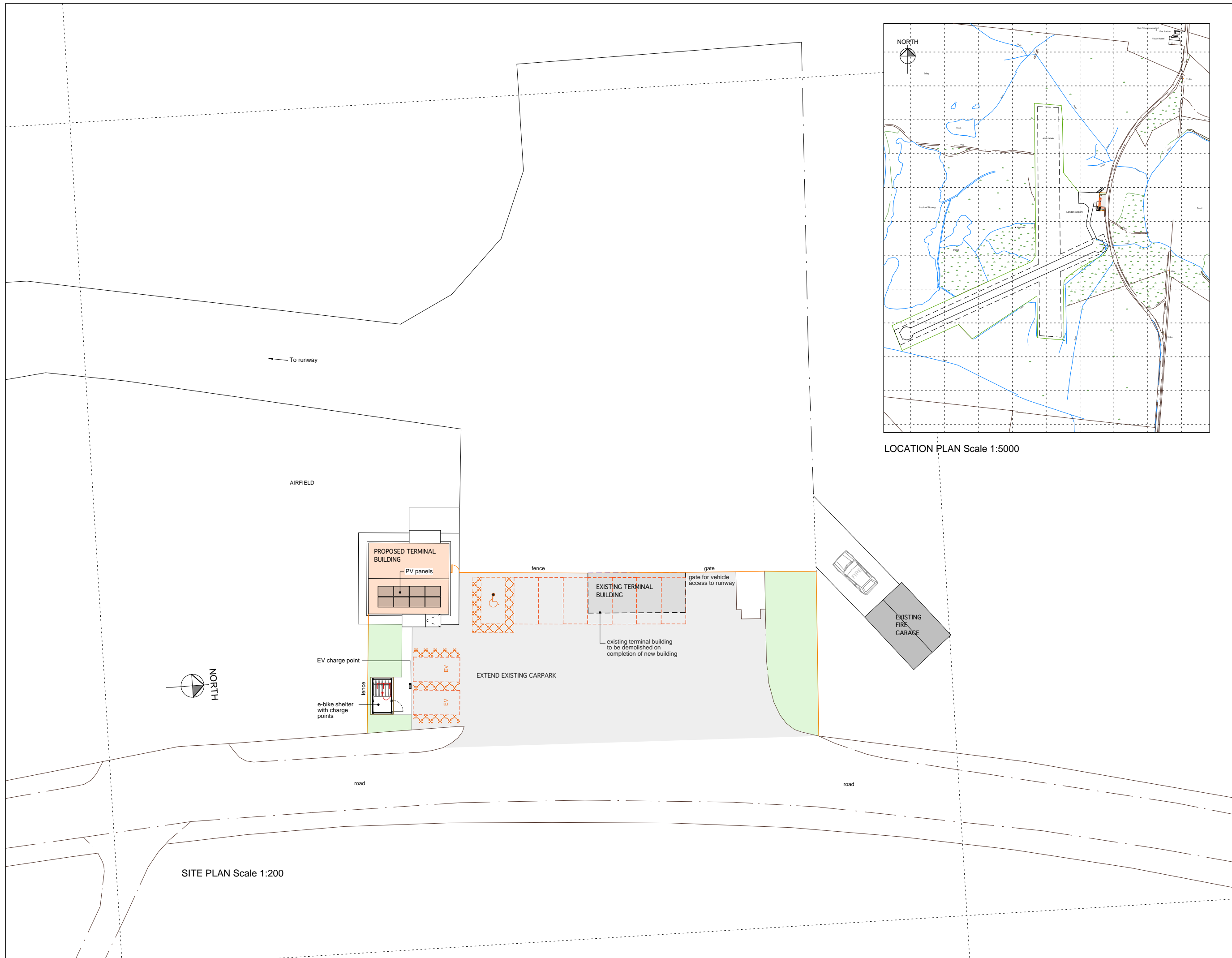
Project No. 24-1056-P002	Drawing No. 02
Revision	
Printed 29/03/2023	Issue
Date March 2023	Drawn JG
Scale 1:200/5000 @A1	Checked

All dimensions to be checked on site before work and the manufacture of fittings commences.
 This drawing is not to be scaled.
 © Information contained within this drawing is copyright of Orkney Islands Council.

NEIGHBOURHOOD SERVICES AND INFRASTRUCTURE
 Council Offices, Kirkwall
 Orkney, KW15 1NY
 tel (01856) 873535
 fax (01856) 876094
 www.orkney.gov.uk



developmentandinfrastructure@orkney.gov.uk



LOCATION PLAN Scale 1:5000

SITE PLAN Scale 1:200

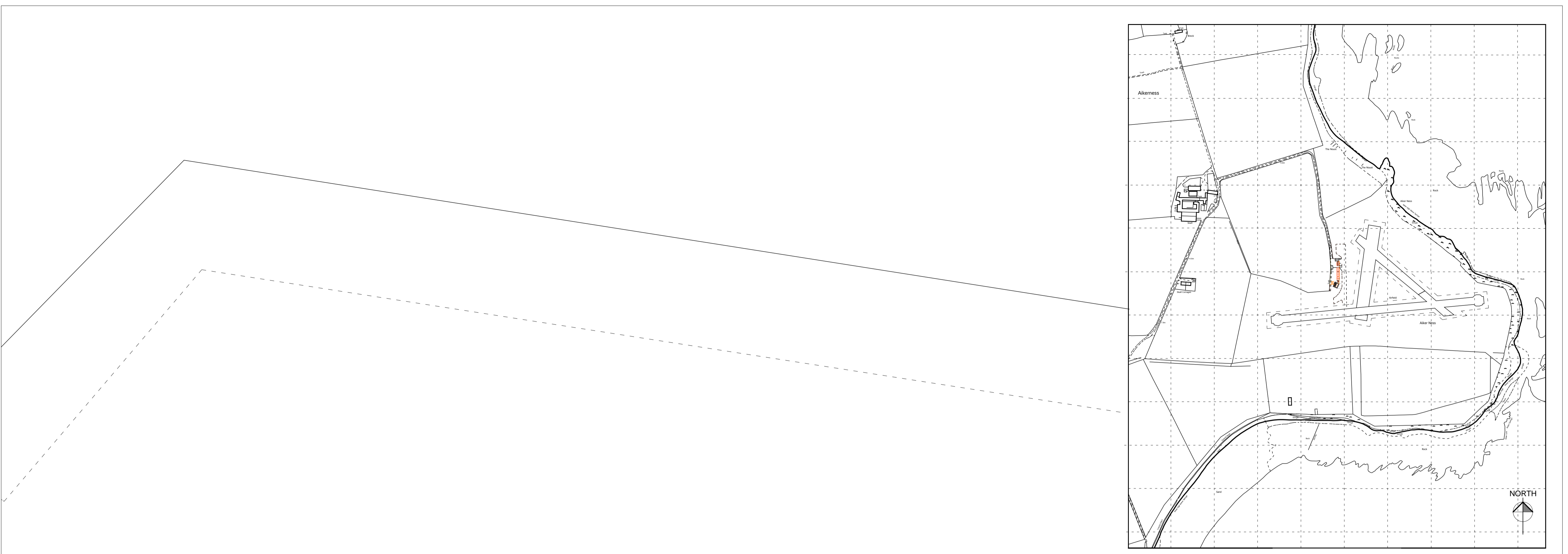
REVISIONS

Project
**EDAY AIRFIELD
 NEW TERMINAL
 BUILDING**

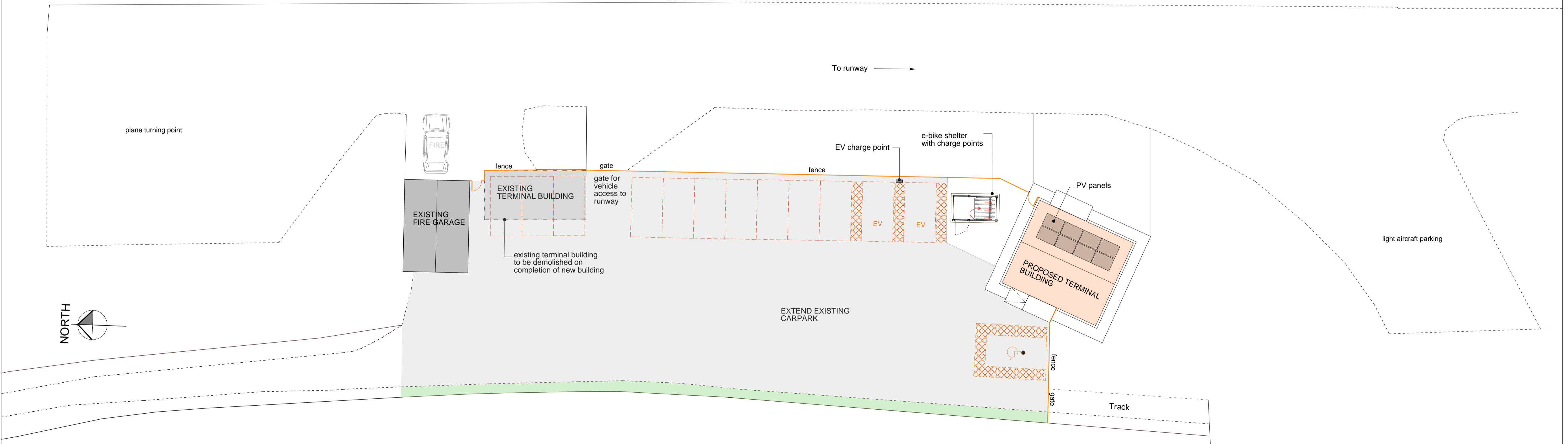
Title
**SITE PLAN &
 LOCATION PLAN**

Project No.	04-1051-P001	Drawing No.	02
Revision			
Printed	29/03/2023	Issue	
Date	March 2023	Drawn	JG
Scale	1:200/5000 @A1	Checked	

All dimensions to be checked on site before work and the manufacture of fittings commences.
 This drawing is not to be scaled.
 © Information contained within this drawing is copyright of Orkney Islands Council.



LOCATION PLAN Scale 1:5000



SITE PLAN Scale 1:200

REVISIONS

Project
**WESTRAY AIRFIELD
 NEW TERMINAL
 BUILDING**

Title
**SITE PLAN &
 LOCATION PLAN**

Project No. 26-1057-P001	Drawing No. 02
Revision	Issue
Printed 29/03/2023	Issue
Date March 2023	Drawn JG
Scale 1:200/5000 @A1	Checked

All dimensions to be checked on site before work and the manufacture of fittings commences.

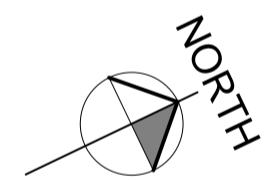
This drawing is not to be scaled.

© Information contained within this drawing is copyright of Orkney Islands Council.

NEIGHBOURHOOD SERVICES AND INFRASTRUCTURE
 Council Offices, Kirkwall
 Orkney, KW15 1NY
 tel (01856) 873535
 fax (01856) 876094
 www.orkney.gov.uk



developmentandinfrastructure@orkney.gov.uk



EV charge point

fence

EV

EV

PROPOSED CARPARK

PROPOSED TERMINAL BUILDING
PV panels

EXISTING FIRE GARAGE

e-bike shelter with charge points

Gate for vehicle access to runway

EXISTING TERMINAL BUILDING

existing terminal building to be demolished on completion of new building

EXISTING CARPARK

pole

road

road

SITE PLAN Scale 1:200



LOCATION PLAN Scale 1:5000

REVISIONS

Project
**PAPA WESTRAY
AIRFIELD
NEW TERMINAL
BUILDING**

Title
**SITE PLAN &
LOCATION PLAN**

Project No.
15-1054-P001

Drawing No.
02

Revision
Printed 29/03/2023 Issue

Date March 2023 Drawn JG

Scale 1:200/5000 @A1 Checked

All dimensions to be checked on site before work and the manufacture of fittings commences.

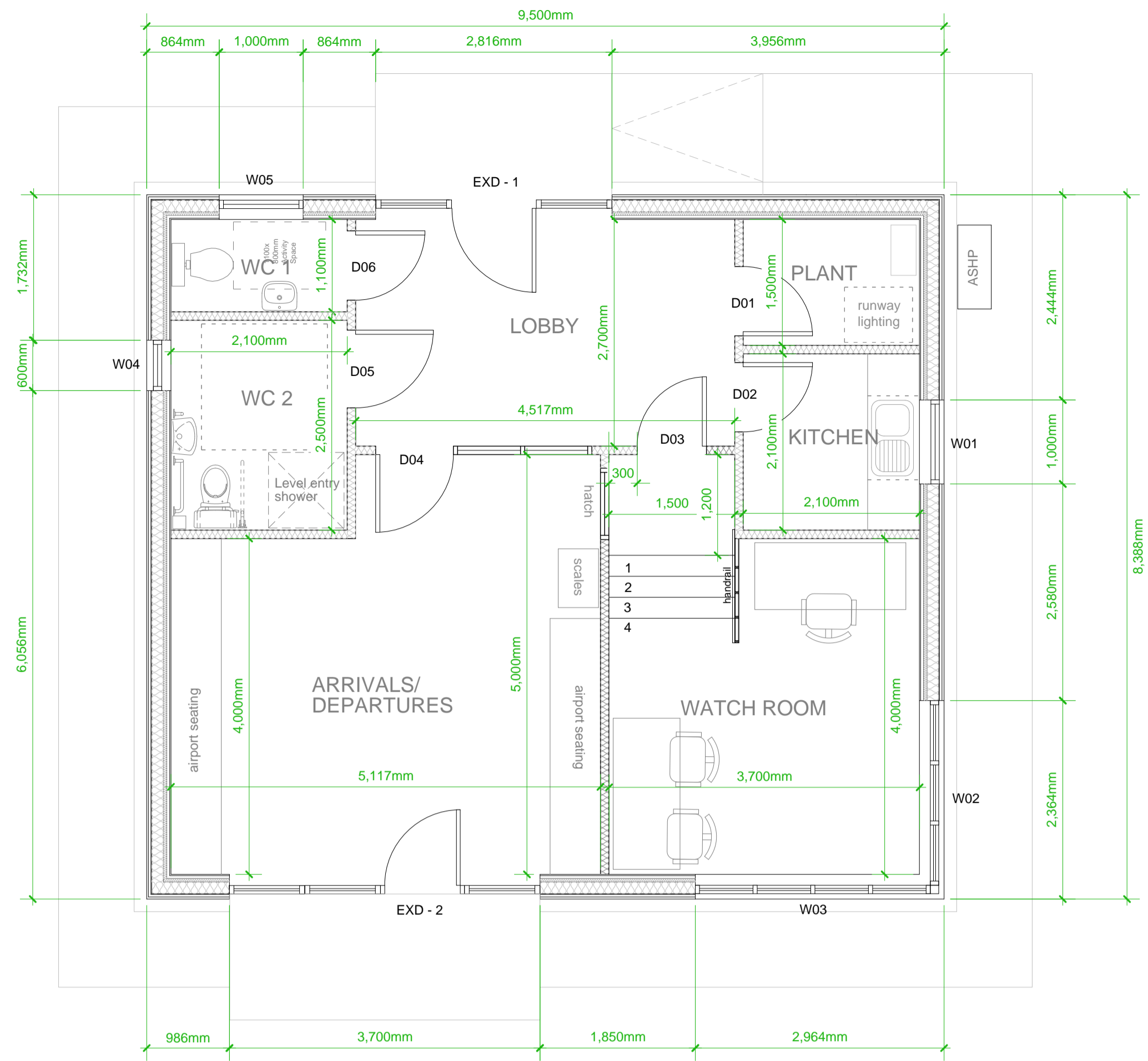
This drawing is not to be scaled.

© Information contained within this drawing is copyright of Orkney Islands Council.

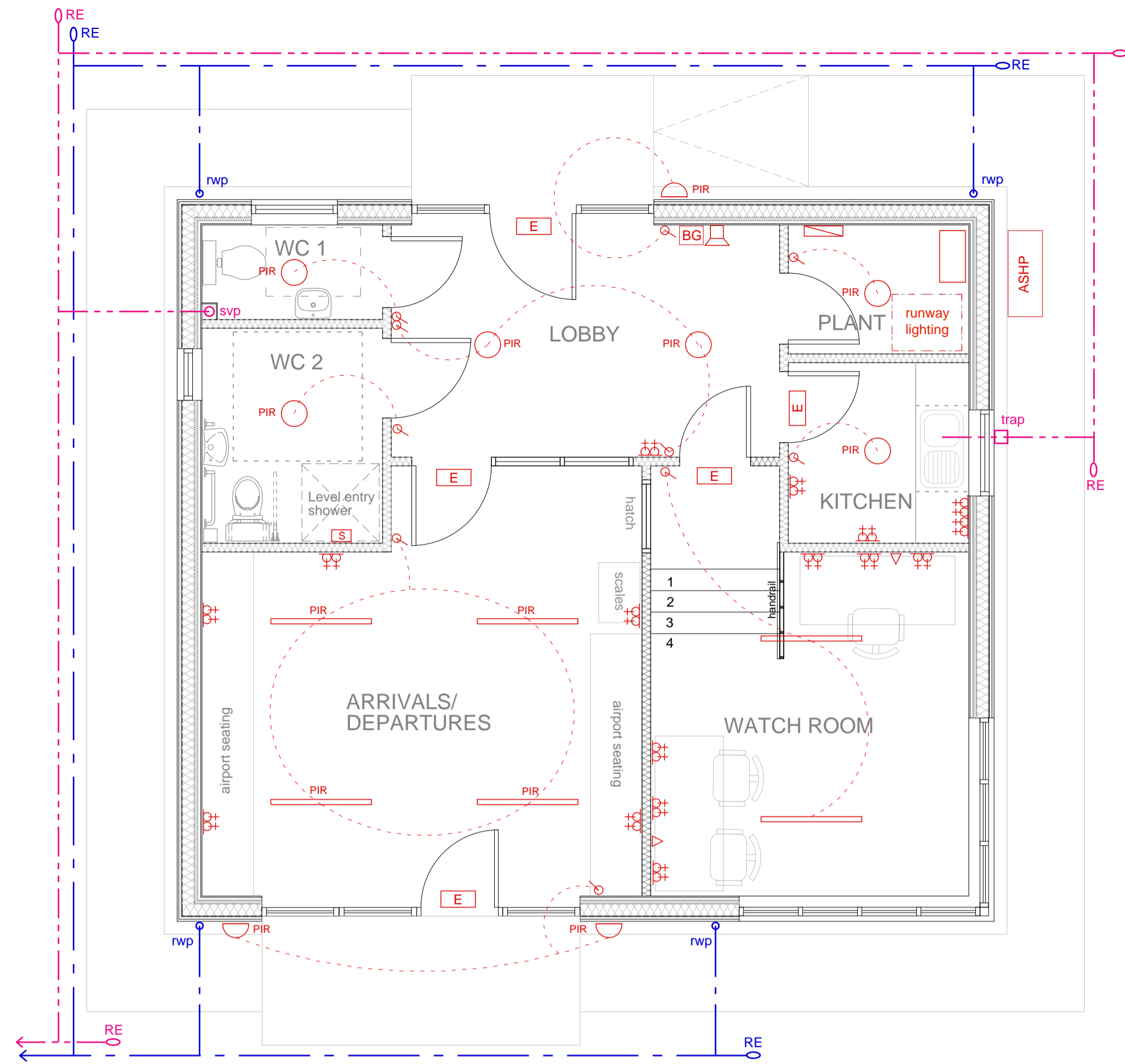
NEIGHBOURHOOD SERVICES AND
INFRASTRUCTURE
Council Offices, Kirkwall
Orkney, KW15 1NY
tel (01856) 873535
fax (01856) 876094
www.orkney.gov.uk



developmentandinfrastructure@orkney.gov.uk

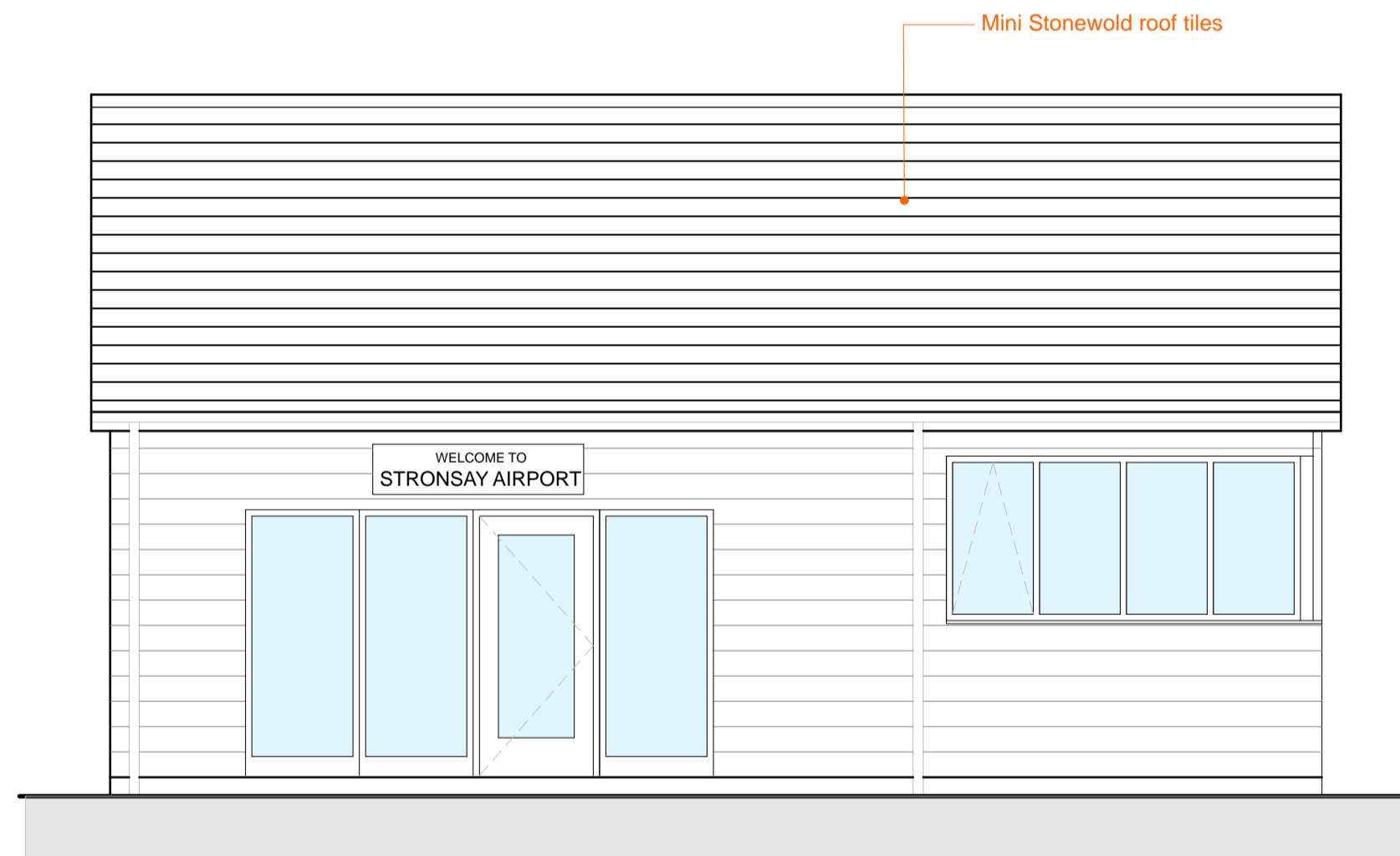


FLOOR PLAN Scale 1:50

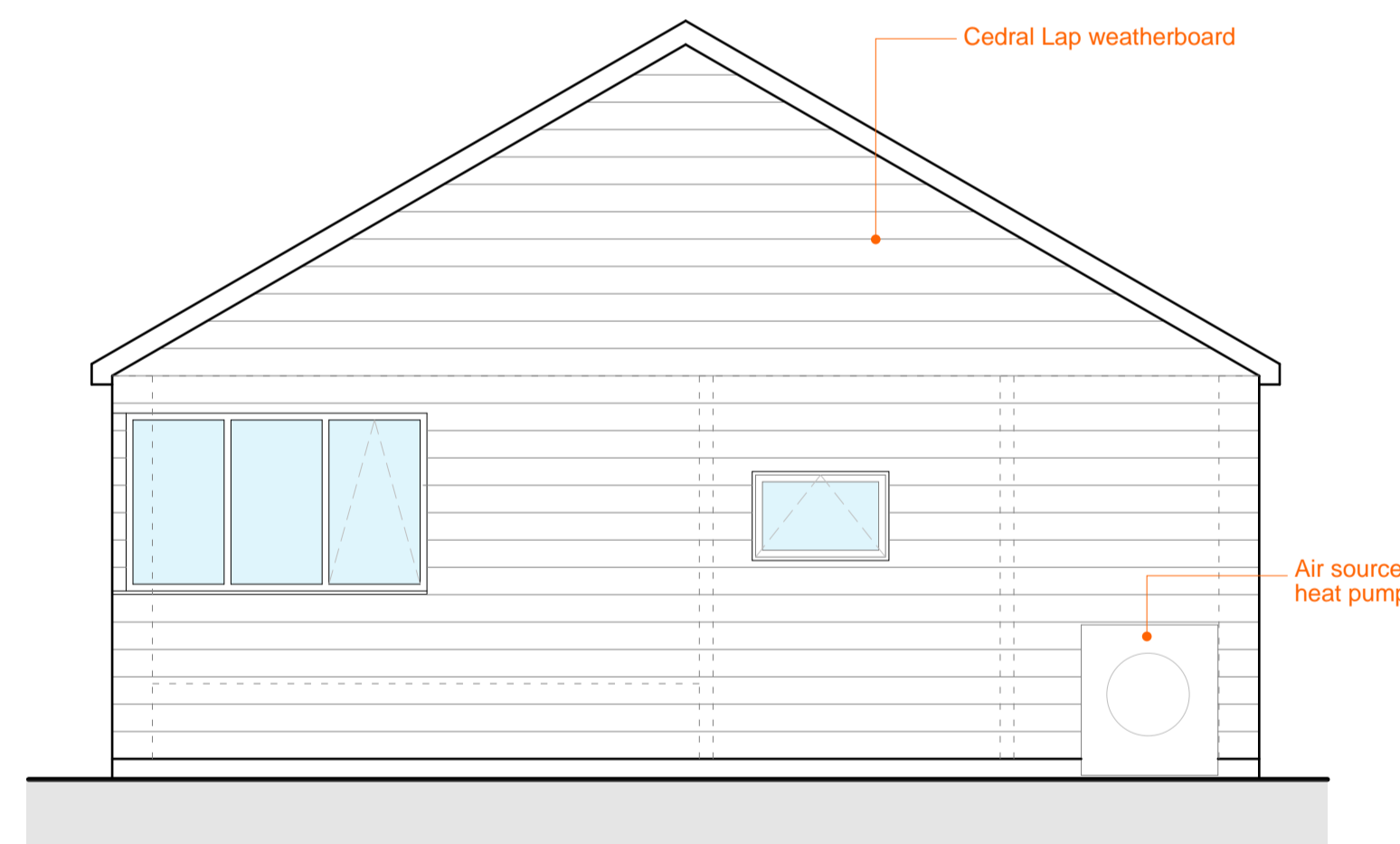


ELECTRICAL & DRAINAGE LAYOUT Scale 1:50

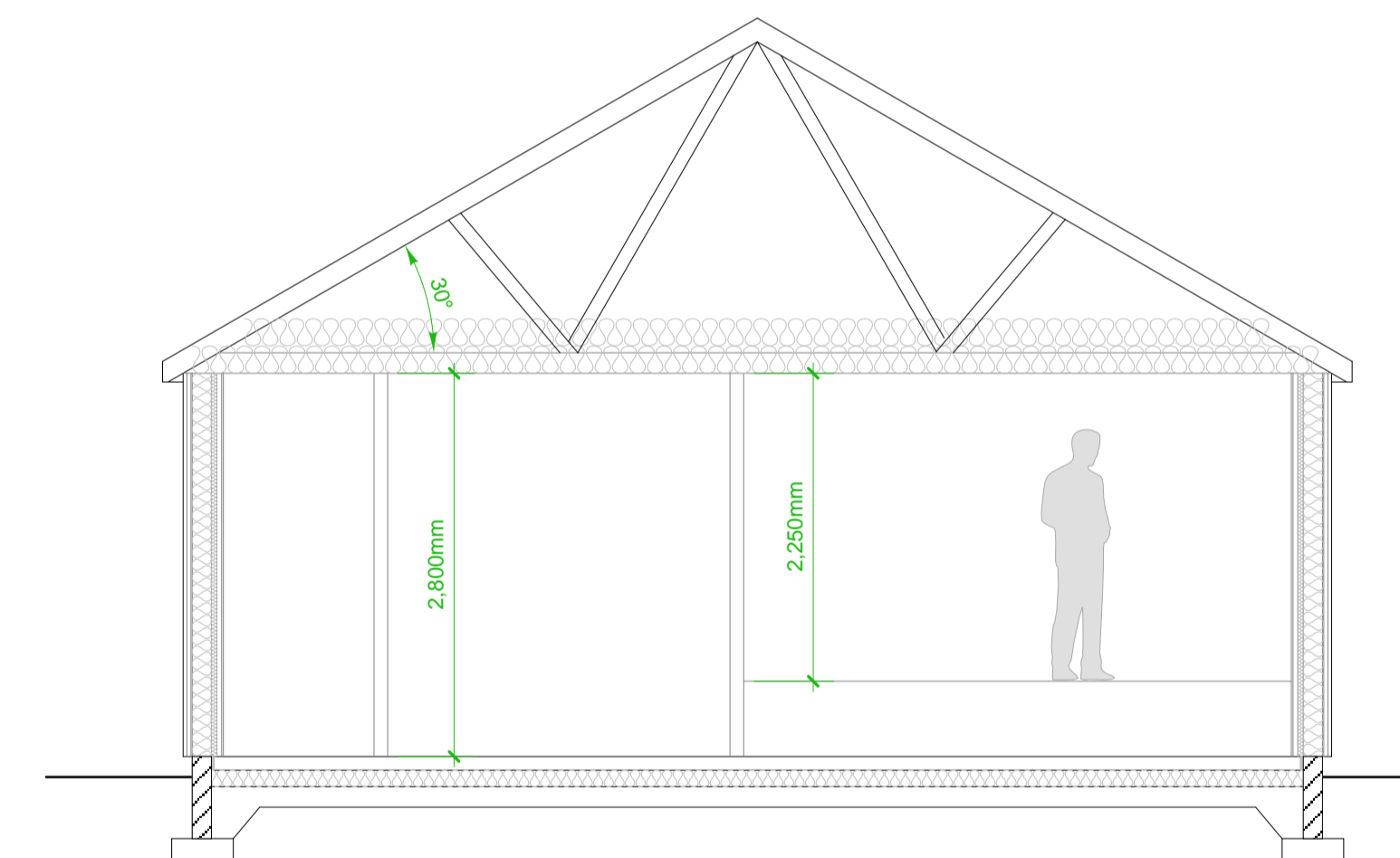
- ELECTRICAL LEGEND**
- Thorn PopPack LED PP4500Z/96242245
POPPACK LED4500-840 HF L1200
 - PIR Thorn Danube DA1200ZOP/96241362 DA 1200 LED on PIR sensor
 - External light fitting on PIR sensor
 - Light Switch
 - 13 amp Double socket outlet
 - Phone socket
 - Heatrae Sadia hot water heater
 - Mira sport electric shower 9kW
 - Distribution board
 - Escape route lighting (self contained)
 - Category M - Stand alone manual fire alarm system Sounder and break glass
 - Air source heat pump (internal unit)
 - ASHP Air source heat pump (external unit) (with cable duct in concrete floor. DO NOT drill hole through external wall).
 - runway lighting Runway lighting box (relocated from existing building) (with cable duct in concrete floor).
- DRAINAGE LEGEND**
- re Rodding eye terminal
 - rwp 80mm dia rain water pipe
 - Foul water drain 100mm UPVC
 - Surface water drain 100mm UPVC



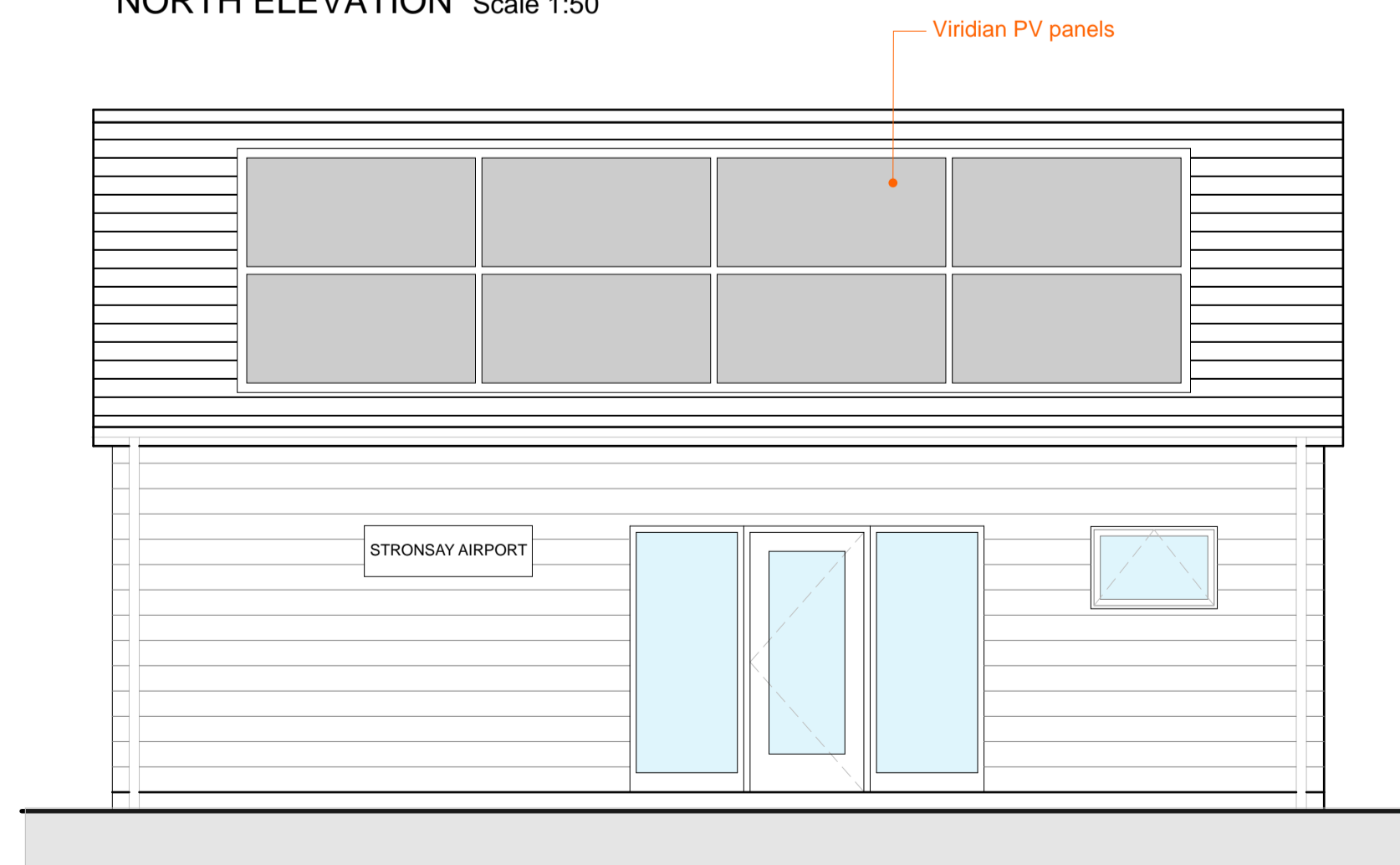
NORTH ELEVATION Scale 1:50



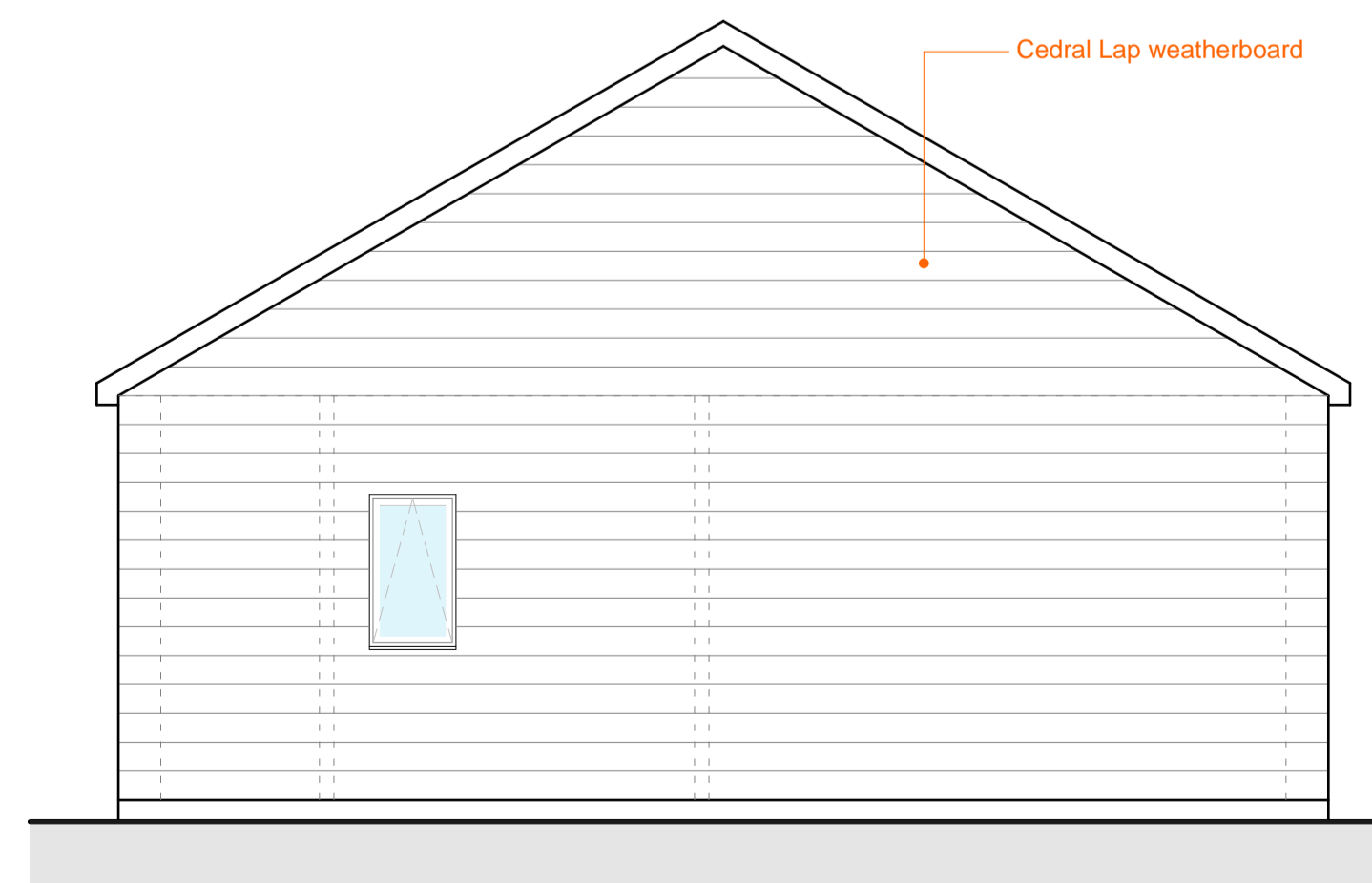
WEST ELEVATION Scale 1:50



SECTION A-A Scale 1:50

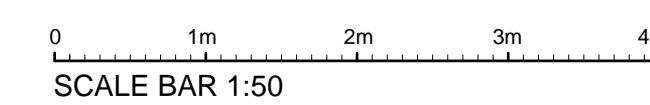


SOUTH ELEVATION Scale 1:50



EAST ELEVATION Scale 1:50

- EXTERNAL FINISHES**
- Roof: Mini Stonewold flat profile roof tiles, colour: Black
 - Walls: Cedral Lap wood effect weatherboard cladding (horizontal), colour: Slate Grey (C18)
 - Fascias and Soffits: Cedral soffit and fascia boards, colour, Slate Grey (C18)
 - Windows and Doors: UPVC colour: anthracite RAL 7016
 - Rainwater goods: UPVC colour: black



DRAFT

REVISIONS

Project
**STRONSAY AIRFIELD
NEW TERMINAL
BUILDING**

Title
**FLOOR PLAN AND
ELEVATIONS**

Project No. 1	Drawing No. 1
Revision	
Printed 20/02/2023	Issue
Date OCT 22	Drawn JG
Scale 1:50 @ A1	Checked

All dimensions to be checked on site before work and the manufacture of fitments commences.
This drawing is not to be scaled.
© Information contained within this drawing is copyright of Orkney Islands Council.

NEIGHBOURHOOD SERVICES AND
INFRASTRUCTURE
Council Offices, Kirkwall
Orkney, KW15 1NY
tel (01856) 873535
fax (01856) 876094
www.orkney.gov.uk
**ORKNEY
ISLANDS COUNCIL**
developmentandinfrastructure@orkney.gov.uk

GENERAL SPECIFICATION

CONCRETE STRIP FOUNDATIONS

Excavate for concrete strip foundations to external walls 600mm x 150mm deep, minimum of 450mm below ground level. Concrete blockwork underbuilding. Concrete strip foundations to load bearing partitions 450mm x 150mm. DPC to top of blockwork underbuilding, minimum of 150mm above ground level. Please refer to Structural Engineers drawings for layout.

CONCRETE FLOOR (u-value = 0.14 W/m2k)

125mm thick concrete floor slab with 1 layer of A193 mesh min 30mm cover, with underfloor heating pipes on 120mm thick Kingspan thermafloor insulation, on 1200g visqueen damp proof membrane turned up at the perimeter of the slab and to pass over the leaf of blockwork, please refer to foundation/wall detail, dpm to meet radon requirements, lap the membrane by a minimum of 150mm and seal with a strip of monobond tape min of 30mm wide. 25mm thick polyurethane insulation to the vertical face of the perimeter of the slab, seated on 50mm blinding and 150mm thick layers of well compacted hardcore.

TIMBER FLOOR AND STAIRS

Timber floor to Watch Room to raise the floor level by 550mm. Timber floor 47x195mm C16 timber joists @400mm centres, supported by 47x195mm wall plate bolted to the timber kit @300mm centres with M12 bolts, with dwangs 50x50mm @1200mm centres. 22mm thick chipboard flooring t&g, glued and screwed. Timber staircase with 4No. risers, 170mm max rise, 250mm minimum going, with timber handrail to extend 300mm beyond top and bottom of stair, 1200mm deep landing to stair. Timber stairs to comply with building standard 4.3 Stairs & Ramps, banister and handrail to be provided at a height of between 840mm and 1000mm as per the guidance in 4.3.14.

WALLS (u-value = 0.13 W/m2k)

Cedral Lap weatherboard planks (timber effect) fixed horizontally using s/s Cedral click clips with s/s screws to 75x30mm vertical timber battens wrapped in breather membrane @600mm centres, fixed as per manufacturers recommendations. Minimum of 30mm vented cavity left between weatherboarding and timber kit to comply with 3.10 Precipitation. Perforated pest control strips fitted at DPC level and soffit line, and above and below window openings. Reflective breather membrane paper on 9mm thick sterling board, 45x140mm timber vertical timber framing @600mm centres, 45x140mm timber horizontal rails, double top and bottom, 45x140mm, horizontal binders, 3No. 45x195mm timber lintols above openings supported by 45x140mm cripple studs, 140mm thick Xtratherm PIR rigid insulation board between timber studs, 40mm thick Xtratherm PIR rigid insulation board to inner face of timber kit, 1 layer of Protect vapour control foil, 35mm service void, 12.5mm plain tapered edge plasterboard, taped and filled with gyproc filler, sanded ready to paint.

ROOF (u-value = ??W/m2k)

Roof pitch 30 degrees. Redland-Monier Mini Stonewold roof tiles, colour black, fixed to 50x25mm tiling battens, on 50x25mm counter battens, roofing felt on 9mm thick OSB, on timber trusses @600mm centres to engineers specifications, 450mm thick fibreglass insulation to ceiling. Timber dwangs to ceilings @1200mm centres. 12.5mm thick plasterboard to ceiling, all joints taped and filled with Gyproc filler, sanded ready to paint. Cedral UPVC fascias and soffits (colour to match cladding), provide continuous strip ventilation to eaves, with dry ridge ventilation.

INTERNAL PARTITIONS -

Standard partitions - 45x75mm vertical timber studs @600mm centres, top and bottom horizontal rails, with dwangs @1200mm centres. All partitions to have 25mm thick acoustic insulation sound deadening roll (10kg/m3) 43dB sound reduction to meet the requirements of 5.2. 1 Layer of 12.5mm thick plain tapered edge plasterboard to each side, 1 layer of 18mm plywood and 1 layer of 12.5mm moisture resistant plasterboard to disabled toilet with shower to comply with Standard 3.12.3 Robust wall construction, all joints taped and filled with gyproc filler, sanded ready to paint.

INTERNAL FINISHES -

12x95mm redwood pencil round skirtings, 18x70mm redwood pencil round facings, no skirting blocks. 32mm redwood door jambs, 12x70mm redwood door stops. Lingoes to be plasterboarded, 18mm redwood cills and apron plates to windows. Internal Doors - Oak veneered solid core flush doors as per door schedule. Internal ironmongery - as per ironmongery schedule. Kitchen units - kitchen units by Howdens Joinery or equal approved, with soft close door and drawer mechanisms, 40mm laminate worktops as per internal elevations drawing.

FLOORING AND SHOWER WALL VINYL -

PAINTERWORK -

Walls - 1 x coat of drywall primer, 2 x coats of matt emulsion, colour : White. Disabled toilet and shower walls - 1 x coat of drywall primer, 2 x coats of mid-sheen emulsion, colour: white. Ceilings - 1 x coats of drywall primer, 2 coats of matt emulsion, colour: white. Bathrooms/ Shower room ceilings - 1 x coat of drywall primer, 2 x coats of mid-sheen emulsion, colour: white. Woodwork - facings, skirtings, window cills, meterboxes, coat hook belting etc. -

WINDOWS AND EXTERNAL DOORS -

Triple glazed high performance UPVC windows and doors (external colour : Anthracite Grey RAL 7016, internal colour : Anthracite Grey RAL 7016), with openers as shown on the elevations. All external glazing to have a maximum u-value of 1.0w/m2k. Toughened glass to doors and any window panes lower than 800mm from floor level. Obscure glass to WC and Disabled Toilet windows. Low threshold to doors for disabled access, with a minimum clear opening width of 800mm. Handles - satin/ stainless steel. Windows and doors to meet the requirements of standard 4.13 security and advise to be taken from Secured by Design.

RAINWATER GOODS -

Deepflow UPVC rainwater gutters held together with gutter brackets @600mm centres, 80mm diameter down pipes. All rainwater goods fixed to manufacturers instructions and to comply with current building regulations. Colour: Black.

PLUMBING -

All plumbing work to comply with current building regulations and to the satisfaction of building standards. 40mm diameter waste pipes provided to whbs, showers, 100mm diameter waste pipe to toilets, all connecting into 110mm diameter soil vent pipe. Soil vent pipe to vent through roof. Shower tray in Disabled WC to be a minimum size of 900x900mm. All hot and cold water pipes to be insulated. Thermostatic mixing valves TMV's to be fitted to sanitary appliances in accordance with building standard 4.9.5. Water efficient fittings will be provided to sanitary appliances to comply with building standard 3.27. Single flush WCs to have a flush volume of not more than 4.5 litres. Taps to have a flow rate of not more than 6 litres per minute.

HEATING AND HOT WATER -

Supply and fit air source heat pump, located outside the building fixed to the gable end. Concrete duct to be left in the concrete floor slab for the cable, DO NOT drill holes in the external walls. Indoor unit and heating manifold to be located in the Plant room. Underfloor heating pipes??

DRAINAGE -

Surface water drainage to connect into new soakaway, minimum of 5 metres from the building and 5 metres from the site boundary, and a minimum of 10 metres from the road. Foul water drainage to connect into new septic tank, minimum of 5 metres from the building and 5 metres from the site boundary, and a minimum of 10 metres from the road. All drainage trenches backfilled with a suitable fill material, all drainage to the satisfaction of building standards, rodding eyes at each change of direction. All manhole covers to have a concrete surround.

ELECTRICAL -

All work to be carried out by a qualified electrical contractor to Standards 4.5, 4.6 and 4.8.5. and to BS 7671: 2008. Certificate of Electrical Compliance to be provided. Consumer unit to be situated inside cupboard as shown on the floor layout. Light switches to be positioned at a height of between 900-1100mm above floor level. Socket outlets and phone sockets etc. to be positioned at a minimum height of 400mm from floor level. Sockets and switches above worktops to be at least 150mm above the worktop surface, all in accordance with with building standard 4.8.5. 100% of the fixed lighting will be low energy in accordance with building standard 6.5. Provide Category M stand alone manual fire alarm system with a manual call point as specified in BS EN 54: Part 11 : 2001 (type A) should be installed in accordance with BS 5839: Part 1 : 20017. Adequate provision will be made for a high speed electronic communications network (broadband connection) a duct will be required in the floor slab in accordance with 4.14.

PV PANELS -

Viridian Clearline Fusion PV16 panels (roof integrated system) installed on South facing elevations as per the elevation drawings. Installed to appropriate spacing recommendations using manufacturer's flashing system. A meter is required for the PV system. The PV panel system is to be fitted with a non-export function to comply with SSE Engineering recommendation G100. The system should also be fitted with a fireman switch so the system can be shut down in the event of a fire. 8No. photovoltaic panels = 4.4kW.

VENTILATION -

Mechanical ventilation system with heat recovery to be installed (MVHR), Domus HRXD system or equal approved, designed and specified by manufacturer. Manufacturers information to be provided for the SAP calculations and EPC certificate. No trickle ventilation is required to windows with use of MVHR system. Ventilation to WCs provided by MVHR system. MVHR inlets and outlets in ceilings to be situated a minimum of 1 metre from Heat Detectors or Smoke Detectors.

ACCESSIBLE ENTRANCE & CAR PARK -

Concrete access ramp with a fall of 1:12, maximum length 2 metres, max rise 166mm, edge of ramp protected by 100mm high concrete kerb. Galvanised steel handrail to be provided at a height of 840mm - 1000mm, handrail to extend 300mm beyond the end of the ramp. The ramp will be provided at entrance door with a level access platt 1500x1800mm. The door will have a min clear opening width of 800mm (use a 1000mm door set) and an accessible low threshold. The accessible entrance will be provided with an external light activated by a motion sensor. A clear space of 300mm to be provided at the leading edge of the door. Level access platt 1500x1500mm to be provided at the external door of Departures leading to the runway, surrounding ground will be graded up to the access platt. A disabled parking space will be provided in the car park and be clearly marked, a dropped kerb will also be provided onto the footpath, as shown on the site plan. The parking space will be no more than 45 metres from the entrance and comply with Standard 4.1.1 accessible carpark.

ACTIVITY SPACES -

Kitchen to have an unobstructed manoeuvring space of 1500x1500mm. WC to have a clear activity space of 1100x800mm, WHB to have an activity space of 800x700mm, Shower to have an activity space of 800x800mm. Doors can open into these activity spaces but a clear space of 1100x800mm will remain unobstructed to allow occupant to enter room and close door behind them. Clear activity space of 1100x800mm provided at the entrance door. All internal doors in the building will have a minimum clear opening width of 800mm, with the exception of cupboard doors, this meets the requirements of 4.2.6.

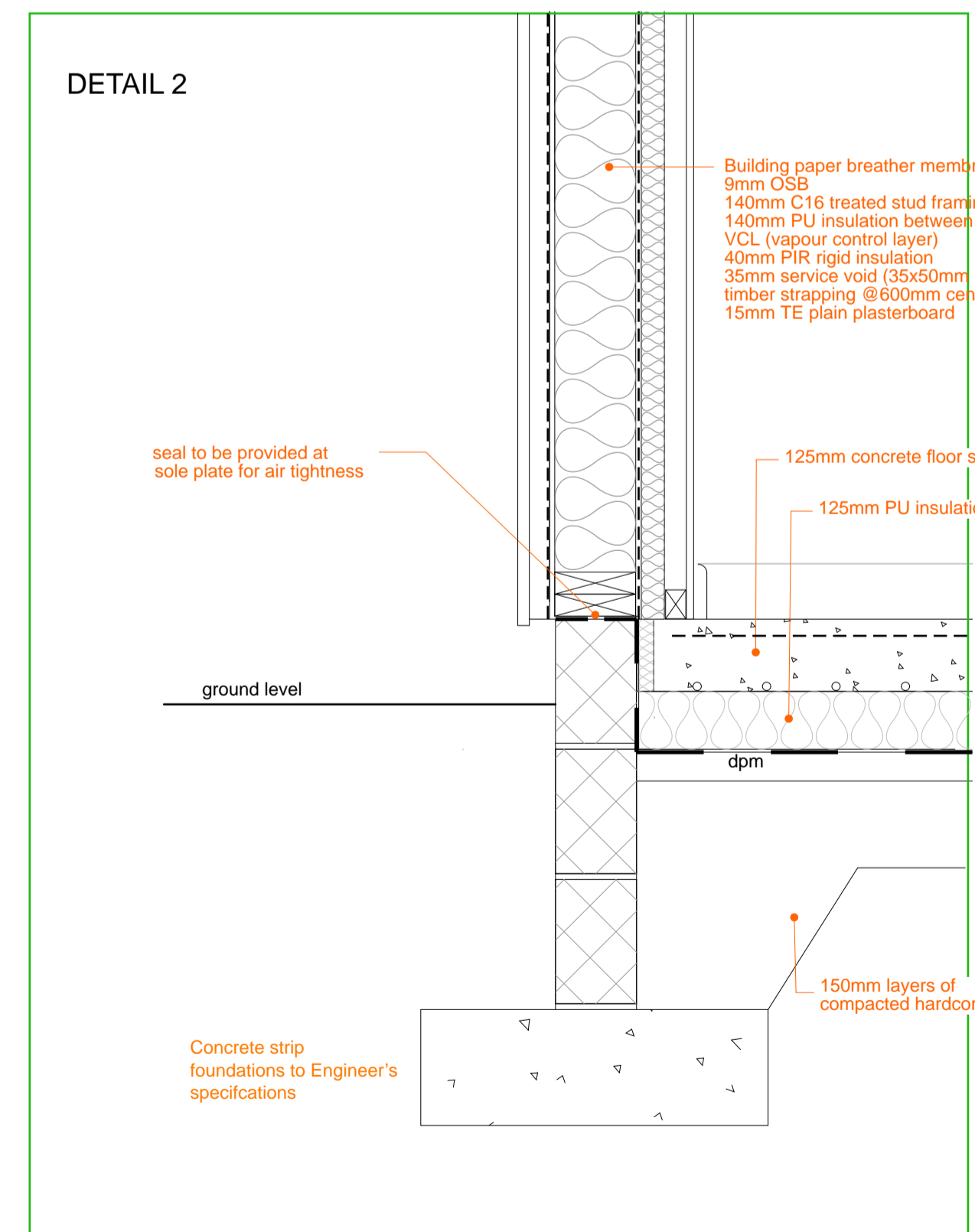
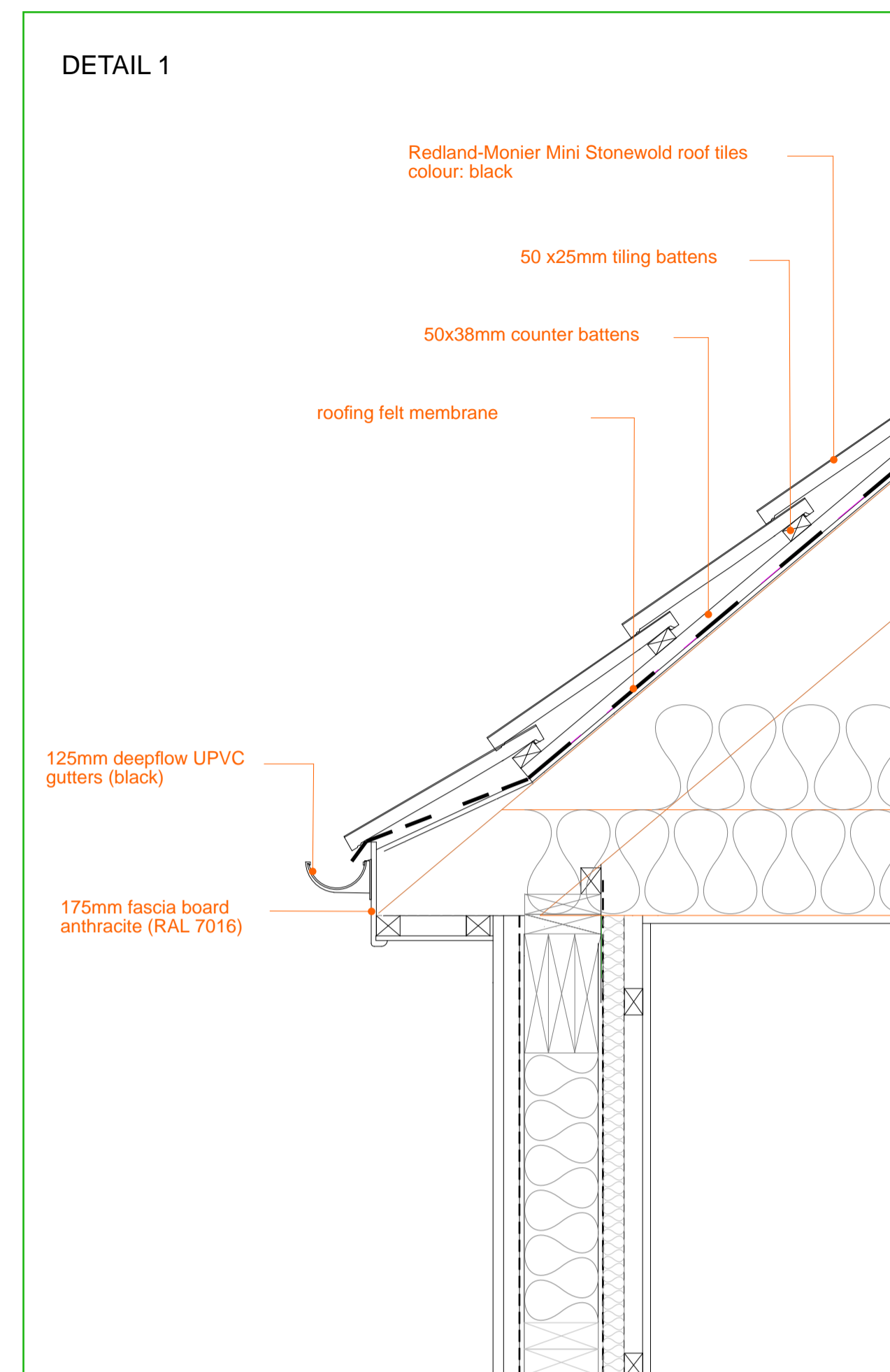
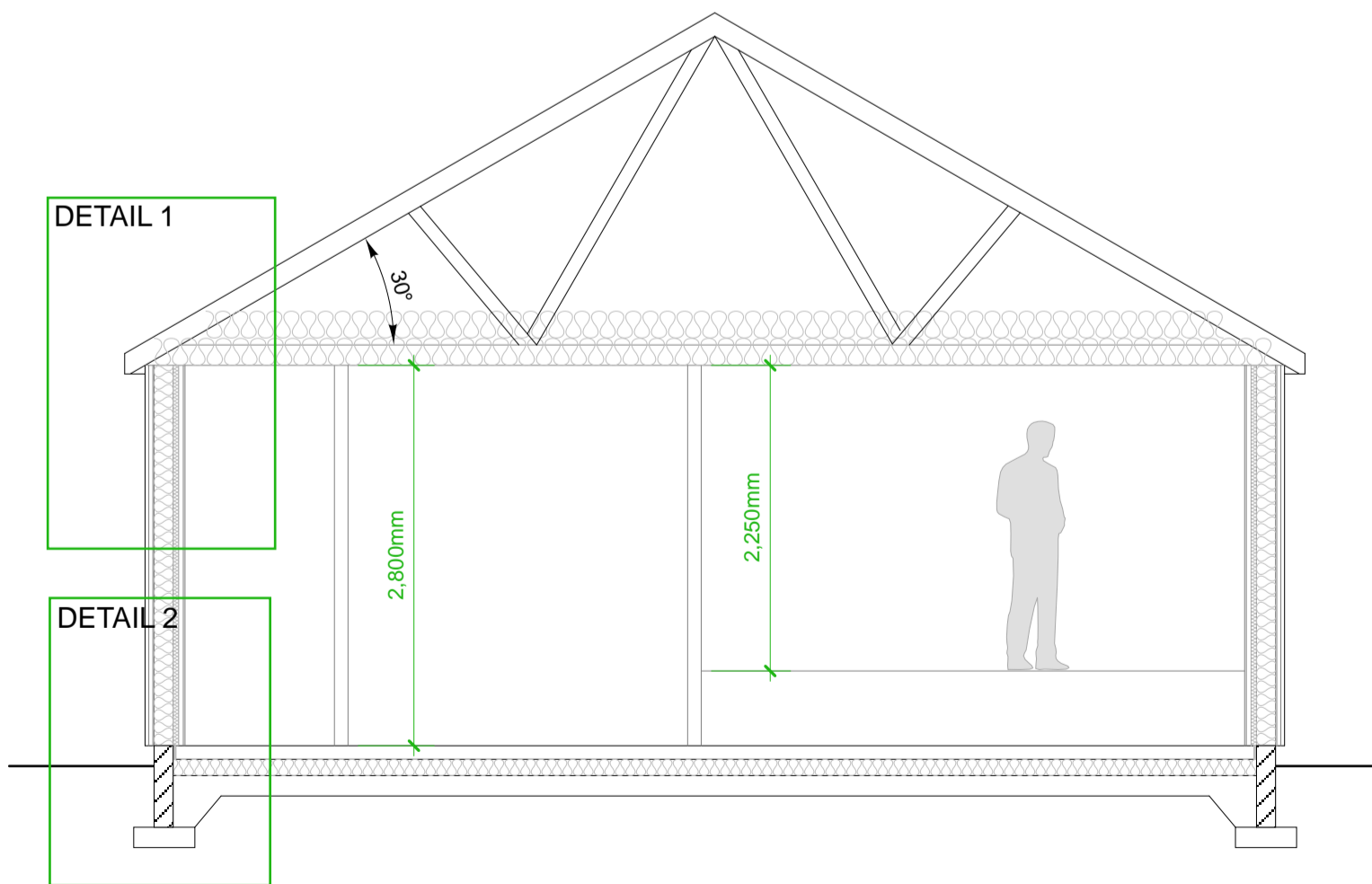
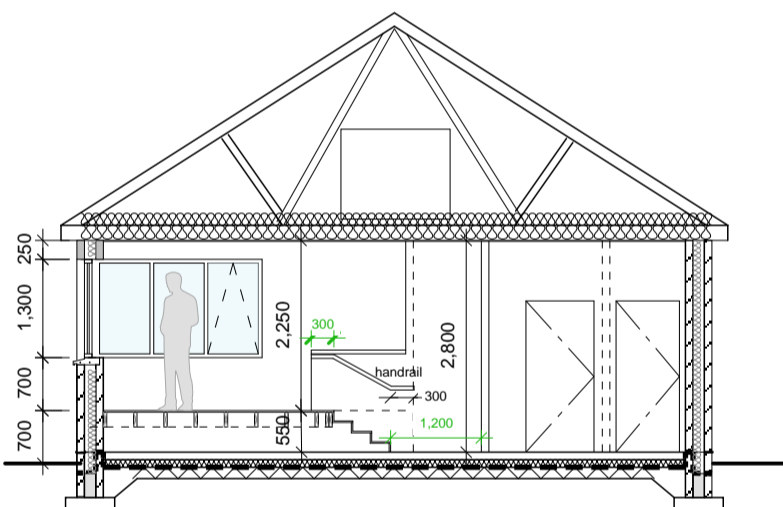
ELECTRIC VEHICLE CHARGING POINTS -

Provide 2No. EV charging points outside the building. Duct to run from meter cupboard to outer side of concrete footpath and terminate in a small draw box with a cover.

DEFIBRILLATOR-

Existing Defibrillator to be removed from existing building and refitted to the outside of the new building close to the entrance.

PLEASE NOTE - SAP rating calculations to be carried out before confirmation of all insulation types and thicknesses. This drawings is to be read in conjunction with all floor plans and Engineer's drawings and specifications.



DRAFT

REVISIONS

Project

TITLE

Title

TITLE

Project No.

Drawing No.

1

1

Revision

Printed

Issue

Date

Drawn

JG

Scale

Checked

All dimensions to be checked on site before work and the manufacture of fittings commences.

This drawing is not to be scaled.

© Information contained within this drawing is copyright of Orkney Islands Council.

DEVELOPMENT AND INFRASTRUCTURE
Council Offices, Kirkwall
Orkney, KW15 1NY
tel (01856) 873535
fax (01856) 876094
www.orkney.gov.uk



ORKNEY ISLANDS COUNCIL

developmentandinfrastructure@orkney.gov.uk
Executive Director- Gavin Barr, BSc(Hons), MSc URP, MRPTI

STAGE 2 - CAPITAL PROJECT APPRAISAL
FINANCIAL ASSESSMENT OF ASSOCIATED CAPITAL EXPENDITURE IMPLICATIONS

Capital Programme: **Airfield Terminal Building Replacement Programme**

Client Service: **Marine Services and Transportation**

Project Name: **Airfield Terminal Building Replacement**

		1	2	3	4	5		
CAPITAL COSTS	Total £ 000	2023/24 £ 000	2024/25 £ 000	2025/26 £ 000	2026/27 £ 000	2027/28 £ 000	Onwards £ 000	Notes
1. Initial Costs (at inflated prices)								
Land or Property Purchase	-	-	-	-	-	-	-	
Other Site Costs (including Fees)	-	-	-	-	-	-	-	
Construction or Improvements	1,600	800	800	-	-	-	-	
Information Technology Costs	-	-	-	-	-	-	-	
Plant, Vehicles & Equipment	30	15	15	-	-	-	-	
Professional Fees - Consultant	-	-	-	-	-	-	-	
- In-house	200	100	100	-	-	-	-	
Gross Capital Expenditure	1,830	915	915	-	-	-	-	
2. Initial Funding (at inflated prices)								
Government Grants (TBC)	549	-	549	-	-	-	-	
Other Grants	-	-	-	-	-	-	-	
Other Financial Assistance	-	-	-	-	-	-	-	
Total Grants Receivable TBC	549	-	549	-	-	-	-	
Net Capital Cost of Project	1,281	915	366	-	-	-	-	
Net Council Capital Expenditure	1,281	915	366	-	-	-	-	
Net Present Value	1,264	915	349	-	-	-	-	
Cost of Capital		5%	5%	5%	5%	5%	5%	
Year		0	1	2	3	4	5	

Notes - Additional narrative on main assumptions and support working papers

- 1
- 2
- 3
- 4

etc.

STAGE 2 - CAPITAL PROJECT APPRAISAL
FINANCIAL ASSESSMENT OF ASSOCIATED REVENUE BUDGET IMPLICATIONS

Capital Programme: **Airfield Terminal Building Replacement Programme**

Client Service: **Marine Services and Transportation**

Project Name: **Airfield Terminal Building Replacement**

		1	2	3	4	5		
REVENUE COSTS / (SAVINGS)	Total £ 000	2023/24 £ 000	2024/25 £ 000	2025/26 £ 000	2026/27 £ 000	2027/28 £ 000	Onwards £ 000	Notes
1. Full Year Operating Costs (at inflated prices)								
Staff Costs	-							
Other Staff Costs (incl. recruitment, etc.)	-							
Property Costs	- 80		- 16	- 16	- 16	- 16	- 16	1
Supplies and Services	-							
Transport, Vessel and Plant Costs	-							
Administration Costs	-							
Apportioned Costs	-							
Third Party Payments	-							
Finance and Loan Charges	308	28	53	58	57	56	56	2
Miscellaneous Expenditure	-							
Gross Revenue Expenditure / (Saving)	228	28	37	42	41	40	40	
2. Operating Income (at inflated prices)								
Government Grants	-	-	-	-	-	-	-	
Other Grants	-	-	-	-	-	-	-	
Rents and Lettings	-							
Sales	-							
Fees and Charges	-							
Miscellaneous Income	-							
Gross Revenue Income	-	-	-	-	-	-	-	
Net Revenue Expenditure / (Saving) of Proj	228	28	37	42	41	40	40	
Revenue Costs	228	28	37	42	41	40	40	
Net Present Value	104	28	36	40	38	36	35	
Cost of Revenue		3%	3%	3%	3%	3%	3%	
Year		0	1	2	3	4	5	

Notes -

- 1 Reduction in property costs expected due to new build
- 2 Loans charges
- 3
- 4
- etc.