

## Item: 5.1

**Planning Committee: 19 August 2020.**

**Extend Quarry, Continued Extraction of Stone, Restoration and Landscaping at Cursiter Quarry, Old Finstown Road, Firth.**

**Report by Executive Director of Development and Infrastructure.**

### 1. Summary

#### 1.1.

A planning application with an Environmental Impact Assessment (EIA) has been submitted for the extension of Cursiter Quarry on the Old Finstown Road, Firth, 1.5 kilometres south-east of Finstown. Determination of this application was deferred by the Committee at its meeting held on 9 June 2020 in order that a site visit by members could be carried out. The development is a 'major development' as defined by the Town and Country Planning (Hierarchy of Developments) (Scotland) Regulations 2009. The planning application has been assessed in relation to all relevant policies of the Orkney Local Development Plan 2017 and other relevant material planning considerations. The quarry produces Devonian Flagstone, which is utilised for a range of crushed aggregate purposes, including roadstone and infrastructure projects. It is proposed to extend the existing quarry by 7.9 hectares to the south and east on land currently used for agriculture. The development seeks to provide three million tonnes of material, sufficient for approximately 30 years of production across four phases of development. As an EIA development, the planning application is accompanied by an Environmental Impact Assessment Report (EIAR). Four letters of objection have been received. Matters raised are adequately addressed, and the objections are of insufficient weight to merit refusal. On balance, the proposed development is considered to accord with all relevant policies of the Orkney Local Development Plan 2017, and Supplementary Guidance. Accordingly, the application is recommended for approval.

Application Number	19/143/PPMAJ.
Application Type	Planning permission – minerals (stone).
Proposal	Extend a quarry, continued extraction of stone and restoration and landscaping.
Applicant	Orkney Islands Council, c/o Development and Infrastructure, School Place, Kirkwall, KW15 1NY.

## **1.2.**

All application documents (including plans, consultation responses and representations) are available for members to view at the following website address:

[https://www.orkney.gov.uk/Service-Directory/D/application\\_search\\_submission.htm](https://www.orkney.gov.uk/Service-Directory/D/application_search_submission.htm)  
(then enter the application number given above).

## **2. Consultations**

### **2.1. Statutory Consultation Bodies**

#### **2.1.1.**

The statutory consultation bodies as prescribed by The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 (“the 2017 EIA Regulations”) are as follows:

- Historic Environment Scotland (HES).
- Scottish Water.
- Scottish Environment Protection Agency (SEPA).
- Scottish Natural Heritage (SNH).

#### **2.1.2.**

No objections have been received from any statutory consultation body. It is considered that matters included in consultation responses from statutory consultation bodies can be adequately addressed by mitigation and planning conditions.

### **2.2. Consultation Responses**

#### **2.2.1. Scottish Environment Protection Agency (SEPA)**

No objection. SEPA noted interests in pollution prevention and environmental management, restoration, groundwater protection and private water supplies, flood risk and surface water drainage and waste management. SEPA has requested that several planning conditions be attached to ensure appropriate safeguards and management strategies are in place to protect the receiving environment, and on cessation of works in relation to restoration and site aftercare. SEPA has several regulatory functions in addition to those as a statutory consultee within the planning process, notably under the provisions of The Water Environment (Controlled Activities) (Scotland) Regulations 2011 and The Pollution Prevention and Control (Scotland) Regulations 2012.

### **2.2.2. Scottish Natural Heritage (SNH)**

No objection. SNH identified the proximity, approximately 650 metres, of the site to the Orkney Moors Special Protection Area (SPA), designated for hen harrier, red-throated diver and short-eared owl. It was noted by SNH that the development is within the two kilometre core feeding range for hen harrier and short-eared owl from the SPA, but the fields identified for the extension would not be preferred foraging habitat for these raptors. In addition, red-throated divers do not breed in this section of the SPA. Therefore, SNH considers there would be no likely significant effect on the features of the SPA. SNH has confirmed its satisfaction with the scope, content and conclusions of the EIAR.

### **2.2.3. Historic Environment Scotland (HES)**

No objection. Through early involvement in the process, HES highlighted that the development is located within the Heart of Neolithic Orkney World Heritage Site Sensitive Area and in the vicinity of several scheduled monuments. The proposed development has potential to affect scheduled monuments, including Cuween Hill chambered cairn and Wideford Hill chambered cairn. HES has reviewed the submitted EIAR and agrees with its findings, that the setting of heritage assets within HES remit are unlikely to be significantly adversely affected by the proposed development.

### **2.2.4. Scottish Water**

No objection. Comment is made regarding water supply provision, and it is confirmed that there is no wastewater infrastructure within the vicinity. Scottish Water notes that water infrastructure is located close to the site boundary.

## **2.3. Other Consultation Responses**

### **2.3.1. Environmental Health**

No objection. No adverse comments following submission of additional information on 22 August 2019, in relation to noise assessment and updated air quality assessment. Appropriate planning conditions are advised in relation to phasing, hours of work, noise, record keeping, blasting and air quality.

### **2.3.2. Roads Services**

No objection. Road Services (the roads authority) has no adverse comments, on the basis that the number of vehicle movements to and from the quarry are expected to remain similar to current levels.

### **2.3.3. County Archaeologist**

No objection. The conclusion reached in Chapter 9, Historic Environment of the EIAR, was subject to query by the County Archaeologist, as the geophysics report, at paragraph 8.1, states, "...this response may warrant further archaeological evaluation". There is also potential for concealed pits, relating to a nearby Bronze Age cemetery; this may not be revealed by geophysics. However, the County Archaeologist agreed that the likelihood of significant damage to heritage assets is small. Several anomalies have been identified as potentially being archaeological in

nature. These require further targeted evaluation; a programme of hand-dug and/or machine-cut and hand-cleaned trial trenching should be undertaken, with the appropriate locations based on information accumulated from the evaluation to date. This evaluation would be aimed at determining the nature, extent and significance of any archaeology present. The use of a Written Scheme of Investigation (WSI) is advised in advance of any expansion of the quarry. The County Archaeologist has further confirmed that works could be progressed subject to planning conditions to ensure further, intrusive investigations of the geophysical anomalies prior to development commencing, or prior to each of the proposed phases of development.

#### **2.3.4. Development and Marine Planning (DMP)**

No objection. Comment is provided in relation to Policy 4 – Business, Industry and Employment, part E – Minerals of the Orkney Local Development Plan 2017, with comment referencing Scottish Planning Policy (SPP) and National Planning Framework 3 (NPF3). SPP states that local development plans should support the maintenance of a landbank of permitted reserves for construction aggregates of at least 10 years at all times in all market areas, through the identification of areas of search. Such areas can be promoted by developers or landowners as part of the plan preparation process or by planning authorities where they wish to guide development to particular areas. As an alternative, a criteria-based approach may be taken, particularly where a sufficient landbank already exists or substantial unconstrained deposits are available. At the time of preparation of the Orkney Local Development Plan 2017, two quarries (Cursiter Quarry and Heddle Quarry, as identified by Minerals Safeguard Areas) had consents in place with over ten years remaining of the respective consent periods. The relevant Policy 4E was included in the Plan to allow for the appropriate expansion of these existing quarries or the creation of an appropriate new quarry.

#### **2.3.5. DMP (Environment)**

No objection. Comments received regarding proposed drainage routes from the quarry were addressed within the EIAR, with water from the quarry workings proposed to continue as discharging via the existing drainage outfall into the Bay of Firth, and therefore no direct discharge from the quarry into either the Burn of Rossmyre to the east or the Burn of Grimbister to the west. Matters with respect to given seed stock of trees to be used in restoration and for the purpose of biodiversity enhancement are clarified in relation to Orkney provenance. Consideration and protection of breeding birds within the quarry, including fulmar and kestrel, is also noted, with advice that all breeding birds, their nests and eggs are protected under the Wildlife and Countryside Act 1981. These matters can be addressed by appropriate planning condition.

#### **2.3.6. The Royal Society for the Protection of Birds Scotland (RSPB Scotland)**

No objection. RSPB Scotland has reviewed the EIAR and is satisfied with the mitigation measures proposed to protect breeding birds within the quarry.

### **2.3.7. Health and Safety Executive (HSE)**

The quarry has a consultation zone for HSE; the proposed development site identified does not currently lie within the consultation distance of another major hazard site or major accident hazard pipeline; therefore, at present HSE does not require to be consulted on any developments on this site.

### **2.3.8. Scottish Government**

The Scottish Government has been notified of submission of the application, which was noted and acknowledged.

## **3. Representations**

### **3.1.**

Four objections have been received from:

- Mr George Brown, Rohallion, Grimbister, KW15 1TT.
- Mr Andrew Giggle, Rossmyre, Grimbister, KW15 1TS.
- Mr John Grimond, Old Manse of Firth, Grimbister, KW15 1TT.
- K A Slater, The Glebe, Grimbister, KW15 1TT.

### **3.2.**

The objections are on the following grounds:

- Dust – in the context of environmental, amenity and human health concerns.
- Blasting – frequency, charge size, ground vibrations, inherent dangers from flying rock, concerns of impacts to a private water supply and mitigation issues owing to proximity to dwellings in Phase 4.
- Concerns over methodologies in relation to amenity/environmental monitoring.
- Impacts to water course – Rossmyre Burn, including water quality/environmental damage and flood risk owing to discharges from quarry – added inputs to Rossmyre Burn.
- Impacts to water table upon cessation and flooding of quarry floor.
- Landscape impacts.
- Visual impacts.
- Proximity to dwellings.
- Effectiveness of proposed screening.
- Noise from vehicles and quarry operations.
- Consideration of alternative sites.
- The proposed expansion area is not safeguarded for minerals development in the adopted local development plan, and that inadequate justification has been submitted to support the scale of expansion proposed.

- The anticipated output from Heddle Quarry has not been properly taken account of in the assessment of need for the maintenance of a ten year supply of mineral reserves, with the result that the proposed extension is greater than it requires to be.
- Lack of a robust dust-impact assessment, pending a further survey to be undertaken during the summer months when a more accurate picture may be obtained.
- Lack of clarity over the basis of the noise-assessment surveys which were carried out during a period of inactivity at the quarry.
- Uncertainty over the feasibility and impacts on human health of blasting operations in Phase 4 of the proposed extension, given the potential for increased blasting events resulting from lower recommended maximum instantaneous charge weights in the EIAR.
- Inadequate information supplied in the landscape and visual-impact assessment section of the EIAR which would enable the reader to fully understand the likely impacts of the proposal.
- Inadequate buffer zone to protect amenity of dwellings.
- Inadequate restoration plan.
- Health and safety risks.
- Flooding.
- Failure to demonstrate appropriate financial provision to ensure restoration and aftercare.
- Lack of an 'Appropriate Assessment' given proximity to SSSIs and SPAs, impacts to wildlife.
- Deficiencies in the EIA, including the landscape and visual impact assessment.
- Impact of bund in Phase 4 on property known as 'Rohallion'.

### **3.3.**

Other points of objection received were non-material in planning terms. These include citing of a verbal assurance provided in 1987 that the quarry would not expand, and anecdotal claims of historic mismanagement of the quarry. Comment was also received regarding historic permissions at the site; each application is considered on its merits in relation to current local and national policy.

### **3.4.**

It should be noted that where more than one representation is received from a household, it is defined as one valid representation. Further comments were received from two existing objectors following re-advertisement and re-notification of the development, following receipt of additional information. Therefore, whilst less than the total number of individual letters received, four is the correct number of valid representations.

## 4. Relevant Planning History

### 4.1.

Reference.	Proposal.	Location.	Decision.	Date.
80/11/138	Proposed Extension of a Quarry.	Cursiter Quarry, Grimbister	Grant subject to conditions.	18.06.80
92/11/291/PPF	Proposed Replacement of a Coating Plant.	Cursiter Quarry, Grimbister	Grant subject to conditions.	14/07/1992
02/14/007/DCO	Creation of a Civic Amenity Site.	Cursiter Quarry, Grimbister	Grant subject to conditions.	29.04.2002
02/391/RPF	Hard rock quarry operation.	Cursiter Quarry, Grimbister	Grant subject to conditions.	21.01.2003
15/442/SCR	Screening opinion request to extract stone.	Cursiter Quarry, Old Finstown Road, Firth.	EIA Required.	18.05.2015
17/138/PPMAJ	Extend a quarry and continued extraction of stone.	Cursiter Quarry, Old Finstown Road, Firth.	Withdrawn.	16.10.2017
18/043/PP	Erect an asphalt mixing plant (retrospective).	Cursiter Quarry, Old Finstown Road, Firth.	Grant subject to conditions	07.03.2018
18/281/SCO	Scoping opinion request to extend quarry.	Cursiter Quarry, Old Finstown Road, Firth.	Scoping Opinion adopted.	25.09.2018

## **4.2.**

The Town and Country (Scotland) Act 1997, as amended, and The Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013 prescribe the requirements for statutory Pre-Application Consultation (PAC) for 'major development'. This was completed and the resultant PAC Report forms part of the supporting documentation for the application as required.

## **5. Relevant Planning Policy and Guidance**

### **5.1. Orkney Local Development Plan**

The full text of the Orkney Local Development Plan 2017 and supplementary guidance can be read on the Council website at:

<https://www.orkney.gov.uk/Service-Directory/D/Planning-Policies-and-Guidance.htm>

The key policies, supplementary guidance and planning policy advice listed below are relevant to this application:

- Orkney Local Development Plan 2017:
  - Policy 1 – Criteria for All Development.
  - Policy 2 – Design.
  - Policy 4 – Business, Industry and Employment.
  - Policy 8 – Historic Environment and Cultural Heritage.
  - Policy 9 – Natural Heritage and Landscape.
  - Policy 10 – Green Infrastructure (Paths, Open Spaces and Green Networks).
  - Policy 13 – Flood Risk, SuDS and Waste Water Drainage.
  - Policy 14 – Transport, Travel and Road Network Infrastructure.
- Supplementary Guidance: Natural Environment.
- Supplementary Guidance: Historic Environment and Cultural Heritage.

### **5.2. Scottish Planning Policy 2014 (SPP)**

#### **5.2.1.**

Scottish Planning Policy (SPP) is a statement of Scottish Government policy on how nationally important land use planning matters should be addressed across the country. As a statement of Ministers' priorities, the content of SPP is a material consideration that carries significant weight, though it is for the decision-maker to determine the appropriate weight in each case. Where development plans and proposals accord with this SPP, their progress through the planning system should be smoother.



### **5.2.2. NPF (National Planning Framework 3) Context**

SPP paragraph 234 states, “Minerals make an important contribution to the economy, providing materials for construction, energy supply and other uses, and supporting employment. NPF3 notes that minerals will be required as construction materials to support our ambition for diversification of the energy mix. Planning should safeguard mineral resources and facilitate their responsible use.”

### **5.2.3. Promoting Responsible Extraction of Resources: Policy Principles**

SPP paragraph 235 notes that, “The planning system should:

- safeguard workable resources and ensure that an adequate and steady supply is available to meet the needs of the construction, energy and other sectors;
- minimise the impacts of extraction on local communities, the environment and the built and natural heritage; and
- secure the sustainable restoration of sites to beneficial after use after working has ceased.”

### **5.3. Other Relevant Policy and Guidance**

- National Planning Framework 3.
- Management of Extractive Waste (Scotland) Regulations 2010.
- Planning Advice Note (PAN) 50: Controlling the Environmental Effects of Surface Mineral Workings, including:
  - Annex A Control of Noise at Surface Mineral Workings.
  - Annex B Control of Dust at Surface Mineral Workings.
  - Annex C Control of Traffic at Surface Mineral Workings.
  - Annex D Control of Blasting at Surface Mineral Workings.
- PAN 51: Planning, Environmental Protection and Regulation.
- PAN 64: Reclamation of Surface Mineral Workings.

## **6. Legal Aspects**

### **6.1.**

Section 25 of the Town and Country Planning (Scotland) Act 1997 as amended (the Act) states “Where, in making any determination under the Planning Acts, regard is to be had to the development plan, the determination is, unless material considerations indicate otherwise...to be made in accordance with that plan...”

### **6.2.**

Where a decision to refuse an application is made, the applicant may appeal under section 47 of the Act. Scottish Ministers are empowered to make an award of expenses on appeal where one party’s conduct is deemed to be unreasonable. Examples of such unreasonable conduct are given in Circular 6/1990 and include:

- Failing to give complete, precise and relevant reasons for refusal of an application.
- Reaching a decision without reasonable planning grounds for doing so.
- Not taking into account material considerations.
- Refusing an application because of local opposition, where that opposition is not founded upon valid planning grounds. While the planning authority will need to consider the substance of any local opposition to a particular application, their duty is to decide a case on its planning merits.

### **6.3.**

An award of expenses may be substantial where an appeal is conducted either by way of written submissions or a local inquiry.

## **7. Environmental Impact Assessment**

### **7.1.**

The development has been subject to consideration in accordance with The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017. The proposed development is a Schedule 2 Development – Category: 2(a) Quarries, as defined in the 2017 EIA Regulations.

### **7.2.**

Having assessed the characteristics and location of the proposed development and the characteristics of the potential impact as set out in Schedule 3 to the 2017 EIA Regulations, Orkney Islands Council, as planning authority, adopted a Scoping Opinion on 25 September 2018, reference 18/281/SCO.

### **7.3.**

This application is accompanied by an Environmental Impact Assessment Report (EIAR) in accordance with the 2017 EIA Regulations. The EIAR addresses all the potential environmental effects associated with the proposed development and the proposed mitigation. In the course of consideration of the EIAR, no objections were received from any statutory or other consultees. Environmental Health sought further clarification with regard to noise and air quality; this additional information was provided on 22 August 2019.

### **7.4.**

Subsequent to receipt of an updated noise and air quality assessment and consultation responses, additional information, in the form of further technical clarification, was requested by the planning authority. An addendum to the EIAR was submitted, and the full and final assessment forming the EIAR is considered robust, meeting legislative requirements. The updated information received included several issues also raised by objectors, as follows:

- Matters in relation to noise and air quality.
- Phasing of the development.
- Blasting.
- Restoration.
- Consideration of alternatives to the proposed development.

## **7.5.**

The environmental assessment included in the EIAR includes the matters listed below, which fall within the regulatory control of other bodies, and therefore not necessarily given weight as part of any planning decision:

- The pump within the quarry discharging to the existing drainage outfall is regulated by SEPA under the Water Environment (Controlled Activities) (Scotland) Regulations 2011 (CAR). The water quality is also monitored through CAR. The current CAR licence would require revision were the application to be subject to approval.
- Air discharges from Cursiter Quarry are currently regulated under PPC Part B (PPC/B/1016992) (The Pollution Prevention and Control (Scotland) Regulations 2012 permit). This PPC permit would require to be upgraded.
- Explosive Regulations 2014 subject to inspection, use and licensing of explosives.
- Reporting of Injuries, Diseases and Dangerous Occurrence Regulations (RIDDOR) (2013). It is noted that the operator has noted '0' events under the terms of RIDDOR in relation to blasting under the current planning consent.

## **7.6. EIAR Non-Technical Summary**

### **7.6.1.**

The EIAR includes a non-technical summary which is a concise document, setting out the basis and rationale for the development, an overview of the proposed expansion through the proposed four phases of the expansion, consideration of alternatives including importation of materials, alternative sites, extent of working area, depth and direction of working, volume of material/lifespan of the quarry, extent of landform and screening and restoration and habitat creation, all presented in a manner to be easily understood by the general public.

### **7.6.2.**

The Overview of Environmental Effects identifies the following environmental topics:

- Hydrology (Groundwater).
- Surface Water.
- Ecology.
- Landscape and Visual.
- Historic Environment.
- Noise and Vibration.
- Air Quality.

### **7.6.3.**

The summary considers wider mitigation, informed through feedback from engagement with the local community and key stakeholders, noting the possibility of establishing a Liaison Group and revised notification procedures prior to blasting.

### **7.6.4.**

The summary of effects states that the only significant adverse effect identified through the assessment process is a moderate effect on landscape character as a result of the extension of the quarry into agricultural land. This impact is identified as occurring at the end of Phase 2 only, during the 'worst case scenario'. Conversely, it is stated that, by the end of Phase 4, after full restoration, the proposed development would have a minor beneficial effect on the landscape overall. The beneficial residual effects upon completion are stated as:

- Water would no longer be required to be pumped out of the site.
- A net habitat gain from the embedded mitigation represented by the restoration.
- The restoration would result in beneficial effect on the site's landscape character.
- Beneficial effects on Viewpoints 1 (Kings Dale) and 6 (Keelylang Hill).

### **7.6.5.**

The EIAR identifies the impacts and risks to natural heritage interests and concludes there would be no significant adverse impacts from the proposed development, subject to the proposed mitigation, and the safeguards which would be imposed by current legislation and appropriate planning conditions.

## **8. Assessment**

### **8.1. Proposed Development**

#### **8.1.1.**

The proposed development involves the extension of the existing Cursiter Quarry, continued extraction of stone and restoration and landscaping. The elements of the proposed development are listed as:

- Continuation of mineral extraction within the current working extent of the quarry and as currently allowed by the 2003 Permission (Phase 1).
- A phased lateral extension of the extraction area ('the Extension Area') across three additional phases (2 to 4), totalling approximately 7.9 hectares. This will release approximately three million tonnes of stone, sufficient for approximately 30 years of production.
- A programmed sequence of restoration of the upper benches of the existing quarry.
- Retention of the screening landform until removal is required to facilitate the lateral extension.
- Soil stripping and storage in advance of mineral extraction (subject to an agreed sequence of archaeological assessment and investigation).

- Advance landscaping of the quarry extension to mitigate environmental and amenity impacts by relocating the existing screening landform and using overburden arising from the development of the additional phases.
- Operating hours and output to follow existing practices.
- Adoption of best practice operating protocols to control, manage, mitigate and monitor dust, noise, blast vibration and water.
- Drilling and blasting to release rock from the working face.
- On site processing of rock to produce crushed rock aggregate to the required specification.
- Storage of crushed rock fines/dust within the void for use as restoration fill or other commercial uses.
- Retention of offices, weighbridge and ancillary plant and machinery.
- Maintain existing surface water drainage discharge to the Bay of Firth.
- Final restoration of the workings, including habitat restoration and creation of a wetland/water-based habitat.

### **8.1.2.**

Cursiter Quarry is owned and operated by Orkney Islands Council as Orkney Islands Quarries (OIQ), on average extracting approximately 90,000 tonnes of Devonian flagstone per annum, ranging from approximately 75,000 to 120,000 tonnes on an annual basis. The proposed development seeks to continue production at similar rates across the phased expansion of the site (Phases 2 to 4), producing up to three million tonnes of material, over 30 years of production.

## **8.2. Site Description**

### **8.2.1.**

The quarry is located adjacent and to the south of the Old Finstown Road, Firth, approximately 1.5 kilometres south-east of Finstown, as indicated on the site plan attached as Appendix 1 to this report. The general landform rises to the south, east and west with prominent hills in the vicinity including the Hill of Heddle, 135 metres above ordnance datum (AOD), located 2 kilometres to the north-east, Hill of Lyradale, 176 metres AOD, 1.3 kilometres to the south-east, Keelylang, 221 metres AOD to the south, and Wideford Hill at 225 metres AOD to the west. This ridge of high ground runs roughly east-west behind the quarry and forms the back-drop to it when viewed from the Old Finstown Road and the main Stromness to Kirkwall road near the coast. The road past the quarry entrance approximately follows the 30 metre contour. The Old Finstown Road in the vicinity of the quarry runs across the landform giving views seaward across the Bay of Firth as the road gradually falls north-west towards Finstown. Habitation in the immediate area is characterised by individual residential properties and farmsteads.

### **8.2.2.**

The present working excavation occupies the southern part of the site with the area closest to the road occupied by storage areas, stockyard, ancillary workshops, office building, weighbridge, materials testing laboratory, small scale (5 kilowatt) wind turbine and emulsion storage tank. Sharing an access with the quarry is the Finstown Civic Amenity Site (household waste recycling centre) which is characterised by a number of skips and storage containers for recyclates, adjacent to the public road. These structures, together with associated boundary features, including low earth bunding and fencing, characterise the near hand view of the site from the public road. A substantial screening landform (vegetated bund in the form of a bank of soil and rock) marks the southern and eastern extraction boundaries.

### **8.2.3.**

The existing quarry site covers approximately 12 hectares with the area of extraction covering approximately 8.5 hectares of the site. The material extracted from the quarry is hard rock, which is used for general construction or processed within the quarry for road construction and maintenance. The plant for processing the road stone is located in the bottom of the quarry as is the screening and crushing plant. A quarry sump and interim settlement lagoon are also located within the quarry, through which surface runoff is settled and decanted by pumped discharge to the Bay of Firth.

### **8.2.4.**

Rock is blasted from the quarry face and is then passed through a primary crusher. Any out-sized pieces are broken into manageable pieces using a hydraulic hammer before going through the crusher. The resultant material is then passed through a screener that sorts the material into numerous sizes. Scalpings are a by-product of primary crushing; the smallest pieces are removed as a by-product. The remaining material is then passed through a secondary crusher and then screened again. Material is stored in stock-piles as a finished product, or for reprocessing, awaiting transportation from the quarry or prior to being passed through the roadstone coating plant (asphalt plant). The coated material is stored in insulated hoppers prior to being loaded into vehicles for transportation from the quarry.

### **8.2.5.**

The civic amenity site is subject to separate planning permission, approved in 2002. The main extent of the civic amenity site is an independent facility, outwith the area subject to the application under consideration.

### **8.2.6.**

The asphalt plant within the bounds of the existing quarry is the sole source of hot mixed asphalt materials in Orkney. This plant is also subject to separate planning permission, approved in 2018. The location and use of the asphalt plant would remain unchanged through Phases 1 to 3 of the proposed development, with removal at the end of the quarry's working life at the end of Phase 4 of the proposed development.

## **8.3. Needs Case**

### **8.3.1.**

Orkney Local Development Plan 2017 Policy 4 – Business, Industry and Employment, section E, Minerals, states at point (i) ‘Proposals will be supported when located in a defined Minerals Safeguard Area or where it is demonstrated that the proposal would meet an identified need or demand for minerals that cannot be provided within a defined Mineral Safeguard Area.’ The principle behind the policy is to protect safeguarded areas from other development that could prejudice mineral extraction, and to ensure existing resources are effectively utilised to meet market needs prior to consideration of proposals to open new reserves. No flexibility is provided within the policy for alteration or expansion of the boundary of the allocated Mineral Safeguard Areas, and the proposed development includes land not within an allocated area. Therefore, for robustness, consideration of the needs case and demand must acknowledge that land not safeguarded solely for minerals use would be utilised for the development.

### **8.3.2.**

Cursiter Quarry is one of two large-scale commercial hard rock quarries in Orkney, the other being the nearby Heddle Quarry, located approximately 1.5 kilometres to the north-west.

### **8.3.3.**

The needs case, as detailed at section 1.5 in the supporting document ‘Planning Policy Statement’, refers to both Scottish Planning Policy (2014) and National Planning Framework 3, noting the strategic policy support for safeguarding mineral resources and facilitating their responsible use. The Strategic Environmental Assessment (SEA) undertaken as part of the process to write and adopt the local development plan supports “the maintenance of a land bank of permitted reserves for construction aggregates for at least 10 years at all times”; subsequent Local Development Plan policy does not limit that land bank to the ten year period stated in the SEA. Development and Marine Planning has confirmed that, at the time of writing the Local Development Plan, the Minerals Safeguard Areas were considered as meeting the ten year requirement as both quarries had over ten years remaining of the respective consents, noting that Cursiter Quarry has permission to 31 December 2030 and Heddle Quarry to 31 May 2045; however, the remaining reserves were not scrutinised. Extant quarry reserves under the current planning permission at Cursiter Quarry have been queried by objectors, and whether there is a necessity for expansion in the event that both current production and the ten year land bank could be maintained.

### **8.3.4.**

In basic terms, extraction permissions are ultimately limited by both time (the period of the consent) and volume (the volume of stone approved to be extracted) and, although the current permission expires in 2030, the applicant has confirmed that the volume of extraction consented under the 2003 permission is approaching completion and demand for aggregates from the quarry remains consistent, albeit with fluctuations from year-to-year and season-to-season. Production from both

large-scale quarries, which are the Minerals Safeguard Areas, is significant in an Orkney context, averaging 90,000 tonnes per annum for Cursiter Quarry and 100,000 tonnes for Heddle Quarry (noting this figure of 100,000 tonnes stated for Heddle Quarry is based on figures specified in the most recent planning application for that site, reference 14/496/PPMAJ and the associated Environmental Statement). The needs case and the current proposal are therefore reflective of the fact that reserves would be exhausted far in advance of the extant period of consent and based on a supply over a longer period rather than the minimum ten years as referenced in the SEA. This would provide a longer-term security of supply at, or similar to, current levels of extraction.

### **8.3.5.**

As the proposed development extends beyond the currently defined Minerals Safeguard Area, it must be considered whether the development would meet an identified need, or demand, for minerals that cannot be provided within an existing defined Mineral Safeguard Area. The developer has considered this, referenced as follows:

- Section 1.5 'The Need for Development'.
- Within the submitted Planning Policy Statement.
- Chapter 3 'Evolution of Design and Alternatives' of the EIAR.
- The addendum to the EIAR provided latterly where a 'consideration of alternatives' is provided and assessed, including a 'do nothing' scenario and also utilisation of Heddle Quarry.

### **8.3.6.**

Importing raw materials from mainland Scotland was considered unfeasible due to environmental effects, lack of practicality, significant cost and non-compliance with National Planning Framework 3. Provision for an alternative, entirely new site in Orkney is not specified in the OLDP, due to potential constraints regarding infrastructure and unknown environmental effects. As stated above, 'do-nothing scenarios' in the event of cessation of extraction at Cursiter Quarry have also been considered, including the use of Heddle Quarry as an alternative, importation of rock from outside Orkney, or the opening of a new quarry. The position stated within the EIAR is accepted: that none of the alternatives set out are feasible in comparison to expansion of the existing Cursiter Quarry. The EIAR concludes, "for reasons including increased environmental effects, alternative infrastructure pressures, constraining further infrastructure growth within the islands through the burden of increased raw material costs and non-compliance with NPF3 and the LDP". The tar plant has a separate consent, so it has to be considered that, if quarrying ceased at Cursiter Quarry, vehicle movements of stone to the quarry would still be required to supply the tar plant.



### **8.3.7.**

The applicant confirms that, in recent years, quarry production has varied between 75,000 and 120,000 tonnes annually, averaging 90,000 per annum. In response to a clarification sought by the planning authority, the applicant has sought to maintain this flexibility, to allow the potential maximum output to 120,000 tonnes per annum. In relation to traffic and transport, the submitted assessment is based on an annual supply from the site of 100,000 tonnes, and it is therefore proposed to attach a planning condition to control this, to ensure that operation of the development is maintained within limits assessed within the EIAR.

### **8.3.8.**

The quarry operator is in a relatively unusual situation in that it is also the local authority. The local authority being the applicant is, in itself, not relevant and cannot prejudice consideration. However, it must be acknowledged that the local authority is responsible for a range of public services and the stone from the quarry is a significant resource which is utilised in the daily function of the local authority, for example for roads maintenance or infrastructure projects. In that specific regard, and the associated socio-economics, this is a material consideration in favour of the development. However, it is not considered a fundamental component of the needs case and is not of such significance to outweigh any considerations of the needs case.

### **8.3.9.**

The case presented is considered to adequately demonstrate that the proposal would meet an identified need or demand which cannot be met from the existing Mineral Safeguard Areas. Furthermore it is considered the EIAR, including addendums to set out additional information, satisfactorily addresses points raised in objections regarding justification for the development, expansion beyond the defined boundary of the Minerals Safeguard Area, the ten year safeguarded supply of aggregates of the type supplied by the existing quarry, and consideration of alternatives including the use of Heddle Quarry. The proposed development is therefore considered to meet this key requirement of Policy 4 – Business, Industry and Employment, part E – Minerals, point (i) of the Orkney Local Development Plan 2017.

## **8.4. Design and Layout – Including Phased Working**

### **8.4.1.**

The proposed development is separated into four distinct phases, highlighted in the drawings attached as Appendix 2 to this report, as follows:

- Phase 1 – Continued extraction in north east and preparation of Phase 2 to the south. Restoration of previous quarry works.
- Phase 2 – Extraction in the south and preparation of Phase 3 to the east, including screening landform. Restoration of previous phases.
- Phase 3 – Extraction to the east and preparation of Phase 4 to the north east. Restoration of previous phases.

- Phase 4 – Final extraction and restoration.

#### **8.4.2.**

The phased approach as proposed and detailed within the EIAR allows for sequential restoration as the development progresses, whilst maintaining the level of output and the general operation of the quarry to remain typically unchanged from the current operation. The first phase is programmed to continue extraction within the current operational extent of the quarry; thereafter, a phased lateral extension of the extraction area would occur across the next three phases, totalling approximately 7.9 hectares. Options for continuation of excavation depth require to be balanced with operational requirements and matters such as groundwater levels. Excavated depth is proposed at 2.5 metres Above Ordnance Datum (AOD) to reduce the risk of encountering groundwater which limits the depth of the quarry workings and, as such, necessitates the lateral expansion of the quarry to ensure a supply of aggregate. Embedded mitigation measures are discussed in section 2.3 of the submitted Planning Policy Statement, noting table 2.1 which describes the type and nature of mitigation and resultant benefits. The design and layout of the proposed development is such that the mitigation measures are integral, and in place to limit potential impacts on the environment and amenity. A programmed sequence of restoration and mitigation across the four phases is detailed in section 8.5 below.

#### **8.4.3.**

Many key issues have been raised in objections to the proposed development given the proximity of the quarry to houses as the lateral extension of the quarry progresses. In relation to amenity issues owing to the operational working of the quarry, noise, dust and vibration are all critical issues and are considered separately. Also raised through objections, and relevant in consideration, is the proximity and presence of the quarry boundary and operational areas to properties, and the potential overbearing presence of the proposed screening earthworks. Given the current nature of the existing screening landform, which is of significant scale and height and of utilitarian form, most notably along the south and south east boundary of current workings, this is a recognised concern. It is, however, of note that the future screening landform would be of a more sympathetic character, with greater emphasis on appearance and assimilation into the local topography and landscape. The design for the new screening landform has also been stated as taking into consideration sightlines from existing properties. It is recognised that the outlook from properties in the immediate vicinity would change as a consequence of development; however, it is not considered that works, such as the screening landform, would have such negative impact that would warrant refusal, mindful that habitat enhancement works and restoration shall assist in balancing the impacts of the expanded area of the quarry.

#### **8.4.4.**

The quarry is in a populated, albeit relatively sparsely, agricultural landscape with a number of scattered houses and steadings in proximity. Properties, including Grimbister Farm and Grimbister Farm Cottage, already exist within 80 metres of the operational quarry. The proximity of quarry workings after the proposed expansion would result in a number of properties in an arc from the south west to the north east

of the quarry being in closer proximity to the working areas of the quarry. Figures of separation details, listed by distance and direction to application boundary and nearest work area, of local properties around the site are provided in Table 11.11 of the EIAR. The closest property is the Cott O'Cursiter, situated 10 metres east of the boundary and within 112 metres of the nearest working area in the final phase of operation of the quarry. This is a key matter in relation to various potential health and amenity impacts, including vibration, noise and air quality, which are considered in relevant chapters of the submitted EIAR and associated appendices.

#### **8.4.5.**

Objections cite the lack of a suitable buffer of intervening land to the quarry operations, quoting from sources such as the British Geological Survey, noting that 500 metres is cited as an appropriate minimum separation distance between a quarry and a sensitive receptor such as a house. However, the definition of what a 'suitable buffer' may be is not stated in the relevant section of the OLDP; it is undefined which necessitates consideration of potential effects. These have been considered through the EIA process. Likewise, there is a concern stated over matters in association with the safe operation of quarrying activities, especially blasting with risk of 'fly-rock' given proximity to houses. Matters in relation to the safe use of explosives and damage arising from fly-rock are considered under separate legislation, are required to meet Quarry Regulations 1999, and are subject to Health and Safety considerations. In the event of breaching such controls, the operator would risk substantial penalties under the respective separate regulatory control.

#### **8.4.6.**

It is considered that the supporting EIAR, associated appendices and the Planning Policy Statement, together with additional supplementary information provided in the course of consideration of the application, provide sufficient detail of the design, layout and phasing necessary in order to understand and assess the proposed development. The proposed working presents a reasonable and practical approach to the operation, allowing restoration in phases. The embedded mitigation by way of design is considered to limit significant potential impacts on the environment and amenity.

### **8.5. Reinstatement and Restoration**

#### **8.5.1.**

The proposed development includes detail of reinstatement and restoration through each of the proposed four development phases, starting in Phase 1 with the restoration of quarry faces and benches in the north west sector of the existing quarry and moving the existing screening bund out to form a permanent screening landform in the south west corner.

##### **8.5.1.1.**

Phase 2 would result in the existing boundary screening along the east and south east being moved outwards and reprofiled to form a new permanent screening landform which would ensure environmental and amenity impacts are mitigated as expansion of the quarry progresses. Secondary elements in this phase include

reinstatement of features, including drystone dykes and positioning of the security fence behind the screening landform to avoid its appearance in views of the immediate setting of the site.

#### **8.5.1.2.**

In Phase 3, woodland planting in the east corner of the site between the outside edge of the permanent screening landform and site boundary would be established, together with use of soil stripped from the site being used to achieve a 0.5 metre topsoil depth on the Phases 2/3 quarry floor.

#### **8.5.1.3.**

Phase 4 is the final extraction phase, with extractive operations concluding at the fullest extent of the north easterly section of the quarry. Stockpiled soil from previous phases not employed in the formation of the screening earthworks would then be employed to create a topsoil depth of 0.5 metre on the quarry floor. A pond would be retained in the north east corner of the quarry and final biodiversity enhancement actions would be undertaken, including woodland planting, separated into a small copse across the site and as previously noted, beyond the earthworks to the boundary of the site. The asphalt plant would also be removed upon cessation of works.

#### **8.5.2.**

It is recognised that reinstatement and restoration is embedded in the phased nature of works which can be further safeguarded by planning condition. Creation of a more naturalistic screening landform in place of the current utilitarian earth bunds is considered a positive step and would reduce the overbearing presence of such features where in close proximity to the site boundary and neighbouring properties. Separation from those properties is deemed sufficient to safeguard amenity in relation to daylight and sunlight. Extensive flooding of the quarry floor is not envisaged, although a distinct pond and wetland area is proposed which would enhance habitat diversity. It is also noted that there would be retention of an element of agricultural use within the bounds of the site which is most likely to be pastoral in nature with retention and re-establishment of traditional boundary features including stone walls.

#### **8.5.3.**

It is indicated that a five year period of aftercare would be necessary to secure long term integration into the natural environment. The detail provided is considered generally acceptable, subject to appropriate safeguards to ensure that the proposed works undertaken conform to the phasing plan through to Phase 4 and cessation. It is reasonable to seek the earliest possible establishment of the proposed woodland screening beyond the final extent of the screening landform within the site boundary in the north east corner to aid in the future naturalisation of the development in advance of the final two stages of development. Furthermore, it is considered prudent from the outset to establish how the applicant would achieve the indicated five year aftercare plan and establish the parameters of securing maintenance and use of the site thereafter. This is a requirement of the Minerals element of Policy 4 of the OLDP. It is again noted that the civic amenity site would remain as this is not a

component of the site under consideration within the current application. It is considered that the proposal has appropriate mitigation embedded into the proposed development and that there are significant opportunities for enhancement identified through restoration.

#### **8.5.4.**

OLDP Policy 4 – Business, Industry and Employment, section E – Minerals, part (ii), states that a mechanism whereby the decommissioning, restoration and reinstatement of the site should be secured, which is a key matter when granting planning permission for a minerals application. This must be addressed, not prejudiced by the fact that the local authority is the applicant, as no policy provision exists for an exception. An argument could be formed that the current permission on the site provides no guarantee of appropriate decommissioning, restoration and reinstatement and therefore that betterment should occur in the event that permission was granted; however, this is not considered as justification. A case may also be presented that, in the event of an unforeseen circumstance, for example the quarry being disposed to a third party, or funds being unavailable for approved restoration works, the terms and conditions of the planning permission would be the sole means to control appropriate decommissioning, restoration and reinstatement of the site. It is therefore considered necessary, notwithstanding the embedded restoration and reinstatement through the phased nature of works, to secure an independent professional assessment of the restoration and aftercare costs for the proposal, and for a restoration bond or other financial mechanism to be agreed. This can be secured by appropriate planning condition.

### **8.6. Air Quality**

#### **8.6.1.**

Air quality and the issue of dust is a key issue in consideration of the application and has been raised in all objections. Matters raised include querying past practices, and methodologies for monitoring and dust suppression with concerns that further extension of the quarry would exacerbate the current situation, given the proximity of the quarry to houses, particularly the properties adjoining the east boundary. Dust and particulate matter can be derived from several activities in a quarrying context, from the process and processing involved in mineral extraction to the transportation of material around the site on unbound surfaces.

#### **8.6.2.**

It is recognised that there is potential for significant detrimental impacts to occur in relation to air quality as a consequence of uncontrolled emissions of coarse dust and particulate matter. Specific neighbouring properties are identified in the EIAR, within a 400 metre study area in relation to air quality, as having high sensitivity to dust soiling and health effects. These properties are noted in table 11.11 of Volume 4 (Appendices) of the EIAR, with further tables identifying Pathway Effectiveness and Dust Impact Risk.

### **8.6.3.**

Air quality is addressed in Chapter 11 of the EIAR, considered in association with relevant appendices. Air quality effects have also been addressed in sections 4.2.15 to 4.2.19 of the Planning Policy Statement provided as supplementary information. In the course of consideration of its consultation response, Environmental Health requested additional information with regard to an air quality assessment, which was provided on 22 August 2019. This allowed for quantitative assessment through dust monitoring in the summer months to complement earlier monitoring which was undertaken in the winter months. The results provided by both rounds of monitoring surveys indicate that measured dust deposition rates are comfortably below the level at which impacts on amenity would be expected to occur (200 mg/m<sup>2</sup>/day). On submission and consideration of these findings, Environmental Health has offered no objection, although has indicated that safeguards through use of appropriate planning conditions would be required.

### **8.6.4.**

The applicant accepts that appropriate measures to reduce impacts to air quality are required within an appropriately managed quarry and is aware of the proximity of residential properties, currently and as a consequence of the proposed extension of the quarry. Normal working practice and existing processes are subject to control and mitigation measures, for example, the crushing and screening plant and asphalt plant operate in terms of a permit under the Pollution and Pollution Prevention and Control (Scotland) Regulations 2012 (PPC regulations) which govern the emissions to air from operation of the plant, namely dust and fumes.

### **8.6.5.**

It is considered that, subject to mitigation and appropriately safeguarded by planning condition, the proposed development can operate without significant impacts on air quality. The developer is aware of the significance of air quality impacts and has evidenced that current impacts are within tolerable limits. It will be incumbent on the developer to ensure that detrimental air quality impacts do not arise as a consequence of continued and future operation of the proposed development.

## **8.7. Noise and Vibration**

### **8.7.1.**

Noise and vibration as a consequence of quarrying activity are key matters raised within objections. A recurrent point is concerns with the existing and future blasting regimes, given the nature of accessing the rock through approximately 20 blasts per annum and the disruption and cited impacts that quarry operations and ancillary activities have on the amenity of nearby residents. It is of note that all the objections are from properties close to Cursiter Quarry.

### **8.7.2.**

Chapter 10 of the EIAR has identified three key areas which have the potential to result in noise and vibration effects, namely:

- Noise and vibration emissions from works associated with screening landform construction and the stripping and storage of topsoil and overburden.
- Noise and vibration emissions from quarrying operations, including heavy goods vehicle (HGV) movements within the site.
- Air overpressure and vibration emissions from blasting activities.

#### **8.7.2.1.**

The above matters, with the current exception of temporary works required in soil stripping and formation of the screening landform, occur through current quarrying operations which are not subject to change through the proposed extension of the quarry. The EIAR identifies specific neighbouring properties as having high sensitivity to noise, and describes the standards and methodologies employed to assess impacts. Environmental Health sought clarification that the proposed development could comply with a suitable noise level limit which could be subject to appropriate planning condition. This led in part to the updated noise assessment dated 19 August 2019. Planning Advice Note PAN 50 'Controlling the Environmental Effects of Surface Mineral Workings Annex A: The Control of Noise at Surface Mineral Workings' was used to inform this assessment with noise monitoring locations utilised at the Cott O' Cursiter, Grimbister Farm Cottage and Kingsdale Lodge as representative locations.

#### **8.7.3.**

The proposed development includes the same methods of production and function as the existing quarry, with noise sources being identified through both temporary works, including soil stripping and screening, landform, construction and operational works in relation to drilling, blasting, crushing and screening, vehicle movements and other operational plant noise. Noise emissions from temporary works, soil stripping and formation of screening earthworks, as assessed by the EIAR, are stated as compliant with the requirements of PAN 50 Annex A, noting that assessment has considered the temporary works concurrent with operational noise.

#### **8.7.4.**

Hours of operation are currently subject to control and this would be safeguarded by planning condition and in consideration of the Environmental Health consultation response. A degree of flexibility is likely to be required in exceptional circumstances where aggregates and/or asphalt is required for specific works. Such eventualities may include critical infrastructure projects such as runway works at Kirkwall airport carried out outwith scheduled flight times; however, any such works would typically involve movement of stockpiled materials and operation of the asphalt plant, rather than drilling, crushing or blasting activities.

#### **8.7.5. Blasting**

The effects of blasting, air overpressure and ground borne vibration have been subject to consideration within the EIAR and associated appendices. Ground borne vibrations have been subject to measurement and assessment using BS 6472-2:2008 (Guide to evaluation of human exposure to vibration in buildings. Blast-induced vibration), performed at Rohallion and Grimbister Farm.

#### **8.7.6.**

Blasting is cited as a key source of concern by objectors, including the proposed increase in maximum number of blasts on a rolling 12 month basis; furthermore it is noted that the notification procedures and nature of alarms used was subject to comment through the pre-application phase of the proposal as stated in the Pre Application Consultation Report, with outcomes reflected in Chapter 10; Noise and Vibration, of the EIAR section 10.8 Mitigation and Monitoring. The nature and frequency of blasting has been cited with concerns raised, given the potential of up to 24 blasts per annum.

#### **8.7.7.**

Air overpressure due to proposed blasting is confirmed as not possible to predict with accuracy at receptors due to the high level of variables involved. It is stated that good blast design and appreciation of local weather conditions can influence levels and impacts with best practice measures to minimise vibration and air overpressure generation owing to blasting being recommended in section 10.8 of the EIAR. Use of explosives is a highly regulated activity with adherence to industry standard protocols and Health and Safety legislative control. It is proposed to secure up to 24 blasts per annum, doubling the number of blasts from recent years (2013 and 2014 figures as quoted by objectors); therefore, the proximity to buildings may necessitate a change in typical blasting procedure to ensure that blasting within accepted parameters can occur, for example use of smaller charges which could lead to the frequency of blasts increasing to maintain output. The control of the total number of blasts within any 12 month period is considered as a legitimate control mechanism and it would be a matter for the quarry operator to ensure that blasting is carried out in a safe manner, noting that the process is subject to monitoring and appropriate controls in the interests of amenity, which can be safeguarded by planning condition.

#### **8.7.8.**

Environmental Health seeks appropriate planning conditions to limit blasting to 24 events in any rolling 12 month period, to ensure that blasting would only occur within normal operation hours of the quarry (excepting Armistice Day), with a limit set of 6mm/s Peak Particle Velocity at any sensitive property used as a dwelling for no more than 90% of events and never exceeding 9mm/s Peak Particle Velocity, and to ensure that an appropriate blast level monitoring scheme is employed which relates to the findings and recommendations of the EIAR and associated appendices and supplementary information.

#### **8.7.9.**

The EIAR addresses noise as an amenity issue which, together with vibration, air quality, landscape and visual effects, can result in inter-relationship effects on residential amenity. No significantly adverse effects either individually or as inter-related effects have been identified that cannot be addressed through appropriate site management and/or mitigation; this can be safeguarded by planning condition.



## **8.8. Access and Traffic**

### **8.8.1.**

The proposed development would continue to use the existing access from the Old Finstown Road to the north of the site. The site entrance is approximately 25 metres wide with a 30 metre filter lane to the west. It is not proposed to alter current access arrangements nor hours of operation.

### **8.8.2.**

The proposed development does not indicate any significant nor substantive change in use of the public highway from that experienced currently based on the current production average of 90,000 tonnes per annum. In consultation with Roads Services, no adverse comment has been received with no indication of any further information necessary to inform the application in relation to transport, travel and road network infrastructure were the use and operation of the quarry to remain at existing levels. Where there is no significant change in use nor intensification of use, a Transport Assessment would be considered unnecessary.

### **8.8.3.**

Appropriate planning conditions would be used to safeguard access matters in relation to quantity of materials exported from the site (100,000 tonnes per annum) which has a direct bearing on large vehicle movements. Were this amount to be exceeded a Transport Assessment may be required.

### **8.8.4.**

Based on the average output from the quarry being limited to 100,000 tonnes, the development would be considered to be in accordance with Policy 14 – Transport, Travel and Road Network Infrastructure of the OLDP.

## **8.9. Natural Heritage/Ecology**

### **8.9.1.**

The development, through continuing use of the existing quarry and expansion into the agricultural land to the south and east through phased development of the site, has potential to impact the natural heritage of the site and the wider area. Within the quarry there are known to be nesting birds on the disused sections of quarry face with fulmar and kestrel being noted species. There are also likely to be smaller bird species utilising nesting opportunities within the quarry. The farmland is likely to be used by various species found on agricultural ground, improved grassland and the small amount of semi-improved and unimproved grassland in and around the existing quarry, possibly including ground nesting birds. Overall the land required to accommodate the proposed expansion of the existing quarry is considered to have negligible ecological value.

### **8.9.2.**

There are no natural, built or cultural heritage designations within the site. Chapter 7 of the EIAR assesses the potential effects of the proposed development on terrestrial ecology, ornithology and aquatic ecology. The EIAR also considers ecological designations in relation to the proposed development. No significant effects have been identified on the nationally or locally important nature conservation sites identified through the EIA process, including Keelylang Hill and Swartaback Burn Site of Special Scientific Interest (SSSI), Evie to Finstown Local Nature Conservation Site (LNCS), Rossmyre LNCS and Keelylang LNCS.

### **8.9.3.**

The closest point of the proposed quarry extension lies approximately 650 metres from the Orkney Mainland Moors Special Protection Area (SPA), a Natura site, designated for hen harrier, red-throated diver and short-eared owl. The development is within the two kilometre core feeding range for hen harrier and short-eared owl from the SPA but the fields identified for the extension would not be preferred foraging habitat for these raptors. In addition, red-throated divers do not breed in this section of the SPA. Therefore, SNH considers there would be no likely significant effect on the features of the SPA. SNH considers the scope, content and conclusions in the EIAR to be satisfactory in relation to their interests and do not offer any further comment. The submitted EIAR has stated that there are no expected significant effects from the proposed development on the SPA of a scale, equating in EIA terminology, to a negligible effect. The planning authority, as the competent authority, has considered the findings of the EIAR and related appendices, noting SNH and other consultee input, and is of the opinion that no potential significant or adverse effects on the integrity of the Natura site have been identified.

### **8.9.4.**

To inform the ecological assessment of the application, field surveys have been undertaken including Phase 1 habitat survey, National Vegetation Classification survey, otter survey, survey for other terrestrial mammals, consideration of likelihood of bats and survey for invasive species. Chapter 7 'Ecology' of the EIAR and associated appendices detail such works. No significant effects or impacts were recorded through these field surveys. It is however appropriate to ensure the safeguarding of protected species and nesting birds, which is commented upon both in the EIAR, supporting Planning Policy Statement and through comment received from consultees, noting in particular comment from RSPB (Scotland) and DMP (Environment) regarding mitigation and safeguards which may be secured by planning condition.

### **8.9.5.**

No peat or carbon rich soils have been identified as impacted upon by the proposed development and neither is there any tree or woodland cover. The development does however have the potential of leaving exposed soil which can become an unwelcome seed bank for colonising species that may not be welcomed in either the surrounding farmland or nearby natural heritage sites. Unmanaged runoff from such areas may cause impacts in watercourses such as sedimentation. Management is therefore required which can be appropriately safeguarded by planning condition in

consideration of environmental management and mitigation. The inclusion of tree and shrub planting as part of both mitigation and remediation strategies is viewed favourably, particularly if local seedstock is used to the benefit of biodiversity on the site. Policy 9 – Natural Heritage and Landscape, sections E and F, of the OLDP, are considered to be satisfactorily addressed by the proposed development.

#### **8.9.6.**

The proposed development has been assessed in relation to natural heritage matters, including designated sites, informed by Chapter 7 of the EIAR and associated appendices, which taken together with consultee comments, indicates that no significantly adverse impacts will arise as a consequence of the proposed development. The application is therefore considered in this respect to satisfy relevant policy requirements of Policy 9 – Natural Heritage and Landscape of the OLDP.

### **8.10. Water Environment**

#### **8.10.1. Hydrogeology (Groundwater)**

Hydrogeology is subject to consideration through Chapter 5 of the EIAR and associated appendices which identifies groundwater features, users, site investigation, levels, receptor sensitivity and assessment of effects through EIAR. Safeguarding the water environment is subject to policy consideration in Policy 9 – Natural Heritage and Landscape, section D – The Water Environment, of the OLDP.

#### **8.10.2.**

The current quarry floor is at a depth of approximately 12 metres above sea level with no groundwater issues being noted within the current extent of the workings. No dewatering is currently required to manage groundwater levels. The developer has stated that 'one of the key design parameters for the proposed development is to avoid the potential interface with groundwater in order to minimise pollution risk and prevent requirement for groundwater dewatering by additional pumping, treatment and water discharge'. For this reason, the lowest level of quarry workings has been established at five metres Above Ordnance Datum without recourse to further investigation. The safeguarding of the water environment through appropriate management strategies and monitoring can be secured by planning condition.

#### **8.10.3. Private Water Supplies**

It is noted that there are two private water supplies (PWS) identified within two kilometres of the development boundary, both of which are believed to be the sole source of drinking water. Any impact to the PWS would be highly disruptive and as such these PWS are considered as highly sensitive receptors. The Orkney Groundwater Body is similarly considered as a high sensitivity receptor. A third, undocumented PWS, was cited by an objector at the property known as Rossmyre, with concerns about impact of blasting upon water quality and supply. Environmental Health has no record of this supply and has written to the contributor seeking further information. Environmental Health has furthermore made comment that, given the consultation response provided by SEPA and its request for a condition to incorporate groundwater monitoring as a condition of any planning permission, this is

sufficient to monitor against possible contamination or loss/reduction of the alleged supply at Rossmyre. In addition, Environmental Health has confirmed that planning conditions would ensure any structures present within the alleged PWS to Rossmyre would not be impacted by the proposed development.

#### **8.10.4. Surface Water/Flood Risk**

Direct surface water runoff and rainfall within the bounds of the quarry collect on the floor of the quarry and flow to the north-east end of the site, where it is collected at the working face. It is thereafter pumped to a higher level in the quarry to a settlement pond from which the water is transferred to a piped discharge into the Bay of Firth near Davie's Brig by the A965 coast road. Both the extraction of water and water quality is subject to SEPA regulatory control through a CAR licence. The proposed drainage regime is to remain without significant change. Therefore, contrary to indications at the EIA Scoping stage, no water discharge from the quarry is proposed to the Burn of Rossmyre. Likewise, no water is discharged to any other freshwater body noting the other watercourse in the vicinity, the Burn of Grimbister. This is considered to address the issue of flooding arising in relation to either of these watercourses as raised within objections.

#### **8.10.5.**

A potential impact to the water environment is however identified owing to groundworks associated with the proposed development outwith the active quarry where construction runoff may occur flowing away from the quarry, noting the landform and proposed screening earthworks. Controls for construction site runoff and sedimentation can be secured by an appropriate Construction Environmental Management Plan (CEMP) and matters in relation to the phasing plan, which can be secured by planning condition.

#### **8.10.6.**

Upon completion of the proposed development, at the end of Phase 4, a distinct pond would be retained within the quarry with an associated wetland habitat which may be considered as providing biodiversity benefits. It is considered that the development could provide a small but meaningful contribution to habitat diversity and biodiversity enhancement with the creation of a pond upon completion.

#### **8.10.7.**

It is considered that the development has satisfactorily considered impacts to the water environment in accordance with Policy 9 – Natural Heritage and Landscape, section D – The Water Environment of the OLDP, and that appropriate safeguards and mitigation can be safeguarded by planning condition.

### **8.11. Landscape and Visual Impact**

#### **8.11.1.**

The EIAR, Chapter 8, includes a Landscape and Visual Impact Assessment (LVIA) which considers the visual impacts of development in relation to landscape character, sensitivity of the landscape to change and the magnitude of change. The LVIA has considered the site landscape character together with the wider landscape

character of the study area in which the proposed development is situated, taking account of both relevant Orkney landscape character assessments; Orkney Landscape Character Assessment (1998) and Orkney and North Caithness Coastal Character Assessment (2016), undertaken by/on behalf of Scottish Natural Heritage (SNH). Negative landscape and visual impacts are noted within the representations against the development.

#### **8.11.2.**

The site is not located within any nationally designated landscape (such as a National Scenic Area). The site is below the closest sensitive ridgeline observable from the Heart of Neolithic Orkney World Heritage Site (WHS) and is therefore not visible from any of the component parts of the WHS. The site does not lie within, or is in close proximity to, any regionally or locally designated landscape.

#### **8.11.3.**

The current quarry, associated structures and civic amenity site all impact on the current landscape character of the site which otherwise would be typical of the prevailing Rolling Hill Fringe Local Character Type (LCT). The immediately surrounding land is in pastoral agricultural grazing use, indicating that the extension area would have a transitional quality as the boundary between industry and rural landscape. The other LCTs identified of relevance include The Holms LCT, Inclined Coastal Pastures LCT and Moorland Hills LCT noting also the coastal character areas. There is an impression that the site is bracketed between areas with a significant coastal influence and the backdrop of rising ground and hills behind.

#### **8.11.4.**

The existing context of the site is as a quarry set within open pastoral agricultural land. The Old Finstown Road from which access is taken to the site passes along the northern boundary, with the immediate view of the site characterised by high chain-link fencing, the amenity site adjacent, buildings and structures associated with the quarry including maintenance sheds, site office and weighbridge. To the west the development is defined by substantial earthworks which are identifiable at a distance, most significantly on travelling towards Finstown from Kirkwall on the Old Finstown Road which also provides a view of the site in combination with Heddle Quarry on the skyline to the west. Views from the coast road, the arterial A965, are limited and fleeting in nature. Owing to the nature of development with rising ground behind acting as a backdrop, views of the site from across the Bay of Firth on the A966 are limited.

#### **8.11.5.**

A Zone of Theoretical Visibility (ZTV) has been provided to inform the LVIA with nine Representative Viewpoints (VPs), providing a representative cross section of visual receptors. Consideration is also made in respect of the worst-case scenario through the phasing of the development which is considered to occur at the end of Phase 2 with moderate adverse visual effects at VP1, Kingsdale, and VP5 from the Core Path (WM8) east of Heddle. It is also noted that temporary effects would arise in close range views associated with soil stripping and formation of the new screening

landform. The submitted LVIA is considered acceptable as an appropriate and reasonable consideration of impacts arising to both landscape and visual effects.

#### **8.11.6.**

Having undertaken an assessment of the visualisations from the viewpoints and noting the conclusions of the submitted LVIA, it is considered that the impact on the wider landscape will not be significant and that there are no significant visual effects from any of the representative viewpoints. It is considered that the landscape is capable of accommodating the development with minimum impact on visual amenity of the surrounding area subject to the phased restoration of the site, which can be secured by planning condition.

### **8.12. Archaeology**

#### **8.12.1.**

The application site is located within the Heart of Neolithic Orkney World Heritage Site Sensitive Area and in the vicinity of several scheduled monuments, noting both Cuween Hill chambered cairn and Wideford Hill chambered cairn. Through consultation with Historic Environment Scotland and consideration of Chapter 9 Cultural Heritage of the EIAR, the following is noted in respect of these two sites:

- Cuween Hill, chambered cairn (Index No. 90092). In paragraph 9.5.16 of Chapter 9 (of the EIAR) it is stated that: 'Although the construction of the Proposed Development would be relatively close to the monument, a ridge of high ground between the asset and the development boundary would block all views from the entrance of the cairn, while the ZTV shows the asset as falling outside of the Zone of Theoretical Visibility (Figure 8.4, Volume 3: EIAR). Furthermore, the key view from the entrance passage is towards the sea and not the Proposed Development.' No change to the cultural significance of the asset is therefore predicted in the EIAR resulting from the proposed development.
- Wideford Hill, chambered cairn (Index No. 90315). In paragraph 9.5.19 of Chapter 9 (of the EIAR) it is stated that: 'Although the Proposed Development would be visible from the asset, views would be limited to the southwest of the arc of view, with the main focus of the view from the passage and entrance being towards the coast and the Bay of Firth, away from the Proposed Development. Furthermore, the distance between the asset and Proposed Development will also reduce any changes on the setting of the asset.' No change to the cultural significance of the asset is therefore predicted in the EIAR resulting from the proposed development.

#### **8.12.2.**

Historic Environment Scotland (HES) accepts that heritage assets within its remit are unlikely to be adversely affected by the proposed development and as such does not object to the proposal. The County Archaeologist accepts and agrees with the comments and consideration of the setting of scheduled monuments as stated by HES.

### **8.12.3.**

The County Archaeologist is generally satisfied regarding the evaluation of the development site; however, the conclusion reached (paragraph 9.8.1 of the EIAR) that no “potential archaeological features” have been identified is subject to query given that the geophysical report (see Rose Geophysics Cursiter Quarry Orkney) at paragraph 8.1 states e.g. “...this response may warrant further archaeological evaluation”. The potential for concealed pits that may relate to the nearby Bronze Age cemetery is also raised as such sites may not appear on geophysics. Therefore, whilst the County Archaeologist accepts that the likelihood of significant damage to heritage assets is low, the nature of the anomalies identified and the potential that such are archaeological in nature, require further targeted evaluation. On this basis it is advised that appropriate planning conditions are attached to further determine the nature, extent and significance of any archaeology present. The methodology advised includes a Written Scheme of Investigation (WSI) to identify anomalies for test pitting/trial trenching; detail what archaeological works will be carried out and how; how any encountered archaeological remains will be dealt with; how any updates to the WSI will be provided; the reporting process; and the potential for post-excavation. The WSI would require to be submitted to the planning authority for approval before being implemented. The intrusive evaluation as advised, may produce material requiring conservation, scientific study, reporting and other dissemination, that will also be the responsibility of the developer to ensure it is undertaken to professional standards (Chartered Institute for Archaeologists).

### **8.12.4.**

The applicant has recognised that additional archaeological assessment and investigation would be required through soil stripping stages of the phased development. Subject to planning condition to establish the nature, extent and significance of any archaeology present and to agree (in discussion with the County Archaeologist) a timetable and outline of any further work needed, prior to quarrying commencing, the proposed development would be considered in accordance with Policy 8 – Historic Environment and Cultural Heritage of the OLDP.

## **8.13. Extracted material**

The development would utilise all extracted material (other than saleable product) to restore previous phases and soften/naturalise existing benches. The Management of Extractive Waste (Scotland) Regulations 2010 provide for operators to reach agreement with the planning authority to waive the requirements of the Regulations for unpolluted soil and peat, being soil removed from the upper layer of the ground during extractive activities and that is not deemed to be polluted, and to make a case to the planning authority in tandem with the planning application that other extracted material resulting from processing be classified as a non-waste by-product.

Treatment of all extracted materials is assessed in full in the EIAR, and classification and agreements reached do not reduce the need to ensure that: the replaced material is physically stable; pollution of soil and water is prevented; and appropriate monitoring of voids and the material continues for as long as is necessary. SEPA provided advice regarding the classification of extracted material in this context. On this basis, and the detailed control of all extracted material during each of the phases as included in submitted plans and as assessed in the EIAR, it was appropriate for

the planning authority to waive the requirements of the Regulations. This is reflected in the Planning Policy Statement submitted with the application, confirming that the site is therefore not an 'extractive waste area' as defined in The Management of Extractive Waste (Scotland) Regulations 2010.

## **8.14. Site Lighting**

Site lighting is a health and safety requirement and is typically most noticeable adjacent to the Old Finstown Road given the site entry and cluster of buildings in that area. No additional buildings or structures are proposed within the area of quarry expansion which would typically include external lighting provision. No significant additional site lighting is proposed from that currently utilised. It is however considered appropriate to ensure that any future security or operational lighting is designed and operated in such a way as to minimise potentially obtrusive lighting from the development site. This can be secured by planning condition.

## **8.15. Socio Economic Impact**

### **8.15.1.**

The case presented for the proposed development is one of securing and safeguarding the level of output and general day to day operation of the quarry. Staff currently employed at the quarry include a quarry manager, quarry supervisor (assistant manager), a weighbridge operative, two technicians and five quarry operatives, giving a staffing total of ten for the site. The applicant has stated an overall desire to continue local production, safeguarding current and future employment at the quarry. The quarry is a Council-owned asset that is income-generating, which in turn is reinvested in public services with the assertion that 'the ongoing viability of the facility therefore has wider benefits from the production of construction material'. The retention and continuing use of Cursiter Quarry is therefore considered to be beneficial in the retention of local employment, safeguarding locally produced aggregate supply and as a local authority-owned and operated asset to the benefit of the wider local community in excess of production of aggregates which are a fundamental requirement of construction and related services. This socio-economic benefit is a material consideration, albeit a consideration of relatively little weight in the context of the proposal as a whole.

### **8.15.2.**

A planning condition would be attached providing for the establishment of a Cursiter Quarry Public Liaison Group, which would allow the Group to make representations and comments to the quarry operator, and responses provided, and for an annual site visit by Group representatives to see within the boundaries of the quarry operation.



## **9. Conclusion and Recommendation**

### **9.1.**

The application seeks to extend the existing Cursiter Quarry. It sets out a development with four phases, with embedded mitigation, whilst ensuring the uninterrupted supply of local aggregate to meet demand levels consistent with recent experience into the future. Details of mitigation have been provided within its supporting Environmental Impact Assessment Report, including phased and final decommissioning and site restoration. A financial bond or other financial arrangement to be agreed would be required to satisfy policy requirements and minimise risk in achieving the required site restoration.

### **9.2.**

The application has been subject to objections locally on a wide range of matters, significantly those with an impact upon amenity including noise, vibration, air quality, landscape and visual impacts. All such matters are considered to have been adequately addressed by information provided in support of the application, EIAR and associated appendices, supplementary information submitted in the course of review of the application and in consideration of matters subject to consultation.

### **9.3.**

The relevant policy in the Local Development Plan is supportive of new quarries or quarry operations where there is an identified need or demand for minerals which cannot be provided within a defined Minerals Safeguard Area (MSA). The larger element of the first of the four proposed phases, programmed into this proposed development, would be achievable within the limits of the defined Minerals Safeguard Area (MSA) identified by the Orkney Local Development Plan 2017 and would benefit from the stated support of the Minerals section of Policy 4. Ancillary elements of Phase 1 and the following three phases would however be located outwith the defined bounds of the MSA. Irrespective of the nature of the development as an extension of an existing quarry, such development is required to demonstrate an identified need or demand for minerals that cannot be provided within a defined MSA. On balance it is considered that the case has been made to justify the need and demand for mineral extraction at the site and outwith the defined bounds of an identified MSA.

### **9.4.**

The planning authority takes cognisance of the content of the EIAR submitted with the application, but that content can only influence its decision insofar as matters considered are material planning considerations. The submitted EIAR identifies and assesses the potential areas of interaction between the proposed development and the environment through assessment of topics including the nature of the proposal and consideration of alternatives, hydrogeology, surface water environment, ecology, landscape and visual impact, historic environment, noise and vibration and air quality. This process is considered to be robust in its consideration of matters pertaining to EIA. It is concluded that the details contained in the EIAR and supporting information cover the issues that could result in a significant effect on the

environment, including in terms of the designations identified. In consideration of the application and with regard to supporting information and the submitted EIAR, it is noted that there are no objections from statutory consultees.

## 9.5.

Objections submitted have been considered in conjunction with the assessments undertaken by the statutory consultation bodies. No objections or requirements have been noted from consultees that have not been addressed in consideration of the application or can otherwise be addressed by planning condition. SNH has provided clear advice on the impacts on natural environment and concludes that the proposed development is acceptable, subject to the mitigation proposed. SEPA has considered matters in relation to the receiving environment and through The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended) (CAR). Environmental Health has considered a range of amenity issues in relation to noise, vibration and air quality.

## 9.6.

The support of the Orkney Local Development Plan 2017, Scottish Planning Policy, and National Planning Framework 3 for sustainable growth of minerals in principle is a material consideration of significant weight in support of this application. The proposed development is acceptable, on balance, subject to mitigation, and would comply with relevant policies 1, 2, 4, 8, 9, 10, 13 and 14 of the Orkney Local Development Plan 2017, and Supplementary Guidance. It is considered that the objections do not carry sufficient weight to justify refusal of the application. Accordingly, the application is **recommended for approval**, subject to the conditions attached as Appendix 3 to this report.

## 10. Contact Officers

David Barclay, Senior Planner, extension 2502, Email [david.barclay@orkney.gov.uk](mailto:david.barclay@orkney.gov.uk).

Jamie Macvie, Planning Manager, extension 2529, Email [jamie.macvie@orkney.gov.uk](mailto:jamie.macvie@orkney.gov.uk)

## 11. Appendices

- Appendix 1: Location Plan.
- Appendix 2: Phasing Plans.
- Appendix 3: Planning Conditions.

PROJECT  
Cursiter Quarry

CLIENT  
Orkney Islands Council  
Development and Infrastructure

KEY:  
 Development boundary

PROJECT NUMBER  
60572290

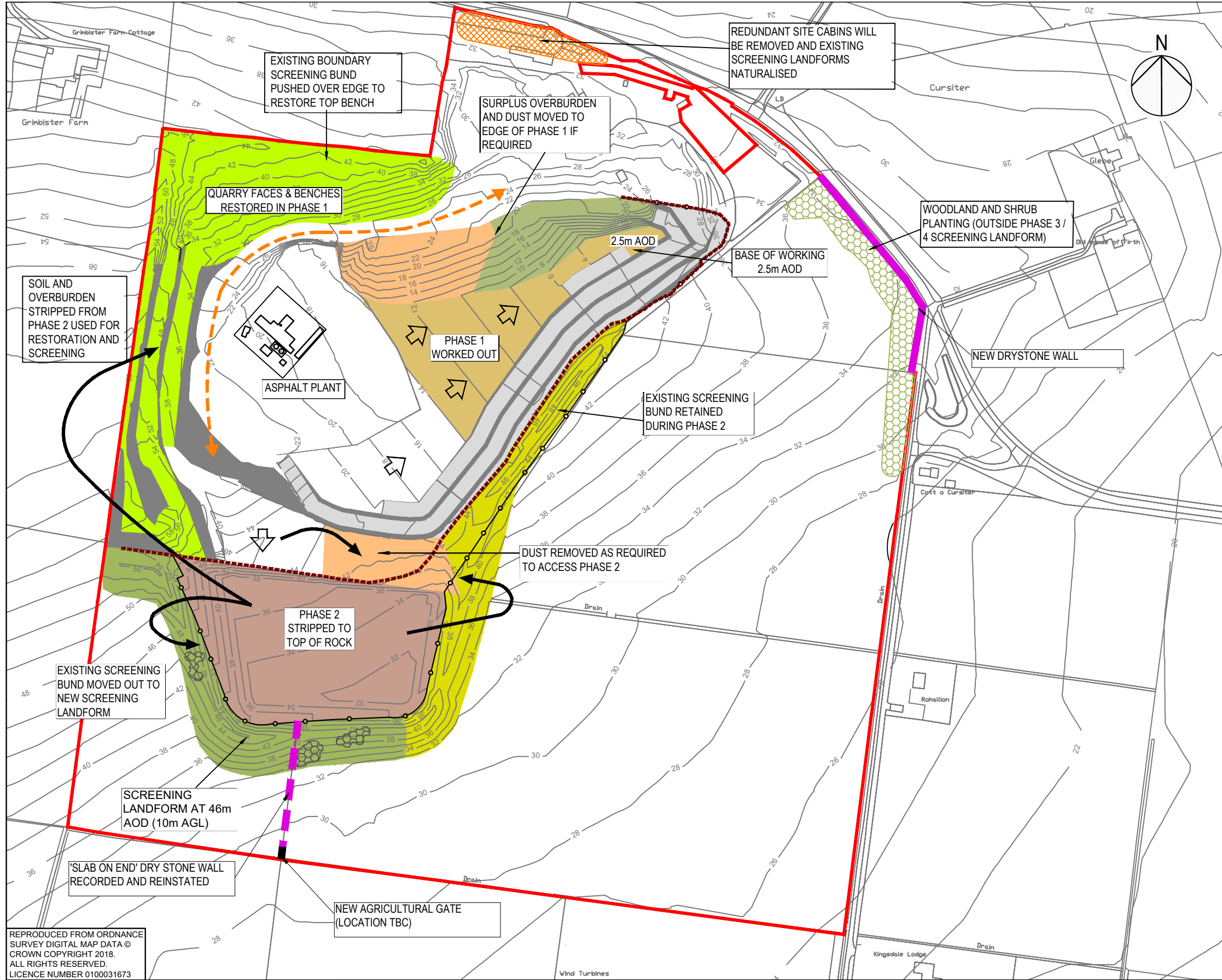
SHEET TITLE  
Location Plan

SHEET NUMBER  
Figure: 1.1

Project Management Initials: SW Designer: NS Checked: GOH Approved: SW  
Scale: 1:15,000 @ A3



This drawing has been produced for the use of AECOM's client. It may not be used, modified or relied upon by third parties, except as agreed by AECOM or as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that uses or relies upon this drawing without AECOM's express written consent. Do not scale this document.



**KEY**

- DEVELOPMENT BOUNDARY
- LIMIT OF MINERAL EXTRACTION
- CONTOURS AT 2m INTERVALS
- QUARRY FACE / STEEP SLOPE
- QUARRY FLOOR AT FINAL LEVELS
- EXISTING DUST STORE
- NEW PERMANENT SCREENING LANDFORM
- NEW TEMPORARY SCREENING LANDFORM
- DIRECTION OF WORKING
- RESTORED BACKFACES
- AREA STRIPPED OF OVERBURDEN (OB)
- WOODLAND/WOODLAND EDGE PLANTING
- GORSE/SHRUB PLANTING
- BOUNDARY FENCE
- PRIMARY HAUL ROAD
- NEW DRYSTONE WALL
- REINSTATED 'SLAB ON END' DRYSTONE WALL
- NEW AGRICULTURAL GATE (LOCATION TBC)
- REDUNDANT SITE CABINS TO BE REMOVED AND EXISTING LANDFORMS NATURALISED

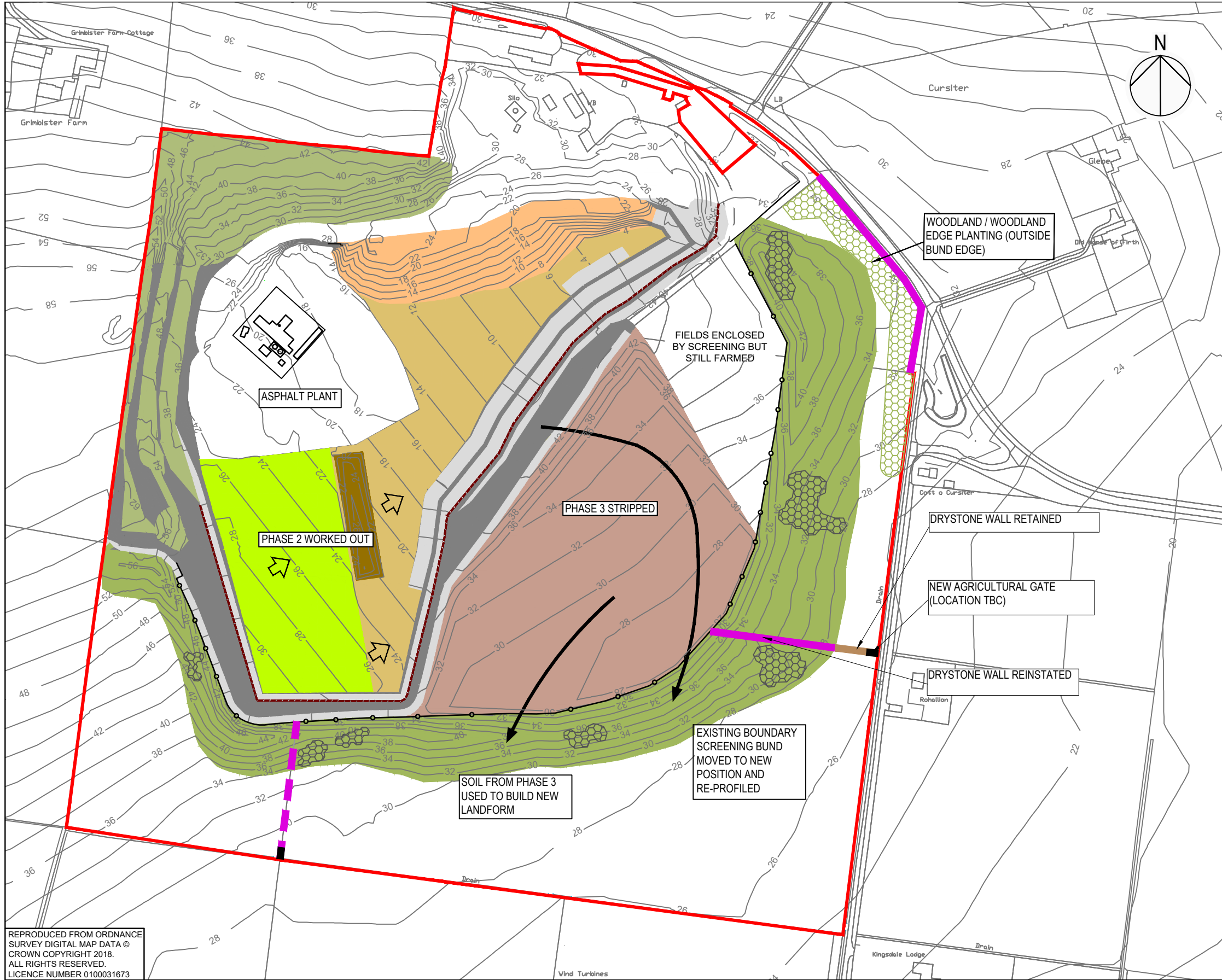
- NOTES**
1. Upper north and west face and benches restored by pushing over existing boundary screening bund plus cut and fill of quarry edge - see Section Detail Figure 60572290.009.
  2. Soil and overburden from Phase 2 stripped and placed in restoration of north and west face and to create new screening landform.
  3. New screening landform created to profile on Figure 60572290.009
  4. Interim quarry faces and benches are representative only.

Plot Date : 21 March 2019 11:42:12  
 File Name : \\UKED\H\FP002\VI\PROPOSALS\LANDSCAPE\LIVE\CURSITER QUARRY\05\_EXECUTION\FIGURES\19.03.19-AMENDMENTS\CURSITER QUARRY - END OF PHASE 1 - 19.03.19

REPRODUCED FROM ORDNANCE  
 SURVEY DIGITAL MAP DATA ©  
 CROWN COPYRIGHT 2018.  
 ALL RIGHTS RESERVED.  
 LICENCE NUMBER 0100031673

<p>Project Title</p> <p style="text-align: center;"><b>CURSITER QUARRY</b></p> <p>Client</p> <p style="text-align: center;"><b>ORKNEY ISLANDS COUNCIL</b></p>	<p>Drawing Title</p> <p style="text-align: center;"><b>FIGURE 2.1: END OF PHASE 1</b></p>	<p>Purpose of issue</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Designed</td> <td>Drawn</td> <td>Checked</td> <td>Approved</td> <td>Date</td> </tr> <tr> <td>-</td> <td>NHW</td> <td>CN</td> <td>CN</td> <td>11/12/2018</td> </tr> </table> <p>AECOM Internal Project No. 60572290</p> <p>Scale @ A3 1:3000</p> <p>Suitability -</p> <p>Zone / Mileage -</p>	Designed	Drawn	Checked	Approved	Date	-	NHW	CN	CN	11/12/2018	<p>THIS DOCUMENT HAS BEEN PREPARED PURSUANT TO AND SUBJECT TO THE TERMS OF AECOM' APPOINTMENT BY ITS CLIENT. AECOM ACCEPTS NO LIABILITY FOR ANY USE OF THIS DOCUMENT OTHER THAN BY ITS ORIGINAL CLIENT OR FOLLOWING AECOM' EXPRESS AGREEMENT TO SUCH USE, AND ONLY FOR THE PURPOSES FOR WHICH IT WAS PREPARED AND PROVIDED.</p>	<p><b>AECOM</b>                  Royal Court, Basil Close                  Chesterfield                  Derbyshire. S41 7SL                  Telephone: (01246) 209221                  Fax: (01246) 209229                  www.aecom.com</p> <p style="text-align: center; font-size: 2em; font-weight: bold;">AECOM</p>
Designed	Drawn	Checked	Approved	Date										
-	NHW	CN	CN	11/12/2018										
		<p>Drawing Number</p> <p style="text-align: center; font-size: 1.2em;"><b>60572290-005</b></p>	<p>Rev</p> <p style="text-align: center;">-</p>											

Plot Date : 21 March 2019 11:48:34  
 File Name : \\UKED\4\FP002\UKED\4\FP002-V\IE\PROPOSALS\LANDSCAPE\LIVE\CURSITER QUARRY\05\_EXECUTION\FIGURES\19.03.19-AMENDMENTS\CURSITER QUARRY - END OF PHASE 2-19.03.19



**KEY**

- DEVELOPMENT BOUNDARY
- LIMIT OF MINERAL EXTRACTION
- CONTOURS AT 2m INTERVALS
- QUARRY FACE / STEEP SLOPE
- QUARRY FLOOR AT BASAL LEVELS
- EXISTING DUST STORE
- NEW PERMANENT SCREENING LANDFORM
- NEW TEMPORARY SCREENING LANDFORM
- DIRECTION OF WORKING
- RESTORED QUARRY FLOOR
- AREA STRIPPED OF OVERBURDEN (OB)
- PERMANENT RESTORATION
- SOIL STORAGE MOUND
- WOODLAND/WOODLAND EDGE PLANTING
- GORSE/SHRUB PLANTING
- BOUNDARY FENCE
- NEW DRYSTONE WALL
- REINSTATED 'SLAB ON END' DRYSTONE WALL
- RETAINED DRYSTONE WALL
- NEW AGRICULTURAL GATE (LOCATION TBC)

- NOTES**
1. Soil and overburden from Phase 3 stripped and moved to create new screening landform.
  2. Existing screening removed to create new screening landform.
  3. New screening landform created to profile on Figure 60572290.009.
  4. Interim quarry faces and benches are representative only.

REPRODUCED FROM ORDNANCE SURVEY DIGITAL MAP DATA © CROWN COPYRIGHT 2018. ALL RIGHTS RESERVED. LICENCE NUMBER 0100031673

Project Title <b>CURSITER QUARRY</b>	Drawing Title <b>FIGURE 2.2: END OF PHASE 2</b>	Purpose of issue					THIS DOCUMENT HAS BEEN PREPARED PURSUANT TO AND SUBJECT TO THE TERMS OF AECOM' APPOINTMENT BY ITS CLIENT. AECOM ACCEPTS NO LIABILITY FOR ANY USE OF THIS DOCUMENT OTHER THAN BY ITS ORIGINAL CLIENT OR FOLLOWING AECOM' EXPRESS AGREEMENT TO SUCH USE, AND ONLY FOR THE PURPOSES FOR WHICH IT WAS PREPARED AND PROVIDED.	<b>AECOM</b> Royal Court, Basil Close Chesterfield Derbyshire, S41 7SL Telephone: (01246) 209221 Fax: (01246) 209229 www.aecom.com
		Designed	Drawn	Checked	Approved	Date		
Client <b>ORKNEY ISLANDS COUNCIL</b>		- AECOM Internal Project No. 60572290 Scale @ A3 1:3000	NHW CN - Zone / Mileage -	CN CN -	11/12/2018	Rev -		

Plot Date : 21 March 2019 11:51:29  
 File Name : \\UKED\4\FP002\UKED\4\FP002-V\IE\PROPOSALS\LANDSCAPE\LIVE\CURSITER QUARRY\05\_EXECUTION\FIGURES\19.03.19-AMENDMENTS\CURSITER QUARRY - END OF PHASE 3-19.03.19



**KEY**

- DEVELOPMENT BOUNDARY
- LIMIT OF MINERAL EXTRACTION
- CONTOURS AT 2m INTERVALS
- QUARRY FACE / STEEP SLOPE
- QUARRY FLOOR AT BASAL LEVELS
- EXISTING DUST STORE
- NEW TEMPORARY SCREENING LANDFORM
- DIRECTION OF WORKING
- RESTORED QUARRY FLOOR
- AREA STRIPPED OF OVERBURDEN (OB)
- PERMANENT RESTORATION
- SOIL STORAGE MOUND
- WOODLAND/WOODLAND EDGE PLANTING
- GORSE/SHRUB PLANTING
- BOUNDARY FENCE
- NEW DRYSTONE WALL
- REINSTATED 'SLAB ON END' DRYSTONE WALL
- RETAINED DRYSTONE WALL
- NEW AGRICULTURAL GATE (LOCATION TBC)

- NOTES**
1. Soil and overburden from Phase 4 used to restore Phases 2 and 3 and placed in store for restoration of Phase 4.
  2. New screening landform created to profile on Figure 60572290.009
  3. Interim quarry faces and benches are representative only.

REPRODUCED FROM ORDNANCE SURVEY DIGITAL MAP DATA © CROWN COPYRIGHT 2018. ALL RIGHTS RESERVED. LICENCE NUMBER 0100031673

<b>Project Title</b> CURSITER QUARRY	<b>Drawing Title</b> FIGURE 2.3: END OF PHASE 3	<b>Purpose of issue</b>				
<b>Client</b> ORKNEY ISLANDS COUNCIL		Designed -	Drawn NHW	Checked CN	Approved CN	Date 11/12/2018
		AECOM Internal Project No. 60572290		Suitability -		
		Scale @ A3 1:3000	Zone / Mileage -			

THIS DOCUMENT HAS BEEN PREPARED PURSUANT TO AND SUBJECT TO THE TERMS OF AECOM' APPOINTMENT BY ITS CLIENT. AECOM ACCEPTS NO LIABILITY FOR ANY USE OF THIS DOCUMENT OTHER THAN BY ITS ORIGINAL CLIENT OR FOLLOWING AECOM' EXPRESS AGREEMENT TO SUCH USE, AND ONLY FOR THE PURPOSES FOR WHICH IT WAS PREPARED AND PROVIDED.

**AECOM**  
 Royal Court, Basil Close  
 Chesterfield  
 Derbyshire, S41 7SL  
 Telephone: (01246) 209221  
 Fax: (01246) 209229  
 www.aecom.com

**Drawing Number** 60572290-007

**Rev** -

Plot Date : 21 March 2019 11:56:16  
 File Name : \\UKED4\FP002\UKED4\FP002-VIE\PROPOSALS\LANDSCAPE\LIVE\CURSITER QUARRY\05\_EXECUTION\FIGURES\19.03.19-AMENDMENTS\FIG 2.4 RESTORATION PLAN 19.03.19



**KEY**

- DEVELOPMENT BOUNDARY
- CONTOURS AT 2m INTERVALS
- QUARRY FACE / STEEP SLOPE
- LAND RETAINED FOR AGRICULTURAL USE
- RESTORED QUARRY FLOOR AND BENCHES
- PERMANENT SCREENING LANDFORM
- ECOLOGICAL ENHANCEMENT AREA
- JUNIPER PLANTING
- MARGINAL POND SEED MIX
- WOODLAND/WOODLAND EDGE
- WET WOODLAND PLANTING
- WOODLAND/WOODLAND EDGE PLANTING
- GORSE / SHRUB PLANTING
- BOUNDARY FENCE
- NEW DRYSTONE WALL
- RETAINED DRYSTONE WALL
- REINSTATED DRYSTONE WALL
- REINSTATED 'SLAB ON END' DRYSTONE WALL

**NOTES:**  
**WOODLAND PLANTING:**  
 Woodland planting proposals (where appropriate) should conform with the Orkney Woodland Projects group 'A Woodland Design Guide; Selecting and establishing trees for woodland projects in Orkney'  
**SOIL:**  
 All soil handling to be undertaken in accordance with relevant British Standards (BS8601:2013 and BS3882:2015). Soil material to be relocated or used for restoration should, prior to seeding, be tested for its suitability to meet the requirements of the proposed seed mixes. Confirmation of suitability should be sought from specialist suppliers.

REPRODUCED FROM ORDNANCE SURVEY DIGITAL MAP DATA © CROWN COPYRIGHT 2018. ALL RIGHTS RESERVED. LICENCE NUMBER 0100031673

Project Title <b>CURSITER QUARRY</b>		Drawing Title <b>FIGURE 2.4: END OF PHASE 4/ RESTORATION PLAN</b>		Purpose of issue					THIS DOCUMENT HAS BEEN PREPARED PURSUANT TO AND SUBJECT TO THE TERMS OF AECOM' APPOINTMENT BY ITS CLIENT. AECOM ACCEPTS NO LIABILITY FOR ANY USE OF THIS DOCUMENT OTHER THAN BY ITS ORIGINAL CLIENT OR FOLLOWING AECOM' EXPRESS AGREEMENT TO SUCH USE, AND ONLY FOR THE PURPOSES FOR WHICH IT WAS PREPARED AND PROVIDED.	<b>AECOM</b> Royal Court, Basil Close Chesterfield Derbyshire, S41 7SL Telephone: (01246) 209221 Fax: (01246) 209229 www.aecom.com	
Client <b>ORKNEY ISLANDS COUNCIL AND INFRASTRUCTURE</b>		Designed CW	Drawn PT	Checked JD	Approved CN	Date 15.02.19	AECOM Internal Project No. 60572290	Suitability -			
		Scale @ A3 1:3000						Zone / Mileage -			
		Drawing Number <b>60572290-008</b>		Rev -							

### **Appendix 3.**

01. The planning permission hereby granted is valid only until 31 August 2050, by which time operations in relation to minerals extraction shall be discontinued and the land restored in accordance with restoration and aftercare proposals detailed under conditions 57 to 66.

Reason: To reserve the right of control by the Planning Authority to ensure restoration of the land with the minimum of delay in the interests of amenity.

02. The development hereby permitted must be carried out in strict accordance with application details received by the Planning Authority on 2 April 2019, including those contained in the Environmental Impact Assessment Report, dated 26 March 2019, and further information submitted, dated 22 August 2019, and the list of 'Plans and Drawings' in the table contained in Schedule 1 of this decision notice, together with other details which may be subsequently approved and the following conditions, which at all times take precedence.

Reason: To ensure that the development is carried out in accordance with the application details.

03. No Minerals extraction or other excavation shall take place outside the limit of extraction shown in the following drawings:

- FIGURE 2.1: END OF PHASE 1, dated 11.12.18.
- FIGURE 2.2: END OF PHASE 2, dated 11.12.18.
- FIGURE 2.3: END OF PHASE 3, dated 11.12.18.
- FIGURE 2.4: END OF PHASE 4/RECORDED AND REINSTATED, dated 15.02.19.

Reason: To ensure that the development is carried out in accordance with the application details.

04. The site shall be worked in phases and restored in accordance with Figures 2.1 to 2.4, as listed in condition 03, and the details provided in the supporting statement, dated 29 March 2019 and the Environmental Impact Assessment Report Volume 2, dated 26 March 2019, and no mineral extraction shall commence in a phase until the preceding phase has been worked out, unless otherwise agreed, in writing, by the Planning Authority.

Reason: To ensure that the development is carried out in accordance with the application details.

05. No mineral shall be extracted from below a depth of 2.5 metres above ordnance datum.

Reason: To protect the groundwater aquifer from saltwater intrusion and quarry working runoff.



06. With the exception of the laboratory, weighbridge and site office which are established at the site, notwithstanding the provisions of Part 16, Class 55 of the Town and Country Planning General Permitted Development Scotland Order 1992 (as amended), or any superseding or subsequent order, no fixed plant or buildings shall be erected within the application site without the prior grant of planning permission by the Planning Authority.

Reason: To reserve the rights of control by the Planning Authority in the interests of amenity.

### **Implementation**

07. Prior to the commencement of development in each phase, the operator shall give no less than twenty-one days' notice, in writing, of the intention to commence the development in that phase.

Reason: To ensure that the development is carried out in accordance with the application details.

### **Groundwater Monitoring**

08. Prior to the commencement of development, the operator shall submit, for the prior written approval of the Planning Authority, a groundwater monitoring plan. The plan shall set out the methodology for monitoring groundwater at the site. The plan, once approved, shall be implemented and retained for the duration of the development. The data produced shall be submitted to the Planning Authority on an annual basis as agreed and used to inform the preparation of the working, restoration and aftercare plan.

Reason: To prevent pollution to the water environment and ensure mitigation and monitoring measures identified in the Environmental Impact Assessment Report are fully addressed.

09. Commencing upon the approval of the groundwater monitoring plan, referred to in planning condition 08, the operator shall submit to the Planning Authority, on a twelve-monthly rolling basis, ground water monitoring data. The monitoring data shall be provided together with an explanatory report which provides an assessment of the results obtained. If, in the opinion of the Planning Authority, the data demonstrates a reduction in quality of the groundwater arising from the development, this shall be communicated in writing to the operator. Upon receipt, the operator shall submit to the Planning Authority for its written approval, a scheme of mitigation to overcome this risk. Upon such approval, the scheme shall be implemented by the operator and retained for the duration of the development.

Reason: To prevent pollution to the water environment and ensure mitigation and monitoring measures identified in the Environmental Impact Assessment Report are fully addressed.

10. Prior to working of mineral in any one phase to a maximum depth of 2.5 metres above ordnance datum (AOD), the operator shall submit for the prior written approval of the Planning Authority either its assessment to demonstrate that groundwater will not be encountered to this depth or a dewatering plan. Until such written approval is obtained, an interim working limit of 5 metres AOD is imposed in each phase.

Reason: To protect the groundwater aquifer from saltwater intrusion and quarry working runoff and ensure mitigation and monitoring measures identified in the Environmental Impact Assessment Report are fully addressed.

### **Surface Water**

11. Prior to the commencement of development, the operator shall submit for the prior written approval of the Planning Authority a method statement for the construction of screening bunds and earthworks associated with the development. The method statement will set out the measures required to avoid potential effects of the operations on the surface water environment, expanding upon the measures set out within Section 6.8.2 of the approved Environmental Impact Assessment Report, dated 26 March 2019. Following approval, the method statement shall be implemented in full, maintained and retained for the duration of the development.

Reason: To avoid any potential effects on the water environment during this operation.

### **Landscaping**

12. Prior to the commencement of any works on site, details of the landscape planting and fencing shall be submitted to, and approved in writing by, the Planning Authority. Such a scheme shall be in accordance with the landscaping plan and embedded mitigation set out in Table 2.1 of the Environmental Impact Assessment Report and shall include:

- The species, size, number and location of all trees and shrubs to be planted and the measures to be taken for their protection from weeds and fauna. Species used should take into account advice provided by Development and Marine Planning, Environment Officer in response to the application in November 2019.
- Details of dry-stone dyke field boundaries to be restored.
- Details of the maintenance to be undertaken for the life of the development.
- A timetable for implementation.

Thereafter landscaping shall be implemented and maintained in accordance with the approved scheme. Any trees which die shall be replaced in the following planting season with trees of such size and species as may be approved by the Planning Authority.

Reason: To ensure the site is landscaped appropriately with species appropriate to the locality and in the interests of visual amenity.

## **Archaeology**

13. Prior to the commencement of development, the operator shall submit for the written approval of the Planning Authority an archaeological Written Scheme of Investigation (WSI). The WSI should detail the investigation and post investigation assessment to be undertaken in advance of minerals extraction, including a programme of hand-dug and/or machine cut and hand cleaned trial trenching to be undertaken; the provision made for analysis, publication and dissemination of results and archive deposition has been secured. Thereafter the approved scheme shall be implemented in full and completed to the satisfaction of the Planning Authority in advance of ground preparation, landscape mound creation or minerals extraction taking place in Phases 2 to 4.

Reason: To safeguard and keep a record of the historic environment.

14. Prior to the removal of boundary stone slabs, a photographic record of these features will be made in accordance with a scheme which shall have previously agreed, in writing, with the Planning Authority. That scheme shall include the provision of photographic images to the Planning Authority within an agreed timeframe.

Reason: To safeguard and keep a record of the historic environment.

## **Ecology**

15. Prior to the commencement of development, the operator shall submit to the Planning Authority for its written approval a scheme for the installation of a kestrel box on the northern quarry face. The scheme once approved shall be implemented in full prior to development taking place and maintained and retained for the duration of the development.

Reason: To protect nesting birds in vegetation in accordance with the Wildlife and Natural Environment (Scotland) Act 2011 (as amended).

## **Operation**

16. Annually, beginning with the date of commencement or within four weeks of a request by the Planning Authority, a topographical survey of the red line area (shown in Figures 2.1 to 2.4) at a minimum of 10 metre grid spacing shall be supplied in electronic format to the Planning Authority showing all levels related to Ordnance Datum, showing also the relationship with the levels of immediately neighbouring land indicating the unworked, operational and restored areas.

Reason: To ensure that the development is carried out in accordance with the application details.

17. No later than 14 April in each year, the operator shall provide the Planning Authority with written confirmation of the total quantity of mineral extracted and exported from the site in the preceding calendar year and a record of the number of associated vehicle movements and weight providing carriage from the site.

Reason: To monitor the rate of extraction and ensure that the development is carried out in accordance with the application details, being a date 14 days following respective financial year end reporting.

18. At the reasonable request (28 days) of the Planning Authority, the operator shall provide a schedule which details the total quantity of minerals exported from site daily over the preceding 12 months.

Reason: To monitor the rate of extraction and ensure that the development is carried out in accordance with the application details.

### **Operational Environmental Control**

19. Extraction and restoration operations shall progress sequentially in accordance with the plans in approved Figures 2.1 to 2.4, dated 15 February 2019, and the sections in approved Figure 2.5: CROSS SECTIONS, dated 11 December 2018. The Planning Authority shall be notified, in writing, within 7 days of:

- Completion of extraction in any one phase.
- Completion of restoration in any one phase.

Reason: To ensure restoration is undertaken in accordance with the approved details and in a satisfactory manner.

### **Vegetation Clearance**

20. No works to, or removal of, vegetation suitable for common breeding birds shall take place between 1 March and 31 August inclusive, unless a competent ecologist has undertaken a detailed check of vegetation for active birds' nests immediately before (within 24 hours) the works commence and provided written confirmation that no birds will be harmed and/or that there are appropriate measures in place to protect nesting bird interest on site. Any such written confirmation should be submitted to the Planning Authority within 3 days of such works commencing.

Reason: To protect nesting birds in vegetation in accordance with the Wildlife and Natural Environment (Scotland) Act 2011 (as amended).

21. Where works to quarry faces commence or expand in extent during the breeding season, 1 March and 31 August inclusive, the operator shall carry out an inspection of the relevant quarry faces for breeding birds. Where breeding birds are identified, the operator shall seek the further opinion of a competent ecologist and those works shall not commence without the prior written approval of the Planning Authority to detail the extent of quarry face which will be left undisturbed by blasting and extraction operations until fledging has been completed and any nests vacated.

Reason: To protect nesting birds in vegetation in accordance with the Wildlife and Natural Environment (Scotland) Act 2011 (as amended).

## **Soil Stripping**

22. Soil stripping and landform construction works shall be limited to a maximum of 8 weeks in any calendar year. The only exception shall be two individual years within the lifetime of the consent, at the outset of Phases 2 and 3 respectively. Prior to the commencement of either of those individual years, full details of the anticipated timescale shall be submitted to, and agreed in writing by, the Planning Authority, and thereafter carried out in accordance with those approved details.

Reason: In the interest of safeguarding local amenity.

23. The quarry operator shall keep a record of each day in which any soil stripping or landform construction activities take place and, on written request within 7 days, provide that record to the Planning Authority.

Reason: In the interest of safeguarding local amenity.

24. Soils and overburden shall only be stripped from those areas where it is intended to extract mineral within the next phase where bulk earthworks are immediately programmed.

Reason: In the interests of amenity.

25. No soils shall be stripped, moved or placed unless moisture content is in accordance with industry good practice in relation to earth working. During soil stripping or placement, machinery shall be routed so as to avoid compaction of such soils.

Reason: To safeguard the soil resource for restoration purposes.

26. Topsoil stripped in the course of working shall be directly placed for use in restoration or stored in bunds and seeded until used in site restoration.

Reason: To safeguard the soils resource for restoration purposes.

27. All topsoil, and sufficient subsoil so that importation of materials is not required for any subsequent restoration works, shall be permanently retained on the site for subsequent use in restoration.

Reason: To safeguard the soil resource for restoration purposes.

28. No plant or vehicles shall cross any area of unstripped topsoil or subsoil except where such trafficking is essential and unavoidable for purposes of undertaking permitted operations. No part of the site shall be excavated or traversed or used for a road or for storage of excavated material deposits, until all available topsoil and subsoil has been stripped from that part. The exception is that topsoils may be stored on like topsoils and subsoils may be stored on like subsoils.

Reason: To safeguard the soils resource for restoration purposes.

29. All topsoil and subsoil shall be stripped to their full depths and, where not used in the formation of an approved landscape screen shown on Figures 2.1 to 2.5, shall be stored temporarily in separate mounds which do not overlap and which:

- For topsoil storage mounds should not exceed 3 metres in height and for subsoil storage mounds should not exceed 5 metres in height unless otherwise approved, in writing, by the Planning Authority.
- Shall be constructed with a minimum of soil compaction necessary to ensure stability and so shaped as to avoid collection of water in surface undulations.
- Shall not be traversed by heavy vehicles or machinery except where essential for purposes of mound construction or maintenance.
- Shall not be subsequently moved or added to until required for restoration unless otherwise agreed, in writing, by the Planning Authority.
- Shall have a minimum 3 metre stand-off, undisturbed around each storage mound.
- Shall only store topsoil on like textured topsoil and subsoil on like textured subsoils.

Reason: To safeguard the soil resource.

30. Once formed, all mounds in which topsoil and subsoil, but excluding weathered rock material, are to be stored for more than 6 months, or over the winter period, shall be grass seeded in accordance with a specification previously agreed, in writing, by the Planning Authority. Mounds shall be managed throughout the period of storage to maintain satisfactory vegetation cover, carry out weed control and avoid erosion and waterlogging.

Reason: To safeguard the soil resource.

### **Transport**

31. The total quantity of materials exported from the site within any 12-month rolling period shall not exceed 100,000 tonnes.

Reason: To ensure the level of traffic accessing the site from and to the public highway does not exceed that associated with the pre-existing operation of the site.

32. No rock or aggregates shall be imported to the site for stockpiling, processing or any other purpose without the prior grant of planning permission.

Reason: To ensure the level of traffic utilising the public highway does not exceed that associated with the pre-existing operation of the site.

## Hours of Working

33. No extraction, processing, handling or export of mineral shall take place other than within the following hours of operation:

- 06:30 to 19:00 on Mondays to Fridays.
- 08:00 to 13:00 on Saturdays.
- Not at all on Sundays and Public Holidays.

The exception is for specific infrastructure works, where working outwith the stated hours of operation are essential. For the avoidance of doubt, such circumstances may include works scheduled around the operation of lifeline services including ferry terminals or the airport, where working could not be programmed to correspond within operational hours of the quarry. Such exceptional circumstances shall be notified, in writing, to the Planning Authority and all neighbouring properties within 500 metres of the site boundary not less than 5 days in advance of such works. Such circumstances may also include emergency works. In the event of emergency works occurring, this shall be notified to the same parties within 24 hours of any such occurrence.

Reason: In the interest of safeguarding the amenity of the local area.

34. No blasting shall take place other than within the following hours of operation:

- 11:00 to 15:00 on Mondays to Fridays.
- Not at all on Saturdays, Sundays, Public Holidays and Armistice Day.

Reason: In the interest of safeguarding the amenity of the local area.

35. The use of breaking or pecking plant and machinery shall only take place between the following hours of operation:

- 10:00 to 16:00 on Mondays to Fridays.
- Not at all on Saturdays, Sundays and Public Holidays.

Reason: In the interest of safeguarding the amenity of the local area.

36. The stripping of soils and construction of screening landform shall take place only between the following hours of operation:

- 08:00 to 18:00 on Mondays to Fridays.
- 08:00 to 13:00 on Saturdays.
- Not at all on Sundays, Public Holidays.

Reason: In the interest of safeguarding the amenity of the local area.

37. No external lighting is permitted outwith the hours of operation as permitted by condition 33. All lighting within the site shall be designed and positioned to illuminate only those areas where lighting is operationally required, avoiding light spill outwith the site and minimising glare. All external lighting used shall employ energy saving technologies.

Reason: In the interest of safeguarding the amenity of the local area.

### **Noise**

38. Prior to the commencement of development, the operator shall submit to the Planning Authority, for its written approval, a noise and vibration plan. The plan will set out how noise and vibration will be minimised for the duration of the development. Following approval, the plan will be implemented and applied for the duration of the development.

Reason: In the interest of amenity.

39. The noise levels at any noise sensitive properties used as dwellings during soil stripping and screening landform construction activities shall not exceed 70dB Laeq, 1hour (free field), unless otherwise agreed, in writing, by the Planning Authority.

Reason: In the interest of safeguarding the amenity of the local area.

40. The noise level at any noise sensitive properties used as dwellings during normal day to day operation of the quarry shall not exceed 45dB Laeq, 1hour (free field), unless otherwise agreed, in writing, by the Planning Authority.

Reason: In the interest of safeguarding the amenity of the local area.

41. Within 21 days from receipt of a written request from the Planning Authority, the operator shall, at its expense, employ an independent qualified acoustic consultant to assess the noise impact from the mineral working upon noise sensitive properties used as dwellings. The scope, methodology and timescales for delivery of the noise assessment shall be agreed, in writing, with the Planning Authority before assessment begins. The assessment shall include all data collected for the purposes of undertaking the compliance measurements. Thereafter the noise assessment shall be completed in accordance with the agreed scope and shall be presented to the Planning Authority within the timescales for delivery unless otherwise agreed, in writing, by the Planning Authority.

Reason: In the interest of safeguarding the amenity of the local area.

42. Upon receipt of the independent consultant's noise assessment by the Planning Authority required by condition 41, including all noise measurements and any audio recordings, where the Planning Authority is satisfied of an established breach of the noise limits set out in the conditions 39 and/or 40, and upon notification by the Planning Authority, in writing, to the quarry operator, the quarry operator shall within 21 days propose a scheme of mitigation for the written approval of the Planning Authority. The scheme of mitigation shall be designed to mitigate the breach and to prevent its future recurrence. This scheme shall specify the timescales for



implementation. The scheme shall be implemented as approved by the Planning Authority and according to the timescales within it. The scheme as implemented shall be retained thereafter unless otherwise agreed, in writing, by the Planning Authority.

Reason: In the interest of safeguarding the amenity of the local area.

43. All plant, machinery and vehicles used on any part of the site shall only be operated when fitted with effective noise attenuation equipment which shall be regularly maintained. Where earthmoving plant is operating in proximity to residential properties in relation to soil stripping or landform construction, non-audible reverse warning alarm systems shall be used unless otherwise agreed in writing by the Planning Authority following submission of a risk assessment by the developer. Any drill rigs operating at the quarry should either have an acoustic barrier installed, which would be suspended from the mast guard or the rig exhaust should be replaced with a silenced version. Plant and machinery shall not be left to idle when not in use.

Reason: In the interest of safeguarding the amenity of the local area.

44. Unless otherwise agreed, in writing, with the Planning Authority, the processing of stone extracted from the site shall only take place in a worked-out unrestored area of Phase 1 area, and never within 150 metres of any residential dwelling.

Reason: In the interest of safeguarding the amenity of the local area.

### **Blasting**

45. Prior to any blasting activities commencing, the operator shall provide for the written approval of the Planning Authority a scheme of Blast Level Monitoring, which shall include fixed monitoring location(s) and portable/deployable monitoring equipment. The scheme shall include details of the monitoring equipment proposed, the installation methods and calibration procedures to be implemented. The scheme shall also set out measures taken to seek coordination with blasting undertaken at Heddle Quarry located to the west. The scheme may include variation of the fixed monitoring locations over time to reflect the development phases of the quarry. Subject to the written agreement of any property owner or occupier, the monitoring locations shall, as agreed with the Planning Authority, be maintained throughout the operational life of the quarry. Data from the monitoring locations shall be made available to the Planning Authority within 7 days of any request in writing.

Reason: In the interest of safeguarding the amenity of the local area.

46. The use of any explosives for blasting shall be limited to a maximum of 24 events in any rolling 12-month period. No more than two blasts shall be carried out during authorised hours in any one week.

Reason: In the interest of safeguarding the amenity of the local area.

47. All residential properties located within 0.5 kilometres of the permitted site shall be given not less than 24 hours prior notification of the intention to undertake a blast at the permitted site. The means of communication with local residents shall be agreed, in writing, with the Planning Authority prior to the first blast taking place in accordance with planning permission.

Reason: In the interest of safeguarding the amenity of the local area.

48. Any blasting undertaken at the site shall not exceed 6mm/s Peak Particle Velocity at any sensitive property used as a dwelling for no more than 90% of events and never exceed 9mm/s Peak Particle Velocity. The operator must monitor vibration levels and air over pressures resulting from blasting and must maintain a data base of results which can be made available for inspection by the Planning Authority.

Reason: In the interest of safeguarding the amenity of the local area.

### **Dust Control**

49. Prior to the commencement of development, the operator shall submit a Dust Management Plan to the Planning Authority for its prior written approval setting out measures to control dust emissions at the site. The measures shall include all those set out within Appendix 11.1 Volume 4 of the Environmental Impact Assessment report, submitted as part of the planning application. The Dust Management Plan so approved shall be implemented in full, maintained and shall be updated in accordance with a plan submitted to the Planning Authority for its written approval every 5 years from the date of commencement of development.

Reason: In the interest of safeguarding the amenity of the local area.

### **Clean Wheels**

50. The operator shall submit a scheme for the prior written approval of the Planning Authority, detailing measures put in place on site to clean wheels or to maintain wheels in a clean condition, to prevent the carriage of mud and debris onto the public highway. Those measures when implemented shall be used, maintained and retained as approved for the duration of the permitted operation.

Reason: In the interest of highway safety.

51. All vehicles involved in the transport of minerals from the site shall be securely sheeted so as to ensure the load is wholly enclosed so that no material may be spilled onto the public highway.

Reason: In the interest of highway safety.

## **Drainage**

52. All water to be discharged from the site shall be passed through an efficient silt trap/settlement pond before entering a water course. All necessary precautions shall be taken to prevent the pollution of adjoining water courses and ground waters as a result of operations on site.

Reason: To safeguard surface and groundwater resources from pollution.

53. All water drained from the site should pass through the existing drainage outfall into the Bay of Firth. No water should drain directly into other water courses without prior written agreement with the Planning Authority in consultation with SEPA.

Reason: To provide adequate protection to other water courses and the ecology within these water courses.

54. Any facilities for the storage of oils, chemicals or fuels on the site shall be sited on an impervious surface with bund walls. The bunded areas shall be capable of containing 110% of the container or containers total volume and shall enclose within their curtilage all fill and draw pipes, vents, gauges and sight glasses. There must be no drain through the bund floor or walls. The bund drainage system shall be sealed with no discharge to any watercourse, land or underground strata. Associated pipework shall be located above ground and protected from accidental damage. All filling points and tank overflow pipe outlets shall be detailed to discharge downwards into the bund.

Reason: To safeguard surface and groundwater resources from pollution.

55. All refuelling and servicing of vehicles and plant will be carried out in a designated bunded area with an impermeable base, situated at least 50 metres from any watercourse, with the single exception of the crushing and screening plant which is based in the quarry floor.

Reason: To safeguard surface and groundwater resources from pollution.

56. Site compounds, access tracks and other works areas will be of the minimum size required for the safe execution of the works. Any site compounds outside the existing quarry will be fenced to prevent encroachment of personnel, machinery or materials onto adjacent habitats.

Reason: To safeguard surface and groundwater resources from pollution and the local nature conservation environment.

## Restoration

57. The site shall be restored in a phased manner in accordance with Figures 2.1 to 2.5, including the 'RESTORATION PLAN' in Figure 2.4, and the methodology outlined in Sections 2.1, 2.2, 2.4 and 2.5 of the Environmental Impact Assessment Report.

Reason: To ensure restoration is undertaken in accordance with the approved details.

58. Unless otherwise agreed, in writing, by the Planning Authority, on completion of extraction overburden and soils shall be placed and graded to ensure that:

- After replacement of topsoil and subsoil and after settlement, the contours conform with those of the agreed restoration plan.
- There is satisfactory site and surface drainage, the land being free from ponding and capable, if necessary, of receiving effective artificial under-drainage.
- Agricultural machinery is not unduly restricted, erosion is avoided.
- Gradients enable agricultural operations to be undertaken.

Reason: To ensure restoration is undertaken in accordance with the approved details.

59. Prior to the placement of topsoil, any non-soil making material or rock, boulder or large stone greater than 200 millimetres in any direction shall be removed from the loosened surface and restoration area before topsoil is laid.

Reason: To ensure restoration in accordance with the approved details is undertaken in a satisfactory manner.

60. Following the replacement of overburden, the topsoil shall be carefully and evenly re-spread to a minimum settled depth of not less than 500 millimetres.

Reason: To ensure restoration is undertaken in accordance with the approved details and in a satisfactory manner.

61. Following the replacement of the soils, the re-spread topsoil shall be rendered suitable for agricultural cultivation by loosening and ripping:

- To provide loosening equivalent to a single pass at a tine spacing of 0.5 metres or closer.
- To the half depth of the topsoil.

Non-soil making material or rock or boulder or larger stone lying on the loosened topsoil surface and greater than 150 millimetres in any dimension shall be removed from the site.

Reason: To ensure restoration is undertaken in accordance with the approved details and in a satisfactory manner.

## **Aftercare**

62. At least 6 months in advance of the implementation of restoration in each phase, a scheme of aftercare shall be submitted for the prior written approval of the Planning Authority. The aftercare period for each restored phase shall commence on a date to be agreed, in writing, with the Planning Authority. The scheme shall outline the steps to be taken, and the period during which they are to be taken, and who will be responsible for taking those steps, to bring the land to the required standard and shall include the provision for a field drainage system and an annual meeting. The scheme shall set out how the restored landform will be improved and managed for a 5 years period following the commencement of the aftercare period.

Reason: To ensure the restored site is managed satisfactory manner to provide for future agricultural use.

63. Before 28 February of every year during the aftercare period, a report shall be submitted by the operator to the Planning Authority, recording the operations carried out on the restored land in the preceding 12 months and setting out the intended operations for the next 12 months.

Reason: To ensure the restored site is managed satisfactory manner to provide for future agricultural use.

64. Before 31 May of every year, unless the Planning Authority agree otherwise, in writing, a site meeting shall be held between the operator and the Planning Authority to review the scheme of working, restoration and aftercare. The discussions shall include agreement of the proposals for managing and land in accordance with the rules of good husbandry for the forthcoming 12 months, and the record of aftercare operations carried out on the land in the previous 12 months. This meeting shall include all interested parties and technical advisors as required and be attended by the person(s) responsible for undertaking the aftercare operations.

Reason: To ensure restoration is undertaken in accordance with the approved details and in a satisfactory manner.

65. Throughout the working life of the site, a copy of this planning permission and all approved documentation shall be made available on site for inspection during normal working hours. Their contents and existence should be made known to all operatives likely to be affected by matters covered by them.

Reason: To ensure the operation of the site place in accordance with the approved details.

66. Unless otherwise agreed, in writing, with the Planning Authority, restoration operations in relation to the area hereby permitted shall be completed within two years of cessation of extraction in the permitted area. The date of cessation of final extraction shall be notified to the Planning Authority, in writing, within 7 days of completion of extraction.

Reason: To ensure restoration is undertaken in accordance with the approved details and in a satisfactory manner.

## **Premature Cessation**

67. In the event of the cessation of the winning and working of minerals from within the area hereby permitted for a period in excess of 18 months, the operator shall, within 3 months, submit to the Planning Authority for its approval, a revised scheme of restoration. Following approval, that revised scheme shall be implemented and completed in full accordance with the scheme.

Reason: To ensure the site is restored in a satisfactory manner in a reasonable timescale.

## **Financial Provision**

68. No development shall commence until:

68.1. Full details of a bond or other financial provision to cover all of the landscaping and embedded mitigation and the methodology outlined in Sections 2.1, 2.2, 2.4 and 2.5 of the Environmental Impact Assessment Report, to be confirmed in advance of each of the consecutive phases specified in Figures 2.1 to 2.5, have been submitted to, and approved in writing, by the Planning Authority.

68.2. Confirmation in writing by a suitably qualified independent professional that the amount of financial provision proposed under part 68.1 above is sufficient to meet the full estimated costs of all landscaping and embedded mitigation, as well as associated professional costs, has been submitted to, and approved in writing by, the Planning Authority.

68.3. Documentary evidence that the bond or other financial provision approved under parts 68.1 and 68.2 above is in place has been submitted to, and confirmation in writing that the bond or other financial provision is satisfactory has been issued by, the Planning Authority.

Thereafter, the developer shall:

68.4. Ensure that the bond or other financial provision is maintained throughout the duration of this permission.

68.5. Pay for the bond or other financial provision, to be subject to review five years after the commencement of development and every five years thereafter until cessation of all minerals operations and the site restored.

Each review shall be:

68.6. Conducted by a suitably qualified independent professional.

68.7. Published within three months of each five-year period ending, with a copy submitted upon its publication to the Planning Authority.

68.8. Approved in writing by the Planning Authority without amendment or approved in writing by the Planning Authority following amendment to their reasonable satisfaction.

Where a review approved under part 68.8 above recommends that the amount of the bond or other financial provision should be altered (be that an increase or decrease) or the framework governing the bond or other financial provision requires to be amended, the quarry operator shall do so within one month of receiving that written approval, or another timescale as may be agreed, in writing, by the Planning Authority, and in accordance with the recommendations contained therein.

Reason: To ensure financial security for the cost of the restoration of the site to the satisfaction of the Planning Authority.

### **Liaison Group**

69. A Cursiter Quarry Public Liaison Group should be established, created by Firth and Stenness Community Council or other public or community organisation. The terms of reference of the Group shall be submitted to, and agreed in writing by, the Planning Authority, and shall include:

- Appointment of a Chair.
- A mechanism for queries or comments to be made to the quarry operator on at least two occasions on any annual basis.
- A visit to the quarry, by no more than three representatives of the Group, once on any annual basis, starting on the date that the terms of reference are agreed in writing by the Planning Authority.

Thereafter, a record of all queries/comments made, responses to those queries/comments, and visits carried out, shall be made by the quarry operator and/or the Group, and shall be submitted to the Planning Authority.

Reason: To facilitate community engagement with the quarry operator using a formal mechanism.