Technical Memorandum

04 December 2024

To	Scott Hackney	**Contact No.**	0493 058579
Copy to	N/A	**Email**	angus.mckenzie-mcharg@ghd.com
From	Angus McKenzie-McHarg	**Project No.**	12655941
Project Name	Norfolk Island - Young's Quarry Extraction Assistance		
Subject	Safe Work Method Statement		

1. Introduction

GHD has been engaged by Norfolk Island Regional Council to produce a Safe Work Method Statement (SWMS) to assist with the safe recovery of blasted rock from Young's Quarry, Norfolk Island. The works covered by the SWMS includes the establishment of safe site access and egress, removal of overheight and loose material, excavation into the rock muckpile, removal of large rocks which are perched near the crest and coordinated traffic management to and from the site. It does not cover the full recovery of the blasted rock, the SWMS and this accompanying memorandum are primarily focussed on making the blasted area safe for standard quarry operations to continue.

A desktop assessment of the risks associated with the project has been used to form the initial SWMS document however it is intended to be a 'live' document that will be regularly reviewed and updated to reflect changing conditions or reflect increased knowledge of the site.

Figure 1 depicts the location of the blasted material. Approximately 13.5 Kbcm was successfully blasted in August 2024.

Figure 1 Approximate blast zone (highlighted)

1.1 Purpose of this memorandum

The purpose of the memorandum is to provide a suggested methodology, supporting activities, highlight key risks and provide a recommended SWMS to make the blast area safe for the future recovery of the blasted rock. This memorandum is intended to assist the preferred earthworks contractor/s who would be responsible for the full rock recovery program.

The memorandum will focus on discussing the steps which would inform the Safe Work Method Statement (SWMS) which is the practical tool to provide guidance on establishing a safe blast work area enabling the future safe extraction of the recently blasted rock at the quarry. The memorandum will outline different stages of the recovery works, including:

– Stage 1 – Project preparation
– Stage 2 – Safe access and egress
– Stage 3 – Removal of overheight,
– Stage 4 – Work into muckpile, development of safe work bench
– Stage 5 – Removal of large rocks to Jetty Road ‘drop zone’
– Stage 6 – Final inspection of muckpile
– Stage 7 – Preparation of site for quarry rock removal, Jetty Road clearance, secondary rock breakage

2. Scope and limitations

2.1 Scope of work

The complete scope of works has been defined as:

– Draft SWMS memorandum (this document), including the provision of accompanying descriptive drawings
– Draft SWMS (Appendix 1 of this memorandum)
– Initial site visit and discussion on the draft memorandum and SWMS
– Incorporation of required changes to both the memorandum and the SWMS
– Issue of the final memorandum and SWMS to NIRC
– Subsequent site visits when required to sight progress against plan

2.2 Limitations

This memorandum: has been prepared by GHD for Norfolk Island Regional Council and may only be used and relied on by Norfolk Island Regional Council for the purpose agreed between GHD and Norfolk Island Regional Council as set out in section 1.1 of this memorandum.

GHD otherwise disclaims responsibility to any person other than Norfolk Island Regional Council arising in connection with this memorandum. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this memorandum were limited to those specifically detailed in the memorandum and are subject to the scope limitations set out in the memorandum.

The opinions, conclusions and any recommendations in this memorandum are based on conditions encountered and information reviewed at the date of preparation of the memorandum. GHD has no responsibility or obligation to update this memorandum to account for events or changes occurring subsequent to the date that the memorandum was prepared.

The opinions, conclusions and any recommendations in this memorandum are based on assumptions made by GHD described in this memorandum (refer section(s) 3 of this memorandum). GHD disclaims liability arising from any of the assumptions being incorrect.

The SWMS document has been developed by GHD for the Norfolk Island Regional Council (NIRC). Responsibility for its implementation is the responsibility of NIRC and any liability rests with NIRC.

GHD has prepared this memorandum on the basis of information provided by Norfolk Island Regional Council and others who provided information to GHD (including Government authorities), which GHD has not independently verified or checked beyond the agreed scope of work. GHD does not accept liability in connection with such unverified information, including errors and omissions in the memorandum which were caused by errors or omissions in that information.

3. Assumptions

The memorandum will be based on the following assumptions:

– GHD will prepare the SWMS. The responsibility for its implementation lies with NIRC.
– GHD has relied on the following information provided to them by NIRC:
  - Norfolk Island Development Application
  - Ground survey and topographical information supplied by NIRC
  - Indicative plant and equipment available on site
– Site / face inspections outlined in the Notice of Decision on Development Application i.e. “post blast and prior to commencement of Phase 4 (rock breaking, loading and hauling activities) of the development, a council engineer is to assess the cliff face for structural stability and safety”, have been undertaken and are seen as acceptable for inclusion and inferences to be drawn upon.
– Written notice has been provided by NIRC for the project to progress to Phase 4 of the Notice of Decision on Development Application.

4. Staging Sequence

GHD has put forward seven sequential stages so as to achieve the safe recovery of the blasted rock. The following sections discuss each stage of the rock recovery process, from project preparation to removal of the rock and breakage of any secondary material. For each stage, relevant considerations and steps are highlighted, risks are discussed, with key activities informing the SWMS.

4.1 Stage 1 – Project preparation

Prior to the commencement of any work, it is essential that a suitable level of project preparation has been undertaken. Preparation includes the generation and communication of all safety documentation ensuring project team members involved in works are familiar with their obligations. Training, competency and any experience records of operators need to be verified, equipment needs to be suitable for the task with appropriate records kept for the full project duration.

Emergency procedures should also be outlined with clear explanations and associated hierarchy of responsibilities, such as who to contact in case of an emergency, first aid, AED etc.

As the quarry is located next to the Cascade jetty and shares the access road that is open to the public it is paramount that all care is taken to exclude anyone that might be in the vicinity of the Jetty and quarry when a number of the latter steps in the recovery operations are being completed, such as the removal of loose material from the exposed cliffs. This is to avoid any injuries or damage to people or property. The quarry will also have to schedule works in consultation with all relevant parties that rely on access to jetty for operational needs such as incoming shipments, departures or emergencies.

Operations are to comply with the Notice of Decision on Development Application document issued by NIRC, summarised below and attached as Appendix A:

- Breaking, loading and haulage of blasted rock to the stockpile site at the Norfolk Island Airport Development Precinct
- Hours of operation of the development are limited to:
  - 7am – 5pm Mondays to Fridays inclusive
  - 8am – 1pm Saturday
  - No works on Sundays or public holidays unless it is safer to transport explosives at this time or emergency works conducted to prevent injuries or damage to property or environmental harm
- Rock breaking, loading and hauling activities at the Youngs Road quarry site must not commence prior to 9am
- Operating hours might be adjusted to minimise impacts or if it is safer to do so in accordance with other Conditions
- Post blast and prior to commencement of Phase 4 (rock breaking, loading and hauling activities) of the development, a council engineer is to assess the cliff face for structural stability and safety
- Not to proceed to Phase 4 until written confirmation from the Council has been received
- Access gate to the Youngs Road quarry site must be closed and locked at the end of every workday
- Clear vehicular access to the access gate to the Youngs Road quarry site must be maintained at all times

4.2 Stage 2 – Safe access and egress

Cascade Road is the main road that connects the quarry to the town, along with other surrounding rural properties. Care should be the primary access by the quarry operators and quarry equipment when accessing and leaving the site via this shared road.

After sighting the aerial imagery of the blasted rock[1], the historical ramp access on the eastern extent of the quarry contains an amount of loose blasted material restricting access with some additional material posing a drop risk, sitting on the quarry crest above. Due to these risks and the likelihood of falling material to be encountered in this area during the initial stages of the works program, the eastern ramp access should have hard barriers installed to prevent access to the area, shown in Figure 2.

As the traditional eastern access will be closed, it is proposed that access to the works area be made from behind the neighbouring property to the south. The access will need to be suitable for tracked equipment and light vehicles with narrow sections and steep grades requiring immediate attention. Vegetation clearing is expected along with the potential installation of a rock road base to re-establish low-risk access.

An assessment of the weather conditions must be made prior to undertaking work and further inspections of the site access and works area are recommended following significant rainfall events which may have the potential to displace loose material. It is also suggested that these activities only be conducted during daylight hours.

Once safe access has been established to the works area, the new crest of Bench 2 (as seen in Figure 2 below) will need to be physically inspected to gain a visual appreciation for the amount of loose material that can be safely accessed from bench 2.

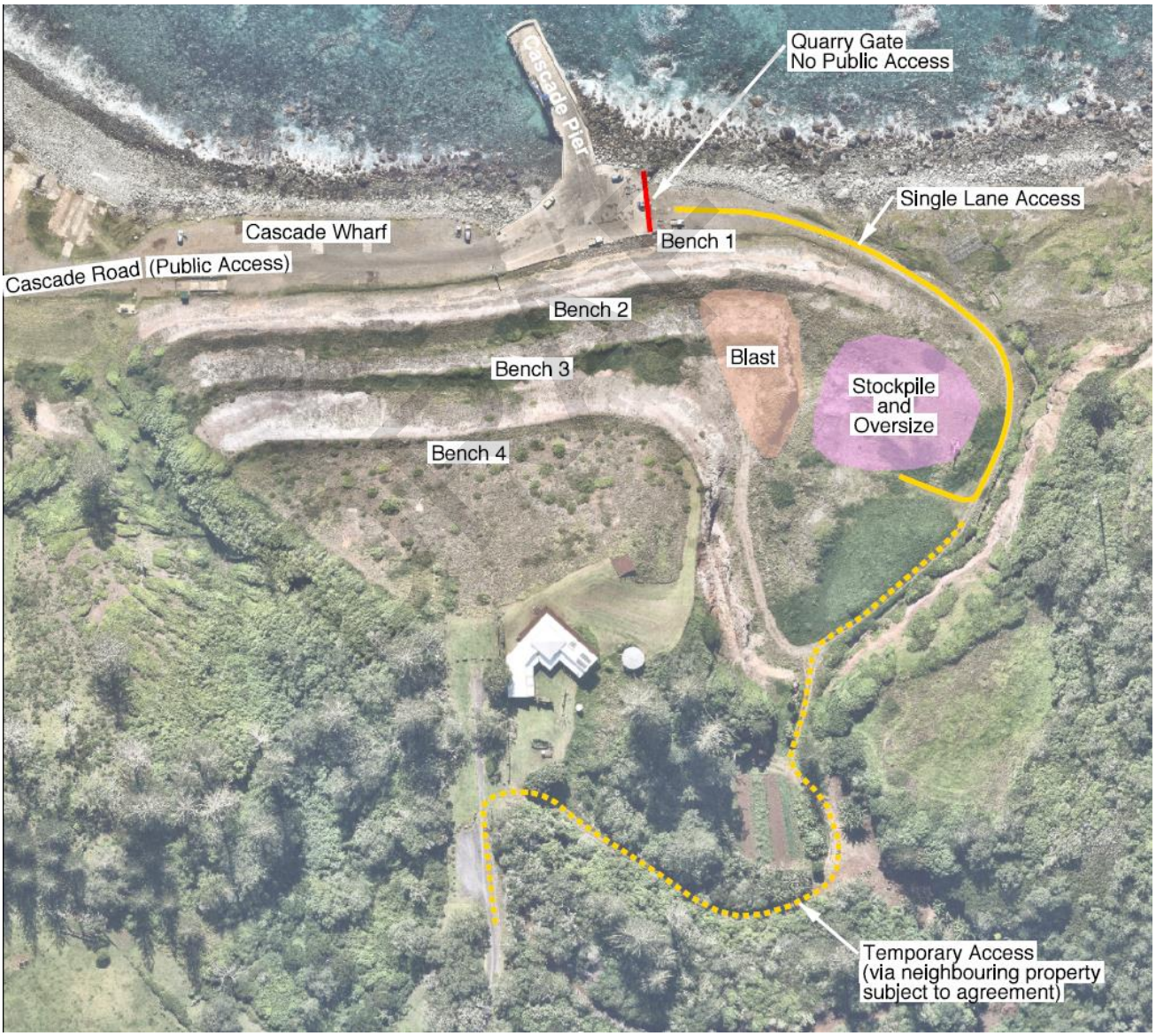


Figure 2 Site layout plan

[1] NIRC, GHD Teams Meeting 2/10/2024 and email 1/10/2024

4.3 Stage 3 – Removal of overheight

After safe access to the works area has been achieved and a physical inspection of the area has been completed, identification and safe removal of any overheight, overhanging, overhead hazards, which could present a risk to workers and machinery in the quarry, is to be undertaken. Hazards may include loose rocks, unstable ledges, rock face instability or blasted material which has hung up on the face. The following steps are suggested for this stage of work and for this stage it is recommended that works be completed during daylight hours.

Step 1: Hazard Assessment and Site Setup

- Conduct a thorough assessment of the quarry face to identify all potential overheight, overhanging, overhead hazards (e.g., loose rock, unstable ledges, overhanging trees).
- Clearly define the exclusion zones for workers, ensuring no personnel are allowed within a minimum safety distance from the quarry face.
- Ensure signage and hard barriers are in place to warn of overhead hazards and prevent entry into exclusion zones.
- Example exclusion zone is shown below in Figure 3.
- Assign a spotter to continuously monitor the operation and communicate with the equipment operators during the work program.

Figure 3 Exclusion zone location

Step 2: Safe Access to Overheight Sites

– For the potential overheight, overhanging, overhead hazards that have been identified, safe access will need to be established to each site from Bench 3.
– It is suggested that machinery (e.g. an excavator) with sufficient reach is utilised (sufficient reach to ensure the cabin of the equipment is a sufficient distance away from the hazard being removed) to remove overhang, overheight and loose rocks or material on the quarry face.
– An east-west approach should be employed, commencing near the entry point, hazards should be accessed first, then dealt with, progressively working around the top of the blast. This ensure that the equipment is always working from an area that has been checked and cleared.

Step 3: Removal of Hazards

– Once safe access has been established, any loose material sitting above the blasted rock (i.e. the crest material from Bench 2) can be side casted, pushed down, working below grade, where it can be safely extracted at a later date.
– Effort should be given to working along the entire face of the new Crest 3, removing any overheight hazards and making the highwall safe.
– Heavy machinery should continue to be employed to remove the loose, pushed down material and maintain a safe access and egress from the work site.

Step 4: Works Area Monitoring

– It is recommended that regular visual monitoring of the entire works area is conducted after hazard removal to ensure no new hazards have appeared and that the area remains stable.
– Visual monitoring should include, inspection of the crest, at grass level, including consideration of any water ingress, cracking, depressions or change in conditions.
– In addition, event-based inspections should also be undertaken, i.e. after any significant weather events such as heavy rain and hail, or strong winds
– Exclusion zones should remain in place until all hazards are removed.

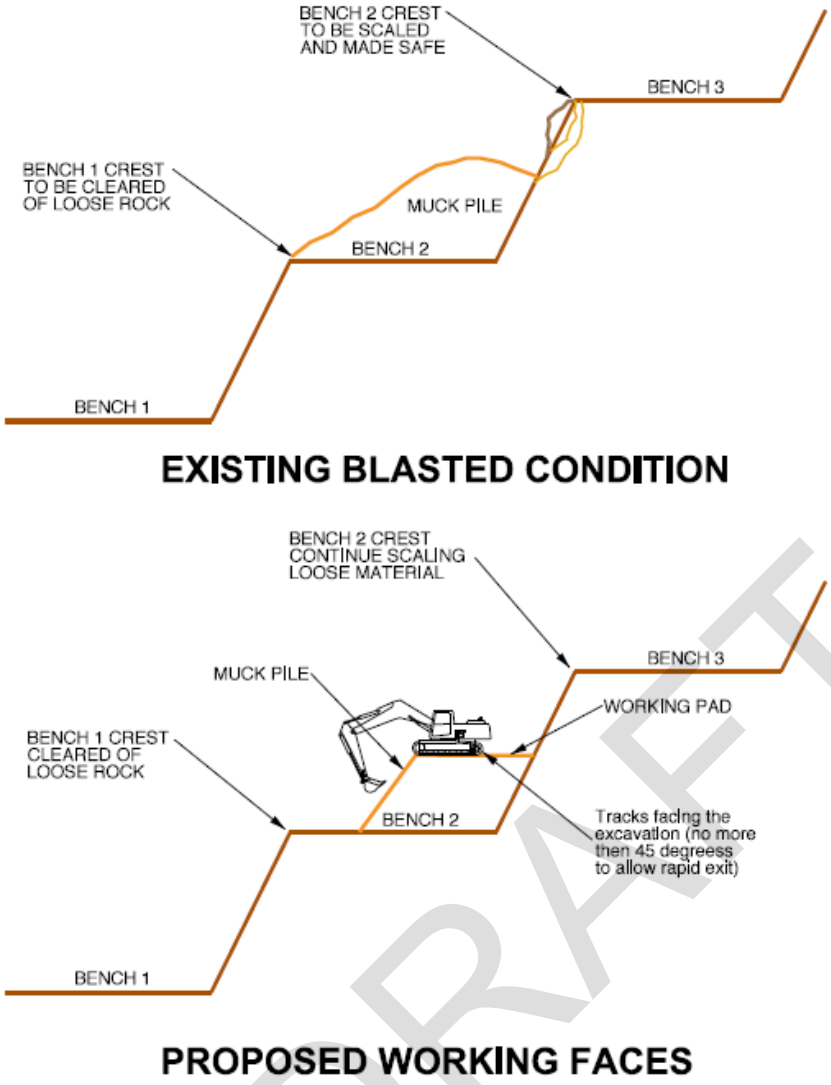


Figure 4 *Typical cross section of benches*

4.4 Stage 4 – Work into muckpile, development of safe work bench

After completion of the higher levels works from the new Crest 2, it is expected that due to the limited reach of local excavators, some work will be required to make the newly blasted wall safe from the top of the muckpile, i.e. below the new crest of Bench 2. After the overheight material has been cleared, a safe access and bench will need to be established to clear this wall and any remaining loose material. This would be located at approximately RL 25m, indicated in the Site Layout plan (Figure 5). The below steps will outline an approximate methodology for this stage of the work:

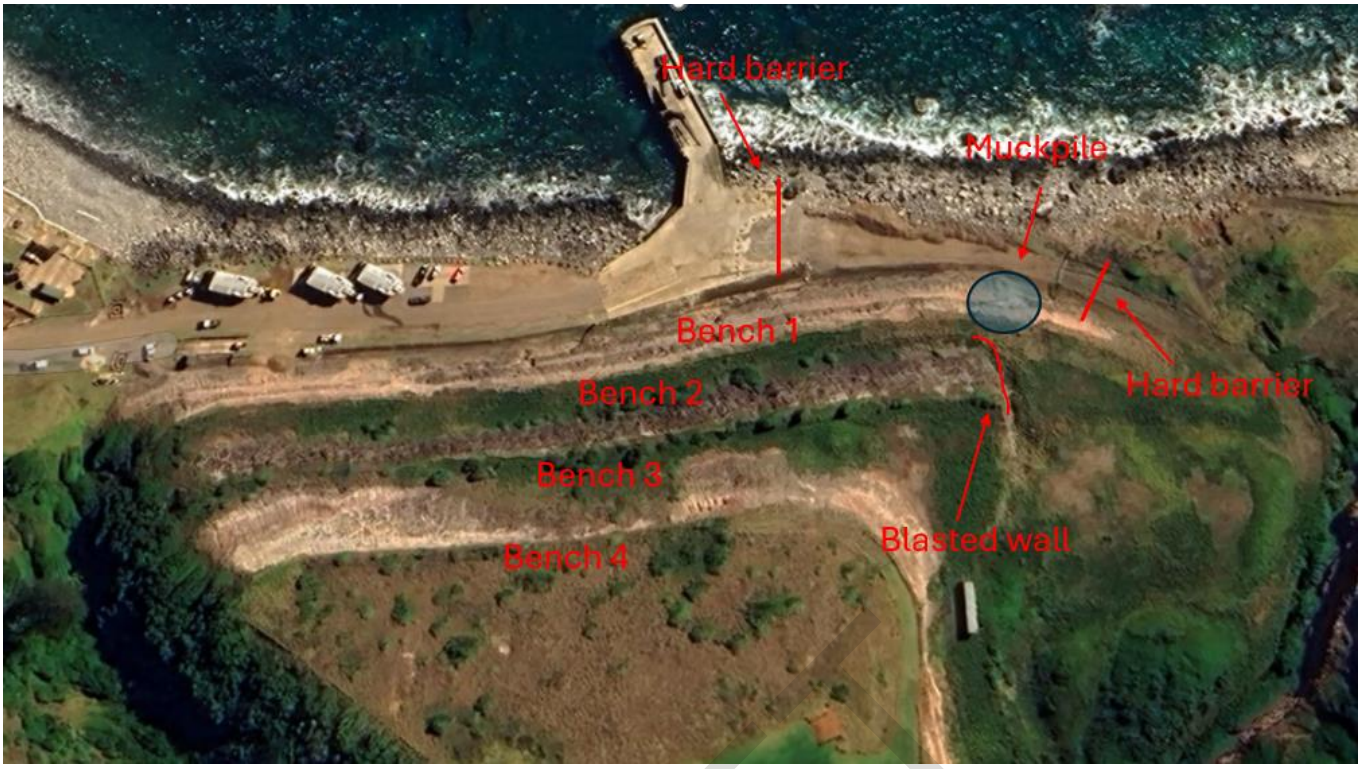


Figure 5 Site layout plan

Step 1: Working Into Muckpile

– Supervisor and operator are to assess the muckpile for stability before approaching it
– A nominated entry point should be agreed, this is expected to be around the RL 25m RL which is within the design capability / reach of the contractors equipment.
– The excavator should then be used to carefully remove unstable debris from the pile to create the safe access and egress.
– The excavator operator should maintain an approximate distance of 3 to 5 m from the crest, outside of the fall zone of any unsighted loose material.
– The excavator operator should maintain positive communication with any spotter or supervisor.

Step 2: Developing Safe Workbench

– It is anticipated that several work benches may be required (as shown in Figure 5).
– Maintaining an approximate distance of 3 to 5 m from the crest, the excavator operator should side cast material at each nominated bench level, working from east to west, clearing and scraping the highwall so it is free from loose material.
– Each work bench should be left free from loose material and debris.
– Ensure that the workbenches are checked via survey to ensure adherence to the design level.

Step 3: Ongoing Monitoring

- Continuously monitor the stability of the muckpile and work benches during the work.
- Ensure the operators are alert for any signs of ground movement or instability.
- Keep communication open between operator and the supervisor, maintain positive communication.

4.5 Stage 5 – Removal of large rocks to Jetty Road ‘drop zone’

The final stage of the treatment work consists of removing the large rocks currently perched above the main eastern access. These rocks will need to be dislodged and then removed from the area.

Step 1: Establish safe ‘drop zone’.

It is recommended that as these rocks are on the crest above the road access, that the eastern access road be isolated (as per Stage 2) with access prevented using hard barriers. This will essentially create a safe’ drop zone’.

Figure 6 Hard barriers to prevent access

Step 2: Establish safe access.

With access to the ‘drop zone’ prevented, access to the large rocks can be made by using the excavator to work out safely to the large rocks, ensuring that at all times sufficient standoff is maintained to the crest.

As the condition of the area underneath the blasted rock is not known, slow progress into the muckpile is recommended. Progress should be attempted at a distance of at least 2 x machine swing radius’s (2 x maximum reach) away from the crest, with the excavator testing each advance with a loaded bucket of rock, prior to advancing the tracks into the area.

As safe access is made into the area and operating proximity to the large rocks on the crest is achieved, the excavator should operate with its tracks perpendicular to the crest so that if loose edge material is present, the excavator is able to retreat further back towards the established access. It is suggested that clearing work should be completed with the excavators tracks perpendicular to and no closer than ½ the maximum reach of the excavator from the crest, i.e. ½ of ‘B’, See Figure 7. If the works can be completed at a further distance, this is preferred.

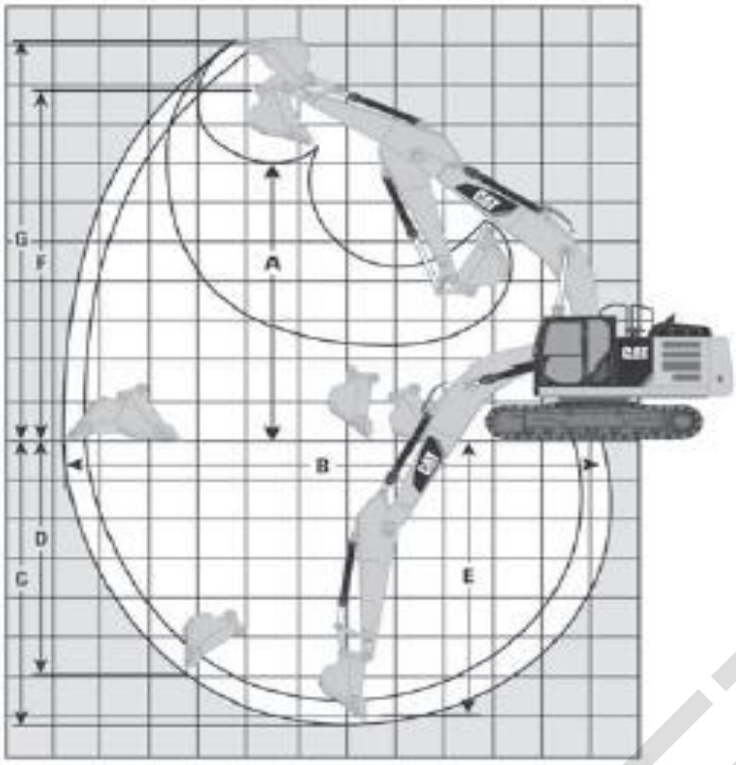


Figure 7 Excavator maximum reach 'B'.

Step 3: Removal of large rocks.

A spotter is recommended during this stage, to monitor the progress of the excavator as it travels out to the large rocks and to watch the displacement of these rocks safely to the drop zone below. The spotter will need to ensure that they have sufficient visibility of the drop zone whilst rocks are displaced and sufficient visibility of the operating platform and access for the excavator. The spotter will also need to ensure there are no 'breaches' of the hard barriers and the drop zone remains clear.

Further risks and mitigations are outlined in the accompanying SWMS.

4.6 Stage 6 – Final inspection of muckpile

Prior to the completion of the rectification works, it is recommended that final inspection of the new Bench 3 Crest and the crest and area surrounding Bench 2 is completed. This is to ensure all loose material and all hazards have been successfully removed. If any additional scaling works are required, they are to be completed at this stage.

It will be important during this final inspection to inspect the wall immediately above the main eastern access road, i.e. Jetty Road, to ensure there is no loose debris which may have 'hung-up' during the works.

The inspection should also include the blasted area and the areas surrounding the blasted material to ensure that drainage systems (e.g., ditches, channels) are properly directing water away from the newly 'made safe' quarry walls. A safety bund should also be constructed on the newly created Bench 3 crest to prevent personnel and machinery falling into the blasted material. Safety bunds on other levels may / may not be required with the subsequent extraction of the blasted rock, however it is suggested though that as the blasted rock is removed, final crests have hard barriers / bunds installed to prevent inadvertent falls.

4.7 Stage 7 – Preparation of site for quarry rock removal, Jetty Road clearance, secondary rock breakage

Once the final safety inspection has been completed the hard barriers, which were preventing access via the main eastern access, can be removed. Trucking and recovery activities can then re-commence from Cascade Road.

Figure 8 Location of site and surrounding roads

An intermediate stockpiling area can be established to the east of the blasted material. This can be used as a transfer site for safe loading of haul trucks or as an oversize and secondary rock breaking area. The area can be seen in Figure 9.

This location is away from the jetty hence not pose any danger to the general public nor disturb any access routes to the jetty.

Figure 9 Stockpile Areas

5. Key Risks and Mitigations

Competency

As heavy machinery will be required to be used on regular basis it is paramount that all operators are suitably qualified and experienced. Some risks outlined in this memorandum and the SWMS can be mitigated by ensuring all operators have been adequately trained and are proficient on the equipment they use, are supervised when required, have read, understood and signed the SWMS.

All site staff, even those not operating machinery will have to be inducted so as to understand the key project risks.

Emergency procedures have also been identified as a key project requirement and all stakeholders such as first responders (firefighters, ambulance and police) as well as on site personnel will have to be familiar with the emergency procedures in order to successfully respond to any emergency situations.

Equipment Availability and Selection

Equipment availability at Norfolk Island may be limited. It would be advisable that the preferred earthworks contractors provide a list of available equipment and specifications to NIRC and GHD prior to the commencement of the works program.

Serviceability of the equipment especially heavy machinery should also be of a priority. Pre-start checks need to be conducted rigorously to identify and deal with any potential issues. Scheduled maintenance should also be completed when required.

Environmental

It is anticipated that dust may cause a disturbance to the surrounding community. As part of good quarrying operations, it would be beneficial that the preferred contractor own or have access to a water cart to control operational dust created during the recovery activities. In excessive dust generating periods, operations may also need to cease until conditions become more favourable.

Rockfall

Rockfalls in a quarry present significant risk, especially in areas with unstable rock faces, blasting operations, and heavy equipment activity. These hazards can result in serious injuries, fatalities, equipment damage, and operational disruptions.

Regular scaling operations, using mechanical equipment to remove loose material from quarry faces will reduce the likelihood of rockfalls. Additionally, access to the face should only be undertaken for inspection purposes only with personnel to remain at safe distances away from the toe of the wall. Workers should be equipped with proper PPE such as hard hats, face shields, and steel-capped boots and trained in safe work practices (construction white card or similar).

Comprehensive training programs, safety briefings (toolbox meeting), and clear communication of rockfall hazards ensure that all workers understand the risks and know how to respond to prevent accidents.

Traffic Interaction and TMP

Quarry access to the public is to be prohibited with clear delineation of exclusion zones.

Loaded trucks will need to interact with public areas such as the jetty and on-site access roads. Clear traffic management and risk management protocols should be established to mitigate risks of quarrying equipment interacting with any public vehicles.

indicates no public access from the pier past the yellow line, to separate public from site access. This access point should also be locked at the end of each day as per conditions on the Development Application (2022).

Figure 10 *No public access past yellow mark line from the pier*

Public / Community Considerations

The Quarry is located at the end of Cascade Road and is adjacent to Cascade Pier and Wharf which are accessible to the public. Access to the quarry site will need to be carefully managed to ensure there is no public access and safety remains paramount.

Cascade Pier and Wharf is used by all incoming maritime vessels which presents some constraints on access availability. Tasks such as rock face scaling and rock breaking will need to take access requirements into consideration in order to minimise impact on wharf users.

Any local road or access closures should also be clearly communicated well in advance.

Additional factors such as noise, traffic congestion, vibration and wildlife disturbance will also need to be considered. These factors have been referred to as considerations contained within the SWMS.

Limitations and scheduling of works prior will also ensure that community is not disadvantaged by any access restrictions that might affect traffic and be kept to a minimum.

Project name	Norfolk Island - Young's Quarry Extraction Assistance						
Document title	Technical Memorandum | [Document subtitle]						
Project number	12655941						
File name	NIRC - Youngs Quarry Extraction Assistance.docx						
Status Code	**Revision**	**Author**	**Reviewer**		**Approved for issue**		
			Name	**Signature**	**Name**	**Signature**	**Date**
S3	A						4/12/24

GHD Pty Ltd | ABN 39 008 488 373
Contact: Angus McKenzie-McHarg, Senior Mining Engineer | GHD
180 Lonsdale Street, Level 9
Melbourne, Victoria 3000, Australia
T +61 3 8687 8000 | **F** +61 3 8732 7046 | **E** melmail@ghd.com | **ghd.com**

Appendices

Appendix A

Approval Notice of Decision

NORFOLK ISLAND REGIONAL COUNCIL

NOTICE OF DECISION ON DEVELOPMENT APPLICATION

FOR A DECLARED SIGNIFICANT DEVELOPMENT

Pursuant to Section 44D(2) of the *Planning Act 2002* (NI)

I, Eric Hutchinson, Administrator of Norfolk Island and delegate of the Commonwealth Minister under paragraph 1.78 of the *Minister's Norfolk Island Delegation Instrument 2017 (No. 1) (Cth),* under section 44(D)(2) of *Planning Act 2002 (NI)* determine the Development Application ('the Application') referred to in Schedule 1 by granting development approval subject to the conditions set out in Schedule 2.

The reasons for the imposition of conditions are to achieve, in part, the principle aim of the *Norfolk Island Plan 2002* (as amended), and to minimise any adverse environmental and other impacts associated with the use / development on the property and on adjacent properties.

Eric Hutchinson
Administrator of Norfolk Island & Commonwealth Minister delegate

Date approved: 22/03/22

Notes:

1. Pursuant to section 50A of *Planning Act 2002 (NI)*, the date upon which this development approval takes effect is the date on which the approval is given.

2. Pursuant to Section 62 of the *Planning Act 2002 (NI),* this development approval will lapse if the land the subject of this approval has not been used or developed in accordance with this approval by the prescribed date, which is 60 months after the approval is given.

SCHEDULE 1 - DEVELOPMENT APPLICATION

DEVELOPMENT APPLICATION NO:	DA.BA 36/2021
APPLICATION MADE BY: (THE APPLICANT)	A Roach for Norfolk Island Regional Council
LAND TO BE USED OR DEVELOPED: (SUBJECT LAND)	Youngs Road Quarry Site: - Part of Youngs Road, described as RD 35, Section No. 10; - Part of land within Cascade Reserve, described as RES, Lot No. 28, Section Nos. 9 and 10. - Part of Portion 5a1, described as Lot 116, Section 9. Temporary bulk explosives storage site: - Part of Portion 109a, described as Lot 20, Section 33. Temporary rock storage site: - Part of Portion 183, described as Lot 1, Section 29. All sites included in the Subject Land are located in NORFOLK ISLAND 2899.
PROPOSED USE OR DEVELOPMENT: (THE DEVELOPMENT)	Extractive Industry (Young's Road Quarry) and ancillary projects: Temporary Bulk Explosive Storage at Anson Point and Temporary Rock Storage at the Norfolk Island Airport.
DECISION:	Approved
DATE OF DECISION:	22 March 2022
DATE THE DEVELOPMENT APPROVAL TAKES EFFECT:	Same date as the date of decision
DATE THE DEVELOPMENT APPROVAL LAPSES:	22 March 2027

DEFINITIONS

Term	Definition
Blasting Specialist	An appropriately qualified and experienced blasting expert engaged to undertake all transport, storage and use of explosives for the Development
Building Condition Survey	A survey of building condition taken before and after a Development (or part of a Development) to determine if any damage to the building was incurred as a result of the Development.
Building Condition Survey Report	A report that documents the outcomes of a Building Condition Survey.
Commencement of the Development	Any on-site work at the Youngs Road Quarry Site or any Ancillary Site (Anson Point and Norfolk Island Airport)
Completion of the Development	The date upon which all works and activities described in the EIS, Response to Submissions and this Notice of Decision, are completed, and any requirements of the General Manager have been met.
Council	Norfolk Island Regional Council

Term	Definition
Council's Environment and Planning Department	The Department responsible, in conjunction with the General Manager, for monitoring compliance with the conditions of this Approval – compliance responsibility.
Council's Infrastructure and Services Department	The Department responsible for undertaking the Development – operational responsibility.
Day	Calendar day
Development	The Development as described in Schedule 1 and **Condition 3** of this Approval.
EIS	Environmental Impact Statement for the Development dated 16 September 2021.
EMP	Environmental Management Plan.
Environmental Representative	A suitably qualified and experienced Environmental Representative who is independent of the Proponent and the design, construction and operation personnel.
Feasible and reasonable	Feasible and reasonable, in relation to a measure or control to prevent or minimise an impact, means a measure or control that is practicable and reasonable having regard to the relative costs and benefits of the measure or control and best practice.
Fire Drill Ground	The location of the temporary rock stockpile site within the broader Norfolk Island Airport Development Precinct.
General Manager	General Manager of the Norfolk Island Regional Council.
Incident	An occurrence or set of circumstances that: • causes, or threatens to cause, material harm to the environment, community or any member of the community, being actual or potential harm to the health or safety of human beings or to threatened species, endangered ecological communities or ecosystems that is not trivial; or • breaches or exceeds the limits or performance measures or criteria required to be complied with under this Approval.
Practicable	As soon as possible and practical taking into account all of the facts and circumstances in the individual case.
Project Works Program	The program for undertaking activities required to complete the Development.
Proponent	Norfolk Island Regional Council.
Minister	Commonwealth Minister for Regional Development and Territories
Month	A period of 28 consecutive days (including weekends).
Road Condition Report	A survey of road condition taken before and after a Development (or part of a Development) to determine if any damage to the road was incurred as a result of the Development.
Safety and Emergency Management Plan	A Plan to ensure on-site safety and to provide emergency response actions to be implemented in the event of an emergency.
Subject Land	The Subject Land as described in Schedule 1 of this Approval.

Term	Definition
Traffic Management Plan	A plan to ensure public safety and avoid conflict and disruption on the local road network as a result of the Development.
Unexpected heritage find	An unexpected heritage find is a potential heritage item that is discovered (usually during construction), where further assessment is required to determine if the item has heritage significance, and the Proponent does not have approval to impact the item.
Week	A period of seven consecutive days (including a weekend).

SCHEDULE 2 - CONDITIONS OF DEVELOPMENT APPROVAL

GENERAL CONDITIONS RELATING TO THIS APPROVAL

Scope of this Approval

1. The Development must be carried out in accordance with:
   a) DA.BA 36/2021 (including the accompanying Environmental Impact Statement (EIS) dated 16 September 2021 and all appendices to the EIS). All commitments made in the EIS must be complied with and have generally not been repeated in this Notice of Decision;
   b) All relevant requirements in the *Norfolk Island Plan 2002* (as amended);
   c) All relevant requirements of *Development Control Plan No. 5 – Norfolk Island Airport*; and
   d) All the conditions of this Approval.

2. Where there is any inconsistency between the items listed at (a), (b), (c) and (d) above, the conditions of this Approval will prevail. For the purpose of this condition, there will be an inconsistency between a condition of this Approval and any other document if it is not possible to comply with both the condition and the other document.

Limits to this Approval

3. This Approval is for "the Development" only, as described in Schedule 1 and this condition **(Condition 3)** of this Approval and Section 4 of the EIS:
   a) Temporary quarry at Youngs Road for extraction of about 13,500 tonne of rock including:
      i. Phase 1: Delivery and temporary storage of about 9,100 kg of Class 5.1 Ammonium Nitrate Emulsion bulk explosive at Anson Point.
      ii. Phase 2: Site establishment at the Youngs Road Quarry Site – including access road regrading, drainage reinstatement and site equipment storage/establishment.
      iii. Phase 3: Drilling and blasting in accordance with the Blast Design prepared for the Development by Donnelly Blasting Services Pty Ltd (2021) and as modified in accordance with the conditions of this Approval.
      iv. Phase 4: Breaking, loading and haulage of blasted rock to the stockpile site at the Norfolk Island Airport Development Precinct.
      v. Phase 5: Temporary storage of rock at the Norfolk Island Airport Development Precinct.

4. Phase 4 (breaking, loading and haulage of rock) of the Development must be completed within three months from the date of commencement of Phase 2 (site-establishment at the Youngs Road Quarry Site) of the Development plus a duration of time that is equivalent to the cumulative amount of time that work on the Development is paused to minimise traffic impacts on Cascade Pier operations (refer to **Condition 59** of this Approval), paused to minimise noise impacts on Forrester's Court Tourist Accommodation (refer to **Condition 53** of this Approval), paused due to unfavourable weather conditions and delayed due to any unforeseen and unavoidable delays to the Project Works Program.

5. If unforeseen and unavoidable delays to the Project Works Program (refer **Condition 4** of this Approval) are incurred, landowners adjoining the Youngs Road Quarry Site (Portion 1d2, Portion 5a1 and Cascade Pier) must be consulted to negotiate the days and times that any residual rock breaking, loading and haulage activities would be undertaken until removal of rock from the Youngs Road Quarry Site is complete.

6. All conditions of this Approval that require cooperation, access to private property or any other action by landowners are subject to the landowner agreeing to that condition and cooperating, providing access or taking any other action to enable the condition to be implemented. If the landowner does not agree to the requirement(s) of any condition, the respective condition must be voided for that particular landowner.

7. Any further use or development of the Subject Land that requires a development approval under the *Planning Act 2002 (NI)* must not be conducted without first obtaining separate development approval.

Conditions to be Satisfied Prior to Commencement of the Development

8. Prior to the commencement of the Development, all relevant approvals must be obtained, including:
   a) Controlled Activity Permit issued in accordance with Division 2 of the *Public Reserves Act 1997 (NI)* for controlled activities in Cascade Reserve.
   b) Licence to use Commonwealth Land as required by the Significant Development Declaration dated 22 March 2019.
   c) Building Approval under the *Building Act 2002 (NI)*.

Commencement of the Development

9. At least one week prior to the commencement of site establishment activities at the Ancillary Site – Temporary Bulk Explosives Storage at Anson Point, the General Manager must be notified in writing of the date of commencement.

10. At least one week prior to the commencement of Phase 2 (site establishment activities at the Youngs Road Quarry Site) of the Development, the General Manager must be notified in writing of the date of commencement.

Completion of the Development

11. Not later than one week following the removal of the Bulk Explosives Storage Facility at the Ancillary Site – Temporary Bulk Explosives Storage at Anson Point, the General Manager must be notified in writing that the work at the Ancillary Site – Temporary Bulk Explosives Storage at Anson Point has been completed and the relevant conditions of this Approval have been complied with.

12. Not later than one week following the completion of work at the Youngs Road Quarry Site, the General Manager must be notified in writing that the work at the Youngs Road Quarry Site has been completed and that the relevant conditions of this Approval have been complied with.

13. Not later than one month following the completion of Phase 5 (temporary rock storage at the Norfolk Island Airport) of the Development, the General Manager must be notified in writing that the Development has been completed and the conditions of this Approval have been complied with.

Compliance

14. All conditions of this Approval must be complied with.

15. All employees, contractors and subcontractors involved in the Development must be made aware of, and required to comply with, the conditions of this Approval.

16. An ethical wall must be established between Council personnel who will be responsible for implementing the Development (Infrastructure and Services Department) and Council personnel who will regulate compliance with the conditions of this Approval (General Manager/Environment and Planning Department).

17. A suitably qualified and experienced Environmental Representative(s) who is independent of Council and any design, construction and operational personnel for the Development must be nominated by Council's Manager – Environment and Planning, approved by the General Manager and engaged for the duration of Phases 1-4 of the Development.

18. Prior to commencement of the Development, a Compliance Tracking Program must be prepared to monitor compliance with the conditions of this Approval.

19. The Compliance Tracking Program must be endorsed by the Environmental Representative and submitted to the General Manager for information prior to the commencement of the Development or within another timeframe agreed with the General Manager.

20. The Compliance Tracking Program must be implemented by Council's Environment and Planning Department for the duration of Phase 1-4 of the Development and must be:
    a) Provided to the Environmental Representative for review and endorsement once per week or at another timeframe nominated by the Environmental Representative.
    b) Provided to the General Manager for information on request at any time.

Dispute resolution

21. For any unresolved dispute arising out of the implementation of these conditions between Council's Infrastructure and Services Department and a public authority, company or person (but excluding any dispute between the Council's Infrastructure and Services Department and its contractors and/or subcontractors engaged in the construction of the Development), in the first instance either party can refer the matter to the General Manager and, if not resolved, the Minister. The Minister's determination of the disagreement shall be final and binding on all parties.

ENVIRONMENTAL PERFORMANCE

Obligation to Minimise Harm to the Environment

22. In addition to complying with the conditions of this Approval and carrying out the commitments made in the EIS, all feasible and reasonable measures must be implemented to prevent or, where prevention is not feasible or reasonable, minimise any harm to the environment that may result from the Development.

Hours of Operation

23. Standard hours of operation of the Development must be limited to:
    a. 7.00am to 5.00pm Mondays to Fridays inclusive;
    b. 8.00am to 1.00pm Saturdays; and
    c. At no time on Sundays or public holidays;

    except in the following circumstances:
    a. Transportation of explosives if transportation out of standard operating hours is safer; and
    b. Emergency work to avoid injury or the loss of life, to avoid damage or loss of property and / or to prevent environmental harm.

24. Standard operating hours must be modified as follows:
    a. Rock breaking, loading and hauling activities at the Youngs Road Quarry Site must not commence prior to 9 am.
    b. Operating hours must be adjusted as required by the **Condition 59** of this Approval to minimise impacts on and maintain safety for commercial operational activities at Cascade Pier, including unloading cargo ships and cruise ship visit days.
    c. Operating hours must be adjusted as required by **Condition 53** of this Approval to minimise impacts on agreed tourism events at Forrester's Court Tourist Accommodation on Portion 1d2.
    d. Operating hours must be adjusted if required by **Condition 52** of this Approval to manage residual noise impacts on nearby residents.

Hazard and Risk

25. During the Development, all necessary measures must be undertaken to ensure public safety including, but not limited to, restriction of public access to the Subject Land by securing the site(s) and, if required, the surrounding area(s) with barricades and warning signs at all entrance points.

Transport, Storage and Use of Explosives

26. All transport, storage, and use of explosives must be undertaken in accordance with the Blast Design and Blast Management Plan prepared by Donnelly Blasting Services Pty. Ltd. for the Development and included in the EIS – as modified in accordance with the requirements of **Conditions 28-30** inclusive of this Approval.

27. A suitably qualified and experienced blasting specialist (Blasting Specialist) must be engaged to undertake, and must undertake, all post-approval blast planning, transport, storage and use of explosives for the Development.

28. Prior to the commencement of the Development, the Blast Design and the Blast Management Plan prepared by Donnelly Blasting Services for the Development must be reviewed by the Blasting Specialist, to ensure:
    a) Currency.
    b) Consistency between the Blast Design and the Blast Management Plan.
    c) Consistency with the conditions of this Approval.
    d) That all blasting and associated activities are carried out so as not to generate unacceptable noise and vibration impacts or pose a significant risk to sensitive receivers.

    Note: This Approval incudes conditions that require additional tasks to be undertaken by the Blasting Specialist and included in the Blast Management Plan. These include, but are not limited to:
    a) Public notifications.
    b) Building Condition Surveys.
    c) Locations for monitoring of ground vibration and airblast overpressure.

29. Prior to the commencement of drilling, the final Blast Design and the Blast Management Plan must be quality checked and endorsed by the Blasting Specialist and provided to the General Manager for information.

30. The endorsed Blast Design and the endorsed Blast Management Plan must be reviewed by the Blasting Specialist on an ongoing basis for the duration of the Phase 3 (drilling and blasting) of the Development to enable progressive adjustments to the design and the management measures based on actual environmental conditions if required.

31. All landowners and all residents within a radius of one kilometre of the Youngs Road Quarry Site must be provided with the Project Works Program within 20 business days of the date of this Approval. Initial contact with these landowners and residents must be direct – Email, phone or in person.

32. All adjoining landowners to the Youngs Road Quarry Site (Portion 1d2, Portion 5a1, Cascade Pier) must be provided with 24 hours notice of the blast. Notification to adjoining landowners must be by email. Each email must be followed up with a phone call or if required, in person, to ensure the notification has been received by the respective landowner. Any subsequent adjustments to the timing of the blast must also be notified by email and followed up by phone or in person.

33. Blast monitoring must be undertaken by the Blasting Specialist at all three residential buildings on Portion 1d2 (one residence and two accommodation units) and the residence on Portion 5a1 to measure ground vibration and airblast overpressure resulting from the blast.

34. All unused explosives and detonators must be removed from the island by the Blasting Specialist as soon as practicable following the blast.

Building Condition (Dilapidation) Survey

35. Prior to commencement of Phase 3 (drilling and blasting) of the Development, pre-blast Building Condition Surveys must be undertaken by an independent structural engineer at all three residential buildings on Portion 1d2 (one residence and two accommodation units), the residence and viewing platform on Portion 5a1 and Cascade Pier. The results of the surveys must be documented in a pre-blast Building Condition Survey Report for each structure surveyed. Copies of the pre-blast Building Condition Survey Reports must be provided to the relevant landowner and the General Manager no later than one week prior to the commencement of Phase 3 (drilling and blasting) of the Development.

36. Following the completion of Phase 3 (drilling and blasting) of the Development, post-blast Building Condition Surveys of all structures for which pre-blast Building Condition Surveys were undertaken in accordance with **Condition 35** of this Approval must be undertaken by an independent structural engineer. The results of the surveys must be documented in a post-blast Building Condition Survey Report for each structure surveyed. Copies of the post-blast Building Condition Survey Reports must be provided to the relevant landowner and the General Manager no later than one month following the completion of Phase 3 (drilling and blasting) of the Development.

37. If damage to property for which Building Condition Surveys were undertaken occurs as a result of the Development, as determined by an independent structural engineer, the Council must, as soon as practicable, either (at the landowner's discretion):
    a) Compensate the landowner for the damage so caused in the amount as may be agreed with the landowner; or
    b) Rectify the damage so as to restore the property to the condition it was in prior to the commencement of Phase 3 (drilling and blasting) of the Development, as may be agreed with the landowner.

38. If damage to property for which Building Condition Surveys have not been conducted is reported to Council, the damage must be assessed by an independent structural engineer. If the independent structural engineer determines that the damage was caused by the Development, Council must, as soon as practicable, either (at the landowner's discretion):
    a) Compensate the landowner for the damage so caused in the amount as may be agreed with the landowner; or
    b) Rectify the damage so as to restore the property to the condition it was in prior to the damage determined by the independent structural engineer.

Safety and Emergency Management Plan

39. A Safety and Emergency Management Plan for the Development (all three sites included in the Subject Land) must be prepared in consultation with Council's Emergency Services Team Leader and the Blasting Specialist. The Safety and Emergency Management Plan must include, but shall not be limited to:
    a) Site safety and security.
    b) Personnel safety (e.g. training, induction, PPE, exclusion zones, health).
    c) Plant and equipment safety (compliance with safety and maintenance standards).
    d) Public safety (e.g. exclusion zones and notifications/communication protocol).
    e) Emergency Response (incident, fire, accidental explosion, medical).

40. The Safety and Emergency Management Plan must be approved in writing by Council's Emergency Services Team Leader and the Blasting Specialist. The approved Safety and Emergency Management Plan must be lodged with the General Manager for information at least one week prior to the arrival of the explosives onto the island.

Storage of Fuels and Oils

41. All fuels, oils and other hazardous liquids must be stored at Council's Services Depot in accordance with *AS 1940 – 2004 (The Storage and Handling of Flammable and Combustible Liquids).*

Post-blast instability of the exposed cliff face

42. Following the blast and prior to commencement of Phase 4 (rock breaking, loading and hauling activities) of the Development, the area of the cliff face impacted by the blast must be assessed by Council's Project Engineer – Civil and Council's Manager - Infrastructure and Services for structural stability and safety.

43. Any loose or unstable rocks identified during inspection of the cliff face, as required by **Condition 43** of this Approval, must be removed and the cliff stabilised.

44. Prior to the commencement of Phase 4 (rock breaking, loading and hauling activities) of the Development, Council's Project Engineer – Civil and Council's Manager - Infrastructure and Services must provide the General Manager with a written declaration that the cliff face is stable and that it is safe for Phase 4 (rock breaking, loading and hauling activities) of the Development to commence.

45. Phase 4 (rock breaking, loading and hauling activities) of the Development must not commence until written approval to commence has been provided by the General Manager.

Noise and Vibration

46. Noise monitors must be installed at each of the three residential buildings on Portion 1d2 (one residence and two accommodation units) and the residential building on Portion 5a1 (one residence) for at least one month prior to the commencement of Phase 2 (site establishment at the Youngs Road Quarry Site) of the Development and remain in place until the completion of Phase 4 (rock breaking, loading and hauling activities) of the Development.

47. Noise monitoring must commence a minimum of one month prior to the commencement of Phase 2 (site establishment works at the Youngs Road Quarry Site) of the Development and continue until the completion of Phase 4 (rock breaking, loading and hauling activities) of the Development.

48. Noise monitoring as required under **Condition 47** must be undertaken by the Environmental Representative in accordance with the methodology provided in the *NSW EPA Noise Policy for Industry (*EPA 2017).

49. Background noise levels must be monitored for at least one month prior to the commencement of Phase 2 (site establishment works at the Youngs Road Quarry Site) of the Development using the procedure documented in *Fact Sheet A: Determining Existing Noise Levels* of the *NSW EPA Noise Policy for Industry (*EPA 2017).

50. Following monitoring of the background noise level for a period of at least one month, the Industrial Noise Trigger Level for the Development must be calculated in accordance with the methodology provided in Section 2 of the *NSW EPA Noise Policy for Industry (*EPA 2017).

51. All reasonable and feasible noise mitigation and management measures must be implemented with the aim of reducing noise levels at any residential building on Portion 1d2 (one residence and two accommodation units) and Portion 5a1 (one residence)[1] as far as possible toward the Industrial Noise Trigger Level relevant to that building – as calculated in accordance with **Condition 50** of this Approval[2].

52. If legitimate noise complaints are received by Council in relation to any aspect of the Development, additional reasonable and feasible measures must be implemented to address the cause of the complaint. If noise levels cannot be further reduced, additional measures reasonable and feasible must be negotiated with the complainant such as respite.

53. Noise generating activities at the Youngs Road Quarry Site must be ceased during up to two key tourism events (such as the Australia/New Zealand Jazz week referenced in the public submission) at the Forrester's Court Tourist Accommodation on Portion 1d2 as agreed in accordance with **Condition 54** of this Approval. Work is not required to cease for more than one week per agreed event.

54. Two key tourism events with a maximum duration of one week per event (refer to **Condition 53** of this Approval) must be identified in consultation with Forrester's Court Management during development of the Project Works Program and incorporated into the Project Works Program.

55. All vehicles, plant and equipment used in relation to the Development must be maintained in a proper and efficient condition for the duration of the Development.

Traffic and Transport

56. During the Development, all feasible and reasonable measures must be implemented to ensure that pedestrian and vehicular access to, and parking in the vicinity of, businesses and affected properties is maintained, and disruptions are avoided, or where avoidance is not possible, minimised.

Traffic Management Plan

57. A Traffic Management Plan must be developed to ensure public safety and avoid conflict and disruption on the local road network.

58. The Traffic Management Plan must be prepared in consultation with relevant stakeholders including: Council; the Commonwealth Department of Infrastructure, Transport, Regional Development and Communications; the Norfolk Island Airport Manager; Cascade Pier operators, Norfolk Island Central School, Norfolk Island Police, the Norfolk Island Pistol Club, the Norfolk Island Gun Club and other stakeholders as relevant.

[1] Tourist accommodation Unit on Portion 5a1 – Forrester A in Figure 16 of the EIS.
Tourist accommodation Unit on Portion 5a1 – Forrester B in Figure 16 of the EIS.
Residence on Portion 1d2 – Forrester C in Figure 16 of the EIS.
Residence on Portion 5a1 – Christian's House in Figure 16 of the EIS.

[2] It is not expected that the Industrial Noise Trigger Levels will be achievable. The Industrial Noise Trigger Level should be used as a goal.

59. The Traffic Management Plan must include all traffic control measures identified in the EIS and any additional measures identified during development of the Traffic Management Plan including, but not limited to:
    a) Measures to avoid conflict with local traffic including, but not limited to:
        i. Norfolk Island Central School traffic.
        ii. Cascade Pier operational traffic.
    b) Identification of vehicular and pedestrian exclusion zones and road closures and public notifications of such.
    c) Traffic management controls including site access arrangements, signage and traffic control measures such as designated routes and speed limits.

60. The Traffic Management Plan must be submitted to the General Manager for approval at least one week prior to the commencement of the Development.

61. The Development must not commence until the General Manager has provided written approval of the Traffic Management Plan.

62. The Traffic Management Plan must be implemented for the duration of the Development.

Access

63. The access gate to the Youngs Road Quarry Site must be closed and locked at the end of every workday.

64. Clear vehicular access to the access gate to the Youngs Road Quarry Site must be maintained at all times.

Delivery of explosives

65. Delivery of bulk explosives to Anson Point must be undertaken outside operational hours of the Pistol Club and the Gun Club as determined in consultation with these two associations.

Road Condition (Dilapidation) Surveys

66. A pre-haulage Road Condition Report must be prepared by Council's Infrastructure and Services Department for all roads proposed to be used by heavy vehicles for Phase 4 of the Development (haulage of rock from the Youngs Road Quarry site to the Norfolk Island Airport Development Precinct) prior to the commencement of use by such vehicles and provided to the General Manager for information.

67. A post-haulage Road Condition Report must be prepared by Council's Infrastructure and Services Department for all roads proposed to be used by heavy vehicles for Phase 4 of the Development (haulage of rock from the Youngs Road Quarry site to the Norfolk Island Airport Development Precinct) within one week following completion of Phase 4 (breaking, loading and haulage of rock) of the Development and provided to the General Manager for information.

68. If the Road Condition Reports show that damage to roads has occurred as a result of the Development, the damage must be rectified so as to restore the road(s) to at least pre-haulage condition. The rectification of damage to roads must be included in the Public Works Program for completion as soon as practicable, subject to availability of materials and balance of road safety priorities.

69. Any damage to private property that occurs as a result of the Development must be rectified so as to restore the damaged property to at least the condition it was in before it was damaged.

70. Any damage to roads or private property resulting from the Development that would render that road or property ineffective or unsafe must be made safe or useable immediately. This may need to be a temporary repair pending a permanent fix, subject to the availability of materials.

Air Quality

Dust Suppression

71. The Development must be constructed, used and maintained in a manner that will minimise the generation of dust in the Subject Land, and the emission of dust from the Subject Land.

Dust Monitoring

72. Dust monitors must be installed at each of the three residential buildings on Portion 1d2 (one residence and two accommodation units) and the residential building on Portion 5a1 (one residence) for at least one month prior to the commencement of Phase 2 (site establishment at the Youngs Road Quarry Site) of the Development and remain in place until the completion of Phase 4 (rock breaking, loading and hauling activities) of the Development.

73. Dust monitoring must commence a minimum of one month prior to the commencement of Phase 2 (site establishment at the Youngs Road Quarry Site) of the Development and continue until the completion of Phase 4 (rock breaking, loading and hauling activities) of the Development.

74. Dust monitoring, as required under **Condition 73**, must be undertaken by the Environmental Representative in accordance with the methodology provided in *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW* (NSW EPA, 2017) for deposited dust.

75. Ambient deposited dust levels must be monitored for a minimum of one month prior to the commencement of Phase 2 (site establishment at the Youngs Road Quarry Site) of the Development to measure baseline ambient deposited dust levels.

76. Should baseline ambient deposited dust levels be exceeded (during Phase 2, Phase 3 and Phase 4 of the Development) by the following parameters (*from Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (NSW EPA, 2017)*), additional mitigation measures must be implemented as detailed in **Condition 77** of this Approval:
    a) 2 g/m^2/month (Maximum increase in deposited dust level), or
    b) 4 g/m^2/month (Maximum total deposited dust level).

77. If baseline ambient deposited dust levels are exceeded (during Phase 2, Phase 3 and Phase 4 of the Development) by the parameters provided in **Condition 76** of this Approval, the following measures must be implemented:
    a) Provision of a gutter cleaning service at the particular monitored residence where a dust parameter(s) was exceeded.
    b) Implementation of additional at source mitigation (such as increased watering of the site) to minimise the potential for further exceedances at the monitored residences.

Erosion and Sedimentation

78. The Development must not result in increased erosion caused by surface water runoff.

79. Disturbed areas must be rehabilitated as soon as practicable.

Water Quality

80. All feasible and reasonable erosion and sediment controls must be installed and maintained in good working order to minimise water pollution.

81. Erosion and sediment control infrastructure on the Youngs Road Quarry Site must be augmented, supplemented and maintained as required to minimise sediment leaving the site and entering the Marine Park for the duration of Phases 1-4 of the Development and until the Youngs Road Quarry Site has been rehabilitated.

82. Where it is not possible to prevent sediment leaving the Youngs Road Quarry site, water quality parameters (at the point where water filters from the rear of the settling pond and exits the erosion and sediment control infrastructure) must not exceed the following water parameters from *Technical Guideline: Wastewater Release to Queensland Waters (Guidance for setting limits for indicators)* (Queensland Government, 2016):
    a) Turbidity or suspended solids (50 NTU or 50 mg/L).
    b) pH (6.5-8.5).

83. Water quality monitoring must be undertaken by Council's Infrastructure and Services Department from at least the commencement of Phase 2 (site establishment at the Youngs Road Quarry Site) of the Development and until the Youngs Road Quarry Site has been rehabilitated.

84. Water quality monitoring results must be reported to Council's Environment and Planning Department as soon as practicable for inclusion in the Compliance Tracking Program and action under **Condition 85** of this Approval if water quality parameters are exceeded.

85. Any exceedance of either parameter provided in **Condition 82** of this Approval must be reported to the Department of Agriculture, Water and the Environment – Marine Parks and the General Manager within 24 hours of the exceedance.

86. Any reasonable and feasible direction from the Department of Agriculture, Water and the Environment – Marine Parks or the General Manager in response to a notification of an exceedance of parameter(s) must be implemented as soon as practicable.

87. Additional measures to retain sediment onsite must be implemented as soon as practicable if either parameter provided in **Condition 82** of this Approval is exceeded to manage the current pollution event and prevent further non-compliances. Measures may include but must not be limited to:
    a) Mechanical removal of sediment from the sediment ponds.
    b) Addition of flocculants to reduce sediment load in water.
    c) Relocation or additional sediment controls in drains.

Water Supply

88. All reasonable and feasible effort must be made to repair Council's desalination plant and restore it to working order prior to commencement of the Development.

89. All water required for the Development must be sourced in accordance with the following priorities:
    a) Council's desalination plant;
    a) Where it is not possible to source water from the desalination plant, water is to be sourced from existing Council water storage tanks; and
    b) Where it is not possible to source water from existing Council water storage tanks, water may be sourced from commercial water carters.

Biodiversity

90. Site establishment, drilling and blasting activities must not be undertaken at the Youngs Road Quarry Site between 1 October and 31 March inclusive (nesting seabird period).

91. Where possible, subject to the Project Works Program, cliff stabilisation works, rock breaking, loading and haulage activities should be avoided between 1 October and 31 March (nesting seabird period).

92. Bulk explosives storage at Anson Point must be avoided between 1 October and 31 March (nesting seabird period) if practicable subject to the Project Works Program.

93. The spread of Argentine Ants to and from the Subject Land must be prevented. Measures to prevent the spread of Argentine Ants must include but need not be limited to, the measures recommended in Section 6 of the *Ecological Assessment - Cascade Quarry* (Castles Environmental December 2020) and Section 3 of the *Ecological Risk Management and Offset Plan, Cascade Quarry* (Castles Environmental, December 2020).

94. The spread of weeds to and from the Subject Land must be prevented. Measures to prevent the spread of Argentine Ants must include but need not be limited to, the measures recommended in Section 6 of the *Ecological Assessment - Cascade Quarry* (Castles Environmental December 2020) and Section 3 of the *Ecological Risk Management and Offset Plan, Cascade Quarry* (Castles Environmental, December 2020).

95. A Habitat Rehabilitation Plan must be developed and implemented in accordance with the recommendations in Section 6 of the *Ecological Assessment - Cascade Quarry* (Castles Environmental December 2020) and Section 3 of the *Ecological Risk Management and Offset Plan, Cascade Quarry* (Castles Environmental, December 2020).

Visual Amenity

96. The Subject Land must be maintained in an orderly manner for both visual aesthetics and occupational health and safety considerations for the duration of the Development.

97. The Anson Point Bulk Explosives facility (including shipping containers, fencing, signage and all other associated structure(s)) must be removed within two weeks after the removal of the explosives to the Youngs Road Quarry.

Waste Management

98. Waste generated during the Development must be dealt with in accordance with the following priorities:
    a) Waste generation is to be avoided and where avoidance is not feasible or reasonable, reduced;
    b) Where avoiding or reducing waste is not possible, waste is to be re-used, recycled, or recovered; and
    c) Where re-using, recycling or recovering waste is not possible, waste is to be treated or disposed of.

99. All waste generated at the Subject Land must be stored in waterproof and vermin proof bins.

100. All waste generated at the Subject Land must be delivered to Council's Waste Management Centre or another appropriate waste facility offshore for disposal.

Heritage

101. Prior to commencement of any ground disturbance associated with the Development, all people, including all contractors, that will be involved in the Development must be:
    a) Made aware that the subject land is within the "Heritage Overlay" in the *Norfolk Island Plan 2002* (as amended) and that there is potential for archaeological remains of heritage significance to be identified at the Youngs Road Quarry site and along the haulage route(s) in the Cascade area; and
    b) Provided with a copy of this Approval.

102. The Commonwealth Heritage Manager must be provided with at least two weeks notice of any ground disturbance at the Youngs Road Quarry site and along the haulage route(s) in the Cascade area. Ground disturbance includes, but is not limited to, excavation for the installation of signage.

103. The Commonwealth Heritage Manager, or another suitably qualified and experienced archaeologist nominated by the Commonwealth Heritage Manager, must be permitted to supervise any ground disturbance.

104. If the Commonwealth Heritage Manager, or another suitably qualified and experienced archaeologist nominated by the Commonwealth Heritage Manager, wishes to supervise any ground disturbance, the excavation must not commence until the Commonwealth Heritage Manager, or another suitably qualified and experienced archaeologist nominated by the Commonwealth Heritage Manager, is present.

105. Should any unknown archaeological deposit be discovered at any time, work in the immediate area of the item must stop immediately. A no-go zone must be established around the item and the Commonwealth Heritage Manager, or another suitably qualified and experienced archaeologist nominated by the Commonwealth Heritage Manager, must be notified as soon as practicable.

106. Work in the immediate area of the item must not recommence until the Commonwealth Heritage Manager, or another suitably qualified and experienced archaeologist nominated by the Commonwealth Heritage Manager, has undertaken any required management action in relation to the item and provided written approval to recommence.

107. A written approval from the Commonwealth Heritage Manager, or another suitably qualified and experienced archaeologist nominated by the Commonwealth Heritage Manager, to recommence work may include conditions. These conditions must be complied with.

Airport Operations

108. To comply with Part 4.1.1 of the Norfolk Island Airport Transport Security Program, no rock or materials are to be stored within three metres landside of the airport security fence that separates airside areas from the landside Norfolk Island Airport Development Precinct.

109. To comply with Part 4.1.1 of the Norfolk Island Airport Transport Security Program, the landside area of the airport security fence separating airside areas from the landside Norfolk Island Airport Development Precinct must be kept clear of all vegetation. The fence structure, including the base of the fence, must be kept clear of all foliage that may conceal cutting or damage, or which may assist any person to gain airside access.

110. To comply with Part 4.1.1 of the Norfolk Island Airport Transport Security Program, the area landside of the airport security fence separating airside areas from the landside Norfolk Island Airport Development Precinct must be kept clear of any object (including but not limited to: trees; vehicles; equipment), which may provide any person with assistance to breach the security barrier.

111. No vehicle or plant movements may occur at the rock stockpile site at the Norfolk Island Airport Development Precinct, or along the unsealed access / egress road between the Fire Drill Ground entry gate at Ben Christian Drive and Fire Drill Ground exit gate at Douglas Drive, for 30 minutes prior to the arrival of any aircraft and 30 minutes after the departure of any aircraft from the commencement of the Development and for as long as rock from the Youngs Road Quarry is stockpiled.

112. Prior to commencement of haulage of rock from the stockpile site, the Norfolk Island Airport Manager must be consulted to develop and agree on procedures for managing the pre- and post-flight exclusion periods.

Youngs Road Quarry Site Rehabilitation

113. Following the removal of rock and decommissioning of the Youngs Road Quarry, the site must be rehabilitated as soon as practicable and within a maximum timeframe of three years.

114. The Youngs Road Quarry site must be reinstated to land suitable for grazing cattle or as otherwise agreed with the owners of land in the area to be rehabilitated (Portion 5a1, Youngs Road reserve and Cascade Reserve). The final land use post rehabilitation must be consistent with the intent, objectives and guidelines for the Rural Zone.

115. A separate Development Approval (or a modification to this Approval) must be sought for the rehabilitation of the Youngs Road Quarry site.

ENVIRONMENTAL MANAGEMENT PLAN

116. An **Environmental Management Plan (EMP)** must be prepared to detail how the performance outcomes, commitments and mitigation measures made in the EIS, the Response to Submissions and the conditions of this Approval will be implemented and achieved throughout the duration of the Development.

117. The **EMP** must include:

a) Details of how the Development will be carried out to:

i. Meet the environmental performance outcomes stated in the EIS, the conditions of this Approval;

ii. Implement the mitigation and management measures identified in the EIS and the conditions of this Approval;

iii. Comply with the relevant conditions of this Approval.

a) A protocol for managing and reporting any:

i. incidents;

ii. non-compliances with statutory requirements;

iii. exceedances of the impact assessment criteria or performance criteria;

b) Management Plans for:

iv. Hazard and Risk.

v. Noise and Vibration.

vi. Traffic and Transport.

vii. Air Quality.

viii. Water Quality.

ix. Water Supply.

x. Biodiversity.

xi. Visual Amenity.

xii. Waste Management.

c) Monitoring Programs for:

i. Noise and Vibration – drilling and blasting.

ii. Noise – activities other than blasting.

iii. Deposited Dust.

iv. Water Quality.

Each Environmental Monitoring Program must include:

i. Details of baseline data available.

ii. Details of baseline data to be obtained and when.

iii. Details of all monitoring of the project to be undertaken.

iv. The parameters of the project to be monitored.

v. The frequency of monitoring to be undertaken.

vi. The location of monitoring.

vii. The reporting of monitoring results.

viii. Procedures to identify and implement additional mitigation measures where results of monitoring are unsatisfactory.

ix. Any consultation to be undertaken in relation to the monitoring programs.

118. The **EMP** must be endorsed by the Environmental Representative and submitted to the General Manager for approval no later than one month prior to the commencement of the Development, or within another timeframe agreed with the General Manager.

119. The Development must not commence until the **EMP** has been approved by the General Manager.

120. The **EMP**, as approved by the General Manager, must be implemented for the duration of the Development.

COMMUNITY INFORMATION AND COMPLAINTS

Distribution of Project information

121. A Community Communication Strategy must be prepared to provide mechanisms to facilitate communication between the Proponent and the community during the Development.

122. The Community Communication Strategy must include:
    a) Identification of people to be consulted during the planning phases of the Development, and during the Development;
    b) Procedures and mechanisms for the regular distribution of accessible information about or relevant to the Development;
    c) Procedures and mechanisms through which the Proponent will respond to enquiries or feedback from the community.

123. The Community Communication Strategy must include the following:
    a) All communication with adjoining landowners (Portion 1d2, Portion 5a1 and Cascade Pier) must be undertaken by email and followed up by a phone call. In the event connection by phone cannot be made, the email must be followed up in person.
    b) Landowners of Portion 1d2, Portion 5a1 and Cascade Pier must be advised of:
        i. Any development approval for the Development within one week of the date of approval.
        ii. The Project Works Program at the Youngs Road Quarry Site within one month of the date this Approval was granted.
        iii. Changes to the Project Works Program for work at the Youngs Road Quarry Site as soon as practicable.
        iv. Completion of the removal of rock from the Youngs Road Quarry Site within 48 hours of completion.
    c) All landowners and occupiers within a radius of one kilometre of the Youngs Road Quarry Site must be provided with:
        i. Direct initial contact by email, phone or in person.
        ii. A name and phone number for direct contact to the Blasting Specialist or relevant Council Representative.
        iii. The Project Works Program at the Youngs Road Quarry Site within one month of the date this Approval was granted.
        iv. Information about how updated information about the Development will be made available.

124. The Community Communication Strategy must be submitted to the General Manager for approval no later than one month prior to commencement of the Development.

125. Work must not commence until the Community Communication Strategy has been approved by the General Manager.

126. The Community Communication Strategy, as approved by the General Manager, must be implemented as soon as practicable following the granting of this Approval until at least the completion of Phase 4 (rock breaking, loading and hauling activities) of the Development.

Complaints

127. A Complaints Management System must be prepared to register complaints, the actions taken to address the complaint and whether resolution was reached.

128. The Complaints Management System must be prepared prior to the commencement of the Development and implemented and maintained until at least the completion of Phase 4 (rock breaking, loading and hauling activities) of the Development.

129. The information contained in the Complaints Management System must be provided to the General Manager upon request, and within the timeframe stated in the request.

130. Prior to the commencement of the Development, the following information must be made available to the community to facilitate enquiries and complaints: Details of how to make a complaint including: Telephone Number; Email Address; Postal Address; Physical Address and hours within which complaints can be made.

PROVISION OF ELECTRONIC INFORMATION

131. Information about the Development must be published on the Council website prior to commencement of the Development and maintained for the duration of Phases 1-4 of the Development. Up-to-date information must be published and maintained on the website including, but not limited to:
    a) A description of the Development.
    b) The Project Works Schedule (to be updated as required).

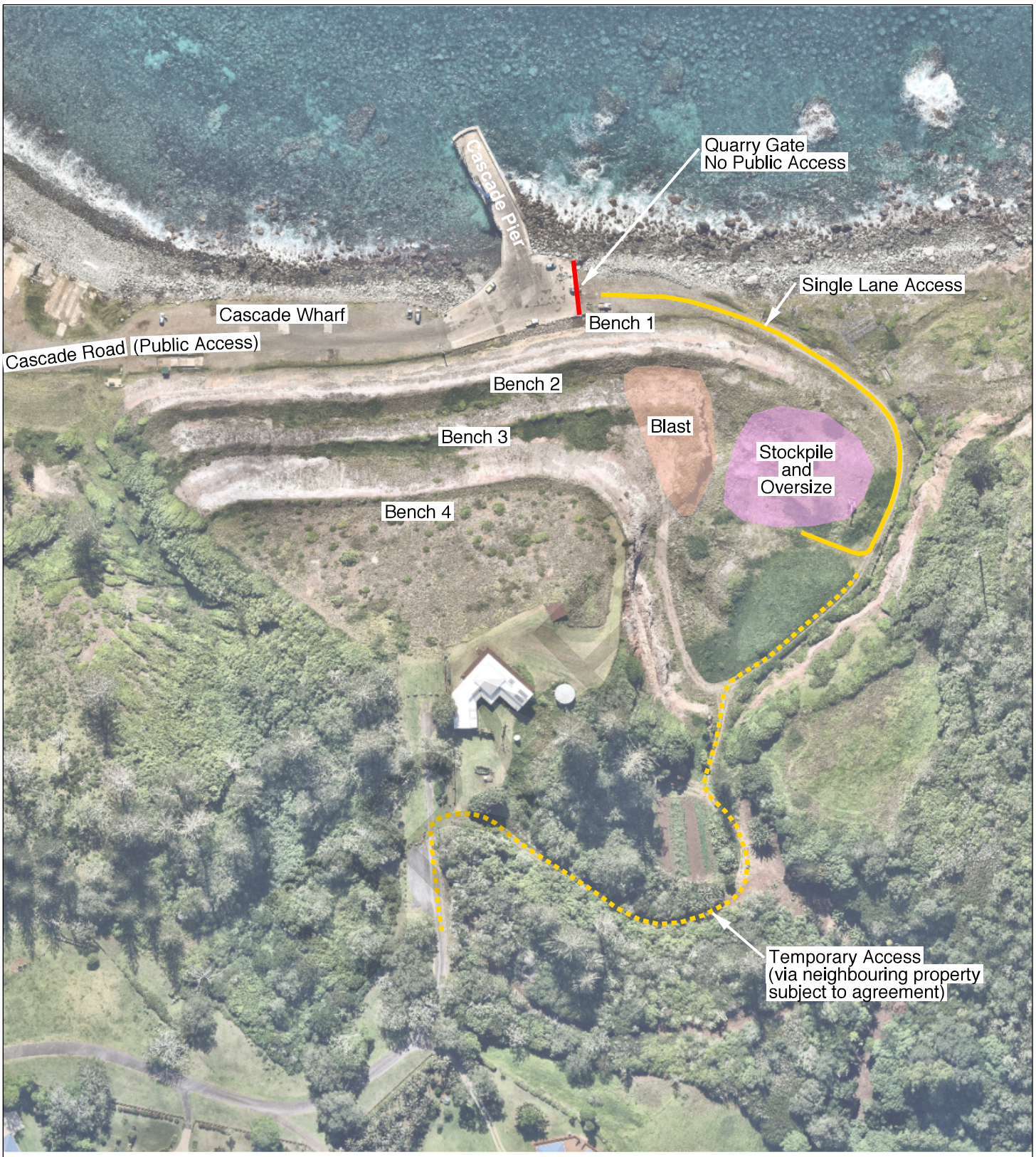
END

Attachment A: Planning Assessment Report

Blank page

Appendix B

Site Plan



25m 0 50 100m

GHD

N

Norfolk Island Young's Qaurry
Site Plan

Project no.
12655941

Rev

www.ghd.com

Plot Date: 26/11/2024 Plotted by: S Verhellen Cad File No:\ghdnet\ghd\AU\Melbourne\Projects\31\12655941\CADD\Drawings\12655941-GHD-00-00SKT-GN-00001 Norfolk Island Youngs Quarry Site Plan.dgn