Appendix F Assessment of objectives and policies

Auckland Unitary Plan – Assessment of objectives and policies

This table sets out a full assessment of all objectives and policies of the RPS, regional plan and district plan components of the AUP. In assessing these objectives and policies, attention is drawn to section B1 of the AUP, which states that objectives and policies at a higher level are given effect at every lower level. In other words, the AUP is designed to be read and applied as integrated document, both vertically and horizontally.

A number of the objectives and policies, particularly at the RPS level, are directed towards the promulgation of regional and district plans (including matters to which Auckland Council must give particular regard), and accordingly those matters are not relevant to this resource consent application. Failure to list and respond to those matters is simply a reflection of that fact.

Table 1: AUP Chapter B Regional Policy Statement: Objectives and policies assessment

	Reference	RPS Objective/Policy	Commentary
	B2. Tāhuhu whakaruruhau ā-taone - Urban growth and form **B2.2. Urban growth and form**		
1.	B2.2.1 Objective (1)	A quality compact urban form that enables all of the following: (a) a higher-quality urban environment; (b) greater productivity and economic growth; (c) better use of existing infrastructure and efficient provision of new infrastructure; (d) good accessibility for all people, including by improved and more efficient public or active transport; (e) greater social and cultural vitality; (f) better maintenance of rural character and rural productivity; (g) reduced adverse environmental effects; and (h) improved resilience to the effects of climate change.	Development of the Clevedon Quarry Expansion will help achieve, and is therefore consistent with, this objective because it will enable: "a higher-quality urban environment", "greater productivity and economic growth", and "improved and more efficient public transport" through providing approximately 150 MT of high-quality, locally sourced aggregate to the Auckland market, as opposed to sourcing aggregate from alternative locations outside the Auckland region. Rock aggregate is a foundation and building product and a fundamental component of concrete. It plays a critical role in various construction and civil engineering projects, including housing, roading and infrastructure. The Economic Assessment (Technical Report A, Volume 2) concludes that the cost saving derived from the lower transport requirements of sourcing aggregate from the Clevedon Quarry Expansion, at the maximum consented production level of 3 MT per annum, is between $38.6 million and $119.8 million, based on transport, environmental and social related costs. This cost saving will contribute to greater productivity and economic growth by

	Reference	RPS Objective/Policy	Commentary
			providing a sustained availability of cost-effective aggregate to enable future urban growth opportunities as well as improving the resilience to the effects of climate change through reduced carbon emissions. The proposal will also achieve "better use of existing quarry infrastructure", as the Project extends the existing Clevedon Quarry pit through a more efficient and operationally workable quarry design, enabling the quarry to continue operating while the quarry is progressively developed. Overall, quarrying activity proposed for the Clevedon Quarry Expansion will provide significant regional benefits and is vital for the growth and maintenance of the region, in regard to housing, business and infrastructure. The Project is therefore consistent with this objective of the RPS.
	B2. Tāhuhu whakaruruhau ā-taone - Urban growth and form **B2.3. A quality built environment**		
2.	B2.3.1 Objective (3)	The health and safety of people and communities are promoted	Appropriate management and operation measures are proposed to manage the health and safety of people within the site and communities surrounding the site.
	B3. Ngā pūnaha hanganga, kawekawe me ngā pūngao - Infrastructure, transport and energy **B3.2 Infrastructure**		
3.	B3.2.1 Objective (1)	Infrastructure is resilient, efficient and effective.	Ensuring the seamless provision of infrastructure is vital for a resilient and well-functioning city and society. However, the design, consenting and development of large-scale infrastructure is not a straightforward exercise and often involves long timeframes. For this reason, the efficient development of infrastructure is recognised and enabled through these objectives and policies. While the proposed Clevedon Quarry Expansion is not infrastructure in itself (rather it is an aggregate extraction activity and an infrastructure supporting activity), a large part of the need for continued aggregate supply is to support the maintenance
4.	B3.2.1 Objective (2)	The benefits of infrastructure are recognised, including: (b) enabling economic growth.	
5.	B3.2.1 Objective (3)	Development, operation, maintenance, and upgrading of infrastructure is enabled, while managing adverse effects on: (a) the quality of the environment and, in particular, natural and physical resources that have been scheduled in the Unitary Plan in relation to … natural resources, …historic heritage and special character;	

	Reference	RPS Objective/Policy	Commentary
		(b) the health and safety of communities and amenity values	and development of infrastructure. Without this aggregate supply, it is likely that the provision of infrastructure would be compromised. Aggregate extraction can only take place where it is found naturally in situ and preferably is extracted in close proximity to demand in order to minimise the environmental effects and costs of transporting aggregate from the pit to the construction site. Due to its accessibility and proximity to projected future growth areas in South and East Auckland, the Project is expected to save costs on transport compared to alternative sources outside of the region. This proximate and affordable local aggregate resource will contribute directly towards efficient development and upgrading of infrastructure in accordance with Objectives 1 and 4, and with Policy 1. The Project has been designed to avoid, remedy or mitigate adverse effects on natural and physical resources and where that is not possible to offset or compensate for them to the extent practicable. This is consistent with Objective 3 and Policy 6.
6.	B3.2.1 Objective (4)	The functional and operational needs of infrastructure are recognised.	
7.	B3.2.2 Policy (1)	Enable the efficient development, operation, maintenance and upgrading of infrastructure	
8.	B3.2.2 Policy (6)	Enable the development, operation, maintenance and upgrading of infrastructure in areas with natural and physical resources that have been scheduled in the Unitary Plan in relation to… natural resources …while ensuring that the adverse effects on the values of such areas are avoided where practicable or otherwise remedied or mitigated.	
	B6. Mana Whenua **B6.2 Recognition of the Treaty of Waitangi/Te Tiriti o Waitangi partnerships and participation**		
9.	B6.2.1 Objective (1)	The principles of the Treaty of Waitangi/Te Tiriti o Waitangi are recognised and provided for in the sustainable management of natural and physical resources including ancestral lands, water, air, … wāhi tapu and other taonga.	SAL has undertaken consultation with iwi in the region who have interests in the site and continues to undertake consultation to ensure that their views on the Project can be taken into account, are recognised and can be addressed where at all possible (refer to Consultation documents attached as Appendix D, Volume 1). As described in Section 7.3.13 of the AEE Report, SAL has engaged with a number of relevant iwi groups, including Ngāi Tai ki Tāmaki, Ngaati Whanaunga, Ngāti Maru, Ngāti Paoa Iwi Trust, Ngāti Tamaterā, Ngāti Te Ata Waiohua, Te Ākitai Waiohua and Waikato-Tainui. Out of these groups, four iwi registered interest in the Project, including Ngāi Tai ki Tāmaki, Ngaati Whanaunga, Ngāti Paoa Iwi Trust and Waikato-Tainui. SAL has received a CVIA from Ngaati Whanaunga and a letter outlining the engagement to date with Ngāi Tai ki Tāmaki (attached as Appendix E), which have
10.	B6.2.1 Objective (2)	The principles of the Treaty of Waitangi/Te Tiriti o Waitangi are recognised through Mana Whenua participation in resource management processes.	
11.	B6.2.2. Policy (1)	Provide opportunities for Mana Whenua to actively participate in the sustainable management of natural and physical resources including ancestral lands, water, sites, wāhi tapu and other taonga in a way that does all of the following: (a) recognises the role of Mana Whenua as kaitiaki and provides for the practical expression of kaitiakitanga;	

	Reference	RPS Objective/Policy	Commentary
		(b) builds and maintains partnerships and relationships with iwi authorities; (c) provides for timely, effective and meaningful engagement with Mana Whenua at appropriate stages in the resource management process, including development of resource management policies and plans; (d) recognises the role of kaumātua and pūkenga; (e) recognises Mana Whenua as specialists in the tikanga of their hapū or iwi and as being best placed to convey their relationship with their ancestral lands, water, sites, wāhi tapu and other taonga; (f) acknowledges historical circumstances and impacts on resource needs; (g) recognises and provides for mātauranga and tikanga; and (h) recognises the role and rights of whānau and hapū to speak and act on matters that affect them.	provided important background context and information about the places and values of importance on site. In recognising the role of Tangata Whenua as kaitiaki with specialist historical knowledge of the area, feedback received through the engagement process has been taken into account and been reflected through design aspects that address areas of importance to Tangata Whenua. One specific example is the design and construction of a wetland system for water quality treatment as well as proposed ecological restoration across the site. The proposed mitigation and management measures and consent conditions address the majority of the concerns raised by Ngaati Whanaunga. The Ngāi Tai ki Tāmaki letter does not identify site-specific cultural impacts or recommend consent conditions. It confirms the iwi's support for continued engagement with SAL throughout the FTAA process, and during the ongoing management and development of the Project where appropriate. The CVIA's recommendations focus on ongoing monitoring, water quality protection, ecological restoration, cultural heritage management, Mana Whenua involvement and long-term environmental accountability. Most of these matters are reflected, where practicable, in the proposed mitigation and management measures and conditions of consent. In addition, the principles of the Treaty, including rangatiratanga and partnership, have been adopted by SAL, and they have been working with Tangata Whenua to identify opportunities for kaitiakitanga during the consent process and the development of the Quarry Expansion. Overall, the Project is consistent with Objectives 1 and 2, and with Policy 1.
	B6. Mana Whenua **B6.3. Recognising Mana Whenua values**		

	Reference	RPS Objective/Policy	Commentary
12.	B6.3.1 Objective (1)	Mana Whenua values, mātauranga and tikanga are properly reflected and accorded sufficient weight in resource management decision-making.	To the extent that this objective relates to the assessment of effects, rather than the resource consent decision process, it is considered that this objective is met as set out in Section 7 of the AEE. SAL has undertaken engagement in the last year with various iwi groups and has received a CVIA report and a letter from two iwi groups as mentioned in Rows 9 – 11. The Project is consistent with Objectives 1 and 2, and with Policy 1. The CVIA (attached as Appendix E, Volume 1) identifies the key cultural values related to the Site, including mauri, tapu, kōrero tūturu (cultural landscape), rawa tūturu (remnant vegetation), hiahiatanga tūturu (habitats of culturally significant species), and contemporary significance. The CVIA acknowledges that the Project will result in environmental and cultural impacts. The potential effects identified in the CVIA are assessed in Section 7 of this AEE report and are informed by the technical reports in Volume 2. The CVIA's recommendations focus on ongoing monitoring, water quality protection, ecological restoration, cultural heritage management, Mana Whenua involvement and long-term environmental accountability. Most of these matters are reflected, where practicable, in the proposed mitigation and management measures and conditions of consent. Overall, Ngaati Whanaunga considers that these impacts can be avoided, remedied or mitigated through robust consent conditions, ongoing monitoring, ecological planting, cultural participation and long-term accountability mechanisms. No wāhi tapu site will be impacted by the proposed works. Although the Project design was amended to avoid native treeland and reduce direct impacts on streams, the proposed expansion requires unavoidable modification of the whenua and awa through substantial earthworks and physical works. A range of mitigation and management measures are proposed to
13.	B6.3.1 Objective (2)	The mauri of, and the relationship of Mana Whenua with, natural and physical resources including freshwater, … land, air … resources are enhanced overall.	
14.	B6.3.2 Policy (1)	Enable Mana Whenua to identify their values associated with all of the following: (a) ancestral lands, water, air, sites, wāhi tapu, and other taonga; (b) freshwater, including rivers, streams, aquifers, lakes, ~~…~~ and associated values; (c) biodiversity; … and (d) air …resources.	
15.	B6.3.2 Policy (2)	Integrate Mana Whenua values, mātauranga and tikanga: (a) in the management of natural and physical resources within the ancestral rohe of Mana Whenua, including: (i) ancestral lands, water, sites, wāhi tapu and other taonga; (ii) biodiversity; and (iii) historic heritage places and areas. (b) in the management of freshwater ~~…~~ resources, such as the use of rāhui to enhance ecosystem health; (c) in the development of innovative solutions to remedy the long-term adverse effects on historical, cultural and spiritual values from discharges to freshwater ~~…~~ water; and (d) in resource management processes and decisions relating to freshwater, geothermal, land, air ~~…~~ resources.	
16.	B6.3.2 Policy (3)	Ensure that any assessment of environmental effects for an activity that may affect Mana Whenua values includes an appropriate assessment of adverse effects on those values.	

	Reference	RPS Objective/Policy	Commentary
			address effects associated with earthworks, discharges to water, sediment generation, use and take of groundwater and vegetation removal. These measures include a best practice approach to earthworks and stormwater management. The proposed stream augmentation to Streams 1 and 3 will ensure no decrease in stream base flows and will be from the same catchment and puna that naturally feeds the streams to help ensure that the mauri and wairua of ngā awa are maintained. Water proposed to be used for augmentation that will be sourced from the quarry sump or bores is proposed to be treated prior to discharge to ensure no water quality effects. The constructed wetland will provide water quality treatment prior to discharge to Stream 1. This system has been designed to achieve a target TSS removal efficiency of 90%. Therefore, the Project is consistent with Policies 2 and 3.
17.	B6.3.2 Policy (4)	Provide opportunities for Mana Whenua to be involved in the integrated management of natural and physical resources in ways that do all of the following: (a) recognise the holistic nature of the Mana Whenua world view; ... (c) restore or enhance the mauri of freshwater ... ecosystems.	Opportunities for Mana Whenua to be involved with the Project and the management of natural resources on site have been provided and will continue to be provided. This is relevant in regard to (a) and (c). Refer to Sections 7.3.13 and 8.3 of the AEE Report, and the consultation documents (Appendix D, Volume 1), outlining the engagement with relevant iwi. Overall, the Project is therefore consistent with Policy 4.
18.	B6.3.2 Policy (6)	Require resource management decisions to have particular regard to potential impacts on all of the following: (a) the holistic nature of the Mana Whenua world view; (b) the exercise of kaitiakitanga; (c) mauri, particularly in relation to freshwater ... resources; (d) customary activities, including mahinga kai; (e) sites and areas with significant spiritual or cultural heritage value to Mana Whenua; and...	This policy is about decisions rather than applications; however, to assist the Fast Track Panel in making its decision, SAL has set out how it has had regard to matters (a) – (e) in Section 7.3.13 of the AEE Report.
	B6. Mana Whenua		

	Reference	RPS Objective/Policy	Commentary
	B6.5. Protection of Mana Whenua cultural heritage		
19.	B6.5.1 Objective (1)	The tangible and intangible values of Mana Whenua cultural heritage are identified, protected and enhanced.	SAL recognises and acknowledges the relationship that Mana Whenua have with the land and their cultural heritage. There are no areas registered as culturally significant within the AUP or on the NZAA ArchSite database; however, SAL recognises that these mechanisms have limitations and that engagement with iwi is an integral part of understanding these values. Section 7 of the AEE identifies some of the values identified by Mana Whenua and discusses how these will be recognised. The CVIA acknowledges that the Project will result in environmental and cultural impacts. Its recommendations focus on ongoing monitoring, water quality protection, ecological restoration, cultural heritage management, Mana Whenua involvement and long-term environmental accountability. Most of these matters are reflected, where practicable, in the proposed mitigation and management measures and conditions of consent.
20.	B6.5.1 Objective (2)	The relationship of Mana Whenua with their cultural heritage is provided for.	
21.	B6.5.1 Objective (3)	The association of Mana Whenua cultural, spiritual and historical values with local history and whakapapa is recognised, protected and enhanced.	
22.	B6.5.2 Policy (1)	Protect Mana Whenua cultural and historic heritage sites and areas which are of significance to Mana Whenua.	
23.	B6.5.2 Policy (2)	Identify and evaluate Mana Whenua cultural and historic heritage sites, places and areas considering the following factors: (a) Mauri: ko te mauri me te mana o te wāhi, te taonga rānei, e ngākaunuitia ana e te Mana Whenua. The mauri (life force and life-supporting capacity) and mana (integrity) of the place or resource holds special significance to Mana Whenua; (b) Wāhi tapu: ko tērā wāhi, taonga rānei he wāhi tapu, arā, he tino whakahirahira ki ngā tikanga, ki ngā puri mahara, o ngā wairua a te Mana Whenua. The place or resource is a wāhi tapu of special, cultural, historic, metaphysical and or spiritual importance to Mana Whenua; (c) Kōrero Tūturu/historical: ko tērā wāhi e ngākaunuitia ana e te Mana Whenua ki roto i ōna kōrero tūturu. The place has special historical and cultural significance to Mana Whenua; (d) Rawa Tūturu/customary resources: he wāhi tērā e kawea ai ngā rawa tūturu a te Mana Whenua. The place provides important customary resources for Mana Whenua; (e) Hiahiatanga Tūturu/customary needs: he wāhi tērā e eke ai ngā hiahia hinengaro tūturu a te Mana Whenua. The place or resource is a repository for Mana Whenua cultural and spiritual values; and	

	Reference	RPS Objective/Policy	Commentary
		(f) Whakaaronui o te Wa/contemporary esteem: he wāhi rongonui tērā ki ngā Mana Whenua, arā, he whakaahuru, he whakawaihanga, me te tuku mātauranga. The place has special amenity, architectural or educational significance to Mana Whenua.	
24.	B6.5.2 Policy (6)	Protect Mana Whenua cultural heritage that is uncovered during … use and development by all of the following: (a) requiring a protocol to be followed in the event of accidental discovery of kōiwi, archaeology or artefacts of Māori origin; (b) undertaking appropriate actions in accordance with mātauranga and tikanga Māori; and (c) requiring appropriate measures to avoid, remedy or mitigate further adverse effects.	Should subsurface archaeological evidence be unearthed during construction, or if human remains are discovered, the Archaeological Accidental Discovery Rule set out in Chapter E11.6.1 of the AUP will be followed. In addition, a condition of consent has been proposed to provide the opportunity for Mana Whenua to specify steps to be taken in the event of any accidental discovery of taonga or kōiwi (Appendix G).
25.	B6.5.2 Policy (8)	Encourage appropriate design, materials and techniques for infrastructure in areas of known historic settlement and occupation by the tūpuna of Mana Whenua.	There are no known recorded archaeological sites, historic occupation or settlement areas within the Project footprint as identified by registered features in the AUP or ArchSite. In the event that any such areas are discovered, accidental discovery protocols will be followed.
	B7. Toitū te whenua, toitū te taiao – Natural resources **B7.2. Indigenous biodiversity**		
26.	B7.2.1 Objective (1)	Areas of significant indigenous biodiversity value in terrestrial, freshwater … areas are protected from the adverse effects of …use and development.	Objective 1 relates to areas of significant indigenous biodiversity and requires these areas to be protected from adverse effects. The objective requires an assessment at the 'area' level, and in some cases, such as this, the objective can be met despite there being a loss of some biodiversity. As identified through the Ecological Impact Assessment (EcIA) (Technical Report I, Volume 2), SEA_T_5588 is a scheduled SEA, which contains regenerating tree fern-broadleaf forest that has been assessed as having a high ecological value. The proposed expansion involves removal of approximately 6.1 ha of this SEA located to the north-east of the impact site. The remainder of the proposed LoQ extent consists of streams and recently harvested exotic pine forest.

	Reference	RPS Objective/Policy	Commentary
			The Project has been designed and developed, with particular attention being given to these natural features. Key design considerations include: • Reduction in the removal of SEA_T_5588 vegetation whilst still achieving a safe and efficient quarry design. • Avoidance of ONL to the west. • Avoidance of Stream 1 due to its high ecological value and very high freshwater fauna value, located to the north of the existing quarry. • Avoidance of direct impact on frog habitat. • Reduction in the removal of native vegetation and extent of direct impacts on Stream 3 by moving the southern boundary of the proposed LoQ extent. However, to enable the efficient and safe development of the in situ resource, there will be an unavoidable loss of indigenous biodiversity. The Project will involve the removal of SEA vegetation outside the SPQZ and reclamation of Stream 2 located entirely within the SPQZ. To address the residual effects from the loss of vegetation, a comprehensive offset package has been designed to achieve a catchment-scale benefit in freshwater ecological function and a net gain in terrestrial biodiversity values. This involves approximately 16.6 ha of riparian offset planting and 40.4 ha of freshwater compensation planting within the Stream 3 catchment and approximately 10.6 ha of restoration planting, adjoining the potential impact area, to offset the loss of approximately 6.1 ha of indigenous vegetation. The offset and compensation package has been specifically designed to connect existing SEA fragments within the Stream 3 catchment, creating a continuous forested corridor linking the Wairoa River to the Hunua Ranges and improving ecological connectivity and buffering to the mature native forest and treeland within that catchment. All offset and compensation plantings will be protected in perpetuity through covenants and conditions of consent (Appendix G).

	Reference	RPS Objective/Policy	Commentary
			Although not all indigenous biodiversity is avoided by the Project, as a result of the redesign, mitigation measures and offset package, the Project is considered to be consistent with Objective 1 because the areas of significant indigenous biodiversity are better protected now than they would be without the Project. In addition, these provisions, whilst directive, must be considered in the context of the FTAA process which this application is proceeding under. Under the FTAA process the purpose of the FTAA, which is to facilitate the delivery of infrastructure and development projects with significant regional or national benefits, is prioritised in the decision making process over and above the provisions of Parts 2, 3, 6 and 8 to 10 of the RMA.
27.	B7.2.1 Objective (2)	Indigenous biodiversity is maintained through protection, restoration and enhancement in areas where ecological values are degraded, or where development is occurring.	In this objective, the focus is on *indigenous biodiversity*. Again, that needs to be assessed at the appropriate habitat scale – it cannot be assessed at the scale of individual flora and fauna. As set out in Row 26, the majority of vegetation removal is cutover and replanted pine forest located within the SPQZ, which is earmarked through the AUP for quarrying activity. This vegetation type has been assessed as having low levels of effects. However, the loss of approximately 6.1 ha of regenerating tree fern-broadleaf forest is located outside of the SPQZ and has been assessed as having a high level of effect. As stated in Row 26, a comprehensive offset and compensation package is proposed, as summarised in Sections 5 and 7.2.3 of the AEE Report and detailed in the EcIA (Technical Report I, Volume 2). The total restoration package will provide a fully forested corridor linking the Wairoa River to the Hunua Ranges, connecting the existing vegetation fragments and providing connectivity and buffering to the mature native forest and treeland within the Stream 3 catchment. Overall, the Project is consistent with Objective 2.
28.	B7.2.2 Policy (5)	Avoid adverse effects on areas listed in the Schedule 3 of Significant Ecological Areas – Terrestrial Schedule and Schedule 4 Significant Ecological Areas – Marine Schedule.	As with other provisions assessed above, the focus of this policy is on *areas* identified in Schedule 3. The area of scheduled SEA located within and adjacent to the proposed Quarry Expansion is SEA_T_5588. Clearance of

	Reference	RPS Objective/Policy	Commentary
			approximately 6.1 ha of high value regenerating tree fern-broadleaf forest within this SEA overlay is proposed. As noted in Row 26, the Project has been designed to reduce the extent of SEA vegetation lost, but total avoidance was not practicable to be able to achieve a more efficient and operationally workable quarry. Where adverse effects cannot be avoided, they have been remedied and mitigated. Residual adverse effects on terrestrial ecology are proposed to be offset and compensated through a comprehensive ecological package designed to achieve a Net Gain. In addition, the proposed terrestrial offset package includes native planting in two areas adjacent to the potential impact area, including on slopes and upper Stream 3 catchment, and the OBDA once filled. This will provide a fully forested corridor connecting the existing SEA_T_5588 and wider Hunua Ranges with the Wairoa River. On that basis, while the Project does result in adverse effects on the SEA due to the removal of some vegetation within this area, the loss of vegetation is offset through revegetation to balance out the adverse effects.
29.	B7.2.2 Policy (5A)	Improve the resilience of areas listed in the Schedule 3 of Significant Ecological Areas – Terrestrial Schedule and of Schedule 4 Significant Ecological Areas – Marine Schedule to the effects of climate change.	As discussed in Technical Report I and Row 26 above, the offset package involves restoration plantings adjacent to the potential impact area to address residual adverse effects on terrestrial ecology. Notably, the terrestrial offset and compensation package will provide approximately 10.6 ha of restoration planting, to address the loss of approximately 6.1 ha of SEA forest. Of this, 4.6 ha of planting on the OBDA will be undertaken once it is filled (approximately 10 years post-consent), while the additional 6.0 ha of slope and open area planting within the Stream 3 catchment will be undertaken within one year of commencement of consent. Over time, this will improve the extent, quality and connectivity of local indigenous biodiversity and terrestrial habitats on site, as well as improve the resilience of the SEA area located at the northern boundary of the LoQ.

	Reference	RPS Objective/Policy	Commentary
			While the Project does involve the removal of existing vegetation within an SEA area, due to the offset and compensation planting proposed, overall, the resilience of the adjoining SEA areas will be improved. Accordingly, the Project is consistent with Policy 5A.
	B7. Toitū te whenua, toitū te taiao – Natural resources **B7.3. Freshwater systems**		
30.	B7.3.1 Objective (2)	Loss of freshwater systems is minimised.	The objective requires that the loss of freshwater systems be "*minimised*" rather than "*avoided*". The proposed Quarry Expansion and ongoing operation will result in the unavoidable loss of permanent and intermittent streams. There are four streams (Streams 1, 2, 2a, and 3) located within or adjoining the LoQ, comprising both permanent and intermittent reaches. Stream 2 is located within the centre of the proposed LoQ and falls entirely within the SPQZ, and the majority of Stream 2a is also within the SPQZ, while Streams 1 and 3 are located outside the SPQZ. The proposed works will result in reclamation of Stream 2 due to quarry expansion, and the loss of intermittent headwater tributaries of Streams 1, 2a, and 3 due to reduction in stream baseflows associated with quarry dewatering. As discussed in Row 26 above, where possible the design has been modified to avoid loss of freshwater systems. Acknowledging that there will be some loss of streams, overall, the loss has been "minimised" where practicable and therefore the Project is consistent with Objective 2.
31.	B7.3.1 Objective (3)	The adverse effects of changes in land use on freshwater are avoided, remedied or mitigated.	The proposed Clevedon Quarry Expansion will involve land use changes, primarily from plantation forestry (recently felled and replanted), to quarrying and aggregate extraction, resulting in the loss of freshwater systems. As noted in Section 7 of the AEE Report, where at all possible, mitigation and offset and compensation measures have been proposed and are encapsulated through the proposed conditions of consent (Appendix G). Therefore, the Project is broadly consistent with Objective 3.

	Reference	RPS Objective/Policy	Commentary
32.	B7.3.2 Policy (4)	*Management of freshwater systems* (4) Avoid the permanent loss and significant modification or diversion of lakes, rivers, streams (excluding ephemeral streams), and their margins, unless all of the following apply: (a) it is necessary to provide for: ... (iii) the sustainable use of land and resources to provide for growth and development; or (iv) infrastructure; (b) no practicable alternative exists; (c) mitigation measures are implemented to address the adverse effects arising from the loss in freshwater system functions and values; and (d) where adverse effects cannot be adequately mitigated, environmental benefits including on-site or off-site works are provided.	The loss of freshwater systems has been minimised where possible through the redesign of the quarry pit extent, which resulted in the reduction in stream loss while recognising that the nature of the activity and its locational constraints have meant that complete avoidance of freshwater system loss is not able to be achieved. Where this has not been possible, the Project satisfies all elements of the exception in (a)-(d): (a) the Project is necessary in order to provide aggregate material, which is an essential material used in various construction and civil engineering applications. Securing a future supply of high-quality aggregate is essential to delivering regionally significant infrastructure projects. Furthermore, it is a sustainable use of an in situ resource, which provides directly for growth and development of the region; (b) for the reasons described above, alternative designs within the proposed site have been investigated, and it is considered that the proposed layout represents the best practicable alternative; (c) mitigation measures to address the adverse effects arising from the loss in freshwater system functions and values are set out in the EcIA (Technical Report I, Volume 2) (there is no requirement under this policy to mitigate the loss of extent); and (d) to address residual effects on freshwater ecology following mitigation, an offset and compensation package is proposed, as follows: • Riparian planting within the 20 m margin along both banks of approximately 4,510 m of Stream 3, which will result in approximately 16.6 ha of planting; and • Approximately 40.4 ha of restoration planting within an additional 20 m either side of the main stem of Stream 3

	Reference	RPS Objective/Policy	Commentary
			downstream of the existing native treeland to compensate for residual freshwater effects. These proposed plantings will improve the ecological condition of streams within the catchment, through improved stream shading, temperature regulation, slowing and filtering runoff, bank stabilisation and reduction of sediment inputs into stream channels. The location of the freshwater compensation planting adjacent to the riparian offset planting will reinforce and extend these benefits. Although this particular policy does not require it, the freshwater offset and compensation package will result in positive effects that outweigh the residual adverse effects on freshwater ecological values, consistent with the principle of the NPS-FM. Overall, the Project is therefore consistent with Policy 4.
33.	B7.3.2 Policy (5)	Manage … use, development, including discharges and activities in the beds of lakes, rivers streams …, to do all of the following: (a) protect identified … Natural Stream Management Areas …~~;~~ … (b) minimise erosion and modification of beds and banks of lakes, rivers, streams…; (c) limit the establishment of structures within the beds of lakes, rivers and streams … to those that have a functional need or operational requirement to be located there; and (d) maintain or where appropriate enhance: (i) freshwater systems not protected under Policy B7.3.2(5)(a); (ii) navigation along rivers and public access to and along lakes, rivers and streams; (iii) existing riparian vegetation located on the margins of lakes, rivers, streams …; and (iv) areas of significant indigenous biodiversity.	The proposed Clevedon Quarry Expansion has been designed and will be operated in order to: • Avoid any development within the Natural Stream Management Area (NSMA) (a small portion of the northern part of the site at 546 McNicol Road is within this overlay; however, this overlay is not within the LoQ footprint) (Policy 5(a)); • Minimise erosion and modification of the beds and banks of the streams within the site in accordance with GD05 (Policy 5(b)); • No structures have been proposed within the beds of streams (Policy 5(c)); • The following features have been maintained or enhanced (Policy 5(d)): ○ Stream 3 will be enhanced through riparian planting, as described in Technical Report I; ○ Existing riparian vegetation located on the margins of Stream 3 will be enhanced over time via the riparian

	Reference	RPS Objective/Policy	Commentary
			planting proposed as part of the offset and compensation package; ○ The constructed wetland will provide water quality treatment prior to discharge to Stream 1. This system has been designed to achieve a target TSS removal efficiency of 90%. ○ A surface water diversion swale is proposed as part of the quarry water management system. Clean water diversions will be constructed to divert upper catchment clean water away from the area of works as part of ESC measures. ○ Areas of significant indigenous biodiversity have been identified on site, including an area scheduled as SEA in the AUP, and areas that will be protected in perpetuity through covenants and conditions of consent (Appendix G). Overall, the Project is consistent with Policy 5.
34.	B7.3.2 Policy (6)	Restore and enhance freshwater systems where practicable when development, change of land use, … occur.	Where practicable, freshwater systems have been restored and enhanced. In particular, riparian planting along Stream 3 will improve the ecological condition of streams within the catchment, including through improved stream shading, temperature regulation, slowing and filtering runoff, bank stabilisation, and reduction of sediment inputs to stream channels. Therefore, the Project is consistent with Policy 6.
	B7. Toitū te whenua, toitū te taiao – Natural resources **B7.4. ~~…~~ freshwater …~~and geothermal water~~**		
35.	B7.4.1 Objective (1)	~~…~~ freshwater ~~…~~ are used within identified limits while safeguarding the life-supporting capacity and the natural, social and cultural values of the waters.	Groundwater take and diversion consent is sought to enable aggregate extraction. The Groundwater Assessment (Technical Report G, Volume 2) concludes that there is sufficient availability of groundwater resource in the Hunua Wairoa Greywacke aquifer and that the take will not result in overallocation. The site is not located within a High Use Aquifer Management Area or a Water

	Reference	RPS Objective/Policy	Commentary
			Supply Management Area under the AUP. Groundwater drawdown is expected to remain localised within the quarry catchment and does not extend beyond the Wairoa River, indicating negligible risk to surrounding groundwater users. The proposed quarry dewatering has the potential to result in stream depletion effects on Streams 1 and 3 through a reduction in stream baseflows. To mitigate the loss of stream base flows on both Streams 1 and 3, augmentation is proposed from the quarry sump or onsite bore. Freshwater monitoring will be undertaken prior to discharges occurring, and throughout the Project, to establish an accurate baseline and monitor effects. The augmentation will be managed to ensure it will not result in an increase in temperature or dissolved oxygen. As mentioned in Rows 14 – 15, the groundwater is from the same catchment or puna that naturally feeds the streams to help ensure that the mauri and wairua of ngā awa are maintained. Overall, the Project is therefore consistent with Objective 1.
36.	B7.4.1 Objective (2)	The quality of freshwater … is maintained where it is excellent or good and progressively improved over time where it is degraded.	The quality of freshwater will be maintained through the mitigation measures set out in Section 7 of the AEE Report, including: • Robust ESC measures are set out in the ESCAR (Technical Report K, Volume 2) designed to manage the potential sediment discharges during the enabling and establishment earthworks, as well as through the construction and operation of the quarry on downstream freshwater systems; • All runoff from quarry operations will be controlled via the quarry sumps and directed to the constructed wetland for treatment prior to discharge, designed to achieve a target TSS removal efficiency of 90%. • Once fully established, the water management system will be permanent and provide the water quality treatment for the life of the quarry.

	Reference	RPS Objective/Policy	Commentary
			• Freshwater monitoring to support augmentation is required by the consent conditions to ensure water quality is not affected by proposed augmentation. Therefore, the Project is consistent with Objective 2.
37.	B7.4.1 Objective (4)	The adverse effects of point and non-point discharges, in particular stormwater runoff and wastewater discharges, on ~~...~~ freshwater … are minimised and existing adverse effects are progressively reduced.	Adverse effects of stormwater discharges on freshwater will be appropriately managed, as addressed in Section 7.3.4 of the AEE Report. As set out in Row 36 above, adverse effects will be minimised through the proposed ESC measures and the constructed wetland water management system. No wastewater discharges are proposed. The Project is therefore consistent with Objective 4.
38.	B7.4.1 Objective (6)	Mana Whenua values, mātauranga and tikanga associated with ~~...~~ freshwater … are recognised and provided for, including their traditional and cultural uses and values.	SAL has undertaken engagement in the last year with various iwi groups and has received a CVIA report prepared by Ngaati Whanaunga and a letter outlining the engagement to date with Ngāi Tai ki Tāmaki. The CVIA identifies the key cultural values associated with the site, including mauri, tapu, kōrero tūturu (cultural landscape), rawa tūturu (remnant vegetation), hiahiatanga tūturu (habitats of culturally significant species), and contemporary significance. Section 7 of the AEE Report sets out various measures to minimise the effects of the Project on mauri and wairua of the awa (waterways) and puna (springs) and provide for Mana Whenua values. Most matters raised in the CVIA are reflected, where practicable, in the proposed mitigation and management measures and conditions of consent. Acknowledging that some freshwater systems are being lost and therefore the Mana Whenua values will be impacted in relation to these particular watercourses, it is still considered that overall the Project is nonetheless consistent with Objective 6.

	Reference	RPS Objective/Policy	Commentary
39.	B7.4.2 Policy (7)	*Water quality* Manage the discharges of contaminants into water from ... use and development to avoid where practicable, and otherwise minimise, all of the following: … (a) significant bacterial contamination of freshwater; (b) adverse effects on the quality of freshwater ...; (c) adverse effects from contaminants, including nutrients generated on or applied to land, and the potential for these to enter freshwater ... from both point and nonpoint sources; (d) adverse effects on Mana Whenua values associated with … freshwater ... including wāhi tapu, wāhi taonga and mahinga kai; and (e) adverse effects on the water quality of catchments and aquifers that provide water for domestic and municipal supply.	Management of discharges of contaminants is integral to the design and management of the proposed Clevedon Quarry Expansion. The Project gives effect to the requirements of this policy as follows: (a) significant bacterial contamination of freshwater will be avoided, with all water treated through the proposed water management system, including the constructed wetland, prior to discharge; (b) adverse effects from the construction and operation of the quarry relate primarily to sediment discharges from earthworks and the augmentation of streams. The quarry is designed during both the construction and operation phase to capture these discharges and treat them, therefore avoiding where practicable or otherwise minimising the adverse effects, as set out in the ESCAR (Technical Report K, Volume 2). Prior to stream augmentation, baseline water quality will be established and augmentation will be managed to ensure no significant change in water temperature or dissolved oxygen; (c) no risk of contaminants generated on or applied to land from consented works entering waterways from point or nonpoint sources; (d) refer to the assessment in Rows 14 – 16 above; and (e) there are not expected to be any effects on potable water used for domestic or municipal supply. Overall, the Project is consistent with Policy 7.
40.	B7.4.2 Policy (8)	*Sediment runoff* Minimise the loss of sediment from ... use and development, and manage the discharge of sediment into freshwater ... by: (a) promoting the use of soil conservation and management measures to retain soil and sediment on land; and (b) requiring land disturbing activities to use industry best practice and standards appropriate to the nature and scale of the	Land disturbing activities associated with the construction and operation of the quarry will be managed using industry best practice and standards appropriate to the nature and scale of the quarrying activities, as set out in the ESCP for preliminary works phases, quarry expansion and operation and overburden removal and within the Quarry Management Plan (QMP) for ongoing quarry operation phases (Appendix K).

	Reference	RPS Objective/Policy	Commentary
		land disturbing activity and the sensitivity of the receiving environment.	ESC measures proposed for the Project have reflected the nature and scale of the earthworks and the sensitivity of the receiving environment. These measures will be monitored and maintained during the works. Monitoring will be undertaken before and immediately after rain events as well as during heavy rainfall events. The Project will minimise the loss of sediment and will appropriately manage the discharge of sediment into freshwater and will therefore be consistent with Policy 8.
41.	B7.4.2 Policy (9)	*Stormwater management* Manage stormwater by all of the following: (a) requiring ~~...~~ use and development to: (i) minimise the generation and discharge of contaminants; and (ii) minimise adverse effects on freshwater ~~...~~ and the capacity of the stormwater network; and (iii) improve resilience to the effects of climate change; (b) adopting the best practicable option for every stormwater diversion and discharge.	Stormwater onsite will be managed in a way that gives effect to the requirements of sub-policies (a) and (b): (a) Refer to Rows 33, 39 and 40 above. (b) The stormwater diversions and discharges will adopt the best practicable option to minimise the effects of discharges. The Project is consistent with Policy 9.
42.	B7.4.2 Policy (12)	Promote the efficient use of freshwater …	The proposed groundwater take is to enable mineral extraction activities that will secure a significant volume of local aggregate, a fundamental resource required to facilitate the delivery of infrastructure and development projects that provide significant regional benefits. Some of the groundwater and surface water will be reused for quarry-related activities (e.g., processing and dust suppression), as well as augmenting streams. The water take is limited to only that which is necessary to enable the activity and therefore this is considered to be an efficient use of the water resource at this site and ensures the Project is consistent with Policy 12.
43.	B7.4.2 Policy (13)	Promote the taking of groundwater rather than the taking of water from rivers and streams in areas where groundwater is available for allocation.	No surface water take is proposed. The proposed groundwater take is consistent with Policy 13.

	Reference	RPS Objective/Policy	Commentary
44.	B7.4.2 Policy (14)	Enable the harvesting and storage of freshwater and rainwater to meet increasing demand for water and to manage water scarcity conditions, including those made worse by climate change	As set out in Section 4.2.6 of the AEE, the sumps at the base of the quarry will act as a storage pond. Some of the water will be reused for quarrying activities, with the remaining water returned to streams. The reuse of this collected water is consistent with Policy 14.
	B7. Toitū te whenua, toitū te taiao – Natural resources **B7.5. Air**		
45.	B7.5.1 Objective (1)	The discharge of contaminants to air from use and development is managed to improve region-wide air quality, enhance amenity values in urban areas and to maintain air quality at appropriate levels in rural … areas.	The LoQ footprint is primarily zoned SPQZ, with the surrounding area being zoned rural. The SPQZ is characterised as a low air quality environment under the AUP, and the rural zone areas are a medium air quality environment. As set out in the Air Quality Assessment (Technical Report F, Volume 2), there is a low risk of off-site dust effects at nearby receptor locations for the proposed expanded quarry operation and adverse effects from the potential discharges of dust from the Quarry Expansion are considered negligible. A range of management measures are proposed in the Dust Management Plan to manage air quality effects, including appropriate intensity of monitoring, dust suppression and minimising unstabilised areas. The total cumulative concentrations of PM_{10} are expected to be maintained below the NES-AQ criteria. The proposed dust mitigation measures will manage dust emissions and limit the impacts to within 50 to 100 m of the sources, resulting in a low likelihood of dust effects on nearby sensitive receptors. Although the Project is not actively improving region-wide air quality, the Clevedon Quarry Expansion will maintain the air quality at an appropriate level, which is also specifically anticipated by the SPQZ. Overall, the Project is consistent with Objective 1.
46.	B7.5.1 Objective (3)	Avoid, remedy or mitigate adverse effects from discharges of contaminants to air for the purpose of protecting human health, property and the environment.	The Air Quality Assessment (Technical Report F, Volume 2) concludes that there is a low risk of dust effects from the proposed expanded Clevedon Quarry operation, and no human health effects arising from the Project.

	Reference	RPS Objective/Policy	Commentary
			With specific regard to health effects, effects from dust discharges are considered to be negligible for the following reasons: • PM_{10} is only a small component of the dust generated from quarrying and aggregate processing activities. Most dust emitted from these activities is not in the inhalable PM_{10} fraction; • Total cumulative concentrations of PM_{10} are predicted to be well below the NES-AQ assessment criteria (as per Section 7.3.2.2 of the AEE Report); and • Proposed dust suppression will suppress PM_{10}. • The predicted Respirable Crystalline Silica (RCS) concentrations are significantly lower than the health response thresholds and are unlikely to generate any offsite RCS effects. The specific management measures proposed are described in Row 45 above. Overall, the Project is consistent with Objective 3.
47.	B7.5.2 Policy (1)	Manage discharge of contaminants to air from use and development to: (a) avoid significant adverse effects on human health and reduce exposure to adverse air discharges; (b) control activities that use or discharge noxious or dangerous substances; (c) minimise reverse sensitivity effects by avoiding or mitigating potential land use conflict between activities that discharge to air and activities that are sensitive to air discharges; (d) protect activities that are sensitive to the adverse effects of air discharges; (e) protect flora and fauna from the adverse effects of air discharges; (f) enable the operation and development of infrastructure, industrial activities and rural production activities that discharge	Discharge of contaminants to air from the construction and operation of the Clevedon Quarry Expansion will not result in human health effects and will be managed as follows (refer to Technical Report F, Volume 2): (a) Significant adverse effects on human health are not anticipated as discussed above in Rows 45 and 46; (b) the discharge of any dangerous substances in dust such as PM_{10} and RCS will be controlled as set out in the DMP; (c) and (d) The nearest sensitive receivers R1 (600 McNicol Road) and R3 (546 McNicol Road) are within 500 m of the Stage 5 LoQ footprint, being 320 m and 420 m away respectively. With dust management measures put in place (refer to Row 45 and Section 7.3.2 of the AEE Report), dust emissions will be minimised to within 50 to 100 m of the

	Reference	RPS Objective/Policy	Commentary
		contaminants into air, by providing for low air quality amenity in appropriate locations.	sources, resulting in low likelihood of effects on any nearby sensitive receptors; (e) Dust disturbance is noted in Section 7.3.2 of the AEE Report as having an indirect effect on habitats and associated species, including: • Low on the small area of plants and streams located within 100 m of the Site's key dust sources; • Very low on the plants and streams located 100 m - 250 m from the key dust sources; and • Negligible on the plants and streams located more than 250 m from the key dust sources. With the proposed dust suppression measures put in place, dust emissions are reduced to effectively minimise the deposition of dust to plants and streams within the site. (f) Refer to Row 45 above. Overall, the Project gives effect to this policy.
	B7. Toitū te whenua, toitū te taiao – Natural resources **B7.6. Minerals**		
48.	B7.6.1 Objective (1)	Auckland's mineral resources are effectively and efficiently utilised.	The Clevedon Quarry Expansion will enable the opportunity to recover a materially greater volume of in situ aggregate within the existing SAL landholdings through a more efficient and operationally workable quarry design. It will also allow the existing FoH area, plant and ancillary infrastructure to continue to be utilised. Accordingly, the Project will ensure an efficient use of established infrastructure. The proposed Quarry Expansion also enables more effective provision of aggregate being located in close proximity to projected future growth areas in South and East Auckland. Overall, the Project is an effective and efficient use of an existing mineral extraction site and its established ancillary infrastructure. The Project is directly supported and enabled by Objective 1.

	Reference	RPS Objective/Policy	Commentary
49.	B7.6.2 Policy (1)	Provide for mineral extraction activities within appropriate areas to ensure a secure supply of extractable minerals for Auckland's continuing development.	The majority of the Clevedon Quarry Expansion footprint (80%) is zoned as SPQZ, demonstrating that the use of this area for quarrying activities has been anticipated. As such, the Project provides for mineral extraction activities within an appropriate location. The Project also enables efficient and more cost-effective provision of aggregate for the development of the Auckland region, being located in close proximity to projected future growth areas in South and East Auckland. Although the site is subject to a number of natural features, the Project has been designed to avoid, remedy or mitigate effects on these resources as far as practicable. Where that is not possible, the offset and compensation package is proposed to address the residual adverse effects. Therefore, the Project is directly supported by and achieves Policy 1.
50.	B7.6.2 Policy (4)	Require mineral extraction activities to be established and operated in ways which avoid, remedy or mitigate significant adverse effects on the environment.	The proposed Clevedon Quarry Expansion has been designed to avoid, remedy or mitigate effects on natural and physical resources and where that is not possible to offset or compensate for them. Refer to the assessment in Rows 26, 29 and 32. Overall, the Project is consistent with Policy 4.
	B9. Toitū te tuawhenua – Rural environment **B9.2. Rural activities**		
51.	B9.2.1 Objective (4)	Auckland's rural areas outside the Rural Urban Boundary and rural ~~...~~ towns and villages are protected from inappropriate ~~...~~ and development.	The Project is an appropriate use in this part of the rural environment, given that quarrying activities are already established on the site and are located within a SPQZ which is specifically established to provide for quarry activities.
52.	B9.2.2 Policy (1)	Enable a diverse range of activities while avoiding significant adverse effects on and urbanisation of rural areas, ~~...~~ and avoiding, remedying, or mitigating other adverse effects on rural character, amenity, landscape and biodiversity values.	The proposed Clevedon Quarry Expansion is considered an appropriate activity in this location, as noted in Rows 49 and 51. Only a relatively small proportion of the expansion (20%) is proposed within the adjoining Rural – Rural Production Zone (RPZ). Furthermore, mineral extraction activities are typical

	Reference	RPS Objective/Policy	Commentary
			features of the Rural – Rural Production Zone and noise, dust, traffic and visual effects associated with mineral extraction activities generally will not give rise to reverse sensitivity issues. In terms of landscape and character values, the Landscape Effects Assessment (LEA) (Technical Report J, Volume 2) notes that the boundary between the SPQZ and the RPZ does not correspond to a change in landscape characteristics, both areas remain influenced by extraction activities, and the balance of the RPZ landholding will remain in production forestry. The Project will progressively reshape the foothills landform into stepped benches, resulting in a noticeable but locally contained change that remains largely consistent with the zoning and existing quarry context. Mitigation planting is proposed on the upper quarry benches (RL 200 m and above) to help manage visual effects. Adverse visual effects on public viewing audiences will be no more than low across all stages, with the highest effects (low) experienced by road users in Groups B to E during Stage 3, and in Groups C to E during Stage 4. Adverse effects on rural character and natural landscape are considered to be low to moderate to very low once mitigation planting has been established. The Project avoids the adjoining Wairoa River Gorge ONF. Where avoidance is not possible, mitigation measures are proposed to the greatest extent possible. Effects on biodiversity values will be avoided or mitigated, with residual effects being subject to a comprehensive offset and compensation package (refer to Technical Report I, Volume 2). Therefore, the Project is consistent with Policy 1.
	B9. Toitū te tuawhenua – Rural environment **B9.3. Land with high productive potential**		
53.	B9.3.1 Objective (2)	Land containing prime soil is managed to enable its capability, flexibility and accessibility for primary production.	The Project footprint entirely avoids areas of prime soils. The Project is consistent with this objective.
54.	B9.3.1 Objective (3)	The productive potential of land that does not contain elite or prime soil is recognised.	The Project site is located on non-arable land, comprising Class 6 and 7 soils. These soils have slight to moderate, or moderate to

	Reference	RPS Objective/Policy	Commentary
			very severe limitations to pastoral use, but are suitable for tree crops and/or forestry. The Class 7 soils along the eastern boundary of the site are categorised as high-risk land and require active management to achieve sustainable production. As such, these areas are considered more suitable for forestry. While the productive potential of this soil is recognised, quarries are functionally constrained to locations where aggregate is naturally found in situ. Accordingly, it is unavoidable that some areas of land that do not contain elite or prime soil will be affected. In addition, only a small portion of the Project site (20%) is located within the rural zone.
55.	B9.3.2 Policy (3)	Recognise the productive potential of land that does not contain elite or prime soil and encourage the continued use of this land for rural production.	
	B10. Ngā tūpono ki te taiao - Environmental risk **B10.2. Natural hazards and climate change**		
56.	B10.2.1 Objective (3)	New … use and development avoid the creation of new risks to people, property and infrastructure.	The proposed expansion has been designed to respond to natural hazards, in particular, seismic activity, slope instability and floodplains. In particular: • The Geotechnical Feasibility Assessment (Technical Report B1, Volume 2) indicates acceptable levels of stability under static and seismic conditions, with no material instability effects anticipated beyond the site. A Slope Stability Management Plan is proposed as part of the consent conditions; • The quarry design reflects the recommended slope geometry and bench/batter configuration to provide an acceptable level of batter performance and to appropriately manage the effects of slope instability; and • A comprehensive suite of mitigation measures will be implemented to manage the potential natural hazard effects, including ESC measures, and the quarry sumps and constructed wetland, which will manage increased catchment runoff, flood risk and storm events up to and including the 100-year ARI, with a 3.8°C climate change allowance, in accordance with GD05 and GD01. The sump is designed to

	Reference	RPS Objective/Policy	Commentary
			capture and store runoff for these events, reducing post-development peak flows to approximately 60% of pre-development rates. Accordingly, the Project is not expected to create new risks for people, property or infrastructure, and therefore is consistent with Objective 3.
57.	B10.2.1 Objective (4)	The effects of climate change on natural hazards, including effects on sea level rise, over at least 100 years and on the frequency and severity of storm events, is recognised and provided for.	The Quarry Expansion is located inland and therefore is not expected to be subject to natural hazards associated with sea level rise over the next 100 years. Storm events have been considered as part of the ESCAR and Surface Water Management Report (Technical Report H, Volume 2) (refer to Row 56). The quarry water management system has been designed with a 3.8°C climate change allowance to account for the frequency and severity of storm events. Therefore, to the extent the objective is relevant, the Project is consistent with Objective 4.
58.	B10.2.1 Objective (5)	The functions of natural systems, including floodplains, are protected from inappropriate ~~...~~ use and development.	Several floodplains are located within the site, generally following the position of the overland flow paths. Almost all of the affected floodplains are located within the SPQZ. As noted in Rows 49 and 51, the Clevedon Quarry Expansion is considered an appropriate activity in this location as it achieves the purpose of the zone. Redirection of surface water flows will be to the quarry sump and managed via the proposed water management system. Removal of these overland flow paths will not exacerbate flooding offsite (refer to Row 56). Stream augmentation is proposed to maintain stream baseflows. Streams that are to be retained on the site will be enhanced as part of the proposed offset and compensation package. The proposed use is not inappropriate in this location, and accordingly the Project is consistent with Objective 5.
59.	B10.2.1 Objective (6)	The conveyance function of overland flow paths is maintained.	Refer to Rows 56 and 58 for details. The Project is consistent with Objective 6.

	Reference	RPS Objective/Policy	Commentary
60.	B10.2.2 Policy (4)	*Identification and risk assessment* Assess natural hazard risks: (a) using the best available and up-to-date hazard information; and (b) across a range of probabilities of occurrence appropriate to the hazard, including, at least, a 100-year timeframe for evaluating flooding ... including sea level rise in response to global warming.	The relevant natural hazard risks have been assessed using the best available and up-to-date hazard information, particularly as set out in the Geotechnical Feasibility Assessment (Technical Report B1, Volume 2), Surface Water Management Report (Technical Report H, Volume 2) and ESCAR (Technical Report K, Volume 2). There are no potential coastal hazards affecting the site. Refer to Rows 56 – 58 with regard to flood hazard risks. The Project is consistent with Policy 4.
61.	B10.2.2 Policy (5)	*Identification and risk assessment* Manage ... use and development of land subject to natural hazards based on all of the following: (a) the type and severity of potential events, including the occurrence natural hazard events in combination; (b) the vulnerability of the activity to adverse effects, including the health and safety of people and communities, the resilience of property to damage and the effects on the environment; and (c) the cumulative effects of locating activities on land subject to natural hazards and the effects on other activities and resources.	A risk-based approach has been taken to the expansion of this site primarily for slope stability and seismic risks (refer to Row 56 above) and OBDA construction. In particular: (a) the type and severity of potential natural hazards have been assessed; (b) the Project has been designed to minimise potential impacts of natural hazards, including the development of management plans; (c) the cumulative (downstream) impact of locating the quarry within a known floodplain has been assessed and determined to be less than minor (refer to Section 7.3.4 of the AEE Report). The Project is consistent with Policy 5.
62.	B10.2.2 Policy (7)	*Management approaches* Avoid or mitigate the effects of activities in areas subject to natural hazards, such as earthworks, changes to natural and built drainage systems, vegetation clearance and new or modified structures, so that the risks of natural hazards are not increased.	The quarry pit has been designed to respond to natural hazards, in particular, areas of seismic activity and floodplains (refer to Rows 56 – 58 above for further details). Overall, the Project is not expected to create new risks or increase existing risks associated with natural hazards. The Project is therefore consistent with Policy 7 and Policy 10.
63.	B10.2.2 Policy (10)	*Management approaches* Encourage redevelopment on land subject to natural hazards to reduce existing risks and ensure no new risks are created by using a range of measures such as any of the following: (a) the design and placement of buildings and structures;	

	Reference	RPS Objective/Policy	Commentary
		(b) managing activities to increase their resilience to hazard events; or (c) change of use to a less vulnerable activity.	

Table 2: AUP Chapter D Overlays: Objectives and policies assessment

	Reference	Chapter D Objective/Policy	Commentary
	D9. Significant Ecological Areas Overlay [rcp/rp/dp]		
64.	D9.2 Objective (1)	Areas of significant indigenous biodiversity value in terrestrial, freshwater~~...~~ areas are protected from the adverse effects of ~~...~~ use and development.	As discussed in Technical Report I and Row 26, expansion of the Clevedon Quarry will result in the removal of approximately 6.1 ha of SEA vegetation, outside the SPQZ. The AUP seeks to preserve as much native vegetation as possible, while also providing for clearance of vegetation (including SEA) where necessary to enable mineral extraction activities. The area of SEA proposed to be removed within the Rural Zone is regenerating tree fern-broadleaf forest that has been assessed as having high ecological value. As such, it is acknowledged that the removal of the SEA vegetation will result in significant adverse effects on terrestrial ecosystems that were unable to be entirely avoided due to the functional need of aggregate extraction. Where practicable, removal of native vegetation has been avoided or reduced, with residual effects addressed through revegetation and additional planting. To maximise the aggregate resource, whilst balancing the need for a safe, efficient and workable quarry design, with good slope stability, and to be able to recover a materially greater volume of in situ aggregate within the existing SAL landholdings, vegetation clearance within this SEA was required. The pit design in this north-eastern corner was reduced, including to avoid direct impacts on potential Hochstetter's frog habitat. Removal of this vegetation will result in more than minor effects. To address the residual effects of vegetation loss, a comprehensive offset and compensation package has been designed to achieve a Net Gain in terrestrial biodiversity values involving approximately 10.6 ha of restoration planting across two restoration areas, including within the OBDA and on slopes and open areas within the Stream 3 catchment, directly adjoining the potential impact area. This planting will address the loss of approximately 6.1 ha of forest. Overall, the

	Reference	Chapter D Objective/Policy	Commentary
			proposed revegetation planting will provide significant improvement in the extent, quality and connectivity of local indigenous biodiversity and habitats. It is acknowledged that due to the removal of 6.1 ha of high value SEA this confined aspect of the Project does not directly achieve the full intent of the objective, but the majority of the Project does and overall the loss of vegetation is minor when considered in the context of the wider area.
65.	D9.2 Objective (2)	Indigenous biodiversity values of significant ecological areas are enhanced.	As set out in Row 64 above, 10.6 ha of planting is proposed as part of the terrestrial offset and compensation package, adjacent to the potential impact area. The proposed planting package has been designed to create an ecological corridor that connects with the existing SEA, the wider Hunua Ranges and the Wairoa River. This will enhance ecological connectivity across the site and facilitate the ongoing survival and development of the recreated and enhanced habitats. Accordingly, the Project gives effect to Objective 2.
66.	D9.2 Objective (3)	The relationship of Mana Whenua and their customs and traditions with indigenous vegetation and fauna is recognised and provided for.	Refer to the details in Rows 12 – 16. It is noted that SAL has undertaken engagement in the last year with various iwi groups. A CVIA and a letter outlining engagement to date have been provided by two iwi, attached as Appendix E. The Project seeks to address issues of significance to Mana Whenua and will ensure the relationship of Mana Whenua and their customs and traditions with indigenous vegetation and fauna is recognised and provided for. In particular, most of the matters raised in the CVIA are reflected, where practicable, in the proposed mitigation and management measures and conditions of consent. SAL has received support in principle from Ngaati Whanaunga and Ngāi Tai ki Tāmaki. The proposed mitigation and management measures, and proposed consent conditions, generally address the concerns raised, and SAL is committed to ongoing engagement with Tangata Whenua. Accordingly, the Project is consistent with Objective 3.

	Reference	Chapter D Objective/Policy	Commentary
67.	D9.3 Policy (1)	*Managing effects on significant ecological areas – terrestrial and marine* Manage the effects of activities on the indigenous biodiversity values of areas identified as significant ecological areas by: ... (b) avoiding other adverse effects as far as practicable, and where avoidance is not practicable, minimising adverse effects on the identified values; (c) remedying adverse effects on the identified values where they cannot be avoided; (d) mitigating adverse effects on the identified values where they cannot be avoided or remediated; and (e) considering the appropriateness of offsetting any residual adverse effects that are significant and where they have not been able to be mitigated, through protection, restoration and enhancement measures, having regard to Appendix 8 Biodiversity offsetting.	As noted in Row 28, a small portion of the regenerating tree fern-broadleaf forest in SEA_T_5588 is proposed to be removed. Complete avoidance of all SEA is not practicable due to the nature and functional requirement of the Project. The Project's ecological advisors have worked through the mitigation hierarchy with avoidance and mitigation as the first priorities, supplemented by an offset and compensation package to manage residual effects on terrestrial ecology, which has been designed to achieve a Net Gain in biodiversity value, as detailed in Sections 5.1 and 7.3.13 of the AEE Report. Overall, the Project is consistent with Policy 1.

68.	D9.3 Policy (2)	Adverse effects on indigenous biodiversity values in significant ecological areas that are required to be avoided, remedied, mitigated or offset may include, but are not limited to, any of the following: (a) fragmentation of, or a reduction in the size and extent of, indigenous ecosystems and the habitats of indigenous species; (b) fragmentation or disruption of connections between ecosystems or habitats; (c) changes which result in increased threats from pests on indigenous biodiversity and ecosystems; (d) loss of buffering of indigenous ecosystems; (e) loss of a rare or threatened individual, species population or habitat; (f) loss or degradation of originally rare ecosystems including ~~...~~ (g) a reduction in the abundance of individuals within a population, or natural diversity of indigenous vegetation and habitats of indigenous fauna; (h) loss of ecosystem services; (i) effects which contribute to a cumulative loss or degradation of habitats, species populations and ecosystems; (j) impacts on species or ecosystems that interact with other activities, or impacts that exacerbate or cause adverse effects in synergistic ways; (k) loss of, or damage to, ecological mosaics, sequences, processes, or integrity; (l) downstream effects on ~~...~~ rivers, streams, and lakes from hydrological changes further up the catchment; (m) a modification of the viability or value of indigenous vegetation and habitats of indigenous fauna as a result of the use or development of other land, freshwater…; (n) a reduction in the historical, cultural, and spiritual association held by Mana Whenua or the wider community; (o) the destruction of, or significant reduction in, educational, scientific, amenity, historical, cultural, landscape, or natural character values; (p) disturbance to indigenous fauna that is likely or known to increase threats, disturbance or pressures on indigenous fauna; or (q) increases in the extinction probability of a species.	As set out in Rows 28 and 67, the mitigation hierarchy has been applied to manage the effects on indigenous biodiversity in SEAs. As detailed in Section 7.2.3 of the AEE, a total of approximately 67.6 ha of restoration planting is proposed under the ecological offset and compensation package. Key measures proposed within the package that will directly address the matters listed in (a) – (q) include: • Approximately 10.6 ha of restoration planting to offset the residual effects from removal of 6.1 ha of regenerating tree fern-broadleaf forest within the SEA; • SEA removal will result in the creation of a new edge approximately 600 m in length (refer to Section 7.3.12.2 of the AEE). Potential edge effects over an area of approximately 0.6 ha have been assessed as low; therefore, no effects management is required; • Plant pest management will be undertaken prior to planting and continue on an ongoing basis; • Terrestrial offset has been designed to ensure that a sufficient quantity, diversity and quality of planting is achieved to offset the terrestrial vegetation and habitats to be removed; • Approximately 16.6 ha of riparian planting within a 20 m riparian buffer along both banks of the 4,510 m of Stream 3 to offset the loss of streams and mitigate effects on the freshwater environment; • Approximately 40.4 ha of restoration planting to compensate for the residual freshwater effects that cannot be addressed through riparian offset planting alone; • The Ecological Management Plan contains Avifauna, Bat, Native Freshwater Fauna and Vegetation Management Plans that set out management measures to avoid and minimise effects on fauna, retained vegetation and new planting prior to and during construction; and • Augmentation of streamflow using groundwater from the quarry pit sump and/or bores is proposed to maintain

	Reference	Chapter D Objective/Policy	Commentary
			appropriate stream base flows in permanent streams from hydrological changes from the upper catchment and dewatering activities. Accordingly, the Project is consistent with Policy 2.
69.	D9.3 Policy (3)	Enhance indigenous biodiversity values in significant ecological areas through any of the following: (a) restoration, protection and enhancement of threatened ecosystems and habitats for rare or threatened indigenous species; (b) control, and where possible, eradication of plant and animal pests; (c) fencing of significant ecological areas to protect them from stock impacts; (d) legal protection of significant ecological areas through covenants or similar mechanisms; (e) development and implementation of management plans to address adverse effects; (f) re-vegetating areas using, where possible, indigenous species sourced from naturally growing plants in the vicinity with the same climactic and environmental conditions; or (g) providing for the role of Mana Whenua as kaitiaki and for the practical exercise of kaitiakitanga in restoring, protecting and enhancing areas.	The Project will enhance indigenous biodiversity values in SEAs through the following: • The proposed restoration planting has been designed to significantly enhance the extent, quality and connectivity of local indigenous biodiversity and habitats in the SEA; • Pest plant and pest animal control will be undertaken as required (refer to Technical Report I); • Restoration planting within the Stream 3 catchment will be legally protected in perpetuity via vegetation covenants and conditions of consent (Appendix G, Volume 1); • Refer to Row 68 above for a suite of management plans proposed to address adverse effects; • Transplanting of At Risk tree fern species will be undertaken where practicable and in accordance with the criteria set out in the certified EMP; and • SAL has undertaken consultation with relevant iwi groups in the region, providing for the role of Mana Whenua as kaitiaki and for the practical exercise of kaitiakitanga in restoring, protecting and enhancing areas. SAL will continue to engage with Tangata Whenua who indicated interest in the Project to address any matters arising during the consent process. Accordingly, the Project is consistent with Policy 3.
	D10. Outstanding Natural Features Overlay and Outstanding Natural Landscapes Overlay [rcp/dp]		
70.	D10.2 Objective (1)	Auckland's outstanding natural features and outstanding natural landscapes are protected from inappropriate … use, and development.	An Outstanding Natural Features Overlay (ONF) (Area 237, Wairoa River Gorge) is located immediately west of the Clevedon Quarry Expansion LoQ footprint. The ONF is considered an important attribute of the SAL Landholdings, as it is one of the few good examples of steep, incised river

	Reference	Chapter D Objective/Policy	Commentary
			gorges in the Auckland region. The LoQ footprint has been designed to avoid encroachment into the ONF, and no physical works to expand the quarry are proposed within the ONF extent. Although the expansion will modify the landform adjacent to the north-eastern edge of the ONF, it will not alter the landform or geological characteristics of the gorge or affect its state of preservation. Accordingly, the Project is consistent with Objective 1.
71.	D10.2 Objective (2)	The ancestral relationships of Mana Whenua with outstanding natural features and outstanding natural landscapes are recognised and provided for.	The Project will avoid any expansion works into the ONF and is therefore consistent with Objective 2.
72.	D10.3 Policy (1)	Protect the physical and visual integrity of outstanding natural landscapes by: (a) avoiding the adverse effects of inappropriate subdivision, use and development on the natural characteristics and qualities that contribute to the values of the outstanding natural landscape; (b) maintaining the visual coherence and integrity of the outstanding natural landscape; (c) maintaining natural landforms, natural processes and vegetation areas and patterns; (d) maintaining the visual or physical qualities that make the landscape iconic or rare; and (e) maintaining high levels of naturalness in outstanding natural landscapes that are also identified as outstanding natural character or high natural character areas.	As noted in Row 70 above, encroachment into the ONF is avoided by the Project. The Quarry Expansion will progressively change the Project footprint, remove a substantial volume of material and permanently reshape the foothills landform into stepped benches, cut faces and the OBDA over the five indicative stages. This will create a noticeable but locally contained change that remains largely consistent with the zoning and existing quarry context. The Project will modify the landform adjacent to the north-eastern edge of the ONF; however, it will not alter the landform or geological characteristics of the gorge or affect its state of preservation. The proposed offset and compensation plantings within the Stream 3 catchment will progressively naturalise the overall landscape setting and soften the engineered quarry landform. Accordingly, the Project is consistent with Policy 1.
73.	D10.3 Policy (2)	Protect the physical and visual integrity of outstanding natural landscapes while taking into account the following matters: (a) the extent of anthropogenic changes to the natural elements, patterns, processes or characteristics and qualities; (b) the presence or absence of structures, buildings or infrastructure;	No buildings or physical works (including planting) are proposed within proximity to the ONF. The existing authorised haul road located within the ONF will continue to be used for mineral extraction activities; however, no changes are proposed as part of this Project.

	Reference	Chapter D Objective/Policy	Commentary
		(c) the temporary or permanent nature of any adverse effects; (d) the physical and visual integrity and the natural processes of the location; (e) the physical, visual and experiential values that contribute significantly to the natural landscape's values; (f) the location, scale and design of any proposed development; and (g) the functional or operational need of any proposed infrastructure to be located in the outstanding natural landscape area.	As detailed in Section 7.3.8 of the AEE Report, the Project will not alter the landform or geological characteristics of the gorge or affect its state of preservation, and the gorge will remain a representative example of the diversity of Auckland's natural landforms and geological features. The LEA considers that the proposed offset and compensation planting within the Stream 3 catchment, adjacent to the ONF area, will contribute to the value of the ONF, and that the planting will progressively naturalise the wider landscape setting for the Site. Notably, Policies D10.3(5) and (7) enable use that enhances the values of the ONF. The proposed offset and compensation planting has the benefit of providing a buffer screen, improving ecological connectivity between existing and newly created habitats as well as enhancing the value of the ONF. Accordingly, it is considered that the Project is consistent with Policies 2, 5 and 7.
74.	D10.3 Policy (5)	Enable use and development that maintains or enhances the values or appreciation of an outstanding natural landscape or outstanding natural feature.	
75.	D10.3 Policy (7)	Encourage the restoration and enhancement of outstanding natural landscapes and outstanding natural features where practical, and where this is consistent with the values of the feature or area.	

Table 3: AUP Chapter E Auckland-wide: Objectives and policies assessment

	Reference	Chapter E Objective/Policy	Commentary
	E1. Water quality and integrated management [rp/rcp/dp]		
76.	E1.2 Objective (1)	Freshwater and sediment quality is maintained where it is excellent or good and progressively improved over time in degraded areas.	Discharges from the site may affect freshwater quality through increasing levels of sedimentation or changes in water temperature or dissolved oxygen from augmentation. The proposed ESC approach is based on minimising the area exposed to erosion at any given time, implementing best-practice ESC measures in accordance with GD05 guidelines, staged establishment, progressive stabilisation and diverting as much of the works site as possible to the water management system. As noted in Row 33 above, the constructed wetland will provide water quality treatment prior to discharge to Stream 1. This system has been designed to achieve a target TSS removal efficiency of 90%. Two chemically treated Sediment Retention Ponds are proposed to manage sediment risk associated with the OBDA. The proposed ESC methodology is consistent with the industry-leading approach and best-practice control measures that have appropriately minimised sediment discharges and downstream effects on multiple projects throughout the Auckland Region. Freshwater quality should be maintained as a result of the proposed treatment devices. Surface water quality sampling is proposed prior to augmentation (to establish baseline data) and during augmentation. Conditions of consent are proposed to ensure that effects on the receiving water are appropriately managed. A Baseflow Monitoring and Management Plan (BMMP) is proposed to ensure that stream augmentation is undertaken in a manner that maintains or enhances the hydrological regime, water quality, and ecological function of the receiving environment.

	Reference	Chapter E Objective/Policy	Commentary
			Planting of riparian margins along Stream 3 will also help to maintain, if not improve, the water quality of the streams and wetlands. Overall, the Project is consistent with Objective 1.
77.	E1.2 Objective (2)	The mauri of freshwater is maintained or progressively improved over time to enable traditional and cultural use of this resource by Mana Whenua.	The Project will maintain mauri by managing and mitigating sediment loading downstream and preventing the discharge of dirty groundwater prior to augmentation. Water quality monitoring is proposed as conditions of consent, and augmentation will be undertaken in accordance with the BMMP (refer to Row 76). Approximately 67.6 ha of restoration planting is proposed as part of the offset and compensation package which over time should result in improvements in water quality. Accordingly, the Project gives effect to Objective 2.
78.	E1.3 Policy (1)	*Freshwater quality and ecosystem health interim guidelines* Manage discharges, until such time as objectives and limits are established in accordance with Policy E1.3(7), having regard to: (a) the National Policy Statement for Freshwater Management National Bottom Lines; (b) the Macroinvertebrate Community Index as a guideline for freshwater ecosystem health associated with different land uses within catchments in accordance with Policy E1.3(2); or (c) other indicators of water quality and ecosystem health.	Discharges that may affect freshwater quality and ecosystem health include erosion and sediment discharges and stream augmentation. (a) A detailed assessment against the NPS-FM is provided in Table 6 of this appendix and overall, the Project is considered consistent with the NPS-FM. (b) Macroinvertebrates were sampled from each SEV reach instream habitat and biotic indices were calculated, including: • the number of taxa; • Macroinvertebrate Community Index for soft-bottomed streams (MCI-sb); • Quantitative MCI for soft-bottomed streams (QMCI-sb); and • Percentage Ephemeroptera, Plecoptera and Trichoptera richness (EPT) (excluding Hydroptilidae).

<table>
<tr><th></th><th>Reference</th><th>Chapter E Objective/Policy</th><th>Commentary</th></tr>
<tr><td></td><td></td><td></td><td>The exact methodologies used to determine the freshwater values, and the associated assessment of effects, are detailed in the EcIA (Technical Report I, Volume 2).
Overall, the Project manages the discharges from the site and is consistent with Policy 1.</td></tr>
<tr><td>79.</td><td>E1.3 Policy (2)</td><td>Freshwater quality and ecosystem health interim guidelines
Manage discharges, … use, and development that affect freshwater systems to:
(a) maintain or enhance water quality, flows, stream channels and their margins and other freshwater values, where the current condition is above National Policy Statement for Freshwater Management National Bottom Lines and the relevant Macroinvertebrate Community Index guideline in Table E1.3.1 below; or
(b) enhance water quality, flows, stream channels and their margins and other freshwater values where the current condition is below national bottom lines or the relevant Macroinvertebrate Community Index guideline in Table E1.3.1 below.
Table E1.3.1 Macroinvertebrate Community Index guideline for Auckland rivers and streams
<table>
<tr><th>Land use</th><th>Macroinvertebrate Community Index guideline</th></tr>
<tr><td>Native forest</td><td>123</td></tr>
<tr><td>Exotic forest</td><td>111</td></tr>
<tr><td>Rural areas</td><td>94</td></tr>
<tr><td>Urban areas</td><td>68</td></tr>
</table></td><td>This policy applies to stream channels that will remain at the completion of the Project construction and requires either maintenance or enhancement of these channels according to their MCI rating.
The freshwater systems will be managed in accordance with (a) or (b) (refer to the Residual Effects Management Plan included in the EMP and the EcIA (Technical Report I, Volume 2)).
In relation to the remaining streams on site post construction and expansion of the quarry, the Project will be consistent with Policy 2.</td></tr>
<tr><td>80.</td><td>E1.3 Policy (3)</td><td>Freshwater quality and ecosystem health interim guidelines</td><td>The ecological offset and compensation package involves riparian planting and restoration planting along Stream 3</td></tr>
</table>

	Reference	Chapter E Objective/Policy	Commentary
		Require freshwater systems to be enhanced unless existing intensive land use and development has irreversibly modified them such that it practicably precludes enhancement.	and headwater tributaries within the Stream 3 catchment. This will provide positive aquatic ecological benefits. The planting will provide connectivity to existing habitats and facilitate the ongoing survival and development of the recreated and enhanced habitats over extensive areas, improving shading and habitat. In respect of the freshwater systems remaining on the Site, the Project is consistent with Policy 3.
81.	E1.3 Policy (4)	*National Policy Statement on Freshwater Management* When considering any application for a discharge, the Council must have regard to the following matters: (a) the extent to which the discharge would avoid contamination that will have an adverse effect on the life-supporting capacity of freshwater including on any ecosystem associated with freshwater; and (b) the extent to which it is feasible and dependable that any more than a minor adverse effect on freshwater, and on any ecosystem associated with freshwater, resulting from the discharge would be avoided.	In relation to Policy 4(a), the AEE Report, the ESCAR, Surface Water Management Report and EcIA have described how discharges from the site will be managed to avoid contamination that will have an adverse effect on the life-supporting capacity of freshwater. Refer to Rows 33 and 78 for further details. The abovementioned reports also have described the management measures to be put in place so that there will be no more than minor effect on freshwater from any discharges, and accordingly Policy 4(b) does not apply. The Project therefore satisfies Policy 4.
82.	E1.3 Policy (5)	*National Policy Statement on Freshwater Management* When considering any application for a discharge the Council must have regard to the following matters: (a) the extent to which the discharge would avoid contamination that will have an adverse effect on the health of people and communities as affected by their secondary contact with fresh water; and (b) the extent to which it is feasible and dependable that any more than minor adverse effect on the health of people and communities as affected by their secondary contact with fresh water resulting from the discharge would be avoided.	As assessed in Table 6 below, no discharges are proposed that have the potential to cause an effect on the health of people and communities. Therefore, the Project is consistent with Policy 5.

	Reference	Chapter E Objective/Policy	Commentary
83.	E1.3 Policy (8)	*Stormwater management* Avoid as far as practicable, or otherwise minimise or mitigate, adverse effects of stormwater runoff from greenfield development on freshwater systems, freshwater ~~…~~ by: (a) taking an integrated stormwater management approach (refer to Policy E1.3.10); (b) minimising the generation and discharge of contaminants, particularly from high contaminant generating car parks and high use roads and into sensitive receiving environments; (c) minimising or mitigating changes in hydrology, including loss of infiltration, to: (i) minimise erosion and associated effects on stream health and values; (ii) maintain stream baseflows; and (iii) support groundwater recharge; (d) where practicable, minimising or mitigating the effects on freshwater systems arising from changes in water temperature caused by stormwater discharges; and …	Adverse effects of stormwater runoff will be avoided as far as practicable, and otherwise minimised or mitigated, by: (a) An integrated stormwater management approach has been applied to this site through the use of the quarry sumps for attenuation and a constructed wetland for treatment. Refer to Row 33 for further details. (b) Site-specific ESC measures will be put in place, as detailed in the ESCAR (Technical Report K, Volume 2). All site water will be captured in the quarry sump and directed to the newly constructed wetland for treatment prior to discharge. Refer to Row 33 for further details. (c) Two SRPs are proposed to manage potential erosion and sediment effects associated with the OBDA. (d) The discharge of contaminants into sensitive receiving environments will be minimised primarily through the measures detailed in (a) above. No car parks or high use roads are proposed as part of this Project. (e) For (c) and (d), refer to Row 76 above for further details. Overall, the Project is consistent with Policy 8.
84.	E1.3 Policy (10)	In taking an integrated stormwater management approach have regard to all of the following*:* (a) the nature and scale of the development and practical and cost considerations, recognising: … (iii) site operational and use requirements may preclude the use of an integrated stormwater management approach. (b) the nature and sensitivity of receiving environments to the adverse effects of development, including fragmentation and loss of connectivity of rivers and streams, hydrological effects and contaminant discharges and how these can be	As discussed in the Surface Water Management Report, an integrated stormwater management approach is proposed. The proposed water management system has been designed to be staged to ensure the quarry can remain operational and appropriately sized to ensure stormwater runoff can be adequately managed throughout the expansion. The use of the proposed constructed wetland for water quality treatment appropriately uses natural hydrological features and green infrastructure to treat stormwater runoff before being directed to a rock riprap structure prior to discharge. Overall, the Project is consistent with Policy 10.

	Reference	Chapter E Objective/Policy	Commentary
		minimised and mitigated, including opportunities to enhance degraded environments; (c) reducing stormwater flows and contaminants at source prior to the consideration of mitigation measures and the optimisation of on-site and larger communal devices where these are required; and (d) the use and enhancement of natural hydrological features and green infrastructure for stormwater management where practicable.	
85.	E1.3 Policy (11)	Avoid as far as practicable, or otherwise minimise or mitigate adverse effects of stormwater diversions and discharges, having particular regard to: (a) the nature, quality, volume and peak flow of the stormwater runoff; (b) the sensitivity of freshwater systems ... including the Hauraki Gulf Marine Park; (c) the potential for the diversion and discharge to create or exacerbate flood risks; (d) options to manage stormwater on-site or the use of communal stormwater management measures; (e) practical limitations in respect of the measures that can be applied; and (f) the current state of receiving environments.	Adverse effects of stormwater discharges will be avoided as far as practicable, and otherwise minimised or mitigated, as detailed in Rows 56, 83 and 84 above. In summary, to attenuate peak flows, the main quarry pit sump has been designed to capture and store runoff for all events up to and including the 100-year ARI (including a 3.8°C climate change allowance). Post-development peak flows in the 100-year ARI event are reduced to approximately 60% of pre-development rates. For events up to the 20-year ARI, stored runoff is released at below the pre-development 95th percentile peak flow rate. For larger events, a 20 m wide spillway weir controls outflows from the sump, directing flows to a diversion channel sized to safely convey the 100-year ARI event. The works will not exacerbate flooding beyond the site. Accordingly, the Project is consistent with Policy 11.
86.	E1.3 Policy (13)	Require stormwater quality or flow management to be achieved on-site unless there is a downstream communal device or facility designed to cater for the site's stormwater runoff.	As discussed in the Surface Water Management Report, all stormwater is to be collected and treated within the site prior to being discharged into the environment. The Project is therefore consistent with Policy 13.
87.	E1.3 Policy (26)	*Other discharges*	The effects of other discharges on freshwater will be managed through site ESC measures (to be described in the ESCP), including the use of silt fences, SRPs, clean and dirty

	Reference	Chapter E Objective/Policy	Commentary
		Prevent or minimise the adverse effects from construction, maintenance, investigation and other activities on the quality of freshwater~~...~~ by: (a) adopting best management practices and establishing minimum standards for the discharges; or (b) where Policy E1.3(26)(a) is not practicable, have regard to the following: (i) the nature, volume and concentration of the contaminants in the discharge; (ii) the sensitivity of the receiving environment to the contaminants in the discharge; (iii) other practicable options for the discharge, including reuse or discharge to the trade sewer; and (iv) practicable measures to reduce contaminant concentrations prior to discharge or otherwise mitigate adverse effects.	water diversions, and a regime of maintenance and inspection of stormwater treatment devices. Accordingly, the Project is consistent with Policy 26.
	E2. Water allocation and use [rp]		
88.	E2.2 Objective (1)	Water in surface rivers and groundwater aquifers is available for use provided the natural values of water are maintained and established limits are not exceeded.	Refer to Row 35 for details on groundwater take, diversion and discharges. There is sufficient availability of the groundwater resource in the Hunua Wairoa Greywacke aquifer, and the proposed groundwater take will not result in overallocation. The proposed take is not from a high use aquifer as defined by Auckland Council's Groundwater Management Areas. Based on the groundwater model, the projected drawdown from Stage 1 and Stage 5 is generally localised and confined to the area between Streams 1 and 2, and Streams 1 and 3, respectively. No drawdown effects are anticipated on any bores located within the predicted zone of influence (Technical Report G, Volume 2). Augmentation is proposed to mitigate drawdown on stream base flows. A Groundwater and Surface Water Monitoring and Contingency Plan is

	Reference	Chapter E Objective/Policy	Commentary
			proposed (attached as Appendix K) which requires ongoing monitoring and management measures to manage potential groundwater effects. Overall, the Project is consistent with Objective 1.
89.	E2.2 Objective (2)	Water resources are managed within limits to meet current and future water needs for social, cultural and economic purposes.	Refer to Row 42 for further details. The Project is consistent with Objective 2.
90.	E2.2 Objective (4)	Water resources are managed to maximise the efficient allocation and efficient use of available water.	Refer to Row 42 for further details. The Project is consistent with Objective 4.
91.	E2.2 Objective (5)	Mana Whenua values, including the mauri of water, are acknowledged in the allocation and use of water.	Refer to Rows 12 – 16 and 35 for further details. In summary, key measures taken into account as part of the Project to ensure Mana Whenua values, including the mauri of water, are acknowledged in the allocation and use of water include: • The proposed stream augmentation regime will ensure no decrease in stream base flows; • Augmentation will be undertaken using water from the quarry sump and/or bore; and • Groundwater drawdown will not affect neighbouring groundwater users. The CVIA acknowledges that the proposed monitoring and offset / compensation strategies will appropriately manage the potential impacts on surrounding water bodies, address potential adverse stream depletion effects and help maintain stream baseflows in Streams 1 and 3. Accordingly, the Project gives effect to Objective 5.
92.	E2.3 Policy (4)	*Efficient allocation and use* Promote the efficient allocation and use of freshwater and geothermal water by: (a) requiring the amount of water taken and used to be reasonable and justifiable with regard to the intended use, and where appropriate:	The take of groundwater is unavoidable in order to allow the aggregate to be safely and efficiently extracted and will have less than minor effects on the aquifer's resource. Some of the groundwater and surface water will be reused for quarry-related activities (e.g., processing and dust suppression), as well as augmenting streams. This is

	Reference	Chapter E Objective/Policy	Commentary
		(i) municipal water supplies are supported by a water management plan; (ii) industrial and irrigation supplies implement best practice, in respect of the efficient use of water for that particular activity or industry; or (iii) all takes (other than municipal water supplies from a dam) are limited to a maximum annual allocation based on estimated water requirements; (b) requiring consideration of water conservation and thermal efficiency methods; (c) facilitating the transfer of surface water take permits, provided the transfer is within the same surface water catchment and does not result in site-specific adverse effects; ….	considered to be an efficient use of the water resource at this site. The proposed use of the water is consistent with Policy 4.
93.	E2.3 Policy (5)	*Water allocation and availability guidelines* Manage the taking and use of surface water from rivers, streams and springs and taking and use of groundwater from aquifers to meet all of the following except where water allocation exceeds or is close to exceeding the guidelines (refer to Policy E2.3(10)): (a) the minimum flow and availability guidelines in Table 1 River and stream minimum flow and availability in Appendix 2 River and stream minimum flow and availability are not exceeded; and (b) the aquifer availability and groundwater levels in Table 1 Aquifer water availabilities and Table 2 Interim aquifer groundwater levels in Appendix 3 Aquifer water availabilities and levels are not exceeded.	Refer to Row 42. The groundwater take will have a minor effect on aquifer resources and freshwater systems following implementation of the proposed mitigation measures. Refer to Row 88 above for further details. The proposed groundwater take is consistent with Policy 5.
94.	E2.3 Policy (7)	*Take and use of water* Require all proposals to take and use groundwater from any aquifer to demonstrate that: a) the taking is within the water availabilities and levels for the aquifer in Table 1 Aquifer water availabilities and Table 2	The Project has demonstrated the following: (a) The proposed groundwater take is within the water availabilities and levels, and will maintain recharge to other aquifers and will avoid aquifer consolidation and surface subsidence.

	Reference	Chapter E Objective/Policy	Commentary
		Interim aquifer groundwater levels in Appendix 3 Aquifer water availabilities and levels, except in accordance with Policy E2.3(11), and meeting all of the following: (i) recharge to other aquifers is maintained. (ii) aquifer consolidation and surface subsidence is avoided. b) the taking will avoid, remedy or mitigate adverse effects on surface water flows, including the following: (i) base flow of rivers, streams and springs. (ii) any river or stream flow requirements and in particular the minimum stream flow and availability in Appendix 2 River and stream minimum flow and availability. c) the taking will avoid, remedy or mitigate adverse effects on terrestrial and freshwater ecosystem habitat. d) the taking will not cause saltwater intrusion or any other contamination. e) the taking will not cause adverse interference effects on neighbouring bores to the extent their owners are prevented from exercising their lawfully established water takes. f) Policy E2.3(7)(e) above will not apply in the following circumstances: (i) where it is practicably possible to locate the pump intake at a greater depth within the affected bore; or (ii) where it can be demonstrated that the affected bore accesses, or could access, groundwater at a deeper level within the same aquifer, if drilled or cased to a greater depth. g) the proposed bore is capable of extracting the quantity of groundwater applied for; and h) the proposal avoids, remedies or mitigates any ground settlement that may cause distress, including reducing the	(b) The proposed augmentation regime will mitigate adverse effects on freshwater systems by offsetting the loss of stream base flows. Future monitoring of stream flows and quality is proposed as consent conditions and will be managed via the Groundwater and Surface Water Monitoring and Contingency Plan (GSWMCP) and BMMP. (c) The potential adverse effects of the stream augmentation on freshwater habitats are considered no more than minor. (d) No saltwater intrusion is anticipated. The predicted zone of influence is confined within the quarry catchment and does not extend materially beyond the quarry boundary, and the location of take is at significant distance from the coast. (e) The taking is not anticipated to have any drawdown effects on neighbouring groundwater users. Refer to Row 88 for further details. (f) No interference on neighbouring groundwater users is anticipated. Should unexpected drawdown responses be recorded through monitoring, the GSWMCP includes contingency provisions to address any such effects. (g) Extraction is not proposed via a bore. Rather, the take and diversion will be from the groundwater inflow from the base of the quarry pit. (h) The proposed groundwater take will not result in ground settlement. Accordingly, the groundwater take and use is consistent with Policy 7.

	Reference	Chapter E Objective/Policy	Commentary
		ability of an existing building or structure to meet the relevant requirements of the Building Act 2004 or the New Zealand Building Code, to any existing: (i) buildings; (ii) structures; or (iii) services including roads, pavements, power, gas, electricity, water and wastewater networks and fibre-optic cables.	
95.	E2.3 Policy (8)	Consider mitigation options, where there are significant adverse effects on the matters identified in policies E2.3(6) and (7) above, including any of the following: (a) consideration of alternative locations, rates and timing of takes for both surface water and groundwater; (b) use of alternative water supplies; (c) use of water conservation methods when water shortage conditions apply; (d) provision for fish passage in rivers and streams; … (f) riparian planting; or (g) consideration of alternative designs for groundwater dewatering proposals.	There are no significant adverse effects identified in relation to the proposed groundwater take and use. Therefore, the proposed take and use is consistent with Policy 8.
96.	E2.3 Policy (9)	Require proposals to take and use surface water and groundwater to monitor the effects of the take on the quality and quantity of the water resource and to: (a) measure and record water use and rate of take; (b) measure and record water flows and levels; (c) sample and assess water quality and freshwater ecology; (d) measure and record the movement of ground, buildings and other structures; and	Groundwater and freshwater monitoring are proposed as conditions of consent (Appendix G, Volume 1). These conditions require the Consent Holder to: (a) Measure and record water use and rate of take. (b) Measure and record surface water flows and levels at specified stream locations. (c) Undertake surface water quality sampling to monitor water quality during augmentation. (d) N/A.

	Reference	Chapter E Objective/Policy	Commentary
		(e) monitoring should be of a type and scale appropriate for the activity.	(e) The proposed monitoring regime is considered to appropriately reflect the type and scale of the proposed take and use. Overall, the take and use of groundwater and surface water is consistent with Policy 9.
97.	E2.3 Policy (13)	*National Policy Statement for Freshwater Management 2014* When considering any application the Council must have regard to the following matters: (a) the extent to which the change would adversely affect safeguarding the life supporting capacity of fresh water and of any associated ecosystem; and (b) the extent to which it is feasible and dependable that any adverse effect on the life-supporting capacity of freshwater and of any associated ecosystem resulting from the change would be avoided.	The NPS-FM 2014 is now outdated, and an assessment against the NPS-FM 2020 is set out in Table 6 below. As set out in Rows 76 and 77, a range of management and mitigation measures are proposed to safeguard the life-supporting capacity of freshwater and associated ecosystems. It is considered that, with these measures in place, the proposed works will not adversely affect the life-supporting capacity of freshwater. Accordingly, the Project is consistent with Policy 13.
98.	E2.3 Policy (23)	*Diversion of groundwater* Require proposals to divert groundwater, in addition to the matters addressed in Policy E2.3(6) and (7) above, to ensure that: (a) the proposal avoids, remedies or mitigates any adverse effects on: (i) scheduled historic heritage places and scheduled sites and places of significance to Mana Whenua; and (ii) people and communities. (b) the groundwater diversion does not cause or exacerbate any flooding; (c) monitoring has been incorporated where appropriate, including: (i) measurement and recording of water levels and pressures; and	The expansion of the quarry pit will result in the diversion of groundwater. The effects of the diversion are described in Technical Report G and are considered to be less than minor. A GSWMCP is proposed as a condition of consent to manage potential effects associated with the groundwater diversion. The Project is therefore consistent with Policy 23.

	Reference	Chapter E Objective/Policy	Commentary
		(ii) measurement and recording of the movement of ground, buildings and other structures. (d) mitigation has been incorporated where appropriate including: (i) minimising the period where the excavation is open/unsealed; (ii) use of low permeability perimeter walls and floors; (iii)use of temporary and permanent systems to retain the excavation; or (iv) re-injection of water to maintain groundwater pressures.	
99.	E2.3 Policy (25)	*Quarrying* Enable regionally significant mineral extraction activities (extraction within groundwater and dewatering) provided that significant adverse effects are managed through considering all of the relevant policies in this section.	As discussed in Rows 88 – 98, all significant adverse effects associated with the proposed groundwater take, use and diversion will be appropriately managed so that adverse effects are minor. The groundwater take and diversion are necessary to be able to undertake mineral extraction activities. The proposed expansion will secure 150 MT of local aggregate to facilitate the construction of regionally significant infrastructure projects in the region. Therefore, the Project directly gives effect to Policy 25.
	E3. Lakes, rivers, streams … [rp]		
100.	E3.2 Objective (1)	Auckland's lakes, rivers, streams … with high natural values are protected from degradation and permanent loss.	As discussed in Rows 30 and 32, the proposed Quarry Expansion will result in the unavoidable loss of permanent and intermittent streams within the quarry footprint. There are four streams and tributaries potentially impacted, of which the majority are located within the SPQZ. Approximately 344 m of Stream 1 tributaries (intermittent headwaters) have been assessed as having High Ecological Value, while the remaining Streams 2, 2a and 3 intermittent tributaries have been assessed as having Moderate to High Ecological Value. Freshwater fauna values have been assessed as high to very high, with the exception of Stream

	Reference	Chapter E Objective/Policy	Commentary
			2a, which was assessed as having low freshwater fauna value. Effects on streams have been minimised, as far as practicable, whilst still achieving an efficient and safe quarry design (refer to Row 32). To address freshwater residual effects, an offset and compensation package is proposed that will eventually result in catchment-scale benefits to freshwater ecological values.
101.	E3.2 Objective (2)	Auckland's lakes, rivers, streams … are restored, maintained or enhanced.	While the Project involves the permanent loss of some streams onsite, this loss has been minimised as far as practicable. In addition, riparian planting and restoration planting along Stream 3 (as per Row 80) will be undertaken to offset the residual adverse effects of permanent stream loss. These improvements will result in positive benefits to the retained stream channel and tributaries within the Stream 3 catchment, including creating new habitat, enhancing the existing habitat and improving connectivity of local indigenous biodiversity. The proposed offset and compensation package is consistent with Objective 2.
102.	E3.2 Objective (3)	Significant residual adverse effects on lakes, rivers, streams … that cannot be avoided, remedied or mitigated are offset where this will promote the purpose of the Resource Management Act 1991.	As detailed in the EcIA (Technical Report I, Volume 2), a comprehensive ecological offset and compensation package is proposed to provide for positive effects that outweigh the residual effects on freshwater ecological values. This offsetting will, in the circumstances of the Project, promote the purpose of the Resource Management Act, as well as other RPS and subordinate provisions that support and enable the extraction of aggregate. Therefore, the Project is consistent with Objective 3.
103.	E3.2 Objective (5)	Activities in, on, under or over the bed of a lake, river, stream … are managed to minimise adverse effects on the lake, river, stream ….	No structures are proposed, and no activities will be undertaken within stream beds, other than the reclamation of streams and the riparian margin planting proposed as part of the restoration package.

	Reference	Chapter E Objective/Policy	Commentary
			The Project is consistent with Objective 5.
104.	E3.2 Objective (6)	Reclamation and drainage of the bed of a lake, river, stream … is avoided, unless there is no practicable alternative.	Refer to Rows 100 and 102 above. Mineral extraction activities have a functional need to be undertaken where aggregate is located in situ, such as within the Clevedon Quarry Expansion footprint. The majority of the site is zoned SPQZ. Approximately 1,411 m (59%) of the total 2,392 m of stream proposed for removal is located within the centre of the LoQ extent, making avoidance not practicable. The loss of freshwater systems has been minimised where possible in the design process, including through the redesign of the pit extent, which has resulted in the reduction in stream loss of Streams 1 and 3, while recognising that the nature of the activity and its locational constraints have meant that complete avoidance of freshwater system loss is not able to be achieved. Accordingly, the proposed reclamation of streams is considered to meet the requirements of Objective 6 as there is no practicable alternative.
105.	E3.3 Policy (1)	*General* Avoid significant adverse effects, and avoid where practicable or otherwise remedy or mitigate other adverse effects of activities in, on, under or over the beds of lakes, rivers, streams … within the following overlays: ~~(a) …~~ (d) D9 Significant Ecological Areas Overlay; and ~~(…~~	The Project will result in the loss of approximately 344 m of intermittent headwaters in the Stream 1 tributaries located within an SEA and 2,048 m outside the SEA overlay. As discussed in Rows 67 and 68, the Project has worked through the effects management hierarchy with avoidance and mitigation as the first priorities, supplemented by an ecological offset and compensation package designed to provide for positive effects that outweigh the residual adverse effects on freshwater ecological values, and a net gain in terrestrial biodiversity values. The proposed offsetting to address the permanent loss of freshwater systems is located along Stream 3, immediately adjacent to the points of impact, within streams of similar order and topography and within the same catchment.
106.	E3.3 Policy (2)	Manage the effects of activities in, on, under or over the beds of lakes, rivers, streams … outside the overlays identified in Policy E3.3(1) by: (a) avoiding where practicable or otherwise remedying or mitigating any adverse effects on lakes, rivers, streams …; and	

	Reference	Chapter E Objective/Policy	Commentary
		(b) where appropriate, restoring and enhancing the lake, river, stream ...	Consideration against the principles of offsetting and aquatic compensation has been addressed in the EcIA (Technical Report I, Volume 2). Specifically, the offsetting is considered to be: (a) The loss of stream habitat value will be replaced by a non-like-for-like trade, being the provision of terrestrial planting. However, in determining the appropriateness of this, the ecological values of the Stream 1, 2, 2a and 3 catchments are not considered irreplaceable or vulnerable. (b) Riparian planting of degraded streams is an established method for offsetting the loss of freshwater ecological values, such as through stream reclamation. Gains will be achieved within an acceptable timeframe and it is anticipated restoration targets will be met prior to impact. (c) The ECR/SEV calculations have been used to demonstrate the proportion of residual stream effects that are offset by the Stream 3 riparian offset planting. The offsetting results in at least no net loss of ecological function (measured through the SEV) for 38% of the residual stream effects. The remaining proportion of residual stream effects is addressed through the freshwater compensation component of the package. (d) Freshwater offset planting is proposed to be implemented prior to the removal of streams and upstream contributing catchment area within the quarry footprint. The majority of these impacts will occur more than 10 years following granting of consent, and some up to 50 years later. Thus, time lags will be minimised as far as possible.
107.	E3.3 Policy (3)	Enable the enhancement, maintenance and restoration of lakes, rivers, streams …	
108.	E3.3 Policy (4)	Restoration and enhancement actions, which may form part of an offsetting proposal, for a specific activity should: (a) be located as close as possible to the subject site; (b) be 'like-for-like' in terms of the type of freshwater system affected; (c) preferably achieve no net loss or a net gain in the natural values including ecological function of lakes, rivers, streams …; and (d) consider the use of biodiversity offsetting as outlined in Appendix 8 Biodiversity offsetting. *Note 1* *When having regard to Policy E3.3(4) above, the following documents or any updated version of them should be referred to:* • *Auckland Council Technical Report 2011/009: Stream Ecological Valuation (SEV): a method for assessing the ecological functions of Auckland Streams (October 2011) for guidance on how the location and extent of any offset may be calculated and assessed; and* • *Guidance on Good Practice Biodiversity Offsetting in New Zealand, New Zealand Government et al, August 2014.* *Neither of these reference documents has precedence. An acceptable offsetting proposal may combine elements from both documents*	

	Reference	Chapter E Objective/Policy	Commentary
			(e) The freshwater offset and compensation package will achieve catchment-scale benefits to freshwater ecological values. (f) Appendix 8 Biodiversity offsetting has been applied in the context of the purpose of the FTAA Act (refer to the EcIA, Technical Report I, Volume 2). Accordingly, the Project is broadly consistent with Policies 1 – 4.
109.	E3.3 Policy (5)	Avoid significant adverse effects, and avoid, remedy or mitigate other adverse effects of activities in, on, under or over the beds of lakes, rivers, streams … on: (a) the mauri of the freshwater environment; and (b) Mana Whenua values in relation to the freshwater environment.	As discussed in Rows 12 – 16 and 77, total avoidance of stream loss is not practicable when taking into account the functional need of the Project and locational constraints. However, the Project has sought to avoid significant adverse effects of stream reclamation through avoidance where possible through the design process; refer to Row 32. For the remaining freshwater systems on site, as described in Rows 12 – 16, the Project has been designed, as far as practicable, to remedy or mitigate the effects on the mauri and Mana Whenua values in relation to freshwater. This is achieved through incorporation of riparian planting and restoration planting to enhance freshwater habitats, and through the use of a constructed wetland system proposed to be used as the primary water quality treatment device to treat captured surface and groundwater prior to discharge. It is acknowledged that there will be significant adverse effects on the mauri of the streams proposed to be removed which cannot be directly addressed other than to an extent through offset and compensation measures as proposed.
110.	E3.3 Policy (6)	Manage the adverse effects on Mana Whenua cultural heritage that is identified prior to, or discovered during, ~~…~~use and development by:	Refer to Rows 12 – 16 for details. Accidental discovery protocols as required under the AUP and ongoing consultation with Mana Whenua are proposed, among other management and monitoring measures. Accordingly, the Project is consistent with Policy 6.

	Reference	Chapter E Objective/Policy	Commentary
		(a) complying with the protocol for the accidental discovery of kōiwi, archaeology and artefacts of Māori origin; (b) undertaking appropriate actions in accordance with mātauranga and tikanga Māori; and (c) undertaking appropriate measures to avoid adverse effects, or where adverse effects cannot be avoided, effects are remedied or mitigated.	
111.	E3.3 Policy (7)	*Structures and the diversion of surface water* Provide for the operation, use, maintenance, repair, erection, reconstruction, placement, alteration or extension, of any structure or part of any structure in, on, under, or over the bed of a lake, river, stream ~~...~~, and any associated diversion of water, where the structure complies with all of the following: (a) there is no practicable alternative method or location for undertaking the activity outside the bed of the lake, river, stream …; (b) the structure is designed to be the minimum size necessary for its purpose to minimise modification to the bed of a lake, river, stream …; (c) the structure is designed to avoid creating or increasing a hazard; (d) the structure is for any of the following: (i) required as part of an activity designed to restore or enhance the natural values of any lakes, rivers, streams … and their margins, or any adjacent area of indigenous vegetation or habitat of indigenous fauna; (ii) designed to maintain and/or enhance public access to, over and along any lake, river, stream … and their margins; (iii) necessary to provide access across a lake, river, stream …;	No structures are proposed in, on, under, or over the bed of a river or stream.

	Reference	Chapter E Objective/Policy	Commentary
		(iv) associated with infrastructure; (v) necessary for flood protection and the safeguarding of public health and safety; or (vi) required for the reasonable use of production land. (e) the structure avoids significant adverse effects and avoids, remedies or mitigates other adverse effects on Mana Whenua values associated with freshwater resources, including wāhi tapu, wāhi taonga and mahinga kai.	
112.	E3.3 Policy (10)	*Planting of plants* Enable the planting of any plant, excluding pest species, in, on, or under the bed of a lake, river, stream … where it is suitable for habitat establishment, restoration or enhancement, the maintenance and enhancement of amenity values, flood or erosion protection or stormwater runoff control provided it does not create or exacerbate flooding.	As outlined in Section 7.2.3 of the AEE Report and Row 68 above, the offset and compensation package comprises approximately 67.6 ha of restoration planting, which consists of native species, and where practicable will be sourced locally. The proposed package has been designed to achieve catchment-scale benefits to freshwater ecological values. The proposed planting will not create or exacerbate flooding. Accordingly, the Project is consistent with Policies 10 – 12.
113.	E3.3 Policy (11)	Encourage the planting of plants that are native to the area.	
114.	E3.3 Policy (12)	Encourage the incorporation of Mana Whenua mātauranga, values and tikanga in any planting in, on, or under the bed of a lake, river, stream …	
115.	E3.3 Policy (13)	*Reclamation and drainage* Avoid the reclamation and drainage of the bed of lakes, rivers, streams …, including any extension to existing reclamations or drained areas **unless all of the following apply**: (a) there is **no practicable alternative method** for undertaking the activity outside the lake, river, stream …; (b) for lakes, permanent rivers and streams, … **the activity is required** for any of the following: (i) as part of an activity designed to restore or enhance the natural values of any lake, river, stream …, any adjacent area of indigenous vegetation or habitats of indigenous fauna;	In respect of Policy 13, the first imperative is to avoid the reclamation of streams. In that regard, the proposed quarry expansion has been designed to avoid: • Reclamation of Stream 1 main stream channel; • Reduction of reclamation of Stream 1 upper tributaries through a reduction in pit extent. • Reduction of reclamation of Stream 3 upper tributaries through a reduction in pit extent. Despite these design measures, the Project will result in the unavoidable loss of permanent and intermittent streams. Accordingly, the elements of Policy 13 need to be stepped through, as follows:

	Reference	Chapter E Objective/Policy	Commentary
		(ii) for the operation, use, maintenance, repair, development or upgrade of infrastructure; or (iii) **to undertake mineral extraction activities**; and (c) **the activity avoids significant adverse effects** and avoids, remedies or mitigates other adverse effects on Mana Whenua values associated with freshwater resources, including wāhi tapu, wāhi taonga and mahinga kai.	(a) There is no practicable alternative method for extracting the aggregate that avoids the reclamation of streams proposed to be reclaimed. (b) The reclamation is required to undertake mineral extraction activities, including the groundwater dewatering which is fundamental to mineral extraction in order to maintain a safe and dry quarry. (c) The activity cannot avoid significant effects altogether (for any streams being reclaimed the effects on that stream will be significant); however, when viewed in its entirety including having regard to the mitigation, offsetting and compensation proposed, the activity has avoided significant adverse effects to the greatest practicable extent and it has remedied or mitigated (and offset or compensated) other effects so that the overall level of effects is not significant. Overall, the Project meets the intent of Policy 13.
116.	E3.3 Policy (15)	*Riparian margins* Protect the riparian margins of lakes, rivers, streams, … from inappropriate use and development and promote their enhancement through all of the following: (a) safeguard habitats for fish, plant and other aquatic species, particularly in rivers and streams with high ecological values; (b) safeguard their aesthetic, landscape and natural character values; (c) safeguard the contribution of natural freshwater systems to the biodiversity, resilience and integrity of ecosystems; and (d) avoid or mitigate the effects of flooding, surface erosion, stormwater contamination, bank erosion and increased surface water temperature.	The restoration package includes riparian planting along Stream 3. This will contribute to protecting the riparian margins of Stream 3 and create new habitat within the offset and compensation site. It also provides a number of benefits, including enhanced aesthetic, landscape and natural character values, additional habitat for terrestrial fauna, improved resilience of ecosystems and mitigation of flooding, surface and bank erosion and contamination. Accordingly, the Project is consistent with Policy 15.
117.	E3.3 Policy (18)	*Rivers*	There is a functional need for the quarrying to occur in the location proposed, and the effects of the activity will be

	Reference	Chapter E Objective/Policy	Commentary
		The loss of river extent and values is avoided, unless the council is satisfied: (a) that there is a functional need for the activity in that location; and (b) the effects of the activity are managed by applying the effects management hierarchy.	managed through the effects management hierarchy. The Project meets Policy 18.
	E11. Land Disturbance – Regional		
118.	E11.2 Objective (1)	Land disturbance is undertaken in a manner that protects the safety of people and avoids, remedies and mitigates adverse effects on the environment.	An ESCAR and ESCP have been prepared (Technical Report K, Volume 2) that set out specific ESC measures to be implemented during construction and operation of the Clevedon Quarry Expansion. Some of the key measures include: • Minimising areas of disturbance as far as practicable; • Staging of earthworks (progressive stabilisation of exposed areas); • Construction of clean water diversion bunds, where practicable; • Use of SRPs to capture and treat dirty water, for the management of the OBDA; • Installation of a perimeter bund to direct site runoff to the OBDA SRP; and • Installation of silt fences. Ongoing monitoring of ESC measures will be undertaken through regular inspection and maintenance of the ESC devices when necessary to maximise the sediment retention efficiency of the site. Additional controls or measures will be implemented where and when there is a greater risk of sediment discharges, or where monitoring indicates that additional controls are required.
119.	E11.2 Objective (2)	Sediment generation from land disturbance is minimised.	
120.	E11.2 Objective (3)	Land disturbance is controlled to achieve soil conservation	

	Reference	Chapter E Objective/Policy	Commentary
			The ESC methodology is consistent with the industry-leading approach and represents best-practice control measures that have appropriately minimised sediment discharges and downstream effects on multiple projects throughout the Auckland region. Accordingly, the Project is consistent with Objectives 1 – 3.
121.	E11.3 Policy (1)	Avoid where practicable, and otherwise mitigate, or where appropriate, remedy adverse effects on areas where there are natural and physical resources that have been scheduled in the Plan in relation to natural heritage, … natural resources, …	Land disturbance of scheduled sites, such as the ONF overlay, has been avoided by the proposed expansion. However, the works will encroach into a small portion of the SEA located at the north-eastern corner of the LoQ footprint and other natural features such as streams onsite that could not be practicably avoided in their entirety. As noted in Row 68, where avoidance is not possible, mitigation followed by offset measures for residual effects have been proposed and encapsulated through proposed conditions of consent. Accordingly, the Project is broadly consistent with Policy 1.
122.	E11.3 Policy (2)	Manage land disturbance to: (a) retain soil and sediment on the land by the use of best practicable options for sediment and erosion control appropriate to the nature and scale of the activity; (b) manage the amount of land being disturbed at any one time, particularly where the soil type, topography and location is likely to result in increased sediment runoff or discharge; (c) avoid, remedy and mitigate adverse effects on accidentally discovered sensitive material; and (d) maintain the cultural and spiritual values of Mana Whenua in terms of land and water quality, preservation of wāhi tapu, and kaimoana gathering.	Land disturbance will be managed through the use of best practicable options for ESC, minimisation of disturbed areas at any one time, measures to avoid, remedy and mitigate adverse effects on accidentally discovered sensitive material, and maintenance of cultural values in terms of land and water quality, as discussed in Rows 40 and 118 – 121 above. The Project is therefore consistent with Policy 2.
123.	E11.3 Policy (3)	Manage the impact on Mana Whenua cultural heritage that is discovered undertaking land disturbance by:	Refer to Rows 12 – 16 and 24 for details. As detailed in the Archaeological Assessment (Technical Report E, Volume 2), there is no reasonable case to suspect

	Reference	Chapter E Objective/Policy	Commentary
		(a) requiring a protocol for the accidental discovery of kōiwi, archaeology and artefacts of Māori origin; (b) undertaking appropriate actions in accordance with mātauranga and tikanga Māori; and (c) undertaking appropriate measures to avoid adverse effects. Where adverse effects cannot be avoided, effects are remedied or mitigated.	that the proposed Quarry Expansion will affect potential unrecorded archaeology. However, if suspected archaeological remains are exposed during land disturbance, the Archaeological Accidental Discovery Rule set out in Chapter E11.6.1 of the AUP will be followed. The Project is consistent with Policy 3.
124.	E11.3 Policy (4)	Enable land disturbance necessary for a range of activities undertaken to provide for people and communities' social, economic and cultural well-being, and their health and safety.	Land disturbance is required in order to expand Clevedon Quarry. Land disturbance will occur in respect of the establishment earthworks associated with the construction of the constructed wetland, widening of the pit floor (FoH area), and the removal of overburden. Construction and expansion of the quarry will enable people and communities of the Auckland Region to provide for their social, economic and cultural wellbeing and for their health and safety by providing a secure continued supply of aggregate, which is a critical component in the construction and maintenance of infrastructure, housing and transport links, as set out in Rows 1 – 8. The Project provides significant regional benefits, and the enablement of land disturbance activities is therefore consistent with Policy 4.
125.	E11.3 Policy (5)	Design and implement earthworks with recognition of existing environmental site constraints and opportunities, specific engineering requirements, and implementation of integrated water principles.	As set out in Section 7.3.5 of the AEE Report, the ESC approach has been designed based on staged quarry and overburden development to minimise exposed areas at any one time. The proposed ESC measures have been designed to reflect site constraints and opportunities. The Project is consistent with Policy 5.
126.	E11.3 Policy (6)	Require that earthworks are designed and undertaken in a manner that ensures the stability and safety of surrounding land, buildings and structures.	As stated in the ESCAR, the proposed ESC methodology is the best practicable option for the Project and includes staging and progressive stabilisation, as detailed in Rows 118 – 120.

	Reference	Chapter E Objective/Policy	Commentary
			A Slope Stability Monitoring Plan is proposed to monitor and measure safety and stability risks associated with the Project. Accordingly, the Project is consistent with Policy 6.
127.	E11.3 Policy (7)	Require any land disturbance that will likely result in the discharge of sediment laden water to a surface water body … to demonstrate that sediment discharge has been minimised to the extent practicable, having regard to the quality of the environment; with: (a) any significant adverse effects avoided, and other effects avoided, remedied or mitigated, particularly in areas where there is: (i) high recreational use; (ii) relevant initiatives by Mana Whenua, established under regulations relating to the conservation or management of fisheries, including taiāpure, rāhui or whakatupu areas; (iii) the collection of fish and shellfish for consumption; (iv) maintenance dredging; or (v) a downstream receiving environment that is sensitive to sediment accumulation; (b) adverse effects avoided as far as practicable within areas identified as sensitive because of their ecological values, including terrestrial, freshwater ~~…~~ ecological values; and (c) the receiving environments ability to assimilate the discharged sediment being taken into account.	Refer to details in Section 7.3.5 of the AEE Report, the ESCAR Report and ESCP (Technical Report K, Volume 2) and Rows 118 – 120 above. The key ESC measures across construction and operation phases include: • The constructed wetland will provide water quality treatment prior to discharge to Stream 1. This system has been designed to achieve a target TSS removal efficiency of 90%. • The works will be undertaken progressively to minimise the open areas; • Use of SRPs for the management of the OBDA; and • Use of silt fences to capture runoff from small areas that will not actively drain to an SRP or the quarry floor and around specific isolated works. The AEE Report concludes that, based on the proposed approach to sediment management and the ESC measures to be implemented during the construction and expansion of the Clevedon Quarry, sediment generation will be minimised, such that the potential additional sediment load generated from the site will be minor. Therefore, the Project is consistent with Policy 7.
	E12. Land disturbance – District [dp]		
128.	E12.2 Objective (1)	Land disturbance is undertaken in a manner that protects the safety of people and avoids, remedies and mitigates adverse effects on the environment.	Refer to the ESCAR and ESCP (Technical Report K, Volume 2) and Rows 118 – 120 above. The Project is consistent with Objective 1.

	Reference	Chapter E Objective/Policy	Commentary
129.	E12.3 Policy (1)	Avoid where practicable, and otherwise, mitigate, or where appropriate, remedy adverse effects of land disturbance on areas where there are natural and physical resources that have been scheduled in the Plan in relation to natural heritage, ~~...~~ natural resources...	Refer to Row 121 above for details. The Project is consistent with Policy 1.
130.	E12.3 Policy (2)	Manage the amount of land being disturbed at any one time, to: (a) avoid, remedy or mitigate adverse construction noise, vibration, odour, dust, lighting and traffic effects; (b) avoid, remedy and mitigate adverse effects on accidentally discovered sensitive material; and (c) maintain the cultural and spiritual values of Mana Whenua in terms of land and water quality, preservation of wāhi tapu, and kaimoana gathering.	Refer to Row 122 above, and the ESCAR and ESCP (Technical Report K, Volume 2) for details. The Project is consistent with Policy 2.
131.	E12.3 Policy (3)	Enable land disturbance necessary for a range of activities undertaken to provide for people and communities social, economic and cultural well-being, and their health and safety.	Refer to Row 124 above for details. The Project is consistent with Policy 3.
132.	E12.3 Policy (4)	Manage the impact on Mana Whenua cultural heritage that is discovered undertaking land disturbance by: (a) requiring a protocol for the accidental discovery of kōiwi, archaeology and artefacts of Māori origin; (b) undertaking appropriate actions in accordance with mātauranga and tikanga Māori; and (c) undertaking appropriate measures to avoid adverse effects, or where adverse effects cannot be avoided, effects are remedied or mitigated.	Refer to Rows 123, 12 – 16 and 24 for details. The Project is consistent with Policy 4.
133.	E12.3 Policy (5)	Design and implement earthworks with recognition of existing environmental site constraints and opportunities, specific engineering requirements, and implementation of integrated water principles.	Refer to Row 125 and the ESCAR (Technical Report K, Volume 2) for details. The Project is consistent with Policy 5.

	Reference	Chapter E Objective/Policy	Commentary
134.	E12.3 Policy (6)	Require that earthworks are designed and undertaken in a manner that ensures the stability and safety of surrounding land, buildings and structures.	Refer to Row 126 and the ESCAR (Technical Report K, Volume 2) for details. The Project is consistent with Policy 6.
	E14. Air quality [rcp/rp]		
135.	E14.2 Objective (1)	Air quality is maintained in those parts of Auckland that have high air quality, and air quality is improved in those parts of Auckland that have low to medium air quality.	Refer to Row 45 and the Air Quality Assessment (Technical Report F, Volume 2) for details. The Project is consistent with Objective 1.
136.	E14.2 Objective (2)	Human health, property and the environment are protected from significant adverse effects from the discharge of contaminants to air.	Refer to Row 46 and the Air Quality Assessment (Technical Report F, Volume 2) for details. The Project is consistent with Objective 2.
137.	E14.2 Objective (3)	Incompatible uses and development are separated to manage adverse effects on air quality from discharges of contaminants into air and avoid or mitigate reverse sensitivity effects.	Refer to Row 46 and the Air Quality Assessment (Technical Report F, Volume 2) for details. The Project is consistent with Objective 3.
138.	E14.2 Objective (4)	The operational requirements of light and heavy industry, other location-specific industry, infrastructure, rural activities and mineral extraction activities are recognised and provided for.	As a mineral extraction activity, the Clevedon Quarry Expansion would extend the existing quarrying operation into areas where aggregate is located in situ and the majority of the proposed footprint (80%) is within the SPQZ. Enabling mineral extraction activities in this location is consistent with Objective 4.
139.	E14.3 Policy (1)	Manage the discharge of contaminants to air, including by having regard to the Auckland Ambient Air Quality Targets in Table E14.3.1, so that significant adverse effects on human health, including cumulative adverse effects, are avoided, and all other adverse effects are remedied or mitigated.	Refer to Row 46 and the Air Quality Assessment (Technical Report F, Volume 2) for details. The Project is consistent with Policy 1.
140.	E14.3 Policy (3)	In the Rural – Rural Production Zone …: (a) recognise that rural air quality is generally a result of dust and odours, and other emissions generated by rural production activities; (b) avoid, remedy or mitigate adverse effects of dust and odour discharges;	Refer to Rows 45 – 47 and the Air Quality Assessment (Technical Report F, Volume 2) for details. This policy expressly provides for minor and localised elevation of dust and odour levels where air discharge is from mineral extraction activities in the Rural – Rural Production Zone. As stated in Rows 45 – 46, the adverse

	Reference	Chapter E Objective/Policy	Commentary
		(c) provide for minor and localised elevation of dust and odour levels where the air discharge is from: (i) rural production activities or rural industry; or (ii) the operation of infrastructure or location specific industry; or (iii) mineral extraction activities; or (iv) activities undertaken by the New Zealand Defence Force for training and munitions testing; or (v) for emergency services training; (d) require adequate separation between use and development which discharge dust and odour and activities that are sensitive to these adverse effects.	effects from the discharge of dust from the Quarry Expansion are considered negligible. Accordingly, the Project is consistent with Policy 3.
141.	E14.3 Policy (5)	Support the use and development in the […], Special Purpose – Quarry Zone […] by: (a) providing for higher levels of dust and odour provided that any adverse effects on human health are avoided, remedied or mitigated; (b) avoiding the establishment of activities sensitive to air discharges in these zones; and (c) discouraging the establishment of activities sensitive to air discharges in areas adjacent to these zones.	Refer to Row 46 and the Air Quality Assessment (Technical Report F, Volume 2) for details. This policy expressly provides for higher levels of dust arising from activities within the SPQZ provided that any adverse effects on human health are avoided, remedied or mitigated. As outlined in Row 45, a range of management measures are proposed in the Dust Management Plan to manage air quality effects, including appropriate monitoring and dust suppression. Additionally, proposed conditions of consent will ensure that any potential adverse effects on human health are appropriately managed. Accordingly, the Clevedon Quarry Expansion within the SPQZ is directly supported by Policy 5.
142.	E14.3 Policy (8)	Avoid, remedy or mitigate the adverse effects on air quality from discharges of contaminants into air by: (a) using the best practicable option for emission control and management practices that are appropriate to the scale of the discharge and potential adverse effects; or (b) adopting a precautionary approach, where there is uncertainty and a risk of significant adverse effects or	As set out in Rows 45 – 47 and the Air Quality Assessment (Technical Report F, Volume 2), a range of mitigation measures are proposed to manage air quality. Overall, in respect of discharges to air, there is no risk of any significant adverse effects or irreversible harm to the environment. Discharge of PM_{10} and RCS will be controlled with dust management. Dust emissions will be minimised to

	Reference	Chapter E Objective/Policy	Commentary
		irreversible harm to the environment from air discharges.	within 50 to 100 m of the source, resulting in low likelihood of effects on any nearby sensitive receptors. Therefore, the Project is consistent with Policies 8 and 9.
143.	E14.3 Policy (9)	Avoid, remedy or mitigate the adverse effects on air quality beyond the boundary of the premises where the discharge of contaminants to air is occurring, in relation to: (a) noxious or dangerous effects on human health, property or the environment from hazardous air pollutants; or (b) overspray effects on human health, property or the environment.	
	E15. Vegetation management and biodiversity		
144.	E15.2 Objective (1)	Ecosystem services and indigenous biological diversity values, particularly in sensitive environments, and areas of contiguous indigenous vegetation cover, are maintained or enhanced while providing for appropriate ... use and development.	Refer to Rows 26 – 29 above and the EcIA (Technical Report I, Volume 2) for details. The Project is broadly consistent with Objective 1.
145.	E15.2 Objective (2)	Indigenous biodiversity is restored and enhanced in areas where ecological values are degraded, or where development is occurring.	Refer to Rows 26 – 29 above and the EcIA (Technical Report I, Volume 2) for details. The Project is broadly consistent with Objective 2.
146.	E15.3 Policy (1)	Protect areas of contiguous indigenous vegetation cover and vegetation in sensitive environments including the ... riparian margins, ... and areas prone to natural hazards.	Refer to Rows 26 – 29, 34 above and the EcIA (Technical Report I, Volume 2) for details. The Project is broadly consistent with Policy 1.
147.	E15.3 Policy (2)	Manage the effects of activities to avoid significant adverse effects on biodiversity values as far as practicable, minimise significant adverse effects where avoidance is not practicable, and avoid, remedy or mitigate any other adverse effects on indigenous biological diversity and ecosystem services, including soil conservation, water quality and quantity management, and the mitigation of natural hazards.	Refer to Rows 26 – 29 above and the EcIA (Technical Report I, Volume 2) for details. Overall, the Project has avoided significant adverse effects on biodiversity values as far as practicable. Where this was not possible, they have been minimised, with residual adverse effects on terrestrial ecosystems being managed through an offset and compensation package to achieve a net gain in terrestrial biodiversity values. The Project is therefore consistent with Policies 2–3.
148.	E15.3 Policy (3)	Encourage the offsetting of any significant residual adverse effects on indigenous vegetation and biodiversity values that cannot be avoided, remedied or mitigated, through protection,	

	Reference	Chapter E Objective/Policy	Commentary
		restoration and enhancement measures, having regard to Policy E15.3(4) below and Appendix 8 Biodiversity offsetting.	
149.	E15.3 Policy (4)	Protect, restore, and enhance biodiversity when undertaking new use and development through any of the following: (a) using transferable rural site subdivision to protect areas in Schedule 3 Significant Ecological Areas -Terrestrial Schedule; (b) requiring legal protection, ecological restoration and active management techniques in areas set aside for the purposes of mitigating or offsetting adverse effects on indigenous biodiversity; or (c) linking biodiversity outcomes to other aspects of the development such as the provision of infrastructure and open space.	Refer to Rows 26 – 29 above and EcIA (Technical Report I, Volume 2) for details. Notably, the proposed riparian planting along Stream 3 and restoration planting on slopes and open areas within the Stream 3 catchment and within the OBDA once filled, proposed as part of the offset and compensation package within SAL Landholdings, will also be protected in perpetuity via covenants and conditions of consent (Appendix G, Volume 1). The Project is consistent with Policy 4.
	E24. Lighting [rcp/dp]		
150.	E24.2 Objective (1)	Artificial lighting enables outdoor activities and the security and safety of people and property.	Ongoing use of lighting is required as part of the proposed Clevedon Quarry Expansion. As detailed in Section 4.2.5 of the AEE Report, lighting will be managed to comply with the relevant permitted standards under the AUP and in accordance with the existing 2018 consent conditions. The placement and direction of lights will avoid high points which are visible outside of the Site. Light shields will be used where necessary, and all lighting will be downward facing to minimise effects on the night sky. Based on these measures, the Project is consistent with Objectives 1–2 and Policies 1–3.
151.	E24.2 Objective (2)	The adverse effects of outdoor lighting on the environment and safety of road users are limited.	
152.	E24.3 Policy (1)	Provide for appropriate levels of artificial lighting to enable the safe and efficient undertaking of outdoor activities, including night time working, recreation and entertainment.	
153.	E24.3 Policy (2)	Control the intensity, location and direction of artificial lighting to avoid significant glare and light spill onto adjacent sites, maintain safety for road users and minimise the loss of night sky viewing.	
154.	E24.3 Policy (3)	Use area or activity specific rules where the particular functional or operational needs of the area or activity make such rules appropriate.	
	E25. Noise and vibration [rcp/dp]		

	Reference	Chapter E Objective/Policy	Commentary
155.	E25.2 Objective (1)	People are protected from unreasonable levels of noise and vibration.	As detailed in the Assessment of Noise Effects (Technical Report D, Volume 2) and Section 7.3.10 of the AEE Report, the Clevedon Quarry expands to the east and south, which means it will get gradually closer to dwellings located outside of the site, in those directions. The noise generated by the Project will result in an increase in ambient noise levels and a change in noise environment for some receivers. However, the noise levels will remain compliant with the relevant AUP limits at all receivers and the proposed conditions, which mirror the existing 2018 Consent conditions. Vibration effects from blasting will be managed so that they comply with the relevant German Standard DIN 4150-3 1999: Structural Vibration – Part 3 (DIN 4150) vibration criteria and AUP standards. Vibration effects will be managed through implementation of controlled blast techniques. A Blast Management Plan is currently in place for the existing Clevedon Quarry and will continue to be used for the Quarry Expansion. Overall, vibration effects will be less than minor. Based on the implementation of these mitigation measures, it is considered that both noise and vibration from the construction and operation of the quarry will be appropriately managed to acceptable levels. Therefore, the Project generally does not give rise to reverse sensitivity effects and is consistent with Objective 1 and Policies 2 – 4, 7, 9 and 10.
156.	E25.3 Policy (2)	Minimise, where practicable, noise and vibration at its source or on the site from which it is generated to mitigate adverse effects on adjacent sites.	
157.	E25.3 Policy (3)	Encourage activities to locate in zones where the noise generated is compatible with other activities and, where practicable, adjacent zones.	
158.	E25.3 Policy (4)	Use area or activity specific rules where the particular functional or operational needs of the area or activity make such rules appropriate.	
159.	E25.3 Policy (7)	Require activities to be appropriately located and/or designed to avoid where practicable or otherwise remedy or mitigate reverse sensitivity effects on: (a) existing or authorised infrastructure; (b) adjacent Business – Light Industry Zone and Business – Heavy Industry Zone; (c) existing lawfully established rural production activities; (d) major recreation facilities; (e) existing lawfully established commercial activities within Business – City Centre Zone, Business – Metropolitan Centre Zone, Business – Town Centre Zone, Business – Local Centre Zone, Business – Neighbourhood Centre Zone, Business – Mixed Use Zone; or (f) regionally significant mineral extraction activities.	
160.	E25.3 Policy (9)	*Noise arising from or affecting rural zones* Avoid, remedy or mitigate the adverse effects of noise in the rural environment, having regard to the working nature of this environment	
161.	E25.3 Policy (10)	*Construction, demolition and maintenance activities*	

	Reference	Chapter E Objective/Policy	Commentary
		Avoid, remedy or mitigate the adverse effects of noise and vibration from construction, maintenance and demolition activities while having regard to: (a) the sensitivity of the receiving environment; and (b) the proposed duration and hours of operation of the activity; and (c) the practicability of complying with permitted noise and vibration standards.	
	E28. Mineral extraction from land [rp/dp]		
162.	E28.2 Objective (1)	Mineral extraction from the land and its delivery is efficient and meets Auckland's needs while significant adverse effects are avoided, remedied or mitigated.	The proposed expansion is within the SAL Landholdings, which contain a significant in situ mineral resource. The proposed Clevedon Quarry Expansion enables more effective provision of aggregate being located in close proximity to projected future growth areas in South and East Auckland. With the existing quarry remaining in continued operation throughout the expansion, the existing FoH area, quarry plant and ancillary infrastructure will be retained and expanded, allowing for efficient use of established infrastructure. The Project has been designed to avoid, remedy or mitigate effects on natural and physical resources and where that is not possible to offset or compensate for them. Overall, the Project is supported by and is wholly consistent with Objective 1.
163.	E28.3 Policy (1)	Avoid where practicable undertaking new mineral extraction activities in areas where there are natural and physical resources that have been scheduled in the Plan in relation to natural heritage, ~~...~~natural resources...~~.~~	Mineral extraction activities have a functional need to be undertaken where aggregate is located in situ, such as within the Project footprint. The majority of the proposed LoQ footprint (80%) is within the SPQZ. The Project avoids all works within the adjoining ONF. Refer to Rows 70 – 75 regarding avoidance of natural heritage (Technical Report J, Volume 2) and Row 26 regarding SEA. When considered in the context of broader mineral extraction directives, the Project is broadly consistent with Policy 1 and avoids natural

	Reference	Chapter E Objective/Policy	Commentary
			areas where practicable. This assessment is further discussed in Row 164 in relation to Policy 2.
164.	E28.3 Policy (2)	Where it is not practicable to locate mineral extraction activities outside the areas identified in Policy E28.3(1), consideration will be given to all of the following: (a) the benefits likely to be derived from the mineral extraction activities; (b) any reduced transport effects from having a mineral extraction site closer to the area of demand; (c) the extent to which significant adverse effects can be avoided; and (d) the extent to which adverse effects can be remedied, mitigated or, where not mitigated, can be offset.	Refer to Sections 7.2 and 7.3 of the AEE Report, and relevant technical reports below for details. (a) Refer to the Economic Assessment (Technical Report A) and Row 1; (b) Refer to the Economic Assessment (Technical Report A). The proposed expansion is an extension of an existing quarry. No changes are proposed to the already authorised transportation effects as set out in the Transportation Assessment (Technical Report C); (c) – (d) Where effects on terrestrial and freshwater features cannot be avoided, remedied or mitigated, they will be offset and compensated with a comprehensive ecological package. Accordingly, the Project is aligned with Policy 2.
165.	E28.3 Policy (4)	Avoid, remedy or mitigate as far as practicable significant adverse effects associated with mineral extraction activities.	Refer to Rows 26, 32 and 50 for details. The Project is consistent with Policy 4.
166.	E28.3 Policy (5)	Require proposals for new mineral extraction activities in rural areas to provide adequate information on the establishment and operation of the activity and demonstrate: (a) the size and scale of extraction activities and the expected length of operation of the extraction site; (b) the design and layout of the site, the access roads and supporting facilities; (c) that adequate measures will be used to: (i) manage noise, vibration, dust and illumination to maintain amenity values of the surrounding land uses, particularly at night-time;	Policy 5 relates to the proposed expansion of the Clevedon Quarry pit and OBDA located outside of the SPQZ into the immediately adjacent rural area. In respect of the elements of Policy 5: (a) The majority of the proposed LoQ footprint (80%) is proposed to be within the SPQZ. The remaining 20% of the footprint is proposed within the Rural – Rural Production Zone. The entire (4.6 ha) OBDA is located within the Rural – Rural Production Zone, which is proposed to be completed within 10 years from commencement of construction. Construction and operation of the quarry is expected across a 50-year

	Reference	Chapter E Objective/Policy	Commentary
		(ii) manage adverse effects of traffic generation and maintain safety to all road users, particularly measures to manage heavy vehicles entering or exiting the site; (iii) avoid, remedy or mitigate adverse effects on soil and water quality, including impacts on watercourses within the extraction site and the effects of discharges from the site into the neighbouring environment; (iv) maintain land stability; (v) mitigate significant adverse effects on visual and landscape values; and (vi) protect the values of identified heritage or archaeological sites, buildings, places or areas, along with Mana Whenua values. (d) options anticipated for the rehabilitation of the site, either by a staged process or at the end of the economic life of the quarry, having regard to the expected life of the mineral extraction site.	timeframe, noting the actual encroachment of the quarry expansion into the rural zone will be contained to the north until approximately Year 40. (b) Refer to the ESCAR and ESCP (Technical Report K) for details. (c) Refer to Section 7 of the AEE Report. (d) As required by the proposed QMP (Appendix K) condition, the certified QMP is to confirm details on the Closure and Rehabilitation of the Clevedon Quarry Expansion within no longer than 5 years of closure. The Project is consistent with Policy 5.
167.	E28.3 Policy (6)	Require a quarry management plan for mineral extraction activities to be prepared to address operational matters associated with mineral extraction, including management of adverse effects and actions to avoid, remedy, mitigate or offset these effects.	An existing QMP (attached as Appendix K) sets out protocols for operational matters associated with the Clevedon Quarry Expansion. This QMP will be reviewed and updated as necessary to incorporate mitigation and management measures associated with the expansion. Specifically, it provides details on the stages and order of quarry development, operational noise and vibration management, slope stability, ESC plans and eventually details on the closure and rehabilitation of the site. Accordingly, the Project is aligned with Policy 6.
168.	E28.3 Policy (8)	Enable the use of the mineral extraction site for activities compatible with mineral extraction activities and provide for a range of appropriate activities within or adjoining the mineral extraction sites where these rely on minerals as a raw material.	Refer to Row 163 for details. The Clevedon Quarry Expansion is compatible with the existing land use within the SPQZ, being the existing Clevedon Quarry pit. The current wider landscape is already characterised by existing quarrying activities.

	Reference	Chapter E Objective/Policy	Commentary
			The Project is consistent with Policy 8.
169.	E28.3 Policy (10)	Require quarry operators to internalise the adverse effects associated with new mineral extraction activities as far as practicable while recognising the need to allow for the efficient ongoing extraction of mineral resources.	Noise, light, dust and vibration effects are expected to be internalised, as far as practicable, while recognising the need to allow for the efficient ongoing extraction of mineral resources (refer to Rows 45 and 150 – 161 above). Accordingly, the Project is consistent with Policy 10.
	E36. Natural hazards and flooding[1]		
170.	E36.2 Objective (1)	... use and development outside urban areas does not occur unless the risk of adverse effects to people, property, infrastructure and the environment from natural hazards has been assessed and significant adverse effects are avoided, taking into account the likely long-term effects of climate change	As detailed in the AEE Report, several floodplains are located within the site, generally following the position of the overland flow paths. Almost all of the affected floodplains are located within the SPQZ. A number of overland flow paths are also identified within the proposed LoQ footprint. These will be diverted or filled as the LoQ footprint expands. The quarry pit, including the construction of internal accessways, has been designed to respond to natural hazards, in particular, areas of seismic activity, slope instability and floodplains (refer to Rows 56 – 58 above for further details). The riparian planting and restoration planting proposed as part of the offset and compensation package within the Stream 3 catchment, located within floodplains, will not create or exacerbate flooding upstream or downstream or otherwise increase flood hazards. In addition, as detailed in the ESCAR (Technical Report K) and Surface Water Management Report (Technical Report H), a comprehensive suite of mitigation measures will be implemented to manage the potential effects of increasing upper surface water catchment area, flooding risk and storm
171.	E36.2 Objective (4)	Where infrastructure has a functional or operational need to locate in a natural hazard area, the risk of adverse effects to other people, property, and the environment shall be assessed and significant adverse effects are sought first to be avoided or, if avoidance is not able to be totally achieved, the residual effects are otherwise mitigated to the extent practicable.	
172.	E36.2 Objective (5)	... use and development including redevelopment, is managed to safely maintain the conveyance function of floodplains and overland flow paths.	
173.	E36.2 Objective (6)	Where appropriate, natural features and buffers are used in preference to hard protection structures to manage natural hazards.	
174.	E36.3 Policy (3)	*General* Consider all of the following, as part of a risk assessment of proposals to subdivide, use or develop land that is subject to natural hazards:	

[1] Under Section 86B(3) of the RMA 1991, relevant rules in this Chapter have legal effect. Accordingly, an assessment against the applicable objectives and policies is provided in Table 5, below.

	Reference	Chapter E Objective/Policy	Commentary
		(a) the type, frequency and scale of the natural hazard and whether adverse effects on the development will be temporary or permanent; (b) the type of activity being undertaken and its vulnerability to natural hazard events; (c) the consequences of a natural hazard event in relation to the proposed activity; (d) the potential effects on public safety and other property; (e) any exacerbation of an existing natural hazard risk or the emergence of natural hazard risks that previously were not present at the location; (f) whether any building, structure or activity located on land subject to natural hazards near the coast can be relocated in the event of … inundation or shoreline retreat; (g) the ability to use non-structural solutions, such as planting or the retention or enhancement of natural landform buffers to avoid, remedy or mitigate hazards, rather than hard protection structures; (h) the design and construction of buildings and structures to mitigate the effects of natural hazards; (i) the effect of structures used to mitigate hazards on landscape values and public access; (j) site layout and management to avoid or mitigate the adverse effects of natural hazards, including access and exit during a natural hazard event; and (k) the duration of consent and how this may limit the exposure for more or less vulnerable activities to the effects of natural hazards including the likely effects of climate change.	events up to and including the 100-year ARI. These measures, comprising ESC measures, quarry sumps, the newly constructed wetland and the treatment train approach, will ensure that post-development stormwater flows do not increase downstream flooding risks or result in degradation of downstream water quality. This will ensure the potential risks from natural hazards and flooding are managed to the extent practicable. Overall, the Project is not expected to create new risks or increase existing risks associated with natural hazards. Therefore, the Project is considered consistent with Objectives 1, 4 – 6 and Policies 3 – 4, 21, 24, 26, 29 – 32 and 35.
175.	E36.3 Policy (4)	Control … use and development of land that is subject to natural hazards so that the proposed activity does not increase, and where practicable reduces, risk associated with all of the following adverse effects:	

	Reference	Chapter E Objective/Policy	Commentary
		(a) accelerating or exacerbating the natural hazard and/or its potential impacts; (b) exposing vulnerable activities to the adverse effects of natural hazards; (c) creating a risk to human life; and (d) increasing the natural hazard risk to neighbouring properties or infrastructure.	
176.	E36.3 Policy (21)	Ensure all development in the 1 per cent annual exceedance probability (AEP) floodplain does not increase adverse effects from flood hazards or increased flood depths and velocities, to other properties upstream or downstream of the site.	
177.	E36.3 Policy (24)	Enable the planting and retention of vegetation cover to enhance amenity values, green linkages and ecological values in floodplains as long as it does not create or exacerbate flooding upstream or downstream or otherwise increase flood hazards.	
178.	E36.3 Policy (26)	Construct accessways, including private roads, so that flood hazard risks are not increased.	
179.	E36.3 Policy (29)	*Overland flow paths* Maintain the function of overland flow paths to convey stormwater runoff safely from a site to the receiving environment.	
180.	E36.3 Policy (30)	Require changes to overland flow paths to retain their capacity to pass stormwater flows safely without causing damage to property or the environment.	
181.	E36.3 Policy (31)	*Land instability* Identify land that may be subject to land instability taking into account all of the following features: (a) proximity to cliffs; (b) steepness of land; (c) geological characteristics; and	

	Reference	Chapter E Objective/Policy	Commentary
		(d) uncontrolled fill.	
182.	E36.3 Policy (32)	Require risk assessment prior to ..., use and development of land subject to instability.	
183.	E36.3 Policy (35)	*Infrastructure in areas subject to natural hazards* Allow for the operation, maintenance, upgrading and construction of infrastructure, in areas subject to natural hazards when: (a) infrastructure is functionally or operationally required to locate in hazard areas or it is not reasonably practicable that it be located elsewhere; ... (c) in all flood hazard areas risks to people, property and the environment are mitigated to the extent practicable.	

Table 4: AUP Chapter H Zones: Objectives and policies assessment

	Reference	Chapter H Objective/Policy	Commentary
	H19. Rural zones [dp]		
184.	H19.2.1 Objective (1)	Rural areas are where people work, live and recreate and where a range of activities and services are enabled to support these functions.	The proposed design results in a relatively small proportion of the Clevedon Quarry Expansion (20%) extending into the Rural – Rural Production Zone with the remaining 80% located within the SPQZ. The AUP Rural Zone policy framework explicitly acknowledges that mineral extraction activities are typical features of the Rural – Rural Production Zone. This policy position is reflected in the immediately wider surrounding landscape, where three existing quarries operate within wider rural areas, reinforcing the presence of mineral extraction activities within rural areas.

	Reference	Chapter H Objective/Policy	Commentary
			Therefore, the Project is considered to be generally consistent with Objective 1.
185.	H19.2.1 Objective (3)	Elite soil is protected, and prime soil is managed, for potential rural production.	As detailed in Row 54 above, the Project site is located on non-arable land, comprising Class 6 and 7 soils and no elite soils are affected by the Project. Overall, the Project is aligned with Objective 3.
186.	H19.2.3 Objective (1)	*Rural character, amenity and biodiversity values* The character, amenity values and biodiversity values of rural areas are maintained or enhanced while accommodating the localised character of different parts of these areas and the dynamic nature of rural production activities.	The existing Clevedon Quarry has been in operation for over 50 years. As noted in Row 184 above, there are two other existing quarries operating within the wider rural area. The land adjoining the existing Clevedon Quarry consists of a mixture of rural and industrial activities, including pine forestry, pastoral farming, existing quarry operations and rural residential development. The proposed offset package will result in a total of 67.6 ha of riparian planting and restoration planting that will in the longer term maintain and enhance the local rural landscape. As mentioned in Row 169 above, noise, lighting, dust and vibration effects will be internalised as far as practicable. Mitigation measures have been proposed to ensure the natural character and biodiversity values of rural areas are maintained, including the mitigation planting on upper quarry benches to naturalise the outlook and soften the engineered quarry landform. Accordingly, the Project is consistent with Objective 1.
187.	H19.2.3 Objective (2)	*Rural character, amenity and biodiversity values* Areas of significant indigenous biodiversity are protected and enhanced.	In terms of enhancing areas of significant indigenous biodiversity, refer to Rows 67 – 69 for more details. In terms of protection, a condition of consent is proposed to protect in perpetuity the 67.6 ha of riparian planting and restoration planting offered as part of the ecological offset and compensation package through a covenant. Overall, the Project is considered to be generally consistent with Objective 2.

	Reference	Chapter H Objective/Policy	Commentary
188.	H19.2.4 Policy (2)	*Rural character, amenity and biodiversity values* Recognise the following are typical features of the Rural – Rural Production Zone~~...~~ and will generally not give rise to issues of reverse sensitivity in these zones: (a) the presence of large numbers of farmed animals and extensive areas of plant, vine or fruit crops, plantation forests and farm forests; (b) noise, odour, dust, traffic and visual effects associated with use of the land for farming, horticulture, forestry, mineral extraction and cleanfills; (c) the presence of existing mineral extraction activities on sites zoned as Special Purpose – Quarry Zone; (d) accessory buildings dot the landscape, particularly where farming activities are the dominant activity; and (e) activities which provide for the relationship of Mana Whenua to their ancestral land and taonga.	This policy explicitly acknowledges that mineral extraction activities are typical features of the Rural – Rural Production Zone, and that noise, dust, traffic and visual effects associated with mineral extraction activities generally will not give rise to reverse sensitivity issues. This policy position is reflected in the immediately wider surrounding landscape, where three existing quarries operate within wider rural areas, reinforcing the presence of mineral extraction activities within rural areas. On this basis, the Project is consistent with Policy 2.
189.	H19.2.4 Policy (3)	Enable opportunities to protect existing Significant Ecological Areas or provide opportunities to enhance or restore areas to areas meeting criteria of Significant Ecological Areas.	Refer to Rows 29 and 67 – 69 above. It is considered that the Project is generally consistent with Policy 3.
190.	H19.3.2 Objective (1)	A range of rural production, rural industries, and rural commercial activities take place in the zone.	Refer to Rows 51 – 52, 53 – 55 and 188 above for details. Considering that mineral extraction activities are typical features of the Rural – Rural Production Zone (as per Row 188 above), and given the immediately adjacent SPQZ, the Project is considered consistent with Objective 1 and Policy 1.
191.	H19.3.3 Policy (1)	Provide for a range of existing and new rural production, rural industry and rural commercial activities and recognise their role in determining the zone's rural character and amenity values.	
192.	H19.4.2 Objective (3)	Rural character and amenity values of the zone are maintained while anticipating a mix of rural production, non-residential and rural lifestyle activities.	Refer to Rows 186 and 188 above with regard to rural character values. Visually, the Project will change the outlook and views experienced by identified viewing audiences within the

	Reference	Chapter H Objective/Policy	Commentary
			surrounding rural landscape. Visual amenity effects are expected to increase progressively as more of the quarry worked faces and benches become exposed across five indicative stages. Consistent with the amended statutory framework (Schedule 5, clause 5(4A) of the FTAA), visual amenity effects relating to views from private properties have been disregarded for the purpose of this assessment. Visual amenity effects on public viewing audiences will generally be very low, increasing to low in specific groups during Stages 3 and 4, and reducing to very low to neutral following the completion of works and establishment of the proposed mitigation planting (as detailed in Section 7.3.7 of the AEE Report). Mitigation planting is proposed to help manage visual effects, as detailed in the LEA (Technical Report J). In addition, transportation effects will remain unchanged from that currently consented and therefore existing amenity values experienced in relation to traffic will be the same. Overall, the Project is considered to be generally consistent with Objective 3.
193.	H19.4.3 Policy (2)	*Rural character, amenity and biodiversity values* Manage reverse sensitivity effects by: (a) limiting the size, scale and type of non-rural production activities; (b) retaining the larger site sizes within this zone; (c) limiting further subdivision for new rural lifestyle sites; and (d) acknowledging a level of amenity that reflects the presence of: (i) rural production and processing activities that generate rural odours, noise from stock and the use	Refer to Rows 186 and 188 above for details. Overall, the Project is consistent with Policy 2.

	Reference	Chapter H Objective/Policy	Commentary
		of machinery, and the movement of commercial vehicles on the local road network; and (ii) non-residential activities which may generate noise, light and traffic levels greater than those normally found in areas set aside for rural lifestyle activities.	
	H28. Special Purpose – Quarry Zone [dp]		
194.	H28.2 Objective (1)	Mineral extraction activities and appropriate compatible activities are carried out efficiently at significant mineral extraction sites.	As noted in Row 49, the majority of the proposed Clevedon Quarry Expansion (80%) is located within the SPQZ. This zone provides for significant mineral extraction activities to ensure that mineral extraction can continue in a manner that minimises adverse effects. The zone prioritises supply of mineral sources from within Auckland and seeks to ensure that demand for minerals can be met. The Project footprint is within the SAL Landholdings and extends the existing Clevedon Quarry pit, which contains a significant in situ mineral resource. The quarry will remain in continued operation throughout the expansion. The existing FoH, ancillary infrastructure and quarry plant will be retained and expanded, allowing for efficient use of established infrastructure and avoiding the need to establish new processing facilities at a greenfield location. The Quarry Expansion is compatible with the existing land use within the SPQZ, being the existing Clevedon Quarry. The current wider landscape is already characterised by existing quarrying activities. Therefore, the Project is consistent with Objective 1.
195.	H28.2 Objective (2)	The significant adverse effects associated with mineral extraction are avoided, remedied or mitigated.	The Project has been designed to avoid, remedy or mitigate effects on natural and physical resources, as detailed in Rows 49 – 50, 64, 115 and 162 above. The Project will result in residual adverse effects on terrestrial and freshwater ecology, which could not be

	Reference	Chapter H Objective/Policy	Commentary
			avoided, mitigated or remedied. Accordingly, these adverse effects are addressed through a comprehensive ecological offset package which is designed to provide for positive effects that outweigh the residual adverse effects on freshwater ecological values and a net gain in terrestrial biodiversity values. Overall, it is considered that the significant adverse effects associated with mineral extraction are avoided, remedied or mitigated. Therefore, the Project is consistent with Objective 2.
196.	H28.3 Policy (2)	Enable appropriate compatible land uses within or adjoining the zone, including mineral recycling activities and the manufacture of products using raw materials from mineral extraction activities.	Refer to Rows 163 and 168 above for details. Overall, the Project is considered consistent with Policy 2.
197.	H28.3 Policy (3)	Avoid where practicable, or otherwise remedy and mitigate significant adverse effects on areas where there are natural and physical resources that have been scheduled in the Plan in relation to natural heritage, ~~...~~ natural resources, ~~...~~.	Refer to Rows 39, 105 – 108 and 121 above for details. The Project has been designed and developed with particular attention being given to avoiding the scheduled natural and physical resources where practicable. This includes avoidance of the ONF adjoining the existing pit. Despite these design measures, expansion of the quarry will unavoidably result in the removal of streams and approximately 6.1 ha of regenerating tree fern-broadleaf forest scheduled as SEA. To address the residual effects from the loss of vegetation and freshwater systems, a comprehensive offset package has been designed to provide for positive effects that outweigh the residual adverse effects on freshwater ecological values and a net gain in terrestrial biodiversity values. Accordingly, the Project is considered consistent with Policy 3.

	Reference	Chapter H Objective/Policy	Commentary
198.	H28.3 Policy (4)	Manage noise, vibration, dust and illumination to protect existing adjacent activities sensitive to these effects from unreasonable levels of noise, vibration, dust and illumination.	Refer to Rows 45 – 47 for dust management, Rows 150 – 154 for lighting management, and Rows 155 – 161 for noise and vibration management measures. Overall, these effects will be internalised as far as practicable and therefore the Project is considered consistent with Policy 4.
199.	H28.3 Policy (5)	Require the rehabilitation of sites following mineral extraction activities to enable the land to be used for other purposes.	As required by conditions of consent, the certified QMP is to confirm details of the Closure and Rehabilitation Plan of the proposed Quarry Expansion at a point no later than 5 years from closure. Accordingly, the Project is broadly consistent with Policy 5.
200.	H28.3 Policy (6)	Avoid, remedy or mitigate adverse effects of traffic generation and maintain safety for all road users, and particularly measures to manage heavy vehicles entering or exiting the site and on quarry transport routes.	No changes are proposed to the limitations on truck movements granted under the 2018 Consent as the annual extraction limit is still capped at 3 MT. An assessment of the transport network has been undertaken and is discussed in the Transportation Assessment (Technical Report C). Overall, the proposed Clevedon Quarry Expansion is not anticipated to result in any additional effects on network capacity, operational or safety effects. However, the number and intensity of truck movements will continue to be dictated by external demand for aggregate and processing capacity. The transport network has been designed and planned to service the existing Clevedon Quarry and has the capacity to accommodate the proposed expansion. Accordingly, the Project is aligned with Policy 6.
201.	H28.3 Policy (7)	Require quarry operators to internalise the adverse effects associated with new or enlarged mineral extraction activities as far as practicable while recognising the need to allow for the efficient ongoing extraction of mineral resources.	Refer to Row 198 for details. The Project is considered consistent with Policy 7.

Table 5: AUP PC 120 Housing Intensification and Resilience: Objectives and policies assessment[2]

	Reference	Chapter E36 (with PC120 changes) Objective/Policy	Commentary
	E36 Natural hazards and flooding		
202.	E36.2 Objective (3B)	New subdivision, use and development avoids significant risk and only occurs when the risk from natural hazards to people, property, infrastructure and the environment is assessed as being tolerable or acceptable.	As described in the Geotechnical Feasibility Assessment (Technical Report B1, Volume 2), a stability analysis of deformation/displacement was undertaken for cross-sections at the Site. Overall, the Geotechnical Feasibility Assessment concludes acceptable levels of stability under static and seismic conditions. A Slope Stability Management Plan is proposed as a condition of consent to monitor and manage slope stability risks. As detailed in the ESCAR (Technical Report K, Volume 2) and the Surface Water Management Report (Technical Report H, Volume 2), to manage the potential adverse effects of increasing upper surface water catchment area, a comprehensive suite of mitigation measures will be implemented. Refer to Row 56 for further details. Overall, the Clevedon Quarry Expansion avoids significant risk. Moreover, it is not expected to create or exacerbate natural hazard risks on other properties, infrastructure and the environment.
203.	E36.2 Objective (3C)	Subdivision, use and development is managed in a way that avoids creating or exacerbating natural hazard risks on other properties, infrastructure and the environment.	
204.	E36.2 Objective (5)	The flood storage and the conveyance functions of floodplains and overland flow paths are maintained, and enhanced where practicable, and the creation of new flood prone areas are avoided.	
205.	E36.2 Objective (6)	Natural features and buffers are used where practicable and nature-based solutions are used in preference to hard protection structures to manage risk from natural hazards.	
206.	E36.2 Objective (7)	All natural hazard risk assessments and management measures take into account the potential long term effects of climate change.	
207.	E36.2 Objective (8)	A precautionary approach is adopted where information is uncertain or incomplete.	
208.	E36.3 Policy (1A)	*Risk classifications* Identify risk from natural hazards associated with … use and development by differentiating risk into the following three classifications: (a) significant (b) potentially tolerable	Mineral extraction is an activity which is 'less sensitive to natural hazards'. Risk classifications for the relevant natural hazards are detailed as follows: • **Flooding:** The LoQ footprint contains small extents of 'very high flood hazard area'. Accordingly, the risk setting under Table E36.3.1B.2 is "Acceptable".

[2] Relevant objectives and policies are shown with the PC 120 amendments (as at 11.05.26) incorporated.

	Reference	Chapter E36 (with PC120 changes) Objective/Policy	Commentary
		(c) acceptable	• **Landslips/instability (seismic activity):** Clevedon Quarry LoQ is mapped on Auckland Council Geomaps as having primarily Very Low susceptibility for large-scale landslide susceptibility with areas of Low and one area of High susceptibility. For shallow landslide susceptibility, there are Very Low to Very High areas mapped across the Clevedon Quarry LoQ. The Geotechnical Feasibility Assessment (Technical Report B1, Volume 2) follows the methodology in Appendix 24 to determine the risk class, which was assessed as Low (Acceptable) slope instability risk for all three landslide scenarios (high likelihood, median likelihood and maximum credible) (Appendix E of Technical Report B1, Volume 2). This assessment also considers seismic activity and slope instability. Although PC120 does not refer directly to risk classification for liquefaction, it is noted that the Geotechnical Feasibility Assessment (Technical Report B1, Volume 2) states that the Clevedon Quarry has very low liquefaction vulnerability. Coastal erosion, coastal inundation and tsunami are not considered to be applicable to the Site. As set out in Rows 202 – 208 above and Sections 7.3.3 and 7.3.4 of the AEE Report, natural hazard risks related to flooding or slope instability have been taken into account during the design stage and appropriately managed using a risk-based proportionate approach.
209.	E36.3 Policy (1B)	*Risk settings and management methodology* (a) Manage risk from … flooding associated with … use and development by: identifying land that may be exposed to these hazards and requiring a site specific assessment to determine the extent and nature of the hazard(s) on site; and (b) using the hazard, the location of the activity, and the sensitivity of the activity to natural hazards to determine the default level of risk, as per Tables E36.3.1B.1 and E36.3.1B.2; and (c) requiring a risk assessment to determine the level of risk and applying management approaches proportionate to that level of risk.	
210.	E36.3 Policy (1C)	Manage risk from landslides associated with subdivision, use and development by: (a) identifying land that may be susceptible to landslides; and (b) requiring a landslide risk assessment to be undertaken in accordance with Appendix 24 Landslide hazard risk assessment methodology, using the level of susceptibility, the underlying zone, the location and type of the activity and the	The Geotechnical Feasibility Assessment (Technical Report B1, Volume 2) includes a landslide hazard risk assessment (referred to in the report as 'slope stability assessment'). The methodology in this report is aligned with Appendix 24, following a step-by-step process of the proportional, risk-based framework required under Policy E36.3, as detailed in Appendix E of Technical Report B1 (Volume 2) and outlined below:

	Reference	Chapter E36 (with PC120 changes) Objective/Policy	Commentary
		sensitivity of the activity to natural hazards as determinants for the type of assessment and the level of risk; and (b) applying management approaches proportionate to the level of risk.	• Auckland Council information and mapping was used to identify known landslip susceptibility. • Development of a conceptual engineering model was completed to consider the risk in the context of the Clevedon Quarry Expansion. • The risk class was assessed as being Low (Acceptable) for all three landslide scenarios. • The outcome of this assessment has been used to inform the activity status for the proposed land use in Table E36.4.1B. As detailed in the AEE Report, standard quarry management practices are proposed, alongside several specific recommendations in keeping with the risk class.
211.	E36.3 Policy (3)	*Risk assessment requirements* Where a resource consent is necessary, require proposals to … use or develop land that is subject to natural hazards to prepare a risk assessment that considers all of the following, taking into account the potential effects of climate change and adopting a precautionary approach where information is uncertain or incomplete: (aa) the type, frequency, range and scale of the natural hazard(s), including: (i) where there may be coinciding, compounding and/or cascading hazards; (ii) whether the hazard risks will be temporary or permanent; (iii) whether natural hazard events of lower intensity and higher frequency than the 1 per cent AEP event will impact the property and proposed activity (c) the consequences of a natural hazard event in relation to the proposed activity; (l) existing and proposed mitigation measures;	The relevant natural hazard risks have been assessed using the best available and up-to-date hazard information, as set out in the Geotechnical Feasibility Assessment (Technical Report B1, Volume 2), Surface Water Management Report (Technical Report H, Volume 2) and ESCAR (Technical Report K, Volume 2). The assessments have adopted a precautionary approach where information is uncertain. A risk-based approach has been taken to development of this site primarily for slope stability and seismic risks (refer to Row 61 above). In particular: • the type, frequency, scale and severity of potential natural hazards have been assessed; • the Project has been designed to minimise potential impacts of natural hazards, including the development of management plans; • the cumulative (downstream) impact of locating the quarry within a known floodplain has been assessed and determined to be less than minor (refer to Section 7.3.4 of the AEE Report); and

	Reference	Chapter E36 (with PC120 changes) Objective/Policy	Commentary
		(m) residual risk; (n) any relevant management plan, strategy or hazard risk assessment relating to the area.	• ESC and surface water mitigation measures will be implemented as specified in Sections 7.3.4 and 7.3.5 of the AEE Report. Overall, the Project is considered consistent with Policy 3.
212.	E36.3 Policy (4A)	Require all of the following matters to be considered when assessing consequences of natural hazards as part of a risk assessment: (a) accelerating or exacerbating the natural hazard and/or its potential impacts; (b) creating natural hazard risks that previously were not present at the location; (c) the type of activity being undertaken and its sensitivity to natural hazard events; (d) creating or increasing the natural hazard risk(s) to people and communities, including long-term impacts from more frequent hazard events; (e) creating or increasing the natural hazard risk(s) to other properties, infrastructure and the environment; and (f) cultural impacts, including consequences for Māori land, Treaty Settlement Land, marae, urupā, mana whenua cultural heritage and values.	All identified matters under E36.3 Policy (4A) and (4B) have been considered as part of the risk assessments, as demonstrated below: • The Geotechnical Feasibility Assessment (Technical Report B1, Volume 2) concludes that the proposed quarry extension design is feasible from a geotechnical perspective and there are acceptable levels of stability, provided the recommended slope geometry and bench/batter configuration is integrated into the design. These recommendations have been incorporated in the proposed consent conditions. There are some additional recommendations, but they do not require relocation of any building, structure or activities, nor is it practicable for a project of this scale to relocate mineral extraction activities away from all landslip hazards. Overall, it is considered that the Project will not accelerate or exacerbate natural hazards and/or its potential impacts. • In terms of flooding risks, refer to Rows 56 and 204 above. The proposed expansion is not expected to increase flood risk or degrade downstream water quality. • In terms of landslips and seismic activity, the Geotechnical Feasibility Assessment (Technical Report B1, Volume 2) acknowledges occasional failures (i.e., landslips); refer to Row 208 above. • As defined by the AUP definitions, mineral extraction activities are “less sensitive to natural hazards”. • The Project site layout and proposed management measures will limit exposure of people and property to natural
213.	E36.3 Policy (4B)	Require all of the following matters to be considered as part of a risk assessment of existing and future mitigation measures and residual risk: (a) whether any building, structure or activity located on land subject to natural hazards can be relocated within the site or removed; (b) whether the use, design and construction of buildings and structures can mitigate risks associated with natural hazards;	

	Reference	Chapter E36 (with PC120 changes) Objective/Policy	Commentary
		(c) the extent to which methods for long term maintenance of areas affected by natural hazards, such as easements, are provided; (d) the ability for site layout and management to limit exposure of people and property to natural hazards, including safe egress during a natural hazard event; (e) the effect of structures to mitigate hazards on landscape values and public access; (f) the robustness of the mitigation measures, their enforceability and the ability to carry out repairs and maintenance; (g) the potential consequences of events that exceed the design parameters of mitigation measures; (h) the potential effects resulting from failure of structural and nature-based mitigation measures over a 100-year timeframe; (i) the impacts of the mitigation on other people, properties, infrastructure and the environment; (j) whether natural hazard risks can be reduced for Māori Land, Treaty Settlement Land, marae, urupā, mana whenua cultural heritage and values; (k) the use of conditions of consent, including the duration of consent, to monitor changes in risk and to limit the exposure of people and property to natural hazards; and (l) the extent to which it is practicable to mitigate residual risk where infrastructure has a functional or operational need to locate in a natural hazard area	hazards. Localised instabilities and flooding risks are not anticipated to result in off-site effects. • There is no identified Māori land, Treaty Settlement Land, marae, urupā or recorded Sites of Significance to Mana Whenua. SAL has engaged with Mana Whenua regarding cultural impacts and this remains ongoing. • It is considered appropriate for Mana Whenua to determine the cultural impact on heritage and values themselves and therefore direct engagement has been undertaken and remains ongoing. The CVIA acknowledges that the Project will result in environmental and cultural impacts. These effects are assessed in Section 7 of the AEE Report. Ngaati Whanaunga considers that these impacts can be avoided, remedied or mitigated through robust consent conditions, ongoing monitoring, ecological planting, cultural participation and long-term accountability mechanisms. No long-term maintenance is required for natural hazards directly. However, relevant long-term management measures such as implementing a fit-for-purpose quarry floor and bench design, intermittent geotechnical design reviews and collation of rock structural data into a geotechnical database will all occur within SAL Landholdings, through the implementation of the Slope Management Plan. • Collectively, the proposed mitigation measures are considered robust and enforceable, which will appropriately manage natural hazard and flooding risks in a manner proportionate to the level of risk identified in the technical assessments. • The proposed management measures will form part of the proposed conditions of consent. Accordingly, the Project is considered consistent with Policies 4A and 4B.

	Reference	Chapter E36 (with PC120 changes) Objective/Policy	Commentary
214.	E36.3 Policy (21)	Ensure all development, including fencing, storage of materials and goods, and earthworks, in flood hazard areas does not create or exacerbate flood risk on other sites.	Refer to Rows 170 – 176 and 202 – 208 above for details. The proposed Quarry Expansion and associated activities will not create or exacerbate flood risks on other sites or give rise to significant flood hazard risks. The Project is considered consistent with Policies 21, 24, 26, 29, 30A and 30H.
215.	E36.3 Policy (24)	Enable the planting and retention of vegetation cover to enhance amenity values, green linkages and ecological values in floodplains whilst ensuring that flood risk on other sites are not created or exacerbated.	
216.	E36.3 Policy (26)	Manage accessways, including private roads and public roads to be vested, and parking areas in flood hazard areas so that safe egress is provided where possible, and flood hazard risks are reduced to as low as reasonably practicable.	
217.	E36.3 Policy (29)	Maintain the function of overland flow paths to convey stormwater runoff safely from a site to the receiving environment by ensuring that any modifications do not result in a reduction in the capacity of the overland flow path and do not cause nuisance or damage to property or the environment.	
218.	E36.3 Policy (30A)	Enable … use and development that gives rise to acceptable flood hazard risk in accordance with Tables E36.3.1B.1 and E36.3.1B.2 where these activities do not involve buildings or structures that exacerbate the flood hazard beyond the site.	
219.	E36.3 Policy (30H)	*Flooding – outside existing urbanised areas* Avoid new… use and development outside existing urbanised areas that gives rise to significant flood hazard risk in accordance with Table E36.3.1B.2.	
220.	E36.3 Policy (33B)	*Landslide hazards – general* Enable … use and development in low (acceptable) landslide hazard risk areas where these activities do not involve buildings or structures that exacerbate landslide hazard risk beyond the site in accordance with Appendix 24 Landslide hazard risk assessment methodology.	As detailed in Section 7.3.3.2 of the AEE Report and the Geotechnical Feasibility Assessment (Technical Report B1, Volume 2), there are acceptable levels of stability under static and seismic conditions, with no material instability effects anticipated beyond the site. The quarry design reflects the recommended slope geometry and bench/batter configuration

	Reference	Chapter E36 (with PC120 changes) Objective/Policy	Commentary
			to provide an acceptable level of batter performance and appropriately manage the effects of slope instability. A PC120 landslide hazard risk assessment has been undertaken, following a step-by-step process of the proportional, risk-based framework and the methodology set out in Appendix 24 (Appendix E of Technical Report B1). This assessment considers there is a low (acceptable) slope instability risk for all three landslide scenarios considered in this assessment. Accordingly, the proposed Quarry Expansion does not involve buildings or structures that are anticipated to exacerbate landslide hazard risk beyond the site. Overall, the Project is considered consistent with Policy 33B.

National Policy Statement – Assessment of objectives and policies

The following tables set out an assessment of the relevant objectives and policies within the following National Policy Statements:

- National Policy Statement for Freshwater Management 2020 (NPS-FM);
- National Policy Statement for Infrastructure 2025 (NPS-I);
- National Policy Statement for Natural Hazards 2025 (NPS-NH); and
- National Policy Statement for Indigenous Biodiversity 2023 (NPS-IB).

Table 6: Assessment against National Policy Statement for Freshwater Management 2020

#	Reference	NPS Objective/Policy	Commentary
221.	Objective 1	The objective of this National Policy Statement is to ensure that natural and physical resources are managed in a way that prioritises: (a) first, the health and well-being of water bodies and freshwater ecosystems (b) second, the health needs of people (such as drinking water) (c) third, the ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future.	The 2024 amendments to the NPS-FM exclude the consideration of the hierarchy of obligations contained in this objective from resource consent applications. The matters listed in (a)-(c) now carry equal weight. Overall, the Project is consistent with these matters for the reasons stated below: • The purpose of the Project is to deliver additional resource access and a more efficient, practical quarry design than the 2018-approved design. The Project will help secure a reliable, high-quality future supply of locally sourced aggregate from the Auckland Region to enable the efficient and cost-effective delivery of regionally and nationally significant infrastructure projects and urban development. These activities in turn will provide positive social and economic benefits, as set out in Section 7.2 of the AEE Report. • The construction and operation of the proposed Clevedon Quarry Expansion have been designed to avoid adverse effects on freshwater systems where at all practicable. The very nature and scale of the activities do mean that there will be loss of streams. Mitigation and management measures are proposed to go towards offsetting this loss. Where residual adverse effects could not be offset, compensation is proposed, designed to provide positive effects that outweigh the residual adverse effects on freshwater ecological values (refer to Section 7.2.3 of the AEE Report and the EcIA (Technical Report I, Volume 2)). In addition, as set out in the ESCAR (Technical Report K, Volume 2), the matters set out in Objective 1 were taken into account when preparing the

#	Reference	NPS Objective/Policy	Commentary
			ESCP. The ongoing operation and expansion of the quarry will be managed carefully, with robust controls in place to manage sediment runoff and other contaminants, to ensure that life-supporting capacity is safeguarded. • The quarry expansion will not impact on the health needs of people as set out in Section 7.3 of the AEE Report. Additionally, no known drinking water bores are close to the site and no bore drawdown interference effects on neighbouring groundwater users are anticipated. The Project is therefore consistent with Objective 1.
222.	Policy 1	Freshwater is managed in a way that gives effect to Te Mana o te Wai.	Te Mana o te Wai is a concept that refers to the fundamental importance of water and recognises that protecting the health of freshwater protects the health and well-being of the wider environment. It protects the mauri of the wai. As set out in the ESCAR (Technical Report K), adoption of the measures detailed in the ESCP is anticipated to manage and mitigate sediment loading downstream to achieve a level of water quality management that is consistent with the policy direction of the NPS-FM and in accordance with Te Mana o te Wai. The constructed wetland will provide water quality treatment prior to discharge to Stream 1. This system has been designed to achieve a target TSS removal efficiency of 90%. The Project has been designed in a way to avoid effects on freshwater where at all possible, while mitigating and then offsetting and compensating where that is not possible. Prioritising water quality is important, and the design of the quarry expansion and the associated management plans and conditions of consent will ensure the water quality of

#	Reference	NPS Objective/Policy	Commentary
			freshwater systems at the site is maintained and enhanced in some instances. SAL has undertaken consultation with relevant iwi groups and a focus of this has included the protection of freshwater. A number of values identified by Ngaati Whanaunga in the CVIA have been incorporated into the Project, including the mauri of water, vegetation and fauna, rawa tūturu (remnant vegetation) and hiahiatanga tūturu (habitats of culturally significant species). Proposed conditions of consent will provide an opportunity for Mana Whenua to review management plans including those relating to freshwater management. On this basis, the Project is consistent with Policy 1.
223.	Policy 2	Tangata Whenua are actively involved in freshwater management (including decision-making processes), and Māori freshwater values are identified and provided for.	SAL has received a CVIA report from Ngaati Whanaunga and a letter outlining the engagement to date with Ngāi Tai ki Tāmaki for the Project (Appendix E), following consultation over the year with various iwi groups (Appendix D). These have identified values of significance to Tangata Whenua and described the relationships they have with the site and its features. Effects on water have been addressed through implementation of design, mitigation and offset measures. These are outlined in the Technical Reports contained in Volume 2. Ngaati Whanaunga considers that the effects on freshwater can be avoided, remedied or mitigated through robust consent conditions, ongoing monitoring, ecological restoration and cultural participation. SAL will continue to engage with Tangata Whenua to address any matters, including freshwater management, arising during the consent process. The Project is consistent with Policy 2.

#	Reference	NPS Objective/Policy	Commentary
224.	Policy 6	There is no further loss of extent of natural inland wetlands, their values are protected, and their restoration is promoted.	The design and layout of the proposed quarry expansion have avoided all wetlands. Therefore, the Project will not result in the loss of any natural inland wetlands, as detailed in the EcIA (Technical Report I). The Project is consistent with Policy 6.
225.	Policy 7	The loss of river extent and values is avoided to the extent practicable.	The Project results in the loss of approximately 2,392 m of permanent and intermittent stream reaches within the LoQ footprint, equivalent to an estimated stream bed area of 1,182 m². Mineral extraction activities have a functional need to be undertaken where aggregate is located in situ, such as within the Clevedon Quarry Expansion footprint. The majority of the site is zoned SPQZ. Approximately 1,411 m (59%) of the total 2,392 m of stream proposed for removal is located within the centre of the LoQ extent, making avoidance not practicable. The loss of freshwater systems has been minimised where possible in the design process. The remaining proposed stream loss is due to a reduction in stream base flows associated with quarry dewatering. Groundwater dewatering is also fundamental to mineral extraction in order to maintain a safe and operational quarry. Augmentation of stream base flows is proposed to directly offset stream depletion effects where practicable. As set out in Section 7.2.3 of the AEE Report, further loss of freshwater values will be offset and compensated through a comprehensive restoration package. This involves approximately 16.6 ha of restoration planting along a 20 m riparian margin (with both banks planted) for freshwater offset and 40.4 ha of freshwater compensation planting within an additional 20 m buffer either side of the Stream 3 main stem in the upper Stream 3 catchment. Overall, the restoration package has been designed to provide for positive effects that outweigh the residual

#	Reference	NPS Objective/Policy	Commentary
			adverse effects on freshwater ecological values. The Project is therefore consistent with Policy 7.
226.	Policy 9	The habitats of indigenous freshwater species are protected.	As outlined in the EcIA (Technical Report I, Volume 2), limited freshwater species were found on site through surveys. However, 'At Risk – Declining' species such as longfin eels, inanga, redfin bully and banded kōkopu are present. In order to protect these species, the EMP and consent conditions require a Native Freshwater Fauna Management Plan, which sets out methods to capture fish, measures to prevent fish re-entering the reach prior to reclamation and a relocation plan to minimise injury and mortality effects on native freshwater fauna. Additionally, the proposed offset and compensation package within the Stream 3 catchment will improve habitats for indigenous freshwater species. Overall, the Project is consistent with Policy 9.
227.	Policy 11	Freshwater is allocated and used efficiently, all existing over-allocation is phased out, and future over-allocation is avoided.	There is sufficient water available within the greywacke aquifer underlying the site to provide efficient allocation of water for SAL's proposed future take. SAL proposes to reuse the water within the quarry floor for the purposes of dust suppression and stream augmentation, which is considered an efficient use of water. Overall, the Project is consistent with Policy 11.

For the purposes of the assessment against the NPS-I, quarrying activities at the proposed Clevedon Quarry Expansion are considered 'infrastructure supporting activities', as they are needed to directly support other infrastructure. The NPS-I applies to all infrastructure activities and infrastructure supporting activities, except for activities specified under Clause 1.3 of the NPS-I.

Table 7: Assessment against National Policy Statement for Infrastructure 2025

#	Reference	NPS Objective/Policy	Commentary
228.	Objective 1	The objective of this National Policy Statement is to: a. ensure the national, regional and local benefits of infrastructure are provided for; b. enable infrastructure to support the social, economic and cultural wellbeing of people and communities and their health and safety; c. enable infrastructure to support the development and change of urban and rural environments to meet the diverse and changing needs of present and future generations; d. ensure infrastructure is well-functioning, resilient and compatible, as far as practicable, with other activities; and e. ensure infrastructure is delivered in a timely and efficient manner while managing adverse effects from or on infrastructure.	The Project provides significant regional benefits by securing a reliable future supply of locally sourced aggregate for the Auckland Region for up to 50 years. This will support the efficient and cost-effective delivery of regionally and nationally significant housing, roading, infrastructure projects and urban development, contributing to the wellbeing, social and economic functioning of Auckland. The Clevedon Quarry Expansion is essential to support the growth and development of Auckland, particularly in South and East Auckland, where a significant portion of the region's future population growth and infrastructure demand is expected to occur. Expanding the existing quarry will help retain and secure aggregate capacity close to these areas, supporting timely delivery while reducing the transport costs from more distant sources. The existing Clevedon Quarry is an established and resilient operation that has been designed and managed in consideration of surrounding land uses. The proposed LoQ quarry extent will optimise recovery of the critical in situ aggregate resource and provide additional supply through a prioritised, staged expansion, beyond that enabled by the 2018 Consent. As the existing site is already operational, with the FoH area continuing to process aggregate, the expansion can be delivered in a timely and efficient manner through the proposed indicative stages while managing adverse effects as set out in Section 7 of the AEE Report. The Project is consistent with Objective 1.
229.	Policy 5	Recognising and providing for infrastructure supporting activities	As stated above, the proposed quarry expansion will secure a reliable and high-quality future supply of locally sourced aggregate for the Auckland Region for up to 50 years, which

#	Reference	NPS Objective/Policy	Commentary
		Decision-makers must recognise and provide for the role of infrastructure supporting activities, including by: a. recognising the importance of infrastructure supporting activities to enable the benefits of infrastructure activities to be realised; b. recognising the operational need or functional need of some infrastructure supporting activities, including supporting quarrying activities to operate in, be located in, or traverse particular environments and locations; and c. enabling the timely delivery of infrastructure supporting activities.	supports the efficient and cost-effective delivery of regionally and nationally significant infrastructure. The NPS-I reinforces that quarrying activities are of importance to the development of infrastructure, but there are locational requirements. Notably, there is a functional need for quarrying to occur in areas containing identified aggregate resources. There are also no practicable alternative locations for the proposed expansion given the existing FoH facilities, ancillary infrastructure and quarry plant will be retained, expanded and continue to be utilised to process the aggregate from Clevedon Quarry. Further, a substantial portion of the proposed Quarry Expansion area has also been earmarked for quarry development, as confirmed through the SPQZ zoning under the AUP. The Project is considered to be directly supported by Policy 5.

Table 8: Assessment against National Policy Statement on Natural Hazards 2025

#	Reference	NPS Objective/Policy	Commentary
230.	Objective 1	Natural hazard risk to people and property associated with subdivision, use and development is managed using a risk-based proportionate approach.	Refer to Rows 208 – 213. In summary, the Geotechnical Feasibility Assessment (Technical Report B1, Volume 2) has assessed the landslide hazard risk to be Low (Acceptable) using the NPS-NH risk matrix. Refer to Row 202 for flood hazard risks and the Surface Water Management Report (Technical Report H, Volume 2). Overall, the proposed expansion will not result in any downstream flooding risk. The proposed OBDA has also been assessed as feasible, with negligible potential for geotechnical off-site environmental effects. The Project is therefore consistent with Objective 1 and Policy 1.
231.	Policy 1	When considering natural hazard risk associated with subdivision, use or development, the risk level must be assessed using the risk matrix.	
232.	Policy 2	Natural hazard risk associated with subdivision, use and development must be managed using an approach that is proportionate to the level of natural hazard risk.	Collectively, the measures set out in Rows 202 and 208 – 211 will manage the potential natural hazard and sedimentation effects in a manner proportionate to the level of risk and are therefore consistent with Policy 2 of the NPS-NH.
233.	Policy 4	Where … use or development, including any associated mitigation measures, will create or increase significant natural hazard risk on other sites, that risk must be avoided or mitigated using an approach that is proportionate to the level of natural hazard risk.	The Project will not create or increase significant natural hazard risk on other sites. A comprehensive suite of mitigation measures will be implemented to avoid and minimise potential downstream flooding and geotechnical instability. These measures include the Slope Stability Management Plan, ESC mitigation measures, the quarry sump, constructed wetland and the treatment train approach, which together will manage stormwater and sedimentation-related hazard risk. The Project is therefore consistent with Policy 4.

#	Reference	NPS Objective/Policy	Commentary
234.	Policy 5	Natural hazard risk assessment and decisions must be based on the best available information and must be made even when that information is uncertain or incomplete.	Natural hazard risks have been assessed using the best available and up-to-date hazard information, as set out in the Geotechnical Feasibility Assessment and the Surface Water Management Report. The Project is therefore consistent with Policy 5.
235.	Policy 6	The potential impacts of climate change to at least 100 years into the future must be considered.	As mentioned in Rows 56 and 57, the quarry water management system has been designed with a 3.8°C climate change allowance to account for the frequency and severity of storm events. The Project is therefore consistent with Policy 6.

Table 9: Assessment against National Policy Statement for Indigenous Biodiversity 2023

#	Reference	NPS Objective/Policy	Commentary
236.	Objective 1	The objective of this National Policy Statement is: a. to maintain indigenous biodiversity across Aotearoa New Zealand so that there is at least no overall loss in indigenous biodiversity after the commencement date; and b. to achieve this: i. through recognising the mana of Tangata Whenua as kaitiaki of indigenous biodiversity; and ii. by recognising people and communities, including landowners, as stewards of indigenous biodiversity; and iii. by protecting and restoring indigenous biodiversity as necessary to achieve the overall maintenance of indigenous biodiversity; and	As mentioned in Rows 26 – 27, the Clevedon Quarry Expansion extends into scheduled SEA_T_5588 under the AUP, and there are other pockets of indigenous biodiversity located within the Project footprint as identified through the ecological surveys on site. All of this is located within the SAL landholdings, with the majority of the LoQ footprint zoned SPQZ. Approximately 6.1 ha of high-valued regenerating tree fern/broadleaf forest and associated habitats will be removed to accommodate the expansion and associated quarrying activities. The Project is consistent with the NPS-IB and the stated objective of maintaining indigenous biodiversity so that there is no overall loss, despite the purpose of the FTAA carrying greater weight in any decision determination. This can be achieved because, where at all possible, vegetation

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		iv. while providing for the social, economic, and cultural wellbeing of people and communities now and in the future.	of significance has been retained and protected, including through setbacks from the regenerating tree fern-broadleaf forest located in the wider Stream 3 catchment. In addition, where effects have not been able to be avoided or mitigated, the Project proposes to offset and compensate for vegetation loss. In particular, approximately 10.6 ha of restoration planting is proposed to offset the loss of 6.1 ha of native vegetation in the regenerating tree fern-broadleaf forest. The terrestrial offset planting will form part of a catchment-scale effects management package comprising over 50 ha of planting. Overall, a Net Gain in terrestrial biodiversity values is anticipated when the effects management package is completed. These plantings will be legally protected in perpetuity via vegetation covenants. The offset and compensation site is proposed within the Stream 3 catchment directly adjoining the impact area and within the same ecological district. The Project is therefore consistent with Objective 1.
237.	Policy 1	Indigenous biodiversity is managed in a way that gives effect to the decision-making principles and takes into account the principles of the Treaty of Waitangi.	SAL has consulted widely with a number of iwi groups on the Project. This has included discussion around how to protect indigenous biodiversity on the site and understanding the cultural values of this biodiversity. As detailed in the CVIA, Ngaati Whanaunga considers the removal of native vegetation and the conversion of land cover from plantation forestry to quarrying is a considerable concern to the iwi. However, they acknowledge the management strategies including enhanced planting and habitat restoration aimed at reconnecting indigenous flora and fauna. Ngaati Whanaunga considers that the environmental and cultural impacts resulting from the Project can be effectively avoided, remedied, or mitigated through robust consent

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			conditions, ongoing monitoring, ecological restoration, cultural participation and long-term accountability mechanisms. The Project is therefore consistent with Policy 1.
238.	Policy 2	Tangata Whenua exercise kaitiakitanga for indigenous biodiversity in their rohe, including through: a) managing indigenous biodiversity on their land; and b) identifying and protecting indigenous species, populations and ecosystems that are taonga; and c) actively participating in other decision-making about indigenous biodiversity	Refer to Row 237 above for more details. SAL will continue to engage with Tangata Whenua to address any matters arising during the consent process.
239.	Policy 9	Certain established activities are provided for within and outside SNAs	There is recognition through the NPS-IB of aggregate extraction activities and the role they play. It is recognised through the exceptions listed in the NPS-IB clause 3.11 that aggregate extraction activities are not required to avoid adverse effects on SNA areas if they provide significant national or regional benefit that cannot otherwise be achieved using resources within New Zealand. It is proposed to expand the existing Clevedon Quarry to recover a materially greater volume of in situ aggregate within the existing SAL landholdings through a more efficient and operationally workable quarry design. The majority of the expansion is specifically zoned for quarrying activities in the AUP, signalling the significance of the resource. The Clevedon Quarry Expansion would ensure access to approximately 150 MT of aggregate. This will enable a significant contribution to Auckland's aggregate supply for the next 50 years. The Project is therefore consistent with Policy 9.

#	Reference	NPS Objective/Policy	Commentary
240.	Policy 10	Activities that contribute to New Zealand's social, economic, cultural, and environmental wellbeing are recognised and provided for as set out in this National Policy Statement.	The supply of aggregate is vitally important to the growth and development of Auckland. Aggregate is used widely in a number of applications, including the construction of infrastructure, housing and roading. All of these activities in turn contribute significantly to the social and economic fabric of New Zealand. Additionally, sourcing aggregate from the Clevedon Quarry Expansion would reduce transport requirements associated with sourcing aggregate from alternative sources outside the Auckland region in the Waikato and Northland regions. Due to the in situ nature of aggregate, the ability to avoid areas of indigenous biodiversity is limited, and instead where avoidance is not possible, a comprehensive offset and compensation package is proposed to ensure that overall indigenous biodiversity is maintained. The Project is therefore consistent with Policy 10.