10 Mineral Resources

10 Mineral Resources

MR: Introduction

10.1 This section of the Plan is concerned with aggregates used in construction, including sand and gravel and stone, principally in the form of crushed rock. These are the only minerals which are actively worked in the Island. All other mineral requirements, including energy minerals (e.g. coal, oil and gas) are met by imports. Aggregates are vital natural resources which make a major contribution to the Island's economic well-being and to quality of life. They are the main raw material of the construction industry and are used for purposes such as making concrete and concrete products, mortar, asphalt, fill material and drainage media. These products are essential for the building and repair of roads, homes, workplaces and schools and for other necessary building and infrastructure work. As a consequence, it is vital that a ready and adequate supply is always available, be it from local extraction, or other sources.

10.2 Aggregates fall into two broad categories: 'primary aggregates' which are naturally occurring materials (e.g. sand and crushed rock) and 'secondary and recycled' aggregates. Secondary aggregates include minerals wastes (e.g. overburden and quarry/processing waste) and industrial by-products where these are used for aggregate purposes (e.g. incinerator ash). Recycled aggregates refer to usable aggregates (i.e. from construction and demolition wastes) that have already been used for one purpose, but which can be used again as a substitute for primary aggregates.

10.3 It is the role of land-use planning, through the Island Plan, to:

- address where essential minerals can be sourced;
- manage where mineral development takes place; and
- set criteria against which applications for extraction of minerals can be judged and the requirements for restoration and aftercare can be assured.

10.4 In doing so, the plan must set a policy framework which strikes the right balance between demand for and the potential effects of mineral development on the environment and local residents. However, it should be noted that there are limitations to planning controls, which cannot normally be used to determine the end use of minerals, or the types/sources of aggregates that are used in construction projects.

10.5 The Plan sets out to ensure that the provision of minerals is in accordance with the principles of 'Sustainable Development'. This, in turn, requires the long-term conservation of mineral supplies for future generations and the minimisation of the environmental impacts arising from their extraction, processing and supply, whilst ensuring an adequate supply to meet the community's present day needs. If these ends are to be met, it is necessary to make the

optimum/efficient use of the mineral resources, which can best be achieved by adopting a hierarchical approach to mineral supply, consistent with the principles of 'Reduce, manage, invest', involving, in order of priority:

- Reducing as far as practicable the quantity of aggregate material used in the building process;
- Using as much recycled and secondary material as possible; and
- Securing the remainder of material needed through new primary extraction, or, where this is not environmentally acceptable, through importation.

10.6 A number of changes have taken place since the 2002 Island Plan, which impact on future mineral planning and make it necessary to review the relevant land use policies. These changes include:

- a new States strategic policy framework;
- the development of a Solid Waste Strategy, which positively promotes the recycling of aggregates / substitute materials;
- recent planning permissions to extend the life of La Gigoulande Quarry well beyond previous expectations.

10.7 Other factors which also need to be taken into account include:

- planned future economic growth, beyond the current downturn;
- likely population growth and continuing trends towards smaller households;
- planned developments for housing and offices and other likely / projected developments;
- the greater willingness of developers to use recycled materials;
- the limited lifespan for continued sand extraction in St. Ouen's Bay;
- likely public concern regarding the potential long-term environmental impact of further local expansion of mineral workings;
- the prospect of ever-higher environmental standards required during mineral working and in restoration.

10.8 The main overriding aims of this section of the Plan are:

- to secure an acceptable balance between the community's need for building aggregates, whilst conserving resources and protecting the Island's environment, and the amenities and health of its residents;
- to give greater certainty as to the location and scale of future aggregate working and to provide a clear guide to mineral operators, other public bodies, interest groups and the public, where aggregate extraction is likely in principle to be acceptable;

- to ensure that any proposals for local aggregate working are environmentally acceptable and are accompanied by satisfactory measures for restoration and after-use;
- to ensure that adequate provision is made for importing aggregates where these cannot be acceptably provided through local extraction.

Current position

Current mineral extraction

10.9 The only minerals which are actively worked at present in the Island are sand and stone (principally in the form of crushed rock). The majority of this is used as aggregates for the construction industry. There are currently two major rock quarries on the Island (Ronez and La Gigoulande), one quarry producing small quantities of building stone (La Saline) and one sand pit (Simon Sand and Gravel Ltd).

10.10 The current position with the principal producers is as follows:

• Ronez - located in the 'Green Zone' in the Parish of St. John on the north coast of the Island. The quarry has been operational since 1890 and is presently constrained by Route du Nord and Sorel Point. The current output is used in a wide range of products, including: asphalt (15-20%); ready-mixed concrete (35-40%); concrete blocks and other concrete products (15-20%); and general market graded loose aggregate sales (25-30%). Some specialist material is imported. Aggregate from Ronez has been adversely restricted by the 'alkali-silica reactivity problem', which has affected the use of quarried material as a concreting aggregate. The quarry company has sought to address this problem and manage the risk through the introduction of low alkali cement, quality control and selective quarrying techniques.

Ronez currently has approximately 1.9 million tonnes of permitted reserves within the consented area. Of this, 900,000 tonnes are easily accessible and the balance would require significant work in moving plant and equipment. This would give a life expectancy of approximately 14 years at recent extraction rates (140,000 tonnes per annum). However, Ronez Ltd has plans to extend the operational area of the guarry to allow for the extraction of further reserves in and around the quarry. The company presently intends to make a planning application to this end. It is considering a westward extension (including the south-east corner of the adjacent scrambling track and fields to the south of the track), which could deliver 2.3 million tonnes of recoverable reserves and a southern extension (under the existing plant and offices), which could deliver 4 million tonnes. If planning permission were granted for either of these proposals it could extend the life of the quarry by a further 16 years or 29 years respectively. If both extensions were to be granted consent, it would enable the guarry floor to be deepened from -20mAOD to -50mAOD and in so doing would increase the total recoverable reserves in the guarry to 17 million tonnes and the life of the guarry to over 120 years (at current extraction rates).

In association with the latter option for expansion, the company is currently considering the feasibility of constructing a port basin in 50-70 years time. The possibility of developing an all-weather port /importing facility at Ronez (as an alternative to St. Helier Harbour), was examined as part of the original Jersey Mineral Study. Clearly, if it were feasible, there would be a strategic value for the Island. However, there are considerable constraints, including known tidal and navigational problems and the costs associated with providing a breakwater in deep water, in order to avoid swell in any new harbour mouth. Ronez Ltd is now of the view that such a port would be feasible, due to navigational advancements in shipping.

La Gigoulande - located in the 'Green Zone' in St. Peter's Valley, on the parish boundary between St. Mary and St. Peter. The guarry is operated by Granite Products Ltd. Approximately 40% of the normal guarry output is used for ready-mixed concrete, 30% is used for concrete products and the remaining 30% is sold as graded loose aggregates (including hoggin). Historically, the company has imported pumice for the manufacture of lightweight blocks, but this market is rapidly diminishing. In July 2001, planning permission was granted for a considerable eastward extension to the quarry, which made available some 2 million tonnes of rock. It was estimated at the time that this would extend the life of the guarry by between 13 and 20 years (depending on extraction rates). More recently, planning permission (P/2006/0427) has been given to replace the ageing mineral processing plant (used for crushing and screening rock) with state-of-the-art plant and relocating this, together with the stocking areas, to a more central location at the base of the quarry. This effectively paved the way for the latest planning permission in 2007 (P/2006/1273), which allowed for an increase in the depth of mineral extraction at the western end of the guarry by 7m to provide an additional 10 years of reserves (1.4m tonnes).

The operating company presently estimates there are approximately 3.2 million tonnes of consented reserves remaining at the quarry⁽¹⁾, giving a theoretical life expectancy of 27 years at current average extraction rates (118,000 tonnes per annum). However, it argues that the life of the quarry could be prolonged by a further 40 years to 2076, when recycling operations are established under the auspices of Policy WM6 (if recycling volumes are available), because primary aggregate production would be reduced by 50%.

- La Saline located in the 'Coastal National Park' and the 'Green Zone' on the north coast, approximately one kilometre north of St. John's Village. This is the only quarry on the Island that produces building stone (including dressed stone) and, as such, it supplies the majority of local stone masons and builders.
- Simon Sand and Gravel Ltd- this family business has been extracting sand from St. Ouen's Bay since 1909. The present workings are located in the 'Coastal National Park' at the foot of Mont a la Brune, on land which was zoned by the

¹ estimated reserves at the start of 2011

States of Jersey in 1976 specifically for 'sources of sand for building purposes'. The quarry is in a particularly sensitive coastal dune landscape and is significant in terms of visual impact and habitat disturbance.

The company currently quarries sand and shale stone and supplies several different products to the local construction industry and the general public, including: windblown sand for concrete and block making; beach sand for plastering, rendering and painting; darker sand for backfill of trenches and foundations; and shale stone of various sizes for pipe-bedding, garden landscaping, drives and pathways. Approximately a third of the sand output is supplied to Granite Products and Ronez Ltd for use in the manufacture of concrete products. Due to the fineness and uniformity of the windblown sand, those companies add granite dust to meet the required concrete grading specifications, whilst making good use of a by-product of their stone processing (i.e. secondary materials).

At present, Simon Sand and Gravel Ltd is only licensed to continue its operation until 2018. In December 2003, it was granted planning permission (P/2003/1318) for a continuation of extraction and processing of sand and gravel until 2018. This included proposals for an extension of extraction area, the construction of a storage shed, landscaping and the development of screening bunds. The company anticipates that there are sufficient reserves within the approved site boundary to meet local requirements until the expiry date, based on average annual extraction rates. The company also owns land immediately to the north of the existing approved site (Field 246A), which has sand reserves and is within the boundaries of the land previously earmarked for sand extraction. This field is currently being used for landscape enhancement and restoration purposes (as part of approved landscaping conditions) and is being covered with sand which will effectively sterilise the deposit. If it were to be approved for extraction, it could extend the life of the guarry by an estimated 8 -10 years at current average production rates. There are also potential additional reserves under several smaller fields immediately adjacent to the approved site, which could potentially yield an additional 3-5 years of supply.

Other alternative sources

10.11 There are several other possible sources of aggregate:

- Other on-Island stone reserves Whilst there is no shortage of suitable rock for the Island to be self-sufficient in stone aggregates for thousands of years, opening new stone quarries is likely to have very significant and serious environmental impacts relating, in particular, to land loss, visual and landscape effects, road traffic generation and other specific location-dependent effects.
- **Other on-Island sand reserves** Although there are considerable reserves of wind-blown sand in St. Ouen's Bay, opening new sand and gravel quarries is not regarded as a suitable option, given the special landscape character of

this part of the Island, which requires the highest level of protection, and the likely environmental impacts.

- Aggregate recycling Construction and demolition activities continue to account for the majority of the Island's solid waste generation. There is already significant activity in recycling material from this part of the waste stream as alternatives to primary aggregates. The main centre in the Island for recycling inert construction, demolition and excavation waste is located at La Collette Phase II reclamation site. Clearly, opportunities can be taken to continue and build upon the present success of this aggregate recovery activity in the Island, which, in addition to extending the life of existing mineral reserves, also has the advantages of reducing the amount of waste going to landfill and extending the life of La Collette Reclamation Site.
- Marine dredged aggregates No aggregates are currently dredged from Channel Island waters, but there is at least one suitable area from which sharp sand and gravel material could be drawn in future (Banc de la Schole). This cannot be considered as a realistic option until a proper survey has been undertaken to establish the potential. This would have to examine numerous issues, including: rights to extract; nature and quality of the resource; suitability for construction industry use; potential conflict with sea fisheries and fishing interests; operational and economic feasibility; and ecological and other environmental impacts (including effects on marine eco-systems and potential beach erosion problems). In any event, the feasibility of using marine dredgings would be dependent upon having suitable port facilities for landing the large volumes that would be involved, if this is to be an economic proposition.
- **Imported aggregates** It would be possible to import more material to the • Island and so reduce the reliance on, and the difficulties presented by, a continuing supply of locally produced aggregates. Crushed rock and/or sand and gravel aggregates are readily available in the nearby French hinterland and the British South Coast and, as alluded to above, sand and gravel may even be available from Channel Island waters. In this context, it is interesting to note that it is UK Government policy to encourage the supply of marine-dredged sand and gravel to the extent that environmentally acceptable sources can be identified and exploited, within the principles of sustainable development. ⁽²⁾However, one of the main problems with importation at present is the high costs occasioned by port dues and handling charges at St. Helier Harbour. This issue was fully addressed in the original Jersey Mineral Strategy 2000-2020 report, November 2000. It highlighted that port-related costs at that time effectively doubled the cost of importing aggregates and presented an insuperable commercial barrier to large-scale importation of aggregates, because "harbour gate" prices were approximately double the typical "quarry gate" prices for local products. Clearly, to be economically

² Minerals Policy Statement 1: Planning and Minerals, Department for Communities and Local Government, November 2006.

feasible, it would be necessary to negotiate lesser port-related costs for bulk importation. In any event, significant bulk importation will not be possible unless suitable port facilities are created with a berth and an adequate area for material storage and handling to guarantee future supply.

10.12 In its 1999 report, 'The Jersey Minerals Study', Arup Consultants carried out an assessment of various sand and gravel supply options (against environmental effects and socio-economic considerations) and importation of sand and gravel emerged as the most acceptable approach. The main downside identified was the likely road transport impacts. The option of importing rock aggregate also scored well in the evaluation. However, Arup Consultants pointed out that this might rate poorly in terms of 'sustainability' and future generations may not judge it wise for the Island to effectively be "exporting" the environmental effects of meeting its aggregate requirements.

Future requirements for aggregates

10.13 Estimates of future aggregate requirements are really the starting point for considering policy options and reviewing established policies. However, it is difficult to be precise about future demand for aggregates in the Island. This depends almost entirely on future construction industry activity, and there are uncertainties about a number of relevant factors, including:

- future economic performance;
- potential changes in the amount and nature of construction output;
- potential changes in building material specifications;
- changes in future levels of waste minimisation and recycling;
- the quality of recyclable materials, which is variable and inconsistent; and
- the extent to which new and different materials will be developed as substitutes for aggregates.

10.14 The 2002 Island Plan estimated that future demand for aggregates of the required quality to serve the construction industry would be around 450,000 tonnes per annum. Notwithstanding the challenges created by the current economic climate and the uncertainties associated with predicting future demand, it is now considered reasonable and prudent to revise the average annual demand figures to include a range from 400,000 to 500,000 tonnes per annum, when one takes into account:

- the general underlying strength of the Island's economy and the strategic measures that have and are being put in place to allow the Island to return to sustainable economic prosperity in the longer term;
- the strategic aim for controlled economic growth across all sectors of the economy over the coming years; and
- the extensive plans for development at the St. Helier Waterfront over the next 10 years or so, including a new financial district.

Constraints on future mineral planning

10.15 There are numerous potential constraints which must be taken into account in considering options for meeting the need for aggregates in the future, including the following:

- the quality, attractiveness and character of the local landscape and coastline, and the sensitivity to the effects of intrusive development;
- potential damage to local wildlife;
- potential environmental and health problems associated with dust, noise, vibration and shock waves (from blasting), visual intrusion, transport impacts, impact on water resources etc.
- willingness or otherwise of customers to specify and/or accept secondary/recycled aggregates;
- the landscape, ecological (maritime, heathland) and geological (Sorel Point) constraints around Ronez;
- the ecological impact of sand extraction at Les Mielles on the coastal dune land;
- the limitations of sand from Les Mielles (i.e. fine, uniform, well-rounded wind-blown sand) which requires the addition of granite dust to meet the grading specification for concrete;
- the existing commitment to wind down Simon Sand and Gravel Ltd by 2018;
- the limited space currently available in the port for importing, handling and storing large volumes of imported aggregate materials;
- the unavailability, at this time, of the previously planned special importing and handling facility at La Collette II reclamation site;
- the potential costs of creating a new berth and storage and handling facilities for importing aggregates;
- potential traffic impacts on the port area; and
- historically high port dues and stevedoring charges in comparison to other ports, rendering 'harbour gate' prices higher than 'quarry gate' prices.

Policy context

States strategic policies

10.16 The Strategic Plan 2009-14 provides no specific mention of mineral provision, however, it does identify a number of priorities for action, which will serve to continue demand pressures for aggregates of the right quality to serve the building industry and support the need for effective local mineral planning. These priorities include:

- supporting the Island community through the economic downturn;
- maintaining a strong, sustainable and diverse economy (i.e. where existing businesses in all sectors can thrive);

¹⁰ Mineral Resources

- promoting sustainable population levels (i.e. involving net inward migration of 150 households per annum);
- maintaining and developing the Island's infrastructure (e.g. sea defences, roads, public areas, waste disposal facilities, utilities, government buildings etc); and
- protecting and enhancing the natural and built environment (e.g. in relation to design quality in the built environment, regenerating St. Helier and the Waterfront, and making best use of the Island's natural resources etc).

The Jersey Mineral Strategy 2000-2020

10.17 The Jersey Mineral Strategy was derived from a comprehensive study undertaken by Arup Consultants in 1999 and subsequent work by the Environment Department. It aimed to provide a framework for the future provision of construction aggregates and was lodged for States debate in March 2001 (*P.51/2000*). The strategy was never debated by the States, having been deferred pending completion of a traffic modelling exercise. However, it was used to inform the statutory 2002 Island Plan and so, in effect, the main components of the strategy were adopted through that mechanism.

10.18 These components were as follows:

- 1. continued production of aggregate at Ronez Quarry, St. John into the longer term beyond 2020;
- 2. continued production of aggregate at La Gigoulande Quarry, St. Mary for 13-20 years, depending on extraction rates;
- 3. winding down of Simon Sand and Gravel Ltd., St. Ouen's Bay by 2018 and progressive restoration of the site;
- 4. creating a new berth and handling area at St. Helier Harbour for importing all the Island's future sand requirements and a large proportion of its future rock aggregate requirements; and
- 5. using La Gigoulande Quarry, St. Mary for landfill with inert waste and for secondary/recycled aggregate production, when La Collette Phase II reclamation site has been filled, and restoring the quarry for a suitable end-use.

10.19 In effect, the strategy looked to move from the former position of 'maximising local supply' to a new position involving a reduction in the extraction of primary aggregates locally and a shift towards the bulk importation of significant amounts of required aggregates, together with continuing production of recycled aggregates.

Review of Jersey Mineral Strategy

10.20 The Strategic Options Green Paper for the Island Plan Review sets out the advantages and disadvantages of the four distinct supply options considered capable of providing for future aggregate requirements of the Island's construction industry, including:

- Option 1: Maximising Local Supply
- Option 2: Importation through St. Helier
- Option 3: Concentrating at Ronez
- Option 4: Current Mineral Strategy (as amended by recent planning permissions).

10.21 As a consequence of the review process, it is considered appropriate to modify the components of the Mineral Strategy, in particular having regard to: the response to the Green Paper; the recent planning permission to significantly extend life of La Gigoulande; up-dated information on permitted reserves / resource availability; sustainability issues; and recent UK Government guidance on minerals planning. The main purposes of the modifications are to emphasise the need for ensuring a continuous supply of aggregates for the construction industry and to focus more on the sustainability objectives of:

- minimising, as far as practicable, demand for primary aggregates (primarily by use of secondary and recycled aggregates) ⁽³⁾;
- maintaining reliance on local production of land-won crushed rock aggregates, where there is environmental capacity, to minimise the effect of transportation (including energy use and carbon emissions) in importing bulky materials from elsewhere and to support local industry and jobs;
- safeguarding resources for future generations;
- promoting high standards of restoration and aftercare for mineral workings; and
- planning for future after-use of mineral workings.

10.22 The modified Mineral Strategy looks to maintain reliance on local production, where this is environmentally acceptable and its main components are set out in the table below.

- 1. Ensuring a continuous supply of aggregates for the building industry;
- 2. Encouraging the greatest possible use of alternatives to primary aggregates;
- 3. Maximising local production of crushed rock required for the local construction industry, within environmental constraints, including:
 - continued production of aggregate at Ronez Quarry, St. John beyond the Island Plan period and probably well into the long-term;

³ Recycled aggregates cannot be used to totally replace primary aggregates, particularly in high strength and high durability concretes. Also, the supply of recycled aggregates is variable and inconsistent, so its availability and adequacy cannot always be relied upon

- continued production of aggregate at La Gigoulande Quarry, St. Mary in the long-term;
- careful consideration of proposals to exploit new or extended reserves of crushed rock on the Island, as necessary;
- 4. Winding down Simon Sand and Gravel Ltd in St. Ouen's Bay by 2018 and progressive restoration of the site;
- 5. Creating appropriate facilities at St. Helier Harbour for importing all the Island's future sand requirements, with sufficient flexibility to allow for bulk importation of some crushed rock, if, as a consequence of future monitoring, this looks a strong likelihood in the longer term;
- 6. Using La Gigoulande Quarry, St. Mary for landfill with inert waste and for recycled aggregate production, when La Collette Phase II reclamation site has been filled, and restoring the quarry for a suitable end-use; and
- 7. Restoration of all other existing/approved quarry sites for a suitable end-use.

Table 10.1 Modified Jersey Mineral Strategy

MR: Objectives and indicators

Objective MR 1

Minerals objectives

- 1. To secure sufficient and steady supplies of aggregate resources needed by the community and the economy within the limits set by the environment, having regard to anticipated demand over the Plan period to 2020 and beyond.
- 2. To minimise the consumption of primary aggregates and encourage the increased usage of secondary and recycled aggregates and other substitute materials.
- 3. To control and mitigate the impacts of mineral operations on the amenities and health of local residents and on the local environment arising over their full life cycle from the extraction, processing, management and transportation of minerals and when restoration has been achieved.
- 4. To protect Les Mielles, St. Ouen's Bay from adverse effects of mineral working
- 5. To maintain a landbank of permitted crushed rock aggregate reserves (equivalent to at least 10 years) at all times over the next 20 years.

- 6. To safeguard existing important aggregate reserves, as far as possible, from unnecessary sterilisation by other forms of development.
- 7. To make adequate provision for the importation of sand (and crushed rock aggregate as necessary), to compensate for the anticipated closure of Simon Sand and Gravel in 2018 and potential shortfalls in rock quarrying capacity in the longer term.
- 8. To encourage the production and use of locally sourced high quality building stone for purposes for which they are most suitable and in order to support local identity.
- 9. To protect and enhance the overall quality of the environment once extraction has ceased at mineral workings, by promoting the highest standards of restoration and aftercare and ensuring appropriate after use.

Indicators MR 1

Minerals indicators

- 1. Amount of aggregates produced
- 2. Outstanding permitted reserves
- 3. Provision of facilities at St. Helier Harbour for future importation of aggregates
- 4. The number of permanent and temporary facilities for handling and processing secondary and recycled aggregates;
- 5. An annual increase in the amount of recycled and secondary aggregates produced at these facilities
- 6. An annual decrease in the amount of inert construction and demolition waste material for disposal by landfill at La Collette and any other registered waste disposal sites.
- 7. The approval of plans for restoration and aftercare and beneficial after uses of mineral extraction sites
- 8. Successful land restoration that returns sites to beneficial after use
- 9. The proportion of mineral applications covered by planning obligations or 'unilateral undertakings'
- 10. Amount of sand and gravel production from Simon Sand and Gravel
- 11. Closure of the Simon Sand and Gravel extraction operation in 2018
- 12. Successful land restoration that returns the Simon Sand and Gravel site to a beneficial after use
- 13. Landbank levels for crushed rock as aggregate
- 14. Amount of aggregate resources sterilised
- 15. The creation of facilities for sand importation at St. Helier Harbour
- 16. Amount of locally sourced building stone produced for local use

MR: Policies and proposals

Policy context

Supply of aggregates

10.23 In the interests of the community and the economy, the Minister for Planning and Environment wishes to ensure a continuous supply of aggregates is available to meet anticipated requirements. In doing so, the emphasis must be on minimising the adverse effects of local mineral extraction by adopting a sustainable approach.

10.24 This would normally be achieved by ensuring adequate permitted reserves are available for extraction locally, having regard also to the likely contribution from secondary and recycled aggregates. Unfortunately, this is not possible in Jersey, because the Island's only sand quarry is due to close in 2018 and there are no environmentally acceptable replacement sand extraction sites locally. It will, therefore, be necessary to make provision for future importation of sand. Furthermore, in the longer term, if consent is not granted to exploit additional reserves of crushed rock aggregate from new or extended quarries, it will again be necessary to rely on a policy of importation to meet a large proportion of likely future demand.

10.25 In line with UK mineral planning guidance (Minerals Policy Statement 1, Annex 1), the aim should be to maintain a stock or 'landbank' of permitted aggregate reserves equivalent to at least 7 years production of sand and at least 10 years of crushed rock. These landbanks, or in the case of sand, the equivalent alternatively sourced material, will need to be maintained at the end of the Plan period (2020). This implies that the landbank of permitted reserves, or their equivalent, will still exist in 2030 for crushed rock and 2027 for sand.

10.26 The estimated future requirements for aggregates during the Plan period (2011-2020) and after and the potential supply structure for meeting them are set out in Table 10.2. The supply structure is intended as a reasonable indication of approximate anticipated yield and has been produced having regard to output patterns from quarries over recent years and the views of the operators. It is not intended to impose any limit on supply from the various quarry operators or other sources. Indeed, it is clear from historical records that the main local quarries are capable of significantly increasing annual production to meet peaks in requirements for construction materials. Both rock aggregate quarries could, for example, produce in excess of 200,000 tonnes per year if necessary. It is also important to take note of the provisos attached to the estimates in Table 10.2 and, in particular, the difficulties in estimating the future contribution of sand imports and recycled materials

Producer / Source	Proportional Yield		Total Yield		Total Yield	
	Island Plan Period (2011-2020) tonnes / annum		Island Plan Period (2011-2020) million tonnes		Following ten years (2021 - 2030) million tonnes	
	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
Ronez	140,000	175,000	1.4	1.75	1.35 ⁽¹⁾	1.7 (1)
Granite Products	140,000	175,000	1.4	1.75	1.35	1.7
Simon Sand & Gravel	60,000	80,000	0.5	0.6	-	-
Sand Imports	-	-	0.1	0.2	0.6 ⁽²⁾	0.8 (2)
Recycled	60,000	70,000	0.6 *3	0.7 *3	0.7 ⁽³⁾	0.8 (3)
Aggregates						
TOTAL	400,000	500,000	4.0	5.0	4.0	5.0

Table 10.2 Potential Aggregate Supply Structure

- 1. This relies on consent being granted for an extension to the permitted reserves
- 2. The estimated requirements for sand may yet prove too high following the move to importation, because the economics may make it worthwhile for rock quarries to produce an alternative sand substitute from rock for concrete making.
- 3. The future contribution made by recycled aggregate is particularly difficult to estimate and there are those in the aggregates industry that believe that level of aggregate recycling are probably already reaching their peak.

10.27 Applying the requirement rates over the 10 year Island Plan period suggests an estimated need of 4 to 5 million tonnes of aggregates, consisting of approximately 2.8 - 3.5 million tonnes of crushed primary rock, 0.5-0.6 million tonnes of locally extracted sand, 0.1-0.2 million tonnes of imported sand and 0.6 - 0.7 million tonnes of recycled aggregates (13 - 14%). If one takes into account the commitment to maintaining a landbank, or its equivalent, at the end of the Plan Period, the total required aggregate provision equates to:

- 5.5 6.9 million tonnes of crushed primary rock; and
- 1.2- 1.6 million tonnes of sand.

There is currently a landbank of permitted crushed rock reserves of some 10.28 5.2 million tonnes in the Island (at Ronez and La Gigoulande), which significantly exceeds the requirement for at least 10 years extraction during the Plan Period, but falls short of the 20 year requirement up to 2030. Guaranteeing the maintenance of the 10 year landbank will be dependent on the industry coming forward with planning applications. As alluded to earlier, Ronez has already indicated that it intends to come forward with a planning application to extend the guarry. A westward extension, or a southern extension under the existing plant and offices could deliver an estimated additional yield of 2.3 million tonnes or 4 million tonnes of recoverable reserves respectively. If granted consent, either of these would be sufficient to ensure a continuous supply of crushed rock for 20 years and beyond. However, if both extensions were approved it would allow for a potential additional yield of some 17 million tonnes of recoverable reserves, which would increase the life of the Island's permitted crushed rock reserves to approximately 60 years at maximum extraction rates.

10.29 The current landbank of permitted sand reserves (est. 800,000+ tonnes) is equivalent to at least 10 years production. Although there are additional reserves immediately around the quarry, referred to earlier, the current planning consent is due to terminate in 2018 and continuing with sand extraction beyond the period of the existing permission is not considered environmentally acceptable. Therefore, in order to maintain continuous supply (equivalent to at least 7 years) it will be necessary to put in place appropriate importation facilities at St. Helier Harbour within the Plan Period. It is recognised that this is not an ideal solution from a 'Sustainable Development' perspective and will give rise to environmental costs associated with long-distance transportation.

10.30 Having secured important primary aggregate reserves, it is important that they be safeguarded against other forms of development which could sterilise them, constrain their future extraction and jeopardise the continuity of supply

10.31 Given the inherent difficulties in accurately predicting future aggregate demand and production, it will be necessary to regularly monitor and review the position and the various factors that impact upon this. By so doing, the Island Plan can evolve to respond effectively to changing circumstances (including allowing for action before remaining reserves fall below required levels). This will require the adoption of a 'Plan, Monitor and Manage' approach, rather than 'Predict and Provide'.

Proposal 28

Supply of aggregates

The Minister for Planning and Environment will seek to ensure continuity of supply of aggregates for the Island, whilst applying the principles of a sustainable approach to mineral extraction, which underpin the Modified Jersey Mineral Strategy.

To this end, he will aim to:

- maintain, throughout and at the end of the Plan period, a 'landbank' of permitted reserves of crushed rock as aggregate, equivalent to at least 10 years production; and
- 2. support the creation of new importing facilities which will be available at the end of the Plan period for importing all the Island's sand requirements.

Policy MR 1

Supply of aggregates

The sites that currently make up the Island's permitted reserves of aggregates are shown on the Island Proposals Map and include:

- 1. Ronez Quarry;
- 2. La Gigoulande Quarry; and
- 3. Simon Sand and Gravel.

Developments which would be likely to cause serious hindrance to the extraction of these reserves, whether it is directly over the deposits or located close to them will not be permitted.

The extraction of the aggregates from these reserves prior to permanent forms of development will generally be encouraged.

Secondary and recycled materials

10.32 The need to conserve and limit demand for non-renewable primary aggregate resources, whilst ensuring an adequate supply, is a key sustainability issue and is central to good minerals planning. This is particularly important because

the resources used in the Jersey construction industry are dominated by primary aggregates (i.e. sand and crushed rock) and the extraction of these minerals can have significant environmental impacts both locally and elsewhere.

10.33 To this end, the Minister is keen to ensure efficient and effective use of aggregates in new construction projects. The Minister's intention is to eliminate avoidable wastage and encourage the maximum possible use of secondary and recycled materials as alternatives to primary aggregates, as far as this is environmentally, economically and technically justified in accord with the principles of 'Reduce, manage, invest'.

10.34 In Jersey, the main source of secondary materials is the waste arising from the mineral extraction and processing operations at the main quarries and this is in comparatively limited supply. Recycled materials, on the other hand, including clean excavated material are largely sourced from construction and demolition waste which constitutes a major part of the Island's waste stream. These are either generated on-site or obtained from second-hand building material suppliers and, together with secondary aggregates, can be used in place of primary materials in many construction and development projects. They tend to go mainly for lower quality end uses such as infilling requirements in the preparation of land for development (including trench fill), landscaping and restoration. However, they can also be used as alternatives to primary aggregates in the construction materials for roads and buildings. Clearly, the construction industry should not be using high quality primary aggregates when lower quality secondary and recycled aggregates are available which are capable of meeting the required standards.

10.35 Encouraging and promoting the use of secondary and recycled materials as alternatives to primary aggregates in new developments will have positive environmental benefits for the Island, including: a reduction in the demand for land for mineral extraction and a reduction in the volume of waste requiring disposal to landfill.

10.36 However, it is also important that developments which are planned today have regard to the possibility for recycling in the longer term. To this end, the Minister wishes to encourage applicants to give careful consideration to the selection of materials for, and the design of proposed new developments, to enable constituent parts to be separated out for reuse at the end of the development's useful life, as far as practicable.

10.37 In any event, if the supplies of secondary and recycled aggregates are to be maximised and there is to be a continued significant longer term contribution from these materials, the Plan must make provision for sufficient facilities (both permanent and temporary) for handling and processing these materials, including facilities on construction sites. These matters are addressed in the Waste Chapter and notably in Policy WM 2 'New and expanded waste management facilities' and Policy WM 6 'Inert waste recycling'.

Policy MR 2

Secondary and recycled materials / alternative aggregates production

The Minister for Planning and Environment will seek, encourage and support the increased use of secondary and recycled materials where appropriate, feasible and practicable. When considering development proposals, the Minister will have regard to the extent to which the development makes use of secondary and recycled materials in place of natural aggregates.

Proposals involving major new developments and/or developments which would involve the demolition of major structures or the potential generation of significant quantities of waste material will be expected to recycle, re-use and recover as much material as practicable as a substitute for natural aggregates.

Applicants should include with the planning application details of the steps taken to make use of secondary and recycled materials. Where appropriate these details should be included in the Design Statement accompanying the application to demonstrate and explain how this principle of sustainable design has been incorporated to the development proposal. They should also feature in any required 'Site Waste Management Plan'.

Where possible secondary and recycled aggregates should be used for building structures and any associated roads, pavements, and car parks as a primary objective. Other potential uses may include;

- Preparation of land for development;
- Landscaping; and
- Land restoration.

The preference should be to use in-situ demolition and construction waste, which can be crushed and utilised as recycled aggregates, where practicable.

The Minister will also seek to ensure that applicants for major new developments give careful consideration to the design of buildings and the selection of materials, so as to enable constituent parts to be separated out for reuse at the end of the development's useful life, as far as practicable.

Proposals for new or extended waste recycling facilities shall accord with the requirements of Policy WM 2 'New and expanded waste management facilities' and Policy WM 6 'Inert waste recycling'.

New or extended mineral workings

New or extended mineral workings

10.38 It is generally considered that extensions to existing crushed rock workings would be preferable to the opening of new mineral sites. This view is based on land-use planning reasons and is not intended as a means to protect existing suppliers, or to constrain competition. Extensions to existing sites are likely to have advantages over new quarries on virgin sites, in that the environmental impacts (including landscape, amenity, traffic and nature conservation issues) are likely to be less pronounced and required infrastructure is already in place. In most cases, extensions would also involve less overall land disturbance, because they allow for the extraction of rock volumes that would not be viable for a new quarry.

10.39 Details of any proposal to work a site cannot be known in advance, although, as alluded to earlier, Ronez Ltd has proposals in the pipeline. In any event, all minerals applications will have to be examined in great detail and applicants will need to provide extensive information to support an application in the form of an Environmental Impact Assessment. Despite the preference for extending existing crushed rock quarries, it is recognised that there may be environmental issues which come to light in associated with existing mineral workings that, on balance, militate against their future extension. It is not inconceivable that opening a new quarry(ies) in the future may be warranted, if Ronez Ltd's plans are found to be unacceptable and/or when permitted reserves at La Gigoulande are exhausted. In such circumstances, this might prove the only way of maintaining sufficient supplies of quality primary aggregates, whilst avoiding a future monopoly situation and the transboundary costs associated with bulk importation.

10.40 All future applications for mineral workings will be considered on their individual merits. However, although the individual characteristics of mineral workings may vary, there are many common factors that need to be considered in assessing proposals for mineral operations. Permission will only be granted for new reserves (whether they are extensions to existing quarries or new quarries) where:

- it is demonstrated they meet a proven need, because production from existing reserves will not maintain landbank requirements;
- existing permitted reserves are unsuitable for a particular proposed use;
- the impact on the environment is acceptable;
- sterilisation of resources will otherwise occur; and
- the proposals comply with required site selection criteria.

10.41 Proposals will need to conform to a range of site selection criteria, which are addressed to varying degrees in the policies of the Plan including Policy SP3 Sequential Approach to Development; Policy GD1 General Development Considerations; Policy NE5 Coastal National Park; and Policy NE6 Green Zone. It will be particularly important to ensure that the sites in question will serve to:

- make adequate provision for access into, and vehicle movement within the site;
- safeguard the amenities of nearby dwellings;
- preserve the best and most versatile agricultural land;
- protect ground and surface water flows, levels and quality;
- avoid undue adverse impacts on areas of nature conservation importance;
- avoid undue adverse impacts on areas of landscape importance;
- avoid adversely affecting important archaeological sites; and
- protect historic buildings and their settings.

10.42 In most cases, mineral working will have some adverse impacts on the environment and other land uses, because of the very nature of the process of extraction, processing and distribution. It is important, therefore, that any proposals look to minimise any potential adverse impacts and prevent an unacceptable degree of harm, through careful planning and design and appropriate mitigation measures

10.43 In considering future applications, the Minister for Planning and Environment will want to guard against a proliferation of quarry sites, which would lead to oversupply, encourage wastage (by discouraging the use of secondary aggregates) and cause unnecessary environmental disturbance.

Policy MR 3

New or extended mineral workings

Proposals for the winning and working of crushed rock and sand outside permitted sites will only be granted consent where:

- 1. they are required to meet a proven need, whether this be an actual or forecast shortfall in the crushed rock or sand landbank;
- 2. there is an essential requirement for a particular type of rock or sand which would not otherwise be met from existing workings;
- 3. their impact on the environment is acceptable;
- 4. there is no unacceptable adverse impact on the amenities of the area;
- 5. it would avoid the sterilisation of resources that would otherwise occur; and
- 6. they would not result in an excessive increase in the level of permitted reserves, such that it would lead to oversupply and encourage wastage.

The preference will be to extend existing quarries. Proposals to open new ones will only be considered where the applicant can demonstrate, to the satisfaction of the Minister for Planning and Environment, that there are no alternative opportunities to extend existing sites which would meet the proven need and be more environmentally acceptable.

The Minister will require an Environmental Impact Assessment for any proposals for new or extended mineral workings and these will only be permitted where:

- 1. the proposal is in line with the Jersey Mineral Strategy (as modified) and Policy SP3 'Sequential Approach to Development';
- 2. there is a demonstrated need for the resource to be worked in terms of its geological characteristics and properties, the gross, net and saleable reserves and the market that the proposal is intended to serve;
- 3. the proposal will retain existing employment opportunities, and
- 4. there is sufficient information provided by the Environmental Impact Assessment to allow a proper assessment of the environmental effects and ensure that any significant impacts predicted can be avoided or mitigated.

Proposals which do not satisfy the above criteria will not be permitted.

Restoration, aftercare and after use

10.44 Mineral extraction represents a temporary use of land which can have a considerable impact on the environment and local amenity not only whilst the operation continues, but also after it has ceased. One of the most important ways to minimise the impact of extraction, therefore, is to ensure that suitable restoration takes place at the earliest practical opportunity following extraction. This will not only help to secure the positive enhancement of the sites in question, but will also help to make them capable of an acceptable beneficial after use when work ceases, whilst allowing future generations to inherit an asset of value.

10.45 It is essential that plans for site restoration are developed at the same time as plans for the extraction of minerals, so that the whole operation is designed with the final character and appearance of the site in mind. Accordingly, the Minister will require all applications for mineral extraction to be accompanied by a formal 'restoration and after-use scheme', which will be considered at the same time. This should detail how the restoration and aftercare of the site is to be integrated with the working operation and should demonstrate the suitability of the proposed after-use. Wherever possible, such schemes should allow for restoration to take place progressively as the mineral site is worked, to reduce the area of land disturbed at any one time and to help minimise the overall time period for working and restoration.

10.46 In some cases, it may not be appropriate or possible to provide precise restoration details at the outset, where a long-term mineral operation is involved. Where this is accepted, only the after-use and an outline of the main stages of the proposed restoration may be agreed at the planning application stage, subject to planning conditions requiring the submission and agreement of a detailed scheme at a later date.

10.47 After-uses should not and will not be used as a justification for mineral working, but it should be recognised that they offer opportunities to contribute to other plan objectives, including habitat creation, landscape restoration, agricultural land creation and provision of informal leisure and recreation facilities and education facilities.

10.48 Schemes should generally look to ensure that sites are restored to an appropriate use within a reasonable timescale and should include end dates for completion of various stages in the restoration programme. They should also look to ensure the highest standards of restoration and aftercare, so as to make a positive contribution to the character and quality of the area in question. In preparing such schemes and to inform the landscape character context, applicants should have regard to the 'Countryside Character Appraisal', produced by Land Use Consultants in 1999. There is likely to be particular support given to schemes which will enhance the long-term quality of the landscape, the land in question and wildlife. Clearly, there needs to be full commitment to achieving proposed after-uses and appropriate parties must be committed to taking on long-term responsibility for future management of the restored site, with sufficient funds available for the purpose.

Policy MR 4

Restoration, aftercare and after-use

Proposals for mineral extraction will only be permitted if they are accompanied by satisfactory detailed 'restoration and after-use schemes'. These should demonstrate that the site will be restored to a high standard and to an appropriate landform and beneficial after-use at the earliest practical opportunity.

It is anticipated that all such schemes will:

- 1. include a programme for restoration, including, where possible, progressive restoration while the mineral working continues;
- 2. provide a programme of aftercare and management for the restored land (normally for a period of five years following completion of the restoration for the particular part of the site in question);
- 3. ensure adequate provision for environmental enhancement of the site and the wider surrounding area together with public benefits where appropriate

(e.g. landscape improvements, creation of appropriate wildlife habitats, maintenance of geological features, establishment of new public access to land);

- 4. provide for suitable after-uses including agriculture, woodland, amenity use and other appropriate uses which accord with other policies in the Plan;
- 5. indicate an end date appropriate to the intended after-use; and
- 6. demonstrate that the scheme is feasible.

Where it is accepted that the submission of a precise detailed 'restoration and after-use scheme' is not appropriate at the planning application stage, the Minister may agree the proposed after-use and an outline of the main stages of the proposed restoration, subject to conditions requiring the submission and agreement of a detailed 'restoration and after-use scheme' at a later date.

Changes to approved 'restoration and after-use schemes' may be approved in association with subsequent applications to amend working and restoration proposals, to accommodate originally unforeseen circumstances, provided they continue to allow for the satisfactory restoration of the site at the earliest practical opportunity.

The Minister will seek to ensure the enhancements and benefits of 'restoration and after-use schemes', by means of conditions attached to planning permissions, or through planning obligations.

Use of planning conditions on mineral workings

10.49 When new planning permissions are granted (or when existing permissions are reviewed), conditions will be imposed to adequately control the possible impacts of the operation, minimise disturbance to the environment and ensure satisfactory restoration, aftercare and after-use of the site.

10.50 There will be a comprehensive set of conditions attached to permits covering a wide range of matters, including those relating to:

- working and related operations;
- access and highway safety;
- local amenity protection;
- environmental protection; and
- restoration and after-use.

Policy MR 5

Use of planning conditions on mineral workings

When granting planning permission for mineral working and related operations, the Minister for Planning and Environment will impose appropriate planning conditions relating to the operation, restoration, aftercare and after-use of the site. These conditions will be designed in particular to address the following considerations, where appropriate:

Working and related operations

- controlling the time scale of operations;
- carrying out the development in accordance with an approved method and phasing of work;
- controlling the hours of working and maintenance (i.e. normally limiting these to exclude Sundays, public holidays and unsociable hours);
- the siting, design and appearance of the buildings;
- the arrangements for site drainage and fencing;
- ensuring good practice when stripping, handling and storing soils;
- ensuring the satisfactory disposal of mineral waste that cannot be used as secondary aggregate;
- the arrangement for landscaping and screening the site;
- imposing a limit on maximum annual output where justified by market and/or environmental considerations.

Access and highway safety

- ensuring satisfactory access to the site;
- ensuring road safety;
- ensuring vehicular management;
- protecting existing and proposed public rights of way;
- preventing transference of mud and dirt onto surrounding roads.

Local amenity protection

- measures to minimise the effects of dust, noise, vibration and land contamination, including buffer zones;
- controlling the visual impact of development;
- measures to avoid damage in the form of subsidence or landslips, and to protect surface development from the effects of land instability.

Environmental protection

10 Mineral Resources

- protecting/enhancing/recording any features of particular archaeological remains and other historic assets;
- protecting water resources, water supply and land drainage (taking into account de-watering effects on adjacent land);
- retention, protection and enhancement of trees, woodlands, hedgerows and other landscape features;
- protecting sites of special scientific interest, other features of nature conservation and geological value, and protecting species.

Restoration and after use

• ensuring progressive restoration of the site to an acceptable after-use, including aftercare, in accordance with a detailed 'restoration and after use-scheme'.

Use of legal agreements for mineral workings

10.51 To further ensure that mineral operations are managed to a high standard during extraction and restoration, it may be necessary for the Minister for Planning and Environment to enter into a legal agreement with the mineral operator, and sometimes other parties, negotiated in the context of granting planning permission. Planning obligations may cover restrictions on working requirements, or mitigation measures that lie outside the normal scope of planning conditions. Such legal agreements can provide a means to enable the proposed development to proceed, whilst meeting the needs of local residents. For example, legal agreements may be used to confirm arrangements for the routing of traffic to and from the site to avoid adverse impact upon residential amenity and highway safety. They may also secure cash or in-kind contributions from the developer towards the provision of infrastructure and services.

10.52 The Minister for Planning and Environment supports the use of negotiated planning obligations covering, where appropriate, matters such as:

- the provision and improvement of access to the transport network;
- the introduction of vehicle weight restrictions on specific roads, as appropriate;
- the provision of long-term site management after restoration;
- the protection of local amenity;
- the protection, replacement and enhancement of environmental features and natural resources; and
- the replacement and enhancement of local community facilities and services (e.g. improved open space and leisure and recreation facilities).

10.53 In some circumstances, it may be acceptable for mineral operators to provide a "unilateral undertaking" without the need for the Minister or other parties to be involved.

Policy MR 6

Use of legal agreements for mineral workings

Before determining applications for new or extended mineral workings, the Minister for Planning and Environment may seek to enter into a legal agreement/s with the mineral operator (and sometimes other parties), through Article 25 of the Planning and Building(Jersey) Law 2002. Under such agreements, the Minister will seek to secure restrictions or measures in connection with the working of minerals and site restoration, where they are regarded as essential for the proper planning of the area and cannot be achieved by the use of planning conditions.

New off-loading facilities for imported aggregates

10.54 Aggregate imports to the Island have only been minimal in recent years and there are currently no dedicated handling or storage facilities for aggregates within the harbour. As alluded to earlier, Ronez Ltd imports small quantities of sand, not exceeding 2,000 tonnes per annum and this is presently handled by St. Helier Port Services. Other aggregate imports include fill / beach replenishment / rock armour, which are imported directly to site and a small amount of stone, in block form, for La Saline Quarry.

10.55 In 2000, the former Harbours and Airport Committee prepared a Harbours Master plan, which considered the feasibility of developing sand and aggregate importation facilities at St. Helier Harbour. In light of the findings of that Master plan, the Jersey Minerals Strategy 2000-2020 recommended the creation of a new berth and handling area at St. Helier Harbour to import all the Island's future sand requirements and a large proportion of its future aggregate requirements. As a consequence, a site was safeguarded in the 2002 Island Plan for an aggregate importing facility at St. Helier Harbour / La Collette.

10.56 When the Simon Sand and Gravel Ltd extraction operation closes in 2018, sand for the construction industry will need to be imported. This, in itself, would be sufficient to require the creation of a suitable importation facility, given the current average quarry output of around 76,000 tonnes per year (fluctuating to a high of 89,000 tonnes per year), the frequency of vessels required for importation (i.e. small 2,000 tonne ships) and the volume of lorries required to collect and distribute the sand. However, it is not clear exactly how much sand will actually need to be imported in future. In response to the economies of importation and

the potentially prohibitive costs involved, it is likely that the two rock quarry operators would invest in dust washing technology and make more use of secondary aggregates (i.e. rock dust and fines) in concrete manufacture as an alternative to natural sand, so reducing the volume of sand imports required.

The area safeguarded for an importing facility in the 2002 Island Plan 10.57 relied on the creation of a separate wharf and adequate storage yard facilities, sufficient to handle total imports of around 200,000 tonnes of aggregates per year. In addition to sand imports, it was then intended to cater for 135,000 tonnes per year of crushed rock aggregates when consented reserves at La Gigoulande were exhausted (then thought to be anywhere between 2013 and 2020). The size of the safeguarded area was determined by a feasibility study carried out by WSP International Ltd. in 2000 as part of the 20 Year Port Masterplan study. It is clear now that the extent and nature of the facility needs to be reviewed, given: the recently extended life expectancy of La Gigoulande Quarry; the new strategic approach to mineral planning, which looks to maximise opportunities for local production of crushed rock aggregate; the possibility that planning permission will be forthcoming for the working of additional crushed rock resources at La Gigoulande and Ronez; and the proposal to produce a comprehensive plan for the 'La Collette and the Port Regeneration Zone'. Ultimately, Jersey Harbours will have responsibility for making adequate provision for sand importation as part of emerging plans for the development of the port.

10.58 It is accepted that a new importing facility will have implications for traffic to and from La Collette II, but these would be minimised if it is reduced in size to cater principally for sand imports.

10.59 The States debate on the original draft Mineral Strategy was deferred pending the completion of a traffic modelling exercise to address the traffic implications of the facility and other planned developments at La Collette and generally in the St. Helier Waterfront Area. This was undertaken by Parsons Brinckerhof who reported in November 2002. The report identified that the proposed developments at the Waterfront would lead to considerably increased congestion during the morning peak period and identified that office developments would produce the highest number of trips. Unfortunately, it is difficult to guage the effects of the proposed importing facility from this traffic modelling exercise. However, importing some 200,000 tonnes of aggregates per year through La Collette (as originally envisaged) would produce the equivalent of 20 truck movements per hour, which is low in terms of the existing traffic using Commercial Buildings and almost insignificant in a traffic model. Furthermore, there would be significant reductions in overall traffic volume if the importation of aggregate were to be programmed to commence after waste tipping ends at La Collette.

10.60 If the facility is restricted to sand imports of say 70,000 tonnes per year, as alluded to above, it would only generate 14,000 x 10 tonne lorry movements to and from the harbour. This is the equivalent of 56 vehicle movements per working day (@250 working days per year), or 7 vehicle movements per hour on each working day.

Policy MR 7

New off-loading facilities for imported aggregates

The Minister for Planning and Environment will support the provision of adequate aggregate importing facilities (principally for sand imports) at St. Helier Harbour and will seek to ensure, in consultation with Jersey Harbours, that the facilities are provided at the earliest opportunity, prior to the anticipated cessation of sand extraction at Simon Sand and Gravel Ltd.

Detailed proposals for the facilities may include an Environmental Impact Assessment, where considered appropriate, to ensure the environmental risks are thoroughly assessed and potential adverse effects are satisfactorily mitigated.

Proposals will only be permitted where it is demonstrated that they;

- 1. Will not have an unreasonable impact on neighbouring uses, the local environment and human health, by reason of: noise, vibration, dust, odour or other emissions/pollution;
- 2. Will not have an unacceptable visual impact;
- 3. Will not lead to unacceptable problems of traffic generation (land and sea);
- 4. Will include an acceptable programme of site management for the duration of the life of the facility
- 5. Will not have an unreasonable impact on the quality of sea water and marine or terrestrial habitats, including the South-East Coast Ramsar; and
- 6. Will satisfactorily address and mitigate all the potential adverse effects identified in the Environmental Impact Assessment process.

New off-loading facilities for aggregates outside the St. Helier Harbour Operational Area will not be permitted, unless a need can be satisfactorily demonstrated.