



# **SOCIAL & ECONOMIC IMPACT ASSESSMENT**

**Bass Point Quarry  
Lot 22 DP 1010797  
Bass Point**

**PREPARED FOR: HANSON CONSTRUCTION MATERIALS PTY LTD**

**DECEMBER 2009**

REF: 09091

**SOCIAL & ECONOMIC IMPACT ASSESSMENT  
HANSON CONSTRUCTION MATERIALS PTY LTD****LOT 22 DP 1010797  
BASS POINT**

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## EXECUTIVE SUMMARY

Insite Social and Economic Planning (Insite) has been engaged by Hanson to prepare a Social and Economic Impact Assessment (SEIA) for the proposed extension of their quarry, located in Bass Point. The SEIA has been prepared as a result of, and in accordance with, the Director General's comments relating to the Part 3A assessment process.

It is found that the proposed extension of the Bass Point quarry represents an opportunity to supply, and contribute to the forecast shortfall, of a significant resource for the construction industry. The expansion of the existing quarry is a preferred scenario when compared to the development of a quarry in a Greenfield site. The strategic benefits are summarised as follows;

1. It is an existing quarry and has been operating for many years.
2. The existing site is significantly disturbed.
3. The resource extracted from Bass Point is high quality.
4. There are limited resources of this quality readily available / accessible to the Sydney region.
5. The expansion of the existing quarry is significantly more cost efficient and favourable than establishing a new quarry in a greenfield site (better for the community, ecology etc).
6. Transport infrastructure is well established (by both road and sea).
7. High quality community and residential development (Shell Cove) is occurring in close proximity to the quarry therefore social and economic impacts are well known and negative impacts have been mitigated.

With the above in mind, the proposed redevelopment is not in conflict with the strategic planning documents relating to the area and the ongoing operation of the quarry is of key economic importance to the construction sector.

In the assessment of this SEIA it is determined that the impact on the neighbouring residential area is not deemed to be significant given the ongoing development of Shell Cove and the awareness and understanding of the quarry's operation by neighbouring residents. In support of this, is the strength of existing residential sales and the lack of complaints over the period of 10 years. The social impacts can be managed and specific strategies relating to visual, noise, dust, natural resource management etc will be detailed in the specific reports relating to these matters.

This is not to say that there will be no opposition to the proposed extension. Some residents will want to see an end date to the quarry which is closer than the potential 34 to 54 years of forecast life.

The impacts on the broader community (users of the Bass Point Reserve and Killalea State Reserve) need to be monitored. Many visitors to the area are not impacted upon by the quarry and any potential issues will be addressed as long as there are no noise, dust and visual impacts.

A relationship with the Aboriginal community needs to be established given their connection to the Bass Point area. This is regardless of whether the area has been significantly disturbed. The existence of the middens and other artefacts is not to be used as an indicator of cultural value, significance of connection. The outcome of this relationship would be determined by Hanson and the Aboriginal community.

In the assessment of the social and economic impacts of the Bass Point quarry, it is determined that the proposed expansion will have a significant net community benefit.

These benefits are:

1. It is an existing site therefore reducing further environmental impacts
2. Its operational activities (transport, hours of operation etc) are established.
3. It utilises sea access, therefore minimising the impact on residents
4. Complaints for the past 10 years are very few given the scope of the quarry's operation
5. The supply of the raw material will significantly contribute to the demand of the resource.
6. The economic and employment multiplier effects to the construction industry are significant.

The final land use would be the most significant impact relating to the proposed expansion of the quarry. To date no end use has been determined.



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# 1. INTRODUCTION - SOCIAL IMPACT ASSESSMENT

Insite Social and Economic Planning (Insite) has been engaged by Hanson to prepare a Social and Economic Impact Assessment (SEIA) for the proposed extension of their quarry, located in Bass Point. The SEIA has been prepared as a result of, and in accordance with, the Director Generals comments relating to the Part 3A assessment process.









A SEIA is required for development matters which are identified to bring about changes to a particular locality where the development will occur. Shellharbour City Council has no policy on the undertaking of a SEIA so principle documents guiding the process are the Draft Economic Evaluation in Environmental Impact Assessment (Dept of Planning) and Techniques for Effective Social Impact Assessment: A Practical Guide (Office of Social Policy, NSW Government Social Policy Directorate).

## 1.1 Social Impact Assessment - Definition

A SEIA is defined as an analysis of the likely effects that a change will have on the social fabric of a community. The process of a SEIA is to systematically investigate how people and communities are affected and to assist determine the scale of change, if any, within the community. These changes may be both positive and negative. For example:-

-  The desirable and undesirable impacts.
-  The intentional and unintentional impacts.
-  The distributional impacts (impacts experienced by different people and different parts of the community).




To fully understand the SEIA of the proposed development an assessment of the following will be undertaken;

-  Population characteristics.
-  The community's structure, character and beliefs.
-  Health.
-  Safety.
-  Social cohesion.
-  Income levels, cost of living, housing prices.
-  Sense of place and community.
-  Other identified contributing factors.







## 1.2 Director Generals Requirements

The Director Generals requirements for a social and economic impact assessment states that the assessment is to identify and address social and economic impacts arising from the proposal and establish appropriate measures that mitigate any negative impacts. In this regard community consultation should be undertaken and the issues/concerns raised need to be addressed.

This report is consistent with the;

-  Draft Economic Evaluation in Environmental Impact Assessment (Dept of Planning) and
-  Techniques for Effective Social Impact Assessment: A Practical Guide (Office of Social Policy, NSW Government Social Policy Directorate).
-  Guidelines for Major Project Community Consultation: Department of Planning 2007. The Departments guidelines stress the importance of community consultation to provide an opportunity to obtain the stakeholders views in the assessment and decision making process.















Generally the SEIA should include:

-  A community social profile.
-  The identification of the scope of the assessment (otherwise known as scoping).
-  The formulation and examination of alternatives.
-  The protection and estimation of identified impacts.
-  The identification of proposed mitigation methods.
-  If negative impacts have been identified through the site analysis, the application will need to outline the amelioration measures to be undertaken.

### 1.3 Consultation
















The SEIA has been undertaken in a consultative manner. In the preparation of this report consultations have been undertaken with the following;

**Table 1: Consultation List**

| Person / Organisation   | Purpose  |
|---|--|
| Shellharbour City Council<br>Strategic Land Use Manager<br>Development Assessment Manager<br>Community Services Manager<br>Aboriginal Project Officer |  To identify if Council's stake in this process.<br> To identify what past reports and studies have been undertaken.<br> To identify if policies exist for the undertaking of a SEIA.<br> To identify if any complaints/concerns had been raised as to the operation of the quarry.<br> To understand the cultural history of the site. |
| Australands / Shellharbour City Council   |  To understand the scope of the Shell Cove development including the final master plan for the marina development.  |
| Hanson's (Quarry Manager)   |  To obtain detailed understanding of the sites operations.<br> To review key documentation such as complaints register.  |
| Killalea State Reserve  |  To provide an overview of the proposed development.<br> Submit documentation for the Boards consideration.<br> Seek feedback regarding the proposed development.   |
| Illawarra Aboriginal Lands Council  |  To provide an overview of the proposed development.<br> To gain an awareness of the history of the area.<br> To understand potential outcomes that need to be explored.  |

## 1.4 Authors Qualifications

This SEIA has been prepared by James Marshall, Senior Planner at Insite Economic and Social Planning (Insite). Insite is a multi disciplinary consulting firm providing specialist assistance to the development industry and public sector in the areas of community consultation, mediation, social planning, economic planning, strategic planning, recreation planning, asset management and project management. IESP's experience includes:

-  Community Consultation and Engagement
-  Social Impact Assessments
-  Economic Impact Assessments
-  Recreation Strategic Planning
-  Social & Community Strategic Planning
-  Safer By Design Reviews
-  Feasibility Studies and Needs Analysis
-  Demographic Analysis and Population Projections
-  Mediation and Conflict Resolution
-  Cemetery Strategic Plans
-  Open Space Analysis
-  Strategic Land Use Planning
-  Asset Management Planning
-  Corporate Planning
-  Management Reviews

James Marshall has over fifteen years experience in the community development and social planning sector. He has held a number of senior management roles in both the welfare sector and in local government. His focus is on social research methodologies, community consultation practices and both demographic analysis and social mapping. James holds graduate qualifications in the social sciences as well as post-graduate qualifications in business management. James has prepared a number of Social Plans, social impact assessments and provided expert advice in the Land and Environment Court.

-  Bachelor of Social Science (Community Development)
-  Advanced Diploma in Business Management

## 1.5 Report Structure

As a means to ensure that the Director General's requirements are adequately addressed the format of the report has been structured to be clear and concise as follows:







- Section 1: Scope of Project
- Section 2: The Development
- Section 3: Strategic Planning
- Section 4: Economic Analysis
- Section 5: Social Analysis
- Section 6: Conclusions and Recommendations



## 2. THE DEVELOPMENT

### 2.1 Existing Operations

The proposed development is for the following:

-  The site is known as the Hanson's Bass Point Basalt (Hard Rock) Quarry and is situated on Lot 22 DP 1010797. The site has an area of approximately 257 hectares. It is within the Shellharbour Local Government Area and located just south of the Shellharbour Village.
-  The land has been used for the purposes of quarrying since circa 1880 and this use continued up until the 1930's. The site was abandoned and used after that period for a munitions depot/storage. Quarrying was re-established in the post war era.
-  A series of applications has been lodged since World War II to continue the extraction of Basalt, including application for various components from the mid 1960's until relatively recently.
-  Hanson is the land owner of the Bass Point quarry and has operated the quarry for over 30 years.
-  At the current time the quarry has consent for the removal of Basalt down to 0 metres AHD. The material is extracted via blasting, is processed on the site and transported via ship and road for use primarily in concrete batching plants for construction purposes.
-  Its current operational life (depending on the rate of extraction which is determined by demand) is approximately 18 years. The proposed extension will increase its operational life from anywhere between 35 – 55 years (approximate).

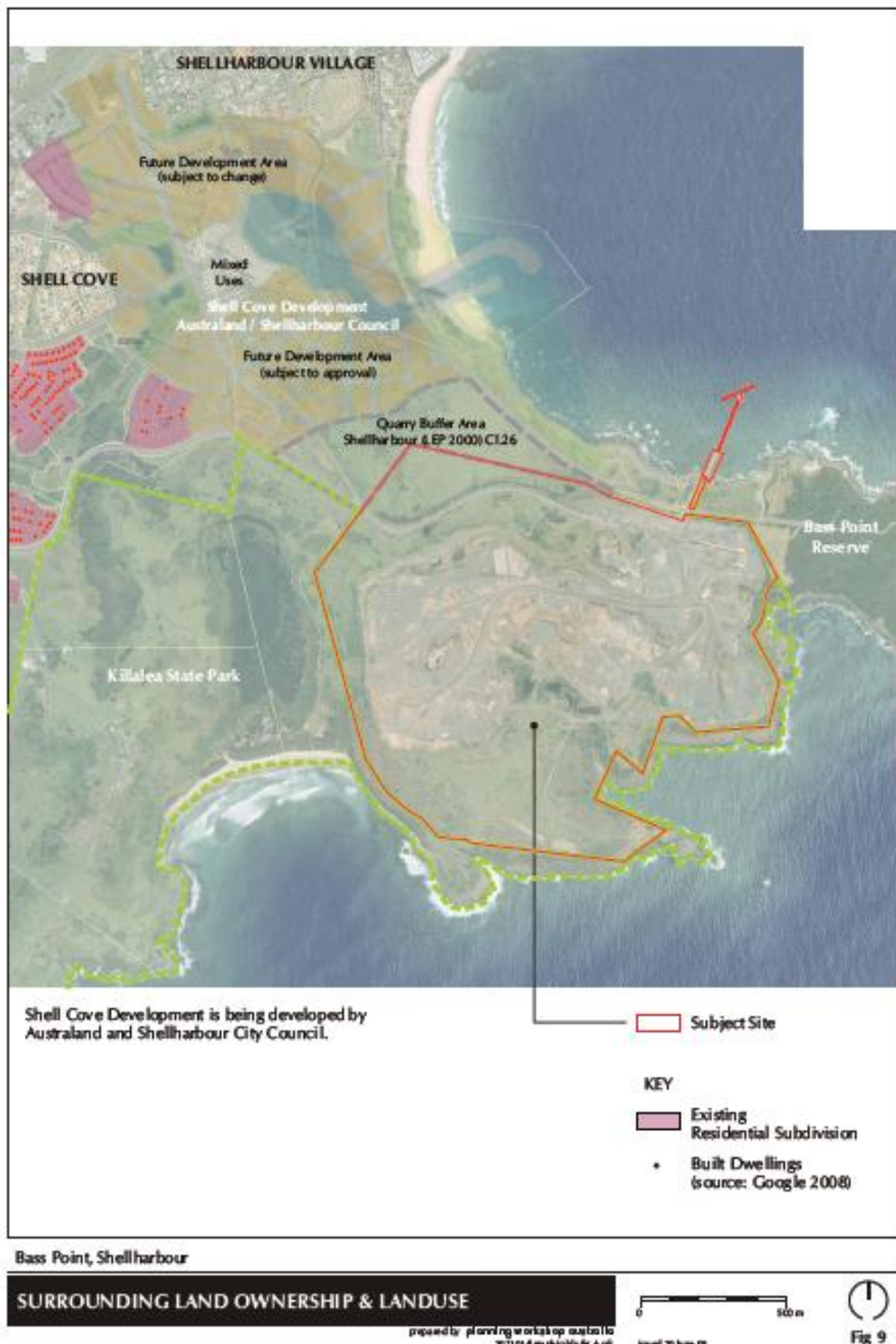





Figure 1: Bass Point Quarry showing surrounding land uses.

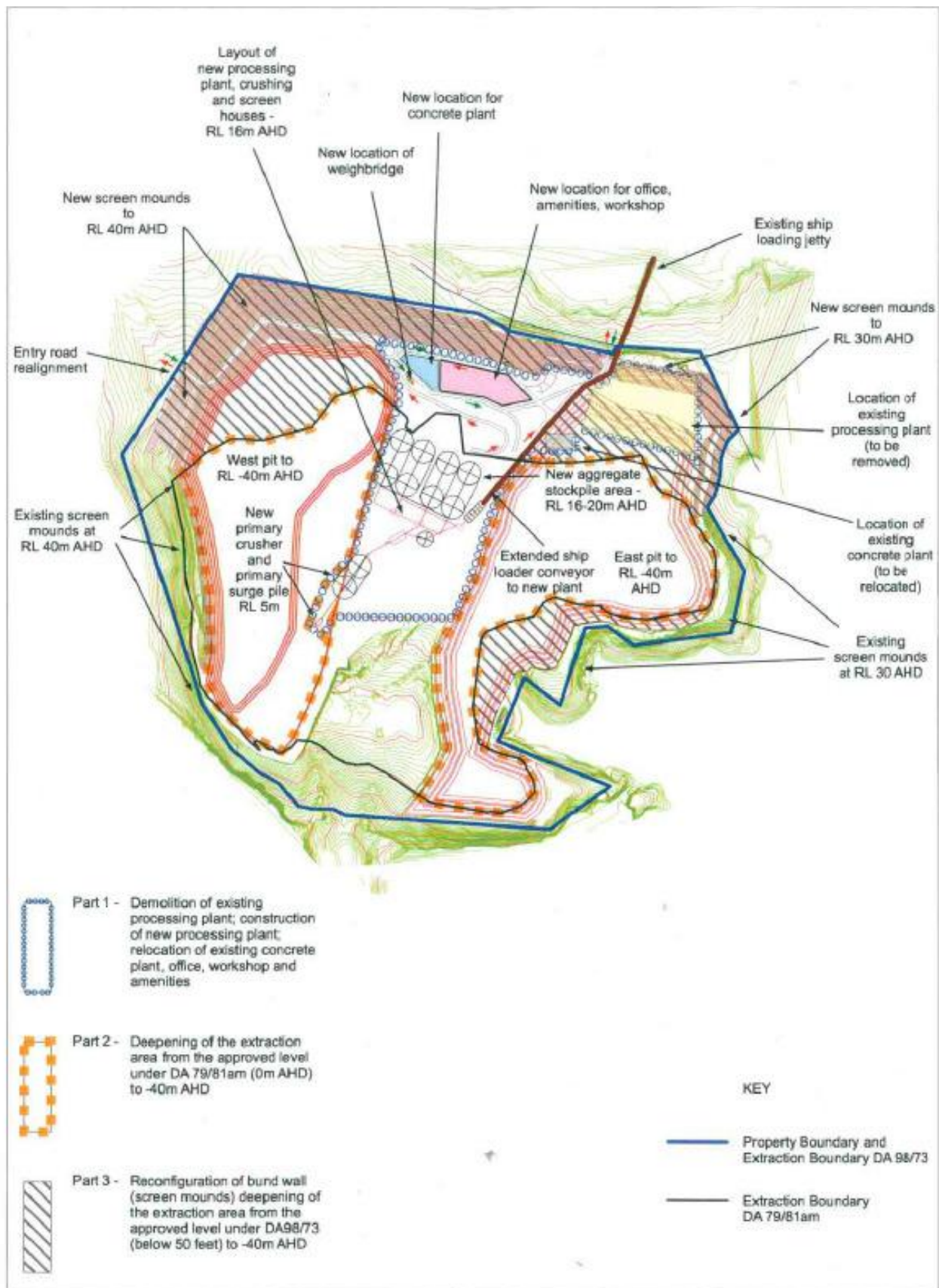
## 2.2 Proposed Redevelopment

The proposal aims to extend the life of the existing hard rock extraction and processing operations by seeking approval as follows:

-  **Part 1 - - New Processing Plant & Decommission Old Processing Plant & Facilities**  
Construction of new processing plant centrally on the site to provide the site with more 'up-to-date' processing equipment and allow decommissioning of the existing, older processing plant and site facilities.
-  **Part 2 - Additional Depth for Current Extraction Area**  
The proposed development aims to permit the extraction of additional resource from the quarry. This will be achieved, in part, by increasing the approved extraction depth from the currently approved (approx 0 metres AHD) to around -40 metres AHD; and
-  **Part 3 - Reconfiguration of Bund Walls and Additional Extraction Area**  
Reconfiguration of the bund wall (screen mounds) previously approved Shellharbour City Council (Development Application Ref D947/2002) and extraction down to approx -40 metres AHD.

The production rate of the quarry, assuming it is approved will be between 2.4 and 4 million tonnes per annum. The maximum life of the resource will be 54 years (based on current extraction rates) but may reduce to 34 years if sales volumes meet forecast and extraction rates increase.

A plan of the proposed redevelopment is shown in **Figure 2**.



Bass Point Quarry, Shellharbour

## Plan View of Proposed Project - Bass Point Quarry, Bass Point

prepared by planning workshop australia  
2071014@pwa.com.au

0 500 m

Issued 21 May 08



Fig 1

**Figure 2: Proposed Re-development of Bass Point Quarry**










### 3. STRATEGIC ASSESSMENT

The proposed extension of the Bass Point quarry is primarily based on the identified shortage of raw construction materials. A range of strategic plans and assessments impact on the proposed redevelopment of Bass Point Quarry including:

- I. Supply and Demand for Construction Materials
- II. Illawarra Regional Strategy
- III. Employment Lands Guidelines for The Illawarra
- IV. Illawarra Regional Environment Plan No. 1
- V. Shellharbour City Council Strategic Plan

#### 3.1 *Supply and Demand for Construction Materials*

A review of the supply and demand basis for construction materials has identified the following key points.

-  The construction industry in the Sydney region consumes around 7 million tonnes of fine aggregate, 12 million tonnes of coarse aggregate and 2-2.5 million tonnes of structural clay/shale per year. Basalt from Bass Point is classified as coarse aggregate and is used predominantly as a raw material for construction purposes (eg concrete).
-  There will be a major change in the market shortly after 2010, when both Penrith Lakes and Prospect Hill are predicted to cease operations. Unless new deposits are developed the region will face a greatly increased supply shortfall which will only be made up by increasing imports from further afield.
-  Further to the above point, there will be closure of several major sand and gravel quarries within the next 10-13 years (from 2006) which will result in a significant short-fall in the raw materials required for the construction industry.
-  A large amount of supply will be required to come from outside of the Sydney region and large resources of coarse aggregate have been identified in the areas surrounding the Sydney planning region. The deposits at Shellharbour/Kiama, Wingecarribee Shire and near Lithgow have the potential to supply a large proportion if not all of the predicted shortfall after 2010.
-  By 2031 it is determined that there may be shortfalls of around 5 million tonnes of coarse aggregate, 7 million tonnes of fine aggregate and 1.7 million tonnes of clay/shale in identified quarries with consent.
-  Shortfalls will need to be met by expanding/extending the life of existing quarries, finding new quarry sites and supplementing this demand from quarries outside of the Sydney region. Many resources are supplied from the Illawarra, Hunter, Southern Highlands and Central West regions.
-  Transportation of materials will need to be considered given that there will be an increased demand and over longer distances.

*Source: Data derived from Geological Survey of NSW Department of Mineral Resources Supply and Demand for Course Aggregate in the Sydney Planning Region (J.T. Pienmunne, 2001); and Supply and Transport of Construction Materials For The Sydney Region to 2031: (GEOS Mining For Dept of Planning NSW October 2006).*

As a raw material, Basalt is a significant resource. These factors (and others) are key reasons for Hanson Construction Materials to seek to extend the operational life of the Bass Point Quarry.

### 3.2 Illawarra Regional Strategy

The Illawarra Regional Strategy provides a principle guiding framework for the future of the area. Carriage of its implementation is primarily via Local Government which would set out a range of key objectives and targets to meet the intention of the Strategy. This would be in the form of the LEP, Strategic Plan, Management Plan and various operational plans. The Illawarra Regional Strategy does not give specific detail regarding extractive industries however does state that one of its objectives is to limit development in places constrained by coastal processes, flooding and wetlands, or which are important primary industry resources or significant scenic/cultural landscape. Basalt is deemed to be an important primary industry resource.

### 3.3 Employment Lands Guidelines for The Illawarra (February 2008)

The Employment Land Guidelines for The Illawarra relates to the guiding principles for the establishment, management and monitoring of employment lands in the Illawarra. The specific reference to extractive industries is found in section 2.4 Guiding Principles for Agriculture and Rural Lands (p7). With reference to the Bass Point Quarry, the continued operation of the site protects the resource lands, protects surrounding lands as no further expansion is possible, avoids further fragmentation of resource land, no further expansion outside of its boundaries is possible therefore existing natural landscape and residential lands are not impacted upon and minimises conflict with surrounding land uses. All of the points outlined here meet the guiding principles under this section.

### 3.4 Illawarra Regional Environmental Plan No. 1

Part 3 of Illawarra REP No 1 relates to provisions relating to extractive materials. Clause 32 provides the objectives relating to extractive materials and they are;

- ☞ To manage the extractive resources of the region in a coordinated manner so as to meet community needs while ensuring that adverse impact on the environment and community is minimal.
- ☞ To ensure that development proposals for land containing extractive resources are assessed in relation to the potential problem of rendering those resources unavailable.
- ☞ To ensure that the transportation of extractive materials has a minimal adverse impact on the community and that the transport of large volumes of extractive materials shall by-pass urban areas where possible.

### 3.5 Shellharbour City Council – Strategic Plan

Given Council's role in implementing the Strategy, a review of its Strategic Plan has found that its primary vision is to achieve a sustainable city. Its vision states that Council is committed to achieving;

***A sustainable city: communities living in harmony, balancing nature's beauty with quality rural and urban environments.***

In meeting its vision, Council's focus on strategic town planning is to;

- ☞ Implement the findings and recommendations of the State Government's Illawarra Regional Strategy
- ☞ Prepare a new comprehensive Local Environmental Plan (LEP) for the entire Local Government Area using the State Government's Model LEP template
- ☞ Review and consolidate all Development Control Plans (DCP), policies and guidelines to assess content against current Best Practice with a view to having only one DCP applying to a parcel of land
- ☞ Review the retail/commercial centres hierarchy and analyse strengths and weaknesses of centres accounting for contemporary retail trends and other influences
- ☞ Review the open space, recreational and community facility needs for both current and future residents of the city
- ☞ Prepare and implement a strategy for the provision of appropriate housing to meet the needs of existing and future residents of the city

- Process any draft LEP amendments where considered appropriate, provided that State Government approval is obtained
- Prepare a major heritage study for the LGA and incorporate findings into the Comprehensive LEP to help ensure the protection of important heritage items/places
- Assist the NSW Department of Planning in the review of land suitable for the extraction of State Significant Mineral Resources
- Undertake a major review of Council's Section 94 Contributions and Works in Kind Plans
- Prepare a new comprehensive Community Infrastructure Plan in accordance with State Government Legislation
- Assist in the planning and delivery of capital works identified in the Community Infrastructure Plan.

With regard to Bass Point Reserve, Council's principle activities will be:

To actively manage and implement improvements at Bass Point Reserve in an ecologically and financially sustainable manner. This will entail the continued implementation the current plan of management for the operation and improvement of Bass Point Reserve and review as required.

### **3.6 Comment – Strategic Assessment**

The Illawarra Regional Strategy, Employment Lands Guidelines for The Illawarra, Illawarra REP and Shellharbour City Council's strategic planning documents are not in conflict with the proposal to extend the operational life of the Bass Point quarry. It is noted that the quarry is located within a significant scenic landscape; is within an area of high Indigenous cultural value; is located in a coastal area, adjacent to coastal wetlands. With this in mind, it is clear that the continued operation of the quarry must preserve the surrounding land uses and cultural and environmental value.

Extractive industries are part of the scenic and cultural landscape of the Illawarra and in particular the Shellharbour and Kiama areas. Strategically, the redevelopment of the quarry makes sense given that it will sure up the supply of coarse aggregate for up to 50 years. It is an existing site which has established transport links (road and rail) and impacts relating to dust, noise and visual will be improved if the redevelopment is approved. In summary, the benefits of the proposed redevelopment of the quarry include;

1. It is an existing quarry and has been operating for many years.
2. The resource extracted from Bass Point is high quality making it available resource for construction materials.
3. There are limited resources of this quality readily available/ accessible to the Sydney region.
4. The expansion of the existing quarry is significantly more cost efficient.
5. The expansion of the existing quarry is more palatable than a new quarry in a greenfield site (better for the community, ecology etc).
6. Transport infrastructure is well established (by both road and sea).

## 4. ECONOMIC BASIS

As identified within the Geological Survey of NSW Department of Mineral Resources Supply and Demand for Course Aggregate in the Sydney Planning Region (J.T. Pienmunne, 2001) and Supply; and Transport of Construction Materials For The Sydney Region to 2031: (GEOS Mining For Dept of Planning NSW October 2006), Basalt is a significant raw resource that is essential for the construction industry.

### 4.1 Supply

Its current operational life (is approximately 18 years) and the proposed extension will increase its operational life from anywhere between 35 – 55 years depending on the rate of extraction which is determined by demand and fluctuations within the market.

The rationale for the extension of the existing quarry is the preferred option given that;

1. It is an existing quarry and has been operating for many years.
2. The existing site is significantly disturbed.
3. The resource extracted from Bass Point is high quality.
4. There are limited resources of this quality readily available / accessible to the Sydney region.
5. The expansion of the existing quarry is significantly more cost efficient and favourable than establishing a new quarry in a greenfield site (better for the community, ecology etc).
6. Transport infrastructure is well established (by both road and sea).
7. High quality community and residential development (Shell Cove) is occurring in close proximity to the quarry therefore social and economic impacts are well known and negative impacts have been mitigated.

The demand for and supply of the hard rock quarry resource is directly related to infrastructure and urban development projects (construction based). Some of these projects are defined by government land use and infrastructure strategies, statutes and projects.

The net supply of the raw material is accounts for 68% internal sales and 28% external sales. This supply scenario has been assumed for the projected operating period should the quarry be approved. The internal sales spread ranges from Milton Ulladulla in the south through to Sydney in the north. Of these internal sales half will go to Blackwattle Bay via Hanson's operated ship the Claudia for distribution throughout the inner Sydney area.

Hanson's major external customers are:

**Table 2. Major External Customers Bass Point Quarry**

| Customer                | Supply Area   |
|-------------------------|---|
| Nace Civil.             | Asphalt, concrete, civil works throughout the Greater Sydney metro area                                 |
| Landscape suppliers -   | Supply to various industries throughout the Illawarra through to the southern and western Sydney metro. |
| Various councils        | Including Shellharbour, Kiama, Southern Highlands and Southern and western Sydney.                      |
| Pioneer road services - | Asphalt company throughout the Sydney metro area  |
| Large project works     | For various clients and used for projects such as the M7 construction.                                  |



## 4.2 Employment

There are approximately 71 persons employed in the following activities related to Bass Point Quarry;

**Table 3. Employment Profile – Bass Point Quarry**

| Activity   | Employees  |
|--|------------|
| Quarry   | 41 persons |
| Tipper Drivers and permanent contractors         | 13 persons |
| Concrete   | 8 persons  |
| Lab  | 3 persons  |
| Office   | 6 persons  |
| Other contractors are engaged from time to time. |            |

The proposed expansion of the Bass Point Quarry will not necessarily increase the workforce required for the quarry however this will be reviewed and be dependent on extraction rates.

Given the use of Basalt as a raw construction material, the multiplier effects for the Bass Point quarry can be estimated using the Australian National Accounts Input – Output Tables (ABS, Cat. No. 5209.0). The input-output model suggests that one direct job year is created in the construction industry per \$160,000 of construction investment. So, for each \$100 million of construction investment the development has the potential to create approximately 625 job years over the construction period. In addition to direct employment ABS National Accounts Data indicates that a multiplier of 2.6 applies to direct construction employment. The following table provides an assessment based on a number of potential investment scenarios.

**Table 4: Potential Employment Multiplier based on construction investment scenarios.**









| Capital cost of development | Employment Multiplier                                 |   |
|-----------------------------|---|---|
|                             | Direct Job Years created over the construction period | Potential jobs created in the wider economy |
| \$100 million               | 625   | 1000  |
| \$200 million               | 1250  | 2000  |
| \$300 million               | 1875  | 3000  |
| \$400 million               | 2,500   | 4000  |
| \$500 million               | 3125  | 5000  |

Given that Bass Point Quarry supplies material primarily to the construction industry the investment and employment multiplier is significant.






## 5. SOCIAL IMPACT ASSESSMENT

As previously noted, the purpose of the social impact assessment is to identify the impacts (both positive and negative) resulting from the proposed development. The strategic analysis undertaken provides an overarching view of the proposal to identify if the proposal is in conflict, or consistent with, key documents and policies.

With this in mind, given the location and utilisation of the area, the SEIA must focus on the impact of the immediate neighbour character and the character and value of the area to the broader community. This is undertaken via specific consultations with local residents, land use surveys and review of other secondary data. The specific analysis relates to the following areas:

-  Population changes and characteristics.
-  The community structure, character and beliefs.
-  Health.
-  Safety.
-  Social cohesion.
-  Income levels, cost of living, housing prices.
-  Sense of place and community.
-  Other identified contributing factors.

In making an assessment of the area of affectation for the social and economic impact assessment the following considerations have been made;

-  Scope and nature of the proposed development.
-  Who is likely to be interested in the matter.
-  Whose involvement is likely to be important to this matter.
-  Statutory notification/consultation requirements associated with the proposal.
-  Who is likely to be directly affected by the project (areas of affectation may be by geographic or issue basis).

The operation of extractive industries is often a contentious issue regardless of whether or not they have been operating for a period of time. In the context of the Bass Point quarry, the main issue identified is that residents may be concerned at the extended life of the quarry. I.e, new residents moving into Shell Cove area was on the initial understanding that the quarry would cease its operations in 15 – 18 years. Notwithstanding this, land sales at Shell Cove have been strong and new developments for eco tourist facilities in the adjacent Killalea State Park have been submitted. From a residential and tourist point of view, the operation of the quarry has not had an impact on these two matters.

Bass Point also has other values of significance given its connections with the Indigenous community, the use of the area as a recreation reserve, its value to marine ecology etc. With this in mind, it is important to note the social and economic impact and the identified primary area of affectation may not be restricted to those residents within the immediate vicinity. The primary area of affectation may also include those other users of the site who identify a strong connection with the area.

On the initial scoping assessment of the proposed extension of the Bass Point quarry a number of potential social and economic impacts have been identified. These are listed below and each of the areas are explored throughout the SEIA.

- ☞ Bass Point Reserve and Killalea State Park neighbour the property and both areas represent high value to visitors to the area as well as the Indigenous community.
- ☞ There is a residential subdivision (including proposed marina) nearby (Shell Cove). The development has performed well with strong demand and high median sales prices for both residential dwellings and strata units. Notification of the quarry is made to potential purchases and forms part of the contract of sale.
- ☞ There is a proposed redevelopment of the neighbouring Killalea State Reserve into an eco tourist facility.
- ☞ The visual impact of the quarry will be improved given that much of the plant and equipment will be relocated and placed lower (deeper) than it currently is.
- ☞ The effects of noise and dust on the surrounding area will be reduced as the quarry becomes deeper.
- ☞ The expansion of the eastern pit of the quarry may have a visual impact to the south and south east. Visual impacts are being addressed via planting and the development of bund walls to maintain the visual landscape of the area.
- ☞ The extended life of the quarry may raise concerns with neighbouring residents of Shell Cove who may have believed that the life of the quarry was limited.
- ☞ The concept of the depth of the quarry to - 40 ARL will not be well received and this will be particularly so if there is no clear remediation strategy/use of the quarry once operations have finished.

### **5.1 Stakeholder Analysis –Bass Point Quarry**

Taking the above factors into account, the stakeholder analysis for the quarry expansion has been determined by:

1. The location of the quarry.
2. Location of neighbouring residents, in particular Shell Cove.
3. General geographical area surrounding the quarry including the Bass Point Reserve and the Killalea State Park.
4. Areas which may be affected by the operation of the park in particular those affected by transport routes.

Identified stakeholders for the Bass Point Quarry are classified into four core streams, being

1. Residents of the area, in particular Shell Cove.
2. Users of the area, in particular the Bass Point Reserve, Killalea State Reserve.
3. Those with identified connection to the area, in particular the Indigenous community.
4. Agencies (including private and statutory) who have a stake in the extraction of the raw material.

To identify the affected stakeholders of the project, an analysis of the projects 'area of affectation' has been undertaken and outlined in the table below.

Each of these are discussed below.

**Table 5: Area of Affection**

| Area of Affection | Contextual Definition and Considerations  |
|-------------------|---|
| Primary.          | <p>Primary area of affection is determined by the impact of the operation of the quarry having a direct affect on a resident's day to day living.</p> <ul style="list-style-type: none"> <li>☞ Adjoining land holders</li> <li>☞ Residents in the vicinity of the land</li> <li>☞ Residents who would utilise the surrounding land.</li> <li>☞ Those who will gain from the sale of the resource.</li> </ul>  |
| Secondary.        | <p>The secondary area of affection is determined by those living in the vicinity (not direct neighbours) of the quarry that may be affected by dust, noise and visual impacts.</p> <p>Affected communities can also be those who have strong connections with the land and in this case may include the Indigenous community.</p>   |
| Tertiary.         | <p>The residents who are indirectly impacted by the operation of the quarry.</p> <ul style="list-style-type: none"> <li>☞ Do not necessarily use the land but see its development as being detrimental to the overall community.</li> <li>☞ Users from other areas (not readily identifiable) who utilise the land for bushwalking, surfing, diving.</li> <li>☞ Other community groups such as land care.</li> <li>☞ General community.</li> </ul> <p>The impact is determined by</p> <ul style="list-style-type: none"> <li>☞ Loss of intrinsic (lifestyle) values by neighbours and nearby residents</li> </ul> |

## 5.2 Population Profile

The development of the Shellharbour Council area has been attributable to four main circumstances:

1. Initial settlement with land grants in the 1800-1850 period.
2. Development of road and rail transportation during the 1800's making Shellharbour accessible to its north, south and west where the physical landscape on its boundaries previously made access largely impossible.
3. The rise of agricultural industries of beef and dairy cattle and associated services/industries leading to the formation of new settlements.
4. Growth of the area in the post WWII manufacturing era which shaped the area from a group of individual settlements into a large urban population.

Today, Shellharbour City contains a number of urban townships/suburbs and rural localities. Urban townships/suburbs include Shellharbour Village, Barrack Heights, Flinders, Blackbutt, Shell Cove, Barrack Point, Warilla, Lake Illawarra, Mt Warrigal, Oak Flats, Albion Park Rail and Albion Park. Shell Cove is a rapidly growing community.

Some population characteristics for Shellharbour City and Shell Cove are outlined below:

### Population:

The population of Shellharbour is over 60,000 people with a median age of 35 years. Shell Cove has a population of 2,833 people (2006 ABS Census) and its median age is 33 years.



#### Labour Force:

In Shellharbour City, 27,078 people are in the labour force. Of these, 57.1% were employed full-time, 28.9% were employed part-time, 3.0% were employed but did not state their hours worked and 7.3% were unemployed. In Shell Cove 1,344 people are in the labour force. Of these, 62.9% were employed full-time, 27.4% were employed part-time, 3.4% were employed but away from work, 2.2% were employed but did not state their hours worked and 4.0% were unemployed.

#### Occupation:

In Shellharbour City the most common occupation were Technicians and Trades Workers 18.0%, Clerical and Administrative Workers 14.0%, Professionals 12.8%, Labourers 12.0% and Sales Workers 11.5%. In Shell Cove, the most common occupation were Professionals 17.1%, Technicians and Trades Workers 17.0%, Clerical and Administrative Workers 15.3%, Managers 13.6% and Sales Workers 10.8%.

#### Industry of Employment:

The most common industries of employment in Shellharbour were Basic Ferrous Metal Manufacturing 6.9%, Cafes, Restaurants and Takeaway Food Services 3.9%, School Education 3.8%, Hospitals 3.4% and Supermarket and Grocery Stores 3.3%. In Shell Cove the most common industries of employment were Basic Ferrous Metal Manufacturing 8.7%, School Education 5.0%, Cafes, Restaurants and Takeaway Food Services 3.7%, Hospitals 3.1% and Public Order and Safety Services 3.1%.

#### Income:

In Shell harbour City, the median weekly individual income was \$391. The median weekly household income was \$983 and the median weekly family income was \$1,107. In Shell Cove the median weekly individual income was \$563. The median weekly household income was \$1,518 and the median weekly family income was \$1,546.

#### Repayments:

In Shellharbour City the median weekly rent was \$200 and the median monthly housing loan repayment was \$1,500. In Shell Cove, the median weekly rent was \$325 and the median monthly housing loan repayment was \$1,844.

#### Home Ownership:

In Shellharbour City 33.5% of occupied private dwellings were fully owned, 35.3% were being purchased and 25.2% were rented. In Shell Cove 28.6% of occupied private dwellings were fully owned, 51.7% were being purchased and 16.0% were rented.

#### Comment Population:

Shell Cove is a more affluent area than when compared to Shellharbour City generally. The population characteristics, and total population numbers will not change as a result of the quarry. The main impact on the area's population characteristics will be the further development of the Shell Cove residential precinct and marina.

This development has been staged (and continues to be) over a number of years. The extended life of the quarry has not been identified as having an impact on this development. This statement is also supported in the fact that the issue of the quarry has not been identified in any previous Social Impact assessment undertaken by Shellharbour City Council or Australands.

### **5.3 Structure, character and beliefs**

The community's structure, character and beliefs will explore if the proposed quarry extension will have any impact on any relationships, customs, beliefs, attitudes, religions, create disruption or need to be considered in any way as part of the development, or will the communities values will be adversely affected or even enhanced.

Quarries have been part of the Illawarra for many years, and this quarry being operational for over 100 years. The area around the quarry has and continues to undergo substantial change, in

particular with the development of Shell Cove, the proposed development of Killalea State Reserve and the general utilisation of the area for recreational purposes. On the basis that the quarry has been in existence (and operational) for many years, the community's values will not generally be affected by the proposed extension. The operation of the quarry is very visible to those who live in the area in the fact that the haul road is a significant feature of the quarries operations (refer photos below).



The route of the quarry haul road. Note its proximity to existing residences and new areas for development.



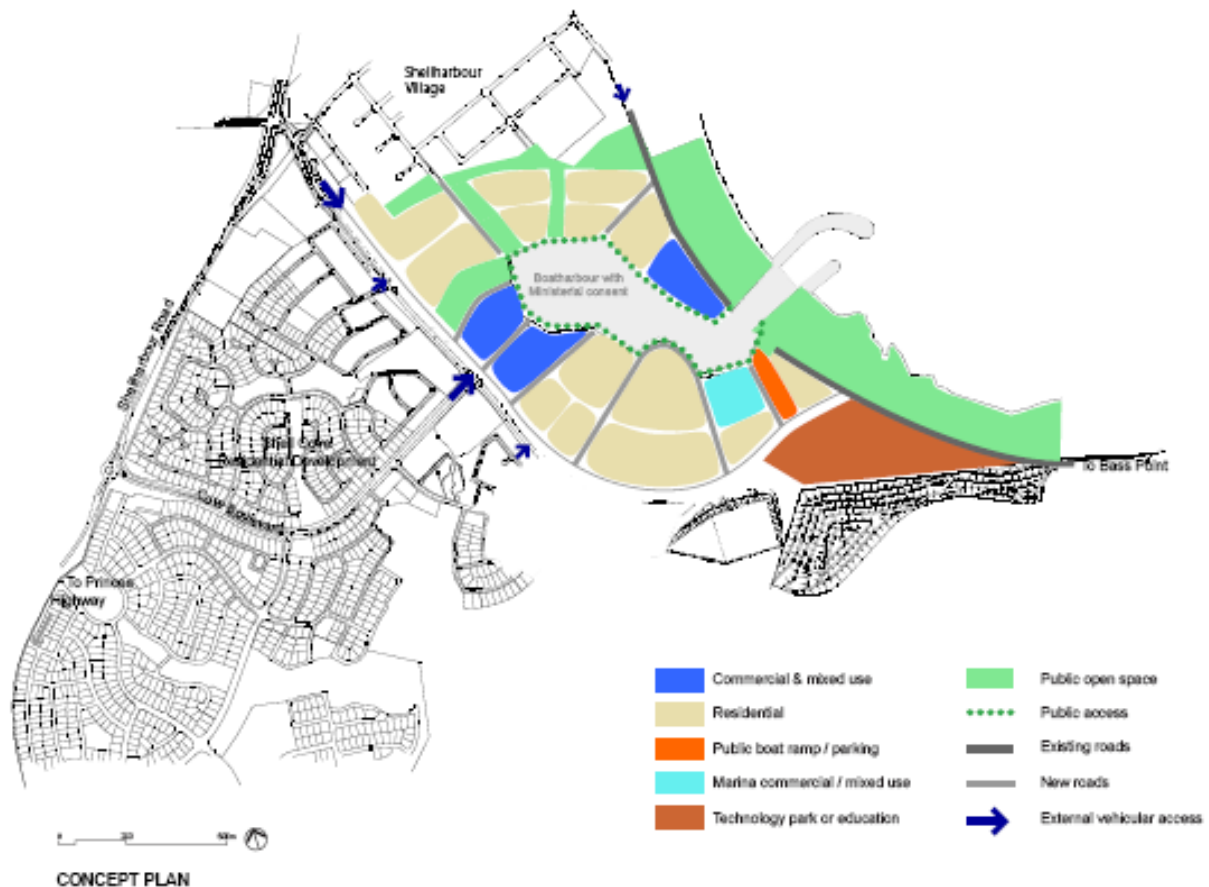
The noise suppression barriers for the quarry haul road are very visible.





New residential development is located along the quarry haul road. As seen in the photograph, the acoustic barrier is a prominent feature of the landscape.

Residents moving into the Shell Cove precinct are advised of the quarries operations in the contract of sale and it is understood that the advice extends to the nature of the quarries operations (ie advice of hours of operation, truck movements, blasting etc). With that in mind however, residents moving into the area are doing so for distinct lifestyle reasons which may include the areas access to major transport routes, access to the areas social, recreational and educational facilities, not to mention its proximity to the coast and soon to be constructed Shell Cove Marina.



**Figure 3: Shell Cove Marina Masterplan**

The final stage of the Shell Cove development is soon to be submitted to the Department of Planning for assessment. The above masterplan shows the marina development which includes tourist facilities as well as residential development. Given the nature of the development, this stage represents the most valuable area of development. Its masterplan, and sale has been undertaken with full knowledge of the operation of the quarry.

The residential development may result in the emergence of land use conflict. While this has been addressed via the contract of sale, masterplan design including acoustic abatement measures to the haul road etc, it is noted on the complaints register the most recent reports of the impact of the blasting.

It was identified that while blasting was within its normal limits complaints had been received. A summary of complaints received and the area where the most recent complaints have been received are highlighted below.





Areas where more recent complaints have been received regarding the quarries operations. These include noise from trucks and blasting.

The effect from blast may not be a constant issue, and factors such as wind, time of the blast etc will determine the effect on neighbouring residents. Consultations also identified that blasting is only undertaken during daylight hours and during the week therefore minimising any impact and many neighbours are aware of the blasting and it causes no undue concern.

Residents living along the established haul route identify have identified noise as being a concern. The area where the main complaints for truck noise is identified in the aerial photograph above. The strategy Hanson has undertaken is to raise awareness of the truck drivers to the issues raised by residents and to monitor the matter. Specific issues will be considered in the specialist reports.

Overall the impact on the community has been managed well given the scale of the quarry and the emerging residential development around the quarry operations.

## 5.4 Health

This will explore if there will be any increase in demand for any health services and how and where will people access them (including ancillary services such as community health care, dental services, child care, counselling social support, etc.). Will the development affect the health of the community or their perceptions of health and will the development create additional pollution (including noise) during construction and operation.

Health is a major concern for the community and the impacts of noise and dust are two key areas for review. The current operations of the quarry, including the acoustic barrier, have been developed to comply with specific noise regulations.

Further to this, Heggies Pty Ltd are to undertake this assessment and the findings will be included in their separate report. The operation of the quarry must comply with the specific regulations and if required, further abatement strategies will be development. It is understood that the impact of dust and noise will be reduced as the quarry becomes deeper, however will not abate the perception of health issues arising from the operation of the quarry (or any quarry).

Given the quarry is operational a benchmark of performance can be established. It is recommended that the outcomes of the assessment, along with ongoing performance of the quarry, be made available to the public.

## 5.5 Safety

This will explore crime and nuisance rates or perceptions of crime likely to change and if any crime prevention strategies will need to be employed/developed. It is also used to identify if the development will require surveillance and protection including lighting, landscape and other Crime Prevention Through Environmental Design principles.

The quarry has not been impacted on by regular or systematic incidences of crime, nuisance or anti-social behaviour. There have been some instances of trespassing onto the site but this is primarily from people accessing the water's edge for fishing. People accessing the water's edge along the boundary of the quarry are discouraged from doing so and if they enter the quarry grounds are requested to leave and escorted from the site.

There have also been some instances of stolen cars being located along the haul road however this is not an ongoing issue. Onsite security monitors/patrols the site and it is found that crime and nuisance is not a systematic issue, nor is it expected to become an issue if the proposed redevelopment is approved.

## 5.6 Social cohesion

This will explore the extent of change in the lifestyles of existing residents in the vicinity of the development or transport routes and how the development may cause conflict between existing and new users. It is also concerned with how people will be involved in the implementation and management of community change caused by the development.

Social cohesion will not necessarily be impacted upon by the proposed redevelopment of the site. The development of Shell Cove has demonstrated that there is strong demand for housing in the area and the visual impact of the quarry (in particular the haul road) has not been identified as a restriction.

Impacts such as noise, dust and also visual impacts (of the plant) will be reduced if the proposed redevelopment is approved and as the quarry goes deeper. The impact of social cohesion may be identified if there is an expectation that the quarry was to cease its operations in its current approval period.




## 5.7 Income levels, cost of living, housing prices

This will explore how the development will affect income levels across the community and if there would be an increase or decrease in employment, and where will the required employment be drawn from. This area also explores if there will be an increase or decrease in the cost of living (e.g. land, supermarket, grocery and housing prices) and how the level of trade will be affected e.g. competition, closure of existing business.

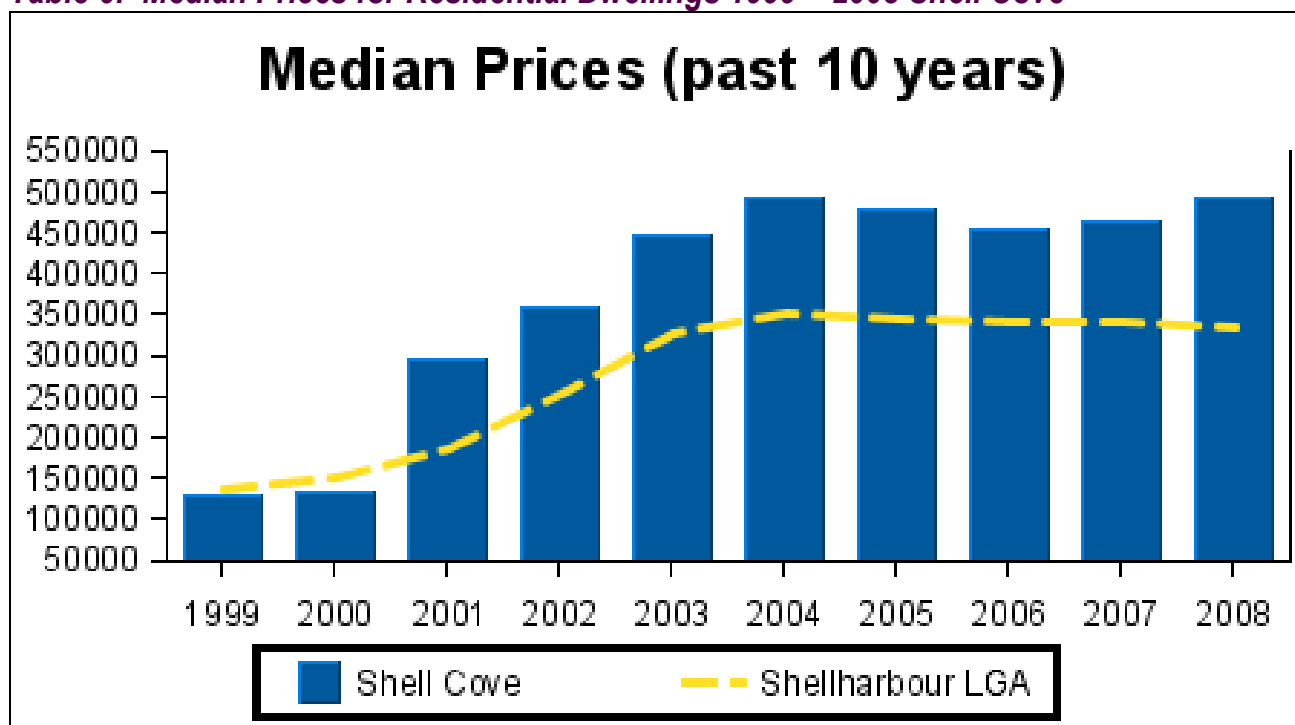
The proposed extension of the quarry will have no impact on income levels across the community, nor will there be an impact on the cost of living or on trade generally. Employment trends at the quarry will remain the same as will employment multipliers (resulting from quarry trade).

Residential sales in the area, in particular Shell Cove have been strong. A review of RP data for sales figures for both residential dwellings and residential strata units has been undertaken for the past 10 years as well as recent sales data (past 12 months). The review has found that residential sales in the immediate Shell Cove area have performed well.

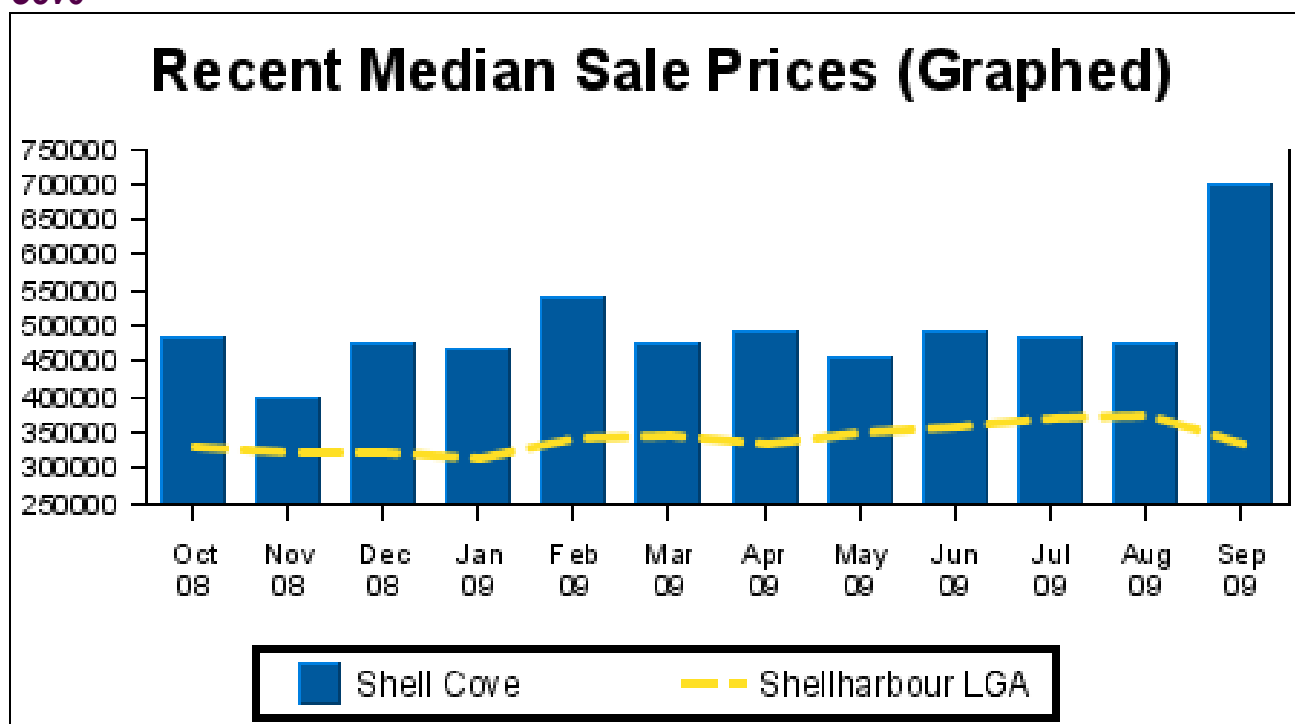
Below is a summary of;

-  residential dwelling and residential strata unit median prices,
-  capital growth in median prices
-  recent median sale prices

## Residential dwellings

**Table 6: Median Prices for Residential Dwellings 1999 – 2008 Shell Cove**

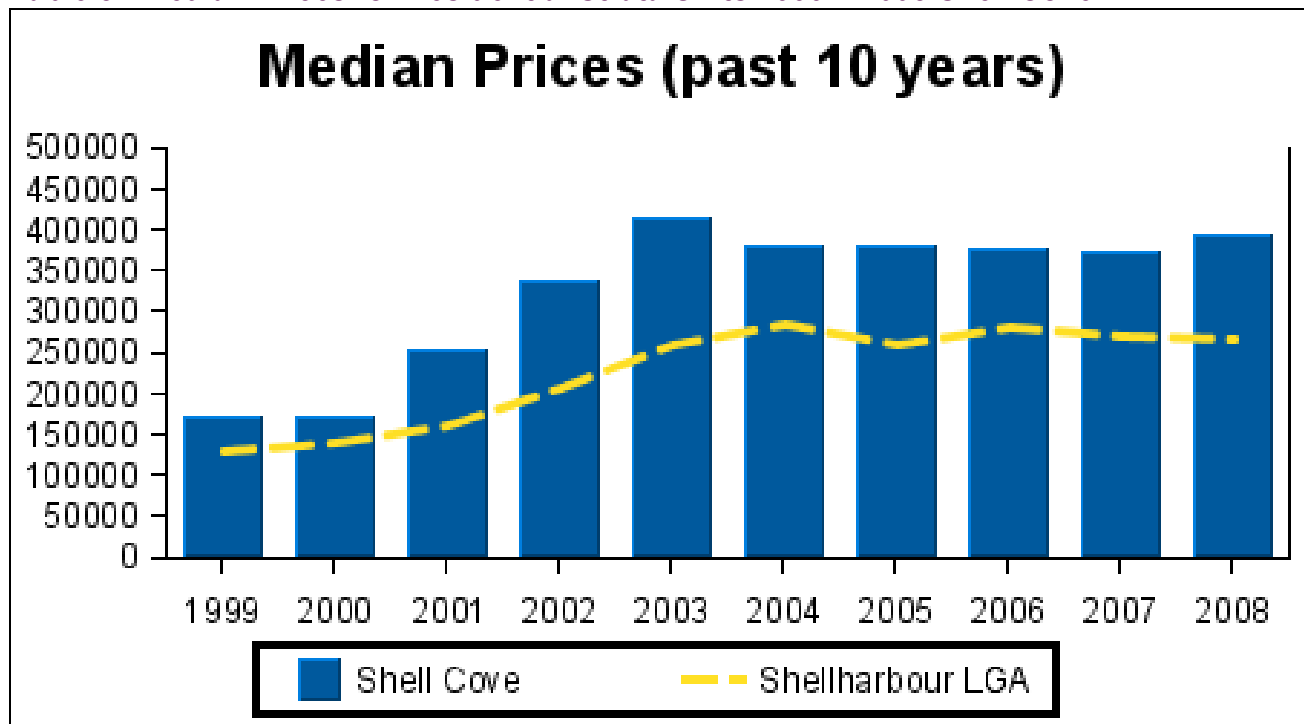
Median Sales for residential dwellings has been strong over the past 10 years. Shell Cove has a higher median price than the rest of the LGA

**Table 7: Median Prices for Residential Dwellings October 2008 – September 2009 Shell Cove**

Recent median sales prices for Shell Cove are high and performed well with the release of additional stages

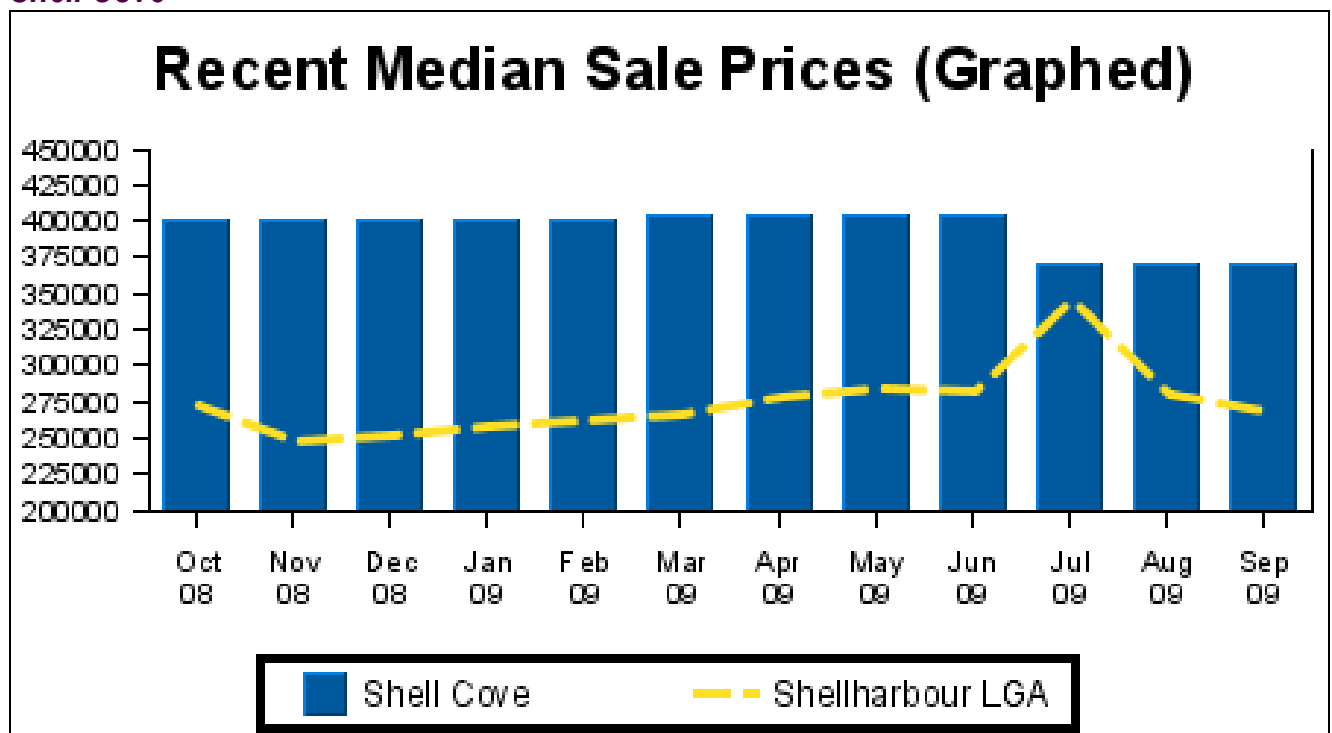
## Residential Strata Units

**Table 8: Median Prices for Residential Strata Units 1999 – 2008 Shell Cove**



Median Sales for residential strata units has been strong over the past 10 years. Shell Cove has a higher median price than the rest of the LGA.

**Table 9: Median prices for Residential Strata Units October 2008 – September 2009 Shell Cove**



Recent median sales prices for Shell Cove are high and performed well over the past 12 months

Sales are expected to remain strong and the quarries operation will not impact on this.



## 5.8 Employment

As previously started, the quarry employs approximately 71 people across a range of activities (refer table 10 below).

**Table 10. Employment Profile – Bass Point Quarry**

| Activity   | Employees  |
|--|------------|
| Quarry   | 41 persons |
| Tipper Drivers and permanent contractors         | 13 persons |
| Concrete   | 8 persons  |
| Lab  | 3 persons  |
| Office   | 6 persons  |
| Other contractors are engaged from time to time. |            |

The proposed expansion of the Bass Point Quarry will not necessarily increase the workforce required for the quarry however this will be reviewed and be dependent on extraction rates.

## 5.9 Sense of place and community.

This explores whether the aesthetic nature of the community is affected and can be determined if people perceive a loss of aesthetic qualities of their community; if items of social and cultural heritage affected and if the development complimentary to the existing neighbourhood character.




With this in mind, the population character and structure of the City is rapidly changing. The growth of Shellharbour over the past 25 years has seen the area proclaimed a city in 1996 when its population passed 50,000 people. The original Shellharbour Village has retained some of its character and more residential development is occurring around the village and into the area known as Shell Cove.

Shellharbour City Council's website reference to Shell Cove identifies that Shell Cove will house some 10,000 residents on 3,068 residential lots, with 1,250 lots already developed. There Community facilities include a public school (opened 2005), community centre (interim – opened 2005), sporting facilities and a small shopping/commercial centre. Extensive public open space networks (with walkways and cycleways) traverse the estate, linking with the harbour, beaches and Shellharbour Village.

The land-based component of the harbour precinct will feature a 1.5km public promenade/boardwalk with associated facilities including a hotel, shops, restaurants and cafes, residential accommodation, boat haul-out and maintenance facilities, carparking and public parks.

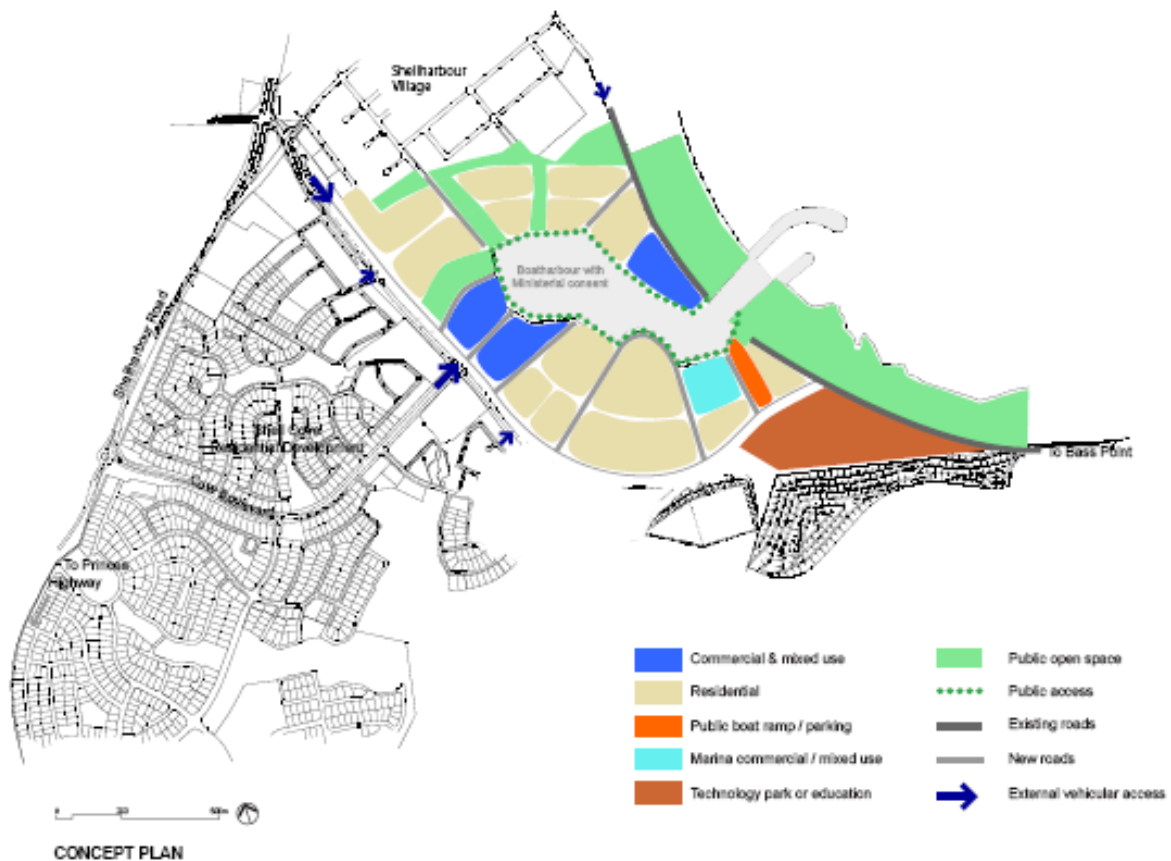
The water-based component of the harbour precinct will feature a 300 berth marina (catering for charter and tourist boats) and a public boat ramp, within a 20 hectare harbour.

MacroPlan has made an assessment of the proposed Shell Cove development and concluded that: The Shell Cove Boatharbour project represents a major investment in the local area of Shell Cove and the Shellharbour City region. The benefits include:

-  A major ongoing construction program across a number of different residential and commercial products supporting spending and employment multipliers throughout the region.
-  The offer of a wide range of residential dwellings not typically offered in the area.
-  The provision of local jobs in retailing, hospitality and commercial activities for local residents encouraging sustainable private commuting behaviour.

The Shell Cove Boatharbour project will contribute to the establishment of a sustainable regional economy within the City of Shellharbour through new expenditure from residents and tourists.

The project will further develop a focus for tourism within the region. The provision of a hotel with conference facilities as well as the golf course development is likely to attract delegates and businesses looking for a unique experience in an attractive recreational location. On this basis, the quarry has not impeded the commercial aspect of this high quality development.



**Figure 4: Shell Cove Masterplan**

It is therefore determined that the sense of place and community is determined by the Shell Cove development and the surrounding land uses (including the Bass Point Reserve, Bushrangers Bay, Killalea State Reserve etc). The quarry is not a focal point however its presence is known via the visual impact of the haul road and also the existing location of the plant and machinery.

For other people the sense of place and community is not determined as a place to live, but rather a place to visit. Visitors to the area are most likely to be impacted upon by the visual impacts if any of the landscape is changed. These particularly include any negative visual impacts and any impact on the areas ecology including the neighbouring marine wetland.

It is understood that some visual impacts will be improved once the plant is relocated to a deeper area within the quarry.

With this in mind, Killalea has also come under some scrutiny with the proposed development of the State Park as an eco tourist facility. Newspaper articles state that the natural beauty of Killalea State Park is at risk of over-development. The project proposal consists of an accommodation resort of 202 eco lodges, restaurant, café, conference centre and recreation facilities. The lodges will be contained in three separate zones of the park, known as the Crest, the Valley and the Farm. These zones cover an area of 17.6 hectares, less than 7% of the park's total area.

Given this opposition to the coastal areas development, including the visual impact, over development and impact on the areas ecology, the ongoing operation and deepening of the Bass Point Quarry could raise similar concerns. Specific consultation has not been carried out with the groups involved in the opposition with Killalea however it is recommended that consultation be undertaken with both Shellharbour and Kiama Councils, elected representatives, South Coast Labour Council, Minnamurra and Shellharbour progress associations etc. to determine if there would be opposition to the quarry's proposal.



Taken from Killalea Reserve showing The Farm (beach), Killalea Lagoon and the quarry is in the background. The Farm, and lagoon are important areas for residents and visitors of the area.

### **5.10 Impact of sense of place to Aboriginal people**

Shellharbour was one of the coastal meeting areas for Aboriginal people. A review of the Shellharbour City Council Area Aboriginal Heritage Study June 2000 was undertaken and while it is not the intent of the SEIA to reproduce this document or undertake an Aboriginal Heritage Assessment, it is understood that this area (amongst others) are identified as significant by the community (p7).

Bass Point is identified as being a tribal meeting place and up until 1922 the area was leased as an aboriginal reserve (at that time it was revoked) therefore ending occupation (p19). The current land use has had an impact on Aboriginal archaeological record, via the clearance of vegetation and the extractive industry its 'self'. It is recorded that the coastal area of Shellharbour (inclusive of Bass Point) held a large amount of Middens which are now lost with only remanet record left as is the riparian vegetation.

The past operation of the quarry has had an impact on the Aboriginal community's heritage. Regardless of whether the site has been disturbed and physical artefacts are found, the areas cultural history should be at least recognised. To recognise this, it is recommended that a relationship between Hanson and the Illawarra Aboriginal Lands Council be established. The outcome of the relationship should focus on the monitoring of the quarries ongoing operation, in particular, that works to extend the boundary of the quarry have the supervision of an Aboriginal site officer and that Hanson the Illawarra Aboriginal Lands Council explore the nature of any ongoing relationship. This may include regeneration of the natural landscape, employment opportunities and other forms of cultural recognition.







## 6. CONCLUSIONS AND RECOMMENDATIONS

The proposed extension of the Bass Point quarry represents an opportunity to supply, and contribute to the forecast shortfall, of a significant resource for the construction industry. The expansion of the existing quarry is a preferred scenario when compared to the development of a quarry in a Greenfield site. The strategic benefits are summarised as follows;




1. It is an existing quarry and has been operating for many years.
2. The existing site is significantly disturbed.
3. The resource extracted from Bass Point is high quality.
4. There are limited resources of this quality readily available / accessible to the Sydney region.
5. The expansion of the existing quarry is significantly more cost efficient and favourable than establishing a new quarry in a greenfield site (better for the community, ecology etc).
6. Transport infrastructure is well established (by both road and sea).
7. High quality community and residential development (Shell Cove) is occurring in close proximity to the quarry therefore social and economic impacts are well known and negative impacts have been mitigated.

With the above in mind, the proposed redevelopment is not in conflict with the strategic planning documents relating to the area and the ongoing operation of the quarry is of key economic importance to the construction sector.



The proposed extension of the Bass Point quarry has identified a number of positive and negative social and economic impacts. These impacts relate to;

-  Visual
-  Noise and Dust
-  Community
-  Natural Resource Management
-  Cultural and
-  General



### Visual

-  The quarry is very visual given the location and layout design of the haul road.
-  The visual impact of the quarry will be improved given that much of the plant and equipment will be relocated and placed lower than it currently is.
-  The expansion of the eastern pit of the quarry may have a visual impact to the south and south east however this impact should be mitigated through earth bunds and the like.

### Noise and Dust

-  The effects of noise, in particular from blasting, could possibly be more evident given the encroaching residential development from the neighbouring Shell Cove.
-  The effects of noise and dust on the surrounding area will be reduced as the quarry becomes deeper.

### Community

-  The nearby residential development (Shell Cove) has performed well with strong sales made. Notification of the quarry is made to potential purchases and forms part of the contract of sale.
-  The extended life of the quarry may raise concerns with neighbouring residents of Shell Cove who may have believed that the life of the quarry was limited.



### Natural Resource Management



The concept of the depth of the quarry to -40ARL will not be well received and this will be particularly so if there is no clear remediation strategy/use of the quarry once operations have finished.

### Cultural



Bass Point is of significant value to the Indigenous community. Their past and current connection with the site (and broader area) needs to be explored and recognised in some manner.

### General



The impact of the proposed extension of the quarry to - 40AHD may have an impact on the coastal wetlands located adjacent to the quarry site. This will be addressed via the hydrology report and the outcome should be reported to the community and the representatives of the Killalea State Reserve

In the assessment of this SEIA it is determined that the impact on the neighbouring residential area is not deemed to be significant given the ongoing development of Shell Cove and the awareness and understanding of the quarries operation by neighbouring residents. In support of this is the strength of existing residential sales and the lack of complaints over the period of 10 years. The social impacts can be managed and specific strategies relating to visual, noise, dust, natural resource management etc will be detailed in the specific reports relating to these matters.

This is not to say that there will be no opposition to the proposed extension. Some residents will want to see an end date to the quarry which is closer than the potential 34 to 54 years of forecast life.

The impacts on the broader community (users of the Bass Point Reserve and Killalea State Reserve) need to be monitored. Many visitors to the area are not impacted upon by the quarry and any potential issues will be addressed as long as there are no noise, dust and visual impacts.

A relationship with the Aboriginal community needs to be established given their connection to the Bass Point area. This is regardless of whether the area has been significantly disturbed. The existence of the middens and other artefacts is not to be used as an indicator of cultural value, significance of connection. The outcome of this relationship would be determined by Hanson and the Aboriginal community.

In the assessment of the social and economic impacts of the Bass Point quarry, it is determined that the proposed expansion will have a significant net community benefit.

These benefits are:

1. It is an existing site therefore reducing further environmental impacts
2. Its operational activities (transport, hours ope operation etc0 are established.
3. It utilises sea access, therefore minimising the impact on residents
4. Complaints for the past 10 years are very few given the scope of the quarries operation
5. The supply of the raw material will significantly contribute to the demand of the resource.
6. The economic and employment multiplier effects to the construction industry are significant.

The final land use would be the most significant impact relating to the proposed expansion of the quarry. To date no end use has been determined.