

Section 3

Key Issues

The Key Issues listed in the DGR's are abbreviated down the left of the page for ease of reference, and provided in bold throughout the text.

3.1 Strategic Planning



There are four strategic documents of particular relevance to the site, including the:

- Mid North Coast Regional Strategy;
- Coffs Harbour Urban Development Strategy;
- Our Living City Settlement Strategy; and
- Hearn's Lake Estuary Management Plan.

The information below includes a justification of the Project against these strategies (and Plan), and addresses **DGR 1.1**.

It is important to note that **DGR 1.2** has been addressed in section 2.4 of this EA.

Mid North Coast Regional Strategy (Regional Strategy)

On 6 March 2009 the NSW Government released the Regional Strategy. The purpose of the Strategy is to provide planning policy guidance for sustainable development of the region over the next 25 years.

One of the key actions of the Regional Strategy is to define growth areas to address land supply needs for the next 25 years.

Growth areas have been identified for their ability to deliver a desirable future growth pattern, in keeping with the settlement planning principles outlined in the Regional Strategy.

Local councils are only able to identify land for settlement if it falls within one of the identified growth areas, or if it meets the Regional Strategy's sustainability criteria.

The site is included in an identified growth area (Sandy Beach), shown on Growth Area Map 3 – Coffs Harbour.

Coffs Harbour Urban Development Strategy (Urban Development Strategy)

The Urban Development Strategy was prepared in 1996 and provided a plan for the accommodation of 86,000 - 100,000 people by the year 2021. The Strategy considered the environmental and servicing capacity for the local government area and envisaged a population of 6000 people for the Sandy Beach/Emerald Beach locality.

The Urban Development Strategy recognised the current zoning of the site as 'tourist lands' and deferred consideration of the lands from the overall residential landstock; the tourist lands were to be addressed in a Tourism Strategy before being included in the Urban Development Strategy. The Tourism Strategy subsequently prepared in 2001 stated that *"in general there is sufficient accommodation product, especially at the resort level, for significant growth in demand"*.

Large tracts of land, including the site, were rezoned under Coffs Harbour Local Environmental Plan 1988 for tourism purposes, reflecting the boom in large tourist resorts in the 1980's. The gradual development of these tourist lands for permanent residential development is symptomatic of the decline in large resort developments on the NSW Coast. Consequently, Council has recognised these market forces and has prepared a Draft LEP (Amendment No. 29) for the locality proposing the rezoning of the land from tourism to residential purposes; the land is now being incorporated into the review of the Urban Development Strategy for permanent residential accommodation (see Our Living City Settlement Strategy below).

Our Living City Settlement Strategy (Settlement Strategy)

The Settlement Strategy will replace the current Urban Development Strategy and anticipates the development of the land for permanent residential accommodation.

Council has adopted the principle of a "Compact City" under the Settlement Strategy. The site falls within the "Compact City" scenario as existing urban lands to assist in accommodating part of the additional 33,000 people expected in the City by 2031.

In light of the above, the Project accords with the Settlement Strategy, proposing to develop the land for residential purposes.

Hearnes Lake Estuary Management Plan (the Plan)

Double Crossing Creek is located in the Hearnes Lake catchment, and feeds into the Hearnes Lake estuary.

The Draft Hearnes Lake Estuary Management Plan was placed on public display from 9 March 2009 to 3 May 2009.

The purpose of the Plan is to guide future decision making regarding long term management of the lake, its foreshores and its broader catchment area.

The Plan includes a series of 29 prioritised strategies to help achieve stated objectives for Hearnes Lake. These strategies comprise a range of mechanisms. Based on the likely effectiveness of the strategy, costs, and the priorities of the objectives being addressed, the strategies are classified as: Critical; Very High; High; Medium; and Low Priorities.

The strategies have also been defined in terms of timeframe for implementation: Immediately (start within 12 – 18 months); Short Term (start within 1 – 3 years); Medium Term (start within 3 – 5 years). Timeframes have also considered the likely rate of progress for development within the catchment in the future. The order of implementation for the different strategies takes into consideration the priority of the strategy as well as the timeframe in which it needs to be undertaken.

The following strategies are relevant to the Project; a comment regarding how each is addressed in the Project is included:

DC-1: Establish a buffer around Hearnes Lake that precludes any future development, including any works (eg stormwater treatment) or clearing (eg bushfire protection) associated with future development.

The Plan seeks to exclude development for a distance of 50m from the Hearnes Lake waterway. While the Project is not located near Hearnes Lake, it does however include Double Crossing Creek, which drains to the Lake. All residential allotments have been excluded from a distance of 50m from the RL 3.5m AHD contour (see **Plan 8 - Site Analysis Plan**), with the exception of proposed Lots 29 and 31.

This strategy is classed as a critical priority, and for immediate implementation.

DC-2: Develop and adopt a Water Sensitive Urban Design (WSUD) policy and review the Urban Stormwater Management

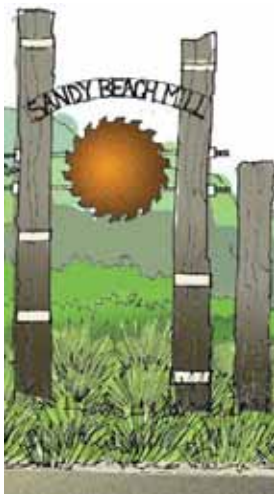
Plan with investigations into sensitive areas. Best practice would include implementation of Water Sensitive Urban Design and Integrated Water Cycle Management (including stormwater harvesting and reuse), which are aimed at reducing stormwater runoff flows and pollutant loads from urban areas by adopting a range of options including Gross Pollutant Traps (GPT), rainwater tanks (with reuse for garden and lawn watering, toilet flush, laundry, hot water services, etc), infiltration systems, grass swales (instead of kerb and guttering) and bio-retention basins.

A detailed Water Quality Assessment has been undertaken by GHD Pty Ltd (**Appendix F**) to ensure the Project has a neutral impact upon the ecology of Double Crossing Creek, Hearn's Lake and the Solitary Islands Marine Park. This Assessment addresses **DGR's 7.1-7.3**.



The Assessment has been carried out having regard to the Coffs Harbour City Council *Urban Stormwater Management Plan – 2000*, which provides for integrated water cycle management; and, includes the adoption of a water sensitive urban design philosophy.

The Assessment details a stormwater treatment train, and outlines the impacts of the Project during both construction and occupation.



Water sensitive urban design measures included in the Project are further discussed in section 3.7.

This strategy is classed as a critical priority, and for implementation over a medium timeframe.

R-8: Removal of environmental weeds (including for example bitou bush and lantana), and control of pests (including for example feral cats and foxes) from private lands, Council-controlled public lands, and the Coffs Coast Regional Park.

The Project proposes the removal of environmental weeds, as detailed in the **Landscape Plans** (Plans 6, 7 and 8) and **Concept Vegetation Management Plan** (Plan 5). A Recognition of these works is also found in the Controlled Activity Approval has also been issued which recognises these works, along Double Crossing Creek.

PMC-1: As lands become developed around Hearn's Lake, appropriate foreshore buffers should be returned to public ownership. These buffers should be zoned accordingly to protect them from future degradation.

While the site is not located on the foreshore of Hearn's Lake, the area adjacent Double Crossing Creek is to be dedicated to Coffs Harbour City Council as public reserve (park).

This strategy is classed as having a very high priority, and for implementation over a medium timeframe.

DC-7: Future development within the Hearn's Lake catchment should be carried out in a manner which gives consideration to the sensitivity of the natural environment. This should be ensured by placing strict controls on development with respect to environmental issues.

The Project is to be carried out in a manner which recognises the sensitivity of Double Crossing Creek and Hearn's Lake. The residential component of the Project is set well back from Double Crossing Creek, with water quality measures proposed which will ensure water entering Double Crossing Creek and Hearn's Lake is of good quality.

This strategy is classed as having a high priority, and for immediate implementation.

R-6: Revegetation of ecologically important areas throughout the catchment, including the buffer area around Hearn's Lake, riparian zones along tributaries and watercourses, and wildlife corridors across the landscape. Revegetation of private lands is likely to require incentives.

Rehabilitation/revegetation of the riparian corridor along Double Crossing Creek is proposed, as is remediation of the site. Notably, the majority of native vegetation on the site is found along the riparian corridor, and this will be preserved via its dedication as public reserve (park) to Coffs Harbour City Council. Some rehabilitation/revegetation works have already been carried out.

This strategy is classed as having a high priority, and for implementation over the short term.

R-7: Remediation of the disused timber mill adjacent to Double Crossing Creek as well as any other lands within the catchment that are potentially affected by contamination from historical landuses.

As discussed in section 2.4 and 3.6 of this EA, the site is presently being remediated. Remediation has the potential to improve the local environment, through the removal of contaminants arising out of the past use of the site as a sawmill.

This strategy is classed as having a high priority, and for implementation over the medium term.

A-2: Install and maintain additional picnic facilities and community amenities around Hearn's Lake, to be partly funded through Developer Contributions from future developments located in the Hearn's Lake feeder area.

While the site is not located around Hearn's Lake, it nonetheless proposes a playground within the public reserve (park), which is to be dedicated to Coffs Harbour City Council.

This strategy is classed as having a low priority, and for implementation over a medium term timeframe.

Draft Local Environmental Plan 29 (Draft LEP No. 29)

Draft LEP No. 29, if gazetted, will rezone the site to part Residential 2A Low Density and part Environmental Protection 7A Habitat and Catchment zone. The Residential 2A Low Density zone will generally replace the current Residential 2E Tourist zone to reflect Council's intention to have the locality developed for permanent residential accommodation. Under the Draft LEP, the Environmental 7A Habitat and Catchment zone is to be adjusted to accord with the findings of the Hearn's Lake Estuary Management Plan. It is expected this will result in a zone boundary that extends 50m from RL 3.5m AHD along Double Crossing Creek. The proposed zones are shown below in **Plan 12 - Draft Zoning Plan**.

The effect of the zoning to change is the same as that already described in section 2.4 above dealing with LEP 2000.

Hearn's Lake/Sandy Beach Development Control Plan (DCP)

To manage development in the locality, Coffs Harbour City Council has prepared the Hearn's Lake/Sandy Beach DCP which came into force on 7 December 2005.

This DCP is the principal guiding plan for development within the Hearn's Lake/Sandy Beach locality. The DCP establishes economic, social and environmental sustainability objectives for the wider locality.



LEGEND

- 2A Residential Low Density
- 7A Environmental Protection - Habitat & Catchment



Source: Coffs Harbour City Council website 12.5.09
Date: May 2009
1184-328

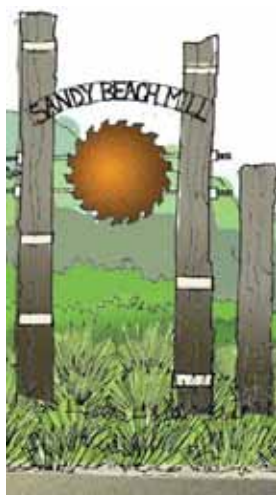
Plan 12

DRAFT REZONING PLAN

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The DCP requires proponents of development to comply with the overall 'Planning Strategy' and detailed 'Planning Controls'. The DCP accepts alternative solutions to these measures where it can be demonstrated that the alternative will meet the DCP objectives. The Table in **Appendix L** details the compliance of the Project against the DCP.

3.2 Subdivision Design, Layout and Desired Future Character



This section addresses **DGR's 2.1 – 2.7**.

The site has one dominant feature; Double Crossing Creek. The Project seeks to protect and enhance the Creek as a place to meet and a focus for the design of the subdivision; the roads are aligned to create a vista to the Creek and that part within the site is to be dedicated to Coffs Harbour City Council as public reserve (park).

While the subdivision layout does not dictate the building form, the allotment sizes and their orientation allow for a range of low density building types and opportunities for passive solar design of buildings and open space areas.

The subdivision layout provides a simple, safe and efficient grid street network for vehicle drivers, pedestrians and cyclists. The layout provides for easy "way finding" and high visibility to increase opportunities for surveillance. As well, the layout provides for a real sense of place, and safety for future residents suited to young families that are expected to be the dominant inhabitants.

The subdivision pattern provides smaller allotments (Lots 32-41), focused on Double Crossing Creek to take advantage of this setting.

All allotments have access to public roads, with two allotments to have access via a small public 'driveway' (Lots 42 and 43). All allotments are well setback from Double Crossing Creek, and separated from the public reserve (park) via perimeter road – this road providing a good transition between the public reserve (park) and residential component, as well as being incorporated into the asset protection zone to vegetation along Double Crossing Creek.

The Project has been designed to integrate with Stage 1 of the SBM estate. In this regard the proposed roads complete the three north-south roads created within Stage 1, and the Project also completes stormwater infrastructure for the estate, which will also accommodate and treat stormwater from Stage 1.

Access to the Project from Graham Drive is via the local roads approved within Stage 1.

The proposed allotments are consistent with the sizes of those within Stage 1, ranging from 410m²-1360m².

To the south and west the site adjoins land subject to a Part 3A application (08_0120), which seeks to develop these lands for low density residential purposes not dissimilar to the Project. The Project is not inconsistent with the development proposed in on this adjoining land; notably, Stage 1 of the SBM estate includes a road which gives this development access to Graham Drive (**DGR 2.1**).

The residential component of the Project has been setback from Double Crossing Creek to achieve a riparian buffer, and to avoid flood prone land and to allow for asset protection zones and the establishment of a parkland setting.

The central road (Road 3) has been provided with a road reserve width of 24m to provide for bio-retention facilities in the spine, as well as a central boulevard to Double Crossing Creek.

In relation to the consistency of the Project with the Coastal Design Guidelines for NSW (**DGR 2.2**), the Guidelines are of limited use given the (relatively small) size of the Project, and the controls contained within the Hearnese Lake/Sandy Beach DCP, which to a large degree dictate the layout of the Project. Notwithstanding, Part II of the Guideline provides design guidelines to help achieve the desired future character for coastal settlements. These five guidelines are addressed below:

- The **footprint** and **boundary** of the Project has effectively been set by the Hearnese Lake/Sandy Beach DCP and Mid North Coast Regional Strategy, which earmark the site for low density residential development;
- Double Crossing Creek is identified in the Hearnese Lake/Sandy Beach DCP for **open space** purposes, and the road layout in the Project ensures that good **connectivity** (including visual) will be provided to this area;
- The Project **protects** the **natural edge** (Double Crossing Creek), by including it in an area to be dedicated to Coffs Harbour City Council as public reserve (park);
- The Project **reinforces** the **street pattern** set by Stage 1, by extending the roads within this stage; and

- The Hearnese Lake/Sandy Beach DCP provides adequate controls relating to **appropriate buildings** being constructed within the Project – in this regard the allotments proposed provide adequate area to accommodate the types of dwelling houses expected in the locality.

Having further regard to **DGR 2.2**, the consistency of the Project against the Coastal Policy is discussed in section 2.4, while in relation to State Environmental Planning Policy No. 71 – Coastal Protection, the Project:

- Is not inconsistent with the Policy's aims, which collectively seek to preserve and protect the natural and heritage value of the coast, while also ensuring that development is appropriate for its location having particular regard to a site's environmental characteristics/attributes;
- Is not located near the coastal foreshore;
- Is of a nature (residential subdivision) suitable for the site as evidenced by various planning documents controlling development on it (i.e. Hearnese Lake/ Sandy Beach DCP);
- Will Have little impact on the scenic qualities of the coast, given that the residential component is set well back from Double Crossing Creek;
- Will preserve conserve animals, fish and plants (within the meaning of that Act), and their habitats as a result of revegetation and rehabilitation of the public reserve (park), and the implementation of water sensitive urban design measures;
- Will aid in creating a wildlife corridor via the revegetation and rehabilitation of the public reserve (park);
- Is unaffected by coastal processes and coastal hazards
- Will not result in conflict between land-based and water-based coastal activities given the characteristics of Double Crossing Creek;
- has no Aboriginal cultural value or archaeological or historic significance
- will not contribute to an adverse cumulative impact on the environment, and will not result in the inefficient use of water or energy.

In relation to **DGR 2.3**:

- Development Consent 931/06 was issued by Coffs Harbour City Council for the demolition of various structures (sheds associated with previous sawmilling operations and houses located along the southern boundary) across Lot 260 DP1110719. This consent does not affect the Project.
- Development Consent 1144/07 was issued by Coffs Harbour City Council for the remediation of the site, in accordance with a RAP. This consent is presently being acted upon.
- Development Consent 508/07 was issued by Coffs Harbour City Council for a staged development incorporating the site. Stage 1 of this development involved the creation of 24 Torrens title residential allotments, as well as a residue allotment – being the remainder of Lot 260 DP1110719 – which is now the Project.

The Project involves the creation of Torrens title allotments (**DGR 2.4**)



Harpullia pendula



Elaeocarpus reticulatus

In relation to **DGR 2.5**, the Hearnese Lake/Sandy Beach DCP provided adequate controls for the construction of dwelling houses on the proposed allotments; further measures are not necessary.

It is not intended to stage the Project; the Project will however commence following the commencement of Stage 1 of the SBM estate (**DGR 2.6**).

The public reserve (park), once dedicated to Coffs Harbour City Council, will come under its management. Dedication is intended to occur once the area has been appropriately remediated; with infrastructure constructed (i.e. playgrounds, footpaths etc); and, once it has been revegetated and rehabilitated largely in accordance with the **Concept Vegetation Management Plan** and **Landscape Plans** (**DGR 2.7**).

3.3 Visual Impact

DGR 3.1 requires the visual impact of the Project to be addressed; the following discussion outlines the impact the Project will have on the visual catchment.

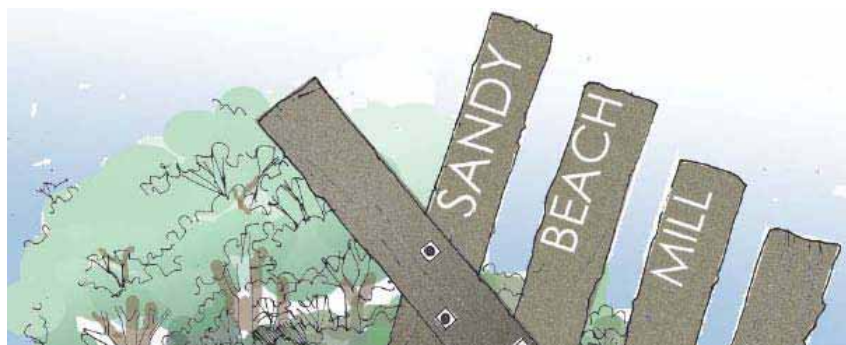
The site sits in a valley which contains large tracts of native vegetation, and rural properties containing dwelling houses and structures such as sheds and greenhouses. The site is therefore not prominent, and the only publicly accessible area that it is visible from is Graham Drive.

Native vegetation lies to the west of the site – across Graham Drive, while to the north are rural properties containing scattered dwelling houses.

To the south and west the site adjoins mostly cleared land, which contains scattered trees and stands of native vegetation. These areas are also zoned for residential purposes, and notably the subject of a Part 3A application (08_0120) seeking to develop the site for residential purposes not dissimilar to the Project. The location of native vegetation and semi rural character of the area are apparent on the **Aerial Photograph (Plan 3)**, while the **Zoning Plan (Plan 11)** shows the extent of land zoned for residential purposes which is expected to develop in a manner similar to that of the site.

Having regard to relevant planning controls and the form of development proposed in the Project, the site will be developed for low density residential purposes, comprising single (and potentially two) storey dwellings.

Within the locality, the Project will eventually be bound by residential development to the north (across Double Crossing Creek), east and south (assuming these areas are developed as envisaged by Part 3A application (08_0120) and various applicable planning documents). In this regard the residential development of the site is consistent with the desired future character of the locality and will simply produce an entirely expected visual impact.



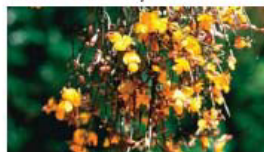
From Graham Drive, the Project will be visible for traffic heading north along this road from Sandy Beach. To an extent the Project will be shielded by scattered trees as shown in Photographs 1 and 3 in **Plan 13 – View Analysis**. In addition, it will be visible from Graham Drive where it is located north of the site, however this view of the site is also partly screened by native vegetation along Double Crossing Creek, which is expected over time, to further reduce views of the site (see Photograph 2 in **Plan 13– View Analysis**). Notably, the land in the foreground of Photograph 2 is also identified for low density residential development.

The Project will have limited impact on the coastal foreshore (Double Crossing Creek), given that the proposed residential component will be set well back from it, and separated by driveways, perimeter road and public park. As well, the expected height of future dwelling houses (single and two storeys), will also ensure this component has minimal visual impact.

Similarly, the public reserve (park) will not be subject to any noticeable extent of overshadowing; the residential component sitting to the south ensuring winter sun will reach the reserve, with driveways and perimeter road separating the two.



Backhousia myrtifolia



Jacksonia scoparia



Grevillea robusta



Backhousia citriodora



1



PHOTO KEY DIAGRAM
(southern end of Graham Drive)



2



3

Note: Photographs taken prior to clearing of buildings.

North
0 50m
1:2500 @ A4
Source: Petersen Consulting
Date: June 2009
1184-328

Plan 13

VIEW ANALYSIS

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3.4 Infrastructure Provision



Brachychiton discolor



Xanthostemon chrysanthus

The following information addresses **DGR 4.1**.

The Project will be serviced by reticulated sewer, extending from Stage 1. The Stage 1 servicing arrangement involves a gravity sewer being directed to a proposed sewer pump station to the south of the site. The sewer pump station will discharge to a gravity sewer system which then discharges into an existing sewer pump station on the eastern side of the Pacific Highway. The existing sewer pump station discharges to the Woolgoolga Sewage Treatment Works via a sewer rising main along the Pacific Highway. The Civil Engineering plans included in **Appendix K** detail the provision of reticulated sewer throughout the Project; these plans also show reticulated sewer for Stage 1.

Potable water will be provided to the Project from the existing 225mm diameter water main immediately to the north east of the site. Reticulated water is required for the carrying out of Stage 1. A 150mm diameter water main is to be constructed to connect to the existing main, and loop around the site. The remainder of the site is to be serviced by 100mm diameter mains fed by the 150mm diameter main. The Civil Engineering plans included in **Appendix K** detail the provision of reticulated water throughout the Project; these also show reticulated water for Stage 1.

Stormwater from the site will be collected by a piped drainage system and discharged to a central grassed swale traversing the length of the site, and which extends from Stage 1. The grassed swale will act as a stormwater treatment device removing pollutants from stormwater runoff.

The Project includes the construction of a bioretention basin in the proposed reserve (park), into which the central grassed swale will discharge. The basin will remove the expected pollutant increase of this development. Details of water quality treatment are more fully discussed in section 3.7 below.

Telecommunications and electricity will be available to service the site, with these services to be extended from Stage 1.

In relation to **DGR 4.2**, contributions are expected to be levied on the Project in accordance with Coffs Harbour City Council's Water and Sewer Developer Services Plans and the Hearnese Lake/Sandy Beach Contributions Plan.

3.5 Traffic and Access

Roadnet Pty Ltd prepared a comprehensive Traffic Impact Study for both Stages 1 and 2 (the Project) in terms of impacts, access, layout, pedestrians and cyclists, public transport servicing and road safety.

The Hearnese Lake/Sandy Beach DCP identifies a Type C intersection at Graham Drive for access to the wider residential area when fully developed (this area includes the site). Given that the development of Stage 1 and 2 (the Project) represents only 40% of the traffic to be generated from this area, a Type C intersection was considered unnecessary. Instead, a Type BA intersection with basic right turn treatment (BAR) was considered suitable for the predicted traffic volumes from Stage 1.

The Roadnet Pty Ltd Study recommended that the intersection be constructed to accommodate a Type C intersection in the future and a threshold treatment on the access road to help identify the intersection as the entry to this area.

An addendum to the Study was provided by Roadnet Pty Ltd dated 23 June 2006, which provided:

"The Traffic Study Report identified full development of the proposal would generate 70 trips during peak hour. This would add 30 turning vehicles to the northern Pacific highway and Graham Drive intersection and 40 to the southern Pacific Highway and Graham Drive seagull intersection. The report identified both intersections currently operate adequately and that the additional traffic from the proposal would not impact on the operation or LOS now or 10 years into the future. Therefore intersection upgrades are not warranted for full development of the proposal."

Notably, the land north of Double Crossing Creek is no longer part of the proposal to develop Stage 1 and the Project.

A further report has been obtained from Roadnet Pty Ltd which addresses **DGR's 5.1** and **5.3**, this report provides:

"The traffic assessment was reviewed in accordance with Table 2.1 of the RTAs Guide to traffic generating developments, including any impacts of the upgrading of the Graham Drive north junction with the Pacific Highway, and it is of Roadnets opinion that the impacts reported in the 2005 traffic impact assessment will be no greater for this proposal."

A copy of this recent report, the 23 June 2006 addendum and the Study are included in **Appendix N**.

In relation to **DGR 5.2**, the site is not located near a coastal foreshore, notwithstanding, Double Crossing Creek which extends through the site is to be included in the public reserve (park) to be dedicated to Coffs Harbour City Council.

3.6 Hazard Management and Mitigation

Coastal Processes

The Flood Assessment in **Appendix H** addresses **DGR 6.1** which requires an assessment of the Project having regard to coastal hazards and the Coastline Management Manual.

In relation to the Coastline Management Manual, the Flood Assessment states:

"DGR 6.1: The Draft Hearnese Lake Estuary Management Study and Plan (2009), prepared by BMT WBM on behalf of Coffs Harbour City Council, addresses the impacts of coastal hazards in the Hearnese Lake area. The report indicates that wave and wind action, coastal erosion, sea level rise and more frequent and intense storms will likely result in shoreline recession and beach rotation, which are not likely to impact on the site, located some 950m inland.

The report also indicates a likely increase in the breakout level of Hearnese Lake. This has been assessed in this report by modelling the impacts of sea level. Flood levels at the site were found to be insensitive to projected increases in downstream water level."

Contamination

Coffey Geotechnics Pty Ltd (Coffey) conducted a Phase 1 ESA which covered both Stage 1 and 2 (the Project) areas within the SBM estate. The Phase 1 ESA included a site history, assessment of AECs and COCs and limited sampling and analysis of site soils.

The Phase 1 ESA identified sixteen main AECs over the site and the test results showed soil contamination, particularly for total petroleum hydrocarbons and zinc, above threshold concentrations for residential use. The report recommended further sampling and analysis in the identified AECs to confirm the presence or absence of contamination and to characterise the site in accordance with NSW EPA guidelines.

Coffey's conducted a subsequent Phase 2 ESA for the Project dated March 2007, making a further assessment of soil and

groundwater contamination across the site, with recommendations regarding further investigation and options for site management/remediation.

Some of the recommendations from the Phase 2 ESA included:



Brachychiton acerifolius



Syzygium jambos

"Due to size of the site, its history, and the number of AECs identified, it is recommended that a Remedial Action Plan (RAP) be prepared ... An RAP will allow remediation to be completed to a specified program, in accordance with relevant guidelines and advice ...

Based on the on the results of the previous report, the field investigations and laboratory testing, it is considered that the proposed Stage 2 development area ... is currently not suitable for residential use with regards to soil contamination."

The Phase 2 ESA for the Project is included in **Appendix E**. This Phase 2 ESA addresses **DGR 6.2**.

In relation to the above recommendations, it is important to note that remediation works have commenced on the site (including across Stage 1). This follows the preparation of a Remedial Action Plan (RAP), as recommended above, and the issuing of development consent for the remediation works by Coffs Harbour City Council. A copy of the RAP is included in **Appendix E**.

As part of the remediation process, a site auditor has been engaged to produce a site audit statement for the works, and has been involved in the remediation works to date.

There is presently no time frame for completion of the remediation works.

It should be noted that a Controlled Activity Approval under the Water Management Act 2000 is in place for the remediation works.

Acid Sulfate Soils

Coffey's have previously prepared a Preliminary Acid Sulfate Soils Assessment for part of Lot 260 DP1110719, as well as an Acid Sulfate Soil Management Plan; both are included in the Phase 2 ESA included in **Appendix E**. These documents address **DGR 6.3**.

The Preliminary Acid Sulfate Soils Assessment and Acid Sulfate Soil Management Plan are discussed in section 2.4. Nonetheless, the results of testing indicate that soils are unlikely to have pyritic sulfur, but contain organic sulfur. These results suggest that the soils are unlikely to be acid sulfate soils.

Notwithstanding this, low pH values were obtained for the alluvial soil at 0.5m depth along the eastern part of the site (identified by Coffey's as an area of "high probability of acid sulfate soils within 1m of the ground surface". On this basis Coffey's recommended that:

- The alluvial soils within the area of "high probability of acid sulfate soils within 1m of the ground surface" as defined by the Potential Acid Sulfate Soils Maps are unlikely to be actual or potential acid sulfate soils, but treatment as a precautionary measure should be carried out; and,
- The residual soils are not acid sulfate soils, but are high acidity soils. For the materials within the "high probability of acid sulfate soils within 1m of the ground surface" area, it is recommended that treatment in the form of mixing disturbed materials with 5kg lime/m³ of disturbed soil should be carried out.

Coffey's recommend that the Acid Sulfate Soils Management Plan be applied to the "high probability of acid sulfate soils within 1m of the ground surface" area, located in the eastern part of Lot 260 DP1110719, and that the management actions in relation to the acidic soils be implemented as part of any subsequent sediment and erosion control plan prepared for the site.

Bushfire

Holiday Coast Bushfire Solutions has carried out a bushfire hazard assessment for the Project against Planning for Bushfire Protection 2006, addressing **DGR 6.4**. A copy of the Bushfire Hazard Assessment Report is included in **Appendix J**.

The Report makes a number of specific recommendations to ensure that appropriate bushfire protection measures are maintained for the Project; these include:

- The location of the reticulated water supply is to comply with the Acceptable Solutions provided in Table 2 of the Report;
- The public roads are to comply with the relevant Acceptable Solutions provided in Table 3 of the Report;

- Vegetation management over vacant allotments should be carried out by the property owner, in accordance with the principles for Outer Protection Areas of **Appendix A** of this Report. Generally this will require the grass to be kept short and green, tree canopies to be maintained <30% foliage cover, and 'crown lifting' to at least 2m above ground level. Vegetation management over occupied allotments should be carried out in accordance with the principles for Inner Protection Areas of **Appendix A** of the Report; and
- The construction requirements of future dwellings are to comply with the provisions of AS3959 Construction of buildings in bushfire-prone areas as provided by Figure 13 and Figure 14 of the Report⁴.

Figures 13 and 14 (of the Report) in combination show that Lots 25-31 and 42-51 will require construction to Level of Construction 1 under AS3959-1999, while the remainder of allotments are not required to meet any particular Level of Construction.



The Report concludes that *"... having satisfied all of the relevant Acceptable Solutions of the PBP-2006 ... the proposal should be granted approval."*

Geotechnical

The Phase 2 ESA in **Appendix E** includes a geotechnical component, which addresses **DGR 6.5**.

The assessment states that provided the Project is carried out in accordance with the recommendations provided in the Assessment, and further work is carried out to assess the reactivity and bearing pressures of the site soils, it is considered that the site would be suitable for residential use from a geotechnical perspective. The recommendations referred to include:

- Following excavation to design level, or to a suitable foundation material in areas where fill is to be placed, the exposed subgrade materials should be proof rolled to identify any wet, excessively deflecting or other deleterious material. Any such areas should be over-excavated and backfilled with a clean select material. All soil materials considered unsuitable for use as engineered fill should be stripped and stockpiled for re-use as landscaping materials only;

⁴ The Report identifies future dwellings within the Project as requiring construction levels ranging from 'No requirement' through to 'Level 1', having regard to AS3959 Construction of buildings in bushfire-prone areas.

- Approved fill beneath roads should be placed in layers not exceeding 300mm loose thickness and be compacted to a minimum dry density ratio of 95% Standard Compaction. Clay fill should be placed and maintained at 60% to 90% of Standard OMC;
- The top 300mm of natural subgrade or subgrade fill below pavements should be compacted to a minimum dry density ratio of 100% Standard Compaction;
- All pavement materials should be placed and maintained at 60% to 90% of Standard OMC; and
- Approved fill beneath structures should be placed in layers not exceeding 300mm loose thickness and be compacted to a minimum dry density ratio of 95% Standard Compaction. Clay fill should be placed and maintained at $\pm 2\%$ of Standard OMC. All filling beneath structures should be carried out under Level 1 construction monitoring and testing as defined in AS3798-1996.

The assessment also provides that *"Earthworks should be carried out in accordance with the recommendations outlined in AS3798-1996, 'Guidelines for Earthworks for Commercial and Residential Developments'."*

Flooding

The Flood Assessment in **Appendix H** addresses **DGR's 6.6** and **6.7**, which respectively deal with flood risk, and the impacts of sea level rise and an increase in rainfall intensity.

In relation to flood risk and in particular flood planning levels - having particular regard to Coffs Harbour City Council's Flood Prone Land Policy, the Assessment recommends:

- Floor levels to be equal to or greater than the 100-year ARI flood associated with the future climate plus 500mm freeboard;
- Floor levels of open car parking areas are be equal to or greater than the 20 year ARI plus 500mm freeboard. Enclosed car parking must be protected to the 100 year ARI. All subdivision roads and allotments will be located outside the High Flood Risk Zone in areas which would generally be deemed as being at Low Flood Risk (areas at risk from a Probable Maximum Flood);

In relation to evacuation, the Assessment recommends:

- Reliable access for pedestrians or vehicles is required from dwellings, commencing at the minimum floor level equal to the lowest habitable floor level to an area of refuge above the PMF level, either onsite or off-site;
- The proposed internal road layout allows access from all dwellings to Graham Road in the 100-year flood event, and from there to areas above the PMF to the south;
- Flood levels for the critical 2-hour storm duration are expected to peak at the site approximately one hour after rainfall begins; and
- A flood level sign should be provided at Graham Drive to allow flood monitoring at the site.

In relation flood affectation, the Assessment provides:

- No major filling will be conducted within the 100-year ARI flood extent. Minor channel improvements will improve flood conveyance through the site; and
- Simulation of climate change management strategies shows that associated filling will result in minor flood level increases under some climate change scenarios.

Having particular regard to **DGR 6.6**, the Assessment simulates flooding conditions at the site due to a combination of catchment-based flooding and downstream lake conditions for a range of flood events up to the Probable Maximum Flood.

It provides that flood hazard has been assessed in accordance with the NSW Floodplain Development Manual (2005), with high hazard areas contained within the banks of Double Crossing Creek in flood events up to the 100-year ARI. In regard to the PMF conditions, the entire site is inundated.

In relation to implementing climate change management strategies, the will potentially result in the filling of part of the site or construction of a small levee to contain the 100-year ARI flood event under future climate conditions. Impacts of this have been assessed and are likely to result in small increases in future climate flood levels of up to 50mm off-site.

In relation to **DGR 6.7** and the impact of sea level rise and rainfall intensity increase, flood levels were found to be insensitive to projected Hearnese Lake level rises associated with sea level rise. In relation flooding and climate change rainfall intensity increases, a rainfall increase greater than 10% will result in the 100-year ARI flood overtopping the banks of Double Crossing Creek and flowing through the site (Low Risk Flood Zone).

The Flood Assessment puts forward two strategies for dealing with the affects of future climate change, and these include:

- Locating floor levels based on high climate change scenario plus freeboard (0.5m) – while leaving the remainder of the site as is, which is unaffected by the low climate change scenario. This is expected to result in increased regularity of site inundation under future climate conditions; or
- Locate floor levels based on the high climate change scenario plus freeboard (0.5m) and a levee to reduce inundation frequency. The levee could be built now or in the future. This scenario is expected to reduce the regularity of site inundation compared to the strategy above, however stormwater issues associated with draining behind the levee would require particular consideration.



The first of these strategies is the preferred option for the Project.

It is important to note that the CSIRO in its *Climate Change in NSW Catchment Series* report predicts increases in extreme rainfall totals of +5% to +10% in the NSW Northern Rivers catchments by 2070. The modelled rainfall intensity increases of 10%, 20% and 30% simulated in accordance with the *Floodplain Risk Management Guideline – Practical Consideration of Climate Change* as a sensitivity analysis in the Flood Assessment (**Appendix H**), are in excess of the values predicted by the CSIRO in its report.

3.7 Water Cycle Management

A detailed Water Quality Assessment has been undertaken by GHD Pty Ltd (**Appendix F**) to ensure the Project has a neutral impact upon the ecology of Double Crossing Creek, Hearnese Lake and the Solitary Islands Marine Park. This Assessment addresses **DGR's 7.1-7.3**. Included in **Appendix F** is also correspondence from GHD Pty Ltd providing that the Assessment is not affected by the fact that the land north of Double Crossing Creek is not part of the Project, even though it is included in the Assessment.

The Assessment has been carried out having regard to the Coffs Harbour City Council *Urban Stormwater Management Plan – 2000*, which provides for integrated water cycle management; and, includes the adoption of a water sensitive urban design philosophy.

The Assessment details a stormwater treatment train, and outlines the impacts of the Project during both construction and occupation.

The *Urban Stormwater Management Plan – 2000*, provides that:

- All developments must comply with the objectives listed in Set A.
- All developments must comply with the objectives listed in either Set B or Set C.

The objectives for Set A include:

- To implement 'best practice' stormwater management techniques.
- To maintain natural drainage patterns as far as possible.
- To maintain watercourses in their natural form, i.e. Watercourses should not be piped or channelled.
- To maintain adequate vegetation buffers around waterways and sensitive areas, i.e. at least 20 metres.

The objectives for Set C include:

Construction Phase:

- Soil Type C To ensure suspended solids concentrations do not exceed 50mg/L for all flow events up to 25% of the 1 year ARI flow.
- Soil Types F and D To ensure suspended solid concentrations do not exceed 50mg/L for all 5 day rainfall totals up to the 75th percentile rainfall event (75th percentile rainfall event in Coffs Harbour = 34.4mm).
- To limit the application, generation and migration of toxic substances to the maximum extent practical.

Post Construction Phase:

- To retain 80% of the average load of suspended solids
- To retain 45% of the average load of Total Phosphorus
- To retain 45% of the average load of Total Nitrogen
- To retain litter greater than 50mm for flows up to 25% of the 1 year ARI peak flow.

The following WSUD objectives have also been adopted for the Project, namely:

- Protect natural systems – protect and enhance natural water systems within urban developments;
- Integrate stormwater treatment into the landscape – use stormwater in the landscape by incorporating multiple use corridors that maximise the visual and recreational amenity of urban developments;
- Protect water quality – protect the water quality draining from urban developments;
- Reduce runoff and peak flows – reduce peak flows from urban developments by local detention measures and minimising impervious areas; and
- Add value while minimising development costs – minimise the drainage infrastructure cost of urban developments.

To achieve the above objectives, the Project adopts a treatment train of measures including:

- rainwater tanks;
- swales and vegetated overland flow paths; and
- a bio-retention basin.

The installation of rainwater tanks will allow future residents to harvest rainwater for gardening, toilet flushing and other non-potable household uses. The tanks can act as an attenuation device and aid in reducing runoff. The expected capacity of each tank is 5000 litres.

Swales and filter strips use vegetation in conjunction with slow and shallow-depth flow for stormwater runoff treatment. As runoff passes through the vegetation, the combined effects of filtration, infiltration, adsorption, and biological uptake remove

contaminants. Vegetation also decreases the velocity of flow and allows for particulates to settle.

Correspondence from Coffey Geotechnics included in **Appendix F** outlines the groundwater regime under the site, and the potential impacts of the Project (**DGR 7.4**). It provides:

- Several investigations on the site including environmental investigations, geotechnical investigations and acid sulfate soils assessments have been undertaken, including installation and monitoring of groundwater wells;
- Soils within the site may contain organic sulphur and have been classed as acidic soils, unlikely to cause significant harm to the environment. Options for minimising harm to the environment from these soils have been previously provided (see Phase 2 ESA in **Appendix E**);
- The anticipated depth of disturbance on the site to install the underground services is about 1.5m below ground surface (bgs). The groundwater levels measured from monitoring wells located down slope and adjacent to Double Crossing Creek were between 1.28m and 1.45m bgs. Given the sites topography, it is considered unlikely that the proposed depth of disturbance (underground service trenches) will extend below the water table;
- Local groundwater is likely used for small scale irrigation. However the bores registered with DWE are located up-gradient of the proposed development, and as such the proposed development is unlikely to impact on this use;
- It is considered that maintenance of aquatic ecosystems is the principal groundwater beneficial use requiring protection. It is considered that the proposed residential development will not have a hydrologic impact that would affect groundwater depth or quality, result in increased groundwater discharge, or impact upon groundwater dependent native vegetation;
- Local stormwater and groundwater regimes will not be relied upon for water management or drainage. There are no existing stormwater drains in the vicinity of the site, and as such new urban stormwater and drainage systems will be installed;
- The most recent groundwater monitoring event (10 July 2008), indicated no significant groundwater contamination was present on the site;

- The reported levels of copper, lead and zinc were marginally above the acceptance criteria ANZECC 2000. The reported levels of copper (BH4), lead (BH4, BH5, BH6) and zinc (BH5) exceeded the adopted acceptance criteria¹ based upon ANZECC 2000 Australian and New Zealand Guidelines for Fresh and Marine Water Quality. The levels reported are marginally above the laboratories limits of reporting and are not considered to have impacted the groundwater at the site; and
- It is considered that the proposed development is unlikely to have an adverse impact on groundwater, or nearby Double Crossing Creek. As the registered bores are located up-gradient of the site it is considered that the Project will not affect the water quality in these bores.

3.8 Heritage and Archaeology



Davies Heritage Consultants Pty Ltd have carried out a preliminary cultural heritage assessment to identify whether there are cultural heritage values (Aboriginal and Non-Indigenous) associated with the site, in order to address **DGR's 8.1 and 8.2**. A copy of this Preliminary Cultural Heritage Assessment is included in **Appendix I**.

The Assessment is the first step in the consideration of potential impacts on Aboriginal cultural heritage and is primarily a desktop exercise. The main purpose of this step is to identify whether there are Aboriginal cultural heritage values associated with the Project.

Two responses were received arising from notification of stakeholder groups and advertising. One from the Coffs Harbour and District Local Aboriginal Land Council and the other from the Yarrawarra Aboriginal Corporation (Garby Elders).

A letter dated 9 April 2008 outlining the Project and methodology for the Assessment was forwarded by mail to identified stakeholders. Stakeholders were also contacted numerous times by phone in relation to the Project.

A copy of the draft Assessment was forwarded on 20 May 2008 so that Stakeholders could review and provide comment prior to finalising the Assessment.

Of note, the Assessment provides that in 2005, prior to the Project commencing, both the Coffs Harbour and District LALC and the Yarrawarra Aboriginal Corporation, advised Sapphire Beach Properties Pty Ltd that a parcel of land which included

the site "did not contain areas of cultural significance" and was "highly unlikely to contain any Aboriginal objects".

In relation to Aboriginal cultural heritage, the Assessment makes the following two recommendations:

- That no further cultural heritage assessments (e.g. site inspection; cultural heritage survey) of the Project area are required; and
- Should future activities associated with the development of Lot 260 DP1110719, Graham Drive, Sandy Beach, uncover anything which may be interpreted as Aboriginal in origin, work in the vicinity of the find should cease immediately and the developer should inform the Department of Environment and Climate Change (NSW), Coffs Harbour, and the Registered Stakeholders, as soon as possible, for discussion, negotiation and direction. The provisions of the National Parks and Wildlife Act of 1974 (as amended) state that it is illegal to damage, deface or destroy a relic without written permission of the Director of the Service. Those failing to report a discovery and those responsible for the damage or destruction occasioned by unauthorised removal or alteration to a site or to archaeological material may be prosecuted under the National Parks and Wildlife Act 1974, as amended.

In relation to non-Indigenous cultural heritage, the Assessment states:

"It would appear that a saw mill complex was located within the Project Area. As at least three fires have occurred and at least two mills have been constructed, it is unlikely that any part of the original mill constructed around 1964 remain. Nevertheless, as noted in Sub-section 6.2.1, a relic under the Heritage Act 1977 is "...any deposit object or material evidence which relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement; and which is 50 or more years old". Hence, as the structures which were present on Lot 260 would not have been 50 or more years old, the provisions of this Act are not applicable."

3.9 Flora and Fauna

A Flora and Fauna Survey (**Appendix G**) of the site has been undertaken, and concludes that the impact of the Project would not have a significant effect on threatened species, populations, ecological communities or their habitats due to the disturbed nature of the site and the preservation of remnant vegetation and habitats of conservation significance, fronting Double Crossing Creek.

The Survey further provides that the restoration works commenced in 2005 are showing great promise in re-establishing wildlife connections to Hearn's Lake and to the hinterland, and that the Project will continue these conservation initiatives.

The Flora and Fauna Survey addresses **DGR's 9.1-9.3**.

3.10 Noise

Atkins Acoustics conducted a Traffic Noise Assessment for Stage 1 and the Project; this Assessment accompanied Development Application 508/07 to Coffs Harbour City Council for Stage 1.

The Traffic Noise Assessment addresses **DGR 10.1**.

The Assessment identified the Pacific Highway and Graham Drive traffic as the only significant noise generators to potentially impact upon future residents on the site. The predicted noise levels were determined using a road traffic noise model.

The Assessment identified that noise mitigation measures would be required for dwellings constructed adjacent to the eastern and western site boundaries (Lots 4-9, 25, 26 and 47-50). In this regard Development Application 508/07 proposed:

- an acoustic mound was proposed in the Graham Drive road reserve running parallel to the western boundary;
- fencing along the eastern and western boundaries; and
- a covenant over Lots 1, 2, 7, 8, 9, 10, 24 and 25 requiring an acoustic report be prepared for any future dwelling on each allotment which, and prior to the issue of development consent, addressing acoustic levels of the proposed dwelling.

The above requirements were acknowledged by Coffs Harbour City Council in conditions 4-6 of Development Consent 508/07, which provided:

"Acoustic Controls - Future Housing:

4. *A covenant shall be created for Lots 1, 2, 7, 8, 9, 10, 24 and 25 within the subdivision pursuant to Section 888 of the Conveyancing Act 1919 and must be registered on the title of each such lot. Registration must be effected in conjunction with registration of the Plan of Subdivision. The restriction requires Council's approval to variation or removal. The covenant shall require the preparation of an acoustic report prior to the issue of development consent for any future dwellings on the affected lots. The acoustic report shall have regard to the design, internal layout, materials and ventilation of any proposed dwelling relative to traffic noise impacts (from Pacific Highway) and be prepared in accordance with relevant EPA Guidelines.*
5. *The western boundary of Lots 1, 23 and 24 and the eastern boundary of Lots 7, 8, 9 and 10 being fenced in accordance with fencing details shown on Figure 7H - Stage One Proposed Fencing prior to issue of the Subdivision Certificate.*
6. *The planted sound mound located adjacent to the western boundary of the site being constructed and landscaped prior to issue of the Subdivision Certificate. The sound mound is to be planted at a minimum 7 plants/m²."*



Proposed Lots 25, 26 and 47-50 are all included in the Project. It is proposed to create a covenant requiring the preparation of an acoustic report prior to the issue of development consent for any future dwellings on the affected lots adjoining Graham Drive, consistent with the requirements of condition 4 above. The required acoustic report is to have regard to the design, internal layout, materials and ventilation of any proposed dwelling relative to traffic noise impacts.

Consistent with the conclusion of the Traffic Noise Assessment, boundary fences for Proposed Lots 25, 26 and 47-50 are to be provided.

A copy of the Traffic Noise Assessment is included in **Appendix L.**

3.11 Riparian Corridor

The Water Quality Assessment (**Appendix F**) and Flora and Fauna Survey (**Appendix G**) in combination demonstrate that the Project will not have an adverse impact on the water quality and ecological integrity of Double Crossing Creek, Hearnese Lake and its tidal tributaries (**DGR 11.1**).

The area including and adjoining Double Crossing Creek is to be dedicated to Coffs Harbour City Council as public reserve (park). Prior to this, the area is to be remediated and improved by revegetation and rehabilitation, including weed removal, with improvements in the form of footpaths, play equipment etc to be provided. The dedication of this area will ensure its protection, while ongoing management of the various improvements will be provided by Coffs Harbour City Council (**DGR 11.2**).

DGR 11.3 requires access to and along Double Crossing Creek. The Project provides such access in the form of the dedication of the area including and adjoining Double Crossing Creek to Coffs Harbour City Council as public reserve (park). Within this reserve, improvements (footpaths, play equipment etc) are to be constructed.

Development Application 508/07 showed a footbridge crossing for Double Crossing Creek, linking the site with the land on the northern side of the Creek. The land on the northern side of the Creek is in a different ownership to that of the site.

It remains to be seen whether the northern wide of the creek might further develop, and whether this form of development is receptive to a crossing of the Creek.

Design details of the Double Crossing Creek footbridge (**DGR 11.4**) are included in **Appendix C**, and its location is shown in the **Landscape Plans**. The footbridge is intended to be constructed of fibreglass tread flooring (panels - charcoal colour) for straight sections and timber (turpentine hardwood) for any turns, with timber (turpentine hardwood) posts, bearers and joist.

It is considered that the necessity for, and the final location of, the footbridge remain unresolved, given that the northern part of the footbridge will be located on land presently in separate ownership to that of the site. In addition, the ownership (and maintenance) of such a footbridge on the site would be Coffs Harbour City Council's given the proposed dedication of the public reserve (park) to the Council. Accordingly, it is intended to provide a payment of \$50 000 to Coffs Harbour City Council,

representing the cost of constructing that part of the footbridge on the site. This payment would be payable upon dedication of the public reserve (park) to Coffs Harbour City Council, and subject to CPI from the date of any approval granted to the Project. In addition, the payment would be refundable after a period of 5 years from the date of dedication of the public reserve (park).

Having regard to the document *Why do fish need to cross the road?* and the various recommendations included within, the footbridge:

- does not pose a barrier to fish passage as it does not block the flow of water;
- footbridge piers are likely to be able to span the watercourse ensuring no large scale turbulence (this impact will in part be dictated by the final location of the footbridge and the number and exact location of piers);
- has been designed to permit light to penetrate its floor, to the Creek floor, resulting in no dark patches in the watercourse, and no likely changes to riparian vegetation (of note too is the relatively narrow width of the footbridge);
- is located along a straight section of the Creek, which is unlikely to meander; and
- will not remove vegetation of value to the riparian environment – the riparian corridor to be revegetated and rehabilitated as part of the Project.

Section 4

Consultation

The development of the site in the manner proposed by the Project has been the subject of consultation between various agencies for some considerable time.

The Hearnese Lake/Sandy Beach DCP provides considerable detail as to how the site should be developed; this DCP was the subject of consultation with various government agencies and was advertised for wider public input. Similarly, the present Draft Hearnese Lake Estuary Management Plan has recently been publicly exhibited; this Plan refers specifically to the site in some instances.

As previously stated, the Project was consented to as staged development by Coffs Harbour City Council under Development Consent 508/07. The Project has as a result been the subject of consultation, and the following entities have had input into, or provided feedback on it:

- Coffs Harbour City Council;
- Local Traffic Committee (incorporating RTA);
- Coffs Harbour Police;
- Rural Fire Service; and
- Marine Parks Authority.

It is also understood that Development Application 508/07 was advertised and notified to adjoining landowners.

As part of the remediation of the site, and as previously stated, the site also benefits by way of a Controlled Activity Approval (30ERM2008/1247) for rehabilitation works along Double Crossing Creek. The Department of Water and Energy have as a result had input into works along Double Crossing Creek.



Section 5

Conclusion



This EA has been prepared by S J CONNELLY CPP PTY LTD and the Petersen Consulting Group for Sandy Beach Mill Pty Ltd (SBM).

It has been prepared following the receipt of DGR's, which were provided in response to the lodgement of a PEA for the Project.

The EA:

- provides a written and graphical description of the Project, which also identifies its location; and
- satisfies legislative requirements under Part 3A of the Act, namely, the submission of an EA which addresses the DGR's issued for the Project.

In our submission the project has considerable merit and warrants approval subject to the commitments set out at Section 2.7.

Should the Department require any additional information or wish to clarify any matter raised by this EA please feel free to contact Mr Connelly (02 66877171) or Mr Petersen (02 6652 6821).

Stephen J Connelly FPIA CPP

Mark Petersen