



# Appendix C

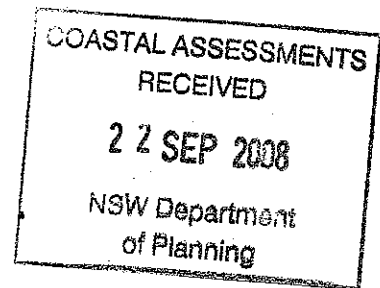
# C



Your reference : MP08\_0167  
Our reference : FIL06/694-04 DOC08/42599  
Contact : Peter A. Ekert, 66402514

Heather Warton  
Department of Planning  
Director Urban Assessments  
GPO Box 39  
SYDNEY NSW 2001

Attention: Paula Tomkins



17 SEP 2008

Dear Ms Tomkins

**RE: REQUEST FOR KEY ISSUES AND ASSESSMENT REQUIREMENTS- RESIDENTIAL SUBDIVISION, SOUTH WEST ROCKS.**

I refer to your request for the Department of Environment and Climate Change (DECC) requirements for the environmental assessment (EA) in regard to the above proposal received by DECC on 8 September 2008.

DECC has considered the details of the project as provided by the Applicant and has identified the information it requires to assess the project concept plan in Attachment A. The proponent should ensure that the EA is sufficiently comprehensive and detailed to determine the extent of the impact of the proposal.

In summary, DECC's recommended key information requirements for the project are:


1. the impacts on local surface water quality;
2. an assessment of local air quality and possible odour impacts;
3. the impacts of the project on threatened species and their habitat;
4. the impacts of the project on Aboriginal cultural heritage values;
5. an assessment of any land contamination and;
6. the actions that will be taken to avoid or mitigate impacts or compensate to prevent unavoidable impacts identified in 1-5 above.

**Site Specific Information Requirements**

A review of DECC Atlas of NSW Wildlife records has shown that a number of threatened species have been recorded on and adjacent to the subject site. These species are listed under the *Threatened Species Conservation Act 1995* (TSC Act). The subject site is part of a known Key Regional Fauna Corridor and Habitat and supports a SEPP 14 wetland. In addition the subject site is likely to support Swamp Sclerophyll Forest and Freshwater Wetlands, which are listed as Endangered Ecological Communities (EEC) under the TSC Act.

Should you require any further information please contact Peter A. Ekert 66402514..

Yours sincerely

A handwritten signature in cursive script, appearing to read "Jon Keats".

**JON KEATS**

**Head Industry and Waste Unit North Coast  
Environment Protection and Regulation Group**

Att: Attachment A DECC EA Requirements  
Attachment B Guidance Material

# **Attachment A – Department of Environment and Conservation's Environmental Assessment Requirements**

## **Environmental impacts of the project**

1. The following environmental impacts of the project need to be assessed, quantified and reported on:
  - Water quality
  - Contaminated Land
  - Noise
  - Threatened Species
  - Aboriginal cultural heritage
2. These should be assessed in accordance with the relevant guidelines listed in Attachment B.
3. Describe mitigation and management options that will be used to prevent, control, abate or mitigate identified environmental impacts associated with the project and to reduce risks to human health and prevent the degradation of the environment. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented.
4. Based on the information provided to the Department of Environment and Climate Change (DECC), the applicant will not require an Environment Protection Licence because the activity is not scheduled under the *Protection of the Environment Operations Act 1997*.

### **Water quality**

The environmental outcomes for the project in relation to water should be:

- There is no pollution of waters during the construction and operational phases of the development;
- There is no inconsistency with any relevant Statement of Joint Intent established by the Healthy Rivers Commission; and
- It is acceptable in terms of the achievement or protection of the River Flow Objectives and Water Quality Objectives.

The Environmental Assessment (EA) should document the measures that will achieve the above outcomes.

### **Contaminated Land**

The EA must document the identification, assessment and management of any land contamination to ensure that the land is not allowed to be put to a use that is inappropriate because of the presence of contamination. Under the *Contaminated Land Management Act 1997* there is a responsibility to notify the DEC of sites that pose a significant risk of harm to human health or the environment.

### **Noise**

The environmental outcomes should include the following:

- The proposal must be designed, constructed, operated and maintained so that there are no adverse impacts from noise (including traffic noise).

## **Odour**

1. Provide a description of existing air quality and meteorology, using existing information and site representative ambient monitoring data.
2. Assess potential odour impacts from the nearby sewage treatment plant (STP). (It is noted that at least part of the proposed subdivision is within 400 metres of the STP. A minimum buffer zone of that size has previously been recommended by Department of Planning and has been adopted by many local councils. DECC encourages the establishment of buffer zones around STPs and any proposed buffer less than 400 metres should be justified using site specific data. In this regard, reference should be made to Assessment and Management of odour from Stationary Sources in NSW (DECC – November 2006)).

## **Impacts of the project on threatened species and their habitat**

### **Vegetation Clearing**

The vegetation on site has the potential to support a wide range of threatened flora and fauna species. Any identified threatened species should be discussed in detail.

The EA will need to include a comprehensive assessment of the following:

1. A field survey of the site should be conducted and documented in accordance with the draft "Guideline for threatened species assessment" and "Threatened Biodiversity and Threatened Species Assessment – Guideline For Developments and Activities".
2. Likely impacts on threatened species and their habitat need to be assessed, evaluated and reported on. The assessment should specifically report on the considerations listed in Step 3 of the draft guideline.
3. Describe the actions that will be taken to avoid or mitigate impacts or compensate to prevent unavoidable impacts of the project on threatened species and their habitat. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented.
4. The EA needs to clearly state whether it meets each of the key thresholds set out in Step 5 of the draft guideline.

## **Impacts of the project on Aboriginal cultural heritage values**

1. The EA should address and document the information requirements set out in the draft "Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation" involving surveys and consultation with the Aboriginal community.
2. Identify the nature and extent of impacts on Aboriginal cultural heritage values across the project area.
3. The extent and significance of this site will need to be assessed and preferably any development in this area would avoid disturbance of the site.
4. Describe the actions that will be taken to avoid or mitigate impacts or compensate to prevent unavoidable impacts of the project on Aboriginal cultural heritage values. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented.

5. The EA needs to clearly demonstrate that effective community consultation with Aboriginal communities has been undertaken in determining and assessing impacts, developing options and making final recommendations.

Note: If the EA is relying on past surveys that they should check that the work is consistent with the requirements within the above 3A guidelines.



## **Attachment B - Guidance Material**

### **Water quality**

- National Water Quality Management Strategy: Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZECC 2000)
- NWQMS Australian Guidelines for Water Quality Monitoring and Reporting (ANZECC 2000)
- Healthy Rivers Commission Report into Coastal Lakes and Statement of Joint Intent
- The relevant targets within the State Water Management Outcomes Plan

### **Wastewater**

- National Water Quality Management Strategy: Guidelines for Sewerage Systems - Effluent Management (ARMCANZ/ANZECC 1997)
- National Water Quality Management Strategy: Guidelines for Sewerage Systems - Use of Reclaimed Water (ARMCANZ/ANZECC 2000)
- Environmental Guidelines for the Utilisation of Treated Effluent by Irrigation (NSW DEC 2004)
- Environment and Health Protection Guidelines: 'Onsite Sewage Management for Single Households', February 1998 (Silver Book).

### **Stormwater**

(Note: some of these documents will be revised in 2006)

- Managing Urban Stormwater: Soils and Construction (NSW Landcom, 2004)
- Managing Urban Stormwater: Source Control (EPA 1998)
- Managing Urban Stormwater: Treatment Techniques (EPA 1998).

### **Contaminated Land**

- Managing Land Contamination: Planning Guidelines - SEPP55 - Remediation of Land, Department of Urban Affairs and Planning and NSW EPA, 1998:
- Contaminated Sites - Guidelines for Consultants Reporting on Contaminated Sites (Environment Protection Authority (EPA) 1997);
- Contaminated Sites - Guidelines on Significant Risk of Harm and Duty to Report (EPA, 1999).

### **Noise and vibration**

- NSW Industrial Noise Policy (EPA, 1999)
- NSW Environmental Criteria for Road Traffic Noise (EPA, 1999)
- Chapter 171 Noise Control Guideline, *Construction Site Noise, Environmental Noise Control Manual*, 1994.

### **Threatened Species Impacts**

- Threatened Biodiversity and Threatened Species Assessment - Guideline For Developments and Activities - Working Draft 2004. Available from DECC.
- Draft Guidelines For Threatened Species Assessment - Available from Department of Planning.

### **Assessing Aboriginal Cultural Heritage Impacts**

- Draft Guidelines For Aboriginal Cultural Heritage Impact Assessment and Community Consultation - Available from Dept of Planning
- Interim Community Consultation Requirements for Applicants
- Aboriginal Cultural Heritage Standards and Guidelines Kit - Available shortly on-line through DEC's webpage.

<http://www3.environment.nsw.gov.au/npws.nsf/Content/Protecting+Aboriginal+objects+and+places>



26 SEP 2008

NSW Department  
of Planning

23 September 2008

The Director Coastal Assessments  
Department of Planning  
GPO Box 39  
SYDNEY NSW 2001

Our Ref: TRIM 2007/1481

**Attention: Paula Tomkins**

Dear Paula,

**Re: Key Issues and Assessment Requirements – MP08/0167**

Thank you for your letter of 4 September 2008 requesting the NSW Department of Primary Industries (DPI) provides comment on the above mentioned major Project application.

NSW DPI has both statutory and advisory responsibilities in relation to development and land use planning matters. The Department is an advocate of sustainable development and profitable and sustainable primary industries through appropriate access to and wise management of natural resources. DPI's responsibility also covers managing fish (including aquatic invertebrates), and fish habitat throughout NSW. In addition, the department works to provide quality commercial and recreational fishing, and aquaculture opportunities.

This is a coordinated response from NSW DPI.

**Agriculture Issues**

The planning and development process for the subject lands should have regard to the publication *"Living and Working in Rural Areas: A handbook for managing land use conflict issues on the NSW North Coast"*. This is a whole of government NRM and interface management guide for all key stakeholders involved in rural land use and land use conversion. The guide is available for free download at [www.dpi.nsw.gov.au/pubs/north-coast-land use](http://www.dpi.nsw.gov.au/pubs/north-coast-land-use).

If you require assistance on agricultural issues from NSW DPI, please contact Mr Rik Whitehead on (02) 66 261349.

**Mineral Resource Issues**

The proposal raises no minerals issue. If you require any assistance on mineral resource issues from NSW DPI, please contact Mr Ian Patterson on (02) 4931 6703.

### Fisheries Issues

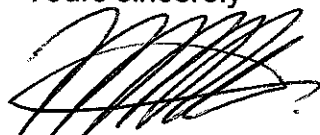
The following key issues should be included in the "Environmental Assessment Requirements":

1. Consistency with "*Saltwater Creek and Lagoon Estuary Management Plan and Saltwater Creek Catchment Flood Study*". Particularly setbacks and water quality issues
2. Storm Water Management (quantity and quality) and impacts on Saltwater Creek and Lagoon.
3. DPI strongly recommend that potential future sea level rise in low lying coastal floodplains be taken into consideration when assessing and determining developments.

General assessment requirements should also include an assessment of the proposals consistency with current policy in the following documents.

- *Policy and Guidelines Aquatic Habitat Management and Fish Conservation* 1999. Available at [www.dpi.nsw.gov.au](http://www.dpi.nsw.gov.au).
- *Fish Passage – Requirements for Waterway Crossings*, 2003. Available at [www.dpi.nsw.gov.au](http://www.dpi.nsw.gov.au).

Yours sincerely



**MARCUS RICHES**

Senior Fisheries Conservation Manager

Authorised delegate of the Minister for Primary Industries

All communications to be addressed to:

Headquarters  
NSW Rural Fire Service  
Locked Mail Bag 17  
GRANVILLE NSW 2142

Headquarters  
NSW Rural Fire Service  
15 Carter Street  
HOMEBUSH BAY NSW 2127

Telephone: (02) 8741 5555

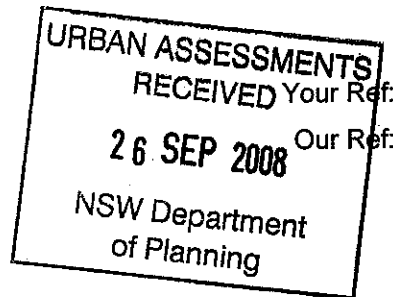
Facsimile: (02) 8741 5550

e-mail: development.control@rfs.nsw.gov.au



Coastal Assessments  
Department of Planning  
GPO Box 39  
SYDNEY NSW 2001

Attention: Paula Tomkins



MP 08\_0167  
S08/0040  
G08/2871  
DA08091054275 LC

16 September 2008

Dear Ms Tomkins,

**RE: Request for provision of Key Issues and Assessment Requirements –  
52//831284, 84//792945, BELLE O'CONNOR STREET SOUTH WEST ROCKS,  
KEMPSEY NSW**

I refer to your letter received 4 September 2008 seeking the NSW Rural Fire Service key issues and assessment requirements regarding bushfire protection for the above property in accordance with section 75F (4) of the *Environmental Planning and Assessment Act 1979*.

The following key issues and assessment requirements shall be included in the Director-Generals environmental assessment requirements:

1. The NSW Rural Fire Service (RFS) notes that the subject site has significant bush fire issues and is identified as bush fire prone. All proposed residential and Special Fire Protection Purpose developments are to fully comply with the requirements of *Planning for Bush Fire Protection 2006*.
2. The impact of radiant heat on buildings and exposure to occupants by separating the development from the bushfire hazard is to be minimised. This is achieved by identifying the extent to which future development can provide for Asset Protection Zones in accordance with *Planning for Bush Fire Protection 2006*. Setbacks will depend on proximity to vegetation, vegetation type and slope.
3. The rate of heat output (intensity) of a bush fire close to a development is to be reduced through control of fuel levels.
4. The ability for adequate egress/access to the proposed development as outlined within 4.1.3 and 4.2.7 of *Planning for Bush Fire Protection 2006* is to be provided.

5. The ability to site and provide for adequate future water supplies for bush fire suppression operations in accordance with *Planning for Bush Fire Protection 2006* is to be addressed.
6. Minimising the vulnerability of buildings to ignition from radiation and ember attack by addressing the construction of assets in accordance with *Australian Standard AS 3959 -1999 'Construction of buildings in bush fire-prone areas'*.

For any enquiries regarding this correspondence please contact Luke Catorall.

Yours faithfully,



Nika Fomin

**Development Control Co-ordinator**

The RFS has made getting additional information easier. For general information on *Planning for Bush Fire Protection 2006*, visit the RFS web page at [www.rfs.nsw.gov.au](http://www.rfs.nsw.gov.au) and search under *Planning for Bush Fire Protection 2006*.

Ms Paula Tomkins  
Senior Environmental Planner  
Coastal Assessments  
NSW Department of Planning  
GPO Box 39  
Sydney NSW 2001

Dear Ms Tomkins

**RE: REQUEST FOR PROVISION OF DETAILS OF KEY ISSUES AND ASSESSMENT  
REQUIREMENTS – MP08\_0167**

Thank you for your letter of 4 September 2008 and the opportunity to identify key issues for inclusion in the Director-General's Environmental Assessment Requirements (DGRs) for the above proposal. Thank you also for the extension of time to comment.

The Northern Rivers Catchment Management Authority (NRCMA) has reviewed the information and provide comments in regard to the Native Vegetation Act not already covered in your Draft DGRs. Our comments are similar to those we forwarded to you in relation to MP07\_0129 involving land adjoining this proposal to the south.

The NRCMA is responsible for the information access and approval processes of the Native Vegetation Act (NVA) 2003. The Act regulates the clearing of native vegetation on all lands in NSW except for land listed in Schedule 1 of the Act as "Excluded Land". The Act currently applies to all land zonings within this proposal, but will not apply to the 1(c) and 1(d) zones if these are rezoned, as proposed, to 2(a) residential.

However the NVA will continue to apply to the land zoned 7(a) (Wetlands Protection Zone) included in this proposal.

The Native Vegetation Act is not included within the draft DGRs. We recommend that it should be included for consideration within both the General Requirements, and Section 9 "Flora and Fauna". The NRCMA would be pleased to discuss the proposal further with the developers in due course, as required in the Consultation section of the DGRs.

If you require clarification of our comments or further assistance with this proposal, please contact Mr Roger Stanley, Catchment Coordinator based in Kempsey on 6561 4964.

Yours sincerely



Michael Pitt  
General Manager



## Department of Lands

Land Administration & Management  
Property & Spatial Information

Paula Tomkins  
Senior Environmental Planner  
Coastal Assessments  
NSW Department of Planning  
GPO Box 39  
SYDNEY NSW 2001

**Crown Lands NSW**  
98 Victoria St  
PO Box 440  
TAREE NSW 2430  
telephone (02) 6691 3500  
facsimile (02) 6652 2816  
e-mail: robert.birse@lands.nsw.gov.au

Our Reference: TE06A11  
Your Reference: 08\_0167

Date: 18 September 2008

Dear Ms Tomkins

**RE: REQUEST FOR PROVISION OF DETAILS OF KEY ISSUES AND ASSESSMENT  
REQUIREMENTS – MP08\_0167**

Thankyou for the opportunity to review the preliminary assessment of the proposed subdivision for Lot 52 DP 831284 and Lot 84 DP 792945, Belle O'Connor Street, South West Rocks. The subject site adjoins a Crown road (Belle O'Connor Street) which is located to the south of the subject site and Crown reserve 82364 for Public Recreation to the west of the subject site.

The Department of Lands provides the following comments.

- It appears as though a number of streets within the proposed subdivision will join Belle O'Connor Street and as such the street will be used extensively by residents of the subdivision. The Department of Lands is not in a position to authorise any works associated with the linking of the road network associated with the subdivision to Belle O'Connor Street. Belle O'Connor Street will need to be transferred to Council prior to any works commencing.
- The proposed use of the land which has not been covered by uses listed in the legend of the location plan map is unclear (i.e. the land adjoining the 7a zoned land). The current subdivision layout does not identify adequate recreational opportunities and as such this land should be set aside for conservation and public recreation with appropriate facilities developed. Without the provision of adequate recreational opportunities pressure will be placed on Crown reserve 82364 which is currently used as a golf course and will not be able to accommodate recreational opportunities that will be required by future residents.

Correspondence to the Department of Lands for issues south of the Nambucca River and north of Port Stephens should be directed to me at the above address. If you have any questions regarding these matters please call me on 6591 3504

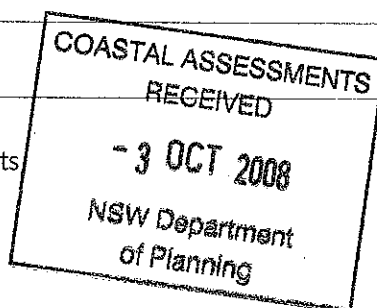
Yours sincerely

R. W. Birse  
Team Leader MNC  
Land Management  
Crown Lands NSW, Taree

File No. 235.5351 08/1772 N01399  
Reference. 08\_0167  
Leisa Sedger



Senior Environmental Planner, Coastal Assessments  
Department of Planning  
GPO Box 39  
SYDNEY NSW 2001



Key issues and assessment requirements. Proposed 400 lot residential subdivision,  
Belle O'Connor Street, South West Rocks.

Dear Sir

I refer to your letter dated 4 September 2008 concerning the proposed residential subdivision.

The Roads and Traffic Authority (RTA) was contacted by the consultant, Connell Wagner in October 2005 requesting the RTA's requirements for this development. Please find attached a copy of this response with the RTA requirements.

If you have any further enquiries please contact Mrs Leisa Sedger on 6640 1362 or email [land\\_use\\_northern@rta.nsw.gov.au](mailto:land_use_northern@rta.nsw.gov.au).

Yours faithfully

A handwritten signature in dark ink, appearing to read 'David Bell'.

30 SEP 2008

David Bell  
Regional Manager, Northern Region



RSTM&D 235.5351  
Reg 05/1828  
Mr Greg Sciffer (02) 6640 1344  
Email: land\_use\_northern@rta.nsw.gov.au

Jenny Ehmsen  
Connell Wagner  
PO Box 19  
CALLAGHAN NSW 2308

Kempsey Shire Council. Local Environmental Study. Lot 19 DP 882848, Lot 52 DP 831284 and Lot 84 DP 792945. Southwest Rocks.

Dear Madam

Reference is made to your letter dated 7 October 2005 concerning the proposed study and planning focus meeting to be held on the 3 November 2005. The Roads and Traffic Authority (RTA) wishes to advise that it will not be able to attend. The following comments are provided for consideration.

Recent statistics indicate that the demand for travel is increasing beyond current expectations. Residential development has the greatest impact as it generates new trips on the road network. In rural areas there is a lack of public transport options and people are more reliant on private transport. Further residential development at Southwest Rocks will have a cumulative impact on the Pacific Highway, its junctions and the Classified Road network.

The planning for the overall development of an area should be sustainable and consolidate land use activities to share infrastructure and to reduce travel and transport demand. The lack of transport has an impact on the whole community.

Any new development should consider and provide facilities to encourage alternative transport modes such as shared paths for pedestrians and cyclists, passenger and school buses. Routes to schools, shopping centres, recreational and employment areas need to be catered for.

Attached is a copy of advice from the Regional Development Committee (RDC) to the Department of Planning (DOP) for a Masterplan for another subdivision adjoining this site. Both these subdivisions will have a significant impact on Southwest Rock's transport and road infrastructure.

Land should not be rezoned unless safe and efficient access can be gained. In accordance with sections 61 and 138 of the NSW Roads Act 1993 any new road works or access to a Classified Road will require the RTA's concurrence. The scale of the proposed development will probably require referral to the RDC for comment.

A traffic study in accordance with the attached Table 2.1 of the RTA's Guide to Traffic Generating Developments should be undertaken. Planning should also take into consideration the overall road network needs for the whole area such as connectivity between developments. It should be designed and facilities provided to manage the speed environment.

Direct access to lots fronting arterial roads should be denied. Road junctions should be located where safe intersection sight distances are available and designed to AUSTROADS standards to safely manage turning traffic.

The design of the subdivision and residences, especially adjacent arterial roads will need to be designed to meet current Department of Environment and Conservation (DEC) road traffic noise guidelines.

Where possible any community, retail or commercial development should be located so it does not have direct access to an arterial road and safe improvements are provided for turning traffic.

Consideration needs to be given to traffic route and junction lighting. It should comply with the local electricity authority's standards.

In order to cater for the impact of the proposed development an appropriate contributions scheme will need to be developed and implement to guarantee the provision of the necessary infrastructure. This should include improvements to the surrounding road network, junctions and access roads to Kempsey.

A copy of this letter has also been forwarded to Department of Planning and Kempsey Shire Council for their information.

For any further information please contact Mr Greg Sciffer (02 6640 1344) at the Grafton Regional Office.

Yours faithfully

*Signed*  
*Greg Sciffer*  
26/10/05

Peter Collins  
Regional Manager, Northern Region

RSTM&D 235.5351  
05/1828  
Mr Greg Sciffer (02) 6640 1344  
Email: Greg-Sciffer@rta.nsw.gov.au

Department of Planning  
Locked Bag 10  
GRAFTON NSW 2460

Kempsey Shire Council. Local Environmental Study. Lot 19 DP 882848, Lot 52 DP 831284 and Lot 84 DP 792945, Southwest Rocks.

Dear Sir

Please find attached a copy of the Roads and Traffic Authority's letter to Connell Wagner regarding the above Local Environmental Study.

Yours faithfully

*Signed*  
*Greg Sciffer*  
26/10/05

Peter Collins  
Regional Manager, Northern Client Services

RS,T&D 235,5351  
05/1828  
Mr Greg Sciffer (02) 6640 1344  
Email: greg\_sciffer@rta.nsw.gov.au

The General Manager  
Kempsey Shire Council  
DX 7153  
KEMPSEY NSW

Kempsey Shire Council. Local Environmental Study. Lot 19 DP 882848, Lot 52 DP 831284 and Lot 84 DP 792945. Southwest Rocks.

Dear Sir

Please find attached a copy of the Roads and Traffic Authority's letter to Connell Wagner regarding the above Local Environmental Study.

Yours faithfully

*Signed*  
*Greg Sciffer*  
26/10/05

Peter Collins  
Regional Manager, Northern Region



September 8, 2008

Anne-Maree Burke  
Macleay Water  
PO Box 78  
WEST KEMPSEY NSW 2440

Dear Anne Maree,

**RE: DEVELOPMENT OF LOT 52 DP 831284 AND LOT 84 DP 792945 SOUTH WEST ROCKS**

Thankyou for our meeting of Tuesday August 26, your time and Sharon's was appreciated. Further to that meeting we wish to clarify our understanding of a number of points and seek additional information from Macleay Water to allow us to progress our development assessment and submission.

**Confirmation and Clarification**

We confirm our understanding of the points made at the meeting:

1. Macleay Water (MW) has allowed for the servicing of the development site for potable water supply; non-potable re-use water supply; and sewerage in their infrastructure planning. The development of 350 ET of residential development on the site is within the scope of development considered and planned for by MW for the area.
2. Connection of early stages of the proposed site development to the 100 mm water supply main supplying Stage 1 of Seascope Grove may be possible if capacity exists in that main. MW will confirm the spare capacity that exists in their main to service the first stages of the development on the site.
3. A 300 – 450 mm potable trunk supply main is proposed from the reservoirs to the south of the site; through Stage 2 of Seascope Grove; through the site; and north to Phillip Drive. A single connection point to this main would be provided to service the proposed 350 allotments on the site.
4. The timing of the construction of this main is not confirmed. However, should development on the site be approved prior to the construction of the main, scheduling of the mains construction to suit a development timeline commencing mid-2009 is achievable by MW.
5. Construction of the trunk main through the development site may be by either (1) Macleay Water; or (2) Malbec Properties using contractors acceptable to MW. In the event that Malbec was to construct part of, or the entire main, the cost of these works would be offset against developer services charges for development.

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**Head Office**

Unit 6 / 37 Leighton Place  
Hornsby NSW 2077, Australia  
**Ph 02 9476 9999 Fax 02 9476 8767**

> mail@martens.com.au

[www.martens.com.au](http://www.martens.com.au)

MARTENS & ASSOCIATES P/L  
ABN 85 070 240 890 ACN 070 240 890

6. The alignment of the future trunk main through Seascapes Grove is not confirmed. A water main alignment along the main north – south spine road through the development site connecting to lands to the north is considered appropriate by MW and final water main design to suit proposed Malbec layout is acceptable.
7. Future connection to the reclaimed water reticulation system would be directly from the west on to the site. This connection point would be for a dedicated main to service the proposed 350 ET site development.
8. The reclaimed water supply system is to commence supply in September / October 2008, conditional on acceptable commissioning results and proving period performance.
9. Direct connection of future site development (where levels allow) to the MW sewage pump station (SPS) at the south western corner of the STP property is acceptable to MW. The SPS has additional well capacity and SPS works to accommodate the development would be limited to possible pump capacity augmentation. MW to confirm the additional capacity of the SPS and to provide details of the connection point (i.e. invert levels, pipe sizes etc).
10. Where areas of the site cannot be sewered by gravity drainage to the SPS a new SPS would be constructed on the site. A rising main from this SPS to the sewer rising main located in an easement on the adjacent property immediately west of the site boundary would be acceptable to MW. It was noted that the easement location abuts the common boundary and means that no other landowners would need to approve the connection given the nature of the MW easement. The SPS and trunk sewer rising main as well as the reticulated sewer within the site would be owned and operated by MW.
11. Water and Sewer DSPs of July 2006 will be the basis of assessment of developer servicing charges. Indexing of rates reported in these documents is as reported in Section 5.5 of each document.
12. MW will consider our proposed servicing options for the site with a view to issuing written confirmation that the site is able to be serviced, subject to detailed design, by MW for water supply and sewer services.
13. All infrastructure to be constructed to service the site shall be designed and constructed to relevant MW / WSAA design standards and shall be transferred to MW on completion.

To allow for the further development of site servicing strategy please provide the following infrastructure details:

1. Details of the alignment of the existing 100 mm potable supply main servicing Stage 1 of Seascapes Grove including spare capacity, size, pressure, flow and connection location.
2. Known capacity details for this main and details of ultimate servicing capacity.
3. Details of alignment and invert levels of the gravity sewer main to the west of the site.
4. Location details and invert levels of the sewage pumping station north west of the site. Confirmation of the deepest acceptable connection point to this SPS.

5. Details of existing SPS load and pump capacities – to allow assessment of likely staging of any pump duplication or augmentation works.
6. Location of acceptable connection points for pumped discharge to the gravity main west of the site (if any constraints exist).
7. Provide details of water and sewer infrastructure surrounding the site.

We would appreciate your confirmation of the points above and look forward to receiving the information requested at your earliest convenience. Please contact the undersigned if you have any queries regarding this matter.

**For and on behalf of**

**MARTENS & ASSOCIATES PTY LTD**



**ANDREW NORRIS**

BSc(Hons), MEngSc, MAWA

Director, Senior Engineer





