Part C

Additional Information Required

C.1 STATEMENT OF COMMITMENTS

As requested by the DoP, a detailed ***Statement of Commitments*** is provided with this ***Preferred Project Plan*** (**Appendix M**). The ***Statement of Commitments*** includes all of the recommendations contained in the various expert Reports for the 'Moonee Waters' project.

STATEMENT OF COMMITMENTS

A detailed Statement of Commitments, incorporating all recommendations from relevant expert consulants, has been provided for the 'Moonee Waters' Preferred Project Plan.

C.2 ACCESS TO CONSERVATION AREA

Access to the Conservation Area is to be controlled and managed by a variety of measures:

- Features such as roads, bio-retention swales, bollards and exclusion fencing will be provided to identify the physical edge of the "Conservation Area";
- The precise location of fencing, access points to the pathway system, local parks, picnic areas and parking areas will be resolved in consultation with Council, Department of Planning, DECC and DoL upon approval of the Preferred Project Plan and prior to the DA stage;
- Potential pedestrian connections will connect with the footpath system in residential areas on the inside of the perimeter road. (See **Figure 27** on this page);
- Small pocket parks will provide entry, orientation, picnic areas, local play with minimal clearing, the retention of native vegetation and no invasive or introduced grasses; and
- Signage and educational material will be provided around the periphery of Development Precincts, as well as along the access roads and in the 'local parks' to advise and educate residents and visitors.

ACCESS TO CONSERVATION AREA

Access for the Conservation Area on the 'Moonee Waters' site will be controlled and managed by a variety of physical features (bollards, fencing, peripheral swales), signage, strategic location of facilities and the provision of dedicated high quality walkways.

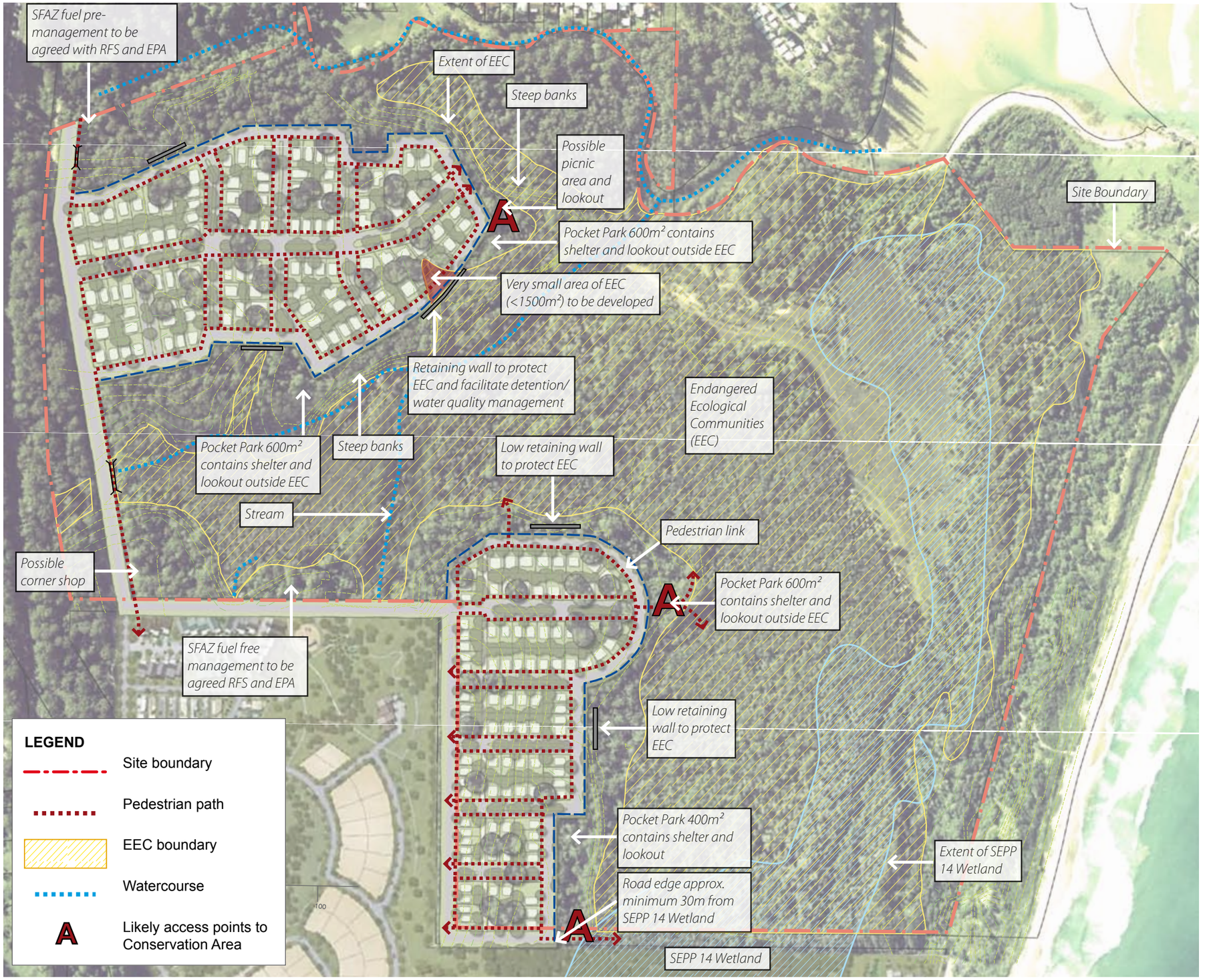

Figure 27 - *Access and edge treatments to Conservation Area.*

C.3 URBAN DESIGN

The following Urban Design modification has been incorporated in the Preferred Project Plan primarily in order to improve ecological performance as outlined in Chapter B1 of this Preferred Project Plan.

- Move development boundary back from edge of EEC. Variable buffer of 20-150m;
- Move development back from steep banks of creeklines;
- Move development back generally from creeks to widen 'wildlife corridors';
- Move development back from SEPP14 Wetland in south-eastern corner.
- Locate and conserve as many HBTs as possible;
- Reduce density and increase lot size to enable on-site tree retention (HBT's and canopy trees);
- Include APZs entirely in the Development Precincts;
- Include local parks/picnic areas in Conservation Area with strict management controls;
- Minimise opportunities for access into the Conservation Area except on controlled paths, tracks and boardwalks;
- Limit fencing on properties to the western half of the Northern Precinct only in order to permit wildlife movement through properties elsewhere. Fences in the western part of the Northern Precinct will assist in diverting fauna to north and south corridors along creek lines and not to the fenced Highway; and
- Density has been reduced although there was no density requirement in Moonee DCP and it does not currently apply to this land in any case (land is proposed as Conservation Area).

URBAN DESIGN

Design controls / guidelines for dwellings will be submitted for each lot type with DA.

The Urban Design of the 'Moonee Waters' Preferred Project Plan has been modified to enhance environmental performance.

C.4 SECTION 94 CONTRIBUTIONS

C.4.1 INTRODUCTION

The Council's Planning regime ignores the current zoning of the land and presumes that the subject site will not be developed. As a consequence, s94 Contributions Plans have not been based on any projected growth on the site, and neither provide for or authorise any contributions being extracted from the proposed development. There are fundamental principles embodied in s94 which have not been followed and the current documents do not enable contributions to be levied.

On the basis that some form of equivalent contribution will be offered on a voluntary basis, it is necessary to make some adjustments to the assumptions and calculations on which the Section 94 contributions are based. In terms of the Moonee Contributions Plan, it is necessary to make allowance for an additional 210 allotments, or 588 increased population. On items such as the link road, which is planned anyway, recognition of the proposal would result in a reduced rate of contribution because the same costs would be distributed over an increased number of lots/people.

It is intended that the part of the subject site affected by the link road be dedicated to Council, and that component of the link road across the site be constructed to Council's requirements. This action would substantially obviate the need for any cash contribution, as noted below.

C.4.2 MOONEE CONTRIBUTIONS PLAN

Community Facilities

If the current rate is adjusted to reflect increased growth, the per person contribution rate is reduced to $211.09, or $591.05 per allotment. This equates to a total contribution of $124,120.50 for the development.

It might be argued that the additional population warrants additional community facilities, and that the current contribution rate should be applied. That produces a total contribution of $143,383.80. The problem with this argument is that a contribution can't be levied for an unidentified and uncosted item. The additional sum does not allow anything of substance.

District Open Space

The proposed development will not in itself require additional district facilities but is entitled to contribute to proposed centralised facilities.

Adjusting the contribution rates to reflect increased growth produces a per person contribution of $1414.38, or $3960/lot, and a total contribution of $831,655.02.

Local Open Space

The proposed development makes a significant contribution to local open space in the proposed conservation areas, and in the enhanced access through the site and to beaches, which will benefit the existing population. This offsets the potential use of other local facilities by residents of the proposed development. On this basis no contribution for this item is warranted.

Traffic Facilities

The mathematics used below contain a number of estimates and assumptions that would need to be verified.

The site contains approximately 590m of the proposed link or "Collector" road. The Contributions Plan assumes a construction cost of $1595/m, which equates to a cost of $941,050.

The Plan provides for acquisition of the land for the Collector Road in a total amount of $472,182. This covers the 590m of road through the subject site and approximately 100m of land south of the Moonee Beach shopping centre. On a pro rata basis, the acquisition of land within the subject site, represents an approximate cost of $403,749.79.

It is seriously questioned whether this costing, which equates to $34/m², adequately reflects the land's value under its existing zoning.

The plan also provides for the construction of a culvert within the subject siteapparently with a general budget cost of $140,000.

The plan includes allowance for lighting, cycleways, design and supervision and contingencies. Applying these items on the relevant pro rata basis equates to $20,650 for lighting, $106,200 for cycleways, $181,185 for design and supervision, and the same for contingencies, representing a total amount of $489,220.

Leaving aside the question of whether appropriate allowance has been made for land value, the dedication of land and the construction of the Collector Road through the site represents a minimum cost to the applicant of $1,974,019.79. This equates to $9400.09 per lot.

The Contributions Plan provides for $9238.40 per lot for road works. Adjusting this figure for the increased population reduces the figure to $7997.05 per lot. The proposed dedication and construction clearly is in excess of what would otherwise be a s94 contribution. The excess would give the Council the capacity to reduce its contribution rates. The saving represented by this contribution may assist the Council in bringing forward other parts of the Collector Road.

Stormwater Management

The proposal is self contained in terms of stormwater management, and does not require any contribution to municipal works.

Urban Planning

The Council has not spent any amount on studies that are pertinent to the development of the subject site, apart from studies associated with the Collector Road. On a pro rata basis the contribution for this item would be $26.26 per lot, allowing for increased population.

Other Contributions Plans

The applicable regional contributions for library, regional open space, beach protection works and s94 administration amount to $1605.61 per lot, or $337,178.10 for the proposed development. In the context of this plan, it is more difficult to argue that the proposal would further increase potential population, and in any event the difference is marginal (in the order of 1.6%).

There is however a case for the provision of a substantial environmental conservation area, to be considered as an offset against the regional open space contribution requirement ($853.86/lot). This is particularly the case if the land was dedicated. While the contributions plans make no provision for the protection of the conservation area, the Council still needs to address the fact that its conservation objectives for the site are not able to be otherwise achieved without a cost. This aspect can only be addressed by negotiation.

Interim Water Supply Servicing Plan

This plan requires a general contribution for water supply equivalent to $5500 per lot. There is no basis to contest this contribution.

Interim Wastewater Treatment and Carrier System Development Servicing Plan 2008

This plan requires a contribution equivalent to $3790/ lot and similarly is not disputed.

Coffs Harbour Road Network Contributions Plan 2008

This plan provides for a contribution equivalent to $764.12 per allotment, which given the general nature of its provisions is not readily contestable.

Surf Rescue Equipment Developer Contributions Plan

This plan provides for a contribution equivalent to $86.83 per lot related to a large overall population growth, and is not challenged.

Summary

Based on this assessment, per lot contributions from the proposal would amount to:

• Community Facilities	$591.05
• District Open Space	$3960.00
• Urban Planning	$26.26
• Regional, district etc facilities (excluding regional open space)	$751.95
• Water	$5500.00
• Sewer	$3790.00
• Road Network	$764.12
• Surf Rescue Equipment	$86.83
Sub Total	**$15470.21**

In addition, it is proposed that:

- Land Dedication and Construction of the Collector Road through the site be funded by the project. Using the calculations from the plan (although the land value component is disputed), this equates to a contribution of at least $1,974,019.79 or $9400.09 per lot compared to an adjusted requirement of $7997.05 per lot.
- Negotiations take place about the offsetting of the regional open space contribution by the provision of the proposed environmental conservation area
- No contributions be made for local open space or stormwater management, for the reasons set out above.

SECTION 94 CONTRIBUTIONS

Appropriate Section 94 Contributions can be negotiated with future DAs for works in the Northern and Southern Precincts.

C.5 WATER CYCLE MANAGEMENT

Based on response from Worley Parsons (formerly Patterson Britten Consulting Engineers), see **Appendix H**.

C.5.1 WATER SENSITIVE URBAN DESIGN

C.5.1.1 Reliance on Site Soils

The performance of the 'water sensitive urban design' mechanisms (such as raingardens and bio-retention swales) does not rely on the site soil characteristics. These features are designed with special drainage media which maximises the infiltration and treatment of runoff, as well as supporting the growth of vegetation to physically filter the runoff and utilise the nutrients and water trapped in the media. An underdrain system ensures these systems remain dry after rainfall.

C.5.1.2 Maintenance

The bio-retention swales in the proposed roads would be maintained either by the Council (for Torrens Title) or a community association in the event of a community title development.

The raingardens within the lots would be maintained by the residents. The raingardens would be covered by a covenant on title with a requirement to report on its maintenance to the Council on an annual basis. In the event of community title development, the community association would require the residents to maintain the raingardens but would have the power to undertake the maintenance if required.

C.5.1.3 Perimeter Swales

The perimeter swale width has been adjusted to 10m, not 8m or 8.8m (**Figure 28 & 29**).

C.5.2 FLOODING

C.5.2.1 Climate Change

The DECC Guidelines for consideration of climate change were released in November 2007 which post-dated our Report and assessment of climate change impacts on flood behaviour.

The DECC Guidelines recommend sensitivity testing of the full range of the IPCC and CSIRO predictions for sea level rise on the NSW coastline. It does not recommend adoption of a particular level. This should be considered in the light of the NSW Government Floodplain Development Policy which requires assessment of the appropriate flood management response given consideration of the whole range of social, economic and environmental aspects. It recommends against unnecessary sterilisation of land.

The IPCC formulated a range of world condition scenarios relating to population, greenhouse gas production and environmental conditions. The best, average and worst case scenarios predicted sea level rises up to 2100 of 0.18m, 0.55m and 0.91m respectively for the NSW coast (including CSIRO derived extra factors for the NSW coast).

The predicted 100 year ARI flood in Moonee Creek and the ocean dominated floodplain of Sugar Mill Creek in 2100 under these scenarios would conservatively range from approximately RL 2.8m AHD to RL 3.5m AHD.

A minimum habitable floor levels of RL 3.6m AHD is recommended which would provide a 100mm freeboard if the worst case sea level rise eventuated in 2100 (ie the floor level would not be inundated).

Only minor filling in the southern and northern areas would be required to ensure that the development area is above a level of RL 3.6m AHD.

Fig 28 *Stormwater Management Plan*

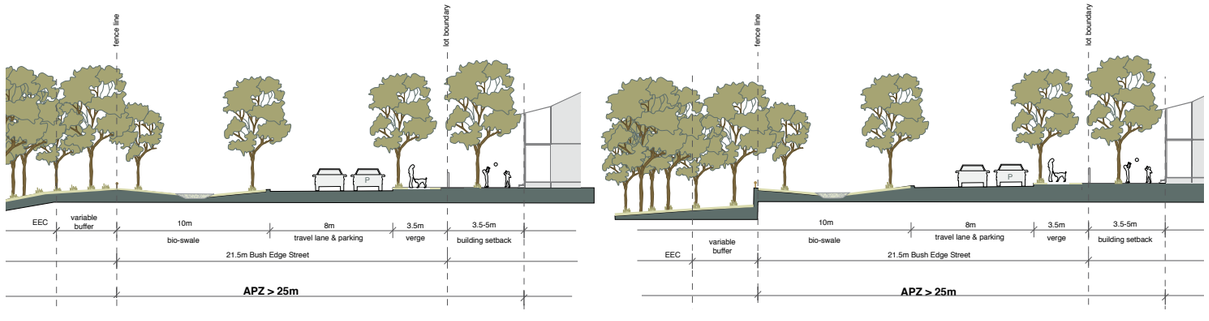

Fig 29 *Sections of Edge Roads with Swale*

Perimeter swale.

Median swale.

Strategies

- Rainwater is harvested on each site.
- Bio-retention swales capture and treat stormwater in all streets.
- Detention and water quality ponds at all low points.
- Perimeter bio-retention swales treat stormwater before entering the Conservation Area.

WATER CYCLE MANAGEMENT

The 'Moonee Waters' Preferred Project Plan incorporates APPROPRIATE Water Sensitive Urban Design principles. Bio-retention swales and detention ponds have been designed to appropriately manage and treat stormwater.

Dwelling floor levels satisfy requirements for even the worst-case scenario for sea level rises and flood levels for 2100.

C.6 EARTHWORKS

C.6.1 FILLING IMPACT ON FLOODING

The area of filling required to provide a minimum level of RL 3.6m AHD for all dwellings is negligible, and would have an immeasurable impact on flood behaviour and levels in the area (**Figure 30**).

The minor filling would also have negligible impact on the retention of hollow-bearing trees.

C.6.2 SEDIMENT AND EROSION CONTROL

There is a commitment in Section 94 of our Report for the preparation of a Sediment & Erosion Control Plan, in accordance with State and local government Guidelines. That plan will be (appropriately) provided at the DA stage for the project.

Fig 30 - *Earthworks Plan*

EARTHWORKS

The MINOR requirement for filling in the 'Moonee Waters' Preferred Project Plan will have NEGLIGIBLE impacts on flood levels or behaviour.

A Sediment & Erosion Control Plan will be provided, as appropriate, with future DAs.

C.7 INFRASTRUCTURE

The location of possible pumping stations were previously shown diagrammatically only. Sewer pumping stations will be located within the Precinct footprints and outside of the Conservation Area. Sewer pump stations and any earthworks required to elevate pumping stations above the 1:100 year flood land will not impinge on the "Conservation Areas".

Rising mains previously shown were also diagrammatic only. These will generally be located in road reserves wherever possible or in the APZs. They will not be located in the "Conservation Areas".

Infrastructure is generally available (see Council letter **Appendix I**)

INFRASTRUCTURE IMPACTS

There will be NO sewer pumping stations or sewer rising mains in the Conservation Area. Such facilities will be provided ENTIRELY within the Development Precincts.

There will be NO impact from these facilities on the Conservation Area.

C.8 LANDSCAPING

The proposal seeks to generally conserve as much of the existing vegetation as possible within the Precincts. Further street planting and on-site planting will be from a landscape palette of indigenous plants to be negotiated with Council and government, and included in future DA documents and Design Guidelines.

LANDSCAPING

An overall Landscape Plan and Design Guidelines wil be prepared in consultation with Council, and submitted with future DAs for the project.

Noxious or invasive species will NOT be used, and indigenous plant species WILL be used in all public places.

C.9 ARCHAEOLOGY

Previous archaeological surveys have revealed no significant issues impacting on proposed development. However, since the last report two possible scarred trees have been reported. These have been investigated and located (MGA P1 & P2, **Figure 31**). Both our consultant archaeologist and the DECC Regional Archaeologist doubt that they are of aboriginal origin, however further investigations will be required to clarify this and to determine if they are in conflict with development proposals and what actions should be taken.

Figure 31 - *Approximate surveyed position of possible scarred trees.*

C.10 COMMUNITY COMMENT

A range of community comment has been received in response to the Public Exhibition and the Information Day. These responses are generally covered in a wider sense in the bulk of this report. The comments vary from supportive to absolute negativity, from very informed to inappropriate.

A summary of direct responses are included in **Appendix J, K &L.**