

PCU034271



WITH COMPLIMENTS

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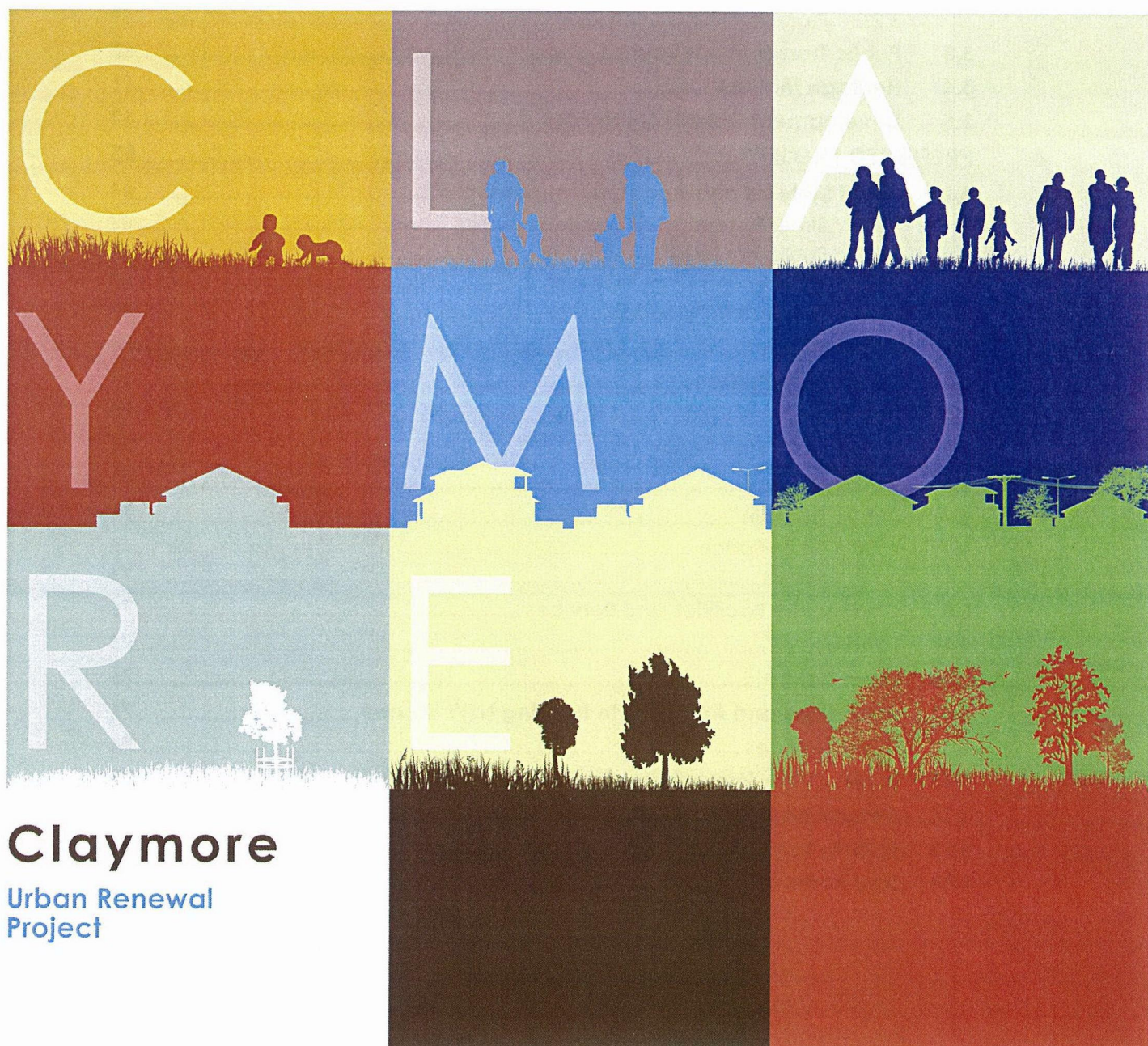
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# RESPONSE TO SUBMISSIONS AND PREFERRED PROJECT REPORT

May 2012





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## **1. INTRODUCTION**

This Response to Submissions and Preferred Project Report relates to the Concept Plan by Landcom and NSW Land and Housing Corporation (formerly Housing NSW) for the Claymore Renewal Project (MP11\_0010 and Council Ref 2128/2011/DA-MP). The Claymore Renewal Project seeks to create a sustainable, mixed community. The urban renewal of the area is proposed to address issues of urban structure, housing quality and social mix based on a detailed consideration of the characteristics of the site and its context including the existing community.

The Environmental Assessment report ("the EA") relating to the above project was exhibited from 16 November 2011 to 3 February 2012.

The Proponent (NSW Land and Housing Corporation) has considered the issues raised in the submissions made during the exhibition period and has implemented various actions in relation thereto. This included some minor changes to the Concept Plan which are described in Section 4. This includes a summary of the requests for Minister's determinations.

A revised Statement of Commitments is contained in Section 6.

### **1.1 Summary of Submissions**

During and after that period 23 submissions were received by Campbelltown Council. 15 of these submissions were from the public and 8 from public authorities. These submissions are summarised in Section 2.

Additional comments were received from Council. These are also addressed in the table to Section 2 and in Section 3.

The submissions from public authorities, who made comments relevant to areas of their responsibility.

Of the 15 submissions from members of the public, 10 raised concerns over the future of the Baptist Church with one of these submissions supported by 310 signatures. The remaining 5 submissions did not object outright but nonetheless raised concerns or some issues for further consideration.



## 2. CONSIDERATION OF SUBMISSIONS

The following table presents a summary of the issues raised in the submissions made during and after the exhibition period. A total of 23 submissions were received by Campbelltown City Council. Of these:-

- 15 were from private individuals;
- 8 were from State and local government agencies;

The table provides the proponent's response to the submissions.



No.	Submitter	Issues Raised	Response and Mitigation Strategy
<b>Public Submissions</b>			
1	Public Submission	<p>Concerned about exclusion of Westside Baptist Church and associated Guardian Angel Pre-School on the following grounds:</p> <ul style="list-style-type: none"> <li>Westside Baptist Church has been active in Claymore for the past 32 years;</li> <li>Since the closure of St Stephen's Anglican Church Westside Baptists have provided the sole evangelical ministry to the residents of Claymore;</li> <li>Guardian Angel Pre-School has been providing child care services for over 18 years; and</li> <li>Guardian Angel Pre-School maintains a waiting list for vacancies, which is very strong indication of its reputation and ability to deliver highest quality child care services.</li> </ul>	Discussed in Section 3.1
2	Public Submission on behalf of Claymore Shopping Centre	<p>Concerned about the impacts the development of the new retail centre will have on the existing centre, for the following reasons:</p> <ul style="list-style-type: none"> <li><b>Economic Impact and Commercial Viability</b></li> </ul> <p>Concerned that owners of the existing centre will struggle to obtain funding for improvements to their premises if the new centre is built.</p> <p>The centre is unlikely to attract an anchor tenant. Coles and Woolworths would not be interested. New centre</p>	Discussed in Section 3.2



No.	Submitter	Issues Raised	Response and Mitigation Strategy
		<p>unlikely to be viable.</p> <ul style="list-style-type: none"> <li> <b>Retail Hierarchy</b> <p>The Concept design should focus on local needs and not an optimistic endeavour to attract trade outside Claymore.</p> <p>The retention of an improved centre at the heart of the suburb, adjacent to other community facilities, (as opposed to a shopping facility located on the edge of the locality largely), would be consistent with the 10(c) and would be better positioned in terms of the retail hierarchy of the locality.</p> </li> <li> <b>Urban Design</b> <p>The siting of a new centre at the edge of the community is nonsensical.</p> <p>Concerned that current proposal hopes to attract trade beyond the local primary catchment from the main road, at the expense of the convenience of the residents of the community itself.</p> </li> <li> <b>Improvements to the Existing Centre</b> <p>The owners wish to improve and expand the existing Centre. There is a concern that if the proposed concept plan is approved, the existing centre will likely be zoned R2 and the current use would become prohibited, and then would be subject of existing use rights.</p> </li> </ul>	

No.	Submitter	Issues Raised	Response and Mitigation Strategy
		<ul style="list-style-type: none"> <li>The owner has plans to improve the centre.</li> <li><b>Other Planning Matters</b></li> </ul> <p>The proposed centre and separation of retail and other existing community uses from the new centre will likely introduce higher dependencies in private vehicle uses.</p> <ul style="list-style-type: none"> <li><b>Conclusion</b></li> </ul> <p>The commercial viability of the proposed centre is critical and should rightly be a significant head of consideration for the Department. The approval of the Concept Application and the consequential impacts on funding and improvements to the existing centre will be devastating.</p> <ul style="list-style-type: none"> <li>Without a major anchor tenant, the Concept is just that - a concept, with little to no chance of fruition, and it is recommended that the whole premise of a new centre is re-considered.</li> </ul>	
3	Public Submission	<ul style="list-style-type: none"> <li>Concern that there has been no provisions made to include the Baptist Church and Guardian Angel Kindergarten in the proposal.</li> </ul>	Discussed in Section 3.1
4	Public Submission	<p>Submission raised the following concerns:</p> <ul style="list-style-type: none"> <li>Boyd St: Build speed humps or erect more speed limit signs to stop car hoon speeding.</li> </ul>	No changes to Boyd Street are proposed. Speed humps not generally favoured by Council due to the noise associated with vehicles going over them. Any existing speeding issues should be dealt with by Police and Council.



# Claymore

## Urban Renewal Project

### Response to Submissions and Preferred Project Report

No.	Submitter	Issues Raised	Response and Mitigation Strategy
		<ul style="list-style-type: none"> <li>Brady Park: Install surveillance cameras, warning signs or build fences/gates to stop bkie hoons, car burnt, vandalism, burglary and graffiti to ensure the park is safe, secure and clean.</li> <li>Indoor Sports Centre: Build Claymore Central similar to Eagle Vale Central, such as indoor badminton courts and tennis courts because of 340 dwelling increase in the project area.</li> <li>Claymore Police Station: A police station must be staffed to give people confidence moving in to the new project area.</li> <li>Upgrade Networks: Faster broadband network and stronger digital TV reception.</li> </ul>	<p>The park landscaping is being designed with surveillance and visibility in mind. This needs to be balanced with the need to regenerate natural vegetation in this area.</p> <p>As identified in the Social Impact Assessment, the increase in demand for regional recreation facilities is expected to be minimal due to the marginal change in overall population. The need for an indoor sports centre is not warranted.</p> <p>The provision of police resources in the area is a matter for Police area command.</p> <p>NBN services are to be provided.</p>
5	Public Submission	Concerned that there is no provision for a church in the Claymore Renewal Project such as the Westside Baptist Church.	Discussed in Section 3.1
6	Public Submission	<ul style="list-style-type: none"> <li>Rename Claymore to reflect the new, redeveloped suburb.</li> </ul>	There is an opportunity to change the name as part of the renewal and it will be carefully considered. Any name change of the suburb will follow the standard approval processes through Council and the Geographical Names Board.

No.	Submitter	Issues Raised	Response and Mitigation Strategy
		<ul style="list-style-type: none"> <li>Erect speed humps in residential streets of Claymore/Eagle Vale areas; particularly along Boyd St, Claymore and Zeolite Place, Eagle Vale. There is concern that speeding cars through the residential streets will pose a safety threat to young children in the area.</li> </ul>	No changes to Boyd Street, Claymore or Zeolite Place are proposed. Speed humps not generally favoured by Council due to the noise associated with vehicles going over them. Any existing speeding issues should be dealt with by Police and Council.
7	Public Submission	Concerned about the Westside Baptist Church and the connected Guardian Angel Pre- School.	Discussed in Section 3.1
8	Public Submission (with petition containing 109 signatures)	<p>Submission particularly concerns Badgally Reserve:</p> <ul style="list-style-type: none"> <li>The Claymore Renewal Project proposes the removal of 5.82 hectares of native vegetation. It will more than halve the current amount of Cumberland Plain Woodland available within the Claymore area.</li> <li>The Renewal Project seeks to significantly reduce the size of Badgally Reserve</li> </ul>	<p>Revised Project plans propose the removal of a total of 9.64 hectares of vegetation which largely includes planted native species and exotic weeds. Total Cumberland Plain Woodland area proposed to be removed is 1.15 hectares which represents 42% of the total Cumberland Plain Woodland within the subject site. This loss will be mitigated by appropriate offset area to be designated and restored as Cumberland Plain Woodland.</p> <p>Noted. Within Badgally Reserve, a 0.2 hectare patch of Cumberland Plain Woodland will be retained. Landcom is currently considering the restoration of this patch. Cumberland Plain Woodland to be removed within the Reserve will be</p>



No.	Submitter	Issues Raised	Response and Mitigation Strategy
		<ul style="list-style-type: none"> <li>Submit that Badgally Reserve within the new Claymore Redevelopment, <i>within an area from the proposed Glenroy Road, along Badgally Road to Dobell road, and backing onto housing (which could even be fronting onto this reserve) along the proposed Norman Crescent, to keep the current width of the Badgally Reserve, could easily be achieved by enhancing the current Badgally Reserve for public use with bike track and/or walking paths, children's play equipment and park benches, and also plantings of native shrubs to provide undergrowth for the native wildlife in the area, and more trees along the Dobell Road side of the reserve, This will not only retain but enhance the Badgally Reserve for the enjoyment of future generations living in and around Claymore and provide an attractive entry point to the new Claymore accessible via Dobell Road and Glenroy Road.</i></li> </ul>	<p>appropriately offset with additional land to be designated and restored as Cumberland Plain Woodland.</p> <p>As stated in the EA, provision is made for open space to meet the needs of the development. Furthermore arrangements are in place for appropriate off-sets to the loss of any endangered ecological communities. Badgally Road is intended to become an important east west arterial and thus direct access to this road is inappropriate and opposed by RMS.</p>

No.	Submitter	Issues Raised	Response and Mitigation Strategy
		<ul style="list-style-type: none"> <li>As per the ecological Study by Cumberland Ecology for the Claymore Urban Renewal Project, many vulnerable species are present within a 10 km radius of the project area.</li> <li>Although consultants consider the fauna habitat across the Claymore area as "generally poor...due to its highly degraded nature and exotic understorey" (paragraph 5.1 of the Ecological Study by Cumberland Ecology) many birds and other creatures frequent the Badgally Reserve.</li> </ul>	<p>Noted.</p> <p>Noted. Habitat has been assessed as "generally poor" and "highly degraded" due to its history of land clearance, residential development and current land management practices e.g. mowing beneath trees. The vegetation is scattered and generally lacks native understorey and groundcover species and other habitat features such as tree hollows and fallen logs which would be present in its original form. Many species recorded present on the subject site are common in disturbed areas such as Australian Magpie, Pied Currawong, Australian Raven, Noisy Miner and Rainbow Lorikeet.</p>



# Claymore

## Urban Renewal Project

### Response to Submissions and Preferred Project Report

No.	Submitter	Issues Raised	Response and Mitigation Strategy
		<ul style="list-style-type: none"> <li>Submits that it is possible for natural regeneration of the Cumberland Plain Woodland to be encouraged during the lead-up to the Redevelopment by removing the current grass under the trees, as this could allow new saplings to begin growing from seed. Perhaps in addition a staged planting of bushes typical to Cumberland Plain Woodland could also help speed up the regeneration process if undergrowth within the current reserve from the area of the proposed Glenroy Road back towards Dobell Road direction.</li> <li>This is an opportunity for Landcom to enhance the border between Claymore and Blairmount as an attractive area for people and the wildlife to enjoy, thereby further enhancing the beauty of the Scenic Hills region of Campbelltown.</li> <li>Submitter visited many residents of nearby Blairmount, and almost everybody they spoke to did not want residential housing backing onto Badgally Road, and wanted to preserve the Badgally Reserve.</li> </ul>	<p>Noted. It is proposed that restoration and revegetation measures be undertaken in areas of retained Cumberland Plain Woodland. This will be done in accordance with a Vegetation Management Plan which will incorporate the timing of management works to be carried out.</p> <p>Commitment: Revised commitment to the preparation of a VMP</p> <p>Refer to response above in relation to open space provision for the renewal project.</p> <p>Refer to response above.</p>

No.	Submitter	Issues Raised	Response and Mitigation Strategy
		<ul style="list-style-type: none"> <li>Although most Campbelltown residents the submitter has spoken to about the Claymore Redevelopment show appreciation about the fact Claymore is being redesigned many Campbelltown residents have also expressed their disappointment at the large number of small blocks of land with small homes proposed – the general consensus being that such development will not greatly enhance the value of Claymore or its surrounding suburbs.</li> </ul>	Block size has been influenced by the need to make efficient use of urban land that is serviced and close to facilities and services. Block sizes are in keeping with current urban design standards and will be developed with housing designed to controls developed for the range of lot sizes proposed.
9	Public Submission	Concern that in the redevelopment area there has been no provision made for the existing Westside Baptist Church and Guardian Angel Preschool.	Discussed in Section 3.1
10	Public submission  Cubbitch Barta Native Title Claimants	Whole area not surveyed	The survey undertaken for the ACH assessment was preliminary in nature, and focussed on areas known to be relatively undisturbed. The recommendations (Section 16) include further investigation of the subject area, including intensive and systematic survey of all areas of reasonably undisturbed land.



No.	Submitter	Issues Raised	Response and Mitigation Strategy
		<p>The carved stones at Dimeny Park are of contemporary cultural significance.</p> <p>The submission makes the following recommendations:</p> <ul style="list-style-type: none"> <li>The location of the site, Claymore 1 within the concept plan at the moment will be destroyed. My recommendation therefore is that this site should be retained within an open area, and proactively preserve the location and surrounding area for the posterity of the people of Claymore, and the greater Campbelltown area. This area requires works to prevent any further erosion, so hat other artefacts present</li> <li>I do not recommend any sub-surface testing of the area. The artefacts that can be seen today, and their place in the landscape, are enough evidence of its existence. It would appear at the present moment that this is the only Aboriginal site still existing in Claymore.</li> </ul>	<p>The cultural significance of the carved stones is noted in Sections 12 &amp; 14 of the revised ACH assessment report contained in <b>Appendix 2</b>. In addition the submission from Cubbitch Barta Native Title Claimants should be included as an appendix to the ACH assessment.</p> <p>The Concept Plan indicates residential development over the area identified as site Claymore 1. Further investigation (in the form of test excavation) was recommended as a basis for the development of mitigation strategies. Should the mitigation strategies include retention of part or all of the site, measures should be put in place to protect the area (including prevention of erosion).</p> <p>The proposed residential redevelopment will impact Claymore 1. Sub-surface testing is therefore recommended to determine the nature and significance of the site, and inform the development of mitigation strategies.</p>

No.	Submitter	Issues Raised	Response and Mitigation Strategy
		<ul style="list-style-type: none"> <li>The carved stones that currently are within the Dimney Park should remain there, but if that is not possible, then perhaps they could be moved to the site now known as Claymore 1, if this site can be retained.</li> <li>The carved stones were made out of respect for the Dharawal people and how fitting for them if they were placed in Claymore 1, a recorded Aboriginal place. I was not aware of their existence originally, but when told the story, I do consider them culturally significant.</li> </ul>	<p>The Concept Plan includes retention of Dimeny Park as open space, although the park will be redesigned and upgraded. The potential impact on the carved stones is not yet known. It is recommended that the stones be retained in their current location (ACH assessment, Section 16). If this is not possible, it is recommended that a new location for the stones be found within the subject area, with the selection of the new site being made in consultation with the Aboriginal community.</p> <p>The cultural significance of the carved stones is noted in Sections 12 &amp; 14 of the ACH report (<b>Appendix 2</b>). In addition the submission from Cubbitch Barta Native Title Claimants has been included as an appendix to the ACH assessment. It is recommended that the stones be retained within Dimeny Park, and that enhanced interpretation be introduced, to reflect the Park as a place that acknowledges the traditional Tharawal custodians (ACH assessment, Section 16).</p>



No.	Submitter	Issues Raised	Response and Mitigation Strategy
		<ul style="list-style-type: none"> <li>When an Aboriginal Heritage Assessment goes on public display, the locations of any sites, and that includes photographs, GPS points and maps should not be put on public display. Vandals and thieves are destroying too many sites and places. The location of sites may only exasperate the problem.</li> </ul>	Potentially sensitive information will be removed from future versions of the ACH assessment to be placed on public display. This information includes site/artefact co-ordinates, maps giving site locations, and photographs where site/artefact locations are readily identifiable. If possible, this information should also be removed from the ACH assessment presently available through the DoP website.
11	Public submission	The Guardian Angel Preschool submitted a response which highlighted concerns about the removal of the pre-school.	Discussed in Section 3.1
12	Public submission	<p>Submitter is responding on behalf of the Campbelltown Baptist Church and would like to express their disappointment and dismay at the non-inclusion of the Westside Baptist Church and the Guardian Angel Preschool in the renewal program for Claymore.</p> <p>In relation to The Guardian Angel Preschool, the leadership of Campbelltown City Baptist Church fully endorses the response to the renewal program made by <b>Submission 11</b> on behalf of The Guardian Angel Preschool Board.</p>	Discussed in Section 3.1
13	Public Submission	Submission is concerned that there is no allocation for a church and Guardian Angel Preschool presence within the proposal.	Discussed in Section 3.1

No.	Submitter	Issues Raised	Response and Mitigation Strategy
14	Public Submission  (included a petition with 310 signatures)	Submission is concerned that there is no allocation for a church and Guardian Angel Preschool presence within the proposal.	Discussed in Section 3.1
15	Public Submission	Submission is concerned that there is no allocation for a church and Guardian Angel Preschool presence within the proposal.	Discussed in Section 3.1



No.	Submitter	Issues Raised	Response and Mitigation Strategy
1	Office of Environment and Heritage (OEH)	<b>Biodiversity</b> <ul style="list-style-type: none"> <li>The Ecological Assessment (EA) states that at least 0.15 hectares of Cumberland Plain Woodland (CPW) and 1.47 hectares of River Flat Eucalypt Forest (RFEF) will be permanently lost.</li> </ul>	<p>The Concept Plan has been revised and the Ecological Study has been updated. The loss of Cumberland Plain Woodland is 1.15 hectares (see revised report in <b>Appendix 3</b>). There will be no loss of River Flat Eucalypt Forest. The loss of Cumberland Plain Woodland will be adequately offset within the offset area to be designated with secure land tenure and restoration and revegetation works to be carried out in accordance with Vegetation Management Plan (VMP). The offset area will support Cumberland Plain Woodland in perpetuity.</p> <p>The proponent acknowledges that prior to determination of any development application under the Concept Plan, the Council must be satisfied that the biodiversity offset strategy as approved by the Director General is not compromised by the development. The proponent further acknowledges that the offset strategy is to be implemented prior to the removal of any affected vegetation and/or ecological community.</p> <p>The offset strategy is to be developed to include the maintain, improve and protect principles. An appropriate offset area location and size is to be determined. The offset area or areas determined</p>

No.	Submitter	Issues Raised	Response and Mitigation Strategy
			<p>will be subject to a Vegetation Management Plan (VMP). The VMP actions will include management and rehabilitation to reform community composition and structure of the original form of the community from which it was derived (or as near to as possible subject to asset protection zones). Weed removal should be the initial focus and the propagation and replanting of local native seed is recommended to hasten community recovery. The plan of the ongoing management under the VMP is to improve and maintain the quality of the vegetation within the offset area. The document will be prepared to contain specific management actions and performance criteria to ensure the quality of the vegetation is maintained.</p> <p>The proponent is looking at meeting offset requirements on site.</p>



No.	Submitter	Issues Raised	Response and Mitigation Strategy
		<ul style="list-style-type: none"> <li>CPW and RFER is known to provide habitat for a number threatened species listed under the <i>Threatened species Conservation Act 1995</i> and <i>Environmental Protection and Biodiversity Conservation Act 1999</i>.</li> <li>The EA recommends that the residual impacts be compensated by the retention of CPW and RFEF remnants and in perpetuity management of native vegetation through a Vegetation Management Plan (VMP). OEH are concerned that active management in the absence of effective and secure long term management arrangements does not meet the <i>Principles for the use of Biodiversity Offsets in NSW</i>, nor the <i>NSW OEH Interim Policy on Assessing and Offsetting Biodiversity Impacts of Part 3A, State Significant Development and State Significant Infrastructure Projects</i>.</li> <li>The <i>Cumberland Plain Recovery Plan (CPRP) (2010)</i> applies to CPW and RFEF. The Claymore estate occurs entirely in the <i>CPRP (2010)</i> area. Under <i>Action 1.5</i> of the plan, the Department of Planning and Infrastructure should ensure that any impact to CPW and RFEF be offset by measures within the priority conservation areas where practical.</li> </ul>	<p>Noted and agreed.</p> <p>The proponent is preparing a VMP for the long term management of the offset area. This will include management arrangements.</p> <p>The proponent is looking at meeting offset requirements on site.</p> <p>Cumberland Plain Woodland is proposed to be offset in an area within the riparian area of the subject site. This area is not within a Cumberland Plain Recovery Plan priority conservation area, however the offset area is approximately 3 kilometres north east of the priority area located on the Campbelltown and Camden LGA boundary. It is considered practical to locate the offset area within or adjoining the subject site where possible.</p>

No.	Submitter	Issues Raised	Response and Mitigation Strategy
		<ul style="list-style-type: none"> <li>EPA identified a lack of an appropriate legal mechanism or instrument in the EA to ensure the perpetual conservation of the biodiversity offset area. To address this, EPA seeks the following statement of Commitment, or alternatively condition of approval:</li> </ul> <p><b>Recommendations for Biodiversity Offset Package:</b></p> <ol style="list-style-type: none"> <li>The proponent shall develop and submit for approval of the Director- General, a Biodiversity Offset Package to compensate for the loss of threatened species, populations, endangered ecological communities and their habitats prior to any clearing of any CPW or RFEF. The Offset shall as minimum             <ol style="list-style-type: none"> <li>1.1 Meet the <i>Principles for the use of Biodiversity Offsets in NSW</i>;</li> <li>1.2 Identify the conservation mechanisms to be used to ensure the long term protection and management of the offset sites;</li> <li>1.3 Be directed towards the priority conservation lands identified in the <i>CPRP (2010)</i> where practicable; and</li> </ol> </li> </ol>	<ul style="list-style-type: none"> <li>A compensatory offset package is currently being developed. This will address ongoing management issues. The offset package will address the principles and recommendations 1.1 to 1.4 listed here and will include a VMP to ensure the offsets are appropriately managed and funded in perpetuity.</li> </ul>



No.	Submitter	Issues Raised	Response and Mitigation Strategy
		<p>1.4 Include an appropriate Management Plan that has been developed as a key amelioration measure to ensure any proposed compensatory offsets, retained habitat enhancement features within the development footprint and/or impact mitigation measures (including proposed rehabilitation and/or monitoring programs) are appropriately managed and funded.</p> <p><b>Management and Restoration of Retained Bushland</b></p> <ul style="list-style-type: none"> <li>While the EA recommends that a VMP be prepared and implemented to guide the revegetation and ongoing maintenance of the Claymore estate, no Statement of Commitment has been included in the EA to this effect. Furthermore, the EA recommends a variety of local plants be replanted along the linear park, however no Statement of Commitment has been included in the EA.</li> <li>EPA recommends that the EA include a VMP to the satisfaction of Council. Council should ensure that there is sufficient resourcing available to implement the VMP over time and that the VMP satisfies actions endorsed by council in the <i>CPRP (2010)</i>, including <i>Action 2.2, 2.5 and 3.7</i>.</li> </ul>	<p>Cumberland Ecology is to prepare a biodiversity offset package and associated VMP.</p> <p>The VMP is being developed in conjunction with Campbelltown Council and it is noted that this should include consideration to their resourcing and endorsement to the CPRP. Matters identified by OEH will be considered in the preparation of the VMP.</p>

No.	Submitter	Issues Raised	Response and Mitigation Strategy
		<p>To address the above issue, OEH seeks the following Statement of Commitment, or alternatively condition of approval:</p> <p>Recommendations for VMP:</p> <ol style="list-style-type: none"> <li>1 The Proponent shall prepare and implement a VMP for the Claymore estate, to the satisfaction of Council prior to any clearing of CPW or RFEF, The VMP shall at a minimum: <ol style="list-style-type: none"> <li>1.1 Be prepared in consultation with fully qualified ecologist;</li> <li>1.2 Be consistent with best practice standards for bushland management and restoration contained in the <i>CPRP (2010)</i> and <i>Recovering Bushland on the Cumberland Plain: Best Practice Guidelines for the Management and Restoration of Bushland(2005)</i>;</li> <li>1.3 Define the rehabilitation objectives and goals for the area, clearly set out the proposed actions required, monitoring regimes, as wells as performance indicators to report on the implementation of rehabilitation;</li> </ol> </li> </ol>	

No.	Submitter	Issues Raised	Response and Mitigation Strategy
		<p>1.4 Include an accompanying work or action plan which includes specific restoration actions, site preparation, rehabilitation techniques to be used as well as care and maintenance following rehabilitation; and</p> <p>1.5 Address the management weed and pest animal species, weed eradication methods, protocols for the use of herbicides, as well as methods to treat the re-use weed infested topsoil.</p> <p><b>Aboriginal Cultural Assessment</b></p> <ul style="list-style-type: none"> <li>The Aboriginal Cultural Heritage (ACH) assessment conforms to the 2005 Draft Guidelines for Aboriginal Cultural Heritage and Impact Assessment and Community Consultation.</li> <li>It should be noted that in Section 1, page 7 Donna Whillock is referred to as representing Mindaribba LALC rather than Tharawal LALC. This should be rectified.</li> <li>An explanation of 'adverse minor impact' is required (Section 15, page 29) as the exact definition this and quantity of impact that represents is not sufficiently clear.</li> </ul>	<p>Noted in Section 5 of the ACH assessment.</p> <p>Amended in revised ACH assessment contained in <b>Appendix 2</b>.</p> <p>Four items/places of Aboriginal heritage significance were identified within the subject area. The potential impact on the significance of these items is as follows:</p> <p>1. Claymore 1: an archaeological site consisting of</p>



No.	Submitter	Issues Raised	Response and Mitigation Strategy
			<p>surface Aboriginal objects and potential archaeological deposit. Sub-surface investigation is required to determine the significance of the site, and the potential impact. The preliminary assessment of the archaeological significance of the site is low. However, the site has cultural significance to the contemporary Aboriginal community. The Concept Plan indicates residential development over the whole of the area of Claymore 1 (as provisionally identified). As the site consists of surface artefacts, and potential archaeological deposit within a shallow topsoil, it is likely that the proposed development will result in removal of the site.</p> <p>2. Potential for the presence of Aboriginal objects in all reasonably undisturbed parts of Claymore. Further investigation, in the form of survey and sub-surface testing, is required to identify the presence, extent and significance of any objects. The preliminary assessment of archaeological significance is low. However, any objects present are likely to have cultural significance to the contemporary Aboriginal community.</p> <p>3. Dimeny Park: carved stones. The stones were created and placed recently. Both the stones and their placement have contemporary Aboriginal cultural significance. Although the Concept Plan</p>

No.	Submitter	Issues Raised	Response and Mitigation Strategy
			<p>involves redesign of Dimeny Park, it may be possible to avoid impact by retaining the stones in their current location, or mitigate impact by relocating the stones to a similar site within the subject area (selecting the site through a process of community consultation).</p> <p>4. Old growth trees. Old growth trees are, in general, of cultural significance to the contemporary Aboriginal community. Any such trees with cultural scarring are also likely to be of high archaeological significance. Further survey is required in order to identify any trees within the subject area that have cultural scarring. Any potential impact will be avoided or minimised by the retention of any identified scarred tree and old growth trees within the McBarron Creek Riparian Corridor.</p> <p>The potential impact of the proposed development requires clarification through the further investigation of the identified items/places of Aboriginal heritage significance. However, at present it appears that impact will be limited to surface artefacts and potential archaeological deposits of low archaeological significance (although these sites are of cultural significance). A preliminary assessment of 'adverse minor impact' has therefore been made.</p>

No.	Submitter	Issues Raised	Response and Mitigation Strategy
		<ul style="list-style-type: none"> <li>The assessment states that the McBarron Creek Riparian Corridor was not considered as part of the assessment as it is not proposed to change the land use in the riparian corridor. Further, EPA notes that the alignment of McBarron Creek has been substantially modified in certain areas. However, if the riparian corridor is to be subject to a change of land use and/or subsurface impacts (for example as a result of construction of infrastructure, services etc) then an assessment will need to be undertaken for the area of any impact to any heritage values that may remain within the corridor adequately mitigated for.</li> <li>Contemporary cultural values have been identified in Disney Park, particularly as a result of the carved stones that have been placed there. The location of these stones was specifically chosen on the basis of height, aspects and reflects continued Aboriginal presence in the landscape and community, from pre-contract to the present day. EPA recommends that this local contemporary landscape is conserved <i>in situ</i>, EPA recommends that a similar location be found for the stones, that also reflect the same height and aspect values and that this location is chosen in conjunction with the Aboriginal community.</li> </ul>	<p>The requirement for an impact assessment of any proposed change of land use and/or sub-surface impact within the McBarron Creek Riparian Corridor, will be included in the Aboriginal Cultural Heritage Management Plan (recommended in Section 16 of the ACH assessment).</p> <p>It is recommended that the stones be retained in their current location, and that enhanced interpretation be introduced to reflect the Park as a place that acknowledges the traditional Tharawal custodians (Section 16 of the ACH assessment). If it is necessary to move the stones, it is recommended that the stones be relocated within the subject area, and that the new location be selected in consultation with the Aboriginal community.</p>



No.	Submitter	Issues Raised	Response and Mitigation Strategy
		<ul style="list-style-type: none"> <li>EPA supports the recommendations in section 16, however, requests that if sub-surface testing/artefact collection takes place, the long-term storage and management of the Aboriginal objects is resolved prior to any program of testing/ collection taking place. If objects are re-buried/re-located in a separate location on site, the new location will need to be registered on AHIMS and the newly created site will require management of these objects will need to be secured in their location. EPA also recommends that if a Care &amp; Control order is required for these objects, it is applied for prior to any sub-surface testing programme commencing.</li> </ul>	<p>The long-term storage and management of Aboriginal objects recovered from any subsurface testing and/or artefact collection will be addressed in the methodology for the testing and/or collection. The methodology will be reviewed by the Aboriginal stakeholders and OEH. If a Care and Control Agreement is decided upon, the application will be lodged prior to commencement of any testing and/or collection. If the artefacts are reburied / relocated, the new location will be registered with AHIMS, and management of the location will be incorporated into a Aboriginal Cultural Heritage Management Plan.</p>
2	NSW Office of Water	<p>Reference is made to the NSW Office of Water DGR submission on 22 February 2011 and the site inspection with Council and Landcom on 13 May 2011.</p> <p>The submission outlines the following concerns:</p> <ul style="list-style-type: none"> <li>The Urban and Landscape Masterplan states "<i>low level planting (&gt;1 M, &lt;3M clearance) should be avoided in the drainage invert as landform also obscures views in these locations</i>" (see page 56). Photos in the Masterplan indicate 'low level canopy' and 'small bushes' obscure views (see pages 56 and 57). The Illustrative Landscape Master Plan in the Urban and Landscape Masterplan does not include the rehabilitation of the riparian area with native riparian vegetation as a design objective</li> </ul>	<p>Noted. The design of landscaping in this area has been revised in conjunction with Cumberland Ecology to enable biodiversity offset while maintaining the drainage function.</p>

No.	Submitter	Issues Raised	Response and Mitigation Strategy
		<p>(see page 21). In contrast, the Ecological Study states "the project will provide for the revegetation of the riparian corridor on the northern boundary of the project area with native trees, shrubs and understorey plants" and recommends "a variety of local native plants including riparian and dry land woodland should be replanted along the linear park (Brady Park through to Fullwood Reserve)". Section 7.1 of the Study also states "the aim of the revegetation process would be to develop vegetation communities similar to those that originally occurred within the project area".</p> <ul style="list-style-type: none"> <li>The Office of Water previously recommended that the riparian area be protected and conserved, or revegetated with native plant species endemic to the vegetation community of this local area at a density that would occur naturally. The inconsistency between the Urban and Landscape Masterplan and the Ecological Study needs to be considered.</li> </ul>	<p>The design of the landscaping and public domain in this area has been revised taking into consideration these comments. This is shown in the detailed landscape plans contained in the revised Urban Design Report contained <b>Appendix 1</b>.</p>



No.	Submitter	Issues Raised	Response and Mitigation Strategy
		<ul style="list-style-type: none"> <li>The Urban and Landscape Masterplan shows a number of cross links are proposed to cross the riparian area (see page 20). In terms of minimising disturbance of the riparian area and improving public safety, it is recommended the number of cross links is minimised. It is recommended that the shared pedestrian cycle link which is proposed along the southern side of the riparian area is located outside the riparian area.</li> <li>The Office of Water previously recommended the design of the Claymore renewal area include perimeter roads fronting the riparian area so that urban lots front onto the riparian land. It is noted a key <i>design objective of the Urban and Landscape Masterplan is to maximise street frontage to parks</i> where possible. During the site inspection, Landcom advised that, it is not possible to incorporate perimeter roads along the northern side of the creek as the existing roads and residential homes are to remain at this location, It is noted some new perimeter roads are proposed along the southern side of the riparian area but it is not clear why a perimeter road can't be incorporated between Gould Road and Claymore Public School (see Street Hierarchy plan, page 9 in the Urban and Landscape Strategy plan). If possible, it is recommended that a perimeter road be incorporated adjacent to the riparian area at this location.</li> </ul>	<p>The design of the landscaping and public domain in this area has been revised taking into consideration these comments. This is shown in the detailed landscape plans contained in the revised Urban Design Report contained <b>Appendix 1</b>.</p> <p>The Concept Plan has been amended to provide additional perimeter roads to the open space.</p>



No.	Submitter	Issues Raised	Response and Mitigation Strategy
		<ul style="list-style-type: none"> <li>The Water Cycle Report indicates that the series of existing detention basins will remain in the post development scenario. As these basins are located within the riparian area, rather than maintaining grass in the basins, it is recommended the basins are vegetated with native plant species endemic to the vegetation community of this local area to be consistent with the recommendations made in the Ecological Study for the riparian corridor.</li> </ul>	<p>Although flood modelling has allowed for small low shrubs in isolated pockets or small stands of trees with no underbrush, It understood that Council would prefer to keep the riparian corridor as mostly grassed due to current ease of maintenance purposes.</p>
3	Sydney Water	<p>The developer will be required to provide an overall concept servicing scheme for the ultimate development, at their expense, this will include but not be limited to:</p> <ul style="list-style-type: none"> <li>o Scheme plan showing the proposed connection to the existing Sydney Water drinking water system;</li> <li>o Proposed mains to be diss-used and removed; and</li> <li>o Water modelling may be required subject to a review of the concept scheme plan.</li> </ul>	<p>Schematic showing proposed connection to the existing Sydney Water system is to be provided at Section 73 application stage.</p> <p>As above</p> <p>As above</p>

No.	Submitter	Issues Raised	Response and Mitigation Strategy
4	Busways Group	<p>The current bus route delivers a comprehensive range of travel options for the residents of the suburb, and it achieves this on a high frequency over a wide spread of hours daily.</p> <p>Busways suggest an alternative bus route that provides improved public transport access.</p>	Discussed in Section 3.3.
5	Councils Technical Service Division	<p>The submission outlines the following concerns:</p> <p><b>Landscape Report</b></p> <ol style="list-style-type: none"> <li>1. Shareways proposed are 2.0m wide. Council's DCP requires 2.5m wide where they are able to be physically provided.</li> <li>2. Some of the proposed road widths and configurations are not in accordance with Council's DCP. Further consideration of the proposals in consultation with Council will be required.</li> </ol>	<p>The Austroads minimum width for shareway is 2.0 metres which is consistent with the existing situation</p> <p>Road widths have been determined to achieve consistency across urban renewal projects and are considered appropriate for this context.</p>

No.	Submitter	Issues Raised	Response and Mitigation Strategy
		<p>3. The location of Shelter Belts (Figure 3.12) will need to take into account the impact that these trees may have on flooding in parks and drainage corridors. Further information will be required to address these issues at the DA stage.</p> <p>4. All street planting will need to consider future maintenance requirements. In this regard, some of the proposals for planted verge blisters at intersections (WSUD Integration Options p. 19) may not be appropriate and alternate locations for WSUD measures may be required.</p> <p>5. Landscape mounding on the Badgally Road batter will need to be carefully designed to ensure that it does not create trapped low points within the adjoining properties. This information can be submitted at the DA stage for each subdivision.</p>	<p>The location of bus stops will be determined at DA stage</p> <p>Revisions have been made to landscaping plans in this regard to remove trees in parking bays except along Dobell Road.</p> <p>Noted and will be considered at DA stage</p>



No.	Submitter	Issues Raised	Response and Mitigation Strategy
		<p><b>Water quantity comments</b></p> <p>6. As the site is effectively a Greenfield site, the general focus of the drainage study is on matching post development flows to pre-development. The system analysis should look at meeting current design standards, addressing existing capacity issues and consideration of major infrastructure constraints.</p> <p>7. The information submitted indicates that all existing detention basins are overtopping in 100 year ARI event. Council's DCP requires the spillway to contain the 100 year ARI storm and further information/ justification addressing this matter is required</p>	<p>As part of the Mott MacDonald report additional Offline OSD was considered to restrict post redevelopment flows to existing developed flows (please refer section 5.3 of the Water Cycle Report). Comments have been made regarding any identified existing issues in section 5.3 and 6.4 of the revised report (<b>Appendix 4</b>), attempts have been made to alleviate any existing capacity issues subject to existing constraints. Please note that Mott MacDonald consider the existing developed site to be a brownfield development.</p> <p>The existing detention basins have been modelled as they have been constructed based on detailed survey information. Based on the modelling, the existing basins currently spill over the control weirs during the 100yr storm. The weirs form part of the outlet system for the basins and act as an emergency spillway in extreme events.</p> <p>As part of the analysis we have assessed the impacts of the redevelopment on each of the detention basin levels, with some basins experiencing little increase in to the 100yr water level. Table 6.1 of the report details the negligible change in flood levels due to the redevelopment. Proposed flows through the development show a negligible increase in flood levels across each of the</p>

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			<p>basins and channels from the existing levels (average 45mm increase from Ch1575 to Ch312.9 with a maximum of 130mm downstream of the Gould St. Bridge, which is well contained within the riparian zone). Results do however indicate that the basins will continue to act as per the original design (by others).</p> <p>A large portion of the eastern and central catchments bypass the existing OSD systems and are alternatively controlled with the addition of the proposed detention basin in the north-east corner of the site.</p> <p>A standard Rafts piped discharge relationship is used (using the Std. RAFTS Culvert Method) in the analysis in conjunction with a staged discharge relationship for the overflow weir. The stage discharge relationship for the overflow weir has been calculated using a modified weir equation to best match the shape of the existing weir. The standard rafts calculation involves the use of a simple weir equation which will give inaccurate results as it does not allow for variations in the width or height of the weir.</p>

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		<p>8. The method of analysis cited for the detention basin stage discharge performance is not acceptable for analysis of system performance as identified in the XP-Rafts User Manual.</p> <p>9. The percentage that has been adopted for impervious conditions (Table 5.1) is generally too low, hence flows will be underestimated. The values in Council's DCP Volume 2 are to be used, which accounts for additional percentage impervious after initial development attributable to paths, sheds, pools etc.</p>	<p>A standard Rafts piped discharge relationship is used (using the Std. RAFTS Culvert Method) in the analysis in conjunction with a staged discharge relationship for the overflow weir. The stage discharge relationship for the overflow weir has been calculated using a modified weir equation to best match the shape of the existing weir. The standard rafts calculation involves the use of a simple weir equation which will give inaccurate results as it does not allow for variations in the width or height of the weir.</p> <p>Increased densities since initial lodgment indicate a percent impervious of 78% (please see the below breakdown. Please note that the below are for new residential lots only.</p> <table><tr><th>Area (m<sup>2</sup>)</th><th>CCC DCP %IMP</th><th>IMP Area (m<sup>2</sup>)</th></tr><tr><td>68613</td><td>0.9</td><td>61751.7</td></tr><tr><td>362916</td><td>0.8</td><td>290332.8</td></tr><tr><td>136884</td><td>0.7</td><td>95818.8</td></tr><tr><td>15442</td><td>0.6</td><td>9265.2</td></tr><tr><td>583855</td><td></td><td>457168.5</td></tr><tr><td></td><td>Percent Impervious</td><td>78%</td></tr><tr><td></td><td>Revised Adopted Impervious</td><td>80%</td></tr></table>	Area (m <sup>2</sup> )	CCC DCP %IMP	IMP Area (m <sup>2</sup> )	68613	0.9	61751.7	362916	0.8	290332.8	136884	0.7	95818.8	15442	0.6	9265.2	583855		457168.5		Percent Impervious	78%		Revised Adopted Impervious	80%
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		<p>10. The RAFTS analysis should include all storms up to 24 hours. A second peak generally found around 9 hours when basins are in place.</p> <p>11. The RAFTS model should be extended downstream to Jackson Park (or as a minimum look at the time to peak at the Freeway) to confirm that the development proposal is not changing downstream timing with respect to other drainage lines.</p> <p>12. Hydraulic modeling indicates presence of (up to) 6 hydraulic jumps. These need to be addressed and the impact of mitigation measures on flood levels incorporated into the assessment.</p>	<p>The report and modeling has been updated to reflect these changes (<b>Appendix 4</b>).</p> <p>The report has been updated to include analysis of storms up to 24hours duration. Rainfall data for storms greater than 3 hours are not provided in Council's DCP and rainfall intensities will be calculated using the list of rainfall coefficients provided on page 155 of Council's DCP.</p> <p>The RAFTS modeling has been extended to compare the redeveloped time to peak at the freeway with respect to existing developed time to peak at the same location.</p> <p>Only one significant hydraulic jump has been identified at the location of the Gould Rd culvert. The hydraulic jump is present in both the existing and proposed scenario's and is generally due to hydraulic losses associated with the existing culvert.</p> <p>Table 6.1 of the report details the change in water levels at these locations are not significant and flood extents are contained within the riparian zone.</p>

No.	Submitter	Issues Raised	Response and Mitigation Strategy
		<p>13. The HECRAS cross sections contain some odd Bank Markers which may impact on the modeled conveyance of the system.</p> <p>14. Generally the hydrologic and hydraulic model values used are in accordance with the values recommended in the DCP - but some are not. DCP values are to be used unless variation is required, in which appropriate justification is to be put to Council.</p> <p>15. Some of the drainage 'hotspots' (Node N1.6) appear to align with dwellings to be retained. Proposed solutions may create trapped low points within these properties. This should be further assessed to determine if alternate treatments are available/possible.</p>	<p>Bank markers have been reviewed and updated if deemed appropriate. Changes to the sections and results have been updated as required in the report.</p> <p>Modeling has been undertaken in accordance with Council's DCP and listed in section 5.1 of the report.</p> <p>As part of the development works it has been proposed that the overland flow path be re-graded in the vacant land between the existing properties (in the location of Node N1.6) to alleviate some of the existing flooding issues to the adjacent properties. Discussion of this area is detailed in section 6.4 and within the 'proposed' HECRAS modeling.</p> <p>In the area of HECRAS chainage CH1417.6 there are existing properties effected by the existing 100YR flood levels (Refer Drawing W08). The dwelling floor levels appear to be well above the 100yr flood level (as the lots fall from Auld Place to the reserve). It is proposed that retaining walls will be provided along the lot boundaries and the lots raised to remove any potential trapped low points (Refer Drawing W08)</p>



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		<p>16. The impacts of flows from the Freeway adjoining Fullwood Reserve will need to be included in the assessment. This has not been done and may impact on the design proposals in Fullwood Reserve.</p> <p>17. The Director General's Requirements (Appendix 1 item 12) require "An assessment of any flood risk on site in consideration of any relevant provisions of the NSW Floodplain Development Manual (2005) including the potential effects of climate change, sea level rise and an increase in rainfall intensity." This has not been done and should be included in the application.</p> <p>18. Whilst investigations have started to consider the PMF , additional work will need to be done with respect to the possible ponding against the Freeway embankment. This additional assessment should be included as part of the EA.</p> <p>19. The assessment of the street drainage system would be more accurately modeled with DRAINS instead of trying to use XP-Rafts and HECRAS for this purpose. Whilst it is acknowledged that this detailed assessment come later, due however to the presence of 2 identified existing road sags with current problems, it may be expedient to look at these locations, at least, now.</p>	<p>Inclusion of the catchments along the Hume Hwy have been made to assess any potential impacts to the site.</p> <p>Discussion and analysis have been undertaken and will be included in the revised report in accordance with Council's requirements (<b>Appendix 4</b>).</p> <p>Rafts analysis of the existing and proposed PMF have been undertaken and comment made within the report in section 5.3.4. Additional survey is being undertaken downstream of the site up to the freeway outlet, results of this additional analysis will be included within the revised report.</p> <p>The RAFTS modeling undertaken provides an indication of the existing problems in these areas within an acceptable order of magnitude and the proposed analysis and Water cycle report suggest methods to improve existing conditions at these locations. Section 5.3.5 (dot point 2) and section 6.4 address the current issues associated with the 2 identified sag points.</p>



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		<p>20. The study does not appear to have considered the mitigation impact of an existing upstream detention basin in playing fields at Eaglevale High School. This should be included or updated in the study.</p> <p><b>Water Quality comments</b></p> <p>21. The water quality targets cited in Table 7.2 and 3.1 are not the same. It is recommended that the Growth Centres Commission targets are adopted. These are proposed to be the adopted values in the next revision of the DCP, and include:</p> <ol style="list-style-type: none"><li>1. 90% reduction of Gross pollutants,</li><li>2. 85% reduction of suspended solids,</li><li>3. 65% reduction in Nitrogen and</li><li>4. 45% reduction in Phosphorus.</li></ol>	<p>These hotspots will need to be investigated in detail with each staged DA package when accurate survey data is available.</p> <p>Inclusion of the Eaglevale High School detention basin has been included in the analysis. Gamini Hattotuwa from Campbelltown City Council has provided details of this basin.</p> <p>Table 7.2 and 3.1 have been updated. Water quality reductions comply with the current CCC DCP. The values in the proposed design exceed council's current standard and exceed Council's draft DCP with the minor exception of TSS.</p> <table><tr><th>Reductions %</th><th>Total Suspended Solids (kg/yr)</th><th>Total Phosphorus (kg/yr)</th><th>Total Nitrogen (kg/yr)</th><th>Gross Pollutants (kg/yr)</th></tr><tr><td>Council 2009 Standard</td><td>80</td><td>45</td><td>45</td><td>90</td></tr><tr><td>Previous Submitted design</td><td>80.1</td><td>68</td><td>67.6</td><td>99.9</td></tr><tr><td>Draft Council Standard</td><td>85</td><td>45</td><td>65</td><td>90</td></tr></table>	Reductions %	Total Suspended Solids (kg/yr)	Total Phosphorus (kg/yr)	Total Nitrogen (kg/yr)	Gross Pollutants (kg/yr)	Council 2009 Standard	80	45	45	90	Previous Submitted design	80.1	68	67.6	99.9	Draft Council Standard	85	45	65	90
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		<p>22. The water quality measures proposed appear reasonable, subject to detailed design, however in the rapidly evolving field of WSUD, any proposed measures should be reconsidered at the time of construction to ensure they are still industry best practice and suitable to the development, soils and topography of the site. A suitable clause reflecting the above should be included in the proposal.</p> <p>23. In terms of Council's future maintenance of WSUD measures, the systems provided should comprise discrete measures (as opposed to distributed systems) and make adequate allowance for maintenance vehicles and any ancillary areas required for maintenance. In this respect the northwestern trash rack proposed on Drawing W03 would appear to be located in a site with difficult maintenance access.</p> <p>24. The percentage impervious adopted (Table 7.3) is generally too low, hence water quality parameters will be underestimated. The values in Council's DCP Volume 2 are to be used, which account for additional percentage impervious after initial development attributable to paths, sheds, pools etc.</p>	<p>A clause stating that best engineering practice should be applied to the detailed design of the Water quality treatment devices; however they should meet the requirements stated in the water cycle report at a minimum.</p> <p>The northwestern trash rack will be removed any gross pollutants will therefore be captured at the downstream trash rack.</p> <p>Please Refer to Item 9 above.</p>



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		<p>25. Section 7.3 indicates that rainwater tanks are a component of the treatment train. No credit will be given in the water quality modeling due to the presence of rainwater tanks (first flush devices are mandatory so all the dirty water is discharges to the system).</p> <p>26. There appears to be an anomaly in the MUSIC parameters cited in table 7.6 with respect to Nitrogen removal.</p> <p><b>Transport and Accessibility Study</b></p> <p>27. Council's considers that the future demographics of the Claymore estate will be more closely aligned with that of the greater Campbelltown LGA. Therefore the current assumption (used to calculate forecast traffic in table 6.1) in the traffic report will need to be amended to include a recognition that traffic movements will increased per household. With a 70% private household component and 30% public component overall traffic movement are likely to increase post development.</p>	<p>Modeling of the property rainwater tanks is considered appropriate. MUSIC does not consider first flush devices and pollutants will only be removed via re-use. Unused overtopping water is considered untreated in the model. Re-use of the stored water is a considerable source of nutrient removal and has been included in the model. Rainwater tanks are considered an effective and widely adopted WSUD treatment measure.</p> <p>Error in Table 7.6 has been amended, values using within the modeling for nitrogen were Input 50mg/L, Output 37.5 mg/L.</p> <p>A review of previous studies undertaken as part of the renewal programmes for other suburbs reveals that the traffic generation rates used in the Study for Claymore exceed previous studies for other suburbs and also includes existing through traffic. The following are the rates used in the Claymore study and other previous studies for comparison.</p> <p><b>Claymore:</b> AM= 1.12 vtp/dwelling PM 1.0vtp/dwelling, through volumes included</p> <p><b>Minto:</b> 0.6 vtp/dwelling based upon surveys of Glenmore Park. No indication of existing through volumes considered.</p>



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		<p>28. The traffic surveys used in the study were taken prior to the opening of the Raby Road "on ramp" to the F5. It is possible that a redistribution of traffic to gain access to this ramp would use Badgally Road, Eaglevale Drive and possibly some of the roads within Claymore. The traffic report should acknowledge these works and the possible redistribution of traffic movements and any associated impacts.</p>	<p><b>Airds/Bradbury:</b> RTA rates used i.e. 0.85 vtph. No indication of existing through volumes considered.</p> <p><b>Oran Park:</b> RTA rates used i.e. 0.85 vtph.</p> <p>Furthermore the modelling indicates that the operation of the critical intersection indicates that all of the critical intersections will operate at a very good level of service without Oran park Town traffic. The intersections only fail with the Oran Park Traffic.</p> <p>A search of RTA documents did not reveal a recent study for the Raby Road on/off ramps and the impact upon Badgally Road. It is considered that the location of the new ramps would generally be used by the residents of the immediate vicinity. Whilst some changes to the traffic flows along Badgally Road during the peaks may have occurred it is likely to be minimal. However, if Council can provide forecast flows from any study this can be investigated further.</p>

No.	Submitter	Issues Raised	Response and Mitigation Strategy
		<p>29. Level "D" Service is not an normally accepted standard for designing intersections. Level "C" is considered the minimum acceptable standard and should be appropriately utilised.</p> <p>30. Traffic volumes presented in Table 6.3, and used as the basis of the traffic facilities assessment, appear to be too low. Taking the existing peak hour volumes identified in Appendix B and adding the Turner Road/Oran Park traffic volumes (page 7) gives higher volumes than Figure 19 shows the Shared Pedestrian/Cycleway Routes. The route on Glenroy Road swaps from the southern side to the northern side at the first roundabout. This is not practical and the route should to be located on one side of the road only.</p> <p>31. Figure 19 shows the Shared Pedestrian/Cycleway Routes. The route on Glenroy Road swaps from the southern side to the northern side at the first roundabout. This is not practical and the route should to be located on one side of the road only.</p> <p>32. Traffic counts presented in Appendix B for the period 12/4/11 to 21/4/11 appear to have partial day counts included for the first and last day. These should to be excluded from the data as they are not complete. Additionally, the weekend data is not representative of the weekday volumes and should also be excluded.</p>	<p>Agreed. The LOS'D' referred to in section 5.3 was for existing roads. Design of new intersections was to LOS 'C' or better.</p> <p>The traffic volumes extracted from the Oran Park Town report cannot be simply added to the forecast flows of the total Claymore renewal project because the Oran Park Town Report forecast flows along Badgally Road includes the existing traffic generated by Claymore. The only additional traffic generated by the proposal that was added to the road network in 2026 was the additional traffic generated by the retail centre and service station (less passing trade described in table 6.1.</p> <p>The proposed cycle route is now proposed on the southern side of the new entry road so as to avoid conflict with retail centre pedestrians and bus stops.</p> <p>Correct the Council data provided appears to include partial days and are AADT's not AAWT's, however, these anomalies are considered to be so minor that they do not change the conclusions or recommendations of the Assessment.</p>

No.	Submitter	Issues Raised	Response and Mitigation Strategy
		<p><b>Miscellaneous comments</b></p> <p>33. The latest versions of all software packages used in the various reports/analysis are to be used as per Council's DCP Volume 2. It is not being complied with in the submitted studies.</p> <p>34. All models used in the technical studies are required to be submitted to Council for assessment. Further comment may be required upon review of these models by Council.</p>	<p>Error omission: RAFTS v2009 was used in the analysis and not v2001 as noted in section 5.1.8</p> <p>Model provided to Council</p>
6	Preliminary issues from Council	<p>The submission outlines the following concerns:</p> <ul style="list-style-type: none"> <li>• <b>Town centre</b> – further conceptual planning of the building form of the town centre is required demonstrating a high level of urban amenity and a mix of land uses. Council raises particular concern regarding the location of the proposed 'town square' and whether there is an alternate location that has an increased interaction with the proposed retail outlets, community facilities and the adjoining residential community. The design of the town centre shall also demonstrate a high level of urban design and street presentation, with a particular emphasis on its address to Badgally Road and the proposed Glenroy Road.</li> </ul>	Refer to Section 3.2



No.	Submitter	Issues Raised	Response and Mitigation Strategy
		<ul style="list-style-type: none"> <li>• <b>Active frontage adjoining Fullwood Reserve</b> – opportunities to provide an active street frontage addressing Fullwood Reserve from Abrahams Ways are to be considered further, with conceptual plans to be provided illustrating potential development scenarios. Consideration shall also be given to Leigh Crescent to be orientated towards the park (at least on one side), particularly given the width of the open space area being approximately 100m, with limited passive surveillance opportunities.</li> </ul>	<p>The Concept Plan has been amended to include additional streets fronting Fullwood Reserve east of Gould Road.</p>

No.	Submitter	Issues Raised	Response and Mitigation Strategy
		<ul style="list-style-type: none"> <li><b>Retention of existing dwellings</b> – provide further details showing the indicative location of dwellings to be retained as part of the project.</li> </ul>	<p>Unlike Minto or Airds, Claymore will not be retaining highly concentrated pockets of retained cottages, perhaps with the exception of approximately 70 cottages located along the Eagle Vale boundary (North &amp; North West) of the project area. These properties are currently being upgraded by HNSW as part of a neighbourhood improvement program.</p> <p>The remaining 70 cottages to be retained will be scattered (or 'salt and peppered') throughout the Project. It is important to note that the number of retained cottages is approximate and may change during detailed design of each stage, as experienced at Minto.</p> <p>As part of the detailed design of each stage of subdivision, HNSW will undertake a preliminary assessment of the existing cottages therein and will make a decision regarding their potential retention. Some of the factors influencing HNSW's decisions will include:</p> <ul style="list-style-type: none"> <li>Whether the property sits adequately within the proposed subdivision layout or not;</li> <li>General lifecycle costs and condition of the property - work required to repair property is feasible or not; and</li> <li>Ability to accommodate new infrastructure or services.</li> </ul>

No.	Submitter	Issues Raised	Response and Mitigation Strategy
		<ul style="list-style-type: none"> <li><b>Road layout</b> – there are a number of small access roads and "T" intersections throughout the concept plan. Council seeks an opportunity to further discuss the number of intersections throughout the estate and whether some of these intersections could be rationalised.</li> </ul> <p>The road layout may also need to be amended as the proposed extension of Abrahams Way protrudes through the private property located at 67 Gould Road, Eagle Vale. Consent from this owner is required should you proceed with the current proposal, or alternatively it is requested that the road layout be reconfigured to avoid 67 Gould Road and provide a road layout that has direct frontage to Fullwood Reserve, as detailed above.</p> <p>The masterplan proposes parking bays located adjacent to the proposed Glenroy Road. Due to the ongoing maintenance issues associated with the configuration of the parking bays, Council requests that the road layout be modified so that there is a 45 degree angle (or similar) at the junction of the parking bay and the road carriageway or that the tree bays be removed and incorporated into the footpath area.</p>	<p>The Concept Plan shows an indicative street layout that will be further developed with each development application which will be based on more detailed design and consideration of street efficiency and lot layout.</p> <p>Concept Plan has been amended accordingly.</p> <p>Tree bays have been removed on minor collector road types and will be incorporated into the footpath. Tree bays will only be provided along Dobell Road.</p>



No.	Submitter	Issues Raised	Response and Mitigation Strategy
		<ul style="list-style-type: none"> <li>• <b>Lot layout</b> – further detail is required regarding the configuration of the lots that are located adjacent to Dobell Road, and face the Hume Highway, and what restrictions apply in respect to these dwellings having a closer relationship with the street. There appears an undeveloped area of land (shown and shaded as 'road reserve' on the draft concept plan) between Dobell Road and these allotments.</li> <li>• <b>Economic impact assessment for town centre</b> – Council has engaged Peter Leyshon (Economic Consultant) to undertake retail assessment/review of the Hill PDA report. This report is forthcoming and further details or particulars may be required upon receipt of this report.</li> </ul>	<p>The existing Dobell Road reserve is being retained because of the services currently located in this area which prevents incorporation into lots.</p> <p>See section 3.2</p>

No.	Submitter	Issues Raised	Response and Mitigation Strategy
		<ul style="list-style-type: none"> <li>• <b>Anglican site</b> – on the corner of Dobell Road and Gould Road has not been indicated on the concept plan as a private property. Instead, the masterplan proposes residential over this allotment, which is owned by Anglican Church Property Trust.</li> <li>• <b>Staging plan</b> – an updated staging plan is required, showing indicative staging dates and a separate staging plan showing the evolution of the stages over time. Included in the evolution staging plan shall be the existing road layout and estate configuration.</li> <li>• <b>Heritage</b> – impact assessment requires further examination and justification, mainly in respect to view lines and the impact upon setting and curtilage. Particular concern is raised regarding the impact that the development of Glenroy Park will have on the heritage significance of 'Glenroy' and 'Homestead'. Presently Glenroy Park positively contributes to the visual curtilage and setting of both heritage items.</li> </ul> <p>Further information is required illustrating the visual impact of the development of Glenroy Park, including views and vistas of the heritage item/s from Dobell</p>	<p>The Concept Plan indicates this site to be within a future residential area. However this does not preclude the continuation of the church.</p> <p>The Anglican Church has written to Landcom requesting consideration to purchase their land. The Anglican Church is no longer operating at Claymore and they are looking at future options for the land. The project is assuming acquisition of the site.</p> <p>Updated staging plan provided in this report.</p> <p>See Section 3.4</p>

No.	Submitter	Issues Raised	Response and Mitigation Strategy
		<p>Road and detailed site analysis. It is noted that sections of Glenroy Park are elevated and a visual illustration shall satisfactorily demonstrate the impacts on the heritage items and whether proposed mitigation measures to protect the heritage significance of 'Glenroy' and 'Homestead' have been considered.</p> <ul style="list-style-type: none"> <li>• <b>Acoustic fencing</b> – further details on the type and finishes of acoustic fencing proposed within the development, particularly Badgally Road and south of Dobell Road within Glenroy Park (adjoining the Hume Highway). The proponent shall coordinate with the RTA in respect to noise mitigation measures, such as noise mounds.</li> <li>• <b>Open space</b> – the small parcel of land (500 sq m) identified as 'C' on the open space plan is proposed to be dedicated to Council in the open space plan and is also shown as a residential allotment in the masterplan. Its size and configuration renders itself inappropriate as a public open space and should be consolidated elsewhere into the project and not public open space.</li> <li>• <b>Bus route</b> – in light of the concerns raised from residents of Claymore precinct Committee and that of Busways, further details are required demonstrating a safe and efficient bus route with appropriate turning circles and carriageway width to accommodate bus movements.</li> </ul>	<p>Some details on the treatment of Badgally Road and the Dobell Road setback area are provided in the revised Urban Design Report contained in <b>Appendix 1</b>. Appropriate screening will be developed at DA stage.</p> <p>Concept Plan has been amended accordingly.</p> <p>Revised bus route proposed as described in Section 3.3 below.</p>



No.	Submitter	Issues Raised	Response and Mitigation Strategy
		<p><b>Biodiversity</b> – council notes the comments provided by Office of Environment and Heritage (OEH) in respect to the project. It is recommended that as part of the response to these issues in the Preferred Project Report (PPR) that a draft biodiversity offsetting strategy be prepared including a concept vegetation management plan. Council has previously discussed these matters with OEH and they are agreeable to discuss such matters further.</p> <p>There is discrepancy in table 7.1 of the ecological report in respect to the loss of Cumberland Plain Woodland and River Flat Eucalyptus Forest. The discrepancy is between the current area on site and the area to be retained for each ecological community. Please provide further clarification on the area of Cumberland Plain Woodland and River Flat Eucalyptus Forest to be retained and the area proposed to be lost as part of the development. This should be consistent with figure 6.1 in the report.</p> <p>Council also notes the comments received from NSW Office of Water, in particular the inconsistencies in respect to Landscape Masterplan and ecological studies and the plant species proposed within the riparian areas.</p>	<p>Cumberland Ecology has been instructed by Landcom to prepare a biodiversity offset package and associated VMP which is to be developed in conjunction with Campbelltown Council. Such VMP will take OEH's comments into consideration.</p> <p>This discrepancy has been rectified within updated Ecological Study report. All River Flat Eucalypt Forest is to be retained. There is 2.75 hectares of Cumberland Plain Woodland within the Subject Site and 1.15 hectares is proposed to be removed and adequately offset.</p> <p>Noted.</p>

No.	Submitter	Issues Raised	Response and Mitigation Strategy
7	Sydney Regional Development Advisory Committee	<p>The submission outlines the following concerns:</p> <ol style="list-style-type: none"> <li>1. It is unclear of how the traffic generated from the project is redistributed and assigned within the proposed road network. Details of trip generation, traffic distribution and traffic assignments should be submitted for review.</li> <li>2. It is noted that traffic signals are proposed at the intersection of Badgally Road and Clydesdale Road. The developer shall demonstrate to RMS' satisfaction that the warrants for traffic signals are met at this location, in addition, a concept plan of the proposed signal intersections and the relevant traffic models should be forwarded to RMS for review and approval. 'In principal' approval has not been granted to the proposed traffic signals as part of this application.</li> </ol>	<p>The traffic generation of the renewal project has been assigned to the road network on the basis of existing traffic flows. The new intersection of Badgally Road and the new entry road was allocated approximately 30% of entering and exiting traffic currently utilising Dobell Road plus the additional traffic generated by the Retail was allocated to the Glenroy Intersection. Trip generation is provided in Table 6.1 of the report (see <b>Appendix 5</b>)</p> <p>Traffic Signals are not currently warranted on traffic volumes; however, pedestrians volumes crossing Badgally Road exceed 150 for 2 one hour periods a day at Blairmount Primary School start and finish times.</p> <p>The traffic volume warrants will be met at some stage in the future when the traffic volumes from Oran Park Town, the Claymore Renewal project and retail centre are realised/operational.</p>

No.	Submitter	Issues Raised	Response and Mitigation Strategy
		<p>3. Council should ensure that the applicant is aware of the potential for road traffic noise impact on residential development on the subject site.</p> <p>In this regard, the applicant should provide and maintain noise attenuation measures in accordance with Office of Environment &amp; Heritage's Environmental Criteria for Road Traffic Noise.</p> <p>Details of noise attenuation measures along Hume highway should be referred to RMS for review and approval as part of stage development application.</p>	<p>Acoustic assessment has been undertaken by Renzo Tonin &amp; Associates and is included in Appendix 13 of the EA.</p>
		<p>4. Any change or proposed new speed zone shall comply with NSW speed zoning guidelines and be referred to RMS for approval.</p>	<p>No speed zone changes proposed.</p>
		<p>5. All local roads shall be designed and constructed in accordance with Council's requirements.</p>	<p>Noted</p>
		<p>6. Council should ensure that the bus services be provided within the area during all development stages of the site. Details of managing bus routes during total 12 development stages should be submitted to Council and Transport for NSW for review.</p>	<p>Bus services dealt with in response to Busways Submission (Government Authority submission 4)</p>



No.	Submitter	Issues Raised	Response and Mitigation Strategy
		<p>7. The proposed development will generate additional pedestrian and cyclist movements in the vicinity of the site. The pedestrian and cyclist facilities should be provided to Council's satisfaction. The proposed pedestrian and cyclist facilities should be designed and constructed in accordance with the relevant standards, It is strongly recommended that Transport for NSW and the State Transit Authority be consulted to determine if additional bus services can be provided or rerouted to this development to achieve a reasonable mode shift to public transport.</p>	Pedestrian and cyclists catered for in proposal
		<p>9. Any sustainable initiatives and measures should be provided to Council and TfNSW's satisfaction which will reduce car dependency and the increased use of sustainable modes of travel including the use of buses, bicycles and walking.</p>	Noted
		<p>10. All works/regulatory signposting associated with the proposed development are to be at no cost to RMS.</p>	Noted

No.	Submitter	Issues Raised	Response and Mitigation Strategy
8	South Western Sydney Local Health District	<p>The submission makes the following suggestions:</p> <p><b>Community Facilities and Services</b></p> <ul style="list-style-type: none"> <li>Reference to the planning agreement under Sections 93F to 93L of the EP&amp;A Act could specify the provision of a community development worker in addition to community facilities to implement community building activities.</li> <li>The Social and Health Impact Report suggests that as the number of highly disadvantaged residents reduces in Claymore as a result of the renewal there will be a reduction in the need for local services (p42). It is suggested that this may not necessarily be the case, and that in the proposed consultations and planning for future service needs particular attention is given to the disadvantages residents remaining in Claymore and to other potential emerging areas of disadvantage such as mortgage stress and increased numbers of young families.</li> <li>There should be an assessment of the level of need for General Practice medical services located in Claymore. It is suggested that contact is made with the Macarthur Division of General Practice to assist with this assessment.</li> </ul>	<p>Housing NSW will manage tenant relocation and services to residents during the redevelopment phase as outlined in the Social and Health Impacts Report contained in Appendix 11 of the EA.</p> <p>Housing NSW will manage tenant relocation and services to residents during the redevelopment phase as outlined in the Social and Health Impacts Report contained in Appendix 11 of the EA. This will include services to tenants following redevelopment in conjunction with services and facilities provided by Council and other government agencies.</p> <p>There is an existing medical practice in Claymore and there will be the opportunity for additional GP services in the town centre or in private dwellings in accordance with local planning controls.</p>

No.	Submitter	Issues Raised	Response and Mitigation Strategy
		<p><b>Seniors Living</b></p> <ul style="list-style-type: none"> <li>A Health Impact Assessment of Seniors Living precincts in Rosemeadow, Minto and Macquarie Fields was undertaken in partnership with NSW Housing in 2011 and produced useful recommendations for maximising positive health impacts of these developments.</li> </ul> <p><b>Access to Town Centre</b></p> <ul style="list-style-type: none"> <li>Some of the proposed senior's precincts are a considerable distance (up to approximately 800m) from the proposed Town Centre at the intersection of Glenroy Road and Badgally Road, and with a steep incline. It is suggested that the impact of these relative locations are assessed and strategies developed to ameliorate any negative impacts (e.g. Investigate the potential for other locations for the Town Centre or the seniors precincts; ensure the early introduction of adequate and accessible public transport between locations).</li> <li>Consideration could be given to public housing tenants who experience higher levels of disadvantage being housed within walking distance of the Town Centre.</li> </ul>	<p>Noted</p> <p>Some seniors housing sites have been identified in proximity to the town centre. The others are located on the proposed bus route providing good access to the local centre and to Campbelltown.</p> <p>Housing allocation is a matter for Housing NSW. The development has been designed to be served by a bus route that is accessible to residents.</p>



[illegible]

No.	Submitter	Issues Raised	Response and Mitigation Strategy
		<ul style="list-style-type: none"> <li>Stormwater retention should be managed to eliminate hazards such as mosquito breeding areas.</li> </ul> <p><b>General</b></p> <ul style="list-style-type: none"> <li>While NSW Health's Healthy Urban Development Checklist (HUDC) is cited as a reference for addressing transport and accessibility impacts it is suggested that this resource would be useful in considering other aspects of the development including healthy food, physical activity, quality employment, community safety and security, public open spaces, housing, social infrastructure, social cohesion and social connectivity, and environment and health. SWSLHD would be keen to assist in the application of HUDC as appropriate.</li> </ul>	<p>Noted</p> <p>Noted. The development has been designed to achieve significant improvement in public safety and accessibility through the new street system. Safe and accessible public spaces are proposed, which together with the new town centre will result in the opportunity for improved social cohesion.</p>

## 3. RESPONSES TO KEY ISSUES

### 3.1 Baptist Church and Pre-School

The issue of the future of the Baptist Church and pre-school was raised by a number of residents as described above. The Land and Housing Corporation have addressed the concerns raised by the residents over the future of the Baptist Church and Pre-School:

*"This letter is to address individual submissions and petitions from residents and the Baptist Church during the Public Exhibition of the Claymore Concept Plan. These submissions showed positive support for the continued presence of the Baptist Church in the area. We are pleased to see such extensive support within the community.*

*We note that the continued presence of the Church and its facilities is not prohibited by the proposed zoning for the area, Residential 2(b) and as such there is no amendment needed to the Concept Plan for this matter. However, we note that this matter is related to providing security of tenure for the church thereby allowing them to secure funding for their services, in turn providing local residents certainty regarding their continued access to the services provided for by the Baptist Church.*

*To that end, negotiations with the church regarding their continued presence in the area have commenced. These negotiations are commercial in confidence, and as such details cannot be released.*

*We anticipate this is enough information to respond to the submissions, given the continued presence of the church is not prohibited by the proposed Concept Plan."*

### 3.2 Retail Centre

#### 3.2.1 Existing Claymore Shopping Centre

The existing Claymore Shopping Centre is zoned 10(c) Local Comprehensive Centre pursuant to Campbelltown (Urban Area) Local Environmental Plan (CLEP) 2002.

The objectives of this zone are:

- To provide conveniently located land for a range of shops, commercial premises and professional services that are of a domestic scale.....to serve the needs of the local neighbourhood
- To provide local employment opportunities
- To accommodate a range of activities required in the locality
- To encourage a variety of forms of higher density housing, including accommodation for older people and people with disabilities, in locations which are accessible to public transport, employment, retail, commercial and service facilities.



A further objective of this zone is to encourage a high quality standard of development which is aesthetically pleasing, functional and relates sympathetically to nearby and adjoining development.

#### Comments:

Whilst the existing centre accommodates a small supermarket and a handful of specialty shops, the current condition of these shops and slope of the land does not encourage any new high quality surrounding development to occur.

The current condition of the centre does not and will not attract any new retail opportunities to commence, meaning that the centre does not and will not provide for the complete needs of the locality. Local employment opportunities are also restricted.

The current condition of the centre does not and will not attract visitation from future purchasers within the Claymore Renewal Project, who will have different spending habits to the former social housing residents (who represented a captured market). New private purchasers will be far more mobile through their higher car ownership and will gravitate to other retail centres offering more opportunities, functionality and higher quality. This existing centre will become redundant over time.

The location of the existing centre is isolated from significant passing traffic volumes, and remains relatively hidden from anyone other than immediate landowners. This does not bode well for potential visitation numbers to the centre.

The slope of the site and impact from adjoining flooding affectation and detention basins severely restricts any future opportunities to promote higher density development on either this site or on any of the adjoining sites. Such site constraints also restrict access for people with disabilities.

An independent assessment of the current shopping centre leases has identified no significant lease holdings as well as a depreciating asset value.

### **3.2.2 Proposed Retail Centre Site**

A new retail centre for the Claymore Renewal Project is proposed on the corner of the main thoroughfares of Badgally Road and the new entry road. A 10(c) Local Comprehensive Centre zoning would be sought over the whole 2 hectare site, similar to the existing Claymore Shopping Centre.

Whilst Campbelltown Council does not have an adopted retail centre hierarchy in place, the proposed new retail centre site offers significant opportunities with strong planning merit:

The proposed location at the corner of two main thoroughfares provides both a recognisable entry point to the project as well as an easily identifiable location to accommodate a range of retail and professional services for the local neighbourhood. This location is further accessible to surrounding parts of Blairmount and Woodbine that are not currently serviced by a local retail centre, which only increases the customer catchment area.

By offering superior passing traffic volumes as well as a more recognisable location, the proposed retail centre has a higher ability to sustain and support a range of retail and professional services. This in turn has greater potential to provide increased opportunities for local employment.

The proposed new retail centre site is fully integrated within the current Claymore Concept Plan layout and is flanked by potential opportunities for higher density residential development as well as accommodation for older persons. A multi-purpose Community Facility building and child care centre are also proposed within the retail centre site itself, to further activate the area and to formalise a more central community hub. Public transport and a public reserve further complete the picture.

The proposed new retail site would be brand new and would be developed as a major drawcard for project sales activities. With the majority of new purchasers likely to be a mixture of first and second home buyers, with higher levels of car ownership and disposable income than before, the centre would be delivered to a high quality standard of development in order to satisfy customer expectations. High quality development will attract a higher standard of retail tenancies, which further promotes customer interest and return business. This also cycles through to local employment opportunities.

An active retail centre site with supporting Council facilities, as well as the adjacent public school and surrounding higher density housing options are all better able to support and demand good public transport options.

Independent and separate market analysis has been conducted by Landcom and Campbelltown Council, with both reports supporting the proposed new retail centre site.

### 3.3 Public Transport Bus Route

The current Bus Route 880 through Claymore travels via Dobell Road. This route services all dwellings in the suburb.

The possible bus route in the Transport Accessibility Study (Figure 18) was proposed in consultation with Busways staff, however, since these discussions Busways had the opportunity to further consider the proposal and consider stakeholders comments.

Busways then proposed an alternative route as part of their submission on the Proposal. As part of discussions with Busways Landcom submitted a concept masterplan alternative route. To depict the 3 routes attached is a 'Claymore Renewal Bus Route Options' plan of the Existing Busways Route 880 through Claymore (Blue), Busways alternative route (red) and Landcoms alternative Route (green) (**Appendix 6**).

Also depicted on the plan is:

1. Distance of each route within the Claymore Study area.
2. 400m radius circles from points along each route which represents the area of coverage (colour coded with route)
3. Hatched area indicating households not within 400m of the corresponding colour bus route.



The attached option plans indicate that:

- The existing bus route 880 provides the 400m coverage from a bus route for all dwellings, however, will not service the proposed retail and seniors living on the new entry road.
- Busways alternative route does not service the total suburb i.e. approximately 76 dwellings not with 400m of bus route which is approximately 5.1% of the total dwellings proposed as part of the renewal. However, does serve the retail precinct.
- Busways alternative route is approximately 86m less than the existing route 880.
- The concept masterplan alternative route is approximately 515m longer than the existing route 880 and services all the seniors living sites.

It is considered that the additional travel distance of Landcoms proposed alternative route is outweighed by the superior service to the retail, seniors and total population of the completed Claymore suburb. The additional patronage that Busways is likely to gain by service the whole suburb and linking it to the new retail area may also outweigh the costs associated with the longer bus route.

### 3.4 Heritage Matters

Campbelltown Council raised the following comments in relation to heritage impacts.

- **Heritage** – impact assessment requires further examination and justification, mainly in respect to view lines and the impact upon setting and curtilage. Particular concern is raised regarding the impact that the development of Glenroy Park will have on the heritage significance of 'Glenroy' and 'Homestead'. Presently Glenroy Park positively contributes to the visual curtilage and setting of both heritage items.
- Further information is required illustrating the visual impact of the development of Glenroy Park, including views and vistas of the heritage item/s from Dobell Road and detailed site analysis. It is noted that sections of Glenroy Park are elevated and a visual illustration shall satisfactorily demonstrate the impacts on the heritage items and whether proposed mitigation measures to protect the heritage significance of 'Glenroy' and 'Homestead' have been considered.

An assessment of the potential impact on the view corridors and visual curtilages of the heritage items *Glenroy* and *Hillcrest* has been undertaken (Weir Phillips for AHMS, April 2012, see **Appendix 9**. The findings are summarised as follows:

*Glenroy*:

- The proposed development will have no impact on historically significant view corridors to or from the *Glenroy*;
- The current statutory heritage listing curtilage for *Glenroy* is the boundary of Lot 2 DP 703539;
- The recommended curtilage consists of Lots 1 & 2 DP 703539, and the adjoining section of the Dobell Road road reserve;
- The proposed development of Lot 3 DP 1017017 will have no impact on the heritage curtilage of *Glenroy*;



- The proposed development of one lot partly within Lot 2 DP 703539 will reduce the heritage curtilage of the item, and should be revised.

#### *Hillcrest:*

- The proposed development will have no impact on historically significant view corridors to or from *Hillcrest*, provided that a vegetative screen is maintained along the eastern boundary of the property;
- Measures should be taken to ensure that an appropriate vegetative screen (and unobtrusive fencing) for *Hillcrest* is maintained upon those lots with which it shares a common boundary;
- The current statutory heritage listing curtilage for *Hillcrest* is the boundary of Lot 2 DP 1017017;
- The recommended curtilage consists of Lots 1 & 2 DP 1017017;
- The proposed development of Lot 3 DP 1017017 will have no impact on the heritage curtilage of *Hillcrest*.

In response to the recommendations in relation to Glenroy, the concept plan has been revised to retain Lot 2 in DP 703539 in its current form.

### 3.5 Development Control Guidelines

The renewal project requires new streets and land uses to integrate into and with existing built form resulting in some restrictions on the ability to locate streets and regular block patterns. NSW Land and Housing Corporation and Landcom propose to accommodate a range of housing types on lot sizes that are less than the minimum of 550 square metres allowable under the Campbelltown (Sustainable) City DCP 2009 (the DCP). This means that a range of controls in the DCP that reflect this minimum lot size are no longer applicable for the renewal project.

Consequently alternative development control guidelines are proposed (**Appendix 7**). These guidelines have been prepared having regard to the provisions of the EA, Council's existing DCP and the desired future character of the area. Consideration has also been given to State Environmental Planning Policy (Exempt and Complying Development) 2008, Council's approved site specific DCP for the Minto Renewal Project as well as Landcom's built form design guidelines and housing diversity guide.

It is anticipated that the Minister will make a determination on any approval of the concept plan application to the effect that subsequent development applications are to be designed having regard to the Claymore Renewal Project Development Control Guidelines contained in **Appendix 7**.

Should council wish to amend the DCP to include the guidelines, this can happen in due course and at Council's convenience.

## 4. PREFERRED PROJECT

The response to the above submissions has resulted in a number of minor changes to the Concept Plan for which approval is sought. The Concept Plan is described as follows.

Approval is sought for a Concept Plan for the Claymore Renewal as shown on *Figure 1*. The Concept Plan comprises the following development:

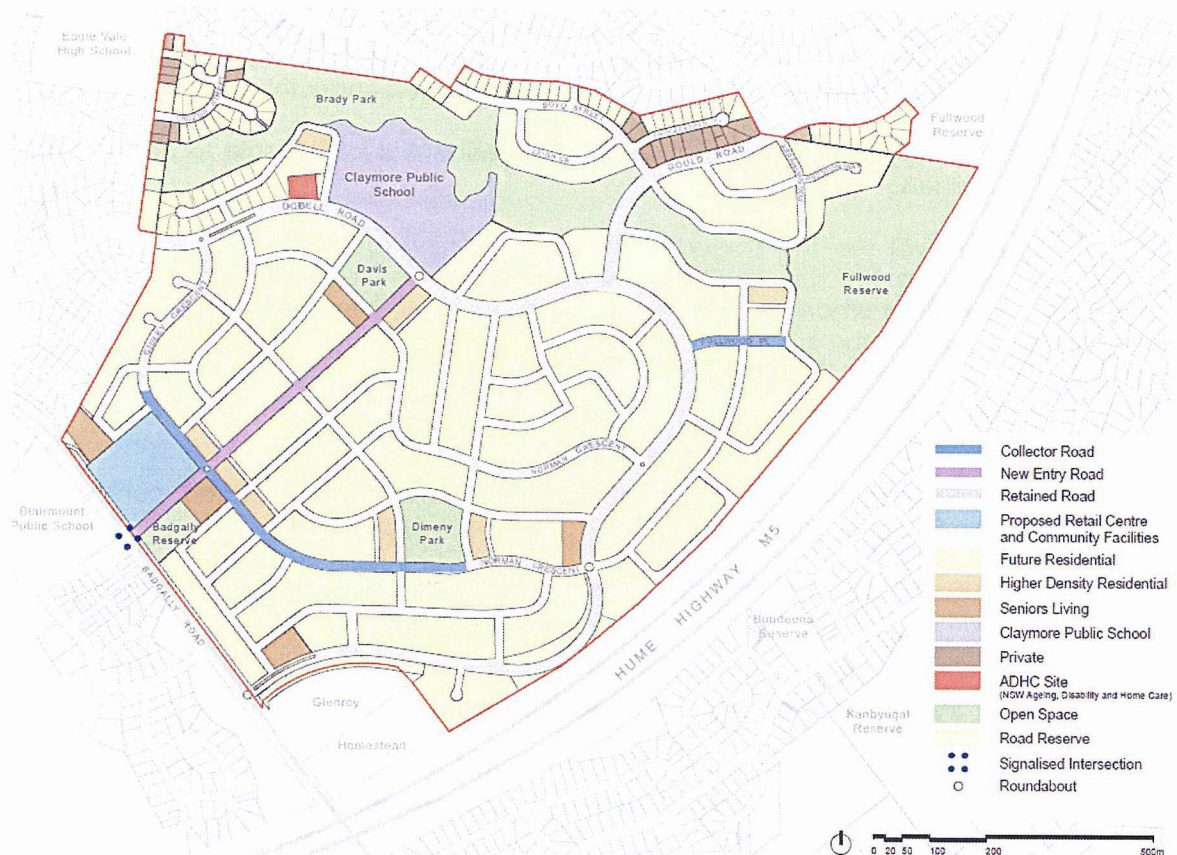
- The demolition of approximately 948 dwellings, vegetation and structures including roads and services;
- Subdivision of land including the consolidation of existing super lots and the re-subdivision of land for residential and related purposes;
- Subdivision works including:
  - new streets;
  - new stormwater management works;
  - extended and upgraded utility services; and
  - bulk earthworks;
- Public domain improvements including new and embellished parks as part of a network of landscaped public open spaces and street trees and pedestrian and cycle paths;
- Provision for a neighbourhood community centre and child care centre;
- The construction of a new shopping centre;
- Alterations and additions to existing Housing NSW dwellings to be retained on the site; and
- The use of land for housing and related purposes.



# Claymore

## Urban Renewal Project

Response to Submissions and Preferred Project Report



**Figure 1 – Concept Plan**

The general features of the renewal are:

- Approximately 948 dwellings will be demolished, (approximately 35 have been demolished) and approximately 140 public and 28 private dwellings to be retained;
- Rehousing the occupants from public housing to be demolished;
- The construction of approximately 1,250 new dwellings and 100 seniors housing units;
- A resulting increase in dwellings from 1,123 to 1,490, 30% of which will be public housing and 70% private;
- A new retail and centre;
- Provision for a neighbourhood community centre and child care centre;
- Improvements to the public domain including parks and streets; and
- New and upgraded roads and utility services in association with the new development.



These numbers are approximate and may vary during more detailed design of subdivisions for each stage of the development and as a consequence of market forces or Housing NSW needs. Thus they are indicative of the development envisaged under the Concept Plan.

There will be the progressive release of some 1,043 residential lots for sale to private home buyers/home builders.

The development will see the staged construction of new roads to provide more direct pedestrian and vehicular links to Campbelltown (Major Centre) and to provide a more connective and robust urban structure together with an extensive street planting program to improve the amenity of the area.

Works are planned to be completed by 2026 subject to market demand and the rehousing program, providing a 15 year development time frame.

The urban design approach to the Concept Plan and details of the design are contained in the Urban Design Report prepared by Aecom contained in **Appendix 1**.

Existing public housing cottages to be retained as public housing will be progressively upgraded as part of the ongoing Community Renewal Strategy in place for the past 10 years.

## 4.1 Street Systems and Access Arrangements

The Concept Plan provides an upgraded urban structure based on a more interconnective street system and improved access from the surrounding main road network. This provides an improved sense of arrival and gateway presentations for the area while improving the integration of the estate with the surrounding area.

The key transport objectives for the Concept Plan are:

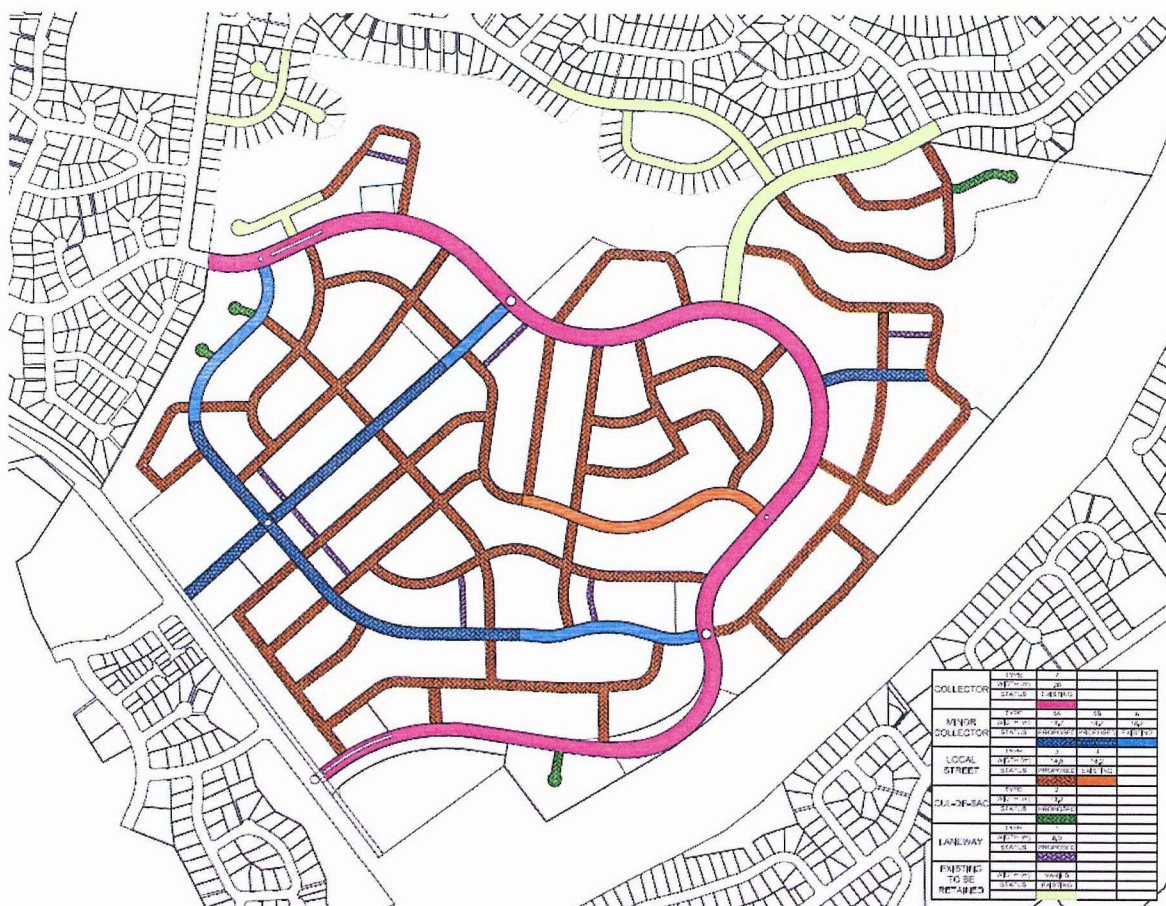
- "De-Radburnise" the study area by improving linkages and overall connectivity within Claymore and to surrounding areas, focused on improvements to Dobell Road (the main circular route through the study area) and by constructing a new entry road;
- Improve vehicular and public transport access within Claymore and to adjoining areas;
- Optimise the location of the town centre having regard to existing and future road network, and public transport networks;
- Provide safe and direct cycleways and pedestrian linkages connecting local services, schools and open spaces in Claymore as well as to other neighbourhoods. The cycleway to Woodbine has already been constructed and will be integrated with the proposed cycleway;
- Identify recommended changes to existing road network to improve connectivity within the estate and to adjoining areas and to support the renewal process; and
- Respect site topography.

- Using existing streets as much as possible; and
- Providing a new entry road off Badgally Road;
- Integrating public transport, cycle paths and pedestrian paths into the new and improved network.

The access strategy incorporated into the Concept Plan is described in greater detail in the *Transport and Accessibility Study* prepared by Traffic Solutions. This report has been updated to reflect the changes to the Concept Plan made in response to submissions to the exhibition of the Environmental Assessment and is contained in **Appendix 5**.

Some roads will be retained and incorporated into the new structure as indicated on *Figure 2*. Minor works may be required to existing streets to integrate with new works.

During registration of future subdivisions the proponent's intention is to dedicate all new and reconstructed roads to Council.



**Figure 2 – Indicative Street Hierarchy**



#### 4.1.1 Street System

**Appendix 1** contains the revised concept plan layout with the street hierarchy shown generally in *Figure 2*.

Proposed road cross-sections have been designed to ensure that all road users (such as pedestrians, cyclists, buses and cars) are catered for within the road reserve. Cross-sections of all roads within the proposed development are included in **Appendix 1**.

Most of the road cross-sections, except laneways will have on-street parking provision on both side of the road.

#### 4.1.2 Public Transport

The road network and intersection treatments have been designed to accommodate efficient bus movements between Claymore and Campbelltown. Early consultation with Busways has been undertaken to develop an indicative bus network for Claymore.

The proposed bus route is shown on the plan contained in **Appendix 6**.

The proponent is confident that the proposed bus routes will be acceptable by Transport NSW because of the benefits that it brings in providing access to the development. The proposed bus catchment (400m on each side of the bus route) will cover the whole of the renewal area.

#### 4.1.3 Walking and Cycle Network

Concept walking and cycling networks have been developed with reference to a range of published guidelines and policies including the Planning Guidelines for Walking and Cycling (Department of Planning, 2004). The network is intended to provide safe and efficient routes that present a viable alternative to car travel for local and regional trips. The improved road network within the study area improves cycle and pedestrian connections.

A network of off-road shared paths and on-road cycle paths is proposed to link key amenities such as open spaces, schools and the facilities in the town centre.

The proposed bicycle routes are shown in *Figure 3*.

The majority of existing on-road cycleways will be converted to off-road shared path to provide a safer environment for cyclists and to cater for on-street parking provision. On-road cycleways are provided in the vicinity of the town centre to segregate pedestrian and cyclists.





**Figure 3– Pedestrian and Cycle Movement**

A new off-road shareway is through Brady Park to Fullwood Reserve Corridor and connecting potentially beyond these areas.

Footpaths are provided along all roads (except laneways). Local streets have pedestrian footpaths on one side of the street. Additional pedestrian refuges are proposed outside schools, major open spaces, senior living areas as well as the town centre to facilitate safe crossing opportunities for pedestrians.

#### 4.1.4 Sustainable Travel Measures

In addition to the infrastructure and service upgrades discussed above, other sustainable travel initiatives have been identified for consideration during project implementation including items such as:

Household Information Packs for the new dwelling units within Claymore, which would incorporate public transport leaflets, route maps and timetables, pedestrian and cycle network maps including leisure maps, and information on sustainable community initiatives

and other local community projects to reduce travel or encourage uptake of sustainable modes.

A local Bicycle User Group (BUG), which the local community could be encouraged to set up or join an existing BUG which is active in the local vicinity and which works to encourage bicycle use and promotes bicycle rides and initiatives.

School travel plans for the local schools (including a walking school bus program), which can lead to a mindset which encourages active travel throughout life for both children and parents for other journeys. Access by walk and cycle will be facilitated by continuous, high quality pedestrian and bicycle paths.

Car share scheme, which would reduce the residents' need to own and operate their own vehicle, safe in the knowledge that they can get access to a vehicle if they require one. Campbelltown Council could consider extending the provision of established car share schemes using an established provider (such as GoGet) to set up a car sharing network for Claymore.

## 4.2 Urban Structure

The Concept Plan approach is to create an urban structure based on a more inter-connective street system focussing movement onto streets. An additional vehicular entry point is provided which enhances a sense of arrival with formalised major pedestrian and cycle movement paths integrated into the street system. The Concept Plan incorporates the following:

- Reconfigured the open space network to respond to community needs, is safe and accessible and is linked to the pedestrian and cycle network;
- Preserve key community cultural resources;
- Improve community safety by introducing street edges to open spaces and fronting housing towards open spaces;
- Establish new roads to create new blocks of a size suitable for a variety of lot sizes and to improve vehicle and pedestrian accessibility and safety.

## 4.3 Subdivision Pattern

Subdivision to create lots within the blocks formed by the new streets is proposed to be subject to subsequent applications. A range of lot sizes is proposed. The subdivision and built form will be guided by sound planning principles in accordance with the Development Control Guidelines contained in **Appendix 7**.

Subdivision to create lots smaller than permitted under Council's DCP is proposed. Thus the following guidelines for subdivision are proposed. Lot size range predominantly from 200 square metres to 600 square metres. Some variation to this might occur in localised areas constrained by the road layout and existing development. This may result in some smaller lots to a minimum of 200 square metres.



Battle axe type lots will be avoided and only entertained where a street frontage can not otherwise be provided due to levels or existing development constraints.

Lots have been designed to accommodate a variety of dwelling types including those envisaged in the General Housing Code.

## 4.4 Built Form

The built form envisaged under the Concept Plan has been driven by the suburban character of the surrounding area and the need to increase density and achieve increased housing provisions in areas with good access to services and transport.

The renewal project will reduce the concentration of social housing to 30% of all dwellings and will follow the traditional pattern of houses and front yards addressing the street. It also aims to emphasise the special qualities of the local environment through the built form and landscape design.

The Concept Plan seeks to:

- Provide a range of dwelling types in response to market demands;
- Provide a subdivision layout whereby new dwellings address and reinforce the street through appropriate building siting and orientation;
- Provide buildings that can be constructed to enhance safety through design, by providing casual surveillance over areas of public open space, including streets and paths;
- Provide varied built edges which respond to open spaces, reinforcing their importance to the community and improving their surveillance;
- Improve the character with higher density housing types, such as attached homes which are designed to resemble a large two-storey home;
- Improve community safety and encourage social interaction by orienting dwellings to the street, parks, and other public spaces;
- Reduce stigma of social housing by designing all dwellings to present a similar built form to the surrounding private housing;
- Encourage more active and inviting streetscapes by designing car parking structures and hardstand areas to complement the built form of dwellings and to avoid dominating the streetscape.

Because the proposed minimum lot size proposed under the Concept Plan is less than that allowed under Council's DCP, different dwelling controls are proposed. These controls are presented in the EA and are summarised in the Development Control Guidelines contained in **Appendix 7**.



Dwelling envelope controls have been developed by Aecom Urban Design to provide high quality urban design outcomes. Side setbacks have been standardised at ground and upper levels to reduce construction cost and promote affordable products. Where sloping land creates added complexity the lot layouts will be determined considering environmental, social and economic impacts (eg. sloping lots - garages to be situated on the low side). Built form diagrams for standard lot types (6m-8m, 8m-10m and 11m+ frontages) indicate the preferred location for the dwelling element based on orientation and street location (**Appendix 1**).

## 4.5 Height, Bulk and Scale

Dwellings will be one or two storeys in height so that the proposed development is consistent with the suburban character of the adjoining residential suburbs.

Multi-unit housing in the form of seniors housing is proposed and is expected to have a maximum height of 2 storeys.

The residential lots will accommodate a variety of dwellings reflecting the choice of the home owner with consistency in streetscape provided by building setback and façade design guidelines.

## 4.6 Housing

The Concept Plan envisages housing as follows:

- Approximately 140 retained cottages, all of which will be retained as public housing, which will be upgraded as part of the Community Renewal Strategy;
- 1,250 new dwellings to be constructed on lots created through the new subdivisions, some of which will be for public housing and some by private purchasers of new lots;
- Approximately 100 seniors housing units on sites selected by Housing NSW as suitable for this purpose.

It is expected that the predominant built form will be detached and attached dwelling houses with some small lot housing forms and seniors units. The Concept Plan envisages five seniors housing developments each comprising approximately 20 to 25 units. Indicative locations for seniors housing is shown on the Concept Plan. These may change during detailed design in response to housing needs as assessed by Housing NSW. It is not expected that such multi-unit housing would exceed 2 storeys in height.

## 4.7 Public Domain

The public domain comprises the proposed parks and reserves and the streets including off street movement systems.

Concepts for the public domain have been prepared by AECOM as shown in **Appendix 1**.

The public streets and open space areas provide both legibility and unity to the renewal. The functional and operational restrictions placed on the public domain leads to the adoption of a strategic approach in the identification of the areas which may deliver maximum impact in the elements of the public domain. The critical areas within the open space, the town centre and the streetscape have been highlighted to maximise the potential outcomes delivered by the public domain and open space strategy.

#### 4.7.1 Open Space

The design objectives for the open space system are:

- Design to consider context, history and future use;
- Open spaces to be contemporary in nature and innovative;
- Passive parks to cater for a range of users, mix of spaces and both structured and informal recreation activities;
- Design to promote passive surveillance of open space;
- Maximise co-location and sharing opportunities of active recreation facilities;
- Park furniture to be functional and aesthetically pleasing in design and be located to integrate not dominate open space areas;
- Integrate existing park facilities into new layout;
- Provide pedestrian connections between open space areas;
- Create clear pedestrian view lines in Linear Parkland Corridor to encourage passive surveillance;
- To encourage planting and landscape treatment which build the environmental value of the site including biodiversity and native fauna habitat.

The Landscape Plan is shown on Figure 4.





**Figure 4 - Landscape Concept**

Park design requirements are:

- Parks shall generally be located as illustrated on the Landscape Master Plan;
- Include embellishment within public open spaces generally in accordance with Concept landscape plans for each park included in **Appendix 1**;
- Where existing significant trees are located within the park areas consider detailed grading to maintain existing ground levels and allow retention of trees;
- Incorporate planting of indigenous species and vegetation communities to enhance native fauna habitats;
- Reduce water usage by using indigenous and low water tolerant species and efficient irrigation systems;
- Native planting should be considered as deep root planting to reduce salinity risk;



Parks are provided at Dimeny Park (1.2 hectares), Davis Park (0.89 hectares), Fullwood Reserve (8.9 Hectares), and Badgally Reserve - a new park at the new entry to the site (0.6 hectare). An additional 8 hectares of linear open space is retained along the existing drainage channel/ overland flow from Brady Park to Fullwood Reserve.

The design of parks and the facilities they contain have been discussed with Council has changes have been made to the Concept Plan accordingly.

#### 4.7.2 Streets

The landscape character of the street is created by well defined front gardens, street trees and the visibility of backyard trees beyond the house. The streetscape is a major contributor to the quality of the overall neighbourhood. (Built Form Guidelines for Landcom Projects May 2008)

The streetscape strategy objectives of the Concept Plan are:

- Street design to create a cohesive public realm with consistent street character;
- Street tree hierarchy and fencing responds to location and aspect;
- Retain and enhance existing trees where possible;
- Upgrade existing sport fields and facilities and integrate into new urban subdivision;
- Highlight estate and Linear Park Corridor entrances;
- Local Streets - solar aspect defines tree selection to shade from the western sun in summer, allow good solar access in winter;
- Local Streets have informal planting layout to accommodate driveway locations;
- Dobell Road - Street trees in parking bays;
- Where possible use street trees to provide microclimate benefits - this includes shading from hot western sun in winter, and allowing solar access for the lower angled northern sun in winter;
- For local streets - larger canopies for lot frontages facing west and south;
- For local streets - smaller canopies for lot frontages facing north and east

The street tree strategy is shown in **Appendix 1**. Changes have been made in response to Council's comments on landscaping including removing tree bays on minor collector road types with trees incorporated into the footpath. Tree bays will only be provided along Dobell Road.

## 4.8 Community Facilities and Services

The Concept Plan envisages that the site can be used for a range of community facilities generally permitted in residential zones. Community services will be provided by Housing NSW and Campbelltown Council during the renewal program. Community facility and services needs have been identified in the Social and Health Impacts Report prepared by Elton Consulting in Appendix 11 of the EA. Their findings include the following in relation to community services for inclusion in the Concept Plan.

Unlike most residential projects, the project will lead to a reduction in the need for local services, because of a fall in the number of highly disadvantaged residents requiring intensive service support. There is expected to be greater integration into the wider area and more use of LGA-level and regional-level services. Eventually, the population of the site will be slightly higher than at present and will not give rise to any need for additional community facilities, although some facility buildings would benefit from upgrade or possibly replacement. In the interim, some services (including Claymore Primary School and child care services) may face challenges because of the reduced population while renewal occurs.

The project will eventually result in only a modest increase in the population of Claymore, and in the short to medium term the population will fall, resulting in some reduction in demands on services and facilities. While this may itself create some challenges, it will mean that, on average, demands for many services and facilities will not increase.

Space for the community activities and functions will continue to be required by the future population. The Claymore neighbourhood centre provides sufficient space to meet future needs, which are not expected to be greater than at present.

Since exhibition of the EA, discussions have continued with Council and the community regarding community services to be provided under the Concept Plan.

The preferred option is existing facilities are replaced by a single multi-purpose centre integrated into the new village centre (320 square metres). A child care centre (430 square metres accommodating 39 places) is also proposed in the town centre. The pre-school and church facilities provided by the Baptist Church will remain.

## 4.9 Land Use

The Concept Plan envisages the following land uses:

Residential uses which include detached and attached dwellings and seniors housing. The Concept Plan envisages a variety of residential types would be permissible on the site together with associated uses typically found in residential areas;

Open space in the form of parks and reserves including active spaces and conservation managed spaces as discussed in Section 3.8;

Community facilities to meet the needs of the development including the facilities identified in Section 3.9;



A new retail centre at the intersection of Badgally Road and the new entry road.

#### 4.10 Town Centre

The town centre is envisaged as a focal point where shopping, working, leisure, sporting and community activities can take place. The Concept Plan envisages a new retail centre at the intersection of the new entry road and Badgally Road at the entrance to the site. The proposed retail precinct will provide a key entry statement to the site and will be accessible to both new residents of the re-developed Claymore estate as well as existing residents in surrounding areas.

The size of the retail centre has been determined following a retail study undertaken by Hill PDA and contained in Appendix 14 of the EA.

The concept plan proposes integrated housing, seniors living units and new streets around the retail and community precinct to create a safer environment and more opportunities for effective surveillance as a result of the higher residential density. See Section 5 in **Appendix 1**.

#### 4.11 Alterations and Additions to Housing NSW Houses

Alterations and additions to dwelling houses owned by the Housing NSW that will be retained on the site will be undertaken. It is anticipated that approximately 140 cottages will be upgraded, all of which will be retained by Housing NSW. These figures are subject to change during the project.

Alterations and additions include external and internal alterations. It is intended that there will be no discernible differences externally between social and private dwellings.

#### 4.12 Utility Services

Utility services serving the site are described in **Appendix 8** containing an updated Infrastructure Report. All utility services are available or can be readily extended to meet the needs of the development. The Concept Plan seeks to minimise disruption to the existing services and thus the residents within the precincts where private residents are being retained.

Endeavour Energy has identified that the existing 11kV network does not have capacity for any additional load and an additional feeder would be required from Endeavour Energy's Campbelltown Zone Substation. The Claymore Urban Renewal Project will incrementally increase the load with an additional 400 dwellings over a 15 year period. The additional feeder will not only service the extra properties at Claymore, but service the greater region, therefore Endeavour Energy should consider full payment in accordance with standard industry service obligations.



## 4.13 Water Cycle Management

### *Water Quantity Management*

The proposed Concept Plan water cycle management strategy is described in detail in the Water Cycle Management Report prepared by Mott MacDonald Hughes Truman accompanying the EA. This report has been updated to address matters raised by Council and other agencies in relation to the drainage system and treatment of the Brady Park to Fullwood Reserve system. This updated report is contained in **Appendix 4**.

The strategy comprises a range of elements that work together to deliver an integrated outcome addressing stormwater quality improvement, detention and flooding.

The pre-developed site has a constructed channel/ basin system which travels from west to east and conveys runoff from a wider catchment area including the site towards north-east before discharging under the Hume Highway. This watercourse consists of a series of detention basins which will remain in place.

The site contains a combination of minor and major stormwater infrastructure in place to assist in conveyance of surface flows to their respective outlets to the channel/basin system. The proposed drainage system will also be a major/minor system. The (minor) piped drainage system is to be designed to control nuisance flooding and enable effective stormwater management for the site. Council's standard requires that the minor system be designed for a minimum 5 year ARI.

The major drainage system incorporates overland flow routes through proposed roads and has been assessed against the 100 year ARI design storm event, with general safety and flooding issues being addressed for events in excess of the 100 year ARI storm. If the major system cannot meet the safety and flooding criteria, the capacity of the minor system will need to be increased.

An additional "offline" detention basin and associated control structures is proposed at the existing modified soccer field at Fullwood Reserve complementing existing basins in order to decrease the peak flow rates generated from the proposed development. This is described in greater detail in **Appendix 4**. This will provide the required detention for the development.

The modeling indicates that the proposed development will not have an adverse impact on downstream property as a result of increased flows.

Drainage corridors for the development have been designed to convey flows for the 100year ARI storm event.

### *Water Quality Management*

The stormwater management systems for the site shall comply with Campbelltown City Council's Development Control Plan. Council's policy requires improved water quality of the stormwater flow from the developed site prior to discharge into the drainage system.

The proposed treatment train is as follows:

Rainwater tanks are to be provided on the proposed dwellings for at source treatment and re-use of roof water;

Gross pollutant traps and trash racks to capture larger pollutants and sediments before discharge into the watercourse; and

Native Grass Infiltration swales to provide online treatment for effective removal of fine sediments and nutrients.

The possibility of using the tree bays as an at source stormwater bio-retention device has not been considered as part of this proposal. The deviation of low flows from the road gutters into these tree bays would enable the at source water quality treatment of the low flows. This additional treatment would further improve any water quality results obtained during this modeling. The potential for this would be assessed as part of individual evaluation of each stage depending upon site parameters including road networks and grades.

It is assumed that Gross Pollutant Traps (GPTs) or trash racks would be located at the outflow from each discharge point into the watercourse. Additionally, GPTs/trash racks are assumed upstream of any proposed water body or infiltrations devices to provide pre-treatment of gross pollutants and suspended solids. Indicative locations of these pre-treatment devices are shown in **Appendix 4**. A trash rack is provided at larger discharge points to the infiltration basin.

With the rapidly evolving field of Water Sensitive Urban Design any proposed measures should be reconsidered at the time of construction to ensure they are still industry best practice and suitable for the development however, at a minimum they should meet the requirements specified **Appendix 4**.

An infiltration basin is proposed to treat runoff with upstream flows from each sub-catchment directed to GPT's and trash racks to provide pre-treatment of gross pollutants and larger suspended solids prior to entry into the infiltration basin.

The overall water cycle management plan is shown on Figure 5.



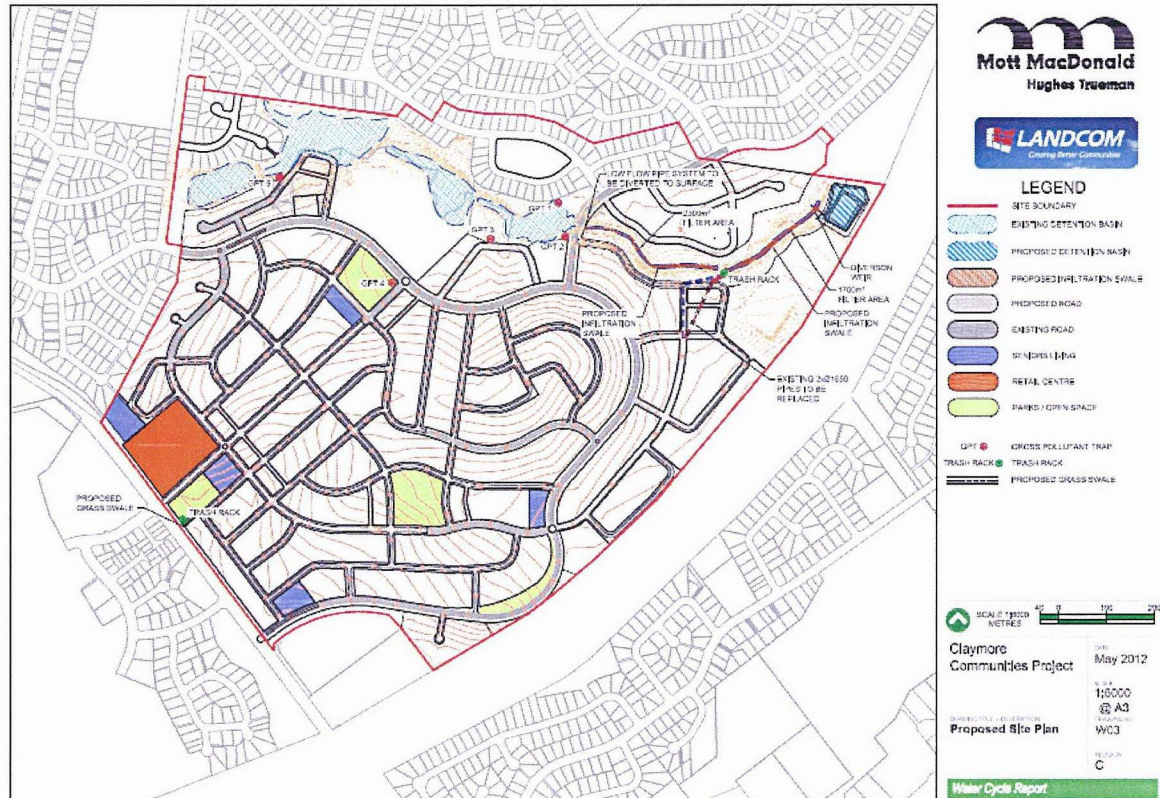


Figure 5. Water Cycle Management Plan

## 4.14 Demolition

Development envisaged under the Concept Plan requires the progressive and managed demolition of existing dwellings primarily within the town house precincts on the site. As with the construction phases, the demolition of existing dwellings will be staged.

It is envisaged that a further 948 dwellings are to be demolished although it is expected that this figure may change as detailed design progresses and as more information comes to hand on the condition of existing dwellings.

Demolition will take place progressively within each stage. Residents will be progressively rehoused. Housing NSW has established a rehousing team to assist tenants through this period.

Approval is sought for the demolition of existing dwellings and structures on the site which are necessary for the development to proceed. This includes vegetation and inground services.

The demolition will be in accordance with the requirements as set out under the Australian Standard AS2601 – 2001: The Demolition of Structures which is incorporated into the Occupational Health and Safety Act 2000 which is administered by WorkCover NSW.



Demolition will include:

- the removal of all improvements;
- breaking down and removing all foundations and footings;
- breaking up and removing road pavements, footpaths and services not required for the development;
- removal of vegetation not retained as part of the project;
- removal of debris and rubbish;
- Barriers will be erected around the work area to protect the public;

A Hazardous Building Materials Management Plan will be prepared prior to demolition commencing. This report will indicate the construction materials to be demolished on-site and the mechanism for controlling and managing the demolition and disposal of possible hazardous materials. Methods used to safely demolish and dispose of any hazardous materials will be provided. The demolition process will be controlled by specific guidelines including the Occupational Health and Safety Regulation 2001 and all WorkCover requirements.

An erosion and sediment control plan will be prepared to control run off during the demolition process.

A Waste Management Plan will be prepared prior to demolition commencing. Where possible materials will be recycled for reuse on the Site.

Gas, electricity, water, sewer and telecommunications will be sealed at relevant Site entrance points and will be undertaken according to the relevant utility standard.

A Site Management Plan will be prepared to ensure the safety of the existing residents during the demolition program. This will include, but will not be limited to:

- means of providing pedestrian and vehicular access to existing dwellings including temporary access as required;
- means of managing noise and dust including the management measures recommended in the Demolition Noise and Vibration Assessment prepared by Renzo Tonin & Associates and contained in Appendix 13 of the EA;
- means of advising the community of the construction program on a regular basis;
- means of communicating with the contractor and clear procedures for registering complaints and follow-up.

The demolition program will involve consultation with the rehousing and community renewal teams.

It is considered that these works can proceed without further environmental assessment and a determination to this effect is requested.

#### **4.15 Earthworks**

Bulk earthworks will be undertaken on a stage by stage basis although there will be some transfer of excavated material between stages requiring short term stockpiling. Regrading works will be undertaken to modify and enhance overland flow paths, to provide for new road construction and to provide suitable building platforms. All efforts will be made to achieve a balance of cut to fill. Additional earthworks will be required for road, drainage and utility works.

#### **4.16 Tree Removal**

The site contains a number of mature trees that have grown following completion of the housing estate. These are located in a number of areas including parks and vacant lands, in front and rear yards and occasionally along streets. The Concept Plan has been prepared having regard to the location of trees. Consideration has been given to locating trees within parks where consistent with other planning objectives. Trees along or streets to be retained are likely to be not affected.

It is inevitable that the renewal process will result in the removal of trees in the areas to be redeveloped. This is necessary to redesign the street network and construct new dwellings. Trees to be removed will be replaced with new street trees a street tree strategy is contain within **Appendix 1**.

#### **4.17 Waste Management**

Waste materials result from construction and demolition (C&D) activities. C&D waste quantities can be significant for urban renewal projects, such as Claymore. Effective planning and management can prevent unnecessary disposal to landfill and consumption of resources. Recycling and reuse options must be considered on all projects with significant quantities of C&D waste.

Landcom's minimum targets will be incorporated in the delivery stage project management brief, tender package (sustainability returnable schedule) for development partners and associated Project Delivery Agreement (PDA), Builder Agreements, civil works contracts and building contracts (where building activity is a direct Landcom contract). The overarching Landcom target is to achieve 95% recovery (reuse and recycle) of total construction and demolition waste materials generated from sum of civil works contracts completed in that year.

The Concept Plan application does not envisage any works other than demolition of existing dwellings. It is proposed that a construction waste management plan will be prepared prior to commencement of construction as part of a construction management plan and a commitment to this effect is included in the statement of commitments.

The envisaged waste management regime is shown in the following table:



DEMOLITION/SUBDIVISION STAGE		
MATERIALS ON SITE	DESTINATION	
	Re-Use and Recycling	
Type of Materials	ON-SITE	OFF-SITE
Excavation material	Project aims for balance of cut and fill which may involve stockpiling between stages.	Any excess will be removed from site as clean fill
	Topsoil stripped and re-used	
Green Waste	Trees to be chipped on site for re-use as landscaping mulch	Any remainder to Camden soil mix, Narellan or equivalent for recycling.
Bricks		To crushing & recycling plant (Jack's Gully Waste Management, Narellan) or equivalent
Concrete Access ways	Possibly used as recycled road base, structural fill crushed on site. Any remainder to re-cycle plant.	To crushing & recycling plant
Footpaths / Driveway / Kerbs etc.	Possibly used as recycled road base, structural fill crushed on site. Any remainder to re-cycle plant.	To crushing & recycling plant
Timber:		To crushing & recycling plant
Plasterboard		To crushing & recycling plant
Metal – General (Includes reinforcement)		To crushing & recycling plant
Road Material - AC	Mill For Reuse, structural fill	
Road Material - Base	Possibly used as recycled road base, structural fill crushed on site. Any remainder to re-cycle plant.	To crushing & recycling plant
Ongoing Management of waste during the subdivision construction will be limited to general waste disposal by the nominated civil contractor. Waste disposal and recycling facilities requirement will be incorporated into the Construction and Environmental Management Plan to be implemented by the approved contractor.		

## 4.18 Sustainability

In striving for sustainability, development should contribute to the enhancement of the natural environment and to provide land and resources in an appropriate condition for future generations.

A major aim of sustainability is to decouple economic growth from increased use of resources and generation of waste. This can be achieved through more efficient use of resources – getting more value out of each unit of energy and mineral extracted from the ground and increasing the efficient use of water. Minimising waste in all stages of production, together with reuse and recycling of the end product, all contribute to resource efficiency and an improved ecological footprint. The Concept Plan is founded on the principles of sustainability. Sustainability is enhanced by the Concept Plan in a number of ways:

- Reuse of an existing developed site to provide improved housing, improved public transport accessibility and better use of available urban services in a location that is accessible to the centre of Campbelltown;
- Providing an urban form that facilitates walking and cycling in safety and with more direct access to facilities and services;
- The requirement for all new dwellings to be designed to achieve BASIX requirements;
- Providing the opportunity for mixed communities with diverse housing and community uses;
- Contributing to community infrastructure to meet the needs of the community;
- Integrating the new community into the existing surrounding community;
- The provision of a stormwater management system that provides controls over water quality prior to discharge off site and opportunities for source based rainwater harvesting;
- Replacing inefficient housing with more sustainable building stock;
- Providing a housing mix and urban form that is conducive to the on-going social sustainability of the precinct.

Subsequent applications for approval for stages of the renewal will give further specific consideration to sustainability.

Sustainability initiatives will be implemented during design, construction and operational phases of the project and will include the following.

#### 4.18.1 Design

- Water sensitive urban design measures that will result in improvement in water quality, incorporate the riparian network and integrate with urban design;
- Providing lots with dimensions and orientation to allow good solar access;
- Making efficient use of existing parks where consistent with good urban design;
- Improve residential densities by more efficient use of serviced and accessible land;



- Providing opportunities for ageing in place through the provision of seniors housing;
- Providing a pedestrian and cycle movement system that is safe and attractive and conducive to healthy living;
- Connectivity to regional infrastructure to support more efficient transport within the wider region;
- Reduction in travel distances and improved mode share split by:
  - Providing a street network with a high level of connectivity and permeability;
  - Locating public transport routes within 400 metres walking distance of the majority of dwellings;
  - Providing an interconnected network of pedestrian priority streets and open space corridors to encourage walking between residences and facilities; and,
  - Providing a system of on-street and off-street cycleways to encourage bicycle usage.

#### 4.18.2 Construction

- Re-use of the existing developed site to provide improved housing, improved public transport accessibility and improved community and recreational facilities;
- Reduction of subdivision construction waste going to landfill by recycling excavated materials 'in-situ';
- Recovery and recycling of waste materials from existing dwellings to be demolished;
- Reduction in waste from homes, during and after construction, by educating builders and residents on the benefits of waste minimisation;
- Undertake environmental and OH&S audits on all civil works and building contracts;
- Remediating land as required during the construction process;
- Implementing BASIX requirements in housing construction;
- All construction contracts let to include sustainable materials, design and practices requirements.

#### 4.18.3 Operation

- Reduction in potable water usage through BASIX initiatives;
- Reduction in greenhouse emissions through BASIX initiatives;

- Achieving a 6 star thermal efficiency rating through NatHERS;

Providing homeowner/resident kits to inform residents of the resource efficiency features and initiatives and the benefits available.

## **4.19 Safety and Security**

Subdivision layout enhances safety through design, by providing casual surveillance over areas of public open space, including streets and paths. Building design and orientation, subject to further approval will also be considerate of safety and security.

Additional road and pedestrian connections are proposed to improve permeability and safety across the site. Pedestrian amenity and safety can be enhanced throughout the development precincts by establishing formal pathways that are clearly visible from the public domain.

Parks have been designed and located to encourage passive surveillance and public safety through their location in relation to adjoining streets, choice of landscaping, street furniture and lighting.

Subsequent applications will give further consideration to principles of CPTED when design details are advanced.

## **4.20 Development Staging**

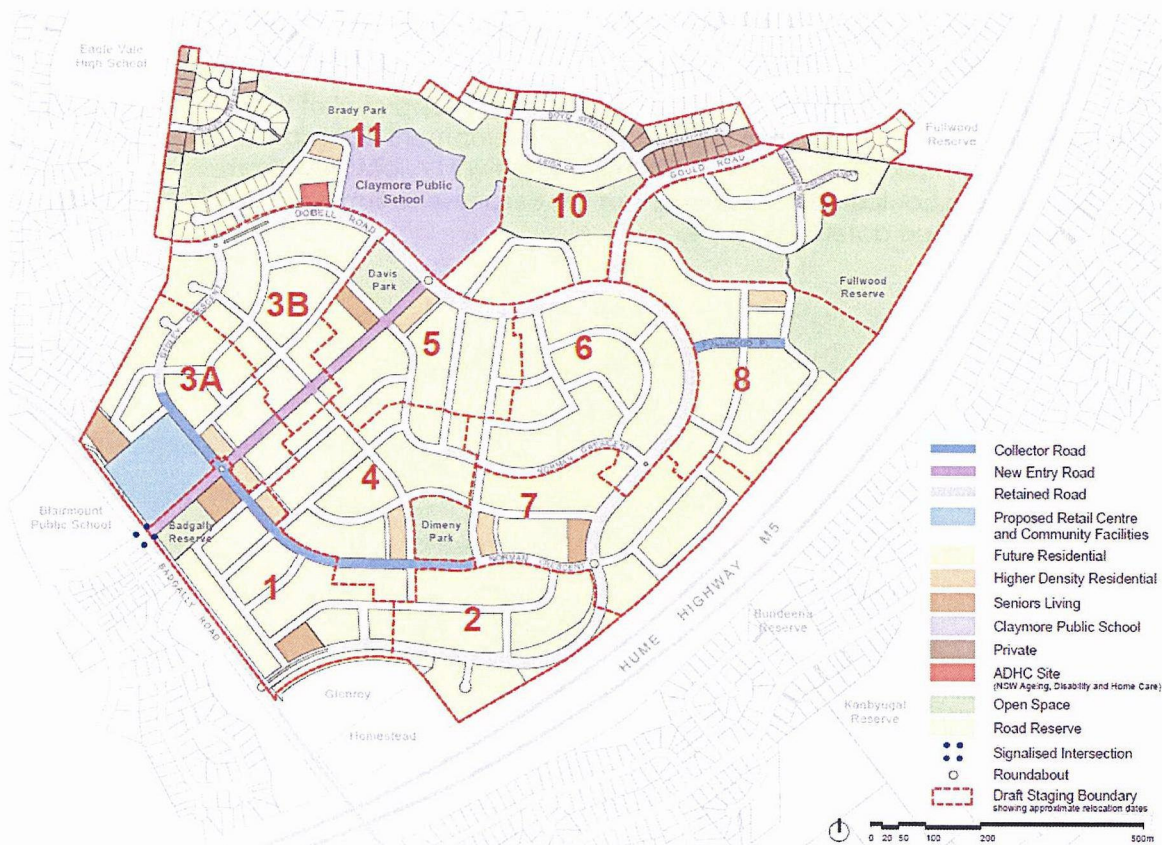
Subsequent to the approval of the Concept Plan application, separate applications will be lodged for all works and development on the land, including subdivision, the carrying out of subdivision works, the creation of parks, the erection of buildings, and any other matters for which further approvals or environmental assessment is required by the terms of the Ministers approval.

As stated above, it is submitted that no further environmental assessment is required for the demolition of buildings, structures, vegetation or services.

The indicative staging plan is shown in *Figure 6* roject staging is subject to change depending on market demand and Housing NSW policies for the relocation of residents. Careful consideration has been given to staging to ensure sufficient time for resident relocation.

The numbers on the staging plan is used to identify areas and does not outline the order in which stages are to be developed.





**Figure 6 - Staging Plan**

## 4.21 Off-Site Works

The implementation of the Concept Plan may require additional works located off site this might include intersection works and works to lead in infrastructure trunk mains and services. Such works are envisaged by the Concept Plan.

## 4.22 Ministerial Determinations

The EA requests the following Minister's determinations pursuant to S75P:

1. That demolition as described in Section 4.14 above can be undertaken without further environmental assessment.
2. It is anticipated that the Minister will make a determination under S75P(1)(b) to the effect that approval to carry out subsequent stages of the project is to be the subject of Part 4 of the Act. If this determination is made, the Minister is also requested to direct, pursuant to S75P(2)(c1), that a provision of an environmental planning instrument prohibiting or restricting the carrying out of the project under Part 4 does not have effect. This will enable early stages of the project to be approved prior to

any housekeeping amendment to the LEP to be consistent with the Concept Plan as approved.

3. That the Minister will make a determination on any approval of the concept plan application to the effect that subsequent development applications are to be designed having regard to the Claymore Renewal Project Development Control Guidelines contained in **Appendix 7** of the Response to Submissions and Preferred Project Report dated May 2012.



## 5. STATEMENT OF COMMITMENTS

A draft Statement of Commitments was provided in the Environmental Assessment Report. Following consideration of the submissions made during (and after) the exhibition period, changes have been made to the draft Statement of Commitments as highlighted below.

### 5.1 Statement of Commitments

#### 5.1.1 Introduction

The Director General's Requirements require the proponent to include in an environmental assessment a statement of the commitments the proponent is prepared to make for environmental management and mitigation measures on the site showing how the project will be managed in an environmentally sustainable manner.

In submitting this statement of commitments, it is recognised that the application is for concept plan approval and that additional environmental assessment, including additional statements of commitment or conditions of approval, will be required prior to works commencing (other than demolition).

#### 5.1.2 General

- A. The development will be undertaken generally in accordance with the Environmental Assessment Report dated March 2011 prepared by BBC Consulting Planners (including accompanying Appendices) and the Response to Submissions and Preferred Project Report dated May 2012.
- B. NSW Land and Housing Corporation and Landcom are committed to the principles of sustainability as defined in the Environmental Planning and Assessment Act 1979.
- C. The proponent will continue to consult with the local community during the development process.
- D. The proponent will continue to liaise with the Council during the development process.
- E. The proponent will enter into a planning agreement with Council to provide roads, social and community infrastructure, drainage and facilities and amenities generally as indicated in the Environmental Assessment Report as updated in the Response to Submissions and Preferred Project Report prepared by BBC Consulting Planners dated May 2012.

#### 5.1.3 Remediation

- A. A Remediation Action Plan will be prepared following more detailed sampling in the vicinity of locations of concern to delineate the extent of contamination.
- B. Remediation will be undertaken in accordance with the RAP.
- C. A site specific Unexpected Finds Protocol is to be prepared and implemented throughout the construction works.

#### 5.1.4 During Demolition

- A. Demolition will be undertaken in accordance with the requirements of Australian Standard AS2601 – 2001: The Demolition of Structures which is incorporated into the Occupational Health and Safety Act 2000 administered by WorkCover NSW.
- B. A Hazardous Building Materials Management Plan will be prepared prior to demolition commencing.
- C. An Erosion and Sediment Control Plan will be prepared to control run off during the demolition process.
- D. A Waste Management Plan will be prepared prior to demolition commencing. Where possible materials will be recycled for reuse on the Site.
- E. A Community Access and Safety Plan will be prepared to maintain access to, and to ensure the safety of, the existing community through the demolition process.
- F. Demolition will occur in consultation with the community and will be integrated with the strategies to be put in place to manage the process of change and rehousing on the site.
- G. Demolition is to take place in accordance with the recommendations of the Demolition Noise and Vibration Assessment prepared by Renzo Tonin & Associates contained in Appendix 13 of the Environmental Assessment.

#### 5.1.5 Social Impacts

- A. The proponent will prepare and implement a Strategic Social Plan to develop a coordinated approach to service planning, service delivery and change management.
- B. The proponent will prepare and implement a Rehousing Process including establishing a Rehousing Team within Housing NSW.
- C. The proponent will prepare and implement a Communications Strategy throughout the development process.
- D. The proponent will obtain all necessary approvals required by State and Commonwealth legislation in undertaking the project.

#### 5.1.6 Access and Movement

- A. Roads will be constructed in accordance with the objectives principles and design criteria contained in Appendix 1 and 5 of the Response to Submissions and Preferred Project Report dated May 2012.

#### 5.1.7 Urban Design

- A. Development will take place generally in accordance with Development Control Guidelines design guidelines contained in the Environmental Assessment Appendix 7 of the Response to Submissions and Preferred Project Report dated May 2012.



#### 5.1.8 Water Cycle Management

- A. Stormwater management works will be undertaken generally in accordance with the Water Cycle Management Plan contained in Appendix 4 of the Response to Submissions and Preferred Project Report dated May 2012.

#### 5.1.9 Biodiversity and Vegetation

- A. The proponent will prepare a Vegetation Management in accordance with the guidelines in Appendix 3 of the Response to Submissions and Preferred Project Report dated May 2012.
- B. The proponent will undertake a survey of all trees and other site features prior to the commencement of construction of any stage of the project and will seek to retain as many trees as possible for incorporation into the new urban form.
- C. The proponent will provide landscaping to all streets and parks as outlined in the Response to Submissions and Preferred Project Report prepared by BBC Consulting Planners dated May 2012.

#### 5.1.10 Aboriginal Culture

- A. The proponent will implement the recommendations on page 30 of the Aboriginal Cultural Heritage Assessment in Appendix 2 of the Response to Submissions and Preferred Project Report dated May 2012.

#### 5.1.11 Open Space and Community Facilities

- A. The public domain will be constructed and enhanced in accordance with the objectives and principles contained in Section 4.7 of Response to Submissions and Preferred Project Report prepared by BBC Consulting Planners dated May 2012.
- B. Community facilities will be provided in accordance with the objectives and principles contained in Section 4.8 of the Response to Submissions and Preferred Project Report prepared by BBC Consulting Planners dated May 2012.

#### 5.1.12 Construction Management

- A. Prior to commencing construction, a Construction Environmental Management Plan will be prepared. This Plan will include:
- Development of a site specific soil erosion and sediment control plan,
  - Construction hours,
  - Air quality/dust control procedures,
  - Noise management procedures,
  - Waste management plan,
  - Flora and Fauna Protection Plan,
  - Community Safety Plan,
  - Arrangements for temporary pedestrian and vehicular access,
  - Storage and Handling of Materials Procedures,
  - Environmental Training and Awareness,
  - Contact and complaints handling procedures,

- Emergency Preparedness and Response.
- B. All trees on the site that are not approved for removal are to be suitably protected by way of tree guards, barriers or other measures as necessary are to be provided to protect root system, trunk and branches, during construction.



# Claymore

Urban Renewal Project

Response to Submissions and Preferred Project Report

## APPENDICES

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# Claymore

Urban Renewal Project

Response to Submissions and Preferred Project Report

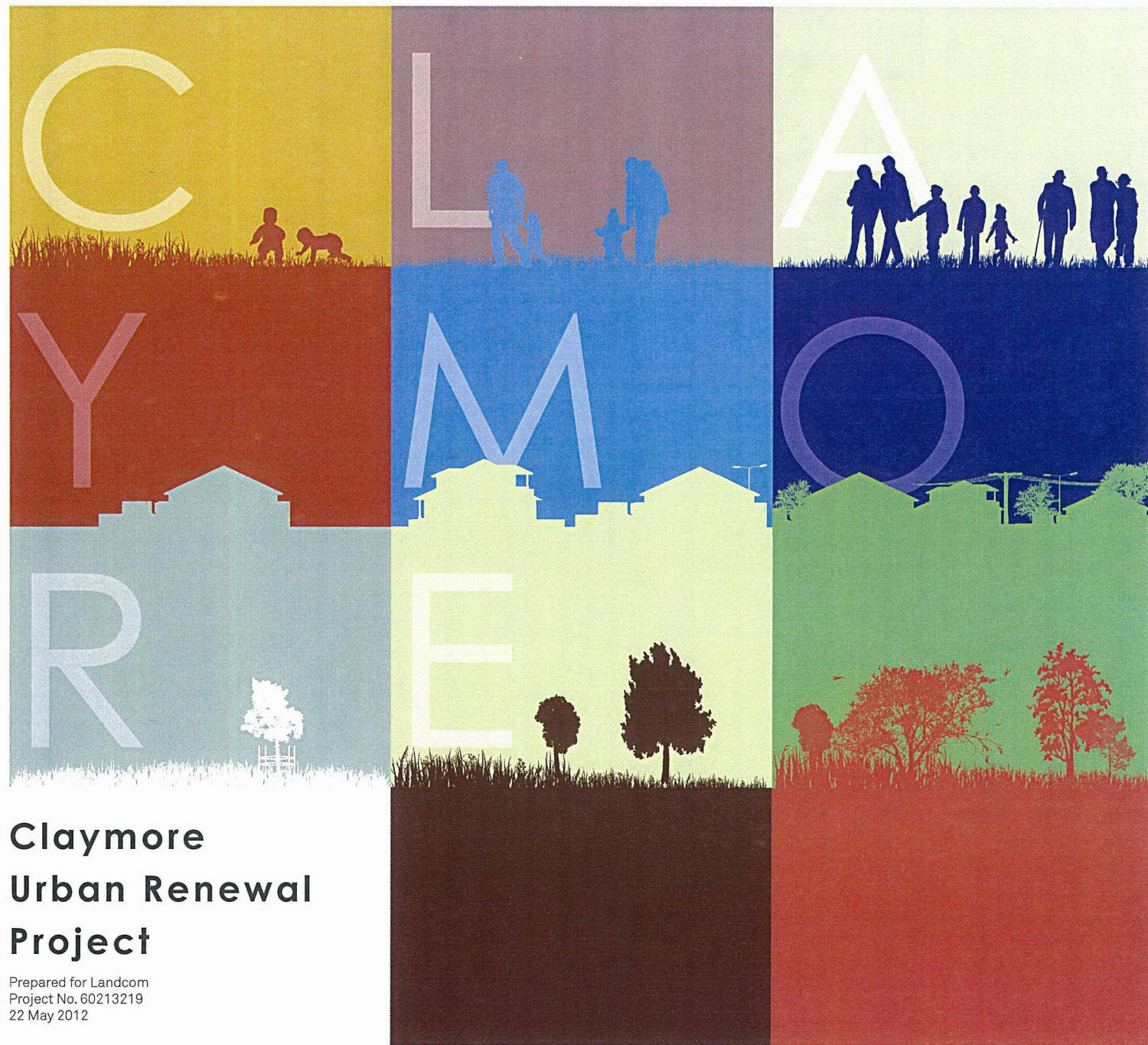
## APPENDIX 1

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# Claymore Urban Renewal Project

Prepared for Landcom  
Project No. 60213219  
22 May 2012



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### REFERENCES





# Introduction



## Introduction

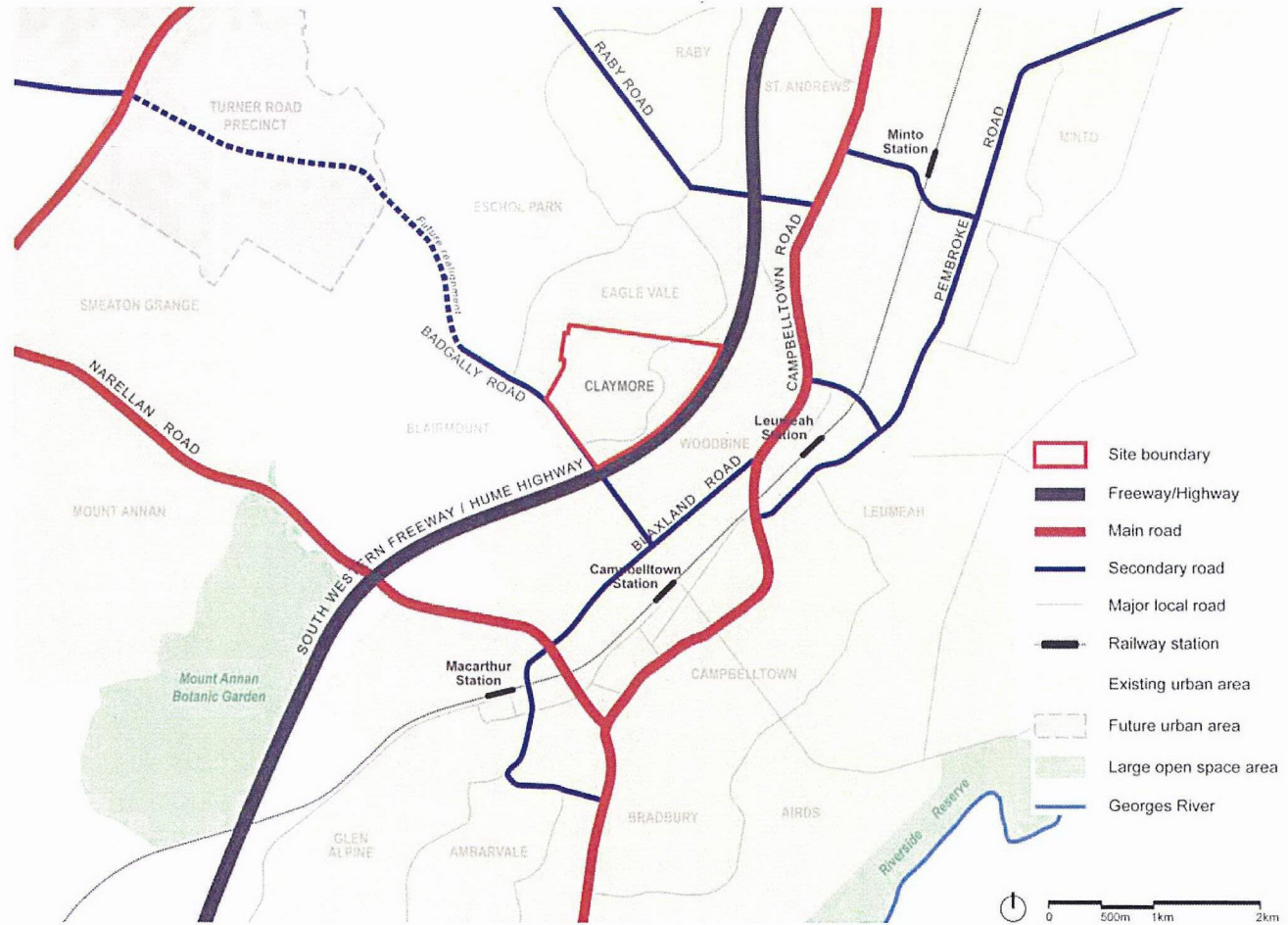
### BACKGROUND

Claymore is a 125ha housing estate located at the junction of Badgally Road and the Hume Highway M5 in Campbelltown Local Government Area (LGA).

A previous study undertaken by Jackson Teece in 2009 formed the basis for the urban layout from which more detailed studies have been undertaken and the design refined.

### PURPOSE OF THE REPORT

This report provides a summary of the urban and landscape design master plan for the Claymore Urban Renewal Project.



Location plan and surrounding road network (source: Jackson Teece, 2009)



O2



## Urban Renewal Master Plan



## Existing Layout

### KEY ISSUES

- Poor connectivity throughout the estate
- Excessive amounts of underutilised open space areas
- Lack of streetscape quality throughout the estate
- Poor street address
- Pedestrian paths poorly defined
- Existing retail centre away from major traffic routes

-  Retail Centre
-  Community Facilities
-  Church
-  Claymore Public School
-  Open Space
-  Existing Streets
-  Existing Houses





## Urban Renewal Master Plan

### KEY DESIGN OBJECTIVES

- Keep existing main roads Dobell Road, part of Norman Crescent and Gidley Crescent including substantial portions of underground infrastructure such as power, water, sewer and stormwater lines
- Create a sense of arrival and link the new retail centre to the linear park corridor (Brady Park and Fullwood Reserve)
- Better legibility and permeability of streets - better access to facilities for local residents and CPTED
- Maximising street frontage to parks where possible
- Standardised lot dimensions (eg. 30m deep x 6-15m wide)
- Respond to topography - roads along contours
- Integrated water management



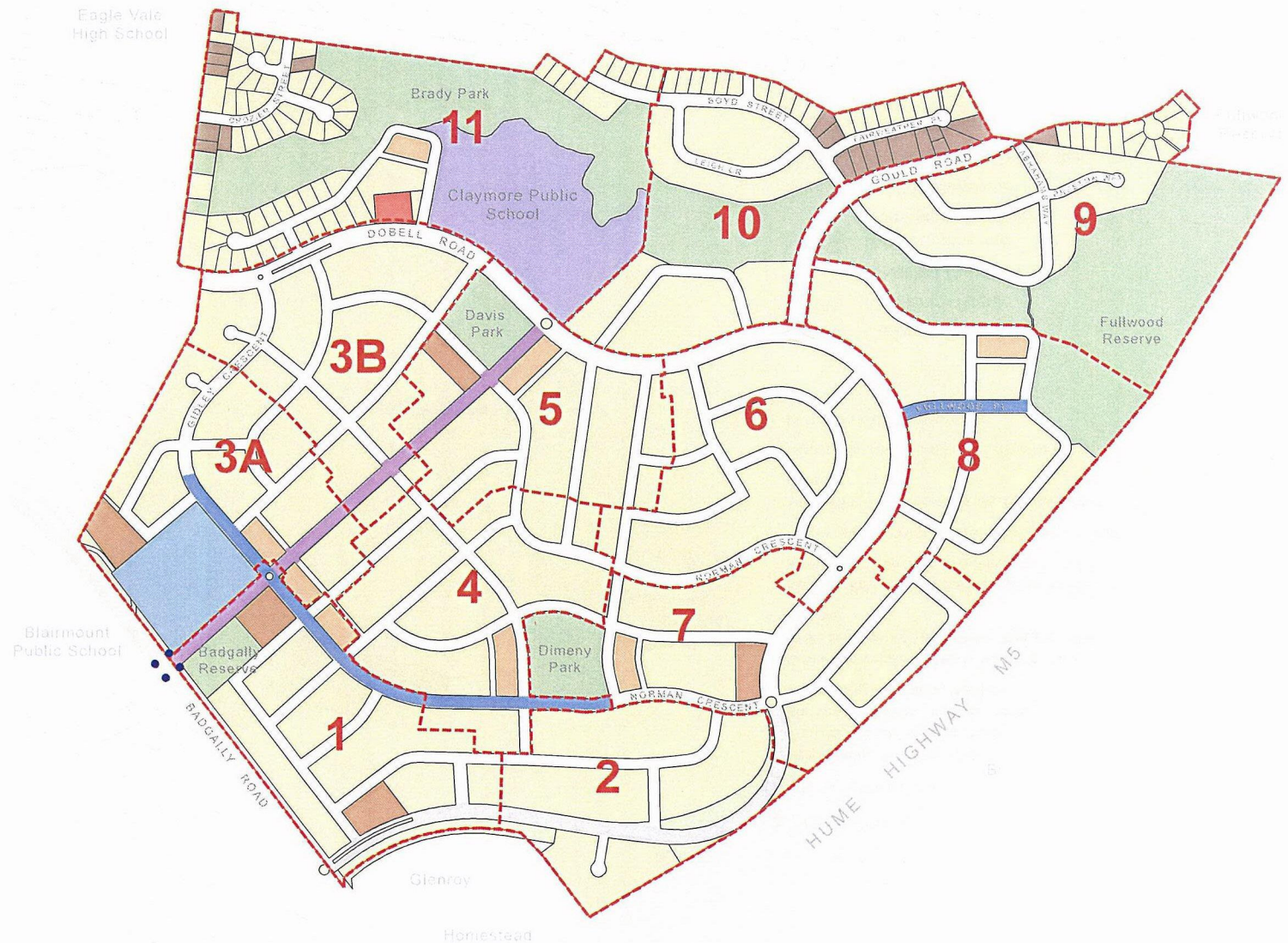
- Collector Road
- New Entry Road
- Retained Road
- Retail Centre and Community Facilities
- Future Residential
- Higher Density Residential
- Seniors Living
- Claymore Public School
- Private
- ADHC Site (NSW Ageing, Disability and Home Care)
- Open Space
- Road Reserve
- Signalised Intersection
- Roundabout



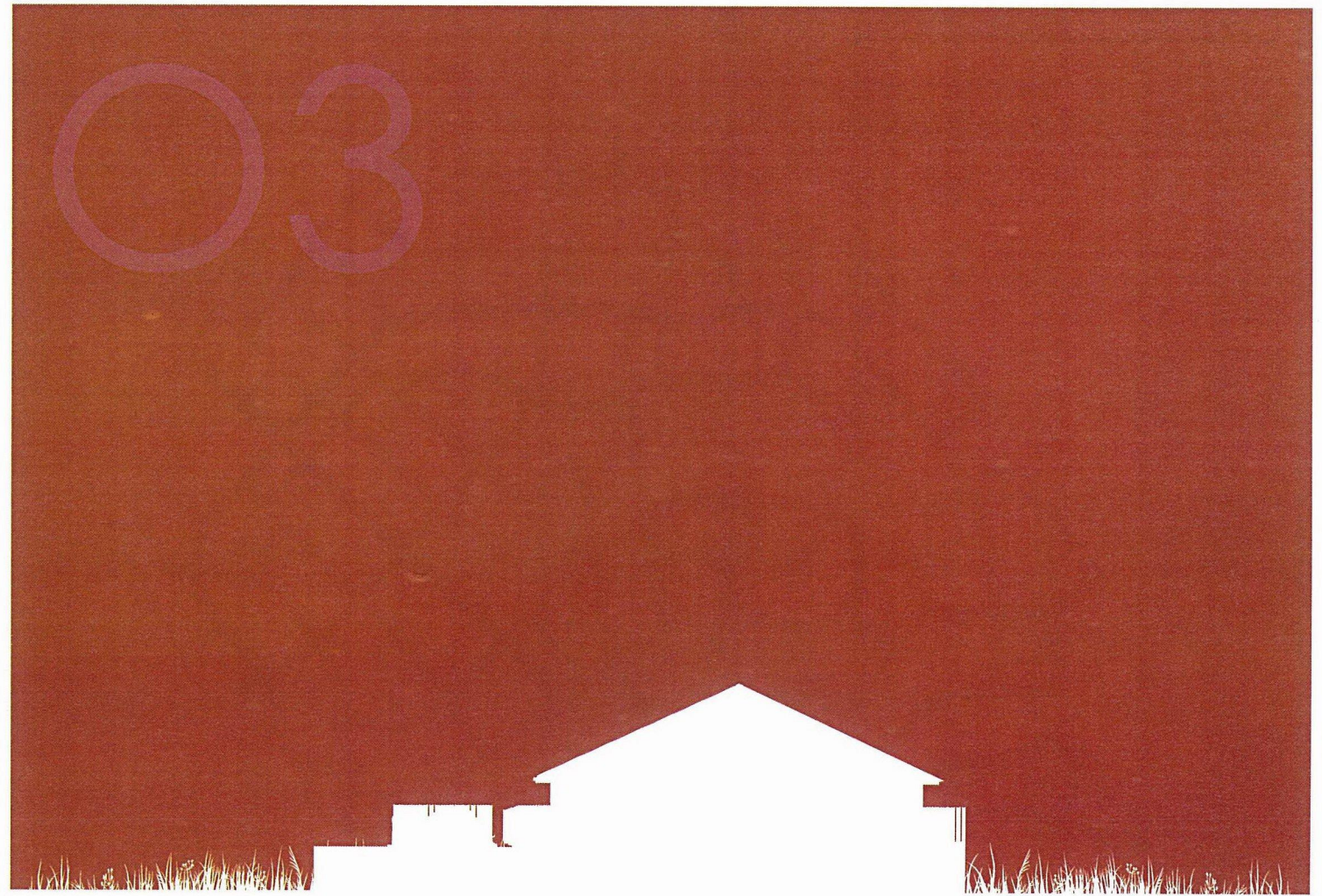


## Indicative Staging Plan

-  Collector Road
-  Enhance Collector Road
-  Retained Road
-  Retail Centre and Potential Community Facilities
-  Future Residential
-  Higher Density Residential
-  Seniors Living
-  Claymore Public School
-  Private
-  ADHC Site (NSW Ageing, Disability and Home Care)
-  Open Space
-  Road Reserve
-  Signalised Intersection
-  Roundabout
-  Draft Staging Boundary showing approximate relocation dates







## Urban and Landscape Strategy Plans



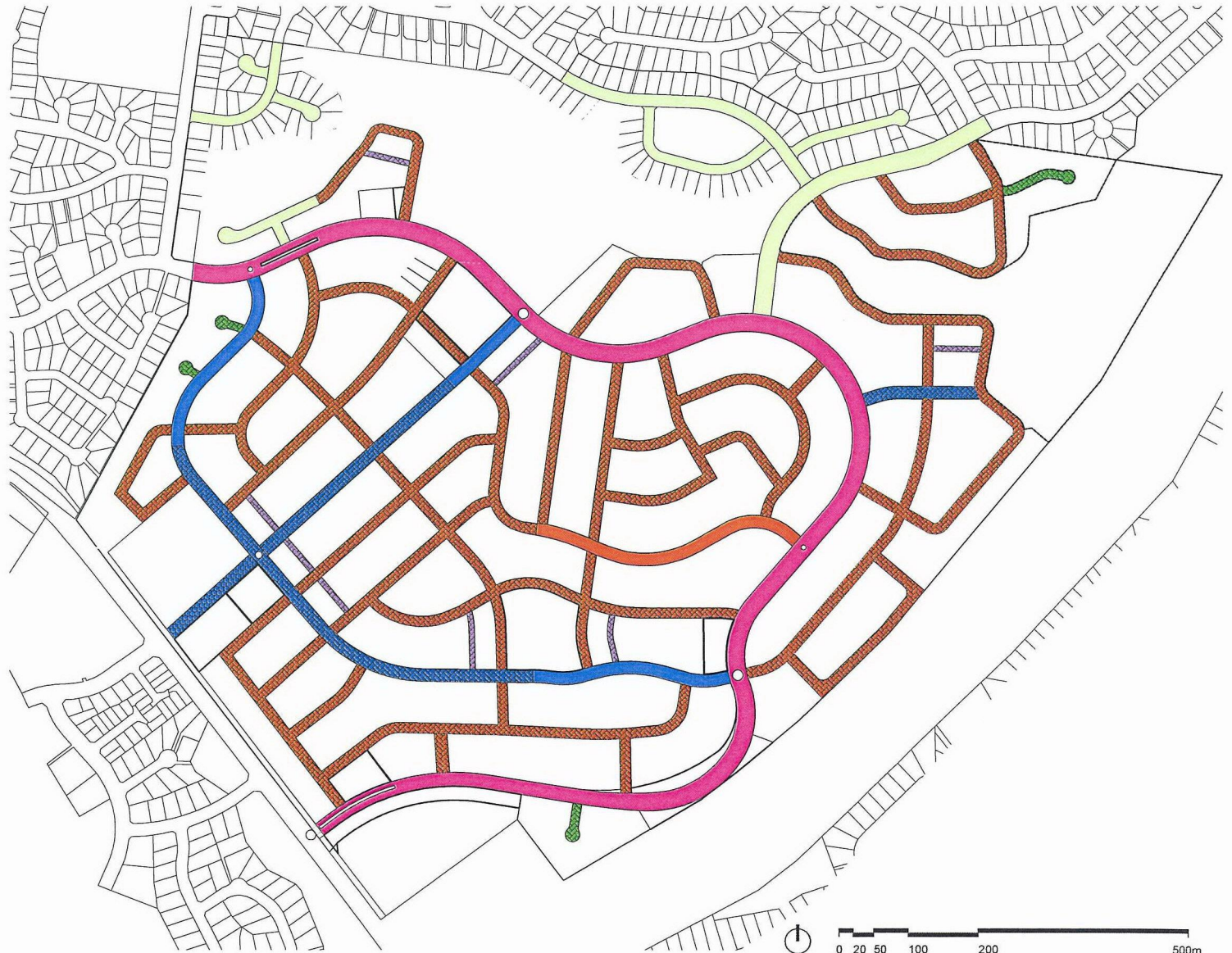
## Street Hierarchy

### DESIGN OBJECTIVES

- Shared paths on Collector Roads and Dobell Road
- Tree bays within the parking zone for Collector Roads and Dobell Road (except for frontages to open space where additional parking is beneficial, and trees can be providing within open space)
- Badgally Road is the new address to the estate, with a new entry road proposed flanked by a new park and a new retail centre.
- Dobell Road forms a key circulation route within the estate, connecting local streets to the Collector Roads, parklands, school and other recreational facilities
- Local Streets are all accessed from a Collector Road or from Dobell Road

COLLECTOR	TYPE	7		
	WIDTH (m)	26		
	STATUS	EXISTING		
MINOR COLLECTOR	TYPE	5A	5B	6
	WIDTH (m)	18.2	18.2	18.2
	STATUS	PROPOSED	PROPOSED	EXISTING
LOCAL STREET	TYPE	3	4	
	WIDTH (m)	14.8	18.2	
	STATUS	PROPOSED	EXISTING	
CUL-DE-SAC	TYPE	2		
	WIDTH (m)	13.2		
	STATUS	PROPOSED		
LANEWAY	TYPE	1		
	WIDTH (m)	8.0		
	STATUS	PROPOSED		
EXISTING TO BE RETAINED	WIDTH (m)	VARIES		
	STATUS	EXISTING		

(source: Mott MacDonald)





# Street Sections

(source: Mott MacDonald)

