

trinity point

LAKE MACQUARIE

S75W Application

Visual Impact Assessment

October 2014



Trinity Point s75W Application

Trinity Point Road, Morisset Park



Report prepared for Johnson Property Group
Report prepared by Dr Richard Lamb, BSc, PhD, CBiol.

VISUAL IMPACT ASSESSMENT

September, 2014



Executive Summary

- The theme for and concept of design of the s75W application to vary the Concept Approval is to create a destination development, with the capacity to draw tourism demand and provide a unique level of accommodation for tourists and residents.
- The report addresses the amended Director General's Requirements dated 7 April 2008 and relevant comments made on the adequacy of the draft proposal for the Concept Approval by Lake Macquarie City Council.
- The site would be transformed by the Concept Approval into an urban setting with the same uses proposed in the s75W application. This will create contrasts with existing development forms in the locality which must be taken into account in determining acceptable visual impacts.
- The visual impacts were assessed using a methodology specific to urban development applications and cross checked using the methods in the LMSMG.
- The visual catchment for the proposed development is confined to isolated parts of the urban foreshores of surrounding settlements in the southern basin of Lake Macquarie, parts of the Lake and the eastern and southeastern shorelines.
- The landscape setting of the site is within Bardens Bay and is set in an urban context. The side slopes and foreshore of the Bay and the site itself are significantly modified features of the underlying natural character of the bay and shoreline.
- The site is of a moderate scenic quality rating with generally low visual accessibility as identified in the LMSMG and confirmed in this assessment. The landscape has a higher potential to absorb visual impacts than one of high scenic quality and high accessibility.
- The site has low visual exposure to the public domain on land and moderate exposure to part of the waters of the southern basin of Lake Macquarie. The southern basin experiences lower usage than the remainder of the Lake.
- View place sensitivity for public domain viewing locations was rated as high for locations less than 100m from the site, medium for locations between 100-1000m from the site and low for distances greater than 1km.
- The effect on view composition compared to the Concept Approval would be minor.
- There is a minor effect of relative viewing level overall; the topography of the visual catchment of the development is relatively flat and most views, including those on the waterway, are on grade with the site.
- Visual effects would be increased for passive users of recreation areas and foreshores and for frequent users of the immediate waterways. There are no roads which provide sustained views.
- Most public domain views other than close views from the water are in the Low sensitivity zone.
- The proposal would cause no greater impact on view through the site from the waterway and foreshores to the north east than the Concept Approval.



- The overall rating of the visual effects of the proposed redevelopment on its total visual catchment was assessed to be low to medium.
- The proposal would cause a low level of view loss and be significantly better in that regard than the Concept Approval. View availability from the site would be superior to the Concept Approval.
- The Physical Absorption Capacity (PAC) for the proposal was rated high for medium range expansive or panoramic views, or restricted views. This is due to its low to moderate intrinsic visibility as a result of retention of existing vegetation and future augmentation of the vegetation canopy.
- The visual compatibility of the proposal with the Concept Approval was rated to be moderate to high. The larger individual buildings would not be any more prominent than the large number of buildings of varying heights in the Concept Approval.
- The overall effects and impacts rating for the high view sensitivity zone in the public domain were assessed to be medium, reflecting the visibility of change in character when viewed in detail, but only from close range on the waterway.
- The overall visual impacts rating of the proposed redevelopment on its total visual catchment, when all relevant weighting factors were taken into account, was assessed to be low.
- Overall, in comparison to the Project Approval, the visual impacts of the s75W application are considered to be either neutral (no different) or superior (less).
- The visual effects and residual impacts of the proposal were assessed as being acceptable in the context of a destination development of distinctive character with a significant tourism component.



Contents

EXECUTIVE SUMMARY	3
1.0 INTRODUCTION	7
1.1 PURPOSE OF THIS REPORT AND BACKGROUND	7
1.2 DOCUMENTS CONSULTED	9
1.3 CONTEXT FOR THE DEVELOPMENT	12
1.3.1 The Regional and Local Visual Context	12
1.3.2 Existing Scenic Resources	12
1.4 EXISTING OPPORTUNITIES AND CONSTRAINTS	12
1.4.1 Opportunities	12
1.4.2 CONSTRAINTS	13
1.5 SCENIC RESOURCE MANAGEMENT PRINCIPLES	13
2.0 CONCEPT FOR THE PROPOSAL	17
2.3 PROPOSED LAYOUT AND BUILDING FORM	21
2.4 PHYSICAL DESCRIPTION OF THE PROPOSAL	22
2.4.1 Proposed Commercial Hub	22
2.4.2 Tourism Component	22
2.4.3 Residential Accommodation	22
2.4.4 Landscape Scheme	23
2.4.5 Enhancement and Nourishment	23
3.0 VIEW ANALYSIS	24
3.1 VISUAL EXPOSURE	24
3.1.1 Views into the Site	24
3.2 RELEVANT PLANNING DOCUMENTS	25
3.2.1 Lake Macquarie Local Environmental Plan 2004	25
3.2.2 Lake Macquarie Local Environmental Plan 2014	26
3.2.3 Lake Macquarie Development Control Plan 2014	26
3.2.4 Lake Macquarie Scenic Management Guidelines	26
3.2.5 Lifestyle 2030 Strategy	26
3.2.6 NSW Coastal Policy 1997	26
3.2.7 SEPP 71 – Coastal Protection	27
3.2.8 Coastal Design Guidelines of NSW (2003)	27
4.0 ASSESSMENT	28
4.1 VIEW ANALYSIS	28
4.1.1 Viewing Locations and Viewing Situations	28
4.1.2 Visual Catchment	28
4.2 VISUAL EFFECTS ANALYSIS	29
4.2.1 Base-Line Factors	29
4.2.2 Variable Factors	31
4.2.3 Overall extent of visual effect	32
4.3 VISUAL IMPACT ANALYSIS	32
4.3.1 Physical Absorption Capacity	32
4.3.2 Visual Compatibility	32
4.3.3 Overall Extent of Visual Impact	33
4.4 VISUAL SENSITIVITY ZONES	34



Contents

4.4.1	Impact Assessment (Ratings)	34
4.5	ANALYSIS AGAINST RELEVANT PLANNING INSTRUMENTS	35
4.5.1	Lake Macquarie Local Environmental Plan 2004	35
4.5.2	Lake Macquarie Local Environmental Plan 2014	36
4.5.3	Lake Macquarie Development Control Plan 2014	37
4.5.4	Lake Macquarie City Council Scenic Management Guidelines	38
4.5.5	Lifestyle 2030 Strategy	40
4.5.6	NSW Coastal Policy 1997	40
4.5.7	SEPP 71 – Coastal Protection	41
4.5.8	Coastal Design Guidelines of NSW 2003	42
4.6	RELEVANT PLANNING PRINCIPLES	44
4.6	ASSESSMENT OF THE PROPOSED MITIGATION MEASURES	48
4.6.1	Proposed Landscaping	48
4.6.2	Colours and Finishes	48
4.6.3	Lighting	49
5.0	RESIDUAL IMPACTS AND CONCLUSIONS	50
APPENDIX A	PHOTOMONTAGES	51
APPENDIX B	PHOTOGRAPHIC PLATES	55
APPENDIX C:	ASSESSMENT METHODOLOGY	71
APPENDIX D	DATA SHEETS	81
APPENDIX E	CV DR R LAMB	101



1.0 Introduction

1.1 Purpose of this Report and Background

This report is an assessment of the visual impacts of the proposed s75W Amendment to the Part 3a Trinity Point Major Project Concept Approval MP 06_0309 obtained with conditions by Johnson Property Group (JPG) at Trinity Point. It specifically relates to visual impacts of the land-based components. The report was prepared by Richard Lamb and Associates (RLA) and authored by the principal Dr Richard Lamb. A curriculum vitae for Dr Lamb is attached at Appendix E. A full CV can be viewed on the RLA website at www.richardlamb.com.au accessed from the People tab.

A marina was part of the Concept Approval. Amendment Modification 2 (MOD 2) was lodged in September, 2013 relating to the staging of the marina and the timing of several condition requirements. In August, 2014 the MOD 2 application was updated by JPG to incorporate design amendments resulting from compliance with Condition B1 of the Concept Approval as well as a number of other modifications. Assessment of MOD 2 is currently ongoing.

Condition B1 required a review of the marina in the Concept Plan, to improve its environmental performance. Compliance with Condition B1 has been achieved and the Concept Approval now incorporates the amendment to the marina. A DA and EIS for the Stage 1 of the Marina has been submitted to Lake Macquarie Council for determination by the JRPP. RLA prepared the Visual Impact Assessment for the Marina EIS which has been lodged with Lake Macquarie Council.

It is noted that the Stage 1 Marina building is proposed in the s75W application to be incorporated into a mixed building that also contains a hotel and tourist accommodation as part of the proposed amended commercial precinct. As a result, this report does not reassess the marina but does comment on the visual impacts of the combined hotel/marina building as one of its assessment tasks.

RLA also prepared the visual impact assessment report on the original Concept Plan Application (RLA 2007 report) in November, 2007. A significant part of the information in that report, which analyses and assesses the existing visual context and visual exposure of the proposal remains current, as no significant changes to the visual environment or access to it have changed in the intervening period. This was confirmed in reassessment of close range viewing places made in July, 2014. Representative photographs taken as part of the analysis of visual exposure of the proposal are included in this report. The analysis of this documentation compared to that undertaken in 2007 demonstrated that no significant changes have occurred to the visual environment or the exposure of the proposal to view, in the intervening period.

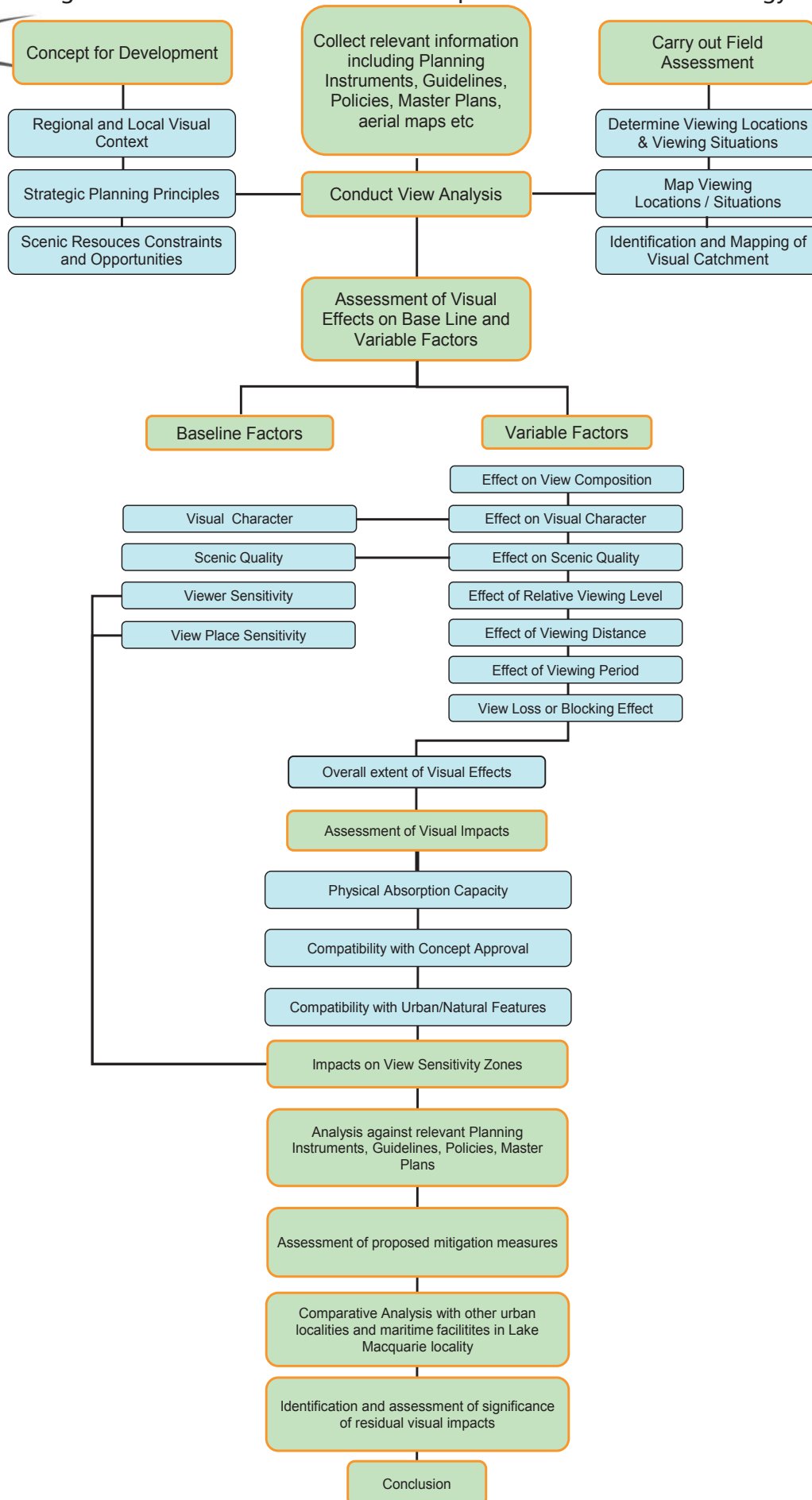
To avoid repetition of relevant material contained in the RLA 2007 report, the report below summarises the findings where appropriate.

The purpose of this report is to assist in the preparation of the Environmental Assessment required under Part 3A and to consider each of the amended Director General of Planning's requirements for that assessment with regard to visual impact considerations, which also remain relevant to the s75W application. A check list which shows how the report addresses the DGRs is below at Table 1.2. The report is based on observations and fieldwork carried out in February, October and November 2007 and in July, 2014.

The report consists of an assessment of the likely extent and significance of the visual impacts of the amended development of the subject land and of the specific built form proposed, considered with regard to the range of public and private places that could be affected and in comparison to the Concept Approval.



Figure 2.1: Flow Chart of the Visual Impact Assessment Methodology





The methodology adopted in this report closely follows that of the RLA 2007 report. For the sake of clarity, the methodology is appended to this report at Appendix B. A flow chart extracted from the methodology (Figure B2.1 in Appendix B), which shows the components and logic of the process of assessment is also shown below at Figure 1.1.

1.2 Documents consulted

In preparing this report, we have consulted the following documents:

- Lake Macquarie City Council Lifestyle 2030 Strategy (Lifestyle 2030).
- Lake Macquarie LEP 2014 (the LEP).
- Lake Macquarie DCP 2014 (the DCP).
- Lake Macquarie Scenic Management Guidelines 2013 (LMSMG) (which are also guidelines to DCP 2014).
- State Environmental Planning Policy No 71 – Coastal Protection 2005 (SEPP 71)
- NSW Coastal Policy 1997
- Coastal Design Guidelines for NSW (2003)
- Architectural Plans prepared by Squillace
- Landscape Concept Plans Sheets, prepared by Terras Landscape Architects
- Detail and contours, including tree locations plan, prepared by Surdevel Consulting Surveyors, dated 8 October, 2008
- Vegetation Communities Plan prepared by Harper Somers O’Sullivan, dated 17 October, 2008
- Real Property Description for Subject Land Plan prepared by (Surdevel Consulting Surveyors), dated 22 October, 2008
- Photomontages of the proposed development, prepared by Squillace
- Amended Director General’s Requirements dated 7 April 2008 for the original Concept Plan Application, which remain relevant to the s75W application.

Table1.2: Checklist for address to the amended requirements of the Director General in this report

Key issues	Relevant sections in the report	Comments
3.1 Provide a comprehensive Site Analysis identifying constraints and including landform features, levels, vegetation, heritage and other relevant environmental features.	Sections 1.4, 1.5	Other site analyses have been provided for other specific aspects of the development by other consultants
3.2 Demonstrate the achievement of design excellence having regard to the significance of the site in relation to Lake Macquarie and its environs. Address impacts of the proposal on the amenity of the foreshore, overshadowing of open space and loss of views from public places and from existing approved development.	Section 2, 2.1-2.3 Section 4.2, 4.3 Sections 3.0 and 4.0	
3.3 Identify urban design guidelines that take into account the existing low-density character of the locality and identify appropriate development parameters in relation to building heights (number of storeys and metres), foreshore setbacks, building separations, site coverage and floor space ratios based on careful analysis of the site's constraints and opportunities and the potential visual and environmental impacts.	Section 2.0	The analysis of the character of the site, its surroundings, the opportunities and constraints of the site and the potential visual and environmental impacts of the proposed development have been included within this Report.
3.4 Address visual impact in the context of adjoining and surrounding development in relation to setting, density, built form, building mass, and height as viewed from the public domain including Lake Macquarie and all publicly accessible foreshore locations	Sections 3.0 and 4.0 Appendix A and B.	
3.5 Use visual aids such as a scale model and photomontage to demonstrate visual impacts. Amelioration of visual impacts through design, use of appropriate colours and building materials, landscaping and buffer areas must be addressed.	Appendix A. Section 4.6	
3.6 Demonstrate the suitability of the proposal with the surrounding area in relation to potential character, height, bulk, scale, built form, amenity (including noise) and visual amenity having regard to SEPP 71, NSW Coastal Policy 1997, Coastal Design Guidelines of NSW (2003), objectives of the 6(2) Tourism and Recreation zone and all relevant development control plans including Lifestyle 2020 Strategy, DCP No 1-Principles of Development.	Section 4.5	
3.7 Address the landscape setting and retention of existing significant vegetation on the site. Demonstrate that any removal of vegetation on the site will have minimal visual impacts.	Section 1.5	





1.3 Context for the Development

1.3.1 The Regional and Local Visual Context

The regional and local visual context are described in the RLA 2007 report in part 1.4.1 and updated in the RLA Marina DA/EIS report. With the exception of further development of adjacent approved residential land by JPG to the west of the site, there have been no significant changes the character, quality or visual accessibility of the site.

1.3.2 Existing Scenic Resources

The existing scenic resources are detailed in the RLA 2007 report in part 1.4.2 and updated in the RLA Marina DA/EIS report. No significant changes have occurred other than the continuing growth of cultural vegetation on the south end of the site and in the Council reserve along the Lake shore.

1.4 Existing Opportunities and Constraints

The site presents similar opportunities and constraints to which the amended development should positively respond to those identified in the RLA 2007 report in part 1.5, with minor amendments to reflect the smaller number of individual buildings proposed and a more permeable tourism/commercial component. The visual opportunities and constraints are summarised below.

1.4.1 Opportunities

- Possibility for high quality destination buildings to signify and anchor the development.
- Views to the north, east and southeast across the adjacent bay or lake.
- The opportunity to share these views with the residential development to the west.
- Extensive and scenic views possible in all directions from taller buildings.
- Views to and from the future residential streets to the west and the public domain generally.
- A foreshore reserve with existing and future natural attributes for public access, including intimate views of the northwestern bay and salt marsh environment.
- Opportunity to retain and enhance the existing partial screening of the site by vegetation in the foreshore reserve land.
- Exposure to eastern and northern sunlight and to winds for cooling and ventilation.
- Development can respond to slopes on site predominantly with northerly aspect.
- Opportunity for high visual and physical permeability and security of the public domain by surveillance.
- Opportunity for a high quality public domain and scenic quality of the site landscape.
- Potential to link the future layout and the public and private domain landscapes to the existing and future development area immediately to the west of the site.
- Potential unlimited views from the foreshore, proposed marina and land/water interface.
- High point, lookout and public parkland possible on southeast, cliff top area.
- Potential for high quality close range views, managed public access to salt marsh, and enclosed, scenic views to the bay at northwest margin of site.



1.4.2 Constraints

- Discontinuous and thin existing tree canopy on lakeshore in places.
- Variable height and form of existing trees.
- Predominant built form profile height to be contained within the existing or future tree canopy line.
- Irregular shape of the foreshore reserve and steep edge on south and southeast face.
- Open aspect toward residential northern shoreline of Bardens Bay and Brightwaters from north eastern foreshore.
- Vegetation in the foreshore reserve and internal site landscape could block views to the Lake and shorelines.
- Layout needs to achieve equitable view sharing and public domain access.
- Permeable but legible interfaces needed between private and public domain landscape.
- Building and landscape design and layout must not conflict with need for casual and physical surveillance of public spaces.

1.5 Scenic Resource Management Principles

The existing scenic resources of the site, the visual exposure to external and future internal views and the visual constraints remain as in 2007 (see RLA 2007 report part 1.4.2) and as updated in the RLA Marina DA/EIS report.

Those reports identified that care needs to be taken in managing the scenic resources of the site so that there is an overall high level of scenic amenity and that the best elements of view experiences are preserved.

In section 1.6.1 of the RLA 2007 report was a series of recommendations for management of scenic resources and for scenic protection and enhancement, which became part of the Concept Approval. The s75W application is consistent with these recommendations.







2.0 Concept for the Proposal

Parts 2.1-2.3 below describe the overall concept for the proposal, the concept for the built form component and for the overall proposal's intended landscape. The specific zoning for the site and the Concept Approval mean that the site and the immediate locality will be changed significantly in character. The acceptability of the s75W amendment proposal is not assumed, simply because the Concept Approval exists. However, the Concept Approval is acknowledged as a starting point for assessment of the visual impacts of the proposal as it envisages transformation of the visual environment of the site into an urban setting different from the adjacent residential and lake-side environment.

2.1 Concept for the Site as a Destination

The underlying concept for this site as in the Concept Approval is as a destination for tourism, with a mix of commercial, tourist accommodation and residential uses along with a destination marina. It is intended to achieve an active, vibrant, competitive destination of world class in the vicinity of the Morisset growth centre. The mix of tourism with an appropriate density of residential accommodation is intended, along with the marina, to provide a unique, high quality urban environment with sufficient profitability to ensure a high quality public domain, civic landscape and conservation of natural foreshore and wetland features.

RLA prepared the visual impacts assessment for the Concept Plan application. However, the final Concept Approval which was developed later featured a number of changes, including a reduction in building height and a significant increase in the number of buildings, in particular detached and semi-detached dwellings, in a suburban arrangement. The commercial component was retained largely as proposed, but the marina was not endorsed in its original form.

RLA do not have the expertise to comment on the likely viability of the Concept Approval. We note advice to JPG that in 2014 terms there are functional problems with the dispersed distribution of hospitality facilities, hotel rooms, numbers of accommodation units sufficient to service the tourism and hospitality hub, the form and mix of tourist/residential accommodation and the likely attractiveness and viability of the development and large and of the piazza space.

We also independently consider that the Concept Approval features too many detached and attached residences and an unnecessarily strict suburban character, with its grid of streets, which forms a theoretical but not a practical transition from the adjacent residential development approved west of the site, to the Lake shore. A small number of individual dwellings are privileged with views, while the remainder are 'walled off' by the street grid.

The Concept Approval retains the commercial component of the Master Plan, which includes the large paved piazza surrounded on three sides by dispersed facilities and separated from the marina component.

In our opinion the mix of residential and tourism accommodation in the Concept Approval does not appear likely to generate the density and intensity of use that would make a large piazza space come to life. Such spaces can work in dense urban environments with high populations of residents and tourists, in particular in places that do not have immediate access to natural and scenic resources. We also note advice provided to JPG that a piazza is at odds with the lake-side environment and does not make adequate use of its attractions and scenic resources.

The proposed s75W modification is broadly intended to:

rationalise the accommodation, both residential and tourist, into a smaller number of individually



larger buildings of between 2 and 4-storeys in height
group like commercial functions together
integrate the marina buildings into a single structure including a hotel
propose a single function building, and;
set all of this into a lush landscaped garden.

2.2 Concept for the Built Form

LMCC supports development of the land to provide for a tourism destination. The Concept Approval however does not appear likely to have sufficient appeal to tourists or tourism operators for reasons stated above. For this reason the s75W application proposes a higher proportion of tourist accommodation, including short and long stay options and a changed proportion of residential accommodation.

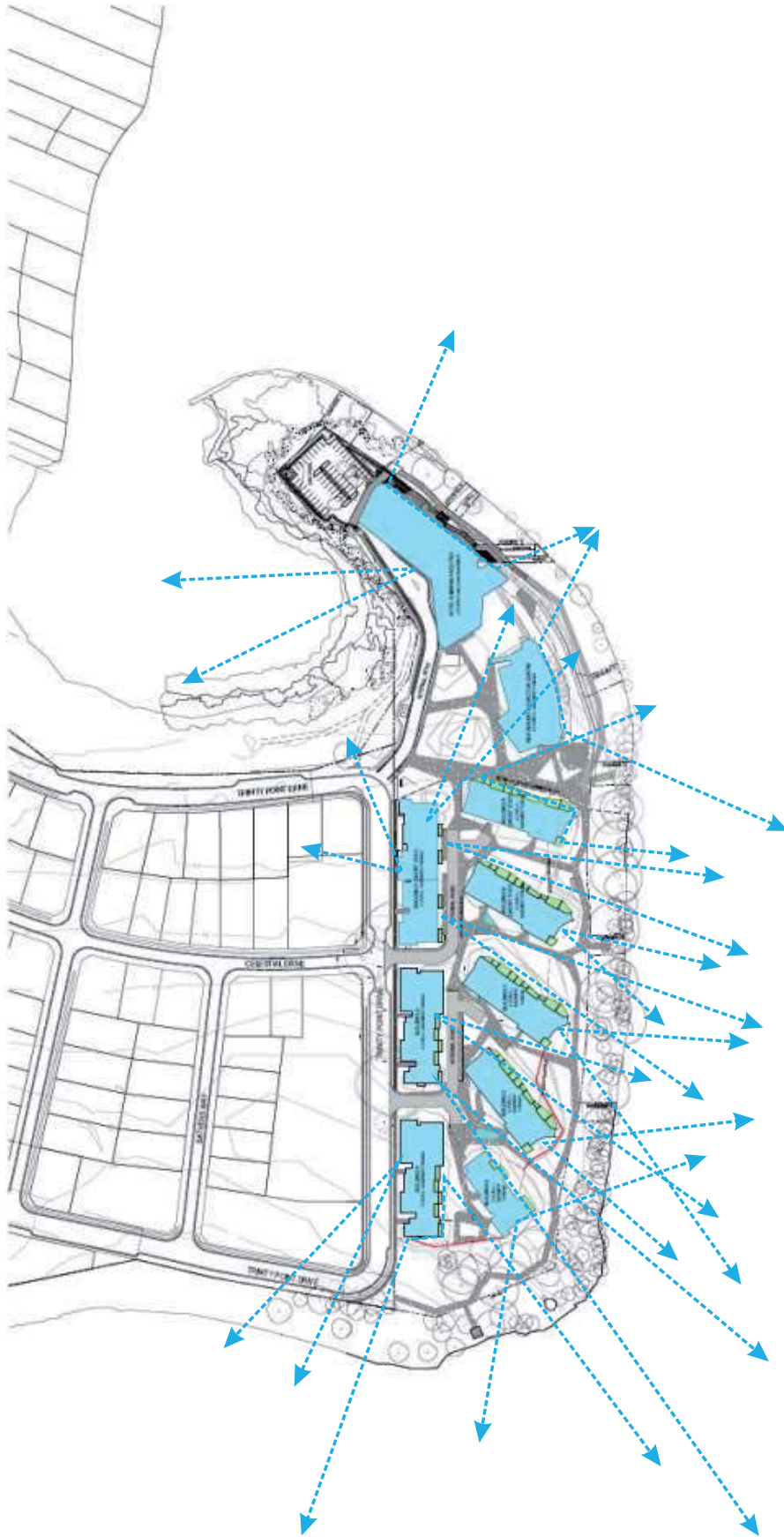
Rather than a large number of small buildings that compromise the amount of landscaped space and compete with views through the site, the s74w application proposes a smaller number of buildings, total undergrounding of resident parking, minimisation of the number and area taken up by roads and the opening up of space around the hospitality areas to provide a variety of vistas through the site, to the Lake.

The overall concept for the built form is for the profile height of buildings to remain always below the height of the predominant tree canopy when seen from viewing places on grade and in particular from the Lake. A comparison between the Concept Approval and the s75W application in long section north-south through the site, shows that the profile remains below the tree canopy level, notwithstanding there are three and four storey building envelopes proposed in the southern half of the site, whereas in the Concept Approval a significant proportion in this area are two-storey. The section shows the surveyed locations and heights of the trees on the site and not a stylised canopy, so the comparison can be validly made.

A second aspect of the concept for the built form is to reduce the number of buildings and increase the landscaped space between buildings, to free up the potential for views through the site. A diagram indicating the extent to which there would be views from buildings and through the site is below at Figures 1A and 1B. View opportunities would be not only significantly improved but also be more equitably distributed. In the Concept Approval, one row of dwellings is privileged with views while the rest are walled off from view opportunities by the narrow or nil side setbacks between buildings and the orientation of buildings towards streets instead of towards the public domain, landscape, views and the Lake.

Plan view of the proposed building layout above ground level shows how this concept is intended to work. The availability of views to dwellings, to the public domain, the private landscape and the open space reserve would be significantly increased in the application. There are potential view corridors at various angles through the site towards the Lake and a wide variety of locations from which this is possible. By comparison, the Concept Approval provides only axial views other than to the front row of dwellings, down roadways. In a practical sense, with public domain landscape in those narrow corridors, views to the lake will be restricted to the eastern ends of the corridors. In the application, views are far more freely available, less formalised and they open in horizontal extent as a viewer moves through the site toward the Lake. This is a far superior outcome in our opinion, at it makes more appropriate and equitable use of the visual resources of the site and the Lake as the focus of views.

A further advantage of the proposal over the Concept Approval is that the sense of spaciousness between the built form and the lake is much greater as a result of the significantly greater setback to the footprint of the built form, from the water. The strict arrangement of lots in the southern portion

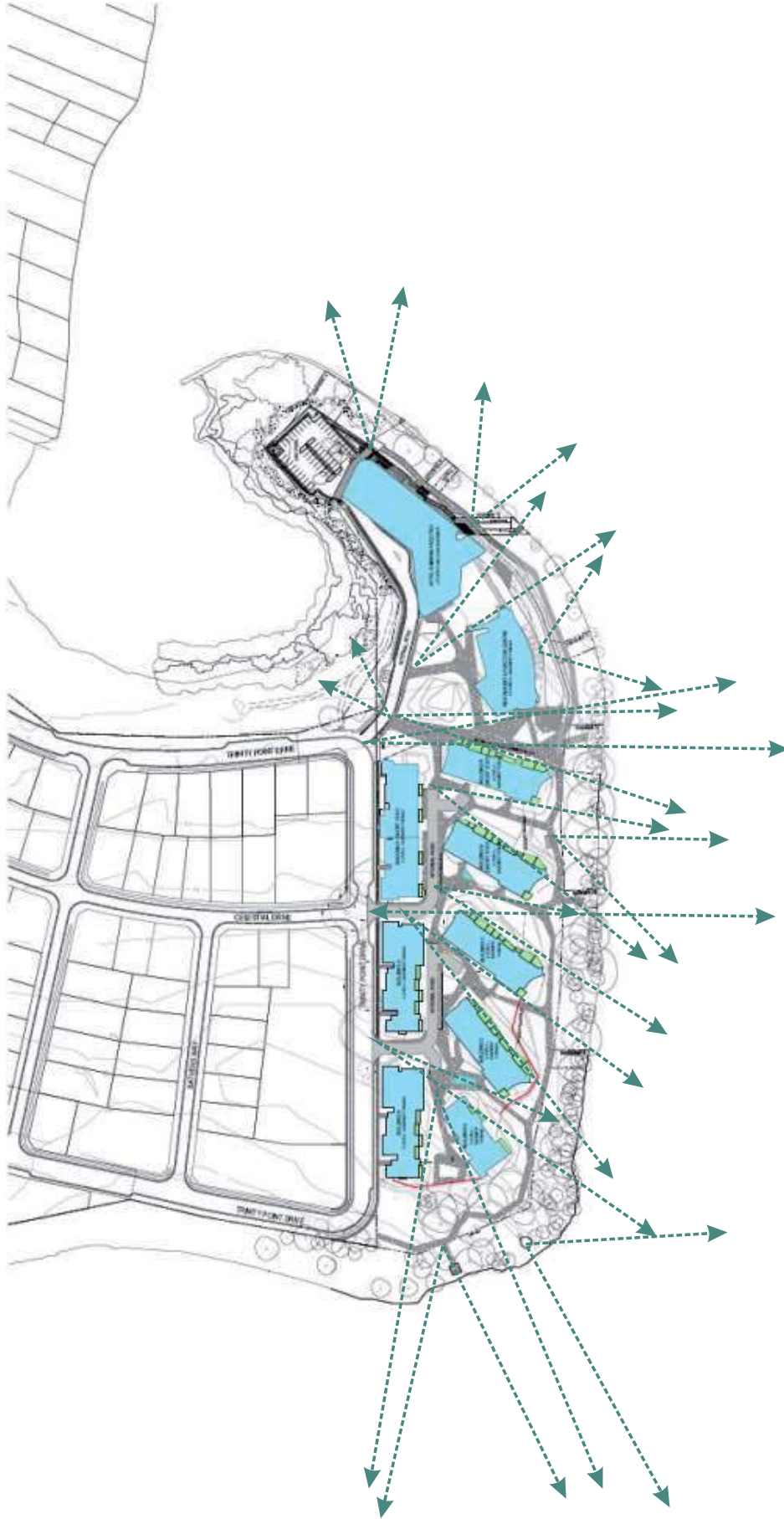


Examples of views accessible from Buildings

Figure 1A: View availability



Note: Based on site plan by Squillace



Examples of views accessible from Landscape

Figure 1B: View availability



Not to Scale

Note: Based on site plan by Squillace



of the site in the Concept Approval leads to a suburban interface with an essentially linear wall of structures, beyond which is somewhat ambiguous landscape which is neither in the public nor the private domain visually or functionally.

In the application, the footprint of the built form is set back to varying distances, with wide splayed spaces between individual buildings for landscaped areas. Extensive views are available through this arrangement in almost all directions. While each building would have identifiable private outdoor space, fingers of potential public landscaped space extend between buildings, the total area of which significantly exceeds that in the Concept Approval. The casual surveillance of these spaces would be significantly improved in the application by comparison.

With regard to views through the site other than toward the lake, the application is also superior to the Concept Approval, in which the dense small-scale dwelling component has view opportunities restricted to one lane-width road and one other road, which run north-south. The views to the south are restricted by rising topography and vegetation in the reserve land south of the site. The view north from both roads is terminated by buildings in the commercial and tourism area associated with the piazza, which is flanked by buildings on three sides. Essentially, there are no views out of the north south spaces between building blocks.

In the application, there is one wide corridor that includes two sections of road, which runs north south, from which there are potential views, not only between buildings, but also north along the axis of the corridor. The corridor is terminated in the distance by the proposed hotel/marina building, however on arrival at the end of the corridor, views are essentially unrestricted between the function building and hotel/marina building, across internal designed landscape and toward the north west and salt marsh area.

In more detail, the concept for the buildings themselves varies according to their function. With regard to the tourist and hospitality buildings, the concept is for an Australian contemporary building form that appears open and welcoming on all sides. The interfaces between the buildings and landscape are intended to be flexible to make maximum use of the climate, proximity to the water and potential different demands for space. For the residential buildings, the concept is also contemporary, for apartment buildings that make maximum use of the environmental qualities of the site, views, sunlight access, ventilation and sustainable materials.

2.3 Proposed Layout and Building Form

The overall program for layout of the s75W application is for what is essentially only 10 buildings on the site, compared to the large number in the Concept Approval. Two are the tourist and hospitality buildings and the other eight are apartment-form buildings providing tourism and residential accommodation. The Hotel building subsumes the Stage 1 marina building into a single structure of up to four storeys in height, stepping from three at the north western end. In common with all of the buildings, it has basement car parking. The Functions building is proposed to be of two storeys in a parkland setting between the Hotel/maina building and the first short-stay accommodation building in the residential part of the site.

Between the Hotel/marina building and Functions building is landscaped gardens and lawn area with potential for a demountable marquee which can be used for functions of various sizes.

Overall building heights of the apartment-form buildings is intended to grade down from four storeys at the north, or lowest part, of the site, to three storeys to the south on the higher part of the site. This results in six four-storey and two three-storey buildings in total.

Streets and cars that characterise the Concept Approval are proposed to be minimised, by ultimately undergrounding all resident parking. The visibility of parking structures is intended to be minimised so it does not add to the visual bulk of buildings.



Rather than a piazza as in Concept Approval, which potentially confines conflicting uses to an internalised space, the tourist and hospitality buildings are proposed to be set in an open landscape that can be used in a variety of ways according to demand. The approved piazza is effectively walled on three sides and while it focusses on part of the adjacent foreshore and the lake, it prevents views from penetrating through the site, in particular from the critical entry point from the future Trinity Point Drive.

The design concept for the Hotel/marina building is to accentuate the openness of the ground floor and minimise the distinction between outdoor and indoor space at that level, to make maximum use of the views and ambiance of the Lake. The proposed form is three to four storeys in height. The concept for the building is to provide an appearance of lightness to the structure by means of detailing and materiality, to de-emphasise the fourth storey element. The fourth storey would be set back from levels 2 and 3 and be of light-weight materials, with a roof form deferential to residential precedents. Levels 2 and 3 would cantilever over the ground floor and produce a dark and deep shadow line above it, reducing the perceive mass of the building. Similarity of materials and detailing of levels 2 and 3 is intended to de-emphasise the distinction between those two levels, assisting in the impressing that the building is of three, rather than or four storeys in height. The building is shown in detail in the Tourist and Hospitality DA reports.

The design concept for the Functions building is for a two-storey contemporary Australian building that is glassy and transparent to views from the adjacent landscape and foreshore, appearing light-weight and with a roof form responsive to residential character and of flexibility in the way internal spaces can be utilised for different kinds of functions.

The design concept for the residential buildings is also contemporary and intended to maximise access to sunlight, ventilation and views. The number of units with views would be vastly in excess of those in the Concept Approval with the majority potentially having a north or east-orientation for balconies, glass doors and windows. Even buildings on the western side of the site have the opportunity for views between others because of the small footprints and wide separation between buildings to the east.

In summary with regard to the concept for the layout and overall building form, the s75W application is different from the Concept Approval, however it is also far superior with regard to equitability and accessibility to views, spatial separation between buildings, spatial qualities of the public domain and potential scenic quality of both the private and public domains.

2.4 Physical Description of the Proposal

2.4.1 Proposed Commercial Hub

The commercial hub of the site is proposed to contain a hotel/marina building of up to four storeys and a Functions centre with restaurant and bar of two storeys in height (both to future detailed design and subject of a separate DA).

2.4.2 Tourism Component

The tourism component is proposed to be housed in three four storey apartment buildings to accommodate short –stay and some dual key apartments.

2.4.3 Residential Accommodation

Residential units are proposed to occupy five buildings, three of four and two of three storeys in height on the southern part of the site, south of the axis of the future approved Celestial Drive intersection, grading down in height toward the south, or higher, part of the site.



2.4.4 Landscape Scheme

The entire development is shown connected by public domain landscape which integrates the public domain with the foreshore reserve and connects the commercial hub to a boardwalk system around the foreshore. The concept is for large open spaces between buildings, minimal road areas and a soft interface between private and public landscape.

2.4.5 Enhancement and Nourishment

Enhancement and nourishment of the foreshore reserve is proposed to be undertaken for the purposes of upgrading existing vegetation as in the Concept Approval, to improve bank stabilisation and ensure the longevity of the mature vegetation as a community. The management of the foreshore and landscape both within the foreshore reserves and the development site will be subject to a Vegetation Management Plan.



3.0 View Analysis

3.1 Visual Exposure

The effective visual catchment for the proposed development is unchanged compared to the Concept Approval. The built form will be no more prominent. The built form is proposed to be retained at a height below that of the existing tree canopy on the site, which will be supplemented by strategic planting of new trees in the public domain.

Most land based views of the site from close range residential locations are from properties accessed from Lakeview Road, which have minimal view access because of the presence of foreshore vegetation associated with the unnamed lake to the west of the proposed commercial hub. There are no close range views from roads.

There will be close range views of the western margin of the site from future approved residential development east of the site. Other medium range viewing locations include the boat ramp and reserve at the end of Lakeview Road. The development would be of minor visibility from this location.

More distant land based viewing locations include views that are predominantly from residences on parts of Pillapai and Bulgonia Roads and Bardon Lane, as well as from the foreshore reserve on Bardens Bay and adjacent to the Brightwaters Christian College. Development will not be visible from Bird Cage Point because of the blocking effect of topography and vegetation in Morisset Park adjacent to the site and the likely future effects of residential development in the same area.

Land based long distance views are available from suburbs across the Lake waters to the east, south east, south and to a limited extent south west of the site, including Summerland Point, Mannering Park and Wyee Point. The changes proposed in the built form in the application would not significantly visible compared to the Concept Approval.

The same principle applies to visual exposure across most of the waterway, where while the site can be seen at middle or long distant viewing locations between Wyee Point, Wyee Bay, Chain Valley Bay, Bardens Bay, Sugar Bay, the area between Fishery Point and approximately midway along Point Wolstoncroft, the changes proposed would be of minimal visibility.

3.1.1 Views into the Site

Views from the area of the approved residential subdivision

The foreshore surrounding the salt marsh and un-named bay south west of the marina site has the densest remnant vegetation on the Trinity Point site. When viewed from the future proposed Trinity Point Road, there will be visibility of the raised topography toward the commercial hub and of the hotel/marina building, while there will be significant view corridors through the site between this building, the functions centre/restaurant and adjacent short-stay tourism accommodation buildings.

The three roads that approach the site from the west in the approved subdivision provide views through the site. The access to views will be improved in the application compared to the Concept Approval. The number of buildings is lower, the footprints are small compared the area approved to be covered by buildings in the Concept Approval and the view opportunities open up as people move into the site, rather than being narrowed and confined as in the Concept Approval.



Views from the public domain

The views from the public domain will be significantly improved compared to the Concept Approval. As already noted above, the sense of space, access to views, variety of opportunities to see and experience new locations and to appreciate and be drawn by connections between spaces, will be significantly enhanced in the application compared to the Concept Approval. Views are possible through the site from the streets that lead from the adjacent future approved residential subdivision as in the Concept Approval. These are inviting in the application, which encourages exploration and provides a variety of view experiences, whereas the Concept Approval has narrow and confined axes and essentially no cross views from the residential areas once the axial road is left.

Views from the foreshore reserve

Views are possible into development area at close range from the foreshore reserve in the Concept Approval and in the application, however the reverse view is interesting and engaging in the application, whereas in the Concept Approval the view is of a wall of privatised back yards, fences and buildings situated with small or no side setbacks. The application invites exploration and is less formal, with various ways to access or move through space between the foreshore reserve and adjacent development. There are only minor differences between the application and the Concept Approval as regards outward views from the foreshore reserve.

Views from the wider visual catchment

Views into the site are analysed in the RLA 2007 report and reviewed in the RLA Marina DA/EIS report not repeated here. In general, other than in close range views from the waterway, the proposed change in distribution of buildings and their heights would not significantly change the visibility of the development in the public and private domains.

Publicly available views from nearby Morisset Park to the north west of the site are limited to those from the boat ramp on Lakeview Road, where the hotel/marina building may be partly visible seen end-on, but significantly screened by vegetation, as evident in the photomontages appended to this report. Views from the private domain in the immediate vicinity would be similar to those available from the boat ramp other than for the variations in distance and orientation with regard to the site. There are no publicly available views from Lakeview Road itself.

Publicly available views into the site from Brightwaters are limited as analysed in the RLA 2007 and Marina DA/EIS reports and would be unchanged in the application compared to the Concept Approval.

3.2 Relevant Planning Documents

The planning documents relevant to the potential visual impacts of the development proposal are as follows. Detailed analysis of the planning documents against the proposal in terms relevant to the visual impacts and amenity issue can be found in section 4.5.

3.2.1 Lake Macquarie Local Environmental Plan 2004

The objectives of the LEP are to develop land in accordance with the principles of ecologically sustainable development by promoting balanced development and by implementing the Lifestyle 2020 Strategy. The development site is zoned 6(2) Tourism and Recreation Zone 6(1) Open Space and 11, Lakes and Waterways (water). The marina is permissible in either zone, with consent. The relevant sections of the LEP with respect to the zoning are Part 3 Clause 15 General controls for land within zones.

3.2.2 Lake Macquarie Local Environmental Plan 2014

Relevant to visual impacts, the particular aims of the plan include recognising the important of Lake Macquarie and its waterways and the coast as an environmental, social, recreational and economic asset to the City of Lake Macquarie and the Hunter and Central Coast regions. In addition, are aims to implement a planning framework, which protects areas of significant conservation importance, while facilitating development and public facilities in appropriate areas, and to facilitate a range of accommodation types throughout the City. The site is zoned SP3 Tourist, RE1 Public Recreation and W1, Natural Waterways. The development will be permissible in the zones, with consent.

3.2.3 Lake Macquarie Development Control Plan 2014

DCP 2014 is the supporting document to LEP 2014. Its purpose is to implement Council's Lifestyle 2030 Strategy. It consists of a written document and a number of parts that contain controls relating to the zonings in LEP 2014, of which parts 6 (Development in Recreation and Tourism Zones) and Part 9 (Specific Land Uses), which includes Foreshore and Waterway Development and Tourist and Visitor Accommodation are relevant. Technical Guidelines are required to be considered in some circumstances including the Lake Macquarie Scenic Quality Guidelines (LMSQG). Those Guidelines have now been superseded by the LMSMG.

3.2.4 Lake Macquarie Scenic Management Guidelines

Lake Macquarie Scenic Management Guidelines provide the support documentation for DCP 2014 in relation to views. The guidelines are to be applied to assess the visual impact of a potential development in preparing a landscape visual impact assessment (LVIA). Inspection of Table 1 shows in the LMSMG shows that an LVIA is required. The assessment carried out in this report is considered to address all of the relevant issues in the LMSMG. A closer analysis is provided below.

3.2.5 Lifestyle 2030 Strategy

The Lifestyle 2030 Strategy provides the long-term direction for the future urban and rural land use and development of the City based on principles of ecological sustainability. Relevant directions of the strategy with regard to visual issues are within Strategic Direction 3, A Well designed and Liveable City, Outcomes 3.13, and in regard to marinas, in Direction 6, Outcome 6.14.

The development would comply with the Lower Hunter Regional Strategy in which Morisset is identified as an emerging regional centre as shown on the Urban Structure Map, which will experience substantial dwelling and employment growth and respond effectively to the City Vision with regard to environmental protection of scenic values and opportunities.

Urban Structure strategy to promote medium density in areas of high amenity near the Lake foreshore and adjacent to public open space, to encourage local neighbourhood centre development, reuse sites efficiently and to encourage tourism.

In relation to the Movement System strategy, it would provide possible future links across the Lake by water and would not conflict with the Green System strategy. The site is a significantly altered site part of a promontory, development of which is not in conflict with natural areas, with the exception of the partially enclosed salt marsh wetland area adjacent to the site, which is proposed for conservation.

3.2.6 NSW Coastal Policy 1997

The Coastal policy is designed to guide coastal development, planning and conservation in New South Wales. Lake Macquarie is part of the coastal Zone adopted in the Policy. The relevant section of the



Policy with regard to visual issues is Part B, Goal 3, Objective 3.2, Strategic Action 3.2.2.

3.2.7 SEPP 71 – Coastal Protection

SEPP 71 is designed to further implement the Coastal Policy and aims to protect and manage the New South Wales coast, including the visual amenity of and the type, bulk and scale of development on it. The relevant sections of SEPP 71 are Part 1 Clause 2 Aims of Policy and Part 2 Clause 8 Matters for Consideration.

3.2.8 Coastal Design Guidelines of NSW (2003)

The Coastal Design Guidelines are designed to guide coastal development, planning and conservation in New South Wales. Lake Macquarie is part of the coastal Zone adopted in the Guidelines. The guidelines contribute to defining appropriate settlement types and developing place-specific development control plans.

4.0 Assessment

4.1 View Analysis

The components and features of the proposed development are explained in section 3.0. A detailed field assessment was undertaken on 22 February, 10 October and 19 October 2007 including from the waterway and the findings were confirmed in August of 2014.

4.1.1 Viewing Locations and Viewing Situations

To assess the visual impacts that would be experienced by viewers, a view point analysis was conducted. This consisted of visiting the site and locality and assessing the likely impact on views from a selected series of locations. The key viewing locations ranged from a number of public domain locations including those on:

- a) Roads,
- b) Recreational areas
- c) Waterways.

The locations were selected to represent the kinds of viewers' experience of the development that would exist in the immediate area. As there has been no change to the visual catchment, the same viewing places were used as in the RLA 2007 and Marina DA/EIS reports. The viewing locations analysed during the site visits are shown on Maps 3 and Map 4. These are shown with respect to the viewing distance-close range, middle distance and long distance as explained in the Methodology at Appendix B. Map 4 is a smaller scale map showing indicative close range viewing locations. It is to be noted that all the viewing locations visited are public domain viewing locations, but they also provide insights into the likely visual effects on private views.

4.1.2 Visual Catchment

Map 1 shows the potential visual catchment for the proposed development as previously determined in the RLA 2007 report and confirmed in the RLA Marina DA/EIS report. The visibility of the proposed redevelopment site is largely confined to the public and private domain viewing locations identified in that report. Map 2 shows the visual sensitivity zoned determined for the development, based on viewing distance, as set out in Appendix B. A table that explains the relationship between viewing distance and viewing situations in the private and public domain Table is included in Appendix B.

4.1.3 Photomontages

At the direction of RLA, a series of photomontages were prepared by Squillace, to represent the appearance of the proposed development as seen from a sample of viewing places on land and on the waterway. The photomontages are appended at Appendix A.

The locations from which the photographic images used to prepare the photomontages were taken were surveyed by registered surveyors who accompanied the photographer. The base photographs were taken with a full-frame DSLR camera at a standard 1.6m above ground or water level, using a 50mm focal length lens. The locations for the images were selected to represent views from the water and land. The land-based locations shown in the photomontages were matched to locations used in the RLA 2007 and Marina DA/EIS reports. The water based locations were similar but not identical to those analysed in the two reports mentioned above.



A series of reference markers were identified on the site or temporarily erected on the site for the purpose of aligning the 3D Sketchup computer model of the proposed development by Squillace, relative to the photographs. The reference markers were added to the electronic survey of the site and the computer model. When identified in the photographs used to prepare the photomontages, the 3D reference points were used to cross-check the location and elevation of the computer model of the proposed development, before it was merged with the photographic images.

The accuracy of the location of the proposed buildings and landscape works in the photomontages was by this means cross checked with the survey information.

4.2 Visual Effects Analysis

4.2.1 Base-Line Factors

4.2.1.1 Visual character

The landscape setting of the development site is within the visual catchment of Bardens Bay, a part of the southern basin of Lake Macquarie. The development site is on land toward the southern-most head of the Bay and is set in an approved and developing urban context.

The foreshore, residential area adjacent to the subject site and the former St John of God site are significantly modified features of the underlying natural character of the bay and shoreline. The general relationships between the natural and cultural features of the landscape which provide its existing scenic character are widespread in various parts of the Lake Macquarie locality and are neither rare nor under threat. The visual character of the site itself has not changed since the RLA report was prepared for the Concept Plan application in 2007.

The Concept Approval ensures that the intrinsic visual character of the development site would be significantly changed, but the components of the changes would not be an introduction into the visual catchment of elements unexpected or out of character within the Lake Macquarie area.

The application by comparison with the Concept Approval is for what is essentially the same components of development, ie. (commercial/hospitality precinct, marina, tourism and residential accommodation and landscape). Lesser numbers and different built forms of buildings from the Concept Approval will not significantly change the overall visual character of the setting when seen from the external visual catchment. However the character of the individual built forms will be different, in that the accommodation is predominantly within individual apartment-style buildings rather than the mixture of attached and detached small individual buildings in the Concept Approval.

The visual character of the application therefore will be less suburban and more compatible with the intention to create a destination of distinctiveness and which attracts a high level of tourist use. In our opinion, the change of character of the built form will be most evident at close range and in particular within the site. It would not cause a significant change to the overall character of the locality as the built form would remain fringed by the natural environment and set below the height of the prevailing tree canopy.

4.2.1.2 Scenic quality

Scenic quality is a base line against which the effects of changes to the physical environment can be predicted to impact either positively or negatively on the perceptions and emotional reactions of viewers. There is an extensive empirical research literature concerning general relationships between aspects of the physical environment and predicted judgments of scenic quality or other expressions of this, such as scenic beauty and scenic preference.

This research would predict that Trinity Point and its locality would be of moderate scenic quality. There is little published evidence as to the scenic quality of the subject site and its general locality, however



The LMSMG agrees with our assessment that Bardens Bay is of medium scenic quality. The LMSMG however identifies all waterfront sites as of high sensitivity, and this agrees with our assessment of that factor below. A moderate scenic quality baseline means that subject to other considerations, the landscape has a higher potential to absorb visual impacts than one of higher scenic quality.

The existing Concept Approval anticipates the urbanisation of the site and its transformation into a tourism destination. The application is for a transformation that is different in detail, but which does not challenge the basis of the existing scenic quality which it retains and enhances.

In our opinion, there would be no significant change in scenic quality following construction of the development proposed in the application compared to the Concept Approval.

4.2.1.3 View place sensitivity

The public domain viewing locations are those located on roads, reserves/foreshores and waterways. The view place sensitivity for public domain viewing locations was rated as high for locations within less than 100m from the development site such as from the immediate streetscape of the approved residential subdivision to the west and the immediate waterways (Refer Photographic Plates 11a, 11b, 12a, 12b, 12c, 13a, 13b & 19).

The view place sensitivity was rated as medium for locations that were located between 100-1000m from the development site such as Brightwaters Park, the boat ramp and reserve on Lakeview Road, parts of Bulgonia Road, Lake View Avenue and Bardon Street, and middle distant waterways (refer Photographic Plates 1, 14, 18a & 18b) and low for locations that were located at a distance greater than 1km from the development site such as the waterway, Sandy Beach, western foreshore reserve at Summerland Point, locations on Pillapai Road and Dandaraga Road (refer Photographic Plates 2, 3, 4, 5, 6a, 6b 7, 8, 9, 10, 15a, 15b 16, 17 & 20).

4.2.1.4 Viewer sensitivity

The potential viewer sensitivity is rated high for residences along the section of Lakeview Road and Doull Lane less than 100m from the development site to the west of the site. It is rated medium for residences along roads located between 100-1000m from the development site such as those located on sections along Lakeview Road, Doull Lane, Bulgonia Road, Lake View Avenue, and Bardon Street. The sensitivity criterion is conservative, because it is high for close range residences as a standard methodological assumption. However it is unlikely that those to the west of the site have any significant view in practice, because of the screening or blocking effect of vegetation in the view line. This can be shown by inspection of the montage showing the view from the boat ramp boundary in Lake View Avenue, in which there is a minimal view of any built form (Appendix A). The sensitivity was rated low for residences along roads located greater than 1km from the development site such as those located along sections of Pillapai Road, Dandaraga Road, Bardon Lane, Gordon Avenue, Kullaroo Road and Scott Road. It is worth noting that there are minimal views from the roads themselves and that the main visibility, which is inferred by view outward from the foreshore of the site, would be to some residences on the above roads.

Our ratings are the same as the rating in the LMSMG. However it is to be noted that at present the area has a generally low accessibility to the public, no significant exposure to roads with high viewer numbers in the public domain and therefore a lower sensitivity to the visual effects of development. Our criteria give greater weight to the significance of impacts on views from close and medium range.



4.2.2 Variable Factors

Effect on view composition

We found that the effect of the built component of the proposed development on view composition compared to the Concept Approval would generally be low. The effect on view composition would be moderate to low for a small number of viewing locations from where there are restricted, focal or feature views towards the development site (Refer Photographic Plate 19).

Effect on view composition would be medium or low for viewing locations that are located at distances greater than 100m and those generally which have panoramic or expansive views (Refer Photographic Plates 1, 5, 6, 7, 8, 9, 10 & 15). While the built forms would be evident as a new feature of the view, the general availability of wide to panoramic views unaffected by the development would not change.

Effect of relative viewing level

The topography of the land-based visual catchment of the development is such that most views are from levels relatively above the site level and therefore other than loss of view of part of the currently unoccupied site, the development would not cause significant change to view availability. There would be no significant difference in this regard between the application and the Concept Approval. Our assessment on this factor is also conservative, as it assumes that all views from the water experience a direct effect of viewing level (ie. The development causes some view loss through the existing bare site). As a result, there would be no significant difference on this factor between the application and the Concept Approval.

Effect of viewing period

The visual effects would be increased for passive users of recreation areas and foreshores such as Brightwaters Park, the boat ramp and reserve on Lakeview Road, the shoreline along Sandy Beach, Frying Pan Point and for the frequent users of the immediate waterways. There are no roads that provide sustained views.

Effect of viewing distance

The visual effects of the proposed redevelopment are assumed to be increased for locations close to the development site within 100m (including the immediate streetscape of Lakeview Road and Doull Lane and immediate waterways). This rating however is conservative with regard to views from residences, as explained above in relation to the sensitivity criterion, as most properties in close range category in the vicinity do not appear to have direct views, as a result of the screening effects of native vegetation on the foreshore which is between the viewers and the site.

The viewing distance would have a medium influence on the visual effect for locations at a distance between 100-1000m from the development site (such as for some viewing locations that are primarily residences along Bulgonia Road, Brightwaters Park, part of Lake View Avenue, Henry Road, parts of Lakeview Road, and the boat ramp and reserve on Lakeview Road. It would cause a low visual effect for locations at a distance greater than 1000m from the development site (such as from Pillapai Road, Gordon Avenue, Kullaroo Road, Sandy Beach and the park on Vales Point).

View loss or blocking effects

In views from the external public domain, the proposal has no significant effect with regard to view blocking compared to the Concept Approval. The built form is subservient to the height of the existing fringing and background vegetation and therefore the height proposed of up to four storeys do not cause any significant view blocking.



In views outward from the proposed development, as discussed above, there would be significantly improved view access as a result of the small number of buildings, small area occupied by footprints, wide view corridors and the variety of directions in which views are possible.

The assessment of view loss also considered the planning principles in Tenacity and in Rose Bay Marina. Tenacity concerns view losses from residential properties and is of some relevance in determining what could be construed to be a valuable feature of the view that could be lost, e.g. land-water interfaces, iconic and whole views. There will be no significant view loss the residences as a result of construction of the proposed development. Tenacity is not relevant to views outward from the site or foreshore. Our assessment is that there would significant increases in access to the view of water and the land-water interface, among the various visual resources of the site.

The planning principles in Rose Bay extended Tenacity to considering view loss from the public domain, which includes the waterway and foreshore reserve in this instance, as well as reserves on the foreshore in other places. A more detailed response to the Rose Bay principles is below. In general however, the proposal is an improvement in access to views compared to the Concept Approval and causes no significant view blocking in inward views.

4.2.3 Overall extent of visual effect

The overall extent of visual effects was evaluated for each view place and also by inspection of the pattern of assessment of the visual effects of all of the individual factors for all viewing locations. These assessments of the visual effects of the proposal for each view place are shown in summary on Table 4.3 below. In summary, we assessed the overall visual effects rating of the proposed development on its total visual catchment to be vary between medium and low.

4.3 Visual Impact Analysis

4.3.1 Physical Absorption Capacity

The physical absorption capacity for the proposal has primarily to be judged not against the existing site characteristics but in relation to the Concept Approval. The existing characteristics of the site satisfactorily absorb the visual effects of the Concept Approval and therefore the relevant question in regard to the application is whether it is more or less able to be absorbed and if so, is this a determinative matter.

The factors that assist in PAC, ie. The fringing vegetation, tree canopy existing and as proposed to be augmented and natural topography of the site, have not been proposed to be changed compared to the Concept Approval. As a result, there is no significant change in PAC between the application and the Concept Approval.

4.3.2 Visual Compatibility

Visual compatibility with urban and natural features

The compatibility of the application with the urban and natural features of the site is considered to be high. The features which give the modest scenic quality to the site, such as its underlying topography, shoreline and minor cliff features, fringing vegetation, residual tree canopy and cultural landscape elements and features associated with the former grotto and sundial garden are retained.

Visual compatibility with the Concept Approval

The visual compatibility of the application with the Concept Approval is considered to be high. While the built form would be different, the form is not unexpected in a water-side tourism setting. The



forms in the application do not have to be the same or similar to the Concept Approval to be visually compatible.

The visual compatibility with maritime features was also observed to depend to some extent on the type of view composition available. It would be generally medium for panoramic and restricted views that contained views of other swing moorings, jetties and the like. Visual compatibility overall is also increased by the existing concept plan approval, which anticipates a marina and the resultant change to the presence of maritime features.

4.3.3 Overall Extent of Visual Impact

The overall extent of visual impacts was evaluated by inspection of the pattern of assessment of the visual impacts of all of the individual factors for each viewing location. These overall assessments of the visual impacts of the proposal are shown in summary on Table 4.3. The overall visual impacts rating of the proposed redevelopment on its total visual catchment was assessed to be medium to low. The ratings for impacts above low-medium on some view points primarily results simply from the visibility of the proposed development.

Table 4.3: Overall Visual Impacts

			Weighting factors				
V i e w p o i n t n u m b e r	Distance class	Overall level of v i s u a l effects	Physical Absorption Capacity	C o m p a t i b i l i t y (Concept Approval)	C o m p a t i b i l i t y (urban features)	Sensitivity	Overall Visual Impact
1	Medium	M	Medium	High	High	Medium	Low
2	Distant	M	Medium	High	High	Low	Low
3	Distant	L	Medium	High	High	Low	Low
4	Distant	M	Medium	High	High	Low	Low
5	Distant	L	High	High	High	Low	Low
6	Distant	M	High	High	High	Low	Low
7	Distant	L	High	High	High	Low	Low
8	Distant	L	High	High	High	Low	Low
9	Distant	L	High	High	High	Low	Low
10	Distant	L	High	High	High	Low	Low
11	Distant	M	Medium	High	High	Low	Low
12	Medium	M	Low	High	High	Medium	Medium
13	Medium	M	Low	High	High	Medium	Medium
14	Medium	M	Medium	High	High	Medium	Medium
15	Distant	L	High	High	High	Low	Low
16	Distant	L	High	High	High	Low	Low
17	Distant	L	High	High	High	Low	Low
18	Medium	L-M	Medium	High	High	Medium	Low-Medium
19	Close	L	High	High	High	High	Low
20	Distant	L	High	High	High	Low	Low

4.4 Visual Sensitivity Zones

4.4.1 Impact Assessment (Ratings)

The overall effects and impacts rating for the high view sensitivity zone in the public domain were assessed to range from low-medium to low.

The overall effects and impacts rating for the medium sensitivity zone, predominantly in the public domain on the waterway, were assessed to be predominantly low.



Low sensitivity zone locations included public domain views other than the immediate foreshore and nearby waterway. The overall effects and impacts rating for the low visual sensitivity zone were assessed to be low.

The visual impacts on the high and medium sensitivity zones are analysed against the relevant mitigation measures in the section below. The views from low sensitivity zones were not analysed. This is because it was considered that no significant impacts could occur for these locations.

4.5 Analysis against relevant planning instruments

4.5.1 Lake Macquarie Local Environmental Plan 2004

Part 1 Clause 3 Objective of plan

The objective of this plan is to achieve development of land to which this plan applies that is in accordance with the principles of ecologically sustainable development by:

- (a) promoting balanced development of that land; and*
- (b) implementing the Lifestyle 2020 Strategy adopted by the Council on 27 March 2000.*

Comment:

Objective (a) is a matter for others with strategic and town planning expertise to address. In visual terms, the development is considered to comply with the Lifestyle 2020 Strategy. However the strategy has been superseded by the Lifestyle 2030 Strategy which is considered in more detail below in 5.5.4. In that regard, the proposal is considered to comply with the objective of the plan.

Part 3 Clause 15 General controls for land within zones

The subject site is zoned 6(2) Tourism and Recreation Zone, 6(1) Open Space Public and 11, Lakes and Waterways (water).

Zone 6(1) Open Space Public

The relevant objectives of the 6(1) zone with regard to visual impacts are to:

- (a) provide community owned land or land intended to be owned by the community (shown with crosshatching on the map) that is suitable for the passive and active recreation needs of the community, and*
- (b) provide for a variety of facilities necessary to support use of this land including barbeque facilities, toilet facilities, sports administration and changing rooms, club-houses, cycle ways, seating, lighting and the like, and*
- (c) facilitate preservation of the environmental qualities of land identified in this plan for public ownership, and*

Comment:

The application is consistent with the objectives as it complements the active and passive recreation potential of the public land and provides facilities that assist in its appreciation and accessibility, while preserving the environmental qualities of the foreshore land.

Zone 6(2) Tourism and Recreation Zone



The relevant objectives of the 6(2) zone with regard to visual impact are to:

- (b) encourage good quality design within the zone, and*
- (e) encourage tourism development that is sensitively designed to complement its location and minimise any adverse impacts on the environment*

Comment:

The Concept Approval would transform the character of the site. The application, while also contrasting with the surrounding setting, it is intended to respond to and complement the desired future urban setting for the same purposes. In our opinion, the application is more meritorious than the Concept Approval in this regard.

The natural components of the landscape will be protected and increase the capacity of the landscape to absorb the development.

Zone 11, Lakes and Waterways (water)

The relevant objectives of the 11 zone with regard to visual impact are to:

- (a) recognise the importance of Lake Macquarie and its waterways as an environmental asset, not only to Lake Macquarie City, but to the Hunter and Central Coast Regions, and*
- (c) ensure development does not adversely affect the ecology, scenic values or navigability of the Lake or its waterways, and*

Comment:

The Concept Approval recognises the importance of the Lake Macquarie and its waterways and acknowledges that tourist development is consistent with these values. This assessment concluded that the application does not adversely affect the scenic values of the site and the environmental assets of Lake Macquarie. We consider that the proposal is consistent in this regard with the relevant zone objectives.

4.5.2 Lake Macquarie Local Environmental Plan 2014

The site is zoned part SP3 Tourist, Part RE1 and part W1 Natural Waterways.

SP3 Tourist Zone

The objectives of the SP3 zone with regard to visual impacts are:

- To provide for a variety of tourist oriented development and related uses.*
- To encourage tourism development that is sensitively designed to enhance and complement its location and which avoids unacceptable adverse impacts on the environment.*

Comment:

The existing Concept Approval provides the context for tourism development as the future character of the site. This assessment found that the application is sensitive to the visual context and does not have unacceptable adverse impacts on the environment as regards visual impacts.



RE1 Public Recreation Zone

The objectives of the RE1 zone with regard to visual impacts are:

To enable land to be used for public open space or recreational purposes.

To protect and enhance the natural environment for recreational purposes.

To facilitate the preservation of the environmental qualities of the land.

Comment:

The application is considered to be consistent with the above objectives. It enables land that is currently not easily accessible to be used for the enjoyment of the public in a way that protects and enhances the natural environment and its recreational values, while facilitating the preservation of the environmental qualities of the foreshore reserve.

W1 Natural Waterways Zone

The objectives of the W1 zone that are relevant to visual impacts are:

To protect the ecological and scenic values of natural waterways.

Comment:

The proposal is considered to protect the scenic values of the waterway to the extent that is reasonable given the tourism oriented development intended by the zoning and the existing Concept Approval. The overall scenic values of the waterway will not be significantly changed by approval of the proposal.

Part 5, Miscellaneous Provisions at clause 5.5 Development within the coastal zone provides Objective 1 (b) which is relevant to visual impacts, as follows:

To implement the principles in the NSW Coastal Policy and in particular to:

(ii) provide opportunities for pedestrian public access to and along the coastal foreshore, and

(v) protect amenity and scenic quality, and

(ix) ensure that the type, bulk, scale and size of development is appropriate for the location and protects and improves the natural scenic quality of the surrounding areas, and

(x) ensure that decisions in relation to new development consider the broader and cumulative impacts on the catchment

Comment:

A specific analysis of the proposal in relation to the NSW Coastal Policy, which includes attention to each of the sub-objectives above, is provided below in part 4.5.8.

Briefly however, the proposal does provide opportunity for pedestrian access to and along the foreshore and protects the amenity and scenic quality of the foreshore, as well as providing potential for views through the development.

4.5.3 Lake Macquarie Development Control Plan 2014

The overall objectives of the plan are to implement the LS 2030 Strategy, elaborate on the requirements of LEP 2014 and to provide detailed guidance to a range of stakeholders of Council's requirements



for land development and to provide detailed guidance for assessment of development applications as required by s 79C (1)(a) of the EP&A Act.

DCP 2014 is divided into a number of parts based on land use zones, of which Parts 6 (Development in recreation and tourist zones) is relevant. The controls for specific land use in Part 9 take precedence over general principles in Part 6 if there is a conflict.

Associated with DCP 2014 are guidelines to supply technical requirements for specific matters, of which the LMSMG are of specific relevance. An analysis of this report against the requirements of the LMSMG follows in section 5.5.6.

The aims for development in tourist zones include 2, 3 and 4 which are relevant to visual impacts:

2: To minimise adverse impacts from tourist developments;

3: to promote innovative designs for tourism developments: and

4: To promote Lake Macquarie as a tourism destination and to promote appropriate tourism related development and investment in the City.

Comment:

The existing Concept Approval indicates that the site is suitable for the type of development proposed. This assessment concluded that the visual impacts of the application have been minimised compared to the Concept Approval, by the design and layout of the marina and that the proposed built form would not cause significant impacts. The application is of a significant and innovative design to promote tourism development. In that regard, the proposed development is consistent with the aims of Part 6 of DCP 2014.

In Part 6 – Development in Recreation and Tourist Zones, 2.2 Scenic Values refers to the Landscape Settings and Significant Natural Landscape Features Maps, which identify Landscape Setting boundaries and the relevant Scenic Management Zone for each Landscape Setting. The maps are a guide to the scenic quality associated with lands with Lake Macquarie and are contained within the LMSMG (see response to the LMSMG below in part 5.5.6).

The objectives in relation to 2.2 Scenic Values are:

To ensure that the scenic values of the City are protected and enhanced.

To ensure that developments visible or adjoining the coastline, Lake Macquarie or ridgelines, maintain and enhance the scenic value of these features.

Comment:

Controls are 1; whether a development requires a landscape and visual assessment prepared in accordance with section 7.3 of the LMSMG and 2; design guidelines. Table 1 in 2.2 shows that the proposed development requires a landscape and visual assessment, as set out in this report. Control 2 is complied with in the retention of existing visual exposure, incorporation of appropriate landscaping, minimising cut and fill and having buildings design, articulation, colours and materials compatible with the natural context and non-reflective

4.5.4 Lake Macquarie City Council Scenic Management Guidelines

The guidelines have been used to determine that the proposal requires a visual impact assessment (see Table 4.5 below, which summarises the response of this report in relation to the Table 1 and

Table 4.5: Checklist for address to the requirements for a visual impact assessment report in the LMSMG

Key Issue	Included	Comment
Identify the landscape setting unit	Yes	The site is identified in the Scenic Management Zone Map and in Appendix A as the Bardens Bay landscape setting, Scenic Management Zone 3
Is the site rated as a visually sensitive landscape?	Yes (Table 2)	Site as a foreshore and is automatically considered to be a sensitive location Viewing level of 3 for the landscape setting unit indicates a low level of public access to the views
Is the site of high or moderate visibility?	Yes (Table 3)	All foreshore sites are rated as of high visibility, however the level of public access to view is Level 3 (low)
Is the site identified as a specific Scenic Management Zone?	Yes	Specific recommendations also exist in the LMSMG for marinas
3.Are there any specific guidelines for the development type proposed?	Yes	RLA methodology is specific to development applications and consistent with the LMSMG
Is a Landscape Visual Assessment required?	Yes	This report specifically addresses the requirements of the LMSMG as well as other relevant guidelines

Comment:

The site is in the Landscape Setting Unit of Bardens Bay which is given a Moderate scenic quality rating and a Viewing Level (public accessibility) of 3, low.

Appendix B in the LMSMG provides Scenic Management Zone guidelines for the Scenic Management Zone of 3 (lake surround, moderate settlement) (Table 8). They identify the existing character of the shoreline as partially or almost totally affected by development, presence of vegetated backdrop ridges and areas of development among almost continuous areas of intervening vegetation. Desired future character is to have regard to key landscape elements. A balance is desired between built form and natural landscape.

Guidelines include minimising substantial alterations to natural ground level and dominance of structures along the foreshore, retaining ridgeline vegetation, screening of buildings and structures, minimising vegetation clearance within 20m of Mean High Water Mark, preserving and improving recreational reserves and keeping the height of buildings below existing ridgelines.

These general guidelines are considered to be satisfied in the proposed development, as it does not require any gross change to ground levels, has no effects on ridges or ridge top vegetation, does not require clearing of vegetation adjacent to the waterway and is not adjacent to a ridge.

We consider that the requirement to prepare an LVIA consistent with the requirements of the LMSMG are met by the assessment in this report.



4.5.5 Lifestyle 2030 Strategy

Direction 3: A well designed and liveable city

Specific relevant directions of the strategy with regard to visual issues are within Strategic Direction 3, A Well designed adaptable and liveable city, Outcomes 3.13, which states:

The scenic qualities of the Lake and its setting, such as foreshores, forested ridged, wooded ridges, riparian areas are promoted, protected and enhanced.

Comment:

The subject site is recognised as of moderate scenic quality and low visual accessibility in this assessment and in the LMSMG, leading to a higher capacity to protect and enhance its values through appropriate development, as is proposed. The application protects the scenic qualities of the Lake and its setting, foreshore etc. to a greater extent than the Concept Approval. In our opinion, the application satisfies Outcome 3.13.

4.5.6 NSW Coastal Policy 1997

Goal 3, Objective 3.2, Strategic action 3.2.2

Goal 3 states:

To protect and enhance the aesthetic qualities of the coastal zone.

Objective 2.2 states:

To design and locate development to complement the surrounding environment and to recognise good aesthetic quality.

Strategic Action 3.2.2 states:

The use of good design principles will be encouraged to ensure more compact, human scale towns are developed with their own character within the constraints of existing infrastructure.

Comment:

The broad Goals and objectives of the policy are matters more appropriately for others with town planning expertise to address.

However it is pointed out that application is made to a location with an existing Concept Approval and in our opinion is of a superior design quality which complements the surrounding environment and is of a potentially good aesthetic quality. It is further considered that the public domain and view availability is of high aesthetic quality and that it uses good design principles which will result in a more compact human scale development.

The LMSMG to which this assessment has had regard has more specific guidelines to appropriate response to the aesthetic qualities of the coastal zone than is provided by the general Goal 3. We also consider that the changes to the site that are proposed, will have no significant negative effect on the resources of landscapes of the same or similar aesthetic quality and character that exist throughout the coastal zone generally and specifically in Lake Macquarie.

The natural components of the landscape that are aesthetic attributes of some value will be protected.



4.5.7 SEPP 71 – Coastal Protection

Part 1 Clause 2 Aims of policy

The relevant aims of the policy are:

a) to protect and manage the natural, cultural, recreational and economic attributes of the New South Wales coast, and

Comment:

The proposed changes to the site would not have any unacceptable visual effect on the natural attributes of the coast. The proposal responds appropriately to the urban, cultural and recreational attributes of the locality as a tourism site and in that regard, the visual effects of the development are compatible with those attributes.

The land is zoned to permit the intended use and one of a very small number of such locations in the region. The natural and cultural features of the land are not negatively affected by the proposal and the application is superior to the Concept Approval. There is minimal tree loss, no change to the foreshore reserves proposed and landscape is intended to soften the appearance of built structures. In our view, the parts of this clause relevant to visual matters are satisfied in the application.

e) to ensure that the visual amenity of the coast is protected

Comment:

The proposed modification to the Concept Approval would not have unacceptable impact on the visual amenity of the coast. The visual character of the immediate setting will be significantly altered, but this would not have an effect of degrading the overall visual amenity of the coast.

As stated above, the site is one identified in the LMSMG as of moderate scenic quality and of low visual accessibility and sensitivity. The development of the land as proposed in the application will have no significant negative effect on the visual resources of the coast generally or on the resources of Lake Macquarie, even if this consideration is confined to the southern basin of the Lake. In addition, the limited areas that can be put to the intended use because of the zoning, means that there would overall be a minimal impact on the amenity of the coast.

k) to ensure that the type, bulk, scale and size of development is appropriate for the location and protects and improves the natural scenic quality of the surrounding area.

Comment:

The character of the built form proposed is similar to those found elsewhere in urban areas on Lake Macquarie where either mixed uses or tourism facilities exist adjacent to the shore, for example Belmont and Toronto. The structures are individually larger in some cases than those in the Concept Approval, however the smaller number, smaller footprint, extensive public domain and high view availability in the application are attributes that better respond to the natural scenic quality of the surrounding area.

At the same time, the proposal is to retain and improve the quality of the natural features of the site, albeit they are limited. The natural and cultural features of the shoreline and reserve are not negatively affected by the proposal.



Part 2 Clause 8 Matters for consideration

The relevant matters for consideration are:

d) the suitability of development given its type, location and design and its relationship with the surrounding area.

Comment:

The Concept Approval acknowledges the suitability of the proposed development's type and design. The built form and mix of residential types to the tourism hub has been amended to be more suitable to the site as a tourism destination. The amended development proposed is suitable to the zone and the intended tourism use.

e) any detrimental impact that development may have on the amenity of the coastal foreshore, including any significant overshadowing of the coastal foreshore and any significant loss of views from a public place to the coastal foreshore.

Comment:

The proposed amended built form would result in improved views to the coastal foreshore compared to the Concept Approval. The amenity of the foreshore would be improved because of the changed spatial qualities of the public domain resulting from smaller built form footprint, expansive landscaped area and continuity with the foreshore reserve. In our opinion there would be no significant loss of views or amenity of the foreshore.

f) the scenic qualities of the New South Wales coast, and means to protect and improve these qualities

Comment:

The extent to which the development could impact on the aesthetic qualities of the coastal zone of New South Wales, is limited by the low visual accessibility of the site to local people as well as the wider population of the state, low sensitivity in regard to the public domain and the moderate scenic quality. We consider that the changes to the site that are proposed, will have no significant negative effect on the resources of landscapes of the same or similar aesthetic quality and character that exist throughout the coastal zone generally and specifically in Lake Macquarie. However, we also note that approval of the application would bring significant tourism use to the site and the region, to the benefit of and improvement of the appreciation of the scenic qualities of the NSW coast.

4.5.8 Coastal Design Guidelines of NSW 2003

Part 1 Introduction

To protect and enhance the cultural, ecological and visual characteristics of a locality

Comment:

The guidelines recommend that land use buffers and setback requirements are necessary to protect ecosystems such as coastal lakes and habitat corridors that often cross between settlements and across public and private boundaries. These aspects of the application are for those with appropriate expertise to address.



To protect local character

Comment:

The guidelines promote diversity consistent with identity and enhancement of local cultural and natural values. The proposed development is compatible with the surrounding existing and approved land uses and the intended future visual character of the locality approved in the Concept Approval. The proposal would be consistent with the desired future character of the site and its surroundings as identified in Lake Macquarie Lifestyle 2030 Strategy.

To encourage new coastal settlements to be appropriately located

In general, large new residential and tourist development are being located on a site-by-site basis controlled by a variety of local and regional plans of differing age and contemporary relevance. Their location often has little regard for how the area will grow in the future or how the development will affect the economic viability of the settlement, its environmental quality, or its character. New development and subdivisions should be located and planned in the context of revised settlement strategies and consistent with provisions in SEPP71.

Comment:

The subject site is in the immediate vicinity of emerging regional centres identified in the Lifestyle 2030 strategy and has an existing Concept Approval, considered in a regional context. In our opinion, the application is strategically superior to the Concept Approval and is therefore consistent with the provisions of SEPP 71.

Vision Statement

The document provides guidelines for appropriate buildings in a coastal context. The vision statement is; The vision for built form in coastal settlements is that all buildings are sensitively designed within their existing context so as to contribute positively to the settlement character in terms of form, height, footprint, scale, massing, amenity, external appearance and materials.

Comment:

I consider for reasons laid out in regard to other coastal amenity issues above that the proposed amended development positively responds to the location, character of the site and the surrounding context. The structures proposed of appropriate height, footprint, scale and external appearance. They would have minimal impacts on amenity. The outcome is a sensitive one that is satisfactory in regard to external appearance.

Objectives Relative to Visual and Related Amenity

Objectives of the guidelines for appropriate buildings in a coastal context in relation to visual and related amenity are;

Ensure amenity is maintained on public land and on site

Be appropriate to its location within the settlement and the settlement type

Be appropriate to its natural setting



Add visual value to its location

Be of high quality design

Recognise the importance of materials suitable to the coastal setting

Maintain a high quality accessible interface with the foreshore.

Comment:

The proposed amended development incorporates foreshore character protection and has no negative impacts on public land. Boardwalks and paths have been proposed to provide desirable amenity and access and linkages throughout the site that are also related to access to the foreshore and provide further opportunities for scenic views and vistas across the site.

The proposed landscape scheme would assist in softening the appearance of the proposed development. There is minimal impact on existing natural vegetation resources.

The public foreshore reserve assists in preserving the existing Lake/foreshore interface and remnant vegetation of both natural and cultural value and the system of paths, gardens, lawns and boardwalks assist in preserving the views from the foreshore.

The proposed development is of potentially high quality design and is supported by a potential suite of materials that are relevant to the coastal setting. Appropriate colours, finishes and construction materials would appropriately respond to the coastal context and mitigate any potential unreasonable impacts.

Guidelines for Appropriate Buildings

The guidelines for appropriate buildings in relation to visual and related amenity are;

Protect views from public places and streets by maintaining consistent setbacks along streets and not placing buildings in view corridors.

Protect local views and vistas throughout and surrounding the settlement from public places by relating new buildings to the topography, reducing heights to maintain views of the surrounding landscape and maintaining consistent, height, bulk, scale with the street and local context.

Comment:

Consistent setbacks are proposed to the existing approved residential development west of the site. However, inside the site, the setbacks between buildings are determined not by reference to roads but in relation to the need to provide maximum view availability to building and the public domain. View corridors are maximised and building placement ensures that corridors remain open. The result is superior to the Concept Approval. There are no unreasonable view loss effects of the built elements in the proposed development.

The proposed amended development will have no other significant effect on the local views and vistas from public places and streetscapes because of the high accessibility to views. It is considered to be consistent with these guidelines.

4.6 Relevant Planning Principles

The principles enunciated in the Land and Environment Court of NSW by Roseth SC in *Tenacity* and by Moore SC in *Rose Bay* were considered in relation to view loss from the private and public domains respectively.



The planning principles in Rose Bay Marina have extended Tenacity to considering view loss from the public domain. For the sake of completeness and reasonableness RLA have reviewed this planning principle and summarised its guidelines below.

Moore SC sets out a process for assessing the acceptability of visual impacts of private developments on views from the public domain in the vicinity of the development. The process of determining whether a development is acceptable or not must account for reasonable development expectations as well as the enjoyment of members of the public, or outlooks from public places. The principle is divided into 2 Stages involved in assessment, the first is factual and the second analytical.

Stage 1

In this stage relevant baseline data is identified and is broken down into 5 key components;

Identification of Views

Nature and extent of any obstruction in the view.

Relevant compositional elements (eg static, dynamic and frequency if a view is dynamic).

What might not be in the view (eg compositional elements)

Is the change permanent or temporary?

What might be the curtilages of important elements within the view? (eg will an acceptable amount of space around such elements remain to allow the existing setting to be viewed and appreciated?)

Location of Views

The assessment should define locations within the public domain from which the potentially interrupted view is enjoyed.

Extent of Obstruction

A public domain view is one which can be enjoyed by all members of the whole population and therefore it is not appropriate to adopt a normative eye height from which views are to be assessed, as is the case in the Planning Principle developed in Tenacity.

Intensity of the public use

How well used are the public domain locations from which the view is currently enjoyed and therefore how many people (a few, a moderate number or many) will be affected by that or those views being obscured in whole or in part, by the proposed development.

Identified Views

The assessment must determine whether the importance of public domain views are identified in any document. This includes whether there is specific acknowledgement of the importance of a view eg heritage or retention of protection of public domain views are recorded in any statutory document.

Stage 2

This involves the analysis of the baseline data, which will need to be weighted in some way in order to develop a quantitative and qualitative assessment.

Qualitative Assessment

This evaluation requires an assessment of aesthetic and other elements in the view, which despite being subjective must follow a defined process which outlines the factors taken into account and the weighting attached to them. As with Tenacity a high value (or weighting) is to be attached to what may be regarded as iconic views of major landmarks) or weight determined by other factors such as the status of a statutory document and the terms in which an objective about views is expressed. A specific weighting framework is not provided.

Factors to be considered include;

Is any significance attached to the view likely to be altered?

Who has attributed the significance to the view and why?



Would a change (ie the proposed development) make this view less desirable?

Would a change alter whether the view is static or dynamic and is this positive or negative?

If the view is a known attraction from a specific location, how will the view be impacted?

Would a change render a view tokenistic?

Has the existing view already been degraded such that the remaining view warrants preservation?

Quantitative Assessment

This requires an assessment of the extent of the present view, compositional elements within it and the extent to which the view will be obstructed by or changed by the insertion of the elements of the proposed development.

Relevant questions to answer include; Is the impacted view (which is created after the change) still sufficient for the public to understand the nature of and appreciate the attractive or significant elements which existed in the non-impacted view eg. the view that exists prior to the development? Moore notes that the greater the existing obstruction of a view, the more valuable that which remains may be.

Table 4.6: Analysis of RLA methodology against Rose Bay planning principles

Assessment Stages	Rose Bay Planning Principle Themes	Present in RLA Methodology
Stage 1		
Identification of Baseline Factors	Identification of View its nature and scope, existing obstructions, compositional elements, longevity of change, view setting	Yes: View Analysis and field assessment physical visual character and scenic quality
	Location of Views, where is the view available from?	Yes: Determine viewing locations and situations
	Extent of Obstruction or visibility in each view	Yes: Effect on view composition, effect on visual character and scenic quality, physical absorption capacity
	Intensity or frequency of exposure to the view	Yes: View loss or blocking and Overall extent of visual effects
	Views identified in any statutory documents	Yes: Relevant information and policies are addressed
Stage 2		
Qualitative Assessment	Changes to the significance of the view, what are the effects of change, Do the impacts make the view less desirable or understandable?	Yes: Assessment of Visual impacts on compatibility, sensitivity
Quantitative Assessment	Analysis of existing effects and those proposed, compositional changes, proportional change in the view compared to the remaining unobstructed view etc.	Yes: Compatibility and sensitivity, Effect on Composition, Significance of residual visual impact on desired future character.



RLA note that our Visual Assessment Method Flow Chart addresses the themes and issues discussed by Moore SC. We have tabulated the key attributes set out in Rose Bay and compared them to those addressed in this assessment using our own Methodology. In this regard we consider that all the relevant themes which Moore sets out, have been addressed.

4.6 Assessment of the proposed Mitigation Measures

4.6.1 Proposed Landscaping

The proposed landscape scheme would assist in mitigating potential visual effects and impacts for both high and medium sensitivity zones. The scheme will assist in providing access to the foreshore, amenity for users and an appropriate setting for earthworks and retaining walls for the road and car park components, while retaining existing natural vegetation in the foreshore reserve.

4.6.2 Colours and Finishes

The colours and finishes of the built component of the development would be chosen to be sympathetic to the colours of the natural environment and to blend and harmonise with the natural features of the site as much as possible. Subject to final design and any residual concerns that Council may have, these may be subject to Conditions of Consent.



4.6.3 Lighting

The lighting for the buildings and landscape would have similar effects to that approved in the Concept Approval. Landscape lighting would only be sufficient for safe access and surveillance and for safe working conditions. The lighting for the proposal would be subject to the need for the design to meet the Australian Standard AS 4282-1997, Control of Obtrusive Effects of Outdoor lighting. A lighting management plan would be a likely requirement for consent.

5.0 Residual Impacts and Conclusions

The southern basin of Lake Macquarie has generally low public accessibility, including low accessibility from the waterway, as identified in the LMSMG and confirmed in the assessment in this report. The locality is of moderate scenic quality and varied integrity. The subject site therefore has a significant capacity to absorb the development proposed without visual effects that would be perceived by large numbers of viewers from sensitive public domain locations. The subject site itself possesses minor scenic resources.

The Concept Approval contemplates the transformation of the site to an urban lake-side setting and a tourism and residential destination. However, for various reasons outlined above, the Concept Approval is unlikely to be successful in making the site into a world-class tourism destination. In our opinion as regards view accessibility, relationship of the built form to the views and the lake, landscape and foreshore, the application is superior to the Concept Approval. The reasons for this opinion are set out in various places above.

The assessment carried out above finds that there are substantive differences between the Concept Approval and the application with regard to building numbers and proposed building form, character of the public and private domains, view availability and spatial qualities of the site. At the same time, these differences will largely be perceived within the site and will be seen as part of the distinctive character that is intended for the development and an integral part of its appeal as a destination.

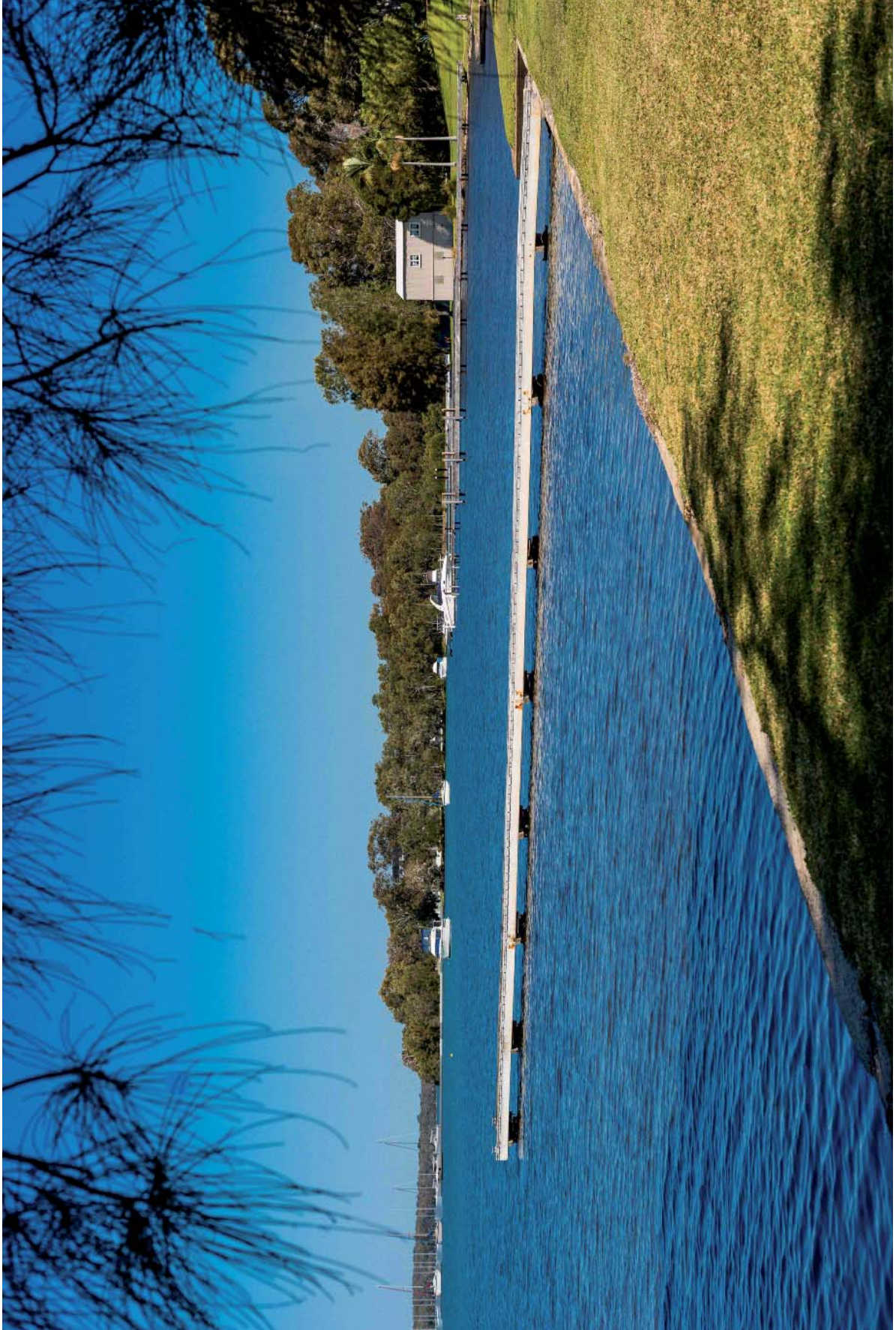
There will be residual impacts as a result of the change in the site brought about by the concepts for the built form being translated into a two to four but predominantly 3-4 storey character. A more consistent theme for the whole site is the result, compared to the Concept Approval, which was partly a tourism site and partly a small lot residential development. The distinctive character of the application would remain no matter how the individual buildings or groups of buildings are delivered, giving more certainty as to the visual character of the outcome in regard to the built form compared to the Concept Approval.

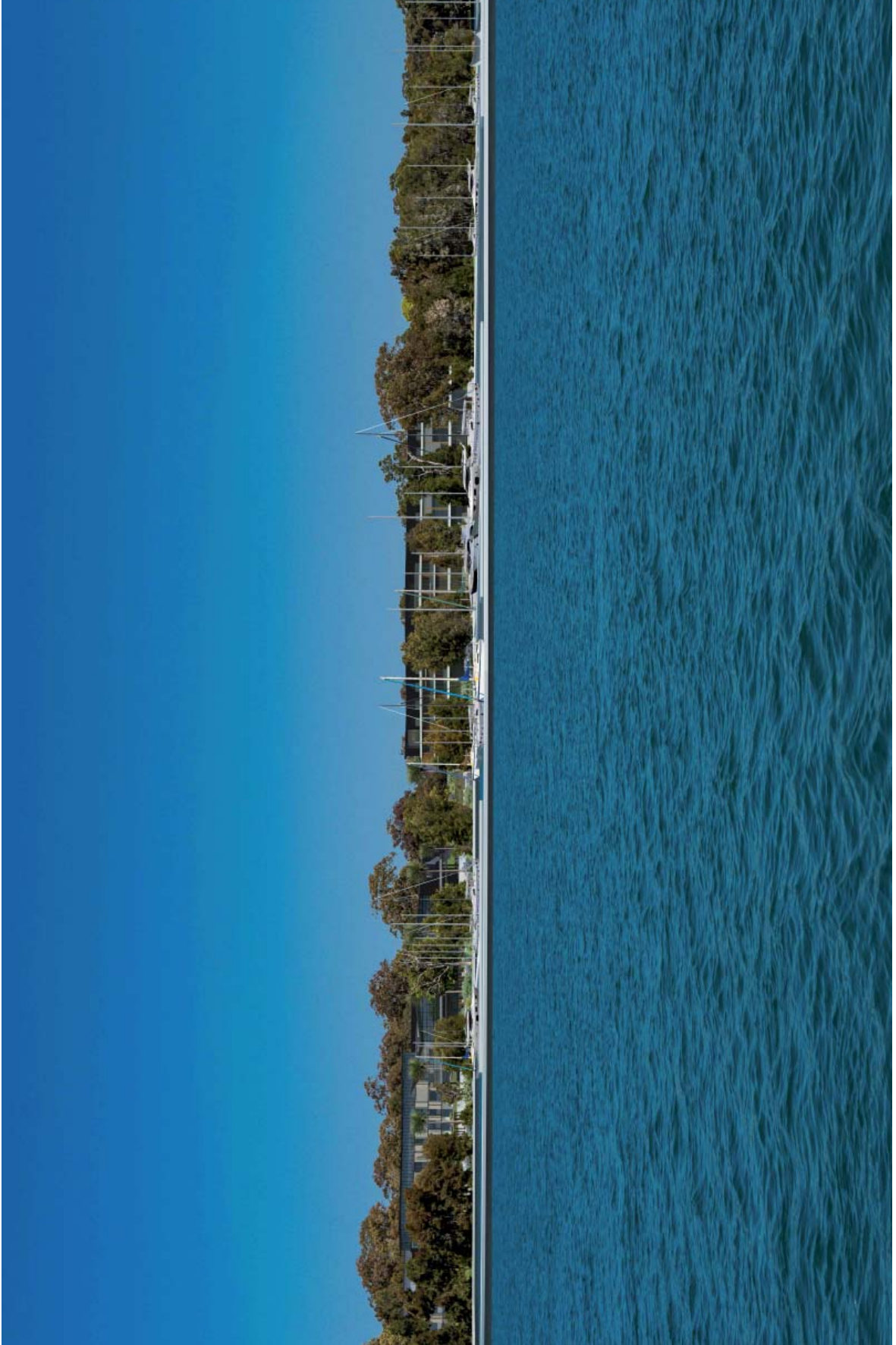
While the predominant building height would be four storeys, that scale can be accommodated on the site within the fringing vegetation and below the tree canopy height. Some additional canopy trees are proposed as a part of the landscape scheme to augment the canopy without conflicting with the obvious pull factor of views of the Lake. Clearly the proposed future hotel/marina building would be more prominent than residential buildings in some views from the north east, however the footprint size indicates it to be a relatively modest scaled building and indications of potential detailing are that the top level would be made to appear recessive and light weight.

This assessment against the criteria of the LMSMG also found the development proposed to be acceptable.

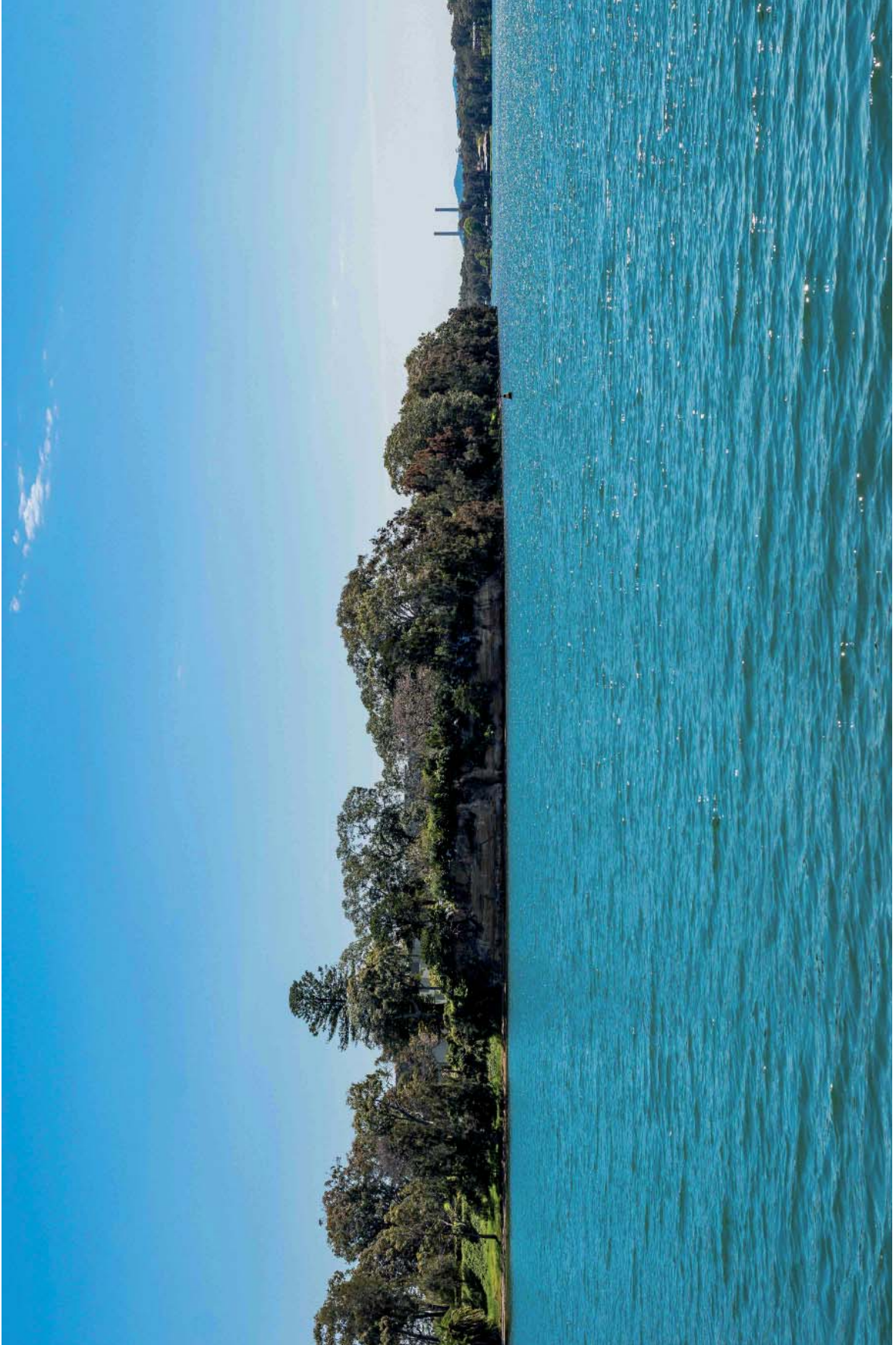
We consider that the public domain benefits of the development and the contrast they will provide to the generally privatised foreshores of the Lake in the vicinity are major compensatory factors in considering the marina component of the proposal, which has a higher level of effect on visual character than the built form. The benefits will flow to high numbers of people, not only those within the subject site, but from elsewhere in the locality and the region.

Appendix A - Photomontages









Appendix B - Photographic Plates



Plate 1. VP1 Brightwaters Park, public reserve at the end of Lake View Avenue, Brightwaters



Plate 2. VP2 Foreshore reserve at the end of Bardon Lane, Brightwaters



Plate 3. VP3 Opposite 78 Bulgonia Road, Brightwaters



Plate 4. VP4 Car park of Brightwaters Christian College



Plate 5. VP5 Waterway west of Point Wolstoncroft Sports and Recreation Centre



Plate 6a. VP6 Waterway north west of Summerland Point



Plate 6b. VP6 Waterway north west of Summerland Point



Plate 7. VP7 Waterway north of Frying Pan Point (Summerland Point)



Plate 8. VP8 Waterway north north west of Sandy Beach (Summerland Point)



Plate 9. VP9 Waterway north of Vales Point



Plate 10. VP10 Waterway north north east of Wyee Point



Plate 11a. VP11 Waterway south south west of Bluff Point



Plate 11b. VP11 Waterway south south west of Bluff Point



Plate 12a. VP 12 Waterway east of Bluff Point



Plate 12b. VP 12 Waterway east of Bluff Point



Plate 12c. VP 12 Waterway east of Bluff Point



Plate 13a. VP 13 Waterway east of the existing large gate on the foreshore. Approximately halfway along the eastern boundary of the site.



Plate 13b. VP 13 Waterway east of the existing large gate on the foreshore. Approximately halfway along the eastern boundary of the site.



Plate 14. VP 14 Waterway mid Bardens Bay on approximate alignment with Brightwaters Christian College



Plate 15a. VP 15 Waterway south of the point between Bardens and Sugar Bays



Plate 15b. VP 15 Waterway south of the point between Bardens and Sugar Bays



Plate 16. VP 16 Waterway eastern extent of Sugar Bay



Plate 17. VP 17 Waterway south east of Fishery Point



Plate 18a. VP 18 Reserve and public boat ramp Lakeview Road, Morisset Park



Plate 18b. VP 18 Reserve and public boat ramp Lakeview Road, Morisset Park



Plate 19. VP 19 Residential subdivision approved under separate DA



Plate 20. VP 20 Pacific Highway near Cams Wharf exit



Plate 21. Detail Bluff Point from the waterway



Plate 22. Brightwaters from the northern foreshore of the site



Plate 23. Adjacent development in Lakeview Road, Morisset Park from the north western foreshore of the site.



Plate 24. Eastern foreshore reserve extending north from Bluff Point



Plate 25. Outward screening effect of remnant vegetation on the eastern foreshore



Plate 26. Sparse remnant vegetation on the north eastern foreshore.



Plate 27. View southward from Bluff Point



Plate 28. Bluff Point and Sundial gardens



Plate 29. Detail, sundial gardens



Plate 30. Lake Macquarie Yacht Club marina, Belmont



Plate 31. Marks Point Marina, Belmont



Plate 32. Wyee Bay Marina



Plate 33. Belmont Bay. Six and eight storey developments.



Plate 34. Belmont Bay. Two storey stepped development



Plate 35. Wallarah/ Murrays Beach



Plate 36. Fishery Point, Sunshine



Plate 37. Mannering Park



Plate 38. Fishing Point



Plate 39. Coal Point



Plate 40. Diamond Drill Point



Appendix C: Assessment Methodology

B.1 Introduction

The assessment of visual impacts is a field that requires a degree of subjective judgement and cannot be made fully objective. It is therefore necessary to limit the subjectivity of the work by adopting a systematic, explicit and comprehensive approach. This has the aim of separating aspects that can be more objective, for example the physical setting, visual character, visibility and visual qualities of a proposal, from more subjective elements, such as visual absorption capacity and the compatibility of the proposal with the setting.

The methodology used in the present assessment has been developed over several years and uses relevant aspects of methods accepted in landscape assessment, extended and modified to adapt to urban and maritime environments. The modifications introduced are informed by visual perception research that has been carried out by others and us in both natural and urban contexts. The methodology is also designed to be compatible with the LMSMG.

The flow chart at Figure 1.1 above indicates the relationships among the parts of the visual impact assessment methodology.

B.2 Components of the Methodology

Overall, the major components of the visual impact assessment are determining the concept for the development, and general strategic planning principles, view analysis, visual effects analysis, visual impact evaluation and assessment of significance of residual visual impacts. This assessment is also supplemented with an assessment of the merits and compliance of the proposed redevelopment with the relevant Planning Instruments in relation to visual and related amenity impacts and the mitigation measures that have been undertaken to reduce or eliminate residual impacts. It is also supplemented by a comparative analysis of other mixed shoreline development and marinas in the Lake Macquarie locality.

B.2.1 The Components of the View Analysis

The development proposed and detailed field assessment

This includes a thorough understanding of the proposed development including its location, scale and extent to understand the scale and spatial arrangement of the development. The next step is to carry out a detailed field assessment by identifying the potential viewing locations, visiting the representative locations, documenting the proposal's approximate location on a base map, photographing representative locations and filling out an evaluation sheet for each, which contains separate and overall assessment of the visual effects and relative visual impacts factors. Examples of the analysis sheets can be found in Appendix D. The assessment factors are explained in Section B2.2.2 and B2.2.3. The analysis sheet that was filled out for each viewing location rated the factors in three ranges; Low, Medium and High. An indicative rating table that describes what is considered a low, medium and high effect and impact on each factor is shown in Table B2.2.

Identifying viewing locations and viewing situations

So as to represent all of the kinds of viewing locations which could be affected by each of these factors and variations among them, a view point analysis was conducted. This was carried out as part of the ground truthing exercise associated with mapping the visual catchment. Views on land and on the waterway were assessed. Viewing places were chosen so as to represent the full range of possible view experiences, situations, distances and land uses that are possible, in the entire visual

Table 2.2 Indicative Contribution to Visual Effects and Visual Impacts if visual factors are applicable

Visual Effects Factors			
Factors	Low Effect	Medium Effect	High Effect
Scenic quality	Proposal does not have any negative effects on features which are associated with high scenic quality, such as the quality of panoramic views, proportion of or dominance of natural vegetation, appearance of steep and complex topography and presence of extensive areas of water.	Proposal has the effect of reducing any or all of: the extent of panoramic views, the proportion of or dominance of natural vegetation, views of steep or complex topography or the perception of extensive areas of water and maritime features, without significantly decreasing their presence in the view or the contribution that the combination of these features make to overall scenic quality	The proposal significantly decreases or eliminates perception of the integrity of any of: panoramic views, dominance of natural vegetation, steep or complex topography, extensive areas or water and maritime features. The result is a significant decrease in perception of the contribution that the combinations of these features make to scenic quality.
Visual character	Proposal does not decrease the presence of or conflict with existing scenic character elements such as topography, urban fabric, land/water interface and maritime features.	Proposal contrasts with or changes the relationship between existing scenic character elements in some individual views by adding new or distinctive features, but does not affect the overall visual character of the Lake Macquarie setting.	The proposal introduces new or contrasting features which are in conflict with, reduce or eliminate existing character features. The proposal causes a loss of or unacceptable change to the overall visual character of the locality.
View place sensitivity	Public domain viewing places providing distant views, and/or with small no. of users for small periods of viewing time (Glimpses-as explained in viewing period).	Medium distance range views from roads, recreation areas and waterways with medium no. of viewers for a medium time period (few minutes up to half day-as explained in viewing period).	Close distance range views from roads, recreation areas and waterways with medium to high numbers of users for the majority of the day (as explained in viewing period).
Viewer sensitivity	Residences providing distant views (>1000m)	Residences located at medium range from site (100-1000m) with views of the development available from bedrooms and utility areas.	Residences located at close or middle distance (<100 or 100-1000m as explained in viewing distance) with views of the development available from living spaces and private open spaces.
View composition	Panoramic views, or views restricted in visibility of the proposal by the screening or blocking effect of vegetation and/or buildings.	Expansive or restricted views where the restrictions do not significantly reduce visibility of the proposal.	Feature or focal views of the proposal
Relative viewing level	Elevated position such as ridge top or higher up on slope with clear view over marina.	Slightly elevated (lower slopes) with partial views over marina.	Adjoining shorelines, waterway or reserves with view blocked by marina and boats.
Viewing period	Glimpse (eg moving vehicles).	Few minutes up to half day (eg walking along foreshore, recreation in adjoining open space, boating on adjoining waterway).	Majority of day (eg adjoining residence or workplace).

Viewing distance	Land area or waterways (Distant Views)($>1000\text{m}$).	Land areas or water (Medium Range)($100\text{--}1000\text{m}$).	Adjoining shoreline or waterway (Close)($<100\text{m}$).
View loss or blocking effect	No view loss or blocking	Partial or marginal view loss compared to the expanse/extent of views available such as loss of part of foreshore, foothill or small portion of land-water interface in an expansive or panoramic view No loss of views of scenic icons.	Loss of majority of available views such as those of majority of shoreline, ridges, waterways, land-water interface in a restricted or focal view. Loss of views of scenic icons.
Visual Impacts Factors			
Factors	Low Impact	Medium Impact	High Impact
Physical absorption capacity	Existing elements of the landscape physically hide, screen or disguise the proposal. The presence of marinas, large nos. of swing moorings, marina buildings and associated structures in the existing landscape context reduce visibility. Low contrast and high blending within the existing elements of the landscape and built forms.	The proposal is of moderate visibility but is not prominent because its components, forms and line and its textures, scale and building and vessel form have low to moderate contrasts with existing features of the scene.	The proposal is of high visibility and it is prominent in some views. The marina buildings and/or the storage arrangement of boats has a high contrast and low blending within the existing elements of the landscape and waterway and associated built forms.
Compatibility with maritime features	High compatibility with the character, scale, form, colours, materials and geometrical arrangements of existing maritime features in the immediate context. The range of sizes of vessels accommodated in the marina is similar to other examples in the immediate setting	Moderate compatibility with the existing maritime features in the immediate context. The proposal introduces new maritime features, but these features are compatible with the scenic character and qualities of similar settings in which they are accommodated in Lake Macquarie. The average sizes of vessels accommodated in the marina is greater than the average of examples in the immediate setting	The character, scale, form and spatial arrangement of the proposal has low compatibility with the maritime features in the immediate context or which could reasonably be expected to be new additions to it when compared to other examples in the Lake Macquarie locality. The sizes and forms of vessels accommodated in the marina are outside the range of examples in the locality
Compatibility with urban/natural features	High compatibility with the character, scale, form, colours, materials and geometrical arrangements of existing urban and natural features in the immediate context. Low contrast with existing elements of the built environment.	Moderate compatibility with the character, and geometrical arrangements of the existing urban and natural features in the immediate context. The proposal introduces new urban features, but these features are compatible with the scenic character and qualities of similar settings in which they are accommodated in Lake Macquarie	The character, scale, form and spatial arrangement of the proposal has low compatibility with the urban features in the immediate context or which could reasonably be expected to be new additions to it when compared to other examples in the Lake Macquarie locality.



catchment, as required by the Director General of Planning's Requirements and by good visual impact assessment practice.

The viewing locations fall into two categories, a) Public domain locations and b) Private domain locations. Public domain locations are major and minor roads, public reserves and recreation areas and waterways. The private domain viewing locations are predominantly residences.

It was not possible for views to be assessed from the many residences that would have views containing the proposal. However, it was possible to interpret the likely effects of the proposal based on views taken toward the proposal from roads and reserves in the vicinity of the residences and also by observing the locations of buildings with windows and outdoor areas which would provide views when these were seen from the existing facilities.

The viewing places visited and analysed therefore represent views predominantly from the public domain, but they also provide insights into the likely visual effects on private views. All the significant vantage points from which the site can be viewed, both water and land based, were assessed. A sample of the very large number of viewing places assessed, which represents examples of every relevant kind of viewing place, was abstracted from the total number of places assessed, for detailed analysis.

Mapping viewing locations and situations

The representative viewing locations sample visited during the field assessment are mapped including the ones for which photomontages have been prepared to represent the future appearance of the proposed redevelopment in the existing context (see photomontages, Appendix A).

Identification and mapping of visual catchment

The potential total visual catchment is mapped. The potential total visual catchment means the physical area within which the proposal would be visible and identifiable if there were no other constraints on that visibility, such as intervening vegetation and buildings. The catchment on the water is not delineated by a finite boundary because there is no identifiable physical feature that can define it. As is the case for views from the distant foreshore or land, the potential total visual catchment is larger than the area within which there could be visual effects of the proposal. This is because with increasing distance, perspective effects, the horizon of the water body itself and intervening elements such as topography, buildings and boats, a viewer's ability to discern and potentially be affected by the proposal would decrease to zero before the theoretical extent of the potential total visual catchment is reached.

Within the boundary of the area mapped as the potential total visual catchment, the visibility of the proposal would therefore vary. We identify the area within which the proposal would be identifiable and where it could cause visual impacts by assessing visibility.

Visibility means the extent to which the proposal would be physically visible to the extent that it could be identified, for example as a new, novel, contrasting or alternatively a recognisable but compatible feature. Features such as vegetation, buildings and intervening topography can affect the degree of visibility.

B2.2.2 The components of the Visual Effect Analysis Matrix

B2.2.2.1 Base-Line Factors

These are the criteria that remain predominantly constant and independent of the nature of viewing locations and factors which condition the viewing situation.

Visual character



The visual character of the locality in which the development would be seen is identified. It consists of identification of the physical and biological components of the area and the setting of the proposal that contribute to its visual character. The character elements include topography, vegetation, natural systems, land use, settlement pattern, urban form, interface of land-water elements, maritime features and waterways. Visual Character has also been assessed for the locality in the LMSMG.

Visual character is a baseline factor against which the level of change caused by the proposal can be assessed. The desired future character of the locality is also relevant to assessing the extent of acceptable change to character.

Scenic Quality

Scenic quality is a measure of the ranking, which the setting of the proposal either is accepted to, or would be predicted to have, on the basis of empirical research carried out on scenic beauty, attractiveness, preference or other criteria of scenic quality. Scenic quality has also been assessed for the locality in the LMSMG.

Scenic quality is a baseline factor against which the visual impacts caused by the proposal can be assessed.

View place sensitivity

View place sensitivity means a measure of the public interest in the view. The public interest is considered to be reflected in the relative number of viewers likely to experience the view from a publicly available location. Places from which there would be close or middle distance views available to large numbers of viewers from public places such as roads, or to either large or smaller numbers of viewers over a sustained period of viewing time in places such as reserves, beaches and walking tracks, are considered to be sensitive viewing places. View place sensitivity in regard to likely viewer numbers and accessibility has also been assessed for the locality in the LMSMG.

Viewer sensitivity

Viewer sensitivity means a measure of the private interests in the effects of the proposal on views. The private interest is considered to be reflected in the extent to which viewers, predominantly viewing from private residences, would perceive the effects of the proposal. Residences from which there would be close or medium distance range views affected, particularly those which are available over extended periods from places such as the living rooms and outdoor recreational spaces, are considered to be places of medium and high viewer sensitivity respectively.

The relationship between the viewer's location in either the private or public domain and the viewing distance in determining view place or viewer sensitivity is shown in the table below. (For example, a view place in a reserve or foreshore at a distance of 100-1000m is rated as of medium sensitivity)

Table B2.3: Relationship between viewing situation, viewing distance and view/viewer sensitivity zones

View Place or Viewer Sensitivity				
	L	M	H	
Public Domain	Roads			
	Reserves/foreshore			
	Waterway			X
Private Domain	Residence			
	>1000m	1 0 0 - 1000m	<100m	
	Viewing Distance			

B2.2.2.2 Variable Factors

These are the assessment factors that vary between viewing places with respect to the extent of visual effects.

View composition type

View composition type means the spatial situation of the proposal with regard to the organisation of the view when it is considered in formal pictorial terms. The types of view composition identified are:

Expansive (an angle of view unrestricted other than by features behind the viewer, such as a hillside, vegetation and buildings.)

Restricted (a view which is restricted, either at close range or some other distance, by features between or to the sides of the viewer and the view such as vegetation and buildings.)

Panoramic (a 360 degree angle of view unrestricted by any features close to the viewer who is surrounded by space elements.)

Focal (a view that is focused and directed toward the proposal by lateral features close to the viewer, such as road corridors, roadside vegetation, buildings, boats etc.)

Feature (a view where the proposal is the form element that dominates the view, for example in close range views.)

It is considered that the extent of the visual effects of the proposal is related to its situation in the composition of the view. The visual effect of the proposal on the composition of the view is considered to be greater on a focal or a feature view, cognisant of the distance effect, compared to a restricted, panoramic or expansive view.

Relative viewing level

Relative viewing level means the location of the viewer in relative relief, compared to the location of the proposal. It is conventional in landscape assessment to assess views from locations above, level with and below the relative location of the proposal. However when maritime developments are concerned, the latter viewing level (i.e. relatively below the level of the proposal) has no practical application.

It is considered that the visual effects of a development are related to the relative viewing level and distance. Viewing levels above the development where views are possible over and beyond it decrease the visual effects, whereas views from level with and close to the development, dependent on viewing distance, may experience higher effects, particularly if built form intrudes into horizons.



Viewing period

Viewing period in this assessment means the influence on the visual effects of the proposal which is caused by the time available for a viewer to experience the view. It is assumed that the longer the potential viewing period, experienced either from fixed or moving viewing places such as dwellings, roads or the waterway, the higher the potential for a viewer to perceive the visual effects of the proposal. Repeated viewing period events, for example views repeatedly experienced from roads as a result of regular travelling, are considered to increase perception of the visual effects of the proposal.

Viewing distance

Viewing distance means the influence on the perception of the visual effects of the proposal which is caused by the distance between the viewer and the development proposed. It is assumed that the viewing distance is inversely proportional to the perception of visual effects: the greater the potential viewing distance, experienced either from fixed or moving viewing places, the lower the potential for a viewer to perceive and respond to the visual effects of the proposal.

Three classes of viewing distance have been adopted which are the same as those in Appendix D and Figure D2 in the DCP methodology, i.e. short range (<100m), medium range (100-1000m) and distant (>1000m).

View loss or blocking effects

View loss or blocking effects in this assessment means a measure of the extent to which the proposal is responsible for view loss or blocking the visibility of items in the view. View loss is considered in relation to the principles enunciated in the Land and Environment Court of NSW by Roseth SC in *Tenacity Consulting v Warringah* [2004] NSWLEC 140 - Principles of view sharing: the impact on neighbours. Although *Tenacity* concerned view losses from residential properties, the matter of what could be construed to be a valuable feature of the view which could be lost, e.g. specific features of views such as whole views and iconic elements viewed across water, alluded to in *Tenacity*, are of some relevance to the public domain also. View loss in the public domain specifically has been considered in relation to the planning principles in *Rose Bay Marina Pty Limited v Woollahra Municipal Council and anor.* [2013] NSWLEC 1046.

It is assumed that view loss and blocking effects increase the perception of the visual effects of the proposal. It is also assumed that view loss and view blocking can be important matters for consideration in regard to short range views from the public domain of the foreshore and potentially from nearby adjacent residences. View loss and blocking effects are likely to be more pronounced for the marina component of the proposal than the buildings.

B2.2.2.3 Overall Extent of Visual Effect

Based on the inspection of the pattern of the assessment ratings for the above factors on the relevant analysis sheet for each viewing location an overall rating is arrived at which represents an overall extent of visual effects for a viewing location.

B2.2.3 The Components of the Visual Impact Analysis

The criteria in 2.2 concern assessment of the extent of the visual effects of the proposal when seen from specific viewing places. The extent of the visual effects is the baseline assessment against which to judge the visual impacts.

Whether or not a visual effect is an impact of potential significance cannot be equated directly to the extent of the visual effect. For example, a high visual effect can be quite acceptable, whereas a

small one can be unacceptable. As a result, it is necessary to give a weighting to the assessed levels of effects to arrive at an assessment of the impact.

This method therefore does not equate visual effects directly to visual impacts. The approach is to assess visual effects as in 2.2.2 above to arrive at an overall level of visual effect of the proposal for each kind of viewing place and then to assess the level of impact, if any, by giving differential weighting criteria to impact criteria. By this means, the relative importance of impacts are distinguished from the size of the effect. We consider that two weighting criteria are appropriate to the overall assessment of visual impacts, Physical Absorption Capacity and Visual Compatibility. Each of these addressed the primary question of the acceptability of the visual effects and changes caused by the proposal.

B2.2.3.1 Physical Absorption Capacity

Physical Absorption Capacity (PAC) means the extent to which the existing visual environment can reduce or eliminate the perception of the visibility of the proposed redevelopment.

PAC includes the ability of existing elements of the landscape to physically hide, screen or disguise the proposal. It also includes the extent to which the colours, material and finishes of buildings and in the case of boats and buildings, the scale and character of these allows them to blend with or reduce contrast with others of the same or closely similar kinds to the extent that they cannot easily be distinguished as new features of the environment.

Prominence is also an attribute with relevance to PAC. It is assumed in this assessment that higher PAC can only occur where there is low to moderate prominence of the proposal in the scene.

Low to moderate prominence means:

Low: The proposal has either no visual effect on the landscape or the proposal is evident but is subordinate to other elements in the scene by virtue of its small scale, screening by intervening elements, or difficulty of being identified.

Moderate: The proposal is either evident or identifiable in the scene, but is less prominent, makes a smaller contribution to the overall scene, or does not contrast substantially with other elements or is a substantial element, but is equivalent in prominence to other elements and landscape alterations in the scene.

Design and mitigation factors are also important to determining the PAC. Appropriate colours, materials, building forms, line, geometry, textures, scale, character and appearance of buildings, marina structures and vessels are relevant to increasing PAC and decreasing prominence.

PAC is related to but distinct from Visual Compatibility (see below).

B2.2.3.2 Visual Compatibility

Visual Compatibility is not a measure of whether the proposal can be seen or distinguished from its surroundings. The relevant parameters for visual compatibility are whether the proposal can be constructed and utilised without the intrinsic scenic character of the locality being unacceptably changed. It assumes that there is a moderate to high visibility of the proposal to some viewing places. It further assumes that novel elements which presently do not exist in the immediate context can be perceived as visually compatible with that context provided that they do not result in the loss of or excessive modification of the visual character of the locality.

A comparative analysis of the compatibility of similar items to the proposal with other locations in the area which have similar visual character and scenic quality or likely changed future character can give a guide to the likely future compatibility of the proposal in its setting.

Because the development proposed is on the interface between water and land, with components



on each, the question of its visual impacts also depends on its perception both as an entity and in regard to its compatibility with the major scenic character attributes. In this regard, both the maritime/ industrial environment and the urban/natural environment are attributes of relevance. Hence, it is considered that there are two relevant measures of Visual Compatibility, i.e. Compatibility with Urban and Natural Features, and Compatibility with Maritime Features.

Visual compatibility with urban and natural features

This assessment is a measure of the extent to which the visual effects of the proposal are compatible with urban and natural features. It is assumed that in some views the proposal can be seen and clearly distinguished from its surroundings. Compatibility does not require that identical or closely similar features to those which are proposed exist in the immediate surroundings.

Compatibility with Urban and Natural Features means that the proposal responds positively to or borrows from within the range of features of character, scale, form, colours, materials and geometrical arrangements of urban and natural features of the surrounding area or of areas of the locality which have the same or similar existing visual character.

Visual compatibility with Concept Approval

This assessment is a measure of the extent to which the visual effects of the proposal are compatible with the existing Concept Approval. In some views, the proposal can be seen and clearly distinguished from its surroundings. Compatibility does not require that identical or closely similar features to those that are approved exist in the application or the immediate surroundings.

Compatibility with the Concept Approval means that the proposal responds positively to or borrows from within the range of features of character, scale, form, colours, materials and overall qualities of tourism development sites of the surrounding area or of areas of the locality or region.

B2.2.3.3 Overall Extent of Visual Impact

Based on the inspection of the pattern of the assessment ratings for the above factors on the relevant analysis sheet for each viewing location an overall rating is arrived at which represents an overall extent of visual impacts for a viewing location.

B2.2.4 Impacts on visual Sensitivity Zones

Three visual sensitivity zones are identified which are based on the view place sensitivity or viewer sensitivity as explained above in 2.2.2.1 and Table B2.1. These are related to the distance zones from the development site and whether views are from significant public domain or private viewing locations. Viewing places within the high or medium visual sensitivity zones are further assessed as explained below.

Impact assessment for each zone

An overall impact rating for each of the three visual sensitivity zones is arrived at by inspecting the pattern of the assessment ratings for the visual impacts factors (as given in 2.2.3) on the relevant analysis sheet for each viewing location in that zone. It is generally found that the close range visual sensitivity zone is most affected by any development as the development forms part of the foreground views from the viewing locations within this zone.



Analysis against relevant information/planning instruments/policies & master plans

The proposed redevelopment and its overall impacts on each of the visual sensitivity zones is analysed against the relevant information above in Section 4.5.

Assessment of the mitigation measures proposed to eliminate visual impacts

The mitigation measures that are proposed and approved in the Concept Approval are then assessed in terms of their capability to overcome the negative visual effects and impacts on each of the visual sensitivity zones. Other mitigation measures and management guidelines are then formulated to overcome every possible visual effect and impact.

Significance of residual visual impacts

Finally and subsequent to the visual effects of the mitigation factors being assessed, a relevant question is whether there are any residual visual impacts and whether they are acceptable in the circumstances. These residual impacts are predominantly related to the extent of visual change to the immediate setting and are also a result of personal choices and preferences.

In terms of the urban component of the development, residual impacts relate to individuals' preferences for the nature and extent of change which cannot be mitigated by means such as vegetation, colours, materials and the articulation of building surfaces.

These personal choices are also a result of people's resistance or resilience towards any change to the existing arrangement of views. Particular individuals or groups may express strong preferences for either the approved or proposed form of urban development. There is no clear research evidence of which we are aware to support either preference.

The significance of these residual impacts is assessed on the basis of the relative sensitivity of viewers and viewing places that may experience these impacts. Whether overcoming these impacts would result in undermining of the potential capacity of the development site to economically support the intended use is not the focus of a visual impacts assessment such as this.

APPENDIX D - DATA SHEETS

View point: 1				
Brightwaters Park, public reserve at the end of Lake View Avenue, Brightwaters				
This is a representative view that also applies to residences located behind the reserve. The proposed Hotel and function centre buildings will be partly visible, with tourism and residential buildings increasingly less visible and screened by vegetation on the foreshore and in the landscape between and among the buildings further south on the site. the vegetation canopy will remain the highest element on the site.				
Expansive	Restricted	Panoramic	Focal	Feature
Assessment and weighting factors		Ratings		
Assessment Factor where effects increase as ratings increase	Assessment	Low	Medium	High
	Visual Effect	(Low Effect)	(Medium effect)	(High effect)
<i>Base-line factors</i>				
Effect On Visual Character of View			X	
Effect on Scenic Quality of View			X	
<i>Variable factors</i>				
Effect On View Composition			X	
Effect of Relative Viewing Level			X	
Effect of Viewing Period				X
Effect of Viewing Distance			X	
View Loss or Blocking Effect			X	
Overall Extent of Visual Effect		MEDIUM		
<i>Weighting factors</i>				
Weighting Factor where impacts decrease as ratings increase	Assessment	High	Medium	Low
	Visual Impact	(Low Impact)	(Medium impact)	(High impact)
Physical Absorption Capacity			X	
Compatibility with Concept Approval		X		
Compatibility with Urban/ Natural Features		X		
Overall Extent of Visual Impact		LOW		

View Place or Viewer Sensitivity				
		L	M	H
Public Domain	Roads			
	Reserves/foreshore		X	
	Waterway			
Private Domain	Residence			
		>1000m	100-1000m	<100m
		Viewing Distance		

View point: 2				
Foreshore reserve at the end of Bardon Lane, Brightwaters				
This is a representative view that also applies to residences located behind the reserve. The proposed Hotel and function centre buildings will be partly visible, with tourism and residential buildings increasingly less visible and screened by vegetation on the foreshore and in the landscape between and among the buildings further south on the site. the vegetation canopy will remain the highest element on the site.				
Expansive	Restricted	Panoramic	Focal	Feature

Assessment and weighting factors		Ratings		
Assessment Factor where effects increase as ratings increase	Assessment	Low	Medium	High
	Visual Effect	(Low Effect)	(Medium effect)	(High effect)
Base-line factors				
Effect On Visual Character of View			X	
Effect on Scenic Quality of View			X	
Variable factors				
Effect On View Composition			X	
Effect of Relative Viewing Level			X	
Effect of Viewing Period				X
Effect of Viewing Distance		X		
View Loss or Blocking Effect				
Overall Extent of Visual Effect		MEDIUM		
Weighting factors				
Weighting Factor where impacts decrease as ratings increase	Assessment	High	Medium	Low
	Visual Impact	(Low Impact)	(Medium impact)	(High impact)
Physical Absorption Capacity			X	
Compatibility with Concept Approval		X		
Compatibility with Urban/ Natural Features		X		
Overall Extent of Visual Impact		LOW		

View Place or Viewer Sensitivity				
		L	M	H
Public Domain	Roads			
	Reserves/foreshore	X		
	Waterway			
Private Domain	Residence			
		>1000m	100-1000m	<100m
		Viewing Distance		

View point: 3				
Road, opposite 78 Bulgonia Rd, Brightwaters				
The proposed Hotel and function centre buildings will be partly visible, with tourism and residential buildings of low visibility. The vegetation canopy will remain the highest element on the site.				
Expansive	Restricted	Panoramic	Focal	Feature

Assessment and weighting factors		Ratings		
Assessment Factor where effects increase as ratings increase	Assessment	Low	Medium	High
	Visual Effect	(Low Effect)	(Medium effect)	(High effect)
Base-line factors				
Effect On Visual Character of View			X	
Effect on Scenic Quality of View			X	
Variable factors				
Effect On View Composition		X		
Effect of Relative Viewing Level		X		
Effect of Viewing Period		X		
Effect of Viewing Distance		X		
View Loss or Blocking Effect		X		
Overall Extent of Visual Effect		LOW		
Weighting factors				
Weighting Factor where impacts decrease as ratings increase	Assessment	High	Medium	Low
	Visual Impact	(Low Impact)	(Medium impact)	(High impact)
Physical Absorption Capacity			X	
Compatibility with Concept Approval		X		
Compatibility with Urban/ Natural Features		X		
Overall Extent of Visual Impact		LOW		

View Place or Viewer Sensitivity				
		L	M	H
Public Domain	Roads	X		
	Reserves/foreshore			
	Waterway			
Private Domain	Residence			
		>1000m	100-1000m	<100m
		Viewing Distance		

View point: 4				
Car park of Brightwaters Christian College				
Vegetation on the site of the Christian College screens the development to a large degree. Public access is freely available to the foreshore reserve in front of the car park where there is no screening. The proposed Hotel and function centre buildings will be partly visible, with tourism and residential buildings of low visibility. The vegetation canopy will remain the highest element on the site.				
Expansive	Restricted	Panoramic	Focal	Feature

Assessment and weighting factors		Ratings		
Assessment Factor where effects increase as ratings increase	Assessment	Low	Medium	High
	Visual Effect	(Low Effect)	(Medium effect)	(High effect)
Base-line factors				
Effect On Visual Character of View			X	
Effect on Scenic Quality of View			X	
Variable factors				
Effect On View Composition			X	
Effect of Relative Viewing Level				X
Effect of Viewing Period			X	
Effect of Viewing Distance		X		
View Loss or Blocking Effect		X		
Overall Extent of Visual Effect		MEDIUM		
Weighting factors				
Weighting Factor where impacts decrease as ratings increase	Assessment	High	Medium	Low
	Visual Impact	(Low Impact)	(Medium impact)	(High impact)
Physical Absorption Capacity			X	
Compatibility with Concept Approval		X		
Compatibility with Urban/ Natural Features		X		
Overall Extent of Visual Impact		LOW TO MEDIUM		

View Place or Viewer Sensitivity				
		L	M	H
Public Domain	Roads			
	Reserves/foreshore	X		
	Waterway			
Private Domain	Residence			
		>1000m	100-1000m	<100m
		Viewing Distance		

View point: 5				
Waterway west of Point Wolstoncroft Sports and Recreation Centre				
Development will be seen in the context of adjoining tourism and residential development of Morisset Park and Sunshine. Buildings on the site will be of low visibility. The vegetation canopy will remain the highest element on the site.				
Expansive	Restricted	Panoramic	Focal	Feature

Assessment and weighting factors		Ratings		
Assessment Factor where effects increase as ratings increase	Assessment	Low	Medium	High
	Visual Effect	(Low Effect)	(Medium effect)	(High effect)
Base-line factors				
Effect On Visual Character of View		X		
Effect on Scenic Quality of View		X		
Variable factors				
Effect On View Composition		X		
Effect of Relative Viewing Level				X
Effect of Viewing Period			X	
Effect of Viewing Distance		X		
View Loss or Blocking Effect		X		
Overall Extent of Visual Effect		LOW		
Weighting factors				
Weighting Factor where impacts decrease as ratings increase	Assessment	High	Medium	Low
	Visual Impact	(Low Impact)	(Medium impact)	(High impact)
Physical Absorption Capacity		X		
Compatibility with Concept Approval		X		
Compatibility with Urban/ Natural Features		X		
Overall Extent of Visual Impact		LOW		

View Place or Viewer Sensitivity				
		L	M	H
Public Domain	Roads			
	Reserves/foreshore			
	Waterway	X		
Private Domain	Residence			
		>1000m	100-1000m	<100m
		Viewing Distance		

View point: 6				
Waterway north west of Summerland Point				
Development will be seen in the context of adjoining tourism and residential development of Morisset Park and Sunshine. Buildings on the site will be of low visibility. The vegetation canopy will remain the highest element on the site.				
Expansive	Restricted	Panoramic	Focal	Feature

Assessment and weighting factors		Ratings		
Assessment Factor where effects increase as ratings increase	Assessment	Low	Medium	High
	Visual Effect	(Low Effect)	(Medium effect)	(High effect)
Base-line factors				
Effect On Visual Character of View		X		
Effect on Scenic Quality of View		X		
Variable factors				
Effect On View Composition		X		
Effect of Relative Viewing Level				X
Effect of Viewing Period		X		
Effect of Viewing Distance		X		
View Loss or Blocking Effect		X		
Overall Extent of Visual Effect		MEDIUM		
Weighting factors				
Weighting Factor where impacts decrease as ratings increase	Assessment	High	Medium	Low
	Visual Impact	(Low Impact)	(Medium impact)	(High impact)
Physical Absorption Capacity		X		
Compatibility with Concept Approval		X		
Compatibility with Urban/ Natural Features		X		
Overall Extent of Visual Impact		LOW		

View Place or Viewer Sensitivity				
		L	M	H
Public Domain	Roads			
	Reserves/foreshore			
	Waterway	X		
Private Domain	Residence			
		>1000m	100-1000m	<100m
		Viewing Distance		

View point: 7				
Waterway north of Frying Pan Point (Summerland Point)				
Development will be seen in the context of adjoining tourism and residential development of Morisset Park and Sunshine. Buildings on the site will be of low visibility. The vegetation canopy will remain the highest element on the site.				
Expansive	Restricted	Panoramic	Focal	Feature

Assessment and weighting factors		Ratings		
Assessment Factor where effects increase as ratings increase	Assessment	Low	Medium	High
	Visual Effect	(Low Effect)	(Medium effect)	(High effect)
Base-line factors				
Effect On Visual Character of View		X		
Effect on Scenic Quality of View		X		
Variable factors				
Effect On View Composition		X		
Effect of Relative Viewing Level				X
Effect of Viewing Period			X	
Effect of Viewing Distance		X		
View Loss or Blocking Effect		X		
Overall Extent of Visual Effect		LOW		
Weighting factors				
Weighting Factor where impacts decrease as ratings increase	Assessment	High	Medium	Low
	Visual Impact	(Low Impact)	(Medium impact)	(High impact)
Physical Absorption Capacity		X		
Compatibility with Concept Approval		X		
Compatibility with Urban/ Natural Features		X		
Overall Extent of Visual Impact		LOW		

View Place or Viewer Sensitivity				
		L	M	H
Public Domain	Roads			
	Reserves/foreshore			
	Waterway	X		
Private Domain	Residence			
		>1000m	100-1000m	<100m
		Viewing Distance		

View point: 8				
Waterway north-north-west of Sandy Beach (Summerland Point)				
Development will be seen in the context of adjoining tourism and residential development of Morisset Park and Sunshine. Buildings on the site will be of low visibility. The vegetation canopy will remain the highest element on the site.				
Expansive	Restricted	Panoramic	Focal	Feature

Assessment and weighting factors		Ratings		
Assessment Factor where effects increase as ratings increase	Assessment	Low	Medium	High
	Visual Effect	(Low Effect)	(Medium effect)	(High effect)
Base-line factors				
Effect On Visual Character of View		X		
Effect on Scenic Quality of View		X		
Variable factors				
Effect On View Composition		X		
Effect of Relative Viewing Level				X
Effect of Viewing Period			X	
Effect of Viewing Distance		X		
View Loss or Blocking Effect		X		
Overall Extent of Visual Effect		LOW		
Weighting factors				
Weighting Factor where impacts decrease as ratings increase	Assessment	High	Medium	Low
	Visual Impact	(Low Impact)	(Medium impact)	(High impact)
Physical Absorption Capacity		X		
Compatibility with Concept Approval		X		
Compatibility with Urban/ Natural Features		X		
Overall Extent of Visual Impact		LOW		

View Place or Viewer Sensitivity				
		L	M	H
Public Domain	Roads			
	Reserves/foreshore			
	Waterway	X		
Private Domain	Residence			
		>1000m	100-1000m	<100m
		Viewing Distance		

View point: 9				
Waterway north of Vales Point				
Buildings on the site will be of low visibility. The vegetation canopy will remain the highest element on the site.				
Expansive	Restricted	Panoramic	Focal	Feature

Assessment and weighting factors		Ratings		
Assessment Factor where effects increase as ratings increase	Assessment	Low	Medium	High
	Visual Effect	(Low Effect)	(Medium effect)	(High effect)
Base-line factors				
Effect On Visual Character of View		X		
Effect on Scenic Quality of View		X		
Variable factors				
Effect On View Composition		X		
Effect of Relative Viewing Level				X
Effect of Viewing Period			X	
Effect of Viewing Distance		X		
View Loss or Blocking Effect		X		
Overall Extent of Visual Effect		LOW		
Weighting factors				
Weighting Factor where impacts decrease as ratings increase	Assessment	High	Medium	Low
	Visual Impact	(Low Impact)	(Medium impact)	(High impact)
Physical Absorption Capacity		X		
Compatibility with Concept Approval		X		
Compatibility with Urban/ Natural Features		X		
Overall Extent of Visual Impact		LOW		

View Place or Viewer Sensitivity				
		L	M	H
Public Domain	Roads			
	Reserves/foreshore			
	Waterway	X		
Private Domain	Residence			
		>1000m	100-1000m	<100m
		Viewing Distance		

View point: 10				
Waterway north-north-east of Wyee Point				
Buildings on the site will be of low visibility. The vegetation canopy will remain the highest element on the site.				
Expansive	Restricted	Panoramic	Focal	Feature

Assessment and weighting factors		Ratings		
Assessment Factor where effects increase as ratings increase	Assessment	Low	Medium	High
	Visual Effect	(Low Effect)	(Medium effect)	(High effect)
Base-line factors				
Effect On Visual Character of View		X		
Effect on Scenic Quality of View		X		
Variable factors				
Effect On View Composition		X		
Effect of Relative Viewing Level		X		
Effect of Viewing Period		X		
Effect of Viewing Distance		X		
View Loss or Blocking Effect		X		
Overall Extent of Visual Effect		LOW		
Weighting factors				
Weighting Factor where impacts decrease as ratings increase	Assessment	High	Medium	Low
	Visual Impact	(Low Impact)	(Medium impact)	(High impact)
Physical Absorption Capacity		X		
Compatibility with Concept Approval		X		
Compatibility with Urban/ Natural Features		X		
Overall Extent of Visual Impact		LOW		

View Place or Viewer Sensitivity				
		L	M	H
Public Domain	Roads			
	Reserves/foreshore			
	Waterway	X		
Private Domain	Residence			
		>1000m	100-1000m	<100m
		Viewing Distance		

View point: 11				
Waterway south south west of Bluff Point				
Three storey buildings on the south margin of the site will be partly visible, screened by vegetation. The vegetation canopy will be significantly higher than the buildings. The remainder of the buildings will not be visible.				
Expansive	Restricted	Panoramic	Focal	Feature

Assessment and weighting factors		Ratings		
Assessment Factor where effects increase as ratings increase	Assessment	Low	Medium	High
	Visual Effect	(Low Effect)	(Medium effect)	(High effect)
Base-line factors				
Effect On Visual Character of View			X	
Effect on Scenic Quality of View		X		
Variable factors				
Effect On View Composition			X	
Effect of Relative Viewing Level		X		
Effect of Viewing Period		X		
Effect of Viewing Distance			X	
View Loss or Blocking Effect		X		
Overall Extent of Visual Effect		LOW TO MEDIUM		
Weighting factors				
Weighting Factor where impacts decrease as ratings increase	Assessment	High	Medium	Low
	Visual Impact	(Low Impact)	(Medium impact)	(High impact)
Physical Absorption Capacity			X	
Compatibility with Concept Approval		X		
Compatibility with Urban/ Natural Features		X		
Overall Extent of Visual Impact		LOW TO MEDIUM		

View Place or Viewer Sensitivity				
		L	M	H
Public Domain	Roads			
	Reserves/foreshore			
	Waterway	X		
Private Domain	Residence			
		>1000m	100-1000m	<100m
		Viewing Distance		

View point: 12				
Waterway east of Bluff Point				
The entire development will be evident in views from this range. The buildings will be lower than the existing and future vegetation canopy heights and the short stay and residential buildings will be significantly screened by it.				
Expansive	Restricted	Panoramic	Focal	Feature

Assessment and weighting factors		Ratings		
Assessment Factor where effects increase as ratings increase	Assessment	Low	Medium	High
	Visual Effect	(Low Effect)	(Medium effect)	(High effect)
Base-line factors				
Effect On Visual Character of View			X	
Effect on Scenic Quality of View			X	
Variable factors				
Effect On View Composition			X	
Effect of Relative Viewing Level				X
Effect of Viewing Period		X		
Effect of Viewing Distance			X	
View Loss or Blocking Effect		X		
Overall Extent of Visual Effect		MEDIUM		
Weighting factors				
Weighting Factor where impacts decrease as ratings increase	Assessment	High	Medium	Low
	Visual Impact	(Low Impact)	(Medium impact)	(High impact)
Physical Absorption Capacity				X
Compatibility with Concept Approval		X		
Compatibility with Urban/ Natural Features		X		
Overall Extent of Visual Impact		MEDIUM		

View Place or Viewer Sensitivity				
		L	M	H
Public Domain	Roads			
	Reserves/foreshore			
	Waterway		X	
Private Domain	Residence			
		>1000m	100-1000m	<100m
		Viewing Distance		

View point: 13				
Waterway east of the existing large gate on the foreshore				
The entire development will be evident in views from this range. The buildings will be lower than the existing and future vegetation canopy heights and the short stay and residential buildings will be significantly screened by it.				
Expansive	Restricted	Panoramic	Focal	Feature

Assessment and weighting factors		Ratings		
Assessment Factor where effects increase as ratings increase	Assessment	Low	Medium	High
	Visual Effect	(Low Effect)	(Medium effect)	(High effect)
Base-line factors				
Effect On Visual Character of View			X	
Effect on Scenic Quality of View			X	
Variable factors				
Effect On View Composition			X	
Effect of Relative Viewing Level				X
Effect of Viewing Period		X		
Effect of Viewing Distance			X	
View Loss or Blocking Effect		X		
Overall Extent of Visual Effect		MEDIUM		
Weighting factors				
Weighting Factor where impacts decrease as ratings increase	Assessment	High	Medium	Low
	Visual Impact	(Low Impact)	(Medium impact)	(High impact)
Physical Absorption Capacity				X
Compatibility with Concept Approval		X		
Compatibility with Urban/ Natural Features		X		
Overall Extent of Visual Impact		LOW TO MEDIUM		

View Place or Viewer Sensitivity				
		L	M	H
Public Domain	Roads			
	Reserves/foreshore			
	Waterway		X	
Private Domain	Residence			
		>1000m	100-1000m	<100m
		Viewing Distance		

View point: 14				
Waterway mid Bardens Bay on alignment with Brightwaters Christian College				
The proposed Hotel will be visible, the function centre not visible, with tourism and residential buildings of low visibility. The vegetation canopy will remain the highest element on the site.				
Expansive	Restricted	Panoramic	Focal	Feature

Assessment and weighting factors		Ratings		
Assessment Factor where effects increase as ratings increase	Assessment	Low	Medium	High
	Visual Effect	(Low Effect)	(Medium effect)	(High effect)
Base-line factors				
Effect On Visual Character of View			X	
Effect on Scenic Quality of View			X	
Variable factors				
Effect On View Composition			X	
Effect of Relative Viewing Level				X
Effect of Viewing Period		X		
Effect of Viewing Distance			X	
View Loss or Blocking Effect			X	
Overall Extent of Visual Effect		MEDIUM		
Weighting factors				
Weighting Factor where impacts decrease as ratings increase	Assessment	High	Medium	Low
	Visual Impact	(Low Impact)	(Medium impact)	(High impact)
Physical Absorption Capacity			X	
Compatibility with Concept Approval		X		
Compatibility with Urban/ Natural Features		X		
Overall Extent of Visual Impact		LOW TO MEDIUM		

View Place or Viewer Sensitivity				
		L	M	H
Public Domain	Roads			
	Reserves/foreshore			
	Waterway		X	
Private Domain	Residence			
		>1000m	100-1000m	<100m
		Viewing Distance		

View point: 15				
Waterway south of the point between Bardens and Sugar Bays				
Development will be partly visible with Hotel and function centre most visible because of low screening effect of foreshore vegetation. Buildings on the site will otherwise be of low visibility. The vegetation canopy will remain the highest element on the site.				
Expansive	Restricted	Panoramic	Focal	Feature

Assessment and weighting factors		Ratings		
Assessment Factor where effects increase as ratings increase	Assessment	Low	Medium	High
	Visual Effect	(Low Effect)	(Medium effect)	(High effect)
Base-line factors				
Effect On Visual Character of View		X		
Effect on Scenic Quality of View		X		
Variable factors				
Effect On View Composition		X		
Effect of Relative Viewing Level				X
Effect of Viewing Period			X	
Effect of Viewing Distance		X		
View Loss or Blocking Effect		X		
Overall Extent of Visual Effect		LOW		
Weighting factors				
Weighting Factor where impacts decrease as ratings increase	Assessment	High	Medium	Low
	Visual Impact	(Low Impact)	(Medium impact)	(High impact)
Physical Absorption Capacity		X		
Compatibility with Concept Approval		X		
Compatibility with Urban/ Natural Features		X		
Overall Extent of Visual Impact		LOW		

View Place or Viewer Sensitivity				
		L	M	H
Public Domain	Roads			
	Reserves/foreshore			
	Waterway	X		
Private Domain	Residence			
		>1000m	100-1000m	<100m
		Viewing Distance		

View point: 16				
Waterway near eastern extent of Sugar Bay				
Development will be partly visible with Hotel and function centre most visible because of low screening effect of foreshore vegetation. Buildings on the site will otherwise be of low visibility. The vegetation canopy will remain the highest element on the site.				
Expansive	Restricted	Panoramic	Focal	Feature

Assessment and weighting factors		Ratings		
Assessment Factor where effects increase as ratings increase	Assessment	Low	Medium	High
	Visual Effect	(Low Effect)	(Medium effect)	(High effect)
Base-line factors				
Effect On Visual Character of View		X		
Effect on Scenic Quality of View		X		
Variable factors				
Effect On View Composition		X		
Effect of Relative Viewing Level				X
Effect of Viewing Period			X	
Effect of Viewing Distance		X		
View Loss or Blocking Effect		X		
Overall Extent of Visual Effect		LOW		
Weighting factors				
Weighting Factor where impacts decrease as ratings increase	Assessment	High	Medium	Low
	Visual Impact	(Low Impact)	(Medium impact)	(High impact)
Physical Absorption Capacity		X		
Compatibility with Concept Approval		X		
Compatibility with Urban/ Natural Features		X		
Overall Extent of Visual Impact		LOW		

View Place or Viewer Sensitivity				
		L	M	H
Public Domain	Roads			
	Reserves/foreshore			
	Waterway	X		
Private Domain	Residence			
		>1000m	100-1000m	<100m
		Viewing Distance		

View point: 17				
Waterway south east of Fishery Point				
Development will be partly visible on the southern part of the site but screened by foreshore vegetation and landscape vegetation. Buildings on the site will overall be of low visibility. The vegetation canopy will remain the highest element on the site.				
Expansive	Restricted	Panoramic	Focal	Feature

Assessment and weighting factors		Ratings		
Assessment Factor where effects increase as ratings increase	Assessment	Low	Medium	High
	Visual Effect	(Low Effect)	(Medium effect)	(High effect)
Base-line factors				
Effect On Visual Character of View		X		
Effect on Scenic Quality of View		X		
Variable factors				
Effect On View Composition		X		
Effect of Relative Viewing Level				X
Effect of Viewing Period			X	
Effect of Viewing Distance		X		
View Loss or Blocking Effect		X		
Overall Extent of Visual Effect		LOW		
Weighting factors				
Weighting Factor where impacts decrease as ratings increase	Assessment	High	Medium	Low
	Visual Impact	(Low Impact)	(Medium impact)	(High impact)
Physical Absorption Capacity		X		
Compatibility with Concept Approval		X		
Compatibility with Urban/ Natural Features		X		
Overall Extent of Visual Impact		LOW		

View Place or Viewer Sensitivity				
		L	M	H
Public Domain	Roads			
	Reserves/foreshore			
	Waterway	X		
Private Domain	Residence			
		>1000m	100-1000m	<100m
		Viewing Distance		

View point: 18				
Reserve & Public boat ramp Lakeview Road, Morisset Park				
The Hotel/marina building and carpark will be partly visible but significantly screened by vegetation on the margins of the unnamed bay west of them. The remainder of the development would not be visible.				
Expansive	Restricted	Panoramic	Focal	Feature

Assessment and weighting factors		Ratings		
Assessment Factor where effects increase as ratings increase	Assessment	Low	Medium	High
	Visual Effect	(Low Effect)	(Medium effect)	(High effect)
Base-line factors				
Effect On Visual Character of View		X		
Effect on Scenic Quality of View			X	
Variable factors				
Effect On View Composition		X		
Effect of Relative Viewing Level				X
Effect of Viewing Period			X	
Effect of Viewing Distance			X	
View Loss or Blocking Effect		X		
Overall Extent of Visual Effect		LOW TO MEDIUM		
Weighting factors				
Weighting Factor where impacts decrease as ratings increase	Assessment	High	Medium	Low
	Visual Impact	(Low Impact)	(Medium impact)	(High impact)
Physical Absorption Capacity			X	
Compatibility with Concept Approval		X		
Compatibility with Urban/ Natural Features		X		
Overall Extent of Visual Impact		MEDIUM TO LOW		

View Place or Viewer Sensitivity				
		L	M	H
Public Domain	Roads			
	Reserves/foreshore			
	Waterway		X	
Private Domain	Residence			
		>1000m	100-1000m	<100m
		Viewing Distance		

View point: 19				
Residential subdivision approved under separate DA.				
The vegetation surrounding the salt marsh and future residential buildings in the foreground of the view will screen the buildings. They will be visible only at close range from the end of Trinity Point Drive where it enters the site. The view between the buildings from this location will be significantly improved compared to the situation in the Concept Approval.				
Expansive	Restricted	Panoramic	Focal	Feature

Assessment and weighting factors		Ratings		
Assessment Factor where effects increase as ratings increase	Assessment	Low	Medium	High
	Visual Effect	(Low Effect)	(Medium effect)	(High effect)
Base-line factors				
Effect On Visual Character of View		X		
Effect on Scenic Quality of View		X		
Variable factors				
Effect On View Composition		X		
Effect of Relative Viewing Level		X		
Effect of Viewing Period				X
Effect of Viewing Distance			X	
View Loss or Blocking Effect		X		
Overall Extent of Visual Effect		LOW		
Weighting factors				
Weighting Factor where impacts decrease as ratings increase	Assessment	High	Medium	Low
	Visual Impact	(Low Impact)	(Medium impact)	(High impact)
Physical Absorption Capacity		X		
Compatibility with Concept Approval		X		
Compatibility with Urban/ Natural Features		X		
Overall Extent of Visual Impact		LOW		

View Place or Viewer Sensitivity				
		L	M	H
Public Domain	Roads			
	Reserves/foreshore			
	Waterway			
Private Domain	Residence			X
		>1000m	100-1000m	<100m
		Viewing Distance		

View point: 20				
Pacific Highway near access to Cams Wharf				
View points is east, approximately 8km distant from the site. Limited to glimpses from vehicles. The development may be barely visible but would have low visual effect or impact. Similar views may be possible from the approach roads to Cams Wharf near the Pacific Highway where the topography permits				
Expansive	Restricted	Panoramic	Focal	Feature

Assessment and weighting factors		Ratings		
Assessment Factor where effects increase as ratings increase	Assessment	Low	Medium	High
	Visual Effect	(Low Effect)	(Medium effect)	(High effect)
Base-line factors				
Effect On Visual Character of View		X		
Effect on Scenic Quality of View		X		
Variable factors				
Effect On View Composition		X		
Effect of Relative Viewing Level		X		
Effect of Viewing Period		X		
Effect of Viewing Distance		X		
View Loss or Blocking Effect		X		
Overall Extent of Visual Effect		LOW		
Weighting factors				
Weighting Factor where impacts decrease as ratings increase	Assessment	High	Medium	Low
	Visual Impact	(Low Impact)	(Medium impact)	(High impact)
Physical Absorption Capacity		X		
Compatibility with Maritime Features		X		
Compatibility with Urban/ Natural Features		X		
Overall Extent of Visual Impact		LOW		

View Place or Viewer Sensitivity				
		L	M	H
Public Domain	Roads	X		
	Reserves/foreshore			
	Waterway			
Private Domain	Residence			
		>1000m	100-1000m	<100m
		Viewing Distance		



APPENDIX E - CV Dr R Lamb

Summary

I am a professional consultant specialising in landscape heritage and visual impacts assessment and the principal of Richard Lamb and Associates (RLA). I was a senior lecturer in Architecture and Heritage Conservation in the Faculty of Architecture, Design and Planning at the University of Sydney for 28 years and Director of the Master of Heritage Conservation program. I have taught and specialised in environmental impact assessment and visual perception studies for 30 years.

As the principal of RLA I provide professional services, expert advice and landscape heritage and aesthetic assessments in many different contexts. I carry out strategic planning studies to protect and enhance scenic quality and heritage values, conduct scenic and aesthetic assessments in contexts from rural to urban, provide advice on view loss and view sharing and conduct landscape heritage studies. I act for various client groups on an independent basis, including local councils, government departments and private clients to whom I provide impartial advice. I provide expert advice, testimony and evidence to the Land and Environment Court of NSW and the Planning and Environment Court of Queensland in various classes of litigation. I have appeared in over 170 cases and made submissions to several Commissions of Inquiry. I have been the principal consultant for over 500 consultancies concerning the visual impacts and landscape heritage area of expertise during the last ten years.

At the University of Sydney I had the responsibility for teaching and research in my areas of expertise, which are visual perception and cognition, aesthetic assessment, landscape assessment and conservation of heritage items and places. I taught postgraduate students in these areas and also gave specialised elective courses in aesthetic heritage assessment. I supervise postgraduate research students undertaking PhD and Masters degree academic research in the area of heritage conservation and Environment Behaviour Studies (EBS). The latter field is based around empirical research into human aspects of the built environment, in particular, in my area of expertise, aspects of visual perception, landscape preference and environmental cognition.

I have a number of academic research publications in local and international journals that publish research in EBS, environmental psychology and cultural heritage management. I have developed my own methods for landscape heritage assessment, based on my education, knowledge from research and practical experience.

Qualifications

- Bachelor of Science, First Class Honours, University of New England (Botany and ecology double major).
- Doctor of Philosophy, University of New England in 1975.
- Visiting lecturer, University of New South Wales, School of The Built Environment
- Principal of Richard Lamb and Associates and Director of Lambcon Associates Pty Ltd.

Employment History

- Tutor, Botany and Ecology, School of Botany, UNE (1968-1974)
- Lecturer in Resource Management, School of Life Sciences, UTS (1975-1980)
- Lecturer, Foundation Program in Landscape Architecture, Faculty of Architecture, University of Sydney (1980-1989)
- Lecturer and Senior Lecturer, Architecture and Heritage Conservation, University of Sydney (1989-2011)

Since 1975 I pursued research related to my teaching responsibilities and professional practice. My research works are in:

- Plant ecology
- Landscape heritage assessment
- Visual perception
- Social and aesthetic values of the natural and built environment

Publications and presentations relevant to visual perception and assessment of landscapes are listed at the end of this CV.

Affiliations

Professional

Chartered Biologist, Institute of Biology (UK)



International Journals for which papers have been refereed

- Landscape & Urban Planning
- Journal of Architectural & Planning Research
- Architectural Science Review
- Journal of the Australian & New Zealand Association for Person Environment Studies
- Journal of Environmental Psychology
- Australasian Journal of Environmental Management
- Ecological Management & Restoration
- Urban Design Review International

Recent Experience : for full CV see website (www.richardlamb.com.au)

Heritage Impacts

Assessment and Advice

Private Clients

- Advice and advocacy concerning heritage view impacts, proposed maritime facility, Toocooya Road, Hunters Hill
- Advice and advocacy with Willoughby Council on visual impacts and amenity effects of development controls on new dwelling proposal in heritage conservation area, Northbridge.
- Advice and analysis of visual and landscape heritage impacts of approved development in Parramatta including referral to Federal Minister for DSEWPaC under provisions of the EPBC Act.
- Advice concerning heritage and visual impacts of proposed additions to the SCEGGS School., Darlinghurst
- Advice concerning heritage and visual impacts of proposed demolition and redevelopment of Willeroon, Ocean Road, Palm Beach.
- Advice on heritage and visual impacts, potential rezoning and development applications, Medlow Bath, Blue Mountains NSW.
- Advice on heritage values, scenic qualities and landscape heritage resources, pre-DA for additions and alterations to heritage streetscape and stone walls, Bronte.
- Advice on heritage, visual and impacts of proposed development application, Currawong Beach, Pittwater.
- Advice on streetscape and character of conservation area for a property on Schedule 2, of Parramatta Council Heritage LEP, Railway Parade, Granville.
- Advice on visual and heritage conservation constraints, development application, Bishopscourt, Darling Point.
- Advice regarding visual and related heritage impacts of proposed development, St Marys Church, Waverley.
- Advice, advocacy and evidence to Land and Environment Court of NSW concerning potential visual impacts of additions and alterations to two heritage listed dwellings, Victoria Street, Watsons Bay.
- Assessment of heritage and related scenic issues for strategic planning study, CUB site, Broadway, Sydney.
- Assessment of heritage impacts of proposed retrospective approval of adjoining development, Loch Lomond Crescent, Burraneer Bay.
- Assessment of heritage impacts of proposed terrace style infill housing and advocacy with City of Sydney Council, Wilson Street, Newtown.
- Assessment of heritage impacts on specific groups of trees and views caused by proposed redesign of Killara Golf Course. Statement of heritage impact of proposed safety screens on adjacent heritage items.



- Assessment of heritage significance of item proposed to be listed on the ACT Heritage Register; St Patrick's Church, Braddon, ACT
- Assessment of potential impacts on heritage views of proposed development, area of National Significance, Tramway Lane, Rosehill.
- Assessment of visual and heritage aspects of development application, conversion of The Boiler House building, Pyrmont Point.
- Assessment, analysis and report to the Federal Minister for the Environment in response to Emergency Listing of Kurnell Peninsula under the Environment Protection and Biodiversity Conservation Act 1999.
- Design stage advice and visual and landscape heritage impact assessment of a proposed seniors living development, SHT listed property, 'Neerim Park', Centennial Road, Bowral.
- Development Control Plan, South West Lochinvar.
- Heritage and visual impact analysis for proposed new residential development, SHR item "Swifts", Darling Point.
- Heritage assessment and Statement of Cultural Significance for Anzac Parade, Sydney.
- Heritage curtilage, cultural landscape assessment and visual controls recommendations, Elderslie Urban Release Area, Camden LGA.
- Heritage Impact Assessment of proposed adjacent new dwelling on heritage registered item "Camelot", 3 The Basion, Griffin Estate, Castlereagh.
- Heritage impact assessment of proposed amendment to permissible uses table in the Wingecarribee LEP, Berrima.
- Heritage impact assessment, curtilage, review of SHR entry and proposal of new landscape conservation area, The Glebe Gully Cemetery, East Maitland.
- Heritage impacts assessment for proposed employment lands rezoning, Menangle, NSW.
- Heritage landscape and streetscape assessment as part of pre-DA study, Easterly, Upper Spit Road, Mosman.
- Heritage view analysis and mitigation strategy for the proposed "Wet n Wild" Water Theme Park, Reservoir Road, Prospect.
- Heritage view line study and pre-DA report, proposed residential development, Morton Street, Parramatta.
- Heritage view study, proposed rezoning for residential use, curtilage of Menangle village including several SHI registered items, Menangle Village.
- Heritage, scenic qualities and landscape impact assessment, proposed residential development, Potts Point.
- Landscape assessment, curtilage study and heritage impact assessment as part of a Local Environmental Study, curtilage of St Helena, Lochinvar, Hunter Valley.
- Landscape heritage impact assessment, proposed aged care development, McLaren Street, North Sydney.
- Local & regional visual assessment study to accompany rezoning and subdivision proposal, Mount Harris, Hunter Valley.
- Pre DA advice re heritage impacts of proposed additions and alterations to heritage homestead Kurrawong, Dunmore.
- Review of documentation concerning heritage landscape and visual issues, St Columba's Springwood.
- Scenic quality and landscape heritage assessment, rural subdivision proposal, Duckenfield, Hunter Valley.
- Statement of heritage impact : proposed development in the vicinity of "Alma's Tree", North Narrabeen.
- Statement of Heritage Impact and Heritage Discovery Plan, proposed dual occupancy dwellings on two lots approved by Land and Environment Court of New South Wales, Birrell Street, Tamarama.
- Statement of heritage impact of proposed additions and alterations, The Corso, Manly.
- Statement of heritage impact of proposed additions and alterations, Military Road, Mosman.
- Statement of heritage impact of proposed development on heritage listed stone wall, Burns Bay Road, Lane Cove.
- Statement of heritage impact on significant gardens, proposed building extensions, PLC Croydon.
- Statement of visual and heritage impact as part of Statement of Environmental Effects, proposed conservation of Ashton,



Elizabeth Bay Road, Elizabeth Bay and construction of new apartment building.

- Submission to Kiama Council on potential heritage impacts of a potential alternative dwelling footprint adjacent to two SHI registered items, Jamberoo Road, Jamberoo
- Submission to Minister for Planning regarding potential visual impacts, proposed alterations to White Bay Cement Terminal.
- Submission to the Minister for DSEWPac including assessment of the potential heritage impacts of the Shine Dome (National Heritage List) of the proposed Nishi Building, New Acton, ACT.
- Visual and cultural landscape assessment, constraints and strategic planning study, potential urban release area, Raby Road, Leppington.
- Visual and cultural landscape assessment, constraints and strategic planning advice, potential seniors living development, Kiama.
- Visual impact, visual constraints and landscape heritage study, proposed residential development, Morpeth, Hunter Valley.

Government Clients

- *Blue Mountains City Council*

Advice on visual and heritage impacts of development application, SHI listed item Everglades, Everglades Avenue, Leura.
Advice on visual impacts of building materials and colours, heritage precinct, Lawson.
Advice on merits of development application with respect to heritage significance, Scenic Railway site, Katoomba.

- *Camden Council*

Cultural landscape and assessment of heritage significance of William Howe, Reserve, Camden, Heritage Assistance Grant Program.

Scenic and cultural landscape advice re proposed subdivision, Kirkham Lane, Camden.

Scenic and Cultural Landscape Study of the entire municipality, including specific input into the Rural Lands and Town Centre Urban Design Studies.

- *Department of Planning and Infrastructure:*

Advice on impacts on views and heritage values of Lennox Bridge and Old Government House and Domain of proposed additional height to approved mixed use building, 330 Church Street, Parramatta.

- *Department of Urban Affairs and Planning*

Scenic Quality Study of the Hawkesbury-Nepean River as part of review of State Regional Environmental Plan No. 20.

Landscape, heritage values and strategic planning study of Hoxton Park Corridor, Western Sydney.

Visual, heritage and cultural landscape boundary location investigations, Hoxton Park Corridor, Western Sydney Regional Parklands.

Cultural and recreational landscape values study, recommendations for form and location of expansion of Waste Services New South Wales facilities, Eastern Creek, Western Sydney.

Cultural and scenic landscape assessment of excluded lands parcels, Western Sydney Regional Parklands, Doonside.

Visual and heritage landscape assessment, Western Sydney Parklands, Core Parklands Precinct 2 and interface parcels 2, 3 and 4.

- *Hornsby Shire Council*

Heritage, scenic qualities and landscape heritage resources study of rural lands of the Shire as part of the Rural Lands Study.
Scenic resources study and strategic planning advice, Brooklyn and Environs Management Plan.

- *Lake Macquarie City Council*

Development assessment of visual and landscape heritage impacts, application for resort and high density housing, former coal preparation plant and other SHI registered heritage items Catherine Hill Bay.

- *Manly Council*

Advice on landscape heritage and visual impact issue concerning an appeal against refusal of development application, Manly Wharf, by Manly Wharf Pty Ltd.

Heritage impact assessment, residential development, Pine Street, Manly.

- *Mosman Council*

Heritage curtilage assessment as part of development assessment adjacent to SHI item, "Woolley House", Bullecourt Avenue, Mosman.

- *Pittwater Council*

Palm Beach Conservation Area: Heritage impact assessment on proposed redevelopment of Blueberry Ash Square and its impact on the Palm Beach Conservation Area.

- *Roads and Traffic Authority*
Heritage Impact Assessment of proposed tree maintenance, SHI registered item "Overthorpe", New South Head Road, Double Bay.
- *Wingecarribee Shire Council*
Visual and heritage landscape impact assessment, Burrawang, Southern Highlands.
Author of Development Control Plan No.53 for sighting of dwellings in rural zones.

Land and Environment Court Proceedings

Altamira v Burwood Council: Demolition and SEPP5 development, Livingstone Street, Burwood.

Architectural Projects v Manly Council: Conservation and addition of apartments, 'Dungowan' South Steyne, Manly.

Australand Holdings Pty Ltd v Sutherland Council: Resort development, Captain Cook Drive, Cronulla.

Blue Mountains Council ats Cecil D Barker: Subdivision and new dwellings, curtilage of Stoneholme Estate, Woodford.

Cody Outdoor Advertising Pty Ltd v South Sydney Council: Retention of existing rooftop advertising sign, Oxford Street, Darlinghurst.

Dixon H v Wingecarribee Council: Proposed conversion of existing stable to manager's residence, Sutton Forest.

Dumaresq Shire Council ats Commercial and Residential Developments Pty Ltd: Proposed residential subdivision, curtilage of Palmerston Estate, Kellys Plains, Armidale.

Hobhouse K v Minister assisting Minister for Infrastructure & Planning and Sydney Gas Operations Pty Ltd: Proposed gas plant adjacent to heritage listed Mt Gilead Homestead, Campbelltown.

Hunters Hill Council ats Bykerk: Proposed additions and alterations to heritage listed property, Vernon Street, Hunters Hill.

Joshua International Pty Ltd v Ku ring gai Council: Proposed new residence, Rosebery Road, Killara.

Kanowie v Woollahra Council: Proposed residential apartment building adjacent to heritage properties, Yarranabbe Road, Darling Point.

L D Fowler Pty Ltd and anor. ats Flower and Samios: Proposed subdivision and construction of residential development, Jane Street, Balmain.

Leichhardt Council ats Bezzina Developments Pty Ltd: proposed demolition and alterations to SHI item Darling Street Wharf, Balmain.

Leichhardt Council ats Charteris: Proposed demolition and construction of new dwelling, Punch Street, Birchgrove.

Lend Lease Development Pty Ltd v Manly Council:
St Patrick's Estate, Manly

- Development precinct 2 (1998)
- Development precincts 1, 2, 3 and 5 (1997)
- Development precincts 5, 10 and 11 (1998)

Manly Council v Vescio: Proposed new dwelling in curtilage of heritage property, Pine Street, Manly.

Marie Antoinette Aviani v Burwood Council: SEPP5 development proposal, Livingstone Street, Burwood.

McClenehan J and T v North Sydney Council: Proposed SEPP5 development, Cremorne Road, Cremorne.

Commission of Inquiry into proposed Exeter Quarry extension and Village bypass route on SHR registered property, Vine Lodge: Concrcrete Quarries, Primary Submission, Southern Highlands, 2000.

Ricki Developments Pty Ltd v The City of Sydney: Proposed redevelopment, former warehouse building, Quay Street Haymarket.

Royal Botanic Gardens & Domain Trust and Minister for the Environment ats City of Sydney Council: Judicial Review of heritage and aesthetic impacts of replacement of trees in The Outer Domain, Sydney.

South Sydney Council ats Gameplan Sport and Leisure Pty Ltd: Proposed McDonalds restaurant, Anzac Parade, (the Old Grand Drive), Centennial Park, Sydney.



Sydney City Council at Anglican Church: Proposed master plan for new apartments, curtilage of St John's Church, Darlinghurst.

Taralga Landscape Guardians Inc v Minister for Planning and RES Southern Cross Pty Ltd: appeal against Minister's approval of proposed wind farm, Taralga.

Toon, John v Ku ring gai Council: Proposed demolition of existing dwelling and SEPP5 residential development, Pentecost Avenue, Pymble.

V Berk and M Kersch v Woollahra Council: Proposed demolition and construction of mixed development, Gap Tavern site, Military Road, Watsons Bay.

Wilton v Hunters Hill Council: Proposed alterations and additions to heritage listed dwelling, Edgecliff Road, Woolwich.

Winten Property Group v Campbelltown Council: Proposed rural and residential development adjacent to Macquarie Field House, SHR item, Quarter Sessions Road, Glenfield.

Wollongong City Council v Weriton Finance: Proposed resort and dual occupancy development, Headlands Hotel site, Austinmer.

ACT Administrative Claims Tribunal

Catholic Archdiocese of Canberra and Goulburn v ACT Heritage Council: Appeal against decision to place St Patrick's Church, Braddon, on the ACT Heritage Register.

Landscape Planning

Assessment and Advice

Private Clients

- Advice on merits of proposal for SEPP HSPD development, Pokolbin.
- Advice on visual impacts of alternative building footprint locations, Foxground Road, Foxground.
- Advice on visual impacts of proposed residential development at Cambewarra.
Report on strategic planning issues related to Scenic Preservation hatching and Draft LEP specific to visual quality protection, Cambewarra Village.
- Advice on visual impacts of proposed subdivision and draft submission to Gosford Council, The Scenic Road, MacMasters Beach.
- Aesthetic assessment and evaluation of REF for proposed wind farm by Pacific Power and Partners, Crookwell.
- Assessment of visual impacts of proposed development and submission to Shoalhaven City Council, Bendeela Road, Kangaroo Valley.
- Heritage and visual impacts assessment as part of statement of environmental effects, proposed monastery at Mangrove Mountain, City of Gosford
- Independent assessment and advice concerning identification of viewing places and presentation of visual impact scenarios, Harrington Park Stage II, Camden.
- Initial advice concerning visual resources of site and potential to accommodate large scale institutional development, Campbelltown Road, Denham Court.
- Landscape assessment and evaluation of alternative building sites, Saddleback Mountain, Kiama.
- Landscape character analysis and visual assessment in relation to "Gateway" concept, The Northern Road, Glenmore Park.
- Landscape constraints and development capability assessment for potential residential development, Governors Way, Macquarie Links.
- Landscape planning strategy and visual impacts assessment, proposed cemetery and crematorium, Elizabeth Drive, Luddenham.
- Landscape visual constraints and capability assessment for potential for residential development, Shellharbour Road, Dunmore.
- Landscape visual constraints and capability assessment for potential residential development, Old Princes Highway, Dunmore.



- Landscape visual constraints and capability assessment of a land proposed to be rezoned for residential development, Cooby Road, Albion Park
- Landscape visual constraints and capability assessment of a parcel of land proposed for rezoning, Ashburton Drive, Albion Park
- Landscape visual constraints and capability assessment of parcels of land proposed for rezoning to residential use within the urban fringe area, Albion Park.
- Pre DA advice and statement of visual exposure, seniors living proposal, Cobbitty, Camden municipality.
- Pre DA advice on constraints and development envelopes, strategy and advice, Windang, Lake Illawarra.
- Pre-DA advice and visual impact assessment of proposed rezoning of rural land for potential residential development, Corner Kirkham Lane and Macquarie Grove Road, Kirkham.
- Pre-DA advice on design, visual and streetscape impacts assessment, proposed Islamic school, Burragorang and Cawdor Roads, Camden
- Pre-DA advice on visual impacts of proposed SEPP 5 development at Cambewarra.
- Report on visual impacts and effects on adjoining zones of a proposed subdivision, Glenhaven Road, Glenhaven.
- Pre DA advice and advocacy on proposed rural residential subdivision, The Northern Road, Glenmore Park.
- Statement of visual impact to accompany rezoning application, Old Northern Road, Castle Hill.
- Strategic planning advice concerning development potential, Fernhill, Mulgoa.
- Strategic planning and 3D modelling study to establish visibility constraints on zone boundaries, East Leppington Urban Release Area.
- Submission of feasibility study for re-zoning of land and subdivision for rural residential uses, Macquarie Grove Road, Kirkham.
- Submission to NSW Department of Planning against proposed extension of Catherine Hill Bay, Mooney Village and Gwandalan for residential development by Asquith & Dewitt Pty Ltd for Rosecorp Ltd.
- Visual and environmental impact assessment, proposed new dwelling, Dora Creek.
- Visual and heritage landscape assessment of impacts of proposed additions on the locality and Landscape Conservation Area, Benedictine Abbey, Jamberoo Pass.
- Visual and scenic impacts advice both pre- and post-DA, SEPP 5 Development, Old Northern Road, Castle Hill.
- Visual and scenic resources management study and visual impact assessment of a Concept Plan for Mixed Use Development, Tallawarra Lands, Tallawarra.
- Visual assessment and development strategy for proposed re-zoning of land partly for cemetery purposes, Varroville, Campbelltown.
- Visual assessment and development strategy for proposed re-zoning of land partly for residential purposes, Grange Hills, Campbelltown.
- Visual assessment and statement of environmental effects, proposed rezoning and subdivision, Cooranbong, Lake Macquarie.
- Visual assessment of proposed Town Centre land, Nambucca Drive, Scotts Head.
- Visual impact advice and report regarding location of dwellings on subdivided lots, Princes Highway, Kiama.
- Visual impact advice for proposed location of new dwelling, Weir Street, Kiama.
- Visual impact assessment and scenic amenity statement, proposed rural residential development, Dido Street, Kiama.
- Visual impact assessment for Jack Nicklaus Golf Resort, Rothbury, Hunter Valley
- Visual impact assessment for proposed Seniors Living Development, Pokolbin, Hunter Valley.
- Visual impact assessment of potentially unsightly landscape features vis-à-vis the Local Government Act definition in the vicinity of Vacy Downs Estate subdivision, Vacy.
- Visual impact assessment of proposed new dwelling, Pheasant Point Drive, Kiama.



- Visual impact assessment of proposed rezoning of land for urban residential use, Blue Seas Parade, Lennox Head.
- Visual impact assessment of proposed subdivision, Hillcrest Road, Mirrabooka, Lake Macquarie.
- Visual impact assessment, assessment against the provisions of Wingecarribee DCP 53 and advice concerning merits of proposed new dwelling location and design, Bibbys Lane, Werai Junction, Southern Highlands.
- Visual impact assessment, residential subdivision and development application, Scotts Head.
- Visual impact assessment, strategic planning analysis and peer review of proposed Forde Masterplan, Canberra.
- Visual impacts assessment of the proposed residential subdivision, Old Northern Road, Castle Hill.
- Visual resources and visual constraints study to accompany DA for establishment of new necropolis, Berrima district, Southern Highlands of NSW.
- Visual resources and visual constraints study, design advice and advocacy for potential DA, proposed resort and seniors living development, Glossodia.

Government Clients

- *Camden Council*
Camden Scenic and Cultural Landscape Study, Local Government Area of Camden.
Report on strategic planning for landscape protection based on the Camden Scenic and Cultural Landscape Study, for the Camden Rural Lands Study.
- *Dungog Council*
Assessment of visual and heritage impacts, scenic protection controls and heritage impact performance standards, proposed rezoning and rural residential development, Paterson, Upper Hunter Valley.
- *Shellharbour City Council*
Strategic planning study for identification, protection and conservation of landscapes of natural and cultural heritage significance, Shellharbour Local Government Area.
- *The Joint Old Growth Forest Project*
Empirical study to assess the feasibility of including cultural and aesthetic values in the evaluation of old growth forest.
- *The Resources and Conservation Council of New South Wales (RaCAC)*
Aesthetic values audit of the Upper North East region of NSW.

Expert workshop on integrating heritage values into the CRA/RFA process for evaluation of Australian forests.
- *Wingecarribee Shire Council*
Preparation of Development Control Plan No.53 for sighting of dwellings in rural zones.

Land and Environment Court Proceedings

Australian Native Landscapes v Warringah Council: s82A Review of conditions of consent, retail nursery, Mona Vale Road, Terrey Hills.

Baevski v Wingecarribee Shire Council: proposed covered dressage arena, Myra Vale Road, Robertson.

Baulkham Hills Council ats Gelle: proposed extension to existing caravan park, KoVeda Caravan Park, Wisemans Ferry.

Broken Bay Pty Ltd v The National Parks and Wildlife Service of NSW: valuation matter concerning acquisition of land, Hawke Head Road, Killcare.

CD Barker Pty Ltd for Eodo Pty Ltd v Council of the City of Blue Mountains: proposed subdivision and detached residential development, Heather Road, Winmalee.

Design Collaborative Pty Ltd v Wingecarribee Shire Council: proposed spring water extraction facility, Governors Street, Bundanoon.

Erolmore Park Pty Ltd v Maitland City Council: proposed industrial development, New England Highway, Thornton.

Flower and Samios v Shoalhaven Council: proposed Seniors Living Development, Main Road, Cambewarra.

Heathcote Gospel Trust v Sutherland City Council: proposed place of worship, Forum Drive, Heathcote.

Hornsby Shire Council



- *ats Haoushar*, proposed attached dual occupancy dwellings, Crosslands Road, Galston.
- *ats Momentum Architects*, proposed SEPP5 development, Old Northern Road, Kenthurst.
- *ats M&R Civil*, proposed SEPP5 development, Old Northern Road, Kenthurst.

Kiama Council ats Moss: proposed new residence in rural land, Alne Bank Road, Gerringong.

Liverpool City Council ats Kira Holdings Pty Ltd: proposed subdivision and low density residential development, Hoxton Park.

Luke Tappouras v Lake Macquarie City Council: proposed Heritage College, Ironbark Road, Morisset.

Marsim (Queensland) Pty Ltd and Gold Coast City Council ats Hoffman & Ors: proposed neo-traditional settlement development, Killowill Avenue, Paradise Point, Gold Coast.

Molusso J v Gosford Council: proposed apartment building, Grosvenor Road, Terrigal.

Penrith City Council

- *ats Pacific Waste Management Pty Ltd*, proposed waste facility, Elizabeth Drive, Badgery's Creek.
- *ats Penrith Waste Services Pty Ltd*, prosecution for alleged breaches of conditions of consent, Mulgoa Quarry.
- *ats Sydney Anglican Schools Corporation*, proposed rural school construction, Homestead Road, Orchard Hills.

Pope Shenouda Coptic Christian Centre v Campbelltown City Council: proposed redevelopment of religious and community facilities, Wills Road, Long Point.

RTA ats Scollard: valuation matter concerning compulsory acquisition of land, Olympic Way, Gerogery.

Sangha Holdings Pty Ltd v Kiama Council: proposed subdivision, Cooby Road, Albion Park.

Save Hawkesbury's Unique River Environment (SHURE) ats Consensus Developments: proposed tourist accommodation facility, Kangaroo Point, Brooklyn.

Seaview Gardens Pty Ltd v Port Stephens Shire Council: proposed medium density residential development, One Mile Close, Boat Harbour, Port Stephens.

Sherringham v Baulkham Hills Council: proposed retail nursery, Old Northern Road, Dural.

Sutherland Shire Council: primary submission to Commission of Inquiry into land use, Helensburgh.

The Coffs Harbour Environment Centre v the Minister for Planning: proposed rezoning of Look at Me Now Headland for the purpose of sewage treatment plant and outfall, Coffs Harbour.

The Jehovah's Witnesses Congregations v Penrith Council: proposed place of worship, Homestead Road, Orchard Hills.

Tony Fidler as Trustee for Howship Holdings v Port Stephens Shire Council: valuation matter concerning acquisition of land, Lily Hill, Nelson Bay.

Townsend W & D v Lake Macquarie City Council: proposed rural dwelling, Chelston Street, Warners Bay.

Warringah Council ats Vigor Master: proposed dwelling construction, Brooker Avenue, Beacon Hill

Wingecarribee Shire Council

- *ats Knox*, prosecution for illegal construction of earth bank, Range Road, Kangaloon.
- *ats Webb*, proposed rural dwelling, Silver Springs Hill, Burrawang.
- *ats Allen*, proposed rural dwelling Greenhills Road, Berrima.

Visual Impacts

Assessment and Advice

Private Clients

- Advices and visual impact assessment of a proposed aged care facility, McLaren Street, North Sydney.
- Advices and visual impact assessment of the proposed concept plan for a medium density residential development, Belmore Street, Ryde.



- Advices and visual impact assessment of the proposed new dwelling and swimming pool, Mountain Road, Austinmer.
 - Advices and visual impact assessment of the proposed retirement resort, Oakey Creek Road and Marrowbone Road, Pokolbin.
 - Advices on potential visual impacts of the proposed driveway and basement car park, Musgrave Street, Mosman.
- Advice on potential visual impacts of proposed amendments to existing consent, Minamurra Road, Northbridge.
- Assessment and advice on visual effects of lighting from adjacent parking garage, Ocean Street, Woollahra
 - Assessment of visual impacts of additions and alterations to existing retirement village, Jersey Road, Paddington.
 - Assessment of visual impacts of proposed subdivision, Bantry Bay Road, Frenchs Forest.
 - Landscape assessment, curtilage study and heritage impact assessment as part of a Local Environmental Study, curtilage of Duckenfield House, Duckenfield, Hunter Valley.
 - Local environmental study, proposed subdivision and residential development, Berkeley Vale, Wyong Shire.
 - Report on strategic planning issues and submission to Shoalhaven City Council related to Scenic Preservation hatching being proposed over the locality of Cambewarra Village, North Nowra.
 - Scenic resources and visual constraints study, proposed seniors living proposal involving concurrent rezoning, Milton, South Coast.
 - Strategic planning and visual impact assessment for proposed rezoning and master plan application, Riverlands Golf Course, Milperra.
 - Strategic planning study for Stage 1 Master Plan, visual impact assessment for rezoning applications, principles for siting of buildings and mitigation of potential impacts, Boydtown, Eden region.
 - Submission to Council against a proposed industrial development on Burley Road, Horsley Park on the visual amenity, Capitol Hill Drive, Mt Vernon.
 - Submission to Council against a proposed industrial development on Burley Road, Horsley Park on the visual amenity, Greenway Place, Horsley Park.
 - Submission to Waverley Council concerning visual impacts of proposed amended DA, Birrell Street, Tamarama.
 - Urban design and visual impact study, Beach Street, Coogee.
 - Urban design and visual impacts assessment, proposed Trinity Point Marina and tourism development Concept Plan, Lake Macquarie.
 - Visual and landscape strategic planning assessment of proposed draft amendment to Wingecarribee LEP 1989, Burradoo, Moss Vale
 - Visual constraints and residential development strategy advice, Lennox Head.
- Advocacy concerning strategic planning process and proposed rezoning of land, Lennox Head.
- Visual impact and view loss assessment for proposed seniors living development, former Loreto site, Bronte Road, Bronte
 - Visual impact assessment and advice on building height controls for Greystanes Estate, Southern Employment Land, Greystanes.
 - Visual Impact Assessment and advices on rural subdivision, The Northern Road, Glenmore Park.
 - Visual impact assessment and strategic planning for proposed rezoning and subdivision of land at Menangle Road, Menangle
 - Visual impact assessment as part of the Review of Environmental Factors for Shellharbour Waste Water Treatment Works.
 - Visual impact assessment for subdivision application, The Northern Road, Glenmore Park.
 - Visual impact assessment of land proposed for rezoning to support a proposed clay target shooting facility, Bong Bong Road, Huntley.
 - Visual impact assessment of new school house, Kingswood Road, Orchard Hills.
 - Visual impact assessment of proposed amendments to existing consent, Tulloch Avenue, Concord
 - Visual impact assessment of proposed residential development, Bray Street, Mosman.



- Visual impact assessment of proposed residential subdivision, mitigation measures and advice on conditions for site specific DCP, Scarborough Gardens, Bonnells Bay
- Visual impact assessment of proposed seniors living development, St Albans Street, Abbotsford.
- Visual impact assessment of the proposed mixed use development, Columbia Precinct, Parramatta Road and Columbia Lane, Homebush.
- Visual impact assessment of the proposed residential townhouses development including preparation and certification of photomontages, Johnston Street, Annandale.
- Visual Impact Assessment Part 3A Concept Plan application. Old Canterbury Road, Lewisham.
- Visual impact evaluation of a series of possible locations for dwelling sites, Menai.
- Visual impacts assessment of proposed residential developments, Thomas and Dumbarton Streets, McMahon's Point.

Government Clients

- *Ashfield City Council*
Ashfield Town Centre, Study of Building Heights to be incorporated into the Town Centre Development Control Plan.
Review of DA for Abacus Ashfield Mall Redevelopment, against the performance standards of Building Heights Study.
- *Brisbane City Council*
Cultural Mapping exercise, for Quality Urban Corridors Program, Logan Road, Lutwyche/Gympie Roads, in association with Archimix Brisbane.
- *Brisbane City Council and the Department of Natural Resources, Queensland*
Protection of Scenic Landscapes Study; Regional landscape study to develop a methodology for the documentation of scenic values of the South East Region of Queensland.
South East Queensland Regional Organisation of Councils
advice on Scenic Amenity Study
- *Council of the City of Gosford*
City Wide Visual Quality Study in association with David Kettle Consulting Services.
Development Control Plan-Scenic Quality.
Local Environmental Study, The Scenic Highway, Terrigal.
- *Department of Infrastructure, Planning and Natural Resources and The Uniting Church of Australia*
Visual impact assessment for subdivision of land at Ingleside Road, Ingleside.
- *Hastings Shire Council*
Review and redrafting of DCPs 9 and 20 relating to scenic and heritage resource protection, Port Macquarie.
Visual resources and scenic conservation study as part of Camden Haven River Estuary Processes Study, in association with Patterson Britton and Partners.
- *Ku ring gai Council*
Brief development for municipality wide neighbourhood visual and streetscape study.
Local Environmental Study: scenic quality of South Turrumurra.
- *Landcom*
Strategic planning advice and visual impact assessment for proposed NSW Police Facilities on former Sydney Water land, Potts Hill.
- *Manly Council*
advice on and provision of certified photomontages of proposed Major Projects developments in Manly Town Centre.
- *Pittwater Council*
Scenic qualities, landscape resources and visual constraints study, potential rezoning and land swap exercise, Council Works Depot site, Ingleside.
- *Sydney Water*
Review of visual environmental effects for Wongawilli Reservoir proposal, West Dapto, Illawarra.
- *Road Transit Authority*
Review of visual environmental effects for Oak Flats Highway Interchange proposal, Oak Flats to Dunmore section, Princes Highway, Illawarra.
- *Office of Marine Administration and Department of Environment and Planning*
Methodology for assessment of visual issues and design guidelines for the DCP to accompany SREP 22 and 23, Sydney and Middle Harbours and Parramatta River: and Part 5 checklist.



- *Rockdale City Council*
Development control strategy and advice for Draft DCP, Rocky Point Road, Ramsgate.
- *Singleton City Council*
Visual impact assessment of proposed temporary accommodation village, Putty Road, Singleton.
- *Shoalhaven City Council*
East Nowra Local Environmental Study.
Old Errowal Bay visual quality study.
Brief for Mollymook Local Environmental Study: Visual Impacts.
- Visual impacts assessment relating to land swap and rezoning proposals, Milton and Narrawallee.
- Sutherland Shire Council, jointly with Wollongong City Council.
Commission of Inquiry into rezoning, primary submission on visual impacts, Helensburgh.
- *Wingecarribee Shire Council*
Preparation of Development Control Plan No 53 for the siting of buildings in rural zones.

Publications

Refereed articles

- Falchero, S., Lamb, R.J., Peron, E.M. and Purcell, A.T. (1992). Is our experience of the world more complicated than we think? In Aristides, M. and C Karaletsou, Socio-Environmental Metamorphoses: Builtscapes, Landscapes, Ethnoscape, Euroscape, Thessaloniki, Aristotle University Press, IV, 121-125.
- Fuller, A, and Lamb, R.J. (2002). The objectification and aestheticization of cultural landscapes: The meeting point of western heritage traditions and Australian Cultural Landscapes, *Journal of the Australian and New Zealand Association for Person Environment Studies*, 57, 16-26
- Lamb, R.J. (1985). Litter fall and nutrient turnover in two eucalypt woodlands. *Australian Journal of Botany*, 33, 1-14
- Lamb, R.J. (1988). The nexus between aesthetics and ecology: perception of naturalness and landscape management. *Journal of the Australian and New Zealand Association for Person Environment Studies*, 30, 23-32.
- Lamb, R.J. (1989). Identification and assessment of rural cultural landscapes: The National Trust's method, and a relevant case study. *Historic Environment* 7(2), 38-44.
- Lamb, R.J. (1991). Ecology and architecture: A tradition of neglect. *Journal of the Australian and New Zealand Association for Person Environment Studies*, 37/38, 7-18.
- Lamb, R.J. (1991). The challenge of ecology to the design professions I: Invention and intervention. *Exedra*, 3(1), 16-24.
- Lamb, R.J. (1992). Aesthetic impacts of development on valued landscapes: The nature of evidence given in five cases. *Journal of the Australian and New Zealand Association for Person Environment Studies*, 41-42, 31-52.
- Lamb, R.J. (1993). Psychological type in first year Architecture students: Potential new answers to some old questions. *Higher Education Research and Development Association*, 16, 159-164.
- Lamb, R.J. (1995). Biodiversity, in: *Architecture and the Environment*, (New Zealand Institute of Architects), 2, 1-6.
- Lamb, R.J. (1995). Biodiversity, in: *Environmental Design Guide*, (Royal Australian Institute of Architects), General Issues, 1(3), 1-6.
- Lamb, R.J. (1995). The scenic quality of the Hawkesbury-Nepean River: a critique of three versions of community participation in its conservation. *Journal of the Australian and New Zealand Association for Person Environment Studies*, 48, 1-17.
- Lamb, R.J., & Purcell, A.T. (1990). Perception of naturalness in landscape and its relationship to vegetation structure. *Landscape and Urban Planning*, 19, 333-352.
- Lamb, R.J., and Purcell, A.T. (2002). Landscape perception: A Comparison of perceived naturalness to variations in the ecological naturalness of vegetation. *Journal of the Australian and New Zealand Association for Person Environment Studies* 57, 1-16.
- Lamb, R.J., and Holland, G. (1995). Are physical and cultural issues of ecologically sustainable development always compatible?: The Australian example of urban consolidation. *People and Physical Environment Research*, 47, 34-41.
- Lamb, R.J., and Morris, C. (1996). Symbolic, Spiritual and Aesthetic values of forests. In: *Design for People*, Groves, M.A. and Wong, S. (eds), Sydney, People and Physical Environment Research, pp 79-84.
- Lamb, R.J., Purcell, A.T., Mainardi Peron, E., and Falchero, S. (1994). Cognitive categorisation and preference for places. In



S.J. Neary, M.S. Symes and F.E. Brown, *The Urban Experience: a People Environment Perspective*, London, E & F.N. Spon, pp 405-416.

Outhred, R.K., Lainson, R., Lamb, R. and Outhred, D. (1985). A floristic survey of Ku Ring Gai Chase National Park. *Cunninghamia*, 3, 313-338.

Lamb, R.J., and Purcell, A.T. (1982). A Landscape Perception Study of the Peninsula Area of Warringah Shire: Implications for Planning Controls, Building Regulations and Other Areas of Council Activities. University of Sydney, Department of Architecture, Occasional Paper, 44pp.

Purcell, A.T. and Lamb, R.J. (1984). Landscape perception: An examination and empirical investigation of two central issues in the area. *Journal of Environmental Management*, 19, 31-63.

Purcell, A.T. and Lamb, R. J. (1998). Preference and naturalness: An ecological approach. *Landscape and Urban Planning*, 42, 57-66.

Purcell, A.T., Lamb, R.J., Mainardi Peron, E.M. and Falchero, S. (1994). Preference of preferences for landscapes? *Journal of Environmental Psychology* 16, 195-205.

Peron, E., Purcell, A.T., Staats, H., Falchero, S. and Lamb, R.J. (1998). Models of preference for outdoor scenes: some experimental evidence. *Environment and Behaviour*, 30, 382-305.

Published Symposia

Lamb, R.J. (1994). Advancing arguments for the conservation of valued places. In: Ramsay, J and Paraskevopolous, J (eds). *More Than Meets the Eye: Identifying and assessing aesthetic value*. Australian Heritage Commission Technical Workshop Series No. 7, University of Melbourne, 1993. Canberra, Australian Heritage Commission, pp 23-38.

Lamb, R. J. (1994). Technics or ethics? In: Ross, H., Dovers, S., Sexton, M. and Rodger, A. (eds). *Sustainability and the built environment: Interpretation and strategies*. Fundamental Questions paper No. 12, Centre for Resource and Environmental Studies, Canberra, Australian National University, p 20.

Lamb, R. J., and Morris, C. (1996). Cultural values in the assessment of old growth forests, in, *The coming of age: Forest age and heritage values*. 1997 Technical Series No. 1, Canberra, Australian Heritage Commission.

Thorne, R.T. and Lamb, R.J. (1990). Can schools of architecture and their design teaching be improved through understanding psychological differences between individuals and groups within the organisations?. In: J. Plume (ed), *Architectural Science and Design in Harmony: Proceedings of Joint ANZASCA/ADTRA Conference*, University of New South Wales.

Thorne, R.T. and Lamb, R.J. (1991). The education of architectural designers. What will be the qualities required of the teachers of design if the Higher Education Council policy for universities is implemented? *ANZASCA Conference Proceedings*, Adelaide, University of Adelaide.

Lamb, R.J. (1988). Ecological and perceptual changes to bushland associated with Lantana invasion. *Managing Warringah's Bushland (Symposium)*. Sydney, Warringah Shire Council.

Lamb, R.J. (1983). Ecological and aesthetic objectives in bush management. In: *Sydney or the Bush?* Australian Institute of Horticulture Conference, Sydney, Ku ring Gai CAE.

Lamb, R.J. (1994). Unique landscape and vegetation. In: *Things we want to keep: Environmental heritage management under the new Local Government Act*. National Trust of Australia seminar, Australian Museum, March 1994; Sydney, National Trust of Australia.

Conference papers

Lamb, R.J. (1991). Integrating the natural and built environments. *Practice and Theory of Cultural Heritage: A New Relationship?*. University of Sydney, Continuing Education Seminar in conjunction with Australia ICOMOS, July 18, 1991.

Lamb, R.J. (1994). Who cares about conservation of river landscapes? Public participation in the scenic quality study of the Hawkesbury-Nepean River. *Hawkesbury River Bi-centenary Conference*, University of Western Sydney, Hawkesbury, September, 1994.

Lamb, R.J. (1995). Conservation of the scenic quality of rural areas: The role of local government. *Planning for Rural Areas: the Key Role of Local Government Conference*, Hawkesbury Nepean River Catchment Management Trust.