

Shellharbour City Council  
and  
Lend Lease Communities (Australia) Limited

## Calderwood Voluntary Planning Agreement

Environmental Planning and Assessment Act 1979

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This Deed is made on 15/09/14

## Parties

- 1 **Shellharbour City Council** (ABN 78 392 627 134) of Lamerton House, Lamerton Crescent, Shellharbour City Centre NSW 2529 (the **Council**).
- 2 **Lend Lease Communities (Australia) Limited** (ABN 88 000 966 085) of Level 4, 30 The Bond, 30 Hickson Road, Millers Point NSW 2000 (the **Developer**).

## Recitals

- A The Developer intends to carry out the Development.
- B On 8 December 2010, the Minister for Planning granted the Concept Plan Approval.
- C The Owner is the owner of the Land and has consented to the Developer taking steps to carry out the Development.
- D The Developer has made or proposes to make a Development Application.
- E From the date the Planning Agreement commences to operate (pursuant to clause 2.1(b)), this Deed constitutes an agreement between the Developer and the Council that the Developer will make the Development Contributions on the terms and conditions of this Deed.

It is agreed as follows.

## 1 Definitions and Interpretation

### 1.1 Definitions

In this Deed, unless the context clearly indicates otherwise:

**Act** means the *Environmental Planning and Assessment Act 1979* (NSW).

**Address for Service** means the address of each party appearing in **Schedule 2** or any new address notified by any party to all other parties as its new Address for Service.

**Albion Park Library** means item C2.16 in the Shellharbour City Council Section 94 Contributions Plan 2013.

**Albion Park Bypass** means item C3.09 in the Shellharbour City Council Section 94 Contributions Plan 2013.

**Allotment** means a lot forming part of the land identified in any Development Application for subdivision of the whole, or any part, of any land for the purposes of the Development which lot is intended to be developed, subject to Development Consent, by construction of one or more Dwellings and is not intended to be further subdivided prior to the construction of those Dwellings for the purposes of the Development.

**Anticipated Dwelling Yield** means the anticipated number of Dwellings proposed to be constructed on Allotments the subject of a Residential Plan, to be determined as follows:

- (a) Council will determine the Anticipated Dwelling Yield acting reasonably having regard to:
  - (i) information provided by the Developer; and
  - (ii) any corresponding determination in accordance with **Clause 1 of Schedule 4** to the State Planning Agreement (which relates to the Transport Contributions payable by the Developer under the State Planning Agreement).

- (b) If the Council does not make a determination within 10 Business Days of receipt of the relevant information from the Developer in relation to the Anticipated Dwelling Yield, the Anticipated Dwelling Yield will be the number of Dwellings provided for in the information provided by the Developer.

**Approval** means any approvals, consents, certificates, permits, endorsements, licences, conditions or requirements (and any modifications or variations to them) which may be required by Law or by adjoining owners for the commencement and carrying out of the Contributions Works or the Development generally and includes an approval under Part 3A of the Act.

**Authority** means any Federal, State or local government or semi-governmental, statutory, judicial or public person, instrumentality or department.

**Bank Guarantee** means one or more irrevocable and unconditional undertakings:

- (a) by an Australian bank which is an eligible financial institution for the purposes of Treasury Circular NSW TC08/01 dated 21 February 2008 as amended, supplemented or substituted from time to time; and
- (b) on terms acceptable to the Council, acting reasonably,

to pay the face value of that undertaking (being such an amount as is required under this Deed) on demand and expressed to be for the performance by the Developer for its obligations under this Deed.

**Business Day** means any day that is not a Saturday, Sunday, gazetted public holiday or bank holiday in Sydney, and concludes at 5pm on that day.

**Certifier** means such person with the appropriate qualifications as is agreed by the parties.

**Concept Plan Approval** means the concept plan for the Development that was approved by the Minister for Planning on 8 December 2010.

**Construction Certificate** has the same meaning as in the Act.

**Contribution Amount** means the amounts of a monetary contribution to be paid by the Developer as described in **Schedule 4**.

**Contribution Land** means the land that the Developer is required to dedicate (or procure the dedication of) to the Council as described in **Schedule 4**.

**Contribution Regime** means all Laws governing the levying of contributions by the proponents of development including:

- (a) any contribution plan adopted by the Council pursuant to s 94EA of the Act (or any equivalent provision); and
- (b) any Ministerial declaration with respect to contributions pursuant to s 94EA of the Act (or any equivalent provision),

but excluding this Deed.

**Contribution Works** means the works to be undertaken by the Developer as described in **Schedule 4**.

**CPI** means the Sydney Consumer Price Index (All Groups) published by the Commonwealth Statistician, or if that index no longer exists, any similar index which the Council determines, acting reasonably.

**Defects Liability Period** means the period of 12 months commencing from the date of Practical Completion of the Contribution Works.

**Deferred Allotment** is defined in **clause 3(d) of Schedule 4**.



**Development** means the proposed use of land and associated works located on the Land and other land in both the Shellharbour and Wollongong Local Government Areas, as described in the Concept Plan Approval that includes approximately 4,800 Dwellings, 3 school sites, 50 hectares of mixed use/employment uses, infrastructure including road layout and utility provision, and land for riparian corridors and conservation.

**Development Application** has the same meaning as in the Act.

**Development Consent** has the same meaning as in the Act.

**Development Contributions** means the contributions provided for in **Schedule 4**.

**Development Contribution Table** means collectively, the tables in **clauses 1.1 and 1.2** of **Schedule 4**.

**Dwelling** means a room, or suite of rooms, occupied or used, or so constructed or adapted, as to be capable of being occupied or used, as a separate domicile to be erected on the Land as part of the Development.

**Explanatory Note** means the explanatory note required by the Regulation.

**General Register of Deeds** means the land register maintained under the *Conveyancing Act 1919* (NSW) and so titled.

**GST** means any form of goods and services tax payable under the GST Legislation.

**GST Legislation** means the *A New Tax System (Goods and Services Tax) Act 1999* (Cth).

**Land** means the land described in **Part 1 of Schedule 3** and shown in **Schedule 8**.

**Landscape Masterplan** means a document that:

- (a) contains the same level of detail as the document entitled "Western Precinct Landscape Masterplan Strategy Report" and which is exhibited to this Deed;
- (b) has been adapted to the circumstances of the Development; and
- (c) has been prepared by the Developer in consultation with the Council.

**Law** means the relevant requirements of all statutes, rules, ordinances, codes, policies, regulations, proclamations, by-laws or consents issued by an Authority, present or future, including applicable principles of common law.

**Notional Value** means the notional value of an item of Contribution Works or Contribution Land specified in column 2 of the Development Contribution Table.

**Owner** means the owners of the Land at the date of this Deed.

**Planning Agreement** means this Deed as and when it becomes operative as a planning agreement under and by virtue of **clause 2.1(b)**.

**Practical Completion** means in relation to the Contribution Works, the point of time at which the relevant Certifier is satisfied, acting reasonably, that the Contribution Works have been completed and installed in accordance with all relevant Approvals and this Deed (except for minor defects or omissions).

**Project Approval** means an approval given under section 75J of the Act.

**Real Property Act** means the *Real Property Act 1900* (NSW).

**Register** means the Torrens title register maintained under the Real Property Act.

**Registered Land** is defined in **clause 5** of **Schedule 7**.

**Regulation** means the *Environmental Planning and Assessment Regulation 2000* (NSW).

**Relevant Lot** is defined in **clause 5.3**.

**Residential Plan** is defined in **clause 3(b)** of **Schedule 4**.

**Service Easements** means easements for services and drainage which are noted on the Subdivision Plan.

**State Planning Agreement** means the planning agreement with respect to the Development between the Minister for Planning and the Developer (formerly known as Delfin Lend Lease Limited) executed on 3 March 2011.

**Subdivision Certificate** has the same meaning as in the Act.

**Subdivision Plan** means any plan of subdivision approved by the Council which creates separate lots for the Contribution Land.

**Transfer** means a transfer in the approved form under the Real Property Act which is duly stamped, signed and otherwise in registrable form for the purpose of transferring the Contribution Land to the Council.

**Unregistered Land** is defined in **clause 1** of **Schedule 7**.

## 1.2 Interpretation

In this Deed unless the context clearly indicates otherwise:

- (a) a reference to **this Deed** or another document means this Deed or that other document and any document which varies, supplements, replaces, assigns or novates this Deed or that other document;
- (b) a reference to **legislation** or a **legislative provision** includes any statutory modification, or substitution of that legislation or legislative provision and any subordinate legislation issued under that legislation or legislative provision;
- (c) a reference to a **body** or **authority** which ceases to exist is a reference to either a body or authority that the parties agree to substitute for the named body or authority or, failing agreement, to a body or authority having substantially the same objects as the named body or authority;
- (d) a reference to the **introduction**, a **clause**, **schedule** or **annexure** is a reference to the introduction, a clause, a schedule or an annexure to or of this Deed;
- (e) **clause headings**, **the introduction** and the **table of contents** are inserted for convenience only and do not form part of this Deed;
- (f) the **schedules** form part of this Deed;
- (g) a reference to a **person** includes a natural person, corporation, statutory corporation, partnership, the Crown or any other organisation or legal entity;
- (h) a reference to a **natural person** includes their personal representatives, successors and permitted assigns;
- (i) a reference to a **corporation** includes its successors and permitted assigns;
- (j) a reference to a right or obligation of a party is a reference to a right or obligation of that party under this Deed;
- (k) an **obligation** or **warranty** on the part of 2 or more persons binds them jointly and severally and an obligation or warranty in favour of 2 or more persons benefits them jointly and severally;
- (l) a requirement to do any thing includes a requirement to cause that thing to be done and a requirement not to do any thing includes a requirement to prevent that thing being done;



- (m) **including** and **includes** are not words of limitation;
- (n) a word that is derived from a defined word has a corresponding meaning;
- (o) **monetary amounts** are expressed in Australian dollars;
- (p) the singular includes the plural and vice-versa;
- (q) words importing one gender include all other genders;
- (r) a reference to a thing includes each part of that thing; and
- (s) neither this Deed nor any part of it is to be construed against a party on the basis that the party or its lawyers were responsible for its drafting.

## 2 Operation and Application of this Deed

### 2.1 Operation

- (a) Until the Planning Agreement operates pursuant to **clause 2.1(b)**, this Deed constitutes an irrevocable offer to the Council from the Developer to enter into the Planning Agreement.
- (b) The Planning Agreement operates, and becomes legally binding on both parties if:
  - (i) the Council grants consent to Shellharbour City Council Development Application DA 468/2013;
  - (ii) the Planning Agreement is entered into as required by clause 25C(1) of the Regulation; and
  - (iii) the Council executes this Deed.

### 2.2 Planning agreement under the Act

This Deed constitutes a planning agreement within the meaning of section 93F of the Act.

### 2.3 Application

This Deed applies to:

- (a) the Land; and
- (b) the Development.

### 2.4 Development Contributions

The Council agrees that it may only use or expend any Development Contribution made by the Developer in accordance with **clause 4 of Schedule 4**.

## 3 Application of Sections 94, 94A and 94EF of the Act

The application of sections 94, 94A and 94EF of the Act are excluded to the extent stated in **Schedule 1**.

## 4 Requirement to Provide Development Contributions

The Developer undertakes to provide, or procure the provision of, the Development Contributions in the manner and at the times set out in **Schedule 4** and the parties agree to abide by the procedures and obligations set out in **Schedule 4, Schedule 5, Schedule 6 and Schedule 7**.

## 5 Registration on title

### 5.1 Land ownership

The Developer represents and warrants that it is:

- (a) the owner of that part of the Land described in **part 2 of Schedule 3** or legally and beneficially entitled to become the owner of the Land described in **part 2 of Schedule 3** and will become the legal and beneficial owner of the Land, prior to the date that this Deed is required to be registered under **clause 5.2** of this Deed; and
- (b) legally and beneficially entitled to obtain all consents and approvals in relation to that part of the Land described in **part 3 of Schedule 3** and to compel any person referred to in or contemplated by **clause 5.2(b)(i)** to assist, cooperate and to otherwise do all things necessary for the Developer to comply with its obligations under **clause 5.2**.

### 5.2 Registration of Deed

- (a) As contemplated by section 93H of the Act, the Developer agrees to procure the registration of this Deed under the Real Property Act in the relevant folio of the Register as soon as practicable after:
  - (i) in relation to that part of the Land described in **part 2 of Schedule 3**, the date the Developer becomes the registered proprietor of that land;
  - (ii) in relation to that part of the Land described in **part 3 of Schedule 3**, the date of this Deed; and
  - (iii) in relation to any other part of the Land not specified in **part 2** or **part 3 of Schedule 3**, the date the Developer enters into arrangements with any person referred to in or contemplated by **clause 5.2(b)(i)** in respect of that land which entitles the Developer to require that person to assist, cooperate and to otherwise do all things necessary for the Developer to procure the registration of this Deed under the Real Property Act in the relevant folio of the Register,

noting that registration of this Deed shall be undertaken progressively, so that this Deed is registered on each part of the Land referred to in this paragraph (a) as soon as practicable in respect of that part of the Land.

- (b) In relation to the land referred to in **clause 5.2(a)**, the Developer, at its own expense, must take all practical steps and otherwise do anything that the Council reasonably requires to procure:
  - (i) the consent of each person who:
    - (A) has an estate or interest in the Land registered under the Real Property Act; or
    - (B) is seized or possessed of an estate or interest in the Land;
  - (ii) the execution of any documents;
  - (iii) the production of the relevant certificates of title; and
  - (iv) the lodgement and registration of this Deed, by the Registrar-General in the relevant folio of the Register, or in the General Register of Deeds if this Deed relates to land not under the Real Property Act.
- (c) The Developer will provide the Council with a copy of the relevant folio of the Register within 10 Business Days of registration of this Deed in accordance with this **clause 5.2**.



### 5.3 Release and discharge of Deed

- (a) If, in respect of an Allotment on which one or more Dwellings are proposed to be constructed and which is not capable of further subdivision (**Relevant Lot**), the Developer has fully satisfied its obligations under this Deed in relation to the payment of Contribution Amounts for the Dwellings proposed for that Relevant Lot and the Developer is not otherwise in default under this Deed (as determined by the Council (acting reasonably) and notified to the Developer in writing), then at the written request of the Developer (such request to contain all necessary title particulars that are relevant to the request), the Council must (at the Developer's cost) promptly:
- (i) provide a release and discharge (in immediately registrable form) of this Planning Agreement to the extent that the Planning Agreement affects that Relevant Lot; and
  - (ii) do all things necessary to enable the extinguishment of this Planning Agreement from the title of that Relevant Lot,
- and the Council agrees to use best endeavours to procure the outcomes referred to in paragraphs (i) and (ii) above as soon as practicable after the relevant request.
- (b) The land to be released and discharged from this Planning Agreement in accordance with **clause 5.3(a)** will also include parts of the Land which are not Allotments or Dwellings or which are not zoned, or intended to be developed, for Allotments or Dwellings.

## 6 Security

### 6.1 Security

The Developer has agreed to provide security under this Deed:

- (a) by registering this Deed on the title to the Land; and
- (b) in accordance with **Schedule 7**.

## 7 Dispute Resolution

### 7.1 Not commence

A party must not commence any court proceedings relating to a dispute unless it complies with this **clause 7**.

### 7.2 Written notice of dispute

A party claiming that a dispute has arisen under or in relation to this Deed must give written notice to the other party specifying the nature of the dispute.

### 7.3 Attempt to resolve

On receipt of notice under **clause 7.2**, the parties must endeavour in good faith to resolve the dispute expeditiously using informal dispute resolution techniques such as mediation, expert evaluation or other techniques agreed by them.

#### **7.4 Mediation**

If the parties do not agree within 21 Business Days of receipt of notice under **clause 7.2** (or any further period agreed in writing by them) as to:

- (a) the dispute resolution technique and procedures to be adopted;
  - (b) the timetable for all steps in those procedures; or
  - (c) the selection and compensation of the independent person required for such technique,
- the parties must mediate the dispute in accordance with the Mediation Rules of the Law Society of NSW. The parties must request the president of the Law Society of NSW or the president's nominee to select the mediator and determine the mediator's remuneration.

#### **7.5 Court proceedings**

If the dispute is not resolved within 60 Business Days after notice is given under **clause 7.2**, then any party which has complied with the provisions of this **clause 7** may in writing terminate any dispute resolution process undertaken under this clause and may then commence court proceedings in relation to the dispute.

#### **7.6 Not use information**

The parties acknowledge the purpose of any exchange of information or documents or the making of any offer of settlement under this **clause 7** is to attempt to settle the dispute. No party may use any information or documents obtained through any dispute resolution process undertaken under this **clause 7** for any purpose other than in an attempt to settle the dispute.

#### **7.7 No prejudice**

This **clause 7** does not prejudice the right of a party to institute court proceedings for urgent injunctive or declaratory relief in relation to any matter arising out of or relating to this Deed.

### **8 GST**

#### **8.1 Definitions**

Words used in this clause that are defined in the GST Legislation have the meaning given in that legislation.

#### **8.2 Intention of the parties**

The parties intend that:

- (a) Divisions 81 and 82 of the GST Legislation apply to the supplies made under and in respect of this Deed; and
- (b) no additional amounts will be payable on account of GST and no tax invoices will be exchanged between the parties.

#### **8.3 Reimbursement**

Any payment or reimbursement required to be made under this Deed that is calculated by reference to a cost, expense, or other amount paid or incurred will be limited to the total cost, expense or amount less the amount of any input tax credit to which any entity is entitled for the acquisition to which the cost, expense or amount relates.



#### 8.4 Consideration GST exclusive

Unless otherwise expressly stated, all prices or other sums payable or consideration to be provided under this Deed are GST Exclusive. Any consideration that is specified to be inclusive of GST must not be taken into account in calculating the GST payable in relation to a supply for the purposes of this **clause 8**.

#### 8.5 Additional Amounts for GST

If GST becomes payable on any supply made by a party (**Supplier**) under or in connection with this Deed:

- (a) any party (**Recipient**) that is required to provide consideration to the Supplier for that supply must pay an additional amount to the Supplier equal to the amount of the GST payable on that supply (**GST Amount**), and:
  - (i) where that GST Amount is payable by the Council, the GST Amount will be limited to the amount of the input tax credit (if any) to which the Council (or the representative member of any GST group of which the Council, in any capacity, is a member) is entitled in relation to the Council's acquisition of that supply and is payable within 5 Business Days after the Council (or the representative member of any GST group of which the Council, in any capacity, is a member) has received the benefit of that input tax credit; and
  - (ii) in any other case, the GST Amount is payable at the same time as any other consideration is to be first provided for that supply; and
- (b) the Supplier must provide a tax invoice to the Recipient for that supply, no later than the time at which the GST Amount for that supply is to be paid in accordance with **clause 8.5(a)**.

#### 8.6 Non monetary consideration

**Clause 8.5** applies to non-monetary consideration.

#### 8.7 No merger

This clause will not merge on completion or termination of this Deed.

### 9 Assignment

#### 9.1 Consent

- (a) This Deed is personal to each party and no party may assign the rights or benefits of this Deed to any person except in the case of the Developer:
  - (i) to a related body corporate (within the meaning of section 50 of the *Corporations Act 2001*), providing that the Developer:
    - (A) must notify the Council of the name of the assignee as soon as practicable prior to the assignment occurring; and
    - (B) must guarantee the obligations of that related body corporate under or in connection with the Deed referred to in paragraph (iii) below and provide to the Council a duly executed deed (on terms reasonably acceptable to the Council) which documents that guarantee; or
  - (ii) to any other person, with the prior consent of the Council, which must not be unreasonably withheld if it is reasonably satisfied that the assignee has sufficient

assets, resources and expertise to perform all of the Developer's obligations under this Deed,

and, in either case prior to any such assignment:

- (iii) the Developer delivers to the Council a deed signed by the assignee which contains provisions under which the assignee agrees to comply with all of the obligations of the Developer under this Deed as if it were joined as a party to this Deed in the place of the Developer (as the case may be) (including obligations which arose before the assignment);
  - (iv) any default by the Developer under any provision of this Deed (as determined by the Council (acting reasonably) and notified to the Developer in writing) has been remedied by the Developer or waived by the Council on such conditions as the Council may determine in his absolute discretion in relation to that waiver;
  - (v) the Developer pays the Council's reasonable costs in relation to that assignment; and
  - (vi) the Council is satisfied acting reasonably, having regard to all evidence and other supporting material provided by the Developer, that the proposed assignee has obtained, whether by way of assignment by the Developer, or otherwise, the same rights in relation to the development of the Land (or the relevant part of the Land) as the Developer had prior to that assignment, in order to enable that assignee to fulfil all obligations to be performed by that assignee under or by virtue of this Deed.
- (b) If the Developer satisfies the requirements of **clause 9.1(a)**, the Developer will be fully released from its obligations under this Deed (subject to any guarantee obligations referred to or contemplated by **clause 9.1(a)(i)(B)**).

## 10 Warranties of Capacity

### 10.1 General warranties

Each party warrants to each other party that:

- (a) this Deed creates legal, valid and binding obligations, enforceable against the relevant party in accordance with its terms; and
- (b) unless otherwise stated, it has not entered into this Deed in the capacity of trustee of any trust.

### 10.2 Power of attorney

If an attorney executes this Deed on behalf of any party, the attorney declares that it has no notice of the revocation of that power of attorney.

## 11 Interest

If the Developer fails to pay any amount due to the Council on the due date for payment, the Developer must also pay to the Council interest at a rate of 2% above the loan reference rate charged by the Commonwealth Bank of Australia from time to time. That interest will be payable on the daily balance of amounts due from the due date for payment of those amounts until all outstanding amounts (including interest on those amounts) have been paid to the Council.



## **12 General Provisions**

### **12.1 Entire Deed**

This Deed constitutes the entire agreement between the parties regarding the matters set out in it and supersedes any prior representations, understandings or arrangements made between the parties, whether orally or in writing.

### **12.2 Variation**

This Deed must not be varied except by a later written document executed by all parties.

### **12.3 Waiver**

A right created by this Deed cannot be waived except in writing signed by the party entitled to that right. Delay by a party in exercising a right does not constitute a waiver of that right, nor will a waiver (either wholly or in part) by a party of a right operate as a subsequent waiver of the same right or of any other right of that party.

### **12.4 Further assurances**

Each party must promptly execute all documents and do everything necessary or desirable to give full effect to the arrangements contained in this Deed.

### **12.5 Time for doing acts**

- (a) If:
  - (i) the time for doing any act or thing required to be done; or
  - (ii) a notice period specified in this Deed,
    - expires on a day other than a Business Day, the time for doing that act or thing or the expiration of that notice period is extended until the following Business Day.
- (b) If any act or thing required to be done is done after 5pm on the specified day, it is taken to have been done on the following Business Day.

### **12.6 Governing law and jurisdiction**

- (a) The laws applicable in New South Wales govern this Deed.
- (b) The parties submit to the non-exclusive jurisdiction of the courts of New South Wales and any courts competent to hear appeals from those courts.

### **12.7 Severance**

If any clause or part of any clause is in any way unenforceable, invalid or illegal, it is to be read down so as to be enforceable, valid and legal. If this is not possible, the clause (or where possible, the offending part) is to be severed from this Deed without affecting the enforceability, validity or legality of the remaining clauses (or parts of those clauses) which will continue in full force and effect.

### **12.8 Preservation of existing rights**

The expiration or termination of this Deed does not affect any right that has accrued to a party before the expiration or termination date.

### **12.9 No merger**

Any right or obligation of any party that is expressed to operate or have effect on or after the completion, expiration or termination of this Deed for any reason, will not merge on the occurrence of that event but will remain in full force and effect.

**12.10 Counterparts**

This Deed may be executed in any number of counterparts. All counterparts taken together constitute one instrument.

**12.11 Relationship of parties**

Unless otherwise stated:

- (a) nothing in this Deed creates a joint venture, partnership, or the relationship of principal and agent, or employee and employer between the parties; and
- (b) no party has the authority to bind any other party by any representation, declaration or admission, or to make any contract or commitment on behalf of any other party or to pledge any other party's credit.

**12.12 Good faith**

Each party must act in good faith towards all other parties and use its best endeavours to comply with the spirit and intention of this Deed.

**12.13 No fetter**

Nothing in this Deed shall be construed as requiring either the Council to do anything that would cause the Council to breach any of the Council's obligations at law and without limitation, nothing in this Deed shall be construed as limiting or fettering in any way the discretion of the Council in exercising any of the Council's statutory functions, powers, authorities or duties.

**12.14 Explanatory note**

The Explanatory Note must not be used to assist in construing this Deed.

**12.15 Expenses and stamp duty**

- (a) Each Party is to pay its own legal costs and disbursements in connection with the negotiation, preparation, execution and carrying into effect of this Deed.
- (b) The Developer must pay for all costs and expenses associated with the giving of public notice of this Deed and the Explanatory Note in accordance with the Regulation.
- (c) The Developer must pay all stamp duty assessed on or in respect of this Deed and any instrument or transaction required by or necessary to give effect to this Deed.

**12.16 Notices**

- (a) Any notice, demand, consent, approval, request or other communication (notice) to be given under this Deed must be in writing and must be given to the recipient at its Address for Service by being:
  - (i) hand delivered; or
  - (ii) sent by facsimile transmission.
- (b) A notice is given if:
  - (i) hand delivered, on the date of delivery; or
  - (ii) sent by facsimile transmission during any Business Day, on the date that the sending party's facsimile machine records that the facsimile has been successfully transmitted.

EXECUTED as a Deed

~~The Common Seal of Shellharbour City~~

~~Council~~ was hereto affixed on

~~day of 2014~~

~~pursuant to resolution no made on~~

~~day of 2014:~~

*CMC MA*

*CMC*

General Manager

ACTING

*Marianne Saliba*

Mayor

*CAREY MCINTYRE*

Print Name

*MARIANNE SALIBA*

Print Name

Executed as a deed in accordance with  
section 127 of the Corporations Act by **Lend  
Lease Communities (Australia) Limited** (ABN  
88 000 966 085):



*Matthew Alan Meurs*

Signature of Director

*Matthew Alan Meurs*

Name of Director

*Paul David Cutler*

Signature of Director/Secretary

Name of Director/Secretary



**Schedule 1****Requirements under section 93F of the Act (clause 1.2)**

The parties acknowledge and agree that the table set out below provides for certain terms, conditions and procedures for the purpose of the Deed complying with the Act.

<b>REQUIREMENT UNDER THE ACT</b>	<b>THIS DEED</b>
<b>Planning instrument and/or development application – (section 93F(2))</b> The Developer has: (a) sought a change to an environmental planning instrument (b) made, or proposes to make, a Development Application (c) entered into an agreement with, or is otherwise associated with, a person, to whom paragraph (a) or (b) applies	(a) No (b) Yes (c) No
<b>Description of land to which this Deed applies – (section 93F(3)(a))</b>	See Schedule 3
<b>Description of change to the environmental planning instrument to which this Deed applies – (section 93F(3)(b))</b>	N/A
<b>The scope, timing and manner of delivery of contribution required by this Deed – (section 93F(3)(c))</b>	See Schedule 4
<b>Applicability of sections 94 and 94A of the Act – (section 93F(3)(d))</b>	The application of sections 94 and 94A of the Act is excluded in respect of the Development, subject to <b>clause 2(b) of Schedule 7</b> .
<b>Applicability of section 94EF of the Act – (section 93F(3)(d))</b>	The application of section 94EF of the Act is not excluded in respect of the Development.
<b>Consideration of benefits under this Deed if section 94 applies – (section 93F(5))</b>	Yes
<b>Mechanism for Dispute Resolution – (section 93F(3)(f))</b>	See clause 7
<b>Enforcement of this Deed – (section 93F(3)(g))</b>	See clause 6
<b>No obligation to grant consent or exercise functions – (section 93F(10))</b>	See clause 12.13

**Schedule 2**

**Address for Service (clause 1.1)**

**1 The Council**

**Contact:** The General Manager, Shellharbour City Council

**Address:** Lamerton House, Lamerton Crescent  
Shellharbour City Centre NSW 2529

**Facsimile No:** (02) 4221 6016

**2 Developer**

**Contact:** The Company Secretary

**Address:** Level 4, 30 The Bond, 30 Hickson Road  
Millers Point NSW 2000

**Facsimile No:** (02) 9673 8888

**Schedule 3**  
**Land (clause 1.1)**

**Part 1**

Lot	Deposited Plan	Lot	Deposited Plan
4	259137	2	608238
5	259137	1	998349
1	1044038	1	194903
2	2534	3	259137
1	259137	22	809156
112	851153	2	259137
1	608238	6	259137
21	809156	10	619547
1	996926	1	558196
8	259137	42	878122
2	158988		

**Part 2**

Lot	Deposited Plan	Lot	Deposited Plan
1	996926	6	259137

**Part 3**

Lot	Deposited Plan	Lot	Deposited Plan
4	259137	2	608238
5	259137	1	998349
1	1044038	1	194903
2	2534	3	259137
1	259137	22	809156
112	851153	2	259137
2	158988		

**Schedule 4****Development Contributions (clause 4)****1 Development Contribution Table**

The Developer undertakes to make the following Development Contributions:

**1.1 Contribution Land and Contribution Works:**

1. Development Contribution Item	2. Manner of Delivery	3. Timing
<p>Any reference in this Development Contribution Table to a number of Dwellings is to be calculated by reference to the sum of:</p> <p>(a) the Anticipated Dwelling Yields for all Subdivision Certificates that have been issued or applied for at the relevant time (excluding the Anticipated Dwelling Yield for any Deferred Allotments); and</p> <p>(b) any Dwellings to which <b>clause 3(d)(ii)</b> of this <b>Schedule 4</b> applies and for which a Construction Certificate has been issued.</p>		
<p><b>Multi-purpose Community Resource Centre</b></p> <p>Centre comprising approximately 900 sqm building on approximately 4,000 sqm site with space for youth, aged and children's services.</p> <p>The centre facilities to be considered will include a variety of large and smaller flexible spaces suitable for a range of social, leisure, learning and cultural activities, for example:</p> <ul style="list-style-type: none"> <li>• a hall suitable for large gatherings and functions</li> <li>• rooms suitable for smaller groups</li> <li>• meeting rooms suitable for education/training</li> <li>• play space for children's activities</li> <li>• informal lounge / foyer area</li> <li>• hot desks for human service providers;</li> <li>• rooms for sessional services;</li> <li>• kitchen suitable to support</li> </ul>	<p><b>Contribution Works:</b></p> <p>Developer to design and construct item including provision of landscaping, fit out, parking, public art and site works (notional value \$3,150,000 (approx. \$3,500/sqm)).</p> <p><b>Contribution Land:</b></p> <p>Developer to procure dedication of item to the Council at no cost (notional value \$1,232,000).</p>	<p>Item to be operational no later than:</p> <ol style="list-style-type: none"> <li>1. twelve months and one day following the issue of a Subdivision Certificate for an Allotment on which the 3,000<sup>th</sup> Dwelling is proposed to be constructed; or</li> <li>2. the issue of a Construction Certificate in respect of the 3,000th Dwelling,</li> </ol> <p>whichever happens earlier.</p>



1. Development Contribution Item	2. Manner of Delivery	3. Timing
<p>small private functions;</p> <ul style="list-style-type: none"> <li>• storage</li> <li>• toilet facilities</li> <li>• adjacent outdoor space with children's play equipment and barbecue.</li> </ul> <p>The Contribution Works will include landscaping, fit out, parking, public art and site works.</p> <p>NOTE: the centre is sized to accommodate requirements of the Development in both Shellharbour and Wollongong Local Government Areas.</p>		
<p><b>Local Park L8</b></p> <p>Embellishment and dedication of a minimum of 0.2 Ha of land (in R1 &amp; E3/RU2 zoned land).</p> <p>Local Park embellishment and community facilities to be considered include:</p> <ul style="list-style-type: none"> <li>• retention of existing vegetation where appropriate;</li> <li>• integrated cycle/pedestrian pathways;</li> <li>• integrated fitness trail nodes and equipment;</li> <li>• identity, directional and/or interpretive signage;</li> <li>• informal kickabout space;</li> <li>• informal playground/playspace with shade provision;</li> <li>• fencing, post and rail barrier and/or bollards;</li> <li>• lighting balanced with street network;</li> <li>• picnic shelter, tables, bins, seating;</li> </ul>	<p><b>Contribution Works:</b></p> <p>Developer to design and construct item (notional value \$150,000).</p> <p>Developer to maintain item for three years following Practical Completion of item (notional value \$16,000).</p> <p><b>Contribution Land:</b></p> <p>Developer to procure dedication of item to the Council at no cost (notional value \$616,000).</p>	<p>The Developer must achieve Practical Completion of item no later than twelve months and one day following the issue of a Subdivision Certificate for a plan of subdivision that creates the Contribution Land as a separate lot.</p>

1. Development Contribution Item	2. Manner of Delivery	3. Timing
<ul style="list-style-type: none"> <li>landscaping including turf or turf seeding, garden beds, tree planting; and</li> <li>other associated works, services and embellishments.</li> </ul>		
<p><b>Local Park L11</b></p> <p>Embellishment and dedication of a minimum of 0.2 Ha of land (in R1 &amp; E2/E3 zoned land).</p> <p>Local Park embellishment and community facilities to be considered include the items specified in relation to Local Park L8.</p>	<p><b>Contribution Works:</b> Developer to design and construct item (notional value \$150,000). Developer to maintain item for three years following Practical Completion of item (notional value \$16,000).</p> <p><b>Contribution Land:</b> Developer to procure dedication of item to the Council at no cost (notional value \$616,000).</p>	<p>The Developer must achieve Practical Completion of item no later than twelve months and one day following the issue of a Subdivision Certificate for a plan of subdivision that creates the Contribution Land as a separate lot.</p>
<p><b>Local Park L10</b></p> <p>Embellishment and dedication of a minimum of 0.2 Ha of land (in R1 &amp; E3 zoned land).</p> <p>Local Park embellishment and community facilities to be considered include the items specified in relation to Local Park L8.</p>	<p><b>Contribution Works:</b> Developer to design and construct item (notional value \$150,000). Developer to maintain item for three years following Practical Completion of item (notional value \$16,000).</p> <p><b>Contribution Land:</b> Developer to procure dedication of item to the Council at no cost (notional value \$616,000).</p>	<p>The Developer must achieve Practical Completion of item no later than twelve months and one day following the issue of a Subdivision Certificate for a plan of subdivision that creates the Contribution Land as a separate lot.</p>
<p><b>Local Park L7</b></p> <p>Embellishment and dedication of a minimum of 0.2 Ha of land (in R1 &amp; E3 zoned land).</p> <p>Local Park embellishment and community facilities to be considered include the items specified in relation to Local Park L8.</p>	<p><b>Contribution Works:</b> Developer to design and construct item (notional value \$150,000). Developer to maintain item for three years following Practical Completion of item (notional value \$16,000).</p> <p><b>Contribution Land:</b> Developer to procure dedication of item to the Council at no cost (notional value \$616,000).</p>	<p>The Developer must achieve Practical Completion of item no later than twelve months and one day following the issue of a Subdivision Certificate for a plan of subdivision that creates the Contribution Land as a separate lot.</p>



1. Development Contribution Item	2. Manner of Delivery	3. Timing
<p><b>Local Park L6</b></p> <p>Embellishment and dedication of a minimum of 0.2 Ha of land (in B4 zoned land).</p> <p>Local Park embellishment and community facilities to be considered include the items specified in relation to Local Park L8.</p>	<p><b>Contribution Works:</b></p> <p>Developer to design and construct item (notional value \$150,000).</p> <p>Developer to maintain item for three years following Practical Completion of item (notional value \$16,000).</p> <p><b>Contribution Land:</b></p> <p>Developer to procure dedication of item to the Council at no cost (notional value \$616,000).</p>	<p>The Developer must achieve Practical Completion of item no later than twelve months and one day following the issue of a Subdivision Certificate for a plan of subdivision that creates the Contribution Land as a separate lot.</p>
<p><b>Local Park L5</b></p> <p>Embellishment and dedication of a minimum of 0.2 Ha of land (in B4 &amp; E2 zoned land).</p> <p>Local Park embellishment and community facilities to be considered include the items specified in relation to Local Park L8.</p>	<p><b>Contribution Works:</b></p> <p>Developer to design and construct item (notional value \$150,000).</p> <p>Developer to maintain item for three years following Practical Completion of item (notional value \$16,000).</p> <p><b>Contribution Land:</b></p> <p>Developer to procure dedication of item to the Council at no cost (notional value \$616,000).</p>	<p>The Developer must achieve Practical Completion of item no later than twelve months and one day following the issue of a Subdivision Certificate for a plan of subdivision that creates the Contribution Land as a separate lot.</p>
<p><b>Local Park L4</b></p> <p>Embellishment and dedication of a minimum of 0.2 Ha of land (in R1 &amp; E2/E3 zoned land).</p> <p>Local Park embellishment and community facilities to be considered include the items specified in relation to Local Park L8.</p>	<p><b>Contribution Works:</b></p> <p>Developer to design and construct item (notional value \$150,000).</p> <p>Developer to maintain item for three years following Practical Completion of item (notional value \$16,000).</p> <p><b>Contribution Land:</b></p> <p>Developer to procure dedication of item to the Council at no cost (notional value \$616,000).</p>	<p>The Developer must achieve Practical Completion of item no later than twelve months and one day following the issue of a Subdivision Certificate for a plan of subdivision that creates the Contribution Land as a separate lot.</p>



1. Development Contribution Item	2. Manner of Delivery	3. Timing
<p><b>Local Park L9</b></p> <p>Embellishment and dedication of a minimum of 0.2 Ha of land (in R1 &amp; E2/E3 zoned land).</p> <p>Local Park embellishment and community facilities to be considered include the items specified in relation to Local Park L8.</p>	<p><b>Contribution Works:</b></p> <p>Developer to design and construct item (notional value \$150,000).</p> <p>Developer to maintain item for three years following Practical Completion of item (notional value \$16,000).</p> <p><b>Contribution Land:</b></p> <p>Developer to procure dedication of item to the Council at no cost (notional value \$616,000).</p>	<p>The Developer must achieve Practical Completion of item no later than twelve months and one day following the issue of a Subdivision Certificate for a plan of subdivision that creates the Contribution Land as a separate lot.</p>
<p><b>Local Park L12</b></p> <p>Embellishment and dedication of a minimum of 0.2 Ha of land (in R1 zoned land).</p> <p>Local Park embellishment and community facilities to be considered include the items specified in relation to Local Park L8.</p>	<p><b>Contribution Works:</b></p> <p>Developer to design and construct item (notional value \$150,000).</p> <p>Developer to maintain item for three years following Practical Completion of item (notional value \$16,000).</p> <p><b>Contribution Land:</b></p> <p>Developer to procure dedication of item to the Council at no cost (notional value \$616,000).</p>	<p>The Developer must achieve Practical Completion of item no later than twelve months and one day following the issue of a Subdivision Certificate for a plan of subdivision that creates the Contribution Land as a separate lot.</p>
<p><b>Local Park L13</b></p> <p>Embellishment and dedication of a minimum of 0.2 Ha of land (in R1 &amp; E3 zoned land).</p> <p>Local Park embellishment and community facilities to be considered include the items specified in relation to Local Park L8.</p>	<p><b>Contribution Works:</b></p> <p>Developer to design and construct item (notional value \$150,000).</p> <p>Developer to maintain item for three years following Practical Completion of item (notional value \$16,000)</p> <p><b>Contribution Land:</b></p> <p>Developer to procure dedication of item to the Council at no cost (notional value \$616,000).</p>	<p>The Developer must achieve Practical Completion of item no later than twelve months and one day following the issue of a Subdivision Certificate for a plan of subdivision that creates the Contribution Land as a separate lot.</p>

1. Development Contribution Item	2. Manner of Delivery	3. Timing
<p><b>District Park D2</b></p> <p>1 Ha "Hillside" District Park</p> <p>Embellishment and dedication of a minimum of 1 Ha of land in R1 &amp; E2/E3 zoned land</p> <p>District Park embellishment and community facilities to be considered include:</p> <ul style="list-style-type: none"> <li>dedicated carparking for parklands (approximately 10 spaces);</li> <li>irrigation;</li> <li>retention of existing vegetation where appropriate;</li> <li>integrated cycle/pedestrian pathways with Australian Standard lighting;</li> <li>identity, directional and/or interpretive signage;</li> <li>public artworks;</li> <li>informal kickabout space;</li> <li>fitness nodes and equipment;</li> <li>half basketball court/hardcourt;</li> <li>formal playground/ playspace with shade provision through trees and/or structures;</li> <li>fencing/bollards and/or post and rail;</li> <li>picnic shelters with lighting;</li> <li>barbecues, tables, bins, seating;</li> <li>landscaping including turf or turf seeding, garden beds;</li> <li>feature tree planting; and</li> </ul>	<p><b>Contribution Works:</b></p> <p>Developer to design and construct item (notional value \$750,000).</p> <p>Developer to maintain item for three years following Practical Completion of item (notional value \$16,000).</p> <p><b>Contribution Land:</b></p> <p>Developer to procure dedication of item to the Council at no cost (notional value \$2,595,200).</p>	<p>The Developer may determine the order in which it achieves Practical Completion of each item identified in this Development Contribution Table as a District Park as long as the Developer has achieved Practical Completion of a separate District Park before each of the following events:</p> <ol style="list-style-type: none"> <li>twelve months and one day following the issue of a Subdivision Certificate in respect of the Allotment on which the 500<sup>th</sup> Dwelling is proposed to be constructed;</li> <li>twelve months and one day following the issue of a Subdivision Certificate in respect of the Allotment on which the 1,000<sup>th</sup> Dwelling is proposed to be constructed;</li> <li>twelve months and one day following the issue of a Subdivision Certificate in respect of the Allotment on which the 2,000<sup>th</sup> Dwelling is proposed to be constructed; and</li> <li>twelve months and one day following</li> </ol>



1. Development Contribution Item	2. Manner of Delivery	3. Timing
<ul style="list-style-type: none"> <li>other associated works, services and embellishments.</li> </ul>		
<p><b>District Park D5</b></p> <p>1 Ha "Rivulet" District Park</p> <p>Embellishment and dedication of a minimum of 1 Ha of land (in E2/E3 &amp; R5 zoned land).</p> <p>District Park embellishment and community facilities to be considered include:</p> <ul style="list-style-type: none"> <li>dedicated carparking for parklands (approximately 10 spaces);</li> <li>irrigation;</li> <li>retention of existing vegetation where appropriate;</li> <li>integrated cycle/pedestrian pathways with Australian Standard lighting;</li> <li>identity, directional and/or interpretive signage;</li> <li>public artworks;</li> <li>informal kickabout space;</li> <li>fitness nodes and equipment;</li> <li>half basketball court/hardcourt;</li> <li>formal playground/ playspace with shade provision through trees and/or structures;</li> <li>fencing/bollards and/or post and rail;</li> <li>picnic shelters with lighting,</li> <li>barbecues, tables, bins, seating;</li> <li>landscaping including turf</li> </ul>	<p><b>Contribution Works:</b></p> <p>Developer to design and construct item (notional value \$750,000).</p> <p>Developer to maintain item for three years following Practical Completion of item (notional value \$16,000).</p> <p><b>Contribution Land:</b></p> <p>Developer to procure dedication of item to the Council at no cost (notional value \$3,080,000).</p>	<p>the issue of a Subdivision Certificate in respect of the Allotment on which the 3,750<sup>th</sup> Dwelling is proposed to be constructed.</p>

1. Development Contribution Item	2. Manner of Delivery	3. Timing
<ul style="list-style-type: none"> <li>or turf seeding, garden beds;</li> <li>feature tree planting; and</li> <li>other associated works, services and embellishments.</li> </ul>		
<p><b>District Park D4</b></p> <p>3.8 Ha "Village Centre" District Park</p> <p>Embellishment and dedication of a minimum of 3.8 Ha of land (in B4, E2 &amp; E3 zoned land).</p> <p>District Park embellishment and community facilities to be considered include:</p> <ul style="list-style-type: none"> <li>dedicated carparking for parklands (approximately 20 spaces);</li> <li>irrigation;</li> <li>ornamental and water quality lakes with boardwalks, promenades and decks;</li> <li>retention of existing vegetation where appropriate;</li> <li>integrated cycle/pedestrian pathways with Australian Standard lighting;</li> <li>identity, directional and/or interpretive signage;</li> <li>public artworks;</li> <li>informal kickabout space;</li> <li>fitness nodes and equipment;</li> <li>half basketball court;</li> <li>formal playground/ playspace with shade provision through trees and/or structures;</li> </ul>	<p><b>Contribution Works:</b></p> <p>Developer to design and construct item (notional value \$2,850,000).</p> <p>Developer to maintain item for three years following Practical Completion of item (notional value \$16,000).</p> <p><b>Contribution Land:</b></p> <p>Developer to procure dedication of item to the Council at no cost (notional value \$6,260,000).</p>	

1. Development Contribution Item	2. Manner of Delivery	3. Timing
<ul style="list-style-type: none"> <li>fencing/bollards and/or post and rail;</li> <li>picnic shelters with lighting;</li> <li>barbecues, tables, bins, seating;</li> <li>landscaping including turf or turf seeding, garden beds;</li> <li>feature tree planting; and</li> <li>other associated works, services and embellishments.</li> </ul>		
<p><b>District Park #D3</b></p> <p>1 Ha "Residential" District Park</p> <p>Embellishment and dedication of a minimum of 1 Ha of land (in R1 zoned land).</p> <p>District Park embellishment and community facilities to be considered include:</p> <ul style="list-style-type: none"> <li>dedicated carparking for parklands (approximately 10 spaces);</li> <li>irrigation;</li> <li>retention of existing vegetation where appropriate;</li> <li>integrated cycle/pedestrian pathways with Australian Standard lighting;</li> <li>identity, directional and/or interpretive signage;</li> <li>public artworks;</li> <li>informal kickabout space;</li> <li>fitness nodes and equipment;</li> <li>half basketball court/hardcourt;</li> </ul>	<p><b>Contribution Works:</b></p> <p>Developer to design and construct item (notional value \$750,000).</p> <p>Developer to maintain item for three years following Practical Completion of item (notional value \$16,000).</p> <p><b>Contribution Land:</b></p> <p>Developer to procure dedication of item to the Council at no cost (notional value \$3,080,000).</p>	

1. Development Contribution Item	2. Manner of Delivery	3. Timing
<ul style="list-style-type: none"><li>• formal playground/ playspace with shade provision through trees and/or structures;</li><li>• fencing/bollards and/or post and rail;</li><li>• picnic shelters with lighting;</li><li>• barbecues, tables, bins, seating;</li><li>• landscaping including turf or turf seeding, garden beds;</li><li>• feature tree planting; and</li><li>• other associated works, services and embellishments.</li></ul>		



1. Development Contribution Item	2. Manner of Delivery	3. Timing
<p><b>City Park CW2 (Urban)</b></p> <p>2 ha "Lakeside" Urban City Park.</p> <p>Embellishment and dedication of a minimum of 2 Ha of land (in B4 &amp; E2/E3 zoned land).</p> <p>City Park embellishment and community facilities to be considered include:</p> <ul style="list-style-type: none"> <li>dedicated carparking for parklands (approximately 20 spaces);</li> <li>public amenities;</li> <li>irrigation;</li> <li>ornamental and water quality lakes with boardwalks, promenades and decks;</li> <li>retention of existing vegetation where appropriate;</li> <li>integrated cycle/pedestrian pathways with Australian Standard lighting;</li> <li>identity, directional and/or interpretive signage;</li> <li>public artworks;</li> <li>informal kickabout space;</li> <li>fitness nodes and equipment;</li> <li>half basketball court;</li> <li>formal playground/ playspace with shade provision through trees and/or structures;</li> <li>fencing/bollards and/or post and rail;</li> <li>picnic shelters with lighting;</li> <li>barbecues, tables, bins, seating;</li> </ul>	<p><b>Contribution Works:</b></p> <p>Developer to design and construct item (notional value \$1,500,000).</p> <p>Developer to maintain item for three years following Practical Completion of item (notional value \$60,000).</p> <p><b>Contribution Land:</b></p> <p>Developer to procure dedication of item to the Council at no cost (notional value \$3,887,500).</p>	<p>The Developer may determine the order in which it achieves Practical Completion of each item identified in the Development Contribution Table as a City Park as long as the Developer has achieved Practical Completion of a separate City Park before each of the following events:</p> <ol style="list-style-type: none"> <li>1 twelve months and one day following the issue of a Subdivision Certificate in respect of the Allotment on which the 3,000<sup>th</sup> Dwelling is proposed to be constructed; and</li> <li>2 twelve months and one day following the issue of a Subdivision Certificate in respect of the Allotment on which the 3,500<sup>th</sup> Dwelling is proposed to be constructed.</li> </ol>



1. Development Contribution Item	2. Manner of Delivery	3. Timing
<ul style="list-style-type: none"> <li>• ornamental landscaping including turf or turf seeding, garden beds; and</li> <li>• feature tree planting and other associated works, services and embellishments.</li> </ul>		
<p><b>City Park CW3 (Bushland)</b> (Location TBC)</p> <p>3.43 Ha "Hilltop" Bushland City Park.</p> <p>Embellishment and dedication of a minimum of 3.43 Ha of land (in E2/E3 zoned land)</p> <p>City Park embellishment and community facilities to be considered include:</p> <ul style="list-style-type: none"> <li>• dedicated carparking for parklands (approximately 20 spaces);</li> <li>• public amenities;</li> <li>• interpretive educational centre/outdoor classroom;</li> <li>• retention of existing vegetation where appropriate;</li> <li>• integrated cycle/pedestrian pathways with Australian Standard lighting;</li> <li>• identity, directional and/or interpretive signage;</li> <li>• public artworks;</li> <li>• informal kickabout space;</li> <li>• fitness nodes and equipment;</li> <li>• half basketball court;</li> <li>• formal playground/ playspace with shade provision through trees</li> </ul>	<p><b>Contribution Works:</b> Developer to design and construct item (notional value \$2,055,000).</p> <p>Developer to maintain item for three years following Practical Completion of item (notional value \$40,000).</p> <p><b>Contribution Land:</b> Developer to procure the dedication of item to the Council at no cost (notional value \$171,500).</p>	

1. Development Contribution Item	2. Manner of Delivery	3. Timing
<p>and/or structures;</p> <ul style="list-style-type: none"> <li>fencing/bollards and/or post and rail;</li> <li>picnic shelters with lighting;</li> <li>barbecues, tables, bins, seating;</li> <li>landscaping including turf or turf seeding, garden beds; and</li> <li>tree planting and other associated works, services and embellishments.</li> </ul>		
<p><b>Sports Fields S1</b></p> <p>15.84 Ha Active Sport Grounds</p> <p>Embellishment and dedication of a minimum of 15.84 Ha of land (in RE1, E3 &amp; B4 zoned land).</p> <p>Sports Field embellishment and community facilities to be considered include:</p> <ul style="list-style-type: none"> <li>vehicular access and dedicated carparking for parklands (approximately 80 spaces);</li> <li>3 x sporting ovals/fields;</li> <li>1 x central amenities building including change rooms, central kiosk facility, communal storage, clubhouse/meeting room, publically accessible toilets;</li> <li>associated training facilities as applicable (eg cricket nets);</li> <li>playing field lighting to Australian Standard;</li> <li>irrigation system for playing fields;</li> <li>ornamental and water</li> </ul>	<p><b>Contribution Works:</b></p> <p>Developer to design and construct fields (notional value \$7,500,000).</p> <p>Developer to maintain item for three years following Practical Completion of each stage of item (notional value \$85,500).</p> <p><b>Contribution Land:</b></p> <p>Developer to procure dedication of item to the Council at no cost (notional value \$792,000).</p>	<p>Delivered in 2 stages.</p> <p>Stage 1 to be delivered no later than:</p> <ol style="list-style-type: none"> <li>12 months and one day following the issue of a Subdivision Certificate in respect of the Allotment on which the 2,000<sup>th</sup> Dwelling is proposed to be constructed; or</li> <li>the opening of the first primary school on the Land,</li> </ol> <p>whichever occurs first.</p> <p>Stage 2 to be delivered no later than:</p> <ol style="list-style-type: none"> <li>12 months and one day following the issue of a Subdivision Certificate in respect of the Allotment on which the 3,000<sup>th</sup> Dwelling is proposed to be constructed; or</li> <li>the opening of the</li> </ol>

1. Development Contribution Item	2. Manner of Delivery	3. Timing
<ul style="list-style-type: none"> <li>quality lakes;</li> <li>• retention of existing vegetation where appropriate;</li> <li>• integrated cycle/pedestrian pathways with Australian Standard lighting;</li> <li>• identity, directional and/or interpretive signage;</li> <li>• public artworks;</li> <li>• fenced dog off leash area;</li> <li>• fitness nodes and equipment;</li> <li>• hardcourts (approximately 6 in number);</li> <li>• formal playground/ playspace with shade provision through trees and/or structures;</li> <li>• fencing/bollards and/or post and rail;</li> <li>• picnic shelters with lighting;</li> <li>• barbecues, tables, bins, seating;</li> <li>• landscaping including turf or turf seeding, garden beds; and</li> <li>• tree planting and other associated works, services and embellishments.</li> </ul>		<p>first high school on the Land,</p> <p>whichever occurs first.</p>



## 1.2 Contribution Amounts

1. Development Contribution Item	2. Manner of Delivery	3. Timing
<b>Albion Park Library Upgrade</b>	<p><b>Contribution Amount:</b> Monetary contributions are to be made towards one or more of the following: buildings; fit out; landscaping; car parking; public art; site works; library resources, equipment and technology.</p> <p>\$2,208,000 to be paid in stages in accordance with <b>clause 3</b> of this <b>Schedule 4</b>.</p>	<p>Contribution Amount to be paid prior to the issue of the relevant Subdivision Certificate in accordance with <b>clause 3</b> of this <b>Schedule 4</b>.</p> <p>The Council will endeavour to ensure that the upgrade of existing Albion Park library facility is operational by:</p> <ol style="list-style-type: none"> <li>1 the time specified in Council's Section 94 Contribution Plan from time to time; or</li> <li>2 such time as the needs generated by the Development are likely to require the provision of the Albion Park Library Upgrade as determined by the Council,</li> </ol> <p>whichever occurs first.</p>
<p><b>Local Roads</b></p> <p>Albion Park Bypass [TMAP 14; 15; 16 &amp; 30]</p>	<p><b>Contribution Amount:</b> \$7,200,000 to be paid in stages in accordance with <b>clause 3</b> of this <b>Schedule 4</b>.</p> <p><b>Contribution Land:</b> Assuming the currently proposed alignment of the Albion Park Bypass shown in <b>Schedule 9</b> (or a materially similar alignment and physical footprint) is adopted, land within the Development that is required for the implementation of the Albion Park Bypass will be provided to the Council for the sum</p>	<p>Contribution Amount to be paid prior to the issue of the relevant Subdivision Certificate in accordance with <b>clause 3</b> of this <b>Schedule 4</b>.</p> <p>Contribution Land to be transferred to the Council following the issue of the relevant Subdivision Certificate, Development Consent and the adoption by the Council of final construction plans for the</p>

1. Development Contribution Item	2. Manner of Delivery	3. Timing
	of \$1 (Notional value \$523,000).	<p>Albion Park Bypass.</p> <p>The Council will endeavour to ensure that the Albion Park By-Pass is operational by:</p> <ol style="list-style-type: none"> <li>1 the time specified in Council's Section 94 Contribution Plan from time to time; or</li> <li>2 such time as the needs generated by the Development are likely to require the provision of the Albion Park Bypass as determined by the Council,</li> </ol> <p>whichever occurs first.</p>
<p><b>City Wide Community Infrastructure</b></p> <p>Including but not limited to:</p> <ul style="list-style-type: none"> <li>• Shellharbour City Performance Theatre;</li> <li>• Council Administration Offices;</li> <li>• City Library; and</li> <li>• Civic Auditorium</li> </ul>	<p><b>Contribution Amount:</b></p> <p>\$7,440,000 to be paid in stages in accordance with <b>clause 3</b> of this <b>Schedule 4</b>.</p>	<p>Contribution Amount to be paid prior to the issue of the relevant Subdivision Certificate in accordance with <b>clause 3</b> of this <b>Schedule 4</b>.</p>
<p><b>City Wide Open Space and Recreation Infrastructure</b></p> <p>Including but not limited to:</p> <ul style="list-style-type: none"> <li>• Beach Foreshore; and</li> <li>• Shellharbour City Stadium</li> </ul>	<p><b>Contribution Amount:</b></p> <p>\$2,160,000 to be paid in stages in accordance with <b>clause 3</b> of this <b>Schedule 4</b>.</p>	<p>Contribution Amount to be paid prior to the issue of the relevant Subdivision Certificate in accordance with <b>clause 3</b> of this <b>Schedule 4</b>.</p>
<p><b>Administration of Planning Agreement</b></p>	<p><b>Contribution Amount:</b></p> <p>\$480,000 to be paid in stages in accordance with <b>clause 3</b> of this <b>Schedule 4</b>.</p>	<p>Contribution Amount to be paid prior to the issue of the relevant Subdivision Certificate in accordance with <b>clause 3</b> of this <b>Schedule 4</b>.</p>

## 2 Increase in Development Contributions

- (a) Any amount:
- (i) specified in **clause 3(c) of Schedule 4**;
  - (ii) specified as a Contribution Amount in the Development Contribution Table; or
  - (iii) specified as a Notional Value for an item of Contribution Works in the Development Contribution Table,

must be increased annually on the date of publication of the June quarterly CPI by the Commonwealth Statistician in accordance with the following formula:

$$A = B \times \frac{C}{D}$$

Where:

**A** is the indexed amount;

**B** is the monetary amount specified in this Deed and referred to above;

**C** is the most recent June quarter CPI published as at the date of calculation; and

**D** is the most recent CPI published as at the date of this Deed.

- (b) For the avoidance of doubt, **clause 2(a)** of this **Schedule 4** does not apply to any Notional Value assigned to an item of Contribution Land listed in the Development Contribution Table.
- (c) Any amount specified as the Notional Value for an item of Contribution Land in the Development Contribution Table must be increased as follows:
- (i) At five year intervals from the execution of this Deed the Developer must appoint an independent registered valuer who has the required experience and is acceptable to the Council (acting reasonably) to undertake a determination of the market value of all items of Contribution Land not then dedicated to the Council.
  - (ii) Any such valuation must be provided to the Council within one month of the date that the relevant five year interval ends.
  - (iii) The Developer must procure that any determination made by the valuer for the purposes of **clause 2(c)(i)** of this **Schedule 4** is expressed to be for the benefit of both the Council and the Developer.
  - (iv) The market value determined by the valuer for an item of Contribution Land will be taken to be the Notional Value of that Contribution Land.

## 3 Payment of Contribution Amounts identified in Clause 1.2 of Schedule 4

- (a) The Developer must pay the Contribution Amounts identified in **Clause 1.2** of **Schedule 4** in accordance with this clause.
- (b) For the purpose of this clause 3 of Schedule 4 a **Residential Plan** is a plan of subdivision with respect to the Development which when registered would create one or more Allotments.



- (c) Prior to the issue of any Subdivision Certificate in respect of a Residential Plan, the Developer must pay a Contribution Amount being the relevant cumulative "Contribution per Dwelling" for the Anticipated Dwelling Yield for the relevant Residential Plan as determined in accordance with the table set out below:

Number of Dwelling	Contribution per Dwelling
For the first 1,000 Dwellings (0 – 1,000 Dwellings)	\$3,310
For the 1,001st Dwelling to and including the 2,000th Dwelling (1,001 – 2,000 Dwellings)	\$3,710
For the 2,001st Dwelling to and including the 3,000th Dwelling (2,001 – 3,000 Dwellings)	\$4,110
For the 3,001st Dwelling to and including the 4,000th Dwelling (3,001 – 4,000 Dwellings)	\$4,510
For any further Dwellings	\$4,810

- (d) If the Developer and the Council agree (such agreement not be unreasonably withheld) that there are Allotments within a Residential Plan which the Developer does not intend to transfer to an end user and with respect to which it is unlikely that a Construction Certificate for Dwellings on that Allotment will be issued within two years following the issue of a Subdivision Certificate for that plan (**Deferred Allotment**):
- (i) any such Deferred Allotment is not included in the calculation of the Contribution Amount payable under **clause 3(c)** of this **Schedule 4** with respect to the relevant Residential Plan; and
  - (ii) the Developer will be required to pay a Contribution Amount being the relevant cumulative "Contribution per Dwelling" for all Dwellings permitted to be constructed in accordance any Construction Certificate lodged with respect to that Deferred Allotment as determined in accordance with the table set out in **clause 3(c)** of this **Schedule 4**.
- (e) The Developer must pay any Contribution Amount payable under **clause 3(d)(ii)** of this **Schedule 4** prior to the issue of the relevant Construction Certificate referred to in that clause.
- (f) On the occurrence of each of the following events:
- (i) every six months following execution of this Deed;
  - (ii) prior to the granting of a Subdivision Certificate that will create the final Allotment within the Development; and
  - (iii) prior to the issue of a Construction Certificate for the final Deferred Allotment, the following must occur:
  - (iv) the Developer must provide the Council with a report stating (to the best of the Developer's knowledge) the number of Dwellings on the Land that have been completed and occupied at the relevant time; and
  - (v) if the number of Dwellings on the Land that have been completed and occupied at the relevant time exceeds the number of Dwellings for which the Developer has paid a Contribution Amount in accordance with **clause 3(c)** of this **Schedule 4**, the Developer must pay the applicable cumulative "Contribution per Dwelling" amount for the number of Dwellings required to ensure that the Council has received a Contribution Amount in accordance with **clause 3(c)** of this

**Schedule 4** for each Dwelling on the Land that has been completed and occupied at the relevant time.

- (g) For the avoidance of doubt, compliance with this **clause 3** of this **Schedule 4** will satisfy the Developer's obligation to make all Development Contributions identified in **Clause 1.2** of **Schedule 4**.
- (h) The parties agree that if the Concept Plan Approval is amended so that the number of Dwellings approved under the Concept Plan Approval significantly exceeds 4,800, the parties will discuss, in good faith, any amendments required to this Deed to reflect the needs generated by the additional number of Dwellings approved under the Concept Plan Approval as amended.

#### **4 Use of Contribution Amounts by the Council**

- (a) In respect of any Contribution Amounts that the Developer is required to pay in relation to the Albion Park Library and the Albion Park Bypass, the Council must only use or expend any Contribution Amounts for their identified purpose.
- (b) Subject to Council's compliance with **clause 4(a)** of this **Schedule 4**, any such Contribution Amount paid by the Developer to the Council may be pooled by the Council with any other Contribution Amounts paid by the Developer pursuant to this Deed and used or expended for any purpose within the Shellharbour Local Government Area.

#### **5 Change to Contributions Regime**

- (a) This clause will apply where:
  - (i) a change to the Contribution Regime occurs such that a specific Development Contribution required to be made by the Developer under this Deed (in whole or in part) is required to be provided to the Council by a person other than the Developer; and
  - (ii) upon the date of the change to the Contribution Regime, the Developer has not paid or provided the relevant Development Contribution.
- (b) If this clause applies, then:
  - (i) the Developer will be entitled to propose amendments to this Deed that reflect the changes to the Contribution Regime; and
  - (ii) the Council will consider these amendments in good faith.

#### **6 Contribution Alternatives**

##### **6.1 Better Outcomes**

Without limiting **clauses 6.2** or **6.3** of this **Schedule 4**, at the request of either the Council or the Developer and provided that the Council and the Developer agree, the Developer may satisfy any of its obligations to provide Contribution Works listed in **clause 1.1** of this **Schedule 4** by providing contributions works of a different nature or at a different time to that specified in the Development Contribution Table, but which serve the same or similar purpose as those specified in the Development Contribution Table.



## 6.2 Alternatives to Contribution Works

- (a) At the request of either the Council or the Developer and provided that the Council and the Developer agree, the Developer may satisfy any of its obligations to provide Contribution Works by paying the Notional Value assigned to the respective Contribution Works as a Contribution Amount.
- (b) The Council agrees that if the Developer performs its obligations in this Deed by paying a Contribution Amount in lieu of providing Contribution Works, the Council must hold the Contribution Amount paid by the Developer for the purpose of the relevant Contribution Works and apply the money towards that purpose within a reasonable time of receipt of the relevant monetary contribution.
- (c) Where it is impractical (in reasonable circumstances) for the Council to comply with **clause 6.2(b)** of this **Schedule 4** and the Developer (acting reasonably) gives its written consent to the Council not complying with **clause 6.2(b)** of this **Schedule 4**, the Council must spend the Contribution Amount on services, infrastructure or facilities to be delivered, in order of precedence:
  - (i) on the Land; or
  - (ii) at a location outside the boundary of the Land but within the Council's Local Government Area in the manner consented to in writing by the Developer (acting reasonably),within a reasonable time of receipt of the relevant monetary contribution.
- (d) The Developer must give, or procure, reasonable access to the Council to that part of the Land upon which works are to be carried out by the Council for the purposes of carrying out the works contemplated by this **clause 6.2** of this **Schedule 4**.
- (e) For the avoidance of doubt, if the Developer, pursuant to this **clause 6.2** of this **Schedule 4**, pays the Notional Value of an item of Contribution Works in lieu of providing the Contribution Works, the Developer is not also required to pay the Notional Value assigned to any Contribution Land that must be provided to the Council in connection with the Contribution Works.

## 6.3 Alternatives to Payment of Contribution Amounts

- (a) At the request of either the Council or the Developer and provided that the Council and the Developer agree, the Developer may satisfy any of its obligations to pay a Contribution Amount by providing the works or services associated with the Contribution Amount as Contribution Works (or contribution works of a different nature to those specified in the Development Contribution Table, but which serve the same or similar purpose as those specified in the Development Contribution Table).
- (b) Any agreement contemplated by **clause 6.3(a)** of this **Schedule 4** must include agreement as to the time in which the Developer is to complete the relevant item of Contribution Works.
- (c) The Developer must carry out the Contribution Works contemplated by **clause 6.3(a)** of this **Schedule 4** in accordance with **Schedule 6**.
- (d) The Council must give, or procure, access to the Developer to all land upon which works are to be carried out or services are to be provided by the Developer for the purposes of the Developer providing the Contribution Works contemplated by this **clause 6.3** of this **Schedule 4**.



**6.4 Amendment to Deed**

If in the opinion of the Council or the Developer (both acting reasonably) any agreement reached under **clause 5** or this **clause 6** of this **Schedule 4** constitutes a variation or amendment to this Deed to which section 93G of the Act applies, then the Parties must comply with section 93G of the Act in relation to that variation or amendment.

**7 Location of Contribution Works and Contribution Land**

The location of all items of Contribution Works or Contribution Land must be generally in accordance with **Schedule 9**.

**Schedule 5****Contribution Land Procedures (clause 4)****1 Subdivision of Land**

In order to give effect to the transfer of the Contribution Land to the Council in accordance with the Development Contribution Table, there must be a subdivision of the Land to create the parcels of land that will comprise the Contribution Land.

**2 Application for Subdivision Certificate**

If the Developer applies for any Subdivision Certificate:

- (a) over any area in which the Developer is required to dedicate Contribution Land in accordance with **Schedule 4** and **Schedule 9**; and
- (b) that purports to create one or more Allotments,

that Subdivision Certificate must also provide for the subdivision of the Contribution Land contemplated by **clause 1** of this **Schedule 5**.

**3 Lodgement of Subdivision Plan**

Within 40 Business Days of the Developer receiving written notification of any approval being given by the Council for the Subdivision Plan, the Developer must lodge the Subdivision Plan for registration at the Land and Property Management Authority.

**4 Transfer of Contribution Land**

On the date of notification that the Subdivision Plan has been registered, the Developer must within 2 Business Days serve a Transfer on the Council with the relevant certificates of title and in circumstances where:

- (a) the Contribution Land is free from any encumbrances other than the Service Easements; or
- (b) relevant discharges in registrable form are also served on the Council at the same time in relation to any encumbrances other than the Service Easements.

**5 Requisitions**

The Developer must immediately comply, or procure compliance with, any requisitions raised by the Registrar-General in relation to the transfer of the Contribution Land.

**Schedule 6****Contributions Works Procedures (clause 4)****1 Approvals and Design responsibility**

- (a) The Developer must at its risk and expense:
  - (i) obtain all Approvals necessary to carry out the Contribution Works; and
  - (ii) comply with all conditions of all such Approvals.
- (b) The Developer agrees to design or procure the design of the Contribution Works (so as to enable the achievement of Practical Completion of the Contribution Works) in accordance with this Deed.
- (c) Before commencing the Contribution Works, the Developer must give to the Council copies of all Approvals for the Contribution Works.

**2 Landscape Masterplan**

- (a) Prior to lodging the first Development Application for a residential subdivision creating more than 50 Allotments following the execution of this Deed, the Developer must submit a Landscape Masterplan to the Council for approval by the Council.
- (b) If the Council, acting reasonably, does not approve or reject the Landscape Masterplan within three months of submission, the Council will be deemed to have approved the Landscape Masterplan.
- (c) **Clause 12.13** does not apply to Council's consideration of the Landscape Masterplan.
- (d) The Developer must carry out the Contribution Works in accordance with a Landscape Masterplan that has been approved by the Council.
- (e) For the purpose of clarity, the Landscape Masterplan must be approved under this **clause 2** of this **Schedule 6** before the Developer can Practically Complete any item of the Contribution Works to which that plan applies.

**3 Insurance**

- (a) The Developer must effect and maintain all necessary insurance policies in respect to the Contribution Works including, but not limited to physical loss, damage or destruction of the Contribution Works, third party liability, contractors and professional indemnity insurance with an insurer approved by the Council and on terms reasonably acceptable to the Council.
- (b) All insurances which the Developer is required by this Deed to effect and maintain must note the rights and interests of the Council.
- (c) All insurances which the Developer is required by this Deed to effect must be maintained until the expiration of the Defects Liability Period.
- (d) The insurance cover in relation to works insurance must be for an amount not less than the full insurable value of the Contribution Works on a full reinstatement and replacement basis (including extra costs of reinstatement, costs of demolition and removal of debris, and professional fees).
- (e) Whenever reasonably requested in writing by the Council, the Developer must give the Council certificates of currency for the insurance policies which the Developer is required by this Deed to effect and maintain.



#### 4 Construction of the Contribution Works

- (a) The Developer must procure the execution and completion of the Contribution Works in accordance with:
  - (i) the Approvals;
  - (ii) the timetable set out in Column 3 of the Development Contribution Table; and
  - (iii) its other obligations under this Deed.
- (b) The Developer must carry out or procure the Contribution Works to be carried out:
  - (i) in a good and workmanlike manner, using good quality materials, so that they are structurally sound and fit for the purpose for which they are required under this Deed; and
  - (ii) in compliance with relevant standards determined by Australian Standards Limited, the Building Code of Australia and any relevant manufacturers' standards.
- (c) The Developer must promptly advise the Council of any significant delays which it experiences in completing the Contribution Works.

#### 5 Access to Land

If the Developer is required to Practically Complete or maintain an item of Contribution Works on Contribution Land that has been transferred to the Council pursuant to **Schedule 5**, the Council must provide the Developer with reasonable access to the Contribution Land in order to enable the Developer to satisfy the Developer's obligation to Practically Complete and maintain the item of Contribution Works.

#### 6 Completion of the Contribution Works

- (a) When the Developer is of the opinion that an item of Contribution Works has reached Practical Completion, the Developer must:
  - (i) request the relevant Certifier to issue a certificate confirming Practical Completion (**Certificate of Practical Completion**); and
  - (ii) at the same time give the Council a copy of that request.
- (b) Within 10 Business Days after the receipt of the Developer's request, the Certifier must carry out a joint inspection of the Contribution Works with the Council and the Developer and either:
  - (i) give the Developer (with a copy to the Council at the same time) a Certificate of Practical Completion certifying that the Contribution Works have reached Practical Completion; or
  - (ii) give the Developer (with a copy to the Council at the same time) the reasons for not issuing that certificate and provide a detailed list of work required to be completed in order for that certificate to be issued.
- (c) On receipt of the detailed list referred to in **paragraph 6(b)(ii)** of this **Schedule 6**, the Developer must carry out the work referred to in that list and, on completion of that work, request the Certifier to issue a Certificate of Practical Completion. If the Certifier is satisfied that all such work has been completed in accordance with this Deed, then the Certifier must issue the Certificate of Practical Completion within 10 Business Days after receipt of the Developer's request. Otherwise the provisions of **clauses 6(a) to 6(c)** in this **Schedule 6** inclusive re-apply.

- (d) If the Council reasonably requires, the Developer must use all reasonable endeavours to procure the issue and delivery to the Council of copies of the following items (as may be relevant) in relation to each item of Contribution Works:
- (i) a copy of as built drawings and all warranties and operations manuals given in connection with the Contribution Works;
  - (ii) a copy of all certificates issued by any Authority in relation to any part of the Contribution Works which have not previously been delivered to the Council; and
  - (iii) a copy of a building certificate under Part 8 of the Act in respect of the Contribution Works,
- promptly, and in any event within 90 Business Days, after Practical Completion.
- (e) If the Development Contribution Table requires the Developer to maintain an item of Contribution Works for a period of time, that period of time commences when the Certifier grants a Certificate of Practical Completion.

## 7 Indemnity

The Developer indemnifies and releases the Council against all damage, expense, loss or liability of any nature, suffered or incurred by the Council arising from any act or omission by the Developer (or any person engaged by it) in connection with the performance of the Contribution Works.

## 8 Defects Liability Period

- (a) At any time during the Defects Liability Period, the Council may inspect the Contribution Works for the purpose of ascertaining what defects and omissions (if any) in the Contribution Works are required to be made good by the Developer.
- (b) The Council may give notice to the Developer that:
- (i) states that part of the Contribution Works is defective, giving details;
  - (ii) specifies the works which the Council considers are required to rectify the defect;
  - (iii) provides a reasonable estimate of the costs to rectify such works, including particulars of how those costs were calculated; and
  - (iv) allows the Developer a reasonable period to rectify such works.
- (c) The Developer must rectify any defects or omissions in the Contribution Works which are identified in a notice issued in accordance with **clause 8(b)** of this **Schedule 6**.
- (d) If the Developer fails to complete or rectify such works within the period required by a notice issued under **clause 8(b)** of this **Schedule 6**, then the Council may have such works completed or rectified and the Developer must reimburse the Council promptly following any demand by the Council for all costs incurred by the Council in completing or rectifying such works.
- (e) The Developer indemnifies the Council for all monies payable by the Developer to the Council pursuant to **clause 8(d)** of this **Schedule 6**.
- (f) The Developer must pay on demand any amount it must pay under the indemnity in **clause 8(e)** of this **Schedule 6**.
- (g) If the Contribution Works have been transferred to the Council as Contribution Land or otherwise, the Council must provide the Developer with reasonable access to the Contribution Land in order to carry out any defect rectification works required under this **clause 8** of this **Schedule 6**.



## **9 Handover of Construction Works**

- (a) The Developer must notify the Council at least one year prior to the date it intends to hand over maintenance of an item of Contribution Works to the Council.
- (b) At least six months before the date it intends to hand over maintenance of an item of Contribution Works to the Council, the Developer must submit to the Council an appropriate plan of management relating to the Contribution Works.
- (c) Prior to the hand over of the maintenance of an item of Contribution Works, the Council and the Developer must carry out a final inspection of the item of Contribution Works.
- (d) Within 5 Business Days of the final inspection, the Council must identify by notice in writing to the Developer any remaining defects in the Contribution Works.
- (e) The Developer must rectify, or procure the rectification of, those remaining defects (excluding any defects arising out of the ordinary use of the Contribution Works) within 20 Business Days after the day on which the Developer received the Council's notification.



**Schedule 7****Bank Guarantee (clause 6.1)****Part A – Unregistered Land****1 Bank Guarantee**

If prior to the issue of a Subdivision Certificate that creates one or more Allotments on any part of the Land, this Deed has not been registered on title to any part of the land which is the subject of the Subdivision Certificate (**Unregistered Land**), then prior to the grant of any such certificate by the Council, the Developer must either:

- (a) procure registration of this Planning Agreement on that Unregistered Land in accordance with **clause 5.2** of this Deed; or
- (b) provide security to the Council in the form of a Bank Guarantee for the face value equivalent to the sum of the:
  - (i) Contribution Amounts that the Developer will be required to pay in relation to the granting of the Subdivision Certificate over the Unregistered Land;
  - (ii) Notional Values of any Contribution Works that the Developer will be required to provide on the Unregistered Land as a consequence of the granting of the Subdivision Certificate by the Council; and
  - (iii) Notional Values of any Contribution Land forming part of the Unregistered Land that the Developer will be required to transfer to the Council as a consequence of the granting of the Subdivision Certificate by the Council,

and the terms and conditions of this **Schedule 7** apply in relation to those arrangements.

**2 Development of Unregistered Land**

- (a) Where the Developer applies for a Subdivision Certificate over Unregistered Land and has not complied with **clause 1** of this **Schedule 7**, the Council may refuse to issue the Subdivision Certificate until the Developer complies with **clause 1** of this **Schedule 7**.
- (b) Where a person who is not a party to this Deed applies for Development Consent for the subdivision of Unregistered Land (**Relevant Development Application**) and **clause 1** of this **Schedule 7** has not been complied with in respect to all subdivision contemplated by the Relevant Development Application, the Council may:
  - (i) notify the Developer in writing that a Relevant Development Application has been made; and
  - (ii) if, after 20 Business Days following the notice given to the Developer pursuant to **clause 2(b)(i)** of this **Schedule 7**, **clause 1** of this **Schedule 7** has not been complied with for all subdivision contemplated by the Relevant Development Application, the Council may elect to exclude the Relevant Development Application from the operation of this Deed so that sections 94 and 94A of the Act apply to the Relevant Development Application.

### 3 Claims under Bank Guarantee

The Developer agrees that the Council may make claims under any Bank Guarantee provided by it in accordance with **clause 1(b)** of this **Schedule 7** on the following basis:

- (a) The Council may call upon a Bank Guarantee (in full or in part):
  - (i) if the Developer has not paid any Contribution Amount in relation to an Allotment on Unregistered Land on or before the time for payment under this Deed;
  - (ii) if the Developer has not dedicated an item of Contribution Land forming part of the Unregistered Land in accordance with this Deed; or
  - (iii) if the Developer:
    - (A) has not Practically Completed an item of Contribution Works on the Unregistered Land before the time specified under this Deed;
    - (B) has not carried out any defect rectification required under **clause 8** of **Schedule 6** in relation to an item of Contribution Works on the Unregistered Land; or
    - (C) has not maintained an item of Contribution Works on the Unregistered Land for the period required by the Development Contribution Table.
- (b) The Council agrees not to make any claim under a Bank Guarantee without providing at least 10 Business Days' prior written notice to the Developer of its intention to do so.

### 4 Release of Bank Guarantee

If the Developer has:

- (a) registered this Planning Agreement on the relevant parcel of Unregistered Land; or
- (b) satisfied all of its obligations under this Deed with respect to the Unregistered Land which were secured by any Bank Guarantee provided to the Council in accordance with **clause 1** of this **Schedule 7**, and:
  - (i) the whole of the monies secured by the Bank Guarantee have not been expended and the monies accounted for in accordance with **clause 3** of this **Schedule 7**; and
  - (ii) the Council is satisfied, acting reasonably, that there are no actual or contingent liabilities arising as a result of the making of the Development Contributions for the relevant parcel of the Unregistered Land,

then the Council will promptly return the Bank Guarantee to the Developer (less any reasonable costs, charges, duties and taxes payable), or the remainder of the monies secured by the Bank Guarantee (as the case may be).

## Part B – Registered Land

### 5 Bank Guarantee

- (a) Prior to the issue of a Subdivision Certificate that creates one or more Allotments on any part of the Land upon which this Deed has been registered on title to any part of the land which is the subject of the Subdivision Certificate (**Registered Land**), then prior to the grant of any such certificate by the Council, the Developer must provide security to the Council in the form of a Bank Guarantee for the face value equivalent to the sum of the Notional Values of any Contribution Works that the Developer will be required to provide



on the Registered Land (and has not already provided) as a consequence of the granting of the Subdivision Certificate by the Council and the terms and conditions of this **Schedule 7** apply in relation to that arrangement.

- (b) For example, if:
- (i) the Subdivision Certificate applies to a plan that when registered would create the Allotment on which it is proposed to construct the 3,000th Dwelling;
  - (ii) an item of the Contribution Works must be provided within a certain period after the issue of that Subdivision Certificate; and
  - (iii) at the time of the application for that Subdivision Certification that item of the Contribution Works has not been provided,

then a Bank Guarantee under this **clause 5** of this **Schedule 7** must be provided with respect to that item.

## 6 Claims under Bank Guarantee

The Developer agrees that the Council may make claims under any Bank Guarantee provided by it in accordance with **clause 5** of this **Schedule 7** on the following basis:

- (a) The Council may call upon a Bank Guarantee (in full or in part) if the Developer:
- (i) has not Practically Completed an item of Contribution Works on the Registered Land before the time specified under this Deed;
  - (ii) has not carried out any defect rectification required under **clause 8** of **Schedule 6** in relation to an item of Contribution Works on the Registered Land; or
  - (iii) has not maintained an item of Contribution Works on the Registered Land for the period required by the Development Contribution Table.
- (b) The Council agrees not to make any claim under a Bank Guarantee without providing at least 10 Business Days' prior written notice to the Developer of its intention to do so.

## 7 Release of Bank Guarantee

### 7.1 Following Practical Completion

If:

- (a) the Developer has satisfied an obligation to Practically Complete an item of Contribution Works which was secured by any Bank Guarantee provided to the Council in accordance with **clause 5** of this **Schedule 7**;
- (b) the whole of the monies secured by the Bank Guarantee have not been expended and the monies accounted for in accordance with **clause 6** of this **Schedule 7**; and
- (c) the Council is satisfied, acting reasonably, that there are no actual or contingent liabilities arising as a result of the making of the Development Contributions,

then the Council will promptly return the Bank Guarantee to the Developer (less any reasonable costs, charges, duties and taxes payable) or the remainder of the monies secured by the Bank Guarantee (as the case may be) in exchange for a Bank Guarantee for the face value equivalent to the Notional Value of any maintenance period the Developer is required to carry out following Practical Completion of the Contribution Works secured by the Bank Guarantee.



## 7.2 Following Maintenance Period

If:

- (a) the Developer has satisfied an obligation to maintain an item of Contribution Works which was secured by any Bank Guarantee provided to the Council in accordance with **clause 7.1** of this **Schedule 7**;
- (b) the whole of the monies secured by the Bank Guarantee have not been expended and the monies accounted for in accordance with **clause 6** of this **Schedule 7**; and
- (c) the Council is satisfied, acting reasonably, that there are no actual or contingent liabilities arising as a result of the making of the Development Contributions,

then the Council will promptly return the Bank Guarantee to the Developer (less any reasonable costs, charges, duties and taxes payable), or the remainder of the monies secured by the Bank Guarantee (as the case may be).

## Part C – General

### 8 Rolling Bank Guarantee

The Council agrees that the Developer may satisfy its obligations under **Parts A** and **B** of this **Schedule 7** by providing one Bank Guarantee with a face value, which varies over time so that it is equal to or greater than the total amount that the Developer is required to secure under **Parts A** and **B** of this **Schedule 7** at the relevant time.

## Part D – Compulsory Acquisition

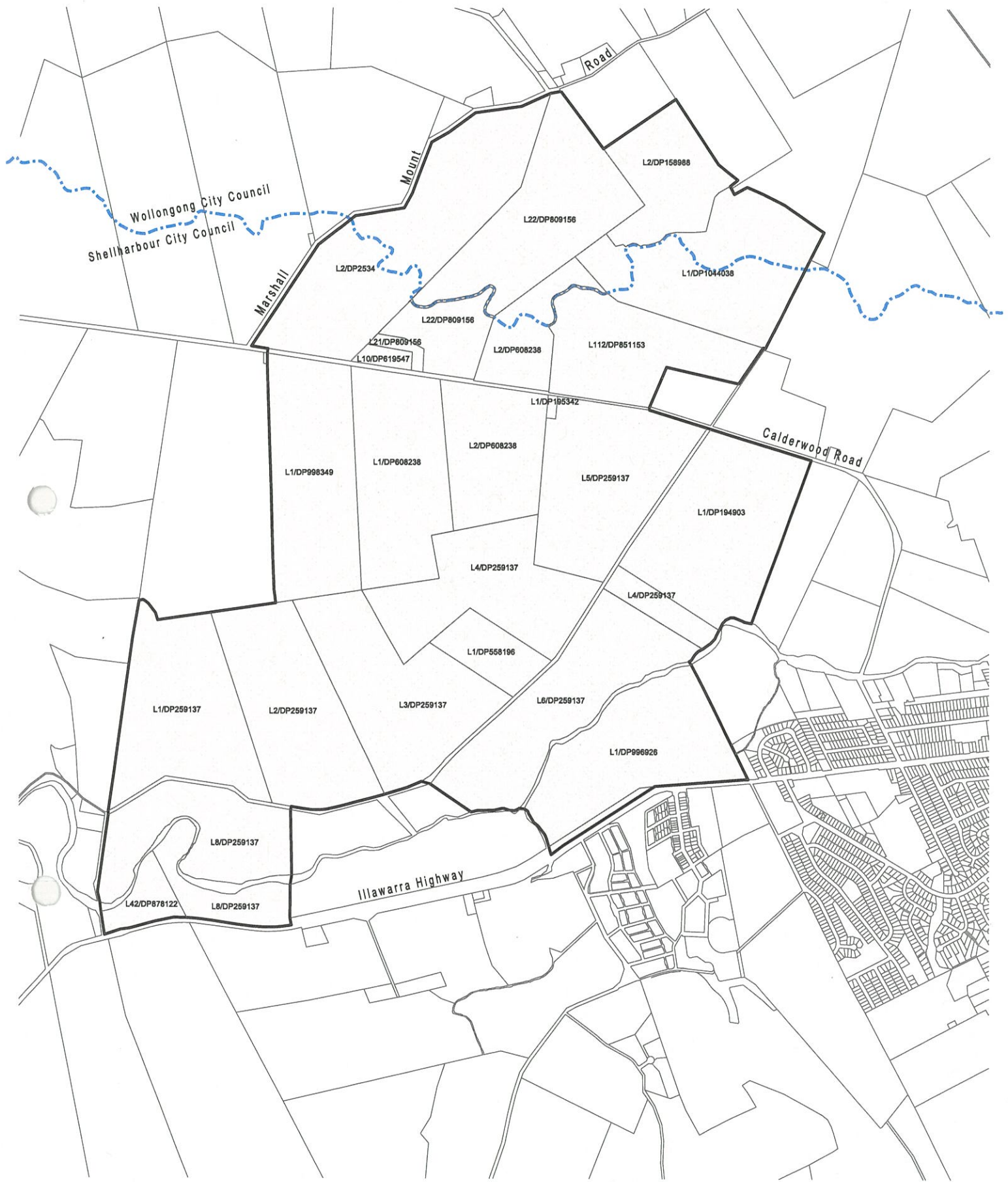
### 9 Compulsory Acquisition

- (a) This **clause 9** of this **Schedule 7** only applies to the extent that the Developer either becomes the registered proprietor of any Contribution Land or otherwise has contractual rights with the registered proprietor of any Contribution Land which are consistent with this **clause 9** of this **Schedule 7** (**Applicable Contribution Land**).
- (b) If the Developer does not transfer any Applicable Contribution Land as required by this Deed, the Developer agrees to the Council, after providing 30 days notice, compulsorily acquiring that Applicable Contribution Land in accordance with the *Land Acquisition (Just Terms Compensation) Act 1991* (NSW), for the amount of \$1.00.
- (c) The Developer and the Council agree that:
  - (i) this **clause 9** of this **Schedule 7** is an agreement between the Council and the Developer for the purposes of section 30 of the *Land Acquisition (Just Terms Compensation) Act 1991* (NSW); and
  - (ii) in this **clause 9** of this **Schedule 7** the Council and the Developer have agreed on all relevant matters concerning the compulsory acquisition and the compensation to be paid for the acquisition.
- (d) Except as otherwise agreed between the Developer and the Council, the Developer must ensure that the relevant Applicable Contribution Land is free of all encumbrances and affectations (including, any charge or liability for rates, taxes and charges) except for Service Easements and those reservations, easements and other affectations (but not including any mortgage or charge) as registered as at the date of this Deed or easements or covenants which have been agreed by the Council, on both the date that the Developer is liable to procure the transfer of the relevant Applicable Contribution Land to the Council in accordance with this **clause 9** of this **Schedule 7** and the date on which

the Council compulsorily acquires the relevant Contribution Land in accordance with the *Land Acquisition (Just Terms Compensation) Act 1991* (NSW).

**Schedule 8**  
**Applicable Area**





KEY PLAN



NOTES

Issue	Amendment	Date
A	Draft VPA	11.4.2014
B	Draft VPA	02.05.2014

Developer



Project

## Calderwood

Drawing Title

Calderwood VPA

Applicable Area



Calderwood project area

Scale AT A3

1:15000

Drawn by

NAH

Drawing Number

OA Applicable Area



Issue B

0 150m 300m 600m 900m

**Schedule 9**

**Location of Contribution Land and Contribution Works**





- L1 Local Parks (Schedule 4)
 D1 District Parks
 ▲ Sporting Fields
 CW1 City Parks
   
 \* final location subject to agreement
   
■ Multi Purpose Community Resource Centre

KEY PLAN



0 150m 300m 600m 900m

NOTES

Issue	Amendment	Date
A	Draft VPA	11.04.2014
B	Draft VPA	02.05.2014



Calderwood project area

Developer

**Lend Lease**

Project

**Calderwood**

Drawing Title

Calderwood VPA

On site Open Space  
and Community Facilities

Scale AT A3

1:15000

Drawn by

NAH

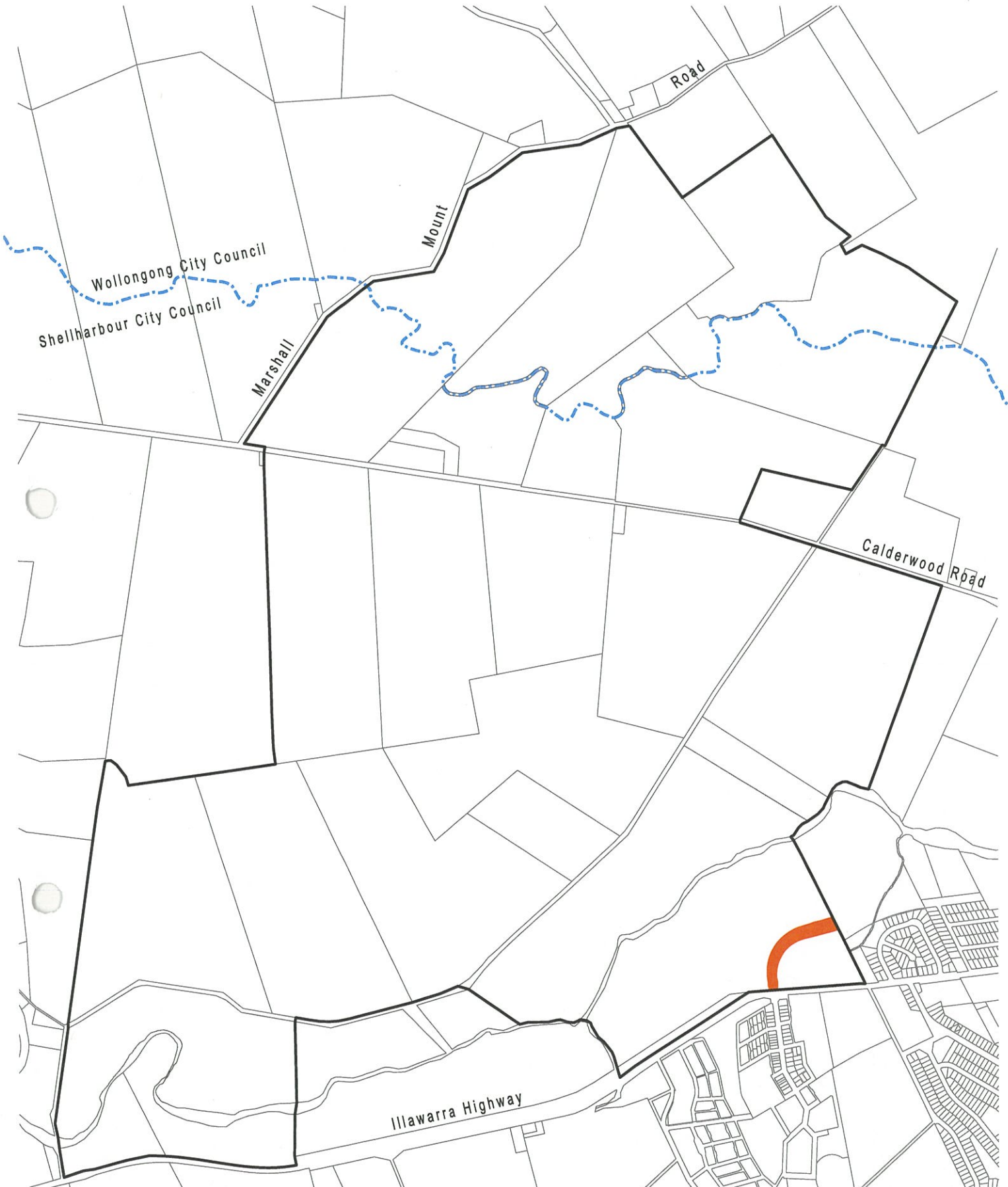
Drawing Number

QA Indicative 05



Issue B






KEY PLAN



NOTES

Issue	Amendment	Date
A	Draft VPA	11.04.2014
B	Draft VPA	02.05.2014

-  Contribution Land - Albion Park Bypass
-  Calderwood project area

Developer



Project

# Calderwood

Drawing Title

Calderwood VPA

Albion Park Bypass Plan

Scale AT A3

1:12000

Drawn by

NAH

Drawing Number

CW AlbPk Bypass



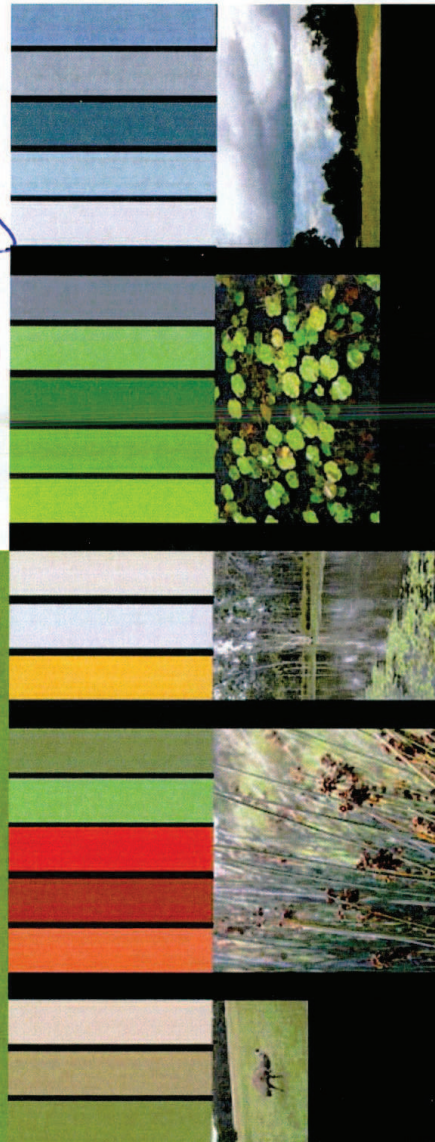
Issue **B**

This page and the attached 80 pages are the exhibit to the Deed dated between Shellharbour City Council and Lend Lease (Communities) Australia Limited.

  
Signed (Shellharbour City Council)

  
Signed (Lend Lease (Communities) Australia Limited)

# WESTERN PRECINCT landscape masterplan strategy report



Prepared for:  


Prepared by:  
Environmental Partnership (NSW) Pty Ltd  
In association with:  
SKM Engineers  
Milne and Stonehouse Public Artist

September 2009



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## PRELUDE

The Western Precinct Landscape Masterplan Strategy Report has been prepared as the next phase in the sequence of open space and landscape planning for the St Marys Western Precinct. The report follows the Western Precinct Landscape and Open Space Masterplan (LOSM), and the Landscape Maintenance and Handover (LMAH) reports prepared in September 2008 as part of the Western Precinct Precinct Plan process.

The Landscape Masterplan Strategy aims to identify a framework of design and materials principles upon which design development can be based. It is intended as a working document that will be subject to supplementation during the ongoing development of the Western Precinct and in parallel with urban and landscape design development.

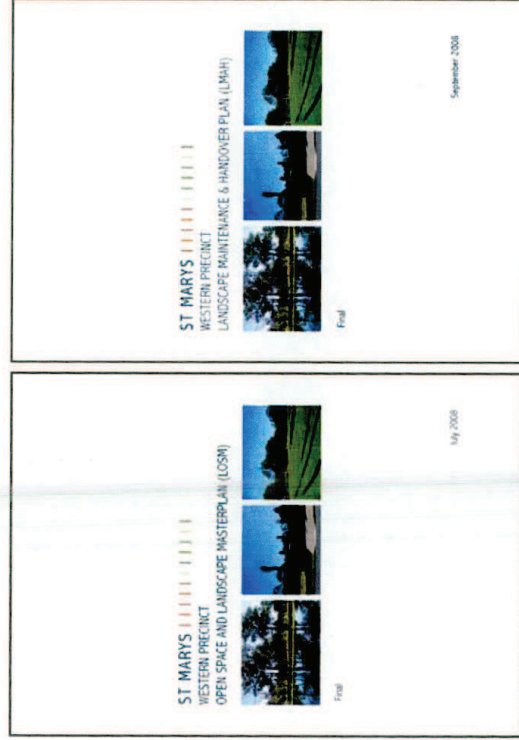
The report specifically outlines the open space framework, desired direction for public domain character and presentation, public domain design principles for key public domain, green corridors and open space elements, as well as the preferred design and materials treatments for the Western Precinct. Maintenance and approvals processes are also confirmed.

The standards for performance, general guidelines and criteria for the allocation and development of the hierarchy of precinct open space and landscape outlined in the Western Precinct Landscape and Open Space Masterplan (LOSM), July 2008 have generally been considered as a basis for achieving the objectives of the Landscape Masterplan Strategy. Any specific requirements for definition, function, presentation, development and landscape character previously provided have also been used.

This Landscape Masterplan Strategy specifically identifies:

- a landscape vision for the precinct based on the site's physical character, cultural heritage and future community;
- open space structure and pedestrian and cycle access network;
- landscape typologies to internal road networks;
- entry/ arrival experiences which recognise and support the Regional Park setting
- visually distinctive village precincts and Village Town Centre experiences that recognise and support the Regional Park setting character type
- public art themes which can be integrated into the overall image and fabric of landscape schemes to streets and open space networks.
- an effective approach to water sensitive urban design

These directions have been identified through an integrated approach, which addresses urban design, engineering, public art and landscape design objectives in close coordination. Workshops and presentations with Delfin Lend Lease, Penrith City Council and relevant project stakeholders were also undertaken during throughout the project have reinforced the integrated outcome identified in this report



LOSM July 2008

LMAH September 2008

The landscape masterplan builds on the open space structure identified in the Open Space and Landscape Masterplan (LOSM) and Landscape Maintenance and Handover Plan prepared in 2008





## 1 INTRODUCTION

### 1.1 Western Precinct Landscape Vision

A specific vision for open space and landscape for the Western Precinct was developed from the overall Western Precinct vision as follows;

#### *Western Precinct Landscape Vision*

*'To enhance the quality and amenity of the Western Precinct through the provision of a sustainable landscape setting which complements its location adjacent the Regional Park and recognises its rural history. Providing accessible, integrated, diverse, safe and adaptable network of open space, streets, precinct entries and a village centre which will continue to serve the physical and visual urban space needs of the local community both now and into the future'.*

#### The Western Precinct Vision

##### The Project Vision

The St Marys Development will be a cohesive community that meets the needs and aspirations of all stakeholders. It will be an integrated, thriving and vibrant place centred on the core elements of learning, community interaction and engagement, housing diversity, enterprise and sustainability. It will capitalise on connections with nature and open space, respecting the natural and rural qualities of the region.

##### Key Elements Driving the Vision

Learning – access to whole of life learning

Diversity – mixture of uses and housing

People Focused – safe, accessible, community centric, lifestyle driven

Employment – employment for local residents providing 21st Century jobs, enterprise capability

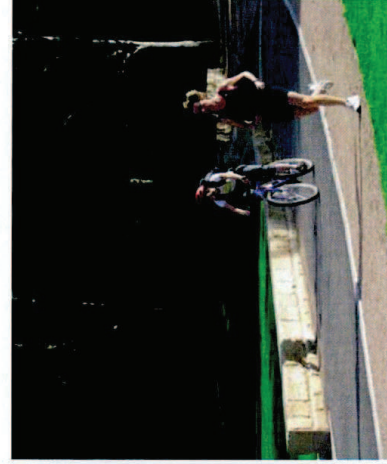
Innovation – creative, distinctive, functional and responsive

Collaboration – partnership and integration

Sustainability – a holistic approach to social, economic and environmental outcomes, consistent with Council's 'Sustainability Blueprint for Urban Release Areas'

Delivery – timely delivery of facilities to meet the needs of the community

Design – provision of safe, well-designed and high quality urban environments that foster a cohesive community





# 1 INTRODUCTION

## 1.2 Background

### ADI Site St Marys

The former Australian Defence Industries (ADI) site at St Marys is located approximately 45km west of the Sydney CBD, 5km north east of Penrith City Centre and 12km west of Blacktown City Centre (Figure 1.1 illustrates the overall site context).

The site was endorsed by the NSW Government for inclusion in the Urban Development Program (UDP) in 1993. It was seen to present an opportunity to provide housing for Sydney's growing population within an environmentally sustainable framework.

### Regional Park Context

A major feature of the development is its setting within, and relationship to 900ha of Regional Park. Through conservation of this open space and its associated habitat values, the local and metropolitan communities will have access to a unique level of passive recreational and educational amenity within a strong conservation context.

### Penrith City Vision

Council's vision for Penrith is one of a sustainable and prosperous region with a harmony of urban and rural qualities and a strong commitment to environmental protection and enhancement. The area should offer both the cosmopolitan and cultural lifestyles of a mature city and the casual character of a rural community.



Figure 1.1 Development Location Plan



# 1 INTRODUCTION

## 1.3 Context

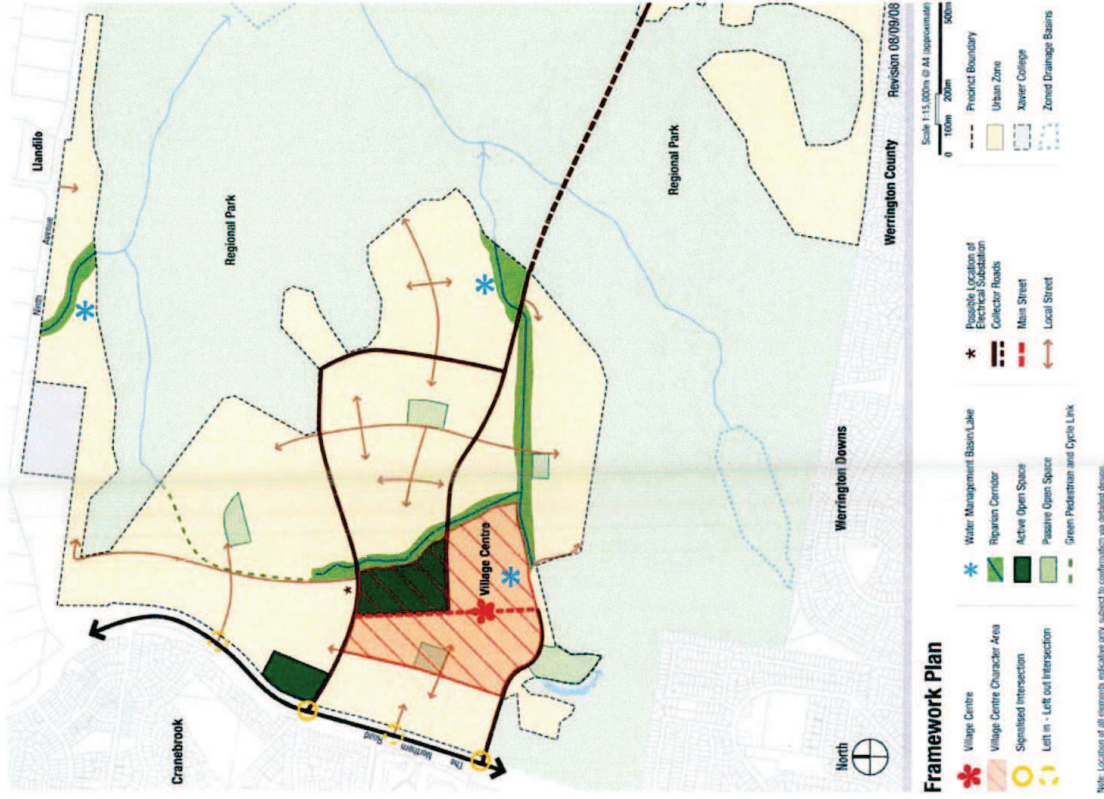
The Western Precinct is bounded by Ninth Avenue to the north within the rural / residential suburb of Llandilo, The Northern Road and the residential development of Cranebrook lie to the west, while land zoned for Regional Park lies to the south and east. The precinct has a total area of approximately 229 ha, including an existing education establishment (Xavier College) in the north-western portion of the precinct fronting Ninth Avenue.

### Proposed Development

The Western Precinct is proposed to include predominantly residential development which will be supported by a Village Centre, comprising of a mix of retail, commercial, community, open space and residential uses, in the southern part of the precinct. A network of local open space, riparian corridors and stormwater basins will include recreation and pedestrian / cycle access through out the site and links to the adjoining Regional Parkland.

Main vehicular entry points to the site will be from four points along the Northern Road on the western boundary. As well as secondary entries east to the Central Precinct; and north along the boundary of Ninth Avenue.

It is anticipated that the Western Precinct will accommodate approximately 2,450 dwellings and a residential population in the order of 6,400.



Note: Location of all elements indicative only, subject to confirmation via detailed design.

Figure 1.2 Western Precinct Structure Plan

## 2 REVIEW OF BACKGROUND INFORMATION

### Introduction

The Western Precinct site presents a range of specific characteristics and opportunities that must be considered in establishing the most effective open space provision and distribution framework, that can not only address community needs and aspirations but be sustainable in the long term for Council. A detailed analysis of the existing natural and built features of the Western Precinct was undertaken in detail as part of the Precinct Plan development and Concept Planning process.

PCC defines Penrith as distinguished by its natural setting, with its western edge defined by the flow of the Nepean River and the rising backdrop of the Blue Mountains. Historical rural landscapes and natural bushland areas characterise the City, and surround its urban/ rural neighbourhoods.

The Western Precinct is physically and visually separated from the Central and Eastern precincts and has a strong immediate relationship to the Northern Road and the adjoining suburb of Cranebrook to the west. Although close in proximity existing vegetation predominantly screens residential suburbs to the south. As such the contextual relationship of the site to the residential communities to the west are just as important as those of the Central and Eastern precincts. Social / demographic research has identified that there is a strong sense of community and identity to the community of Cranebrook, being passionate about its locale, environment, and social fabric.

The undulating topography of Cranebrook is echoed in the Western Precinct providing a strong element of its identity from both the Central and Eastern precincts. This is reinforced by the less developed nature of the lands having being less exploited for building sites, and more rural in its past landuses.



## 2 REVIEW OF BACKGROUND INFORMATION

### 2.1 Landform

#### Topography and Drainage

- Varied and interesting topography over much of the Western Precinct.
- Topography generates diversity of character within Western Precinct in relation to slope, aspect, exposure to views and winds
- Several gullies result in highly enclosed pockets isolated from cooling breezes
- South eastern section of Western Precinct is significantly more undulating to level with limited visual contact / linkage to areas of precinct beyond.
- High points to the north western corner of the site
- Limited wetland habitat occurs in the Western Precinct, with a man made drainage line running west to east though the southern portion of the precinct draining into a tributary of South Creek.
- Ephemeral north south running drainage line

#### Landscape Opportunities

- Potential for ridge top open space as identifiable image of Western Precinct.
- DECC has advised the two "peninsulas" of Regional Park that extend into the Western Precinct has have potential for use as local passive open space and may not be fenced. The potential role of these areas as open space should be explored further through planning agreement discussions.
- Generally good falls for drainage in Western Precinct
- Open space opportunities around indicative drainage basins and drainage lines within the precinct.

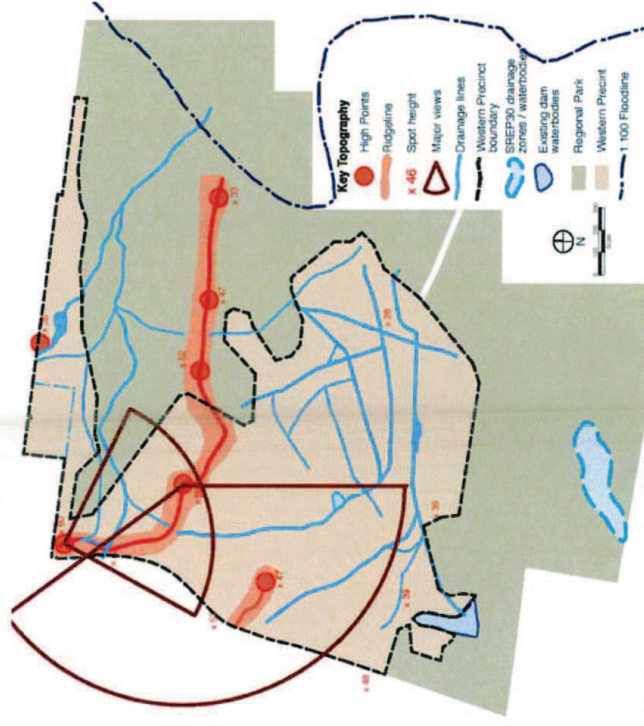
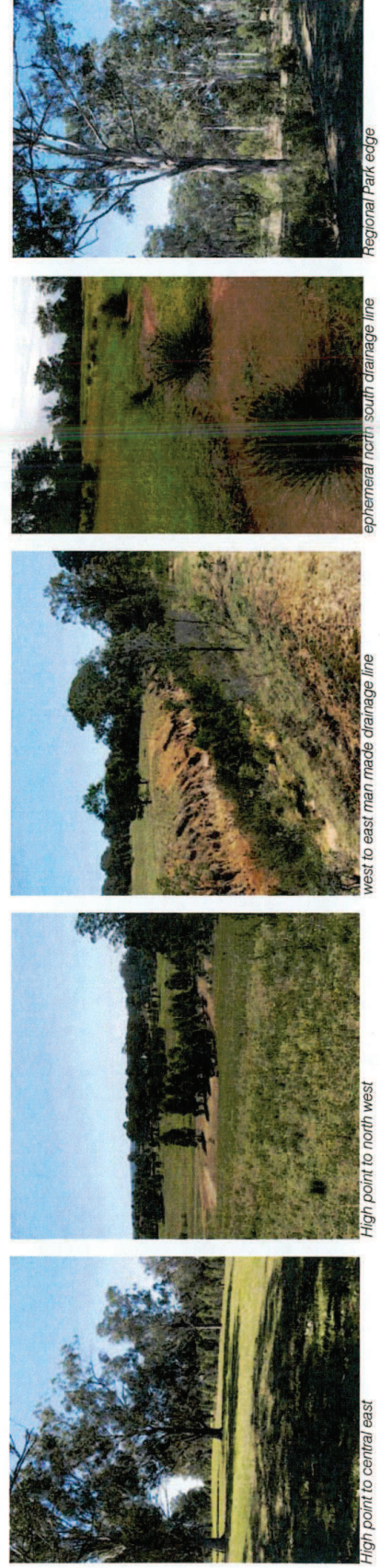


Figure 2.1. Western Precinct Landform Analysis





## 2 REVIEW OF BACKGROUND INFORMATION

### 2.2 Views and Visual quality

#### Views / Visual Character

- Panoramic views from north western section of the western precinct to west / south west and south east
- Existing visual penetration to Northern Road and adjoining residential area from north of Western Precinct - buffer to this exposure is possible
- Strong visual enclosure of site on eastern and southern edges by vegetation within the Regional Park

#### Landscape Opportunities

- Open space opportunity to ridge lines
- Predominant aspect is in the southerly arc from west to east in Western Precinct - consider implications for street alignment and allotment orientation to achieve optimum conditions
- Potential landscaped buffer treatment along Northern Road frontage - required for amenity reasons (in particular traffic noise) and also as there is no driveway access from lots permitted to the Northern Road.
- Opportunity for open space (& key Regional Park access point) adjacent to the western and eastern sides of the remnant farm dam in the south west corner, potentially integrated with an activity node, (eg. retail) to the immediate north. This opportunity is reinforced by the constraints of APZs on development adjacent to the farm dam.
- Time lag for establishment of new tree planting – potential for early works

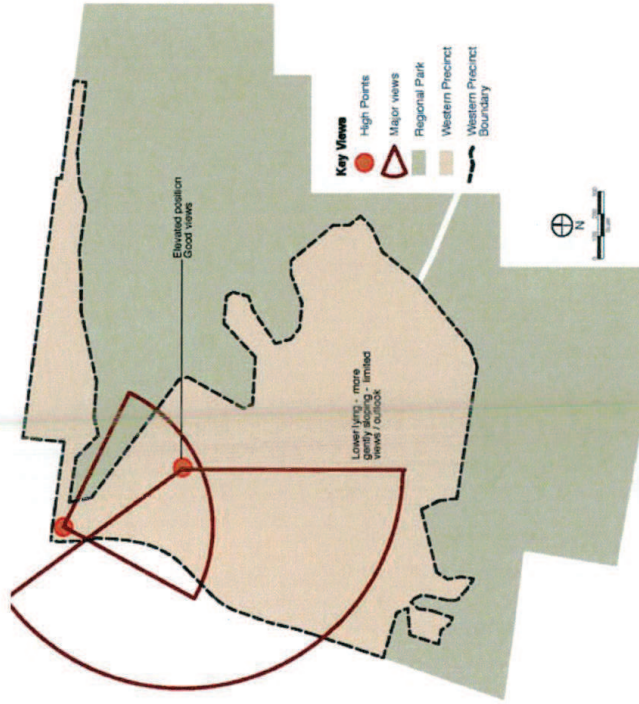


Figure 2.2. Western Precinct Views and Visual Quality Analysis





## 2 REVIEW OF BACKGROUND INFORMATION

### 2.3 Vegetation quality, character and links

#### Remnant Vegetation

- remnant mature tree species play a significant role in the composition of the Western Precinct's landscape character.
- woodland and forest areas are generally dominated by *Eucalyptus moluccana*, reflecting the reduced amounts of lateritic gravel in the soil.
- large areas are grassland created by previous clearing of natural woodland and open forest. (pasture improvement and weed invasion has resulted in the establishment of variable amounts of introduced species).

#### Significant Trees

- widespread native tree planting provides an effective visual and physical buffer to the southern and eastern boundaries.
- significant species include: *Eucalyptus tereticornis* (Forest Red Gum) and *Eucalyptus maculata* (Spotted Gum).
- some exotic tree species are located surrounding heritage building sites in the south east.

#### Landscape Opportunities

- Northern, eastern and south western edges of site characterised by mixed vegetation form and tree canopy – visual interest.
- Open space opportunities around stands of significant trees
- Adjoining the south western corner of the Precinct is the remnant farm dam area which is surrounded by remnant bushland
- Time frame for establishment of new tree plantings – potential for early works.



Remnant Farm Dam area



Remnant stands of trees



Figure 2.3. Western Precinct Existing Trees



## 2 REVIEW OF BACKGROUND INFORMATION

### 2.4 Soils / Hydrology

#### Soils

A detailed analysis of the existing water, drainage and soil characteristics of the site is contained within the Water, Soils & Infrastructure Report prepared by SKM. A summary of relevant key issues, opportunities and constraints follows.

- Bringley Shale bedrock weathered and overlain with alluvial Hawkesbury- Nepean River system floodplain deposits composed largely of clays and thinner and discontinuous layers of sand and gravel.
- Western Precinct differs from the remainder of the St Marys site due to its higher proportion of surface shale bedrock and less alluvium, such as the clays found in the Central Precinct.

#### Hydrology

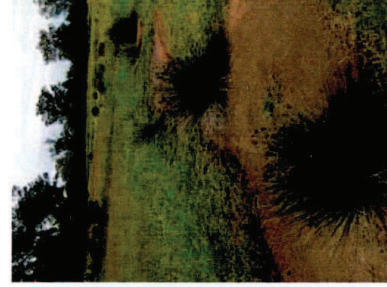
- The Western Precinct has a planar land surface, and generally rises towards the north and westwards towards the site boundary. The southern and northern catchments of the precinct drain eastwards to a tributary of South Creek.
- The Western Precinct lies to the west of South Creek and the site is not at risk of flooding from South Creek in the 100 year ARI event. The Probable Maximum Flood (PMF), the regional flooding in the Hawkesbury Nepean River system does not impact on the Western Precinct as demonstrated in the SREP 30 Structure Plan.
- Two groundwater-bearing systems are present within the St Marys site. These are a shallow (regolith soil) aquifer and a deep (fractured shale bedrock) aquifer. These two systems are not true aquifers due to their various characteristics. Both systems comprise a complex of scattered and discontinuous sub-aquifers of limited area and volume.

#### Landscape Opportunities

- Use of predominately native plant palette from the Cumberland plain that will establish effectively within site soils to open space areas.
- Localised soil improvements where feature landscape outcomes are required,
- Soil and drainage works provided to field/ sport areas
- Integration into drainage and open space systems of major existing drainage lines
  - east west
  - maintain embankment (with greater quality existing vegetation) to one side of existing alignment where possible
  - expand opposite embankment as required for stormwater capacity
  - attractive semi wetland character along existing swale / drainage line
  - potential for early establishment of tree and other vegetation to corridor - minimal existing large scale vegetation
- north south



Western Precinct soils



Feature garden beds and sports fields will require localised soil improvements



## 2 REVIEW OF BACKGROUND INFORMATION

### 2.5 Heritage management and interpretation

#### Aboriginal Heritage

In the Penrith area, the original inhabitants were Aboriginal people. The Gomerigal – Tongara band within the Dharug language group are believed to have lived in the South Creek (St Marys) area for over 30,000 years (South Creek – St Marys Heritage Assessment, Paul Davies 2008 p12). European settlement of the area dates from when the first land grants were made in 1803.

Six target areas within the developable areas of the Western Precinct were identified in the Strategic Management Model (McDonald and Mitchell 1994, Jo McDonald CHM 1997a) were identified as requiring archeological salvage prior to development (refer figure 2.6).

#### European heritage

Four sites identified in SREP 30 of environmental heritage archaeology within the Western Precinct, include;

- Site 9 - Former House C1990's adjacent Ninth Ave frontage - local heritage significance
- Site 14 - Former New 'Dumbles' house C1930's - remnant Canary Island Date Palm
- Site 15 - Former Old 'Dumbles' house C1990's - remnant Canary Island Date Palm
- Site 16 - Former Mrs Smith's House C1850's - Local heritage significance

#### Landscape Opportunities

- Integration where possible of heritage sites into open space network
- Retention of significant plantings within open space and streetscapes
- Opportunity for further understanding of aboriginal occupation through salvage excavation process
- Integration of heritage themes landscape / artworks design.
- Maximise views to heritage sites/ interpretation located within open space where possible.

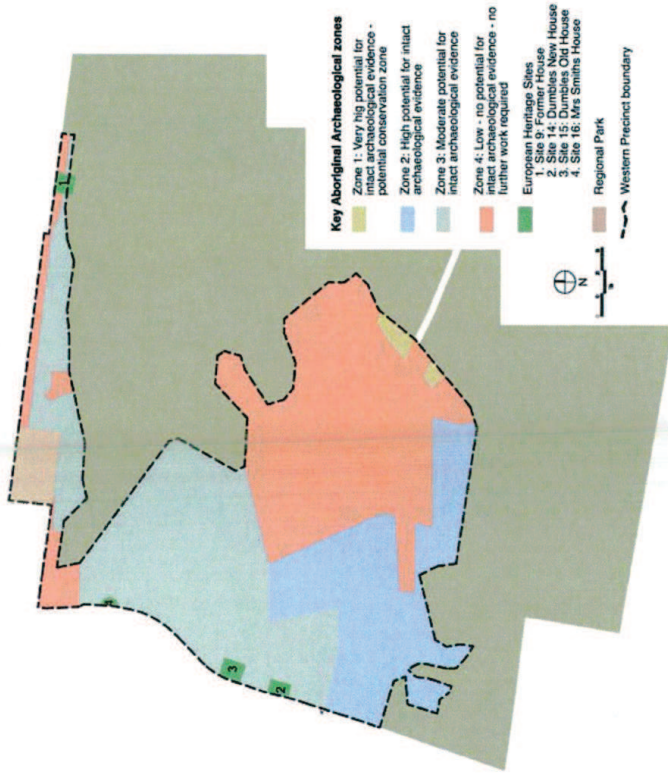
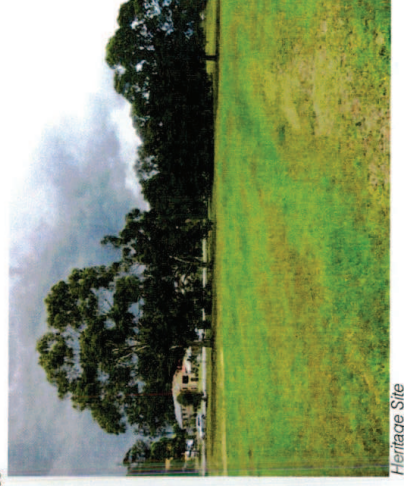


Figure 2.4. Western Precinct Existing Heritage Sites





## 2 REVIEW OF BACKGROUND INFORMATION

### 2.6 Access links

#### Existing

- The Western Precinct has two primary potential access points to site;
  - two from the Northern Road (plus two secondary left turn only)
  - one through the Regional Park roadway linking from the Central Precinct to the Eastern Precinct
- regional cycle access linkage earmarked by RTA along Northern Road
- off road cycle links in Cranebrook to the west and to Ropes Creek Corridor (via Eastern Precinct) in the east

#### Landscape Opportunities

#### Vehicular

- Hierarchy of entry points from Northern Road into development including signalised intersections and secondary left in / left out access
- Link road to Central Precinct and Eastern Precinct through Regional Park

#### Cycle

- Off Road access along Northern Road frontage
- Off Road access to green corridors and continued through major open spaces
- Off Road link to Eastern precinct and onwards to Ropes Creek corridor
- Regional Park access and trails

#### Pedestrian

- Connectivity between precinct facilities and open space / recreation networks by both shared paths and pedestrian paths to road verges
- Low key gravel path access through bushland character to specific locations complements Regional Park context
- Maximise opportunity for provision of universal access.

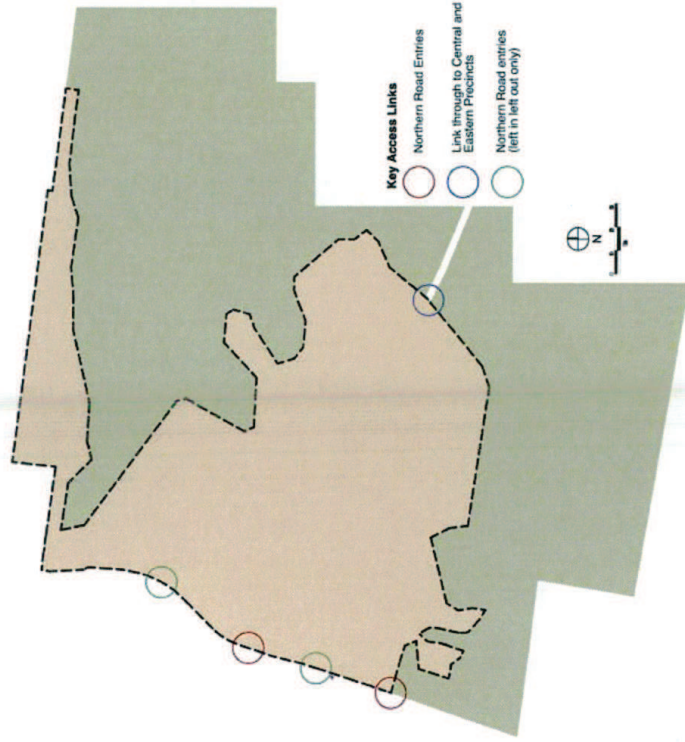


Figure 2.5. Western Precinct Existing Access networks





## 2 REVIEW OF BACKGROUND INFORMATION

### 2.7 Community and social values

A Community Plan by Elton Consulting prepared as part of the 2008 Precinct Plan identified that the future population of the Western Precinct will require social infrastructure and services beyond that presently provided to the existing surrounding population. The provision of these services will help ensure that a socially sustainable community and social integration with existing neighbouring communities is achieved. This is consistent with both the St Marys EPS and Council's Sustainability Blueprint.

#### Landscape Opportunities

Opportunities to engage and involve the community in a greater level of use and ownership of open space in the Western Precinct include:

- Public spaces that capture the imagination and activate use and activity
- Integrated public art projects in the public domain / landscape
- Provision of community gathering/ event areas
- Potential for Community Gardens/ farms - with potential for green/ sustainable education
- Aged / Youth specific gathering places, recreation and exercise

#### Art Opportunities

Art will be integrated as a fundamental design influence and element to key areas of the public domain for the community including:

- art as part of the precinct entry experience and identity
- art within the Village Centre
- art within parks and open spaces

Involvement of adjoining community in public art initiatives should be integrated where possible, and due to the staged nature of the development - involvement of the evolving community on site in ongoing design development of open space to future stages should be explored



Community events areas



Community sports



Community farm



New production technologies



Community garden





## 2 REVIEW OF BACKGROUND INFORMATION

### 2.8 Services and infrastructure

#### Existing

An analysis of the existing services and infrastructure of the site is contained within the Water, Soils & Infrastructure Report prepared by SKM.

Generally an existing infrastructure in and around the Western Precinct (generally with spare capacity or with the ability to be upgraded, augmented or amplified) in close proximity, including trunk components such as:

- Water reservoirs (Orchard Hills drinking water supply system and Cranebrook reservoir);
- Sewerage treatment plants, carriers and pumping stations (St Marys Sewerage Treatment Plant, the "Werrington Downs Carrier", and pumping station SPS366); and
- Zone substations (Cambridge Gardens Zone Substation although a new zone substation for the entire Western Precinct will be required).
- Gas and underground communications services (including optical fibre and copper cables) also exist in the area.

#### Future direction

- Sydney Water and Integral Energy have indicated that they are able to service the Western Precinct with extensions to their existing networks. Water supply will be available from the existing Cranebrook reservoir adjacent the site. Sewer is able to be transferred to the existing St Marys Sewerage Treatment Plant via pumping stations, rising mains and carriers. Electricity is able to be extended from the existing zone substation at Cranebrook with the establishment of a temporary zone substation and the ultimate establishment of a permanent zone substation on the site. These proposed measures all achieve the SREP 30 objectives related to services infrastructure strategy.

- The potential location of a future electrical substation located centrally within the Precinct has been identified. The exact location of the substation will be determined through further negotiation with Integral Energy and subject to relevant approvals.

- Recycled water supply will be subject to negotiations with Sydney Water.

- Delivery of Fibre to the Premises (FttP) broadband will also be subject to negotiations with service providers.

#### Landscape Opportunities

- To residential streets - assess and plan as an integral process all influences on tree positions (e.g. services, driveways, street parking) while flexibility to adjacent locations of each is available

- Services corridors to streetscapes to be consolidated as common trenches where possible
- Maintain consistent alignments to all services types to promote security to tree planting.
- Locate major kiosks / substations/ gpts etc at early stages of project to ensure integration with open space/ landscape treatments



## 2 REVIEW OF BACKGROUND INFORMATION (INFLUENCES)

### 2.9 Open space and recreation

#### Regional Park

- 60% of the perimeter of the Western Precinct is bounded by Regional Park, this "bushland edge" of the park will significantly influence the landscape amenity and character of the urban development.
- Regional Park edge may be fenced for protection of flora and fauna values but general access and recreation opportunities will be available subject to the NPWS PoM process.
- Regional Park bush trails and internal park facilities will greatly enhance the recreational amenity available to Western Precinct residents.

Discussions with Department of Environment and Climate Change (DECC) have also identified that it is highly likely that the two "peninsular areas" of Regional Park projecting into the northern edge of the main section of the Western Precinct could play a role in the passive local open space network as Bushland type parkland similar to the "Woodlands Park" in the Eastern Precinct.

#### Regional Open Space

In the adjoining Central Precinct is 40 ha of land dedicated as Regional Open Space which will provide a range of district level sporting and recreation facilities.

#### Drainage and vegetation corridors

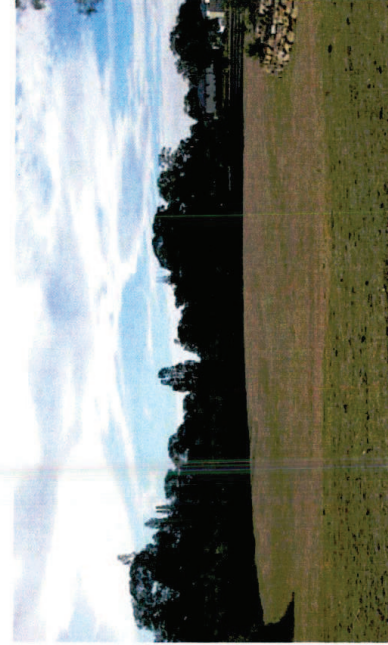
- provision of dual riparian and recreation function to creek lines, water bodies and dual detention and recreation function to stormwater basins will enhance landscape amenity and diversity of experiences and visual setting.
- infrastructure which traverses corridors will be minimised habitat / biodiversity maintained through minimised tree removal, and maintaining fauna movement function.
- a variable bushfire asset protection zone (APZ) will adjoin the Regional Park boundary and provide opportunities for cycle / pedestrian access, and for consolidation with adjoining "interface parks".



Regional Park between Central Precinct



Existing drainage corridor



Potential storm water basin with dual recreation function



Figure 2.6: Open Space Masterplan

- Riparian Corridor / Parkland
- Passive Open Space
- Active Open Space
- Regional Park Passive Open Space Opportunity (approx. size 11ha)
- Water Management Basin / Lake



## 2 REVIEW OF BACKGROUND INFORMATION

### 2.9 Open space and recreation

Penrith Council's 2007 Open Space Action Plan identified a series of open space definitions which will form the basis of the open space network:

#### District Facilities > 5ha

Recreational facilities used by and benefiting a district (eg. St Marys) catchment. The OSAP identified the potential contributions to existing Regional Facilities in the surrounding area that may be used by residents of the new community (eg. Potential Penrith Lakes district sporting complex). For the Western and Central Precincts these contributions may include facilities within the Regional Open Space adjoining the eastern edge of the Central Precinct.

#### District Park > 5ha

To provides a wide range of recreational experiences and facilities for local individuals, groups, families as well as for Penrith City's visitors. To be accessible by public transport, and typically includes car parking, and toilet and change room facilities that may be associated with formal active sports facilities. To provide visitor facilities, such as BBQs and picnic furniture, lighting, attractive landscaped areas, shade structures where natural shade is not available, and universally designed playground systems (in areas of priority within the city). Areas to cater for a range of age groups such as pedestrian and cycle way systems, and informal areas for sports and recreation.

#### Neighbourhood Park Parks up to 5 ha

A Neighbourhood Park will be up to 5 hectares in area, and typically serves a 'cluster' of suburbs. Neighbourhood Parks will generally be accessible to bus routes, include (limited) parking, and have lighting, attractive landscaped areas, pedestrian and cycle ways, playground structures, standard toilet facilities, natural shade, and picnic and visitor facilities. A Neighbourhood Park could include a sports field suitable for children's training and competition activities, and other formal or informal (non-competitive) recreation areas. It is proposed that neighbourhoods parks may develop a design and facilities theme distinguishing it from that of the other neighbourhoods, and as such may draw on a larger user catchment than purely the local neighbourhood.



District Park



Neighbourhood Park



Local Park

#### Local Parks 0.3 - 5 ha

A Local Park will be from 0.5 to 3 hectares in area, and primarily serves a suburb, or an area up to 2km in radius. The Local Park will typically have on street parking, landscaping, natural shade, park benches and seating, and a playground area (no toilet facilities).

#### Pocket Parks 0.25 to 1ha

A Pocket Park will be between 0.25 and 1 hectare in area, and caters for the local area. It will be within a 5 minute walk from most households (400m - 600m radius). The Pocket Park will typically include natural surface and shade areas, sometimes seating, informal play and passive recreation areas, and may have some play equipment. Pocket Parks will provide passive recreational use over a smaller sub-neighbourhood catchment, and as such will be distributed and sized to provide equitable access to open space for all residents. Parks will be developed under two general themes:

- Sub-neighbourhood Parks: located within Neighbourhood Parks to supplement Local Parks for open space distribution
- Interface Parks: adjoining drainage basin, Bush Fire Protection Zone or Regional Park



### 3 FRAMEWORK PLAN

#### 3.1 Principles

The Western Precinct framework plan defines an integrated framework of streets, open space and corridors, and residential development. This has been subject to ongoing refinement since the Precinct Plan in 2008. The open space framework plan (Figure 3.1) on the following page responds to a range of key site planning principles;

- Creation of neighbourhood scale and structure.
- Use of the road subdivision pattern to create distinct and identifiable neighbourhoods - either park, community facility and/ or local retailing space.
- Orientation of street layout towards neighbourhood nodes to enhance connectivity between residence, open spaces and public transport
- Scale of neighbourhood nodes influencing an area within approximately 75 metres of the edge of neighbourhood, local and pocket parks and / or bus stop.
- Good proximity of neighbourhood nodes to local parks, playing fields and within 5-10 minutes walking distance (400-800) of a bus stop.
- Fronting uses for all parcels overlooking nodal areas.
- Provision of local and collector street links, including pedestrian links, between neighbourhood nodes and the village centre
- Emphasis of the Regional Park interface within the neighbourhood.

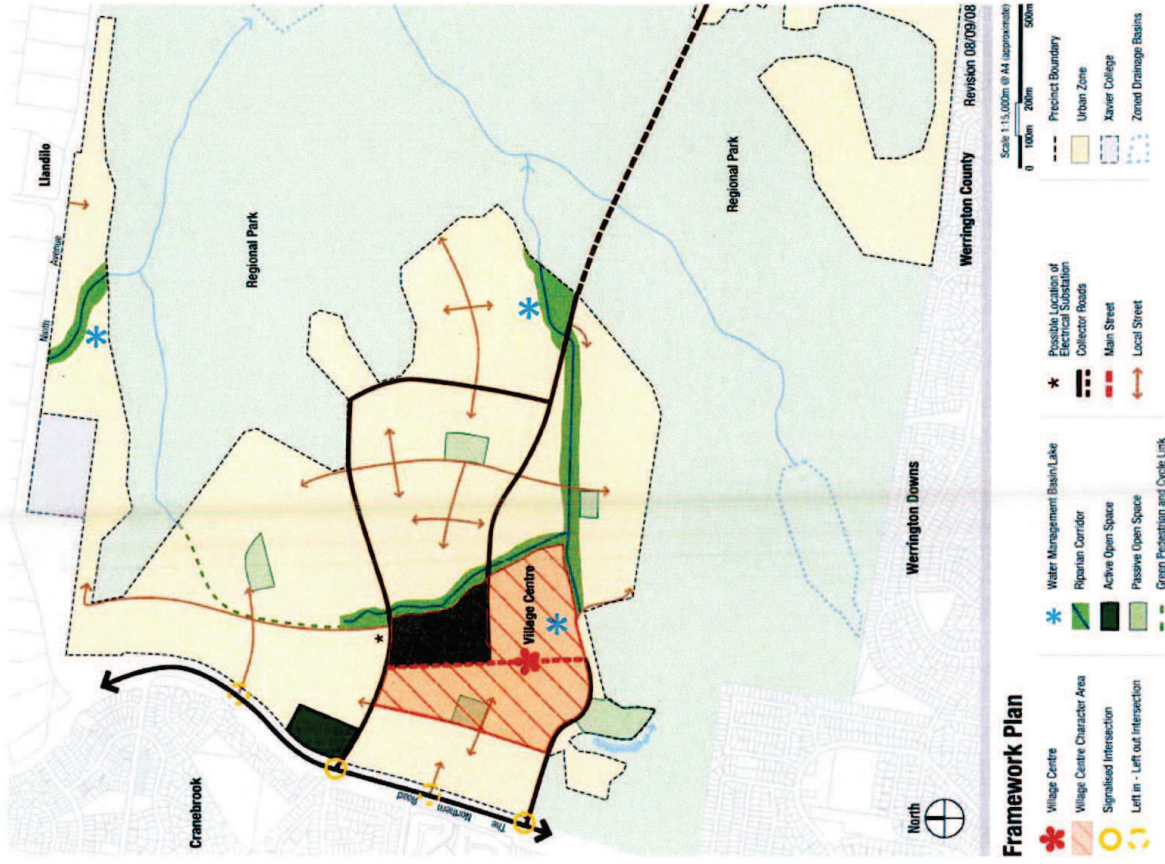


Figure 3.1: Open Space Framework Plan



### 3 STRUCTURE PLAN

#### 3.2 Landscape opportunities

Type Location / requirements	Opportunities
<p><b>Street Corridors</b> A legible hierarchy of street access that assist in wayfinding and creation of identity for the development</p> <p>Integrate tree planting at a scale that can significantly shape identity and provide climatic amelioration (eg shade)</p>	<ul style="list-style-type: none"> <li>Collector Main street through the village centre</li> <li>Collector Streets</li> <li>Local Streets</li> <li>Access Streets</li> <li>Road edge cycle ways Streets</li> <li>Streetscape / access - Pedestrian Pathways</li> </ul>
<p><b>Open Space Corridors</b> Principally established to alignments of existing drainage found in the Western Precinct</p> <ol style="list-style-type: none"> <li>The man made drainage running east - west to the south of the site</li> <li>The ephemeral creek line which runs north - south through the centre of the precinct</li> <li>The ephemeral creek line which runs north - south through to the north of the precinct</li> </ol>	<ul style="list-style-type: none"> <li>incorporate the Riparian Management setbacks established by DWE (Department of Water and Energy) to each side of top of embankment</li> <li>Off road cycle ways / pedestrian links connecting urban areas to park areas and to Regional Open Space and facilities.</li> <li>provide conservation of existing stands of vegetation</li> </ul>
<p><b>Buffer Zones</b> Protection zones or setbacks such as Asset Protection Zone</p> <p>Also included within open space corridors and selected parks located to edge of stormwater management and sensitive Regional Park zones (such as the Remnant Farm Dam)</p>	<ul style="list-style-type: none"> <li>provide buffer to fauna habitat</li> <li>provide visual mitigation to Remnant Farm Dam</li> <li>Off road cycle ways / pedestrian links connecting urban areas to park areas and to Regional Open Space and facilities</li> </ul>
<p><b>Drainage Basins</b> Located at strategic locations to provide storage for stormwater runoff</p> <ol style="list-style-type: none"> <li>Central Basin</li> <li>Eastern Basin</li> <li>Northern Basin</li> <li>South- west basin</li> </ol>	<ul style="list-style-type: none"> <li>provides open space adjoining water bodies for recreational amenity</li> <li>basins to different areas and functions can provide a variety of water edge characters form urban to natural:</li> <li>SW Basin natural</li> <li>Central Basin urban to natural</li> <li>East Basin parkland to natural</li> <li>NRP basins natural</li> </ul>

Figure 3.2 Landscape Opportunities in Western Precinct

Type Location / requirements	Opportunities
<p><b>Open Space Parklands</b> 1. District Park- Western Village Oval</p>	<ul style="list-style-type: none"> <li>located at the focus of the precinct</li> <li>close proximity to retail centre, learning facilities, community facilities, bus routes and major trunk road access.</li> </ul>
<p>2. Neighbourhood Parks - Northern Road Oval</p>	<ul style="list-style-type: none"> <li>located at the focus of the precinct</li> <li>close proximity to retail centre, learning facilities, community facilities, bus routes and major trunk road access.</li> <li>optimise use of existing level, highly modified and sparsely treed areas</li> </ul>
<p>3. Local Parks - Remnant Dam Farm Park</p>	<ul style="list-style-type: none"> <li>located adjoining the existing Remnant Farm Dam water body (but outside Regional Park)</li> <li>linkages to the Village Centre</li> <li>optimise use of existing tree canopy</li> </ul>
<p>4. Pocket Parks - Village Centre</p>	<ul style="list-style-type: none"> <li>located at the focus of the neighbourhood</li> <li>integrated into street network of village centre with strong retail focus</li> <li>close proximity to retail centre, learning facilities, community facilities, bus routes and major trunk road access, major collector road</li> <li>optimise use of existing tree canopy</li> </ul>
<p>6. Pocket Parks</p> <ul style="list-style-type: none"> <li>- Sub Neighbourhood parks</li> <li>- Bushland / corridor interface parks</li> </ul>	<ul style="list-style-type: none"> <li>located in ongoing development of the urban development plan to provide accessibility of residences to open space within 5 minutes walking distance</li> <li>optimise use of existing tree canopy</li> <li>possible location adjoining bushfire protection zone or green corridors</li> </ul>



## 4 LANDSCAPE CHARACTER

### 4.1 Response to site

The Western Precinct has been subject to significantly less intensive building development. Past uses have been predominantly agricultural and dispersed accommodation and although vegetation has been cleared over much of its area, the undulating landform is relatively intact, and a rural character dominates.

Expansive views are possible from higher sections of the precinct which also afford exposure to cooling breezes.

In keeping with the Western Precinct's immediate context within the Regional Park, the key landscape theme for the development is that the melding of the city and the bush / rural character. This reflects the identity of Penrith LGA as being a community where the sophistication of a city lifestyle is possible in a rural / bushland setting.



Manmade water channel



Cleared grassland



Woodland

Existing landscape settings to Western Precinct



Existing stands of native trees



Regional Park edge



Ephemeral drainage Channel



## 4 LANDSCAPE CHARACTER

### 4.2 Character zones and types

Landscape character of open space and streetscapes will be a function of existing site qualities, landscape approaches, and the urban development fabric and its related density and form.

#### Character Zones

Character zones describe the allocation of particular landscape thematic approaches.

Character zones for the site as identified in the precinct plan were identified in response to the inherent qualities of different sections of the site and the structure of the Framework Plan. A summary of these follows as identified in Figure 4.1.

Zone / Characteristics	Landscape Principles for streets and open spaces
<b>Hilltop</b> <ul style="list-style-type: none"> <li>• eastern edge adjoins RP</li> <li>• steepest slopes</li> <li>• oriented to south and west</li> <li>• views to west (Mountains) east (RP and south</li> <li>• good sense of orientation</li> <li>• RP basins at interface to RP</li> </ul>	<ul style="list-style-type: none"> <li>• maintain and emphasise views</li> <li>• native tree canopy reflecting relationship to Regional Park</li> <li>• large scale street trees to maintain views under / through</li> </ul>
<b>Village Centre</b> <ul style="list-style-type: none"> <li>• no interface to Regional Park other than small but significant relationship to Remnant Farm Dam area</li> <li>• dissected by north south corridor to east and bounded by east-west to the south - provides enclosure</li> <li>• gently undulating landform</li> <li>• oriented to south</li> <li>• limited views out</li> <li>• incorporates village oval</li> <li>• village centre uses and smaller residential blocks</li> </ul>	<ul style="list-style-type: none"> <li>• predominantly native tree canopy with targeted use of exotics for village amenity</li> <li>• provides the focal representation of the overall theme of urban lifestyle in a rural / bush setting - consider in design of main street and public domain spaces</li> <li>• mix of medium to small scale trees reflecting higher density</li> <li>• promote views to Village Lake</li> <li>• provide visual and physical connection to Village Oval</li> </ul>
<b>Western slopes</b> <ul style="list-style-type: none"> <li>• no interface to Regional Park - minor junction at nw corner of precinct</li> <li>• undulating landform</li> <li>• oriented to south-south east</li> <li>• views across site to hilltop zone</li> <li>• close proximity to Northern Road</li> <li>• medium sized residential blocks</li> </ul>	<ul style="list-style-type: none"> <li>• conserve and reinforce visual links to hilltops to north east</li> <li>• predominately native tree canopy with some potential use of exotics to streets for amenity roles - reflect rural / agricultural history of site</li> <li>• mix of medium to small scale street trees reflecting higher density</li> <li>• provide buffer to Northern Road</li> </ul>

<b>Eastern slopes</b> <ul style="list-style-type: none"> <li>• strong interface to RP to eastern edge dissected by north south corridor to west and bounded by east-west to the south - provides enclosure</li> <li>• undulating landform</li> <li>• highly varied orientation from SW to SE</li> </ul>	<ul style="list-style-type: none"> <li>• conserve and reinforce visual links to hilltops to north west</li> <li>• native tree canopy reflecting relationship to Regional Park and corridor</li> <li>• mix of large to medium scale trees reflecting varied density</li> </ul>
<b>Northern slopes</b> <ul style="list-style-type: none"> <li>• strong interface to Regional Park to south</li> <li>• dissected by secondary north south corridor</li> <li>• varied orientation from south to east</li> <li>• close proximity to Ninth Avenue</li> <li>• strongly linear form of development area - harder to create focal community area</li> </ul>	<ul style="list-style-type: none"> <li>• native tree canopy reflecting relationship to Regional Park</li> <li>• large scale trees reflecting rural residential scale blocks</li> <li>• Opportunity for rural / residential blocks</li> </ul>
<b>The Plain</b> <ul style="list-style-type: none"> <li>• strong interface to Regional Park to southern edge</li> <li>• bounded by east west corridor to north</li> <li>• strong enclosure to north and south - of linear form of development area</li> <li>• gently undulating landform</li> <li>• gentle orientation to north</li> </ul>	<ul style="list-style-type: none"> <li>• native tree canopy reflecting relationship to Regional Park and corridor</li> <li>• large scale trees reflecting rural residential scale blocks</li> </ul>

Figure 4.1 Landscape principles for streets and open space



## 4 LANDSCAPE CHARACTER

### Character / Presentation Types

Landscape character/ presentation types are the detailed landscape approaches that define the setting and feel of a space. These are largely defined by the designed landscape but are informed and influenced by existing features. Character types to be pursued in the Western Precinct were defined in the Open Space and Landscape Masterplan 2008, and are further detailed in their application following. These will provide a basis for ongoing design of open space and streetscapes

These types are applied to each park type in Section 10 Key Parks and Nodes.

Character Types	Criteria and Application in Western Precinct
Bushland	full strata native vegetation
	strong visual link to natural setting of Regional Park
	provides a direct visual and ecological link to the plant communities of Regional park / remnant communities
	provide green corridor linkages for flora and fauna habitat and movement
	pedestrian cycle access paths in bush setting
	limited park seating to key locations
	potential for habitat based interpretational / educational overlay
	high sustainability value with low relative maintenance/ weed management required
	<b>TO CORRIDORS ONLY</b>
Woodland	transition zones between bushland and parkland character
	Tree canopy with native grass understorey
	retain a moderate visual link to Regional Park native bushland through retention and enhancement of native tree canopy
	pedestrian cycle access paths in bush setting
	limited park seating to key locations
	moderate relative maintenance/ weed management required
Parkland	<b>TO CORRIDORS, APZ, &amp; DRAINAGE BASINS ONLY</b>
	Native or exotic tree canopy in maintained grass or beds of native grass or underplanting planting
	Maintained grasslands
	Path links and paved areas for access and recreation
	Playspaces, shelters, and other park facilities
	high to moderate relative maintenance/ weed management required
	<b>TO PARKS, STREETS, APZ, DRAINAGE BASINS</b>

Open space water	Ephemeral or permanent water bodies providing drainage function
	Commonly adjoin Riparian / APZ buffers
	May be adjoined by combination of Bushland, Woodland, and Park Characters
	moderate relative maintenance/ weed management required
	<b>TO DRAINAGE BASINS ONLY</b>
Urban plazas / squares	Mix of native and exotic plantings to address public amenity needs
	Designed landscape combining pavements, planting and furniture elements
	high relative maintenance/ weed management required
	<b>TO PARKS / STREETS</b>

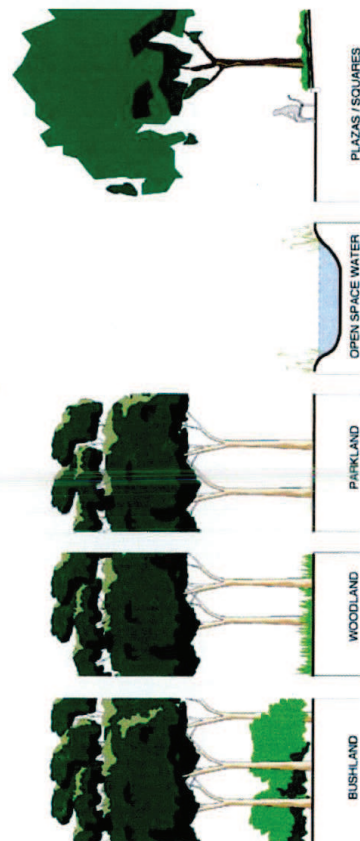


Figure 4.2 Landscape presentation categories



## 4 LANDSCAPE CHARACTER

### 4.3 Themes arising for public domain

The Public Art Strategy prepared by Milne and Stonehouse for the Western Precinct identified several key themes proposed to be developed through public art. These themes are also fundamentally relevant to the development of landscape response to the site in the context of its past form and function and future direction. The themes and their related landscape opportunities are listed following:

#### The Common

The Northern Road was part of the Caslereagh Common given by Macquarie to the settlers for grazing. There was strong protest when King absorbed part of it into his holdings. A trust managed the land right into the twentieth century.

- Emphasise communal role of all open spaces through flexibility of use and inviting character,
- Develop focal open space such as the District and Neighbourhood parks and public domain to the Village Centre,
- Expand within pocket parks as a communal garden, communal facilities or elements that promote interaction and teamwork,
- Explore in the process of an art project which draws upon the local community for collaboration and consultation.

#### Breathing Space

Penrith regards itself as the interface between the urban and the rural. It borrows the mountains in the background and immerses itself in the river. The retention of this rural perception without using nostalgic references is an important local preoccupation. The agricultural footprint is embedded in the Penrith psyche. The acquisition of land and its assumption of status and power influenced today's perceptions of place and difference as felt by the "Penrith Passionates".

- Provision of a sense and feeling of space in street and park environments including optimising change of level / scale to within parks
- Promote long views and vistas whilst at the same time maximising the sense of variety and size within parks by controlling boundary to boundary views and appropriately modulating spaces to a comfortable scale

#### Celebration Of The Everyday

The manipulation and placement of the materials used in the everyday can elevate them to a more significant public role.

- Integrate public art elements that interpret everyday elements relevant to the existing and future community, as punctuation points in parks and streetscapes.

#### Sustainable Action

The integration of sustainable response as an underpinning philosophy for the precinct empowers community.

- Alternative harnessing of air and water with art as part of the design makes this process accessible.
- Integration of alternative pathways for cycling, running and walking acknowledges the health of community as sustainable practice.

#### Air

In this precinct a more undulating topography captures longer views and a larger sky.

- Explore effects of air on grasses and water can project this as patterns and textures.
- Using high ground for cloud watching and looking down on the world encourages an integration of art and structure to extend the experience.
- Kinetic artworks that give the illusion of movement and those that have components that actually move with the wind are powerful yet poetic statements here.
- The funneling of wind and sound can be explored as sound scapes and create instruments at ephemeral events.

#### Water

The local creeks nourished the Darug people and much later were utilised by colonial farmers.

- The proposed echo of the Remnant Farm Dam with a large water body defining / as the focus of the Village Centre can reinforce water as a motif for the precinct.
- Corridors will be significant spatial and visual elements in the precinct defining visual and access boundaries whilst at the same time being important off road cycle and pedestrian routes, and thus reinforcing the connection of the precinct to water as an over arching theme.
- Formalisation of channels and the widening of existing creek beds to improve water flow from households compels an imaginative interpretation for communities.
- Intervene using actual water or its qualities of reflection, surface tension, cooling, storage pattern and texture.
- Integrate infrastructure that directs stormwater, filters groundwater and captures rain in dams and tanks,

### 4.4 Arrival and Entry Experience

Precinct arrival will be established at key entry points with landscape features such as entry elements, public art, and vegetation.

Major entry public art elements will be provided to the Western Precinct at the two proposed signalled intersections along the Northern Road and at the east-west access road in the east. Village entry points will be provided within road reserve / open space landscape zones.

The precinct identity will be further strengthened through a precinct specific colour, texture and materials palette which repeated throughout the open space landscape areas.

Figure 4.3 identifies the key entry arrival points. Rural / bushland setting. Celebration of the everyday. Space and Air form the basis for entry / arrival experience design themes. Key strategies for each



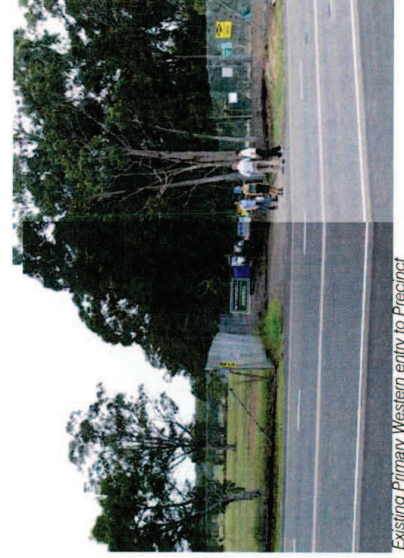
## 4 LANDSCAPE CHARACTER

### 4.4 Arrival and Entry Experience (continued)

- 1 **Northern Road frontage**
  - 10 metre setback frontage to road
  - native tree groves in informal pattern arrangement (echoing rural / bushland character to Ninth Avenue)
  - mounding as integrated landscape / public art project
  - shared access path
- 2a **Northern Road precinct entry - north**
  - Public artwork entry marker
  - Major tree avenue as part of the Northern Road Oval
- 2b **Northern Road precinct entry - south**
  - Public artwork entry marker
  - Native tree avenue to northern edge of entry road
  - Regional Park bushland to southern edge
- 3 **Eastern Entry - at Regional Park**
  - Public artwork entry marker
  - Corridor bushland to southern edge
4. **Village Centre entry**
  - Public artwork as part of the Village Centre
  - Major nodal tree planting in widened verge - eg Fig planting, Canary Island Date Palm
5. **Neighbourhood entries**
  - Entry naming elements - signage on landscape wall or in garden
  - Major nodal tree planting in widened verge
6. **Park entries**
  - Public artwork entry markers to specific design in garden bed zones
7. **Regional Park entries**
  - Public artwork entry marker & wayfinding signage



Figure 4.3 Key Landscape arrival and entry locations





## 5 VILLAGE THEMING & IDENTITY

### 5.1 Neighbourhood identities and villaging

Identity is a function of the fundamental qualities or physical characteristics that makes a locality or space unique.

For public domain elements in the Western Precinct it is aimed to provide a recognisable, unified character across the Precinct while still reinforcing individual neighbourhood identities.

This is proposed to be achieved through a consistency of materials fabric used in site specific design responses, and the use of individual design elements / functions to individual parks.

Built form of housing will remain a strong influence in promoting the identity of individual villages as will the shape and nature of its public spaces.

#### Housing type / Architectural style

Accommodation of mixed residential incorporating varied building types with typical building heights of 2-3 storeys at neighbourhood nodes is envisaged..

A continuity of architectural styles for each neighbourhood is achieved through a range of colours, materials and roof types selected for each neighbourhood that provides opportunity for diversity of choices within a coordinated framework.

#### Setbacks

Street frontage setbacks will allow the scale of tree planting feasible to street environments. Large scale plantings to open spaces can also play a major role but to engender a sense of space and scale - generous setbacks are preferred.

#### Street Planting

Street tree planting provides an important element in promoting long term individual village identity to each areas of the Western Precinct. This is particularly important at gateway and entry nodal points as way finding cues.

#### Open Space

Parkland areas can develop space specific designs that support individual village identities. This will be a function of site specific characteristics of slope and existing tree canopy and the overlay of recreational roles and built elements.

#### Identification

Villages will be identified with appropriately themed signage. Signage will explore identifiable aspects of the character of neighbourhoods including their location, name and colour schemes.

#### Public Art

Entry markers and sculptural elements will reflect overall themes to further strengthen identity

#### Elements

Furniture and lighting elements will be from a consolidated palette to provide continuity across the development.



Housing type



Street Planting



Open Space



Identification



## 6 STREETSAPES

### 6.1 Streetscape planting approach

Penrith Councils Draft DCP - section 6 - Landscape Design promotes through its objectives and controls the role of landscape in the street environment. This includes the provision of a visual amenity that complements local character and enhances the communities quality of life. Street trees are a fundamental element in realising these objectives.

This section outlines the proposed approach to streetscapes in the Western Precinct including

- Streetscape planting approach
- Principles for streetscape planting (refer 6.2)
- Streetscape planting species (refer 6.3)

The foundations for development of an approach include Councils existing policy framework and other relevant strategies such as Landcoms Street Tree Guidelines of 2008.

#### Penrith City Council Draft DCP 2008

Section C10 Transport Access and Parking defines in table 10.1 Road Configuration parameters as a basis for development of design. The concept designs developed for the Western Precinct generally reflect these parameters, and introduce supplementary elements such as planting islands within parallel or 90 degree parking bays where possible.

The Road Configuration parameters are part of a coordinated set of design requirements provided through the DCP. The requirements have recognised the functional and commercial constraints of the estate design environment in establishing minimum parameters.

Section C6 Landscape Design identifies the predominant use of indigenous plant species as a key objective:

- f) *planting native or indigenous plants - these plants have lower water requirements and have evolved to cope best with existing conditions hence reducing maintenance fertilising and watering requirements* (C6.2 Protection of the Environment - 1. Environmentally Sustainable Design)
- a) *"plant selection for all sites must consider ....suitability to existing site conditions..."* (C6.2 Protection of the Environment - 6. Species Selection
- a) *"landscape design should minimise water consumption through selection of indigenous and drought tolerant species..."* (C6.2 Protection of the Environment - 8. Irrigation / water consumption
- a) *"plant selection for all sites must consider ....suitability to existing site conditions..."* (C6.2 Protection of the Environment - 6. Species Selection

Section C8 Public Domain reinforces the importance of trees to the street environment:

*"street tree planting can improve legibility in the urban environment by reinforcing the hierarchy of streets and enhancing sense of place. The placement of trees and landscaping generally affects light and shadow, colour and views and contribute to the quality of pedestrian experience (C8.1 Pedestrian Amenity - C Controls - clause 4 Landscape in the Public Domain and Street Tree Planting)*

#### Landcom Street Tree Guidelines

The Landcom Guidelines were prepared in 2008 to guide street tree planting seen as a fundamental component of Landcom residential development. Section 1.2 Background states:

*"Trees in streets are essential for a high quality streetscape. Healthy, established urban trees provide a long term legacy for the community. Many of the most memorable streets and localities can attribute their noteworthy status to the presence of large healthy trees. At the regional scale street trees contribute to the overall percentage canopy cover which in turn delivers a variety of environmental benefits"*

The guidelines recognise three categories of tree size based on height and spread and identifies corresponding spacing and required soils volumes for healthy and stable establishment:

	height	spread	pref spacing	required soil volume	Area @ 1m depth x width as noted
Small Trees	6-8m	5m	5-7m	5-15 m <sup>3</sup>	2.7-8.3m length x 1.8m
Medium Trees	10-12m	8m	7-10m	20-40 m <sup>3</sup>	10-20m length x 2.0m
Large Trees	16-20m	16m	10-20m	50-80 m <sup>3</sup>	25-40m length x 2.0m or 6.75-20m length x 4.0m

Provision of the required soils volume can be shared between adjoining trees as long as the overall volume for a section of street provides an average of the target volume.

#### A basis for a street tree approach

The Penrith Public Domain and Landscape DCP sections and Landcoms street tree guidelines emphasise the importance of street trees to urban areas. This includes the provision of trees that are indigenous to the site as a preference and of a scale and positioning to positively influence the visual scale and environmental amenity of a street.

The required soils volumes targets identified in the Landcom guidelines suggest that soils volume can be met within a tree planting zone of 1.8 to 2.0m width for small to large trees if the overall length is sufficient to achieve the average soils volumes target.

As such the approach for street tree planting in the Western Precinct:

- i. reflects the Road Configuration parameters as identified in Penrith DCP section C10
- ii. recognises the preference for site indigenous trees for environmental sustainability as identified in Penrith DCP section C6
- ii. recognises the importance of trees of adequate scale and form to positively influence street amenity as identified in Penrith DCP section C8



## 6 STREETSAPES

### 6.2 Principles for streetscape planting

In applying the Streetscape Planting approach a series of guiding principles have been identified to guide detailed species selection and tree planting design to individual streets. This will include the general application of the required soils volume parameters identified in 6.1.

#### Landscape Principles

- Provide ecological linkages to key nodes, corridors and the Regional Park
- reinforce the landscape setting and character of the site including its Regional Park relationship and related visual and environmental objectives
- promote street hierarchy through clear species strategies and use of formal and informal planting design
- provide tree canopy which affords shade and amenity to the new urban environment
- provide tagret required clear soil areas along with root barrier protection to all street trees
- minimise long term maintenance issues related to adjacent engineering structures whilst recognising trees are a living organism and some degree of ongoing maintenance should be sustainable on the basis of enhanced environmental and visual amenity - provide required soils volumes in design of street trees

#### Urban Design Principles

- Maximise solar access and gain in residential dwellings particularly during winter months
- Reduce urban heat island affect
- Provide shade and protection from hot westerly summer sun
- Minimise the impact of driveways on required clear soils volumes through
- positioning of driveways and use of permeable surfaces where possible
- planting to in street "islands" where possible

#### Street Hierarchy principles

Street trees are proposed to each of the street types in the Western Precinct. The street types present varied conditions and requirements for street trees and are proposed to receive identifiable themes to enhance their legibility:

#### Streets

##### Collector Road Main Street

- avenue tree planting
- with or without median
- angle parking
- extended footpath zone width for main street pedestrian movement and trading

##### Collector Road

- avenue tree planting
- parallel parking

##### Local Roads

- avenue tree planting
- parallel parking
- bus routes in some areas

#### Access Road

- avenue tree planting
- parallel parking

#### Nodes

##### Northern Road Frontage

- landscape setback with native grove planting,
- shared path link as part of Penrith / RTA Regional access network

##### Entries streetscapes

- entry zones of Collector Roads
- extended verge width
- feature avenue planting - integrated to adjoining open space in some situations

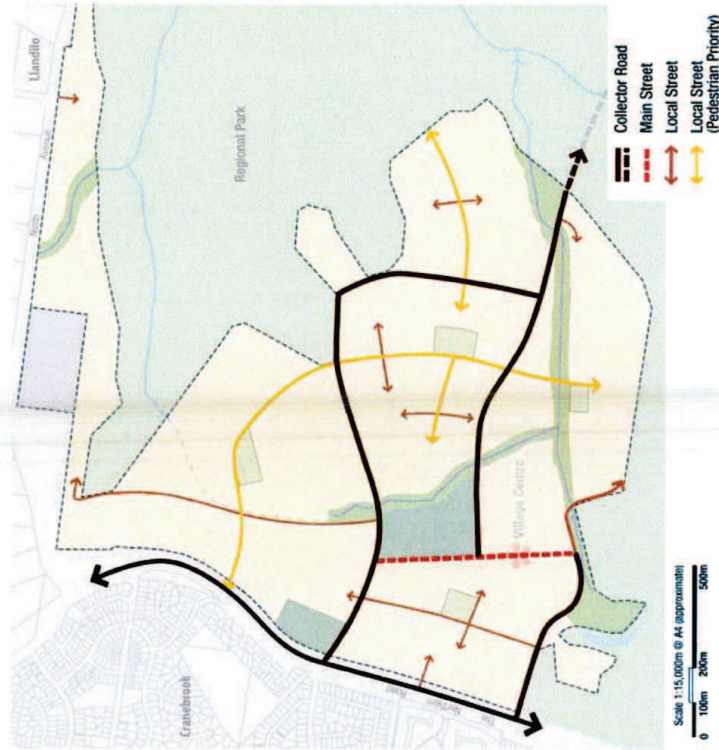


Figure 6.1 Street Hierarchy plan



## 6 STREETSAPES

### Key Species Principles

- strengthen the sites relation to the Regional Park through street tree planting within the Western Precinct by focussing on Grey Gum (*Eucalyptus moluccana*) and Forest Red Gum (*Eucalyptus tereticornis*) plantings where suitable soils volumes are achievable, (signature trees of the Cumberland Plains and endemic to the site).
- Street hierarchy and character themes of larger signature species will be further strengthened through supplementary plantings of medium native evergreen species such as Water Gum (*Tristanopsis laurina*) and Melaleuca species.
- remnant iconic rural exotic species including Hoop Pine (*Araucaria cunninghamii*), Bunya Pine (*Araucaria bidwillii*) and Canary Island Date Palm (*Phoenix canariensis*) provide an opportunity to visually heighten the precinct's historic context.
- have regard for site soil characteristics, salinity management, biodiversity value, potential impact on essential services and public safety issues,
- consider existing trees to be retained in verges and open space.
- Landscape treatments at ground level to street tree planting to be hardy groundcover plantings, turf or paved/ mulch treatments to provide a clear definition of the extended public domain and complement street tree planting selection and hierarchy.
- Undertaken pre- construction plant procurement programme to ensure availability of plant material to meet requirements for:
  - local provenance of plant stock in site / locally indigenous species
  - plant stock to meet NATSPEC (a Guide to Assessment of Tree Quality) Tree Supply requirements

Examples of typical street hierarchy outcomes envisaged for the Western Precinct



Entry / Main Collector Roads



General Collector Roads



Primary Local Streets



General Local Streets



General Local Streets



## 6 STREETSCAPES AND PLANTING PALETTE

### 6.3 Street tree strategy

#### Northern Road Frontage

Buffer tree plantings along Northern Road which lead to entries are to continue existing boundary themes of strong avenues of Grey Box (*Eucalyptus moluccana*) as found to Ninth Avenue. These will be broken by intermittent informal stands of *Eucalyptus tereticornis* and any existing stands of native species strengthening the visual link to the Regional Park and echoing the existing tree planting to the Western edge of Northern Road. A secondary zone of smaller trees will be used through the frontage to residential properties

Botanical Name (* site indigenous)	Common Name	Mature Height	Spread	Nom Spacing & (Req Soil Area)	Specific uses
<b>Zone A</b>					
<i>Eucalyptus moluccana</i> *	Grey Box	15-35m	6-10m	6-8m (50m <sup>2</sup> )	verges of 5m and above
<i>Eucalyptus tereticornis</i> *	Forest Red Gum	15-35m	6-10m	12m (50m <sup>2</sup> )	verges of 5m and above
<b>Zone B</b>					
<i>Angophora floribunda</i> *	Rough Barked Apple	8-20m	4-10m	8m (25m <sup>2</sup> )	verges/ medians
<i>Banksia integrifolia</i>	Coast banksia	15m	4m	4-6m (10m <sup>2</sup> )	verges

#### Note:

Required clear soils areas are indicative only based on Landcom Street Tree Guidelines - Indicative areas assume tree pit depth for volume of 1m.

• denotes species indigenous to district

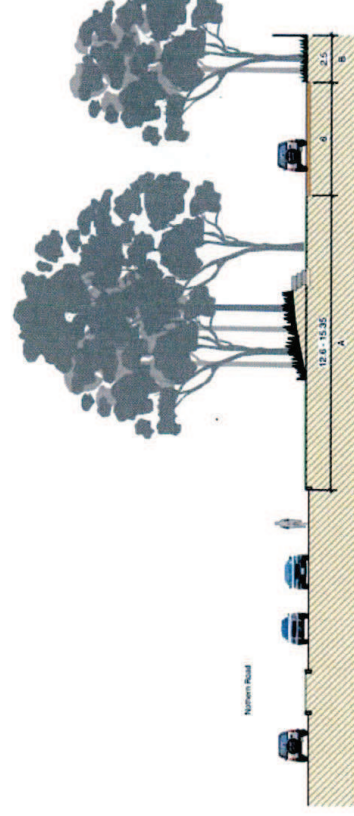


Figure 6.2 Northern Road Frontage cross section

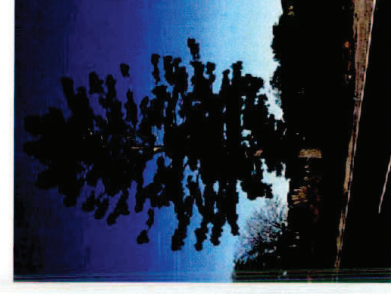
#### Entry street zones

Trees for major entry streetscapes have been selected to provide a strong visual (rural/ western Sydney) identity at a suitable (medium to large) scale reinforce primary road / entry hierarchy. As such a selection of iconic large rural trees, Hoop Pine (*Araucaria cunninghamii*) and Canary Island Date Palm (*Phoenix canariensis*) will be used at major entries in conjunction with native species - Grey Box (*Eucalyptus moluccana*), Forest Red Gum (*Eucalyptus tereticornis*) and *Ficus macrophylla*. Verge widths range from 9.5 metres to 6.7m to 3.5m and plantings will be selected and design to meet these constraints on soil area.

Botanical Name	Common Name	Mature Height	Spread	Nom Spacing & (Req Soil Area)	Specific use
<i>Araucaria bidwillii</i>	Bunya Pine	30-60m	5-8m	10m (50m <sup>2</sup> )	precinct entries
<i>Araucaria cunninghamii</i>	Hoop Pine	30-60m	5-8m	10m (50m <sup>2</sup> )	precinct entries/ nodes
<i>Corymbia maculata</i>	Spotted Gum	15-20m	6-10m	6m (50m <sup>2</sup> )	verges of 5m min
<i>Eucalyptus moluccana</i> *	Grey Box	15-20m	6-10m	6-8m (50m <sup>2</sup> )	verges of 3.5m min
<i>Eucalyptus tereticornis</i> *	Forest Red Gum	15-20m	6-10m	12m (50m <sup>2</sup> )	verges of 5m min
<i>Ficus macrophylla</i>	Moreton Bay Fig	15-20m	10-15m	18m (70m <sup>2</sup> )	nodes



*Eucalyptus moluccana*



*Araucaria cunninghamii*



*Eucalyptus tereticornis*



## 6 STREETSCAPES AND PLANTING PALETTE

### 6.3 Street tree strategy

#### Collector Road

The collector roads are to incorporate formal avenue plantings of native evergreen tree species which will strengthen visual continuity and provide legibility of the highly important civic road route.

Botanical Name	Common Name	Mature Height	Spread	Nom Spacing & (Req Soil Area)	Specific uses
<i>Angophora floribunda</i> *	Rough Barked Apple	8-20m	4-10m	10-15m (30m <sup>2</sup> )	verges of 4m min
<i>Corymbia maculata</i>	Spotted Gum	15-20m	6-10m	10-20m (50m <sup>2</sup> )	verges of 4m min
<i>Eucalyptus sideroxylon</i> *	Mugga Ironbark	12-18m	6-8m	10-15m (30m <sup>2</sup> )	verges of 4m min
<b>Species for possible street trialing</b>					
<i>Corymbia eximia</i>	Yellow Bloodwood	10-12m	5m	8-12m (30m <sup>2</sup> )	verges of 4m min
<i>Angophora costata</i>	Smooth Barked Apple	15-30m	6-12m	8-12m (30m <sup>2</sup> )	verges of 4m min

#### Note:

Required clear soils areas are indicative only based on Landcom Street Tree Guidelines - indicative areas assume tree pit depth for volume of 1m.

It is proposed that trialing of several species in recommended soils volumes and planting approaches is undertaken to verify further use across the Penrith area

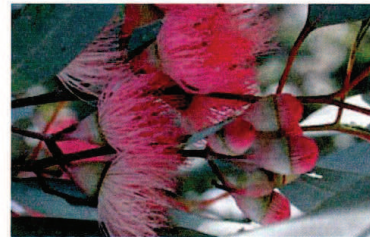
- denotes species indigenous to district



*Angophora floribunda*



*Corymbia maculata*



*Eucalyptus sideroxylon*

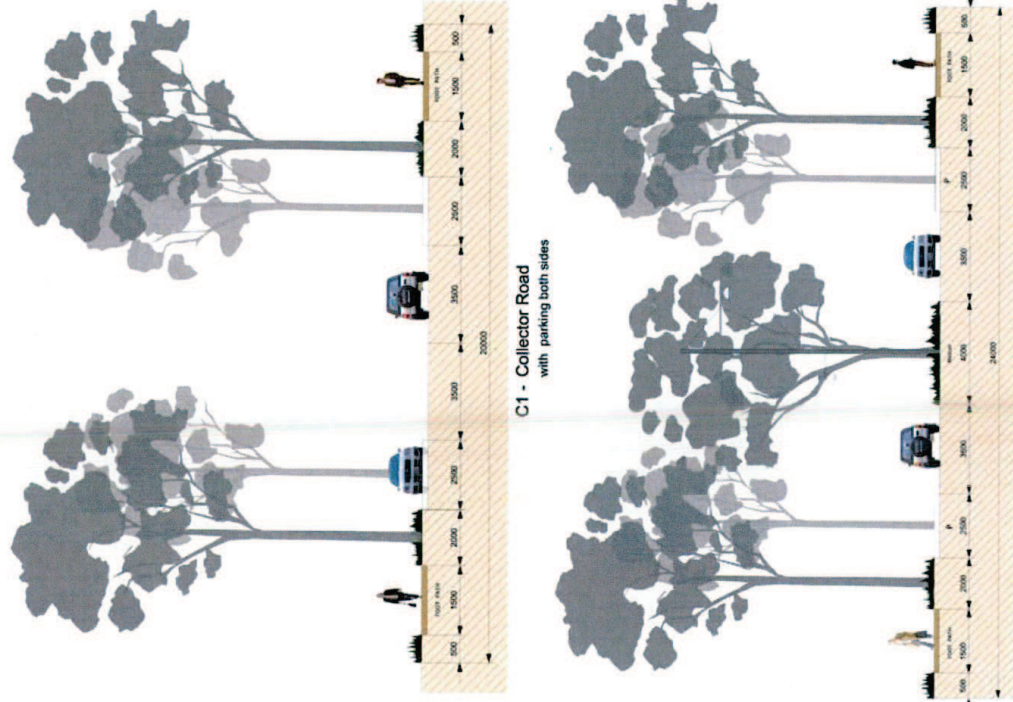


Figure 6.3 Collector Street cross section options



## 6 STREETSCAPES AND PLANTING PALETTE

### 6.3 Street tree strategy

#### Collector Main Street

Botanical Name	Common Name	Mature Height	Spread	Nom Spacing & (Req Soil Area)	Specific uses
<i>Angophora floribunda</i> *	Rough Barked Apple	8-20m	4-10m	10-15m (30m <sup>2</sup> )	4m min medians
<i>Brachychiton populneus</i>	Bottle Tree	10-12m	3-4m	8m (30m <sup>2</sup> )	verges of 3.5m min
<i>Brachychiton acerifolius</i>	Illawarra flame	15m	6-8m	10m (30m <sup>2</sup> )	verges of 3.5m min
<i>Corymbia maculata</i>	Spotted Gum	10-12m	6-8m	10m (30m <sup>2</sup> )	verges of 4m min
<i>Ficus macrophylla</i>	Moreton Bay Fig	15-20m	10-15m	25m (70m <sup>3</sup> )	verges of 6m min and nodes
<i>Fraxinus griffithii</i>	Evergreen Ash	5-7m	3-4m	4-6m (10m <sup>2</sup> )	to constrained verges
<i>Pittosporum rhombifolium</i>	QLD Pittosporum	8-10m	3-4m	4-6m (10m <sup>2</sup> )	verges of 3.5m min
<i>Pyrus Calleryana</i>	Callery Pear	10-12m	3-4m	10m (20m <sup>2</sup> )	verges of 3.5m min
<b>Species for possible street trialling</b>					
<i>Angophora bakeri</i> *	Narrow Leaved Apple	10m	5-6m	4-6m (10m <sup>2</sup> )	to constrained verges

#### Note:

Required clear soils areas are indicative only based on Landcom Street Tree Guidelines - indicative areas assume tree pit depth for volume of 1m.

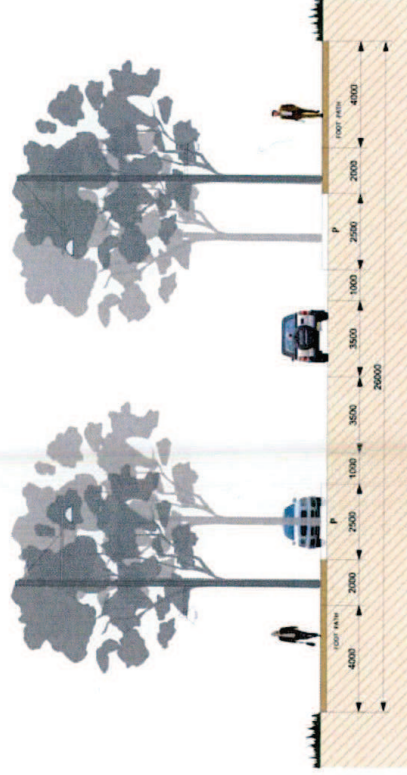
It is proposed that trialling of several species in recommended soils volumes and planting approaches is undertaken to verify further use across the Penrith area

- \* denotes species indigenous to district

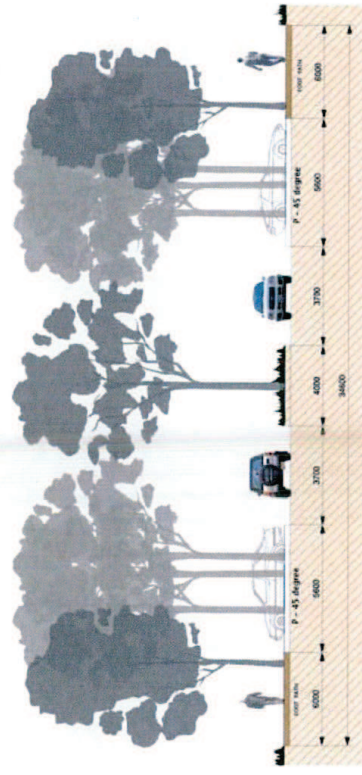


*Brachychiton populneus*

*Brachychiton acerifolius*



C3 - Collector Main Street  
with parking and cycle lanes



C4 - Collector Main Street  
with angle parking and median

Figure 6.4 Collector Main Street cross section options



## 6 STREETSCAPES AND PLANTING PALETTE

### 6.3 Street tree strategy

#### Pedestrian Priority Local Streets

Botanical Name	Common Name	Mature Height	Spread	Nom Spacing & (Req Soil Area)	Specific uses
<i>Arbutus unedo</i>	Strawberry Tree	5-10m	6-8m	10m (10m <sup>2</sup> )	verges
<i>Angophora floribunda</i>	Rough Barked Apple	8-20m	4-10m	12m (40m <sup>2</sup> )	4m min medians
<i>Eucalyptus crebra</i> *	Narrow leaved Ironbark	10-25m	6-10m	12m (40m <sup>2</sup> )	verges of 4m min
<i>Brachychiton populneus</i>	Bottle Tree	10-12m	3-4m	8m (30m <sup>2</sup> )	verges of 3.5m min
<i>Corymbia maculata</i>	Spotted Gum	10-12m	6-8m	10m (30m <sup>2</sup> )	verges of 4m min
<i>Eucalyptus sideroxylon</i>	Mugga Ironbark	12-18m	6-8m	10-15m (30m <sup>2</sup> )	verges of 3.5m min
<i>Glochidion ferdinandii</i>	Cheese tree	5-10m	4-8m	8m (10m <sup>2</sup> )	verges
<i>Melaleuca decora</i>	White Cloud Tree	18-20m	8-10m	12m(40m <sup>2</sup> )	verges
<i>Waterhousea floribunda</i>	Weeping Lilly pilli	5-10m	3.5-6m	8m (10m <sup>2</sup> )	narrow verge/ second line
<b>Species for possible street trialling</b>					
<i>Angophora bakeri</i> *	Narrow Leafed Apple	10m	5-6m	4-6m (10m <sup>2</sup> )	to constrained verges

**Note:** Trees to be grown on with single leading trunk to ensure raised canopy.



*Angophora floribunda*

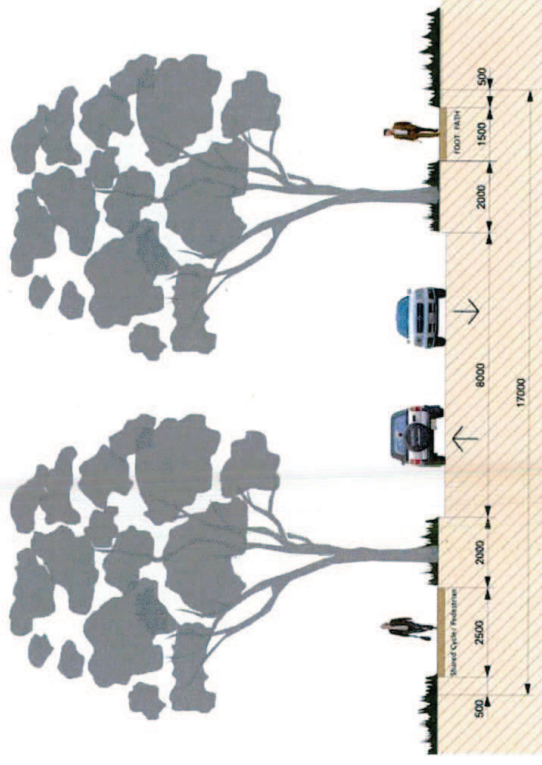
*Glochidion ferdinandii*

#### **Note:**

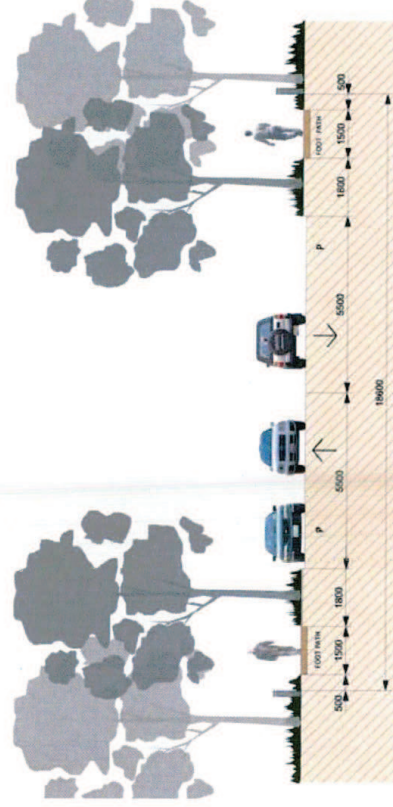
Required clear soils areas are indicative only based on Landcom Street Tree Guidelines - indicative areas assume tree pit depth for volume of 1m.

It is proposed that trialling of several species in recommended soils volumes and planting approaches is undertaken to verify further use across the Penrith area

- denotes species indigenous to district



**L2 - Pedestrian Priority Local Street**  
with parking both sides  
Figure 6.5 Pedestrian Priority Local Street cross section



**L3 - Local Street Possible Bus Route**  
with parking both sides  
Figure 6.6 Local Street cross section

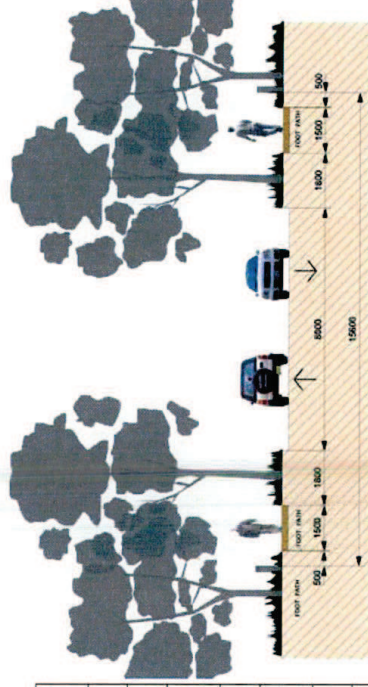


## 6 STREETSCAPES AND PLANTING PALETTE

### 6.3 Street tree strategy

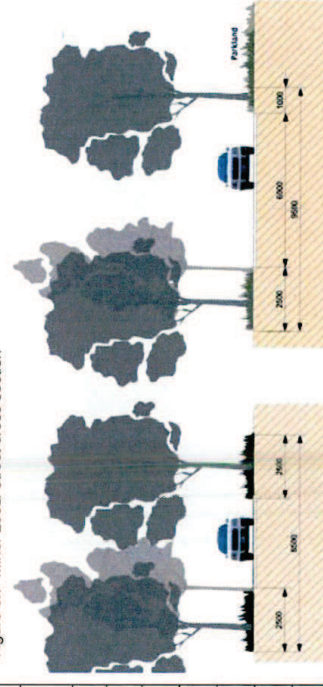
#### Local Streets & Accessways

Botanical Name	Common Name	Mature Height	Spread	Nom Spacing & (Req Soil Area)	Specific uses
<i>Angophora floribunda</i> *	Rough Barked Apple	8-20m	4-10m	12m (40m <sup>2</sup> )	4m min medians
<i>Acmena smithii</i>	Lillypilly	10-12m	8-9m	10m (30m <sup>2</sup> )	verges of 3.8m min
<i>Backhousia citrifolia</i>	Lemon scented myrtle	10-12m	8-9m	10m (30m <sup>2</sup> )	verges of 2.5m min
<i>Buckinghamia celsissima</i>	Ivory Curl Flower	4-10m	1.5-8m	10m (20m <sup>2</sup> )	verges of 2.5m min
<i>Brachychiton populneus</i>	Bottle tree	10-12m	3-4m	10m (20m <sup>2</sup> )	park nodes/ verges of 3.8m min
<i>Cupaniopsis anacardioides</i>	Tuckeroo	6-8m	4-8m	7m (12m <sup>2</sup> )	verges of 3.8m min
<i>Corymbia maculata</i>	Spotted Gum	10-12m	6-8m	10m (20m <sup>2</sup> )	verges of 4m min
<i>Elaeocarpus reticulatus</i>	Blueberry Ash	8-10m	3-4m	9m (10m <sup>2</sup> )	verges of 2.5m min
<i>Eucalyptus crebra</i> *	Narrow leaved Ironbark	10-25m	6-10m	12m (40m <sup>2</sup> )	verges of 4m min
<i>Eucalyptus sideroxylon</i> *	Mugga Ironbark	12-18m	6-8m	10-15m (30m <sup>2</sup> )	verges of 2.5m min
<i>Geijera parviflora</i>	Australian Willow	8-9m	6-8m	10m (20m <sup>2</sup> )	verges of 3.8m min
<i>Glochidion ferdinandi</i>	Cheese tree	5-10m	4-8m	7m (12m <sup>2</sup> )	verges of 3.8m min
<i>Harpullia pendula</i>	Australian tulipwood	10-12m	8-9m	10m (30m <sup>2</sup> )	verges of 3.8m min
<i>Lagostroemia indica</i>	Crepe myrtle	6-8m	4-8m	7m (12m <sup>2</sup> )	verges of 2.5m min
<i>Lophostemon confertus</i>	Brushbox	16-20m	12-16m	15m (50m <sup>2</sup> )	verges of 3.8m min
<i>Melaleuca linariifolia</i> *	Snow in Summer	6-20m	4-6m	15m (50m <sup>2</sup> )	verges of 2.5m min
<i>Melaleuca styphelioides</i> *	Prickly leaved Paperbark	15-20m	5-8m	15m (50m <sup>2</sup> )	verges of 3.8m min
<i>Pistacia chinensis</i>	Chinese Pistachio	10-12m	8-9m	12m (30m <sup>2</sup> )	verges of 2.5m min
<i>Pyrus calleryana</i> 'Chanticleer'	Gallery Pear	10-12m	8-9m	12m (30m <sup>2</sup> )	verges of 2.5m min
<i>Quercus palustris</i>	Pin Oak	16-20m	12-16m	18m (65m <sup>2</sup> )	verges of 3.8m min
<i>Tristanopsis laurina</i>	Water Gum	8-12m	6-8m	15m (50m <sup>2</sup> )	verges of 2.5m min
<i>Sapium sebiferum</i>	Chinese Tallow	10-12m	8-9m	12m (30m <sup>2</sup> )	verges of 2.5m min
<i>Syncarpia glomulifera</i>	Turpentine	15-20m	6-8m	15m (60m <sup>2</sup> )	verges of 3.8m min



L1 - Minor Local Street  
with parking both sides

Figure 6.7 Minor Local Street cross section



A1 - Accessway  
near loaded no parking

A2 - Accessway  
with parking to one side

Figure 6.8 Accessway cross section

#### Note:

Required clear soils areas are indicative only based on Landcom Street Tree Guidelines - indicative areas assume tree pit depth for volume of 1m. It is proposed that trialling of several species in recommended soils volumes and planting approaches is undertaken to verify further use across the Penrith area \* denotes species indigenous to district



## 7 ACCESS AND CIRCULATION

### 7.1 Pedestrian and cycle networks

The planning of cycle and pedestrian networks responds to both regional access systems and the opportunities for connectivity and accessibility within the development (as outlined in 7.2).

Several regional strategies identifying regional networks exist relevant to the site. These include the Sydney Metropolitan Regional Trails Network and Ropes and South Creeks Masterplan, refer Figures 7.1 and 7.2.

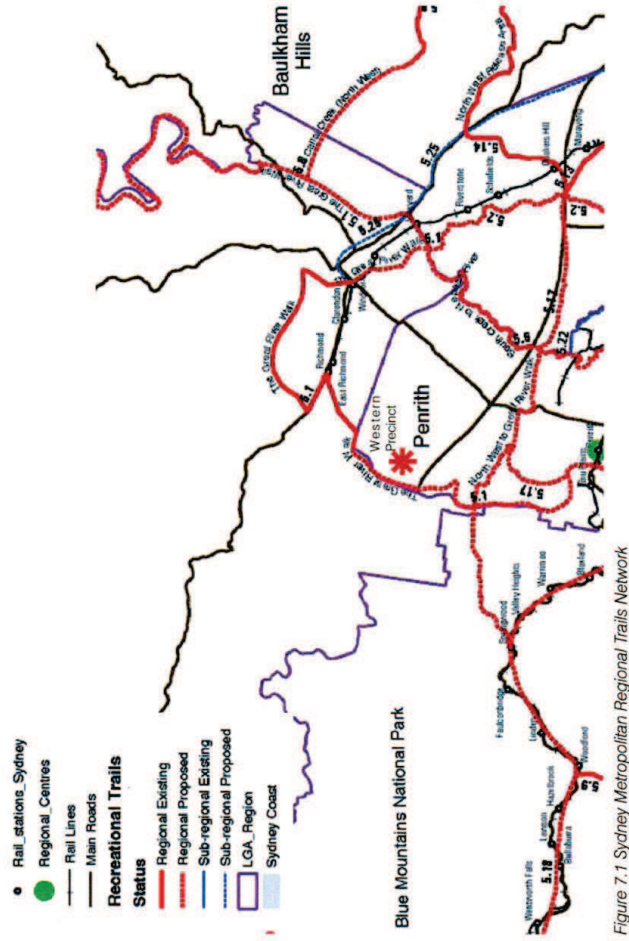


Figure 7.1 Sydney Metropolitan Regional Trails Network

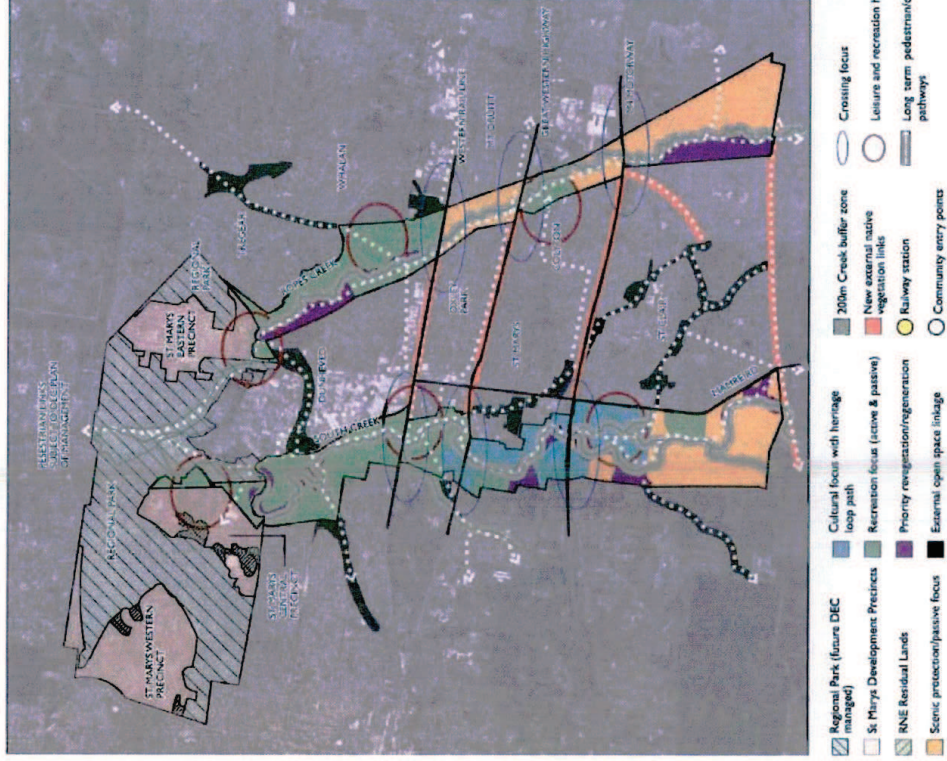


Figure 7.2 Ropes and South Creeks Masterplan



## 7 ACCESS AND CIRCULATION

### 7.2 Connectivity / accessibility opportunities

Fundamental to Delfin's vision is that provision of access is enhanced both in quantitative terms (as in extent of access) and in qualitative terms (in relation to recreational, visual, and environmental values). The network of pedestrian and cycle access linkages will be supported by the open space system access, which will provide a connectivity throughout the precinct between neighbourhoods, parks, the village centre, schools and the Regional Park. Access within open space areas will include a variety of varying access experiences across formal parks, Green Corridors, and Bushland areas (and possibly into the Regional Park).

The access network shall be planned and designed to maximise safety and security observing all applicable width, signage, and sight line requirements. Planning shall also maximise connections to the street, and park system to optimise security and passive surveillance.

Disability and equitable access is to be ensured for all public domain areas and community facilities. Tactile indicators, directional signage and edge treatments will also be employed where appropriate. Figure 7.1 identifies the key connections of the pedestrian cycle access network

A series of access links is proposed to suit the open space categories, and road network these include:

Off road shared path

2.5 metre wide shared pedestrian / cycle paths to parks, corridors and corridor links

Off road pedestrian path

1.5 metre wide pedestrian paths to parks, corridors and corridor links

Verge shared path

2.5m dual pedestrian and cycle paths to pedestrian priority streets are to be provided by means of a wider, landscaped setback

On road route

Dual or split cycle paths where corridors or parks convert to roadside access links.

Pedestrian paths

An important component of the access system incorporating footpaths adjoining roads.

Tracks/ trails

Connectivity to regional cycle and pedestrian routes will ensure integration with existing established community.

Board walks

Boardwalks will be incorporated to over-water and sensitive on grade situations in the precinct.



off road shared 2.5m



off road pedestrian 1.5m



verge shared 2.5m



pedestrian path 1.5m

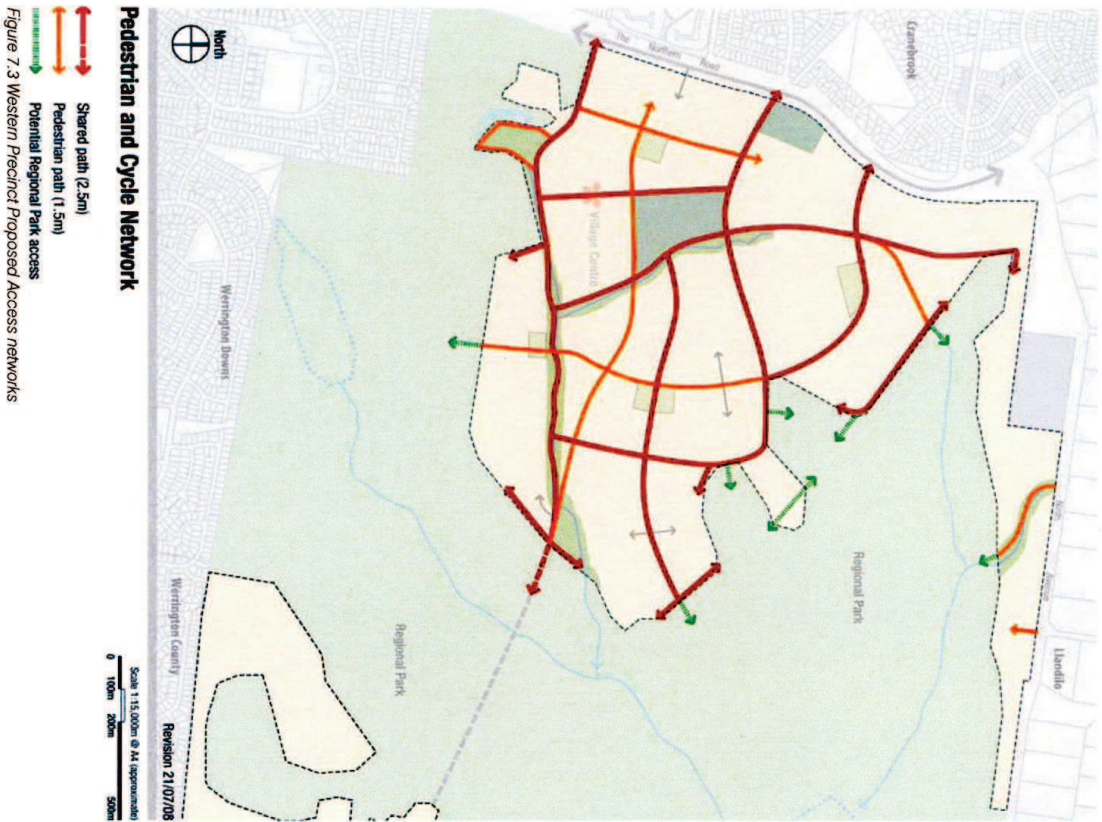


stabilised gravel path 1.5m



boardwalks

## 7 ACCESS AND CIRCULATION



September 2009



## 8 RECREATIONAL STRATEGY

### 8.1 District Context

Council's 2007 Open Space Action Plan identified the following directions for the St Mary's release area;

- inclusion of regional and district facilities
- low key passive recreation to conserve habitat values of the Regional Park
- establishment of Regional Park to ensure appropriate preservation of habitat
- establish large park /sporting oval which includes varied passive and active recreation
- potential provision of district sporting facilities
- potential provision of environmentally sustainable centre for research and education
- provide senior AFL/ cricket venue, local level playground
- district level sports pavilion and field/ outdoor entertainment venue
- provision of full size playing fields, 4 mini fields, basketball / netball - lighting, carparking, spectator seating/ shelter
- district level universally designed playground facility, amenities, shared access pathways

#### Precinct Objectives

Objectives as identified in the Landscape and Open Space Masterplan include:

#### network connectivity

- serving a practical user catchment (ie within walking distance)
- linked to broader regional network of open space and access (ie Ropes and South Creeks and the Regional Park)

#### multi use facilities

- open space / recreation linked to other community facilities
- combination of open space types to provide opportunity for a variety of facilities
- be of practical dimensions to achieve the recreational / landscape role intended
- optimise role of Regional Open Space

#### responsiveness to needs

- cater for family use (playgrounds, kick about with support facilities – shaded seating, some parking)
- cater for personal fitness (walking, cycling, jogging, exercise)
- potential to cater for new active trends (skate uses, mountain bikes, adventure playgrounds)
- community gathering spaces
- flexibility and adaptability in planning to cater for changing community needs
- provide safe and secure recreation environment

#### Principles for siting of open space (LOSM 2008)

1. Local park at centre of neighbourhood as recreational, civic, and landscape focus
2. Residents within walking distance (5 minutes) of quality open space
3. Central active recreational parkland that builds upon and complements active and passive recreational facilities through the development and relates to the Village Centre community and educational facilities.
4. Locate parklands to take advantage of quality existing tree canopy where possible
5. Provide access to recreational and environmental amenity of Regional Park and Regional Open Space to complement local open space provision
6. Balance quantum of open space for residential population against quality of open space settings and experiences and diversity and range of recreational and lifestyle opportunities available.
7. Provide a sustainable quantum of open space that does not place undue demand on Council's maintenance resources without tangible benefit for the community.





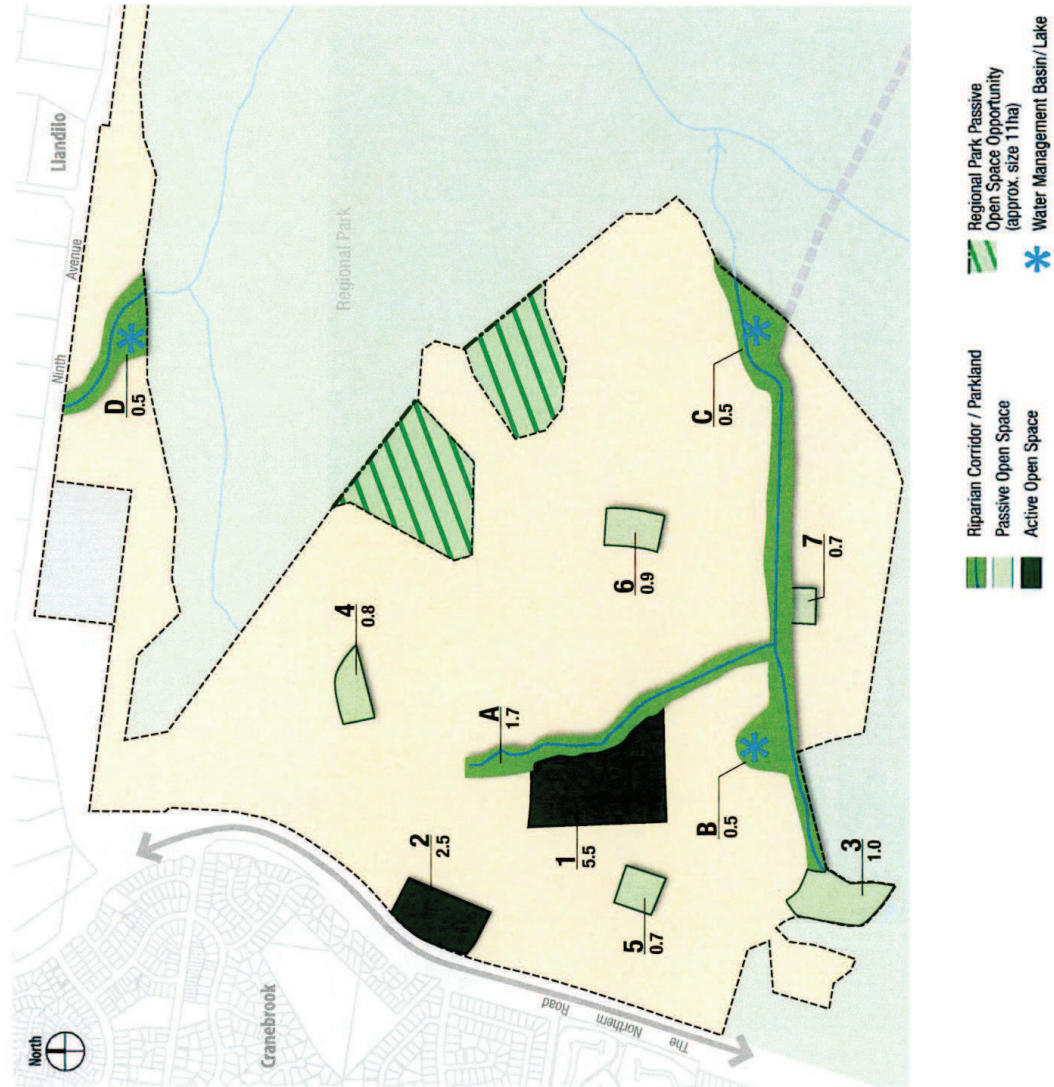


Figure 8.1 Open Space Masterplan



## 8 RECREATIONAL STRATEGY

### 8.2. Key recreational usage opportunities

#### Active recreation

Active or facilitated recreation is provided across the site, however main sporting fields and facilities lie to the core of the central part of the site adjacent the main collector road. This provides a clustering of recreation facilities that responds to both the access network and landform, as well as the physical remnant fabric of green corridors which shape the overall network of proposed recreation network. This includes consideration of the following factors:

- The core zone provides the highest carrying capacity for more intensive use
- Drainage corridor interface adaptable to recreation use
- Close relationship to educational precinct
- Core relationship to Village centre and main access collector roads
- Better surveillance and security to centre of site

Recreation facilities to the active recreational areas include:

- Sporting Ovals with car parking and facilities building
- Basketball / tennis courts
- Cycle/ pedestrian circuits within overall network
- Communal gathering and picnic areas
- Children's play spaces with a series of grouped and scattered elements taking advantage of existing tree canopy and topography. Play elements to respond to site history, bushland and rural character, topography and integrate public art elements that can also serve a play role.
- Picnic tables and seating scattered to areas of the core zone that provide views and utilise shade canopy for summer use as well as ensuring areas are provided that enjoy good solar access in winter months.



#### Western Precinct active recreation

Location	Active
Western Village Oval	district oval/ sports field with AFL/ Soccer/ athletics with amenities building / carparking
	basket ball/ tennis courts
	off road pedestrian /cycle network
	play space
Northern Road Oval	sports field with carparking
	half Basketball court
	off road pedestrian /cycle
	play space
Remnant Farm Dam	off road pedestrian /cycle network
Village Centre - Central Basin Park	play space
Hilltop Park	play space
	off road pedestrian /cycle network
Drainage Basin parks	off road pedestrian /cycle network

## 8 RECREATIONAL STRATEGY

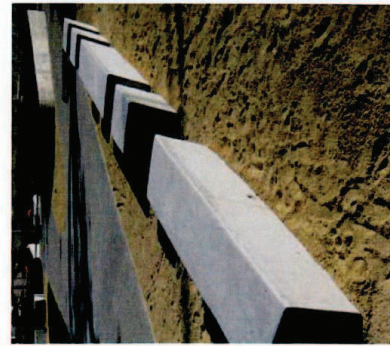
### 8.2 Key recreational usage opportunities

#### Passive recreation

Passive recreation is provided across the site and will include neighbourhood, local and pocket park, which will cater for a range of scales and nature of activities and facilities. Various landscape settings found across the site such as open space adjacent water bodies provide for varied recreational activities to the Western Precinct. This includes consideration of the following factors:

- Drainage corridor adaptable to recreation use
- Close relationship to neighbourhood centres
- Neighbourhood / local parks

Recreation facilities to the passive recreational areas may include the facilities identified in Table 8.2 opposite.



Concrete bench seating



Play elements



Play sculptures



Barbeque space



Grassed areas



# Passive Recreational Opportunities

	Western Village Oval	Northern Road Oval	Western Basin / Remnant Farm Dam	Village Centre / Central Basin Park	Hilltop Park	Eastern Park	Western Park	Southern Park	Eastern Basin Park	Ninth Avenue Basin Park	Northern Regional Park Basin	Green Corridors
<b>Opportunities</b>												
Development of open grassed areas for informal games	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Good links to all open space areas												
Setback (buffer to residential edges)												
Provide barbeque	✓				✓							
Shelters for picnic tables / seats	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	
Focal event spaces for large gatherings	✓			✓	✓							
Focal play zones with toddlers and children's zones	✓			✓	✓	✓	✓	✓	✓			
Shade and amenity tree planting	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Shaded Seating	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Seating with winter solar access	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Viewing areas that look across / over the site		✓			✓							
Community Gardens				✓								
Shared path connection	✓			✓					✓	✓		✓
Local pedestrian paths	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Fenced Off leash Dog		✓										
Youth activities	✓											
Loop walk that takes in aspects of water bodies/ riparian areas				✓					✓	✓		✓

Table 8.2 Passive Recreational Opportunities

## 8 RECREATIONAL STRATEGY

### 8.2 Key recreational usage opportunities Community Events

Community events are an important aspect of community building and sustaining community pride and involvement. Open space will play an important role in providing for a range of events to be undertaken across the Western Precinct. Section 5.0 identified that the historical "Castlereagh Common" role of the area can be integrated to planning and design in reinforcing a contemporary role and identity.

Events may part of Council programmes but also may have a community basis when attractive and functional venues are provided.

Spaces that are to cater for event usage should consider event mode requirements such as:

- potential area that can be used as a stage for events - maybe a platform that functions as a stage, or space for the setup of temporary stage
- at least single and ideally 3 phase power
- possible night lighting for events
- effective balance of hard paved areas to grass that cater for event volumes of usage but are appropriate in scale in non-event times

#### Potential Community events / activities include:

- family fun days / carnivals
- outdoor theatre
- community markets
- sporting events (fun runs etc)
- awards / presentation days
- community gardens

#### Community Events

Location	Opportunities
Western Village Oval/ Northern Road Oval	Sports Carnivals
	Outdoor Theatre
Village Centre public domain (eg Community Hub), Town Square	Community gardens
	Outdoor Theatre
Village Centre - Central Basin Park	Community markets
Hilltop Park	Family fun day - kite carnival
	Family fun day - active play / fitness challenges
Green corridors	Environment walks
	Extend hilltop / ridge lines through tree canopy including, to road cycle networks



grassed areas





## 8 RECREATIONAL STRATEGY

### 8.2 Key recreational usage opportunities

Playscapes - exploration and interpretation play

Playscapes will be an integral aspect of open space development in the Western Precinct. The play role to be developed in each open space is listed on the table this page

The approach to playspace design will emphasise the use of natural design themes. "Natural playgrounds" are play environments that blend natural materials, features, and indigenous vegetation with creative landforms to create purposely complex interplays of natural, environmental objects in ways that challenge and fascinate children and teach them about the wonders and intricacies of the natural world while they play within it.

Play components may include earth shapes (sculptures), environmental art, indigenous vegetation (trees, shrubs, grasses, flowers, lichens, mosses), boulders or other rock structures, dirt and sand, natural fences (stone, willow, wooden), textured pathways, and natural water features.

Location	Opportunities
Northern Road Park:	Toddlers Play to compliment family sports usage of oval and to serve the immediately local population - possible rural themes
Village Oval	Major district playspace with all ages / abilities capacity - that will serve on regional catchment in addition to serving local residents - explore Castlereagh Common theme
Village Centre - Central Basin Park	Toddlers playspace to serve retail / commercial function of centre - potential themes complimenting Central Basin
Eastern Basin	Potential loop walk that takes in aspects of water bodies/ riparian areas and heritage sites - potential themes complimenting Central Basin/ Regional Park
Hilltop Park	All ages play using hilltop views, wind, slopes
Western Park / Eastern Park / Nith Avenue Park	Toddlers Play to serve the immediately local population - celebrate everyday themes



Interpretation panels





## 8 RECREATIONAL STRATEGY

### 8.2 Key recreational usage opportunities

#### Dedicated Youth Recreation

Penrith LGA demographically reflects many of the outer western communities is having large numbers of youth aged 12-18. These patterns will undoubtedly evolve over time as the population ages as currently predicted.

Catering for youth needs through open space and recreation facilities is a challenging area. A range of research has been undertaken but outcomes and recommendations vary at the detailed level. However there are some consistencies that may form an overall approach to ensuring youth needs are considered.

At the core of these considerations is one of validation. Can places be provided that through their location form and facilities provide places to meet, interact, and interface (with other sections of the community) in a viable and acceptable way. Some principles we would seek to explore include:

- gathering and meeting spaces that provide both a sense of ownership to youth in addition to sustainable levels of interaction with the broader community
- an appropriate level of activity (exercise, games) that can coexist with adjoining uses
- ability for the space and facilities to evolve with changing needs and the influence of its youth constituents / users

Location	Opportunities
Northern Road Oval	Flexible sports ground active elements (eg basketball or climbing elements) as place for recreation
Village Oval Park	Active elements (eg basketball or climbing elements) as place for recreation - linked to gathering space / events area that allows for casual seating / viewing with open surveillance and connections to access
Village Centre - Central Basin Park	Central gathering area for all members of the community to encourage integration - potential interactive elements supported by programme of events
Hilltop Park	Active (exercise) play on steps etc.



Interpretation panels





## 8 RECREATIONAL STRATEGY

### 8.2 Key recreational usage opportunities

#### Technology Focussed Recreation

It is an aim of open space development in the Western Precinct that open space and uses embrace as far as possible new and developing technologies and are "forward looking" in allowing for future evolution and adaption of spaces and their facilities. This must be balanced against the need for open space and facilities to be as robust as possible, and of efficient recurrent maintenance demand.

#### Examples

##### Empower Play Pump

Integration of active hydraulic pumping mechanism to play equipment - activated by the equipment day to day motion and use. This can expose children to the principles of hydraulics and mechanics especially if the water-raising mechanism is visible.

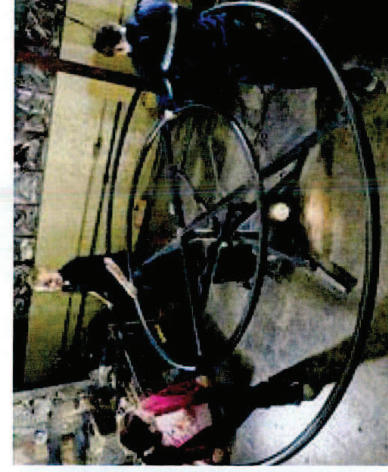
##### Play power - play generators

Similar in principle to the pump mechanism - the ability to generate power that may activate play elements / lighting / displays etc. Available as "off the shelf" items in addition to potential for customising.

##### Interactive technology

Can include digital displays / terminals to public domain, motion activated audio and video.

Location	Opportunities
Village Centre / Central Basin Park	Key site opportunities for elements related to major gathering / events areas and plaza spaces related to Central Basin
Hilltop Park	Wind powered elements that provide aural and visual interaction
Village Oval	Play pump and play generation elements to be explored
All parks	Integrate interpretation where possible that addresses the future: <ul style="list-style-type: none"> <li>- climate change</li> <li>- new technologies</li> </ul> and their relationship to day to day life



## 8 RECREATIONAL STRATEGY

### 8.2 Key recreational usage opportunities

#### Interpretation

Interpretation in the Western Precinct aims to integrate several core themes relating to site history in park design, elements, and the public art programme.

The core themes are:

- rural character and values
- cross roads of the city and the bush lifestyles
- Aboriginal and European history
- vegetation, water and the environment

These themes will be woven into park design and the design and fabric of public art in the public domain.

Location	Opportunities
Northern Road Park:	Rural character Celebration of everyday
Village Oval	Breathing space
Village Centre / Central Basin Park	Castelreagh Common / meeting place
Eastern Basin Park	Habitat / Regional Park
Hilltop Park	Air themes
Eastern Park	Celebration of everyday
Western Park	Celebration of everyday
Southern Park	Celebration of everyday Habitat / Corridors
Northern Regional Park Basins	Regional Park
Ninth Avenue Park	Rural Character



Interpretation panels





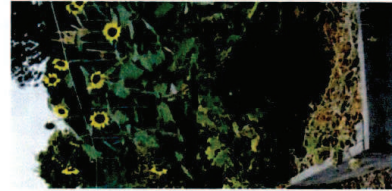
## 8 RECREATIONAL STRATEGY

### 8.2 Key recreational usage opportunities

#### Productive Parklands

Community gardens provide an opportunity for local and wider residents to be involved within the site at a hands on level. The potential management of this area may include 'ownership' of individual plots whereby individuals or groups may rent the plot for a small annual fee. Alternatively the garden may be managed overall by a committee or group.

Location	Opportunities
Village Centre - public domain - eg Community Resource Hub	Small community garden for group activities (eg schools/ elderly) or for display/ educational purposes



Community garden



New production technologies



Community farm

## 8 RECREATIONAL STRATEGY

### 8.2 Key recreational usage opportunities

#### Dog Parks

The Companion Animals Act aims to ensure that the role of pets in our society is supported through public domain and open space design and management. As a primarily detached housing community a large proportion of Ropes Crossing residents can be expected to have pets.

Of these dogs will be the greatest in number (of types of pets) and are the most significant in how open spaces may contribute to their role in the family group. Walking the dog for families down to single persons is a key recreational activity.

Effective catering for a combination of on leash and off leash opportunities for dog owners needs to be addressed in open space planning, design and management. A strategic approach to distribution of off leash areas is desirable, so that these are equitably located, and maximise "walk up" use rather than needing to be accessed by vehicle. Establishment of the strategic (that is district wide) context of the Western Precinct is to be established with Council. Designated off leash dog use areas are located at Werrington and St Marys with 4 in the overall LGA, and the provision of additional off leash space is to be confirmed.

Paws4Play - dogs park designers note that a "comprehensive dog park should incorporate natural environments where dogs can explore, open areas that cater for ball play, and more structured areas where dogs can be educated with the assistance of equipment and simulated environments".

The provision of a diverse landscape character also ensures that the open space can play a broader visual and recreational role in the open space and landscape system

Location	Opportunities
Northern Road Park:	Off leash
Village Oval	On leash
Village Centre / Central Basin Park	On leash
Eastern Basin Park	On leash
Hilltop Park	On leash
Eastern Park	On leash
Western Park	On leash
Southern Park	On leash
Northern Regional Park Basins	On leash
Ninth Avenue Park	On leash



Doggy Play



Doggy Bubbler



Doggy Bubbler



Doggy off leash area



Doggy off leash area



## 9 GREEN LINKS & SUSTAINABILITY

### 9.1 Corridors

The Open Space performance principles identified in the LOSM report for the Western Precinct outlined in broad terms that the corridors in the Western Precinct were to;

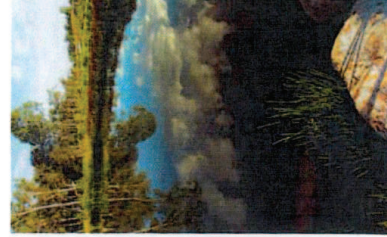
- relate to existing site drainage lines formalised during previous lands use
- retain where possible native tree canopy
- provide generally an overall width greater than 30m
- provide a minimum of 10 metres of vegetation buffer beyond top of embankment to both sides of channel
- provide nodal local / pocket recreational spaces adjoining corridor
- align off road cycle/ pedestrian linkages with corridors

These were applied in the detailed siting and design of the corridors, developed for the sites key corridor concepts outlined as follows and including;

Constraints	Opportunities
Stormwater	<ul style="list-style-type: none"> <li>• existing ephemeral</li> <li>• existing man made drainage systems</li> </ul>
Green Habitat Corridor	<ul style="list-style-type: none"> <li>• running adjacent to Remnant Farm Dam</li> <li>• drainage Corridors</li> <li>• maintain existing trees where possible</li> <li>• supplement with revegetation</li> <li>• provide canopy link to Regional Park</li> </ul>
Recreation	<ul style="list-style-type: none"> <li>• access/ bridge links</li> <li>• recreational walking paths</li> <li>• fitness nodes</li> <li>• informal passive nodes -seating</li> </ul>
APZ	<ul style="list-style-type: none"> <li>• Buffer Road or pathway to Regional Park</li> <li>• Supplementary shared access</li> <li>• managed vegetation</li> <li>• green visual / character link to rural residential / streetscapes</li> </ul>



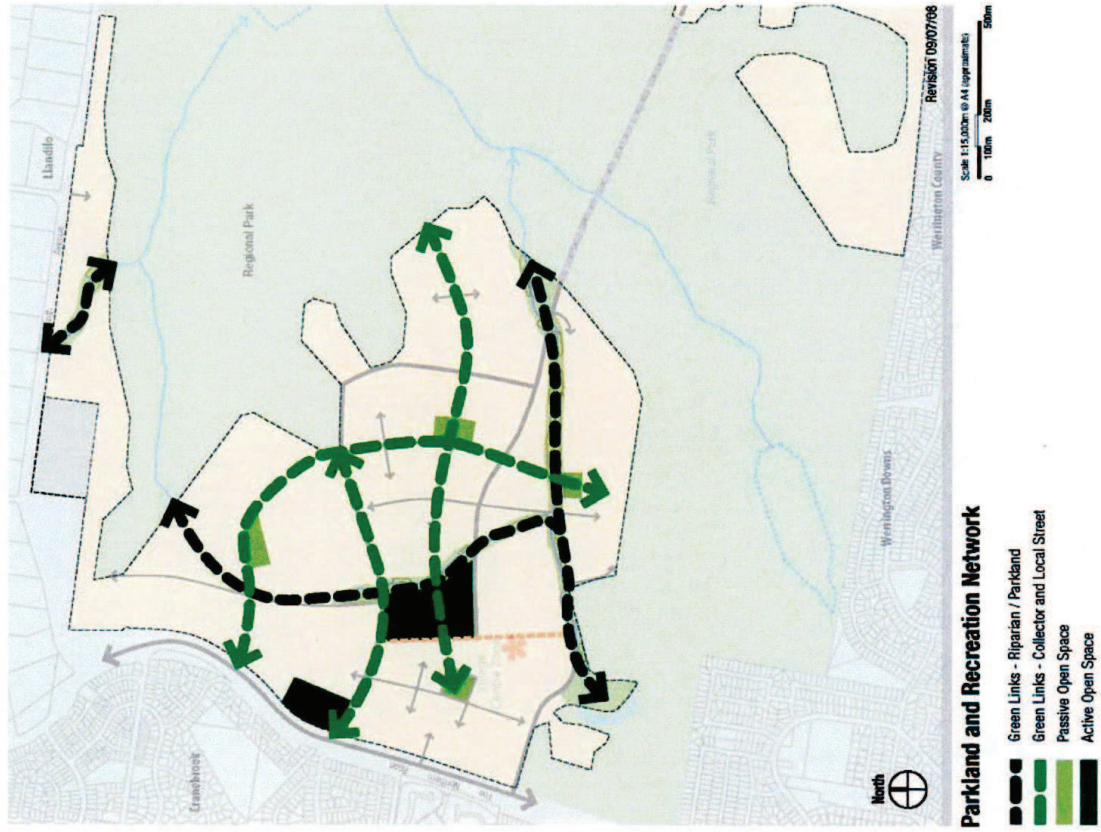
stormwater basins and corridors



Access / bridge links



recreational walking paths





## 9 GREEN LINKS & SUSTAINABILITY

### 9.2 Sustainable open space and landscapes

Sustainability throughout the landscape development process

The landscape development process must emphasise sustainability at all stages

#### Planning and design

- Site planning to reduce environmental impacts and enhance environmental performance
- Maximise life through best practice design (including the ability to surpass fashions / trends in design, and inable ease of removal of parts in order to refurbish the item and extend overall life).
- Reduce or eliminate reliance on energy required to light, heat and ventilate structures
- Conserve valuable resources and avoid waste
- Use recovered or recycled content materials where practical
- Minimise or eliminate water usage and reduce reliance on mains supplies (eg. utilise rain or grey water)
- Use low or non-toxic materials to reduce impacts on human health and the environment
- Maximise the recovery of components and materials at end-of-life.

#### Materials

- Reuse demolition components materials or recycled content materials that meet engineering specifications
- Source materials locally to reduce transport impacts and support the local community
- Use materials adequate for a job and not of an excessive standard (eg. don't use stainless steel when galvanised will do)
- Use materials that have a lower environmental footprint i.e. removed trees to be mulched and re used on site in open space areas

#### Fabrication

- Use prefabricated structures or fabricate components off-site where possible
- Build bulk quantities of structures and components if practical
- Use techniques that maximise recovery at end-of-life (eg. bolting not nailing)
- Use contractors with an environmental management system in place to minimise environmental impacts.

#### Construction

- Use environmentally friendly construction techniques where appropriate
- Use contractors with an environmental management system in place to minimise environmental impacts.

#### Maintenance

- Undertake maintenance following PCC's Asset Maintenance System (AMS) to maximise a structure's life
- Fix things before they break or as soon as a problem is identified.
- Use long-life and low-toxicity materials where possible
- Repair vandalism and graffiti immediately to deter further attacks.

#### Disposal at end-of-life

- Maximise the quantity of materials recovered at end of life with landfill as the last option
- Reuse and recycle components and materials where possible.

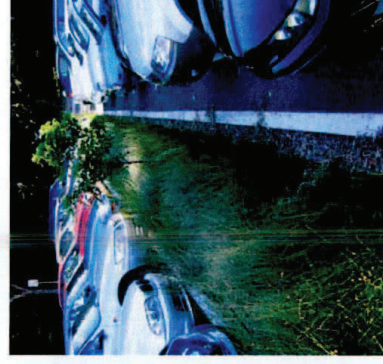
#### Life cycle and maintenance evaluation

It is important in facilities planning and provision to understand the short and long-term cost implications of capital construction

preferred treatments including both construction and maintenance for the life of a facility. Higher costs may be justified based on a longer life span of a facility or lower cyclic maintenance costs.

Evaluation of life cycle benefits and maintenance costs should consider the following (which may vary from area to area):

- capital cost of supply and installation
- anticipated life span before replacement or renewal





## 10 KEY PARKS AND NODES

### 10.1 Generally

#### Western Precinct Open Spaces

The Open Space performance principles identified in the LOSM report for the Western Precinct outlined in broad terms the general location of the open space components that comprise the Western Precinct's open space network. These Performance Criteria base objectives were applied in the detailed siting and design of the open space components, developed for the sites key park concepts outlined as follows and including:

Village Centre Open Space	Western Village Oval
Neighbourhood	Northern Road Oval
Local	Remnant Farm Dam Park
Pocket Parks	Hill Top Pocket Park
Pocket Parks	West Pocket Park
Pocket Parks	East Pocket Park
Pocket Parks	South Pocket Park
Corridor / Basin	North Corridor Park
Corridor / Basin	Central Basin Park
Corridor / Basin	Eastern Basin Park
Corridor / Basin	Ninth Avenue

Generally the network of parklands and corridors have been designed to create an integrated environment which provides both a functioning and sustainable drainage system and a range of quality recreational opportunities both active and passive. The network of open space will be connected by an extensive circulation system of paths and tracks for both pedestrian and cycle use.

#### Open Space Planting Strategy

Park and open space areas provide an opportunity to apply site specific approaches to tree and garden bed planting which will enhance the relevant character type through species selection. Plant densities and selection should be utilised to highlight entry points, nodal areas, recreational spaces / routes, and provide views into the park from roads and footpaths.

#### General Principles

- Species selected for corridors and areas adjoining regional parkland to be predominately indigenous to the vegetation communities evident in the Western Precinct - to link site character to remnant Cumberland plain vegetation found in the Regional Park,
- The sites location adjacent rural suburbs to the north provides opportunity to visually heighten the precinct's historic context
- Species selection to have regard for site soil characteristics, salinity management, biodiversity value, potential impact on essential services and public safety issues,
- Species selection and placement is to consider existing trees to be retained
- Feature exotic plantings at key entry points and within the Village Centre



District Park



Neighbourhood Park



Local Park



Pocket Park



Corridor



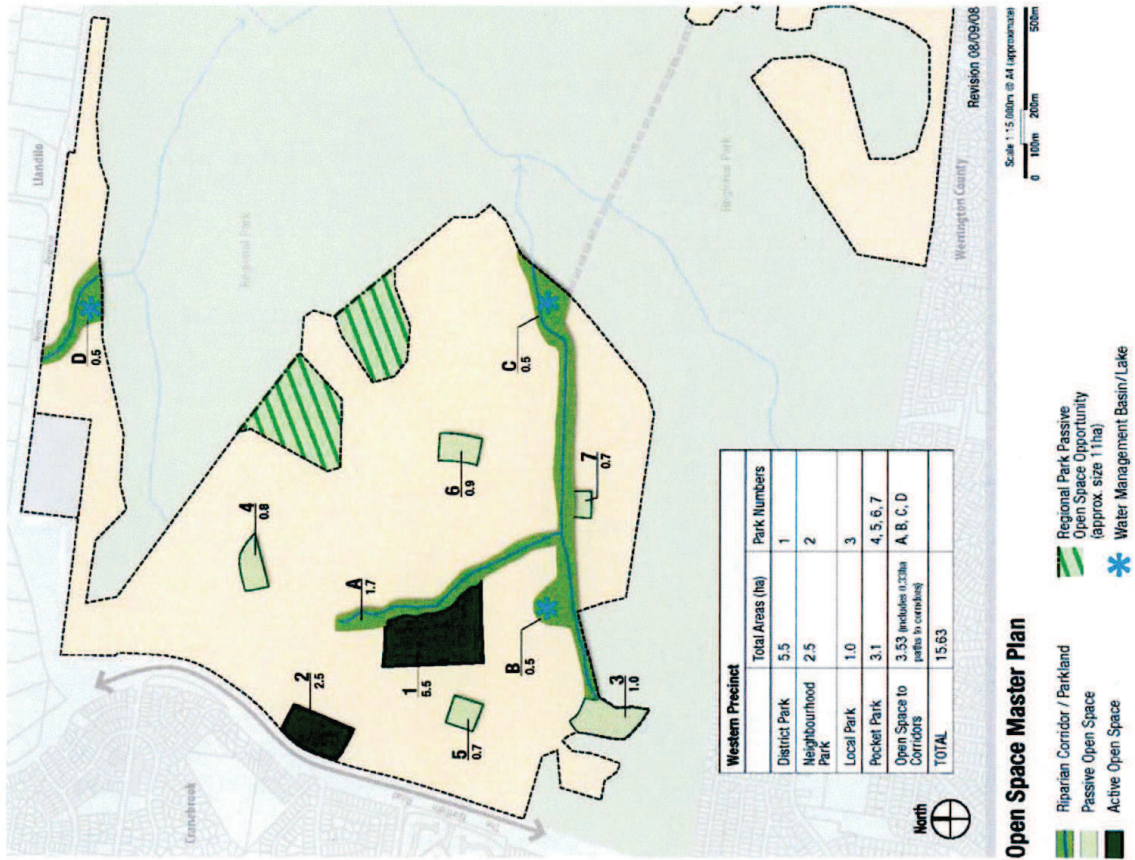


Figure 10.1 Open Space Masterplan

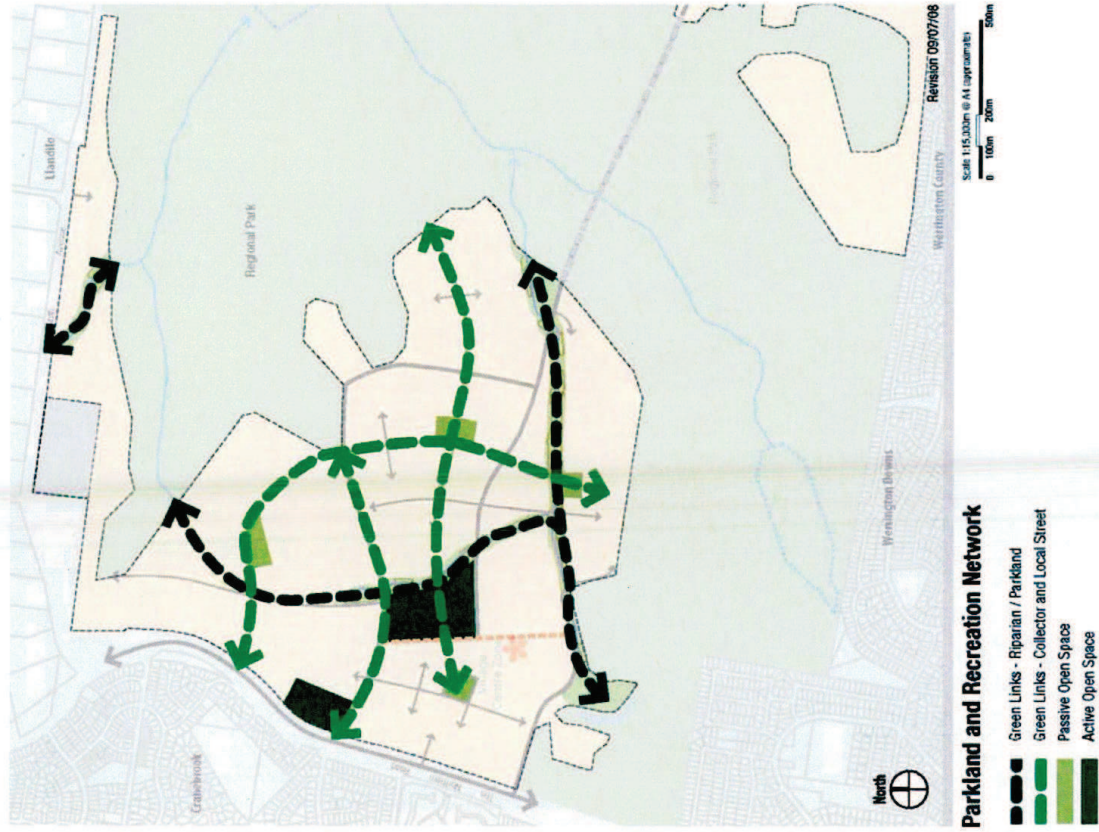


Figure 10.2 Parkland and recreation network



## 10 KEY PARKS AND NODES

### 10.2 Village Centre Open Space

The Western Precinct will be served by a Village Centre which will act as the heart of the new community integrating retail, commercial, and civic / public domain functions within a cohesive environment that responds to the character and identity of the Western Precinct. The Village Centre incorporates three key elements:

- Village Main Street (refer also to 6.1 Collector Road Main Street)
- Village Lake (refer also to 10.5 Pocket Parks - Village Centre Basin)
- Town Square

#### Recreational Role

The three elements work together to create the community heart where residents and visitors can gather and have access to services. The main street provides a retail "strip" environment activated by vehicular access and parking but with high pedestrian amenity through generous pavements and boulevard tree planting.

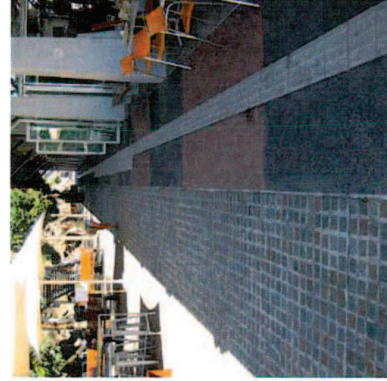
The Village lake provides a major permanent water body which acts as a focus for the centre and strongly shapes adjoining urban planning. The Lake periphery will provide a variety of experiences including urban water edges including promenades and cafes in the west, through to natural water edges with informal walking and cycle path access in the east linking to the riparian corridor

The Town Square will provide a flexible and adaptable public domain, and the major public space in the Village Centre. The square will visually and spatially extend the public domain of the lake edge promenade, and provide for day to day use as a place for cafes, seating, and gathering. In addition it will provide for organised events such as markets and displays.

### Village Square design principles

Key principles for the Village Main Street and Village Lake open space are defined in separate sections as identified above. Those applying to the town square as the focal space of the Village Centre are listed following:

- Incorporate into design development key contextual considerations:
  - integration of character of adjoining streetscape corridors into design theme (alignment, materials, urban built forms, vistas and views);
  - urban role of square or plaza as visual focus and landmark
  - emphasise relationship to water body
  - heritage, character, and social fabric of adjoining neighbourhoods
- the relationship of the plaza or square to an active street frontage to enhance public accessibility and security
- the provision of equitable access for all members of the community,
- recognise / influence where possible spatial definition and character of adjoining architectural form;
- reinforce pedestrian linkages to main street corridor and lake promenade through use of in road pavements and widened footpaths
- public art as fundamental component of design scheme with artworks provided as both functional and visual elements of the designs.
- opportunity to incorporate richer palettes of materials including paving and plant material into design,
- Provision of seating, tables, bins etc as appropriate to location and adjoining uses.
- Decorative street lighting poles and banners
- Decorative pedestrian pole top lights or under awning / colonnade lighting





## 10 KEY PARKS AND NODES

### 10.3 Neighbourhood Park

#### Western Village Oval - Neighbourhood Park - Level 1 Park

Size

5.5 ha

#### Recreational Role

The focal recreational space of the Western Precinct for organised sports and for larger scale community gatherings and activities.

#### Provision

- playing fields with irrigation and night lighting
- hard courts with night lighting
- amenities block with associated services
- play space with shade structures/shelters
- picnic facilities
- pathways
- associated landscaping
- approximately 80 carparking spaces and on road directly adjoining the open space frontage to Village Centre area

#### Embellishment / character

- Parkland landscape character
- Urban / suburban presentation (as a park adjoining Village Centre - should be of higher presentation)

#### Site characteristics

- Undulating slope from north to south - south west (6m fall from north to south)
- Scattered existing tree canopy from centre to north of site
- Strong relationship of western edge to north south green (drainage) corridor
- Secondary school adjoins corridor to west
- Potential visual links to hill top park

#### Design Considerations

- Concentrate fields to south of site to maximise tree retention to northern section
- "Cut in" playing fields to provide south / south west facing viewing slopes
- Locate passive recreational facilities including playground in north of site to take advantage of existing tree canopy
- mitigate open character of fields as far as possible with native tree planting to provide shade and define usage areas
- Provide bridge link to Secondary School site across north south corridor
- Pursue path / street tree links between oval and adjacent parks (Hilltop Park and Eastern Park)

#### Public Art

- Major installation element/s along interface with Green Corridor or within park to reinforce village "common" theme - and community gathering use
- Sports related elements interpreting distance, height etc
- Art inspired design of bridge link - with potential exploration of "water" theme





## 10 KEY PARKS AND NODES

### 10.3 Neighbourhood Park

#### Northern Road Oval - Neighbourhood Park - Level 1 Park

##### Size

2.5ha

##### Recreational Role

A secondary recreational space serving the Western Precinct for organised sports in particular for training purposes. Also supplements other local open space in providing for passive recreational activities.

##### Provision

- playing field with irrigation and night lighting
- multifunction hardcourt
- play space with shade structures/shelters
- picnic facilities
- fenced off leash dog zone
- amenities (toilet only) block
- associated landscaping
- approximately 40 carparking spaces provided

##### Embellishment

- Parkland landscape character
- Urban / suburban presentation

##### Site characteristics

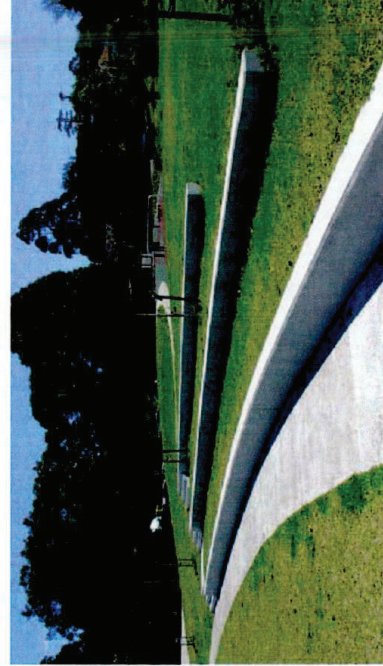
- Undulating slope from west to east
- Existing tree canopy limited to north west of site
- Strong relationship of western edge to buffer zone to Northern Road
- Strong relationship of southern edge to one of the principal Northern Road entries
- Potential visual links to hill top park

##### Design Considerations

- Concentrate fields to east side of site to maximise tree retention to western section
- "Cut in" playing field to provide east west facing viewing slopes
- Locate passive recreational facilities including playground in west of site to take advantage of existing tree canopy
- Potential provision of ninety degree or angle parking to park edge (on street) to replace or supplement off street parking and reduce land take on park
- Buffer to Northern Road having regard to the intermittent views to oval

##### Public Art

- Major installation element/s to entry of precinct
- Sports related elements interpreting distance, height etc
- Potential relationship to public art elements to Northern Road buffer





## 10 KEY PARKS AND NODES

### 10.4 Local Park

#### Remnant Farm Dam Park - Local Park - Level 2 Park

##### Size

1.0 ha

##### Recreational Role

Passive recreation for the local community in a bushland setting, echoing the Regional Park. The park will cater for walking, picnics, and interpretation in close proximity to the Remnant Farm Dam precinct of the Regional Park

##### Provision

- kick about area
- play space
- picnic facilities
- associated landscaping
- interpretive signage

##### Embellishment

- Woodland landscape character
- Natural - suburban presentation

##### Site characteristics

- Generally level - low lying area - minimal falls
- Floodway from Remnant Farm Dam in high rainfall
- Extensive tree canopy across site
- Strong relationship to Regional Park to west south and east
- Strong relationship to southern site entry road from Northern Road
- Embankment provides a visual and grade barrier to the Remnant Farm Dam

##### Design Considerations

- The design of the park should integrate with the Remnant Farm Dam landscape
- Reinforce access linkages back to the village centre, and will optimise the visual relationship with the Remnant Farm Dam landscape
- Link park to access along east west green corridor

##### Public Art

- Public art / interpretation of eg. breathing space and sustainability themes
- Interpretation of natural environment / Regional Park edge
- Interpretation of water - agricultural uses / farm dams



## 10 KEY PARKS AND NODES

### 10.5 Pocket Parks

#### Hilltop Pocket Park - Pocket Park - Level 3 Park

Size

0.8 ha

#### Recreational Role

Passive recreation for the local community taking advantage of the panoramic hilltop views and breezes. The park will include a destination play space integrated into the slopes along with fitness challenge trails that give it a "one off" identity in Western Precinct.

#### Provision

- kick about area
- play space
- picnic facilities
- associated landscaping

#### Embellishment

- Parkland character
- Suburban presentation

#### Site characteristics

- Hilltop location with outlook to west south and east
- Varied gradient from hilltop around 1:7 grade
- 1 tree at hilltop with several to lower western slopes

#### Design Considerations

- Park design will optimise level changes and slope as site feature
- Tree canopy planting to limit impacts on views
- Promote visual / access links to Village Oval
- Opportunity for playspace design to maximise excitement created by slope

#### Public Art

- Public art / interpretation of eg. breathing space and air themes
- Interpretation of views / outlook and its evolving perspective over time





## 10 KEY PARKS AND NODES

### 10.5 Pocket Parks

#### West Pocket Park - Pocket Park - Level 3 Park

Size

0.7 ha

#### Recreational Role

Passive recreation for the local community, situated in close proximity to the Village Centre to the east. The park is located centrally to adjoining residential neighbourhood to provide optimum accessibility and function.

#### Provision

- kick about area
- play space
- picnic facilities
- associated landscaping

#### Embellishment

- Parkland character
- Suburban presentation

#### Site characteristics

- Gentle / undulating landform
- Adjoins tertiary access roads to Village Centre

#### Design Considerations

- Opportunity for formal design expression of local neighbourhood characteristics
- Promote visual / access links to Village Centre, Village Oval and Central Basin

#### Public Art



## 10 KEY PARKS AND NODES

### 10.5 Pocket Parks

#### East Pocket Park - Pocket Park - Level 3 Park

##### Size

0.7 ha

##### Recreational Role

The east local park lies centrally within the adjoining neighbourhood to provide optimum accessibility and function to recreational opportunities to residents. Gently undulating slopes and strong links to Regional Park character. The park will include a play space and integrate fitness aligned with walking/ cycling circuits paths to central corridor. The space will take advantage of existing tree canopy.

##### Provision

- kick about area
- play space
- picnic facilities
- associated landscaping

##### Embellishment

- Parkland character
- Suburban presentation

##### Site characteristics

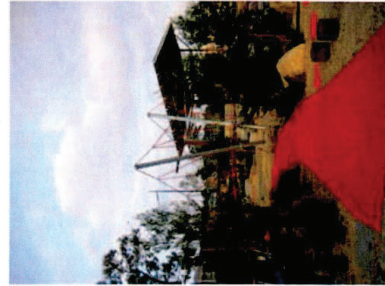
- Gentle / undulating landform with aspect to east
- Scattered stands of trees
- Natural drainage

##### Design Considerations

- Park design will optimise existing stand of trees and natural drainage line as site features
- Opportunity for formal design expression of natural setting characteristics
- Promote visual / access links to Village Oval, School Precinct and Central Corridor

##### Public Art

- Public art / interpretation of eg. celebration of the everyday





## 10 KEY PARKS AND NODES

### 10.5 Pocket Parks

#### South Pocket Park - Pocket Park - Level 3 Park

Size

0.7 ha

#### Recreational Role

Passive recreation for the local community at the centre of a 'rural plain' neighbourhood located adjoining the southern corridor. The park will include a play space and integrate fitness aligned with walking/ cycling circuits paths to corridor. The space will take advantage of existing tree canopy.

#### Provision

- kick about area
- play space
- picnic facilities
- associated landscaping
- internal/street path linkages, and connections to cycle/pedestrian links

#### Embellishment

- Parkland character
- Suburban presentation

#### Site characteristics

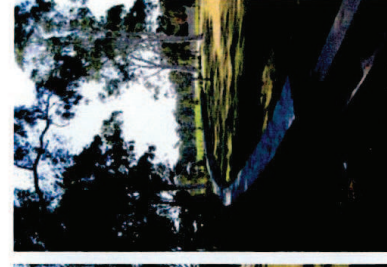
- Gentle / undulating landform with aspect to north
- Scattered stands of trees and links to east west Corridor canopy

#### Design Considerations

- Park design will optimise existing trees as site feature
- Opportunity for formal design expression of natural setting characteristics
- Promote visual / access links to Corridor

#### Public Art

- Public art / interpretation of eg. water themes associated with adjoining Corridor
- Interpretation of views / outlook and its evolving perspective over time



## 10 KEY PARKS AND NODES

### 10.6 Corridor & Basin Parkland

#### North Corridor Park (A)

Size

0.6 ha

#### Recreational Role

Passive recreation for the local community adjoining the south western basin. Park will focus on natural waterfront experiences adjoining the east west green corridor

#### Provision

- Play space
- Associated landscaping
- Internal/street path linkages, and connections to cycle/pedestrian links
- Native canopy tree planting - non linked canopies within fire protection zone

#### Embellishment

- Woodland character
- Natural presentation

#### Site characteristics

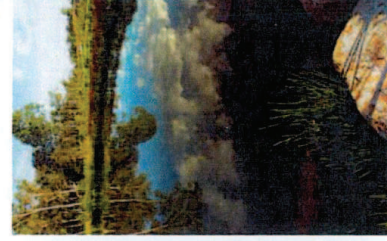
- Adjoins south western basin which provides a basin storage role for stormwater
- Adjoins east west corridor
- Low lying lands with minimal falls
- No existing tree canopy

#### Design Considerations

- Additional space targeted to most effective usage / amenity areas - adjoining corridor
- Natural character will compliment corridor landscape
- Promote visual / access links to east west corridors

#### Public Art

- Public art / interpretation of eg. water, sustainability





## 10 KEY PARKS AND NODES

### 10.6 Corridor & Basin Parkland

#### Central Basin Park (B)

Size

0.75ha

#### Recreational Role

Passive recreation for the local community adjoining the central basin and village centre. Park will combine "urban" waterfront activities such as promenade and cafe with natural waterfront experiences adjoining the north west green corridor

#### Provision

- play space
- picnic facilities
- associated landscaping
- internal/street path linkages, and connections to cycles/pedestrian links
- native canopy tree planting - non linked canopies within fire protection zone
- 15 % of open space permitted to contribute to stormwater detention

#### Embellishment

- Parkland character
- Suburban presentation

#### Site characteristics

- adjoins central basin which combines "wet" permanent retention with basin storage zones
- adjoins north south and east west corridors
- low lying lands with minimal falls
- limited existing tree canopy (3 specimens)

#### Design Considerations

- Additional space targeted to most effective usage areas - adjoining village centre with outlook to basin
- Combination of urban / natural edge characters
- Promote visual / access links to north south and east west corridors

#### Public Art

- Public art / interpretation of eg. water, sustainability and celebration of the every day





## 10 KEY PARKS AND NODES

### 10.6 Corridor & Basin Parkland Eastern Basin Park (C)

Size  
1.3ha

#### Recreational Role

Passive recreation for the local community adjoining the eastern basin. Park will focus on natural waterfront experiences adjoining the eastern Basin and existing grid stand of plantation trees to the north east.

#### Provision

- play space
- picnic facilities
- associated landscaping
- internal/street path linkages, and connections to cycle/pedestrian links
- native canopy tree planting - non linked canopies within fire protection zone
- 15 % of open space permitted to contribute to stormwater detention

#### Embellishment

- Woodland character to basin
- Natural presentation to basin
- Rural overlay to parkland

#### Site characteristics

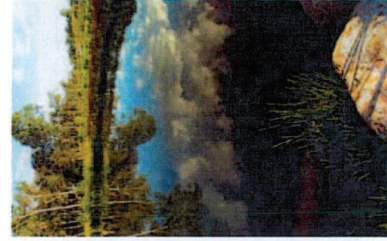
- Adjoins eastern basin which provides a basin storage role for stormwater
- Adjoins east west corridor
- Low lying lands with minimal falls
- Existing grid plantation tree canopy (immature specimens)

#### Design Considerations

- Additional space targeted to most effective usage / amenity areas - adjoining corridor
- natural character of basin surrounds will compliment corridor landscape
- Promote visual / access links to east west corridors
- Interpretation of existing stand of plantation Eucalyptus grove to north eastern parkland area

#### Public Art

- Public art / interpretation of eg. water, sustainability





## 10 KEY PARKS AND NODES

### 10.6 Corridor & Basin Parkland

#### Ninth Ave Corridor Park (D)

Size

0.6 ha

#### Recreational Role

Passive recreation for the local community adjoining the south western basin. Park will focus on natural waterfront experiences adjoining the east west green corridor

#### Provision

- play space
- picnic facilities
- associated landscaping
- internal/street path linkages, and connections to cycle/pedestrian links
- native canopy tree planting - non linked canopies within fire protection zone
- 15 % of open space permitted to contribute to stormwater detention

#### Embellishment

- Rural character
- Suburban presentation

#### Site characteristics

- adjoins northern corridor which provides a basin storage role for stormwater
- low lying lands with minimal falls
- existing tree canopy

#### Design Considerations

- Additional space targeted to most effective usage / amenity areas - adjoining corridor
- rural character will compliment natural character to corridor landscape
- Promote visual / access links to corridors
- Promote perceived links to rural suburb to the north of the Western Precinct

#### Public Art

- Public art / interpretation of eg. breathing space and the rural context



## 10.7 Landscape presentation and maintenance of parks

Presentation is typically linked to landscape character. As such open spaces of plaza / square type character may be generally associated with an urban (or higher) presentation / maintenance standard, whilst bushland character is sustainable with a natural (or lower) presentation / maintenance standard.

Urban presentation

Suburban presentation

This presentation type will typically encompass a combination of landscape character types which will dictate variations in the level of presentation across the open space dependent on the character and type / level of usage it receives.

Suburban presentation will also apply to Bushfire Protection Zones where recurrent maintenance is required to address fuel management requirements.

Natural landscape presentation will apply to low level and intensity of use spaces areas that incorporate and adjoin natural systems.

Typically green corridors and the interface areas of adjoining parks will fall into this category. Retention of existing vegetation and revegetation (where applicable) with indigenous species will provide a generally self-sustaining landscape with low recurrent maintenance demands.

Figure 10.3 Relationship of landscape / presentation / standards to landscape character

Figure 10.3 Relationship of landscape / presentation / standards to landscape character



## 11 PUBLIC ART STRATEGY

### 11.1 Relationship of public art to landscape

#### General Approach

Opportunities to incorporate public art into the public domain will occur in a range of situations. Art should be incorporated as formative design input not just as overlay elements to a design. Opportunities may include:

- At focal precinct entries
- To park entries with a vehicular access emphasis to be interpreted from the motor vehicle
- To town centre squares and plazas
- At focal intersections and locations to street corridors
- To local open space
- To major street corridors
- On walking / cycle trails where applicable
- To promote natural features such as water, elevation, open space, views and vistas

The potential for integration of public art into these spaces has been identified at the initial stages of a project to enable complete integration into the design process, and incorporation of the artwork as a functional and integral component of the scheme rather than an overlaid installation.

A public art component can provide a reference to physical or cultural characteristics of a site or neighbourhood, or alternatively may provide a purely visual element, enhancing the appreciation and diversity of the public domain.

In all cases public art should contribute to the identity and character of open space and landscape and engage users of open space in an ongoing way.

#### Design Principles

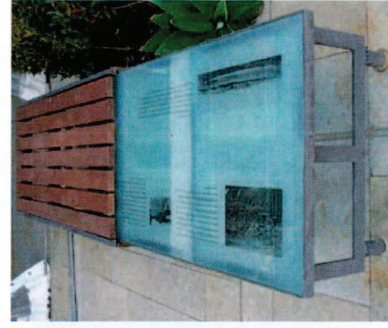
- Incorporate public art treatments to reinforce town centre character and identity
- Provision of public artworks as integrated components of streetscape improvements rather than stand alone / 'one off' items
- Art elements shall generally be in a form that is efficiently removed
- Art elements to include ephemeral works which involve community input over time
- Integrate public art elements that interpret everyday elements

#### Materials Principles

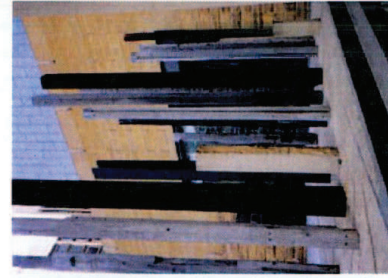
- Art components to be of durable materials, resistant to potential vandalism



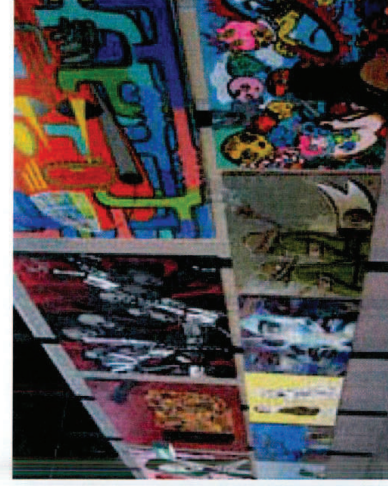
Precinct Entry Statement



Seat with artwork component



Pole sculptures



Grffiti artwork wall



## 11 PUBLIC ART STRATEGY

### 11.2 Conceptual Framework for Public Art

The following principles have been explored as a framework for developing public art in the western precinct.

#### Elements

##### Water

The local creeks nourished the Darug people and much later were utilised by colonial farmers. Subject to flooding and dry spells these creeks were reliable sources until their flows were reduced by silting and the infestation of weeds. The existing dam though artificial has settled into the landscape and with its skeletal backdrop of stark trees provides a place of reflection and possibilities. The proposed echo of this pond with a large water body defining the Village Centre reinforces water as a motif for the precinct.

The art response to this focus can intervene using actual water or its qualities of reflection, surface tension, cooling, storage, pattern and texture. As an integrated part of infrastructure that directs stormwater, filters groundwater and captures rain in dams and tanks, the potential for artworks to tell the stories, to interpret flows and partner sustainable approaches is potent and articulates engineering solutions for an accessible audience.

The creation of channels and the widening of existing creek beds to improve water flow from households compels an imaginative interpretation for communities.

##### Air

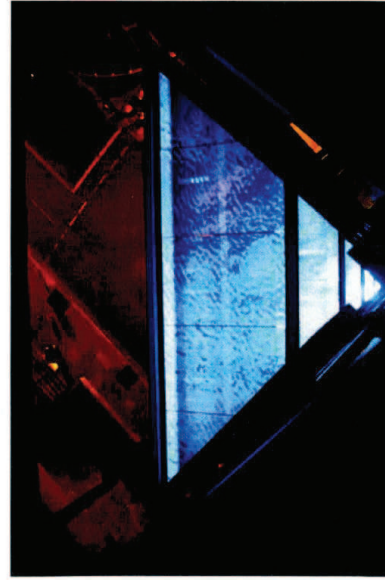
In this precinct a more undulating topography captures longer views and a larger sky. A sensitive artistic response to the effects of air on grasses and water can project this as patterns and textures. Using the high ground for cloud watching and looking down on the world encourages an integration of art and structure to extend the experience.

Kinetic artworks that give the illusion of movement and those that have components that actually move with the wind are powerful yet poetic statements here.

The tunnelling of wind and sound can be explored as sound scapes and create instruments at ephemeral events.

##### The Common

The Northern Rd was part of the Castlereagh Common given by Macquarie to the settlers for grazing. There was strong protest when King absorbed part of it into his holdings. A trust managed the land right into the twentieth century. This concept explores the notion of collective space and a shared vision. This is important for the entry elements for their location within the common. This can be expanded within pocket parks as a communal garden. This idea builds upon the community's investment in shared places and can be explored in the process of an art project which draws upon the local community for collaboration and consultation.



David Longland Building Brisbane



Solander Park, Erskineville



Director Russell Dumas, Performance Mixed Media, Dee Why Beach



## 11 PUBLIC ART STRATEGY

### Breathing Space

Penrith regards itself as the interface between the urban and the rural. It borrows the mountains in the background and immerses itself in the river. The retention of this rural perception without using nostalgic references is an important local preoccupation. The agricultural footprint is embedded in the Penrith psyche. The acquisition of land and its assumption of status and power influenced today's perceptions of place and difference as felt by the Penrith community.

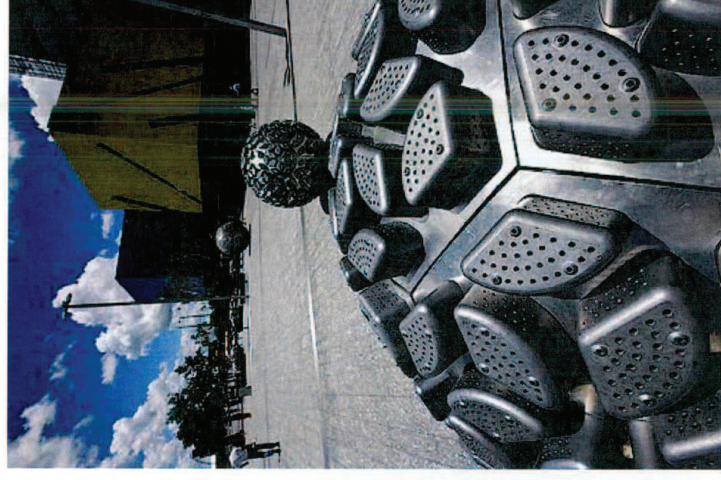
### Sustainable Action

The integration of sustainable response as an underpinning philosophy for the precinct empowers community. Alternative harnessing of air and water with art as part of the design makes this process accessible. The insertion of alternative pathways for cycling, running and walking acknowledges the health of community as sustainable practice.

### Celebration Of The Everyday

The manipulation and placement of the materials used in the everyday elevates them to the pedestal of the antique. These objects are important because they link the ritual of consumption with cross generational memories. As the chip replaces the robust mechanical movement of hand crafted and powered tools, their geometry and design qualities dissipate and they gather dust.

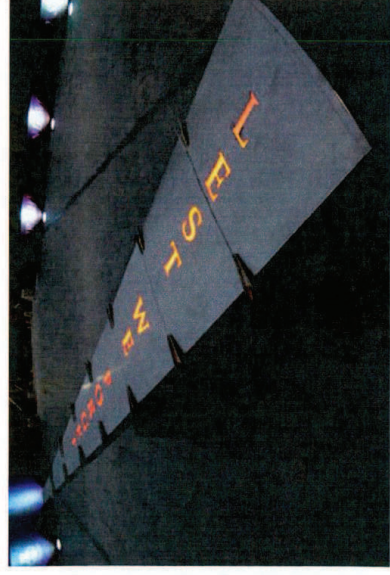
The wit of the everyday scaled and stretched as artworks punctuate the precinct and nostalgic utensils are recontextualised. Although the intimate relationship of hand to product is evident in its design, they become references of prior arcane rituals.



Artist Donna Marcus, Stein, Brisbane



Artist Antony Gormley, Margate, England



Artist Mike and StonehouseConcept, Ryde Park

# 11 PUBLIC ART STRATEGY

## 11.3 Ideas for Public Art

### Wayfinders

The objectives of these markers are to-

- Link places
- Encourage circulation
- Orient communities
- Punctuate nodal points
- Add colour

These wayfinders can explore any of the themes outlined.

### Watercrossings

The objectives of these embellishments are to-

- Prompt water rhythms
- Integrate infrastructure imaginatively
- Celebrate water flows
- Punctuate creeks as journeys
- Access the landscape as narrative

As integration types, these artworks explore the themes of air and water.

### Hill Top Park

The objectives of artworks here are to-

- Integrate with the park
- Encourage exercise
- Emphasise the elevation
- Interact with the element of wind
- Announce the park
- Reinforce wayfinding

Artworks are interventions in this park exploring the element of air.

### Pocket parks

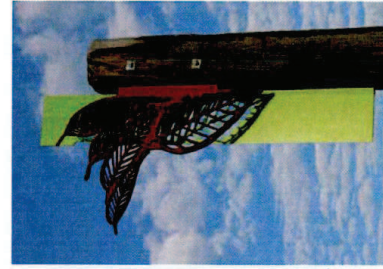
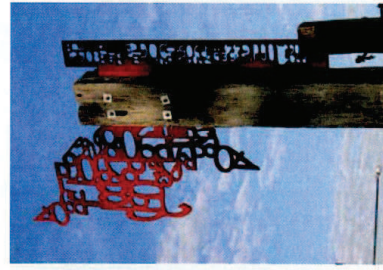
The objectives of artworks in pocket parks are to-

- Individualise neighbourhoods
- Reinforce exercise
- Make the park a destination
- Include the local community participation
- Integrate with the park playground

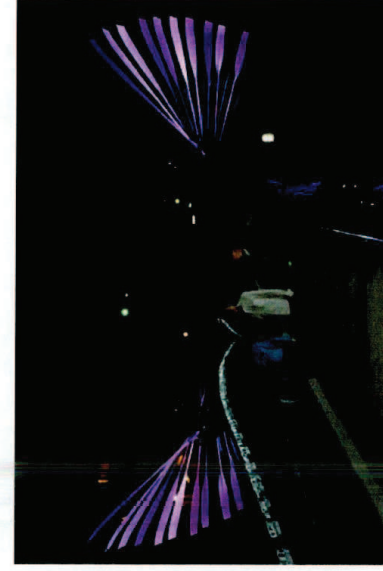
These artworks can explore any of the outlined themes. The intimacy of the spaces influences the artworks.



cycleway markers. Fairfield



Wayfinders at Ropes Crossing



Elizabeth St Footbridge Parramatta



# 11 PUBLIC ART STRATEGY

## Entries

The objectives of artworks at entry points are to-

- Announce arrival
- Connect the site to its environment
- Reinforce as a destination
- Create pride for the local community
- Reflect the character of the locale

The artworks both intervene and integrate at these points. The ideas for proposed entries inform the character of the precinct.

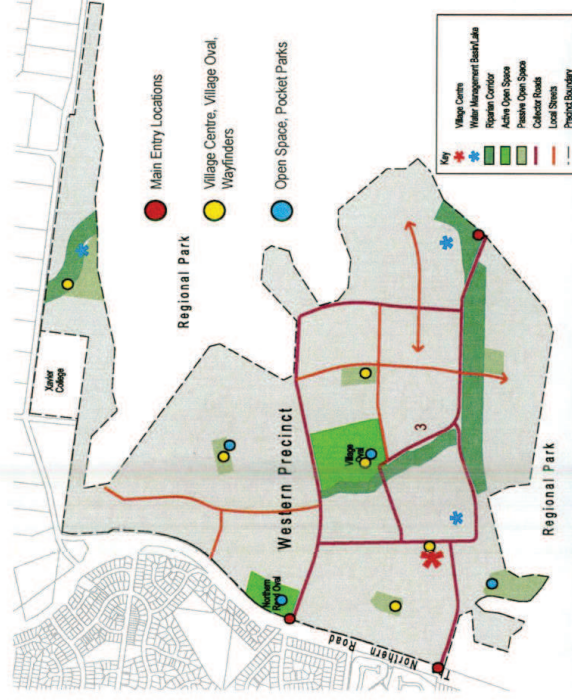
## Village Centre Water Urban

The objectives of artworks in the village centre are to

- respond to the water body as a destination
- Integrate with the edges of water and pathways
- Connect the Town Centre, Market and Community plazas
- Integrate with the business, residential and leisure usages

The type of artworks in the Village Centre will integrate with the built form, may provide innovative shelter structures as cohesive markers and may intervene robustly in the Village Centre hubs.

## Potential Artwork Locations



Artist: Richard Sturchbury entrance Carrington Place in Katoomba



Artist: Mina and Stonehouse The Ponds



Artist: Robyn Bucken Architecture of Building Wodanooko



Artist: Suey Bata Parramatta





## 12 MATERIALS AND FINISHES

### 12.1 Generally

The use of design and materials treatments should aim to recognise both the district, local and rural context of the Western Precinct as part of the Penrith area within the context of adjoining suburbs, and as a community within the Regional Park.

At the same time the development needs to provide an identifiable and marketable image to prospective residents that promotes the overall St Marys development as a desirable and attractive place to live and work.

The ongoing masterplanning and design development process will identify and confirm design and materials treatments for the Western Precinct public domain.

Listed below are materials objectives for each of the key public domain elements, that should be observed in this ongoing process.

### 12.2 Key materials & Finishes

- Pavements and Paths
- Street and Park Furniture
- Shelters
- Street Lighting

### Pavements

Footpath paving for the St Marys development including the Western Precincts must provide a hard wearing, cost effective and practically maintainable surface that enhances the character and identity of the public domain and provides an aesthetically pleasing visual experience.

A hierarchy of pavement treatments is desirable which will reflect the varied pedestrian and vehicular access roles of streetscapes and open space areas, from urban to natural landscape character contexts.

Park and open space areas provide an opportunity to apply a less structured approach to application of pavement materials, as parks tend to be destinations for users, and as such do not need to provide strong visual continuity between different sites. This is with the exception of:

- pedestrian linkages connecting to systems beyond the individual park; and
- cycle linkages connecting to systems beyond the park.

There is also a strong justification to limit the range of paving materials incorporated to the public domain (including parks and open space) to make maintenance, renewal and extension works more cost effective and practical for Council.

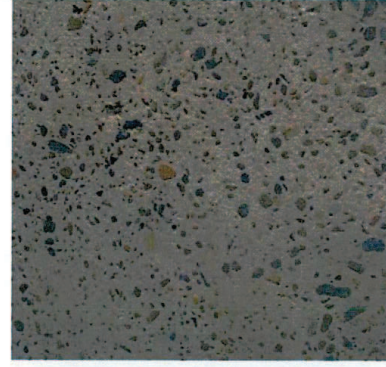
Potential materials for open space may provide for a limited range of materials from quality stone (for use as an accent and 'special places' pavement) to asphalt or exposed aggregate in situ concrete as a pathway surface through corridors and asset protection zones.

### Summary of key recommendations include:

- shared cycle / pedestrian path:
- pedestrian paths/ footpaths:
- bush tracks:
- paved entry areas / private domain:
- coloured concrete / plain concrete
- plain concrete
- crushed sandstone
- exposed aggregate concrete/ or unit pavement



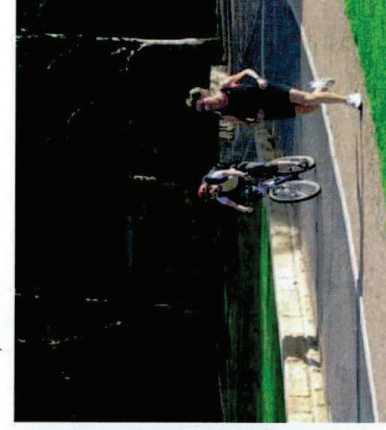
Porphyry sett threshold



Exposed aggregate concrete



Concrete path



Asphalt path



## 12 MATERIALS AND FINISHES

### Material Finishes

#### Concrete

Concrete provides an attractive path treatment, that is particularly suited to areas of intense use. Concrete finishes should be consistent with surrounding pavements (broomed, exposed aggregate etc.).

#### Asphalt

Asphalt paths are a highly cost effective path treatment that can be used in a number of situations. Asphalt is a particularly successful material for utilisation in bushland areas as it comfortably sits within bushland landscapes.

Asphalt will generally be laid on a stabilised base course with edge restraints.

#### Boardwalk

Timber, steel, precast concrete, or recycled plastic boardwalks are suitable for pedestrian access. Cycle access to boardwalks can only be in a low speed environment and is generally not suitable on steel or recycled plastic surfaces due to slip potential.

#### Stabilised Gravel

Stabilised decomposed granite gravel is likely to be used as a drainable surface alternative to hard pavements to pedestrian areas. Consideration needs to be given for slopes and drainage to avoid erosion of gravel pavements.

#### Edging

Flush Steel or concrete would be provided to open space where edging is required

#### Crushed Sandstone

Crushed sandstone is preferred to stabilised granite gravel to lower priority pedestrian / walking trails due to its finer compaction / texture, and inert nature with regard to native vegetation impacts. Regard needs to be given for slopes and drainage to avoid erosion of crushed sandstone pavements.

#### Gravel Tracks

In situ gravel tracks formed and maintained by regular use will occur as secondary / tertiary level of walking track access for temporary (short term) access provision, and some maintenance access routes. This surface needs to be maintained for erosion / gulying and can be supplemented by an overlay of crushed sandstone.

The development of the pedestrian and cycle network through the St Marys development including the Western Precincts are an important component of the ongoing planning for the site.

The success of the cycle routes will depend upon the suitability of the routes in providing effective and safe access, quality of surface, a pleasing visual environment, and clarity in route identification.

Where possible a unified colour surfacing and line marking system is followed as a long term objective for ongoing implementation that identifies cycle routes in their various forms. Major road crossing points will be treated differently to highlight their location.



Concrete path



Asphalt pavement



Stabilised gravel



Steel boardwalk



## 12 MATERIALS AND FINISHES

### 12.2 Public Domain

#### Street and Park Furniture

Furniture items have been selected considering both PCC preferred suppliers and providing both functional and aesthetic contributions to the quality of public domain and form part of a recognisable thematic approach particular to the Western Precinct.

For both maintenance, cost, and replacement purposes it is preferable that a simple palette of furniture be incorporated into open space design. Again opportunities may arise for specific "one off" designed elements such as artwork sitting walls or other elements to have design themes or interpretation in open spaces.

#### Bollards

Bollard treatments will reflect those undertaken in the Ropes Crossing of 250 x 175mm hardwood posts.

#### Signage

Signage will be subject to ongoing site specific design and related development approval.

#### Fencing

Fencing will be required to park edges adjoining residential allotments. Generally allotment design guidelines call for buildings to recognise the "second" address of the open space. A permeable fence treatment is a galvanised palisade to 1.8m height is proposed.

#### Shelters

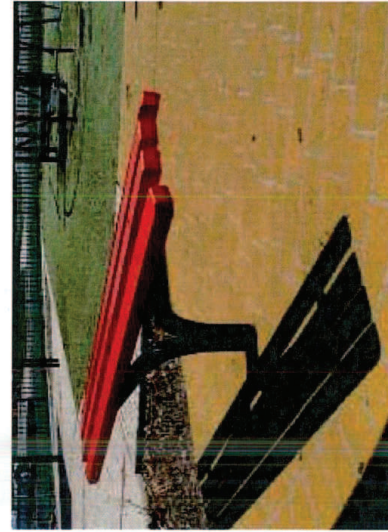
Design and material treatments for shelters in the Western Precinct are to be reflective of the surrounding village themes. As well as relating to an overall park character theme that integrates with paving, walling and other built elements. The scale will be directly informed by the hierarchy of the park type.



Backed Seating



Picnic table and Benches



Bench Seating

#### Village Centre

It is envisaged that one off furniture items may be designed and developed for the Village Centre which further enforce the Village Centre identity and reflect the overall Western Precinct themes.

#### Street lighting

One form of street lighting will be provided within the Western Precinct to contribute to a coordinated street environment. Selection will be subject to Integral Energy approval.

#### Open Space lighting

There are a range of issues that must be considered in determining the level of lighting to be provided to open space areas. The situations to which lighting may apply are:

1. Lighting of major cycle routes and pedestrian access paths for night time usage
2. Feature lighting of elements as visual displays (eg. sculpture/artwork elements, uplighting trees, feature bridges or structures)
3. Oval Lighting to Council requirements having regard for relationship to adjoining uses

Pedestrian lighting of path access ways through parks should be evaluated for each specific site based on linkage value, impacts on pedestrian amenity, and safety/security considerations. The use of pole top fittings to match those to pedestrian streets is the recommended approach to provide visual continuity where lighting is agreed to be required, however in general lighting will not be provided in open space.

#### Residential fencing adjacent to open space

Where lots are adjacent to open space a consistent and permeable (ie. low visual impact) will be used along the open space boundary.



## 12 MATERIALS AND FINISHES

### 12.3 Private Domain

The quality of landscape outcomes within the private domain inevitability affects the overall quality of public domain. The vision for private domain within the Western Precinct is that it retains a broad context within the natural regional park setting whilst also developing individual residential landscape character which enhances the following:

- enhances visual interest
- sense of place
- neighbourhood identity
- residential pride in the quality of private domain

Key Objectives for landscape in the Private Domain include;

#### **Reinforcement Of Native Canopy**

Reinforcement of existing tree canopy found within the Western Precinct throughout the private domain is desirable. This can be achieved through maximising native tree planting to property boundaries and front setbacks as appropriate. Tree placement should take into account overshadowing, stability issues and integration of infrastructure.

#### **Reflect The Local Natural Environment**

Residential landscaping should be sympathetic to the overall character of the Western Precinct and promote continuity with surrounding properties and the bushland setting within its Regional Park context.

#### **Water Conservation Planning**

Species selection should consider ongoing water demands. Where irrigation is utilised, drainage to storm water system must also be provided.

#### **A Place For Everything**

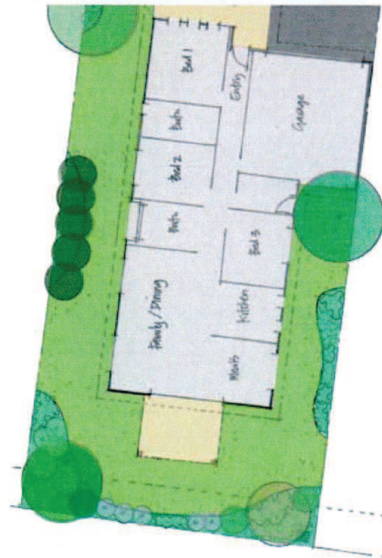
Landscape design should incorporate adequate planning to ensure open space remains uncluttered to the street. ie. locate bins to easy storage area and incorporate lockable garden shed.

#### **Stick To A Style**

Individual lots should predominately incorporate native species (locally endemic where appropriate) and natural materials in keeping with the rural/ bushland themes.

#### **Private Garden Manual**

A manual for residents that allows practical responses to the above principles with cost effective and clear ideas for private domain landscape enhancement has been developed and a landscape plan will be required to be submitted to PCC for approval for individual homes.





## 12 MATERIALS AND FINISHES

Summary Chart - Materials and Finishes

Street Furniture	Item	Corridors	Open Space	Streetscape	Village
Bench seats - urban	Playmaker Model No. CPLS-8 bench with triplex coated mild steel frame and galvanised legs, recycled hardwood battens	✓	✓	✓	
Bench and table - parklands	Playmaker picnic tables PTSC-6 and benches CPLS-8 shall be TBC mm length (subsurface fixing)	✓	✓	✓	
Platform seats - parklands	Playmaker Standard seats CPLS-8 with triplex coated mild steel frame and galvanised legs, recycled hardwood battens	✓	✓		
Rubbish bins - urban	Town and Park Furniture MB120/CL (Timber) 120 Litre Wheeled Bin Enclosure	✓	✓	✓	
Drinking fountains - urban	Urban Art Projects PRK06 Drinking Fountain, which allows wheel chair access with light touch, push button activation with a mounting pit	✓	✓	✓	
Bollards - parklands	Fixed / removable 250x175x1500mm hardwood stained with 10mm chamfer to top edges	✓	✓		
Bollards - urban	Fixed / removable 250x175x1500mm Azole treated pine stained with 10mm chamfer to top edges		✓	✓	
Bicycle rack/stand - urban	Street Furniture Australia BST04A Spiral Cycle Rack with Base	✓	✓	✓	
Lighting					
Standard Street Lighting	Energy Australia		✓	✓	
Feature Street Lighting	TBC			✓	
Park Nodes	TBC	✓			
Cycleway	TBC		✓	✓	

Paving Materials	Item	Corridors	Open Space	Streetscape	Village
Roundabout paving	Porphyry sett / interlocking pavement / exposed aggregate concrete			✓	
Island / median strip paving	Stabilised gravel			✓	
Roadside footpath	Concrete (Broom finished)		✓		
Path footpath	Concrete (Broom finished)	✓			
Bicycle path	Concrete (Broom finished)		✓		
Commuter Bicycle Path	Concrete (Broom finished)	✓			
Landscape Elements					
Retaining wall - natural	Basalt / sandstone rip rap	✓			
Retaining wall - urban	Coloured in situ concrete		✓		
Links Road Frontage	Basalt dry pack wall			✓	
Collector Road Frontage	Steel palisade			✓	
Regional Park Boundaries					
Fence	Black plastic coated chainwire		✓		
Signage			✓		
Neighbourhood Naming Sign	Custom designed from approved design standard		✓		
Shelters					
Bus Shelters	Colorbond roof sheeting, mild steel / corten steel posts - bench seat anodised aluminum slats			✓	
Open Space Shelters	Not applicable			✓	

Table 12.1 Summary chart of Materials and Finishes for Western Precinct



## 13 MAINTENANCE AND HANDOVER PROCESS

### Maintenance and Handover of Open Space

#### Objectives

The Landscape Maintenance and Handover Plan (LMAH) criteria and guidelines for the maintenance of open space within the Western Precinct is to provide all parties involved with a clear framework for their responsibilities. This report aims to ensure that the processes are undertaken and finalised in a logical and timely manner based on an agreed set of outcomes.

The agreement of ongoing maintenance levels is aimed to provide the new community with a level of assurance that the environment that they have moved into will not unreasonably be allowed to degrade over time. The LMAH identified the following maintenance phases;

#### Maintenance phases

##### a) On maintenance (12 months)

Refers to the contract maintenance period that is included in the implementation of open space and embellishment works by the developer and shall generally be of six to twelve months duration depending on the park type (Urban Character Parks to generally have longer establishment maintenance).

The maintenance period will incorporate a Defects Liability Period for hard landscape works and a plant establishment period for soft landscape works. During this time defects including plant losses will be monitored and addressed prior to final inspection (by Council) and handover to Council.

Three copies of As Constructed drawings of the embellishment works will be provided to Council along with any applicable warranties etc.

Establishment of landscape quality setting;

- Hard landscape finishes to be "settled in" and stable without deflections or drainage ponding
- Furniture elements maintained with firm fixings and any vandalism repaired, or damaged items replaced
- Soft landscape surfaces fully established (turf / grassed areas rolled, topdressed, and jointed), and any non-established areas replaced
- Turfed / grassed areas subject to weed control
- Turfed areas mown and watered to regular regime for establishment
- Plantings fully established and site hardened. Any non-established / failed items replaced
- Tree and garden bed plantings watered to regular regime for establishment
- Garden bed areas subject to weed control
- Garden plantings pruned / shaped as required
- All plantings fertilised as applicable
- Litter removal from open space
- Dumping removed

##### b) Supplementary maintenance by developer

The developer may determine in agreement with Council that it is desirable to continue maintaining areas of open space for an extended period for a deferred handover. This may be necessitated due to proximity to ongoing works stages, or other issues that make it more practical for maintenance of the subject area to be continued by the developer.

Establishment and maintenance of quality landscape setting;

- Hard landscape finishes to be "settled in" and stable without deflections or drainage ponding
- Impacts of adjoining works on existing finishes made good and "settled in"
- Furniture elements maintained with firm fixings and any vandalism repaired, or damaged items replaced
- Any non-established Soft landscape surfaces replaced
- Turfed areas mown and watered to regular regime for establishment
- Turfed / grassed areas subject to weed control
- Any non-established / failed plantings replaced
- Tree and garden bed plantings irrigated to regular regime
- Garden bed areas subject to weed control and regular re-mulching
- Garden plantings pruned / shaped as required
- All plantings fertilised as applicable
- Litter removal from open space
- Dumping removed

##### c) Off maintenance

Following the completion of the 12 months 'on maintenance' period, the developer will invite Council to inspect the works to be handed over. Council will advise of any issues that need to be achieved prior to handover. These will then be addressed as required by the developer's maintenance contractor.

Certain maintenance objectives that are deemed to fall outside the current scope of Councils capabilities and resources are identified as such with appropriate strategies for implementation identified.

Maintenance of quality landscape setting;

- Hard landscape finishes subject to weed management
- Any failure of hard landscape finishes to be identified and actioned
- Furniture elements monitored with firm fixings and any vandalism repaired, or damaged items replaced
- Turfed areas mown and irrigated to regular regime
- Garden bed areas subject to weed control
- Tree and garden bed vandalism actioned and replaced
- Litter removal from open space
- Dumping removed