

- Car parking; and
- Landscaped areas.

### 3.4.2 NSW Police Force business units

The Police Facility will comprise the following uses:

- Offices;
- Warehouse and archives;
- Workshops and garages;
- Hard stand areas for vehicles, plant and other equipment;
- Car parking;
- Landscaped areas;
- Up to two radio antennae, potentially up to 30m high; and
- An emergency helicopter landing pad. The helipad will be sited to ensure that there are no unacceptable impacts on nearby residents.



Figure 57 – Employment land – possible building types

### 3.4.3 TransGrid electricity substation

The proposed substation will be a new prototype. This development will be an essential component of the planned augmentation of the electricity supply for the greater Sydney

metropolitan area. While no design concepts have been prepared at this stage, a low profile building is envisaged built into the embankment south of Reservoir 1.

Substantial boundary setbacks from Rookwood Road, the proposed access road off Rookwood Road, and the Sydney Water Facility are also envisaged to allow for landscape screening and appropriate security measures.

#### **3.4.4 EnergyAustralia depot**

The existing parcel of land on Brunner Road currently occupied by Sydney Water administration uses and parking/ open storage also provides the opportunity for development as a depot for EnergyAustralia, comprising office and warehouse uses. This parcel will also be the subject of a future application.

#### **3.4.5 Signage on Rookwood Road**

It is envisaged that there will be identification signage and advertising on the Rookwood Road frontage of the employment precinct and possibly within the employment precinct as part of Sydney Water's delivery of community information about water use and conservation. Advertising signage is also desirable for the marketing of the residential precinct. Applications for consent for signage will be prepared at the appropriate time.

### **3.5 Road structure and access**

A concept of the potential road layout and access locations for the employment precinct and the residential precinct are shown on Figure 50 and Figure 51.

The traffic implications of the proposed access arrangements for the residential precinct, and for the employment precinct, including an assessment of the nature and scale of the expected occupants of the employment land have been addressed by MWT and are detailed at Appendix D. The assessment has been carried out using the proposed land-uses and expected traffic generation levels in accordance with accepted modelling approaches consistent with Council and RTA requirements. Proposed traffic management measures to address the effects of development are outlined in Section 4.5. Given that this is a concept plan application, the details of parking arrangements have not yet been addressed, however, compliance with relevant codes and policies is not expected to be a problem, and this will be addressed in subsequent project or development applications.

#### **3.5.1 Employment precinct**

The proposed access arrangements for the employment precinct comprise a cul-de-sac off Brunner Road in the location of the current access driveway into the Sydney Water site, and a cul-de-sac off Rookwood Road adjacent to the boundary with the greyhound track. Each access is proposed as a full-turning movement signalised intersection. This arrangement will enable adequate access to the employment precinct for internal users of the land, and will avoid any possibility of a traffic shortcut through the employment land between Brunner Road and Rookwood Road.

In addition, a pedestrian and emergency vehicle access will be provided from the Sydney Water Facility across the Sydney Water retained land to the residential precinct, to allow employees to walk to and from Birrong Station, and to facilitate access by emergency vehicles.

The other parcel of employment land on Brunner Road will be accessed via a driveway in the vicinity of the existing driveway to Sydney Water uses.

### 3.5.2 Residential precinct

The residential precinct will be served by two access points off Cooper Road, and one access point off Brunker Road just east of Cooper Road.

Two dedicated pedestrian access points are proposed off Cooper Road to facilitate efficient access between the residential precinct and Birrong Station.

### 3.6 Proposed land form

Geotechnical investigations have indicated that future landforms can closely follow the existing ground levels. Roads will be placed at grade wherever possible. Some earth works will be required to form terraces or retaining walls on the embankments in order to allow dynamic compaction, but otherwise the earthworks are expected to be minimal.

### 3.7 Removal of fill and re-use of Reservoir 1

The proposed solution to the geotechnical conditions on-site is dynamic compaction of fill areas to achieve stability. A trial measure is proposed. However, if the results are not satisfactory, an alternative approach will be adopted.

The alternative would be to remove an amount of fill that is equivalent to the weight/ pressure of the development that is likely to go on the land. This process is expected to produce an amount of surplus fill, which is estimated to be of such a quantity that is not cost effective to remove to landfill. Investigations carried out by Patterson Britton & Partners (now Worley Parsons) into the possible use of Reservoir 1 for the storage of the excess fill has determined that it is structurally and economically feasible (a copy of that report is included at Appendix J).

The preferred manner in which the fill could be stored is shown in Figure 58, prepared by Worley Parsons (formerly Patterson Britton & Partners).

The reservoir has the capacity to accommodate up to 6m of fill above the reservoir floor. The preferred approach to using the reservoir would see the fill located adjacent to the eastern and southern walls to improve its wall stability. It would be located to allow Sydney Water continued access to key infrastructure within and around the reservoir, and to allow the reservoir to continue to perform its present minor storm water management role.

In addition to locating the excess fill within Reservoir 1, there is an opportunity to utilise part of the reservoir for the storage of storm water or recycled water. These options are being investigated in conjunction with water sustainability measures associated with the redevelopment of the surplus land.

Preliminary investigations indicate that the storage of fill and water within Reservoir 1 (including site preparation and the transporting of fill) can be achieved without any detrimental impact on the fabric of the reservoir.

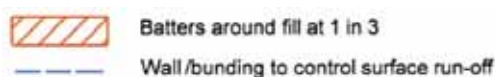
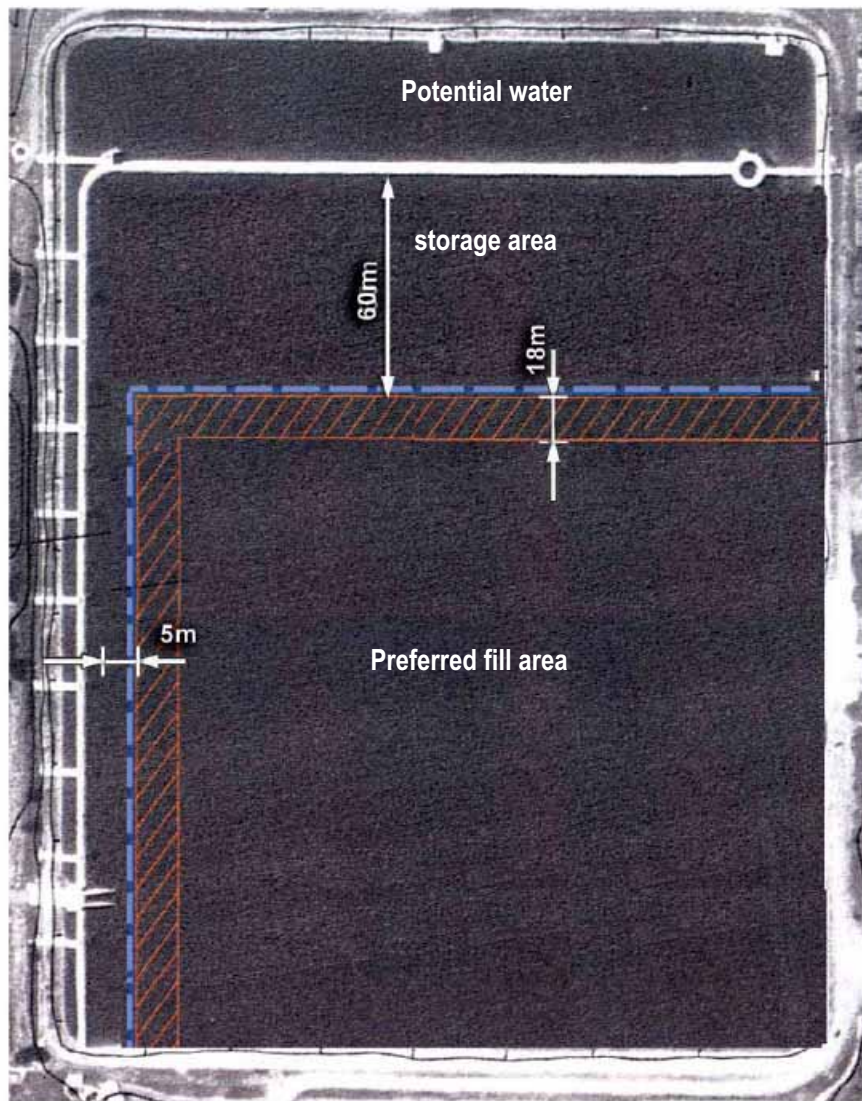


Figure 58 – Approach for the re-use of Reservoir 1 for storage of excess inert fill and/ or water

### 3.8 Proposed zonings

The proposed zones for the site are outlined below and shown on Figure 59. Under the arrangements for Part 3A applications and State Significant Sites, an amendment is needed to the Major Projects SEPP. Appendix K contains a draft amendment to the SEPP incorporating the preferred zoning and planning provisions, consistent with the 'new LEP Template'.

#### 3.8.1 Redevelopment land

##### Residential precinct

The preferred zoning for the residential component comprises Zone R2 Low Density Residential for the bulk of the residential precinct, and Zone R3 Medium Density Residential for the 2 sites identified as suitable for medium density/ apartment buildings, as shown on Figure 59. These zones allow for a range of housing types to respond to the market in this locality.



The concept planning for the residential precinct indicates that it has the capacity for around 410 dwellings, comprising around 230 predominantly detached dwellings, and two medium density sites that have the capacity for about 180 apartments or seniors housing.

The medium density (apartment building) sites have been identified after a rigorous assessment of the site and its attributes, including available views, presence of landscape to create a high level of amenity, and proximity to proposed park areas. These sites have the potential to create a high level of amenity, and on the basis of site planning, urban design and environmental assessment appear to be highly suitable medium density sites.

The actual number of apartment dwellings and seniors housing that may occur on these sites is dependent on market conditions. However, the assessment carried out for this concept proposal supports such an outcome on planning and urban design grounds.

Based on the above potential dwelling yield, the number of new residents that could be added to the existing Birrong community is expected to be in the order of 1,000–1,500 persons, depending on the final number and configuration of housing types.

This level of development and housing choice is considered appropriate having regard for the physical and landscape attributes of the site, and its proximity to public transport, employment and other essential community facilities and services.

#### **Employment / business park precinct**

The preferred zoning for the eastern employment area is Zone B7 Business Park. This zone is preferred on the grounds that it will enable a broad range of uses in line with the anticipated future uses. The employment area is expected to accommodate in the order of 800–900 employees.

#### **Open space**

The preferred zoning for the open space areas is zone RE1 Public Recreation. These areas are proposed for dedication to Bankstown City Council for recreation purposes.

#### **3.8.2 Sydney Water retained land**

Since the land to be retained by Sydney Water has been excluded from any rezoning action, it will remain under its current zoning arrangements (Bankstown and Auburn LEPs).

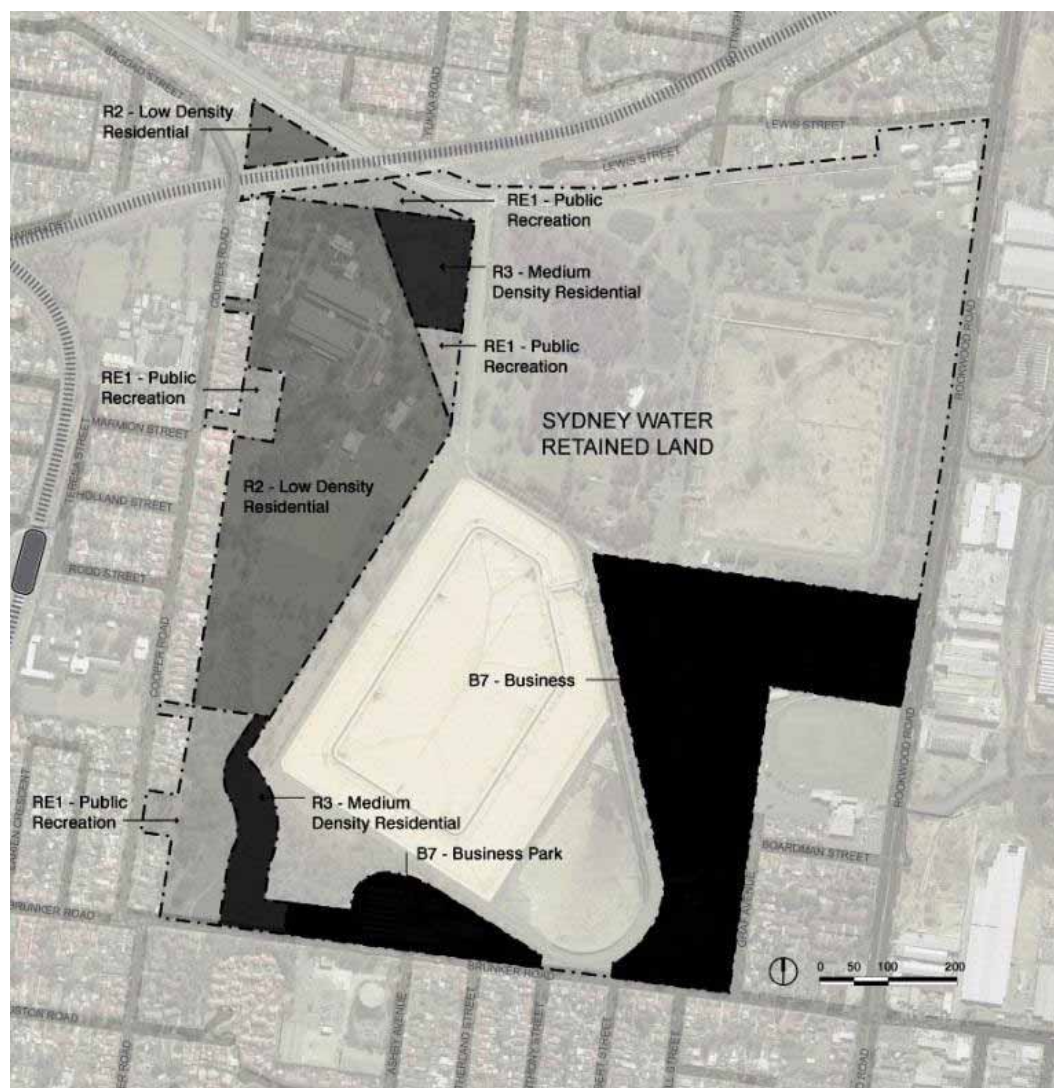


Figure 59 – Proposed zonings

### 3.9 Proposed development parameters

#### 3.9.1 Residential precinct

Residential development should deliver a range of housing types to meet the needs of different households, and in response to the location of the site close to public transport, employment, schools and other essential urban facilities. This should include detached and attached dwellings ranging from single dwellings to residential apartments and seniors' housing.

Given its locational characteristics, it would be appropriate for the residential precinct to achieve an overall density of at least 20 dwellings per hectare, which could comprise an area of 15 dwellings per hectare for mainly detached and attached dwellings, with 2 additional medium density areas suitable for apartments and/ or seniors housing, shown on Figure 60.

It is proposed that the maximum building height for the detached/ attached dwelling areas would be generally 2 storeys, and 3 storeys for the apartment/ seniors housing sites, as shown on Figure 61. In those parts of the proposed residential precinct where the final form of the embankment west of Reservoir 2 will result in steeper topography, it may be appropriate to allow three storey dwelling construction, with a garage at ground level and 2 storeys of residential accommodation above. The identification of areas where this may be suitable is expected to follow detailed site planning.



Figure 60 – Proposed density/ development parameters - business park and residential precinct

### 3.9.2 Employment / business park precinct

For the employment land, a density (or floor space ratio) of 1:1 is proposed, which matches Bankstown Council's current planning provisions for industrial development. Furthermore, a maximum building height of 16 metres is proposed, for both warehouse-style buildings and office components. Potential telecommunications towers within the employment area are likely to required, up to around 20 metres high.

The density and height parameters are illustrated on Figure 60 and Figure 61.

Development guidelines have been prepared for the business park area to address issues such as the relationship of future development along site interfaces to surrounding residential areas, landscape and public domain, and are outlined in Appendix I.





Figure 61 – Proposed building height - business park and residential precinct

### 3.10 Design guidelines

Draft design guidelines have been prepared for the proposed residential area by AJ+C, incorporating landscape proposals by Taylor Brammer, Landscape Architects. A copy of the guidelines is provided at Appendix H.

#### 3.10.1 Residential precinct

The guidelines for the residential precinct address the following matters:

- The landscape character sought for the residential area;
- Development guidelines for each of the character areas (outlined in Section 2), to make the most of the attributes of each area;
- Potential styles of residential development;
- Guidelines for proposed public domain areas;
- Street types and sections;
- Planting guidelines;
- Subdivision and siting objectives;



- Draft development controls for each type of residential development, which are to form part of the development controls for complying development. These draft controls address parameters such as floor space ratios; boundary setbacks; solar access; private open space; and access and car parking; and
- Siting guidelines for residential apartment buildings.

### **3.10.2 Employment/ business park precinct**

The guidelines for the employment/ business park precinct address the following matters:

- Overall vision for the business park;
- Desirable built form character;
- Planting guidelines;
- Subdivision and site planning; and
- Planning parameters, including floor space ratio; building height; boundary setbacks; and access and parking.

### **3.11 Heritage proposals**

A number of heritage-related measures are proposed for the redevelopment land (and the retained land) to reflect the heritage significance of the Reservoirs land. These include the following:

- Interpretive elements in the residential precinct reflective of the original street pattern within the Potts Hill area prior to the construction of the reservoirs;
- Interpretive elements in the residential precinct that recall the migrant workers' settlement, including street names and signage;
- Restoration and conservation of two heritage sheds on the eastern edge of Reservoir 2, and their incorporation into the new Sydney Water facility;
- Street names within the employment/ business park precinct associated with people connected with the site and Sydney Water;
- Retention of cultural planting within the ecological corridor, the proposed public open space areas, key development parcels, and the Sydney Water retained land;
- Provision of adequate distance separation between the new development and heritage elements remaining within the retained land;
- Landscape treatment at key locations within the residential precinct that relates to heritage planting schemes within the Reservoirs land;
- Landscape treatment along the interface of the redevelopment land and the retained land to provide visual transition between the developed land and open areas within the operational land; and
- A scale of development that is suitable for the site given its past use and future relationship with the retained land.

#### **3.11.1 Revised SHR boundary**

A submission will be made to the Heritage Council seeking approval to amend the boundary of the site that appears on the State Heritage Register.

A Heritage Impact Statement (HIS) prepared by Tanner Architects to accompany the submission demonstrates that the revised boundary relates appropriately to the operational area, and that the

proposed boundary respects the heritage context of the site, including cultural plantings of trees and shrubs. The Tanner HIS is located in Appendix L.

### 3.11.2 Re-use of Reservoir 1 for storage of inert fill

A HIS for the re-use of Reservoir 1 has been prepared by Tanner Architects and included at Appendix L. It demonstrates that the re-use of Reservoir 1 for the placement of inert fill and/ or water is consistent with the options assessed under the endorsed Conservation Management Plan (2005), and that storage of fill in the manner set out in this proposal is supportable on heritage grounds since it will assist with maintaining the structural integrity of the reservoir, will enable the heritage significance of the reservoir to continue to be appreciated, and will not have any detrimental impact on the heritage fabric or heritage values of Reservoir 1.

### 3.12 Proposed 'ecological footprint' and biodiversity package

A package of ecological outcomes addressing the ecological issues associated with redevelopment land has been prepared by Eco Logical Australia. A draft of the proposals was submitted to the Department of Environment and Climate Change in September 2007. The package and the associated assessments are the equivalent of the information and approach that would have been proposed for achieving 'biodiversity certification' under the *Threatened Species Conservation (TSC) Act 1995*.

Since September, 2007, a number of amendments have been made to the concepts for the redevelopment land (especially the location of proposed open space areas), and Sydney Water has identified two potential future areas within the retained land likely to be required for future water infrastructure. As a consequence, a revised report has been prepared by ELA. The principles of the original package of measures remain unchanged. A full copy of the updated ELA report is attached at Appendix B. The proposed ecological footprint is shown on Figure 62.

The package outlines the retention, rehabilitation, conservation and on-going management of ecological areas within the Sydney Water retained land, as an offset for the loss of ecological areas within the redevelopment land.

The gains and losses that have been identified from the ecological outcomes package are set out in Table 7 (from ELA report at Appendix B).

**TABLE 7 – ASSESSMENT OF VEGETATION 'GAINS AND LOSSES', POTTS HILL RESERVOIRS LAND**

Vegetation Community	Ecological Gains – Retain/ rehabilitate (ha)	Ecological Gains - revegetation (ha)	Losses (ha)	Neutral (ha)	Interim Gain (10-20 year - weed management only)
Cooks River/Castlereagh Ironbark Forest	6.36	-	0.26	1.11	0.22
Riparian (Cumbungi-dominated drainage)	-	-	0.07	0.04	-
Cumberland Plain Woodland	-	-	0.72	0.32	-
Grassland - Native	0.33	-	-	-	-
Sydney Turpentine Ironbark Forest	1.35	-	0.55	-	0.51
Revegetation (includes corridor - 2.23 ha).	-	10.49	-	-	-
<b>Total</b>	<b>8.04</b>	<b>10.49</b>	<b>1.60</b>	<b>1.47</b>	<b>0.73</b>

The ELA report concludes as follows in respect of the 'offset ratio' created by the biodiversity package, and the assessment of the principle of 'maintain or improve' biodiversity (ELA report, pp 25-29).

*'Comparing the loss of 1.60 ha, with the retention, management and rehabilitation of 8.04 ha in the retained land, gives an offset ratio of approximately 1:5 (loss vs gain).*

*Additionally, up to 10.49 ha of vegetation will be revegetated, which will consolidate existing fragmented patches of high conservation value vegetation. Revegetation within the proposed corridor will also promote connectivity between vegetation patches, thus 'linking up' the proposed ecological gains. These works will partially assist the achievement of the ecological corridor along the northern boundary of the site, which is identified as a desirable outcome in the Bankstown Biodiversity Strategy (BCC and ELA 2002).'*

*Based on the outcomes proposed in this document, the Part 3A Concept Plan proposal passes the 'maintain or improve' assessment for biodiversity values, because:*

- *Loss of 1.60 ha of vegetation will be offset by ecological gains of 8.04 ha of rehabilitation of existing vegetation (offset ratio 1: 5, loss v gain) and up to 10.49 ha of revegetation (offset ratio 1: 6, loss v gain) in retained lands*
- *Rehabilitation of 8.04 ha of vegetation proposed to be retained will improve the current condition of vegetation and habitat values.*
- *A loss of 0.26 ha of Cooks River/ Castlereagh Ironbark forest will be offset by ecological gains of 6.36 ha of rehabilitated Cooks River/ Castlereagh Ironbark forest (offset ratio 1: 24, loss v gain)*
- *A loss of 0.55 ha of Sydney Turpentine Ironbark Forest will be offset by ecological gains of 1.35 ha of rehabilitated Sydney Turpentine Ironbark Forest (offset ratio 1: 2.5, loss v gain)*
- *Enhanced connectivity on-site will be provided by a proposed 30m wide corridor connecting areas of retained vegetation in the north of the site to areas of vegetation in the south of the site*
- *Potential impacts of the proposal on threatened species Acacia pubescens, Eastern Bent-wing Bat and Grey-Headed Flying Fox have been assessed following Part 3A Draft Assessment Guidelines for Threatened Species listed under TSC Act."*

It should be noted that the reference in the ELA report (p27) to an additional area of 10.49 hectares of vegetation that will be revegetated includes an area adjacent to the water supply pipeline (north-west of Reservoir 1) that Sydney Water advises may be the subject of future consideration for water infrastructure. This area is presently largely cleared and contains existing underground water infrastructure that may need augmentation in future.

In summary, the proposed ecological outcomes located on the Sydney Water retained land include the following:

- Protection and enhancement (rehabilitation) of native vegetation communities;
- Restoration of vegetation communities in selected areas to consolidate or link currently fragmented native vegetation;



- Creation of an ecological corridor to link areas of retained native vegetation thus enhancing their long term viability and integrity;
- Protection of threatened plant species and areas of habitat;
- Improvements to habitat quality for certain threatened fauna species; and
- Provision for ongoing vegetation management by Sydney Water, and integrating these management outcomes with continued water management activities.

To provide security for proposed ecological outcomes Sydney Water has made the following commitments in respect of the retained land:

- The identification of areas likely to be needed for future water management infrastructure over the next 10–20 years;
- The preparation of an Environmental Management Plan (EMP) and a Vegetation Management Plan (VMP) for the Sydney Water retained land, in conjunction with DECC. The structure of those management plans is illustrated in the ELA report at Appendix B; and
- Implementation of the vegetation management plan over a five year period.

Appropriate funding for vegetation management will be identified by Sydney Water as part of the preparation of the VMP.

Given that the residential precinct contains vegetation communities listed under the Commonwealth EPBC Act, the proposals will be referred to the Commonwealth Department of Environment, Water, Heritage and the Arts (DEWHA) for consideration.



Figure 62 – Proposed ecological 'footprint'/ conservation gains and losses

### 3.13 Landscape proposals

A landscape concept for the residential precinct has been prepared by Taylor Brammer Landscape Architects (see Appendix M), and Figure 63.

Landscape guidelines for the employment precinct are included in Appendix I.

### 3.14 Development staging

The development works in the redevelopment land will commence on the employment precinct. Sydney Water proposes to commence works on the field headquarters facility as early as possible in 2009, which is likely to coincide with the commencement of the Police Facility. The delivery of physical infrastructure to the site has been the subject of preliminary discussion with all relevant service agencies as outlined in Section 2.11.

The likely sequence of development staging for the employment precinct will be as follows:

- Subdivision to create a “superlot” for the employment land (and further subsequent subdivision to create individual development parcels);
- Site preparation (remediation and earthworks);
- Installation of infrastructure (access roads, stormwater drainage, water reticulation, sewer, power, and telecommunications) in accordance with the requirements of servicing authorities, including off-site traffic management works subject to arrangements with Council and/ or the RTA; and
- Construction of buildings.

The residential precinct will form the second stage of the works. Sydney Water will vacate its facilities on the northern area of the residential precinct and relocate to the new field headquarters when completed. This will make the residential precinct available for development in stages with the southern area likely to start first.

The likely sequence of development staging for the residential precinct will be as follows:

- Subdivision of a “superlot” to create the overall residential area (and further subsequent subdivision to create development precincts);
- Site preparation (remediation and earthworks);
- Installation of infrastructure (access roads, stormwater drainage, water reticulation, sewer, power, and telecommunications) in accordance with the requirements of servicing authorities, including off-site traffic management works subject to arrangements with Council and/ or the RTA; public domain works;
- Subdivision to create individual retail house or medium density lots, roads and open space areas; and
- Construction of dwellings, and strata subdivision where necessary.

Detailed staging of the residential precinct will depend on market demand for the various types of housing proposed.





**Figure 63 – Proposed landscape concept for the residential precinct**

### 3.15 Job creation

The creation of jobs will commence with the construction of the new Sydney Water field headquarters and the Police Facility.

The Sydney Water Facility will accommodate employees from the existing buildings on Potts Hill as well as a number of other nearby locations. There will be about 450 employees in this facility.

The Police Facility will accommodate around 400 employees.

The completion of the Sydney Water Facility and the Police Facility will mean that the additional jobs will be created within the next three years.

The timing of the utility depot is expected to occur shortly after the completion of the Sydney Water and Police facilities, adding a further 50 employees.

The TransGrid substation will be an unmanned facility. Its construction program has not yet been determined.

### 3.16 Housing construction and community building

Housing construction in the residential precinct is not expected to occur until 2010, following the completion of the Sydney Water field headquarters, the associated demolition of existing buildings on the site, remediation and key earthworks to render the site suitable for development.

While the likely market conditions can not be predicted at this stage, it is anticipated that the site will be developed over a 4–5 year period. As a result, completion and full occupancy are expected to occur around 2015.

### 3.17 Social sustainability proposals

To address the potential social and community issues arising from the redevelopment, Heather Nesbitt recommended a number of actions outlined in Table 8. These measures will be investigated as part of a Strategic Social Plan to be prepared by Landcom as outlined in the Draft Statement of Commitments at Appendix O.

**TABLE 8 – RECOMMENDED SOCIAL AND COMMUNITY MEASURES**

<b>Healthy and inclusive community</b>
Partner with appropriate agencies to provide community infrastructure both on and off site
Implement a skills development program for local residents and local youth
Provide a range of housing products including flexibility in purchase and design approaches e.g. housing for extended families, culturally appropriate housing
Ensure marketing and financing strategies are appropriate to the local area's diverse population
Provide a component of housing for moderate income households
Ensure there are no physical and visual barriers between new development area and existing community

Table 8 cont'd

<b>Expanded/upgraded community infrastructure</b>
Partner with appropriate agencies to provide new/expanded community infrastructure including facilities and services/programs
Build on existing services/ programs/ organisations to ensure services are available to new residents and employees
Provide high speed broadband access to all homes and employment uses
Support provision of a community-based technology program to improve local skills and literacy
<b>Housing mix</b>
Provide a range of housing products including flexibility in purchase and design approaches e.g. housing for extended families, culturally appropriate housing
Provide a component of housing for moderate income households
Provide appropriate housing options suitable for older people already living in the area e.g. supported housing, homes for extended families, universal housing
<b>Skilled community</b>
Implement a skills development program for local residents and local youth
Support provision of a community-based technology program to improve local skills and literacy
<b>Public and active transport provision and linkages</b>
Prepare a Public and Active Transport Strategy for the site including initiatives for both residents and workers which:
– improve physical access to public transport services
– improve frequency of public transport services
– provide walking and cycling infrastructure which connect to existing facilities/attractors
– encourage use of public transport
– encourage active transport i.e. walking and cycling
– addresses car parking issue
<b>Valuing existing community assets</b>
Build on existing services/programs/organisations to ensure services are available to both new and existing residents
Implement a skills development program for local residents and local youth
Undertake a crime and safety audit for the Concept Plan and address concerns identified including safety at Birrong Railway Station
Undertake a crime and safety audit for all subsequent development applications and address issues raised
Provide a component of housing for moderate income households
Implement a Welcome Program for new residents which provides information on the existing community and links them to existing services, organisations and networks
<b>Community engagement</b>
Prepare and implement a consultation and communication program for the local community covering all stages of the development
Build on existing services/programs/organisations to ensure services are available to new residents and employees
Engage existing service providers and community organisations in the community infrastructure initiatives identified
Partner with appropriate agencies to provide community infrastructure both on and off site
Sydney Water develop opportunities to “open up” their existing facility for tours, educational activities and community partnerships



Table 8 cont'd

Healthy community
Prepare and implement a consultation & communication program for the local community for all stages of the development
Ensure the construction program for all development includes mitigation measures for dust, noise, etc
Ensure the transport strategy includes measures to ensure pedestrian and cyclist safety particularly around local schools

In respect of public access to the existing Reservoirs site, it should be noted that Sydney Water currently allows limited public access to the site during Heritage Week for interested heritage groups.

### 3.18 Services and utilities

All essential services and utilities will be provided to the residential and employment precincts in accordance with the requirements of servicing agencies. The connection to services will occur as the need arises with the staging of development.

### 3.19 Energy and water sustainability

A statement on energy and water sustainability has been prepared by Cundall (see Appendix N), outlined below

*The proposed development at Potts Hill will comply with all relevant sustainability requirements.*

*Eastern Precinct – Employment/Business Park*

*All government office buildings will be designed to achieve a minimum ABGR rating of 4.5 stars. This will include:*

- *Energy efficient building design; and*
- *Energy efficient hot water systems, air conditioners and lighting.*

*All buildings, including warehouses and TransGrid facility, will achieve the requirements of BCA Section J Energy Efficiency.*

*A site water management plan will be prepared and water efficient fixtures will be installed as standard throughout.*

*Western Precinct – Residential*

*All residential buildings will comply with the requirements of BASIX and BCA Section J Energy Efficiency.*

*Detailed strategies to address these sustainability requirements will be provided as part of the Project Applications when site specific built forms are proposed. In addition, all commercial offices will implement Energy Savings Action Plan in accordance with DEUS guidelines as soon as it is practically feasible post Practical Completion if applicable.*

Energy Savings Action Plans for the commercial buildings will be prepared by the relevant agency proposing these developments (i.e. Sydney Water, NSW Police Force, etc) following practical completion of these buildings.

Worley Parsons has prepared a stormwater management concept that addresses water sensitive urban design (WSUD) principles and the requirements of Bankstown City Council for on-site detention of stormwater run-off. The concept is shown on Figure 64. Its main components comprise:

- At-source runoff control, such as rainwater re-use and bio-retention systems; and
- Integration of water quality control measures with the urban design and ecological features.

*The proposed development will include a range of best practice measures to meet the following Water Sensitive Urban Design (WSUD) objectives:*

- *Reduction in potable water consumption;*
- *Utilisation of available rainwater;*
- *Minimisation of impacts on downstream receiving waters;*
- *Safe conveyance of stormwater;*
- *Integration of water management measures with landscape design into the proposed development, and*
- *Sustainable use of available water resource.*

*Elements of the WSUD approach .... include:*

- *rainwater tanks ...;*
- *bio-retention swales along roads ...;*
- *gross pollutant traps (GPTs) to remove sediment, debris, organic matter and litter; and*
- *bio-retention basins at focal points in the catchment ....*

*Generally, the stormwater treatment flow path for runoff in the residential area will consist of the following:*

- *Runoff from roof areas ... collected and retained in rainwater re-use tanks and then into the minor drainage system,*
- *runoff from many roads and lots .. directed into bio-retention swales where it will be filtered and treated biologically,*
- *stormwater collected from impervious areas (roads, paths and driveways) ... piped towards GPTs to remove coarse sediment, litter, debris, oils and greases, and*
- *runoff ... treated in bio-retention basins at catchment focal points.*

Development within the business park/ employment land will manage its own stormwater on-site.

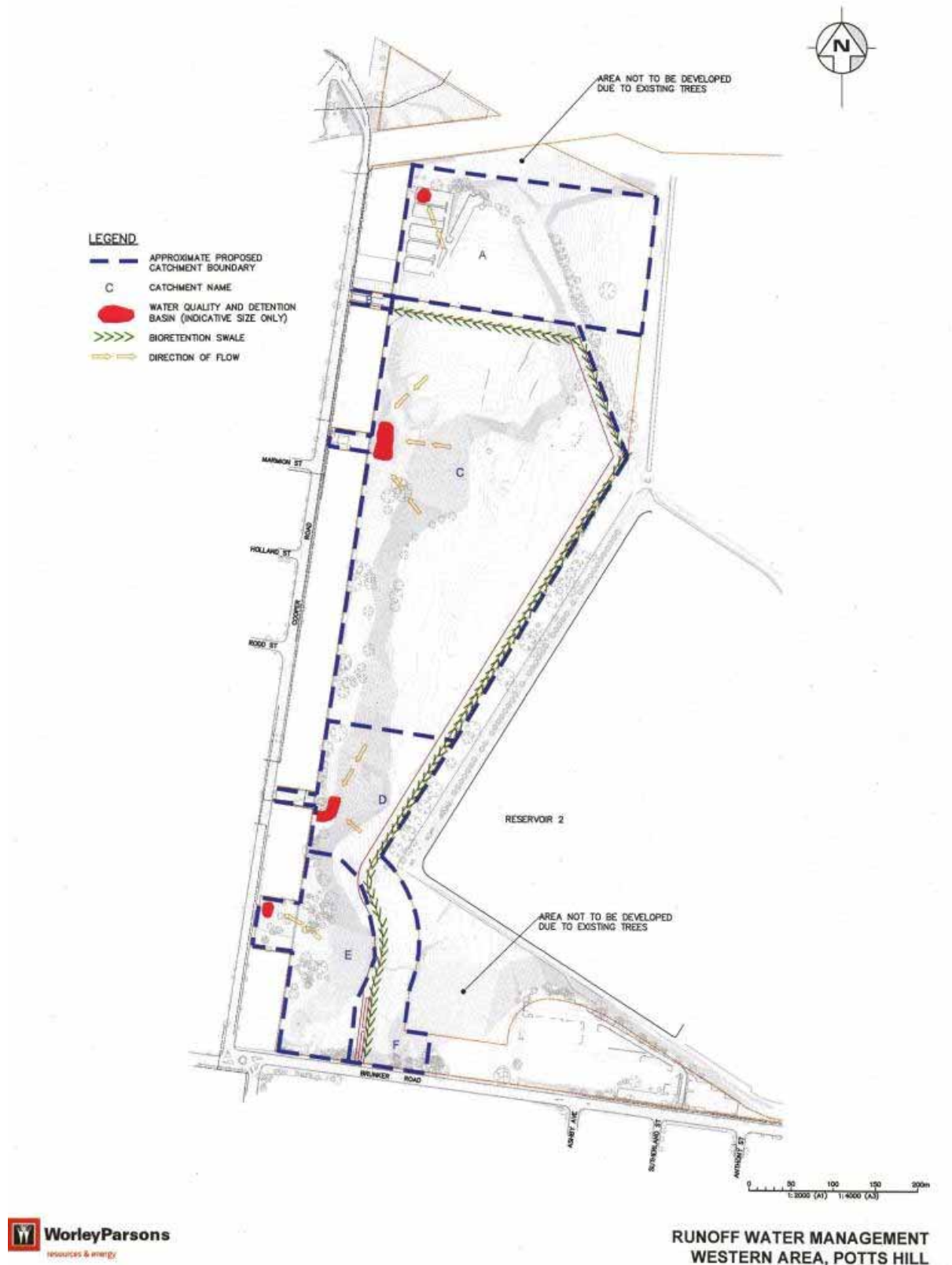


Figure 64 – Stormwater management concept for the residential precinct



### 3.20 Summary of project outline and approvals sought

A summary of the key outcomes expected for the Potts Hill Reservoirs land is provided in Table 9. Those aspects for which approval are sought are highlighted in **bold**.

**TABLE 9 – PROJECT OUTLINE AND APPROVALS SOUGHT**

LAND USE/ ELEMENT	AREA/ OUTCOME AND APPROVAL SOUGHT
Residential precinct	<p>19.8 hectares of net residential land that has the potential to yield around 410 dwellings, comprising approximately 230 detached/ attached dwellings, two sites suitable for medium density apartments/ seniors housing with a capacity for around 180 apartments. This equates to an overall density on the residential precinct of 20 dwellings per hectare.</p> <p><b>The low density area has a notional density of 15 dwellings per hectare. The two medium density areas have a notional maximum density of 0.7:1 floor space ratio (FSR).</b></p> <p>Built form is expected to be generally similar to the form in the surrounding residential areas. <b>The two areas proposed for medium density development have the maximum building height of three storeys.</b></p> <p><b>Adoption of residential design guidelines as controls for complying development.</b></p> <p><b>The preferred zoning is a combination of Zone R2 Low Density Residential, and Zone R3 Medium Density Residential.</b> These zonings will provide for a range of dwelling types to respond to the demand for a variety of housing in this locality.</p> <p>The residential development is expected to add approximately 1,000–1,500 persons to the local community.</p>
Employment/ business park precinct	<p>Approximately 15.3 hectares of employment land suitable for light industrial and business park-style activities; occupiers of the employment land are expected to include Sydney Water, NSW Police Force, TransGrid and EnergyAustralia.</p> <p><b>The preferred zoning is Zone B7 Business Park.</b></p> <p><b>A density (floor space ratio) of 1:1 is sought.</b></p> <p><b>A maximum building height of 16 metres is sought, excluding potential telecommunications antennae.</b></p> <p>Total employment is expected to be in the order of 800–900 employees.</p>
Open space	<p>4.9 hectares of open space in four locations: an area in the south-western corner of the site adjacent to Brunner Road/ Cooper Road; an area adjacent to the water supply canal; an area off Cooper Road in the centre of the site; and an area alongside the freight line in the northern part of the site – to be dedicated to Bankstown City Council. These areas are most suitable for passive recreation.</p> <p><b>The preferred zoning for the open space areas is Zone RE1 Public Recreation.</b></p>
Sydney Water 'retained land'	<p><b>Approval for the use of Reservoir 1</b> for the storage of surplus inert fill, and/ or storage of stormwater (or recycled water), in lieu of approval under Section 60 of the Heritage Act.</p>
Biodiversity package	<p><b>Approval of the biodiversity package</b> so that it is acknowledged that future development on the site to be rezoned for residential purposes is not likely to significantly affect any threatened species, population or ecological community or its habitat.</p>