

JRPP Ref. No.:	2010SYW059
DA No.:	DA10/0851
PROPOSED DEVELOPMENT:	Stormwater Management Basin and Related Site Works – Lot 1036 DP 1149525, 1070-1170 The Northern Road, Llandilo
APPLICANT:	Maryland Development Company Pty Ltd
REPORT BY:	Robert Craig, Senior Environmental Planner, Penrith City Council



(Source: JBA Urban Planning Consultants)

Assessment Report

Executive Summary

A Development Application has been received from Maryland Development Company Pty Ltd for a stormwater management basin and related site works in the Western Precinct of the St Marys Release Area (otherwise known as the Jordan Springs estate) at Lot 1036 DP 1149525, 1070-1170 The Northern Road, Llandilo. Maryland Development Company is a joint venture company comprising St Marys Land Ltd (the landowner and joint developer) and Lend Lease Development Pty Ltd (joint developer).

The subject site is zoned *Urban* under *Sydney Regional Environmental Plan No. 30 – St Marys*. The proposed development is defined as a “drain” (including stormwater detention basins) and “park”, which are both permissible forms of development with consent in the *Urban* zone.

The proposed development is Designated Development under Section 77A of the *Environmental Planning and Assessment Act 1979*. As such, the Sydney West Region Joint Planning Panel has the function of determining the application in accordance with

Section 23G of the *Environmental Planning and Assessment Act 1979*.

The proposed development is also Integrated Development under Section 91 of the *Environmental Planning and Assessment Act 1979*. In this regard, concurrent approval has been sought and obtained from the following state government authorities in accordance with relevant legislation:

- NSW Fisheries Office – Section 219 of the *Fisheries Management Act 1994* (Part 7 Permit to obstruct the passage of fish)
- NSW Office of Water – Section 91 of the *Water Management Act 2000* (Controlled Activity Approval to undertake works within 40m of a watercourse)

The proposed development was advertised in the local newspapers on two separate occasions and notified to the owners and occupiers of adjoining and nearby properties. A total of 117 property owners and occupiers were notified in the surrounding area as well as Blacktown City Council, being the adjoining local government area. The public exhibition period for the proposal was from 11 September to 15 October 2010. There were no public submissions received in relation to the proposal.

An assessment of the proposed development under Section 5A, Section 23G, Section 77A, Section 79C and Section 91 of the *Environmental Planning and Assessment Act 1979* has been undertaken and the proposal has been found to be satisfactory. The following key issues have emerged as a result of this assessment process:

- Stormwater management
- Landscape and open space treatment
- Flora and fauna impacts

These matters are discussed in detail in this report.

The proposed development is in accordance with the relevant provisions of the environmental planning instruments, Precinct Plan, Development Control Strategy and Development Control Plan pertaining to the land. The proposed development is unlikely to have a negative impact on the surrounding environment. The site is suitable for the proposed development and the proposal is in the public interest. The proposed development represents a significant contribution towards the establishment of a new greenfield master planned estate in the City of Penrith. The proposed development will not only provide major social and economic benefits to the wider community but also to the future residents of the estate. The proposal is therefore worthy of support.

This report recommends that the application be approved subject to recommended conditions of consent.

There are six appendices to this report, as detailed below.

- Appendix No. 1 – Location Plan
- Appendix No. 2 – Aerial View of Site
- Appendix No. 3 – Site Plan & Typical Cross-Sections
- Appendix No. 4 – NSW Fisheries' General Terms of Approval
- Appendix No. 5 – NSW Office of Water's General Terms of Approval
- Appendix No. 6 – Zoning Plan

Background

The St Marys Release Area forms part of the former St Marys ADI (Australian Defence Industries) site, with the balance of the site contained in the Blacktown local government area. The site was previously used as a munitions factory by the Commonwealth Government. The majority of the site munitions manufacturing operations ceased by 1994.

The St Marys ADI site was endorsed by the NSW Government for inclusion on the Urban Development Program in 1993. On 19 January 2001, *Sydney Regional Environmental Plan No. 30 – St Marys* (SREP 30) was gazetted. SREP 30 rezoned 1,535 hectares of land on the site to permit a range of urban uses and a large area of regional parkland and regional open space. The overall site comprises six development precincts as shown in the figure below, including the Western Precinct, Central Precinct and South Dunheved Precinct in the Penrith local government area and the Eastern Precinct, Ropes Creek Precinct and North Dunheved Precinct in the Blacktown local government area.

Development Precincts of the former St Marys ADI Site



(Source: JBA Urban Planning Consultants)

On 29 September 2006, the Minister for Planning declared the Western Precinct to be a “release area” under the provisions of SREP 30. Since that time, a Precinct Plan for the Western Precinct and an accompanying Development Control Strategy have been prepared to guide future development of the Western Precinct. The Precinct Plan and Development Control Strategy were adopted by Penrith City Council at its Ordinary Meeting on 23 March 2009. The adopted Precinct Plan and Development Control Strategy function like a Development Control Plan in the assessment of Development Applications for the precinct.

The first series of Western Precinct residential subdivision proposals, being Stage 1A, Stage 1B and Stage 1C including a total of 109 residential lots, were approved by Penrith City Council at its Ordinary Meeting on 30 November 2009. Subdivision Certificates for these initial stages were issued by Council on 2 December 2010 and registration of the subdivisions occurred on 20 December 2010.

The Stage 1D residential subdivision including a further 18 residential lots was approved by Penrith City Council under delegated authority on 9 March 2010. This subdivision is currently under construction on the site. Other development approvals issued by Council under delegated authority include public domain landscaping works, real estate signage, village centre works (sales and information centre, town square and main street providing public road access through the hub of the future village centre) and use of the Stage 1D lots as an exhibition village.

The Stage 1E residential subdivision proposal including a total of 98 residential lots was approved by Penrith City Council at its Ordinary Meeting on 11 October 2010. The Stage 1F residential subdivision including a further 25 residential lots was approved by Council under delegated authority on 14 December 2010. The Stage 1G residential subdivision including a further 17 residential lots was approved by Council under delegated authority on 25 January 2011.

The applicant attended a pre-lodgement meeting in relation to the subject proposal on 16 April 2010. The key issues identified by Penrith City Council officers at the pre-lodgement meeting have been addressed as part of the Development Application.

Site and Surrounds

The Western Precinct of the St Marys Release Area, otherwise known as the Jordan Springs estate, is 229 hectares in area inclusive of the Xavier College site located at the north-western corner of the precinct fronting Ninth Avenue (Llandilo). The Western Precinct is bordered by Ninth Avenue and rural-residential development in Llandilo to the north, The Northern Road and residential development in Cranebrook to the west and regional parkland to the south and east. The Western Precinct is zoned entirely for urban purposes and is intended to accommodate primarily residential uses, with limited non-residential uses in the future village centre such as local retail and commercial uses.

The subject site is located centrally in the southern half of the Western Precinct, approximately 500m to the east of The Northern Road (refer to the location plan at Appendix No. 1). The site is approximately 5.4 hectares in area and is situated immediately to the east of the Stage 1 residential subdivisions and the future village centre, main street and town square. The site adjoins the future north-south and east-west running riparian corridors which contain natural and engineered drainage lines. These drainage lines flow to South Creek and have been identified as watercourses by the NSW Office of Water. The regional parkland is located approximately 100m to the south of the site.

The site is currently vacant and does not contain any existing structures although drainage lines and access roads associated with the site's past uses traverse the site. The site is largely devoid of significant vegetation and predominately comprises cleared grassland. A number of trees scatter the site primarily in the south-eastern corner and along the western boundary (refer to the aerial view of the site at Appendix No. 2).

The site slopes gently from the north-western corner to the south-eastern part of the site with an overall cross-fall of approximately 4m. The site is generally level with the exception of a number of shallow depressions.

The Proposed Development

The proposed development includes the following aspects:

- Construction of a stormwater management basin to capture and treat rainfall and stormwater flows from urban development in the Western Precinct. The basin will be a

wetland/detention basin that will be filled naturally via stormwater flows and rainfall collected within upstream catchments. The basin will have an eventual maximum depth of 2m, a surface area of approximately 3.27 hectares and a volume of 55.5 megalitres.

- Excavation works including the importation of approximately 40,000m³ of clean inert fill material to form the proposed basin and basin edge (including the batters and slopes to hold the required volume of water).
- Provision of a water-proof polymer liner to the base of the basin to prevent any interaction between groundwater and water in the basin.
- Construction of the basin edge including the placement of existing and imported rocks and concrete and the establishment of macrophyte planting beds to assist with water quality management in the basin.
- Construction of the basin outlet and spillway.
- Landscaping and embellishment works in the areas surrounding the basin including tree planting, provision of turfed areas and the construction of walkways, street furniture, play spaces and safety perimeter fencing around parts of the basin.
- Tree removal and other related site works.

The following documents and plans have accompanied the Development Application:

- Environmental Impact Statement – JBA Urban Planning Consultants
- Engineering Plans – Sinclair Knight Merz
- Landscape Plans – Environmental Partnership
- Flora and Fauna Impact Assessment – Cumberland Ecology
- Stormwater Management Report – Sinclair Knight Merz
- Construction Noise, Vibration and Air Quality Assessment – Sinclair Knight Merz
- Waste Management Plan – Delfin Lend Lease
- Landscape Maintenance Manual – Environmental Partnership
- Indigenous Heritage Assessment – Jo McDonald Cultural Heritage Management
- Traffic Assessment – Halcrow
- European Heritage and Archaeological Sites Assessment – Casey & Lowe

Refer to Appendix No. 3 for a copy of the site plan and typical basin cross-sections. A full set of scaled engineering and landscape plans are held at Appendices B and C of the Environmental Impact Statement submitted with the application.

Planning Assessment

The proposed development has been assessed against the relevant heads of consideration contained in Section 5A, Section 23G, Section 77A, Section 79C and Section 91 of the *Environmental Planning and Assessment Act 1979*, and based on this assessment, the following issues have been identified for further consideration.

1. Section 23G – Joint Regional Planning Panels

Under Section 23G of the *Environmental Planning and Assessment Act 1979*, a regional panel is taken to be the Council whose functions are conferred on a regional panel.

The proposed development is Designated Development under Section 77A of the *Environmental Planning and Assessment Act 1979*. Under Clause 13B of *State Environmental Planning Policy (Major Development) 2005*, a regional panel has the function of determining applications for Designated Development. The Sydney West Region Joint Planning Panel therefore has the function of determining the subject Development Application in accordance with Section 23G of the *Environmental Planning and Assessment Act 1979*.

Penrith City Council officers met with the Sydney West Region Joint Planning Panel on 2 December 2010. The purpose of the meeting was to present and brief the panel members on the Development Application ahead of the panel's determination of the application at a future panel meeting.

2. Section 77A – Designated Development

As previously discussed, the proposed development is Designated Development under Section 77A of the *Environmental Planning and Assessment Act 1979*. In this regard, the proposed development is defined under Schedule 3 of the *Environmental Planning and Assessment Regulation 2000* as an "artificial waterbody". Artificial waterbodies satisfying the following criteria constitute Designated Development:

(1) *Artificial waterbodies:*

- (a) *that have a maximum aggregate surface area of water of more than 0.5 hectares located:*
 - (i) *in or within 40 metres of a natural waterbody, wetland or an environmentally sensitive area, or*
 - (ii) *in an area of high watertable or acid sulphate, sodic or saline soils, or*
- (b) *that have a maximum aggregate surface area of water of more than 20 hectares or a maximum total water volume of more than 800 megalitres, or*
- (c) *from which more than 30,000 cubic metres per year of material is to be removed.*

The proposed stormwater management basin will have an aggregate surface area of approximately 3.27 hectares and the subject site is located within 40m of a natural waterbody in an environmentally sensitive area. The proposed development therefore constitutes Designated Development.

An Environmental Impact Statement (EIS) prepared by JBA Urban Planning Consultants on behalf of the applicant has been submitted as part of the Development Application in accordance with Section 78A(8)(a) of the *Environmental Planning and Assessment Act 1979*. The EIS provides an assessment of the proposed development in accordance with the Designated Development provisions of the *Environmental Planning and Assessment Act 1979* and the *Environmental Planning and Assessment Regulation 2000*.

The Development Application and accompanying EIS have been advertised, notified and publicly exhibited in accordance with the Designated Development provisions of the *Environmental Planning and Assessment Act 1979* and the *Environmental Planning and Assessment Regulation 2000*. In this regard, the proposed development was advertised in the local newspapers on two separate occasions and notified to the owners and occupiers of adjoining and nearby properties as well as Blacktown City Council, being the adjoining local government area.

The public exhibition period for the proposal was from 11 September to 15 October 2010 in accordance with the minimum statutory period of 30 days required for Designated Development proposals. Copies of the exhibition material were held at the Penrith City Civic Centre, Council's Queen Street Centre (St Marys), the Penrith City Library and the NSW Department of Planning's Information Centre in Bridge Street, Sydney. An exhibition sign providing details of the proposal was also placed on the site in accordance with the Designated Development public notice provisions.

On 22 April 2009, the Director of Major Infrastructure Assessments from the NSW Department of Planning (as delegate of the Director-General) issued Director-General's requirements for the proposal. The matters identified in the Director-General's requirements have been addressed as part of the Development Application.

3. Section 91 – Integrated Development

The proposed development is also Integrated Development under Section 91 of the *Environmental Planning and Assessment Act 1979*. In this regard, concurrent approval has been sought from the following state government authorities in accordance with relevant legislation:

- NSW Fisheries Office – Section 219 of the *Fisheries Management Act 1994* (Part 7 Permit to obstruct the passage of fish)
- NSW Office of Water – Section 91 of the *Water Management Act 2000* (Controlled Activity Approval to undertake works within 40m of a watercourse)

The NSW Fisheries Office has assessed the proposed development pursuant to the *Fisheries Management Act 1994* and raised no objections to the proposal subject to general terms of approval (GTAs) (refer to Appendix No. 4 for a copy of the GTAs). The GTAs are recommended to be suitably conditioned (see Special Condition 2.40). It should be noted that the Fisheries Office has advised that a Part 7 Permit is not required as part of the proposed works.

The NSW Office of Water has assessed the proposed development under the *Water Management Act 2000* and raised no objections to the proposal subject to GTAs (refer to Appendix No. 5 for a copy of the GTAs). Prior to the issue of a Construction Certificate, the applicant will be required to obtain a Controlled Activity Approval in accordance with the GTAs. This matter is recommended to be suitably conditioned (see Special Condition 2.41).

It should be noted that the NSW Office of Water has also included GTAs for the proposal under the *Water Act 1912*. Prior to the issue of a Construction Certificate, the applicant will be required to obtain a Water Licence in accordance with the GTAs. This matter is recommended to be suitably conditioned (see Special Condition 2.42).

4. Section 79C(1)(a)(i) – Any Environmental Planning Instrument

Sydney Regional Environmental Plan No. 30 – St Marys

Sydney Regional Environmental Plan No. 30 – St Marys (SREP 30) is the main statutory planning framework document for the entirety of the St Marys Release Area. It includes land use zones, zone objectives and special provisions to control development and provides the process for land release and the approval of precinct plans. The overarching aim of SREP 30 is to provide a framework for the sustainable development and management of the entire St Marys site.

SREP 30 is accompanied by the *St Marys Environmental Planning Strategy 2000* (EPS) which identifies the aims for the future use and management of the St Marys site and sets out specific performance objectives and strategies to address key planning issues, including conservation, cultural heritage, water and soils, transport, urban form, energy and waste, human services, employment and remnant contamination risk. The St Marys EPS identifies actions to be undertaken by local and state governments, as well as the obligations of developers. The Precinct Plan and Development Control Strategy for the Western Precinct address the requirements of the St Marys EPS and incorporate development objectives and typical planning and design principles and guidelines for the Western Precinct, as discussed later in this report.

The subject site is zoned *Urban* under SREP 30. The proposed development is defined as a “drain” (including stormwater detention basins) and “park”, which are both permissible forms of development with consent in the *Urban* zone (refer to the zoning plan at Appendix No. 6).

The proposed development is consistent with the aims and objectives of the REP. The particular objectives of the *Urban* zone are addressed as follows:

- (a) *to ensure that buildings and works within the zone are primarily used for residential purposes and associated facilities, and*

The proposed development comprises non-residential development associated with the future urban residential development of the precinct.

- (b) *to limit the range and scale of non-residential uses to ensure that they are compatible with residential amenity and primarily serve local residents, and*

The proposed non-residential uses will be compatible with the future residential amenity and will primarily serve local residents.

- (c) *to provide for local retailing and related services, including supermarkets, which will complement established centres in the Blacktown City and Penrith City local government areas and not have a significant adverse effect on the viability of established retail centres, and*

- (d) *to provide for medium density residential development in locations which provide optimum access to employment, public transport and services, while ensuring residential amenity, and*

- (e) *to promote home based industries where such activities are unlikely to adversely affect the living environment of neighbours, and*

These objectives will be addressed through other future stages of development in the estate in accordance with the Penrith City Council endorsed Precinct Plan.

- (f) *to ensure that development adjacent to the Regional Park zone does not have a negative impact on biodiversity or conservation within that zone.*

The proposed development will not have a negative impact on biodiversity or conservation in the regional parkland.

As outlined above, the proposed development satisfies each of the relevant objectives of the *urban* zone.

There are several special provisions contained in SREP 30 which seek to control development on the St Marys site. These provisions are considered below.

- **Clause 20 – Development Consent Restrictions**

The consent authority must be satisfied that proposed developments are consistent with the applicable zone objectives and performance objectives (relating to conservation, cultural heritage, water and soils, transport, urban form, energy and waste, human services, employment and remnant contamination risk). The consent authority must also consider the development control strategies contained in the EPS, the applicable Precinct Plan and any relevant Development Agreements. The development proposal suitably satisfies each of these matters.

- **Clause 44 – Consultation with National Parks and Wildlife Service**

Consultation with the Department of Environment, Climate Change and Water (DECCW),

which incorporates the National Parks and Wildlife Service, is required regarding development proposals adjoining the regional parkland. The Development Application was not referred to DECCW as there are no works proposed adjacent to the regional parkland.

- **Clause 51 – Salinity and Highly Erodible Soils**

The Soil and Water Management Plan forming part of the Western Precinct Plan includes recommended strategies to be implemented to address potential soil salinity issues should they occur. Specific measures to prevent the proposed development resulting in increased soil salinity are to be implemented on the site and are detailed on the submitted engineering plans. These measures are consistent with the Precinct Plan recommendations and aim to reduce rainwater infiltration in locations at which recharging of the water table is likely to result in saline minerals rising up through the soil. In particular, a water-proof polymer liner is to be provided to the base of the proposed stormwater basin to prevent any interaction between groundwater and water in the basin. In addition, the soil salinity management measures outlined in the Western Precinct Plan will be implemented during construction. This matter is recommended to be suitably conditioned (see Special Condition 2.43).

- **Clause 52 – Tree Preservation**

This clause requires approval for tree removal. All existing trees on the site are intended for removal. The extent of proposed tree removal is considered negligible relative to the extensive tracts of high quality bushland that will be conserved within the regional parkland. In addition, extensive compensatory tree planting will be provided around the edges of the basin.

Sydney Regional Environmental Plan No. 20 – Hawkesbury-Nepean River (No. 2 – 1997)

Sydney Regional Environmental Plan No. 20 – Hawkesbury-Nepean River (No. 2 – 1997) (SREP 20) integrates planning with catchment management to protect the Hawkesbury-Nepean river system, requiring the impact of future land use to be considered in a regional context. The plan covers water quality and quantity, environmentally sensitive areas, riverine scenic quality, agriculture and urban and rural-residential development. It controls development that has the potential to impact on the river environment. The plan applies to all parts of the catchment in the Sydney region (15 local government areas, including Penrith), except for land covered by *Sydney Regional Environmental Plan No. 11 – Penrith Lakes Scheme*. SREP 20 is supported by an Action Plan, which includes actions necessary to improve existing conditions.

The development proposal is in accordance with the general planning considerations set out in Clause 5 of SREP 20 and the relevant specific planning policies and related recommended strategies set out in Clause 6. In particular, provision will be made for adequate erosion and sediment control measures to ensure sediment as a result of the development is not deposited in the Hawkesbury-Nepean River via the stormwater system.

State Environmental Planning Policy No. 55 – Remediation of Land

State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55) aims to provide a framework for the assessment, management and remediation of contaminated land throughout the state. Clause 7(1) of SEPP 55 prevents consent authorities from consenting to a development unless it has considered whether the land is contaminated and is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the

purpose for which the development is proposed to be carried out.

The St Marys site has been subject to extensive contamination investigations and where necessary remediation works throughout the 1990s. The objectives of the investigation and remediation program were to assess the nature and degree of chemical contamination and/or identify any potentially explosive ordnance to allow the remediation of the site to a level where it was suitable for redevelopment for a variety of uses. The former Environment Protection Authority (EPA), now the Department of Environment, Climate Change and Water (DECCW), has been involved throughout this process and an EPA accredited Site Auditor has issued Site Audit Statements for the St Marys site under the *Contaminated Land Management Act 1997*. The majority of the site has now been validated for residential and other sensitive land uses through these Site Audit Statements.

For the purposes of the remediation and validation, the St Marys site was divided into nine sectors. The Western Precinct includes the following sectors and associated Site Audit Statements (SASs):

- Part Western Sector – SAS CHK001/1
- Part Southern West Sector – SAS CHK001/1, SAS CHK001/6 and SAS CHK001/7

The information presented in the remediation and validation reports for these sectors has been used to develop a Contamination Management Plan (CMP) for the Western Precinct. The majority of the precinct has been assessed by the Site Auditor to pose a negligible risk to the public or the environment with regard to chemical contamination or explosive ordnance. Areas under retained roads and building footprints which have not yet been addressed by the SASs will require future investigation and assessment. Access roads associated with the site's past uses traverse the site, therefore a SAS for these parts of the site will need to be issued prior to the issue of a Construction Certificate. This matter is recommended to be suitably conditioned (see Special Condition 2.44).

The CMP aims to ensure the appropriate management of any sub-surface contamination that may be encountered during works in the Western Precinct. The CMP was adopted by Penrith City Council as part of the Western Precinct Plan. The CMP outlines the measures to be undertaken should contamination and/or explosive ordnance material be uncovered during the proposed works. The development proposal will be carried out in accordance with the procedures set out in the CMP and the conditions and procedures set out in the SASs relating to the Western Precinct. This matter is recommended to be suitably conditioned (see Special Condition 2.45).

5. Section 79C(1)(a)(ii) – Any Draft Environmental Planning Instrument

There are no draft environmental planning instruments applicable to the subject site or to the proposed development.

6. Section 79C(1)(a)(iii) – Any Development Control Plan

Western Precinct Plan and Development Control Strategy

The Western Precinct Plan and Development Control Strategy, being much like a Development Control Plan that is to be used in the assessment of Development Applications, provide the parameters to ensure that future development within the Western Precinct achieves the performance objectives of SREP 30 as well as those contained in the *St Marys Environmental Planning Strategy 2000*. The proposed development is in accordance with the relevant development objectives and typical planning and design principles and guidelines for the Western Precinct. The key planning and design principles relevant to the development

proposal are considered below.

Section 4.9 Landscape and Open Space

The application has been accompanied by landscape plans which provide for landscaping and embellishment works in the public domain areas surrounding the basin. These works include tree planting, provision of turfed areas and the construction of walkways, street furniture, play spaces and safety perimeter fencing around parts of the basin. The landscape works will provide for the high-quality embellishment of the site with suitable ground covers, shrubs and trees which, at maturity, will complement the scale, design and function of the proposed basin.

The application has been accompanied by a Landscape Maintenance Manual prepared by Environmental Partnership. The Landscape Maintenance Manual outlines the maintenance and operational requirements associated with the proposed basin edges and play spaces. The Landscape Maintenance Manual will be fine tuned in consultation with Penrith City Council's Parks Department as part of the Construction Certificate process. It should be noted that there will be a one year maintenance period following practical completion of the basin edges and play spaces. After this period, the basin basin edges and play spaces will be handed over to Penrith City Council.

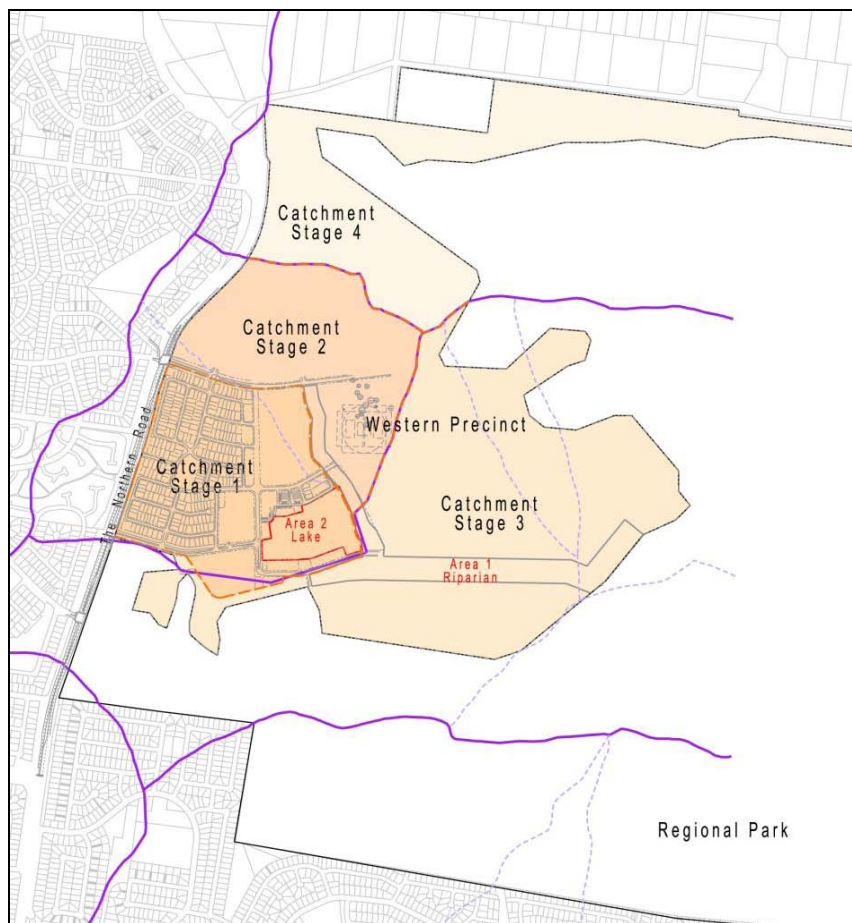
Penrith City Council's Landscape Architect and Parks Department have reviewed the proposed landscaping and embellishment works in the areas surrounding the basin and are satisfied with this aspect of the development proposal subject to conditions (see Special Condition 2.46).

Section 4.11 Water Cycle Management

The proposed stormwater management basin will capture and treat rainfall and stormwater flows from urban development in the Western Precinct. The basin will be a wetland/detention basin that will be filled naturally via stormwater flows and rainfall collected within upstream catchments. The basin will have an eventual maximum depth of 2m, a surface area of approximately 3.27 hectares and a volume of 55.5 megalitres. The proposed basin consists of a deep water zone and a perimeter safety bench macrophyte zone which will consist of reed beds around the perimeter of the basin. The basin will provide detention, facilitate removal of nutrient suspended solids and provide a habitat for wildlife. The basin waters will be suitable for secondary contact access only and therefore recreational use will be limited.

The proposed basin will function as the main water cycle management measure for the Stage 1 catchment of the Western Precinct, as shown in the figure on the following page. Interim stormwater management and sediment control basins will operate until such time as the proposed basin is operational. While only two stormwater inlets are proposed to convey stormwater from development within the Stage 1 catchment, the basin has been designed so that the future north-south running riparian corridor and drainage channel will also connect to the basin and convey stormwater flows from a wider catchment. The proposed basin will provide peak stormwater flow mitigation (detention) for the 2 year to 100 year ARI (average reoccurrence interval) storm events and will ultimately work in tandem with three other stormwater detention basins which will be progressively constructed as the Western Precinct further develops. The stormwater quality functions of the basin will also work in tandem with two other basins which will ultimately be constructed outside the precinct.

Western Precinct Drainage Catchment Stages



(Source: JBA Urban Planning Consultants)

The application has been accompanied by a Stormwater Management Report prepared by Sinclair Knight Merz. This report provides details of the hydrological assessment undertaken to determine peak flow rates for existing conditions at the subject site at its downstream end and an assessment of the peak flow rates for a fully developed catchment. The size of the proposed basin and its outlet has been designed to provide sufficient peak flow mitigation such that the peak flows from the fully developed catchment do not exceed current peak flow rates.

The water quality objectives for the proposed basin are to achieve the target reductions of pollutant loads generated from a fully developed upstream catchment. A water quality assessment has been undertaken by Sinclair Knight Merz as part of the Stormwater Management Report using the MUSIC model (model for urban stormwater improvement conceptualisation) to estimate the reduction in water pollution by the proposed basin. The main purpose of the modelling was to demonstrate that the proposed water quality management controls would meet the water quality objective of reducing the annual pollutant loads generated from the future urbanised catchment. The results of the modelling indicate that the proposed size of the basin will meet and exceed this objective.

While water quality wetlands provide an effective means of treating stormwater in urban areas, ongoing maintenance is essential in maintaining water quality performance. The application has been accompanied by a Basin Maintenance Manual prepared by Sinclair Knight Merz as part of the Stormwater Management Report. The Basin Maintenance Manual outlines the maintenance and operational requirements associated with the proposed basin

and includes a maintenance regime, noxious weed management protocols and inspections regime. The Basin Maintenance Manual will be fine tuned in consultation with Penrith City Council's City Works and Parks Departments as part of the Construction Certificate process. It should be noted that there will be a three year maintenance period following practical completion of the basin. After this period, the basin will be handed over to Council.

A water balance assessment has been undertaken by Sinclair Knight Merz as part of the Stormwater Management Report to investigate water levels in the proposed basin and to estimate the draw down changes to water levels that will occur due to partial and then ultimate development of the upstream catchment. The water balance model results indicate that the drop in water levels would rarely be more than 200mm for partial development of the upstream catchment and 150mm for the ultimate development of the upstream catchment. A sensitivity assessment was also undertaken to determine any potential significant impacts from climate change. This assessment indicated that the effect of climate change on any additional drops in the basin water levels would not be significant.

Penrith City Council's Development Engineer and Waterways Officer have reviewed the proposed development regarding stormwater quantity and stormwater quality considerations. In this regard, Council's Development Engineer and Waterways Officer are both satisfied with these aspects of the proposal subject to standard and special conditions (see Standard Conditions 2.20 to 2.29 and Special Conditions 2.46 to 2.50).

Penrith Development Control Plan 2006

The development proposal is in accordance with the relevant provisions of *Penrith Development Control Plan (DCP) 2006*. Not all provisions of this DCP are applicable to the Western Precinct based on overriding provisions contained in the Precinct Plan and Development Control Strategy. The relevant provisions are considered in this report either in discussions relating to the applicable environmental planning instruments or in terms of the likely impacts of the development proposal.

7. Section 79C(1)(a)(iia) – Any Planning Agreement

St Marys Penrith Planning Agreement

The *St Marys Penrith Planning Agreement* was executed on 19 December 2006 by the co-signatories Penrith City Council, St Marys Land Limited and Lend Lease Development Pty Ltd. At this time, the Planning Agreement only related to development within the South Dunheved Precinct and required the provision of local transport works, local open space works and water quality basins. A Deed of Variation to the Planning Agreement was subsequently executed on 12 May 2009 to include provisions relating to the development of the Western and Central Precincts, including provision of local open space works, human services works, a central park and related facilities (as part of the regional open space land) and passive recreation elements in the regional parkland.

The Planning Agreement is the principal means for identifying infrastructure requirements, facilities and services which will be delivered for the incoming community. The Planning Agreement identifies proposed work schedules, delivery timing and contributions for the Western and Central Precincts. The works and contributions relevant to the Western Precinct include:

- Delivery of a district park (5.5 hectares), neighbourhood park (2.5 hectares), local park (1 hectare), four pocket parks (3.1 hectares), four open space corridors (3.53 hectares) and a pedestrian and cycle path network.
- Delivery of a multi-purpose community resource centre, temporary neighbourhood centre,

library contribution, community initiatives fund, funding for a community development worker and a community bus.

- Undertaking of works and payment of a contribution to a combined value of \$11,705,850 for the establishment of district open space in accordance with Penrith City Council's adopted City-wide District Open Space Development Contributions Plan. This plan identifies the opportunity for the establishment of a multi-sports facility located adjacent to the Central Precinct for which the applicant will contribute works to the value of \$6,834,000 for the establishment of this facility. This will be required within 12 months from the issue of development approval for the 500th residential lot in the Central Precinct. The balance of the funds, which will be in the form of a monetary contribution, can potentially be available for the establishment of district open space facilities elsewhere in the City. The initial component of this contribution (\$1,400,000) will be required following development approval of the 1,000th lot in the Central and Western Precincts combined.
- Payment of a contribution of \$486,400 for cultural facilities development in accordance with Penrith City Council's adopted City-wide Cultural Facilities Development Contributions Plan. The initial component of this contribution (50%) is due for payment upon the issue of the Occupation Certificate for the 1,000th dwelling in the Western Precinct.
- Payment of a contribution of \$20,000 towards studies to determine characteristics and needs and preferences of the community.

The current application includes provision for the central basin park in the basin surrounds and the relevant parts of the pedestrian and cycle path network in accordance with the provisions of the Planning Agreement. The provision of the stormwater management basin will be conditioned as part of the development consent for the proposal. The remaining works and contributions will be provided as the Western Precinct is progressively developed.

It is recommended that an advisory condition be imposed reiterating the applicant's obligations under the *St Marys Penrith Planning Agreement* (see Special Condition 2.51). Ongoing management, maintenance and dedication requirements for the proposed stormwater management basin and central basin park under the Planning Agreement are also recommended to be suitably conditioned (see Special Condition 2.52).

St Marys Development Agreement

The *St Marys Development Agreement* dated 13 December 2002 is also in place between the applicant and the State Government. This Development Agreement relates to the entire St Marys site and includes provisions for works, dedications and contributions regarding the regional parkland, regional open space, regional transport and road infrastructure and affordable housing.

It is recommended that an advisory condition be imposed reiterating the applicant's obligations under the *St Marys Development Agreement* (see Special Condition 2.53).

8. Section 79C(1)(a)(iv) – The Regulations

There are no fire safety matters applicable to the proposed development under the *Environmental Planning and Assessment Regulation 2000*.

9. Section 79C(1)(b) – The Likely Impacts of the Development

Context and Setting

The development proposal is consistent with the existing character of other development in

surrounding suburbs. The proposal is compatible with the surrounding and adjacent land uses and will have no major impact on the amenity of the area. The proposal will have no adverse impacts on the natural environment.

Access and Traffic

Construction vehicle access to the subject site will be via Jordan Springs Boulevard which is the main entry collector road off The Northern Road. The application has been accompanied by a Traffic Impact Assessment prepared by Halcrow. Halcrow concludes that the proposed vehicle access arrangements are satisfactory and that the additional traffic flows which will be associated with the construction works can be accommodated by the surrounding road network.

Penrith City Council's Traffic Engineer has reviewed the proposed development with regard to access and traffic considerations and has provided the following comments:

The Traffic Study reports on the potential impacts of truck movements to/from the site during construction of the lake.

In summary, construction will occur during approved hours and truck movements limited to minimise heavy vehicle trips on The Northern Road during busy times (e.g. school hours). Although some disruption will occur to general traffic in the vicinity, the surrounding road network can cater for the additional vehicles and sight distances are satisfactory at access points.

Construction operations will be in accordance with the contractor's Construction Traffic Management Plan.

In summary, Council's Traffic Engineer is satisfied with the proposed access and traffic related aspects of the proposal.

It will be necessary for a Construction Traffic Management Plan detailing construction vehicle routes, numbers of trucks, hours of operation, access arrangements and traffic control to be submitted and approved prior to the issue of a Construction Certificate. This matter is recommended to be suitably conditioned (see Special Condition 2.54).

Flora and Fauna

Flora and Fauna Impact Assessment

Under Section 5A of the *Environmental Planning and Assessment Act 1979* (the Act), an assessment must be made as to whether a development proposal is likely to have a "significant effect" on any threatened species, populations or ecological communities or their habitats (referred to as an "Assessment of Significance" or "seven-part test"). The application has been accompanied by a Flora and Fauna Impact Assessment prepared by Cumberland Ecology in accordance with Section 5A of the Act. This assessment finds that Cumberland Plain Woodland (CPW) is the main ecological community that occurs on the site amongst a mosaic of native and exotic grassland with minor occurrences of three other ecological communities. CPW is dominated by Grey Box Eucalypts (*Eucalyptus moluccana*) and Forest Red Gums (*Eucalyptus tereticornis*) and contains a variety of other lesser known eucalypts as well as shrubs, grasses and herbs. CPW is also the main native vegetation community occurring more broadly within the Western Precinct.

Cumberland Ecology concludes as part of its assessment that the development proposal is not likely to have a "significant effect" on any ecological communities, threatened species or

habitats, including CPW, as detailed below.

The development of the Village Lake will result in the clearance or modification of a portion of the small patch of regrowth Cumberland Plain Woodland and exotic grassland present in the study area. As a result, a small area of potential habitat for threatened fauna such as the Cumberland Land Snail, some bat and possibly some bird species will be removed. However the areas of disturbed bushland concerned are very small relative to the extensive tracts that will be conserved within the 900ha Regional Park.

The future Village Lake will provide some habitat for aquatic and semi aquatic fauna, such as macro invertebrates, fish, water fowl, frogs, lizards and possibly bats through the attraction of insects. The creation of vegetated and connective riparian habitat will increase the habitat value in the study area and improve the water quality of downstream habitats in South Creek tributaries.

Therefore, whereas the development will contribute cumulatively to the removal of woodland habitat within the Western Precinct, such removal is not considered likely to constitute a significant impact in terms of the Assessment of Significance...

Sustainable areas of CPW have been set aside for conservation in the regional parkland. The zoning of the St Marys site facilitated the creation of the regional parkland as compensation for the potential future loss of CPW and associated species habitats in development precincts. *Sydney Regional Environmental Plan No. 30 – St Marys* and the Western Precinct Plan establish the regional parkland as the foremost conservation measure to compensate for development in the Western Precinct and the other development precincts.

Based on the findings contained in the Flora and Fauna Impact Assessment, a Species Impact Statement (SIS) is not required to further assess the level of impact from the development proposal. It should be noted that as part of the Stage 1A, 1B and 1C residential subdivision proposals for the Western Precinct, an independent flora and fauna consultant was engaged by Penrith City Council to undertake a peer review of the Flora and Fauna Impact Assessments prepared by Cumberland Ecology. The independent consultant, UBM Ecological Consultants, concluded that there would be nothing gained through the preparation of a SIS in relation to Cumberland Plain Woodland at the Development Application stage given that all stakeholders have agreed that a regional park will be established and that this parkland will conserve representative samples of the identified ecological communities, threatened species and habitats. In addition, UBM concurred with Cumberland Ecology's findings that the removal of small fragmented areas of potential habitat for the Cumberland Snail is "not significant". These conclusions can therefore be extrapolated to apply to the subject development proposal.

Penrith City Council's Natural Systems Team has reviewed the proposed development with regard to flora and fauna impacts and is satisfied with the methodology, findings and recommendations of the submitted Flora and Fauna Impact Assessment. Council's Natural Systems Team has provided conditions for the development proposal in relation to flora and fauna matters which are recommended to be suitably conditioned (see Special Conditions 2.55 to 2.59).

NSW Threatened Species Conservation Act 1995

On 18 December 2009, CPW was up-listed under the *NSW Threatened Species Conservation (TSC) Act 1995* from an "endangered ecological community" to a "critically endangered ecological community" ("endangered" means likely to become extinct or in immediate danger of extinction). The heightened conservation status of CPW was assessed

and considered as part of the methodology, findings and recommendations of the Flora and Fauna Impact Assessment.

Commonwealth Environment Protection and Biodiversity Conservation Act 1999

The Commonwealth *Environment Protection and Biodiversity Conservation (EPBC) Act 1999* focuses on the protection of matters of National Environmental Significance (NES). Development proposals that are likely to have a significant impact on matters of NES ("controlled actions") must be assessed and approved under the EPBC Act by the Commonwealth Department of Sustainability, Environment, Water, Population and Communities.

On 9 December 2009, CPW was up-listed under the EPBC Act from an "endangered" ecological community to a "critically endangered" ecological community (i.e. an extremely high risk of extinction in the wild in the immediate future). As previously mentioned, CPW is the main native vegetation community occurring within the Western Precinct. The ecological community was also re-named from CPW to "Cumberland Plain Shale Woodlands and Shale Gravel Transition Forest". This change reflects its key location, substrate and vegetation structure and more clearly reflects its relationship with two threatened ecological communities listed under the NSW *Threatened Species Conservation Act 1995* (i.e. CPW and Shale Gravel Transition Forest in the Sydney Basin Bioregion).

Assessment of development proposals relating to the St Marys site is not required under the EPBC Act. Assessment and approval under Commonwealth environmental law was granted to the entire St Marys development under the former *Environment Protection (Impact of Proposals) Act 1974*, prior to the gazettal of the EPBC Act. This position was confirmed in writing by the former Commonwealth Minister for Environment Protection, Heritage and the Arts in a letter dated 31 March 2010 to the Western Sydney Conservation Alliance (WSCA).

Conservation Outcomes

In summary, the proposed development is considered satisfactory with regard to flora and fauna impacts for the following reasons:

- The significant level of background investigations leading up to the release of the Western Precinct for urban development.
- The estate is zoned for urban purposes and has effectively been ratified by three levels of government.
- The Western Precinct is an extensively altered landscape comprising mainly mixed exotic and native grasses.
- The examples of CPW communities that occur in the Western Precinct are highly degraded and consist of sparse native tree regrowth with largely disturbed understoreys.
- The largest and highest quality vegetation communities (including CPW) and habitats are found outside the Western Precinct in the 900 hectare regional parkland (the land area of the Western Precinct is 229 hectares). The regional parkland represents approximately 58% of the total land area of the overall St Marys site.
- The extent of proposed tree removal is considered negligible relative to the extensive tracts of high quality bushland that will be conserved within the regional parkland.
- Assessment of the development proposal under the NSW *Threatened Species Conservation Act 1995* has been undertaken and the proposal is not likely to have a "significant effect" on any ecological communities, threatened species or habitats.

Aboriginal Archaeology

The management of Aboriginal archaeology on the site is to be undertaken in accordance with approvals that have been issued by the Department of Environment, Climate Change and Water (DECCW) under Section 87 and Section 90 of the *National Parks and Wildlife Act 1974*. Salvage excavation work is ongoing on the site in accordance with these existing consents, with much of the salvage work having been completed. Clearance reports will be submitted to DECCW allowing for development works to commence on sites at which salvage works are complete. The potential for future development of the site to result in impacts to Aboriginal archaeological significance has been thoroughly addressed and as such no further impacts will result from the proposal.

European Heritage

There are four heritage items located within the Western Precinct listed under *Sydney Regional Environmental Plan No. 30 – St Marys*. These heritage items are not located in the vicinity of the subject site.

Waste Management

The application has been accompanied by a waste management plan which suitably describes the likely waste generation of the proposal and identifies appropriate actions to manage the generation, storage and disposal of waste.

Community Safety

Safety perimeter fencing will be provided around the parts of the basin where level changes exceed 1m in height. Lower basin edge accessible areas will be provided with a hob edge. With the exception of the basin foreshore area immediately to the south of the proposed town square, the proposed basin design provides for a minimum 3m safety ledge at the basin edge which is no deeper than 600mm and no steeper than 1:8 (v:h). The safety ledge will be adjoined by a transition area of 1m which is no steeper than 1:5 (v:h). The basin foreshore area immediately to the south of the proposed town square will be provided with safety chains immediately below the water level to provide a safety support in case of an emergency.

Noise, Vibration and Air Quality

The application has been accompanied by a Construction Noise, Vibration and Air Quality Assessment prepared by Sinclair Knight Merz. This assessment concludes that the likely impacts of the proposal will be negligible in terms of noise, vibration and air quality impacts subject to the implementation of appropriate mitigation measures. Penrith City Council's Environment Team has reviewed the proposed development with regard to potential noise, vibration and air quality impacts and is satisfied with the methodology, findings and recommendations of the submitted assessment subject to conditions (see Special Conditions 2.60 to 2.63).

Social and Economic Impacts

The proposed development represents a significant contribution towards the establishment of a new greenfield master planned estate in the City of Penrith. The proposed development will not only provide major social and economic benefits to the wider community but also to the future residents of the estate.

10. Section 79C(1)(c) – The Suitability of the Site for the Development

The site attributes are conducive to the development proposal. The proposal has been designed in a manner consistent with the character of the locality.

11. Section 79C(1)(d) – Any Submissions made in relation to the Development

The proposed development was advertised in the local newspapers on two separate occasions and notified to the owners and occupiers of adjoining and nearby properties. A total of 117 property owners and occupiers were notified in the surrounding area as well as Blacktown City Council, being the adjoining local government area.

The public exhibition period for the proposal was from 11 September to 15 October 2010 in accordance with the minimum statutory period of 30 days required for Designated Development proposals. Copies of the exhibition material were held at the Penrith City Civic Centre, Council's Queen Street Centre (St Marys), the Penrith City Library and the NSW Department of Planning's Information Centre in Bridge Street, Sydney. An exhibition sign providing details of the proposal was also placed on the site in accordance with the Designated Development public notice provisions.

There were no public submissions received in relation to the proposal.

External Referral Comments

The table below summarises the results of external referrals in relation to the proposal.

<i>Referrals</i>	<i>Comments</i>
NSW Fisheries	No objection, subject to general terms of approval.
NSW Office of Water	No objection, subject to general terms of approval.

Internal Referral Comments

The table below summarises the results of internal Penrith City Council referrals in relation to the proposal.

<i>Referrals</i>	<i>Comments</i>
Development Engineer	No objection, subject to conditions.
Environment Team	No objection, subject to conditions.
Landscape Architect	No objection, subject to conditions.
Natural Systems Team	No objection, subject to conditions.
Parks Department	No objection, subject to conditions.
Traffic Engineer	No objection.
Waterways Officer	No objection, subject to conditions.

12. Section 79C(1)(e) – The Public Interest

The site is suitable for the proposed development. The proposed development is permissible in the *Urban* zone and the proposal meets the aims and objectives of the relevant environmental planning instruments. No public submissions were received in relation to the

proposal.

Section 94 Contributions

The following Section 94 contributions plans apply to the subject site:

- Cultural Facilities
- Penrith City District Open Space Facilities

The *St Marys Penrith Planning Agreement* includes provisions relating to works and contributions which off-set the payment of Section 94 contributions under the above contributions plans. These works and contributions will be provided as the Western Precinct is progressively developed.

Conclusion

The proposed development is in accordance with the relevant provisions of the environmental planning instruments, Precinct Plan, Development Control Strategy and Development Control Plan pertaining to the land. The proposed development is unlikely to have a negative impact on the surrounding environment. The proposed development represents a significant contribution towards the establishment of a new greenfield master planned estate in the City of Penrith. The proposed development will not only provide major social and economic benefits to the wider community but also to the future residents of the estate.

The proposed development has been assessed against the relevant heads of consideration contained in Section 5A, Section 23G, Section 77A, Section 79C and Section 91 of the *Environmental Planning and Assessment Act 1979* and has been found to be satisfactory. The site is suitable for the proposed development and the proposal is in the public interest. The proposal is therefore worthy of support.

Recommendation

That:

1. The information contained in the report on Development Application No. DA10/0851 for a stormwater management basin and related site works in the Western Precinct of the St Marys Release Area at Lot 1036 DP 1149525, 1070-1170 The Northern Road, Llandilo be received.
2. Development Application No. DA10/0851 for a stormwater management basin and related site works in the Western Precinct of the St Marys Release Area at Lot 1036 DP 1149525, 1070-1170 The Northern Road, Llandilo be approved subject to the following conditions:

Standard Conditions

2.1 A001 – Approved Plans

The development must be implemented substantially in accordance with the following plans stamped approved by Penrith City Council, the application form and any supporting information received with the application, except as may be amended in red on the attached plans and by the following conditions.

Engineering Plans

Drawing Title	Drawing No.	Issue	Prepared By	Dated
Cover Sheet	EN02754-C-001	C	Sinclair Knight Merz	23/08/10
Index Sheet & Notes	EN02754-C-002	C	Sinclair Knight Merz	23/08/10
Basin Layout Plan	EN02754-C-003	C	Sinclair Knight Merz	23/08/10
Typical Sections	EN02754-C-004	C	Sinclair Knight Merz	23/08/10
Detail Plans & Sections	EN02754-C-005	C	Sinclair Knight Merz	23/08/10
Detail Spillway Plan	EN02754-C-006	C	Sinclair Knight Merz	23/08/10
Detail Spillway Sections	EN02754-C-007	C	Sinclair Knight Merz	23/08/10
Erosion & Sediment Control Plan	EN02754-C-008	B	Sinclair Knight Merz	23/08/10
Erosion & Sediment Control Details	EN02754-C-009	B	Sinclair Knight Merz	23/08/10
Bulk Earthworks Plan	EN02754-C-010	B	Sinclair Knight Merz	23/08/10

General Plans

Drawing Title	Drawing No.	Issue	Prepared By	Dated
Waste Management Plan	-	-	Delfin Lend Lease	05/08/10

Landscape Plans

Drawing Title	Drawing No.	Issue	Prepared By	Dated
Cover Sheet	2914.LADA.00	2	Environmental Partnership	Aug-10
Key Plan	2914.LADA.01	2	Environmental Partnership	Aug-10
Lake Edge Treatment Plan	2914.LADA.02	2	Environmental Partnership	Aug-10
Barrier Plan	2914.LADA.03	2	Environmental Partnership	Aug-10
Open Space & Recreation Plan	2914.LADA.04	2	Environmental Partnership	Aug-10
Vegetation Strategy	2914.LADA.05	2	Environmental Partnership	Aug-10
Landscape Master Plan	2914.LADA.06	2	Environmental Partnership	Aug-10
Landscape Plan (Area 1)	2914.LADA.07	2	Environmental Partnership	Aug-10
Landscape Plan (Area 2)	2914.LADA.08	2	Environmental Partnership	Aug-10

Landscape Plan (Area 3)	2914.LADA.09	2	Environmental Partnership	Aug-10
Landscape Plan (Area 4)	2914.LADA.10	2	Environmental Partnership	Aug-10
Cross-Sections	2914.LADA.11	2	Environmental Partnership	Aug-10
Cross-Sections	2914.LADA.12	2	Environmental Partnership	Aug-10
Cross-Sections	2914.LADA.13	2	Environmental Partnership	Aug-10
Barrier Details	2914.LADA.14	2	Environmental Partnership	Aug-10
Northern Play Space Plan	2914.LADA.15	2	Environmental Partnership	Aug-10
Southern Play Space Plan	2914.LADA.16	2	Environmental Partnership	Aug-10
Equipment Details	2914.LADA.17	2	Environmental Partnership	Aug-10
Equipment Details	2914.LADA.18	2	Environmental Partnership	Aug-10
Equipment Details	2914.LADA.19	2	Environmental Partnership	Aug-10
Maintenance & Service Plan	2914.LADA.20	3	Environmental Partnership	Jan-11

2.2 A008 – Works to BCA Requirements

The works must be carried out in accordance with the requirements of the Building Code of Australia.

2.3 A019 – Occupation Certificate

The development shall not be used or occupied until an Occupation Certificate has been issued.

2.4 A038 – Lighting Locations

Prior to the issue of a Construction Certificate, a detailed lighting strategy providing for uniform lighting across all pedestrian and cycle networks shall be submitted and approved. Pedestrian and cycle paths shall be marked and signposted to clearly delineate the intended path of travel for pedestrians and cyclists.

All lighting shall be located and directed in such a manner so as not to create a nuisance to surrounding land uses. The lighting shall be the minimum level of illumination necessary for safe operation. The lighting shall be in accordance with AS 4282 "Control of the obtrusive effects of outdoor lighting" (1997), Penrith City Council's Public Domain Lighting Policy and Integral Energy's standards and requirements.

2.5 A039 – Graffiti

The proposed retaining/sitting walls, shade structures, picnic shelters, park seats, picnic tables and bin enclosures shall utilise vandal resistant treatments where

possible and be constructed of sturdy materials to minimise opportunities for malicious damage, graffiti, vandalism and theft.

The finishes of all structures and buildings are to be maintained at all times and any graffiti or vandalism immediately removed and/or repaired.

2.6 *A046 – Construction Certificate*

A Construction Certificate shall be obtained prior to commencement of any building works.

2.7 *B004 – Dust*

Dust suppression techniques are to be employed during the course of the works to reduce any potential nuisances to surrounding properties.

2.8 *B005 – Mud/Soil*

Mud and soil from vehicular movements to and from the site must not be deposited on the road.

2.9 *C003 – Uncovering Relics*

Prior to the issue of a Construction Certificate, documentary evidence from a suitably qualified archaeological consultant shall be submitted to the Principal Certifying Authority (PCA) confirming satisfactory completion of any required archaeological salvage works on the site.

Should any archaeological relics be uncovered during the course of the works, no further work shall be undertaken until further directed by Penrith City Council or the NSW Heritage Office.

The applicant is advised that depending on the possible significance of the relics, an archaeological assessment and an excavation permit under the Heritage Act 1977 may be required before any further work can be recommenced in that area of the site.

2.10 *D002 – Spray Grass*

All land that has been disturbed by earthworks is to be spray grassed or similarly treated to establish a grass cover.

2.11 *D06A – Validation of Fill Material*

No fill material shall be imported to the site until such time as a Validation Certificate (with a copy of any report forming the basis for the validation) for the fill material has been submitted to Council. The Validation Certificate shall:

- state the legal property description of the fill material source site,
- be prepared by an appropriately qualified person (as defined in Council's Contaminated Land Development Control Plan) with consideration of all relevant guidelines (e.g. EPA, ANZECC, NH&MRC), standards, planning instruments and legislation,
- clearly indicate the legal property description of the fill material source site,
- provide details of the volume of fill material to be used in the filling operations,

- provide a classification of the fill material to be imported to the site in accordance with the Environment Protection Authority's "Environmental Guidelines: Assessment, Classification & Management of Non-Liquid Wastes" 1997, and
- (based on the fill classification) determine whether the fill material is suitable for its intended purpose and land use and whether the fill material will or will not pose an unacceptable risk to human health or the environment.

An appropriately qualified person/s (as defined in the Penrith City Council Contaminated Land Development Control Plan) shall:

- supervise the filling works,
- (on completion of filling works) carry out an independent review of all documentation relating to the filling of the site and submit a review findings report to Council and any Principal Certifying Authority,
- certify by way of certificate or written documentation that fill materials have been placed on the site in accordance with all conditions of this consent and that the site will not pose an unacceptable risk to human health or the environment. A copy of the Certificate or other documentation shall be submitted to Council and any Principal Certifying Authority.

The contact details of any appropriately qualified person/s engaged for the works shall be provided with the Notice of Commencement.

If the Principal Certifying Authority or Penrith City Council is not satisfied that suitable fill materials have been used on the site, further site investigations or remediation works may be requested. In these circumstances, the works shall be carried out prior to any further approved works.

{Note: Penrith Contaminated Land Development Control Plan defines an appropriately qualified person as "a person who, in the opinion of Council, has a demonstrated experience, or access to experience in hydrology, environmental chemistry, soil science, eco-toxicology, sampling and analytical procedures, risk evaluation and remediation technologies. In addition, the person will be required to have appropriate professional indemnity and public risk insurance."}

2.12 D009 – Covering of Waste Storage Area

All waste materials stored on-site are to be contained within a designated area such as a waste bay or bin to ensure that no waste materials are allowed to enter the stormwater system or neighbouring properties. The designated waste storage areas shall provide at least two waste bays/bins so as to allow for the separation of wastes and are to be fully enclosed when the site is unattended.

2.13 D010 – Appropriate Disposal of Excavated or Other Waste

All excavated material and other wastes generated as a result of the development are to be re-used, recycled or disposed of in accordance with the approved waste management plan.

Waste materials not specified in the approved waste management plan are to be disposed of at a lawful waste management facility. Where the disposal location or waste materials have not been identified in the waste management plan, details shall be provided to the Certifying Authority as part of the waste management documentation accompanying the Construction Certificate application.

All receipts and supporting documentation must be retained in order to verify lawful disposal of materials and are to be made available to Penrith City Council on request.

2.14 D014 – Plant and Equipment Noise

The operating noise level of plant and equipment shall not exceed 5dB (A) above the background noise level when measured at the boundaries of the premises. The provisions of the Protection of the Environment Operations Act 1997 apply to the development, in terms of regulating offensive noise.

2.15 G002 – Section 73 Compliance Certificate

A Section 73 Compliance Certificate under the Sydney Water Act 1994 shall be obtained from Sydney Water. The application must be made through an authorised Water Servicing Coordinator. Please refer to the “Your Business” section of Sydney Water’s website at www.sydneywater.com.au then the “e-developer” icon, or telephone 13 20 92.

The Section 73 Compliance Certificate must be submitted to the Principal Certifying Authority prior to the issue of an Occupation Certificate.

2.16 G004 – Integral Energy Clearance

Prior to the issue of a Construction Certificate, a written clearance is to be obtained from Integral Energy stating that electrical services have been made available to the development or that arrangements have been entered into for the provision of services to the development.

In the event that a padmounted substation is necessary to service the development, Penrith City Council shall be consulted over the proposed location of the substation before the Construction Certificate for the development is issued as the location of the substation may impact on other services and building, driveway or landscape design already approved by Council.

2.17 H001 – Stamped Plans and Erection of Site Notice

Stamped plans, specifications, a copy of the development consent, the Construction Certificate and any other Certificates to be relied upon shall be available on site at all times during construction.

The following details are to be displayed in a maximum of 2 signs to be erected on the site:

- the name of the Principal Certifying Authority, their address and telephone number,
- the name of the person in charge of the work site and telephone number at which that person may be contacted during work hours,
- that unauthorised entry to the work site is prohibited,
- the designated waste storage area must be covered when the site is unattended, and
- all sediment and erosion control measures shall be fully maintained until completion of the construction phase.

Signage, but no more than 2 signs, stating the above details is to be erected:

- at the commencement of, and for the full length of the, construction works onsite, and
- in a prominent position on the work site and in a manner that can be easily read by pedestrian traffic.

All construction signage is to be removed when the Occupation Certificate has been issued for the development.

2.18 H002 – Provision of Site Facilities

Prior to the commencement of construction works:

- a) Toilet facilities at or in the vicinity of the work site shall be provided at the rate of one toilet for every 20 persons or part of 20 persons employed at the site. Each toilet provided must be:
 - a standard flushing toilet connected to a public sewer, or
 - if that is not practicable, an accredited sewage management facility approved by Council, or
 - alternatively, any other sewage management facility approved by Council.
- b) All excavations and backfilling must be executed safely and in accordance with the appropriate professional standards. All excavations must be properly guarded and protected to prevent them from being dangerous to life or property.
- c) If an excavation extends below the level of the base of the footings of a building on an adjoining allotment of land, the person causing the excavation to be made:
 - must preserve and protect the building from damage, and
 - if necessary, must underpin and support the building in an approved manner, and
 - must, at least 7 days before excavating below the level of the base of the footings of a building on an adjoining allotment of land, give notice of intention to do so to the adjoining allotment of land and furnish particulars of the excavation to the owner of the development site.

The owner of the adjoining allotment of land is not liable for any part of the cost of work carried out for the purposes of this condition, whether carried out on the allotment of land being excavated or on the adjoining allotment of land (includes a public road and any other public place).

- d) If the work is likely to cause pedestrian or vehicular traffic in a public place to be obstructed or rendered inconvenient, or involves the enclosure of a public place, a hoarding or fence must be erected between the work site and the public place:
 - if necessary, an awning is to be erected, sufficient to prevent any substance from, or in connection with, the work falling into the public place, and
 - the work site must be kept lit between sunset and sunrise if it is likely to be hazardous to persons in the public place, and
 - any such hoarding, fence or awning is to be removed when the work has been completed.

2.19 H041 – Hours of Construction Work

Construction works or subdivision works that are carried out in accordance with an approved consent that involve the use of heavy vehicles, heavy machinery and other equipment likely to cause offence to adjoining properties shall be restricted to the following hours in accordance with the NSW Environment Protection Authority Noise Control Guidelines:

- Mondays to Fridays, 7am to 6pm;
- Saturdays, 7am to 1pm (if inaudible on neighbouring residential premises), otherwise 8am to 1pm;
- No work is permitted on Sundays and Public Holidays.

Other construction works carried out inside a building/tenancy and not involving the use of equipment that emits noise are not restricted to the construction hours stated above.

The provisions of the Protection of the Environment Operations Act 1997 in regulating offensive noise also apply to all construction works.

2.20 K101 – Costs

All road works, drainage works and dedications, required to effect the consented development shall be undertaken at no cost to Penrith City Council.

2.21 K201 – Erosion and Sediment Control Plans and Details

Any Construction Certificate issued by the Principal Certifying Authority or Certifying Authority shall incorporate plans and details for erosion and sediment control in accordance with the Department of Housing's "Managing Urban Stormwater: Soils and Construction" 2004.

2.22 K301 – Erosion and Sediment Control Installation

Prior to the commencement of works on site, including approved clearing of site vegetation, erosion and sediment control measures shall be installed. The erosion and sediment control measures are to be installed in accordance with the approved erosion and sediment control plan(s) for the development and the Department of Housing's "Managing Urban Stormwater: Soils and Construction" 2004.

2.23 K401 – Erosion and Sediment Control During Construction

Erosion and sediment control measures shall remain in place and be maintained until all disturbed areas have been rehabilitated and stabilised.

2.24 K404 – Services Underground

All existing (aerial) and proposed services for the development are to be located or relocated underground in accordance with relevant authorities' regulations and standards.

2.25 K407 – Major Filling

All filling shall be undertaken in accordance with AS 3798 and Penrith City Council's Design Guidelines and Construction Specification for Civil Works.

The level of testing shall be determined by the Geotechnical Testing Authority/Superintendent in consultation with the Principal Certifying Authority.

2.26 K503 – Stormwater Compliance

Prior to the issue of an Occupation Certificate, the Principal Certifying Authority shall ensure that the on-site detention system, stormwater pre-treatment systems and overland flow path works:

- Have been satisfactorily completed in accordance with the approved Construction Certificate and the requirements of this consent.
- Have met the design intent with regard to any construction variations to the approved design.
- Any remedial works required to be undertaken have been satisfactorily completed.

Details of the approved and constructed system/s shall be provided as part of the works-as-executed drawings.

2.27 K504 – Restriction and Positive Covenant

Prior to the issue of an Occupation Certificate, a restriction as to user and positive covenant relating to the on-site detention system, stormwater pre-treatment systems and overland flow path works shall be registered on the title of the property. The restriction as to user and positive covenant shall be in Penrith City Council's standard wording as detailed in Penrith City Council's Design and Construction Guidelines and Construction Specification for Civil Works.

2.28 K513 – Maintenance Bond

Prior to the issue of an Occupation Certificate, a maintenance bond is to be lodged with Penrith City Council for the whole of the stormwater basin works.

The value of the bond shall be determined in accordance with Penrith City Council's Bond Policy. The bond will be administered in accordance with this policy.

NOTE:

Contact Council's Development Engineering Unit on (02) 4732 7777 for further information relating to bond requirements.

2.29 K514 – Occupation Certificate Compliance Documentation

Prior to the issue of an Occupation Certificate, the following compliance documentation shall be submitted to the Principal Certifying Authority. A copy of the following documentation shall be provided to Council where Council is not the Principal Certifying Authority:

- a) Work-as-executed (WAE) drawings of all civil works. The WAE drawings shall be marked in red on copies of the stamped Construction Certificate drawings, signed, certified and dated by a registered surveyor or the design engineer. The WAE drawings shall be prepared in accordance with Council's Design Guidelines.
- b) The WAE drawings shall clearly indicate the 1% Annual Exceedance

- Probability flood lines (local and mainstream flooding).
- c) The WAE drawings shall be accompanied by plans indicating the depth of fill for the entire development site. The plans must show, by various shadings or cross hatchings, the depth of any fill within 0.3m depth ranges.
 - d) CCTV footage in DVD format to Council's requirements and a report in "SEWRAT" format for all drainage within future public roads and public land. Any damage that is identified is to be rectified in consultation with Penrith City Council.
 - e) Surveyor's Certificate certifying that all pipes and services are located wholly within the property or within appropriate easements and that no services encroach boundaries.
 - f) A Geotechnical Report certifying that all earthworks have been completed in accordance with AS 3798 and Council's Design Guidelines and Construction specifications. The report shall include:
 - Compaction reports for bulk earthworks and regrading works.
 - Statement of compliance.
 - g) Structural Engineer's construction certification of all structures.

2.30 *L001 – Approved Landscape Plans*

All landscape works are to be constructed in accordance with the stamped approved landscape plans and Sections F5 "Planting Techniques", F8 "Quality Assurance Standards" and F9 "Site Management Plan" of Penrith Council's Landscape Development Control Plan.

Landscaping shall be maintained:

- in accordance with the approved plans, and
- in a healthy state and in perpetuity by the existing or future owners and occupiers of the property.

If any of the vegetation comprising that landscaping dies or is removed, it is to be replaced with vegetation of the same species and, to the greatest extent practicable, the same maturity, as the vegetation which died or was removed.

2.31 *L002 – Landscape Construction*

The approved landscaping for the site must be constructed by a landscape professional listed in Council's Approved Landscape Consultants Register as suitable to construct category 3 landscape works.

2.32 *L003 – Landscape Report Requirements*

The following series of reports relating to landscaping are to be submitted to the nominated consent authority at the appropriate time periods as listed below. These reports shall be prepared by a landscape professional listed in Council's Approved Landscape Consultants Register as suitable to design category 3 landscape works.

Implementation Report

- Upon completion of the landscape works associated with the development and prior to the issue of an Occupation Certificate for the development, an

Implementation Report must be submitted to the Principal Certifying Authority attesting to the satisfactory completion of the landscaping works for the development. The report is to be prepared by a landscape professional listed in Council's Approved Landscape Consultants Register as suitable to design category 3 landscape works.

- An Occupation Certificate should not be issued until such time as a satisfactory Implementation Report has been received. If Penrith City Council is not the Principal Certifying Authority, a copy of the satisfactory Implementation Report is to be submitted to Council together with the Occupation Certificate for the development.

Maintenance Report

- On the first anniversary of the date of the Occupation Certificate issued for the development, a Landscape Maintenance Report is to be submitted to Penrith City Council certifying that the landscape works are still in accordance with the development consent and the plant material is alive and thriving.
- This report is to be prepared by a landscape professional listed in Council's Approved Landscape Consultants Register as suitable to design category 3 landscape works.

Three Year Landscape Report

- Three years after an Occupation Certificate was issued for the development, a landscape professional listed in Council's Approved Landscape Consultants Register as suitable to design category 3 landscape works shall prepare a Landscape Report for Council's consideration and approval, certifying to one of the following:
 - (a) The landscaping on site has matured and is in accordance with the original landscape approval.
 - (b) The landscaping on site has not matured in accordance with the original design philosophy and requires significant restoration. In this case, restoration plans are to be submitted to Council for its consideration and approval. The approved plans shall be implemented at the expense of the property owner.

2.33 L005 – Planting of Plant Material

All plant material associated with the construction of approved landscaping is to be planted in accordance with the Tree Planting Specification prescribed in Penrith Council's Landscape Development Control Plan.

2.34 L006 – Australian Standard Landscape Requirements

All landscape works are to meet industry best practice and the following relevant Australian Standards:

- AS 4419 Soils for Landscaping and Garden Use,
- AS 4454 Composts, Soil Conditioners and Mulches, and
- AS 4373 Pruning of Amenity Trees.

2.35 L007 – Tree Protection Measures

All trees that are required to be retained as part of the development are to be

protected in accordance with the minimum tree protection standards prescribed in Section F4 of Council's Landscape Development Control Plan.

2.36 L008 – Tree Preservation Order

No trees are to be removed, ringbarked, cut, topped or lopped or wilfully destroyed (other than those shown on the approved plans) without the prior consent of Penrith City Council and in accordance with Council's Tree Preservation Order and Policy.

2.37 P002 – Fees Associated with Council Land

Prior to the issue of a Construction Certificate, all fees associated with Penrith City Council-owned land and infrastructure shall be paid to Council. These fees include Road Opening fees and Infrastructure Restoration fees.

2.38 Q01F – Notice of Commencement and Appointment of PCA

Prior to the commencement of any earthworks or construction works on site, the proponent is to:

- a) employ a Principal Certifying Authority to oversee that the said works carried out on the site are in accordance with the development consent and related Construction Certificate issued for the approved development, and with the relevant provisions of the Environmental Planning and Assessment Act and accompanying Regulation, and
- b) submit a Notice of Commencement to Penrith City Council.

The Principal Certifying Authority shall submit to Council an "Appointment of Principal Certifying Authority" in accordance with Section 81A of the Environmental Planning and Assessment Act 1979.

Information to accompany the Notice of Commencement

Two (2) days before any earthworks or construction/demolition works are to commence on site (including the clearing site vegetation), the proponent shall submit a "Notice of Commencement" to Council in accordance with Section 81A of the Environmental Planning and Assessment Act 1979.

2.39 Q05F – Occupation Certificate

An Occupation Certificate is to be obtained from the Principal Certifying Authority on completion of all works and prior to the use of the development.

The Certificate shall not be issued if any conditions of this consent, but not the conditions relating to the operation of the development, are outstanding.

A copy of the Occupation Certificate and all necessary documentation supporting the issue of the Certificate is to be submitted to Penrith City Council, if Council is not the Principal Certifying Authority.

Special Conditions

- 2.40** The general terms of approval (GTAs) dated 17 September 2010 issued by the NSW Fisheries Office under the *Fisheries Management Act 1994* shall be suitably

satisfied prior to the issue of a Construction Certificate and/or an Occupation Certificate, as relevant. A copy of these GTAs is provided with this development consent notice.

- 2.41 The general terms of approval (GTAs) dated 30 September 2010 issued by the NSW Office of Water under the *Water Management Act 2000* shall be suitably satisfied prior to the issue of a Construction Certificate and/or an Occupation Certificate, as relevant. A copy of these GTAs is provided with this development consent notice. Prior to the issue of a Construction Certificate, a copy of the Controlled Activity Approval required in accordance with the GTAs shall be submitted to Penrith City Council, if Council is not the Principal Certifying Authority.
- 2.42 The general terms of approval (GTAs) dated 30 September 2010 issued by the NSW Office of Water under the *Water Act 1912* shall be suitably satisfied prior to the issue of a Construction Certificate and/or an Occupation Certificate, as relevant. A copy of these GTAs is provided with this development consent notice. Prior to the issue of a Construction Certificate, a copy of the Water Licence required in accordance with the GTAs shall be submitted to Penrith City Council, if Council is not the Principal Certifying Authority.
- 2.43 The soil salinity management measures outlined in the Western Precinct Plan shall be implemented during construction.
- 2.44 Prior to the issue of a Construction Certificate, a Site Audit Statement (SAS) shall be issued for the parts of the site not covered by the terms of SAS CHK001/1, SAS CHK001/6 and SAS CHK001/7, being land beneath the former access roads traversing the site.
- 2.45 The development shall be carried out in accordance with the procedures set out in the Western Precinct Contamination Management Plan and the conditions and procedures set out in the Site Audit Statements relating to the Western Precinct.
- 2.46 Prior to the issue of a Construction Certificate, amended plans and details shall be submitted and approved addressing the following matters:

Stormwater Management Basin

- (a) The maintenance access ramp shall be appropriately sealed and constructed to accommodate vehicles and machinery required for periodic maintenance including weed harvesting, de-silting and rubbish removal. The ramp shall be gated or provided with removable bollards to enable future access control and to discourage recreational access and use.
- (b) Details and specifications of the proposed water-proof polymer liner for the base of the basin shall be submitted. This shall include details of the life span of the liner and details of the likely on-going maintenance and repair costs. The liner shall be a robust thickness to reduce the likelihood of damage to the liner during future weed harvesting and de-silting operations.
- (c) Provision shall be made for a water mixing mechanism such as an aeration system which is powered by a land-based air compressor to reduce the risk of thermal stratification. Provision shall also be made for a conduit for a three-phase power source for the air compressor system.
- (d) The crossings to the basin island shall be appropriately sealed and constructed to accommodate vehicles and machinery required for periodic maintenance.
- (e) A community education strategy shall be submitted addressing issues such as the functions of the basin, environmental sustainability, acceptable and

unacceptable levels of access by humans and animals, safety issues and vegetation management. The community education strategy shall also include a signage strategy regarding these matters.

- (f) A detailed and fully-costed annual maintenance schedule shall be submitted. The maintenance schedule shall be in Microsoft Word or Excel format (electronic) suitable for incorporation into Penrith City Council's maintenance scheduling system. The maintenance schedule shall include details of water quality control targets, ongoing water quality monitoring using MUSIC modelling with details of its implementation, maintenance responsibilities and costs (including measures for weed prevention and controlling birds, ducks, carp, mosquitoes, etc) and medium and long-term maintenance and asset renewal and replacement items. The performance monitoring shall be linked to the contract maintenance period and the timing of handover to Council.

Basin Edges and Play Spaces

- (g) The proposed play equipment shall be sourced from a supplier with a proven track record for timely and inexpensive provision of replacement parts.
- (h) Anti-graffiti coatings shall be applied to external surfaces of the proposed retaining/sitting walls.
- (i) A concrete or masonry edge shall be provided to all gravel paths.
- (j) Physical separation shall be provided between the proposed play space softfall areas and the proposed gravel areas to prevent cross-mixing.
- (k) Shade structures shall be provided to the proposed play spaces.
- (l) Details of all proposed shade structures, picnic shelters, park seats, picnic tables and bin enclosures shall be submitted.
- (m) All barbeques shall be deleted due to the high maintenance burden of these facilities and the associated public health dangers.
- (n) The location and design of the southern play space adjacent to a future residential site shall be modified to reduce potential future negative residential amenity impacts.
- (o) The remnant Canary Island palm tree associated with heritage item "Site 14" (Dumbles new house and outbuildings) shall be translocated to the basin edge. Details of the translocation and an Interpretation Strategy relating to the former Dumbles house and outbuildings and the remnant palm tree shall be submitted.
- (p) Additional tree planting shall be provided the basin edges.
- (q) All proposed plantings shall generally be consistent with the vegetation communities currently present in the area and, if possible, local provenance stock shall be utilised.
- (r) A detailed Vegetation Management Plan (VMP) shall be submitted and approved. The VMP shall include mechanisms for weed control and planting quality control. All invasive environmental weeds identified in the St Marys Western Precinct Weed Management Plan prepared by Cumberland Ecology (Report No. 7070RP2) dated 16 July 2008 shall be included in the VMP and targeted for species specific control before, during and after the development works have been completed.
- (s) A detailed and fully-costed annual maintenance schedule shall be submitted. The maintenance schedule shall be in Microsoft Word or Excel format (electronic) suitable for incorporation into Penrith City Council's maintenance scheduling system.

2.47 Works shall be provided generally in accordance with the engineering plans prepared by Sinclair Knight Merz, Reference No. EN02754-C-001 to EN02754-C-010, Revisions B and C, dated 23/08/10.

Any Construction Certificate issued by the Certifying Authority shall include, but not be limited to, the following works:

- a) Detention system.
- b) Stormwater drainage.
- c) Stormwater pre-treatment systems.
- d) Overland flow paths and spillways.
- e) Earthworks.
- f) Car parking.
- g) Vehicular access for maintenance purposes.

2.48 Stormwater run-off from the development site shall be directed to stormwater pre-treatment systems and the water quality/detention basin in general accordance with the Water, Soils and Infrastructure Report prepared by Sinclair Knight Mertz (Project No. IN90398, Revision 5, dated 26 May 2009), the Stormwater Management Report prepared by Sinclair Knight Mertz (Project No. EN02754, Revision 1, dated 23 August 2010) and Penrith Development Control Plan 2006.

Any Construction Certificate issued by the Principal Certifying Authority or Certifying Authority shall incorporate:

- a) Specifications and installation details of the stormwater pre-treatment systems.
- b) An operational and maintenance management plan for the basin including operation and maintenance manuals for the proposed devices and specifications of a regular maintenance regime for all seasons that address water quality and vegetation management of the basin.
- c) Lifetime costings of the treatment devices and maintenance of the basin.
- d) Pollutant retention rates to Council's standard.
- e) Suitable sealed vehicular access to Council's satisfaction.

A copy of the approved operation and maintenance manuals/programs, maintenance regimes and lifecycle costings shall be submitted to Penrith City Council with notification of the Construction Certificate issue.

2.49 The water quality/detention system shall be maintained by the person/company with the benefit of the development consent for a time period to be agreed to by Penrith City Council. During the maintenance period, the basin shall be monitored by the developer for water quality and vegetation management as per the adopted maintenance regime/operational manual.

Prior to handover to Penrith City Council, the basin shall be de-silted and cleaned to the satisfaction of Council.

2.50 Prior to the issue of a Construction Certificate, amended plans and details for the stormwater management basin shall be submitted and approved addressing the following water quality matters:

- (a) The ratio of aquatic macrophyte vegetation to open water shall be significantly increased.
- (b) The base of the basin shall be benched in order to establish bands of macrophytes perpendicular to the flow of water through the basin.

Alternatively, a detailed written submission from a suitably qualified stormwater quality engineer shall be submitted attesting to the adequacy of the stormwater quality features of the proposed basin.

- 2.51 The site is subject to the provisions of the St Marys Penrith Planning Agreement, as amended. The applicant is reminded of the obligations under the Planning Agreement with regard to the delivery of certain infrastructure and services as part of the development of the Western Precinct. All works shall be carried out in accordance with the requirements of the St Marys Penrith Planning Agreement, as amended.
- 2.52 The stormwater management basin, basin edges and play spaces shall be:
- (a) Landscaped and embellished in accordance with the approved landscape plans, Annexure 4A1 and 4B1 of the St Marys Penrith Planning Agreement (as varied by the Deed of Variation dated 19 May 2009) and Volume 2 (Landscape Maintenance and Handover Plan) of the Western Precinct Plan.
 - (b) Dedicated to Council at no cost to Council. The dedication shall occur in accordance with Annexure 4A1 and 4B1 of the St Marys Penrith Planning Agreement (as varied by the Deed of Variation dated 19 May 2009).
 - (c) Maintained by the landowner for a period of 3 years (basin) and/or 12 months (basin edges and play spaces) prior to the handover to Council in accordance with Section 2.2(f) of the Landscape Maintenance and Handover Plan.
 - (d) Handed over to Council at the completion of the contract maintenance period and the inspection of works by Council.
- 2.53 The site is subject to the provisions of the St Marys Development Agreement. The applicant is reminded of the obligations under the Development Agreement with regard to the delivery of certain infrastructure and services as part of the development of the Western Precinct. All works shall be carried out in accordance with the requirements of the St Marys Development Agreement, as amended.
- 2.54 A Construction Traffic Management Plan detailing construction vehicle routes, numbers of trucks, hours of operation, access arrangements and traffic control shall be submitted and approved prior to the issue of a Construction Certificate.
- 2.55 The development shall be undertaken in a manner which incorporates the recommendations outlined in the St Marys Western Precinct Weed Management Plan prepared by Cumberland Ecology (Report No. 7070RP2) dated 16 July 2008.
- 2.56 The development shall be undertaken in a manner which incorporates the mitigation measures and site specific measures outlined in the Flora and Fauna Impact Assessment prepared by Cumberland Ecology (Report No. 8143RP12) dated 10 August 2010.
- 2.57 The development shall be undertaken in a manner which incorporates the recommendations outlined in the St Marys Western Precinct Feral and Domestic Animal Management Strategy prepared by Cumberland Ecology (Report No. 7070RP3) dated 16 July 2008.
- 2.58 No fill, machinery or materials shall be placed or stored within the drip line of any tree to be retained on the site.
- 2.59 No other vegetation (including understory species) shall be cleared as part of this development other than specified on the approved plans.
- 2.60 Noise levels from the site shall not exceed the relevant noise criteria detailed in the Construction Noise, Vibration and Air Quality Assessment prepared by Sinclair Knight Merz (Project No. EN02754, Revision 1, dated 23 August 2010). The

recommendations provided in this assessment report shall be implemented and incorporated into the construction phase of the development.

The provisions of the Protection of the Environment Operations Act 1997 apply to the development, in terms of regulating offensive noise.

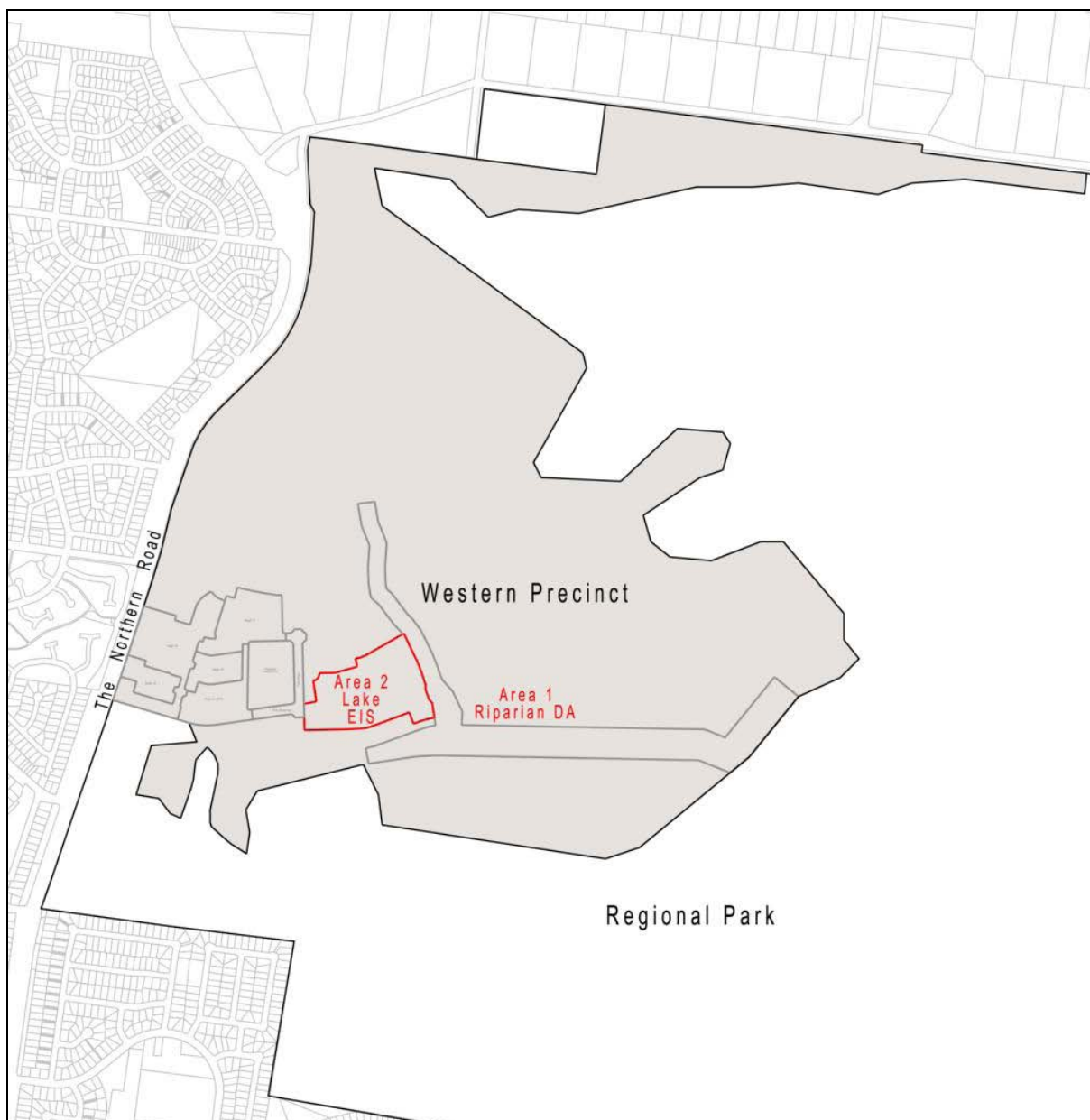
- 2.61 The mitigation measures for air quality outlined in the Construction Noise, Vibration and Air Quality Assessment prepared by Sinclair Knight Merz (Project No. EN02754, Revision 1, dated 23 August 2010) shall be implemented during construction in order to minimise dust emissions.
- 2.62 Prior to the commencement of construction work, the following documents shall be prepared and submitted to Council for approval:
- Construction waste management plan.
 - Construction noise and vibration management control plan.
 - Erosion and sedimentation control plan.
 - Environmental management plan.
- 2.63 Should dwellings located in Stage 1 of the Jordan Springs estate become occupied prior to the commencement and/or completion of this development, no further work is to be undertaken on this development until such time as a new noise assessment report addressing the impact of the works on the residents in Stage 1 is prepared, submitted to and approved by Council.
3. The Department of Planning be advised of the Sydney West Region Joint Planning Panel's decision and be forwarded a copy of Penrith City Council's Notice of Determination.
4. All other state government statutory authorities who commented on the proposal be advised of the Sydney West Region Joint Planning Panel's decision and be forwarded a copy of Penrith City Council's Notice of Determination.

Robert Craig



**Senior Environmental Planner
Penrith City Council**

Appendix No. 1 – Location Plan



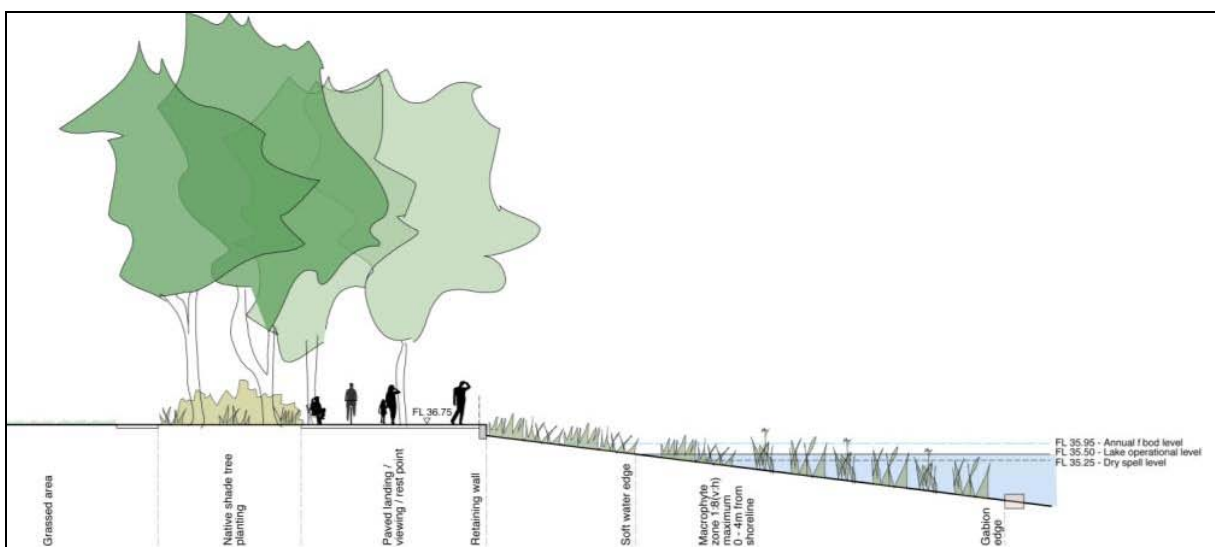
(Source: JBA Urban Planning Consultants)

Appendix No. 2 – Aerial View of Site (February 2010)

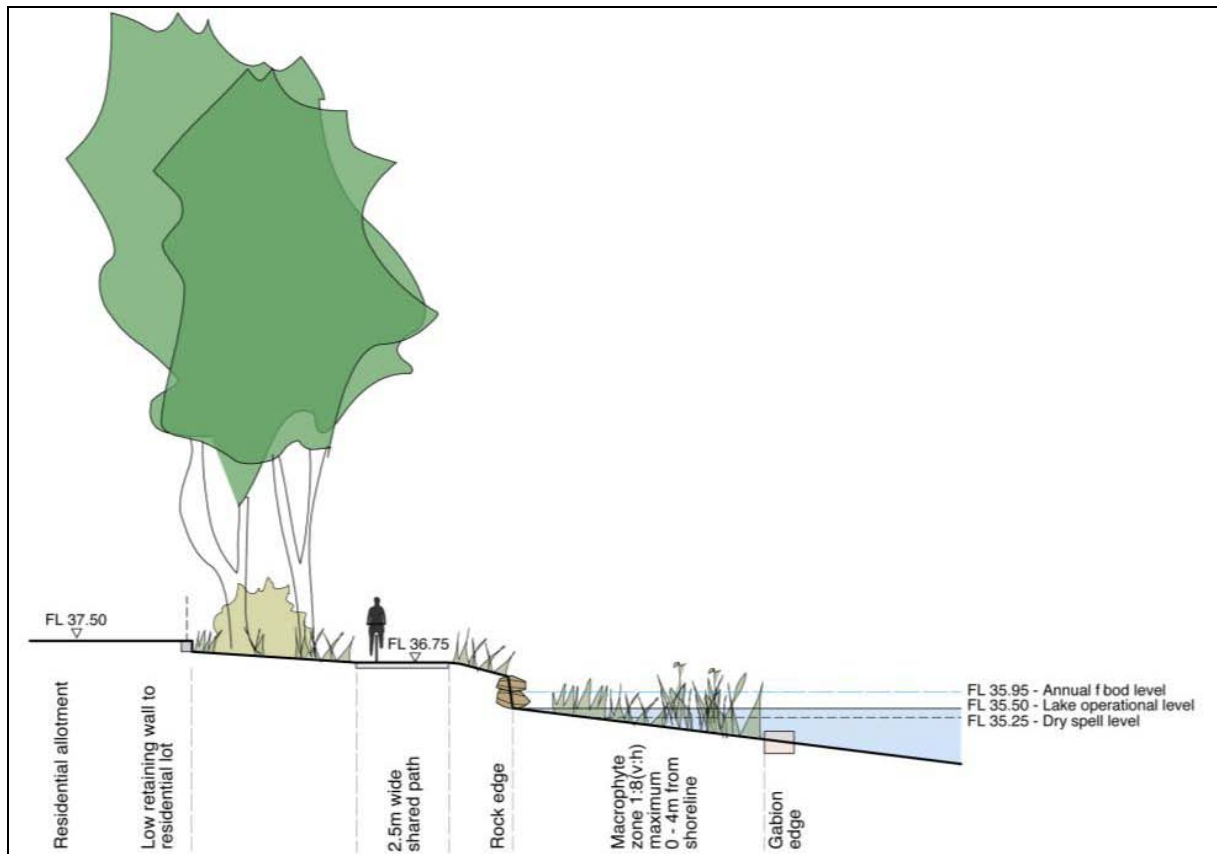


(Source: Penrith City Council)

Appendix No. 3 – Site Plan & Typical Cross-Sections



(Source: Environmental Partnership)



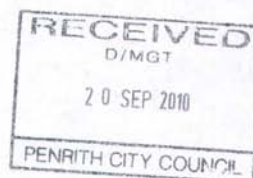
(Source: Environmental Partnership)

Appendix No. 4 – NSW Fisheries' General Terms of Approval



**Industry &
Investment**

Our ref: OUT10/14426
Your ref: DA10/0581



Penrith City Council
(Attn: Mr Robert Craig)
PO Box 60
PENRITH NSW 2751

Dear Mr Craig

Re: Integrated Development Application No. 10/0581
Property: 1070-1274 The Northern Road, LLANDILO NSW 2747 (Lot 2 DP 1132380)
Proposal: Construction of Stormwater Management Basin & Related Site Works

Thankyou for your letter dated 30 August 2010 requesting Industry and Investment (I&I) NSW comment on the above proposal.

I&I NSW is responsible for ensuring that fish stocks are conserved and that there is "no net loss" of key fish habitat upon which they depend. To achieve this, I&I NSW ensures that developments comply with the requirements of the *Fisheries Management Act 1994* (namely the aquatic habitat protection and threatened species conservation provisions in Parts 7 and 7A of the Act, respectively), and the associated *Policy and Guidelines for Aquatic Habitat Management and Fish Conservation (1999)*.

I&I NSW has reviewed the above proposal in light of the policies and provisions under the *Fisheries Management Act 1994* and has no objections providing the following general terms of approval are included in any development consent issued for this proposal:

1. Erosion and sediment mitigation devices are to be erected in a manner consistent with currently accepted Best Management Practice (ie Managing Urban Stormwater: Soils and Construction 4th Edition Landcom, 2004) to prevent the entry of sediment into the waterway prior to any earthworks being undertaken. These are to be maintained in good working order for the whole duration of the works and subsequently until the site has been stabilised and the risk of erosion and sediment movement from the site is minimal. Exposed soil is to be reseeded or turfed.
2. The vegetation management plan for the riparian zone is implemented.
3. Only clean fill is used on site.
4. All other relevant authorities have no objections to this proposal.

I&I NSW is supportive of these works as they will result in improving the water quality outcomes resulting from urban development in the Hawkesbury-Nepean catchment.

Cronulla Fisheries Centre
PO Box 21, Cronulla NSW 2230
202 Nicholson Parade, Cronulla
Tel: 02 9527 8411 Fax: 02 9527 8576
ABN 72 189 919 072 www.industry.nsw.gov.au

A permit under Part 7 of the *Fisheries Management Act* is not required for these works.

For any further information please telephone me on (02) 9527 8552.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Carla', followed by a horizontal line.

Carla Ganassin
Conservation Manager
Aquatic Habitat Protection Unit

17 September 2010

PAGE 2 OF 2

Appendix No. 5 – NSW Office of Water's General Terms of Approval



Office
of Water



Contact: Greg Brady
Phone: 02 47298 134
Fax: 02 4729 8141
Email: greg.brady@ohn.nsw.gov.au

Our ref: 10 ERM2010/0920
Our file:
Your ref: DA10/0851

The General Manager
Penrith City Council
PO Box 60
Penrith NSW 2751

Attention: Robert Craig

30 September 2010

Dear Sir

**Re: Integrated Development Referral – General Terms of Approval
DA10/0851 - Jordan Springs Village Lake (Water Management Basin) including
civil engineering works to the lake and associated lake edge foreshore
landscaping, 1070 - 1274 The Northern Road LLANDILO**

I refer to your recent letter regarding an Integrated Development Application (DA) proposal for the subject property. Attached, please find the NSW Office of Water's General Terms of Approval (GTA) for 'works' requiring a Controlled Activity Approval under the *Water Management Act 2000 (WMA)*, and a **Water licence under the Water Act 1912** as detailed in the subject DA.

It is likely that a water licence will be required for this and existing and future similar structures within the ADI site where it is intended to irrigate from them.

Please refer to the attachment *Dams in NSW. Do you need a licence.*

Please note Council's statutory obligations under section 91A(3) of the *Environmental Planning and Assessment Act, 1979 (EPAA)* which requires a consent, granted by a consent authority, to be consistent with the GTA proposed to be granted by the approval body.

If the proposed development is approved by Council, the NSW Office of Water requests that these GTA be included (in their entirety) in Council's development consent. Please also note the following:

- The NSW Office of Water should be notified if any plans or documents are amended and these amendments significantly change the proposed development or result in additional 'works' on waterfront land (ie in or within 40 metres from top of highest bank of a watercourse, foreshore, or lake). Once notified, the NSW Office of Water will ascertain if the amended plans require review or variation/s to the GTA. This requirement applies even if the proposed 'works' are part of Council's proposed consent conditions and the 'works' do not appear in the original documentation.
- The NSW Office of Water should be notified if Council receives an application to modify the consent conditions. **Failure to notify may render the consent invalid.**
- The NSW Office of Water requests notification of any legal challenge to the consent.

www.water.nsw.gov.au | NSW Office of Water is a separate office within the Department of Environment, Climate Change and Water
Macquarie Tower, 10 Valentine Avenue, Parramatta NSW 2150 PO Box 3720 Parramatta NSW 2124 Australia
t +61 2 9895 6211 | e information@water.nsw.gov.au | ABN 47 661 556 763

Under Section 91A(6) of the EPAA, Council must provide the NSW Office of Water with a copy of any determination/s including refusals.

As a controlled activity (ie the 'works') or construction cannot commence before the applicant obtains a Controlled Activity Approval, **and a water licence** the NSW Office of Water recommends that the following condition be included in the development consent:

"The Construction Certificate will not be issued over any part of the site requiring a Controlled Activity Approval and Water licence until a copy of the Approval and licence has been provided to Council".

The attached GTA are not the Controlled Activity Approval or Water Licence. The applicant must apply (to the NSW Office of Water) after consent has been issued by Council but before the commencement of any 'works'.

Applicants must complete and submit (to the undersigned) an application form together with any required plans, documents, the appropriate fee and security (ie bond, if applicable) and proof of Council's development consent.

The NSW Office of Water requests that Council provide a copy of this letter to the applicant.

Yours Sincerely



Greg Brady
Instream Development Officer
NSW Office of Water
Office of Hawkesbury Nepean



**Office
of Water**

General Terms of Approval – for works requiring a Controlled Activity Approval under the Water Management Act 2000

Our Reference		10 ERM2010/0920	File No:
Site Address		1070 - 1274 The Northern Road LLANDILO	
DA Number		DA10/0851	
LGA		Penrith City Council	
Number	Condition		
Plans, standards and guidelines			
1	<p>These General Terms of Approval (GTA) only apply to the controlled activities described in the plans and associated documentation relating to DA10/0851 and provided by Council:</p> <p>(i) Site plan, map and/or surveys</p> <p>Any amendments or modifications to the proposed controlled activities may render these GTA invalid. If the proposed controlled activities are amended or modified the NSW Office of Water must be notified to determine if any variations to these GTA will be required.</p>		
2	<p>Prior to the commencement of any controlled activity (works) on waterfront land, the consent holder must obtain a Controlled Activity Approval (CAA) under the Water Management Act from the NSW Office of Water. Waterfront land for the purposes of this DA is land and material in or within 40 metres of the top of the bank or shore of the river identified.</p>		
3	<p>The consent holder must prepare or commission the preparation of:</p> <p>(i) Vegetation Management Plan</p> <p>(ii) Works Schedule</p> <p>(iii) Erosion and Sediment Control Plan</p> <p>(iv) Soil and Water Management Plan</p>		
4	<p>All plans must be prepared by a suitably qualified person and submitted to the NSW Office of Water for approval prior to any controlled activity commencing.</p> <p>(i) Vegetation Management Plans</p> <p>(ii) In-stream works</p> <p>(iii) Outlet structures</p>		
5	<p>The consent holder must (i) carry out any controlled activity in accordance with approved plans and (ii) construct and/or implement any controlled activity by or under the direct supervision of a suitably qualified professional and (iii) when required, provide a certificate of completion to the NSW Office of Water.</p>		
6	<p>The consent holder must carry out a maintenance period of two (2) years after practical completion of</p>		

www.water.nsw.gov.au | NSW Office of Water is a separate office within the Department of Environment, Climate Change and Water
Macquarie Tower, 10 Valentine Avenue, Parramatta NSW 2150 PO Box 3720 Parramatta NSW 2124 Australia
t + 61 2 9895 6211 | e information@water.nsw.gov.au | ABN 47 661 556 763

Our Reference	10 ERM2010/0920	File No:	
Site Address	1070 - 1274 The Northern Road LLANDILO		
DA Number	DA10/0851		
LGA	Penrith City Council		
Number	Condition		
	all controlled activities, rehabilitation and vegetation management in accordance with a plan approved by the NSW Office of Water.		
7	The consent holder must reinstate waterfront land affected by the carrying out of any controlled activity in accordance with a plan or design approved by the NSW Office of Water.		
8	The consent holder must use a suitably qualified person to monitor the progress, completion, performance of works, rehabilitation and maintenance and report to the NSW Office of Water as required.		
9	The consent holder must provide a security deposit (bank guarantee or cash bond) - equal to the sum of the cost of complying with the obligations under any approval - to the NSW Office of Water as and when required.		
10	N/A		
11	The consent holder must not locate ramps, stairs, access ways, cycle paths, pedestrian paths or any other non-vehicular form of access way in a riparian corridor other than in accordance with a plan approved by the NSW Office of Water.		
12	The consent holder must ensure that the construction of any bridge, causeway, culvert or crossing does not result in erosion, obstruction of flow, destabilisation or damage to the bed or banks of the river or waterfront land, other than in accordance with a plan approved by the NSW Office of Water.		
13	N/A		
14	N/A		
15	The consent holder is to ensure that all drainage works (i) capture and convey runoffs, discharges and flood flows to low flow water level in accordance with a plan approved by the NSW Office of Water; and (ii) do not obstruct the flow of water other than in accordance with a plan approved by the NSW Office of Water.		
16	N/A		
17	The consent holder must establish all erosion and sediment control works and water diversion structures in accordance with a plan approved by the NSW Office of Water. These works and structures must be inspected and maintained throughout the working period and must not be removed until the site has been fully stabilised.		
18	N/A		
19	N/A		
20	The consent holder must ensure that (i) river diversion, realignment or alteration does not result from any controlled activity work and (ii) bank control or protection works maintain the existing river hydraulic and geomorphic functions, and (iii) bed control structures do not result in river degradation other than in accordance with a plan approved by the NSW Office of Water.		
END OF CONDITIONS			

GENERAL TERMS OF APPROVAL

WATER ACT (1912)

SURFACE WATER LICENCE

In accordance with the Environmental Planning and Assessment Act 1979 and Regulation 1994 (as amended) the NOW has an approval role in relation to Development Application DA10/851 with Penrith City Council.

Based on details disclosed in the development application, a licence under Part 2 of the Water Act (1912) is required to licence the proposed 55 megalitre dam for the conservation of water and water supply for irrigation purposes.

Pursuant to Part 2 of the Water Act, the NOW, having reviewed the documentation associated with the Development Application, proposes to grant an approval. The general terms of approval are set out below:

1. General and Administrative Issues

1.1 The location of the dam as shown on a plan retained in the office of the NSW Office of Water shall not be altered. Please be advised that any installation of an additional dam and /or enlargement of an existing dam may require further local council approval and /or an amended license from the NSW Office of Water.

1.2 Subject to any access or flow condition contained in the license, the holder may divert part or all of the stored water from the licensed work.

1.3 The applicant shall not allow any tailwater drainage to discharge into or onto:

- any adjoining public or crown road;
- any other persons land;
- any Crown Land;
- any river, creek or watercourse;
- any groundwater aquifer;
- any area of native vegetation as described in the Native Vegetation Conservation Act 1997;
- any wetlands of environmental significance

1.4 Your attention is particularly drawn to the provisions of condition (1.3) regarding disposal of drainage waters. The discharge of polluted waters into a river or lake otherwise than in accordance with the conditions of a license under the Protection of the Environment Operations Act may render the offender subject to prosecution and penalty under the Act. Therefore where an approved drainage disposal system involves the possible discharge of drainage water into a river or lake, a license may be required under the Protection of the Environment Operations Act to authorise such discharge.

1.5 The existing profile of the channel and bank of any watercourse or drainage depression must not be disturbed any more than is necessary in order to site and maintain the authorised work. Any area that is disturbed when carrying out such work shall be stabilised and maintained by vegetation cover, stone pitching or any other approved material as directed and to this Department's satisfaction so as to prevent the occurrence of erosion.

1.6 Works used for the purpose of conveying, distributing or storing water taken by means of the authorised work shall not be constructed or installed so as to obstruct the reasonable passage of floodwaters flowing into or from a river.

1.7 Works used for the purpose of conveying, distributing or storing water taken by means of the authorised work shall not be constructed or installed so as to obstruct the reasonable passage of floodwaters other than water to be impounded or obstructed.

1.8 The pumping and ancillary equipment and pump site shall be, at all times, properly secured and/or sealed so as to prevent any leakage of petroleum based products and/or noxious material from entering any river or lake. Typically, a bunding wall of hay bales or other approved material shall be installed around the pumping plant to avoid contamination of any river or lake through spills or leaks of oils, fuels or greases.

1.9 The existing profile of the channel and bank of any watercourse or drainage depression must not be disturbed any more than is necessary in order to site and maintain the authorised work. Any area that is disturbed when carrying out such work shall be stabilised and maintained by vegetation cover, stone pitching or any other approved material as directed and to this department's satisfaction so as to prevent the occurrence of erosion.

1.10 Any drainage channels or cross banks associated with the authorised works or access roads to or from that work shall have installed and maintained a bunding wall of hay bales or other approved material, to prevent siltation reaching any river or lake.

1.11 The work shall be constructed and maintained in such manner as will ensure its safety and as will preclude the possibility of damage being occasioned by it, or resulting from it, to any public or private interest.

2. Conditions Specific

2.1 All inflow and outflow drainage lines shall be maintained with sufficient vegetation to ensure optimum quality of water entering the dam.

2.2 The level of the bywash crest shall be fixed at not higher than RL 35.5 (Ref Plan No: EN02754-C-003, amendment C) and particulars of which are retained in the NSW Office of Water.

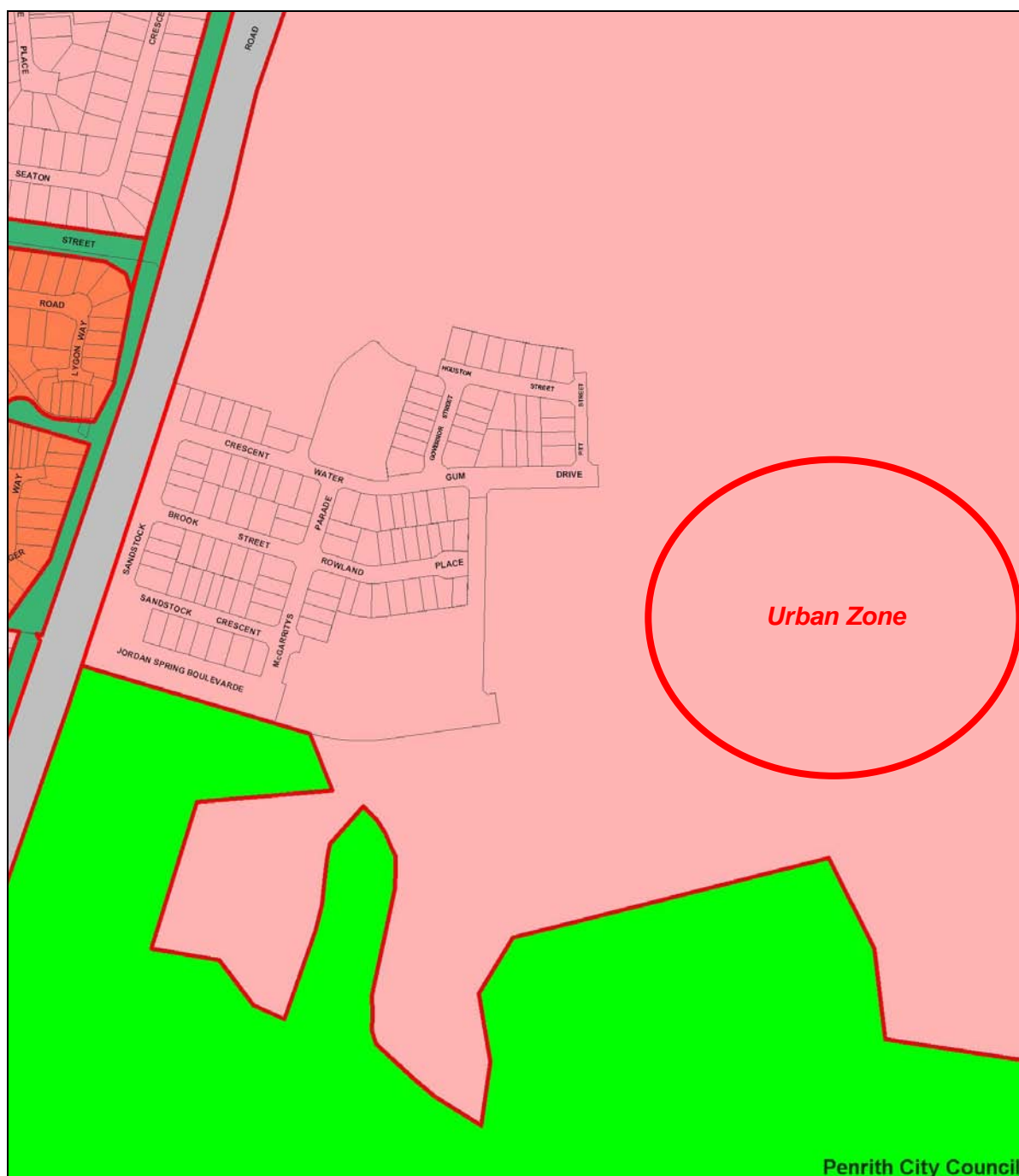
2.3 The bywash of the dam must be stabilized and vegetated within 3 months of the issue of the license.

3. Formal Application Issues

3.1 Upon receipt of an approved development application from Penrith City Council, NOW will issue a new license under Section 10 of the Water Act, 1912.

3.2 A licence under Part 2 of the Water Act would generally fall due for renewal every five years.

Appendix No. 6 - Zoning Plan



(Source: Penrith City Council)