

## MEMORANDUM TO THE JRPP

TO: JOINT REGIONAL PLANNING PANEL REPRESENTATIVES  
JOINT REGIONAL PLANNING PANEL SECRETARIAT

FROM: SUBDIVISION COORDINATOR

YOUR REF: JRPP 2011SYW050

OUR REF: DA 1276/2011/JPZ

SUBJECT: CONDITIONS OF CONSENT  
PROPOSED INTEGRATED HOUSING DEVELOPMENT

PROPERTY: LOT 3 DP 1123958 AND PROPOSED LOT 216 IN DA 937/2011/ZB  
24-26 FAIRWAY DRIVE KELLYVILLE

DATE: 09 NOVEMBER 2011

COPIES TO: MANAGER – SUBDIVISION AND DEVELOPMENT CERTIFICATION  
SENIOR TOWN PLANNER (SUBDIVISIONS)

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The subject application is to be considered by the Joint Regional Planning Panel on 15 December 2011.

The report previously referred to the Panel did not include the recommended conditions of consent. Attached is a complete list of the recommended conditions that should be read in conjunction with the report.



**Ben Hawkins**  
**SUBDIVISION COORDINATOR**

### RECOMMENDED CONDITIONS OF CONSENT

#### **ALL STAGES**

#### **GENERAL MATTERS**

##### **1. Approved plans**

The development must be carried out in accordance with the approved plans and details listed below, except where amended by other conditions of consent:

Drawing:	Description:	Prepared:	Page:	Revision:	Date:
A16055-DA	Staging plan	A&N Design	2	B	23.3.11
A16055-DA	Part Site Plan	A&N Design	3	B	23.3.11
A16055-DA	Part Site Plan	A&N Design	4	B	23.3.11
A16055-DA	Part Site Plan	A&N Design	5	B	23.3.11
A16055-DA	Part Site Plan	A&N Design	6	B	23.3.11
A16055-DA	Streetscapes	A&N Design	7	B	23.3.11
A16055-DA	Streetscapes	A&N Design	8	B	23.3.11
A16055-DA	Shadow Diagrams 9am, 10am & 11am	A&N Design	9	B	23.3.11
A16055-DA	Shadow Diagrams 12pm and 1pm	A&N Design	10	B	23.3.11
A16055-DA	Shadow Diagrams 2pm and 3pm	A&N Design	11	B	23.3.11
A16055-DA	BASIX Requirements	A&N Design	12	B	23.3.11
A16055-TYP	Type A Floor Plans	A&N Design	1	B	23.3.11
A16055-TYP	Type A Elevations	A&N Design	2	B	21.3.11
A16055-TYP	Type B Floor Plans	A&N Design	3	B	21.3.11
A16055-TYP	Type B Elevations	A&N Design	4	B	21.3.11
A16055-TYP	Type C Floor Plans	A&N Design	5	B	21.3.11
A16055-TYP	Type C Elevations	A&N Design	6	B	21.3.11
A16055-TYP	Type D Floor Plans	A&N Design	7	B	21.3.11
A16055-TYP	Type D Elevations	A&N Design	8	B	21.3.11
A16055-TYP	Type E Floor Plans	A&N Design	9	B	21.3.11
A16055-TYP	Type E Elevations	A&N Design	10	B	21.3.11
A16055-TYP	Type F Floor Plans	A&N Design	11	B	21.3.11
A16055-TYP	Type F Elevations	A&N Design	12	B	21.3.11
A16055-TYP	Type G Floor Plans	A&N Design	13	B	21.3.11
A16055-TYP	Type G Elevations	A&N Design	14	B	21.3.11
A16055-TYP	Type H Floor Plans	A&N Design	15	B	21.3.11
A16055-TYP	Type H Elevations	A&N Design	16	B	21.3.11
A16055-TYP	Type J1 / J2 Ground Floor Plans	A&N Design	17	B	21.3.11
A16055-TYP	Type J1 / J2 First Floor Plans	A&N Design	18	B	21.3.11
A16055-TYP	Type J1 / J2 Elevations	A&N Design	19	B	21.3.11
A16055-TYP	Type K1 / K2 Ground Floor Plans	A&N Design	20	B	21.3.11
	Type K1 / K2 First Floor Plans	A&N Design	21	B	21.3.11
A16055-TYP	Type K1 / K2 Elevations	A&N Design	22	B	21.3.11
A16055-TYP	Type L1 / L2 Ground Floor Plans	A&N Design	23	B	21.3.11
A16055-TYP	Type L1 / L2 First Floor Plans	A&N Design	24		21.3.11
A16055-TYP	Type L1 / L2 Elevations	A&N Design	25	B	21.3.11
A16055-TYP	Type A Alternative Floor Plans	A&N Design	26	B	21.3.11
A16055-TYP	Type A Alternative Elevations	A&N Design	27	B	21.3.11
A16055-TYP	Type B Alternative Floor Plans	A&N Design	28	B	21.3.11
<del>A16055-TYP</del>	<del>Type B Alternative Elevations</del>	<del>A&amp;N Design</del>	<del>29</del>	<del>B</del>	<del>21.3.11</del>
A16055-TYP	Type D Alternative Floor	A&N Design	30	B	21.3.11

	Plans				
A16055-TYP	Type D Alternative Elevations	A&N Design	31	B	21.3.11
A16055-TYP	Type E Alternative Floor Plans	A&N Design	32	B	21.3.11
A16055-TYP	Type E Alternative Elevations	A&N Design	33	B	21.3.11
A16055-TYP	Type F Alternative Floor Plans	A&N Design	34	B	21.3.11
A16055-TYP	Type F Alternative Elevations	A&N Design	35	B	21.3.11
A16055-TYP	Colour Scheme 1	A&N Design	1	A	22.03.11
A16055-TYP	Colour Scheme 2	A&N Design	2	A	22.03.11
A16055-TYP	Colour Scheme 3	A&N Design	3	A	22.03.11
A16055-TYP	Colour Scheme 4	A&N Design	4	A	22.03.11
14332/201	Construction Staging Plan	North Western Surveys	2	00	24.03.11
11-012/L01	Landscape Plan	Jocelyn Ramsay and Assoc	1	B	24.03.11
11-012/L02	Landscape Plan	Jocelyn Ramsay and Assoc	2	B	24.03.11
11-012/L03	Landscape Plan	Jocelyn Ramsay and Assoc	3	B	24.03.11
11-012/L04	Landscape Plan	Jocelyn Ramsay and Assoc	4	B	24.03.11
14332/202	Plan of Subdivision – Stage 1	North Western Surveys	3	00	04.05.2011
14332/202	Plan of Subdivision – Stage 2	North Western Surveys	4	00	04.05.2011
14332/202	Plan of Subdivision – Stage 3	North Western Surveys	5	00	04.05.2011
14332/202	Plan of Subdivision – Stage 4	North Western Surveys	6	00	04.05.2011
14332/202	Plan of Subdivision – Stage 5	North Western Surveys	7	00	04.05.2011
14332/202	Plan of Subdivision – Stage 6	North Western Surveys	8	00	04.05.2011

Where a Construction Certificate is required, no work is to be undertaken before it has been issued.

## **2. External Finishes**

External finishes and colours must comply with the details submitted with the development application and approved with this consent.

### **3. House Numbering**

The lots within the subdivision must be allocated a street address. Council is responsible for providing house numbering. You must apply for house numbering prior to lodging an application for a Subdivision Certificate.

### **4. Australia Post Mailbox Requirements**

Australia Post has specific requirements for mail deliveries on private roads. Separate approval from Australia Post is required before installing individual mailboxes for this development.

### **5. Construction Certificate – Building Works**

Prior to building works commencing, it is necessary to obtain a Construction Certificate from either Council or an accredited certifier. The plans and detail submitted with the Construction Certificate must be amended, where required, to incorporate the conditions of this consent.

### **6. BCA Compliance**

All building work must be carried out in accordance with the provisions of the Building Code of Australia.

### **7. Zero Lot Line Dwellings – Easement Encroachment**

The easement for repair/ access and maintenance, in response to an adjacent zero lot line dwelling, must remain clear of overhanging guttering and fascia or any other encroachments at all times and maintained as such throughout the life of the development.

### **8. Compliance with NSW Office of Water Requirements**

Compliance with the requirements of the NSW Office of Water throughout all stages of the subdivision as outlined in their letter dated 25 May 2011 Ref 10ERM2011/0349 attached to this consent as Appendix A.

### **9. Compliance with Sydney Water Requirements**

Compliance with the requirements of Sydney Water throughout all stages of the subdivision as outlined in their letter dated 5 May 2011 attached to this consent as Appendix B.

### **10. Subdivision Certificate Pre-Lodgement Meeting/ Check**

Prior to the submission of a Subdivision Certificate application a final plan pre-lodgement meeting is required to establish that all conditions have been completed to the satisfaction of Council. Prior to a final plan pre-lodgement meeting a copy of the final plan and 88B Instrument must be submitted for checking.

### **11. Building Work to be in Accordance with BCA**

All building work must be carried out in accordance with the provisions of the Building Code of Australia.

### **12. Stockpiles**

Stockpiles of topsoil, sand, aggregate, spoil or other material capable of being moved by water, to be stored clear of any drainage line, easement, natural watercourse, footpath, kerb or roadside.

### **13. Contamination**

Any new information, which comes to light during construction works, which has the potential to alter previous conclusions about site contamination, shall be immediately notified to Council.

### **14. Construction Noise**

Upon receipt of a justified complaint in relation to noise pollution emanating from rock breaking as part of the excavation and construction processes, rock breaking will be restricted to between the hours of 9am to 3pm, Monday to Friday.

Details of noise mitigation measures and likely duration of the activity, will also be required to be submitted to Council seven (7) days of receiving notice from Council.

### **15. Contamination Assessment & Site Remediation**

The recommendations of the Site Assessment and Report prepared by SMEC Testing Services Pty Ltd, referenced as Report no 10/1364, dated November 2010 for 22-24 Fairway Drive Kellyville and submitted as part of the Development Application are to be implemented as part of this approval. In particular: 7 – Conclusions and Recommendations namely the requirement to carry out soil sampling and analysis.

A secondary preliminary soil sampling and laboratory analysis should be carried out on 22-24 Fairway Drive Kellyville in randomly selected areas and areas occupied by buildings and floor slabs after demolition works in order to ensure these areas are not affected by contamination.

Should high levels of contaminants be present, works are to cease and Council's Environmental Health Officer is to be notified and site remediation by excavation or other approved methods will be required.

The report should consider:

- heavy metals;
- total petroleum hydrocarbons (TPH);
- monocyclic aromatic hydrocarbons (BTEX);
- polycyclic aromatic hydrocarbons (PAH);
- pesticides (OC/OP);
- herbicides;
- phenols;
- polychlorinated biphenols (PCB); and
- asbestos.

### **16. Street Naming**

Street naming must comply with Council's approved "Balmoral Road Release Area Road Names" map.

A copy of this map can be accessed from Council's website:

<http://www.thehills.nsw.gov.au/>

### **17. Engineering Works – Design and Construction Approval Process**

The design certification and construction approval of the engineering works nominated in this consent require an Engineering Construction Certificate (ECC) to be obtained prior to the commencement of any works.

An ECC can only be issued by Council.

For Council to issue an ECC the following must be provided:

- a) A completed application form.
- b) Four copies of the design plans and specifications.
- c) Payment of the applicable application and inspection fees.
- d) Payment of any required security bonds.
- e) Payment of a long service levy.

### **18. Street Trees**

Street trees must be provided for the section of Laura Street, Horatio Avenue and Rosetta Crescent within or fronting the development site at a spacing of between 7m and 10m with a minimum of one tree per lot frontage. The location of street trees must compliment driveway locations. The species and size of all street trees must comply with Council's requirements and DCP Part E Section

Street trees can be provided by Council subject to payment of the applicable fee as per Council's Schedule of Fees and Charges.

Street tree planting adjacent to the golf course must consider Clause 9.4(b) from DCP Part E Section 17.

The landscaped batter adjacent to the golf course must provide for a maximum batter of 1(V):4(H) for a distance of 1m measured from the back of kerb increasing to 1(V):3(H) thereafter. The area must be stabilised similar to that shown on Council's Standard Drawing 43.

#### **19. Upgrading of Existing Water and Sewerage Services**

Should the development necessitate the installation or upgrade of water or sewerage services within an area that is either heavily vegetated or traversed by a natural watercourse, services must be located in a route that causes the least amount of impact on the natural environment. Excavation by hand or small machinery is required where the ecological impact would otherwise be considered excessive.

#### **20. Recycled Water**

The subject site must be connected to Sydney Water's Rouse Hill Recycled Water Scheme, unless written evidence from Sydney Water is submitted advising that this service is not available.

#### **21. Road Opening Permit**

Should the subdivision/ development necessitate the installation or upgrading of utility services or any other works on Council land beyond the immediate road frontage of the development site and these works are not covered by a separate Engineering Construction Certificate required to be obtained by Council, as outlined elsewhere in this consent, then a separate road opening permit must be applied for and the works inspected by Council's Restorations Coordinator.

The contractor is responsible for instructing sub-contractors or service authority providers of this requirement. Contact Council's Construction Engineer if it is unclear whether a separate road opening permit is required or not.

#### **22. Protection of Public Infrastructure**

Council must be notified of any damage to public infrastructure caused by the development. Adequate protection must be provided prior to work commencing and maintained during building operations. Any damage caused must be made good, to the satisfaction of Council, before an Occupation Certificate can be issued. Public infrastructure includes the road pavement, kerb and gutter, concrete footpaths, drainage structures, utilities and landscaping fronting the site.

#### **23. Structures Adjacent to Piped Drainage Easements**

Buildings and structures, including footings and brick fences, adjacent to existing or proposed drainage easements must be located wholly outside the easement. A design must be provided by a structural engineer certifying that the structure will not impart a load on the pipe in the easement.

#### **24. Vehicular Access and Parking**

The formation, surfacing and drainage of all driveways, parking modules, circulation roadways and ramps is required, with their design and construction complying with:

- a) AS/ NZS 2890.1:2004
- b) DCP Part D Section 1 – Parking
- c) Council's Driveway Specifications

Where conflict exists the Australian Standard must be used.

The following must be provided:

- i. All driveways and car parking areas must be prominently and permanently line marked, signposted and maintained to ensure parking and traffic circulation is appropriately controlled.
- ii. The shared driveway must be separated from landscaped areas by a low level concrete kerb or wall.
- iii. All driveways and car parking areas must be concrete or bitumen. The pavement design must consider the largest design service vehicle expected to enter the site.
- iv. All driveways and car parking areas must be graded, collected and drained by pits and pipes to a suitable point of legal discharge.

## **25. Gutter and Footpath Crossing Application**

Each driveway requires the lodgement of a separate gutter and footpath crossing application, accompanied by the current fee as prescribed by Council's Schedule of Fees and Charges.

## **26. Minor Engineering Works**

The design and construction of the engineering works listed below must be provided for in accordance with the following documents and requirements:

- a) Council's Design Guidelines Subdivisions/ Developments
- b) Council's Works Specifications Subdivisions/ Developments

Any variance from these documents requires separate approval from Council.

Works on existing public roads or any other land under the care and control of Council must be approved and inspected by Council in accordance with the Roads Act 1993 or the Local Government Act 1993.

### **i. Driveway Requirements**

The design, finish, gradient and location of all driveway crossings must comply with the above documents and Council's driveway specifications which can be found on Council's website:

<http://www.thehills.nsw.gov.au/>

The proposed individual driveways must be built to Council's residential standard.

The proposed shared driveway must be built to Council's medium duty standard.

A separate driveway application fee is payable as per Council's Schedule of Fees and Charges.

### **ii. Site Stormwater Drainage**

The entire site area must be graded, collected and drained by pits and pipes to a suitable point of legal discharge based on a 1 in 10 year ARI storm event.

## **27. Supervision of Works**

All work in the road reserve must be supervised by a suitably qualified and experienced person. The supervisors name, address and contact phone number must be submitted to Council prior to works commencing in the road reserve. A construction programme and anticipated duration of works must be submitted to Council prior to works commencing in the road reserve.

## **28. Public Liability Insurance**

All contractors working in the road reserve must have a current public liability insurance policy with an indemnity limit of not less than \$10,000,000.00. A copy of this insurance must be submitted to Council prior to works commencing in the road reserve.

### **29. Domestic Waste Management – Single or Integrated Dwellings and up to Seven (7) Units/Townhouses/Villas**

Council will provide each unit with a minimum of one 140-litre garbage bin (emptied weekly) and one 240 litre-recycling bin (emptied fortnightly) and one 240L garden organics bin (emptied fortnightly) Allowance is to be made for:

- a) Space for all garbage and recycling bins to be placed on the kerb for servicing on collection day;
- b) Storage of bins allocated to each unit to be:
  - i. within the lot boundary of each unit;
  - ii. incorporated into the landscape design of each unit;
  - iii. screened and not visible from the street;
- c) Adequate natural or mechanical ventilation where bins are stored in an enclosed cupboard or storage compound so that odour emissions do not cause offensive odour as defined by the Protection of the Environment Operations Act 1997; and
- d) Flat or ramped paved pathway, grade not to exceed 7% and distance not to exceed 75m (or 50m for aged persons or persons with a disability), to allow manoeuvring of the bins from the lot/unit to the kerb for servicing (and not over steps, landscape edging or gutters or through the unit).
- e) each bin to be clearly marked with individual unit numbers.

### **30. Adherence to Waste Management Plan**

The Waste Management Plan submitted to Council must be adhered to at all stages in the demolition/construction/design of facilities and on-going use phases. All waste material nominated for recycling must be reused or recycled. Any material moved offsite is to be transported in accordance with the requirements of the Protection of the Environment Operations Act (1997) and only to a place that can lawfully be used as a waste facility. Dockets/receipts verifying recycling/disposal must be kept and presented to Council when required.

### **31. Waste Storage and Separation – Construction and Demolition**

The reuse and recycling of waste materials must be maximised during construction and demolition. The separation and recycling of the following waste materials is required:

- a) Masonry products (bricks, concrete, concrete roof tiles) to be sent for crushing/recycling;
- b) Timber waste to be separated and sent for recycling;
- c) Metals to be separated and sent for recycling;
- d) Clean waste plasterboard to be returned to the supplier for recycling (excluding plasterboard from demolition); and
- e) Mixed waste (plastic wrapping, cardboard etc) to be sent to a licensed recycling or disposal facility.

This can be achieved by constructing a minimum of five trade waste compounds on-site. Each waste compound must be adequately sized to enclose the waste . Alternatively, mixed waste may be stored in one or more adequately sized waste compounds and sent to a waste contractor/waste facility that will sort the waste on their site for recycling. Waste must be adequately secured and contained within designated waste areas and must not leave the site onto neighbouring public or private properties. Personal waste



must not litter the site. Copies of actual weighbridge receipts verifying recycling/disposal must be kept and presented to Council when required.

### **32. Commencement of Domestic Waste Services**

All garbage, recycling and garden organics bins (including bulk bins) are to be ordered no earlier than (3) days prior to occupancy of the development. The bins are to be ordered by the property owner or agent acting for the owner by calling Council's Domestic Waste Line on Ph 1800 623 895.

### **33. Surplus Excavated Material**

The disposal / landfill of surplus excavated material, other than to a DECC licensed facility, is not permitted without formal approval from Council prior to the commencement of works. Any unauthorized disposal of waste, which includes excavated material, is a breach of the Protection of the Environment Operations Act 1997 and subject to substantial penalties. Unless Council approves an alternate site, then all surplus excavated material must be disposed of at a licensed waste facility. Copies of actual weighbridge receipts verifying recycling/disposal must be kept and presented to Council when required.

### **34. Vegetation Management Plan (VMP)**

A Vegetation Management Plan (VMP) is required for the riparian zone and is to be submitted to Council for approval prior to construction.

1. The VMP will outline:

- the management actions to increase biodiversity values of the retained Cumberland Plain Woodland and River-flat Eucalypt Forest in the trunk drainage land.
  - planting of groundcovers, climbers, shrubs and canopy species planted to a density of 2-3 per sqm. Plants will be of local provenance and consist of those species listed on the Cumberland Plain Woodland and the River-flat Eucalypt Forest NSW scientific committee - final determinations.
  - Maintenance visits are to be conducted at 2-monthly intervals for the first year after planting and 6-monthly intervals for the second year after planting, however, weed control and landscape maintenance will be undertaken by the applicant & at no cost to Council or any other authorities for a minimum of 60 months from the Council endorsed date of completion.
  - The whole of the trunk drainage land is to be rehabilitated.
  - No slashing or mechanical works are to be undertaken.
  - Weed control is to be restricted to hand removal or cut-and-paint to reduce exotic flora to less than 5% cover by the conclusion of each visit.
  - Trees which are approved to be removed are to be replaced at with five trees for every one removed. This is not to include trees planted for landscaping purposes. The VMP is to demonstrate how this can be achieved. If the number of trees cannot be replaced at a 5:1 ratio within the riparian zone then the VMP is to demonstrate where this planting will occur.
  - A Landscape Plan is to be provided as an appendix to the VMP and is to demonstrate the plan for 90% of locally endemic landscape plants of local provenance from the Cumberland Plain Woodland community as nominated under the NSW scientific committee – final determination. Landscape plantings within the road reserve are to be maintained for a minimum of 2 years and any failures replaced.
2. Lodgement of a security bond of \$20,000.00 to ensure satisfactory completion and maintenance of the vegetation works.
3. Submission of progress reports at (annually) intervals within the 5 year maintenance period. The progress reports shall indicate compliance with the

Council-approved VMP. The progress reports shall be prepared by a professional ecologist.

4. Progressive release of the security bond at various stages subject to submission of satisfactory completion in accordance with the Council approved VMP detailing progress & maintenance from a professional ecologist & Council verification as per the following criteria:
  - Release of 25%, 12 months after Council certified completion;
  - Release of a further 25%, 24 months after Council certified completion;
  - Final release of 50%, 60 months after Council certified completion.

### **35. Landscaping/planting -seed collection**

Prior to clearance of the vegetation in the development area, all collectable floristic material shall be harvested for use in landscaping and rehabilitation works on site for the implementation of the Vegetation Management Plan. Sufficient material to meet the planting requirements of the site must be collected from the site or the surrounding locality whilst plants are in seed prior to clearing. Supplementary seed sources may be used as long as they are of local provenance.

Details prepared by the project ecologist in writing demonstrating compliance is to be submitted to the Principal Certifying Authority.

### **36. Fauna and Tree Hollow re-location**

- A pre-construction survey is to be undertaken by a qualified ecologist to confirm no bats are roosting in the culvert beneath the driveways prior to disturbance/removal of the culverts. Any individuals found should be captured and released. A bat management plan **shall** be prepared to the satisfaction of Council to detail how this will be undertaken if the bats are present.
- Tree hollows are to be salvaged from trees within the development area and placed within the Riparian Areas within the Lots. This is to be done by a qualified and experienced arborist, under the direction of the Project Ecologist.
- During the vegetation clearance for construction works the applicants Project Ecologist is to be present to re-locate any displaced fauna that may be disturbed during this activity. A tree clearing protocol is to be submitted to Councils satisfaction prior to any tree removal and is to demonstrate how they will achieve the following:
  1. The removal/clearing of hollow-bearing trees should be undertaken outside of the hollow-dependant fauna breeding seasons in accordance with the following. Note: hollow-dependency for the purposes of breeding is greatest during August to February for threatened species within this locality.
    - Trees shall be lopped in such a way that the risk of injury or mortality to fauna is minimised, such as top-down lopping, with lopped sections gently lowered to the ground, or by lowering whole trees to the ground with the "grab" attachment of a machine.
    - An experienced wildlife handler/ecologist shall be in attendance during the felling of trees on this site in order to rescue any injured wildlife.
    - Potential hollows in lowered trees or sections of trees shall be searched by an experienced ecologist and any fauna shall be removed and, if uninjured, either released into roost boxes on the site or fed, warmed and released in the evening, or, if injured, transferred to the care of a wildlife carer and released on the site when re-habilitated.

2. If Hollow-bearing tree removal is unavoidably to occur during August to February in the hollow-dependant fauna breeding seasons, the following is required.:-
  - A fauna breeding season action plan prepared by a suitably qualified and experienced ecologist prior to tree removal being undertaken. The plan must be to the satisfaction of Council and submitted and approved prior to tree removal works being undertaken.
3. The proposed development will result in the removal of habitat resources for some fauna. Hollow-bearing trees and potential recruitment trees will be impacted on. Habitat enhancing features for microchiropteran bats, possums and birds are to be installed within the trunk drainage area. A total of 4 nest boxes are to be installed, two for microchiropteran bats, one for possums and one for birds.

Details prepared by the project ecologist in writing demonstrating compliance is to be submitted to the Principal Certifying Authority.

### **37. Weeds**

No noxious or environmental weeds, as listed on the Hills Shire Council's website are to be imported on to the site. Any noxious weeds or environmental weeds on the site are to be managed continuously, in accordance with the Noxious Weeds Act 1993 and the Vegetation Management Plan for this development. All weeds cleared during the course of building works should be removed off site to an appropriate facility. Mitigation measures should be put in place to prevent the spread of weeds as a result of soil disturbance during earthworks. Piling of soil that may contain seeds of exotic species must be located at least 50m away from the creek and other areas of native vegetation to prevent transportation to adjacent areas during rainfall or wind events.

Details prepared by the project ecologist in writing demonstrating compliance is to be submitted to the Principal Certifying Authority.

## **PRIOR TO ISSUE OF CONSTRUCTION CERTIFICATE**

### **38. Landscape Plan to be submitted**

A plan (to scale) for the landscaping of the site in accordance with Part D Section 3 - Landscaping and be prepared by a suitably qualified landscape architect or horticulturalist is to be submitted to and approved by Council's Tree Management Team. Details should include:

- Site boundaries and dimensions surveyed;
- North point, scale (1:200 desirable);
- Existing and proposed levels;
- All existing trees, grassed areas, landscape features and main structures on the site (buildings, car parking, driveways, walls, fences, paving, storage areas, elements contributing to the significance of a heritage item etc.);
- Plant species, their locations and quantities to be clearly shown on plan;
- Minimum 80% plant species to comprise those endemic to Cumberland Plain Woodland;
- A schedule of proposed planting, including botanic name, common name, quantities, expected mature height and staking requirements;
- Details indicating a minimum of 300mm of good quality topsoil to all garden beds;

- Details indicating a minimum of 150mm of good quality topsoil to all open space areas;
- All garden bed areas to be clearly defined by brick, concrete or timber edging with its top edge finishing flush with the surface of adjacent grass areas; and
- Name and contact telephone number of the person who prepared the plan.

A Landscape Management Statement should accompany the Landscape Plan and provide the intended management and maintenance principles for non-private, community or common open space, including grassed areas, ornamental and native planting; water features; play equipment; outdoor furniture; and other facilities.

#### **39. Landscape Bond**

A landscape bond in the amount of \$10,000.00 is to be lodged with Council prior to the issue of the Construction Certificate. It shall be refunded 6 months following the issue of the Occupation Certificate and the submission to Council of certification from a qualified Landscape Architect or Council's Tree Management Team that the works have been carried out in accordance with the approved landscape plan.

#### **40. Internal Pavement Structural Design Certification (Waste Services)**

A Certified Practicing Engineer (CPEng) must confirm the structural adequacy of the internal pavement design to Council prior to the issue of a Construction Certificate. The proposed pavement design must be adequate to withstand the loads imposed by a loaded waste vehicle (i.e. 28 tonne axle load) from the boundary to the waste collection point including any manoeuvring areas.

#### **41. Controlled Activity Authority – NSW Office of Water**

A copy of the Controlled Activity Authority required to be obtained from the NSW Office of Water must be submitted to Council before a Construction Certificate is issued.

#### **42. Concept Engineering Design Approval**

The submitted concept engineering design plans are for DA purposes only and must not be used for construction.

#### **43. Erosion & Sediment Control Plan**

Submission of an Erosion and Sediment Control Plan to the Principal Certifying Authority, including details of:

- a) Allotment boundaries
- b) Location of the adjoining roads
- c) Contours
- d) Existing vegetation
- e) Existing site drainage
- f) Critical natural areas
- g) Location of stockpiles
- h) Erosion control practices
- i) Sediment control practices
- j) Outline of a maintenance program for the erosion and sediment controls

(NOTE: For guidance on the preparation of the Plan refer to 'Managing Urban Stormwater Soils & Construction' produced by the NSW Department of Housing).

#### **44. Western Sydney Growth Areas – Payment of Special Infrastructure Contribution**

A special infrastructure contribution is to be made in accordance with the Environmental Planning and Assessment (Special Infrastructure Contribution – Western Sydney Growth Areas) Determination 2011, as in force when this consent becomes operative.

Information about the special infrastructure contribution can be found on the NSW Department of Planning and Infrastructure website:

<http://www.planning.nsw.gov.au/PlanningSystem/DevelopmentContributionsSystem/tabid/75/language/en-US/Default.aspx>

Please contact the NSW Department of Planning and Infrastructure regarding arrangements for the making of a payment.

#### **45. Construction Management Plan (Staged Applications)**

A construction management plan must be submitted demonstrating how the potential for conflict between resident and construction traffic is to be minimised and managed throughout all stages of the development. The construction management plan must be submitted before a Construction Certificate is issued and complied with for the duration of works.

#### **46. Works on Adjoining Land**

Where the engineering works included in the scope of this approval extend into adjoining land, written consent from all affected adjoining property owners must be obtained and submitted to Council before a Construction Certificate is issued.

#### **47. Stormwater Discharge Acceptance**

Where the engineering works included in the scope of this approval necessitate the discharge of stormwater onto adjoining land, written consent from all affected adjoining property owners must be obtained and submitted to Council before a Construction Certificate is issued.

#### **48. Stormwater Discharge to Trunk Drainage Land**

Stormwater connections to Sydney Water owned trunk drainage land must be approved by Sydney Water.

#### **49. Stormwater Drainage to Natural Watercourse**

Stormwater connections to a natural watercourse must be approved by the NSW Office of Water.

#### **50. Security Bond – Pavement and Public Asset Protection**

In accordance with Section 80A(6)(a) of the Environmental Planning and Assessment Act 1979, a security bond of \$72,000.00 is required to be submitted to Council to guarantee the protection of the adjacent road pavement and public assets during construction works. The above amount is calculated at the rate of \$30.00 per square metre based on the public road frontage of the subject site (100m) plus an additional 50m on either side (200m) and the width of the road measured from face of kerb on both sides (12m). The minimum bond amount is \$10,000.00.

The bond must be lodged with Council prior to the issue of a Construction Certificate.

The value of this bond shall be confirmed with Council prior to submission and may be in the form of cash or an unconditional bank guarantee. The bond is refundable upon written application to Council along with payment of the applicable bond release fee, and is subject to all work being restored to Council's satisfaction. Should the cost of restoring any damage exceed the value of the bond, Council will undertake the works and issue an invoice for the recovery of these remaining costs.

#### **51. Security Bond – External Works**

In accordance with Section 80A(6)(b) of the Environmental Planning and Assessment Act 1979, a security bond is required to be submitted to Council to guarantee the construction, completion and performance of all works external to the site. The bonded amount must be based on 150% of the tendered value of providing all such works. The minimum bond amount is \$10,000.00.

The bond must be lodged with Council prior to the issue of any Construction Certificate.

The value of this bond shall be confirmed with Council prior to submission and may be in the form of cash or an unconditional bank guarantee. The bond is refundable upon written application to Council along with payment of the applicable bond release fee, and is subject to all work being completed to Council's satisfaction.

## **52. Bank Guarantee Requirements**

Should a bank guarantee be the proposed method of submitting a security bond it must:

- a) Have no expiry date;
- b) Be forwarded direct from the issuing bank with a cover letter that refers to Development Consent DA 1276/2011/JPZ;
- c) Specifically reference the items and amounts being guaranteed. If a single bank guarantee is submitted for multiple items it must be itemised.

Should it become necessary for Council to uplift the bank guarantee, notice in writing will be forwarded to the applicant fourteen days prior to such action being taken. No bank guarantee will be accepted that has been issued directly by the applicant.

## **53. Engineering Works and Design**

The design and construction of the engineering works outlined below must be provided for in accordance with the following documents and requirements:

- a) Council's Design Guidelines Subdivisions/ Developments
- b) Council's Works Specifications Subdivisions/ Developments

Any variance from these documents requires separate approval from Council.

The works listed below require an Engineering Construction Certificate (ECC) as outlined earlier in this consent. The following engineering works are required:

### **i. Gutter Crossings**

Gutter crossings to each of the proposed new allotments are required.

### **ii. Disused Layback/ Driveway Removal**

All disused laybacks and driveways must be removed and replaced with full kerb and gutter together with the restoration and turfing of the adjoining footpath verge area.

### **iii. Service Conduits**

Service conduits to each of the proposed new allotments, laid in strict accordance with the relevant service authority's requirements, are required. Services must be shown on the engineering drawings.

### **iv. Inter-allotment Stormwater Drainage**

Piped inter-allotment drainage designed for a 1 in 10 year ARI storm event catering for the entire area of each lot must be provided, with an assumed impervious surface of 80%. Each lot must be uniformly graded to its lowest point where a grated surface inlet pit must be provided. All collected inter-allotment stormwater is to be piped to an approved constructed public drainage system.

### **v. Stormwater Drainage – Temporary Management**

Grassed swale drains or temporary piped drainage must be installed to intercept, control and redirect surface stormwater runoff from upstream undeveloped properties.

### **vi. Stormwater Drainage – Temporary Discharge**

Tail out drains over adjoining properties are required to be provided, where necessary, of sufficient length and width to dissipate stormwater flows to an acceptable level from the end of all stormwater outlets.

**vii. Earthworks/ Trunk Drainage Interface**

All works, including earthworks, within a 40m corridor measured from the centreline of Strangers Creek are limited to that associated with the construction of stormwater outlets, filling of the existing dam and riparian corridor works. All works in this area must be approved by Council, Sydney Water and the NSW Office of Water.

**PRIOR TO WORKS COMMENCING ON SITE**

**54. Permits under the National Parks and Wildlife Act 1974**

Permit under s90 of the National Parks and Wildlife Act, 1974 are required to be obtained from the Department of Environment, Climate Change and Water prior to any construction or other activity that may cause soil disturbance on the site.

**55. Discontinuation of Domestic Waste Service(s)**

Prior to commencement of any demolition works, Council must be notified to collect any garbage or recycling bins from any dwelling/building that is to be demolished and to discontinue the waste service (where the site ceases to be occupied during works). Construction or demolition workers must not use Council's domestic and garbage and recycling service for the disposal of waste. Please contact Council's Domestic Waste Hotline on 1800 623 895 for the discontinuation of waste services.

**56. Demolition Works & Asbestos Removal/Disposal**

The demolition of any existing structure is to be carried out in accordance with the Occupational Health & Safety Regulations 2001 Part 8 and the Australian Standard AS 2601-1991: The Demolition of Structures. All vehicles leaving the site carrying demolition materials are to have loads covered and are not to track any soil or waste materials on the road. Should the demolition works obstruct or inconvenience pedestrian or vehicular traffic on adjoining public road or reserve, a separate application is to be made to Council to enclose the public place with a hoarding or fence. All demolition waste is to be removed from the site according to the Council's approved waste management plan. – Demolition Waste Section. All asbestos, hazardous and/or intractable wastes are to be disposed of in accordance with the Workcover Authority Guidelines and requirements. The asbestos must be removed by a bonded asbestos licensed operator. Supporting documentation (dockets/Receipts), verifying recycling and disposal must be kept, to be checked by Council if required.

**57. Traffic Control Plan**

A Traffic Control Plan is required to be prepared in strict compliance with the requirements of AS 1742.3 and the current RTA Traffic Control and Work Sites Manual and submitted to Council for approval. The person preparing the plan must have the relevant RTA accreditation to do so. Where amendments to the approved plan are required, they must be submitted to Council for approval prior to being implemented.

**58. Erection of Signage – Supervision of Work**

In accordance with Clause 98A(2) of the Environmental Planning and Assessment Regulations 2000, a sign is to be erected in a prominent position displaying the following information:

- a) The name, address and telephone number of the Principal Certifying Authority (PCA). Where Council is the nominated PCA for the development, the following is to be displayed:

The Hills Shire Council

PO Box 75

CASTLE HILL NSW 1765

Phone (02) 9843 0555

- b) The name of the person responsible for carrying out the works;
- c) A telephone number on which the person responsible for carrying out the works can be contacted after hours;
- d) That unauthorised entry to the work site is prohibited.

This signage must be maintained while the subdivision work is being carried out and must be removed upon completion.

#### **59. Stabilised Access Point**

A stabilised all weather access point is to be provided prior to commencement of site works, and maintained throughout construction activities until the site is stabilised. The controls shall be in accordance with the requirements with the details approved by Council and/or as directed by Council Officers. These requirements shall be in accordance with Managing Urban Stormwater – Soils and Construction produced by the NSW Department of Housing (Blue Book).

#### **60. Erosion and Sedimentation Controls – Minor Works**

Erosion and sedimentation controls shall be in place prior to the commencement of site works; and maintained throughout construction activities until the site is landscaped and/or suitably revegetated. The controls shall be in accordance with the details approved by Council and/or as directed by Council Officers. These requirements shall be in accordance with Managing Urban Stormwater – Soils and Construction produced by the NSW Department of Housing (Blue Book).

#### **61. Contractors Details**

In accordance with Section 109E(3) of the Environmental Planning and Assessment Act 1979, the contractor carrying out the subdivision works must have a current public liability insurance policy with an indemnity limit of not less than \$10,000,000.00. The policy must indemnify Council from all claims arising from the execution of the works. A copy of this insurance must be submitted to Council prior to works commencing.

#### **62. Stormwater Management - Site Runoff and Detention**

The applicant shall submit a site plan/diagram prior to any works commencing on site, of methods to mitigate highly turbid water from leaving the site from a storm or rain event. The site plan/diagram is to include any constructed surface water flow paths/channels and onsite detention pits to hold stormwater from the site. The site plan/diagram will include materials used for sedimentation control and minimising turbid water from leaving the site. The site plan/diagram will also demonstrate how the water runoff will be directed from the site. If there are no plans to channel/direct surface water flow, then a statement from the applicant should be addressed to Council's Environmental Health Officer for assessment.

#### **63. Sediment and Erosion Control**

The approved sediment and erosion control measures, including a stabilised all weather access point, must be in place prior to works commencing and maintained during construction and until the site is stabilised to ensure their effectiveness. For major works, these measures must be maintained for a minimum period of six months following the completion of all works.

#### **64. Pre-Construction Public Infrastructure Dilapidation Report**

A public infrastructure inventory report must be prepared and submitted to Council recording the condition of all public assets in the direct vicinity of the development site. The report shall include:

- a) Designated construction access and delivery routes; and



- b) Photographic evidence of the condition of all public assets. The report shall clearly identify the date of recording.

#### **65. Erosion & Sediment Control Plan Kept on Site**

A copy of the Erosion and Sediment Control Plan must be kept on site at all times during construction and made available to Council officers on request.

#### **66. Service Authority Consultation – Building Works**

Before building works commence:

- a) Unimpeded access must be available to the electricity supply authority to the electricity meters and metering equipment during construction and following the completion of building works.
- b) Documentary evidence, including a notice of requirements from Sydney Water, must be submitted confirming that satisfactory arrangements have been made for the provision of water and sewerage facilities and that the building works will affect existing services.
- c) Consultation with the relevant telecommunications provider authorised under the Telecommunications Act regarding the installation of telephone conduits is recommended.
- d) Consultation with Australia Post regarding letterboxes is recommended.

#### **67. Builder and PCA Details**

The builders name, address, telephone and fax numbers must be submitted to the before building works commence. Where Council is not the PCA, Council must be notified of the PCA in writing two days before building works commence in accordance with the Regulations.

### **DURING CONSTRUCTION**

#### **68. Internal Pavement Construction Certification (Waste Services)**

Certification from a Certified Practicing Engineer (CPEng) must be submitted to Council prior to the issue of an Occupation Certificate, confirming that the internal pavement has been constructed in accordance with the approved plans and is suitable for use by a loaded waste vehicle.

#### **69. Permits under the National Parks and Wildlife Act 1974**

All construction or other activity must be in accordance with the terms and conditions of the Section 90 obtained from the Department of Environment, Climate Change and Water prior to any construction or other activity that may cause soil disturbance on the site.

It is noted that the Section 90 permits obtained are valid for a period of five (5) years from the date of issue.

#### **70. Aboriginal Archaeological Sites or Relics**

If, during activities involving earthworks and soil disturbance, any evidence of an Aboriginal archaeological site or relic is found, all works on the site are to cease and the Department of Environment and Climate Change and Water and the Department of Planning (Heritage Branch) must be notified immediately.

#### **71. European Sites or Relics**

If, during the earthworks, any evidence of a European archaeological site or relic is found, all works on the site are to cease and the NSW Heritage Branch contacted immediately. All relics are to be retained in situ unless otherwise directed by the NSW Heritage Branch.

#### **72. Standard of Works**

All work must be completed in accordance with this consent and Council's Works Specification Subdivisions/ Developments and must include any necessary works required to make the construction effective. All works and public utility relocation must incur no cost to Council.

### **73. Engineering Construction Inspections**

Construction inspections are required for the engineering works included in this consent at the completion of the following inspection stages:

- a) Prior to commencement of work;
- b) Traffic control to AS 1742-3;
- c) Bedding of pipes in trenches;
- d) Trench backfill within roads;
- e) Formwork for concrete structures;
- f) Sub-grade proof roller test;
- g) Proof roller test for kerb;
- h) Sub-base course proof roller test;
- i) Base course proof roller test;
- j) Prior to placing of fill;
- k) Road crossing;
- l) Final inspection; and
- m) Asphaltic concrete surfacing.

The inspection of works approved by Council can only be carried out by Council. An initial site inspection is required prior to commencement of works. 24 hours notice must be given for all inspections.

### **74. Stormwater Management**

All existing stormwater pits to the site will be covered with geofabric sediment fencing to prevent sediment runoff into the stormwater system. To prevent sediment contamination the filters will be regularly inspected and replaced during the duration of the works.

### **75. Subdivision Earthworks – Allotment Topsoil**

Where earthworks are not shown on the engineering drawings, the topsoil within lots must not be disturbed. Where earthworks are shown, a 150mm deep layer of topsoil must be provided, suitably compacted and stabilised in accordance with Council's Works Specification Subdivisions/ Developments.

### **76. Hours of Work**

Work on the project to be limited to the following hours: -

Monday to Saturday - 7.00am to 5.00pm;

No work to be carried out on Sunday or Public Holidays.

The builder/contractor shall be responsible to instruct and control sub-contractors regarding the hours of work. Council will exercise its powers under the Protection of the Environment Operations Act, in the event that the building operations cause noise to emanate from the property on Sunday or Public Holidays or otherwise than between the hours detailed above.

### **76. Documentation**

A copy of the following documents must be kept on site and made available upon request:

- a) Arborist Report/ Tree Management Plan

- b) Waste Management Plan
- c) Sediment and Erosion Control Plan
- d) Traffic Control Plan
- e) Salinity Management Plan
- f) Construction Management Plan

#### **77. Working Hours**

All work associated with the subdivision must be restricted to between the hours of 7.00am and 5.00pm, Monday to Saturday. No work can occur outside the hours specified above or on Sundays or public holidays. The contractor must instruct sub-contractors regarding the hours of work.

#### **78. Confirmation of Compliance with Zero Lot Line**

Prior to the installation of the external roof tiles or sheeting, written advice from a registered surveyor must be provided to the Principal Certifying Authority confirming that the constructed guttering and fascia to the wall for each property using a zero lot line, is located wholly within the property boundary.

#### **79. Location of Dwelling**

A dwelling on lots burdened by an easement for repair/ access and maintenance, in response to an adjacent zero lot line dwelling, must be located wholly within the subject property and clear of the easement. This includes all services, equipment and utilities.

#### **80. Compliance with Critical Stage Inspections and Inspections Nominated by the PCA**

Section 109E(d) of the Act requires critical stage inspections, prescribed by Clause 162A of the Regulations, to be carried out for building work. Prior to allowing building works to commence, the PCA must give notice of these inspections pursuant to Clause 103A of the Regulations.

An Occupation Certificate cannot be issued and the building may not be able to be used or occupied where any mandatory critical stage inspection or other inspection required by the PCA is not carried out. Inspections can only be carried out by the PCA unless agreed to by the PCA beforehand and subject to that person being an accredited certifier.

### **PRIOR TO ISSUE OF OCCUPATION AND / OR SUBDIVISION CERTIFICATE**

#### **81. Completion of Subdivision Works**

A Subdivision Certificate must not be issued for each stage prior to the completion of all subdivision works covered by this consent for that stage, in accordance with this consent.

#### **82. Completion of Engineering Works**

An Occupation Certificate must not be issued for the dwellings in each stage prior to the completion of all engineering works for that stage covered by this consent, in accordance with this consent.

#### **83. Compliance with NSW Office of Water Requirements**

A letter from the NSW Office of Water must be submitted confirming that all works associated with the Controlled Activity Authority have been completed to their satisfaction and that no objection is raised to the issuing of a Subdivision Certificate.

#### **84. Compliance with Sydney Water Requirements**

A letter from Sydney Water must be submitted confirming that the works have been completed to their satisfaction and that no objection is raised to the issuing of a Subdivision Certificate.

#### **85. Works as Executed Plans**

Works as Executed (WAE) plans prepared by a suitably qualified engineer or registered surveyor must be submitted to Council when the engineering works are complete. The WAE plans must be prepared in accordance with Council's Design Guidelines Subdivisions/ Developments on a copy of the approved engineering plans. An electronic copy of the WAE plans, in ".dwg" or ".pdf" format, must also be submitted.

Where applicable, the plans must be accompanied by pavement density results, pavement certification, concrete core test results and site fill results.

#### **86. Performance/ Maintenance Security Bond**

A performance/ maintenance bond of 5% of the total cost of the engineering works is required to be submitted to Council. The bond will be held for a minimum defect liability period of one year and may be extended to allow for the completion of necessary maintenance or in the case of outstanding works. The minimum bond amount is \$5,000.00. The bond is refundable upon written application to Council along with payment of the applicable bond release fee, and is subject to a final inspection.

#### **87. Confirmation of Pipe Locations**

A letter from a registered surveyor must be provided certifying that all pipes and drainage structures are located within the proposed drainage easements.

#### **88. Removal of Sediment and Erosion Control Measures**

A \$5,000.00 bond must be submitted to Council to ensure the satisfactory removal of all sediment and erosion control measures, including the removal of any collected debris.

#### **89. Final Subdivision Fees**

All outstanding fees must be paid before a Subdivision Certificate can be issued. The final fees that remain outstanding will be assessed following the submission of written advice confirming all works have been completed.

#### **90. Compliance with NSW Office of Environment and Heritage Requirements**

A letter from the NSW Office of Environment and Heritage must be submitted confirming that the works have been completed to their satisfaction and that no objection is raised to the issuing of a Subdivision Certificate.

#### **91. Constructed Dwelling Adjacent to Proposed Boundary**

Where any part of a proposed dwelling has been constructed within 2m of a proposed boundary the location of such must be determined by a registered surveyor and shown on a separate copy of the final plan.

#### **92. Constructed Dwelling Services**

A letter from a registered surveyor must be submitted certifying that all facilities servicing the proposed dwellings on the lots created are located wholly within their respective lot or are otherwise contained within a suitable easement.

#### **93. Landscaping**

The landscaping of the site must be finalised as per the approved plan. Landscaping must be maintained at all times.

#### **94. Satisfactory Final Inspection**

A final inspection must be carried out before an Occupation Certificate is issued. An Occupation Certificate must be issued before the dwellings are occupied.

#### **95. Maintenance of BASIX Commitments**

All BASIX requirements must be implemented before an Occupation Certificate is issued and maintained throughout the life of the proposed development in accordance with the approved BASIX Certificates.

#### **96. Prior or Concurrent Registration of Preceding Subdivision**

A Subdivision Certificate cannot be issued for this subdivision before a Subdivision Certificate has been registered with the NSW Land and Property Information for the preceding stage/ subdivision pursuant to Development Consent DA 893/2011/ZA unless the two are issued and registered concurrently.

#### **97. Section 73 Compliance Certificate**

A Section 73 Compliance Certificate issued under the Sydney Water Act 1994 must be obtained from Sydney Water confirming satisfactory arrangements have been made for the provision of water and sewer services. Application must be made through an authorised Water Servicing Coordinator. A list can be found by following this link:

[http://www.sydneywater.com.au/BuildingDevelopingandPlumbing/SupplierInformation/wsc/waterserv\\_ext\\_print.htm](http://www.sydneywater.com.au/BuildingDevelopingandPlumbing/SupplierInformation/wsc/waterserv_ext_print.htm)

The certificate must refer to the issued consent, all of the lots created and Development Consent DA 1276/2011/JPZ.

#### **98. Provision of Electrical Services**

Submission of a notification of arrangement certificate confirming satisfactory arrangements have been made for the provision of electrical services. This includes the under-grounding of existing electrical services where directed by Council or the relevant service provider. Street lighting is required for new roads and a hinged lighting column is required in any proposed pedestrian pathways links.

The certificate must refer to the issued consent, all of the lots created and Development Consent DA 1276/2011/JPZ.

#### **99. Provision of Telecommunication Services**

Submission of a telecommunications infrastructure provisioning confirmation certificate, issued by the relevant telecommunications provider authorised under the Telecommunications Act, confirming satisfactory arrangements have been made for the provision, or relocation, of telecommunication services including telecommunications cables and associated infrastructure. This includes the under-grounding of aerial telecommunications lines and cables where directed by Council or the relevant telecommunications carrier.

The certificate must refer to the issued consent, all of the lots created and Development Consent DA 1276/2011/JPZ.

#### **100. Geotechnical Report (Lot Classification)**

Submission of a lot classification report, prepared by a suitably qualified geotechnical engineer, following the completion of all subdivision works confirming that all residential allotments are compliant with AS2870 and are suitable for residential development. The lot classification report must be accompanied by a separate table which clearly shows the classification of all lots created as part of the subdivision.

#### **101. Stormwater CCTV Recording**

All piped stormwater drainage systems and ancillary structures which will become Council assets must be inspected by a CCTV and a report prepared. A hard copy of the report must be submitted along with a copy of the CCTV inspection on either VHS or DVD (in WMA format).

#### **102. Public Asset Creation Summary**

A completed public asset creation summary form must be submitted with the WAE plans. A blank form can be found on Council's website.

#### **103. Flooding Extent Plan**

A plan of survey prepared by a registered surveyor must be provided that shows the Probable Maximum Flood (PMF) and 1 in 100 year ARI storm event flood levels associated with the adjacent drainage system. The plan must reflect the WAE plans and clearly indicate the extent of inundation.

#### **104. Final Plan and 88B Instrument**

The final plan and 88B Instrument must provide for the following. Standard wording is available on Council's website and must be used.

- a) **Drainage Easements – Inter-allotment/ Private**

Inter-allotment drainage easements must be provided to ensure each and every lot is provided with a legal point of discharge. The width of all inter-allotment drainage easements must comply with Council's Design Guidelines Subdivisions/ Developments and the terms must nominate each lot burdened and benefited.

**b) Temporary Public Stormwater Outlet Easements**

Creation of suitable temporary drainage easements, minimum 5m wide and 30m long, from the outlet of any culverts located within the property or on adjoining land.

**c) Easement for Repairs (Zero Lot Line Dwellings)**

A 900mm wide easement for repairs is required over those lots adjacent to the zero-lot line dwellings identified on the approved plan.

**d) Party Walls (Semi-detached Dwellings)**

Any common walls between semi-detached dwellings must be nominated as party walls on the final plan.

**e) Restriction – Earthworks**

Restricting cut or fill on all residential lots in accordance with the DCP.

**f) Restriction – Site Coverage**

Restricting development of all residential lots to reinforce the maximum site coverage from DCP Part E Section 17, being 65% for single storey or 60% for two storey or more.

**g) Restriction – Rainwater Tanks**

Restricting residential development of all lots to ensure a 3000L rainwater tank is provided and maintained on each lot in accordance with DCP Part E Section 17.

**h) Restriction – Bedroom Numbers**

A restriction must be placed on the title of all proposed lots limiting the number of bedrooms to that shown on the plans and details approved with this consent. The restriction must also state that no internal alterations are permitted that result in the creation of additional bedrooms.

**i) Restriction – Riparian Corridor**

A restriction must be placed on the title to ensure that any development is located outside of the riparian corridor, which must be shown on the final plan, in accordance with the requirements of both Council and the NSW Office of Water.

**j) Positive Covenant – Riparian Corridor**

A positive covenant must be placed on the title to ensure the ongoing maintenance of the riparian corridor, which must be shown on the final plan, in accordance with the requirements of both Council and the NSW Office of Water.

**k) Restriction – Salinity**

A restriction must be placed on the title of all proposed lots to ensure that any dwelling built on the affected lot is considerate of the saline nature of the site, in accordance with the approved salinity report and the requirements of Council.

**105. Post Construction Public Infrastructure Dilapidation Report**

Before an Occupation Certificate is issued, an updated public infrastructure inventory report must be prepared and submitted to Council. The updated report must identify any damage to public assets in the direct vicinity of the development site and the means of rectification for the approval of Council.

## **THE USE OF THE SITE**

### **106. Offensive Noise - Acoustic Report**

The proposed use of the premises and/or machinery equipment installed must not create offensive noise so as to interfere with the amenity of the neighbouring properties.

Should an offensive noise complaint be received and verified by Council an acoustic assessment is to be undertaken (by an appropriately qualified consultant), and an acoustic report is to be submitted to Council for review. Any noise attenuation recommendations recommended and approved by Council must be implemented.

### **107. Servicing of Bins**

Council contracted or private garbage/recycling collection vehicles servicing the development are not permitted to reverse in or out of the site. Collection vehicles must be travelling in a forward direction at all times to service bins.

### **108. Servicing of Bins**

Council contracted or private garbage/recycling collection vehicles servicing the development are not permitted to reverse in or out of the site. Collection vehicles must be travelling in a forward direction at all times to service bins.

### **109. Agreement for On-site Waste Collection**

An Indemnity Agreement is to be signed and returned to Council to enable servicing of bins from the private road by Council's waste collection vehicles.

### **Advisory Note**

### **Environmental Protection and Biodiversity Conservation Act 1999**

You are advised that you may have responsibilities under the Environmental Protection and Biodiversity Conservation Act 1999 to consult with the Department of Sustainability, Environment, Water, Population and Communities in relation to this application.

## **STAGE 1**

### **GENERAL MATTERS**

### **110. Approved Plans (Dwellings)**

The dwellings to be constructed within this stage are to be limited to those relevant dwellings approved by condition no. 1 of this consent.

### **111. Works Within Stage**

The works within this stage are to be limited to those identified within the staging plan, and other approved plans, identified by this consent.

### **112. Prior to Demolition Works Commencing**

Prior to any demolition works commencing on the site, the applicant is to notify all adjoining and adjacent neighbours and Council, five (5) working days prior to work commencing.

### **113. Notice of Required Inspections for demolitions**

Council requires twenty four (24) hours notice for inspections. Please ring Development Certification on 9843 0301 before 3.30pm to book an inspection for the following day.

The proposed demolition works must be inspected by Council at the following key stages:-

- a) Pre-demolition including sediment controls and site fencing / signage; and
- b) Completion of demolition (incorporates Infrastructure Inspection).

## **PRIOR TO ISSUE OF CONSTRUCTION CERTIFICATE**

### **114. Engineering Works and Design (Stage 1)**

The design and construction of the engineering works outlined below must be provided for in accordance with the following documents and requirements:

- a) Council's Design Guidelines Subdivisions/ Developments
- b) Council's Works Specifications Subdivisions/ Developments

Any variance from these documents requires separate approval from Council.

The works listed below require an Engineering Construction Certificate (ECC) as outlined earlier in this consent. The following engineering works are required:

#### **i. Full Width Road Construction**

The full width construction of the roads listed below is required, including footpath paving and other ancillary work to make this construction effective.

Proposed roads must be constructed to the following requirements:

Road Name	Formation (Footpath/ Carriageway/ Footpath) (m)	Traffic Loading N(ESA)
Horatio Avenue	Road Type: DCP Access Street (1) 3.5m/ 8.5m/ 3.5m (15.5m)	5 x 10(5)
Rosetta Crescent	Road Type: DCP Access Street Adjacent to Golf Course (1L) 3.5m/ 8.5m/ 3.5m (15.5m)	5 x 10(5)

The design must incorporate a standard kerb return radius of 7.5m based on a 4m splay corner unless otherwise directed by Council.

This condition applies to the section of Horatio Avenue between Laura Street and the site's southern boundary.

#### **ii. Partial Width Road Construction**

The partial width construction of the roads listed below is required, including footpath paving and other ancillary work to make this construction effective.

Road Name	Formation (Footpath/ Carriageway/ Footpath) (m)	Traffic Loading N(ESA)
Horatio Avenue	Road Type: DCP Access Street (1) 3.5m/ 8.5m/ 3.5m (15.5m)	5 x 10(5)

The design must incorporate a standard kerb return radius of 7.5m based on a 4m splay corner unless otherwise directed by Council.

This condition applies to the section of Horatio Avenue adjacent to the site's southern boundary.

Where partial width construction exists opposite, the completed road must comply with the overall requirements outlined in the table above. Where partial width construction does not exist opposite, you will be responsible for the formation of the footpath verge, kerb and gutter and the construction of 6m of road pavement.



Any requirements relating to partial width road construction from the relevant section of Council's DCP must also be complied with. All works must be carried out in accordance with the submitted traffic safety statement.

### **iii. Partial Width Road Reconstruction**

The partial width reconstruction of the existing roads listed below is required, including any necessary service adjustments and ancillary work required to make the construction effective.

Road Name	Formation (Footpath/ Carriageway/ Footpath) (m)	Traffic Loading N(ESA)
Fairway Drive	Road Type: DCP Enhanced Collector Road w/ Cycleway (3C) 3.5m/ 12m/ 4.5m (20m)	5 x 10(6)

The design must incorporate a standard kerb return radius of 7.5m based on a 4m splay corner unless otherwise directed by Council.

Where partial width reconstruction exists opposite, the completed road must comply with the overall requirements outlined in the table above. Where partial width reconstruction does not exist opposite, you will be responsible for the formation of the footpath verge, kerb and gutter and the reconstruction of 6m of road pavement. This new road pavement must transition into the existing road pavement opposite to provide for a total minimum carriageway width of 10m. Additional pavement reconstruction may be necessary to provide for this carriageway width.

Any requirements relating to partial width road reconstruction from the relevant section of Council's DCP must also be complied with. All works must be carried out in accordance with the submitted traffic safety statement.

Where the existing road reserve width exceeds that required to be provided, the additional width is to be evenly distributed on either side of the road carriageway to provide for a wider footpath verge.

The reconstruction of Fairway Drive must extend across the entire site frontage, being 24 and 26 Fairway Drive.

The design must consider/ include the cycleway crossing in Fairway Drive fronting the development site shown on the DCP map, including the need to swap the 3.5m wide and 4.5m wide footpath verges at this location.

### **iv. Concrete Footpath Paving**

A 1.5m wide concrete footpath, including access ramps at all intersections, must be provided on one side of Horatio Avenue and Rosetta Crescent and along the sites Fairway Drive frontage in accordance with the DCP and the above documents.

### **v. Street Names Signs**

Street name signs and posts are required, as approved by Council.

### **vi. Landscaped Batter/ Footpath Verge**

The landscaped batter within the footpath verge of Rosetta Crescent adjacent to the golf course must provide for a maximum batter of 1(V):4(H) for a distance of 1m measured from the back of kerb increasing to 1(V):3(H) thereafter. The area must be stabilised similar to that shown on Council's Standard Drawing 43.

### **vii. Retaining Wall – Public Road Interface**

The retaining wall shown between Rosetta Crescent and the golf course must be located wholly within the golf course (including footings). The final height, extent and finish of this wall must be submitted to Council for approval.

#### **115. Section 94 Contribution – Balmoral Road Release Area**

The following monetary contributions must be paid to Council in accordance with Section 94 of the Environmental Planning and Assessment Act, 1979, to provide for the increased demand for public amenities and services resulting from the development.

Payments comprise of the following: -

<b>STAGE 1 - EASTERN PRECINCT</b>	<b>Purpose: Integrated Housing</b>	<b>No. Of Lots: 23</b>	<b>No. Of Credits: 1</b>	<b>TOTAL S94</b>
Open Space - Land	\$ 18,865.47	\$ 433,905.81	\$ 18,865.47	\$ 415,040.34
Open Space - Capital	\$ 5,006.83	\$ 115,157.09	\$ 5,006.83	\$ 110,150.26
Transport Facilities - Capital	\$ 3,565.12	\$ 81,997.76	\$ 3,565.12	\$ 78,432.64
Community Facilities - Land	\$ 373.08	\$ 8,580.84	\$ 373.08	\$ 8,207.76
Community Facilities - Capital	\$ 1,528.43	\$ 35,153.89	\$ 1,528.43	\$ 33,625.46
Administration	\$ 261.85	\$ 6,022.55	\$ 261.85	\$ 5,760.70
Drainage Facilities - Capital	\$ 399.22	\$ 9,182.06	\$ 399.22	\$ 8,782.84
<b>Total</b>	<b>\$ 30,000.00</b>	<b>\$ 690,000.00</b>	<b>\$ 30,000.00</b>	<b>\$ 660,000.00</b>

Prior to payment of the above contributions, the applicant is advised to contact Council's Development Contributions Officer on 9843 0268. Payment must be made by cheque or credit/debit card. Cash payments will not be accepted.

This condition has been imposed in accordance with Contributions Plan No. 12 (Eastern Precinct).

Council's Contributions Plans can be viewed at [www.thehills.nsw.gov.au](http://www.thehills.nsw.gov.au) or a copy may be inspected or purchased at Council's Administration Centre.

#### **PRIOR TO WORKS COMMENCING ON SITE**

#### **DURING CONSTRUCTION**

#### **116. Compliance with BASIX Certificate**

Under Clause 97A of the Environmental Planning and Assessment Regulation 2000, all commitments listed in the following BASIX Certificates submitted with the application must be complied with:

Lot/ Dwelling No.	BASIX Certificate No.
32	367975S
33	367976S
34	367977S
35	367979M
36	367979M
37	367980M
38	367980M
39	367981M
40	367981M
41	367983M
42	367983M
43	367984M
44	367984M

45	367986S
46	367987M
47	367987M
48	367990S
49	367992S
50	367993S

## **PRIOR TO ISSUE OF OCCUPATION AND / OR SUBDIVISION CERTIFICATE**

### **117. Prior or Concurrent Registration of Preceding Subdivision**

A Subdivision Certificate cannot be issued for this subdivision before a Subdivision Certificate has been registered with the NSW Land and Property Information for the preceding stage/ subdivision pursuant to Development Consent DA 893/2011/ZB unless the two are issued and registered concurrently.

### **118. Final Plan and 88B Instrument (Stage 1)**

The final plan and 88B Instrument must provide for the following. Standard wording is available on Council's website and must be used.

#### **a) Dedication of Public Roads**

The proposed roads within the subdivision must be dedicated as public road at no cost to Council. All lots shown on the final plan must be provided with access to the public road network.

#### **b) Restriction – Flood Levels**

Restricting excavation on proposed lots 46 to 50 to ensure the floor level of any dwelling or garage erected is a minimum of 500mm above the 1 in 100 year ARI flood level associated with Strangers Creek adjacent in accordance with the DCP. The terms of the restriction must nominate the required Flood Planning Level (FPL) for each lot along with the source of the flood data relied upon in deriving these values.

## **STAGE 2**

### **GENERAL MATTERS**

#### **119. Approved Plans (Dwellings)**

The dwellings to be constructed within this stage are to be limited to those relevant dwellings approved by condition no. 1 of this consent.

#### **120. Works Within Stage**

The works within this stage are to be limited to those identified within the staging plan, and other approved plans, identified by this consent.

#### **121. Community Association Lot (Community Title Subdivision)**

All lots or dwellings within the community scheme must be entitled to utilise the community allotment and share in the costs associated with its upkeep.

## **PRIOR TO ISSUE OF CONSTRUCTION CERTIFICATE**

### **122. Engineering Works and Design (Stage 2)**

The design and construction of the engineering works outlined below must be provided for in accordance with the following documents and requirements:

- a) Council's Design Guidelines Subdivisions/ Developments

b) Council's Works Specifications Subdivisions/ Developments

Any variance from these documents requires separate approval from Council.

The works listed below require an Engineering Construction Certificate (ECC) as outlined earlier in this consent. The following engineering works are required:

i. **Full Width Road Construction**

The full width construction of the roads listed below is required, including footpath paving and other ancillary work to make this construction effective.

Proposed roads must be constructed to the following requirements:

Road Name	Formation (Footpath/ Carriageway/ Footpath) (m)	Traffic Loading N(ESA)
Private Road	Road Type: Private Road 1m/ 6m/ 1m (variable) (8m minimum)	5 x 10(5)

The intersection between the proposed private road and Horatio Avenue and Rosetta Crescent must distinguish the private road from the public roads. This will require pavement threshold treatment and a gutter layback, as opposed to an extension of the road pavement and corner splays.

ii. **Street Names Signs**

Street name signs and posts are required, as approved by Council. A sign reading "private road" must also be installed.

**123. Section 94 Contribution – Balmoral Road Release Area**

The following monetary contributions must be paid to Council in accordance with Section 94 of the Environmental Planning and Assessment Act, 1979, to provide for the increased demand for public amenities and services resulting from the development.

Payments comprise of the following: -

STAGE 2 - EASTERN PRECINCT	Purpose: Integrated Housing	No. Of Lots: 15	No. Of Credits: 1	TOTAL \$94
Open Space - Land	\$ 18,865.47	\$ 282,982.05	\$ 18,865.47	\$ 264,116.58
Open Space - Capital	\$ 5,006.83	\$ 75,102.45	\$ 5,006.83	\$ 70,095.62
Transport Facilities - Capital	\$ 3,565.12	\$ 53,476.80	\$ 3,565.12	\$ 49,911.68
Community Facilities - Land	\$ 373.08	\$ 5,596.20	\$ 373.08	\$ 5,223.12
Community Facilities - Capital	\$ 1,528.43	\$ 22,926.45	\$ 1,528.43	\$ 21,398.02
Administration	\$ 261.85	\$ 3,927.75	\$ 261.85	\$ 3,665.90
Drainage Facilities - Capital	\$ 399.22	\$ 5,988.30	\$ 399.22	\$ 5,589.08
<b>Total</b>	<b>\$ 30,000.00</b>	<b>\$ 450,000.00</b>	<b>\$ 30,000.00</b>	<b>\$ 420,000.00</b>

Prior to payment of the above contributions, the applicant is advised to contact Council's Development Contributions Officer on 9843 0268. Payment must be made by cheque or credit/debit card. Cash payments will not be accepted.

This condition has been imposed in accordance with Contributions Plan No. 12 (Eastern Precinct).

Council's Contributions Plans can be viewed at [www.thehills.nsw.gov.au](http://www.thehills.nsw.gov.au) or a copy may be inspected or purchased at Council's Administration Centre.

**PRIOR TO WORKS COMMENCING ON SITE**

**DURING CONSTRUCTION**

**124. Compliance with BASIX Certificate**

Under Clause 97A of the Environmental Planning and Assessment Regulation 2000, all commitments listed in the following BASIX Certificates submitted with the application must be complied with:

Lot/ Dwelling No.	BASIX Certificate No.
2	367949M
3	367949M
4	367951M
5	367951M
6	367952M
7	367952M
8	367953M
9	367953M
10	367954M
11	367954M
12	367955S
13	367956S
14	367957M
15	367957M
16	367960S

## **PRIOR TO ISSUE OF OCCUPATION AND / OR SUBDIVISION CERTIFICATE**

### **125. Prior or Concurrent Registration of Preceding Subdivision**

A Subdivision Certificate cannot be issued for this subdivision before a Subdivision Certificate has been registered with the NSW Land and Property Information for the preceding stage/ subdivision pursuant to Development Consent DA 1276/2011/JPZ (Stage 1) unless the two are issued and registered concurrently.

### **126. Community Management Statement (Staged Developments)**

The community management statement must permit the creation of additional community land in later stages in a manner wholly under the control of the developer.

### **127. Final Plan and 88B Instrument (Stage 2)**

The final plan and 88B Instrument must provide for the following. Standard wording is available on Council's website and must be used.

#### **a) Right of Carriage way/ Easement for Services**

A right of carriage way/ easement for services must be created over the private road.

#### **b) Positive Covenant – Maintenance/ Repair of Shared Access**

A positive covenant must be placed on the title of all the lots in the community title scheme, including the residue development lot, to ensure the maintenance/ repair of the private road.

### **STAGE 3**

#### **GENERAL MATTERS**

##### **128. Approved Plans (Dwellings)**

The dwellings to be constructed within this stage are to be limited to those relevant dwellings approved by condition no. 1 of this consent.

##### **129. Works Within Stage**

The works within this stage are to be limited to those identified within the staging plan, and other approved plans, identified by this consent.

#### **PRIOR TO ISSUE OF CONSTRUCTION CERTIFICATE**

##### **130. Section 94 Contribution – Balmoral Road Release Area**

The following monetary contributions must be paid to Council in accordance with Section 94 of the Environmental Planning and Assessment Act, 1979, to provide for the increased demand for public amenities and services resulting from the development.

Payments comprise of the following: -

<b>STAGE 3 - EASTERN PRECINCT</b>	<b>Purpose: Integrated Housing</b>	<b>No. Of Lots: 8</b>	<b>No. Of Credits: 1</b>	<b>TOTAL S94</b>
Open Space - Land	\$ 18,865.47	\$ 150,923.76	\$ 18,865.47	\$ 132,058.29
Open Space - Capital	\$ 5,006.83	\$ 40,054.64	\$ 5,006.83	\$ 35,047.81
Transport Facilities - Capital	\$ 3,565.12	\$ 28,520.96	\$ 3,565.12	\$ 24,955.84
Community Facilities - Land	\$ 373.08	\$ 2,984.64	\$ 373.08	\$ 2,611.56
Community Facilities - Capital	\$ 1,528.43	\$ 12,227.44	\$ 1,528.43	\$ 10,699.01
Administration	\$ 261.85	\$ 2,094.80	\$ 261.85	\$ 1,832.95
Drainage Facilities - Capital	\$ 399.22	\$ 3,193.76	\$ 399.22	\$ 2,794.54
<b>Total</b>	<b>\$ 30,000.00</b>	<b>\$ 240,000.00</b>	<b>\$ 30,000.00</b>	<b>\$ 210,000.00</b>

Prior to payment of the above contributions, the applicant is advised to contact Council's Development Contributions Officer on 9843 0268. Payment must be made by cheque or credit/debit card. Cash payments will not be accepted.

This condition has been imposed in accordance with Contributions Plan No. 12 (Eastern Precinct).

Council's Contributions Plans can be viewed at [www.thehills.nsw.gov.au](http://www.thehills.nsw.gov.au) or a copy may be inspected or purchased at Council's Administration Centre.

#### **DURING CONSTRUCTION**

##### **131. Compliance with BASIX Certificate**

Under Clause 97A of the Environmental Planning and Assessment Regulation 2000, all commitments listed in the following BASIX Certificates submitted with the application must be complied with:

<b>Lot/ Dwelling No.</b>	<b>BASIX Certificate No.</b>
51	367999S
52	368001S
53	368002S
54	368003S
55	368004S
56	368005S
57	368006S
58	368007S

## **PRIOR TO ISSUE OF OCCUPATION AND / OR SUBDIVISION CERTIFICATE**

### **132. Prior or Concurrent Registration of Preceding Subdivision**

A Subdivision Certificate cannot be issued for this subdivision before a Subdivision Certificate has been registered with the NSW Land and Property Information for the preceding stage/ subdivision pursuant to Development Consent DA 1276/2011/JPZ (Stage 2) unless the two are issued and registered concurrently.

## **STAGE 4**

### **GENERAL MATTERS**

#### **133. Approved Plans (Dwellings)**

The dwellings to be constructed within this stage are to be limited to those relevant dwellings approved by condition no. 1 of this consent.

#### **134. Works Within Stage**

The works within this stage are to be limited to those identified within the staging plan, and other approved plans, identified by this consent.

#### **135. Community Association Lot (Community Title Subdivision)**

All lots or dwellings within the community scheme must be entitled to utilise the community allotment and share in the costs associated with its upkeep.

## **PRIOR TO ISSUE OF CONSTRUCTION CERTIFICATE**

### **136. Section 94 Contribution – Balmoral Road Release Area**

The following monetary contributions must be paid to Council in accordance with Section 94 of the Environmental Planning and Assessment Act, 1979, to provide for the increased demand for public amenities and services resulting from the development.

Payments comprise of the following: -

<b>STAGE 4 - EASTERN PRECINCT</b>	<b>Purpose: Integrated Housing</b>	<b>No. Of Lots: 15</b>	<b>No. Of Credits: 1</b>	<b>TOTAL \$94</b>
Open Space - Land	\$ 18,865.47	\$ 282,982.05	\$ 18,865.47	\$ 264,116.58
Open Space - Capital	\$ 5,006.83	\$ 75,102.45	\$ 5,006.83	\$ 70,095.62
Transport Facilities - Capital	\$ 3,565.12	\$ 53,476.80	\$ 3,565.12	\$ 49,911.68
Community Facilities - Land	\$ 373.08	\$ 5,596.20	\$ 373.08	\$ 5,223.12
Community Facilities - Capital	\$ 1,528.43	\$ 22,926.45	\$ 1,528.43	\$ 21,398.02
Administration	\$ 261.85	\$ 3,927.75	\$ 261.85	\$ 3,665.90
Drainage Facilities - Capital	\$ 399.22	\$ 5,988.30	\$ 399.22	\$ 5,589.08
<b>Total</b>	<b>\$ 30,000.00</b>	<b>\$ 450,000.00</b>	<b>\$ 30,000.00</b>	<b>\$ 420,000.00</b>

Prior to payment of the above contributions, the applicant is advised to contact Council's Development Contributions Officer on 9843 0268. Payment must be made by cheque or credit/debit card. Cash payments will not be accepted.

This condition has been imposed in accordance with Contributions Plan No. 12 (Eastern Precinct).

Council's Contributions Plans can be viewed at [www.thehills.nsw.gov.au](http://www.thehills.nsw.gov.au) or a copy may be inspected or purchased at Council's Administration Centre.

## **DURING CONSTRUCTION**

### **137. Compliance with BASIX Certificate**

Under Clause 97A of the Environmental Planning and Assessment Regulation 2000, all commitments listed in the following BASIX Certificates submitted with the application must be complied with:

Lot/ Dwelling No.	BASIX Certificate No.
17	367960S
18	367962M
19	367962M
20	367964M
21	367964M
22	366062S
23	367968S
24	367969M
25	367969M
26	367970M
27	367970M
28	367974M
29	367974M
30	367433M
31	367433M

## **PRIOR TO ISSUE OF OCCUPATION AND / OR SUBDIVISION CERTIFICATE**

### **138. Prior or Concurrent Registration of Preceding Subdivision**

A Subdivision Certificate cannot be issued for this subdivision before a Subdivision Certificate has been registered with the NSW Land and Property Information for the preceding stage/ subdivision pursuant to Development Consent DA 1276/2011/JPZ (Stage 3) unless the two are issued and registered concurrently.

## **STAGE 5**

### **GENERAL MATTERS**

#### **139. Approved Plans (Dwellings)**

The dwellings to be constructed within this stage are to be limited to those relevant dwellings approved by condition no. 1 of this consent.

#### **140. Works Within Stage**

The works within this stage are to be limited to those identified within the staging plan, and other approved plans, identified by this consent.

## **PRIOR TO ISSUE OF CONSTRUCTION CERTIFICATE**

### **141. Section 94 Contribution – Balmoral Road Release Area**

The following monetary contributions must be paid to Council in accordance with Section 94 of the Environmental Planning and Assessment Act, 1979, to provide for the increased demand for public amenities and services resulting from the development.



Payments comprise of the following: -

<b>STAGE 5 - EASTERN PRECINCT</b>	<b>Purpose: Integrated Housing</b>	<b>No. Of Lots: 11</b>	<b>No. Of Credits: 1</b>	<b>TOTAL S94</b>
Open Space - Land	\$ 18,865.47	\$ 207,520.17	\$ 18,865.47	\$ 188,654.70
Open Space - Capital	\$ 5,006.83	\$ 55,075.13	\$ 5,006.83	\$ 50,068.30
Transport Facilities - Capital	\$ 3,565.12	\$ 39,216.32	\$ 3,565.12	\$ 35,651.20
Community Facilities - Land	\$ 373.08	\$ 4,103.88	\$ 373.08	\$ 3,730.80
Community Facilities - Capital	\$ 1,528.43	\$ 16,812.73	\$ 1,528.43	\$ 15,284.30
Administration	\$ 261.85	\$ 2,880.35	\$ 261.85	\$ 2,618.50
Drainage Facilities - Capital	\$ 399.22	\$ 4,391.42	\$ 399.22	\$ 3,992.20
<b>Total</b>	<b>\$ 30,000.00</b>	<b>\$ 330,000.00</b>	<b>\$ 30,000.00</b>	<b>\$ 300,000.00</b>

Prior to payment of the above contributions, the applicant is advised to contact Council's Development Contributions Officer on 9843 0268. Payment must be made by cheque or credit/debit card. Cash payments will not be accepted.

This condition has been imposed in accordance with Contributions Plan No. 12 (Eastern Precinct).

Council's Contributions Plans can be viewed at [www.thehills.nsw.gov.au](http://www.thehills.nsw.gov.au) or a copy may be inspected or purchased at Council's Administration Centre.

## **DURING CONSTRUCTION**

### **142. Compliance with BASIX Certificate**

Under Clause 97A of the Environmental Planning and Assessment Regulation 2000, all commitments listed in the following BASIX Certificates submitted with the application must be complied with:

Lot/ Dwelling No.	BASIX Certificate No.
59	368009S
60	368010S
61	368011S
62	368014S
63	368015S
64	368016M
65	368016M
66	368020M
67	368020M
68	368021M
69	368021M

## **PRIOR TO ISSUE OF OCCUPATION AND / OR SUBDIVISION CERTIFICATE**

### **143. Prior or Concurrent Registration of Preceding Subdivision**

A Subdivision Certificate cannot be issued for this subdivision before a Subdivision Certificate has been registered with the NSW Land and Property Information for the preceding stage/ subdivision pursuant to Development Consent DA 1276/2011/JPZ (Stage 4) unless the two are issued and registered concurrently.

## **STAGE 6**

### **GENERAL MATTERS**

#### **144. Approved Plans (Dwellings)**

The dwellings to be constructed within this stage are to be limited to those relevant dwellings approved by condition no. 1 of this consent.

#### **145. Works Within Stage**

The works within this stage are to be limited to those identified within the staging plan, and other approved plans, identified by this consent.

### **PRIOR TO ISSUE OF CONSTRUCTION CERTIFICATE**

#### **146. Section 94 Contribution – Balmoral Road Release Area**

The following monetary contributions must be paid to Council in accordance with Section 94 of the Environmental Planning and Assessment Act, 1979, to provide for the increased demand for public amenities and services resulting from the development.

Payments comprise of the following: -

<b>STAGE 6 - EASTERN PRECINCT</b>	<b>Purpose: Integrated Housing</b>	<b>No. Of Lots: 18</b>	<b>No. Of Credits: 1</b>	<b>TOTAL S94</b>
Open Space - Land	\$ 18,865.47	\$ 339,578.46	\$ 18,865.47	\$ 320,712.99
Open Space - Capital	\$ 5,006.83	\$ 90,122.94	\$ 5,006.83	\$ 85,116.11
Transport Facilities - Capital	\$ 3,565.12	\$ 64,172.16	\$ 3,565.12	\$ 60,607.04
Community Facilities - Land	\$ 373.08	\$ 6,715.44	\$ 373.08	\$ 6,342.36
Community Facilities - Capital	\$ 1,528.43	\$ 27,511.74	\$ 1,528.43	\$ 25,983.31
Administration	\$ 261.85	\$ 4,713.30	\$ 261.85	\$ 4,451.45
Drainage Facilities - Capital	\$ 399.22	\$ 7,185.96	\$ 399.22	\$ 6,786.74
<b>Total</b>	<b>\$ 30,000.00</b>	<b>\$ 540,000.00</b>	<b>\$ 30,000.00</b>	<b>\$ 510,000.00</b>

Prior to payment of the above contributions, the applicant is advised to contact Council's Development Contributions Officer on 9843 0268. Payment must be made by cheque or credit/debit card. Cash payments will not be accepted.

This condition has been imposed in accordance with Contributions Plan No. 12 (Eastern Precinct).

Council's Contributions Plans can be viewed at [www.thehills.nsw.gov.au](http://www.thehills.nsw.gov.au) or a copy may be inspected or purchased at Council's Administration Centre.

### **DURING CONSTRUCTION**

#### **147. Compliance with BASIX Certificate**

Under Clause 97A of the Environmental Planning and Assessment Regulation 2000, all commitments listed in the following BASIX Certificates submitted with the application must be complied with:

<b>Lot/ Dwelling No.</b>	<b>BASIX Certificate No.</b>
70	368022M
71	368022M
72	368023M
73	368023M
74	368024M
75	368024M
76	368028M

77	368028M
78	368030S
79	368031S
80	368033S
81	368036S
82	368037S
83	360038M
84	360038M
85	368040M
86	368040M
87	368042S

## **PRIOR TO ISSUE OF OCCUPATION AND / OR SUBDIVISION CERTIFICATE**

### **148. Prior or Concurrent Registration of Preceding Subdivision**

A Subdivision Certificate cannot be issued for this subdivision before a Subdivision Certificate has been registered with the NSW Land and Property Information for the preceding stage/ subdivision pursuant to Development Consent DA 1276/2011/JPZ (Stage 5) unless the two are issued and registered concurrently.

### **149. Final Plan and 88B Instrument (Stage 6)**

The final plan and 88B Instrument must provide for the following. Standard wording is available on Council's website and must be used.

#### **a) Restriction – Flood Levels**

Restricting excavation on proposed lots 46 to 50 to ensure the floor level of any dwelling or garage erected is a minimum of 500mm above the 1 in 100 year ARI flood level associated with Strangers Creek adjacent in accordance with the DCP. The terms of the restriction must nominate the required Flood Planning Level (FPL) for each lot along with the source of the flood data relied upon in deriving these values.



# Office of Water

The General Manager  
The Hills Shire Council  
PO Box 75  
Castle Hill NSW 1765

Attention: Simon Turner

Dear Sir/Madam

DOC. No.:	
BOX No.:	
27 MAY 2011	
THE HILLS SHIRE COUNCIL	

Contact: Gina Potter  
Phone: 02 8838 7566  
Fax: 02 8838 7554  
Email: gina.potter@water.nsw.gov.au

Our ref: 10 ERM2011/0349  
Our file: 9054639  
Your ref: 1276/2011/JPZ

25 May 2011

**Re: Integrated Development Referral – General Terms of Approval  
1276/2011/JPZ - A six stage Integrated housing Development and Subdivision  
creating 85 lots including demolition and new roads,  
24 Fairway Drive, KELLYVILLE**

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), as detailed in the subject DA.

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.

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') cannot commence before the applicant applies for and obtains a Controlled Activity Approval, the NSW Office of Water recommends that the following condition be included in the development consent:

[www.water.nsw.gov.au](http://www.water.nsw.gov.au)  
Macquarie Tower, 10 Valentine Avenue, Parramatta NSW 2150 PO Box 3720 Parramatta NSW 2124 Australia | t + 61 2 8281 7777 | f + 61 2 8838 7554 | e [information@water.nsw.gov.au](mailto:information@water.nsw.gov.au) | ABN 47 661 556 763

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

**The attached GTA are not the Controlled Activity Approval.** The applicant must apply (to the NSW Office of Water) for a Controlled Activity Approval **after consent** has been issued by Council **and before** the commencement of any 'works' on waterfront land.

Finalisation of a Controlled Activity Approval can take up to 8 weeks from the date the NSW Office of Water receives all documentation (to its satisfaction). 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.

Application forms for the Controlled Activity Approval are available from the undersigned or from the NSW Office of Water's website  
<http://www.water.nsw.gov.au/Water-Licensing/Approvals/Controlled-activities/default.aspx>

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

Yours Sincerely



Gina Potter  
Licensing Officer (Controlled Activities)  
NSW Office of Water - Licensing South



Office  
of Water

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

Our Reference		10 ERM2011/0349	File No:	9054839
Site Address		24 Fairway Drive, KELLYVILLE		
DA Number		1276/2011/JPZ		
LGA		The Hills Shire 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 1276/2011/JPZ 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) Erosion and Sediment Control Plan</p> <p>(iii) 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. The following plans must be prepared in accordance with the NSW Office of Water's guidelines located at <a href="http://www.water.nsw.gov.au/Water-Licensing/Approvals/default.aspx">www.water.nsw.gov.au/Water-Licensing/Approvals/default.aspx</a></p> <p>(i) Vegetation Management Plans</p> <p>(ii) Riparian Corridors</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>			
Rehabilitation and maintenance				
6	<p>The consent holder must carry out a maintenance period of two (2) years after practical completion of all controlled activities, rehabilitation and vegetation management in accordance with a plan approved by the NSW Office of Water.</p>			
7	<p>The consent holder must reinstate waterfront land affected by the carrying out of any controlled activity</p>			

[www.water.nsw.gov.au](http://www.water.nsw.gov.au)

Macquarie Tower, 10 Valentine Avenue, Parramatta NSW 2150 PO Box 3720 Parramatta NSW 2124 Australia | t + 61 2 8281 7777 | f + 61 2 8838 7554 | e [information@water.nsw.gov.au](mailto:information@water.nsw.gov.au) | ABN 47 661 556 763

Our Reference		10 ERM2011/0349	File No:	9054839
Site Address		24 Fairway Drive, KELLYVILLE		
DA Number		1276/2011/JPZ		
LGA		The Hills Shire Council		
Number	Condition			
	in accordance with a plan or design approved by the NSW Office of Water.			
Reporting requirements				
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.			
Security deposits				
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.			
Access-ways				
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.			
Bridge, causeway, culverts, and crossing				
12-13	N/A			
Disposal				
14	The consent holder must ensure that no materials or cleared vegetation that may (i) obstruct flow, (ii) wash into the water body, or (iii) cause damage to river banks; are left on waterfront land other than in accordance with a plan approved by the NSW Office of Water.			
Drainage and Stormwater				
15-16	N/A			
Erosion control				
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.			
Excavation				
18	The consent holder must ensure that no excavation is undertaken on waterfront land other than in accordance with a plan approved by the NSW Office of Water.			
19	N/A			
Maintaining river				
20-21	N/A			
River bed and bank protection				
22	The consent holder must clearly mark (with stakes using a GPS or peg out survey), protect and maintain a riparian corridor with a width of 20 metres measured horizontally landward from the centreline of the river for the length of the site directly affected by the controlled activity in accordance			

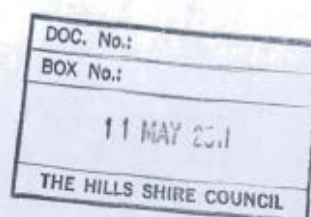
Our Reference		10 ERM2011/0349	File No:	9054839
Site Address		24 Fairway Drive, KELLYVILLE		
DA Number		1276/2011/JPZ		
LGA		The Hills Shire Council		
Number	Condition			
	with a plan approved by the NSW Office of Water.			
23	The consent holder must establish a riparian corridor along the Strangers Creek in accordance with a plan approved by the NSW Office of Water.			
Plans, standards and guidelines				
24-27	N/A			
END OF CONDITIONS				



Sydney  
**WATER**

5 May 2011

Mr Simon Turner  
Senior Subdivision Planner  
The Hills Shire Council  
PO Box 75  
Castle Hill NSW 1765



**DA 1276/2011/JPZ Proposed 85 lot Subdivision at 24-26 Fairway Drive, Kellyville**

Dear Mr Turner,

Thank you for your letter of 30 March 2011 about the proposed 85-lot subdivision of 24-26 Fairway Drive, Kellyville. Sydney Water has reviewed the proposal and provides the following comments for Council's consideration.

**Water**

The current drinking water system has sufficient capacity to service the proposed subdivision. The developer will need to design and construct a connection to the available 150 mm drinking main in Fairway Drive.

The connection will need to be sized and configured according to the Water Supply Code of Australia (Sydney Water Edition WSA 03-2002). Evidence of Code compliance should be attached with the extension design.

**Wastewater**

The current wastewater system has sufficient capacity to service the proposed subdivision. The wastewater main available for connection is the 450 mm wastewater main in Fairway Drive.

The connection will need to be sized and configured according to the Sewerage Code of Australia (Sydney Water Edition WSA 02-2002). Evidence of Code compliance should be attached with the extension design.

**Recycled water**

The recycled water servicing strategy for the Balmoral Road Precinct is attached at the back of this letter. The lots within the proposed subdivision do not front an available recycled water main. The developer will need to design and construct a 150 mm recycled water main to extend from the existing network to the site.

All works are to be constructed in accordance with the Water Supply Code of Australia (Sydney Water Edition WSA 03-2002).

**Stormwater**

Sydney Water has received engineering concept plans from North West Surveys on behalf of the developer. The plans propose a bridge over Strangers Creek comprising 3 by 6 metre spans. Sydney Water has no objection to the proposed bridge, however some transitional earthworks

will be required. The details of these works will need to be determined prior to the issuing of the Construction Certificate.

The plans show a single 450 mm RCP stormwater connection to the creek. Stormwater connections are to be designed in accordance with the requirements of the 'Pipe Connections to Sydney Water Natural Creeks and Stormwater Assets' guidelines attached. In particular the developer will need to:

- Prepare a broad catchment plan and investigate the practical configuration of the pipe connections needed to service the local catchment area draining to Strangers Creek. The plan should aim to consolidate minor connections as per the guidelines.
- Ensure the proposed pipe connection is established in the context of the broader connection strategy.
- Ensure connections are configured in a way that will enable a Gross Pollutant Trap device to be retrofitted by Sydney Water in accordance with the guidelines, particularly in reference to maintenance accessibility and traffic management.

The additional investigation and design must be submitted to and approved by the Sydney Water Stormwater Group prior to the issuing of the Construction Certificate for the subdivision works.

#### **Sydney Water Servicing**

Sydney Water will further assess the impact of the subdivision and subsequent development when the proponent applies for a Section 73 Certificate. This assessment will enable Sydney Water to specify any works required as a result of the subdivision and to assess if amplification and/or changes to the system are applicable. The proponent must fund any adjustments needed to Sydney Water infrastructure as a result of any development.

The proponent should engage a Water Servicing Coordinator to get a Section 73 Certificate and manage the servicing aspects of the development. The Water Servicing Coordinator will ensure submitted infrastructure designs are sized & configured according to the Water Supply Code of Australia (Sydney Water Edition WSA 03-2002) and the Sewerage Code of Australia (Sydney Water Edition WSA 02-2002).

Sydney Water requests the Hills Shire Council to continue to instruct proponents to obtain a Section 73 Certificate from Sydney Water. Details are available from any Sydney Water Customer Centre on 13 20 92 or Sydney Water's website at [www.sydneywater.com.au](http://www.sydneywater.com.au).

#### **Sydney Water e-planning**

Sydney Water has created a new email address for planning authorities to use to submit statutory or strategic planning documents for review. This email address is [urbangrowth@sydneywater.com.au](mailto:urbangrowth@sydneywater.com.au). The use of this email will help Sydney Water provide advice on planning projects faster, in line with current planning reforms. It will also reduce the amount of printed material being produced. This email should be used for:

- Section 62 consultations under the Environmental Planning and Assessment Act 1979
- consultations where Sydney Water is an adjoining land owner to a proposed development
- Major Project applications under Part 3A of the Environmental Planning and Assessment Act 1979
- consultations and referrals required under any Environmental Planning Instrument
- draft LEPs, SEPPs or other planning controls, such as DCPs
- any proposed development or rezoning within a 400m radius of a Sydney Water Wastewater Treatment Plant
- any proposed planning reforms or other general planning or development inquiries

If you require any further information, please contact Sonia Jacenko of the Urban Growth Branch on 02 8849 4004 or e-mail [sonia.jacenko@sydneywater.com.au](mailto:sonia.jacenko@sydneywater.com.au).

Yours sincerely,

A handwritten signature in black ink, appearing to read 'A. Miller', written over a horizontal line.

Adrian Miller,  
Manager of Urban Growth Strategy and Planning





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## **Pipe Connections to Sydney Water Natural Creeks and Stormwater Assets**

The following information is provided to assist developers in preparing a detailed design plan of their proposal to connect to Sydney Waters Natural Creeks and Stormwater Assets, particularly at Rouse Hill Development Area.

Connections to Sydney Water's Rouse Hill Development Area trunk drainage corridor are to be generally undertaken in accordance with the NSW Department of Water (now DECCW) and Energy's 'Guidelines For Controlled Activities – Outlet Structures'.

- Sydney Water aims to minimize the number of uncontrolled stormwater pipes discharging into the Rouse Hill trunk drainage corridor.
- By uncontrolled, Sydney Water means:
  - An outlet pipe without appropriate water quality control measures in place.
- OR
- An outlet pipe not located and constructed to expressly facilitate the retrofit of appropriate water quality control measures.

### **Determining a Connection Point**

#### *Residential Subdivisions*

The developer is required to inspect the local area and to contact Council / Sydney Water Stormwater Group to determine if a Connection Point has already been constructed / approved by Council and Sydney Water Stormwater Group.

- If an existing Connection Point is available, approved then the developer is to contact Council and Sydney Water to verify that they may utilise the existing connection.
- If an existing Connection Point is not available, approved then:
  - The developer is to prepare a broad catchment plan and investigate the best locations for a new local connection point to service their development site as well as other nearby development sites within the catchment in a manner that will facilitate orderly development.

- o The developer is to consult with Council and Sydney Water to identify an agreed preferred connection point, ensuring a balanced outcome in terms of:
  - Avoiding a proliferation of small pipe connections and avoiding very large pipe connections – as nearly as is practical generally aim for pipe connections in the order of 600mm to 1350mm diameter for residential subdivision developments.
  - Providing for the installation of a future Gross Pollution Trap upstream of the pipe outlet connection:
    - GPT located with good, safe vehicular access available ensuring minimal impact on the creek riparian vegetation corridor.
    - With an elevation drop from the inflow pipe invert into the GPT down to the outlet flow invert – Preferred if no pipe grading constraint 600mm, Desirable minimum 450mm, Constrained minimum 300mm.
    - With an elevation drop from the invert of the outlet pipe to the normal water level in the creek - Preferred if no pipe grading constraint 600mm, Desirable minimum 450mm, Constrained minimum 300mm.

Sydney Water will give preferential direction to:

- Combine small pipe connections to develop an economy of scale for the retrofit and maintenance of future Gross Pollutant Traps.
- Directing pipe outlets to under road bridge / culvert structures rather than into a more sensitive creek corridor. This is especially the case for larger pipes. Subject to the bridge / culvert capacity and configuration circumstances the pipe connection would usually be required to discharge on the downstream side of the road bridge / culvert structures. This approach aims to generally consolidate hard rock erosion work to around road crossings and centralise maintenance and desilting duties to these generally more accessible locations. It aims to minimise likely future maintenance requirements and impacts within the creek corridor environment itself.

#### *Larger Multi Residential, Industrial, Commercial and Other Development Sites*

Large development sites backing onto the creek corridor will generally be permitted to make a connection to the trunk drainage creek corridor. These sites will be required to incorporate a site stormwater management system that demonstrably meets the following specified water quality outcomes:

Pollutant	Requirement
Gross Pollutants	90% reduction in pollutant loads.
Total Suspended Solids	85% reduction in pollutant loads.
Total Phosphorous	65% reduction in pollutant loads.
Total Nitrogen	45% reduction in pollutant loads.

Western Sydney Growth Centres - Stormwater Guidance For Precinct Planning  
Prepared by DEC November 2006

The ongoing performance of the site stormwater management system is to enforceable through a positive covenant on the property title in favour of Sydney Water or its assigns.

- Maintenance tasks to be identified.
- Maintenance records to be kept for 3 years.
- Maintenance records to be produced on demand.
- Sydney Water to be able to require compliance with the covenant. Arbitration process to be described.
- Sydney Water to be able to undertake maintenance tasks should the owner be determined to be derelict in maintenance.
- Sydney Water to be able to recover costs for maintenance activity. Any unrecovered costs may be burdened to the property title.

#### **Pipe Outlet Headwalls**

Connections to Sydney Water's Rouse Hill trunk drainage corridor are to be generally undertaken in accordance with the NSW Department of Water and Energy's (now DECCW) 'Guidelines For Controlled Activities – Outlet Structures'. See the attached marked up copy showing a general section and description.

The following Figure 1 shows the general plan geometry of the pipe outlet connection.

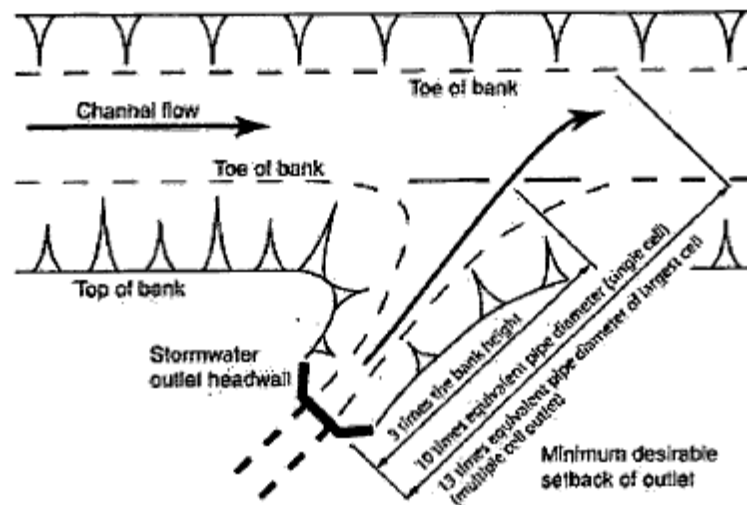


Figure 1 - Headwall Setback From Creek Channel

Source: Queensland Urban Drainage Manual 2008

#### Clarifying Specification

- Geotextile fabric Bidim A44 or approved equivalent.
- Coarse gravel / cobbles to be 10mm to 40mm smooth river rock 100mm thick layer.
- Stacked Rock Headwall and Rip Rap
  - Mixture of hard sandstone rocks.
  - 70% by volume to be large rocks of regular dimension suitable for neat interlocking stacks. Large rocks to be generally too big for two strong men to manually recover. Typically 200kg to 500kg; approximately 1.2m to 0.75m by 0.5m by 0.25m to 0.45m.
  - 15% by volume medium rocks in the order of 'soccer ball' size.
  - 15% by volume small rocks down to 'closed fist' size.



- o Voids to fill during placement and 'lightly' washed in (not too wet to wash out) with topsoil as the rock work is 'brought up'.
- Headwall to be stacked generally to avoid vertical drops. Preference to 1H:1V batters at the immediate pipe opening such that up to 1m of the top of the pipe may protrude, 2H:1V away from the pipe opening. Fencing to be provided at all fall locations in excess of 900mm.
- All disturbed areas and rock apron areas are to be landscaped per Sydney Water requirements. See attached specification.
- Entry to Sydney Water land is not granted by means of Council Development approval.
- Contractor to obtain Permission to Enter from Sydney Water prior to entering to undertake works. Contact Assad Baheer of the Stormwater Group (02) 88494834.



February 2008

## Guidelines for controlled activities Outlet structures

This guideline relates to the design of stormwater outlets and spillways from infrastructure (including roads, buildings, constructed basins/wetlands, swales or other drainage works) into a watercourse or waterfront land.

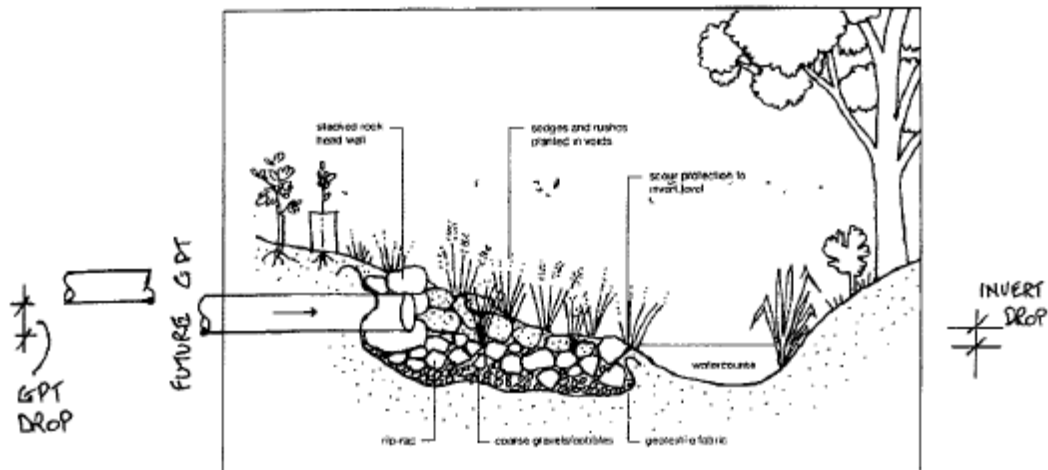
Controlled activities carried out in, on or under waterfront land are now regulated by the *Water Management Act 2000* (WMA). The Department of Water and Energy is required to assess the impact of a controlled activity to ensure that minimal harm will be done to any waterfront land, ie the bed and a distance inland of 40 metres from a river, lake or estuary.

This means that a controlled activity approval must be obtained from the Department prior to carrying out a controlled activity.

The design and construction of stormwater outlets should aim to be 'natural', yet provide a stable transition from a constructed drainage system to a natural flow regime (see Figure 1). The design and construction footprint and extent of disturbances within the riparian corridor should be minimised while still achieving the intended discharge function (refer to the Department's *Guidelines for controlled activities - Riparian corridors*).

All ancillary drainage infrastructure, such as oil/grease interceptors, sediment & litter traps, constructed wetlands and detention basins, should be located outside the riparian corridor. Run-off should be of appropriate water quality and quantity before discharging into a riparian corridor or watercourse. Appropriate rehabilitation of disturbed areas following the installation of outlet structures should adequately restore the integrity of the riparian corridor.

Figure 1. 'Natural' outlet structure.



The design and construction of outlet structures should consider, but not be limited to, the following design principles.

- Define the infrastructure route and identify the specific point of discharge. Ideally select a route along an existing cleared or disturbed area that avoids trees (preferably beyond their drip line).
- Choose a stable section of the stream for the discharge point, preferably mid-way between bends. Alternatively, if appropriate, incorporate outlet discharge points into disturbed/eroded areas which are to be stabilised or rehabilitated.
- Minimise construction footprint and ensure that disturbance to soil and vegetation within the riparian corridor is kept to the minimum extent required. *See Note 1.*
- Assess changes to the hydrology of the receiving watercourse to demonstrate that there is no detrimental impact on discharge volumes and channel velocities. Discharge velocities and flow rates should mimic 'natural' flows and not initiate erosion.
- Discharge from an outlet should not cause bed or bank instability.
- Protect the bed of the watercourse below the outlet, if not bedrock, or if bed scour is likely. Consider bank material and outlet 'jet' effect and protect the opposite streambank if required.
- Point outlet structure and direct discharge downstream.
- The outlet should not protrude beyond the streambank but tie-in with the adjoining bank alignment.
- Calculate tractive stresses generated from outlet discharges and from bank full discharges to determine rock size requirements for the structure.
- Rock rip rap is the preferred material to provide a 'natural' outlet. Rip-rap should extend for the full extent of the design scour apron and adjoining banks/streambank. Rip-rap should be appropriately keyed in and cut-off trenches provided.
- Rip-rap should consist of durable, angular run-of-quarry rock placed over a bedding layer of angular cobbles over geotextile. Where possible, incorporate vegetation, eg. sedges and rushes, into scour management (Figure 1).
- Grade the scour apron to the bed level of the watercourse, or just below any permanent water created by any stable feature, eg. a rock bar, within the watercourse.
- Stabilise and rehabilitate all disturbed areas including topsoiling, revegetation/regeneration, mulching, weed control and maintenance.

Figure 2: Rip-rap outlet structure with vegetation growing in voids between rocks.



*Note 1: See attached Revegetation Specification for Sedness Water Riparian Land.*

When seeking approval to construct outlet structures, information detailing the above is required for the Department to assess the works.

Additional information will generally also be required and may include but not be limited to:

- detailed design drawings of outlet structures
- cross-sections and long-section of the stream
- hydrology report detailing pre and post construction hydrology of the channel
- a Vegetation Management Plan (VMP) prepared in accordance with the Department's *Guidelines for controlled activities – Vegetation Management Plans*
- a Site Management Plan incorporating the schedule, sequence and duration of works, erosion and sediment controls, etc.
- costing of all works (i.e. materials, labour) and stages of works (eg. outlet structure installation, rehabilitation).

#### Further information

If you require more information about controlled activity approvals please contact your local Departmental office or visit our website [www.dwe.nsw.gov.au](http://www.dwe.nsw.gov.au)

#### Important notes

CWE has prepared these guidelines in good faith. In the case of any inconsistency between the guidelines and the controlled activity approval or legislation, the controlled activity approval or legislation will prevail to the extent of that inconsistency.

Achtung! If these guidelines are taken to authorise a controlled activity, these guidelines are designed to provide information to assist in the design of any development or work that constitutes a controlled activity and the preparation of an application for a controlled activity approval. Users are advised to seek professional advice and to refer to the legislation and any relevant approvals, as necessary, before taking action in relation to any matters covered by the guidelines.

#### Disclaimer

While every reasonable effort has been made to ensure that this document is correct at the time of publication, the State of New South Wales, its agencies and employees, disclaim any and all liability in any person in respect of anything or the consequences of anything done or omitted to be done in reliance upon the whole or any part of this document.

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### **Revegetation Specification for Area around Riparian Land and Connection to Sydney Water's Trunk Drainage Land Adjacent to any section of the Creek System in Rouse Hill Development Area**

This document outlines Sydney Water Stormwater Management's recommendations for establishing a suitable vegetation cover on the margins or within the riparian land of Smalls Creek, Caddies Creek, Second Ponds Creek, Strangers Creek and Elizabeth Macarthur Creek in Rouse Hill Development Area (RHDA).

#### **Background**

Sydney Water owns and manages drainage land that falls within the riparian zone of the Creek System within RHDA. A number of developers and landowners adjacent to Sydney Water drainage land are seeking advice on how to vegetate the area within or immediately around the drainage land following undertaking stormwater or sewer connection. This document outlines Sydney Water requirements for vegetation management of the area that will be affected by civil work components of these connections.

Sydney Water's recommendation for grassing and establishment of vegetation cover around the disturbed area takes into consideration the appropriateness of species, in relation to best-fit for the environment and long-term maintenance needs.

#### **Recommendation**

##### **Site preparation**

1. **Ground preparation:** The area and batters needs to be returned to a form that facilitates rehabilitation works. Topsoil needs to be spread to a depth of about 30 cm and free of large debris and contaminant.
  - a. Any soil stripping is conducted in such a way that soil is removed according to horizon, and horizons are stockpiled separately, so that they can be replaced in the correct order upon reinstatement. Topsoil (30cm of top layer) needs to be removed first and stored separately and returned last and flashed to the natural/original surface level.
  - b. The area immediately around the connection will be excavated and then lined with geo-fabric, gravel sandstone rock to reduce weed infestation and prevent erosion. The structure of the stream or area around the connection needs to consist medium to large sized rock boulders (about 1X0.6x0.6m) and appropriate rock fillings at the base of these boulders. Void between boulders will be filled with soil to allow for aquatic plant establishment. The foundation for the rock lining will be a layer of coarse gravel and a heavy-duty geo-fabric to prevent undermining and erosion.
  - c. **No topsoil or any material should be imported into drainage land** and spread in any sections of the riparian land. Imported topsoil or any other material is of a composition that does not suite the growth of native plants, and likely to encourage the growth of weed species.
  - d. Herbicide treatment of weeds (exotic grass) and manual removal of some perineal weed on the margins of the area is also proposed. Application of fertilizer and soil conditioning material (pellets) can be considered for areas depending on topsoil condition and soil fertility.
2. **Mulching and Plant Guards:** Use and spread of clean mulch is recommended to reduce weed infestation and future maintenance cost. Installation of mini weed-mate can be considered for some of the plants in certain areas only. Alternatively, coconut matting can be used to stabilise the topsoil.

### Native Plant Species Mix and Density

Plant species used for revegetation should be of **provenance**, native stock. According to NSW NPWS Cumberland Plain Bushland Mapping, the significant vegetation stands in various parts of Rouse Hill Development Area (RHDA) consist of the endangered *Cumberland Plain Woodlands* (CPW), *Sydney Sandstone Gully Forests* (SSGF), *Shale Sandstone Transitional Forests* (SSTF) and *Sydney Coastal River Flat Forest* (SCRFF) on Sydney Water (SW) drainage lands and few private lands. Some of these communities are listed as an Endangered Ecological Community under the *NSW Threatened Species Conservation Act (1995)*. As such, only species listed as a part of these communities, and which have been collected from these community in local areas, should be used for revegetation works.

You are required to check with either Sydney Water or its nominated landscaping and revegetation contractors on species mix for the area you are required to rehabilitated using provenance native species.

Sydney Water prescribes to any developer to revegetate any area of its riparian land impacted as a result of civil work, connection or other related activities at a density of 5 to 6 plants per square metre. Plant species will be chosen to reflect an approximate density of one canopy species per 8-10 square metres, one shrub species per 2 square metres and 4-5 grass, groundcover or sedge species per square metre.

### Revegetation and Maintenance

Rehabilitation of the riparian land needs to be done in accordance with NSW Department of Environment, Climate Change and Water (DECCW). The following recommendations are made on the way pre and post-construction work needs to be undertaken.

1. No exotic grass, which includes couch, Kikuyu or other common turf varieties, should be installed to riparian land.
2. Plant species used for revegetation should be of provenance, native species of listed Ecological Communities in the area. According to NSW NPWS Cumberland Plain Bushland Mapping, the project area is comprised of Alluvial Woodland, a component of the greater Sydney Coastal River-flat Forest (SCRFF) and Cumberland Plain Woodland, which are listed as an Endangered Ecological Communities under the *NSW Threatened Species Conservation Act (1995)*. As such, only species listed as a part of these communities, and which have been collected from these communities within the local areas, should be used for revegetation of this project.
3. **Limited post-planting maintenance:** A limited number of post-planting maintenance sessions that include watering and fixing damaged plants need to be included.
3. **Transplanting:** Native Plants raised in Hikos are required to be planted in the areas

### Reputable Services Providers

Stormwater Management recommends that a developer, agent or Water Service Coordinator (WSC) requires the services of a reputable contractor that has some knowledge of the area and indigenous native vegetation to undertake the vegetation work. Sydney Water recommends planting a mixture of ground layer and suitable indigenous native shrubs to the area. Any developer or its representative can engage one of the following organisation for this work:

- Toolijooa Environmental Restoration Pty Ltd (current Sydney Water's Bush Regeneration and Revegetation contractor)
- Australian Environmental Services Pty Ltd (current Sydney Water's Weed Management and Riparian Land Maintenance contractor)
- EcoHort Pty Ltd (previous Sydney Water Contractor carried out bush regeneration and revegetation work)
- Greening Australia (NSW) Pty Ltd (previous Sydney Water Contractor carried out revegetation work)

- Australian Wetlands Nursery, Specialist grower and supplier of Australian Native Plants (current supplier of native vegetation of appropriate ecological communities of RHDA)
- Simpson Landscape Pty Ltd (undertaken Bush Regeneration and Revegetation work on Sydney Water drainage land in Rouse Hill Development Area)
- Any other landscaping, vegetation management organisation or local registered nurseries in northwest of Sydney that can supply provenance native vegetation for RHDA area.

A List of preferred native species for establishing ground cover is also provided (Table 1). The contractor can obtain the required number of plants from among the list provided. Sydney Water needs to be advised on species mix, numbers and time of planting for our record and reporting purposes.

#### **Establishment & Maintenance**

It is important that after landscaping and establishment, limited post-planting maintenance be considered. In the event that there is no rain, adequate water application in an appropriate format needs to be scheduled to ensure native plants establish and survive.

Maintenance strategy and methods for a period of 12 months need to be developed and these need to suit the native species mix and weed infestations. Manual weeding is preferred and is recommended.

#### **Inspection**

It is proposed that a developer or its representative organises for inspection of the site once immediately after completion of the revegetation and grassing work, and a final one at the end of maintenance period. Sydney Water representative is to be advised on date and time of inspection.

Sydney Water will then issue compliance certificate upon satisfactory completion of work.

#### **Table 1: Species Mix 1:**

A number of native species are listed here. Any species mix combination can be chosen from the following species and used to establish adequate ground vegetation cover:

##### **Grasses and Shrubs**

- *Commelina cyanea*
- *Dianella spp.*
- *Dichelachne crinita*
- *Kunzea spp. (i.e. k. ambigua)*
- *Leptospermum spp*
- *Ghania spp.*
- *Imperata cylindrica*
- *Juncus spp. (i.e Juncus usitatis)*
- *Lomandra longifolia*
- *Poa affinis*
- *Themeda Australis*, or any other similar species.

There are other native vegetation from Sydney Coastal River Flat Forest (SRFF), Cumberland Plain Woodland (CPW), Sydney Sandstone Gully Forest (SSGF) and Shale/Sandstone Transition Forest (SSTF) ecological communities that can be considered for planting. Sydney Water can provide a comprehensive list of species upon request. Alternatively, you can visit NSW DECCW website for further information and list of species.