

CONDITIONS

Standard Conditions

1 **A001**

The development must be implemented substantially in accordance with the plans stamped approved by Council, the application form, and any supporting information received with the application, except as may be amended in red on the attached plans and by the following conditions. Amendments in red including the deletion of the hard and soft landscape embellishment works from this consent.

Plan	Plan/Drawing No.:	Issue:	Prepared By:	Dated:
Site Layout Plan	110358/K008	A	J. Wyndham Prince	16/12/16
Engineering Plan	110358/DA202	B	J. Wyndham Prince	21/12/16
Bulk Earthworks Plan	110358/DA203	B	J. Wyndham Prince	21/12/16
Site Sections – Sheet 1	110358/DA204	B	J. Wyndham Prince	21/12/16
Site Sections – Sheet 2	110358/DA205	B	J. Wyndham Prince	21/12/16
Typical Road Cross Sections	110358/DA206	B	J. Wyndham Prince	21/12/16
Road Longitudinal Sections – Sheet 1	110358/DA207	B	J. Wyndham Prince	21/12/16
Road Longitudinal Sections – Sheet 2	110358/DA208	B	J. Wyndham Prince	21/12/16
Road Longitudinal Sections – Sheet 3	110358/DA209	B	J. Wyndham Prince	21/12/16
Road Longitudinal Sections – Sheet 4	110358/DA210	B	J. Wyndham Prince	21/12/16
Road Longitudinal Sections – Sheet 5	110358/DA211	B	J. Wyndham Prince	21/12/16
Road Longitudinal Sections – Sheet 6	110358/DA212	B	J. Wyndham Prince	21/12/16
Road Longitudinal Sections – Sheet 7	110358/DA213	B	J. Wyndham Prince	21/12/16
Road Longitudinal Sections – Sheet 8	110358/DA214	B	J. Wyndham Prince	21/12/16
Road Longitudinal Sections – Sheet 9	110358/DA215	B	J. Wyndham Prince	21/12/16

Road Longitudinal Sections – Sheet 10	110358/DA216	B	J. Wyndham Prince	21/12/16
Road Longitudinal Sections – Sheet 11	110358/DA217	B	J. Wyndham Prince	21/12/16
Road Longitudinal Sections – Sheet 12	110358/DA218	B	J. Wyndham Prince	21/12/16
Road Longitudinal Sections – Sheet 13	110358/DA219	B	J. Wyndham Prince	21/12/16
Road Longitudinal Sections – Sheet 14	110358/DA220	B	J. Wyndham Prince	21/12/16
Stormwater Plan	110358/DA221	B	J. Wyndham Prince	21/12/16
Basin and Raingarden B – Plan and Sections	110358/DA222	B	J. Wyndham Prince	21/12/16
Basin and Raingarden D Plan	110358/DA223	B	J. Wyndham Prince	21/12/16
Basin D – Sections and Raingarden Details	110358/DA224	B	J. Wyndham Prince	21/12/16
Soil and Water Management Plan – Sheet 1	110358/DA225	B	J. Wyndham Prince	21/12/16
Soil and Water Management Plan – Sheet 2	110358/DA226	B	J. Wyndham Prince	21/12/16
Tree Management and Demolition Plan	110358/DA227	B	J. Wyndham Prince	21/12/16
Lot Calculation Stage Two Caddens Hill Estate	20467-2L(a)	A	Vince Morgan Surveyors	15.11.16
Lot Calculation Stage Three Caddens Hill Estate	20467-3L(A)	A	Vince Morgan Surveyors	21.12.16
Lot Calculation Stage Four Caddens Hill Estate	20467-4L	A	Vince Morgan Surveyors	27.10.16
BEP Key Masterplan	11494/DA2000	-	DKO Architecture	21-12-2016
10.0m Lots (Front Loaded) BEP	11494/DA2001	-	DKO Architecture	21-12-2016
10.0m Lots (Rear Loaded) BEP	11494/DA2002	-	DKO Architecture	21-12-2016

Patio Lots BEP	11494/DA2003	-	DKO Architecture	21-12-2016
Caddens Hill Design Guidelines for 10m Lots	-	A	Legacy Property	December 2016
Precinct Master Plan (As amended in red)	Page 5	-	Place Design Group	January 2017
Detention Basin B	Page 23	-	Place Design Group	January 2017
Detention Basin D	Page 24	-	Place Design Group	January 2017

2 **A044 - Compliance with NSW Rural Fire Service conditions of consent**

Evidence of compliance with all conditions of the bush fire safety authority issued by NSW Rural Fire Service (reference D16/3799 & DA16111404715 LD, dated 1 December 2016) shall be submitted to the Principal Certifying Authority, before the Construction Certificate can be issued for the development. A copy of the documentation provided shall be submitted to Penrith City Council with the copy of the Construction Certificate, if Council is not the Principal Certifying Authority.

3 **B001 - Demolition of existing structures**

The dwelling and associated wastewater system, dams and fencing are to be demolished as part of the approved work.

4 **B002 - AS FOR DEMOLITION AND DISPOSAL TO APPROVED LANDFILL SITE**

All demolition works are to be conducted in accordance with the provisions of AS 2601-1991 "The Demolition of Structures". **Prior to demolition**, all services shall be suitably disconnected and capped off or sealed to the satisfaction of the relevant service authority requirements.

All demolition and excavated material shall be disposed of at a Council approved site or waste facility. Details of the proposed disposal location(s) of all excavated material from the development site shall be provided to the Principal Certifying Authority **prior to commencement of demolition**.

5 **B003 - ASBESTOS**

Prior to commencement of demolition works on site, a portaloo with appropriate washing facilities shall be located on the site and the Principal Certifying Authority is to be satisfied that:

- Measures are in place so as to comply with the WorkCover Authority's "Short Guide to Working with Asbestos Cement" and
- The person employed to undertake the works is a licensed asbestos removal contractor and is holder of a current WorkCover Asbestos Licence.

Any demolition works involving the removal of all asbestos shall only be carried out by a licensed asbestos removal contractor who has a current WorkCover Asbestos Licence.

All asbestos laden waste, including asbestos cement flat and corrugated sheeting must be disposed of at a tipping facility licensed by the Environmental Protection Authority to receive asbestos wastes.

6 B006 - Hours of work

Demolition works will be restricted to the following hours in accordance with the NSW Environment Protection Authority Noise Control Guidelines:

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

In the event that the demolition relates to works inside the building and do not involve external walls or the roof, and do not involve the use of equipment that emits noise then the demolition works are not restricted to the hours stated above.

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

7 C002 - ARCHIVAL RECORDING

Two (2) complete copies of the archival recording for the farmhouse ruins are to be submitted to Penrith City Council, including a set of photographic negatives prior to demolition. The archival recording shall be prepared by an experienced heritage consultant and is to be in accordance with the Archival Recording Standards described below:

- Title page (with subject, author, client, date and copyright).
- Statement of why the record was made.
- Outline history of the item and associated sites, structures and people.
- Statement of heritage significance of the items using the State Heritage Inventory criteria.
- Inventory of archival documents related to the item (eg. company records, original drawings) when available.
- Location plan (show relationship to surrounding geographical features, structures, roads, vegetation etc. Include a north point).
- Base plans, drafted or hand-drawn base plans including:
 - (i) cross references to photographs;
 - (ii) name the relevant features, structures and spaces;
 - (iii) a north point.
- Black and white photographic record, including one set of 35mm black and white negatives labelled and cross referenced to base plans and accompanied by informative catalogues, and two copies of proof sheets and select medium format prints showing important details. The images shall include:
 - (i) views to and from the site (possibly from four compass points);
 - (ii) views showing relationships to other relevant structures and landscape features;
 - (iii) all external elevations;
 - (iv) views of all external and internal spaces (eg. courtyards, rooms, roof spaces etc.); and
 - (v) external and internal details (eg. joinery, construction joints, decorative features, paving types etc.). All photographic images shall be mounted and labelled.
- Colour slides (two copies mounted in archivally stable slide pockets, clearly labelled and cross referenced to base plans). Images shall include:
 - (i) view to and from the site and/or the heritage item, and
 - (ii) views and details of external and internal colour schemes as appropriate.Selected colour prints may be required. They should be mounted and labelled.
- Measured drawings, with appropriately scaled drawings printed on archivally stable paper. For a built item, this may include:
 - (i) site plan (1:500 or 1:200),
 - (ii) floor plan(s) (1:100 or 1:50),
 - (iii) elevations and sections (1:100 or 1:50),
 - (iv) roof plan(s) (1:100 or 1:50),
 - (v) ceiling and joinery details (1:20 or 1:10), and
 - (vi) machinery and services details eg. drainage lineshafts.
- Presentation
- The archival recording shall be presented to Council as a single bound document preferably in A4 format. Large maps shall be folded and inserted as map pockets attached to the document. Similarly, all photographic images shall be fixed to the document and labelled.

Unbound documents or loose supporting materials such as maps, plans, slides, negatives or prints are not acceptable.

8 C003 - Uncovering relics

If any archaeological relics are uncovered during the course of the work, other than the farmhouse ruins, no further work shall be undertaken until further directed by Penrith City Council or the NSW Heritage Office.

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

9 C002A Special (BLANK)

Prior to any works being undertaken at Stage 4 of the development, a permit is to be obtained under Section 139 of the Heritage Act 1977 for the exposure or removal of the farmhouse ruins.

10 D06A – Approval for bulk earthworks/major filling operations (Use for bulk earthworks/ major filling operations)

An appropriately qualified person/s shall:

- Supervise all filling works.
 - (On completion of filling works) carry out an independent review of all documentation relating to the filling of the site, and submit a review findings report to Council and any Principal Certifying Authority.

All fill material documentation is to:

- be prepared by an appropriately qualified person with consideration to all of the controls within Penrith Development Control Plan 2014;
- clearly state the legal property description of the fill material source site and the total amount of fill tested;
- provide details of the volume of fill material to be used in the filling operations;
- provide a classification of the fill material to be imported to the site in accordance with the NSW Environment Protection Authority's "Waste Classification Guidelines" 2009;
- (based on the fill classification) determine whether the fill material is suitable for its intended purpose and land use and whether the fill material will or will not pose an unacceptable risk to human health or the environment; and
- Certify by way of a Compliance Certificate or other written documentation that fill materials have been placed on the site in accordance with all conditions of this consent and that the site will not pose an unacceptable risk to human health or the environment. A copy of the Compliance Certificate or other documentation shall be submitted to Council and any Principal Certifying Authority.

Evidence demonstrating an "appropriately qualified person/s", including details of qualifications and experience, shall be provided with the documentation to the satisfaction of Penrith City Council.

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

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

Note: An appropriately qualified person is "a person who, in the opinion of Council, has a demonstrated experience, or access to experience in hydrology, environmental chemistry, soil science, eco-toxicology, sampling and analytical procedures, risk evaluation and remediation technologies. In addition, the person will be required to have appropriate professional indemnity and public risk insurance."

11 D009 - Covering of waste storage area

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

12 **D010 – Appropriate disposal of excavated or other waste**

A completed construction waste management plan shall be submitted to Penrith City Council for consideration and approval. Council must approve the plan before a Construction Certificate can be issued for the development.

The construction waste management plan shall be prepared in accordance with the Penrith Development Control Plan and with consideration to the NSW Waste Avoidance and Resource Recovery Act 2001, and shall address all waste materials likely to result from the proposed development, with details of the estimated waste volumes, onsite storage and management, proposed re-use of materials, designated waste contractors, recycling outlet and / or landfill site.

The approved waste management plan must be implemented on-site and adhered to throughout all stages of the development, with supporting documentation / receipts retained in order to verify the recycling and disposal of materials in accordance with the approved plan.

13 **D026 - Liquid wastes**

Only clean and unpolluted water is to be discharged into Penrith City Council's stormwater drainage system.

Dam water resulting from dewatering of the dams is to be disposed of off-site to a lawful waste management facility or is to be used and contained within the boundaries of the property. Dam water is not permitted to enter Council's stormwater system and is not to impact adjoining properties.

14 **G001 - Installation of services and Service Clearances (subdivision)**

All services (water, sewer, electricity, telephone and gas) are to be installed within the proposed public roads before final inspection of the engineering works. Water, electricity and gas are to comply with Section 4.1.3 of 'Planning for Bush Fire Protection 2006'.

Prior to the release of the linen plan for each stage of the development, the following service authority clearances shall be obtained:

- a Section 73 Compliance Certificate under the Sydney Water Act 1994 shall be obtained from Sydney Water. This is required prior to the issue of the Subdivision Certificate and
- a letter from Integral Energy stating that satisfactory arrangements have been made for electricity supply to all proposed allotments in the subdivision, including any necessary easements; and
- a letter from an approved telecommunications service provider that satisfactory arrangements have been made for underground telephone services to all proposed allotments in the subdivision, including any necessary easements.

These clearances are to be submitted to the Principal Certifying Authority.

15 **G006 -**

Prior to the issue of a Construction Certificate for roads and drainage, the Principal Certifying Authority shall be satisfied that telecommunications infrastructure may be installed to service the premises which complies with the following:

- The requirements of the Telecommunications Act 1997:
- For a fibre ready facility, the NBN Co's standard specifications current at the time of installation; and
- For a line that is to connect a lot to telecommunications infrastructure external to the premises, the line shall be located underground.

Unless otherwise stipulated by telecommunications legislation at the time of construction, the development must be provided with all necessary pits and pipes, and conduits to accommodate the future connection of optic fibre technology telecommunications.

Prior to the issue of a Subdivision Certificate, written certification from all relevant service providers that the telecommunications infrastructure is installed in accordance with the requirements above and the applicable legislation at the time of construction, must be submitted to the Principal Certifying Authority.

16 [H041 - Hours of work \(other devt\)](#)

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

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

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

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

17 [H001 - Stamped plans and erection of site notice](#)

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

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

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

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

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

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

18 [H002 - All forms of construction](#)

Prior to the commencement of works:

(a) Toilet facilities at or in the vicinity of the work site shall be provided at the rate of one toilet for every 20 persons or part of 20 persons employed at the site. Each toilet provided must be:

- a standard flushing toilet connected to a public sewer, or
- if that is not practicable, an accredited sewage management facility approved by the council, or
- alternatively, any other sewage management facility approved by council.

(b) All excavations and backfilling associated with the erection or demolition of a building must be executed safely and in accordance with the appropriate professional standards. All excavations associated with the erection or demolition of a building must be properly guarded and protected to prevent them from being dangerous to life or property.

(c) If an excavation associated with the erection or demolition of a building extends below the level of the base of the footings of a building on an adjoining allotment of land, the person causing the excavation to be made:

- must preserve and protect the building from damage, and
- if necessary, must underpin and support the building in an approved manner, and
- must, at least 7 days before excavating below the level of the base of the footings of a building on an adjoining allotment of land, give notice of intention to do so to the owner of the adjoining allotment of land and furnish particulars of the excavation to the owner of the building being erected or demolished. The owner of the adjoining allotment of land is not liable for any part of the cost of work carried out for the purposes of this condition, whether carried out on the allotment of land being excavated or on the adjoining allotment of land, (includes a public road and any other public place).

(d) If the work involved in the erection or demolition of a building is likely to cause pedestrian or vehicular traffic in a public place to be obstructed or rendered inconvenient, or involves the enclosure of a public place, a hoarding or fence must be erected between the work site and the public place:

- if necessary, an awning is to be erected, sufficient to prevent any substance from, or in connection with, the work falling into the public place,
- the work site must be kept lit between sunset and sunrise if it is likely to be hazardous to persons in the public place, and
- any such hoarding, fence or awning is to be removed when the work has been completed.

19 [K101 - Works at no cost to Council](#)

All roadworks, stormwater drainage works, associated civil works and dedications, required to effect the consented development shall be undertaken at no cost to Penrith City Council. This does not apply to the Hilltop park site as a part of this development consent.

20 [K201 - Infrastructure Bond](#)

An Infrastructure Restoration Bond is to be lodged with Penrith City Council for development involving works around Penrith City Council's Public Infrastructure Assets. The bond is to be lodged with Penrith City Council **prior to the issue of any Construction Certificate**. The bond and applicable fees are in accordance with Council's adopted Fees and Charges.

An application form together with an information sheet and conditions are available on Council's website.

Contact Penrith City Council's City Works Department on (02) 4732 7777 or visit Penrith City Council's website for more information.

21 **K202 - S138 Roads Act – Works and Structures - Minor Works in the public road DRIVEWAYS ROAD OPENINGS**

Prior to the issue of any Construction Certificate, a Section 138 Roads Act applications, including payment of application and inspection fees, shall be lodged and approved by Penrith City Council (being the Roads Authority for any works required in a public road). These works may include but are not limited to the following:

- a) Vehicular crossings (including kerb reinstatement of redundant vehicular crossings)
- b) Concrete footpaths and or cycleways
- c) Road opening for utilities and stormwater (including stormwater connection to Penrith City Council roads and other Penrith City Council owned drainage)
- d) Road occupancy or road closures
- e) The placement of hoardings, structures, containers, waste skips, signs etc. in the road reserve
- f) Temporary construction access

All works shall be carried out in accordance with the Roads Act approval, the development consent, including the stamped approved plans, and Penrith City Council's specifications, guidelines and best engineering practice.

Contact Penrith City Council's City Works Department on (02) 4732 7777 or visit Penrith City Council's website for more information.

Note:

- a) Where Penrith City Council is the Certifying Authority for the development, the Roads Act approval for the above works may be issued concurrently with the Construction Certificate.
- b) Separate approvals may also be required from the Roads and Maritime Services for classified roads.
- c) All works associated with the Roads Act approval must be completed prior to the issue of the Subdivision Certificate for that stage of the development.
- d) On completion of any awning over the road reserve, a certificate from a practising structural engineer certifying the structural adequacy of the awning is to be submitted to Council before Council will inspect the works and issue its final approval under the Roads Act

22 [K203 - S138 Roads Act – Works and structures - Roadworks requiring approval of civil drawings. CIVIL CONSTRUCTION IN THE ROAD RESERVE](#)

Prior to the issue of any Construction Certificate, the Certifying Authority shall ensure that a Section 138 Roads Act application, including payment of application and inspection fees, has been lodged with, and approved by Penrith City Council (being the Roads Authority under the Roads Act), for provision of half road and full road construction in (Caddens Road fronting the entire development including the proposed playing fields to the eastern side of the proposed subdivision)

Engineering plans are to be prepared in accordance with the development consent, Penrith City Council's Design Guidelines for Engineering Works for Subdivisions and Developments, Engineering Construction Specification for Civil Works, Austroads Guidelines, and best engineering practice.

Contact Penrith City Council's Development Engineering Department on (02) 4732 7777 or visit Penrith City Council's website for more information.

Note:

- a) Where Penrith City Council is the Certifying Authority for the development the Roads Act approval for the above works may be issued concurrently with the Construction Certificate.
- b) Separate approvals may also be required from the Roads and Maritime Services for classified roads.
- c) All works associated with the Roads Act approval must be completed prior to the issue of the Subdivision Certificate for that stage of the development.

23 **K206 - Construction Certificate for Subdivision Works**

A Construction Certificate is to be approved by the Certifying Authority for the provision of engineering works (road, drainage, earthworks, subdivision works).

A Construction Certificate shall be issued for any subdivision works.

Prior to the issue of any Construction Certificate, the Certifying Authority shall ensure that engineering plans are consistent with the Stormwater Management Strategy prepared by J.Wyndham Prince, dated 16 December 2016, issue C; and concept plan/s prepared by J. Wyndham Prince, reference number 110358, drawings DA200 to DA231, revision B, dated 21 December 2016 and that all subdivision works have been designed in accordance with the development consent, Penrith City Council's Design Guidelines for Engineering Works for Subdivisions and Developments, Engineering Construction Specification for Civil Works, Penrith Council's Water Sensitive Urban Design Policy, Austroads Guidelines and best engineering practice.

The subdivision works may include but are not limited to the following:

- Public and private roads
- Storm water management (quantity and quality)
- Interallotment drainage
- Private access driveways
- Sediment and erosion control measures
- Flood control measures
- Overland flow paths
- Traffic facilities
- Earthworks
- Bridges, culverts, retaining walls and other structures
- Landscaping and embellishment works

The Construction Certificate must be supported by engineering plans, calculations, specifications and any certification relied upon.

Note: Council's Development Engineering Department can provide this service. Contact Penrith City Council's Development Engineering Department on (02) 4732 7777 or visit Penrith City Council's website for more information.

24 [K207 - Road design criteria table](#)

Prior to the issue of any Construction Certificate, the Certifying Authority shall ensure that the proposed roads have been designed in accordance with Penrith City Council's Design Guidelines for Engineering Works for Subdivisions and Developments, Engineering Construction Specification for Civil Works and the following criteria:

Road No.	Road Reserve Width	Carriageway Width	Verge Width	Footpath (1.5m wide) Min.	ESA
Rd 1	22.6	12.0	5.8N & 4.8S	2.5N & 1.5S	1x10 ⁶
Rd 6 CH240- CH300	17.25	8.0	5.25N & 4.0S	2.5N & 1.5S	5x10 ⁴
Rd 6 CH320 - CH360	12.7	8.0	4.0N & 0.7S	1.5N & 1.5 along park frontage	5x10 ⁴
Rd 6 CH0-CH240 CH370-CHEND	16.0	8.0	4.0N & 4.0S	1.5 both sides	5x10 ⁴
Rd 16 CH165-END	17.25	8.0	5.25N 4.0S	2.5N & 1.5S	5x10 ⁴
Rd 16 CH0-CH120	16.0	8.0	4.0 both	1.5 both	5x10 ⁴
Rd 16 CH120-CH165	12.7	8.0	4.0S & 0.7N	1.5S & 2.5 along park frontage	5x10 ⁴
Rd 20 CH0-Ch90	12.7	8.0	4.0W & 0.7E	1.5(W) & 2.5 along park frontage	5x10 ⁴
Rd 22	8.0	6.0	1.0 both		5x10 ⁴
Rd 7,14,15,19 Rd 20 CH90- End Rd 12 CH135- CH405	16.0	8.0	4.0 both	1.5both	5x10 ⁴
Rd 12 CH0- CH135	16.0	8.0	4.0W & 4.0E	1.5W & 2.5E	5x10 ⁴
Rd17	16.0	8.0	4.0 E & 0.7 W	1.5E & 1.5 along park frontage	5x10 ⁴

A copy of the pavement design prepared and certified by a suitably qualified geotechnical engineer must accompany the application for Construction Certificate.

25 **K208 - Road Safety Audit**

A Stage 3 (detailed design) Road Safety Audit (RSA) shall be undertaken in accordance with Austroads Guide to Road Safety Part 6: Road Safety Audit on the proposed roadworks by an accredited auditor who is independent of the design consultant. A copy of the RSA shall accompany the design plans submitted with the Construction Certificate or Roads Act application.

Prior to the issue of the Construction Certificate or Section 138 Roads Act approval, the Certifying Authority shall ensure that the recommendations of the RSA have been considered in the final design, through review of the Road Safety Audit Checklist, including Findings, Recommendations and Corrective Actions.

A copy of the Road Safety Audit shall be submitted to Penrith City Council by the applicant or Certifying Authority for information purposes.

26 **K224 - Construction Traffic Management Plan**

Prior to the issue of a Construction Certificate, the Certifying Authority shall ensure that a Construction Traffic Management Plan (CTMP) has been submitted to and approved by Penrith City Council. Approval of the CTMP may require endorsement from the Local Traffic Committee. The CTMP shall include, but not limited to the following: vehicle routes, number of construction vehicles, hours of operation, access arrangements, pedestrian management, turning templates for narrow streets and intersections and parking management for workers. The CTMP shall be certified by an appropriately accredited person and/or Roads and Traffic Authority Traffic Controller for patrons. The CTMP shall be certified by an appropriately accredited person and/or Roads and Traffic Authority Traffic Controller. The CTMP shall ensure that adequate parking is provided for the development and not severely impacted by the construction of this development.

The CTMP shall be supported by a traffic control plan, designed in accordance with the requirements of the Roads and Traffic Authority's Manual, Traffic Control at Work Sites Version 2, and the current Australian Standards, Manual of Uniform Traffic Control Devices Part 3, 'Traffic Control Devices for Works on Roads'.

The Construction Traffic Management Plan shall provide that there is no construction site access through potentially contaminated areas (being Lot 11 DP 522660, Lot 101 DP 564332, Lot 1 DP 515678 and Lot 2 DP 502333) until such time as Condition 22 regarding site remediation has been satisfied.

The traffic control plan must be prepared by a suitably qualified and accredited Work Site Traffic Controller.

27 **K403 - Major Filling/ Earthworks**

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

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

28 **K404 - Soil testing - Subdivisions**

Soil Testing is to be carried out to enable each lot to be classified according to AS2870 "Residential Slabs and Footings". The results shall be submitted to Penrith City Council **prior to the issue of the Subdivision Certificate**.

29 **K406 - Underground Services**

All existing (aerial) and proposed services for the development, including those across the frontage of the development are to be located or relocated underground in accordance with the relevant authorities regulations and standards.

30 **K502 - Completion of subdivision works**

Prior to the issue of a Subdivision Certificate, the Principal Certifying Authority shall ensure that all subdivision works required by this consent have been satisfactorily completed or that suitable arrangements have been made with Penrith City Council for any outstanding works.

31 [K504 - Stormwater Compliance](#)

Prior to the issue of any Subdivision Certificate, the Principal Certifying Authority shall ensure that the:

- a) Stormwater management systems (including on-site detention and water sensitive urban design)
- Have been satisfactorily completed in accordance with the approved Construction Certificate and the requirements of this consent.
- Have met the design intent with regard to any construction variations to the approved design.
- Any remedial works required to be undertaken have been satisfactorily completed.

Details of the approved and constructed system/s shall be provided as part of the Works As Executed drawings.

32 [K509 - Linemarking & Signage](#)

Prior to the issue of a Subdivision Certificate, and installation of regulatory / advisory linemarking and signage, plans are to be lodged with Penrith City Council and approved by the Local Traffic Committee.

Notes:

- a) Contact Penrith City Council's Engineering Services Department on (02) 4732 7777 for further information on this process.
- b) Allow eight (8) weeks for approval by the Local Traffic Committee.
- c) Applicable fees are indicated in Council's adopted Fees and Charges

33 [K512 - Street Naming](#)

Prior to the issue of a Subdivision Certificate, an application for proposed street names must be lodged with and approved by Penrith City Council and the signs erected on-site.

The proposed names must be in accordance with Penrith City Council's Street Naming Policy.

Notes:

- a) Contact Penrith City Council's Engineering Services Department on (02) 4732 7777 for advice regarding the application process and applicable fees.
- b) Allow eight (8) weeks for notification, advertising and approval.

34 [K513 - Bond for final wearing course](#)

Prior to the issue of the Subdivision Certificate, a bond for the final layer of outstanding asphalt works (AC Bond) is to be lodged with Penrith City Council.

The final layer of asphalt on all roads shall not to be placed without the written consent of Penrith City Council (consent will generally be provided when 80% of the housing within the subdivision has been completed).

The value of the bond shall be determined in accordance with Penrith City Council's adopted Fees and Charges.

Note: Contact Penrith City Council's Engineering Services Department on (02) 4732 7777 for further information relating to bond requirements.

35 [K514 - Outstanding Works Bond for Stormwater Management Systems](#)

Prior to the issue of the Subdivision Certificate, an Outstanding Works Bond for the construction, landscaping and implementation of the basins is to be lodged with Penrith City Council.

The Outstanding Works bond will be refunded once the stormwater management system works have been completed to Penrith City Council's satisfaction and a separate Maintenance Bond has been lodged with Penrith City Council.

The value of the bonds shall be determined in accordance with Penrith City Council's adopted Fees and Charges

Note: Contact Penrith City Council's Engineering Services Department on (02) 4732 7777 for further information relating to bond requirements.

36 [K515 - Maintenance Bond](#)

Prior to the issue of a Subdivision Certificate, a Maintenance Bond is to be lodged with Penrith City Council for civil works .

The value of the bond shall be determined in accordance with Penrith City Council's adopted Fees and Charges.

Note: Contact Penrith City Council's Engineering Services Department on (02) 4732 7777 for further information relating to bond requirements.

37 **K516 - Subdivision Compliance documentation**

Prior to the issue of a Subdivision Certificate for each stage of the development, the following compliance documentation shall be submitted to the Principal Certifying Authority. A copy of the following documentation shall be provided to Penrith City Council where Penrith City Council is not the Principal Certifying Authority:

- a) Works As Executed (WAE) drawings of all civil works. The WAE drawings shall be marked in red on copies of the stamped Construction Certificate drawings signed, certified and dated by a registered surveyor or the design engineer. The WAE drawings shall be prepared in accordance with Penrith City Council's Engineering Construction Specification for Civil Works.
- b) The WAE drawings shall clearly indicate the 1% Annual Exceedence Probability flood lines (local and mainstream flooding).
- c) The WAE drawings shall be accompanied by plans indicating the depth of cut / fill for the entire development site. The survey information is required to show surface levels and site contours at 0.5m intervals. All levels are to be shown to AHD.
- d) CCTV footage in DVD format to Penrith City Council's requirements and a report in "SEWRAT" format for all drainage as identified as Council's future assets. Any damage that is identified is to be rectified in consultation with Penrith City Council.
- e) A copy of all documentation, reports and manuals required by Section 2.6 of Penrith City Council's WSUD Technical Guidelines for handover of stormwater management facilities to Penrith City Council.
- f) Surveyor's Certificate certifying that all pipes and services are located wholly within the property or within appropriate easements and that no services encroach boundaries.
- g) Documentation for all road pavement materials used demonstrating compliance with Penrith City Council's Engineering Construction Specification for Civil Works.
- h) A Geotechnical Report certifying that all earthworks and road formation have been completed in accordance with AS3798 and Penrith City Council's Design Guidelines and Construction specifications. The report shall include:
 - Compaction reports for road pavement construction
 - Compaction reports for bulk earthworks and lot regarding.
 - Soil classification for all residential lots
 - Statement of Compliance
- i) Structural Engineer's construction certification of all structures
- j) A slope junction plan for interallotment drainage lines indicating distances to boundaries and depths.
- k) Soil testing for each lot to be classified according to AS2870 "Residential Slabs and Footings".

38 **K601 - Stormwater Management system operation and maintenance**

The stormwater management systems shall continue to be operated and maintained in perpetuity for the life of the development in accordance with the final operation and maintenance management plan.

Regular inspection records are required to be maintained and made available to Penrith City Council on request. All necessary improvements are required to be made immediately upon awareness of any deficiencies in the stormwater management systems.

39 **K209 - Stormwater Concept Plan**

The stormwater management system shall be provided generally in accordance with the commitments made in the Stormwater Management Strategy prepared by J. Wyndham Prince dated 16 December 2016 issue C; and concept plan/s and associated MUSIC modeling lodged for development approval, prepared by J. Wyndham Prince, plan numbers 110358/DA200 - 110358/DA231 revision B dated 21 December 2016.

Engineering plans and supporting calculations for the stormwater management systems are to be prepared by a suitably qualified person and shall accompany the application for the Construction Certificate for the roads and drainage infrastructure for the subdivision.

Prior to the issue of a Construction Certificate for roads and drainage, the Certifying Authority shall ensure that the stormwater management system has been designed in accordance with Council's Stormwater Drainage for Building Developments and Water Sensitive Urban Design Policies.

40 **K301 - Sediment & Erosion Control**

Prior to commencement of works sediment and erosion control measures shall be installed in accordance with the approved Construction Certificate and to ensure compliance with the Protection of the Environment Operations Act 1997.

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

41 **K502 - Works as executed – General and Compliance Documentation**

Prior to the issue of a Subdivision Certificate for each stage of the development, works-as-executed drawings, final operation and maintenance management plans and any other compliance documentation shall be submitted to the Principal Certifying Authority in accordance with Penrith City Council's Engineering Construction Specification for Civil Works, Water Sensitive Urban Design Technical Guidelines and Stormwater Drainage for Building Developments.

An original set of works-as-executed drawings and copies of the final operation and maintenance management plans and compliance documentation shall also be submitted to Penrith City Council with notification of the issue of the Occupation Certificate where Council is not the Principal Certifying Authority.

42 **M001 - Prior to subdivision work (Applies to subdivision except strata)**

Work on the subdivision is not to commence until:

- a Construction Certificate has been issued,
- a Principal Certifying Authority has been appointed for the project, and
- any other matters prescribed in the development consent for the subdivision and the Environmental Planning and Assessment Act and Regulation have been complied with.

Penrith City Council is to be notified 48 hours prior to commencement of engineering works or clearing associated with the subdivision.

43 **M008 - Linen Plan**

Submission of the original Linen Plan and six (six) copies. The Linen Plan must indicate that:

- a) "It is intended to dedicate all new roads to the public as road"; and
- b) "It is intended to create Lot 498 as a residue lot".

All drainage easements, rights of way, restrictions and covenants are to be included on the linen plan.

All dedications of roads/drainage are to be undertaken at no cost to Penrith City Council.

The following information is to be shown on one (1) copy of the plan.

- The location of all buildings and/or other permanent improvements shall comply with any statutory boundary clearances or setbacks as defined by the Building Code of Australia and Council's resolutions.
- All existing services are wholly contained within the lot served and/or covered by an appropriate easement.

44 **M013 - Street trees**

Prior to the issue of a Subdivision Certificate for each stage of the development, street trees are to be planted at a rate of one (1) super advanced tree per 10 metre road frontage. Street tree planting is to be undertaken in accordance with the Guidelines for Engineering Works for Subdivisions and Developments and Penrith City Council's Development Control Plan.

Before the street trees are planted, approval of the plant species and location of the street trees in the form of a street tree planting scheme are to be approved by Penrith City Council (as the relevant Roads Authority). In this regard, please contact Council's Development Services Unit on 4732 7777.

45 **M014 - Surveyors certificate**

A Surveyors Certificate is to be lodged with the application for a Subdivision Certificate that certifies that all pipes and services are located wholly within the property or within appropriate easements and that no services encroach boundaries.

46 **N001 - Section 94 contribution (apply separate condition for each Contribution Plan)**

This condition is imposed in accordance with Penrith City Council's Section 94 Contributions Plan for Werrington Enterprise Living and Learning (WELL) Precinct. Based on the current rates detailed in the accompanying schedule attached to this Notice, contributions **are to be paid to Council prior to a Subdivision Certificate** being issued for that stage of the development (the rates are subject to quarterly reviews). The rates and stages are outlined in the table below. If not paid within the current quarterly period, this contribution will be reviewed at the time of payment in accordance with the adopted Section 94 plan. The projected rates of this contribution amount are listed in Council's Fees and Charges Schedule.

Stage	Contribution	Existing lot/Credit	Total
2	\$2,070,000	\$60,000	\$2,010,000
3	\$2,730,000	\$30,000	\$2,700,000
4	\$2,910,000	\$30,000	\$2,880,000

Council should be contacted prior to payment to ascertain the rate for the current quarterly period. The S94 invoice accompanying this consent should accompany the contribution payment. The Section 94 Contributions Plan for Werrington Enterprise Living and Learning (WELL) Precinct. may be inspected at Council's Civic Centre, 601 High Street, Penrith.

The abovementioned contributions are to be paid **prior to the release of a Subdivision Certificate** unless a Voluntary Planning Agreement is executed by Penrith City Council which negates the payment of the above contributions.

47 [Q008 - Subdivision Certificate](#)

A Subdivision Certificate is to be obtained prior to the release of the linen plan of subdivision. The Subdivision Certificate will not be issued if any of the conditions in this consent are outstanding.

48 [R113 - Decommission old system](#)

The contents of the existing septic tank are to be removed by a licensed waste contractor and deposited to an approved waste facility. The disconnected tank shall be removed. Documentation of the collection and disposal of waste are to be retained and provided to Council on request.

Special Conditions

49 [A Special \(BLANK\)](#)

Prior to the issue of a Subdivision Certificate for Stage 4, a separate development application is required to be submitted to and approved by Council for the landscape embellishment of the Hilltop Park. The park is required to be completed prior to the release of the final Subdivision Certificate.

50 [A Special \(BLANK\)](#)

The following shall be registered on the title of the relevant properties at each stage:

1) a positive covenant is to be registered against Lots 201, 208, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431 and 432 that refers to the letter report titled "Re: Caddens - Central Bypass Road Traffic Noise - Stages 2-6" prepared by Wilkinson Murray Pty Limited dated 2 November 2016 (Ref. MW 021116 TRAFFIC Ver 2). The covenant is also to:

- stipulate the noise criteria as outlined in the above report;
- provide advice on the mechanisms required for each lot to meet the noise criteria, as outlined in Table 3 and Table 4 of the report; and
- ensure that the noise criteria be achieved through the implementation of the recommendations of the report.

2) A restriction as to user and positive covenant relating to the stormwater management systems (including on-site detention and water sensitive urban design). The restriction as to user and positive covenant shall be in Penrith City Council's standard wording as detailed in Penrith City Council's Stormwater and Drainage for Building Developments policy.

51 [A Special \(BLANK\)](#)

Prior to commencement of works, any identified Kangaroos are to be suitably relocated.

52 [A Special \(BLANK\)](#)

Prior to commencement of works, 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. This includes, but is not limited to, the road fronting the site along with any access route used by heavy vehicles. If uncertainty exists with respect to the necessary scope of this report, it must be clarified with Council before works commence. The report must include:

- Planned construction access and delivery routes; and
- Dated photographic evidence of the condition of all public assets.

53 [A Special \(BLANK\)](#)

Prior to the issue of the final staged Subdivision Certificate, an updated public infrastructure inventory report must be prepared and submitted to Council. The updated report must identify any damage to public assets and the means of rectification for the approval of Council.

54 [D - Mud/Soil](#)

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

55 **D special BLANK**

An Unexpected Finds Protocol (the Protocol) is to be developed by an appropriately qualified environmental consultant. **Prior to the issue of the Construction Certificate**, the Protocol is to be submitted to Council for approval. If Council is not the certifying authority for this development, the report is required to be provided to Penrith City Council for approval. The Protocol is to address, but not be limited to, the identification/finding of contaminated soils, buried building materials, asbestos, odour and/or staining, rubbish and incinerated rubbish, and soils impacted by on-site sewage management system(s).

The Protocol is to acknowledge that all remediation works within the Penrith Local Government Area are considered to be Category 1 works under State Environmental Planning Policy 55-Remediation of Land and that should any contamination be found during development works, and should remediation be required, consent is to be sought from Penrith City Council before the remediation works commence.

The above Protocol is to be complied with at all times during the construction phase of the development.

Note: An appropriately qualified person is a "a person who, in the opinion of Council, has a demonstrated experience, or access to experience in hydrology, environmental chemistry, soil science, eco-toxicology, sampling and analytical procedures, risk evaluation and remediation technologies. In addition, the person will be required to have appropriate professional indemnity and public risk insurance". Evidence demonstrating an "appropriately qualified person/s", including details of qualifications and experience, shall be provided with the documentation to the satisfaction of Penrith City Council.

56 **D special BLANK**

Site remediation works, including asbestos removal works, shall be carried out **prior to the commencement of any other works on Lot 11 DP 522660, Lot 101 DP 564332, Lot 1 DP 515678 and Lot 2 DP 502333**, in accordance with the following:

- "Detailed Contamination Assessment & Remedial Action Plan" (Report No 12486/2-AA) prepared by Geotechnique Pty Ltd and dated 10 October 2011,
- Document titled "Re: Review of RAP and Remediation Requirements - 117 O'Connell Street, Caddens, NSW 2747" prepared by DLA Environmental Services and dated 27 January 2017 **(with the exception of point 5 contained within Attachment 3)**

as well as Penrith Development Control Plan 2014, the National Environment Protection (Assessment of Site Contamination) Measure 1999 [NEPM 2013], the Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia, May 2009, and applicable NSW Environment Protection Authority Guidelines.

On completion of the site remediation works, the following documentation is to be submitted for approval to the Principal Certifying Authority and Penrith City Council, if Council is not the Principal Certifying Authority:

- Written notification that the site remediation works have been completed is to be submitted **within 30 days of the said works having been completed**.
- A Validation Report, including Asbestos Clearance Certificates, prepared by an appropriately qualified person, is to be submitted **prior to the issue of the Construction Certificate**. The report shall certify that the remediation and asbestos removal works have been carried out in accordance with the documents listed above and shall certify that the entire site is suitable for the proposed residential land use.

Note: An appropriately qualified person is a "a person who, in the opinion of Council, has a demonstrated experience, or access to experience in hydrology, environmental chemistry, soil science, eco-toxicology, sampling and analytical procedures, risk evaluation and remediation technologies. In addition, the person will be required to have appropriate professional indemnity and public risk insurance". Evidence demonstrating an "appropriately qualified person/s", including details of qualifications and experience, shall be provided with the documentation to the satisfaction of Penrith City Council.

57 **D special BLANK**

Contaminated topsoil shall not be mixed with uncontaminated underlying natural soils.

58 **D Special BLANK**

An appropriately qualified person/s shall:

1. Supervise the remediation and asbestos removal works.
2. Supply Council with a copy of any relevant documentation for further testing carried out during the remediation works.
3. Address off site impacts and proposed management strategies where relevant.
4. (after completion of works) Certify by way of a Clearance Certificate or other written documentation that remediation works have been carried out in accordance with all conditions of this consent and that the site will not pose an unacceptable risk to human health or the environment (this information can be included in the Validation Report). A copy of the Clearance Certificate or other written documentation is to be submitted to the Principal Certifying Authority (PCA) and Penrith City Council if it is not the PCA.

The contact details of any appropriately qualified person/s engaged for the works shall be **provided with the notice of commencement**.

Note: An appropriately qualified person is defined as "a person who, in the opinion of Council, has a demonstrated experience, or access to experience in hydrology, environmental chemistry, soil science, ecotoxicology, sampling and analytical procedures, risk evaluation and remediation technologies. In addition, the person will be required to have appropriate professional indemnity and public risk insurance". Evidence demonstrating an "appropriately qualified person/s", including details of qualifications and experience, shall be provided with the documentation to the satisfaction of Penrith City Council.

59 **D Special BLANK**

Prior to the issue of the Construction Certificate, a Construction Noise Management Plan is to be prepared and submitted to Council for approval. This Plan is to consider (at minimum) the details of the construction program, construction methods, equipment and vehicles in association with the NSW Department of Environment and Climate Change's "Interim Construction Noise Guideline" 2009.

The recommendations of the approved Management Plan are to be implemented and adhered to during the construction phase of the development.

60 **D Special BLANK**

All contaminated soil and material that does not meet residential land use criteria as defined by the National Environment Protection (Assessment of Site Contamination) Measure 1999 is to be removed from the site and is to be disposed of at a licensed waste management facility. No contaminated or asbestos containing soil or material is permitted to be retained on site.

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

The Validation Report and Asbestos Clearance Certificate(s) are to detail the amount, characteristics and classification of waste material disposed of and detail the location of disposal of this material, and are to include copies of receipts and supporting documentation.

61 **D Special BLANK**

Site watering and dust suppression works are to be carried out to ensure no runoff leaves the site. Watering activities associated with asbestos removal and remediation works are to be carried out to ensure they do not cause contamination elsewhere on the site and outside of the asbestos impacted areas.

62 [D Special BLANK](#)

Upon dewatering of the dams, assessment of the dam sediment and walls is required to be undertaken in accordance with the Detailed Contamination Assessment and Remedial Action Plan (Report No 12486/2-AA) prepared by Geotechnique Pty Ltd and dated 10 October 2011. This assessment is to be undertaken by an appropriately qualified person and the results are to be reported to Council for approval, prior to the issue of the Subdivision Certificate. Should the assessment determine that the dam sediment is not suitable for the proposed residential land use, an addendum to the approved Remedial Action Plan is to be submitted to Council for approval with all remediation and validation works to be carried out prior to the issue of the Subdivision Certificate.

Note: An appropriately qualified person is defined as "a person who, in the opinion of Council, has a demonstrated experience or access to experience in relevant areas. In addition, the person will be required to have appropriate professional indemnity and public risk insurance". Evidence demonstrating an "appropriately qualified person/s", including details of qualifications and experience, shall be provided with the documentation to the satisfaction of Penrith City Council.

63 [D Special BLANK](#)

The concrete presentation pad for Lots 401 and 402 is required to be constructed 1m by 4m.

64 [D Special \(BLANK\)](#)

Dust suppression techniques are to be employed when earthworks are being undertaken to reduce any potential nuisances to surrounding properties.

65 [K - Waterways - Storm water Management – sediment basin](#)

The bio-retention basin (for each stage) is to be maintained by the proponent as a sediment basin until 90% of housing construction is completed and retain in the ownership of the proponent. After 90% of housing has been constructed the sediment basin is to be decommissioned and the bio-retention basin completed. After completion of the bio-retention basin has occurred, the proponent is to maintain the bio-retention basin for a period of 3 years after which time handover is permitted (see separate conditions relating to handover).

66 **K - Waterways - Vegetated Stormwater Management systems - compliance prior to Council accepting works following maintenance period**

Handover of assets to Council will not occur until Council is satisfied that they are constructed in with the approved plans, conditions of approval and all certification requirements have been complied with:

1. Vegetated systems (e.g. bioretention measure/s) are required to remain 'on maintenance' for a minimum period of three (3) years or as otherwise approved and a performance-based inspection has been undertaken with Council.
2. The on-maintenance period for all vegetated systems can be considered as on-maintenance once 90% of dwellings are substantially completed within the development sub-catchment associated with the relevant treatment measure.
3. Certification is required to be provided for the installation of the filter media to demonstrate that the media complies with the approved specifications. At a minimum compliance is required with the "Guidelines for Soil Filter Media in Bioretention Systems" (Facility for Advancing Water Biofiltration).
4. Photographs of the construction of the vegetated system are required as part of certification. A minimum of one labelled, date stamped photograph is required to be provided following each of the following construction phases:
 - i. Installation of the overflow pit and bulking out / trimming profiling
 - ii. Installation of under drainage
 - iii. Installation of cleanout points
 - iv. Installation of drainage layer
 - v. Installation of transition layer
 - vi. Installation of filtration media
 - vii. Laying of geofabric protection for build-out phase
 - viii. Laying of turf temporary protection layer
 - ix. Final planting

A licensed surveyor is required to undertake an 'as constructed' survey of the bioretention device elements. The survey data is to demonstrate that design grades and levels have been achieved to the required tolerances. A copy of the survey is required to be lodged as part of the certification.

67 **K - Waterways - Commissioning and Handover**

Prior to the handover of the assets, Council requires all of the following conditions to be met:

- The WSUD assets / measures are constructed and operate in accordance with the approved design specifications / parameters and any other specific design agreements previously entered into with Council
- The performance of the WSUD measure(s) has been validated, which must include the provision of a Performance Validation Report supporting the performance of the WSUD measure
- Where applicable, the build up of sediment has resulted in no more than a 10% reduction of operational volume
- Asset inspections for defects has been completed and, if any defects are found, rectified to the satisfaction of Council
- The WSUD infrastructure is to the satisfaction of Council, structurally and geotechnically sound (this will require the submission of documents demonstrating that such infrastructure has been certified by suitably qualified persons)
- Design drawings have been supplied in a format acceptable to Council
- Works as Executed (WAE) drawings have been supplied for all infrastructure in a format and level of accuracy acceptable to Council
- Other relevant digital files have been provided (e.g. design drawings, surveys, bathymetry, models etc)
- Landscape designs have been supplied, particularly those detailing the distribution of functional vegetation, i.e. vegetation that plays a role in water quality improvement (clearance certificates from the landscape architect will need to be supplied)
- The condition of the infrastructure associated with the land complies with the approved design specification
- Filter media infiltration rates are within 10% of the rates of the design parameters for the filtration system concerned
- Comprehensive operation and maintenance manuals (including indicative costs) have been provided. The plan should include details on the following
 - i. Site description (area, imperviousness, land use, annual rainfall, topography etc)
 - ii. Site access description
 - iii. Likely pollutant types, sources and estimated loads
 - iv. Locations, types and descriptions of measures proposed
 - v. Operation and maintenance responsibility
 - vi. Inspection methods (including inspection checklists)
 - vii. Maintenance methods (frequency, equipment and personnel requirements);
 - viii. Landscape and weed control requirements
 - ix. Operation and maintenance costs;
 - x. Waste management and disposal options; and
 - xi. Reporting.

68 **L Special (BLANK)**

Prior to the release of a Construction Certificate for roads and drainage, a revised landscape plan is to be prepared, submitted to and approved by Penrith Council detailing screening vegetation to be incorporated within the proposed lots containing tiered retaining walls.

69 L Special (BLANK)

Upon completion of the bulk earthworks and bench levels have been established for the site, a geotechnical assessment is to be undertaken to determine the soil and ground conditions of the site. A tree report detailing the methodology of how street trees will thrive within the site is to be prepared and reviewed by an independent Arborist. The report should also consider the use of root barrier to prevent long term damage to surrounding infrastructure from street trees and confirm if this is required on a street by street basis depending on the space available and intended design outcomes.

A copy of the geotechnical assessment, tree report and independent arborist review of these reports is to be submitted to Penrith Council prior to the approval of a street tree planting scheme.