Blacktown
City Council

Your ref: SSD -10425
File no: MC-20-00005

11 June 2021

NSW Department of Planning, Industry and
Environment
GPO Box 39
SYDNEY NSW 2001

Recipient Delivery paula.bizimis@planning.nsw.gov.au

Attention: Paula Bizimis

Dear Madam

SSD10425: Stage 2 – Detailed Development Application - Tallawong Station Precinct South

Thank you for your correspondence dated 2 June 2021 inviting us to provide comments on the revised documents for the above application at 1-15 and 2-12 Conferta Avenue, Rouse Hill, which is a State Significant Development proposal under section 4.36 of the *Environmental Planning and Assessment Act 1979.*

The revised documents including the revised basement car parking plans have been reviewed by our officers and we now have no objection to the proposal provided all our conditions listed at Attachment A are included in any development consent issued by the DPIE.

If you would like to discuss this matter further, please contact Judith Portelli, our Manager Development Assessment, on 9839 6228.

Yours faithfully

Chris Shannon
Acting Director Planning and Development

Blacktown Council's requested conditions of consent to SSD 10425: Stage 2 – Detailed Development Application - Tallawong Station Precinct South

1. Planning conditions

1.1 Any relevant obligation required to be performed by the applicant by the Planning Agreement-Village Green Land at Tallawong Station Precinct South, must be completed prior to the issue of an Occupation Certificate or Subdivision Certificate either by Council or any accredited certifier, whichever occurs first.

1.2 Separate approval is required for the fit out of each of the retail and commercial units or any use other than the retail /commercial use.

2. Car parking Management conditions

2.1 The building manager of the proposed commercial Lot 1 is to obtain from the Lessees of the shops all their staff vehicle registration numbers to exclude them from the paid parking rego reader so they can go through the boom gates at any time free of charge. This matter is to be included in the Parking Management Plan for the development.

2.2 Free all-day parking is to apply to drivers of cars parked in disabled spaces when a valid mobility permit is displayed. Centre Management must validate the driver's parking ticket accordingly.

2.3 A total minimum of 99 residential visitor car parking spaces shall be provided and made available to visitors at all time free of charge and accessible to the visitors of each building at the rate of 1 visitor car space per 10 residential unit as per the approved concept plan for a total of 987 residential units in this development.

2.4 The following minimum number of residential visitor car parking spaces shall be provided for each residential building and within its own residential basement car park in accordance with the corresponding Architectural Drawing for Basement car parking:

Residential visitor car parking space	Site	Corresponding Architectural Drawing
33	1A& 1B	Dwg No. DA-110-006, Rev 13, dated 20/05/21, Dwg No. DA-110-007, Rev 13, dated 20/05/21
16	2A	Dwg No. DA-110-008, Rev 12, dated 20/05/21
33	2BCE	Dwg No. DA-110-007, Rev 13, dated 20/05/21
17	2D	Dwg No. DA-110-008, Rev 12, dated 20/05/21

3. Section 7.11 Contributions conditions

3.1 The following monetary contributions pursuant to *Section 7.11 of the Environmental Planning & Assessment Act 1979* must be paid. The amounts below are valid as at 3 June 2021. They WILL BE INDEXED from this date to the date of payment. Payment of the indexed amounts must be made prior to the issue of a Construction Certificate (for building works) or Subdivision Certificate (for subdivision works) either by Council or any accredited certifier, whichever occurs first.

PLEASE NOTE: Payments must be made by BANK CHEQUE IF IMMEDIATE CLEARANCE IS REQUIRED. Payments of the full amount by credit card or EFTPOS are accepted. However, payments by credit card or EFTPOS over $10,000.00 are levied a 3% surcharge on the whole amount and cannot be split between different credit or EFTPOS cards.

The contribution(s) will be indexed according to the Australian Bureau of Statistics' Consumer Price Index (Sydney Housing) or Consumer Price Index (All Groups Sydney).

Stage 1 – Sites 1A and 1B

Contribution Item	Amount
Stormwater Quantity Second Ponds Creek Land	$556,858.00
Stormwater Quantity Second Ponds Creek Works	$80,311.00
Stormwater Quality Second Ponds Creek	$111,115.00
Traffic Management Rouse Hill Land	$322,138.00
Traffic Management Rouse Hill Works	$1,798,500.00
Open Space Rouse Hill Land	$6,711,415.00
Open Space Rouse Hill Works	$2,047,255.00
Community Facilities	$26,119.00
Community Facilities Land	$50,373.00
E2 Conservation Zone Land	$121,268.00
E2 Conservation Zone Works	$43,532.00
Total	**$11,868,884.00**

These contributions are based upon the following parameters as specified in the Contributions Plan.

Number of intended dwellings/apartments: 333
apartments Total Developable Area: 1.6250 hectares

Additional population: 590.4 persons

Stage 2 – Road only

Contribution Item	Amount
Stormwater Quantity Second Ponds Creek Land	$155,441.00
Stormwater Quantity Second Ponds Creek Works	$22,418.00
Stormwater Quality Second Ponds Creek	$31,016.00
Total	**$208,875.00**

These contributions are based upon the following parameters as specified in the Contributions Plan.

Total Developable Area: 0.4536 hectares

Stage 3 – Site 2A

Contribution Item	Amount
Stormwater Quantity Second Ponds Creek Land	$161,300.00
Stormwater Quantity Second Ponds Creek Works	$23,263.00
Stormwater Quality Second Ponds Creek	$32,186.00
Traffic Management Rouse Hill Land	$150,047.00
Traffic Management Rouse Hill Works	$837,716.00
Open Space Rouse Hill Land	$3,126,083.00
Open Space Rouse Hill Works	$953,583.00
Community Facilities	$12,166.00
Community Facilities Land	$23,463.00
E2 Conservation Zone Land	$56,485.00
E2 Conservation Zone Works	$20,277.00
Total	**$5,396,569.00**

These contributions are based upon the following parameters as specified in the Contributions Plan.

Number of intended dwellings/apartments: 164
apartments Total Developable Area: 0.4707 hectares

Additional Population: 275 persons

Stage 4 – Site 2D

Contribution Item	Amount
Stormwater Quantity Second Ponds Creek Land	$213,765.00

Stormwater Quantity Second Ponds Creek Works	$30,830.00
Stormwater Quality Second Ponds Creek	$42,654.00
Traffic Management Rouse Hill Land	$170,508.00
Traffic Management Rouse Hill Works	$951,950.00
Open Space Rouse Hill Land	$3,552,367.00
Open Space Rouse Hill Works	$1,083,617.00
Community Facilities	$13,825.00
Community Facilities Land	$26,663.00
E2 Conservation Zone Land	$64,188.00
E2 Conservation Zone Works	$23,042.00
Total	**$6,173,409.00**

These contributions are based upon the following parameters as specified in the Contributions Plan.

Number of intended dwellings/apartments: 172
apartments Total Developable Area: 0.6238 hectares

Additional Population: 312.5 persons

Stage 5 – Sites 2B, 2C and 2E

Contribution Item	Amount
Stormwater Quantity Second Ponds Creek Land	$396,106.00
Stormwater Quantity Second Ponds Creek Works	$57,127.00
Stormwater Quality Second Ponds Creek	$79,038.00
Traffic Management Rouse Hill Land	$307,406.00
Traffic Management Rouse Hill Works	$1,716,252.00
Open Space Rouse Hill Land	$6,404,491.00
Open Space Rouse Hill Works	$1,953,631.00
Community Facilities	$24,925.00
Community Facilities Land	$48,069.00
E2 Conservation Zone Land	$115,722.00
E2 Conservation Zone Works	$41,541.00
Total	**$11,144,308.00**

These contributions are based upon the following parameters as specified in the Contributions Plan.

Number of intended dwellings/apartments: 318
apartments Total Developable Area:1.1559 hectares

Additional Population: 563.4 persons

Copies of the following relevant Contributions Plan may be inspected/purchased from Council's Customer Information Centre. Alternatively, Contributions Plans may be downloaded from Council's website:

S7.11 CP No. 22 – Rouse Hill (Works and Land).

Should the final plan of survey indicate any change in the total developable area or should amendments change the potential additional population, the information for these Section 7.11 Contributions will be adjusted accordingly.

4. Open Space conditions

4.1 The Operational Maintenance Plan in relation to the private Park Land is to be submitted and approved by Council's Open Space Maintenance Team prior to the issue of the first Occupation Certificate for Stage 1 to ensure minimum standards of maintenance are met for all assets within the Park Land.

5. Tree Management condition

5.1 A revised Landscape Plan is to be provided indicating a revised species list for the proposed street trees along Themeda Avenue and Conferta Avenue to Council's satisfaction prior to issue a Construction Certificate.

5.2 The applicant is to undertake street tree planting and maintenance along the frontage of the development site to improve the amenity of the streetscape must be approved before a Occupation Certificate is issued.
Trees are be planted at a minimum spacing of approximately 8 metres, taking into account vehicle sightlines and street light spill. Trees must be of a minimum container size of 100 litres with root directors.

5.3 The applicant must obtain clearances from relevant service authorities.

5.4 The applicant will be required to pay a bond per tree as indicated in the current goods and services pricing schedule to ensure the health and vigour of the tree(s). The bond will be returned 12 months after the completion of the development (i.e. on issue of final occupation certificate), by council if the trees are maturing satisfactorily. The applicant is responsible for notifying Council when the works are completed to request a practical completion inspection and at the end of street tree bond maintenance period for an inspection.

5.5 The applicant will also be required to pay an inspection fee and a landscaping assessment fee as indicated in the current goods and services pricing schedule. A Blacktown City representative will inspect all street tree and public landscaping during the establishment period (i.e. between the practical date of completion and formal handover). Elements deemed to be not adequately performing are to be removed, substituted or repaired by the developer within 60 days of written notification."

6. Waste conditions

6.1 It is noted that:

6.1.1 The proposed 11 m Heavy Rigid Vehicle (HRV) generally demonstrates a potential to move within the space provided. Having said that, there is little room provided for driver error within the loading bay areas on both plans D & E. Furthermore, on plan D the HRV will slightly encroach the 3 m clear zone when reversing, but is able to move forward when coming to a complete stop to maintain the 3 m rear clearance.

6.1.2 The applicant has provided the minimum 3 m clear zone behind the service vehicle in accordance with BCC requirements.

6.2 The proposed development has nominated to use Council's Waste Service in accordance with Council's Resource (Waste) Management Services Charter. Council may only provide this service if the site is designed to satisfy Council concerns regarding safety and access.

6.3 Prior to Construction Certificate

6.3.1 The removal of asbestos from the site and its transportation to its final destination is to be undertaken in accordance with the NSW Environment Protection Authority's WasteLocate online system for tracking asbestos waste. Upon completion of transportation, the WasteLocate consignment number is to be submitted to Council. For more information, please refer to the following link: https://www.epa.nsw.gov.au/your-environment/waste/transporting-asbestos-waste-tyres

6.3.2 The applicant must ensure that roads and driveways are rated suitable for 24 tonne trucks.

6.3.3 The applicant must ensure access for collection vehicles is designed in accordance with the dimensions indicated on the approved architectural plans, CAD files and vertical clearances (as per Australian Standards), showing adequate truck entry and exit and in all manoeuvring areas to the consent authority's satisfaction.

6.3.4 The applicant must demonstrate that the proposed construction plans (with particular respect to the services and piping infrastructure secured to the ceilings of the basement and waste collection area) do not encroach the required 4.5 m headroom allowance for truck access as per Australian Standard 2890.2. This 4.5 m headroom allowance must be achievable clear of all eaves, overhangs, balconies, services (including sprinklers, pipes etc) and at the roller door entry point. Failure to comply may impact the ability for waste collection vehicles to safely access the development to service its waste and recycling bins.

6.3.5 The applicant must reconfigure the waste room so it is a more practical space to the satisfaction of the consent authority. Irregularly shaped rooms as proposed are not suitable for storage of 1100 L bins or bulky waste. It also makes cleaning this area problematic.

6.3.6 The applicant must ensure the proposed residential bin tug and trailer can traverse all the ramps required to move bins around the site to the satisfaction

of the consent authority. The paths must be attached to the waste management plan.

6.3.7 The applicant must label each waste room to reflect the list of residential waste rooms provided in the waste management plan.

6.3.8 The applicant must ensure no stairs are required to bulky waste rooms, as this endangers users and service staff. Bulky waste rooms must be designed to open onto the loading bay to limit manual handling.

6.3.9 The applicant must ensure that enough space is allocated to location and storage of machinery as many require additional headroom for operation. This must be demonstrated to the satisfaction of the consent authority. The location of each type of machinery must be identified on the plans and referred to in the Waste Management Plan.

6.3.10 The applicant must delete from the Waste Management Plan reference to bulk cardboard collection. Council does not collect bulk cardboard. This will need to be an interim service provided by the Strata for the building for a period of 6 weeks from occupation to cover residents moving into the building.

6.3.11 The applicant must demonstrate on plans that the chute discharge point and/or chute compactor is suitably caged (or enclosed) to prevent injury with sufficient circulation space around the equipment for bin rotation as per the manufacturer's specifications. Update the waste management plan accordingly

6.3.12 The applicant must provide a vertical cross-section plan with swept paths demonstrating a 4.5 m headroom allowance clear of eaves, overhangs, balconies, services and at the roller door entry point, for the trucks' entire travel path (as per AS2890.2). This must also include the corresponding AutoCAD file in DWG format and 1:1 scale for the trucks' entire travel path for review.

Stage 1: 1A

- The applicant must demonstrate how bins are to be moved from the residential waste room (1.A – 26.1m) to the loading dock. The plans do not indicate how bins in this area will be serviced. The waste management plan must be updated to this effect.

Stage 1: 1B

- The applicant must reconfigure the waste room located on ground floor (24.5m) as the current design does not support bin movement and circulation. The doors should be replaced with roller doors to allow bins to be accessed without obstruction.
- The applicant must relocate the residential waste room as it requires bins to be moved an excessive distance for servicing. Bulk bins are not to be moved an excess of 10m without the aid of a bin tug and trailer
- The applicant must demonstrate the residential loading area can safely accommodate all the required bins for servicing. If all the bulk bins are being serviced, they will need space to the rear of the waste collection

vehicle. As required, the waste rooms must open onto the loading area directly.

- The applicant must increase the number of 1.5m wide access doors to the residential waste room (18 x bulk bins) to the satisfaction of the consent authority The current access does not support effective servicing of this area. Roller doors should be used to provide access to the deeper areas.

- The applicant must relocate the commercial waste room (17 x bulk bins) to the satisfaction of the consent authority as it requires the building manager to move bins through the paths of heavy vehicles, increasing risk of injury. Waste rooms must open directly onto the loading bay without obstruction to facilitate the movement of bins.

Stage 2: A

- The applicant must ensure chute discharge rooms are located on the same level as waste rooms to facilitate the movement of bins. Split level locations require dependence on bin movement aids that must traverse ramps and the path of other vehicles. This must be demonstrated to the satisfaction of the consent authority.
- The applicant must ensure the waste chute room is an enclosed space and includes a 240L recycling bin. This must be demonstrated on amended plans.

Stage 2: BCE

- The applicant must demonstrate bulky waste rooms are designed to open directly onto the loading bay. This must be demonstrated to the satisfaction of the consent authority. Relocate access to the bulky waste room (19m) within building L level 1
- The applicant is to clarify how the bulky waste room (19m) within building L level 1 will be accessed by residents. Access to any waste room, including bulky waste rooms, must not be through the lobby or require travel outside the building.
- The applicant must relocate the waste room to ensure general waste bulk bins open directly onto the loading bay to facilitate the effective servicing of bins. This must be demonstrated to the satisfaction of the consent authority.
- The applicant is to clarify how residents on levels 1 and 2 are accessing the waste chute rooms. Access must be provided through the building without the need to traverse the lobby. Distances must not exceed 30m with bagged rubbish.

Stage 2: D

- The applicant must reconfigure access to the bulky waste room as it makes the practical use of this space difficult.. Currently, there is insufficient space to move bulk items. This must be demonstrated to the satisfaction of the consent authority.

- The applicant must reconfigure the bin tug and trailer storage area to a more suitable size. This area must accommodate the full length of the vehicle and the trailer.

6.4 Prior to Occupation Certificate

6.4.1 Should Council provide a waste service to this site, the owner or elected strata manager must sign our 'Onsite Waste Collection Agreement Form' on behalf of all lot owners (and stamped using the common seal), before collections can occur.

6.4.2 The applicant must provide an updated and comprehensive waste management plan which reflects all changes made to design and servicing.

6.4.2.1 A bin tug and trailer plan demonstrating the proposed collection path of the device must be attached as an appendix to the waste management plan.

6.4.2.2 A bulky waste room access plan demonstrated how all the bulky waste rooms of the site will be accessed and service must be attached as an appendix to the waste management plan.

6.4.3 Any Community Management Agreement/Strata Management Agreement is required to Council's satisfaction which:

- Indicates a requirement for the appointment of a building manager/caretaker to manage bins and bulky waste on-site in accordance with the approved Waste Management Plan. This includes placement of bins out for collection and their return to the storage areas following servicing.
- Indicates the responsibility for maintenance of the garbage collection system and bin cleaning, and ensure waste collection points are clear and unobstructed prior to collection times, including providing access to the loading bay prior to bin servicing.
- Indicates the method of communication to new tenants and residents regarding the waste management service and collection system for the complex.
- Clearly outlines the requirement for the building manager to maintain and display consistent signs on all bins and in all communal bin storage areas.
- Clearly outlines the requirement for the building manager to arrange for the prompt removal of dumped rubbish from the site.
- Includes the updated (and approved) Waste Management Plan as lodged with the Development Application.

6.4.1 A seated motorised bin tug and trailer must be provided for each core of the development that requires bins to be moved to the collection area from interim waste rooms.

6.5 Operational (waste)

6.5.1 The Owners Corporation/Community Management Association will be responsible for ensuring that clear access is provided to waste collection trucks entering the property.

6.5.2 Waste and recycling collection vehicles entering and exiting the property must do so in a forward direction.

6.5.3 Ongoing management of waste for the site must be in accordance with the waste requirements outlined in the approved Waste Management Plan as submitted with the Development Application. This includes but is not limited to:

- Separation or caging of waste equipment on-site from residents (such as chute discharge points or storage areas for bin movement aides etc), to prevent injury or damage.
- Provision and maintenance of suitable signage in all areas with waste facilities such as bin storage areas, waste chute rooms on each floor, chute discharge points, bin collection points, loading bays or any other relevant area accessible to residents, cleaners and/or building management staff.
- Separated bin storage areas and associated waste management equipment for commercial and residential components of a development if applicable.
- Provision of bin movement aids such as bin tugs and trolleys if suggested for the site. Adequate storage for both the bin tug and trolley attachment must be shown on the architectural drawings.
- Engagement of a building manager and/or caretaker on-site to manage the waste system if suggested for the site. This includes prompt removal of illegal dumping.

6.5.4 The Community Management Statement, Strata Management Statement and/or the Total Maintenance Plan (whichever is relevant to this site) must be provided to each tenant and/or owner-occupier upon commencement of the site, and for every subsequent lease renewal and/or change in ownership of every lot in perpetuity.

6.5.5 The applicant must ensure all road networks are completed prior to occupation and bin commencement to facilitate truck movement throughout the site to the satisfaction of the consent authority.

6.5.6 Council's Abandoned Shopping Trolley Policy (Policy Number: P000497.1) must be added as a consent condition to the Notice of Determination for approval of this development.

6.5.7 The building manager must ensure access to residential loading areas is always readily accessible during nominated collection days. Council does not offer collection windows.

6.5.8 Residents must not have access to waste rooms surrounding the loading bay as bins are separated and not mixed between waste and recycling. Due to the density of the development a merit evaluation will permit the proposed separated arrangement. This is not to be replicated in future designs.

7. Drainage conditions

7.1 General conditions

7.1.1 The registered proprietor/owners corporation for each unit block is to provide to Council's WSUD Compliance Officer a report outlining all maintenance undertaken on the Stormwater Quality Improvement Devices in accordance with the approved maintenance schedule. All materials removed are to be disposed of in an approved manner. Copies are to be provided of all contractors' cleaning reports or certificates to Council's WSUD Compliance Officer WSUD@blacktown.nsw.gov.au.

7.1.2 Each year the registered proprietor/owners corporation for each unit block is to provide to Council's WSUD Compliance Officer at WSUD@blacktown.nsw.gov.au a report outlining all non-potable water used annually and the percentage of non-potable reuse.

7.1.3 Each unit block development must at all times maintain the water quality system to achieve the following minimum pollutant removal targets for the entire site for the life of the development:

Required percentage reductions in post development average annual load of pollutants

Pollutant	**% post development pollutant reduction targets**
Gross Pollutants	90
Total Suspended Solids	85
Total Phosphorous	65
Total Nitrogen	45

7.2 Conditions required prior to release of Construction Certificate

7.2.1 Amended drainage plans Series 60618532 from AECOM are to be provided to meet the requirements under Council's WSUD developer handbook and Council's Engineering Guide for Development 2005 to the satisfaction of Council's Manager Asset Design. The amended plans must address the following:

- Indicate lot numbers and extents of lot 1, lot 2, lot 3, lot 4, lot 5 and lot 6 on key plan.
- Indicate staging plans for the development.
- Provide a detail and section for both the public and private bioretention street tree pit details separate to Council WSUD standard drawings including:
  a. Dimensions to demonstrate that the minimum areas as shown on C1-0311(2) are achieved. Show multiple types.
  b. Concrete masonry pit surrounds to base of pit with HDPE liner/concrete below.
  c. Horizontal bar screen over kerb for entry to pit.

d. Provide for minimum 150 mm EDD below the gutter invert. Allow for slope to ensure minimum achieved throughout.
e. Allow for 900 mm filter media, 100 mm transition layer and 150 mm gravel layer.
f. Provide slotted unsocked PVC through the pit with flushing point and non-slotted pipe outside discharging to outlet pit.
g. Designed to ensure all parts of the filter area are accessible for cleaning.
h. Provide a temporary public street pit detail allowing for the gravel and transition layers, 400 mm filter media, geotextile, sacrificial 100 mm filter media over the geotextile and a solid heavy-duty plate over in lieu of a grate. Tree not to be installed until all work complete in street

- Provide a crest to all basement driveways a minimum of 300 mm above the gutter invert.
- On drawing C1-0300 (6),
  a) Number all pits.
  b) Set the habitable floor level a minimum of 150 mm above finished ground level.
  c) Indicate the non-trafficable roof area connected to each rainwater tank and trafficable roof area connected to the Stormwater tank.
  d) Provide details and a section through the RWT 1 and SWT1. Provide a series of overflow pipes with non-return flaps from RWT1 to SWT1.
  e) Delete the inflow pipes shown from P6.4, P7.1 and P24.1 into RWT1.
  f) Show the overflow pipe connection from the Stormwater tank to the nearest pit likely P6.8.
  g) Show the location of the HumeGard HG15 downstream of pit P6.8 over the 600mm pipeline to treat the flows at location 1 prior to treating in the Stormfilter chamber.
  h) Demonstrate that the area of private park to the north and east of pit 10.1 can be collected and discharge ultimately to this pit.
  i) Any area of the park that cannot discharge to pit 10.1 can be collected and treated by an OceanGuard or similar prior to discharge.
  j) Relocate the Treatment Location 2 to be fully within the private lot. No part of the treatment is permitted in the public roadway.
  k) Provide details of the Bifurcation Pit at P25.9 to direct low flows to P25.10.
  l) Provide details of the overland flow path with cross-sections from P36.1a to P36.2 and then to P36.3 assuming the 375 mm pipe is fully blocked in the 1% AEP critical event. Provide flow levels at frequent intervals. Set the habitable floor level of the adjacent buildings or any openings into the basement carpark a minimum of 300 mm above the minimum flow level.
  m) Provide details of the overland flow path with cross-sections from P36.3 to P36.8 assuming the pipe is half blocked in the 1% AEP critical event. Provide flow levels at frequent intervals. Set the habitable floor level of the adjacent buildings or any openings into the basement carpark a minimum of 300 mm above this level.

n) Provide an OceanGuard or similar to pits P36.3, P36.4, P36.5, P36.6 and P36.7 to treat swale surface flows prior to discharge.
o) Provide a GPT – HumeGard HG12A upstream of the Jellyfish to treat the flows from the swale for Treatment Location 5 in lot 4.
p) Provide details of the OSD tank required in lot 6 to reduce the downstream discharge

- On drawing C1-0305 (4), delete the row with 1yr HGL Directly Downstream of Jellyfish and Treatment Location Column 5 in the table.
- On drawing C1-0305 (4) at "Typical Treatment Arrangement Plan" delete reference to" HG12A/L" and "Jellyfish JF3250". Provide a table with the following; Treatment Location 2, HumeGard HG12A and Jelllyfish JF2250-7-2; Treatment Location 3, HumeGard HG12A and Jelllyfish JF2250-7-2; Treatment Location 4, HumeGard HG15 and Jelllyfish JF3250-16-3; Treatment Location 5, HumeGard HG12A and Jelllyfish JF2250-7-2;
- On drawing C1-0306 (2) at Stormfilter Pit Details,
  a) Provide dimensions to the Stormfilter chamber. The maximum plan area is to be 18m^2.
  b) Provide dimensions to the OSD tank. The minimum area is to be 90 m^2. Show base levels.
  c) Provide two 900 mm by 900 mm size access grates to Stormfilter tank with metal mosquito screens welded on top.
  d) Provide a minimum 900 mm by 900 mm size access grates to the below ground OSD tank and position the access grates such that the maximum distance from any point in the tank to the nearest grate is not greater than 3 m
  e) On the plan replace the arrow pointing to "FULL HEIGHT WALL' and redirect the arrow to the wall adjacent to the overflow pit.'.
  f) Indicate the RL of the overflow weir to achieve a minimum OSD storage of 150 m^3 before overflow.
  g) Show the length of the overflow weir.
  h) Provide a 350 mm orifice outlet from the OSD protected by a Weldlok screen. Delete the screen in the overflow pit
  i) In the plan correctly indicate the Impermeable baffle at 250mm offset from the overflow weir.
  j) Delete the reference to the Impermeable baffle shown adjacent to the wall between filter storage and overflow pit. This is the underdrain.
  k) Provide 1% grade to the base of the OSD tank towards the pipe invert of the pipe connection between filter chamber and the OSD tank.
  l) On the plan reverse the direction of arrows for Section B
  m) Provide a new section C through the orifice control of the tank.
  n) At Section B Delete the dimension (400) shown between the top of weir and top of cartridges and indicate 400mm up to the length of the baffle extended from the top of weir.

- Confined space entry warning signs are to be detailed on the drainage plans adjacent to all entries into the water quality devices and rainwater

tank in accordance with Council's Engineering Guide for Development 2005.

- The minimum storage and dual alternating pump requirements for the basement garage is to satisfy AS/NZS 3500.3:2015 – Plumbing and Drainage Part 3: Stormwater Drainage.
- Provide a basement design that ensures a minimum 0.5% slope to all surface inlet pits.
- Provide galvanised or equivalent step irons or ladders for all entry points to the tanks.

7.2.2 An experienced Drainage Engineer registered with NER and supported by a DRAINS or other hydraulic modelling is to certify that the internal drainage system is capable of carrying the 5% AEP flows without surcharge at any pits.

7.2.3 An engineer registered with NER is to certify that the maximum depth of flows in the critical 1% AEP storm event within the loop road is less than 200 mm.

7.2.4 Provide details for permanent interpretive signage minimum A1 size to be installed to each lot to highlight the water quality improvement process. The sign is to incorporate a simplified drainage layout of the site and detail through words and pictures all the different water quality devices and rainwater tanks and explain the benefit to the site and community as per chapter 14 of Council's WSUD Developer Handbook 2020. The sign is to be supported by a steel post or on a wall and is to be located adjacent to the major water quality device. The wording and detail is to be approved by Council.

7.2.5 Due to the cut and/or fill exceeding 1.5 m, a desktop Groundwater Assessment Report is required for the site in accordance with section 4.6 of DCP 2015 Part J and chapter 5 of Council's WSUD Developer Handbook 2020. Where there is the potential for interaction with groundwater, a Groundwater Management Plan must be prepared by a Geotechnical Engineer registered with NER.

7.2.6 Amended architectural plans are required for buildings, or parts of buildings within lots 1 and 2, that are not affected by BASIX, to demonstrate compliance with the minimum standards defined by the Water Efficiency Labelling and Standards (WELS) Scheme for any water use fittings. Minimum WELS ratings are:

- 4 star dual-flush toilets
- 3 star showerheads
- 5 star taps (for all taps other than bath outlets and garden taps)
- waterless urinals only permitted
- 3 star water efficient washing machines and dishwashers are to be specified.

7.2.7 An experienced chartered hydraulic engineer is to prepare and certify a detailed Rainwater Water Supply and Irrigation Plan for non-potable water uses on the site for each unit block including all toilet flushing (excluding urinals) for the commercial development in lots 1 and 2 and landscape watering in lots 3, 4, 5 and 6 and that all Sydney Water requirements have

been satisfied. The plan is to show the rainwater pipe and tank arrangement including:

- a first flush or pre-treatment system (typically 0.2 litres / m^2 of roof area going to the tank for a first flush)
- a pump with isolation valves
- a solenoid controlled mains/recycled water bypass
- flow meters on the solenoid controlled mains/recycled water bypass line and the pump outflow line, to determine non-potable usage and actual percentage reuse
- an automatic backwash inline filter
- a control panel with warning light to indicate pump failure
- ensuring all the rainwater reuse pipes and taps are coloured purple
- connection points for all the proposed irrigation area supplied by the rainwater tank
- fitting rainwater warning signs to all external taps using rainwater.

7.2.8 An experienced chartered hydraulic engineer is to prepare and certify a detailed Non-Potable Irrigation Plan for landscape watering only sourced from stormwater tank for lots 1 and 2 and that all Sydney Water requirements have been satisfied. The plan is to show the stormwater pipe and tank arrangement including:

- a pre-treatment system appropriate to the water source
- a pump with isolation valves
- mains water tank top-up
- flow meters on the mains water tank top up line and the pump outflow line, to determine non-potable usage and actual percentage reuse
- an automatic backwash inline filter
- any additional treatment system to ensure stormwater is of a sufficient standard for the nominated reuse and fit for purpose.
- a control panel with warning light to indicate pump failure
- ensuring all the stormwater reuse pipes and taps are coloured a different purple notation to the rainwater reuse purple pipes to avoid cross-contamination
- connections points for all proposed irrigation areas supplied by the stormwater tank
- fitting stormwater warning signs to all external taps using stormwater.

7.2.9 An experienced chartered hydraulic engineer is to certify that the proposed treatment of the stormwater for landscape watering for lots 1 and 2 is of a sufficient standard to protect the public and residents from any likely risks and is safe to use.

7.2.10 Provide a Temporary Public Bioretention Street Pit Estimate for the removal of the steel plate, all the sacrificial filter media and geotextile and replacement with 500 mm of filter media, installation of street trees and fitting the tree grates for the 22 public tree pits within the loop road.

7.3 Conditions required during construction

7.3.1 The twenty-five 690 Stormfilter cartridges for the Stormfilter chamber supplied by Ocean Protect are not to be reduced in size or quantity, nor replaced with an alternate manufacturer's product.

7.3.2 The Jellyfish filters three numbers of JF 2250-7-2 and one JF 3250-16-3 supplied by Ocean Protect are not to be reduced in size or quantity, nor replaced with an alternate manufacturer's product.

7.3.3 The Gross Pollutant Traps- two numbers HumeGard HG15 and three numbers of HumeGard HG12A supplied by Humes are not to be reduced in size or replaced with an alternate manufacturer's product.

7.3.4 A plumber licensed with NSW Fair Trading is to undertake flow testing of the non-potable water reuse system to certify that all the toilets are capable of being supplied by rainwater and that there is no cross mixing or cross contamination with the potable water supply.

7.3.5 Provide certification prior to placement that the bioretention filter media ex-bin has:

- a minimum hydraulic conductivity as defined by ASTM F1815-11 of 250 mm/hr (actual, not predicted)
- a maximum hydraulic conductivity as defined by ASTM F1815-11 of 700 mm/hr (actual, not predicted)
- a pH between 5.5 and 7
- an Orthophosphate content < 20 mg/kg
- a Total Nitrogen content between 800 and 1000 mg/kg
- is not hydrophobic.

7.4 Conditions required prior to occupation

7.4.1 Surveys/certificates/works as executed plans

- A Chartered Civil Engineer registered with NER is to certify that:
  - all the requirements of the approved drainage plan have been undertaken
  - the bioretention systems in the tree pits have been installed with a minimum total filter media area of 30 m^2 on the private road north of Conferta Avenue.
  - a minimum 110 KL rainwater tank - RWT 1 has been provided collecting roof water from a minimum 1000 m^2 of lot 1 non trafficable roof area and a minimum 2340 m^2 of lot 2 non trafficable roof area;
  - a minimum 6.6 KL rainwater tank – RWT 2 has been provided collecting roof water from a minimum 1940 m^2 of lot 3 non trafficable roof area;
  - a minimum 11 KL rainwater tank – RWT 3 has been provided collecting roof water from a minimum 1400 m^2 of lot 4 non trafficable roof area;
  - a minimum 22 KL rainwater tank - RWT 4 has been provided collecting roof water from a minimum 1760 m^2 of lot 5 non trafficable roof area and a minimum 1620 m^2 of lot 6 non trafficable roof area;

- a minimum 32 KL stormwater tank – SWT 1 has been provided collecting roof water from a minimum 570 m^2 of lot 1 trafficable roof area and a minimum 2070 m^2 of lot 2 trafficable roof area;
- the Gross Pollutant Traps – two HumeGard HG15 and three HumeGard HG12A are installed for the site in accordance with the Humes standard operational guidelines and production drawings
- the minimum six 200 micron OceanGuards or similar are installed for the site in accordance with the manufacturer's standard operational guidelines and production drawings
- the interpretative water quality signs have been correctly installed
- all other signage and warning notices have been installed
- a copy of the certification and the works-as-executed drainage plan has been provided to the certifier, who shall provide it to Council.

o Ocean Protect is to certify for the installation of OceanGuard (where supplied), Stormfilter and Jellyfish filters that:

- they are installed in accordance with the Ocean Protect standard operational guidelines and production drawings
- the minimum six OceanGuards have been installed correctly
- the minimum twenty-five 690mm high Stormfilter cartridges for the Stormfilter tank have been installed as per the approved plan
- the Stormfilter tank includes a baffle 400 mm below the Stormfilter weir and set 250 mm upstream from the weir to retain floatables for the 690 mm cartridges
- the Stormfilter weir length for the Stormfilter chamber matches the approved plan
- metal mosquito proof screens have been provided welded over under all grated accesses into the Stormfilter tanks
- energy dissipaters have been provided on the inlets to the Stormfilter chamber as per the approved plan
- a maintenance contract has been entered into for the maintenance of the Stormfilter
- the Jellyfish filters of three JF 2250-7-2 and one JF 3250-16-3 match the approved drainage plans
- a maintenance contract has been entered into for the maintenance of the Jellyfish cartridges of each Jellyfish filter.

o A plumber licensed with NSW Fair Trading, or experienced hydraulic engineer, is to certify that:

- the non-potable water uses of toilet flushing are being supplied by rainwater tank RWT 1 for lots 1 and 2;
- the non-potable water use of landscape watering for a total of 1315 m^2 minimum landscaped area is being supplied by rainwater tanks RWT 2, RWT 3 and RWT 4;
- all the requirements of the detailed Rainwater Water Supply and Irrigation Plan have been installed to the required locations

- the flow meters have been installed on the pump outflow and the solenoid controlled mains/recycled water bypass to determine non-potable usage and actual percentage of reuse
- the initial flow meter readings are detailed in the certificate
- the pumps, alarms and all other systems are working correctly
- the water from at least two toilets per grouped amenities section have been tested to show no chlorine residual
- rainwater warning signs are fitted to all external taps using rainwater
- a signed, works-as-executed Non-Potable.Water Supply & Irrigation Plan is to be provided to Council's WSUD Compliance Officer at WSUD@blacktown.nsw.gov.au

o an experienced irrigation specialist is to certify that for lots 1 and 2:
- the landscape watering water uses for a minimum 265 m^2 are being supplied by stormwater from SWT1
- all the requirements of the detailed Non-Potable Irrigation Plan have been installed to the required locations, including all necessary treatment requirements to ensure the stormwater is fit for purpose
- the flow meters have been installed on the pump outflow and the mains water top-up to determine non-potable usage and actual percentage of reuse
- the initial flow meter readings are detailed in the certificate
- the pumps, alarms and all other systems are working correctly
- for the rainwater/stormwater tank indicated on the approved drainage plan, the automatic timer has been set up for time and frequency to deliver 0.4 kL/m2/year on average and the system has been designed for a minimum of 50% above the average rate in summer and half the rate in winter
- the water from at least two garden taps, or two sample points for the landscape watering system have been tested to show no chlorine residual
- warning signs are fitted to all external taps using stormwater
- a signed, works-as-executed Non-Potable Water Supply & Irrigation Plan is to be provided to Council's WSUD Compliance Officer at WSUD@blacktown.nsw.gov.au

o A plumber licensed with NSW Fair Trading is to certify that the lots 1 and 2 buildings, or parts of buildings that are not affected by BASIX, comply with the minimum standards defined by the Water Efficiency Labelling and Standards (WELS) Scheme for any water use fittings. Minimum WELS ratings are:
- 4 star dual-flush toilets
- 3 star showerheads
- 5 star taps (for all taps other than bath outlets and garden taps)
- only waterless urinals have been installed
- 3 star Water efficient washing machines and dishwashers have been used.

7.4.2 **Easements/restrictions/positive covenants**

- Provide a Restriction as to User and Positive Covenant over the Stormwater Quality Improvement Devices including rainwater and stormwater tanks in accordance with the requirements of Council's Engineering Guide for Development 2005. The covenant requirements are to include the submission of an annual report on water treatment and non-potable water usage before September each year. The Restriction as to User and Positive Covenant must be registered with NSW Land Registry Services prior to the final Occupation Certificate.

7.5 Other matters

7.5.1 Provide maintenance requirements for each of the proposed water quality devices including rainwater tank generally in accordance with the Council's *WSUD Inspection and Maintenance Guidelines* available on Council's website. Where a proprietary device is not included within this guideline provide these separately in accordance with the manufacturer's requirements. Where these devices are located in roadway/parking areas these are to include traffic management requirements. The designer of the stormwater treatment system must prepare the Maintenance Schedule and this schedule must show the designer's name, company, signature and date on it.

7.5.2 Provide written evidence that the registered owner/lessee/owners corporation has entered into a minimum five (5) year signed and endorsed maintenance contract with a reputable and experienced cleaning contractor for the maintenance of Humegards, Stormfilters, Jellyfish filters, OceanGuards and rainwater/stormwater tanks. Forward a copy of the signed and endorsed contract(s) and maintenance contractor(s) details to Council's WSUD Compliance Officer at WSUD@blacktown.nsw.gov.au. This maintenance contract cannot be cancelled, but can be replaced with an alternative contract of the same standard or with a differing entity (e.g. owners' corporation).

7.5.3 The maintenance contract is to contain a requirement that all replacement Stormfilter and Jellyfish filter cartridges are supplied by Ocean Protect and either the Stormfilter and Jellyfish filter cartridges are replaced no later than three years after the date of installation, or a flow test is to be undertaken on the filter chamber in accordance with Council's WSUD developer handbook. The flow test is to be repeated and passed each and every year after that for the filters to be retained, but the filters must be replaced after a maximum of 5 years.

7.5.4 Where the Groundwater Assessment Report indicated the requirement for a Groundwater Management Plan, then a Chartered Geotechnical Engineer registered with NER is to certify that all the requirements of the Groundwater Management Plan have been undertaken and that there is no adverse impact due to groundwater.

PRIOR TO SUBDIVISION CERTIFICATE BEING RELEASED

Surveys/certificates/works as executed plans

- A chartered engineer is to certify that the bioretention street trees have been installed with the temporary protections measures as per the approved plans with provision for a total bioretention filter media area of 68.8 m^2 on the public loop road south of Conferta Avenue.

Easements/restrictions/positive covenants

- Provide at no charge, a minimum 2.5 m wide drainage easement with a Restriction to User over the centreline of the proposed Council stormwater pipe from pits P36.2 to P36.8 over lots 4, 5 and 6 in favour of Council as per the Engineering Guide for Development. The Restriction to User and drainage easement must be registered with NSW Land Registry Services.

- Provide at no charge, a positive covenant over the proposed Council stormwater pipe from pits P36.2 to P36.8 over lots 4, 5 and 6 that the nominated lot owners will be responsible for the ongoing maintenance of the stormwater pipe. The covenant must be registered with NSW Land Registry Services.

- Provide a Restriction to User and Positive Covenant for the Overland Flowpath from Pits P36.2 to P36.8 over the full width of the overland flow extents in the peak 1% AEP event in accordance with the requirements of the Council's Engineering Guide for Development 2005. The Restriction to User and Positive Covenant must be registered with NSW Land Registry Services.

- Provide a Restriction to User and Positive Covenant for the Overland Flowpath along the southern boundary of Lot 4 from the carpark to the west to Pit P36.4 over the full width of the overland flow extents in the peak 1% AEP event in accordance with the requirements of the Council's Engineering Guide for Development 2005. The Restriction to User and Positive Covenant must be registered with NSW Land Registry Services

Bonds/Securities

- Payment to Council of the Temporary Public Bioretention Street Pit Security at 200% of the Temporary Public Bioretention Street Pit Estimate for the removal of the temporary plate, all the sacrificial filter media and geotextile and replacement with 500 mm of filter media, installation of street trees and fitting the tree grates for the 22 public tree pits within the loop road.

8. Engineering conditions

8.1 Other approvals

8.1.1 A separate valid Construction Certificate/Subdivision Works Certificate shall be issued prior to commencement of any construction works.

8.2 Services

8.2.1 The developer shall be responsible for all public utility adjustment/relocation works, necessitated by the above work and as required by the various public utility authorities and/or their agents.

8.3 Identification survey

8.3.1 The applicant is advised to obtain an identification survey from a registered surveyor to ascertain the correct location of the property boundaries, and to ensure the development does not encroach upon adjoining properties.

8.4 Other approvals

8.4.1 All works requiring approval under the *Roads Act 1993* (except standard vehicular crossings) or *Local Government Act 1993* must be approved PRIOR to the issue of any Construction Certificate or Subdivision Works Certificate.

8.5 Payment of engineering fees

8.5.1 If the applicant wishes for Council to issue the Construction Certificate or Subdivision Works Certificate please:

- Complete application form
- Submit all relevant plans produced by a suitably qualified person and in accordance with Council's Standards.

8.6 Release of plan of subdivision

8.6.1 The plan of subdivision is not to be released until Public Road access is provided. This may require the registration of the adjoining subdivision.

8.7 Road damage

8.7.1 The cost of repairing any damage caused to Council's assets in the vicinity of the land as a result of the development works shall be met in full by the applicant/developer.

8.8 Design and works specification

8.8.1 All engineering works required by this consent must be designed and undertaken in accordance with the relevant aspects of the following documents except as otherwise authorised by this consent:

- Blacktown City Council's Works Specification - Civil (Current Version)
- Blacktown City Council's Engineering Guide for Development (Current Version)
- Blacktown City Council Development Control Plan (Current Version) including Part J – Water Sensitive Urban Design and Integrated Water Cycle Management
- Blacktown City Council Growth Centre Precincts Development Control Plan 2010
- Blacktown City Council On Site Detention General Guidelines, S3QM online tool and standard drawing A(BS)175M
- On Site Stormwater Detention Handbook - Upper Parramatta River Catchment Trust FOURTH Edition.

Design plans, calculations and other supporting documentation prepared in accordance with the above requirements MUST be submitted to Council with any application for Construction Certificate, *Roads Act 1993* approval or *Local Government Act 1993* approval.

Any Construction Certificates issued by Private Certifiers must also be accompanied by the above documents.

NOTE: Any variations from these design requirements must be separately approved by Council.

8.8.2 The Applicant is required to submit, to Council, Bonds and/or Contributions for works associated with the development in conjunction with the civil engineering works required to be constructed as part of this development. Works may include:

- Path Paving construction
- Final Layer Asphaltic Concrete (AC) construction
- Maintenance of the construction works
- Removal of temporary infrastructure.

8.8.3 Prior to release of any bond securities held by Council for civil engineering works, the payment of a bond release inspection fee in accordance with Council's Goods and Services Pricing Schedule must be made.

8.8.4 Written notice must be provided to adjacent properties, at least 5 days prior to works commencing, where works are approved by this consent and located within Council controlled lands (i.e. roads, drainage reserves, parks, etc.)

A copy of this notice must be provided to Council's Co-ordinator of Engineering Approval.

8.9 Other necessary approvals

8.9.1 A separate application will be required for the following approvals, under the *Local Government Act 1993* and/or the *Roads Act 1993*.

- Vehicular crossing
- Works on or occupation of existing public roads (not including works covered by a Roads Act Approval).

8.10 Subdivision

8.10.1 Principal Certifying Authority - Blacktown City Council shall be the Principal Certifying Authority for the proposed subdivision and issue the Subdivision Certificate.

8.11 Imported fill material

8.11.1 The only fill material that may be received at the development site is:

(a) virgin excavated natural material (within the meaning of the *Protection of the Environment Operations Act 1997).*

8.12 Other matters

8.12.1 No construction preparatory work (such as excavation, filling and the like) shall be undertaken on the land prior to a valid Construction Certificate being issued.

8.12.2 Any future substation, temporary drainage works or other utility installation required to service the approved subdivision/development shall not be sited on future or existing Council land, including road reservations and/or public reserves.

PRIOR TO CONSTRUCTION CERTIFICATE (GENERAL)

8.13 DA plan consistency

8.13.1 A Construction Certificate or Subdivision Works Certificate for the proposed development shall only be issued when the accompanying plans, specifications and/or details are consistent with the approved Development Application design plans.

8.14 Road deposit/bond

8.14.1 The following current fee (which is subject to periodic review and may vary at time of payment) shall be lodged with Council:

(a) Road inspection fee.

Council will undertake initial and final inspection of civil assets outside the development site. The applicant will be held liable for any damage arising from construction activities. Council will undertake reinstatement works and recover the costs from the applicant in accordance with Council's current Goods & Services Pricing Schedule.

8.14.2 The payment of a vehicular crossing fee to Council's Maintenance Section pursuant to Sections 608 and 609 of the Local Government Act 1993. The fee is subject to periodic review and may vary at actual time of payment.

8.15 Development Control Plan

8.15.1 Except as otherwise approved, the design plans which accompany the Construction Certificate shall comply with the design criteria specified in Council's Growth Centre Precincts Development Control Plan 2010.

PRIOR TO CONSTRUCTION CERTIFICATE/SUBDIVISION WORKS CERTIFICATE (ENGINEERING)

8.16 General

8.16.1 All relevant conditions within the 'Prior to Construction Certificate' section of this consent shall be satisfied before any Construction Certificate or Subdivision Works Certificate can be issued.

8.16.2 Where this consent requires both subdivision and building works to be undertaken, no Construction Certificate for building works is to be issued until all subdivision works have been completed to the satisfaction of Council and the Subdivision Certificate issued. This includes future public infrastructure such as roads and road drainage systems, as well as any engineering infrastructure required to serve the road and road drainage systems, including temporary on-site stormwater detention (OSD) and Water Sensitive Urban Design (WSUD) located on privately owned land.

For temporary OSD and WSUD located on privately owned land, the registration of all associated easements/restrictions and positive covenants of said infrastructure is required prior to any building works Construction Certificate being issued.

8.16.3 The engineering drawings referred to below are not for construction. The Construction Certificate/Subdivision Works Certificate drawings shall be generally in accordance with the approved drawings and conditions of consent. Any significant variation to the design shall require a section 4.55 application.

The construction Certificate/Subdivision Works Certificate plan shall be generally in accordance with the following drawings and relevant Consent conditions:

Prepared By	Project No.	Sheet No.	Revision	Dated
Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0001	6	11/03/21
Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0003	4	07/05/20
Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0011	5	25/11/20
Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0021	7	15/12/20
Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0101	6	25/11/20
Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0102	5	25/11/20
Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0103	6	25/11/20
Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0104	5	25/11/20
Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0121	5	11/03/21
Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0122	5	11/03/21
Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0123	1	15/12/20
Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0124	1	15/12/20
Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0125	1	15/12/20

Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0161	4	07/05/20
Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0162	4	07/05/20
Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0163	4	07/05/20
Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0164	4	07/05/20
Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0201	5	25/11/20
Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0221	4	07/05/20
Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0240	5	25/11/20
Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0300	6	22/03/21
Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0301	7	22/03/21
Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0302	7)	22/03/21
Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0303	7	22/03/21
Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0304	7	22/03/21
Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0305	4	22/03/21
Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0306	2	22/03/21
Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0311	2	22/03/21
Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0312	2	22/03/21
Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0321	1	11/03/21
Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0322	1	11/03/21
Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0401	5	22/03/21

Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0402	5	22/03/21
Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0403	5	22/03/21
Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0404	5	22/03/21
Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0405	5	22/03/21
Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0406	5	22/03/21
Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0407	5	22/03/21
Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0408	5	22/03/21
Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0409	5	22/03/21
Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0410	5	22/03/21
Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0421	3	07/05/20
Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0500	4	25/11/20
Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0501	5	25/11/20
Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0502	5	25/11/20
Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0503	5	25/11/20
Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0504	5	25/11/20
Deicorp P/L	60618532	60618532-SHT-00-0000-CI-0505	5	25/11/20
Staging Diagram				
TURNER	18095	DA-010-011	06	23/2/21
TURNER	18095	DA-010-012	06	23/2/21
TURNER	18095	DA-010-013	06	23/2/21
TURNER	18095	DA-010-014	06	23/2/21

TURNER	18095	DA-010-015	06	23/2/21

8.16.4 The following items are required to be addressed on the Construction Certificate plans:

- Private stormwater drainage infrastructure must be adjusted to be wholly located within the subject lots excluding connections from boundary pits to the existing stormwater network within public roads.
- The proposed road design must be adjusted to cater for a design speed of 60 km/hr in accordance with Blacktown City Council's Engineering Guide for Development.
- Proposed WSUD street tree pits that are intended to treat stormwater quality must be designed in accordance with Blacktown City Council's Street Tree Standards. The applicant is to obtain written concurrence from Council's Manager Asset Design.
- The applicant is to obtain written concurrence from Council's Manager Traffic and Transport Management for the proposed location of the vehicular crossing intended to serve the new substation off Cudgegong Road at the north-eastern end of the site.
- The applicant is to obtain written concurrence from Council's Manager Traffic and Transport Management for the proposed location of the pedestrian crossings proposed along Conferta Avenue. The applicant is also required to obtain approval from the Local Traffic Committee.
- The applicant is to provide a certificate from a suitably qualified engineer to verify that the overland flow path conveyance at the low point within MC02 at approximate chainage 00.00 will not negatively impact the proposed vehicular crossing within close proximity and that all flows bypass the vehicular crossing.
- All proposed kerb ramps are to comply with Blacktown City Council Standard Drawing A(BS)104M and are to be located/aligned so as to ensure there is a kerb ramp on the opposing side of the road.
- Parking bays are to be adjusted to meet the requirements of AS2890 and all associated Australian Standards and Austroad requirements.
  Note the kerb alignment along the verge side of all parking bays is to incorporate an appropriate radius along the perimeter of any proposed breaks.
- Stormwater connections from private property into the existing public stormwater network must not be located within the existing carriageway where practical to do so, i.e. within Conferta Avenue.
- Stormwater quality treatment systems/devices intended only to cater for the treatment of stormwater from the future private development lots shall be wholly located within those lots and not within the future public road reserve. This includes but is not limited to the stormwater quality treatment devices/system denoted Treatment Location 1 and Treatment Location 2.

8.17 Subdivision Works/Construction Certificate requirements

8.17.1 Under the *Environmental Planning and Assessment Act 1979* a Subdivision Works Certificate is required. These works include but are not limited to the following:

- Road and drainage construction
- Water quality treatment – WSUD street tree pits
- Earthworks
- Path paving (within a subdivision).

The above requirements are further outlined in this section of the consent

8.17.2 Under the *Environmental Planning and Assessment Act 1979* a Construction Certificate is required. These works include but are not limited to the following:

- Private park/open space, private road and drainage construction
- Rainwater tank construction
- On-site stormwater detention
- On-lot stormwater quality treatment.

The above requirements are further outlined in this section of the consent.

8.18 Roads Act requirements

8.18.1 Under *Section 138 of the Roads Act 1993* an approval for engineering work is required. These works include but are not limited to the following:

- Any works within Council's road reserve
- Stormwater drainage pit connections and associate works within existing public roads, i.e Conferta Avenue and Cudgegong Road
- Any works associated with expansion to the existing reaional bioretention basin located within the existing road corridor on the eastern side of Cudgegong Road
- Interface works between proposed new roads and existing public roads
- Roads works, kerb realignment and wombat crossings along Conferta Avenue
- Vehicular crossings
- Path paving.

8.19 Other engineering requirements

8.19.1 Proof of long service levy payments is required.

8.19.2 Any ancillary works undertaken shall be at no cost to Council.

8.19.3 Submit written permission from the affected property owner for any works proposed on adjoining land.

8.19.4 Submit written evidence from the Roads and Maritime Services indicating compliance with all necessary requirements. This includes but is not limited to written confirmation from the Roads and Maritime Services for any proposed works within Cudgegong Road and for the connection of proposed new stormwater lines into the existing stormwater network within Cudgegong Road.

8.19.5 The applicant must obtain written concurrence from the relevant rail authority for any works proposed along Themeda Avenue or within close proximity, that

have the potential to impact the zone of influence affecting the adjacent rail corridor on the northern side of Themeda Avenue.

8.19.6 All street name poles, light poles and bus shelters shall be black powder coated in accordance with Blacktown City Council's Engineering Guide for Development. Ensure this is noted on the construction plans.

8.19.7 Submit a Public Utilities Plan demonstrating adequate clearance between services to stormwater pits, pipes, driveways, light poles, etc.

8.20 Roads

8.20.1 Submit a pavement report prepared and designed by a professional civil engineer with soil tests carried out by a registered NATA soils laboratory. The pavement design shall withstand the traffic loadings listed in this consent.

NOTE: The design CBR is to be confirmed on site prior to placement of any pavement. If actual CBR is less than design CBR, revised pavement design will be required.

8.20.2 Submit a Traffic Management Plan (TMP), including but not limited to a Traffic Control Plan (TCP) and Pedestrian Management Plan, for any works within public road reserves. The TCP shall be approved, signed and dated by a person who holds a current Roads and Maritime Services (RMS) Work Zone Traffic Management Plan accreditation and photo card.

8.20.3 The applicant is to obtain a Road Occupancy Licence (ROL) from the Roads and Maritime Services for any works proposed along Cudgegong Road and/or that is within 100 m of an existing signalised intersection. Evidence of the ROL is to be submitted to Council.

8.20.4 Any approved design drawings must show a minimum 5 m x 5 m splay for residential allotments at each street intersection.

8.20.5 Splays are to be adjusted to meet site specific intersection designs in accordance with Council's Engineering Guide for Development.

8.20.6 Proposed new roads shall be designed and constructed as follows:

Name	Width(m) (Overall Minimum)	Length (m)	Formation (m)	Traffic Loading N(E.S.A)
MC01	18	190	3.5-11-3.5	5x10^5
MC02	18	65	3.5-11-3.5	5x10^5

NOTE: The formation of roads MC01 and MC02 shall generally be in accordance with engineering plans prepared by Aecom, plan reference No. 60618532-SHT-00-0000-CI-0021 (revision 7 and dated 15/12/20), 60618532-SHT-00-0000-CI-0121 and 60618532-SHT-00-0000-CI-0122 (revision 5 and dated 23/02/21). The following items must be addressed;

1. Travel lanes must achieve a minimum 3m of unobstructed width.

2. Parking lanes must achieve a minimum 2.5m width.
3. All footway areas must not be flush with the carriageway and must ensure delineation from the carriageway and incorporate an appropriate kerb and gutter system with a minimum height of 150mm.
4. Parking bay design shall be in accordance with AS2890.1.
5. Confirmation from a suitably qualified engineer must be provided to validate that the proposed road reserve has an adequate capacity to convey the appropriate 1:100 year overland stormwater flows for the subject upstream catchment.
6. The geometric road design must comply with all the relevant AUSTROADS specification. Note in this regard the kerb and gutter alignment is required to incorporate an appropriate bend, not a right angle transition. See southern side of kerb and gutter for chainage 55.00 for MC01 and chainage 0.00 for MC02.

8.20.7 Private access roads or right of way driveways shall be designed and constructed in accordance with the nominated engineering plans and generally in accordance with Council's Engineering Guide for Development. This includes part of MC02 approximately from CH70.00 to CH160.00.

NOTE: The proposed private road design, including but not limited to the travel lanes and parking bays, are to be designed and constructed to meet the requirements of the relevant Austroads and Australian Standard requirements as well as provide for the safety and amenity of pedestrian movement.

The pavement shall be designed as a rigid pavement. A suitably qualified engineer (NER registered) must certify that the pavement has been structurally designed in accordance with Austroads Guide to Pavement Technology Part 2: Pavement Structural Design with a Design Traffic loading determined in accordance with Austroads, particularly Section 7.7, and that all jointing and reinforcement requirements are consistent with RMS NSW practice (i.e. RMS NSW Publication - Plain concrete pavement MD.R83.CP, Jointed concrete pavement MD.R83.CJ and Continuously reinforced concrete pavement MD.R83.CC).

NOTE: the minimum equivalent N(ESA) traffic loading for design shall be 5 x 10.4.

8.20.8 Staging of road construction will be permitted where suitable traffic circulation or temporary turning areas in dead end roads are evident in accordance with Council's Engineering Guide for Development.

8.21 Drainage

8.21.1 Drainage from the site must be connected into Council's existing drainage system.

8.21.2 Provided inter-allotment drainage lines for lots that do not drain directly to a public road. The design shall include pipeline long-sections and identify location and levels of services.

8.21.3 Any overland or stormwater flows must be intercepted at the property boundary, conveyed through the site in a piped or channelled drainage system and discharged in a satisfactory manner.

8.22 Signage and line marking

8.22.1 A formal submission must be made to the Local Traffic Committee (LTC) through Council's Traffic Engineering Section for all signage and line marking details proposed as part of these works.

8.22.2 A determination will be required prior to the implementation of all signage and line marking works.

8.23 Erosion and sediment control

8.23.1 Provide a sediment and erosion control plan in accordance with Council's Soil Erosion and Sediment Control Policy and Engineering Guide for Development.

8.24 Earthworks

8.24.1 Proposed lots must be filled so that the ground levels behind the building are a minimum of 500 mm above the designed 100-year average recurrence interval flood level.

8.24.2 Batters are not to exceed a grade of 1V:5H and are to be stabilised with topsoil, turf and vegetation.

8.24.3 Finished levels of all internal works at the road boundary of the property must be 4% above the top of kerb.

8.24.4 Show on plan adjacent to road cross sections approximate quantities of road materials required for construction (i.e. Densely Graded Subbase and Densely Graded Base).

8.25 On-site stormwater detention

8.25.1 The On-site stormwater detention system shall be designed in accordance with the parameters set out in Council's Water Sensitive Urban Design Standard Drawings A(BS)175M On-site detention requirements - Sheet 20, or an S3QM Certificate.

8.25.2 The on-site detention system shall be generally designed to achieve the following:

- All systems shall use at least 2 orifice plates to control flows:
  - The 1.5 year ARI orifice shall be designed to convey a maximum of 40/L/s/ha.
  - The 100 year ARI orifice shall be designed to convey a maximum of 190 L/s/ha.
- Storage shall be provided as follows:
  - Volume up to 1.5 year ARI TWL = 300 m^3/ha
  - Volume up to 100 year ARI TWL = 455 m^3/ha.
- Orifice flow rates will be adjusted for bypass with a maximum site bypass of 15% as per the following table:

Total OSD BYPASS (%)	ENVIRONMENTAL DISCHARGE (1.5 YEAR ARI ORIFICE) (L/s/ha)	ENVIRONMENTAL STORAGE (BELOW 1.5 YEAR ARI WEIR) (m^3/ha)	FLOOD DISCHARGE (100 Year ARI ORIFICE (L/s/ha)	FLOOD STORAGE (BELOW EMERGENCY WEIR) (m^3/ha)
0	40.0	300	190	455
2.5	38.5	300	176	455
5	37.0	300	162	455
7.5	35.5	300	148	455
10	34.0	300	134	455
12.5	32.5	300	120	455
15	31.0	300	106	455

8.25.3 A registered engineer (NER) must certify that:

- The structures associated with the on-site stormwater detention system have been designed to withstand all loads likely to be imposed on them during their lifetime.
- The on-site stormwater detention system will perform to meet the on-site stormwater detention requirements and function hydraulically in general accordance with Council's Engineering Guide for Development, DCP Part J - Water Sensitive Urban Design and Integrated Water Cycle Management, S3QM Deemed to comply tool and Council's Standard Drawing A(BS)175M.

8.25.4 The following documents shall be submitted to accompany the on-site detention design in accordance with the design:

- Comprehensive drainage drawings with cross-sectional details of the storage area, pit numbers, pipe sizes, catchment plan, etc
- On-site detention detailed design submission and calculation summary sheet
- A maintenance schedule that complies with Council's Water Sensitive Urban Design maintenance guidelines, signed and dated by the designer
- S3QM Deemed to Comply On-site detention summary details.

8.26 Stormwater quality control

8.26.1 The stormwater quality treatment system shall be designed in accordance with Council's Engineering Guide for Development and DCP Part J - Water Sensitive Urban Design and Integrated Water Cycle Management.

8.26.2 Provide a maintenance schedule for the stormwater quality device that is signed and dated by the designer.

8.26.3 Bio-retention basin(s) to be designed in accordance with Council's Water Sensitive Urban Design standard drawings and Council's Engineering Guide for Development and DCP Part J - Water Sensitive Urban Design and Integrated Water Cycle Management.

8.27 Vehicular crossings

8.27.1 Plans must demonstrate the construction of commercial and industrial vehicular crossings to Council's standard A(BS)103S.

8.28 Footpaths

8.28.1 Path paving is to be provided generally in accordance with Council's Path Paving Policy, Blacktown City Council Engineering Guide for Development and Blacktown City Council Growth Centre Precincts Development Control Plan 2010.

NOTE: maximum cross fall permissible for full width path paving is 2.5%. Path paving is to be designed and constructed generally in accordance with Blacktown City Council Standard Drawing A(BS)178M – CBD Pavers.

8.28.2 The construction of path paving is to be provided generally in accordance with Council's Path Paving Policy, Blacktown City Council Engineering Guide for Development and Blacktown City Council Growth Centre Precincts Development Control Plan 2010.

Proposed locations and widths are to be approved by Blacktown City Council's Co-ordinator Engineering Approvals. Cycleways/ shared pathways are to include line marking and signposting in accordance with the requirements of Austroads "Guide to Road Design" Part 6A and the Roads and Maritime Services NSW Bicycle Guidelines November 2003.

8.28.3 Construct shared user paths (including signage and linemarking) in accordance with Part 6A (Paths for Walking and Cycling) 2017 of Austroads "Guide to Road Design" and the RMS NSW Bicycle Guidelines – July 2005.

PRIOR TO DEVELOPMENT WORKS COMMENCING

8.29 Notification to Council

8.29.1 The person having the benefit of this consent shall, at least 2 days prior to work commencing on site, submit to Council a notice under Clauses 135 and 136 of the Environmental Planning and Assessment Regulation 2000, indicating details of the appointed Principal Certifying Authority and the date construction work is proposed to commence.

8.29.2 At least 5 full working days written notice must be given for the commencement of engineering works. Such notice must be accompanied by evidence of the contractor's Public Liability and Workers Compensation Insurances. For Public Liability Insurance this should be a minimum amount of $10,000,000.

8.30 Roads and maritime services

8.30.1 Written evidence shall be obtained from the Roads & Maritime Services indicating compliance with its requirements, including the payment of any necessary works supervision fees. A copy of such approval shall be lodged with Council.

8.31 Adjoining owners

8.31.1 Written permission from the respective owner(s) must be obtained to:
(a) discharge stormwater onto adjoining owners land
(b) carry out works on adjoining land
(c) drain the site across land owned by others.

A copy of such written permission shall be lodged with Council.

DURING CONSTRUCTION (ENGINEERING)

8.32 Notification of works

8.32.1 A written notification of works must be submitted to Council's Engineering Approvals Team prior to the commencement of any engineering works required by this consent. This must be submitted a minimum 5 business days prior to commencement of engineering works.

8.33 Insurances

8.33.1 Current copies of relevant insurance Certificates of Currency are to be submitted to Council's Engineering Approvals Team. This shall be submitted prior to commencement of engineering works required by this consent that are carried out on Council controlled lands such as roads, drainage reserves and parks. This includes Public Liability Insurance with a minimum of $20,000,000 Indemnity and Workers Compensation.

8.34 Service authority approvals

8.34.1 Prior to the commencement of construction of footway crossings and driveways a clearance shall be obtained from the relevant telecommunications carriers and Endeavour Energy. The clearance shall notify that all necessary ducts have been provided under the proposed crossings.

8.35 Boundary levels

8.35.1 Any construction at the property boundary, including but not limited to fences, retaining walls and driveways, shall not be carried out until boundary alignment levels have been fixed.

8.36 Tree protection and preservation

8.36.1 Existing vegetation and trees shall be left undisturbed except where roads, stormwater drainage infrastructure, site filling and/or building works are proposed.

8.36.2 There is to be no storage of materials, stockpiling of excavated material or parking of plant/machinery within the drip line of the crown of any retained trees.

8.37 Soil Erosion and sediment control measures

8.37.1 Soil erosion and sediment control measures on-site shall be implemented, maintained and monitored in accordance with Council's Soil Erosion and Sediment Control Policy.

8.37.2 Re-vegetation and restoration of all disturbed areas as a result of the development works shall be completed as soon as practicable after the completion of earthworks and before the commencement of any other works on-site. The revegetated/restored areas must be established prior to the release of maintenance security/bonds. Note: All open drains must be turfed.

8.37.3 All required soil erosion and sedimentation control measures are to be maintained throughout the entire construction period and until all disturbed areas are restored to the satisfaction of Council in accordance with the design and construction specification. Infringement Notices incurring a monetary penalty may be issued by Council where the maintenance of measures is deemed inadequate.

8.38 Filling of land and compaction requirements

8.38.1 Suitable land fill replacement is required when unsuitable soils are removed. All fill including existing fill shall be compacted in accordance with Council's Works Specification - Civil (current version). A compaction certificate shall be obtained from an appropriately qualified practising registered engineer (NER) verifying that the correct compaction requirements have been met. This compaction certificate is to be submitted to Council.

8.38.2 Special attention is drawn to the below listed requirements of Council's Works Specification - Civil (Current Version).

- Compaction certificated for fill with road reserves
- Compaction certificates for road sub-grade
- Compaction certificates for road pavement materials (sub-base and base courses).
- Contour lot fill diagrams and lot fill compaction certificates. A restriction as to User with Council's standard wording must be placed on filled lots.
- Applicant to submit material compliance documentation in accordance with Council's Civil Works Specification 8.1.4:
  - Compliance Certificate and test results
  - Delivery dockets
  - Summary of material deliveries as per template available on Council's website.

NOTE: Council's Works Specification (Civil) requires road pavement and pipe bedding materials be sourced from N.A.T.A. certified stockpiles.

The above documentation shall be submitted prior to Subdivision and/or Occupation Certificate as required by this consent.

8.38.3 Site filling within lot boundaries (not in road reserves) and compaction is to be carried out under the supervision of a Chartered Geotechnical Engineer and shall be in accordance with Blacktown City Council's "Works Specification - Civil (Current Version)". Minimum standard compaction of 95% must be achieved and certified by a NATA registered soils lab and details submitted to Council.

8.38.4 Only clean fill shall be deposited/imported on site in accordance with Council's Works Specification - Civil (Current Version). Note: dry builder's waste, i.e. bricks, plaster and timber, industrial waste or putrescible materials, are not to be deposited on site. Validation of the imported fill material will be required by a suitably qualified registered engineer.

8.38.5 Appropriate dust control measures are to be implemented during construction to reduce any impact on local air quality and reduce dust emissions. This will include but not be limited to regularly wetting down of the site during the course of works being carried out in order to control wind blown dust.

8.38.6 All roads adjoining the site must be kept clean and free of all materials. Infringement Notices incurring a monetary penalty may be issued by Council where this measure is not being complied with.

8.38.7 Trucks transporting cut and fill must have their loads covered and the provision of "shaker pads" and wash-down areas for trucks leaving the site are to be made available. All details are to be shown on soil erosion and sediment control plans.

8.38.8 Prior to the placement of any fill on the site, all topsoil and vegetation must be removed down to a suitable sub-grade material. The topsoil is to be stockpiled for use in revegetation of the site.

8.39 Inspection of engineering works – Environmental Planning and Assessment Act 1979

8.39.1 Comprehensive inspection compliance certificate(s) to be issued for all engineering works required by this consent and the approved Construction Certificate. The inspection compliance certificate(s) can only be issued by Council or an accredited certifier, under *Part 4A of the Environmental Planning and Assessment Act 1979* as amended. A schedule of mandatory inspections is listed in Council's Works Specification – Civil (current version).

8.39.2 Where Council is appointed as the Principal Certifying Authority for the development, compliance certificates issued by accredited certifiers in lieu of council inspections will only be accepted by prior agreement or by Council request. All compliance certificate(s) must certify that the relevant work has been completed in accordance with the pertinent Development Consent and Construction Certificate.

8.40 Inspection of Engineering Works – Roads Act 1993 or Local Government Act 1993

8.40.1 All inspection(s) required by this consent for any engineering works that are approved under the *Roads Act 1993* or Local Government Act 1993 must be made by Council's Development Overseers.

8.40.2 Inspections must be pre-booked with a minimum 24 hours' notice. Council's Development Overseers may be contacted on 02 9839 6586 between 6 am – 7 am, Monday to Friday. Note: A site inspection is required prior to commencement of work. A schedule of mandatory inspections is listed in Council's Works Specification – Civil (current version).

8.41 Public safety

8.41.1 The applicant is advised that all works undertaken are to be maintained in a safe condition at all times. Council may at any time and without prior notification make safe any such works Council considers to be unsafe and recover all reasonable costs incurred from the applicant.

8.42 Site security

8.42.1 Chainwire gates and security fencing must be provided around the site in order to prevent unauthorised access and dumping of rubbish.

8.43 Traffic control

8.43.1 Any "Traffic Control Plan" utilised for engineering works required by this consent must be prepared by a person who holds a current Roads and Maritime Services (RMS) Work Zone Traffic Management Plan accreditation and photo card for all works that are carried out in or adjacent to a public road. This Plan must satisfy all the requirements of AS 1742.3 - 2009.

8.43.2 Traffic control devices/facilities (i.e. barricades, signs, lights, etc.) required by the certified Traffic Control Plan must be setup, installed, monitored and maintained and by a person who holds a current Roads and Maritime Services (RMS) accreditation and photo card to implement Traffic Control Plans.

8.43.3 Persons undertaking the control of traffic through or around work sites on Council controlled roads must hold a current Roads and Maritime Services (RMS) Traffic Controller accreditation and photo card and carry it with them.

8.43.4 The applicant is advised that prior to implementation of any traffic control system, and during the entire course of construction, suitably qualified Roads and Maritime Services (RMS) accredited work site traffic controllers will ensure a smooth transition with other nearby traffic control setups. The coordination, communication and cohesion between adjacent traffic control systems shall be addressed by the applicant and must satisfy all the requirements of AS 1742.3 - 2009.

8.43.5 Where the Traffic Control Plan may change during the course of construction to facilitate new works, a revised traffic control plan shall be prepared and certified by a person who holds a current Roads and Maritime Services (RMS) accreditation to prepare a Work Zone Traffic Management Plan. This Plan must satisfy all the requirements of *AS 1742.3 – 2009* and the current version of the RMS *Traffic Control at Work Sites* manual and shall be submitted to Council prior to implementation.

8.44 Powder coated furniture

8.44.1 Where the conditions of this consent permit the installation of powder coated furniture (i.e. street lighting poles, bus shelters, rubbish bins, seats or any other items of street furniture), a certificate from the manufacturers shall be provided to Council confirming that the nominated powder coated items have been prepared and coated in accordance with Australian Standard AS/NZ 4506-2005 (service condition category 3). This certificate must be no more than 3 months old and shall be provided to Council prior to the installation of the relevant items of street furniture. Any items of street furniture not so certified shall be removed and replaced at no cost to Council with items appropriately certified.

8.45 Road line marking and traffic signage

8.45.1 Prior to the implementation of any road line marking and traffic signage required by this development, the applicant shall acquire an approved Construction Certificate for the line marking and traffic signage plan arrangement.

8.45.2 In regard, the applicant shall provide evidence to the certifying authority in order to demonstrate that the proposed line marking and traffic signage plan has approval from the Local Traffic Committee and has been adopted by Council at an Ordinary Council Meeting.

NOTE: all recommendations by the Local Traffic Committee and Ordinary Council Meeting shall be reflected within the Construction Certificate for line marking and traffic signage.

PRIOR TO ISSUE OF OCCUPATION CERTIFICATE

8.46 Road damage

8.46.1 The cost of repairing any damage caused to Council's assets in the vicinity of the land as a result of the development works shall be met in full by the applicant/developer.

8.47 Compliance with conditions

8.47.1 An Occupation Certificate shall not be issued until such time as all conditions of this consent, other than "Operational" conditions, have been satisfied. The use or occupation of the development prior to compliance with all conditions of consent, other than "Operational" conditions, may render the applicant/developer liable to legal proceedings.

8.48 Fee payment

8.48.1 Any fee payable to Council as part of a Construction, Subdivision Works, Compliance or Occupation Certificate, or inspection associated with the development (including the registration of privately issued certificates), shall be paid in full.

8.49 Surveys/Certificates/Work as Executed plans

8.49.1 A Work-as-Executed (WAE) plan signed by a Registered Engineer (NER) or a Registered Surveyor must be submitted to Council when the engineering works are completed. A colour soft copy (on a CD/USB with file format .PDF) of the WAE plans are to be submitted to Council. All engineering WAE plans MUST be prepared on a copy of the original, stamped Construction Certificate plans for engineering works.

8.49.2 A certificate from a Registered Engineer (NER) must be obtained and submitted to Council verifying that the On-Site Detention System as constructed will perform to meet the on-site stormwater detention requirements in accordance with the approved design plans.

8.49.3 A certificate from a Registered Engineer (NER) must be lodged with Council verifying that the structures associated with the On-Site Detention System(s)

have been constructed to withstand all loads likely to be imposed on them during their lifetime.

8.49.4 A Certificate shall be submitted by a Registered Surveyor indicating that all pipelines and associated structures lie wholly within any easements required by this consent.

8.49.5 A certificate from a Registered Engineer (NER) must be obtained and submitted to Council verifying that the constructed Stormwater Quality Control system will function effectively in accordance with Blacktown Council's DCP Part J – Water Sensitive Urban Design and Integrated Water Cycle Management.

8.49.6 Written evidence is to be obtained from the Roads and Maritime Services (RMS) indicating compliance with its requirements including the payment of any necessary works supervision fees.

8.49.7 The applicant is to compile and submit the following in accordance with Council's Works Specification - Civil (Current Version):

- Compaction certificates for fill within road serves
- Compaction certificates for road sub-grade
- Compaction certificate for road pavement materials (sub-base and base courses).
- Contour lot fill diagrams and lot fill compaction certificates, A restriction as to User with Council's standard wording must be placed on filled lots
- Material compliance documentation in accordance with Council's Civil Works Specification 8.1.4:
  - Compliance Certificate and test redults
  - Delivery dockets
  - Summary of material deliveries as per templateavailable on Council's website.

8.49.8 The applicant is to submit the certified line marking and traffic signage plan as required by this consent. This will require evidence to demonstrate that approvals have been obtained from the Local Traffic Committee and adoption at Council's Ordinary Meeting. A final inspection report is to be included noting that all line marking and traffic signage works are complete.

8.49.9 This development requires separate approvals under the Roads Act 1993 and / or Local Government Act 1993. Prior to the issue of an Occupation Certificate, the applicant must obtain written confirmation from Council that these works have been completed to its satisfaction.

8.50 Easements/restrictions/positive covenants

8.50.1 Any easement(s) or restriction(s) required by this consent must nominate Blacktown City Council as the authority to release vary or modify the easement(s) or restriction(s). The form of easement or restriction created as a result of this consent must be in accordance with the following:

- Blacktown City Council's standard recitals for Terms of Easements and Restrictions (Current Version).

- The standard format for easements and restrictions as accepted by the Land Registry Services (LRS).

8.50.2 Restrictions and positive covenants must be endorsed by Council and lodged with NSW Land Registry Services (LRS) over the on-site detention storage areas and outlet works.

8.50.3 Restrictions and positive covenants must be endorsed by Council and lodged with NSW Land Registry Services (LRS) over the Stormwater Quality Control devices/system and outlet works.

8.50.4 Restrictions and/ or positive covenants must be endorsed by Council and lodged with NSW Land Registry Services (LRS) over the overland flow path.

8.50.5 The creation of an Easement to Drain Water with a minimum width in accordance with Council's Engineering Guide for Development (current issue). The easement must be created under the *Conveyancing Act 1919* and have the nominated lot(s) burdened and each and every lot upstream benefited.

8.50.6 The creation of easement(s) related to inter-allotment drainage with a minimum width in accordance with Council's Engineering Guide for Development (current issue).

8.50.7 A Right of Carriageway as an easement in gross (under schedule 4A Part 1) benefitting Blacktown City Council shall be provided over the private access road and an appropriate restriction and positive covenant on the use of the land shall be created under Section 88B of the *Conveyancing Act 1919* covering this requirement.

8.50.8 All Section 88B restrictions and covenants created as part of this consent shall contain a provision that they cannot be extinguished or altered except with the consent of Blacktown City Council.

8.51 Bonds/securities/payments in lieu of works

8.51.1 The payment to Blacktown City Council of a monetary contribution in lieu of works for the placement of the final layer of asphaltic concrete on the new road works. The amount will be calculated at Council's approved rate upon request and following issue of a Construction Certificate for the work.

8.51.2 A maintenance security of 5% of the value of the required engineering works must be lodged with Council prior to the practical completion of the works. Council will hold this security for a period of at least twelve months.

- In the case of subdivision - this period commences at the release of the final plan of subdivision (Issue of Subdivision Certificate).
- In the case where no subdivision occurs - this period commences at the date of practical completion of the development.

This maintenance period may be extended in the following situations to allow for the completion of necessary maintenance and/or all outstanding minor works.

8.51.3 Concrete path paving must not be placed until the lots have been built upon or until approved in writing by Council. The applicant has the option of lodging a

security deposit for the works, or paying a monetary payment in lieu of works based upon Council's Goods and Services Pricing Schedule. The security will be released upon satisfactory completion to the works.

8.51.4 Where Council's has granted approval to providing security in lieu of outstanding works, a security, in the form of a bank guarantee or a cash deposit, shall be lodged with Council to cover outstanding works required by this consent. The security amount will be calculated at Council's approved rate upon request.

8.52 Inspections

8.52.1 Any additional Council inspections beyond the scope of any Compliance Certificate package and needed to verify full compliance with the terms of this consent will be charged at the individual inspection rate nominated in Council's Fees and Charges Schedule.

8.53 CCTV inspection of stormwater drainage structures

8.53.1 All road stormwater drainage structures (pipelines and pits) must be inspected via CCTV after completion of road pavement construction works (excluding any deferred AC works) and the provision of all public utility services in accordance with Council's current Works Specification Civil. CCTV reports must be submitted to Council in the form of video footage of the inspections, a copy of the SEWRAT (or equivalent) report, and a certified CCTV statement in accordance with section 6.8 of Council's Works Specification Civil, indicating that any defects identified by this inspection have been rectified.

PRIOR TO ISSUE of SUBDIVISION CERTIFICATE

8.54 Site area

8.54.1 There shall be no direct vehicular or pedestrian access to and/or from the following nominated road(s) for any lots having frontage to that road. An appropriate restriction on the use of land shall be created under Section 88B of the *Conveyancing Act 1919* covering this requirement. The Section 88B Instrument shall contain a provision that it may not be extinguished or altered except with the consent of Blacktown City Council.

Nominated Road: Cudgegong Road.

8.54.2 All lots shall have access from a dedicated public road. In this regard all proposed roads shall be dedicated as public road free of cost to Council.

8.54.3 Any future substation or other utility installation required to service the approved subdivision/development shall not under any circumstances be sited on a future public road. Any proposal to locate a proposed substation or other utility installation on a future public road shall be negotiated with and fully endorsed by Council.

8.54.4 A Right of Carriageway as an easement in gross (under schedule 4A Part 1) benefitting Blacktown City Council shall be provided over the private access road and an appropriate restriction and positive covenant on the use of the

land shall be created under Section 88B of the *Conveyancing Act 1919* covering this requirement.

8.55 Road Damage

8.55.1 The cost of repairing any damage caused to Council's assets in the vicinity of the subject site as a result of the development works must be met in full by the developer.

8.55.2 The cost of repairing any damage caused to Council's assets in the vicinity of the subject site as a result of the development works must be met in full by the developer.

NOTE: Should the cost of damage repair work not exceed the road maintenance bond, Council will automatically call up the bond to recover its costs. Should the repair costs exceed the bond amount a separate invoice will be issued.

8.56 Asset Management

8.56.1 A fee is to be paid to Council for the ongoing maintenance of the black powder coated light poles, street name poles and bus shelters proposed in this subdivision. This amount is based on Council's Goods and Services Prcing Schedule (current) and is to be paid prior to the release of the Subdivision Certificate. Any enquiries regarding this fee are to be directed to the Maintenance Section of Council.

8.56.2 The manufacturer of the light poles/street name poles/bus shelters is to provide written certification that all structures have been black powder coated to the satisfaction of Council's Development Services Engineers prior to installation.

8.57 Consent compliance

8.57.1 A Subdivision Certificate shall not be issued until all conditions of this consent have been satisfied.

8.58 Additional inspections

8.58.1 Any additional Council inspection services provided beyond the scope of any Compliance Certificate or inspection package, and required to verify full compliance with the terms of this consent, will be charged at the individual inspection rate nominated in Council's Goods and Services Pricing Schedule and shall be paid to Council.

8.59 Surveys/Certificates/Work As Executed plans

8.59.1 A Work-as-Executed (WAE) plan signed by a Registered Engineer (NER) or a Registered Surveyor must be submitted to Council when the engineering works are completed, in a colour soft copy format (PDF). All engineering Work-as-Executed plans MUST be prepared on a copy of the original, stamped Construction Certificate plans for engineering works (including works under the *Roads Act 1993* and the *Local Government Act 1993* covered by the Development Application).

8.59.2 The Work-as-Executed (WAE) plans must confirm that the On Site Detention system(s) identification plate has been installed in accordance with Council's WSUD Standard Drawings A(BS)175M Sheet 20.

8.59.3 A certificate from a Registered Engineer (NER) must be obtained and submitted to Council verifying that the On-Site Detention Systems as constructed will perform to meet the on-site stormwater detention requirements in accordance with the approved design plans.

8.59.4 A certificate from a Registered Engineer (NER) must be lodged with Council verifying that the structures associated with the On-Site Detention System(s) have been constructed to withstand all loads likely to be imposed on them during their lifetime.

8.59.5 A Certificate shall be submitted by a Registered Surveyor indicating that all pipelines and associated structures lie wholly within any easements required by this consent.

8.59.6 A certificate from a Registered Engineer (NER) must be obtained and submitted to Council verifying that the constructed Stormwater Quality Control system will function effectively in accordance with Blacktown Council's DCP Part J – Water Sensitive Urban Design and Integrated Water Cycle Management.

8.59.7 Written evidence is to be obtained from the Roads and Maritime Services (RMS) indicating compliance with its requirements including the payment of any necessary works supervision fees.

8.59.8 The applicant is to submit the following in accordance with Council's Works Specification - Civil (Current Version):

- Compaction certificates for fill within road reserves.
- Compaction certificates for road sub-grade.
- Compaction certificates for road pavement materials (sub-base and base courses).
- Contour lot fill diagrams and lot fill compaction certificates. A restriction as to User with Council's standard wording must be placed on filled lots.
- Applicant to submit material compliance documentation in accordance with Council's Civil Works Specification 8.1.4:
  - Compliance Certificate and test results
  - Delivery dockets
  - Summary of material deliveries as per template available on Council's website.

8.59.9 The applicant is to submit the certified approved line marking and traffic signage plan as required by this consent. This will require evidence to demonstrate that approvals have been obtained from the Local Traffic Committee and adopted by Council's Ordinary Meeting. A final inspection report is to be included noting that all line marking and traffic signage works are complete.

8.59.10 Submit to Council all Compliance Certificates and construction inspection reports required by this consent for engineering works. A final inspection report is to be included noting that all works are complete.

8.59.11 When Council has been nominated or defaulted as the nominee for engineering compliance, final inspections can be arranged through Council's Coordinator of Engineering Approvals contactable on (02) 9839 6263. A final inspection checklist must be completed by the applicant prior to the final inspection.

8.59.12 A survey report prepared and signed by a Registered Surveyor providing confirmation of the depth of all constructed road pavements in the form of finished surveyed levels for each road pavement layer, noting tolerances for any variations in constructed pavement depth.

8.59.13 Structural certification must be submitted 'as built' by a qualified Engineer (NER) for all structural items approved by the scope of this consent. This relates to the following components:

- Retaining walls over 0.6 m in height
- Rigid pavements
- Non-standard stormwater pits.

8.59.14 A Certificate shall be submitted by a suitably qualified geotechnical engineer verifying that any fill material imported to the site is virgin excavated natural material (VENM) or (ENM).

8.60 Easements/restrictions/positive covenants

8.60.1 Any easement or restriction created as a result of this consent must be in accordance with the following:

- Blacktown City Council standard recitals for Terms of Easements and Restrictions (Current Version).
- The standard format for easements and restrictions as accepted by NSW Land Registry Services (LRS).

8.60.2 Restrictions and positive covenants must be endorsed by Council and lodged with NSW Land Registry Services (LRS) over the on-site detention storage areas and outlet works. Documentary evidence of this LRS lodgement shall be submitted to Council.

8.60.3 Restrictions and positive covenants must be endorsed by Council and lodged with NSW Land Registry Services (LRS) over the Stormwater Quality Control devices/system and outlet works. Documentary evidence of this lodgement shall be submitted to Council.

8.60.4 Restrictions and positive covenants must be endorsed by Council and lodged with NSW Land Registry Services (LRS) over the overland flowpath. Documentary evidence of this LRS lodgement shall be submitted to Council.

8.60.5 The creation of an Easement to Drain Water, with a minimum width in accordance with Council's Engineering Guide for Development (current issue), free of cost to Council. The easement must be created under the

Conveyancing Act 1919 and have the nominated lot(s) burdened and each and every lot upstream benefited.

8.60.6 The creation of easement(s) related to inter-allotment drainage with a minimum width in accordance with Council's Engineering Guide for Development (current issue).

8.60.7 All relevant Section 88B restrictions and covenants created as part of this consent shall contain a provision that they cannot be extinguished or altered except with the consent of Blacktown City Council.

8.61 Dedications

8.61.1 Dedication at no cost to Council of 5 m x 5 m splay corners on allotments at each street intersection.

8.61.2 Dedication at no cost to Council of pathways for stormwater conveyance in accordance with Council's Engineering Guide for Development.

8.62 Bonds/securities/payments in lieu of works

8.62.1 The payment to Blacktown City Council of a monetary contribution in lieu of works for the placement of the final layer of asphaltic concrete on the new road works. The amount will be calculated at Council's approved rate upon request and following the issue of a Construction Certificate for the work.

8.62.2 A maintenance security of 5% of the value of the required engineering works must be lodged with Council prior to the practical completion of the works. Council will hold this security for a period of at least 12 months.

(a) In the case of subdivision - this period commences at the release of the final plan of subdivision (issue of Subdivision Certificate).

(b) In the case where no subdivision occurs - This period commences at the date of practical completion of the development.

This maintenance period may be extended in the following situations to allow for the completion of necessary maintenance and/or all outstanding minor works.

8.62.3 Concrete path paving must not be placed until about 75% of the lots have been built upon or until approved in writing by Council. The applicant has the option of lodging a security deposit for the works or paying a monetary payment in lieu of works based upon Council's Goods and Services Pricing Schedule. The security will be released upon satisfactory completion of the works.

8.62.4 Where Council has granted approval to providing security in lieu of outstanding works, a security in the form of a bank guarantee or a cash deposit shall be lodged with Council to cover outstanding works required by this consent. The security amount will be calculated at Council's approved rate upon request.

8.63 Inspections

8.63.1 Any additional Council inspections beyond the scope of any Compliance Certificate package and needed to verify full compliance with the terms of this consent will be charged at the individual inspection rate nominated in Council's Fees and Charges Schedule.

8.64 Inspection of work

8.64.1 All road stormwater drainage structures (pipelines and pits) must be inspected via CCTV after completion of road pavement construction works (excluding any deferred AC works) and the provision of all public utility services in accordance with Council's current Works Specification Civil. CCTV reports must be submitted to Council in the form of video footage of the inspections, a SEWRAT (or equivalent) report, and a certified CCTV statement in accordance with section 6.8 of Council's Works Specification Civil indicating that any defects identified by this inspection have been rectified.