ATTACHMENT 6 – Conditions Of Consent

Approved Plans and Specifications

1 The development shall be implemented substantially in accordance with the details and specifications set out on Project No 2016-14 Drawing A06-E to A10-E and A11-D to A18-D dated 9 November 2018, A03-E to A05-E dated 19 September 2018, A01-D, A20-D, A25-D and A26-D dated 10 August 2018 and A21-C and A29-C dated 15 June 2018 prepared by ADM Architects and any details on the application form, and with any supporting information received, except as amended by the conditions specified and imposed hereunder.

General Matters

2 Geotechnical

- 2.1 All work is to be in accordance with the geotechnical recommendations contained in the report dated 17 July 2017 by SMEC and any subsequent geotechnical report required to address unanticipated conditions encountered during construction.
- 2.2 Hard bedrock if encountered will be difficult to excavate. Alternative excavation methods should be considered to minimise noise and vibration.
- 2.3 All earthworks including drainage, retaining wall and footing construction is to be subject to Level 1 geotechnical supervision as defined in Australian Standard AS3798 Guidelines for Earthworks for Commercial and Residential Developments. Where necessary amendments are to be made to the designs during construction based on supplementary geotechnical advice given during the supervision to ensure that the completed works accommodates all encountered geotechnical constraints.
- 2.4 Foundation systems are to be designed for Class P soils with all footings to be founded within the underlying weathered bedrock as recommended by the geotechnical consultant.
- 2.5 All excavations for foundations are to be inspected by the geotechnical consultant and certified that the ground has been suitably prepared for the placement of footings.

3 Stormwater Quality Treatment Goal (WSUD)

The stormwater treatment goals for removal of pollutants and nutrients shall be Gross Pollutants – 90%, Total Suspended Solids – 80%, Total Phosphorus – 60% and Total Nitrogen – 45%.

The ongoing WSUD maintenance and stormwater quality monitoring shall be undertaken by strata management.

Stormwater quality monitoring shall be undertaken every six (6) months until proven that the treatment train is achieving WDCP Chapter E 15 water quality objectives. The first monitoring shall commence after 85% occupation of the units. A copy of the monitoring report shall be sent to Council's Environmental Strategy and Planning Division on regular basis.

4 Sydney Trains

Requirements issued by Sydney Trains dated 19 October 2018 as attached shall form part of this Notice of Determination.

5 Endeavour Energy

Requirements issued by Endeavour Energy dated 11 January 2018 as attached shall form part of this Notice of Determination.

6 Sydney Water

Requirements issued by Sydney Water dated 8 August 2018 as attached shall form part of this Notice of Determination.

7 NSW Rural Fire Service (RFS)

Pursuant to Section 4.14 of the Environmental Planning and Assessment (EP&A) Act 1979 – requirements imposed by the NSW RFS dated 24 August 2018 as attached shall form part of this Notice of Determination.

8 State Infrastructure Contributions

The proposed development is for construction of the residential flat buildings only. Should subdivision of the residential flat buildings be proposed at a future time satisfactory arrangements

for the provision of designated State public infrastructure with the Department of Planning and Environment will be required.

9 Adaptable Units

The nominated adaptable units within the development must be designed and constructed so as to be capable of adaptation for disabled or elderly residents. Dwellings must be designed in accordance with the Australian Adaptable Housing Standard (AS 4299-1995), which includes "pre-adaptation" design details to ensure visitability is achieved. Level access is required to be provided between the internal living space and balcony of the adaptable units and sufficient circulation space is required throughout.

10 Building Work - Compliance with the Building Code of Australia

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

11 **Construction Certificate**

A Construction Certificate must be obtained from Council or an Accredited Certifier prior to work commencing.

A Construction Certificate certifies that the provisions of Clauses 139-148 of the Environmental Planning and Assessment Amendment Regulations, 2000 have been satisfied, including compliance with all relevant conditions of Development Consent and the Building Code of Australia.

Note: The submission to Council of two (2) copies of all stamped Construction Certificate plans and supporting documentation is required within **two (2)** days from the date of issue of the Construction Certificate, in the event that the Construction Certificate is not issued by Council.

12 **Disability Discrimination Act 1992**

This consent does not imply or confer compliance with the requirements of the Disability Discrimination Act 1992.

It is the responsibility of the applicant to guarantee compliance with the requirements of the Disability Discrimination Act 1992. The current Australian Standard AS1428.1 (2009) – Design for Access and Mobility is recommended to be referred for specific design and construction requirements, in order to provide appropriate access to all persons within the building.

13 Mailboxes

The developer must install mailboxes along street frontage of the property boundary in accordance with Australia Post Guidelines. Prominent house numbers are to be displayed, with a minimum number size of 150 mm in height for each number and letter in the alphabet.

Mailboxes shall be individually keyed.

14 Height Restriction

The development shall be restricted to the following maximum heights of:

26.5 metres AHD for Block A;

26.1 metres AHD for Block B;

25.6 metres AHD for Block C;

24.9 metres AHD for Block D; and

25.8 metres AHD for Block E;

from the natural ground level (inclusive of the lift tower and any air conditioning plant). Any alteration to the maximum height of the development will require further separate approval of Council.

15 Occupation Certificate

An Occupation Certificate must be issued by the Principal Certifying Authority prior to occupation or use of the development. In issuing an Occupation Certificate, the Principal Certifying Authority must be satisfied that the requirements of section 6.9 of the Environmental

Planning and Assessment Act 1979, have been complied with as well as all of the conditions of the Development Consent.

16 **Tree Retention/Removal**

The developer shall retain the existing trees indicated on the Landscape Plan by Ochre Landscape Architects dated 14/8/2018 consisting of trees numbered T1 to T12, T15, T17 to T31, T33 to T47, T50 to T67, T69 to T77 and T79 to T83.

Any branch pruning, which has been given approval, must be carried out by a qualified arborist in accordance with Australian Standard AS4373-2007.

All tree protection measures are to be installed in accordance with Australian standard AS4790-2009 Protection of Trees on development Sites.

All recommendations in Arborist's Report by Allied Tree Consultancy dated August 2018 to be implemented including and not restricted to: remedial tree pruning, deadwooding, fencing and signage, sediment buffer, stem protection, establishing tree protection zones and watering and root hormone application if required.

In regards to existing trees to be retained numbers T4, the recommendations in section 7.1.2 are to be implemented to ensure the safety of the tree. Following completion of the project, as part of the maintenance schedule, it is the responsibility of the owners/management to undertake regular inspections and remediation of the tree to ensure its safety, as recommended by the qualified arborist.

In regards to T2 and the conflict with drainage infrastructure, the developer is to implement the recommendations in the Arborist report, section 7.1.5.

This consent permits the removal of trees numbered T13, T14, T16 and T84 to T93 as indicated on the Landscape Plan by Ochre Landscape Architects dated 14 August 2018. No other trees shall be removed without prior written approval of Council.

This consent does not approve the removal of trees on neighbouring properties.

Prior to the Issue of the Construction Certificate

17 The submission of certification from a suitably qualified and experienced landscape designer and bush fire consultant to the Principal Certifying Authority prior to the release of the Construction Certificate, confirming that the landscape plan and the bush fire report are compatible.

18 Road Requirements

Prior to the issue of a Construction Certificate the Certifying Authority shall ensure that the proposed roads have been designed in accordance with Wollongong City Council's Design Guidelines and Construction Specification for Civil Works and the following criteria.

Road No.	Road Reserve Width (metres)	Carriageway Width (Face of kerb to face of kerb in metres)	Verge (metres)	Footpath/ Cycleway	ESA
1	20.4	12.4	4 - southern side 4 - northern side	2.5 metre shared path both sides	1 x 10 ⁶

19 Signs and Linemarking

A sign and linemarking diagram must be endorsed by the Local Traffic Committee and approved by Council prior to the issue of the Construction Certificate.

20 Construction Environmental Management Plan

Prior to the release of a Construction Certificate or the commencement of any works at the site, a detailed Construction Environmental Management Plan (CEMP) prepared by a suitably

qualified person shall be submitted to the Principal Certifying Authority and Council (in the event Council is not the Principal Certifying Authority for its records). The CEMP shall include (but not be limited to) the following details:

- i) plan of proposed demolition materials and construction storage areas;
- ii) parking for construction workers during the demolition and construction phases;
- iii) the type of materials/plant/equipment to be transported to and stored at the site and how is it to be transported and stored;
- timing of delivery of materials;
- the proposed access points to the site during demolition and construction; and
- address all environmental aspects of the development's demolition and construction phases including erosion and sediment control; dust suppression and noise and waste management.
- Soil Management Plan as outlined in the Detail Site Investigation Report (Revision 1) dated 4 September 2018 prepared by SMEC Consulting.
 - Dewatering Plan for the privately owned dam located onsite.

21 Flows from Adjoining Properties

Flows from adjoining properties shall be accepted and catered for within the site. Finished ground and top of retaining wall levels on the boundary shall be no higher than the existing upslope adjacent ground levels. The above requirements must be clearly shown on construction certificate plans prior to the release of the construction certificate.

22 Basement Waterproofing

Full engineering details of the proposed wall around the basement car park shall be submitted to the Principal Certifying Authority prior to the issue of the Construction Certificate. These shall include construction details indicating that no ingress of stormwater is possible into the basement levels other than from sub-soil drainage, vehicle wash water and runoff from the driveway that drains towards the basement. This applies to any proposed opening such as doors or ventilation louvres. The problem of backwater from the stormwater pipeline entering the basement car park level shall be addressed by a method such as a flap gate or one-way valve system.

23 Pump System

A pump system shall be provided in association with the detailed drainage design for the site to cater for stormwater from a prolonged/extreme storm event entering the basement. The pump system shall be designed by a suitably qualified and experienced civil engineer and reflected on the Construction Certificate plans and supporting documentation.

24 West Dapto Road – Detailed Civil Engineering Design – Council Land

A detailed civil engineering design shall be provided for the proposed road works within the road reserve and/or Council Land. The detailed civil engineering design shall be prepared by a suitably qualified practicing civil engineer in accordance with the relevant Council engineering standards. The design plans shall be generally in accordance with the Drainage Concept Plan, Job no. KF112578, Drawing no. C201, Revision B, by KFW, dated 17 September2018 and shall include:

- a Levels and details of all existing and proposed infrastructure/services such as kerb and gutter, public utility, pits, poles, fencing, stormwater drainage, adjacent road carriageway crown, street signs (clearly identifying the type of sign), and shall extend a minimum of 5 metres beyond the limit of works.
- b Road longitudinal sections, and cross-sections at 10 metre intervals as well as including building entrance points and transitions to existing at the property boundary demonstrating compliance with the latest versions the AUSTROAD road design standards.
- c Engineering details of the proposed pit and pipe stormwater drainage system within Council's road reserve, including a hydraulic grade line analysis and longitudinal section of the proposed system showing calculated flows, velocity, pits, pipe size/class, grade, inverts

and ground levels. Each proposed pit must be constructed generally in accordance with Wollongong City Council's Engineering Standard Drawings.

- d Where any adjustments to public utilities are proposed the applicant shall submit documentary evidence that they have the consent of the owner of the public utility authority.
- e All construction must be in accordance with the requirements of Council's Subdivision Code. Evidence that this requirement has been met must be detailed on the engineering drawings.
- f Details are to be provided regarding the type of materials used for construction. They should conform to the adjacent road reserves.

The detailed civil engineering design and supporting documentation shall be submitted to and approved by Wollongong City Council's Development Engineering Manager prior to the issue of a Construction Certificate.

25 Stormwater Line Darkes and West Dapto Road – Council Road Reserve

The stormwater design of the development must include the upgrade of the existing stormwater line at the intersection of Darkes and West Dapto Road. The stormwater line must be designed to cater for the minor (5 year) storm event from the contributing catchment. A temporary headwall must be installed at the outlet of the existing drainage line in accordance with Office of Water Guidelines. Detailed design including a hydraulic grade line analysis and longitudinal section of the proposed system showing calculated flows, velocity, pits, pipe size/class, grade, inverts and ground levels clearly demonstrating the above outcomes must be submitted to Councils Development Engineering Manager for approval prior to the release of the construction certificate.

26 The arrangements and costs associated with any adjustment to a public utility service shall be borne by the applicant/developer. Any adjustment, deletion and/or creation of public utility easements associated with the approved works are the responsibility of the applicant/developer. The submission of documentary evidence to the Principal Certifying Authority which confirms that satisfactory arrangements have been put in place regarding any adjustment to such services is required prior to the release of the Construction Certificate.

27 Utility Services

Should a proposed Vehicular Crossing be located where it is likely to disturb or impact upon a utility installation (ie power pole, Telstra pit etc) written confirmation from the affected supplier that they have agreed to the proposed impacts shall be submitted to the Principal Certifying Authority prior to the issue of the Construction Certificate.

28 Pedestrian access ways, entry paths and lobbies must be constructed with durable materials commensurate with the standard of the adjoining public domain with appropriate slip resistant materials, tactile surfaces and contrasting colours.

29 Finish of Vehicular Entries

Vehicular entries are to have high quality finishes to walls and ceilings as well as high standard detailing. No ducts or pipes are to be visible from the street.

30 Placement of Air Conditioning Units

Air conditioning systems are to not to be located where they are visible from either West Dapto Road or Darkes Road. Plans submitted to the Principal Certifying Authority prior to issue of the Construction Certificate are to identify any external components of air conditioning systems to ensure they meet the requirements of this condition.

31 **Permeable Garage Shutter**

Any shutters provided within the basement car park shall be permeable so as to improve basement ventilation, as per the requirements of 3J-4 of the Apartment Design Guide.

32 Fire Safety Schedule

When issuing a Construction Certificate, a certifying authority must attach a Fire Safety Schedule specifying all of the fire safety measures required for the building to ensure the safety of persons in the building in the event of fire.

33 **Present Plans to Sydney Water**

Approved plans must be submitted online using Sydney Water Tap, available through <u>www.sydneywater.com.au</u> to determine whether the development will affect Sydney Water's sewer and water mains, stormwater drains and/or easements, and if further requirements need to be met.

The Certifying Authority must ensure that Sydney Water has issued an approval receipt prior to the issue of a Construction Certificate.

Visit www.sydneywater.com.au or telephone 13 20 92 for further information.

34 Endeavour Energy Requirements

The submission of documentary evidence from Endeavour Energy to the Principal Certifying Authority is required confirming that satisfactory arrangements have been made with Endeavour Energy for the provision of electricity supplies to the development, prior to the release of the Construction Certificate.

Note: Applications should be made to Customer Connections – South Coast, Endeavour Energy PO Box 811 Seven Hills NSW 1730.

35 **Telecommunications**

The submission of documentary evidence from an approved telecommunications carrier to the Principal Certifying Authority confirming that underground telecommunication services are available for this development is required prior to the issue of the Construction Certificate.

36 Integration of Rooftop Structures in Approved Building Envelope

All rooftop or exposed structures including lift rooms, plant rooms together with air conditioning units, ventilation and exhaust systems are to be integrated within the approved rooftop envelope. This requirement shall be reflected on the Construction Certificate plans.

37 External Finishes – Residential Apartment Building

The building shall be constructed and finished in accordance with the approved schedule of finishing materials and colours except where amended by conditions of this consent. This requirement shall be reflected on the Construction Certificate plans and supporting documentation.

38 Glass Reflectivity Index

The reflectivity index of the glass used in the external façade of the building shall not exceed 20 per cent. The details and samples of the glass to be used are to be submitted with the Construction Certificate together with written evidence that the reflectivity of the glass is 20 per cent or less.

39 Crime Prevention through Environmental Design (CPTED - Landscaping

In order to reduce the opportunities for "hiding places" the proposed landscaping must:

- a use shrubs/plants which are no higher than 1 metre adjacent to pathways.
- b the type of trees proposed must have a sufficiently high canopy, when installed and fully grown, so that pedestrian vision is not impeded.
- c Shrub planting to be set back minimum one (1) metre from the edge of the pathway. Groundcover planting acceptable.

This requirement shall be reflected on the Construction Certificate plans.

40 Crime Prevention through Environmental Design (CPTED) - Lighting

The proposed development shall incorporate 'low impact' lighting to ameliorate any light spillage and/or glare impacts upon surrounding properties in accordance with Council's CPTED principles. The final design details of the proposed lighting system shall be reflected on the

Construction Certificate plans. The erection of the lighting system shall be in accordance with the approved final design.

41 Car Parking and Access

The development shall make provision for a total of 170 car parking spaces (including 22 visitor car parking spaces and 11 spaces capable of adaption for people with disabilities), 7 motorcycle parking spaces, 36 secure (Class B) residential bicycle spaces and 9 visitor (Class C) bicycle spaces. This requirement shall be reflected on the Construction Certificate plans. Any change in the above parking numbers shown on the approved DA plans shall be dealt with via a section 96 modification to the development. The approved parking spaces shall be maintained to the satisfaction of Council, at all times.

42 The parking dimensions, internal circulation, aisle widths, kerb splay corners, head clearance heights, ramp widths and grades of the car parking areas are to be in conformity with the current relevant Australian Standard AS2890.1, except where amended by other conditions of this consent. Details of such compliance are to be reflected on the Construction Certificate plans.

43 Water/Wastewater Entering Road Reserve

Provision shall be made for a minimum 200mm wide grated box drain along the boundary of the property at the vehicular crossing/s to prevent surface water entering the road reserve. This requirement shall be reflected on the Construction Certificate plans.

44 The depth and location of all services (ie gas, water, sewer, electricity, telephone, traffic lights, etc) must be ascertained and reflected on the Construction Certificate plans and supporting documentation.

45 Landscaping

The submission of a final Landscape Plan will be required in accordance with the requirements of Wollongong City Council DCP 2009 Chapter E6 and the approved Landscape Plan (ie as part of this consent) for the approval by the Principal Certifying Authority, prior to the release of the Construction Certificate.

- 46 The submission of certification from a suitably qualified and experienced landscape designer and drainage consultant to the Principal Certifying Authority prior to the release of the Construction Certificate, confirming that the landscape plan and the drainage plan are compatible.
- 47 The implementation of a landscape maintenance program in accordance with the approved Landscape Plan for a minimum period of 24 months to ensure that all landscape work becomes well established by regular maintenance. The maintenance plan is to include tree inspections by a qualified arborist and tree remediation by a qualified arborist to ensure trees remain a safe asset. Details of the program must be submitted with the Landscape Plan to the Principal Certifying Authority prior to release of the Construction Certificate.

48 Tree Protection and Management

The existing trees are to be retained upon the subject property and any trees on adjoining properties shall not be impacted upon during the excavation or construction phases of the development. This will require the installation and maintenance of appropriate tree protection measures, including (but not necessarily limited to) the following:

- a) Installation of Tree Protection Fencing Protective fencing shall be 1.8 metre cyclone chainmesh fence, with posts and portable concrete footings. Details and location of protective fencing must be indicated on the architectural and engineering plans to be submitted to the Principal Certifying Authority prior to release of the Construction Certificate.
- b) Zone: Areas within a Tree Protection Zone are to be mulched with minimum 75 mm thick 100% recycled hardwood chip/leaf litter mulch.
- c) Irrigate: Areas within the Tree Protection Zone are to be regularly watered in accordance with the arborist's recommendations.

49 Bushfire Attack Level (BAL)

49.1 Block B shall comply with the requirements for BAL 12.5 Australian Standard AS3959-2009 'Construction of buildings in bush fire-prone areas' or NASH Standard (1.7.14 updated) 'National Standard Steel Framed Construction in Bushfire Areas – 2014' as appropriate and section A3.7 Addendum Appendix 3 of 'Planning for Bush Fire Protection'.

The construction requirements for BAL 12.5 Australian Standard AS3959-2009 'Construction of buildings in bush fire-prone areas' or NASH Standard (1.7.14 updated) 'National Standard Steel Framed Construction in Bushfire Areas – 2014' as appropriate and section A3.7 Addendum Appendix 3 of 'Planning for Bush Fire Protection' for Block B shall be reflected on the Construction Certificate plans and supporting documentation for the endorsement of the Principal Certifying Authority prior to the issue of the Construction Certificate.

49.2 Blocks A, C, D and E shall comply with Sections 3 and 7 (BAL 29) Australian Standard AS3959-2009 'Construction of buildings in bush fire-prone areas' or NASH Standard (1.7.14 updated) 'National Standard Steel Framed Construction in Bushfire Areas – 2014' as appropriate and section A3.7 Addendum Appendix 3 of 'Planning for Bush Fire Protection'.

The construction requirements for BAL 29 Australian Standard AS3959-2009 'Construction of buildings in bush fire-prone areas' or NASH Standard (1.7.14 updated) 'National Standard Steel Framed Construction in Bushfire Areas – 2014' as appropriate and section A3.7 Addendum Appendix 3 of 'Planning for Bush Fire Protection' for Blocks A, C, D and E shall be reflected on the Construction Certificate plans and supporting documentation for the endorsement of the Principal Certifying Authority prior to the issue of the Construction Certificate.

50 Engineering Plans and Specifications - Retaining Wall Structures Greater than One (1) Metre

The submission of engineering plans and supporting documentation of all proposed retaining walls greater than 1m to the Principal Certifying Authority for approval prior to the issue of the Construction Certificate. The retaining walls shall be designed by a suitably qualified and experienced civil and/or structural engineer. The required engineering plans and supporting documentation shall include the following:

- 50.1 A plan of the wall showing location and proximity to property boundaries;
- 50.2 An elevation of the wall showing ground levels, maximum height of the wall, materials to be used and details of the footing design and longitudinal steps that may be required along the length of the wall;
- 50.3 Details of fencing or handrails to be erected on top of the wall;
- 50.4 Sections of the wall showing wall and footing design, property boundaries and backfill material. Sections shall be provided at sufficient intervals to determine the impact of the wall on existing ground levels. The developer shall note that the retaining wall and footing structure must be contained wholly within the subject property;
- 50.5 The proposed method of subsurface and surface drainage, including water disposal;
- 50.6 Reinforcing and joining details of any bend in the wall at the passing bay of the accessway;
- 50.7 The assumed loading used by the engineer for the wall design.
- 50.8 Flows from adjoining properties shall be accepted and catered for within the site. Finished ground and top of retaining wall levels on the boundary shall be no higher than the existing upslope adjacent ground levels.

51 Bicycle parking facilities must have adequate weather protection and provide the appropriate level of security as required by the current relevant Australian Standard AS2890.3 - Bicycle Parking Facilities. This requirement shall be reflected on the Construction Certificate plans.

52 Property Addressing Policy Compliance

Prior to the issue of any construction certificate, the developer must ensure that any site addressing complies with Council's **Property Addressing Policy** (as amended). Where appropriate, the developer must also lodge a written request to Council's **Infrastructure Systems & Support – Property Addressing (propertyaddressing@wollongong.nsw.gov.au)**, for the site addressing prior to the issue of the construction certificate. Please allow up to 3-5 business days for a reply. Enquiries regarding property addressing may be made by calling 4227 8660.

53 Footpath Paving

The developer is responsible for the construction of footpath paving for the West Dapto Road frontage of the development. The type of paving for this development is a 1500mm wide, 100mm thick, reinforced, broom finished concrete. A nominal two percent (2%) minimum one percent (1%), maximum two and a half percent (2.5%) cross fall to be provided from property line to back of kerb. Any changes of level, ramps or stairs and associated tactile markers and handrails are to be contained with the property boundary.

The driveway entry threshold from the property boundary line to the face of kerb is to be broom finished concrete to match the footpath and be designed to withstand predicted traffic loadings.

The driveway threshold finish within property boundary line is to contrast with driveway entry.

The footpath and driveway entry on the council property must be installed to the satisfaction of WCC Manager of Works.

A Landscape Plan is to be submitted to Council for approval prior to the issue of the Construction Certificate showing proposed paving, footpath design levels, street tree details and location of all services.

54 Street Trees

The developer must address the street frontage by installing street tree planting. The number and species for this development are nine Angophora floribunda, 200 litre container size, in accordance with AS 2303:2015 Tree stock for landscape use. Street trees are to be installed in accordance with Wollongong Development Control Plan 2009 – Chapter E6: Landscaping. 'Dial Before You Dig' must be consulted prior to any excavation on site. Pot holing must be carried out to determine service location. Tree pits must be adequately mulched, plants installed and staking installed to the satisfaction of WCC Manager of Works. Staking is to consist of min. $3 \times 2400 \times 50 \times 50$ mm hardwood stakes driven min 600mm into firm ground. Hessian webbing is to be utilised to secure plant stock to industry standard.

These requirements shall be reflected on the Construction Certificate plans and any supporting documentation.

55 Sizing of Drainage

All roof gutters, downpipes, pits, and pipelines draining roof areas and other impervious surfaces with no deliberate overflow path to the on-site stormwater detention (OSD) facility, shall be designed to cater for a 1 in 100 year ARI storm event in accordance with AS 3500.3 – Plumbing and Drainage (Stormwater Drainage). Details of gutter/downpipe/pipeline sizes and locations shall be reflected on the Construction Certificate plans.

56 Stormwater Drainage Design

A detailed drainage design for the development must be submitted to and approved by the Principal Certifying Authority prior to the release of the Construction Certificate. The detailed drainage design must satisfy the following requirements:

a Be prepared by a suitably qualified civil engineer in accordance with Chapter E14 of Wollongong City Council's Development Control Plan 2009, Subdivision Policy, conditions listed under this consent, and generally in accordance with the concept plan/s lodged for development approval, being the Drainage Concept Plan, Job no. KF112578, Drawing no. C201, Revision B, by KFW, dated 17/09/2018

- b Include details of the method of stormwater disposal. Stormwater from the development must be piped to Council's existing stormwater drainage system.
- c Engineering plans and supporting calculations for the stormwater drainage system are to be prepared by a suitably qualified engineer and be designed to ensure that stormwater runoff from upstream properties is conveyed through the site without adverse impact on the development or adjoining properties. The plan must indicate the method of disposal of all stormwater and must include rainwater tanks, existing ground levels, finished surface levels on all paved areas, estimated flow rates, invert levels and sizes of all pipelines.
- d Overflow paths shall be provided to allow for flows of water in excess of the capacity of the pipe/drainage system draining the land, as well as from any detention storage on the land. Blocked pipe situations with 1 in 100 year ARI events shall be incorporated in the design. Overflow paths shall also be provided in low points and depressions. Each overflow path shall be designed to ensure no entry of surface water flows into any building and no concentration of surface water flows onto any adjoining property. Details of each overflow path shall be shown on the detailed drainage design.

57 **On-Site Stormwater Detention (OSD) Design**

The developer must provide on-site stormwater detention (OSD) storage for stormwater runoff from the development. The design and details of the OSD system must be provided in conjunction with the detailed drainage design and approved by the Principal Certifying Authority prior to the release of the Construction Certificate. The OSD design and details must satisfy the following requirements:

- a Must be prepared by a suitable qualified engineer in accordance with Chapter E14 of the Wollongong DCP 2009.
- b The OSD system must be designed to ensure no increase in stormwater discharge at any disposal point from the development (West Dapto Road and Darkes Road) for events up to the 100 year ARI (5 year ARI to 100 year ARI). Pre development flow rates must give consideration to existing swale capacities within the road reserve to each discharge location. Evidence and certification from a suitable qualified civil engineer that the above requirements have been addressed must be provided prior to the release of the construction certificate.
- c The OSD facility must be designed to withstand the maximum loadings occurring from any combination of traffic (with consideration to residential and heavy vehicles), hydrostatic, earth, and buoyancy forces. Details must be provided demonstrating these requirements have been achieved.
- d The OSD facility shall incorporate a minimum 900mm x 900mm square lockable grate for access and maintenance purposes, provision for safety, debris control screen, and a suitably graded invert to the outlet to prevent ponding.
- e Must include discharge control calculations (i.e. orifice/weir calculations) generally in accordance with Section 12.2.6 and 12.5.4 of Chapter E14 of the Wollongong DCP2009.
- f Details of the orifice plate including diameter of orifice and method of fixing shall be provided.
- g Must include details of a corrosion resistant identification plaque for location on or close to the OSD facility. The plaque shall include the following information and shall be installed prior to the issue of the occupation certificate:
 - \cdot The structure is an OSD facility, being part of the stormwater drainage network, and is not to be tampered with.
 - Identification number DA-2017/1759;

- Any specialist maintenance requirements.
- h Must include a maintenance schedule for the OSD system, generally in accordance with Chapter E14 of the Wollongong DCP2009.

58 Council Footpath Reserve Works

All redundant vehicular crossings and laybacks rendered unnecessary by this development must be reconstructed to normal kerb and gutter or existing edge of carriageway treatment to match the existing. The verge from the back of kerb to the boundary must be removed and the area appropriately graded, topsoiled and turfed in a manner that conforms with adjoining road reserve. The area forward of the front boundary must be kept smooth, even and free from any trip hazards. All alterations of public infrastructure where necessary are at the developer's expense.

All new driveway laybacks and driveway crossings must be designed in accordance with Wollongong City Council Standards. Details and locations are to be shown on the Construction Certificate Plans.

59 **Development Contributions**

Pursuant to Section 4.17 of the Environmental Planning and Assessment Act 1979 and the West Dapto Section 94 Development Contributions Plan (2017), a total monetary contribution of \$3,405,496.09 is levied as a result of this development.

This amount has been calculated on the basis of 29 additional 1 bedroom dwellings and 78 additional 2 bedroom dwellings (includes one credit for the existing dwelling).

In accordance with the Section 94E Direction dated 17 July 2017 and the NSW Department of Planning and Environment Planning Circular – PS 17-02 Changes to section 94 local infrastructure contributions dated 27 July 2017, the contribution payable by the developer is capped, with the remaining contribution funded through the Local Infrastructure Growth Scheme (LIGS). This is shown in the table below:

Category	Total Contribution	LIGS fuded Portion	Developer Portion
West Dapto Residential - Community	\$5,838.67	\$	\$5,838.67
West Dapto Residential - Open Space	\$271,970.23	\$	\$271,970.23
West Dapto Residential - Roads	\$2,689,055.11	\$	\$2,689,055.11
West Dapto Residential - Drainage	\$388,354.17	\$	\$388,354.17
West Dapto Residential - Administration	\$50,277.91	\$	\$50,277.91
Total	\$3,405,496.09	\$0.00	\$3,405,496.09

The LIGS portion will be subject to indexation until the date of payment in accordance with the Contributions Plan (2017).

The developer's portion of \$3,405,496.09 must be paid prior to the release of any associated Construction Certificate.

The following payment methods are available:

METHOD	HOW	PAYMENT TYPE
Online	http://www.wollongong.nsw.gov.au/applicationpayments	Credit Card
	Your Payment Reference: 941043	
In Person	Wollongong City Council	• Cash
	Administration Building - Customer Service Centre	· Credit Card
	Ground Floor 41 Burelli Street, WOLLONGONG	• Bank Cheque

PLEASE MAKE BANK CHEQUE PAYABLE TO: Wollongong City Council

(Personal or company cheques are not accepted)

A copy of the West Dapto Section 94 Development Contributions Plan (2017) and accompanying Fact Sheet may be inspected or obtained from the Wollongong City Council Administration Building, 41 Burelli Street, Wollongong during business hours or on Council's web site at www.wollongong.nsw.gov.au

Prior to the Commencement of Works

60 Appointment of Principal Certifying Authority

Prior to commencement of work, the person having the benefit of the Development Consent and a Construction Certificate must:

- a Appoint a Principal Certifying Authority (PCA) and notify Council in writing of the appointment irrespective of whether Council or an accredited private certifier is appointed; and
- b notify Council in writing of their intention to commence work (at least two days notice is required).

The Principal Certifying Authority must determine when inspections and compliance certificates are required.

61 Residential Building Work – Compliance with the Requirements of the Home Building Act 1989

Building work involving residential building work within the meaning of the Home Building Act 1989 must not be carried out unless the Principal Certifying Authority for the development to which the work relates

- a in the case of work to be done by a licensee under that Act:
 - i has been informed in writing of the licensee's name, contractor license number and contact address details (in the case of building work undertaken by a contractor under the Home Building Act 1989); and
 - ii is satisfied that the licensee has complied with the requirements of Part 6 of the Home Building Act 1989; or
- b in the case of work to be done by any other person:
 - i has been informed in writing of the persons name, contact address details and owner-builder permit number; and
 - ii has been given a declaration signed by the property owner(s) of the land that states that the reasonable market cost of the labour and materials involved in the work is less than the amount prescribed for the purposes of the definition of owner-builder work in Section 29 of the Home Building Act 1989 and is given appropriate information and declarations under paragraphs (a) and (b) whenever arrangements for the doing of the work are changed in such a manner as to render out of date any information or declaration previously given under either of those paragraphs.

Note: A certificate issued by an approved insurer under Part 6 of the Home Building Act 1989 that states that the specific person or licensed contractor is the holder of an insurance policy issued for the purposes of that Part of the Act is, for the purposes of this condition, sufficient evidence that the person has complied with the requirements of that Part of the Act.

62 Sign – Supervisor Contact Details

Before commencement of any work, a sign must be erected in a prominent, visible position:

a stating that unauthorised entry to the work site is not permitted;

- b showing the name, address and telephone number of the Principal Certifying Authority for the work; and
- c showing the name and address of the principal contractor in charge of the work site and a telephone number at which that person can be contacted at any time for business purposes.

This sign shall be maintained while the work is being carried out and removed upon the completion of the construction works.

63 Temporary Toilet/Closet Facilities

Toilet facilities are to be provided at or in the vicinity of the work site on which work involved in the erection or demolition of a building is being carried out at the rate of one toilet for every 20 persons or part of 20 persons employed at the site.

Each toilet provided must be:

- a a standard flushing toilet; and
- b connected to either:
 - i the Sydney Water Corporation Ltd sewerage system or
 - ii an accredited sewage management facility or
 - iii an approved chemical closet.

The toilet facilities shall be provided on-site, prior to the commencement of any works.

64 Structural Engineer's Details

Structural engineer's details for all structurally designed building works such as reinforced concrete footings, reinforced concrete slabs and structural steelwork must be submitted to the Principal Certifying Authority, prior to the commencement of any works on the site.

65 Enclosure of the Site

The site must be enclosed with a suitable security fence to prohibit unauthorised access, to be approved by the Principal Certifying Authority. No building work is to commence until the fence is erected.

66 **Demolition Works**

All demolition works shall be carried out in accordance with Australian Standard AS2601 (2001): The Demolition of Structures or any other subsequent relevant Australian Standard and the requirements of the SafeWork NSW.

No demolition materials shall be burnt or buried on-site. The person responsible for the demolition works shall ensure that all vehicles leaving the site carrying demolition materials have their loads covered and do not track soil or waste materials onto the road. Any unforeseen hazardous and/or intractable wastes shall be disposed of to the satisfaction of the Principal Certifying Authority. In the event that the demolition works may involve the obstruction of any road reserve/footpath or other Council owned land, a separate application shall be made to Council to enclose the public place with a hoarding or fence over the footpath or other Council owned land.

67 Notification to SafeWork NSW

The demolition licence holder who proposes demolition of a structure or part of a structure that is loadbearing or otherwise related to the physical integrity of the structure that is at least six metres in height, involving load shifting machinery on a suspended floor, or involving the use of explosives must notify SafeWork NSW in writing at least five (5) calendar days before the work commences.

68 Demolition Notification to Surrounding Residents

Demolition must not commence unless at least two (2) days written notice has been given to adjoining residents of the date on which demolition works will commence.

69 Consultation with SafeWork NSW – Prior to Asbestos Removal

A licensed asbestos removalist must give written notice to SafeWork NSW at least five (5) days before licensed asbestos removal work is commenced.

70 **Contaminated Roof Dust**

Any existing accumulations of dust in ceiling voids and wall cavities must be removed prior to any demolition work commencing. Removal must take place by the use of an industrial vacuum fitted with a high efficiency particulate air (HEPA) filter.

71 Temporary Sediment Fences

Temporary sediment fences (eg haybales or geotextile fabric) must be installed on the site, prior to the commencement of any excavation, demolition or construction works in accordance with Council's guidelines. Upon completion of the development, sediment fencing is to remain until the site is grassed or alternatively, a two (2) metre strip of turf is provided along the perimeter of the site, particularly lower boundary areas.

72 All-weather Access

An all-weather stabilised access point must be provided to the site to prevent sediment leaving the site as a result of vehicular movement. Vehicular movement should be limited to this single accessway.

73 Road Requirements

Prior to the issue of a Construction Certificate the Certifying Authority shall ensure that the proposed roads have been designed in accordance with Wollongong City Council's Design Guidelines and Construction Specification for Civil Works and the following criteria.

Road No.	Road Reserve Width (metres)	Carriageway Width (Face of kerb to face of kerb in metres)	Verge (metres)	Footpath/ Cycleway	ESA
1	20.4	12.4	4 - southern side 4 - northern side	2.5 metre shared path both sides	1 x 10 ⁶

74 Certification from Arborist - Adequate Protection of Trees to be Retained

A qualified arborist is required to be engaged for the supervision of all on-site excavation or land clearing works. The submission of appropriate certification from the appointed arborist to the Principal Certifying Authority is required which confirms that all trees and other vegetation to be retained are protected by fencing and other measures, prior to the commencement of any such excavation or land clearing works.

75 Notification to Council of any Damage to Council's Infrastructure

Council must be notified in the event of any existing damage to any of Council's infrastructure including, but not limited to the road, kerb and gutter, road shoulder, footpath, drainage structures and street trees fronting the development prior to the commencement of work. Adequate protection must be provided to Council infrastructure prior to work commencing and during the construction period. Any damage to Council's assets shall be restored in a satisfactory manner prior to the issue of the Occupation Certificate.

76 Bushfire – Inner Protection Area

At the commencement of building works and in perpetuity the entire property apart from areas of EEC and the Deep Soil Zone, shall be managed as an inner protection area (IPA) as outlined within section 4.1.3 and Appendix 5 of 'Planning for Bush Fire Protection 2006' and the NSW Rural Fire Service's document 'Standards for asset protection zones'.

77 Works in Road Reserve – Major Works

Any occupation, use, disturbance or work on the footpath or road reserve for construction purposes, which is likely to cause an interruption to existing pedestrian and/or vehicular traffic flows requires Council consent under Section 138 of the Roads Act 1993.

The application form for Works within the Road Reserve – Section 138 Roads Act can be found on Council's website. The form outlines the requirements to be submitted with the application, to give approval to commence works under the roads act. It is advised that all applications are submitted and fees paid, 5 days prior to the works within the road reserve are intended to commence. An application must be submitted must be obtained from Wollongong City Council's Development Engineering Team prior to any works commencing where it is proposed to carry out activities such as, but not limited to, the following:

- a Digging or disruption to footpath/road reserve surface;
- b Loading or unloading machinery/equipment/deliveries;
- c Installation of a fence or hoarding;
- d Stand mobile crane/plant/concrete pump/materials/waste storage containers;
- e Pumping stormwater from the site to Council's stormwater drains;
- f Installation of services, including water, sewer, gas, stormwater, telecommunications and power;
- g Construction of new vehicular crossings or footpaths;
- h Removal of street trees;
- i Carrying out demolition works.

Restoration must be in accordance with the following requirements:

- a All restorations are at the cost of the Applicant and must be undertaken in accordance with Council's standard document, "Specification for work within Council's Road reserve".
- **b** Any existing damage within the immediate work area or caused as a result of the work/occupation, must also be restored with the final works.

During Demolition, Excavation or Construction

78 Site Auditor's Report (SAR) and Site Auditor's Statement (SAS)

The submission to Council of both a SAR and SAS is required from a NSW EPA accredited site auditor pursuant to the provisions of Part 4 of the Contaminated Land Management Act 1997 upon completion of the bulk earthworks and prior to construction of the proposed units.

The site auditor's report shall verify that:

- a the site is not affected by soil and/or groundwater contamination, above the NSW EPA threshold limit criteria; and
- b the site is suitable for the proposed development.

The SAR and SAS are to be issued by the Site Auditor direct to Council. No third party submissions will be accepted.

79 Vegetation Management Plan

The Vegetation Management Plan, (Final Version) dated 11 September 2018 prepared by Biosis shall be implemented as described.

80 Flora and Fauna Assessment Report

The recommendations of the Flora and Fauna Assessment Report dated 11 September 2018 prepared by Biosis shall be implemented as described.

81 Avoidance of Cruelty and Harm to Fauna

During tree removal works, all care shall be taken to avoid cruelty and harm to fauna.

82 Injured Native Fauna

In the event any native fauna are injured during tree removal works, then the NSW Wildlife Information, Rescue and Education Service (WIRES) shall be contacted (phone 1300 094 737) for assistance.

83 Disposal of Excess Removed Vegetation Off-site

Any excess removed vegetation taken from the property shall be disposed of only at a location that may lawfully accept that waste.

84 Implementation of Detail Site Investigation Report

The recommendations of the Detail Site Investigation Report (Revision 1) dated 4 September 2018 prepared by SMEC Consulting shall be implemented as described.

85 Installation of WSUD Treatment Train

The applicant shall install the WSUD infrastructure (primary and tertiary water quality treatment devices) as per WSUD report prepared by KF Williams Infrastructure Professional dated August 2018 to comply with the WDCP Chapter E-15 water quality objectives.

86 Heritage - Unanticipated finds of Aboriginal Objects

All Aboriginal objects and Places are protected under the NSW National Parks and Wildlife Act 1974. It is an offence to knowingly disturb an Aboriginal site without a consent permit issued by the Office of Environment and Heritage (OEH). Should any Aboriginal objects be encountered during works associated with this proposal, works must cease in the vicinity and the find should not be moved until assessed by a qualified archaeologist. If the find is determined to be an Aboriginal object the archaeologist will provide further recommendations. These may include notifying the OEH and Aboriginal stakeholders.

87 Heritage - Discovery of Aboriginal Ancestral Remains

Aboriginal ancestral remains may be found in a variety of landscapes in NSW, including middens and sandy or soft sedimentary soils. If any suspected human remains are discovered during any activity you must:

- a Immediately cease all work at that location and not further move or disturb the remains;
- b Notify the NSW Police and OEH's Environmental Line on 131 555 as soon as practicable and provide details of the remains and their location;
- c Not recommence work at that location unless authorised in writing by OEH.

88 Survey Report

The submission of a survey report by a registered Land Surveyor to the Principal Certifying Authority is required, prior to the work proceeding beyond each of the following respective stages so as to guarantee that each stage of the development is completed in accordance with the approved plans:

a slab formwork;

b buildings on the site.

89 Survey Certificate

The submission of a Survey Certificate to the Principal Certifying Authority confirming that the height level of all rooftop or exposed structures including lift rooms, plant rooms together with air conditioning units, ventilation and exhaust systems accords with the following maximum height levels as per the approved plans under this consent being:

26.5 metres AHD for Block A;

26.1 metres AHD for Block B;

25.6 metres AHD for Block C;

24.9 metres AHD for Block D; and

25.8 metres AHD for Block E.

90 No Adverse Run-off Impacts on Adjoining Properties

The design of the development shall ensure there are no adverse effects to adjoining properties as a result of flood or stormwater run-off. Attention must be paid to ensure adequate protection for buildings against the ingress of surface run-off.

Allowance must be made for surface run-off from adjoining properties. Any redirection or treatment of that run-off must not adversely affect any other property.

91 Copy of Consent to be in Possession of Person carrying out Tree Removal

The applicant/developer must ensure that any person carrying out tree removal/vegetation clearance is in possession of this development consent and/or the approved landscape plan, in respect to the trees/vegetation which have/has been given approval to be removed in accordance with this consent.

92 Treatment of any Tree Damage by a Supervised Arborist

Any damage inflicted on a tree during the construction phase which has been nominated for retention shall be treated by an approved arborist at the developer's expense.

93 **Restricted Hours of Construction Work**

The developer must not carry out any work, other than emergency procedures, to control dust or sediment laden runoff outside the normal working hours, namely, 7.00 am to 5.00 pm, Monday to Saturday, without the prior written consent of the Principal Certifying Authority and Council. No work is permitted on public holidays or Sundays.

Any request to vary these hours shall be submitted to the **Council** in writing detailing:

- the variation in hours required (length of duration);
- the reason for that variation (scope of works);
- the type of work and machinery to be used;
- method of neighbour notification;
- supervisor contact number;
- any proposed measures required to mitigate the impacts of the works.

Note: The developer is advised that other legislation may control the activities for which Council has granted consent, including but not limited to, the Protection of the Environment Operations Act 1997.

- 94 The lighting of the premises must be directed so as not to cause nuisance to the owners or occupiers of adjoining premises or to motorists on adjoining or nearby roads.
- 95 Trucks which are entering and leaving the premises and carrying loads must be sealed or covered at all times, except during loading and unloading.

96 Excavation/Filling/Retaining Wall Structures

Any proposed filling on the site must not:

- a encroach onto the adjoining properties, and
- b adversely affect the adjoining properties with surface run-off.
- 97 All proposed cut and filling works must be adequately retained with all battered slopes being no steeper than 2H: 1V and comply with Council's Development Control Plan.
- 98 All excavations and backfilling associated with the erection of a building must be executed safely and in accordance with appropriate professional standards.
- 99 All excavations and backfilling associated with the erection of a building must be properly guarded and protected to prevent them from being dangerous to life or property.

100 Asbestos – Removal, Handling and Disposal Measures/Requirements Asbestos Removal by a Licensed Asbestos Removalist

The removal of any asbestos material must be carried out by a licensed asbestos removalist if over 10 square metres in area of non-friable asbestos, or if any type of friable asbestos in strict accordance with SafeWork NSW requirements (<<u>http://www.safework.nsw.gov.au></u>).

101 Asbestos Waste Collection, Transportation and Disposal

Asbestos waste must be prepared, contained, transported and disposed of in accordance with SafeWork NSW and NSW Environment Protection Authority requirements. Asbestos waste must only be disposed of at a landfill site that can lawfully receive this this type of waste. A receipt must be retained and submitted to the Principal Certifying Authority, and a copy submitted to Council (in the event that Council is not the Principal Certifying Authority), prior to commencement of the construction works.

102 **Provision of Waste Receptacle**

The developer must provide an adequate receptacle to store all waste generated by the development, pending disposal. The receptacle must be regularly emptied and waste must not be allowed to lie or accumulate on the property other than in the receptacle. Consideration should be given to the source separation of recyclable and re-usable materials.

103 **Provision of Taps/Irrigation System**

The provision of common taps and/or an irrigation system is required to guarantee that all landscape works are adequately watered. The location of common taps and/or irrigation system must be implemented in accordance with the approved Landscape Plan.

104 **Podium Planting**

All podium planting areas are to have a waterproofing membrane that can provide a minimum 10 year warranty on product. Protective boarding is to be installed to protect membrane from damage.

All podium planting areas to be provided with an adequate drainage system connected to the stormwater drainage system. The planter box is to be backfilled with free draining planter box soil mix.

If selected mulch is decorative pebbles/gravel, the maximum gravel pebble size is 10mm diameter

Prior to the Issue of the Occupation Certificate

105 Works-as-Executed Plans – Works within Council Land

The submission of a Works-As-Executed (WAE) plan for works within Council land must be submitted to Councils Development Engineering Manager for assessment and approval, prior to the release of the occupation Certificate. The Works-As-Executed plans shall be certified by a registered surveyor indicating that the survey is a true and accurate record of the works that have been constructed. The Works-As-Executed dimensions and levels must also be shown in red on a copy of the approved Construction Certificate plans. The Works-As-Executed (WAE) plans must include:

- Final locations and levels for all works associated with the development within Council land.
- the plan(s) must include but not be limited to the requirements stated in Chapter E14 of the Wollongong DCP 2009.

106 CCTV

All stormwater pipes within road reserves intended to be dedicated to Council must be inspected by CCTV. A copy of the CCTV inspection (report and video) must be submitted to Councils Development Engineering Manager for assessment and approval prior to the issue of the Occupation Certificate. Below standard work must either be replaced or repaired to Councils satisfaction prior to the issuing of the Occupation Certificate.

107 Completion of Engineering Works

The completion of all engineering works within Council's road reserve or other Council owned or controlled land in accordance with the conditions of this consent and any necessary work to make the construction effective must be to the satisfaction of Council's Manager Development Engineering. The total cost of all engineering works shall be fully borne by the applicant/developer and any damage to Council's assets shall be restored in a satisfactory manner, prior to the issue of the Occupation Certificate.

108 A Section 73 Certificate must be submitted to the Principal Certifying Authority prior to occupation of the development/release of the plan of subdivision.

109 Fire Safety Certificate

A Fire Safety Certificate must be issued for the building prior to the issue of an Occupation Certificate. As soon as practicable after a Fire Safety Certificate is issued, the owner of the building to which it relates:

- 109.1 Must cause a copy of the certificate (together with a copy of the current fire safety schedule) to be given to the Commissioner of New South Wales Fire Brigades, and
- **109.2** must cause a further copy of the certificate (together with a copy of the current fire safety schedule) to be prominently displayed in the building.

110 Drainage

The developer must obtain a certificate of Hydraulic Compliance (using Council's M19 form) from a suitably qualified civil engineer, to confirm that all stormwater drainage and on-site detention works have been constructed in accordance with the approved plans. In addition, full works-as-executed plans, prepared and signed by a Registered Surveyor must be submitted. These plans and certification must satisfy all the stormwater requirements stated in Chapter E14 of the Wollongong DCP2009. This information must be submitted to the Principal Certifying Authority prior to the issue of the final Occupation Certificate.

111 Restriction on Use – On-site Detention System

The applicant must create a restriction on use under the Conveyancing Act 1919 over the on-site detention system. The following terms must be included in an appropriate instrument created under the Conveyancing Act 1919 for approval of Council:

"The registered proprietor of the lot burdened must not make or permit or suffer the making of any alterations to any on-site stormwater detention system on the lot(s) burdened without the prior consent in writing of the authority benefited. The expression 'on-site stormwater detention system' shall include all ancillary gutters, pipes, drains, walls, kerbs, pits, grates, tanks, chambers, basins and surfaces designed to temporarily detain stormwater as well as all surfaces graded to direct stormwater to those structures.

Name of the authority having the power to release, vary or modify the restriction referred to is Wollongong City Council."

The instrument, showing the restriction, must be submitted to the Principal Certifying Authority for endorsement prior to the issue of the final Occupation Certificate and the use of the development.

112 Access Certification

Prior to the occupation of the building, the Principal Certifying Authority must ensure that a certificate from an "accredited access consultant" has been issued certifying that the building complies with the requirements of AS 1428.1.

113 **Retaining Wall Certification**

The submission of a certificate from a suitably qualified and experienced structural engineer or civil engineer to the Principal Certifying Authority is required, prior to the issue of the Occupation Certificate or commencement of the use. This certification is required to verify the structural adequacy of the retaining walls and that the retaining walls have been constructed in accordance with plans approved by the Principal Certifying Authority.

114 Occupation Certificate

A Occupation Certificate must be issued by the Principal Certifying Authority prior to occupation or use of the development. In issuing an Occupation Certificate, the Principal Certifying Authority must be satisfied that the requirements of section 6.9 of the Environmental Planning and Assessment Act 1979, have been complied with as well as all of the conditions of the Development Consent.

115 **BASIX**

A final occupation certificate must not be issued unless accompanied by the BASIX Certificate applicable to the development. The Principal Certifying Authority must not issue the final occupation certificate unless satisfied that selected commitments have been complied with as specified in the relevant BASIX Certificate. NOTE: Clause 154B of the Environmental Planning and Assessment Regulation 2000 provides for independent verification of compliance in relation to certain BASIX commitments.

116 **Positive Covenant – On-Site Detention Maintenance Schedule**

A positive covenant shall be created under the Conveyancing Act 1919, requiring the property owner(s) to undertake maintenance in accordance with the Construction Certificate approved On-Site Stormwater Detention System and Maintenance Schedule (application number to be referenced).

The instrument, showing the positive covenant must be submitted to the Principal Certifying Authority for endorsement prior to the issue of the final Occupation Certificate and the use of the development.

117 **On-Site Detention – Structural Certification**

The submission of a certificate from a suitably qualified practising civil and/or structural engineer to the Principal Certifying Authority is required prior to the issue of the final Occupation Certificate. This certification is required to verify the structural adequacy of the on-site detention facility and that the facility has been constructed in accordance with the approved Construction Certificate plans.

118 Bushfire – Compliance Certificate

A Compliance Certificate shall accompany any Occupation Certificate for Bushfire construction works as have been completed, verifying that the development has been constructed in accordance with the relevant Bushfire Attack Level (BAL) requirements of the Development Consent and Construction Certificate.

119 Completion of Landscape Works

The completion of the landscaping works as per the final approved Landscape Plan is required prior to the issue of Occupation Certificate.

Operational Phases of the Development/Use of the Site

120 Residential Storage

Each residential unit shall be allocated storage within the residential storage area provided within the building. The residential storage area shall be appropriately secured and fitted with CCTV surveillance. This requirement shall be reflected on the Construction Certificate plans.

121 Strata Plan Requirements

Should a Strata Plan be prepared for this development in the future, the following matters must be addressed:

- 121.1 Garbage area must be contained within the common area;
- 121.2 Motorbike and bicycle storage areas and visitor car parking must be contained within the common area; and
- 121.3 Appropriate allocation of carparking and storage areas to the dwellings.

122 Clothes Drying on Balconies/Terrace Areas Prohibited

The use of the balconies/terrace areas for the external drying of clothes is strictly prohibited.

123 Loading/Unloading Operations/Activities

All loading/unloading operations are to take place at all times wholly within the confines of the site or within the road reserve under an approved traffic control plan.

124 Maintenance of Inner Protection Area

The Inner Protection Area must be maintained at all times as follows:

- There shall be minimal fine fuel at ground level which could be set alight by a bushfire.
- Use of non combustible ground surfaces such as gravel roads, paved areas, in-ground pools, etc is acceptable.
- · Lawn areas shall be maintained low cut and clear.
- Areas under fences, fence posts, gates and trees shall be raked and kept clear of fine fuel.
- Gutters, roofs and roof gullies shall be kept free of leaves and other debris.
- Verandahs, decks, carports, etc shall not be used to store combustible materials and shall be kept free of leaves and other debris.
- Areas within courtyards shall be maintained free of leaves and other debris.
- Reticulated or bottle gas services shall be installed and maintained in accordance with AS 1596.
- Gas cylinder relief valves shall be directed away from the building and away from any hazardous materials such as firewood, etc.
- Trees may be retained within the IPA where:
 - no part of the tree overhangs within two (2) metres of any building.
 - the canopy is discontinuous such that tree crowns are separated by a minimum of 10 metres where the APZ adjoins tall open forest, open forest or low open forest.
 - the canopy is discontinuous such that tree crowns are separated by a minimum of five
 (5) metres where the APZ adjoins woodland or other vegetation type.
 - they are smooth barked species or, if rough barked, shall be maintained free of decorticating bark and other ladder fuels (rough barked species are not encouraged).
 - o a well-watered and maintained vegetable garden may be located within the IPA.
 - no part of a tree shall be closer to a power line than the distances set out in the current edition of "Planning for Bush Fire Protection".
 - the use of local native plants with features that minimise the extent to which they contribute to the spread of bush fires is encouraged within the above constraints.



19 October 2018

The General Manager Wollongong City Council Post Locked Bag 8821 Wollongong DC NSW 2500

ATTENTION: Rodney Thew

Dear Sir/Madam

STATE ENVIRONMENTAL PLANNING POLICY (INFRASTRUCTURE) 2007 DEVELOPMENT APPLICATION – DA2017 /1759 – Construction of apartments at 141 Darkes Road, Kembla Grange

I refer to Council's letter requesting RailCorp's concurrence for the above development application in accordance with Clause 84 of the above SEPP.

As of 1 July 2014 the property functions of RailCorp have been transferred to Sydney Trains. Whilst RailCorp still exists as the legal land owner of the rail corridor, its concurrence function under the above SEPP has been delegated to Sydney Trains.

As such, Sydney Trains now advises that the proposed development has been assessed in accordance with the requirements of Clause 84 being:

- any rail safety or operational issues associated with the aspects of the development, and
- b) the implications of the development for traffic safety including the cost of ensuring an appropriate level of safety, having regard to existing traffic and any likely change in traffic at level crossings as a result of the development.

In this regard, Sydney Trains has taken the above matters into consideration and has decided to grant its concurrence to the development proposed in development application DA2017/1759 subject to Council imposing the operational conditions listed in Attachment A.

Should Council choose not to impose the conditions in Attachment A (as written), then concurrence from Sydney Trains has not been granted to the proposed development.

In the event that this development proposal is the subject of a Land and Environment Court appeal, Council's attention is drawn to Section 8.12 of the Environmental Planning and Assessment Act 1979 which requires Council to give notice of that appeal to a concurrence authority. Sydney Trains therefore requests that Council comply with this requirements should such an event occur.





Please contact Gurvinder Singh on 92191970 should you wish to discuss this matter. Sydney Trains requests that a copy of the Notice of Determination and conditions of consent be forwarded to Sydney Trains.

You's sinderely John Camarda Executive Manager **Commercial Property**



Sydney Trains is a NSW Government agency Ground Floor - East 36-46 George Street, Burwood NSW 2134 - PO Box 459 Burwood NSW 1805 Phone 8575 0780 Email DA_sydneytrans@transport.nsw.gov au www.transport.nsw.gov.aw/sydneytrans_ABN 38 284 779 682



Attachment A

- During all stages of the development, extreme care shall be taken to prevent any form of
 pollution (including dust) entering the railway corridor. Any form of pollution that arises
 as a consequence of the development activities shall remain the full responsibility of the
 Applicant.
- During all stages of the development extreme care shall be taken to prevent environmental harm within the railway corridor. Any form of environmental harm to areas within the railway corridor or legislative non-compliance that arises as a consequence of the development activities shall remain the full responsibility of the Applicant.

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Endeavour Energy—email dated 11 January 2018

The General Manager

Wollongong City Council

ATTENTION: Rodney Thew

Dear Sir or Madam

I refer to Council's letter of 4 January 2018 regarding Development Application DA2017/1759 at 141 Darkes Road, KEMBLA GRANGE NSW 2526 (Lot 1 DP 770451) for 'Demolition of existing structures and tree removals. Construction of a residential flat development and associated infrastructure comprising six (6) separate apartment blocks containing a total of 124 apartments across four(4) levels'. Submissions need to be made to Council by 25 January 2018.

As shown in the below site plan from Endeavour Energy's G/Net master facility model there are:

- No easements over the site benefitting Endeavour Energy (easements are indicated by red hatching).
- 33,000 volt/33 kV high voltage overhead power lines and overhead earthing cables and pilot cables (carrying protection signals or communications between substations) to the West Dapto Road road verge/roadway.
- Low voltage overhead service conductors to the customer connection point on the existing dwelling/structures to the Darkes Road road verge/roadway.

Please note the location, extent and type of any electricity infrastructure, boundaries etc. shown on the plan is indicative only. Generally (depending on the scale and/or features selected), low voltage (normally not exceeding 1,000 volts) is indicated by blue lines and high voltage (normally exceeding 1,000 volts but for Endeavour Energy's network not exceeding 132,000 volts / 132 kV) by red lines (these lines can appear as solid or dashed). This plan is not a 'Dial Before You Dig' plan under the provisions of Part 5E 'Protection of underground electricity power lines' of the Electricity Supply Act 1995 (NSW).

Subject to the following recommendations and comments, Endeavour Energy has no objection to the Development Application.

Network Capacity/Connection

Endeavour Energy has noted the following in the Statement of Environmental Effects:

6.7 Part 7 Local Provisions- General

Clause 7.1 Public Utility Infrastructure

The objective of this clause is to ensure that sufficient infrastructure is available to service development, the accompanying Utility Service Infrastructure report prepared by KFW shows the location of existing infrastructure in relation to the subject site and confirms the following:

The Utility Service Infrastructure report contains the following:

```
    d. Electricity
Figure 5 shows the location of Endeavour Energy infrastructure in West Dapto Road
and Darkes Road.
    Electricity is available to the site.
    Detail design of the electrical servicing of the site can be undertaken as part of the
construction certificate documentation. The need or otherwise for a site specific
transformer can be determined at this time.
    Council's standard condition in relation to electricity connection can address this
issue.
    It is noted that the existing dwelling is currently connected to the existing Endeavour
Energy overhead mains in Darkes Road.
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The availability of electricity supply to the site is based on a wide range of factors eg. the age and design of the network; other development in the locality utilising previously spare capacity within the local network; the progress of nearby / surrounding sites including electricity infrastructure works eg. a smaller and isolated development that may not of its own accord require a substation to meet the load but due to the foregoing factors, a substation may still be required to facilitate the development and from which the spare capacity is made available to subsequent nearby development. Older/above

ground areas of the network utilising pole mounted substations (indicated by the symbol On the site plan from Endeavour Energy's G/Net master facility model) have comparatively limited capacity of 25 kilovolt amperes (kVA) up to a maximum of 400 kVA where as a newer padmount substation can accommodate loads from 315 kVA up to 1,500 kVA.

Although Endeavour Energy plans for the expansion and augmentation of its electrical network, applicants should not automatically assume that the existence of the electricity network or an existing low voltage service conductor/customer connection to a site means that adequate supply is immediately available to facilitate their proposed development. Given the size of the proposed development (124 apartments), at present it is expected the existing local network would not be able to service the proposed development ie. an extension and/or augmentation of the existing network will be required. Endeavour Energy's preference is to alert proponents/applicants (and Council) of the potential matters that may arise as further rezoning and development of non-urban areas continues to occur.

In due course the applicant for the future proposed development of the site will need to submit an application for connection of load via Endeavour Energy's Network Connections Branch to carry out the final load assessment and the method of supply will be determined. The padmount or indoor/chamber substation/s required to service the proposed development will need to be located within the property (in a suitable and accessible location) and be protected (including any associated cabling) by an easement and associated restrictions benefiting and gifted to Endeavour Energy. Please refer to Endeavour Energy's Mains Design Instruction MDI 0044 'Easements and Property Tenure Rights'. Further details are available by contacting Endeavour Energy's Network Connections Branch via Head Office enquiries on telephone: 133 718 or (02) 9853 6666 from 8am - 5:30pm or on Endeavour Energy's website under 'Home > Residential and business > Connecting to our network' via the following link:

http://www.endeavourenergy.com.au/

Advice on the electricity infrastructure required to facilitate the proposed development can be obtained by submitting a Technical Review Request to Endeavour Energy's Network Connections Branch, the form for which FPJ6007 is attached and further details (including the applicable charges) are available from Endeavour Energy's website under 'Our connection services'. The response to these enquiries is based upon a desktop review of corporate information systems, and as such does not involve the engagement of various internal stakeholders in order to develop a 'Connection Offer'. It does provide details of preliminary connection requirements which can be considered by the applicant prior to lodging a formal application for connection of load.

Alternatively the applicant should engage a Level 3 Accredited Service Provider (ASP) approved to design distribution network assets, including underground or overhead. The ASP scheme is administered by NSW Trade & Investment and details are available on their website via the following link or telephone 13 77 88:

http://www.resourcesandenergy.nsw.gov.au/energy-supply-industry/pipelines-electricity-gas-networks/networkconnections/contestable-works

Endeavour Energy has noted that as shown in the following extract of the Site Plan provision has been made for a 'Possible Substation Location' to the Darkes Road frontage of the site.



The fact that provision is being made for the substation is a positive. From Endeavour Energy's perspective, rather than being too specific in regards to the detailed design of the substation at this stage a note on the drawing referring to Endeavour Energy's Mains Design Instruction MDI 0044 'Easements and Property Tenure Rights' should suffice. Endeavour Energy's general requirements is for a padmount substation easement to have a minimum size of 2.75 x 5.5 m and also have the additional restrictions for fire rating (and possibly swimming pools and spas which in this instance does not appear to be applicable) which should not affect any adjoining property, be at ground level and have direct access from a public street. Generally it is the Level 3 ASP responsibility (engaged by the developer) to make sure that the substation location and design complies with Endeavour Energy's standards the suitability of access, safety clearances, fire ratings, flooding etc. As a condition of the Development Application consent Council should request the submission of documentary evidence from Endeavour Energy confirming that satisfactory arrangements have been made for the connection of electricity and the design requirements for the substation, prior to the release of the Construction Certificate/commencement of works.

As the site is in Zone R3 Medium Density Residential, the site is subject to Endeavour Energy Underground Residential Distribution (URD) policy. Endeavour Energy's Company Policy 9.2.5 'Network Asset Design', includes the following 'Key Requirements' for electricity connections to new residential subdivisions:

5.16 Reticulation policy

5.16.1 Distribution reticulation

In order to improve the reliability performance of and to reduce the operating expenditure on the network over the long term the company has adopted the strategy of requiring new lines to be either underground cables or where overhead is permitted, to be predominantly of covered or insulated construction.

5.16.2 Urban areas

Reticulation of new residential subdivisions will be underground. In non-bushfire prone areas, new lines within existing overhead areas can be overhead, unless underground lines are cost justified or required by local council.

Extensions to the existing overhead 11kV/22kV network must generally be underground.

An 'urban' area is any area that is not a 'rural land zoning'. As a guide, residential lots of greater than 4,000 square metres are regarded as 'non-urban'.

• Bushfire

Endeavour Energy has noted that the Statement of Environmental Effects indicates 'The land is recorded as **Bushfire Prone Land**'. The Bushfire Hazard Risk Assessment & Compliance Report contains the following recommendation:

7.4 Gas and Electricity Supply Recommendations

Intent of Bushfire Protection Measures (PBP 2006): 'To locate gas and electricity so as not to contribute to the risk of fire to a building'.

RECOMMENDATION 4;

That gas and electrical supply connections servicing future proposed building development within the

site are designed & located in accordance with PBP, including:

· Electrical transmission lines are located underground.

NSW Rural Fire Service 'Planning for Bush Fire Protection 2006' provides the following advice:

 Electricity Services location of electricity services limits the possibility of ignition of surrounding bushland or the fabric of buildings where overhead electrical transmission lines are propo- lines are installed with short pole spacing (30 metr unless crossing gullies, gorges or riparian areas; a no part of a tree is closer to a power line than the set out in accordance with the specifications in Version 	
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	osed: res), and distance getation
 regular inspection of lines is undertaken to ensure they are not fouled by branches. Safety Clearances issued by Energy Australia (NS1 April 2002). 	79,

The following is an extract of Endeavour Energy's Company Policy 9.1.1 Bushfire Risk Management:

9.1.1 BUSHFIRE RISK MANAGEMENT

1.0 POLICY STATEMENT

The company is committed to the application of prudent asset management strategies to reduce the risk of bushfires caused by network assets and aerial consumer mains to as low as reasonably practicable (ALARP) level. The company is also committed to mitigating, the associated risk to network assets and customer supply reliability during times of bushfire whilst achieving practical safety, reliability, quality of supply, efficient investment and environmental outcomes. The company is committed to compliance with relevant acts, regulations and codes.

Accordingly the network required to service the proposed development must be fit for purpose and meet the technical specifications, design, construction and commissioning standards based on Endeavour Energy's risk assessment associated with the implementation and use of the network connection / infrastructure for a bushfire prone site. In assessing bushfire risk, Endeavour Energy has traditionally focused on the likelihood of its network starting a bushfire, which is a function of the condition of the network. Risk control has focused on reducing the likelihood of fire ignition by implementing good design and maintenance practices. However safety risks associated with the loss of electricity supply are also considered.

Safety Clearances

Any future proposed buildings, structures, etc. must comply with the minimum safe distances / clearances for voltages up to and including 132,000 volts (132kV) as specified in AS/NZS 7000:2010 'Overhead line design - Detailed procedures' and the 'Service and Installation Rules of NSW'. Different voltages are kept at different heights, the higher the voltage, the higher the wires are positioned on the pole. Similarly, the higher the voltage, the greater the required building setback. These distances must be maintained at all times to all buildings and structures ie. including temporary site sheds, tower cranes used during construction etc. and regardless of the Council's allowable building setbacks etc. under its development controls, allowance must be made for the retention of appropriate / safe clearances. As a guide please find attached a copy of Endeavour Energy Drawing 'Overhead Lines Minimum Clearances Near Structures'.

Even if there is no issue with the safety clearances to the building, ordinary persons must maintain a minimum safe approach distance of 3.0 metres to all voltages up to and including 132,000 volts / 132 kV (and a distance of 4.0 metres for the erection and dismantling of scaffolding). For future access and maintenance of buildings and structures, in order to avoid the need to work within the safe approach distances for ordinary persons (which requires an authorised or instructed person with technical knowledge or sufficient experience to perform the work required and a safety observer for operating plant) or possibly an outage request and/or erection of a protective hoarding, the retention of adequate building setbacks and/or suitable building design eg. not having parts of the building normally accessible to persons in close proximity of the overhead power lines, the use of durable /

low maintenance finishes to reduce the need to access areas within the safe approach distances, is recommended. Alternatively, in some instances the adoption of an underground solution may be warranted.

The Statement of Environmental Effects indicates that Block A is set back a minimum of 5.4m from West Dapto Road. However with the erection of scaffolding and depending on the proximity of the overhead power lines to the boundary, consideration may need to be given to the 'Work Near Overhead Power Lines Code of Practice 2006', Section 6.5 'Control measures for erection and dismantling of scaffolding near overhead power lines up to and including 33kV' an extract of which follows:

6.5 Control measures for the erection and dismantling of scaffolding near overhead power lines up to and including 33kV



Note: End protection omitted for clarity

Figure 10 - A 4 metre approach distance applies in any direction where metallic scaffold is erected, used or dismantled near overhead power lines.

Prudent Avoidance

The electricity network is operational 24/7/365 ie. all day, every day of the year. The electricity industry has adopted a policy of prudent avoidance by doing what can be done without undue inconvenience and at modest expense to avert the possible risk to health from exposure to emissions form electricity infrastructure such as electric and magnetic fields (EMF) and noise which generally increase the higher the voltage ie. Endeavour Energy's network ranges from low voltage (normally not exceeding 1,000 volts) to high voltage (normally exceeding 1,000 volts but not exceeding 132,000 volts / 132 kV). In practical terms this means that when designing new transmission and distribution facilities, consideration is given to locating them where exposure to the more sensitive uses is reduced and increasing separation distances. These emissions are generally not an issue but with new development occurring within closer proximity of electricity infrastructure, there is a potential increase in sensitivity. Where development is proposed in the vicinity of electricity infrastructure, Endeavour Energy is not responsible for any amelioration measures for such emissions that may impact on the nearby proposed development.

Please find attached a copy of ENA's 'Electric & Magnetic Fields – What We Know, January 2014' which can also be accessed via the ENA's website at <u>http://www.ena.asn.au/</u> and provides the following advice:

Localised EMFs may also be encountered in specific situations such as near substations, underground cables, specialised electrical equipment, or at elevated locations near lines. Note that the strengths of EMFs decrease rapidly with distance from the source.

Typical magnetic field measurements associated with Endeavour Energy's activities and assets given the required easement widths, safety clearances etc. and having a maximum voltage of 132,000 volts / 132 kV, will not exceed the recommended magnetic field public exposure limits.

Endeavour Energy believes that likewise applicants (and Council) should also adopt a policy of prudent avoidance by the siting of more sensitive uses away from any electricity infrastructure.

Earthing

The construction of any building or structure (including fencing, signage, flag poles etc.) that is connected to or in close proximity to Endeavour Energy's electrical network is required to comply with AS/NZS 3000:2007 'Electrical installations' to ensure that there is adequate connection to the earth. Inadequate connection to the earth places persons and the electricity network at risk.

Vegetation Management

The planting of large trees in the vicinity of electricity infrastructure is not supported by Endeavour Energy. Suitable planting needs to be undertaken in proximity of electricity infrastructure. Only low growing shrubs not exceeding 3.0 metres in height, ground covers and smaller shrubs, with non-invasive root systems are the best plants to use. Larger trees should be planted well away from electricity infrastructure (at least the same distance from overhead power lines as their potential full grown height) and even with underground cables, be installed with a root barrier around the root ball of the plant. Landscaping that interferes with electricity infrastructure may become a potential safety risk, cause of bush fire, restrict access or result in the interruption of supply. Such landscaping may be subject to Endeavour Energy's Vegetation Management program and/or the provisions of the *Electricity Supply Act 1995* (NSW) Section 48 'Interference with electricity works by trees' by which under certain circumstances the cost of carrying out such work may be recovered.

Endeavour Energy has noted that as shown in the following extracts of the Landscape Plan the proposed planting of trees to the West Dapto road verge in proximity of the 33 kV high voltage overhead power lines. Whilst the Indicative Planting Schedule does not indicate the mature height or spread of the trees, Endeavour Energy is opposed to the planting of trees in close proximity of the overhead power lines eg. Blueberry Ash and Water Gum can grow over 15m tall.



In regards to the 'Possible Substation Location', please also find attached for the applicant's reference a copy Endeavour Energy's 'Guide to Fencing and Maintenance Around Padmount Substations'.

Dial before You Dig

Before commencing any underground activity the applicant is required to obtain advice from the **Dial before You Dig 1100** service in accordance with the requirements of the <u>Electricity Supply Act</u> <u>1995</u> (NSW) and associated Regulations. This should be obtained by the applicant not only to identify the location of any underground electrical and other utility infrastructure across the site, but also to identify them as a hazard and to properly assess the risk.

Demolition

Demolition work is to be carried out in accordance with Australian Standard AS 2601—2001: 'The demolition of structures'. All electric cables or apparatus which are liable to be a source of danger, other than a cable or apparatus used for the demolition works shall be disconnected ie. the existing customer service lines will need to be isolated and/or removed during demolition. Appropriate care must be taken to not otherwise interfere with any electrical infrastructure on or in the vicinity of the site eg. street light columns, power poles, overhead power lines and underground cables etc.

• Public Safety

Workers involved in work near electricity infrastructure run the risk of receiving an electric shock and causing substantial damage to plant and equipment. I have attached Endeavour Energy's public safety training resources, which were developed to help general public / workers to understand why you may be at risk and what you can do to work safely. The public safety training resources are also available via Endeavour Energy's website via the following link:

http://www.endeavourenergy.com.au/wps/wcm/connect/ee/nsw/nsw+homepage/communitynav/safety/safety+broc hures

• Emergency Contact

In case of an emergency relating to Endeavour Energy's electrical network, the applicant should note the Emergencies Telephone is 131 003 which can be contacted 24 hours/7 days.

I appreciate that not all the foregoing issues may be directly relevant or significant to the Development Application. However, Endeavour Energy's preference is to alert proponents / applicants of the potential matters that may arise should development within closer proximity of the existing and/or proposed electricity infrastructure required to facilitate the proposed development on or in the vicinity of the site occur.

Could you please pass on the attached resources to the applicant? Should you wish to discuss this matter, or have any questions, please do not hesitate to contact me or the contacts identified above in relation to the various matters. As I am working on different projects across the company's franchise area, to ensure a response contact by email is preferred.

Yours faithfully

Cornelis Duba

Development Application Review

Network Environment & Assessment

T: 9853 7896

E: cornelis.duba@endeavourenergy.com.au

51 Huntingwood Drive, Huntingwood NSW 2148

www.endeavourenergy.com.au





Sydney Water—email dated 8 August 2018

Dear Sir/Madam,

Thank you for notifying Sydney Water of the proposed development listed above. We have reviewed the proposal and can provide the following comments for your consideration.

Due to the proximity of the proposed development to Sydney Water assets, we recommend that Council imposing the following conditions of consent:

Building Plan Approval

The approved plans must be submitted to the Sydney Water <u>Tap in[™]</u> online service to determine whether the development will affect any Sydney Water sewer or water main, stormwater drains and/or easement, and if further requirements need to be met.

The Sydney Water Tap in[™] online self-service replaces our Quick Check Agents as of 30 November 2015.

The <u>Tap in[™]</u> service provides 24/7 access to a range of services, including:

- building plan approvals
- connection and disconnection approvals
- diagrams
- trade waste approvals
- pressure information
- water meter installations
- pressure boosting and pump approvals
- changes to an existing service or asset, e.g. relocating or moving an asset.

Sydney Water's <u>Tap in™</u> online service is available at:

https://www.sydneywater.com.au/SW/plumbing-building-developing/building/sydney-water-tap-in/index.htm

Section 73 Certificate

A Section 73 Compliance Certificate under the Sydney Water Act 1994 must be obtained from Sydney Water

It is recommended that applicants apply early for the certificate, as there may be water and sewer pipes to be built and this can take some time. This can also impact on other services and building, driveway or landscape design.

Application must be made through an authorised Water Servicing Coordinator. For help either visit <u>www.sydneywater.com.au</u> > Plumbing, building and developing > Developing > Land development or telephone 13 20 92.

If you require any further information, please contact the Growth Planning and Development Team at <u>urbangrowth@sydneywater.com.au</u>.

Kind Regards,

Growth Planning & Development Team



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All communications to be addressed to:

Headquarters 15 Carter Street Lidcombe NSW 2141

Telephone: 1300 NSW RFS e-mail: records@rfs.nsw.gov.au Headquarters Locked Bag 17 Granville NSW 2142



Facsimile: 8741 5433

The General Manager Wollongong City Council Locked Bag 8821 WOLLONGONG DC NSW 2500

Your Ref: DA-2017/1759 Our Ref: D18/136 DA18011111258 AJ

ATTENTION: Rodney Thew

24 August 2018

Dear Sir

Development Application - 141 Darkes Road Kembla Grange 2526

I refer to your correspondence dated 25 May 2018 seeking advice regarding bush fire protection for the above Development Application in accordance with Clause 55(1) of the Environmental Planning and Assessment Regulation 2000.

The New South Wales Rural Fire Service (NSW RFS) has considered the information submitted and provides the following recommended conditions:

 The development proposal is to generally comply with the site plan prepared by adm Architects numbered 2016-14 A-03 Issue D, dated August 2018.

Asset Protection Zones

The intent of measures is to provide sufficient space and maintain reduced fuel loads so as to ensure radiant heat levels of buildings are below critical limits and to prevent direct flame contact with a building. To achieve this, the following conditions shall apply:

2. At the commencement of building works and in perpetuity the entire property, apart from areas of EEC and the Deep Soil Zone, shall be managed as an inner protection area (IPA) as outlined within section 4.1.3 and Appendix 5 of 'Planning for Bush Fire Protection 2006' and the NSW Rural Fire Service's document 'Standards for asset protection zones'.

Water and Utilities

The intent of measures is to provide adequate services of water for the protection of buildings during and after the passage of a bush fire, and to locate gas and electricity so as not to contribute to the risk of fire to a building. To achieve this, the following conditions shall apply:

ID:111258/107090/5

 Water, electricity and gas are to comply with the following requirements of section 4.1.3 of 'Planning for Bush Fire Protection 2006'.

Access

The intent of measures for public roads is to provide safe operational access to structures and water supply for emergency services, while residents are seeking to evacuate from an area. To achieve this, the following conditions shall apply:

 Public road access shall comply with section 4.1.3 (1) of 'Planning for Bush Fire Protection 2006'.

The intent of measures for internal roads is to provide safe operational access for emergency services personnel in suppressing a bush fire, while residents are accessing or egressing an area. To achieve this, the following conditions shall apply:

 Internal road shall comply with section 4.2.7 of 'Planning for Bush Fire Protection 2006'.

Design and Construction

The intent of measures is that buildings are designed and constructed to withstand the potential impacts of bush fire attack. To achieve this, the following conditions shall apply:

- Block B shall comply with Sections 3 and 5 (BAL 12.5) Australian Standard AS3959-2009 'Construction of buildings in bush fire-prone areas' or NASH Standard (1.7.14 updated)'National Standard Steel Framed Construction in Bushfire Areas – 2014' as appropriate and section A3.7 Addendum Appendix 3 of 'Planning for Bush Fire Protection 2006'.
- Blocks A, C, D and E shall comply with section 3 and section 7 (BAL 29) Australian Standard AS3959-2009 'Construction of buildings in bush fire-prone areas' or NASH Standard (1.7.14 updated) 'National Standard Steel Framed Construction in Bushfire Areas – 2014' as appropriate and section A3.7 Addendum Appendix 3 of 'Planning for Bush Fire Protection' 2006'.

Landscaping

 Landscaping to the site is to comply with the principles of Appendix 5 of 'Planning for Bush Fire Protection 2006'.

This letter is in response to a further assessment of the application submitted and supersedes our previous advice regarding bush fire protection dated 20 February 2018. Should you wish to discuss this matter please contact Anna Jones on 1300 NSW RFS.

Yours sincerely

4

Martha Dotter A/Team Leader Development Assessment & Planning

For general information on bush fire protection please visit www.rfs.nsw.gov.au