

**10.1.13.ECDEV - 25/11/19 - DA196/18 Proposed 1 Lot into 32 Lot Subdivision and Draft Planning Agreement, 111 Ian Holt Drive Lidsdale**

**Report by** Director of Economic Development & Environment

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**Summary**

To assess and recommend determination of Development Application DA196/18 and to seek endorsement of the Draft Voluntary Planning Agreement for a proposed subdivision of 1 lot into 32 lots on land known as Lot 2 DP 574754, 'Woodlands' 111 Ian Holt Drive Lidsdale NSW 2790.

**Commentary**

The proposal is to development 32 residential allotments with 2 new public roads. The property contains an area of 11.31ha with all proposed lots to be equal or greater than 2000m<sup>2</sup>. The development proposes to construct two new roads off Ian Holt Drive to service the new lots. No lots are proposed to gain access from Maddox Lane. The development is proposed to be undertaken in 3 stages, that being:

- Stage 1 – creation of Lot 1,
- Stage 2 – creation of Lots 2 to 8 and construction of part subdivision road 1 to provide access to Lot 3 and subdivision road 2, and
- Stage 3 – creation of Lots 9 to 32 and construction of remaining subdivision road 1.

An existing heritage cottage and outbuildings are located on the Western side of the property and the subdivision is designed to adjoin Ian Holt Drive with the existing driveway to remain.

The applicant proposed an offer for a Voluntary Planning Agreement for the following:

- \$3,000 per allotment to go towards community facilities and public open space.

A Draft Planning Agreement has now been prepared for endorsement so the required public notification process may proceed.

**NOTIFICATION**

The proposal was sent to surrounding landowners and placed on public display in Council's Administration Building on two occasions. During the first notification period 5 submissions were received. Due to the plans being amended during the assessment process, the application was re-advertised with one additional submission received. Details of these submissions are outlined in the attached Planning Assessment report along with comments from both the Applicant and Council's assessing officer.

**DISCUSSION AND CONCLUSIONS**

The proposal is considered to generally comply with the relevant provisions of the applicable Planning controls. The proposal is not considered likely to have any significant negative impacts upon the environment or upon the amenity of the locality. As such it is recommended that development consent is issued subject to the conditions outlined in the attached assessment report and the draft Voluntary Planning Agreement be endorsed for public exhibition.

**Policy Implications**

Policy 1.2 Acquisition and Disposal of Assets

This Policy needs to be considered when Council is considering the acquisition and/or development of assets. This Development Application proposes to construct bio-retention basins,

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stormwater infrastructure and roads. The open space/drainage reserves and the new road networks will be dedicated to Council as an asset as part of the Subdivision Certificate release process.

Council's Director of Infrastructure Services has advised that these assets satisfy the criteria identified within this Policy. The developer will be required to construct the assets to Council's specifications prior to a maintenance period and subsequent dedication if the development is approved.

**Policy 7.1 Filling and Levelling of Land**

*Unless otherwise provided by an Environmental Planning Instrument or Development Control Plan, a development application be required in the following circumstances:*

1. *Where land is subject to inundation by floodwaters, or*
2. *Where excavation or the depth of fill exceeds 900mm.*

*Separate development applications are not required where the cut and/or fill is identified in a development application for a structure on the land.*

The development proposes earthworks to be undertaken for the two new road networks, water and sewer connections and drainage works. These are included as part of the development application.

**Policy 7.2 Subdivision – Release Of Subdivision Plans**

The proposed development, being for a subdivision, will require compliance with this policy as part of the Subdivision Certificate release.

**Policy 7.5 Notification Of Development Applications**

The development is not classified as being exempt under Council's Notification Policy. Therefore the following clause applies:

5.3 Certain types of development will be notified to adjoining landowners as well as the wider neighbourhood, and in some circumstances for 21 days, as indicated in the following table:

<b>Type of Development Proposed</b>	<b>Minimum Required Notification (Surrounding Landowners)</b>	<b>Period</b>
Subdivisions, for more than 10 lots, on land zoned land zoned R1, R2, R5 and RU5	6 either side of the subject site, 6 at the rear and 6 opposite the site	21 days

The proposal was notified to surrounding landowners and placed on display for a period of 21 days on two occasions.

**Policy 7.10 Voluntary Planning Agreements**

A Voluntary Planning Agreement (VPA) has been negotiated with the developer in accordance with Section 7.4 of the *Environmental Planning & Assessment Act 1979* in relation to this proposal. The VPA has been drafted as per the Policy and will be advertised appropriately for compliance.

The developer has agreed to make a contribution of \$3,000.00 per lot to go towards community facilities and open space.

The applicant has provided the following justification:

*There is an existing park and recreation area only 250m in a straight line from the subject land on Wolgan Road that includes playground equipment, toilets and tennis courts. This is well within easy access distance from the subject land.*

*The nature of the lots is such that due to the larger size, the residents are likely to recreate on their own land rather than seek open space areas in Lidsdale.*

*They are also likely to travel to Lithgow to take part in organised sport etc.*

*It is noted that where Council has entered into voluntary planning agreements with other applicants, these have generally related to much higher density residential subdivisions in Lithgow. This subdivision provides for a much lower density (zoned R5 Large Lot Residential) and accordingly the nexus as outlined here is not the same and accordingly the rate suggested is not considered reasonable.*

*Accordingly, the applicant is prepared to enter into a voluntary planning agreement at an amount \$3,000 per lot to go towards community facilities and public open space, which is considered more appropriate in the situation.*

Council Officers concur with the justification submitted above and recommend that the applicant pays a contribution of \$3,000 per lot to go towards community facilities and open space.

### **Financial Implications**

- Budget approved - N/A
- Cost centre - N/A
- Expended to date - N/A
- Future potential impact - The endorsement of a Voluntary Planning Agreement will assist Council to provide facilities which will be of benefit towards a public purpose.

### **Legal and Risk Management Implications**

In determining a development application, a consent authority is required to take into consideration the matters of relevance under Section 4.15 of the Environmental Planning and Assessment Act 1979.

The legislative basis for the Planning Agreement is incorporated in the *Environmental Planning and Assessment Act 1979* (EP&A Act) (Section 7.4 – 7.10) and the *Environmental Planning and Assessment Regulations 2000* (Clauses 25B – 25H). Section 7.5 of the EP&A Act provides that public notice must be given of a proposed Planning Agreement for at least 28 days before it can be entered into.

### **Attachments**

1. Section 4.15 Report- DA196/18 Proposed 32 lot subdivision - Ian Holt Drive [**10.1.13.1** - 70 pages]
2. DA196/18 Plan [**10.1.13.2** - 1 page]
3. VPA Final [**10.1.13.3** - 9 pages]

### **Recommendation**

#### **THAT**

1. The Development Application DA196/18 be **APPROVED** subject to conditions on the consent as shown in the attached Section 4.15 report.
2. A **DIVISION** be called in accordance with the requirements of Section 375A(3) of the Local Government Act, 1993.
3. Council endorse the Draft Voluntary Planning Agreement proposed for DA196/18 being for \$3,000 per residential lot to go toward community facilities and open space.
4. The Draft Voluntary Planning Agreement for DA196/18 be placed on public exhibition for a period of 28 days.

## **DEVELOPMENT ASSESSMENT REPORT – DA196/18 – PROPOSED SUBDIVISION 1 LOT INTO 32, 'WOODLANDS' 111 IAN HOLT DRIVE LIDSDALE NSW 2790**

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### **1. PROPOSAL**

Council is in receipt of a Development Application DA196/18 for a subdivision of 1 lot into 32 lots at 'Woodlands' 111 Ian Holt Drive Lidsdale.

The proposal is to development 32 residential allotments with 2 new public roads.

The property contains an area of 11.31ha with all proposed lots to be equal or greater than 2000m<sup>2</sup>. The development proposes to construct two new roads off Ian Holt Drive to service the new lots. No lots are proposed to gain access from Maddox Lane.

The development is proposed to be undertaken in 3 stages, that being:

- Stage 1 – creation of Lot 1,
- Stage 2 – creation of Lots 2 to 8 and construction of part subdivision road 1 to provide access to Lot 3 and subdivision road 2, and
- Stage 3 – creation of Lots 9 to 32 and construction of remaining subdivision road 1.

An existing heritage cottage and outbuildings is located on the Western side of the property and is designed to adjoin Ian Holt Drive with the existing driveway to remain. The topography of the land is undulating with the highest point located towards the south eastern boundary. The property contains farm dams and adjoins the Coxs River in the North Western corner. The property is relatively clear with scattered pine trees to the south west.

The "Woodlands" dwelling is shown in the picture below:



### **2. SUMMARY**

To assess and recommend determination of DA196/18. Recommendation will be for approval subject to conditions.

### 3. LOCATION OF THE PROPOSAL

Legal Description: Lot 2 DP 574754  
Property Address: 'Woodlands' 111 Ian Holt Drive Lidsdale NSW 2790

**4. ZONING:** The land is zoned R5 Large Lot Residential in accordance with Council's current planning instrument, being Lithgow Local Environmental Plan (LEP) 2014.

**5. PERMISSIBILITY:** The development being a 'subdivision' is considered permissible under Lithgow Local Environmental Plan 2014, subject to development consent as per Clause 4.1 below.

#### **4.1 Minimum subdivision lot size**

(1) *The objectives of this clause are as follows:*

- (a) *to minimise the cost to the community of:*
  - (i) *fragmented and isolated development of rural land, and*
  - (ii) *providing, extending and maintaining public amenities and services,*
- (b) *to ensure that the character and landscape setting of an area is protected and enhanced by any development,*
- (c) *to promote development on appropriately sized lots and to ensure access to available essential services.*
- (2) *This clause applies to a subdivision of any land shown on the Lot Size Map that requires development consent and that is carried out after the commencement of this Plan.*
- (3) *The size of any lot resulting from a subdivision of land to which this clause applies is not to be less than the minimum size shown on the Lot Size Map in relation to that land.*

The minimum allotment size shown on the Lot Size Map is 2000m<sup>2</sup>. The proposal is for a 32 lot subdivision with the lots ranging between 2000m<sup>2</sup> and 1.003ha. All of the proposed lots would be connected to Council's sewer services and consist of residential dwellings surrounding the property.

The development is permissible in the zone and complies with Clause 4.1 above.

### 5.1 POLICY IMPLICATIONS (OTHER THAN DCP's)

#### **Policy 1.2 Acquisition and Disposal of Assets**

This Policy needs to be considered when Council is considering the acquisition and/or development of assets. This Development Application proposes to construct stormwater infrastructure and two new roads. The drainage reserves and the new road networks will be dedicated to Council as an asset as part of the Subdivision Certificate release process.

The developer will be required to construct the assets to Council's specifications prior to a maintenance period and subsequent dedication if the development is approved.

#### **Policy 7.1 Filling and Levelling of Land**

*Unless otherwise provided by an Environmental Planning Instrument or Development Control Plan, a development application be required in the following circumstances:*

- 1. Where land is subject to inundation by floodwaters, or*
- 2. Where excavation or the depth of fill exceeds 900mm.*

*Separate development applications are not required where the cut and/or fill is identified in a development application for a structure on the land.*

The development proposes earthworks to be undertaken for the two new road networks, water and sewer connections and drainage works. These are included as part of the development application.

**Policy 7.2 Subdivision – Release Of Subdivision Plans**

The proposed development, being for a subdivision, will require compliance with this policy as part of the Subdivision Certificate release.

**Policy 7.5 Notification Of Development Applications**

The development is not classified as being exempt under Council’s Notification Policy. Therefore the following clause applies:

5.3 Certain types of development will be notified to adjoining landowners as well as the wider neighbourhood, and in some circumstances for 21 days, as indicated in the following table:

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The proposal was notified to surrounding landowners and placed on display for a period of 21 days. As the plans were amended during the assessment process, a second notification period was undertaken for an additional 21 days.

**Policy 7.10 Voluntary Planning Agreements**

A Voluntary Planning Agreement (VPA) has been negotiated with the developer in accordance with Section 7.4 of the *Environmental Planning & Assessment Act 1979* in relation to this proposal. The plan has been created as per the Policy and will be advertised appropriately for compliance.

The developer has agreed to make a contribution of \$3,000.00 per lot (total of \$96,000) to go towards community facilities and open space.

The applicant has provided the following justification:

*There is an existing park and recreation area only 250m in a straight line from the subject land on Wolgan Road that includes playground equipment, toilets and tennis courts. This is well within easy access distance from the subject land.*

*The nature of the lots is such that due to the larger size, the residents are likely to recreate on their own land rather than seek open space areas in Lidsdale.*

*They are also likely to travel to Lithgow to take part in organised sport etc.*

*It is noted that where Council has entered into voluntary planning agreements with other applicants, these have generally related to much higher density residential subdivisions in Lithgow. This subdivision provides for a much lower density (zoned*

*R5 Large Lot Residential) and accordingly the nexus as outlined here is not the same and accordingly the rate suggested is not considered reasonable.*

*Accordingly, the applicant is prepared to enter into a voluntary planning agreement at an amount \$3,000 per lot to go towards community facilities and public open space, which is considered more appropriate in the situation.*

Council Officers concur with the justification submitted above and recommend that the applicant pays a contribution of \$3,000 per lot to go towards community facilities and open space.

## **5.2 FINANCIAL IMPLICATIONS**

### **Water Management Act 2000**

This financial implication applies to the development as the development creates an additional load on Council's water or sewer systems.

Council's 'Development Servicing Plans for Water Supply and Sewerage August 2018' was adopted by Council at Council's Ordinary Meeting dated 27 August 2018.

The DSPs have been prepared in accordance with the 2016 Developer Charges Guidelines for Water Supply, Sewerage and Stormwater issued by the Minister for Lands and Water, pursuant to section 64 of the LG Act 1993, exercising its function under section 306 (3) of the *Water Management Act, 2000*.

Under the Water Management Act 2000, Section 305, an application for Certificate of Compliance must be submitted to Council. This Act states:

- (1) A person may apply to a water supply authority for a certificate of compliance for development carried out, or proposed to be carried out, within the water supply authority's area.*
- (2) An application must be accompanied by such information as the regulations may prescribe.*

Therefore Councils Section 64 Contributions under Local Government Act 1993 for water and sewer connections will be required to be paid prior to the release of the Subdivision Certificate release.

Following condition would be included in the condition of consent:

- An application shall be submitted to Council for the supply of a Certificate of Compliance under Section 305 of the Water Management Act. A Subdivision Certificate shall not be issued for each stage until such time as the contributions applicable to release the Certificate of Compliance are paid in full to Council. These contributions may be found in the Lithgow Council Fees and Charges or any applicable document adopted by Council in relation to contributions under Section 64 of the Local Government Act 1993 at the time of payment.*

### **Section 94A (Section 7.12) Development Contributions Plan 2015**

The Section 94A plan does not apply to this development given it is for a subdivision.

**Planning Agreements**

A Voluntary Planning Agreement (VPA) has been negotiated with the developer in accordance with Section 7.4 of the *Environmental Planning & Assessment Act 1979* in relation to this proposal. The plan has been created as per the Policy and will be advertised appropriately for compliance.

The developer has agreed to make a contribution of \$3,000 per lot (total of \$96,000) to go toward community facilities and open space.

**Lithgow City Council Open Space and Recreation Needs Study February 2011**

Council’s open space and recreation needs study does not specifically identify when a dedication of open space is required for any new urban subdivisions. However, a common industry standard alluded to in the study is:

- *rate of 2.83ha/1,000 people, with approximately 65% of this space to be active/sports area.*
- *residents should be within 400m walking distance from a public open space, and 500m from an active open space area/playground.*

The proposal is for 32 allotments, if the subdivision is calculated for approximately 5 people per future dwellings this equates to the subdivision generating approximately 170 occupants overall. Utilising the 2.83ha per 1,000 head of population calculation would equate to an open space dedication of 0.48 of a hectare. This needs to be considered in the context of the subdivision and its location.

Council owns a recreation park on Lot 133 DP751651, Wolgan Road Lidsdale. This area contains open space area and a tennis court. The development is located over 500m walking distance from the park with no road or pedestrian linkage to the closest route.

The study also states:

*Council will ensure that provision of recreation and open space opportunities accurately reflect current community needs and Council resource constraints, and protect these opportunities. It is important to ensure that planning decisions made today do not jeopardise the decision making of the future.*

**Range (Accessibility Standard)**

*The accessibility standard is used to guide appropriate spatial distribution of open space. The recommended spacing and distribution of recreation and sport parks will vary depending on the park hierarchy, the population to be serviced and the predominant land use as indicated in Table 10 below.*

<b>Infrastructure Type</b>	<b>Local</b>	<b>District</b>	<b>City-wide</b>
<i>Recreation park</i>	<i>0.5km in urban areas</i>	<i>2.5km in urban areas</i>	<i>n/a</i>
<i>Sport park</i>	<i>n/a</i>	<i>2.5-5km in urban areas</i>	<i>Local government area</i>

Given the size of the allotments having a minimum area of 2000m<sup>2</sup>, the location of the subdivision being on the outskirts of the Lidsdale village, adjacent to the rural

zone and given the population of Lidsdale, dedicated open space within the subdivision would not be feasible, practical or reflect the community needs. It would also create a constraint to Council's resources due to the management and upkeep of the land.

Given the population of the Lidsdale community and the size of the lots a linkage to the existing Council owned park would not be feasible.

Therefore a planning agreement has been negotiated between Council and the applicant.

### **5.3 LEGAL IMPLICATIONS**

#### **Conveyancing Act 1919**

A Positive Covenant is to be implemented for services around the subdivision and the use of coal burning appliances to be prohibited with Council having the right to vary, modify or release the restrictions.

#### **Environmental Protection and Biodiversity Conservation Act 1991**

No federally listed Threatened Species or Endangered Ecological Community is required to be cleared as a result of this application. Accordingly, there are no legal implications of this Act on the proposed development.

#### **Local Government Act 1993**

If this application is approved, the applicant must obtain a written Section 68 application for connection to Council's water and sewerage supply. This must be lodged and approved prior to commencement of any work on site and shall be at full cost to the applicant.

The Section 68 application requires the submission of all detailed engineering drawings/design, specifications and any applicably supporting information for the proposed works. All conditions of the Section 68 Approval must be complied with prior to the release of the Subdivision Certificate.

#### **Biodiversity Conservation Act 2016**

The proposed clearing must ensure that it is not captured by the Biodiversity Offset Scheme as per the Biodiversity Conservation Act 2016 (BC Act 2016) as below:

##### ***7.2 Development or activity "likely to significantly affect threatened species"***

*(1) For the purposes of this Part, development or an activity is likely to significantly affect threatened species if:*

- (a) it is likely to significantly affect threatened species or ecological communities, or their habitats, according to the test in section 7.3, or*
- (b) the development exceeds the biodiversity offsets scheme threshold if the biodiversity offsets scheme applies to the impacts of the development on biodiversity values, or*
- (c) it is carried out in a declared area of outstanding biodiversity value.*

There is no proposed clearing of native vegetation and habitats would not be impacted upon due to the size of the allotments and surrounding landuses being for residential purposes. The development requires less than 0.25ha of clearing and therefore meets the Biodiversity Offset Scheme thresholds, as set by the *Biodiversity Conservation Regulation 2017* (BC Reg 2017) which states:

**7.2 Clearing of area of land that exceeds threshold**

(1) Clearing of native vegetation is declared by this clause to exceed the biodiversity offsets scheme threshold if the area proposed to be cleared is the area set out in Column 2 of the Table to this clause opposite the minimum lot size applicable to the land to be cleared in Column 1 of that Table.

Column 1	Column 2
Minimum lot size of land	Area of clearing
<b>Less than 1 hectare</b>	<b>0.25 hectare or more</b>
Less than 40 hectares but not less than 1 hectare	0.5 hectare or more
Less than 1,000 hectares but not less than 40 hectares	1 hectare or more
1,000 hectares or more	2 hectares or more

The biodiversity map also does not indicate any biodiversity located on the property.

**Biosecurity Act 2015**

This Act applies when rural land is being developed, therefore to ensure compliance with this Act the following condition of consent will be imposed:

- Prior to the issue of the Subdivision Certificate, Council is to be provided with a report from Upper Macquarie County Council indicating:
  - Noxious plants are under adequate management; or
  - Noxious plant management has been undertaken and adequate control measures are in place; or
  - Noxious plants are not a concern for the property.

**Roads Act 1993**

The proposed road within this subdivision is to be dedicated to Council under this Act. Council will become the controlling authority for the road once construction works are satisfactory and the subdivision certificate released. The proposal will meet the requirements of the Act subject to conditions of consent.

**Rural Fires Act 1997**

The development is integrated under this act (via Section 4.46 of the EP & A Act 1979). Accordingly the approval of the Rural Fire Service is required prior to Council being in a position to determine the application. Recommendations from the Rural Fire Service have been obtained and it is considered that subject to conditions of consent the development will comply with the provisions of this Act.

**Environmental Planning and Assessment Act 1979**

In determining a development application, a consent authority is required to take into consideration the matters of relevance under Section 4.15 of the *Environmental Planning and Assessment Act 1979*. These matters for consideration are as follows:

5.3.1 Any Environmental Planning Instruments

***Lithgow Local Environmental Plan 2014***

LEP 2014 – Compliance Check		
Clause		Compliance
<b>Land Use table</b>	R5 Large Lot Residential	Yes
<b>4.1</b>	Minimum subdivision lot size– 2000m <sup>2</sup>	Yes
<b>5.10</b>	Heritage Conservation	Yes

<b>7.1</b>	Earthworks	Yes
<b>7.3</b>	Stormwater management	Yes
<b>7.4</b>	Terrestrial biodiversity	Yes
<b>7.5</b>	Groundwater vulnerability	Yes
<b>7.6</b>	Riparian land and watercourses	Yes
<b>7.7</b>	Sensitive lands	Yes
<b>7.10</b>	Essential Services	Yes

**Comment:** The proposed subdivision of land is consistent with the zone objectives. The objectives of the zone are:

**1 Objectives of the R5 Zone**

- *To provide residential housing in a rural setting while preserving, and minimising impacts on, environmentally sensitive locations and scenic quality.*
- *To ensure that large residential lots do not hinder the proper and orderly development of urban areas in the future.*
- *To ensure that development in the area does not unreasonably increase the demand for public services or public facilities.*
- *To minimise conflict between land uses within this zone and land uses within adjoining zones.*
- *To limit development to areas in reasonable proximity to the settled town centres of Lithgow, Wallerawang and Portland to strengthen settlement hierarchy.*
- *To maintain or improve the water quality of receiving water catchments.*

The proposed subdivision would allow lots to be developed for future residential purposes. The development is surrounded by residential uses. The development is not expected to impact facilities or services in the area. Water quality would be maintained and not be impacted upon. The development was referred to WaterNSW whose comments are found later in this report.

The minimum allotment size shown on the Lot Size Map is 2000m<sup>2</sup>. The proposal is for a 32 lot subdivision with the lots ranging between 2000m<sup>2</sup> and 1.003ha.

The property contains a heritage item known as "woodlands". Council's Heritage Inventory Study 1997-8 states that building was constructed in 1860 as a hotel and was named the Carriers Arms. The development was referred to Council's Heritage Advisor, whose comments are found later in this report.

The proposed development will include earthworks for services and road construction which will change the drainage patterns of the area. The road network and stormwater infrastructure proposed has been designed to allow for the diversion of stormwater to be captured within bio-retention basin systems and treated before being naturally dispersed in the area. There will be conditions of consent imposed to ensure dust, noise and erosion is minimised during works and in perpetuity as a result of earthworks. The development has been assessed by appropriate authorities in relation to potential impacts from earthworks on water courses and found to be satisfactory subject to conditions of consent, if approved. It is unlikely that the development will disturb relics on the site given the site history is grazing land. The development will comply with the requirements of the earthworks provisions.

The proposal has been designed to maximise water permeable surfaces with minimal road networks and stormwater infrastructure. The development will have minimal

runoff to adjoining properties as it will be retained onsite and dispersed adequately into adjoining water catchments as per existing arrangements. The development has been assessed by appropriate authorities with no objection to the stormwater management proposals subject to appropriate conditions of consent being imposed, if approved.

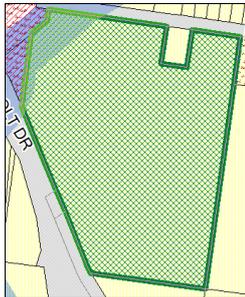
The property is identified as containing Biodiversity. The proposed subdivision is not expected to have any adverse impact on ecological value or significant flora and fauna on the property as no building structures are proposed at this stage. Biodiversity is shown on the map below:



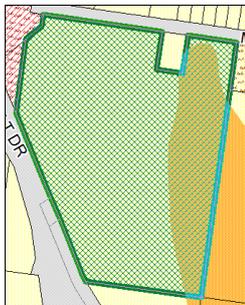
The property is subject to groundwater vulnerability. The development is designed and will be managed to avoid any significant adverse environmental impact. The development is not expected to have contamination impacts as the use of the land will remain. A NorBE assessment was undertaken for the development and was found to be satisfied. The NorBE assessment is found later in this report. The groundwater vulnerability is shown on the map below:



Part of the property is located within the riparian corridor as it includes a third order stream and minor first order water corridors. The development is not proposed to impact the water course as the proposed building envelopes are well over 100m from the creek. The building envelopes are also on a higher elevation than the water course. The riparian corridor is shown on the map below:



The property is identified as being sensitive land. The location of the development has a slight slope that is less than 25%. The land is not subject to high erosion potential, salinity, impeded drainage or expected to be subject to regular or permanent inundation. The development is designed, sited and will be managed to avoid significant adverse environmental impact. The sensitive land map is shown below:



The development will provide reticulated water, sewer, underground electricity, sewerage management/disposal, stormwater drainage and suitable vehicular access through the design and via conditions of consent, if approved. The development will have all essential services as required.

The land is deemed suitable for the proposal and is considered to comply with Council's LEP 2014.

***State Environmental Planning Policy 44 – Koala Habitat Protection***

SEPP 44 is applicable to site given that it exceeds 1ha in size and is located within the Lithgow Local Government Area to which the SEPP applies. Part 2 of the SEPP requires Council to consider whether the land the subject of the application retains potential and subsequently core koala habitat.

Many of the trees listed within Schedule 2 of the SEPP are common within the Lithgow Local Government area, however core koala habitat within this area is rare, with only 12 koala sightings ever reported on private land within the LGA.

**Comment:** There are no known koala habitats identified on the Department of Planning and Environment koala habitat map relating to the property. Given that minimal trees are to be removed as part of the development, and the section of the

subject site relevant to the application is devoid of native vegetation it is considered unnecessary to proceed further with SEPP 44 assessment.

**State Environmental Planning Policy (Infrastructure) 2007**

SEPP (Infrastructure) 2007 – Compliance Check		
	Clause	Compliance
13	Consultation with Councils- development with impacts on council-related infrastructure or services	Yes
14	Consultation with councils—development with impacts on local heritage	Yes
16	Consultation with public authorities other than councils	Yes
Schedule 3	Traffic generating development to be referred to the RTA	NA

**Comment:** The development requires Council’s infrastructure such as water, sewer stormwater and road network to be upgraded. The development was referred to Council’s Water and Sewer Officer as well as Council’s Engineers for comment these comments are found later in this report.

The property is heritage listed under Council’s LEP 2014. The development was referred to Council’s Heritage Consultant whose comments are found later in this report.

The development was referred to other government authorities such as WaterNSW and the Rural Fire Service (RFS). These authority comments are found later in this report.

The development does not warrant a referral to the Roads and Maritime Services as it is below the threshold for traffic generating activity and the development does not have a direct frontage to the Castlereagh Highway.

The development satisfactorily complies with the SEPP above.

**State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011**

SEPP (Sydney Drinking Water Catchment) 2011 – Compliance Check		
	Clause	Compliance
10	Development consent cannot be granted unless neutral or beneficial effect on water quality	Yes
11	Development that needs concurrence of the Chief Executive	Yes

**Comment:** WaterNSW has provided the following comments:

Reference is made to Council’s email received 12 December 2018 requesting the concurrence of Water NSW under State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011 with a proposal for a 32-lot urban subdivision on the above land.

The subject property, which has been inspected by Water NSW, is located within the Warragamba catchment which forms part of Sydney's water supply.

It is noted that the gross pollutant trap (GPT) was modelled at the end of the outlets of the bioretention basins in the MUSIC stormwater quality model. Water NSW suggested to the relevant consultant that the GPT be moved to the inlet or upstream of the bioretention basins for the long-term sustainable operation of the bioretention basin according to Water NSW's current recommended practices. This matter has been addressed in conditions below.

Based on Water NSW's site inspection and the information provided, the proposed development has been assessed by Water NSW as being able to achieve a neutral or beneficial effect (NorBE) on water quality provided appropriate conditions are included in any development consent and are subsequently implemented. These conditions are found later in this report.

5.3.2 Any draft environmental planning instrument that is or has been placed on public exhibition and details of which have been notified to the consent authority

Nil.

5.3.3 Any Development Control Plan

There are no DCP's applicable at the time of lodgement of the application. Council's previous DCP's that have now been repealed

5.3.4 Any planning agreement that has been entered into under Section 7.4, or any draft planning agreement that a developer has offered to enter into under Section 7.4?

A Voluntary Planning Agreement (VPA) has been negotiated with the developer as per Section 7.4 Planning Agreements of the *Environmental Planning & Assessment Act 1979* in relation to this proposal.

See previous commentary under **Policy 7.10** above.

5.3.5 Any matters prescribed by the regulations that apply to the land

There are no demolition works, rebuilding or extension of the building is proposed as part of this application. There are no prescribed matters outlined under Clause 92, 93, 94 or 94A of the Regulations that are applicable to this proposal.

5.3.6 The likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality

**Adjoining Landuse:** The surrounding area is generally for rural residential with the proposal to be consistent with the surrounding land uses. The proposal will not cause any land use conflicts and the development is permissible within the zone.

**Services:** The development proposes to extend Council's reticulated water and sewer supply to all of the proposed allotments with Lot 1 to remain on a septic system in the interim due to the larger area size and lower elevation. Conceptual drawings were included with the application and referred to Council's Water and Sewer Officer for comment. These comments are found later in this report.

Electricity and telephone services are located within Ian Holt Drive and Maddox Lane. The existing dwelling is currently connected with services available to be connected for future dwellings on the proposed allotments.

The following condition would be included on the consent:

*The applicant shall consult with an Authorised Telecommunications and Electricity Authorities for the provision of underground telephone and electricity services to each allotment. Confirmation of connection to each allotment and a plan is to be lodged with Lithgow City Council prior to the release of a final 'Subdivision Certificate'.*

The development was also referred to Endeavour Energy as part of the assessment process. Endeavour Energy's comments are found later in this report.

**Context and Setting:** The proposed development will be located within an established rural residential area and will have no major impact on the context and setting of the area. Residential development is located along Maddox Lane and larger residential lots are located along Ian Holt Drive. The size of the proposed allotments is considered to be similar in size to the proposed development Ian Holt Drive.

Future dwellings would be required to be constructed to suit the surrounding streetscape.

Four proposed lots back onto Maddox Lane with frontages to the new proposed roads. The streetscape presentation to Maddox Lane would be impacted upon as existing dwellings that front Maddox Lane are close to the roadway.

The applicant opposed Council's proposed requirements for the upgrade of Maddox Lane if any access points were directly from the Lane, hence the redesign of the subdivision.

To minimise potential impacts to the streetscape of Maddox Lane, the following condition would be included on the consent:

*To minimise potential impacts to Maddox Lane, the applicant is to submit a landscaping plan to Council showing the location and type of vegetation for all lots that adjoins Maddox Lane.*

*Once approved by Council, the landscaping is to be planted.*

*An 88B restrictive covenant is to be placed on proposed Lots 21, 20, 18 and 17, preventing the vegetation to be removed and that they are to be maintained.*

*This is to be undertaken prior to the release of the Stage 3 Subdivision Certificate.*

**Access/traffic:** The development proposes to construct two new roads off Ian Holt Drive to service the allotments.

The Statement of Environmental Effects states that when the subdivision is fully constructed there will be approximately 204 movements per day (6 vehicle movements per day per lot).

Ian Holt Drive is a bitumen sealed, 2 directional road. One lot (existing dwelling lot) is proposed to have direct access from this road. Two new access roads are proposed to be constructed through the development to service the new allotments. The new roads will be required to be constructed to Council's Engineering requirements.

The access to the proposed subdivision is within the vicinity of the Castlereagh Highway with direct access from Ian Holt Drive. It is expected that many vehicles attending the subdivision would have the choice of entering Ian Holt Drive from the North Western end where there are no other properties to access the Highway or from the Southern end of Ian Holt Drive where there are numerous residential dwellings and small businesses. Given the option of the road network, Ian Holt Drive is expected to have the capacity to service the additional traffic movements.

Traffic and access is considered suitable for the development. Council's Engineering comments and conditions are found later in this report.

**Heritage:** The property contains a heritage item known as "woodlands". Council's Heritage Inventory Study 1997-8 states that building was constructed in 1860 as a hotel and was named the Carriers Arms. The hotel was renamed the Woodlands Inn in 1874 by the new owner. The property was utilised as a trading post for Cobb & Co with a meathouse and stone dairy (now in ruins), a wooden dairy with surviving bails and a wooden stables. The original stone inn was renovated in 1900 with a new stone kitchen. In the 1920's the Lidsdale Post Office was operated from the Woodlands.

The property is noted to be an important complex situated with a long frontage to Coxs River, incorporating tangible and attractive remains of a long lived highway inn and supplier to Cobb and Co. There is a range of 8 buildings, a well and other early features (10 elements) on the property. These elements include; the stone inn, a single sand stoned cottage with high pitched gable roof and hipped front verandah, two stone chimneys, to the north is a 1950s residence with a separate sandstone kitchen, a ruined stone dairy, the well, a boilerhouse and chimney is located on the western side of the property, early vertical slab stables, a timber cottage with a stone privy and a wooden dairy with surviving cow bails.

The values viewed are now more viewed from the property or Maddox Lane due to neglect and infill.

The Statement of Environmental Effects states that all of the existing buildings associated with the Woodlands heritage item be retained within proposed Lot 6 with suitable buffer setbacks to neighbouring lots.

The development was referred to Council's Heritage Advisor who advised that a curtilage around the heritage significant items be maintained. As such the plans were amended to achieve this.

The whole of the property will retain heritage status, until more investigation is undertaken.

Conditions will be imposed on the consent to ensure that the heritage significant items on the property will be retained, with minimal impact.

Council's heritage map showing the surrounding heritage listed properties is shown below:



**Flora and Fauna:** There is no native vegetation proposed to be removed as part of the development. There are scattered pine trees on the site that will be removed for the development. The property has previously been utilised for grazing operations and has previously been disturbed. Therefore the development is expected to have minimal impact to flora or fauna.

There are no known threatened species or critical habitat on the property that would have an impact on the location of the proposed building envelopes.

**Social and Economic Impact:** As the proposed development will be generally in keeping with the provisions of the planning instrument and is reasonably compatible with other similar development in the locality, it is expected to have minimal social and economic impact.

**Soils:** The proposed development will have no significant impact on soils. There is no reason to believe the site would be affected by acid sulphate soil or contamination problems.

The proposed development will include earthworks for services and road construction which will change the drainage patterns of the area. The road network and stormwater infrastructure proposed has been designed to allow for the diversion of stormwater to be captured within bio-retention basin systems and treated before being naturally dispersed in the area. There will be conditions of consent imposed to ensure dust, noise and erosion is minimised during works and in perpetuity as a result of earthworks. The development has been assessed by appropriate authorities in relation to potential impacts from earthworks on water courses and found to be satisfactory subject to conditions of consent, if approved. It is unlikely that the development will disturb relics on the site given the site history is grazing land. The development will comply with the requirements of the earthworks provisions.

**Water:** The proposed development has been assessed using the NorBE tool as required by the *State Environmental Planning Policy (Sydney Catchment Drinking*

*Water) 2011* with a result of satisfied. Therefore with appropriate conditions of consent it is considered that the development will have minimal impact on water.

**Air and Microclimate:** There will be no significant impact on air or microclimate. However, a condition of consent will be imposed requiring that dust suppression be used during construction works to minimise impacts on the surrounding area.

**Natural Hazards:** The property is located within the bushfire prone area. The Statement of Environmental Effects states there is minimal vegetation located on the property and that the topography of the land has a gradual fall to the north and north west.

APZ zones exist for the lots along the eastern boundary of the property.

Water supply for fire-fighting purposes is proposed to be via reticulated town water.

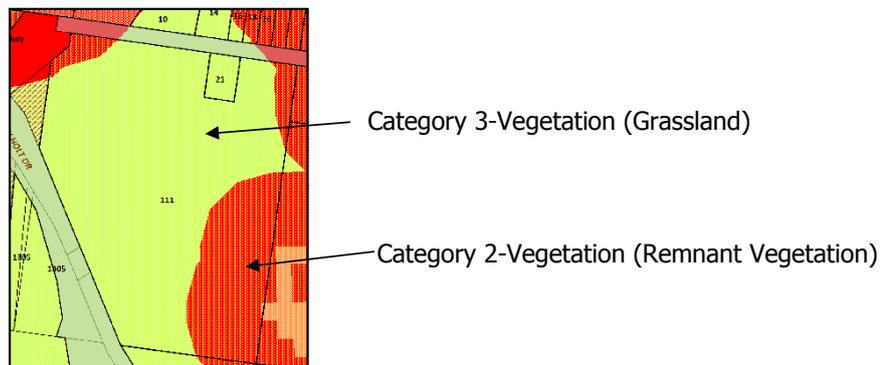
The development was referred to the Rural Fire Service (RFS) for comment. These comments are found later in this report.

Council's bushfire maps are shown below:

Council's bushfire map when the application was submitted:



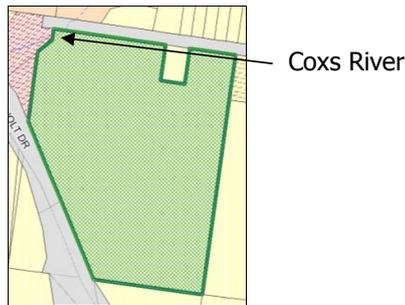
Council's current Bushfire Map during the assessment of the application:



Although the property is not identified as being flood prone under Council's LEP 2014, the property adjoins Coxs River. No new access's are proposed to be within

100m from the river and the topography of the land slope towards the river. Therefore there is adequate space on the proposed lots for future dwellings to be at a higher elevation to the river and to have reasonable setbacks to prevent flooding impacts.

The location of the river is shown on the map below:



**Noise and Vibration:** There are no nearby sources of noise or vibration that would impact detrimentally the proposal. The proposal is not expected to cause any noise issues in the surrounding area, given it is for future residential use.

**Other Land Resources:** The development will not impact on the value of the land in terms of agricultural potential or mining as it is zoned for rural residential use and adjacent to an established residential area. The land is not suitable for mining or forestry developments and is close to existing residential areas.

#### 5.3.7 The Suitability of the site for the development

The surrounding land uses are for rural residential pursuits. The proposal is compatible with the objectives of the zone and is considered to have minimal impact on the surrounding amenity subject to conditions of consent if approved. Therefore, the site is considered to be suitable for the proposed development.

#### 5.3.8 Any submissions made in accordance with this Act or the Regulations

The proposal was sent to Crown Lands and Water Division (The Department), Rural Fire Service, Endeavour Energy, WaterNSW, Council's Heritage Advisor, Water & Wastewater Officer and Engineers for commenting with recommendations detailed below. The proposal was also sent to surrounding landowners and placed on public display in Council's Administration Building for a period of 21 days with 5 submissions received. As the plans were amended during the assessment process, the application was placed on exhibition for an additional 21 days. During the second notification period one submission was received. These submissions are summarised below.

#### **CROWN LANDS AND WATER DIVISION (THE DEPARTMENT)**

Reference is made to Council's letter dated 12 Sept 2018 regarding comments for the above proposal.

Department of Industry, Crown Lands and Water Division (the Department) has reviewed the letter, together with the submitted application and plans and offers no objections to the proposed development providing:

1. In relation to the current unauthorised use of Crown Land (Lot 7323 DP 1150037) for access from Maddox Lane onto the Castlereagh Highway, that Council either:
  - a. Acquire part being used and dedicate it a public road, or
  - b. Terminate Maddox Lane to ensure driving off Maddox Lane straight onto the Crown Land is not possible.

**Council Comment:** *The development does not propose to utilise the Crown Land (Lot 7323 DP 1150037) as part of the subdivision. The development will further not impact the Crown Land. Council will not be acquiring any land or terminating Maddox Lane.*

2. This response does not imply the concurrence of the Minister for Lands and Forestry for the proposed development.

**Council Comment:** *The development does not propose to utilise or impact any forestry land.*

3. Any development or works including the extension of utilities to service the development will require a separate development application to be lodged. Should these works fall within Crown land such an application will require an Application for Landowner's Consent to the lodgement of a Development Application with respect to Crown land.

**Council Comment:** *The development does not propose to utilise the Crown Land as part of the subdivision. The development will further not impact the Crown Land.*

4. The Minister for Lands and Forestry reserves the right to make comments, lodge an objection and/or require conditions with respect to development proposed on Crown land.

**Council Comment:** *Noted. No development is proposed on Crown Land.*

5. Road construction is not permitted within the Crown road reserves.

**Council Comment:** *The development does not propose to utilise the Crown Land as part of the subdivision. The development will further not impact the Crown Land.*

6. Irrespective of any development consent or approval given by other public authorities, any work or occupation of Crown land cannot commence without a current tenure from the Department authorising such work or occupation.

**Council Comment:** *Noted*

7. No development drainage, overflow or contaminated waste (contaminated runoff or septic) shall impact negatively on the Crown land or waterway.

**Council Comment:** *Conditioned*

8. No materials are permitted to be dumped or stored on Crown land, roads, or waterways.

***Council Comment: Conditioned***

9. The development is conducted with minimal environmental disturbance to the Crown land and is to avoid the removal or damage of any native trees located within the subject Crown lands or waterways.

***Council Comment: Conditioned***

10. Public access on the Crown land and waterway is retained and not restricted on and along the Crown land and waterways.

***Council Comment: Noted***

11. Appropriate pollution control measures shall be provided for the duration of the works. Such measures are not to be located on Crown land or waterways.

***Council Comment: Conditioned***

12. Measures should be taken by the applicant to ensure that the work does not contribute to the spread of noxious weeds.

***Council Comment: Conditioned***

**WATER NSW**

Reference is made to Council's email received 11 September 2019 providing amended plans and requesting amendment to Water NSW's previous concurrence advice (dated 2 May 2019) on a proposal for a 32-lot urban subdivision under *State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011*. Amended plans seek to change subdivision road layout and reduce number of lots from 35 to 32.

The subject property, which has been inspected by Water NSW, is located within the Warragamba catchment which forms part of Sydney's water supply.

Water NSW has considered the following documents along with previously provided documents in its assessment of the application:

- a revised Statement of Environmental Effects (dated 12 September 2019) and amended Plans (dated 28 August 2019) prepared by Anthony Danitith Town Planning, and
- a Conceptual Stormwater Management Plan incorporating a MUSIC stormwater quality model and Stormwater treatment plans all prepared by Calare Civil Pty Ltd (dated 18 September 2019).

The amendment proposes to stage the subdivision as follows:

- Stage 1 – creation of Lot 1,
- Stage 2 – creation of Lots 2 to 8 and construction of part subdivision road 1 to provide access to Lot 3 and subdivision road 2, and
- Stage 3 – creation of Lots 9 to 32 and construction of remaining subdivision road 1.

Water NSW considers that the location of proposed stormwater treatment devices to treat road runoff may not allow treatment of all road runoff and the proposed

treatment train (i.e. pit basket after bioretention basins) is not effective and not in accordance with our current recommended practices. Therefore, Water NSW has required that the final stormwater management plan shall be prepared in consultation with Water NSW and this is addressed in conditions below.

Water NSW notes that Council considers that the current size of existing sewerage pump station on Maddox lane has adequate capacity to accommodate wastewater generated from the proposed 32-lot subdivision. Water NSW requests that any upgrades to the existing sewerage infrastructure including the sewerage pump station on Maddox Lane shall be referred to Water NSW for assessment of any impacts on water quality.

Based on the site inspection and information provided, Water NSW is satisfied that the proposed development can achieve a neutral or beneficial effect (NorBE) on water quality provided appropriate conditions are included in any development consent and are subsequently implemented.

Water NSW concurs with Council granting consent to the application subject to the following conditions. This advice replaces Water NSW's previous concurrence advice provided to Council on 2 May 2019.

If, after receipt of this letter, revisions are made to any of the DA plans, Council does not need to refer the plans to Water NSW if the revisions would not impact on water quality. Council is requested to amend the relevant Water NSW's condition/s to reference the revised plans, and notify the assessing officer by email.

#### **General**

1. The works, lot layout and staging of the subdivision shall be as specified in the Statement of Environmental Effects (dated 12 September 2019) and shown on the proposed Subdivision Plan and Staging Plan (Ref No. 2018-081DA, Figure 2, dated 28.08.2019) all prepared by Anthony Danitith Town Planning. No revisions to works or lot layout or staging of the subdivision that will have any impacts on water quality, shall be permitted without the agreement of Water NSW.

*Reason for the above Condition - Water NSW has based its assessment under State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011 on this version of the subdivision.*

#### **Subdivision Roads**

2. The subdivision roads, as relevant to each stage of the subdivision, shall:
- be sealed and otherwise constructed in accordance with Council's engineering standards.
  - collect road runoff via a series of pits and pipes and direct to various water quality treatment measures, and
  - incorporate litter baskets (as a minimum) upstream of all bioretention basins, as appropriate.
3. All stormwater structures and drainage works associated with the proposed subdivision roads shall be wholly included in the road or drainage reserve or within suitably defined easements.

*Reason for the above Conditions – To ensure that the proposed subdivision roads and associated infrastructure will have a sustainable neutral or beneficial impact on water quality during the operational phase of the development.*

#### **Stormwater Management**

4. All stormwater management measures, as relevant to each stage of the subdivision, specified in the Conceptual Stormwater Management Plan (Revision P4, dated 18 September 2019) and shown on the Preliminary Treatment Train and Bio-retention Details (Job No. 2018.1010, Dwg Nos. P02 and P03, Issue P4, dated 18/09/19) prepared by Calare Civil Pty Ltd shall be incorporated in the final stormwater management plan. The final stormwater management plan shall be prepared in consultation with Water NSW and approved by Council prior to the issuance of a Construction Certificates for Stages 2 and 3, as relevant. The Plan shall:

- clearly specify the staging of the proposed stormwater management measures,
- ensure that the proposed bioretention basins are located to allow and maximise treatment of all road runoff, and
- include bioretention basins which also incorporate the following requirements:
  - be designed consistent with Adoption Guidelines for Stormwater Biofiltration Systems Version 2 (Payne et al, 2015, Melbourne, CRC for Water Sensitive Cities),
  - a minimum combined filter area of 62.5 square metres,
  - each bioretention basin shall:
    - have a filter media consisting of a clean sandy loam with a certified median particle diameter of 0.5 mm, a maximum orthophosphate concentration of 40 mg/kg and a maximum total nitrogen concentration of 400 mg/kg,
    - direct all discharge and overflow to the proposed piped stormwater drainage system.
  - be accessible from roads by machinery to facilitate cleaning, monitoring and maintenance of the structures
  - be permanently protected from vehicular damage by bollards, fences, castellated kerbs or similar structures, with a sign to be erected to advise of its nature and purpose in water quality management, and
  - be protected by sediment and erosion control measures during any construction and post-construction phase until the ground surface is revegetated or stabilised.

5. Stormwater treatment measures including bioretention basins, as relevant to each stage of the subdivision, shall be designed, located and constructed as per the approved final stormwater management plan.

6. No changes to stormwater treatment and management that will impact on water quality, shall be permitted without the agreement of Water NSW.

7. A suitably qualified stormwater consultant or engineer shall certify in writing to Water NSW and Council prior to the issuance of a Subdivision Certificate for that stage of the subdivision that all stormwater management structures have been installed as per these conditions of consent and are in a functional state.

8. An Operational Environmental Management Plan (OEMP) shall be prepared in consultation with Water NSW and Council by a person with knowledge and experience in the preparation of such plans. The OEMP shall be prepared prior to the

issuance of a Subdivision Certificate for each stage of the subdivision. The OEMP shall be provided to Council when the management and maintenance of the stormwater structures is handed over to Council. The OEMP as a minimum shall include but not be limited to:

- include details about the location and nature of stormwater management structures such as pits, pipes, inlet filters, interallotment drainage, bioretention basins, buffer area, and any other stormwater structures and drainage works,
- outline the responsibilities and detailed requirements for the inspection, monitoring and maintenance of all stormwater management structures, before and after handing over to Council, including the frequency of such activities,
- identify the persons responsible for inspection and maintenance activities, before and after handing over to Council, including a reporting protocol and hierarchy,
- the identification of detailed requirements and measures for the protection of bioretention basins from future upstream construction works i.e. construction of dwellings on future lots, and
- include checklists for recording inspections and maintenance activities, particularly for bioretention basins.

9. All stormwater treatment measures shall be inspected, monitored, maintained and managed in accordance with the Operational Environmental Management Plan.

*Reason for the above Conditions – To ensure that the stormwater quality management measures and structures for the proposed subdivision have a sustainable neutral or beneficial impact on water quality over the longer term.*

#### **Construction Activities**

10. A Soil and Water Management Plan shall be prepared for all works, for each stage of the subdivision, required as part of the subdivision by a person with knowledge and experience in the preparation of such plans. Each Plan shall meet:

- the requirements outlined in Chapter 2 of NSW Landcom's Soils and Construction: Managing Urban Stormwater (2004)
- be prepared prior to issuance of a Construction Certificate for that stage of the subdivision and shall be to the satisfaction of Council, and
- include controls to prevent sediment or polluted water leaving the construction site or entering any natural drainage lines or stormwater drain.

11. The Soil and Water Management Plan for each stage shall be implemented, and effective erosion and sediment controls shall be installed prior to any construction activity for each stage of the subdivision. The construction site and controls shall be regularly inspected and maintained until works have been completed and groundcover established.

*Reason for the above Conditions – To manage adverse environmental and water quality impacts during the construction phase of the development so as to minimise the risk of erosion, sedimentation and pollution within or from the site during this phase.*

#### **RURAL FIRE SERVICE**

Reference is made to Council's correspondence dated 4 February 2019 and 11 September 2019 seeking general terms of approval for the Integrated Development Application.

The New South Wales Rural Fire Service (NSW RFS) has considered the information submitted. General Terms of Approval, under Division 4.8 of the 'Environmental Planning and Assessment Act 1979', and a Bush Fire Safety Authority, under Section 100B of the 'Rural Fires Act 1997', are now issued subject to the following conditions:

1. The general terms of approval relate to the proposed development as shown on the site plan prepared by Anthony Daintith Town Planning, titled 'Figure 2 Proposed Subdivision', drawing number 2018-081DA, dated 28 August 2019.

#### ***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 issue of subdivision certificate and in perpetuity the entire property 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'.

3. A suitably worded instrument pursuant to section 88 of the 'Conveyancing Act 1919' shall be placed on lots 22 to 26 requiring the provision of a 20m APZ from the eastern boundary and which prohibits the construction of buildings other than class 10b structures within the APZ. The name of authority empowered to release, vary or modify the instrument shall be Lithgow Council.

#### ***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:

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

- Fire hydrant spacing, sizing and pressures shall comply with Australian Standard AS 2419.1- 2005 'Fire Hydrant Installations'.
- Fire hydrants shall not be located within any road carriageway.

#### ***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:

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

- Roads shall be two wheel drive, all weather roads.
- Road No. 1 shall have a carriageway 8 metres minimum kerb to kerb.
- A cross fall not exceeding 3 degrees.
- Dead end roads incorporate a 12 metre outer radius turning circle, and are clearly signposted as dead end.

- The capacity of road surfaces is sufficient to carry fully loaded fire fighting vehicles (approximately 15 tonnes for areas with reticulated water, 28 tonnes or 9 tonnes per axle for all other areas).

### **ENDEAVOUR ENERGY**

No response was received from Endeavour Energy therefore the following standard conditions apply:

#### ***Network Capacity/Connection***

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. Depending on the outcome of the assessment, any required padmount substation 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.

#### ***Bushfire***

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.

#### ***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.

#### ***Easement Management/Network Access***

The following is a summary of the usual/main terms of Endeavour Energy's electrical easements requiring that the land owner:

- Not install or permit to be installed any services or structures within the easement site.
- Not alter the surface level of the easement site.
- Not do or permit to be done anything that restricts access to the easement site without the prior written permission of Endeavour Energy and in accordance with such conditions as Endeavour Energy may reasonably impose.

Endeavour Energy's preference is for no activities or encroachments to occur within its easement areas. If any proposed works or activities (other than those approved/certified by Endeavour Energy's Network Connections Branch as part of an enquiry/application for load) will encroach/affect Endeavour Energy's easements, contact must first be made with the Endeavour Energy's Easements Officer.

It is imperative that the access to the existing electrical infrastructure adjacent and on the site is maintained at all times. To ensure that supply electricity is available to the community, access to the electrical assets may be required at any time.

***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.

***Noise***

Where development is proposed in the vicinity of electricity infrastructure, Endeavour Energy is not responsible for any acoustic/noise amelioration measures for such noise that may impact on the nearby proposed development.

***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 *Electricity Supply Act 1995* (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.

***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. 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 is 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+brochures>

***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.

**COUNCIL'S HERITAGE ADVISOR**

Reference is made to DA196/18, and a site inspection on 12th September. The following preliminary report is based on that site inspection, discussions with the owner and a review of the following DA documents currently lodged: proposed subdivision drawings 2018-081DA dd 8/08/18 showing existing boundaries, site detail and proposed subdivision (3 dwgs) and SoEE prepared by Anthony Daintith Town Planning dd 8th August 2018.

Subsequently, an additional document was forwarded for consideration, *Woodland Inn, Heritage Assessment* prepared by a UTS student Louis Gay dd June 1999. Other pertinent documents reviewed include (i) an extract from the *Greater Lithgow Heritage Study 1997-8*, prepared by Jack, Edds, Colleran and Higginbotham for University of Sydney in February 1998 and (ii) Council's current State Heritage Inventory sheet (SHI 1960267) prepared in 2001 and updated in 2006.

### **Background**

Woodlands is a highly significant early property in the Lithgow area with State level cultural significance values. Settled in the late 1850s the property has played an important role at the crossing to the Cox's River with its 1860's inn, the Carrier's Arms renamed Woodlands in 1867, a well-serviced Cobb & Co trading post in the 1870s and Lidsdale post office in the 1920s. The property once included a stone dairy, a wooden dairy, a meat house, stables and other outbuildings. There appears to be an uncertainty in available documents as to the exact number of buildings and at least one is now in ruins. It is possible that there were other earlier buildings within the property which may have archaeological significance.

The 1998 heritage study inventory sheet highlights the following "*10 main elements*": an 1860s stone cottage, a 1950s residence and 1900 stone kitchen, a circular well behind the residence, an 1870s ruined stone dairy and substantial boiler house and chimney in the large yard, an early vertical slab stables, a weatherboard timber cottage, a stone privy and a wooden dairy. While the 2001 SHI inventory sheet notes that "*it has a quite uncommon range of 8 buildings*". A brief review of the 1999 student analysis notes that there are 10 items making up Woodlands but these 10 items include groups, such as the cottage and separate privy, the meathouse and the dairy, and a single room shack which is not noted in other documents but may be referring to the weatherboard cottage in the rear house yard. The current subdivision plan does include some survey information relating to existing buildings but the building naming is not consistent with the heritage assessment or the earlier history analyses so there may be missing elements. Unfortunately, the student assessment and the earlier history analyses do not include site plans of the building arrangements or a property analysis in plan form showing the evolution of the built form within the property through its various phases of development.

The layout of the subdivision was amended during the assessment process to ensure that an appropriate curtilage surrounds the heritage significant items. It is to be noted that the whole property will retain heritage significance under Council's LEP 2014 until further investigation is undertaken and the applicant or owner of the land/s applies for an LEP amendment.

1. A Section 88b restriction is to apply to propose Lot 6 to restrict any future subdivision from occurring on the property. This is to ensure that the curtilage around the heritage significant items is retained.
2. A Conservation Management document and Statement of Heritage Impact (SOHI) is to be prepared by an experienced heritage architect or consultant. The documents are to include all aspects which are going to flow on from a subdivision, such as future building locations, building form, materials, fencing, road finishes, boundary fencing, landscaping, overhead power supply, drainage and services etc.

The Conservation Management document and Statement of Heritage Impact (SOHI) is to be undertaken and approved by Council prior to the issue of the Stage 1 Subdivision Certificate. These documents will help to form the design of future dwellings and developments in the locality as well as to preserve the heritage significance.

3. Construction is to cease if any archaeological relics are found on the property. Intact structures must not be removed and Council should be contacted immediately if any relics are found.

**COUNCIL'S WATER & WASTEWATER OFFICER**

Reference is made to the development application in regard to Council's Planner's referral dated 12 September 2018.

Please find attached general design requirements in relation to the servicing requirements for water and sewerage as part of the Development Application based on Preliminary Concept Design drawing received by Council and dated 5/3/19.

The attached conditions do not constitute approval under *section 68, Local Government Act 1993*. Prior to the commencement of any works as described below;

- Undertaking of water supply works
- Undertaking of sewerage works
- Installation, alteration, disconnection or removal of a meter connected to a service pipe
- Connect a private drain or sewer with a public drain or sewer under the control of a council or with a drain or sewer which connects with such a public drain or sewer
- The developer must obtain written Section 68 approval from Council; this will be required prior to the issue of the Construction Certificate. The Section 68 application requires the submission of all detailed engineering drawings/design, specifications and any applicable supporting information for the proposed works.

If your Section 68 application is approved, Council will issue you with a Section 68 approval containing conditions that must be complied with during construction.

Please be advised of the following conditions:

1. S68 Approval shall be required for all Water and Sewer works prior to release of the Construction Certificate. If the development is staged then each stage will require a separate Section 68 Approval for construction.
2. S68 fees for both water and sewer construction for each stage are to be submitted with the Construction Certificate and prior to any works commencing.
3. All conditions of any S68 approval for each Stage shall be met prior to the issue of any Subdivision Certificate, compliance with the terms of Approval must be completed to the satisfaction of Councils Water & Wastewater Director. Council's written approval must be obtained in this regard.
4. Stage 1 – 1 Lot plus residue Lot. Lot 1 is to connect to the existing sewer reticulation system located in Maddox Lane that discharges to the existing Sewer

Pump Station No 964. Any additional Sewer Manholes for connection or realignment to the pump station will be at full cost to the applicant. A 150mm stub will be provided and installed by Lithgow Council into the northern boundary of Lot 1 for the construction of an access chamber and the provision of a sewer junction/riser 1m upstream of the Man Hole. The sewer line is to extend along the boundary and terminate into Lot 17 as a dead end or Man Hole.

5. Stage 2 and Stage 3 sewer connections will connect to the sewer reticulation main provided by the developer and connect at a point of connection manhole located at the northern boundary of Lot 1 and Lot 17.
6. Stage 2 water and sewer connections to be completed prior to the release of the subdivision works certificate for Stage 3.
7. Any upgrades to the existing sewerage pump station to service this area will be in accordance with Councils Development Services Plan and headworks contributions.
8. The existing water main and sewer rising mains located on Lot 1 are to have easements created over and be in favour to Council prior to the linen plan being released for Stage 1.
9. The applicant is to provide a sewer main dead end and terminate at a point determined by Council at the SW boundary lot 12 DP574754 and Lot 11 DP800967. The sewer point of connection will be for future connections.
10. The applicant shall provide a full Water and Sewer Design Plan for approval prior to the release of the Construction Certificate/Subdivision Works Certificate. Design to include, longitudinal sections for each main, minimum depth and cover, maximum depth, grade, chainage, inverts, size, depths, manholes, manhole numbers, manhole depths, pipe velocity, proposed material and positions of junctions and dead ends for all Lots.
11. The Applicant is required to submit three (3) complete sets of Engineering Drawings to Council prior to the commencement of any assessment, development or subdivision site work as a minimum, the engineering plan submission must include one (1) A1 sized set and two (2) A3 sized sets of all drawing sheets.
12. Bio retention basins are not to impede sewer infrastructure assets
13. Maximum Grade of 20% is permitted for gravity sewer design purposes. Applicant is to provide details of addressing hydraulic jump, odour suppression and the use of energy dissipaters and sewer vents.
14. The maximum allowable sewer flow velocity shall be 3.0 m/s.
15. Applicant to gain full approval for any easements required for water and sewer works prior to release of construction certificate.

16. The design shall include Gravity sewer connections for each proposed Lot. Privately owned Low Pressurised Sewer Systems and Package Pump Stations shall not be accepted. Exception granted for existing dwelling located on Lot 6.
17. Sewer mains located within lots adjacent to stormwater drainage lines shall be a minimum of 750 mm clear of the stormwater pipe.
18. Plans showing all easements to be created over water and sewer infrastructure shall be submitted to Council prior to the release of the Construction Certificate.
19. All Water and Sewer works, including minimum and maximum flows and velocities, shall be designed in accordance WSAA code.
20. Manholes that have been elevated for flood zone requirements shall require work platforms for WHS purposes.
21. Full vehicular access shall be provided to all sewer man holes to allow for servicing and maintenance.
22. The applicant shall provide detailed water design details to include a ring main design. The new water supply network shall connect into the Council reticulation network via two points of connection, being Ian Holt Drive & Maddox Lane.
23. The design of water reticulation shall generally be in accordance with the latest version of the Water Services Association of Australia (WSAA) "Water Supply Code of Australia" (WSA 03).
24. The applicant shall provide fire flow analysis for all water supply networks prior to the release of the Construction Certificate, to ensure that the network is capable of providing the performance for the design of pressure for spring hydrants. Maximum spacing of hydrants shall be 60metres.
25. Construction Certificate design drawings and specifications shall clearly address the following:
  - a. Location of pipelines, valves, hydrants, pipe materials, size, pressure class, jointing methods and corrosion protection measures.
  - b. Specifications for products, materials, site investigation, excavation/trench details and other technical matters.
  - c. Documentation of design assumptions, constraints and issues relevant to the design and not otherwise noted in the Concept Plan.
26. Water supply design to provide Desirable Minimum Static Pressure of 350kpa. Static Pressure shall not to exceed 500kpa at each house hold boundary.
27. Stop (dividing and isolating) and control valves shall be positioned to give required control of the system and to provide an alternative means of supply when a distribution main is taken out of service.
28. Minimum and maximum allowable service pressures will not be exceeded in each zone.

29. Minimum and maximum flows and velocities shall be in accordance with the WSA Code.
30. A geotechnical report shall be submitted to Council prior to the release of the Construction Certificate. All Pipe and fitting materials must be suitable for application and environment.
31. The spacing and positioning of valves shall allow for isolation of individual zones.
32. Water mains shall only be installed in undisturbed ground or compacted ground that is approved by a certified engineer.
33. All stop valves shall be anticlockwise closing and be positioned at a minimum of every 300 metres. Valves shall be positioned adjacent to branch take offs.
34. Each lot shall have an individual water meter, which shall be purchased from Council at the applicants full cost and held at Council store.
35. Right angled 90 degree brass lockable meter ball valves to be used as meter control valves and a type approved by the Water and Wastewater Manager. Council will secure the water meter valve with a stainless steel locking device prior to the subdivision certificate being released.
36. Water meters to be purchased by the owner after submitting to Council an Application for Work at Owners Cost Payment Authority Application and the completion of a Water Service Connection Application. Council will install the meter when a Development Application has been approved for the new allotment and a S68 Approval granted for connection to draw water.

**COUNCIL'S INFRASTRUCTURE SERVICES DEPARTMENT**

Reference is made to the abovementioned Development Application in regard to Council's Planner's referral.

It is recommended that the following conditions be placed on any development consent:

- A Construction Certificate must be obtained prior to the commencement of any Civil Works.
- All engineering works are to be to the standard specified in Council's "Guidelines for Civil Engineering Design and Construction for Development". This document is available on Council's website or upon request from Council's administration desk.
- Prior to the commencement of any works on site, the applicant shall advise Council of any damage to property controlled by Council which adjoins the site including kerbs, gutters, footpaths, walkways, reserves and the like. Failure to identify existing damage will result in all damage detected after completion of the building work being repaired at the applicant's expense.
- That a Geotechnical Report be provided for all proposed roads, including subgrade design prior to a Construction Certificate being issued. Geotechnical compaction tests and visual deflection tests are to be undertaken and to be approved by Council prior

to the application of seal. Such tests are to be included with the Construction Certificate Engineering Drawings.

- A site investigation is to be performed which is to include logging of test holes to a depth not less than one metre below design subgrade levels (unless rock is encountered). Soil tests shall be taken at the design depth and samples taken for CBR testing in accordance with Australian Standard 1289. The design California Bearing Ratio (CBR) shall be selected following a careful assessment of the materials encountered in the site investigation and the variability of subgrade moisture and density conditions likely in service. The design CBR value should assume poor drainage and shall be determined from soaked CBR. A copy of the site investigation, including test results, is to be included with the Engineering Drawings. Where the design subgrade CBR is below 3, the subgrade shall be chemically stabilised to a minimum depth of 150mm, and the pavement design based on a CBR of 3.
- The road crossfall must not exceed a maximum of 3% at any point.
- All batters must not exceed a maximum gradient of 1:5.
- The road grade must not exceed a maximum of 12% at any point. All internal roads shall have a minimum of 150mm (subject to testing) of DGB-20 road base applied and compacted providing a smooth transitional surface. The road surface is to be constructed to a 8m wide carriageway formation within a 15m wide minimum road reserve (minimum).
- All internal residential roads are to be surfaced with a minimum 40mm thickness of Asphaltic Concrete (AC) laid upon a sprayed bituminous prime coat, designed in accordance with the RTA publication "Sprayed Sealing Guide". Layers of asphaltic concrete may be included in the total design pavement depth, but should not be assigned a layer equivalency of greater than unity. Where variation to this condition is required, approval may be granted subject to discussion with Council.
- All cul-de-sacs/turning circles are to be surfaced with a minimum 40mm thickness of Asphaltic Concrete (AC) laid upon a sprayed bituminous prime coat, designed in accordance with the RTA publication "Sprayed Sealing Guide". Cul-de-sacs/turning circles are to be constructed so that a minimum kerbline radius of 12 metres (as per the RFS requirements) is achieved from the centre of the cul-de-sac/turning circle. The boundary of the road reserve should be curved with a minimum radius of 14 metres to provide for a 4.5 metre wide footpath. Where the head of the cul-de-sac is located on the low side of the road, special provision should be made to convey overland storm water flows through easements or drainage reserves.
- Street signs are required at all road junctions. Signs shall be purchased from Council. The location of proposed street signs is to be shown on the Engineering Drawings submitted with the construction certificate.
- Traffic signs, traffic signals, pavement markings, guide posts, delineators, safety barriers and the like, whether permanent or temporary, are to be designed and installed at all roads in accordance with guidelines contained within the Austroads publication, "Guide to Traffic Engineering Practice – Part 8: Traffic Control Devices", Australian Standard 1742 – Manual of Uniform Traffic Control Devices and the Roads and Traffic Authority "Road Design Guide". All traffic control devices and signage are

to be detailed in the engineering drawings submitted with the construction certificate. The consent of Lithgow City Council's Director of Infrastructure Services or appointed officer will be required prior to the installation of any traffic control devices on existing roads.

- A fully certified traffic control plan and road works signage will be required where machinery may obstruct traffic on any Public Road whilst construction work is being undertaken. A traffic control plan and certification of fully qualified contractors/persons will be required to be submitted to Council prior to any work commencing on the shoulder of any Public Road. Failure to comply may result in Work Cover Intervention and may also include Council stopping all work immediately until such time the developer complies with suitable traffic management procedures.
- A maintenance bond of 5% of final construction costs shall be paid to Council upon final inspection and approval of all civil works. The value of the maintenance bond shall be approved by Council after witnessing a certified copy of the contract documentation showing all civil construction costs for the subdivision. The maintenance period will start from the date of final inspection for a period of 12 months. At the conclusion of the 12 month period a final inspection is to be undertaken by Council at the request of the developer to determine if any defects have arisen during this time. All deficiencies are to be rectified by the developer, should outstanding works remain Lithgow City Council reserves the right to expend bond monies on rectification works.
- Two street trees per lot are to be planted within the road reserve. The developer shall consult with and seek approval from Council regarding the species to be used. Only non-frangible trees, having a mature diameter of less than 100mm, shall be planted near road verges and medians. A landscaping plan showing, but not limited to, plant species and estimated height and spread of mature trees is to be provided to Council with the construction certificate.
- Each layer of pavement shall be tested for compaction and deflection as detailed below. The Director of Operations or his delegate must approve each layer prior to the placing and compaction of subsequent layers.

(a) Compaction Testing:

The subgrade, and all pavement layers, shall be density tested in-situ at the start and finish of the work (within the first/last five metres), and thereafter at intervals of no more than 50 metres, or as indicated by Council's Development Engineer. A minimum of two tests will be required for road pavements less than 50 metres in length. At cul-de-sacs, additional testing will be required at the turning head. The test sites selected should be representative of the likely minimum pavement compaction levels achieved. Density testing must be undertaken by an authorised representative of a laboratory registered by the National Association of Testing Authorities (NATA). Density testing may be conducted using either the sand replacement test, nuclear gauge, or other NATA approved method.

Where a nuclear gauge in direct transmission mode is used to determine pavement density, the test method shall comply with RTA Test Method T173. Results of density testing shall be forwarded directly to Council for approval. No pavement layer shall be covered by a subsequent layer until the results of

the density testing have been delivered to and approved by Council's Development Engineer. Table 1 below sets out the minimum compaction requirement for each pavement layer.

Layer	Compaction Requirement	Standard
Subgrade	98% standard maximum dry density	AS 1289.E1.1
	California Bearing Ratio (CBR) test	AS 1289.F1.1
Sub-Base	100% standard maximum dry density	AS 1289.E1.1
Base	100% standard maximum dry density	
	• <i>Unbound Materials</i>	AS 1289.E2.1
	• <i>Cemented Materials</i>	AS 1289.E3.1
	Density in place test	AS 1289.E3.1
	California Bearing Ratio (CBR) test	AS 1289.F1.1

Laboratory determination of maximum dry density for pavement materials which have been modified with cement must be undertaken within 4 hours of the cement being added to the material. Materials tested outside this time will be subject to an adjustment to correctly determine the maximum dry density of the sample. For either natural or modified material, the laboratory determination of maximum dry density shall be undertaken at a frequency of no less than one determination for each days production of material.

(b) Deflection Testing:

All pavement layers must be proof-rolled, and approved by Council's Development Engineer prior to the placement of subsequent pavement layers.

The proof-rolling will be conducted using either:

(i) a roller having a load intensity of seven (7) tonnes per metre width of roller.

(ii) a tandem axle rigid vehicle, having a maximum load of 15 tonnes per axle group (8 tyres), 12 tonnes per axle group (6 tyres), or 10 tonnes per axle group (4 tyres). Single axle vehicles should have maximum loads of 8.5 tonnes (dual tyres), or 5.4 tonnes (single tyres).

Any movement of the pavement layer under loading will be deemed a failure.

Although not a subdivision requirement at this stage, Council strongly encourages Developers to specify in their contracts the use of Benkelman Beam tests to test for any deflection in the pavement layers, and as a means of quality assurance.

(c) Final Road Profile:

The mean construction tolerance on pavement surface crossfalls should be within  $\pm 5\%$  of the design crossfall. The maximum allowable construction tolerance is  $\pm 5\%$ , and the maximum standard deviation of crossfalls is 5%. The vertical alignment should not deviate by more than 25mm from the value shown on the drawings.

• All road, drainage, kerb and gutter, water and sewerage reticulation works associated with a development shall be inspected by Council's Operations Department. The whole of the works are to be carried out to the satisfaction of the

Executive Manager of Operations. Council shall inspect engineering works at the following stages as a minimum:

- Following site regrading and shaping, and prior to installation of footway services;
- Installation of erosion and sedimentation control measures;
- Storm water drainage lines prior to backfill;
- Water and sewer lines prior to backfill;
- Testing of water and sewer lines;
- Subgrade preparation, before placing pavement;
- Establishment of line and level for kerb and gutter placement;
- Completion of each pavement layer ready for testing;
- Road pavement surfacing;
- Completion of works

The developer or contractor shall give Council a minimum 24 hours' notice when requesting an inspection to ensure that development works are not delayed. The developer shall, if required by a Council Engineer, submit delivery dockets for all materials used, and all material and performance test results obtained in the development.

• A "Work-As-Executed" (WAE) plan is required to be prepared by a Registered Surveyor or professional engineer and forwarded to Council prior to the final inspection. The WAE is to include, as a minimum:

- certification that all works have been completed generally in accordance with the approved plans and specification,
- any departure from the approved plans,
- any additional/deleted work,
- the location of conduits, subsoil lines, stub mains and inter-allotment drainage lines,
- pipeline long sections showing the constructed invert levels of each pipe at each pit and pipe dimensions,
- details of overland flow provisions,
- site regrading areas by new contours, and
- all other details which have a bearing on the extent of works and their acceptance by Council.

• All Engineering Drawings submitted to Council for approval are to have a title block showing the following:

- Applicant's Name,
- Consultant's Name, Address, Phone No. and Contact Name,
- Drawing Number, Sheet Number and Amendment Number,
- Schedule showing Date and Nature of Amendments,
- Site Address, including Lot and Deposited Plan (DP) Number,
- Council's File Reference,
- Stage Number,
- Drawing Title,
- Scale with Scale Bar, and
- Signature of Authorised Person

• Construction noise shall be in accordance with the 'Noise Control Guidelines for Construction Noise Standards'. Hours of operation shall be permitted between 7am and 6pm Monday to Friday and 8am and 1pm Saturdays. No heavy machinery work or usage shall be permitted on Sundays or Public Holidays.

- Street lighting shall be provided on all internal access roads in accordance with Australian Standard 1158 – Road Lighting. Energy absorbing columns may be required where fallen columns would be particularly hazardous. The use of energy-saving lighting fixtures is encouraged, however no rebate will be issued to the developer if these types of lamps are approved.
- The applicant shall consult with an Authorised Telecommunications, Electricity and Gas Authorities for the provision of underground telephone, electricity, and gas services to each allotment. Notification of Arrangement for provision to each allotment shall be lodged with Council prior to the issue of a Subdivision Certificate for each stage.
- The applicant shall submit a soil erosion and sedimentation control plan with the engineering design for Council approval. Such shall address both short and long term management of all disturbed areas and specified methods and structures to be employed to minimise any impact.
- The applicant is to comply with all reasonable requests from Council with regard to any complaints received during construction works.
- The following conditions apply to Stormwater Drainage design and construction:
  - a) Stormwater Drainage plans shall be submitted to Council as part of the construction certificate, drawn at a scale sufficient to show all necessary details, nominally 1:200, 1:500, 1:1000 or 1:2000. The following data is to be included with a contoured catchment area plan:
    - i. Catchment areas and sub-areas, watershed (catchment boundary), overland flow paths, existing and proposed pipe layout. For large catchments, the total catchment area should be shown at a large scale on a separate plan or inset.
    - ii. All sub-areas, drainage lines and pits are to be logically numbered.
    - iii. A schedule of pipe details, including pipe number, size, class, bedding type, joint type, invert levels at inlet and outlet, slope, and length.
    - iv. A schedule of pit details, including pit number, type, road chainage, surface level to the Australian Height Datum (AHD), invert level to AHD, depth, and lintel length.
    - v. North point and legend.
    - vi. Setout information.
    - vii. Accurate position and level of all services and utilities which cross underground drainage pipelines.
    - viii. Identify those building allotments adjacent to channels and major storm flow paths which may be liable to flooding in major flood events, and the minimum design habitable floor level adjacent to prevent flooding in the design flood event.
    - ix. Inlet and outlet treatments.
    - x. Measures for the prevention of erosion and sedimentation.
  - b) Stormwater pit construction:
    - i. Pits shall be provided in drainage lines at all changes in grade, level, and direction, and at all pipe junctions and shall be spaced at no more than 85m apart.

- ii. Drainage pits are to conform to Council's standard Drawings, or RTA standards for Classified Roads. Non-standard structures shall be constructed as detailed in the design drawings. Such designs shall comply with AS3600 –Concrete Code, AS4100 – Steel Structures, AS1657 – SAA code for fixed platforms, walkways, stairways and ladders; and any other relevant standard.
  - iii. Pits used for storm water drainage shall be fitted with square lids to distinguish them from sewer manholes.
  - iv. Junction pits shall be fitted with reinforced lids and approved lifting eyes.
  - v. Grated inlet pits shall not be used for street or roadway drainage.
  - vi. Precast pits, incorporating insitu bases, may be used if the prior approval of the pit type and design are approved by the Group Manager of Operations.
  - vii. Every endeavour shall be made to maintain flow velocities through pits. Excessive drops will not be permitted.
  - viii. Pipe grading across pits should be designed on the following basis:
    - No change in direction or diameter - minimum 50mm;
    - Direction change but no change in diameter - minimum 70mm;
    - Changes in pipe diameter should be graded from obvert to obvert;
  - ix. At pit connections, a 3 metre length of approved subsoil drainage pipe enclosed in a geofabric sock shall be placed alongside the main pipe so as to enter the pit at the same invert level and adequately drain the main trench, in accordance with Council's standard drawing EN 1016 (copy attached).
- c) Location of pits in roadways, for the adopted minor drainage system annual exceedance probability:
- i. Inlet pits shall be located so as to restrict the maximum gutter flow width to 2.5 metres.
  - ii. Maximum spacing between any two consecutive pits is 85 metres.
  - iii. Pit bypass flows should be limited to 15% of the gutter flow at that location.
  - iv. At intersections, kerb inlet pits shall be constructed adjacent to the upstream kerb return tangent point where flows exceed 20 litres per second or gutter flow width is more than 1 metre.
  - v. The minimum clearance from the top of the manhole to the design pit water level should be 150mm.
  - vi. The product of flow velocity and depth of flow in the kerb and gutter should not exceed 0.4 m<sup>2</sup>/s.
  - vii. Kerb inlet pits should be located clear of horizontal curves, pedestrian desire lines, and vehicle driveways.
  - viii. Inlet conditions shall be designed so that the potential for blockage by silt and debris is minimised. This may require special treatment of the inlet sump under some conditions.
- d) Hydraulic Design
- i. Pit inlet capacities shall be estimated from design charts and formulae, based on lintel size for on-grade pits and depth of ponding for sag pits. The calculated inlet capacity shall be reduced by a factor of 50% for sag pits, and 20% for on-grade pits, on the assumption that debris is preventing some inflow.

- ii. Standard lintel sizes of 1.8, 2.4, 3.0, or 3.6 metres should be used when possible.
- iii. The minimum internal lintel size on a sag should be 2.4 metres.
- iv. The head loss through pits shall be determined from Missouri Charts or other recognised methods.

- The engineering designs of Bio-Retention 1 & 2 must be consistent with Water by Design, 2014, "Bio-Retention Technical Design Guidelines", Healthy Waterways Ltd, Brisbane. The designs must incorporate an impermeable liner when located in close proximity to Sewer and/or Water infrastructure. In coordination with the engineering designs an Operational and Maintenance Plan for the assets is to be developed and submitted to Council for approval.

- The following conditions must be met prior to asset handover of the street tree bio-retention basins:

- Certification that the asset has been constructed in accordance with approved plans.
- Work as executed drawings and engineering certifications have been provided
- All required sediment and water management controls as outlined in the soil and water management plan are in place and functioning as intended.
- Details of any incidents including Work Health and Safety incidents, public safety and complaints received are documented and provided to Council.
- Any required maintenance and security bonds have been received as detailed in the following condition.

- The following stormwater asset maintenance and security bonds are required prior to asset handover:

- Street Tree Bio-Retention Basins –A bond totalling the expected maintenance costs for a 2 year maintenance period are to be provided to Council prior to asset handover.

### **PUBLIC SUBMISSIONS**

During the first notification period 5 submissions were received. Due to the plans being amended during the assessment process, the application was re-advertised with one additional submission received. After both advertising periods, the following concerns were raised:

1. Fencing should be in character of the area and be reasonable for privacy and security purposes.
2. The development would devalue properties within Maddox Lane as the semi-rural atmosphere would be modified. Privacy and current tranquillities would also be impacted upon.
3. The development would impact noise and traffic in the area.
4. The surrounding landowners should be given first priority to purchase lots in the subdivision in order to reduce their loss of perceived rural aspect and privacy.
5. The proposed roads be named in consideration of the heritage of the area.

6. As the development would provide additional traffic movements, Maddox Lane would be impacted upon and would be required to be upgraded and repaired to a more suitable standard for two way traffic.
7. The development would impact Wolgan Road and Ian Holt Drive with the proposed additional traffic movements.
8. The development is an over development for the site and the surrounding small rural village. The size of the allotments should be increased to approximately 2ha each.
9. There is a lack of amenities and infrastructure to be able to service the proposed development.
10. The development is not in character and density with the historical and rural presence of the area.
11. The development would impact tourism in the area as the rural and historical atmosphere would be amended.
12. The development would impact the Cox's River that adjoins the development in relation to potential water runoff from housing and roadways.
13. It is recommended that an 8 foot, soundproof, total screening fencing is erected along the southern boundary of the development to minimise noise and privacy issues.
14. Concern about extent of traffic generated by the development, particularly with respect to the intersection with Ian Holt Drive.
15. The development would impact wildlife in the area.

**Applicants Response:**

- 1. Fencing to be provided to an urban standard.*
- 2. Devaluation of property is not a valid planning consideration. Regardless, no attempt has been made to justify this point.*
- 3. The subdivision has been designed to meet Council's LEP requirements in terms of minimum lot size. The amended plans show no lots off Maddox Lane as all lots will gain access off Ian Holt Drive. Accordingly, traffic impacts on existing development will be minimal and expected in an urban zone.*
- 4. This point is not a valid planning objection.*
- 5. The naming of future roads will be undertaken in accordance with Council's Policy.*
- 6. As no lots will be serviced from Maddox Lane, there will be no works on Maddox Lane required.*
- 7. Contributions will be required to be paid as a result of the subdivision for roads.*

8. *The development is not considered an over development – the subdivision has been designed to meet all LEP requirements including minimum lot size.*

9. *Council's LEP has zoned the land for residential purposes with a minimum lot size of 2000m<sup>2</sup>. Council has confirmed that there is infrastructure available to service this subdivision.*

10. *The revised plan has provided for a 3.15ha lot around the existing buildings (curtilage suggested by Council has been acceptable). This lot will also assist in preserving the rural character of the site when viewed from the Highway.*

11. *Don't think that this subdivision will have any impact whatsoever on local tourism. The issues relating to heritage have been addressed.*

12. *Issues relating to stormwater etc have been addressed in the submitted Stormwater Report/Music Modelling.*

13. *This request is completely unreasonable. There is already an established Hawthorne hedge on that boundary. Regardless, the visual impact on this site by such a fence is excessive and will negatively impact upon the heritage item on the site and the intention to retain an "open" feel for the subdivision.*

14. *There is a significant intersection treatment already at the intersection of the Castlereagh Highway and Ian Holt Drive (BAL and BAL intersection) and a further intersection constructed to the lower Ian Holt Drive back down to the "Woodlands" homestead (which will connect up to the new road system to serve the new subdivision).*

*The road infrastructure is already existing and built to suit such a subdivision on the subject land – no further upgrading works is considered necessary or warranted. The impact on any other property would be negligible.*

15. *The submission has provided no justification as to what the impact there may be on local wildlife. There are no identified threatened species (flora or fauna) on the subject land. The land has been worked agriculturally for many years.*

**Council Officer's Response:**

1. No fencing is proposed as part of this application. Fencing for future dwellings would be assessed under separate applications. Fencing under the State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 is not applicable as the whole of the property will remain heritage listed.

Any new fencing for the allotments would need to be compatible with the surrounding area and not impact the streetscape.

2. Impact on property valuation is not a planning consideration.

3. Traffic- The amended plans show no new lots to be serviced from Maddox Lane. Therefore Wolgan Road would not be impacted upon.

Ian Holt Drive is a sealed, 2 directional road. One lot (existing dwelling lot) is proposed to have direct access from this road. A new access road is proposed to be constructed through the development to service the new allotments. The new roads will be required to be constructed to Council's Engineering requirements.

The access to the proposed subdivision is within the vicinity of the Castlereagh Highway with direct access from Ian Holt Drive. It is expected that many vehicles attending the subdivision would have the choice of entering Ian Holt Drive from the North Western end where there are no other properties to access the Highway or from the Southern end of Ian Holt Drive where there are numerous residential dwellings and small businesses. Given the option of the road network, Ian Holt Drive is expected to have the capacity to service the additional traffic movements.

Noise-Besides during construction works, noise is expected to be generated by general residential social and vehicle noise. Given the allotment sizes being of 2000m<sup>2</sup> and the vegetation along Ian Holt Drive and along the Eastern boundary are proposed to remain, noise would be minimised to reduce impacts to some adjoining properties. Noise will be the standard residential noise as per the surrounding property uses.

4. It is up to the property owner as to how they wish to sell the lots. There is no remaining rural character on the southern side of the creek as majority of the properties consists of large lot residential land (approximately 2000m<sup>2</sup>), with this land being one of the only ones that has not been subdivided. Therefore the rural character of the area has already been replenished.

In terms of privacy, the lots are proposed to contain an area of 2000m<sup>2</sup>. Any future dwellings on the proposed allotments would be required to be setback from the boundaries of adjoining properties and would be designed to reduce potential privacy impacts.

5. A condition would be placed on the consent for road names to be issued to Council. The road names would be advertised for public comment.

6. As previously advised in point 3 above, no lots would gain access Maddox Lane.

7. As per Point 3 above the roads are at a suitable standard for the additional traffic movements. Contributions would also apply for some future road maintenance.

8. The size of the proposed allotments complies with Council's LEP 2014 and is of similar size to surrounding properties.

9. Services such as water and sewer would be extended to the property at full cost to the applicant. Contributions would also be sought for the additional load to these services.

10. As previously stated there is no remaining rural character on the southern side of the creek as majority of the properties consists of large lot residential land (approximately 2000m<sup>2</sup>), with this land being one of the only ones that has not been subdivided. Therefore the rural character of the area has already been extinguished and the development complies with the surrounding lot sizes. Future dwellings would be required to be constructed to suit the surrounding streetscape.

11. Tourism to the area would utilise Wolgan Road and not the proposed location of the development. The historical elements of the property would be maintained and visually viewed from Ian Holt Drive and the Highway. As such tourism to the area is unlikely to be impacted upon by the development.

12. Stormwater Management plans have been submitted and assessed by Water NSW. Stormwater run-off is considered satisfactory and would not impact Coxs River.

13. The proposed development and surrounding properties consist of semi-rural residential size lots with no sound proof type fencing in the area. Due to the size of the lots and a there are other means to minimise privacy and visual impacts for further dwellings such as the dwelling orientation, setback, and landscaping, it is unreasonable to require fencing along the southern boundary for the subdivision.

14. Council's Engineers have assessed the application and advise that the new roads would be required to comply with Council's Engineering requirements including the connections and intersections with the existing road structure.

15. There is no native vegetation proposed to be removed as part of the development. There are scattered pine trees on the site that will be removed for the development. The property has previously been utilised for grazing operations and has previously disturbed. Therefore the development is expected to have minimal impact to flora or fauna.

There are no known threatened species or critical habitat on the property that would have an impact on the location of the proposed building envelopes.

#### 5.3.9 The public interest

There have been no issues raised from the public regarding planning issues.

**Road Extension:** The development requires 2 new roads off Ian Holt Drive. As a result, these roads will be dedicated to Council once completed. Therefore, Council is required to be satisfied that these roads will be at a standard acceptable as a roads authority. This is of public interest as although the new roads will be constructed at full cost to the applicant, the additional roads will be required to be maintained by Council resulting in future costs to the community.

**Sewer:** The development requires additional connections to Council's reticulated sewer. This requires potential upgrades of existing services to allow for the additional loadings. The cost of these of upgrades will be borne by the developer; however the ongoing maintenance of the services will be the responsibility of Council. It is important for Council to ensure that these services are properly provided to minimise potential unnecessary maintenance in the future. This is of public interest as there are additional sewer services that will be required to be maintained by Council resulting in future costs to the community. However, contributions through the Water Management Act 2000 will be applicable and will provide support to Council's ongoing maintenance of this utility.

**Water:** The development requires additional connections to the reticulated water services. The cost of these of upgrades will be borne by the developer; however the

ongoing maintenance of the services will be the responsibility of Council. It is important for Council to ensure that these services are properly provided to minimise potential unnecessary maintenance in the future. This is of public interest as there are additional water services that will be required to be maintained by Council resulting in future costs to the community. However, contributions through the Water Management Act 2000 will be applicable and will provide support to Council's ongoing maintenance of this utility.

**6. DISCUSSION AND CONCLUSIONS**

The proposal is considered to generally comply with the relevant provisions of the applicable Environmental Planning Instruments. The proposal is not considered likely to have any significant negative impacts upon the environment or upon the amenity of the locality. As such it is recommended that development consent is issued subject to the conditions outlined below.

**7. ATTACHMENTS**

Schedule A- Conditions of consent.

**8. RECOMMENDATION**

**THAT** development application DA 196/18 is approved subject to conditions set out in Schedule A.

Report prepared by:

Supervisor:

Signed:.....

Signed:.....

Dated:.....

Dated:.....

**REASONS FOR CONDITIONS**

The conditions in Schedule A have been imposed for the following reasons:

- To ensure compliance with the terms of the relevant Planning Instruments
- To ensure no injury is caused to the existing and likely future amenity of the neighbourhood
- Due to the circumstances of the case and the public interest.
- To ensure that adequate road and drainage works are provided.
- To ensure that satisfactory arrangements are made to satisfy the increased demand for public recreation facilities
- To ensure access, parking and loading arrangements will be made to satisfy the demands created by the development.
- To ensure the structural integrity of the development.
- To protect the environment.
- To prevent, minimise, and/or offset adverse environmental impacts.
- To ensure lots are adequately serviced.
- To ensure there is no unacceptable impact on the water quality.
- To ensure compliance with the requirements of the Rural Fire Services.
- To ensure adequate soil conservation and protect against movement of soil and sediments.

**Schedule A**  
**Conditions of Consent (Consent Authority)**

**Please Note:** It should be understood that this consent in no way relieves the owner or applicant from any obligation under any covenant affecting the land.

Due to changes in the Environmental Planning and Assessment Act coming into effect on 1 December 2019, the terms Construction Certificate and Subdivision Works Certificate shall have the same meaning.

<b>ADMINISTRATIVE CONDITIONS</b>	
1.	That the development be carried out in accordance with the application, Statement of Environmental Effects, accompanying information, plans listed in the approval and any further information provided during the process unless otherwise amended by the following conditions.
2.	No dwelling has been approved as part of this subdivision application. Separate development applications are required to be lodged with Council for any future development or demolition of dwellings.
3.	That the a Subdivision Certificate Application, release fee, Registered Surveyors Plans (original & 11 copies) along with associated 88B instrument if applicable, be submitted to Council for finalisation following the compliance with all conditions of this consent.
4.	No coal burning appliances are to be installed on the residential allotments. A restrictive covenant shall be placed on each lot created through an 88(b) Instrument of the <i>Conveyancing Act 1919</i> with Council having the right to vary, modify or release this restriction.
5.	A street tree planting plan is to be submitted to Council and approved for the overall subdivision prior to Subdivision Certificate release of Stage 1. The street trees are to be implemented within each stage prior to Subdivision Certificate release of those stages respectively.
6.	The development is proposed to be undertaken in 3 stages, that being: <ul style="list-style-type: none"> <li>• Stage 1 – creation of Lot 1,</li> <li>• Stage 2 – creation of Lots 2 to 8 and construction of part subdivision road 1 to provide access to Lot 3 and subdivision road 2, and</li> <li>• Stage 3 – creation of Lots 9 to 32 and construction of remaining subdivision road 1.</li> </ul>
7.	Prior to release of the Subdivision Plan for Stage 2, the applicant shall submit options for road names to Council for consideration and approval in accordance with guidelines for the naming of roads (Geographical Names Board of NSW).
8.	To minimise potential impacts to Maddox Lane, the applicant is to submit a landscaping plan to Council showing the location and type of vegetation for all lots that adjoins Maddox Lane.  Once approved by Council, the landscaping is to be planted.  An 88B restrictive covenant is to be placed on proposed Lots 21, 20, 18 and 17, preventing the vegetation to be removed unless replaced by similar species and that they are to be maintained.  This is to be undertaken prior to the release of the Stage 3 Subdivision Certificate.
9.	The Council's Economic Development and Environment Department shall be contacted to arrange the appropriate address numbers to be allocated to the subdivision.

10.	A street lighting plan is to be provided with adequate street lighting in accordance with AS/NZS and be to the satisfaction of the relevant electricity supplier prior to release of the Subdivision Certificate for all stages. Such lighting shall have regard to its visual impact and be designed to complement the streetscape. Street lighting is to be implemented prior to the release of the Subdivision Certificate for each stage.
11.	Excavation work is to be wholly confined within the property boundary. Excavation is to have minimal impact to the heritage items in the area.
<b>PRIOR TO ISSUE OF SUBDIVISION CERTIFICATE</b>	
<b><i>Voluntary Planning Agreement</i></b>	
12.	That the Voluntary Planning Agreement (VPA) be endorsed by all parties as proposed by the applicant on 16/05/2019 prior to the Subdivision Certificate release of Stage 1. Additionally, the contribution agreed to within the VPA is to be paid at a rate of \$3,000.00 per lot for community facilities and public open space prior to the Subdivision Certificate release of each stage.
<b><i>Section 64</i></b>	
13.	An application shall be submitted to Council for the supply of a Certificate of Compliance under Section 305 of the Water Management Act. A Subdivision Certificate shall not be issued for each stage until such time as the contributions applicable to release the Certificate of Compliance are paid in full to Council. These contributions may be found in the Lithgow Council Fees and Charges or any applicable document adopted by Council in relation to contributions under Section 64 of the Local Government Act 1993 at the time of payment.  You are to note that the current headwork charges for the 2018-2019 period is within Council's 'Development Servicing Plans for Water Supply and Sewerage August 2018' adopted by Council on 27 August 2018.
<b><i>Utilities</i></b>	
14.	The applicant shall consult with an Authorised telecommunications, Electricity and Gas Authorities for the provision of telephone, electricity and gas to each allotment. Confirmation of connection to each allotment or a 'Notification of Arrangement' shall be lodged from each authority, with Council prior to the issue of the Subdivision Certificate for each stage.
15.	Prior to the issue of the Subdivision in connection with a development, the developer (whether or not a constitutional corporation) is to provide evidence satisfactory to the Certifying Authority that arrangements have been made for: <ol style="list-style-type: none"> <li>1. the installation of fibre-ready facilities to all individual lots and/or premises in a real estate development project so as to enable fibre to be readily connected to any premises that is being or may be constructed on those lots. Demonstrate that the carrier has confirmed in writing that they are satisfied that the fibre ready facilities are fit for purpose.</li> </ol> and <ol style="list-style-type: none"> <li>2. the provision of fixed-line telecommunications infrastructure in the fibre-ready facilities to all individual lots and/or premises in a real estate development project demonstrated through an agreement with a carrier.</li> </ol> <p>Note: real estate development project has the meanings given in section 372Q of the Telecommunications Act.</p>
<b><i>Environmental Protection</i></b>	

15.	<p>Prior to the issue of the Subdivision Certificate, Council is to be provided with a report from Upper Macquarie County Council indicating:</p> <ul style="list-style-type: none"> <li>• Noxious plants are under adequate management; or</li> <li>• Noxious plant management has been undertaken and adequate control measures are in place; or</li> <li>• Noxious plants are not a concern for the property.</li> </ul>
<b>Dust</b>	
16.	<p>The applicant shall ensure that during construction works all measures are taken to eliminate/suppress any dust nuisance emanating from the site. This includes an onsite sprinkler and or water truck being on the property at all times during construction works. Trucks are to be covered with a tarp or other material that would prevent dust emissions when leaving the property.</p>
17.	<p>Measures shall be implemented to minimise wind erosion and dust nuisance in accordance with the requirements of the manual – “Soils and Construction” (2004) (Bluebook). All roads and construction areas shall be treated/regularly watered to the satisfaction of the principal certifying authority.</p>
<b>Engineering Requirements</b>	
18.	<p>A Construction Certificate must be obtained prior to the commencement of any Civil Works.</p>
19.	<p>All engineering works are to be to the standard specified in Council’s “Guidelines for Civil Engineering Design and Construction for Development”. This document is available on Council’s website or upon request from Council’s administration desk.</p>
20.	<p>The applicant shall provide Council with Work as Executed drawings (AutoCAD format) prior to the issue of the Subdivision Certificate. These drawings shall include all details listed in Section 1.10 of Council’s ‘Guidelines for Civil Engineering Design and Construction for Development’.</p>
21.	<p>Prior to the commencement of any works on site, the applicant shall advise Council of any damage to property controlled by Council which adjoins the site including kerbs, gutters, footpaths, walkways, reserves and the like. Failure to identify existing damage will result in all damage detected after completion of the building work being repaired at the applicant’s expense.</p>
22.	<p>That a Geotechnical Report be provided for all proposed roads, including subgrade design prior to a Construction Certificate being issued. Geotechnical compaction tests and visual deflection tests are to be undertaken and to be approved by Council prior to the application of seal. Such tests are to be included with the Construction Certificate Engineering Drawings.</p>
23.	<p>A site investigation is to be performed which is to include logging of test holes to a depth not less than one metre below design subgrade levels (unless rock is encountered). Soil tests shall be taken at the design depth and samples taken for CBR testing in accordance with Australian Standard 1289. The design California Bearing Ratio (CBR) shall be selected following a careful assessment of the materials encountered in the site investigation and the variability of subgrade moisture and density conditions likely in service. The design CBR value should assume poor drainage and shall be determined from soaked CBR. A copy of the site investigation, including test results, is to be included with the Engineering Drawings. Where the design subgrade CBR is below 3, the subgrade shall be chemically stabilised to a minimum depth of 150mm, and the pavement design based on a CBR of 3.</p>
24.	<p>The road crossfall must not exceed a maximum of 3% at any point.</p>

25.	All batters must not exceed a maximum gradient of 1:5.
26.	The road grade must not exceed a maximum of 12% at any point. All internal roads shall have a minimum of 150mm (subject to testing) of DGB-20 road base applied and compacted providing a smooth transitional surface. The road surface is to be constructed to a 8m wide carriageway formation within a 15m wide minimum road reserve (minimum).
27.	All internal residential roads are to be surfaced with a minimum 40mm thickness of Asphaltic Concrete (AC) laid upon a sprayed bituminous prime coat, designed in accordance with the RTA publication "Sprayed Sealing Guide". Layers of asphaltic concrete may be included in the total design pavement depth, but should not be assigned a layer equivalency of greater than unity. Where variation to this condition is required, approval may be granted subject to discussion with Council.
28.	All cul-de-sacs/turning circles are to be surfaced with a minimum 40mm thickness of Asphaltic Concrete (AC) laid upon a sprayed bituminous prime coat, designed in accordance with the RTA publication "Sprayed Sealing Guide". Cul-de-sacs/turning circles are to be constructed so that a minimum kerbline radius of 9.5 metres is achieved from the centre of the cul-de-sac/turning circle. The boundary of the road reserve should be curved with a minimum radius of 14 metres to provide for a 4.5 metre wide footpath. Where the head of the cul-de-sac is located on the low side of the road, special provision should be made to convey overland storm water flows through easements or drainage reserves.
29.	Street signs are required at all road junctions. Signs shall be purchased from Council. The location of proposed street signs is to be shown on the Engineering Drawings submitted with the construction certificate.
30.	Traffic signs, traffic signals, pavement markings, guide posts, delineators, safety barriers and the like, whether permanent or temporary, are to be designed and installed at all roads in accordance with guidelines contained within the Austroads publication, "Guide to Traffic Engineering Practice – Part 8: Traffic Control Devices", Australian Standard 1742 – Manual of Uniform Traffic Control Devices and the Roads and Traffic Authority "Road Design Guide". All traffic control devices and signage are to be detailed in the engineering drawings submitted with the construction certificate. The consent of Lithgow City Council's Director of Infrastructure Services or appointed officer will be required prior to the installation of any traffic control devices on existing roads.
31.	A fully certified traffic control plan and road works signage will be required where machinery may obstruct traffic on any Public Road whilst construction work is being undertaken. A traffic control plan and certification of fully qualified contractors/persons will be required to be submitted to Council prior to any work commencing on the shoulder of any Public Road. Failure to comply may result in Work Cover Intervention and may also include Council stopping all work immediately until such time the developer complies with suitable traffic management procedures.
32.	A maintenance bond of 5% of final construction costs shall be paid to Council upon final inspection and approval of all civil works. The value of the maintenance bond shall be approved by Council after witnessing a certified copy of the contract documentation showing all civil construction costs for the subdivision. The maintenance period will start from the date of final inspection for a period of 12 months. At the conclusion of the 12 month period a final inspection is to be undertaken by Council at the request of the developer to determine if any defects have arisen during this time. All deficiencies are to be rectified by the developer, should outstanding works remain Lithgow City Council reserves the right to expend bond monies on rectification works.

33.	Two street trees per lot are to be planted within the road reserve. The developer shall consult with and seek approval from Council regarding the species to be used. Only non-frangible trees, having a mature diameter of less than 100mm, shall be planted near road verges and medians. A landscaping plan showing, but not limited to, plant species and estimated height and spread of mature trees is to be provided to Council with the construction certificate.												
34.	<p>Each layer of pavement shall be tested for compaction and deflection as detailed below. The Director of Infrastructure Services or his delegate must approve each layer prior to the placing and compaction of subsequent layers.</p> <p>(a) Compaction Testing:            The subgrade, and all pavement layers, shall be density tested in-situ at the start and finish of the work (within the first/last five metres), and thereafter at intervals of no more than 50 metres, or as indicated by Council’s Development Engineer. A minimum of two tests will be required for road pavements less than 50 metres in length. At cul-de-sacs, additional testing will be required at the turning head. The test sites selected should be representative of the likely minimum pavement compaction levels achieved. Density testing must be undertaken by an authorised representative of a laboratory registered by the National Association of Testing Authorities (NATA). Density testing may be conducted using either the sand replacement test, nuclear gauge, or other NATA approved method.</p> <p>Where a nuclear gauge in direct transmission mode is used to determine pavement density, the test method shall comply with RTA Test Method T173. Results of density testing shall be forwarded directly to Council for approval. No pavement layer shall be covered by a subsequent layer until the results of the density testing have been delivered to and approved by Council’s Development Engineer. Table 1 below sets out the minimum compaction requirement for each pavement layer.</p> <table border="1" data-bbox="497 1240 1174 1469"> <thead> <tr> <th>Layer</th> <th>Compaction Requirement</th> <th>Standard</th> </tr> </thead> <tbody> <tr> <td>Subgrade</td> <td>98% standard maximum dry density California Bearing Ratio (CBR) test</td> <td>AS 1289.E1.1 AS 1289.F1.1</td> </tr> <tr> <td>Sub-Base</td> <td>100% standard maximum dry density</td> <td>AS 1289.E1.1</td> </tr> <tr> <td>Base</td> <td>100% standard maximum dry density  <ul style="list-style-type: none"> <li>• <i>Unbound Materials</i></li> <li>• <i>Cemented Materials</i></li> </ul>           Density in place test California Bearing Ratio (CBR) test</td> <td>AS 1289.E2.1 AS 1289.E3.1 AS 1289.E3.1 AS 1289.F1.1</td> </tr> </tbody> </table> <p>Laboratory determination of maximum dry density for pavement materials which have been modified with cement must be undertaken within 4 hours of the cement being added to the material. Materials tested outside this time will be subject to an adjustment to correctly determine the maximum dry density of the sample. For either natural or modified material, the laboratory determination of maximum dry density shall be undertaken at a frequency of no less than one determination for each days production of material.</p> <p>(b) Deflection Testing:            All pavement layers must be proof-rolled, and approved by Council’s Development Engineer prior to the placement of subsequent pavement layers.            The proof-rolling will be conducted using either:            (i) a roller having a load intensity of seven (7) tonnes per metre width of roller.</p>	Layer	Compaction Requirement	Standard	Subgrade	98% standard maximum dry density California Bearing Ratio (CBR) test	AS 1289.E1.1 AS 1289.F1.1	Sub-Base	100% standard maximum dry density	AS 1289.E1.1	Base	100% standard maximum dry density <ul style="list-style-type: none"> <li>• <i>Unbound Materials</i></li> <li>• <i>Cemented Materials</i></li> </ul> Density in place test California Bearing Ratio (CBR) test	AS 1289.E2.1 AS 1289.E3.1 AS 1289.E3.1 AS 1289.F1.1
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	<p>(ii) a tandem axle rigid vehicle, having a maximum load of 15 tonnes per axle group (8 tyres), 12 tonnes per axle group (6 tyres), or 10 tonnes per axle group (4 tyres). Single axle vehicles should have maximum loads of 8.5 tonnes (dual tyres), or 5.4 tonnes (single tyres). Any movement of the pavement layer under loading will be deemed a failure. Although not a subdivision requirement at this stage, Council strongly encourages Developers to specify in their contracts the use of Benkelman Beam tests to test for any deflection in the pavement layers, and as a means of quality assurance.</p> <p>(c) Final Road Profile: The mean construction tolerance on pavement surface crossfalls should be within <math>\pm 5\%</math> of the design crossfall. The maximum allowable construction tolerance is <math>\pm 5\%</math>, and the maximum standard deviation of crossfalls is 5%. The vertical alignment should not deviate by more than 25mm from the value shown on the drawings.</p>
35.	<p>All road, drainage, kerb and gutter, water and sewerage reticulation works associated with a development shall be inspected by Council's Infrastructure Services Department. The whole of the works are to be carried out to the satisfaction of the Executive Manager of Operations. Council shall inspect engineering works at the following stages as a minimum:</p> <ul style="list-style-type: none"> <li>• Following site regrading and shaping, and prior to installation of footway services;</li> <li>• Installation of erosion and sedimentation control measures;</li> <li>• Storm water drainage lines prior to backfill;</li> <li>• Water and sewer lines prior to backfill;</li> <li>• Testing of water and sewer lines;</li> <li>• Subgrade preparation, before placing pavement;</li> <li>• Establishment of line and level for kerb and gutter placement;</li> <li>• Completion of each pavement layer ready for testing;</li> <li>• Road pavement surfacing;</li> <li>• Completion of works</li> </ul> <p>The developer or contractor shall give Council a minimum 24 hours' notice when requesting an inspection to ensure that development works are not delayed. The developer shall, if required by a Council Engineer, submit delivery dockets for all materials used, and all material and performance test results obtained in the development.</p>
36.	<p>A "Work-As-Executed" (WAE) plan is required to be prepared by a Registered Surveyor or professional engineer and forwarded to Council prior to the final inspection. The WAE is to include, as a minimum:</p> <ul style="list-style-type: none"> <li>• certification that all works have been completed generally in accordance with the approved plans and specification,</li> <li>• any departure from the approved plans,</li> <li>• any additional/deleted work,</li> <li>• the location of conduits, subsoil lines, stub mains and inter-allotment drainage lines,</li> <li>• pipeline long sections showing the constructed invert levels of each pipe at each pit and pipe dimensions,</li> <li>• details of overland flow provisions,</li> <li>• site regrading areas by new contours, and</li> <li>• all other details which have a bearing on the extent of works and their acceptance by Council.</li> </ul>
37.	<p>All Engineering Drawings submitted to Council for approval are to have a title block showing the following:</p>

	<ul style="list-style-type: none"> <li>• Applicant's Name,</li> <li>• Consultant's Name, Address, Phone No. and Contact Name,</li> <li>• Drawing Number, Sheet Number and Amendment Number,</li> <li>• Schedule showing Date and Nature of Amendments,</li> <li>• Site Address, including Lot and Deposited Plan (DP) Number,</li> <li>• Council's File Reference,</li> <li>• Stage Number,</li> <li>• Drawing Title,</li> <li>• Scale with Scale Bar, and</li> <li>• Signature of Authorised Person</li> </ul>
38.	Construction noise shall be in accordance with the 'Noise Control Guidelines for Construction Noise Standards'. Hours of operation shall be permitted between 7am and 6pm Monday to Friday and 8am and 1pm Saturdays. No heavy machinery work or usage shall be permitted on Sundays or Public Holidays.
39.	Street lighting shall be provided on all internal access roads in accordance with Australian Standard 1158 – Road Lighting. Energy absorbing columns may be required where fallen columns would be particularly hazardous. The use of energy-saving lighting fixtures is encouraged, however no rebate will be issued to the developer if these types of lamps are approved.
40.	The applicant shall submit a soil erosion and sedimentation control plan with the engineering design for Council approval. Such shall address both short and long term management of all disturbed areas and specified methods and structures to be employed to minimise any impact.
41.	The applicant is to comply with all reasonable requests from Council with regard to any complaints received during construction works.
42.	<p>The following conditions apply to Stormwater Drainage design and construction:</p> <ul style="list-style-type: none"> <li>a) Stormwater Drainage plans shall submitted to Council as part of the construction certificate, drawn at a scale sufficient to show all necessary details, nominally 1:200, 1:500, 1:1000 or 1:2000. The following data is to be included with a contoured catchment area plan: <ul style="list-style-type: none"> <li>i. Catchment areas and sub-areas, watershed (catchment boundary), overland flow paths, existing and proposed pipe layout. For large catchments, the total catchment area should be shown at a large scale on a separate plan or inset.</li> <li>ii. All sub-areas, drainage lines and pits are to be logically numbered.</li> <li>iii. A schedule of pipe details, including pipe number, size, class, bedding type, joint type, invert levels at inlet and outlet, slope, and length.</li> <li>iv. A schedule of pit details, including pit number, type, road chainage, surface level to the Australian Height Datum (AHD), invert level to AHD, depth, and lintel length.</li> <li>v. North point and legend.</li> <li>vi. Setout information.</li> <li>vii. Accurate position and level of all services and utilities which cross underground drainage pipelines.</li> <li>viii. Identify those building allotments adjacent to channels and major storm flow paths which may be liable to flooding in major flood events, and the minimum design habitable floor level adjacent to prevent flooding in the design flood event.</li> <li>ix. Inlet and outlet treatments.</li> <li>x. Measures for the prevention of erosion and sedimentation.</li> </ul> </li> <li>e) Stormwater pit construction:</li> </ul>

	<p>i. Pits shall be provided in drainage lines at all changes in grade, level, and direction, and at all pipe junctions and shall be spaced at no more than 85m apart.</p> <p>ii. Drainage pits are to conform to Council’s standard Drawings, or RTA standards for Classified Roads. Non-standard structures shall be constructed as detailed in the design drawings. Such designs shall comply with AS3600 –Concrete Code, AS4100 – Steel Structures, AS1657 – SAA code for fixed platforms, walkways, stairways and ladders; and any other relevant standard.</p> <p>iii. Pits used for storm water drainage shall be fitted with square lids to distinguish them from sewer manholes.</p> <p>iv. Junction pits shall be fitted with reinforced lids and approved lifting eyes.</p> <p>v. Grated inlet pits shall not be used for street or roadway drainage.</p> <p>vi. Precast pits, incorporating insitu bases, may be used if the prior approval of the pit type and design are approved by the Group Manager of Operations.</p> <p>vii. Every endeavour shall be made to maintain flow velocities through pits. Excessive drops will not be permitted.</p> <p>viii. Pipe grading across pits should be designed on the following basis:</p> <ul style="list-style-type: none"> <li>• No change in direction or diameter - minimum 50mm;</li> <li>• Direction change but no change in diameter - minimum 70mm;</li> <li>• Changes in pipe diameter should be graded from obvert to obvert;</li> </ul> <p>ix. At pit connections, a 3 metre length of approved subsoil drainage pipe enclosed in a geofabric sock shall be placed alongside the main pipe so as to enter the pit at the same invert level and adequately drain the main trench, in accordance with Council’s standard drawing EN 1016 (copy attached).</p> <p>f) Location of pits in roadways, for the adopted minor drainage system annual exceedance probability:</p> <p>i. Inlet pits shall be located so as to restrict the maximum gutter flow width to 2.5 metres.</p> <p>ii. Maximum spacing between any two consecutive pits is 85 metres.</p> <p>iii. Pit bypass flows should be limited to 15% of the gutter flow at that location.</p> <p>iv. At intersections, kerb inlet pits shall be constructed adjacent to the upstream kerb return tangent point where flows exceed 20 litres per second or gutter flow width is more than 1 metre.</p> <p>v. The minimum clearance from the top of the manhole to the design pit water level should be 150mm.</p> <p>vi. The product of flow velocity and depth of flow in the kerb and gutter should not exceed 0.4 m<sup>2</sup>/s.</p> <p>vii. Kerb inlet pits should be located clear of horizontal curves, pedestrian desire lines, and vehicle driveways.</p> <p>viii. Inlet conditions shall be designed so that the potential for blockage by silt and debris is minimised. This may require special treatment of the inlet sump under some conditions.</p> <p>g) Hydraulic Design</p> <p>i. Pit inlet capacities shall be estimated from design charts and formulae, based on lintel size for on-grade pits and depth of ponding for sag pits. The calculated inlet capacity shall be reduced by a factor of 50% for sag pits, and 20% for on-grade pits, on the assumption that debris is preventing some inflow.</p> <p>ii. Standard lintel sizes of 1.8, 2.4, 3.0, or 3.6 metres should be used when possible.</p> <p>iii. The minimum internal lintel size on a sag should be 2.4 metres.</p> <p>iv. The head loss through pits shall be determined from Missouri Charts or other recognised methods.</p>
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43.	The engineering designs of Bio-Retention 1 & 2 must be consistent with Water by Design, 2014, "Bio-Retention Technical Design Guidelines", Healthy Waterways Ltd, Brisbane. The designs must incorporate an impermeable liner when located in close proximity to Sewer and/or Water infrastructure. In coordination with the engineering designs an Operational and Maintenance Plan for the assets is to be developed and submitted to Council for approval.
44.	The following conditions must be met prior to asset handover of the street tree bio-retention basins: <ul style="list-style-type: none"> <li>• Certification that the asset has been constructed in accordance with approved plans.</li> <li>• Work as executed drawings and engineering certifications have been provided</li> <li>• All required sediment and water management controls as outlined in the soil and water management plan are in place and functioning as intended.</li> <li>• Details of any incidents including Work Health and Safety incidents, public safety and complaints received are documented and provided to Council.</li> </ul> Any required maintenance and security bonds have been received as detailed in the following condition.
45.	The following stormwater asset maintenance and security bonds are required prior to asset handover: <ul style="list-style-type: none"> <li>• Street Tree Bio-Retention Basins –A bond totalling the expected maintenance costs for a 2 year maintenance period are to be provided to Council prior to asset handover.</li> </ul>
<b>WATER AND SEWER CONDITIONS</b>	
46.	S68 Approval shall be required for all Water and Sewer works prior to release of the Construction Certificate. If the development is staged then each stage will require a separate Section 68 Approval for construction.
47.	S68 fees for both water and sewer construction for each stage are to be submitted with the Construction Certificate and prior to any works commencing.
48.	All conditions of any S68 approval for each Stage shall be met prior to the issue of any Subdivision Certificate, compliance with the terms of Approval must be completed to the satisfaction of Councils Water & Wastewater Director. Council's written approval must be obtained in this regard.
49.	Stage 1 – 1 Lot plus residue Lot. Lot 1 is to connect to the existing sewer reticulation system located in Maddox Lane that discharges to the existing Sewer Pump Station No 964. Any additional Sewer Manholes for connection or realignment to the pump station will be at full cost to the applicant. A 150mm stub will be provided and installed by Lithgow Council into the northern boundary of Lot 1 for the construction of an access chamber and the provision of a sewer junction/riser 1m upstream of the Man Hole. The sewer line is to extend along the boundary and terminate into Lot 17 as a dead end or Man Hole.
50.	Stage 2 and Stage 3 sewer connections will connect to the sewer reticulation main provided by the developer and connect at a point of connection manhole located at the northern boundary of Lot 1 and Lot 17.
51.	Stage 2 water and sewer connections are to be completed prior to the release of the subdivision works certificate for Stage 3.
52.	Any upgrades to the existing sewerage pump station to service this area will be in accordance

	with Councils Development Services Plan and headworks contributions.
53.	The existing water main and sewer rising mains located on Lot 1 are to have easements created over and be in favour to Council prior to the linen plan being released for Stage 1.
54.	The applicant is to provide a sewer main dead end and terminate at a point determined by Council at the SW boundary lot 2 DP574754 and Lot 11 DP800967. The sewer point of connection will be for future connections.
55.	The applicant shall provide a full Water and Sewer Design Plan for approval prior to the release of the Construction Certificate/Subdivision Works Certificate. Design to include, longitudinal sections for each main, minimum depth and cover, maximum depth, grade, chainage, inverts, size, depths, manholes, manhole numbers, manhole depths, pipe velocity, proposed material and positions of junctions and dead ends for all Lots.
56.	The Applicant is required to submit three (3) complete sets of Engineering Drawings to Council prior to the commencement of any assessment, development or subdivision site work as a minimum, the engineering plan submission must include one (1) A1 sized set and two (2) A3 sized sets of all drawing sheets.
57.	Bio retention basins are not to impede sewer infrastructure assets
58.	Maximum Grade of 20% is permitted for gravity sewer design purposes. The applicant is to provide details of addressing hydraulic jump, odour suppression and the use of energy dissipaters and sewer vents.
59.	The maximum allowable sewer flow velocity shall be 3.0 m/s.
60.	The applicant to gain full approval for any easements required for water and sewer works prior to release of construction certificate.
61.	The design shall include Gravity sewer connections for each proposed Lot. Privately owned Low Pressurised Sewer Systems and Package Pump Stations shall not be accepted. Exception granted for existing dwelling located on lot 1.
62.	Sewer mains located within lots adjacent to stormwater drainage lines shall be a minimum of 750 mm clear of the stormwater pipe.
63.	Plans showing all easements to be created over water and sewer infrastructure shall be submitted to Council prior to the release of the Construction Certificate.
64.	All Water and Sewer works, including minimum and maximum flows and velocities, shall be designed in accordance WSA code.
65.	Manholes that have been elevated for flood zone requirements shall require work platforms for WHS purposes.
66.	Full vehicular access shall be provided to all sewer man holes to allow for servicing and maintenance.
67.	The applicant shall provide detailed water design details to include a ring main design. The new

	water supply network shall connect into the Council reticulation network via two points of connection, being Ian Holt Drive & Maddox Lane.
68.	The design of water reticulation shall generally be in accordance with the latest version of the Water Services Association of Australia (WSAA) "Water Supply Code of Australia" (WSA 03).
69.	The applicant shall provide fire flow analysis for all water supply networks prior to the release of the Construction Certificate, to ensure that the network is capable of providing the performance for the design of pressure for spring hydrants. Maximum spacing of hydrants shall be 60metres.
70.	Construction Certificate design drawings and specifications shall clearly address the following: <ul style="list-style-type: none"> <li>a. Location of pipelines, valves, hydrants, pipe materials, size, pressure class, jointing methods and corrosion protection measures.</li> <li>b. Specifications for products, materials, site investigation, excavation / trench details and other technical matters.</li> <li>c. Documentation of design assumptions, constraints and issues relevant to the design and not otherwise noted in the Concept Plan.</li> </ul>
71.	Water supply design to provide Desirable Minimum Static Pressure of 350kpa. Static Pressure shall not to exceed 500kpa at each house hold boundary.
72.	Stop (dividing and isolating) and control valves shall be positioned to give required control of the system and to provide an alternative means of supply when a distribution main is taken out of service.
73.	Minimum and maximum allowable service pressures will not be exceeded in each zone.
74.	Minimum and maximum flows and velocities shall be in accordance with the WSAA Code.
75.	A geotechnical report shall be submitted to Council prior to the release of the Construction Certificate. All Pipe and fitting materials must be suitable for application and environment.
76.	The spacing and positioning of valves shall allow for isolation of individual zones.
77.	Water mains shall only be installed in undisturbed ground or compacted ground that is approved by a certified engineer.
78.	All stop valves shall be anticlockwise closing and be positioned at a minimum of every 300 metres. Valves shall be positioned adjacent to branch take offs.
79.	Each lot shall have an individual water meter, which shall be purchased from Council at the applicants full cost and held at Council store.
80.	Right angled 90 degree brass lockable meter ball valves to be used as meter control valves and a type approved by the Water and Wastewater Manager. Council will secure the water meter valve with a stainless steel locking device prior to the subdivision certificate being released.
81.	Water meters to be purchased by the owner after submitting to Council an Application for Work at Owners Cost Payment Authority Application and the completion of a Water Service Connection Application. Council will install the meter when a Construction Certificate has been approved for the new allotment and a S68 Approval granted for connection to draw water.
<b>RURAL FIRE SERVICE (RFS)</b>	

82.	The general terms of approval relate to the proposed development as shown on the site plan prepared by Anthony Daintith Town Planning, titled 'Figure 2 Proposed Subdivision', drawing number 2018-081DA, dated 28 August 2019.
<p><b>Asset Protection Zones</b>  <i>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:</i></p>	
83.	At the issue of subdivision certificate and in perpetuity the entire property 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'.
84.	A suitably worded instrument pursuant to section 88 of the 'Conveyancing Act 1919' shall be placed on lots 22 to 26 requiring the provision of a 20m APZ from the eastern boundary and which prohibits the construction of buildings other than class 10b structures within the APZ. The name of authority empowered to release, vary or modify the instrument shall be Lithgow Council.
<p><b>Water and Utilities</b>  <i>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:</i></p>	
85.	<p>Water, electricity and gas are to comply with the following requirements of section 4.1.3 of 'Planning for Bush Fire Protection 2006'.</p> <ul style="list-style-type: none"> <li>● Fire hydrant spacing, sizing and pressures shall comply with Australian Standard AS 2419.1– 2005 'Fire Hydrant Installations'.</li> <li>● Fire hydrants shall not be located within any road carriageway.</li> </ul>
<p><b>Access</b>  <i>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:</i></p>	
86.	<p>Public road access shall comply with the following requirements of section 4.1.3 (1) of 'Planning for Bush Fire Protection 2006'.</p> <ul style="list-style-type: none"> <li>● Roads shall be two wheel drive, all weather roads.</li> <li>● Road No. 1 shall have a carriageway 8 metres minimum kerb to kerb.</li> <li>● A cross fall not exceeding 3 degrees.</li> <li>● Dead end roads incorporate a 12 metre outer radius turning circle, and are clearly signposted as dead end.</li> <li>● The capacity of road surfaces is sufficient to carry fully loaded fire fighting vehicles (approximately 15 tonnes for areas with reticulated water, 28 tonnes or 9 tonnes per axle for all other areas).</li> </ul>
<p><b>WATERSW</b>  <b>General</b></p>	
87.	The works, lot layout and staging of the subdivision shall be as specified in the Statement of Environmental Effects (dated 12 September 2019) and shown on the proposed Subdivision Plan and Staging Plan (Ref No. 2018-081DA, Figure 2, dated 28.08.2019) all prepared by Anthony

	Danitith Town Planning. No revisions to works or lot layout or staging of the subdivision that will have any impacts on water quality, shall be permitted without the agreement of Water NSW.
<i>Reason for the above Condition - Water NSW has based its assessment under State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011 on this version of the subdivision.</i>	
<b>Subdivision Roads</b>	
88.	The subdivision roads, as relevant to each stage of the subdivision, shall: <ul style="list-style-type: none"> <li>• be sealed and otherwise constructed in accordance with Council’s engineering standards.</li> <li>• collect road runoff via a series of pits and pipes and direct to various water quality treatment measures, and</li> <li>• incorporate litter baskets (as a minimum) upstream of all bioretention basins, as appropriate.</li> </ul>
89.	All stormwater structures and drainage works associated with the proposed subdivision roads shall be wholly included in the road or drainage reserve or within suitably defined easements.
<i>Reason for the above Conditions – To ensure that the proposed subdivision roads and associated infrastructure will have a sustainable neutral or beneficial impact on water quality during the operational phase of the development.</i>	
<b>Stormwater Management</b>	
90.	All stormwater management measures, as relevant to each stage of the subdivision, specified in the Conceptual Stormwater Management Plan (Revision P4, dated 18 September 2019) and shown on the Preliminary Treatment Train and Bio-retention Details (Job No. 2018.1010, Dwg Nos. P02 and P03, Issue P4, dated 18/09/19) prepared by Calare Civil Pty Ltd shall be incorporated in the final stormwater management plan. The final stormwater management plan shall be prepared in consultation with Water NSW and approved by Council prior to the issuance of a Construction Certificates for Stages 2 and 3, as relevant. The Plan shall: <ul style="list-style-type: none"> <li>• clearly specify the staging of the proposed stormwater management measures,</li> <li>• ensure that the proposed bioretention basins are located to allow and maximise treatment of all road runoff, and</li> <li>• include bioretention basins which also incorporate the following requirements: <ul style="list-style-type: none"> <li>○ be designed consistent with Adoption Guidelines for Stormwater Biofiltration Systems Version 2 (Payne et al, 2015, Melbourne, CRC for Water Sensitive Cities),</li> <li>○ a minimum combined filter area of 62.5 square metres,</li> <li>○ each bioretention basin shall: <ul style="list-style-type: none"> <li>▪ have a filter media consisting of a clean sandy loam with a certified median particle diameter of 0.5 mm, a maximum orthophosphate concentration of 40 mg/kg and a maximum total nitrogen concentration of 400 mg/kg,</li> <li>▪ direct all discharge and overflow to the proposed piped stormwater drainage system.</li> </ul> </li> <li>○ be accessible from roads by machinery to facilitate cleaning, monitoring and maintenance of the structures</li> <li>○ be permanently protected from vehicular damage by bollards, fences, castellated kerbs or similar structures, with a sign to be erected to advise of its nature and purpose in water quality management, and</li> <li>○ be protected by sediment and erosion control measures during any construction and post-construction phase until the ground surface is revegetated or stabilised.</li> </ul> </li> </ul>
91.	Stormwater treatment measures including bioretention basins, as relevant to each stage of the subdivision, shall be designed, located and constructed as per the approved final stormwater management plan.

92.	No changes to stormwater treatment and management that will impact on water quality, shall be permitted without the agreement of Water NSW.
93.	A suitably qualified stormwater consultant or engineer shall certify in writing to Water NSW and Council prior to the issuance of a Subdivision Certificate for that stage of the subdivision that all stormwater management structures have been installed as per these conditions of consent and are in a functional state.
94.	<p>An Operational Environmental Management Plan (OEMP) shall be prepared in consultation with Water NSW and Council by a person with knowledge and experience in the preparation of such plans. The OEMP shall be prepared prior to the issuance of a Subdivision Certificate for each stage of the subdivision. The OEMP shall be provided to Council when the management and maintenance of the stormwater structures is handed over to Council. The OEMP as a minimum shall include but not be limited to:</p> <ul style="list-style-type: none"> <li>• include details about the location and nature of stormwater management structures such as pits, pipes, inlet filters, interallotment drainage, bioretention basins, buffer area, and any other stormwater structures and drainage works,</li> <li>• outline the responsibilities and detailed requirements for the inspection, monitoring and maintenance of all stormwater management structures, before and after handing over to Council, including the frequency of such activities,</li> <li>• identify the persons responsible for inspection and maintenance activities, before and after handing over to Council, including a reporting protocol and hierarchy,</li> <li>• the identification of detailed requirements and measures for the protection of bioretention basins from future upstream construction works i.e. construction of dwellings on future lots, and</li> <li>• include checklists for recording inspections and maintenance activities, particularly for bioretention basins.</li> </ul>
95.	All stormwater treatment measures shall be inspected, monitored, maintained and managed in accordance with the Operational Environmental Management Plan.
<i>Reason for the above Conditions – To ensure that the stormwater quality management measures and structures for the proposed subdivision have a sustainable neutral or beneficial impact on water quality over the longer term.</i>	
<b>Construction Activities</b>	
96.	<p>A Soil and Water Management Plan shall be prepared for all works, for each stage of the subdivision, required as part of the subdivision by a person with knowledge and experience in the preparation of such plans. Each Plan shall meet:</p> <ul style="list-style-type: none"> <li>• the requirements outlined in Chapter 2 of NSW Landcom’s Soils and Construction: Managing Urban Stormwater (2004)</li> <li>• be prepared prior to issuance of a Construction Certificate for that stage of the subdivision and shall be to the satisfaction of Council, and</li> <li>• include controls to prevent sediment or polluted water leaving the construction site or entering any natural drainage lines or stormwater drain.</li> </ul>
97.	The Soil and Water Management Plan for each stage shall be implemented, and effective erosion and sediment controls shall be installed prior to any construction activity for each stage of the subdivision. The construction site and controls shall be regularly inspected and maintained until works have been completed and groundcover established.

<i>Reason for the above Conditions – To manage adverse environmental and water quality impacts during the construction phase of the development so as to minimise the risk of erosion, sedimentation and pollution within or from the site during this phase.</i>	
<b>CROWN LANDS AND WATER DIVISION (THE DEPARTMENT)</b>	
98.	No development drainage, overflow or contaminated waste (contaminated runoff or septic) shall impact negatively on the Crown land or waterway.
99.	No materials are permitted to be dumped or stored on Crown land, roads, or waterways.
100.	The development is conducted with minimal environmental disturbance to the Crown land and is to avoid the removal or damage of any native trees located within the subject Crown lands or waterways.
101.	Public access on the Crown land and waterway is retained and not restricted on and along the Crown land and waterways.
102.	Appropriate pollution control measures shall be provided for the duration of the works. Such measures are not to be located on Crown land or waterways.
<b>ENDEAVOUR ENERGY</b>	
<b><i>Network Capacity/Connection</i></b>	
103.	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. Depending on the outcome of the assessment, any required padmount substation 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.
<b><i>Bushfire</i></b>	
104.	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.
<b><i>Earthing</i></b>	
105.	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.
<b><i>Easement Management/Network Access</i></b>	
106.	The following is a summary of the usual/main terms of Endeavour Energy’s electrical easements requiring that the land owner: <ul style="list-style-type: none"> <li>○Not install or permit to be installed any services or structures within the easement site.</li> <li>○Not alter the surface level of the easement site.</li> <li>○Not do or permit to be done anything that restricts access to the easement site without the prior written permission of Endeavour Energy and in accordance with such conditions as Endeavour Energy may reasonably impose.</li> </ul>

	<p>Endeavour Energy's preference is for no activities or encroachments to occur within its easement areas. If any proposed works or activities (other than those approved/ certified by Endeavour Energy's Network Connections Branch as part of an enquiry/ application for load) will encroach/affect Endeavour Energy's easements, contact must first be made with the Endeavour Energy's Easements Officer.</p> <p>It is imperative that the access to the existing electrical infrastructure adjacent and on the site is maintained at all times. To ensure that supply electricity is available to the community, access to the electrical assets may be required at any time.</p>
<b>Vegetation Management</b>	
107.	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.
<b>Noise</b>	
108.	Where development is proposed in the vicinity of electricity infrastructure, Endeavour Energy is not responsible for any acoustic/noise amelioration measures for such noise that may impact on the nearby proposed development.
<b>Dial before You Dig</b>	
109.	Before commencing any underground activity the applicant is required to obtain advice from the <b>Dial before You Dig 1100</b> service in accordance with the requirements of the <i>Electricity Supply Act 1995</i> (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.
<b>Public Safety</b>	
110.	Workers involved in work near electricity infrastructure run the risk of receiving an electric shock and causing substantial damage to plant and equipment. 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 is available via Endeavour Energy's website via the following link:  <a href="http://www.endeavourenergy.com.au/wps/wcm/connect/ee/nsw/nsw+homepage/communitynav/safety/safety+brochures">http://www.endeavourenergy.com.au/wps/wcm/connect/ee/nsw/nsw+homepage/communitynav/safety/safety+brochures</a>
<b>Emergency Contact</b>	
111.	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.
<b>ADVISORY NOTES</b>	
<b>Catchment Management Authority Clearing Approvals</b>	
AN1.	That any proposed clearing of native vegetation may require approval from the Catchment Management Authority-Local Land Services. Prior to the removal of any native vegetation it is suggested that you contact the Catchment management Authority for advice.

<b><i>Threatened Species</i></b>	
AN2.	No Threatened Species or Endangered Ecological Community listed under the Environmental Protection and Biodiversity Conservation Act 1999, the Biodiversity Conservation Act 2016 and the Biodiversity Conservation Regulation 2017 or the associated Regulations are to be cleared as result of this Approval. This includes for fencing or accessways.

Please find attached general design requirements in relation to the servicing requirements for water and sewerage as part of the Development Application based on Preliminary Concept Design drawing received by Council and dated 5/3/19.

The attached conditions do not constitute approval under *section 68, Local Government Act 1993*. Prior to the commencement of any works as described below;

- Undertaking of water supply works
  
- Undertaking of sewerage works
  
- Installation, alteration, disconnection or removal of a meter connected to a service pipe
  
- Connect a private drain or sewer with a public drain or sewer under the control of a council or with a drain or sewer which connects with such a public drain or sewer
  
- The developer must obtain written Section 68 approval from Council; this will be required prior to the issue of the Construction Certificate. The Section 68 application requires the submission of all detailed engineering drawings/design, specifications and any applicable supporting information for the proposed works.

If your Section 68 application is approved, Council will issue you with a Section 68 approval containing conditions that must be complied with during construction.

Please be advised of the following conditions:

## **Sewerage**

### **1. General Design Considerations**

A sewerage service is to be provided for each property; joint sewerage services are prohibited under the *Local Government (General) Regulation 2005, Part 6, Division 3, section 162*

#### **1.1 Objectives**

The sewerage objectives are seen as being achieved when:

- i. The planning, design and construction of new facilities are adequate in servicing new and future developments.
- ii. there is compatibility with the existing facilities, methods of operation, and maintenance techniques; and
- iii. The facilities provide public health, environmental, and asset protection consistent with the accepted design and construction requirements set out in this document and with developments in technology as approved from time to time.

The pipe system may, on occasions, be subject to "surcharge" (where the hydraulic grade line is higher than the pipe invert) or "overflows" (where sewage overflows out of maintenance holes). These situations may be the result of blockages and/or flows in excess of the design flows. In establishing the layout of the pipe network, designers should take care to ensure that any overflows are likely to cause only minimal nuisance or damage.

#### **1.2 Maintenance Aspects**

#### 1.2.1 General

The sewerage system is to be designed with due regard to the continuing maintenance requirements after the works have been constructed. A system that can be easily and economically maintained is essential.

Maintenance holes located in readily identifiable locations (e.g. opposite a building line), and not within leased properties, are an aid to rapid clearance of sewer blockages.

#### 1.2.2 Special equipment

The purchase of special maintenance equipment and plant requires considerable lead times, special approvals and funding. As a consequence, no design incorporating the need for special or unusual equipment should be prepared without the prior written approval of Lithgow City Council.

### **1.3 Discharges from stormwater systems to sewers**

Unless approved otherwise, under the specific *Trade Waste Agreement*, no stormwater discharge will be accepted into sewers.

## **2. Location of Sewers**

### **2.1 Sewer Locations**

#### 2.1.1 Sewers located outside privately owned lands

The design of a sewer system should take into account the fact that there is a significant increase in the risk of tree root blockages after a period of about 20 years. Further, the access to sewers for maintenance is a major problem in the Lithgow despite the use of sewerage reserves for this purpose. Therefore minimising the use of sewer alignments and reserves in leased land is an important feature of good sewer design. Where there is public land at the rear or the side of privately owned block the sewer should be located within the public land rather than within the leased/privately owned block.

##### i. Diversion of principal carrier sewers around leased lands

Blockages in the sewer system have the potential to result in sewage overflows into leased properties. To minimise problems caused by blockages, wherever practicable, sewers, particularly main carriers, shall be located in public areas rather than within leases.

##### ii. Other situations

Where a sewer is to be constructed across open areas it is to be sited to;

- (1) Maximise its use for future development, and
- (2) Minimise its impact on possible future use of the site.

Wherever possible sewers under playing fields are to be sited so that maintenance holes are not located within the playing area.

#### 2.1.2 Sewers located within leased lands

Where a sewer is to be constructed within privately owned properties a 3m wide easement is to be created in favour of Council, with the pipe(s) centrally located within the easement and in a location that minimises the impact on the future development potential of the leased/ privately owned land(s).

## **2. Hydraulic Design**

### **2.1 General Hydraulic Aspects**

All sewer works in connection with the application are to be of a size no less than 150mm to the service tie or buried vertical riser

#### **i. Minimum grades for DN150 pipes**

Minimum permissible grades of the uppermost reaches of sewers are to be no less than 1.00%

This is the absolute minimum grades that shall be used. In general, it is not considered good practice to use a minimum grade on a short intermediate section of sewer when the upstream and downstream sections are laid at steeper grades.

#### **ii. Maximum grades for sewers**

Restrictions are placed on the maximum grades of sewers to limit internal erosion of pipe material, and/or pipe movement (due to trench flows causing loss of bedding).

The maximum pipe grade for sewers larger than DN150 is 15%. Where grades steeper than 15% are planned the circumstances are to be referred to Lithgow City Council for assessment.

To limit the scouring effect arising from water flow within the pipe bedding material, and also to anchor the pipe, special bedding, scour stops or trench stops may be required. To enable easy location, scour and trench stops shall be placed at intervals of equal length with spacing not exceeding that which is specified. The actual spacing and number of stops shall be nominated on layout drawings.

#### **iii. Grade changes between pipe reaches**

It is essential in the lower reaches of the sewerage system, where sewage may have low dissolved oxygen levels, that turbulence leading to the release of hydrogen sulphide from solution be avoided. In these areas, conditions such as a rapid change from steep to flat pipe slope, which favors the formation of a hydraulic jump at dry weather flows, must be avoided.

## **3. Structural Design**

### **3.1 Sewer pipe materials and construction methods**

#### **3.1.1 Types of pipe**

Sewers shall be constructed from materials proven to be structurally sound and durable, and shall have satisfactory jointing systems. The use of two or more types of pipe material on a single run of pipe between adjacent maintenance holes is not acceptable.

Materials approved for use in sewers are:

- Vitriified Clay - VC
- Reinforced Concrete - RC, see notes 1, 2 and 3
- Ductile Iron - DI, see notes 1, 2

- Unplasticised Poly Vinyl Chloride – uPVC (Equivalent to class SEH, solid wall or approved structured wall), **150mm x 3m RRJ SN8 pipes and junctions are Councils preferred material**
- Glass Reinforced Plastics - GRP, see note 4 (Polyester Based)
- Polyethylene – HD-PE, see note 4

#### Notes

1. Not to be used within, nor up to 1 km downstream of industrial areas or hospitals.
2. Concrete shall be made with Type "SR" sulphate resisting cement with a tri-calcium aluminate content not greater than 5%, or Type "LH" low heat cement. Concrete pipes intended for other than trunk sewers shall be manufactured with a minimum 10mm sacrificial layer on the inside of the pipe.
3. Concrete pipes are not acceptable for DN150 and DN225 sewers.
4. Subject to special conditions and only with written approval of Lithgow City Council.

Proposals for the use of other materials will be considered if supported by adequate technical and performance data.

Where the pipe material is known it shall be shown on the drawings. Where the pipe material is not known prior to submission for detailed design acceptance, the drawings are to contain notes ensuring that the above requirements are satisfied.

#### 4.1.2 Class of pipes

- Sewerage pipes must be of adequate strength to meet overburden and traffic loads. Loads are to include loads created from likely construction and maintenance activities;
- VC pipes shall be Class 4 or stronger;
- Class 2 (X), 3 (Y) and 4 (Z) reinforced concrete pipes manufactured in accordance with the latest version of AS 4058 are acceptable if used in accordance with the requirements of AS 3725;
- uPVC pipes shall be of grade Sewer Extra Heavy (SEH) or of equivalent SN grade in accordance with AS/NZS 1260;
- Classes for Ductile Iron, Glass Reinforced Plastics, Polyethylene, or ABS pipes shall be approved by Lithgow City Council prior to use.

#### Notes

1. Where load limits apply the locations shall be clearly designated on drawings.
2. During the construction phase specific load provision shall be made for heavy construction equipment where required.
3. No more than one type of pipe material will be used between successive maintenance holes or sewer maintenance shafts.

#### 4.1.3 Pipe jointing

The sewer pipes are to be capable of excluding groundwater, resisting root intrusion, and withstanding pressure loading, both internal and external. Sewer systems must also have some flexibility, either through controlled deflection at joints (rigid materials) or pipe bending (flexible materials).

Acceptable pipe jointing systems are:

- i. VC pipes with rubber ring jointing comprising:
  - Spigot - Socket system;
  - Spigot - Spigot system utilising approved Socket-Socket coupler.
- ii. Reinforced Concrete Pipes, Spigot-Socket, with rubber ring jointing.
- iii. PVC pipes:
  - DN100: solvent welded;
  - DN150: rubber ring jointed or solvent welded; \*
  - Larger than DN150: rubber ring jointed. \*

Note: For proclaimed mine subsidence areas, the Mine Subsidence Board should be referred to for advice of subsidence design parameters for proposed drainage systems.

#### **4.2 Depth of sewer and cover**

##### **i. Depth of Cover**

Sewers shall be laid with a depth of cover, measured from the top of the pipe socket or inspection opening to the ground surface as per section 3.7 of AS/NZS 3500.2, unless the product specific Standard specifies, or the manufacturer recommends, a greater depth.

##### **ii. Maximum Depth**

Sewer mains are to be designed for a maximum depth to invert of 5.0 metres. In special cases (e.g. to avoid a pump station or for a short length of line through a ridge) specific approval may be sought from Council to exceed this limit.

#### **4.3 Sewer main junctions**

Within a sewerage system it is mandatory that all sewer main junctions occur within maintenance holes. However, DN150 sewer tie connections can be connected by means of maintenance holes or sloped junctions. For connection of service ties see section 4.4.

#### **4.4 Sewer Service Connections**

##### **Service ties (house junctions)**

A sewerage service is to be provided for each property; joint sewerage services are prohibited under the *Local Government (General) Regulation 2005, Part 6, Division 3, section 162*.

##### **4.4.1 Location**

A service tie connecting to a sewer outside a residential block should generally be at right angles to the sewer. Where a service is a maintenance hole (manhole) or "dead-end", the service shall be at an angle between 90° and 180° from the downstream sewer to ensure a smooth flow of entry into the main line.

Service ties shall be located clear of all authorities easements, driveways and retaining walls.

Where the sewer main is located outside of the residential block, the service tie shall extend inside the property boundary and an inspection shaft extended vertically upward to the surface ground level to form a shaft. The tie should generally be located on the sewer main line at 1.0 metre from the lowest corner of the property and extend 1 metre into the boundary.

The upstream end of any "dead-end" sewer shall extend to at least 1 metre past the boundary to accommodate a service tie within a maintenance hole.

##### **4.4.2 Size of Tie**

Sewer service ties are normally 150mm solvent welded pipes or rubber ring (in mine subsidence areas). For multiple dwellings a single tie is to be provided per property.

#### **4.4.3 Depth of Tie**

A service tie is required to serve the entire leased block. However where building restrictions do not permit part of the block to be developed (e.g. set back distances from the front building line), then depths need to make allowance for this limitation.

In calculating the depth the designer should be familiar with the requirements for grade and depth provided in *AS/NZS 3500.2 sections 3.4 and 3.7*.

An acceptable design will have the following minimum depths of tie:

- For residential blocks: calculated on the basis of minimum cover with a property of 300mm and a maximum possible length of house drain at a grade of 1 in 60
- For residential blocks: calculated on the basis of minimum cover with in the property, if subject to vehicular traffic, of 500mm and a maximum possible length of house drain at a grade of 1 in 60.

#### **4.4.4 Grades**

The service tie shall have a minimum grade of 1.0 % and a maximum of 20 %. For ties to deep sewers, a buried vertical riser is to be used (refer section 4.4.5)

#### **4.4.5 Buried Vertical Risers (BVR)**

On deep sewers that are near boundaries it may be necessary to use a BVR. These are to be noted on work-as-executed drawings

It is absolutely critical that BVR's are installed on a compacted trench base with suitable concrete support

#### **4.4.6 Manholes**

Manholes shall be located along a sewer main at all changes in grade, level and direction and at the intersections with other mains or dead-ends. Manholes will not be accepted within the carriageway of public roads.

The maximum permissible spacing between adjoining manholes is 80 metres.

Manholes are to be designed so that sewage is not forced to deflect by an angle of more than 90 degrees.

Manholes shall be constructed using 20 MPa concrete cast in-situ base. Either Type C or Type D cement shall be used in the concrete mix.

Chamber and covers shall be constructed from precast concrete components of a type authorised by Council.

Drop manholes or Jump-ups may only be used to avoid underground services, or at the intersection of shallow and deep mains where the difference in the invert level exceeds 450mm. The maximum

difference in invert levels is 2.0 metres. Drop manholes or Jump-ups are to be constructed as per the requirements of *section 4.10* of *AS/NZS 3500.2*

## **5. Testing**

All drainage work is subject to testing and shall comply with the with the requirements of *section 12* of *AS/NZS 3500.2*

## **Water**

### **1.1.1 General**

Lithgow's Water Supply System is to be designed with due regard to the continuing maintenance requirements after the works have been constructed. A system that can be easily and economically maintained is essential.

### **1.1.2 Special Equipment**

The purchase of special maintenance equipment and plant requires considerable lead times, special approvals and funding. As a consequence, no design incorporating the need for special or unusual equipment should be prepared without the prior written approval of Lithgow City Council.

This requirement also extends to the need to use special techniques or hired equipment. To ensure that maintenance personnel can respond and overcome operational problems consistent with service objectives, it is essential that maintenance of the system is not dependent on non-standard techniques or equipment

## **2 Location of Water Mains**

Water mains shall be constructed within road or public reserves or require the creation of a 3 metre wide easement for water supply, in favour of Council and subject to approval by Council. The pipe is to be centrally located within that easement should approval be given.

Easements across privately owned lands should be avoided.

Marking tape to *AS 2648* shall be laid in a continuous length on top of the pipe embedment material, 150mm above all water mains.

### **2.1 Provision of branches for future connection**

Many branches provided for future development turn out to be either the wrong size, in the wrong place, or not eventually required. Temporary end caps on such branches are often not satisfactorily anchored, and become a liability if the branch is not subsequently used. To avoid this, the following is required:

- branches for future development shall not be provided unless the alignment and diameter of the future connecting mains are confidently known, and the extension is to occur within a short time span (less than 12 months);
- To avoid anchorage problems and future shut downs of the main, a flanged branch with a stop valve is preferred to a branch with an end cap. Valves shall be blank flanged. Where an end cap is necessary a full and adequate thrust block shall be provided;
- Where a branch is proposed to be laid across a road, the section across the road should be end capped at both ends rather than connected at one end initially (to avoid future road openings). If

the pipes are not to be connected within 24 months, consideration should be given to charging it via a DN20 service connection and then flushing periodically.

### 3 Material, Size and Cover Requirements

Unless specifically approved otherwise by Lithgow City Council, pipes for water supply shall be selected from the following approved materials:

- Ductile iron, cement lined and rubber ring jointed, produced in standard lengths of 5.5 metres to AS 2280, having sizes of DN100, 150, 225, 300, 375, 450, 500, 600 and 750. For pipes up to DN300 an approved seal coating on the internal cement mortar lining is applied to reduce leaching. Class K9 shall be used for general application and class K12 where additional structural capability is required;
- PVC Class 16 to AS/NZS 1477 Series 2, having sizes of DN100, 150, 225, 300 and 375.
- **Modified PVC (PVC-M) Class 16 to AS/NZS 4765 (Int) Series 2**, having sizes **DN100**, 150, 225, 300, 375 and 450.
- Molecular Oriented PVC (PVC-O) Class 16 to AS/NZS 4441 (Int) Series 2, having sizes DN100, 150, 225, 300 and 375.
- for sizes above DN750, steel pipe to AS 1579, cement mortar lined to AS 1281, and externally coated with fusion bonded polyethylene;
- PE, pressure class PN16, to AS/NZS 4130 having size DN63. Direct tapping not permitted.

The minimum **cover to water mains** shall normally be **750mm** in roadways or traffic areas and 600mm elsewhere. The minimum **cover to water services** shall be 450mm in roadways or traffic areas and 375mm elsewhere. Provision shall be made for transient loads such as construction equipment where cover is reduced during the construction phase.

A pipeline shall be lowered when cover is removed from existing pipelines for new works (such as roads). If this is physically impossible then consideration shall be given to protection by a suitably designed reinforced concrete relieving slab; extending at least 500mm into natural ground beyond existing pipe trench lines. This slab shall be segmented by construction joints into maximum 1.0 metre long easily removed segments, and separated from the pipe obvert by no less than 25mm of granular or compressible material.

Thrust or anchor blocks of plain or reinforced concrete, which have been designed to resist unbalanced hydraulic forces, shall be provided at all bends, tees, tapers, in-line stop valves and dead ends.

To limit the scouring effect arising from water flow within the pipe bedding material, and also to anchor the pipe, special bedding, trench stops and scour stops may be required. Scour stops shall be provided along inclined mains where the slope is 5 to 30%. Trench stops can be regarded as an alternative to scour stops and may be provided along inclined mains where the slope is 5 to 15%. To enable easy location, trench and scour stops shall be placed at intervals of equal length with spacing not exceeding that which is specified

### 4. Service Connections

Water service connections works are to be undertaken under the provisions of *section 152 of the Local Government (General) Regulations 2005*

Water services should be of single service drawn **copper pipe, Type A**, manufactured in accordance with *AS 1432*. Services are to be a minimum of 20mm diameter, with 1.4mm wall thickness.

**Right angled 90 degree brass lockable meter ball valves to be used as meter control valves and a type approved by the Water and Wastewater Manager. Council will secure the water meter valve with a stainless steel locking device prior to the subdivision certificate being released.**

**Water meters to be purchased by the owner after submitting to Council an Application for Work at Owners Cost Payment Authority Application and the completion of a Water Service Connection Application. Council will installed the meter when a Development Application has been approved for the new allotment and a S68 Approval granted for connection to draw water.**

Brass or copper capillary fittings are to be installed at all joints, branches, and bends. Meter boxes, meters, maincocks and elbows are to be of a type approved by the Water and Wastewater Manager or alternatively these fitting can be provided by Council at full cost recovery.

Separate metered water services are to be provided to every allotment, as well as parks, reserves and landscaped roundabouts.

The meter box for each lot should be located approximately **500mm outside the front and side property boundaries**. Services should be located in pairs at side property boundaries. Note that the stop valve should be located no more than 450mm from the water meter, measured from the road alignment.

All service connections should cross the road perpendicular to the road centreline. Non-detectable marking tape to *AS 2648* shall be laid 150mm above all water services. Such connections should be marked on each kerb with a "W"

A Work as Executed plan (WAE) **MUST** be submitted to council prior to the release of the linen plan, outlining the following:

- Service meter location
- All main isolation valves hydrants and scours
- Water mains lay out and property services

## **5. Pipe Fittings**

Fire hydrants of an approved type are to be installed along the water main at such convenient distances, and at such places, as may be necessary for the ready supply of water to extinguish fires accordance with AS/NZS 2419.

On water mains without hydrants (e.g. generally bulk supply mains), scour (or drain) outlets, with isolating valve control, shall be provided at all low points. Wherever possible, on water mains with hydrants (e.g. reticulation), a hydrant should be located at or near all low points, and are to be discharged via a pipe to a storm water drainage pit.

Stop valves are generally located adjacent to tees, and so that no more than 25 properties are isolated at any one time, by closing no more than four valves. To close a valve, the spindle will turn anticlockwise, as viewed, when facing the spindle cap.

Provision shall be made concerning air release from all high points on water mains. This should normally be achieved in reticulation mains by means of a fire hydrant, a branch, or a service pipe located at the high point. Where this cannot be achieved a DN25 single orifice air valve should be provided.

All maincocks, tees, hydrants, stop valves, scour valves, and air valves should be located within the public footway and shall be of type approved by Council.

All gibaults are to be long sleeved.

At road intersections, two forty-five degree (45o) bends should be used to negotiate the corner.

Thrust blocks shall be provided at all bends, tees, valves and dead-ends.

All valves and hydrants shall be enclosed within valve chambers.

Markings and indicator posts shall be provided at all hydrants and valves.

#### **6. Testing**

Prior to acceptance of the water reticulation network, all pipelines shall be inspected and pressure testing will be carried out.

#### **7. Mains in Cul-de-Sacs**

Where the cul-de-sac incorporates an adjacent street connected by a pathway, or ends in a public reserve, the water main shall extend through the pathway or reserve so that a dead-end is not created in the main.

In all other cases, the main is to be looped around the cul-de-sac.

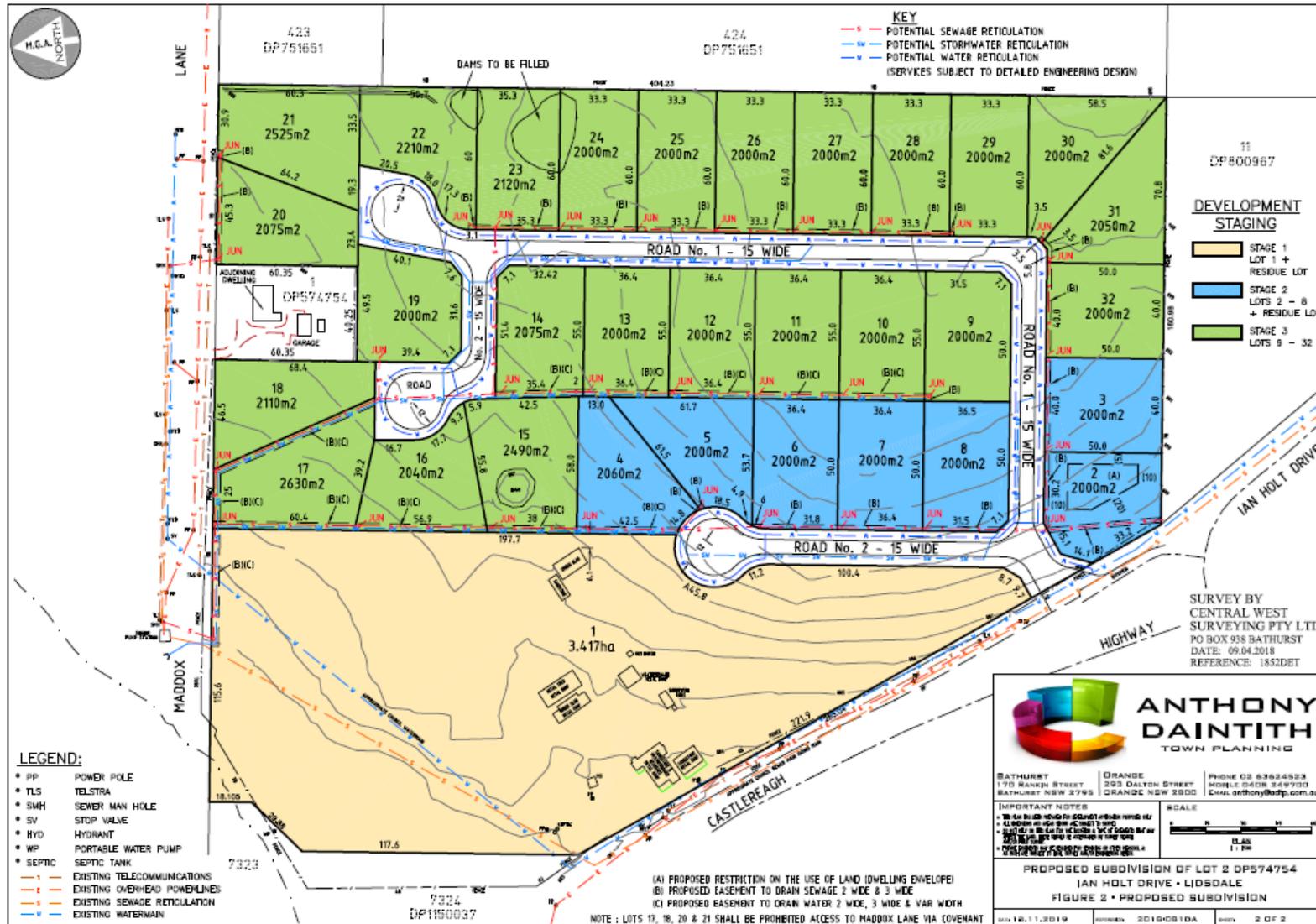
#### **Work as Executed Plans**

Following the satisfactory completion of works, 'Works-As-Executed' (W.A.E.) plans prepared by a registered surveyor or professional engineer shall be submitted to Council's Group Manager of Operations. Such plan must be lodged prior to the release of the subdivision linen plan, or prior to occupation or use of the development.

The W.A.E. plans shall be Engineering Drawings as modified, and shall include the following items:

- invert levels of all drainage and sewerage lines at entrance and exit of MH;
- location, class, size, and material of all pipes and subsoil lines;
- location and diameter of service conduits;
- location of stop valves, hydrants, water services,
- longitudinal sections for each sewer main,
- depth of sewer manholes,
- sewer man hole schedule numbered
- location of sewer junctions measured from downstream of MH
- minimum depth and cover, maximum depth, grade, chainage, inverts,
- storm water and interallotment drainage pits;
- location of water meters and serial number of meter installed in relation to the lot it is installed on
- site regarding details – finished surface levels at centre of front and rear boundaries;
- the location and level of any permanent survey marks;

Each Works-As-Executed plan must include certification by the Registered Surveyor responsible for the preparation of the plan



**Explanatory Note – DA 196/18**

**Objectives of the Planning Agreement**

To provide a material benefit to be used for or applied towards a public purpose

**Nature of the Planning Agreement**

- \$3,000.00 per additional allotment to go towards community facilities and public open space.

**Effect of the Planning Agreement**

The effect of the Planning Agreement will be to allow for the provision of facilities for public use within the Lithgow Local Government Area.

**Merits of the Planning Agreement**

- The proposed development is for a subdivision of land from 1 allotment into 32 residential allotments. This will result in an increase in demand for public facilities.
- In the assessment of the merits of the development, Council must consider the social impacts of the proposal on the immediate locality and on the wider community, and ensure through whichever means are available for community facilities and infrastructure to be provided which will address this matter.
- The provisions of community facilities and infrastructure is the main outcome derived from the development and operation of this Planning Agreement.

**Promotion of Council's Charter**

Council has a vision for the Lithgow area to be recognised as a desirable place to live and visit and a viable place in which to invest. The provision of community facilities and infrastructure will assist in promoting this vision.

**Planning Purpose**

The Planning purpose of the Planning Agreement is:

- In compliance with the Environmental Planning and Assessment Act and Regulation.
- In compliance with the public interest of the development, being to provide facilities which may be of benefit towards a public purpose.
- To enhance the positive social impact of the development on the locality.

**Capital Works Program**

Once funds from the Planning Agreement have been collected Council begins planning for their expenditure through incorporation into the capital works program.

As agreed this day: \_\_\_\_\_

Charles Stephen and Joan Lorraine Applin: \_\_\_\_\_

Lithgow City Council: \_\_\_\_\_

Between **LITHGOW CITY COUNCIL**  
and **CHARLES STEPHEN APPLIN and JOAN LORRAINE APPLIN.**

## **PLANNING AGREEMENT**

### **Parties**

Lithgow City Council of 180 Mort Street, Lithgow, New South Wales 2790 (Council)

and

Charles Stephen Applin and Joan Lorraine Applin, 111 Ian Holt Drive, Lidsdale New South Wales 2790 (Developer).

### **Background**

(For Development Applications)

- A. On 15 August 2018, the Developer made a Development Application to the Council for Development Consent for subdivision of 1 lot into 32.
- B. That Development Application was accompanied by an offer by the Developer to enter into this Agreement to make Development Contributions towards Public Facilities and Infrastructure if that Development consent was granted.

### **Operative provisions**

#### **1 Planning agreement under the Act**

The Parties agree that this Agreement is a planning agreement governed by Subdivision 2 of Division 6 of Part 4 of the Act.

#### **2 Application of this Agreement**

This application applies to Lot 2 DP574754, 111 Ian Holt Drive, Lidsdale, for a subdivision of 1 lot into 32.

#### **3. Operation of this Agreement**

This Agreement takes effect on the date of execution. All contributions must be paid prior to the release of a subdivision certificate for each stage of the development.

#### 4. Definitions and interpretations

4.1 In this Agreement the following definitions apply:

**Act** means the *Environmental Planning and Assessment Act 1979* (NSW).

**Dealing**, in relation to the Land, means without limitation, selling, transferring, assigning, mortgaging, charging, encumbering or otherwise dealing with the Land.

**Development** means that associated with DA196/18 for a subdivision of land from 1 lot into 32.

**Development Application** has the same meaning as in the Act.

**Development Consent** has the same meaning as in the Act.

**Development Contribution** means a monetary contribution, the dedication of land free of cost or the provision of a material public benefit.

**GST** has the same meaning as in the GST Law.

**GST Law** has the meaning given to that term in *A New Tax System (Goods and Services Tax) Act 1999 (Cth)* and any other Act or regulation relating to the imposition or administration of the GST.

**Land** means Lot 2 DP574754, 111 Ian Holt Drive, Lidsdale NSW 2790.

**Party** means a party to this Agreement, including their successors and assigns.

**Regulation** means the *Environmental Planning and Assessment Regulation 2000*.

4.2 In the interpretation of this Agreement, the following provisions apply unless the context otherwise requires:

- (a) Headings are inserted for convenience only and do not affect the interpretation of this Agreement.
- (b) A reference in this Agreement to a business day means a day other than a Saturday or Sunday on which banks are open for business generally in Sydney.

- (c) If the day on which any act, matter or thing is to be done under this Agreement is not a business day, the act, matter or thing must be done on the next business day.
- (d) A reference in this Agreement to dollars or \$ means Australian dollars and all amounts payable under this Agreement are payable in Australian dollars.
- (e) A reference in this Agreement to any law, legislation or legislative provision includes any statutory modification, amendment or re-enactment, and any subordinate legislation or regulations issued under that legislation or legislative provision.
- (f) A reference in this Agreement to any agreement, deed or document is to that agreement, deed or document as amended, notated, supplemented or replaced.
- (g) A reference to a clause, part, schedule or attachment is a reference to a clause, part, schedule or attachment of or to this Agreement.
- (h) An expression importing a natural person includes any company, trust, partnership, joint venture, association, body corporate or governmental agency.
- (i) Where a word or phrase is given a defined meaning, another part of speech or other grammatical form in respect of that word or phrase has a corresponding meaning.
- (j) A word which denotes the singular denotes the plural, a word which denotes the plural denotes the singular, and a reference to any gender denotes the other genders.
- (k) References to the word "include" or "including" are to be construed without limitation.
- (l) A reference to this Agreement includes the agreement recorded in this Agreement.
- (m) A reference to a party to this Agreement includes a reference to the servants, agents and contractors of the party and the party's successors and assigns.

(n) Any schedules and attachments form part of this Agreement.

**5. Development Contributions to be made under this Agreement**

5.1 The Developer shall pay to Council an amount of \$3,000.00 per additional allotment to go towards community facilities and open space.

**6. Application of the Development Contributions**

6.1 Payments or provision of material public benefits must be made prior to the issue of each stages subdivision certificate.

**7. Application of s94 and s94A of the Act to the Development**

Sections 94 and 94A do not otherwise apply to the development.

**8. Registration of this Agreement**

This Agreement will not be registered as provided for in s93H of the Act as its provisions are to be finalised prior to the issue of any occupation certificate.

**9. Amendment of this Agreement**

This Agreement shall not be amended except with the approval of both parties.

**10. Dispute Resolution**

Should a dispute arise as to any part of this Agreement that cannot be resolved between the parties then the parties may engage an independent mediator to be funded by the parties in equal shares to assist in resolving the dispute. If the dispute is not resolved by mediation then before either party has recourse to litigation, the party must submit the dispute to expert appraisal. If the parties do not agree upon an independent expert, either may request the Chief Executive Officer of the Australian Disputes Centre to nominate an expert.

**11. Enforcement**

If this agreement is not honoured prior to any request for the issue of any subdivision certificate then the parties agree that enforcement shall mean any subdivision certificate will not be released.

12. Notices

12.1 Any notice, consent, information, application or request that must or may be given or made to a Party under this Agreement is only given or made if it is in writing and sent in one of the following ways:

- (a) Delivered or posted to that Party at its address set out below.
- (b) Faxed to that Party at its fax number set out below.
- (c) Emailed to that Party at its email address set out below.

**Council**

Attention: Andrew Muir  
Address: 180 Mort Street, Lithgow NSW 2790  
Phone Number: 02 6354 9999  
Fax Number: 02 6351 2927  
Email: [Andrew.muir@lithgow.nsw.gov.au](mailto:Andrew.muir@lithgow.nsw.gov.au)

**Developer**

Attention: Charles Stephen Applin  
and Joan Lorraine Applin  
Address: [REDACTED] Ian Holt Drive, Lidsdale NSW 2790  
Phone Number: [REDACTED]  
Email: [REDACTED]

12.2 If a Party gives the other Party three (3) business days' notice of a change of its address or fax number or email address any notice, consent, information, application or request is only given or made by that other Party if it is delivered, posted, faxed or emailed to the latest address or fax number or email address.

12.3 Any notice, consent, information, application or request is to be treated as given or made at the following time:

- (a) If it is delivered, when it is left at the relevant address.

- (b) If is sent by post, two (2) business days after it is posted.
- (c) If it is sent by fax, as soon as the sender receives from the sender's fax machine a report of an error free transmission to the correct fax number.
- (d) If it is sent by email, twenty-four (24) hours after it is sent unless notice of failure of transmission is received by the sender.

12.4 If any notice, consent, information, application or request is delivered, or an error free transmission report in relation to it is received, on a day that is not a business day, or if on a business day, after 4.30 p.m. on that day in the place of the Party to whom it is sent, it is to be treated as having been given or made at the beginning of the next business day.

### **13. Approvals and consent**

Except as otherwise set out in this Agreement, and subject to any statutory obligations, a Party may give or withhold an approval or consent to be given under this Agreement in that Party's absolute discretion and subject to any conditions determined by the Party. A Party is not obliged to give its reasons for giving or withholding consent or for giving consent subject to conditions.

### **14. Assignment and Dealings**

The parties agree that this Agreement shall not be assigned to any other party. Should the Developer intend to sell, transfer or otherwise dispose of the property the subject of the Agreement then the Developer hereby agrees to honour the terms of the Agreement contemporaneously with completion of such sale, transfer or disposition. For the purposes of this clause, a transfer of the property to an executor or beneficiary under a will or an administrator or beneficiary in respect of an intestate estate, shall not constitute an assignment, transfer, or disposition.

### **15. Costs**

Each party shall bear its own costs in relation to the negotiation, preparation and implementation of this Agreement.

**16. Entire agreement**

This Agreement contains everything to which the Parties have agreed in relation to the matters it deals with. No Party can rely on an earlier document, or anything said or done by another Party, or a director, officer, agent or employee of that Party, before this Agreement was executed, except as permitted by law.

**17. Further acts**

Each Party must promptly execute all documents and do all things that another Party from time to time reasonably requests to effect, perfect or complete this Agreement and all transactions incidental to it.

**18. Governing law and jurisdiction**

This Agreement is governed by the law of New South Wales. The Parties submit to the non-exclusive jurisdiction of its courts and courts of appeal from them. The Parties will not object to the exercise of jurisdiction by those courts on any basis.

**19. Joint and individual liability and benefits**

Except as otherwise set out in this Agreement, any agreement, covenant, representation or warranty under this Agreement by two (2) or more persons binds them jointly and each of them individually, and any benefit in favour of two (2) or more persons is for the benefit of them jointly and each of them individually.

**20. No Fetter**

Nothing in this Agreement shall be construed as requiring Council to do anything that would cause it to be in breach of any of its obligations at law, and without limitation, nothing shall be construed as limiting or fettering in any way the exercise of any statutory discretion or duty.

**21. Representations and warranties**

The parties represent and warrant that they have power to enter into this Agreement and comply with their obligations under the Agreement and that entry into this Agreement will not result in the breach of any law.

**22. Severability**

If a clause or part of a clause of this Agreement can be read in a way that makes it illegal, unenforceable or invalid, but can also be read in a way that makes it legal,

enforceable and valid, it must be read in the latter way. If any clause or part of a clause is illegal, unenforceable or invalid, that clause or part is to be treated as removed from this Agreement, but the rest of this Agreement is not affected.

**23. Modification**

No modification of this Agreement will be of any force or effect unless it is in writing and signed by the Parties to this Agreement.

**24. Waiver**

The fact that a Party fails to do, or delays in doing, something the Party is entitled to do under this Agreement, does not amount to a waiver of any obligation of, or breach of obligation by, another Party. A waiver by a Party is only effective if it is in writing. A written waiver by a Party is only effective in relation to the particular obligation or breach in respect of which it is given. It is not to be taken as an implied waiver of any other obligation or breach or as an implied waiver of that obligation or breach in relation to any other occasion.

**Execution**

**Dated:**

**Executed as an Agreement.**

**Charles Stephen Applin**

**And Joan Lorraine Applin**

\_\_\_\_\_

**Lithgow City Council**

\_\_\_\_\_