



Office of
Environment
& Heritage

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Planning panels secretariat
PlanComment@planningpanels.nsw.gov.au

Dear Sir/Madam

Request for Agency Comments under Section 3.34(2)(d) of the EP&A Act 1979 - Agency Consultation - Planning Proposal – James St, Cessnock

I refer to your letter dated 26 June 2018 seeking agency comment under Section 3.34(2)(d) of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

OEH has reviewed the planning proposal in relation to biodiversity, Aboriginal cultural heritage, and flooding issues. OEH's recommendations are provided in **Attachment A** and detailed comments are provided in **Attachment B**. If you require any further information regarding this matter, please contact Steven Cox, Senior Team Leader Planning, on 4927 3140 or via email at rog.hcc@environment.nsw.gov.au.

Yours sincerely

Sharon Molloy 2/8/2018

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Enclosure: Attachments A and B

OEH's recommendations

James St, Cessnock – rezoning

Flooding and flood risk

1. OEH recommends that the flood planning area is shown on plans and rezoning be restricted to the area outside of the flood planning area.
2. OEH recommends that local overland flooding issues are considered, including provision of easements for local drainage in consultation with Cessnock City Council, recognition of the cost of providing additional drainage in Section 94 contributions plans, and consideration of flood risk from overland flow on flood planning levels (slab on ground construction may not be viable).
3. OEH recommends that fill is not placed within flood storage areas and the effect of fill in other areas of the floodplain including overland flow paths is supported by hydraulic modelling to ensure no offsite impacts.
4. OEH recommends that the riparian corridor on the site is mapped and an appropriate riparian buffer is provided from the proposed roadway and development site boundaries.
5. OEH recommends that the rezoning proposal considers the residual risk for floods greater than the 1% AEP event. The capacity of the emergency services to effectively respond in such a scenario is also unknown and should be assessed and consideration in the rezoning proposal.
6. OEH recommends that cumulative impacts of development that increase impervious areas upstream be considered alongside any significant downstream flooding. The precautionary principle should apply to further encroachment of development into the floodplain in this area.

Biodiversity

7. OEH recommends that future development proposals on the site demonstrate how any loss of biodiversity value is mitigated and offset.
8. OEH recommends that the development consent pathway is clarified within the planning proposal.
9. OEH can confirm that the existing planning agreement within the Cessnock Civic Precinct does not apply to the current planning proposal at James Street Cessnock.

OEH's detailed comments

James St, Cessnock – rezoning

Flooding and flood risk

1. Development should only occur outside the flood planning area

Maps provided by Geoff Craig & Associates (GCA) in the flood assessment supplement dated 5 April 2016 (Figure 1, Flood envelope overlay) indicate that the site is located above the 1% annual exceedance probability (AEP) flood level for the site for the central portion of the development. For the lots located between Obrien Street and James Street the proposed lots and access road location are located below the 1% AEP flood (Black Creek FRMS&P Cardno 2015). The south-western section of the access roadway (continuation of Michael Street) is also below the existing 1% AEP level.

Figure 1 by GCA shows the extent of the 1% AEP flood. In accordance with the recommendations in the NSW Flood Plain Development Manual, the flood planning area should extend to land 500mm higher than the 1% extent. The extent of encroachment into the flood planning area is therefore not shown on the provided maps. Flood planning areas include freeboard partially as a recognition of uncertainty in the process and it is important that the flood planning area be the deciding factor, not the 1% flood line. The flood planning area has not been mapped on the provided figures.

Recommendation 1

OEH recommends that the flood planning area is shown on plans and rezoning be restricted to the area outside of the flood planning area.

2. The rezoning is affected by local overland flooding

The rezoning site is affected by mainstream flooding from Black Creek to the east and from local overland flooding from the developed catchment to the west.

The developed catchment uphill of the proposed allotment has very limited pipe drainage infrastructure and currently the roadways act as the primary overland flow paths with secondary flow occurring through private property. All of these flow paths discharge to Black Creek through the rezoning site. The termination of James street roadway forms a significant discharge point.

A council drainage study by Royal Haskoning DHV (Dec 2016) has suggested that significant upgrades to piped drainage together with formal easements and overland flow paths would be required to reduce the existing issues in the area and reduce flows onto the prospective development site. These easements will need to be accommodated in the subdivision design.

Recommendation 2

OEH recommends that local overland flooding issues are considered, including provision of easements for local drainage in consultation with Cessnock City Council, recognition of the cost of providing additional drainage in Section 94 contributions plans, and consideration of flood risk from overland flow on flood planning levels (slab on ground construction may not be viable).

3. Filling is proposed within the floodplain

The rezoning proposal recommends extending James Street roadway and connecting through to Michael Street. It is further proposed that this area be filled to provide access above the 1% AEP flood level.

The James street extension is located within a section of the flood plain mapped as flood storage in the Cardno report. The NSW Floodplain Development Manual generally recommends that flood storage not be filled due to its important function in the temporary storage of flood water.

The calculations provided by GCA indicate that only a small portion of flood storage will be removed by fill and that this will not have an impact on offsite flooding. This analysis has been carried out using volume analysis only, not remodelling with encroachment on the floodplain.

It is proposed to fill the access road to provide access to the proposed lots up to the 1% AEP level. These lots back onto existing residential properties and dead end streets which will become landlocked post subdivision. It is noted that council have requested provision of overland flow paths between the lots to alleviate this problem. It may not be possible to achieve the required fall on overland flow paths if the road at the downstream end is raised in level. Cessnock City Council is aware of local overland flooding issues in this locality which affect both existing residential land and the land proposed to be rezoned. Construction of the subdivision will make rectification of the existing drainage issues more difficult and may lead to an increase in local ponding issues.

Filling may impact the function of James street as a primary overland flow path and this has not been assessed in the proposal. Furthermore preservation of floodplain storage is considered important to prevent cumulative impacts from multiple small incursions into the floodplain.

Recommendation 3

OEH recommends that fill is not placed within flood storage areas and the effect of fill in other areas of the floodplain including overland flow paths is supported by hydraulic modelling to ensure no offsite impacts.

4. Development encroaches on the riparian corridor

The northern end of the proposed rezoning is close to the banks of Black Creek (a 4th order watercourse), and the proposed road alignment and lot boundaries will encroach on the existing riparian corridor of both Black Creek and the drainage line in the south-west of the site. Road construction will be likely to require removal of overbank vegetation.

Riparian vegetation is important in stabilising embankments and in slowing flood flows. Riparian zones are also significant environmental features that are important in supporting a variety of biodiversity and providing habitat connectivity. The riparian buffer distance identified within the Biodiversity Assessment Method for a 4th order watercourse is 40 metres.

Recommendation 4

OEH recommends that the riparian corridor on the site is mapped and an appropriate riparian buffer is provided from the proposed roadway and development site boundaries.

5. Consideration of subject development by emergency services

The critical storm for the probable maximum flood (PMF) event is noted as a 6 hour storm and council currently has no flood warning system in place for flash flooding. Many of the local roads are affected by local flooding. It is recognised that flooding in this area poses limited time for response or damage reduction and the proposed sites will require evacuation. In future climate change scenarios with predicted higher rainfall intensities the land would be flood prone more frequently. This should be a consideration of the emergency services.

Recommendation 5

OEH recommends that the rezoning proposal considers the residual risk for floods greater than the 1% AEP event. The capacity of the emergency services to effectively respond in such a scenario is also unknown and should be assessed and consideration in the rezoning proposal.

6. Impact of additional development pressure in the catchment on flooding

The additional development and channelisation of Black Creek in this area reduces available area for flood mitigation works. The change in intensity of land use from 1 residence per 40 hectares to 1 residence per 450 square metres will result in an increase in impervious surfaces within the catchment.

It is noted that on site detention is proposed to mitigate the additional flows, however this is not always effective at preventing mainstream flooding and associated issues. For example, on site detention is unlikely to be effective during peak flows if they coincide with flows from further up the catchment.

Recommendation 6

OEH recommends that cumulative impacts of development that increase impervious areas upstream be considered alongside any significant downstream flooding. The precautionary principle should apply to further encroachment of development into the floodplain in this area.

Biodiversity

7. Offsetting of vegetation clearance is required

The site includes approximately one hectare of Lower Hunter Spotted Gum Ironbark Forest. This vegetation is degraded and lacks a significant understory due to historical land use practices, however it has been assessed as qualifying as the Lower Hunter Spotted Gum Ironbark Forest endangered ecological community (EEC). Whilst no threatened species were recorded within the site during surveys, there are known records of mobile threatened species within the vicinity of the site and the vegetation on the site is likely to provide a foraging resource for these species. It is recommended that future development proposals on the site demonstrate how any loss of biodiversity value is mitigated and offset.

In the case of proposed subdivisions, the proposed clearing must include all future clearing likely to be required for the intended use of the land after it is subdivided. Given proposed lot sizes are 450m², it is likely the majority of vegetation would be required to be cleared for the intended use of low density residential housing and the assessment should therefore consider the loss of all vegetation on the site.

Recommendation 7

OEH recommends that future development proposals on the site demonstrate how any loss of biodiversity value is mitigated and offset.

8. Vegetation SEPP

Within its determination and statement of reasons dated 5 February 2018, the Hunter and Central Coast Joint Regional Planning Panel requested further assessment of the planning proposal against the State Environmental Planning Policy (Vegetation in Non-Urban Areas) 2017 (Vegetation SEPP) for consideration by OEH. OEH understands that this was in response to the possibility that the development could be assessed through complying development under the new Low Rise Medium Density Housing Code and therefore may not require a development application.

The development consent pathway for the project should be clarified within the planning proposal, including whether a development application would be required or if the project could be assessed under complying development. OEH notes however that if a development application is required, the biodiversity offsets scheme would apply to the development (if the entry thresholds are triggered). If development consent is not required, the vegetation SEPP would apply to the development (if the entry thresholds are triggered) and the biodiversity offsets scheme would still apply, with the vegetation clearance requiring approval from the Native Vegetation Panel.

The clearance threshold for areas with a minimum lot size less than 1 hectare is 0.25 hectares or more. Given the site includes approximately one hectare of Lower Hunter Spotted Gum Ironbark Forest, the proposal is likely to exceed the clearing threshold.

Recommendation 8

OEH recommends that the development consent pathway is clarified within the planning proposal.

9. Existing planning agreement for Cessnock Civic Precinct

There is an existing planning agreement for the broader Cessnock Civic Precinct, which includes protection of an area of land in the south-east of the precinct area for conservation to offset previous rezoning of parts of the precinct. The Hunter and Central Coast Joint Regional Planning Panel requested clarification within its determination and statement of reasons dated 5 February 2018 on whether this existing planning agreement would apply to the new rezoning proposal. OEH confirms that the existing planning agreement and the offsets provided within the planning agreement do not apply to the new rezoning proposal because the planning agreement area does not include the James Street planning proposal area. Any vegetation clearance proposed under the new planning proposal may need to be offset in accordance with the biodiversity offset scheme in operation at the time of the development application.

Recommendation 9

OEH can confirm that the existing planning agreement within the Cessnock Civic Precinct does not apply to the current planning proposal at James Street Cessnock.