



DIRECTOR SUSTAINABLE DEVELOPMENT SERVICES REPORT

16th January 2007

DSDS1	SUBDIVISION OF LOTS B AND C, DP399906 OFF CROADS ESPLANADE, SMITHTOWN FILE: T6-06-531 AJC {Folio No. *}
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SUMMARY:

Reporting to Council on a proposal to re-subdivide two (2) lots off Croads Esplanade, Smithtown into three (3) allotments.

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Applicant: R & S Walker and M & C Rodwell
Subject Property: LOTS B AND C, DP399906
Off Croads Esplanade, Smithtown
Zone: 2(v) Village Zone

BACKGROUND:

A similar application T6-05-117 for an identical subdivision was previously considered by Council in 2005 / 06 for the subdivision of Lots B and C into three (3) lots.

Proposal

The proposal is to create one (1) additional allotment from the two existing allotments having an area of approximately 720 m². The two existing allotments will each have a modified area of 750 and 770 square metres respectively.

The subject properties are located at 2 & 4 Croads Esplanade, Smithtown. A plan showing the subdivision proposal is attached to this report **(Appendix A)**

This proposal does not comply with the development standard contained in Clause 12(1)(a) & (c) of Kempsey Local Environmental Plan 1987.

In support of the application the applicant has submitted supporting documentation including a submission addressing the reasons the previous application was refused.

Heads of Consideration

The proposal has been examined having regard for the Heads of Consideration identified under Section 79C(1) of the Environmental Planning and Assessment Act, with the following matters considered to be relevant in relation to the matter at hand.

Kempsey Local Environmental Plan 1987

Clause 12(1) provides that Council must not consent to the subdivision of land within Zone 2(v) unless Council is satisfied that: -

- a. The land is outside the limit of the 1 in 100 year flood, and is not subject to an unacceptable risk from localised flooding during a 1 in 20 year storm event, or
- b. The allotment includes not less than 500m² of land outside the limit of the 1 in 100 year flood and not subject to unacceptable risk from localised flooding during a 1 in 20 year storm event.

Clause 21 provides that Council shall not grant consent to the placement of fill on any land unless it is satisfied that it will not have an adverse environmental impact.

Council's Flood Risk Management Policy

The relevant section applicable to this development proposal is Section 6.3.5 *Urban Subdivision*. The following criterion cannot be met by this development proposal if the site is not to be filled: -

- a. *When land is within a flood prone area, subdivisions will not be approved unless contour surveys of land by a Registered Surveyor or qualified Engineer show that at least 500 square metres of each proposed lot will be above the 1 in 100 and / or highest flood level.*
- b. *The 500m² identified in the subdivision is to be utilised for the erection of buildings on the site.*

The applicant's preference is not to fill the proposed allotment which means that the development proposal will not comply with the current council policy. Any proposal by the applicant to fill the proposed additional allotment is to be accompanied by a Flood Impact Assessment prepared by a recognized Consultant Engineer having expertise in this field and using a suitable hydraulic model, demonstrating that the fill when placed will not alter current flooding patterns, depth and velocity in the immediate locality, nor obstruct local drainage.

The applicant has not been requested to provide such a report as the proposed is unacceptable having regard to the lack of an evacuation route in times of flooding.

The NSW Floodplain Management Manual 2005

The new Manual requires Council to consider flood events up to Probable

Maximum Flood (PMF).

The provisional hydraulic hazard category for this site up to and including the 1 in 100 year Flood is LOW. However for floods between the 1 in 100 year to the Probable Maximum Flood (PMF) at some point the preliminary hydraulic hazard category will become HIGH.

Consideration should be given to the cumulative impact of similar development in this area of the floodplain, and that will add to the damages bill including social and environmental aspects.

Department of Natural Resource Advice

In order to ensure that the interpretation of KEMP 1987 and Councils Flood Risk Management Policy was being applied properly in respect to Gladstone and Smithtown, the advice of the Department of Natural Resources was sought.

The following information has been provided by the Department of Natural Resources with respect to Clause 12 "*Flood Prone Land*" of Kempsey Local Environmental Plan 1987 and the original document is appended to this report as (Appendix B) -

- The principle objective of Clause 12 is to minimise development in areas of unacceptable flooding risks. While flood damages can be mitigated through application of appropriate floor level controls, the flood hazard and evacuation difficulties at Gladstone and Smithtown pose unacceptable risks.
- Evacuation is not always triggered by the immediate threat of inundation. Other factors may be isolation, lack supplies, Medical reasons, loss of services power, telephone, potable water, sewer reticulation. In the recent 2001 flood event (approximately a 1 in 12 year flood event) from the Macleay River evacuation was instigated by loss of sewerage services and associated health threat.
- Clause 12 of Kempsey Local Environmental Plan 1987 is consistent with the adopted 2005 NSW Flood Plain Development Manual. Application of the provisions of the Manual aims to minimise the immediate hydraulic hazard at the allotment.
- The Department recognises that using SEPP 1 provisions to increase development in Gladstone and Smithtown is inappropriate.
- The current Clause 12 of Kempsey Local Environmental Plan 1987 fails to address the risk associated with flooding above the 1 in 100 year flood level up to the PMF level, nor onsite issues such as evacuation and the hydraulic hazard of the evacuation route.
- If Council intends to review Clause 12 of Kempsey Local Environmental Plan 1987 the process as outlined in the adopted 2005 NSW Flood Plain Development Manual is to be followed. For example in the first instance, refer the matter to the Council's Flood plain Risk

Management technical sub-committee and from there to the full committee.

- If the provisions, of clause 12 of Kempsey Local Environmental Plan 1987 are to be relaxed, it is recommended Council consider the provisions of Section 733 of the local Government Act 1993. S 733 provides indemnity to Council where it has acted in "good faith" with respect to flood matters. The test of "good faith" is where the action has been taken substantially in accordance with the principles contained in the adopted 2005 NSW Flood Plain Development Manual.
- The provision of the adopted 2005 NSW Flood Plain Development Manual suggest that Clause 12 of Kempsey Local Environmental Plan 1987 could be strengthened and therefore any relaxation of the provisions may place S733 provisions in jeopardy.

Potential Cumulative Impacts

The minimum lot size for subdivision in Zone 2(v) is 500m². Within Smithtown there are 3 land parcels of about 1 hectare which could potentially yield about 15 lots each, land parcels of 2541m², 1784m² and 1752m² could yield a further 6 lots, and a further 14 land parcels of between 1,000m² and 1308m² which could yield another 14 additional lots. This results in a potential for an additional 65 lots within Smithtown, which will lead to a significant increase in population. An analysis of un-subdivided land in Gladstone indicates a similar potential for subdivision.

If approved the resulting precedent would have a cumulative impact, as it would encourage similar developments that would place additional load upon readiness, response and recovery plans as at risk population's increase. Although this development on its own may not have a significant impact on flood levels, risk, evacuation needs or potential damage, the cumulative impact of a number of such developments would have a significant impact which is unacceptable.

Any proposal to step outside the framework NSW Floodplain Development Policy by approving this or any similar development within the floodplain without regard to the contents and process in the manual may jeopardize the indemnity currently enjoyed by Council under Section 733 of the local Government Act 1993.

Considerations of Submission

The applicants submission as it relates to the merits of the applicant may be summarised as follows: - (Appendix C)

Submission	Planning Comment
1 The owner states he is a member of the State Emergency Services and has had 25 years experience in rescue and evacuation. In his opinion the proposal would not	1 Concern is raised in relation to the cumulative impact in Smithtown and Gladstone of allowing similar types of development to occur. The original Council report highlighted

place any additional load on Emergency Services for the following reasons:

The subject property is the highest part of Smithtown;

It has direct access to Smithtown / Gladstone Bridge (if evacuation is required);

It is the only land in the village suitable for this type of subdivision

2 A Council report dated August 2005 states that the proposed development will not have any adverse environmental impacts.

3 Council has not addressed the intent of filling the land for the new lot.

4 Council's Reason "A" for refusing the previous development application is flawed because the new allotment once filled will have an area of 500m² above the assessed 1 in 100 year flood level and therefore comply with Clause 12(1)(c) of KLEP 1987. The existing dwellings have floor levels above the assessed 1 in 100 year flood. Therefore the SEPP 1 Objection relates to the existing lots containing the existing dwellings.

5 The SEPP 1 objection relates to the 2 lots containing the existing dwellings. The proposed new lot will comply with clause 12. Therefore, there is no need for a SEPP 1 objection to create the new lot.

that there existed a potential for subdivision of this nature of up to 65 additional lots in Smithtown. This would increase the population in the village by approximately 29% with a similar potential in Gladstone.

The lack of an effective evacuation route will result in residents being isolated during times of flooding from essential services.

2 The impacts relate to flood planning, which are predominately social and economic issues.

3 See "Council's Flood Risk Management Policy"

4 The clause requires "each lot to include at least 500m² outside the limit of the 1 in 100 year flood." Even if the new house lot is filled to be above the 1 in 100 year level, it will not be outside the limit of the 1 in 100 year flood. It would be isolated during such an event. In addition, the 2 lots that will contain the existing dwelling-houses will not comply with clause 12, as the lots will not contain 500m² either above or outside the 1 in 100 year flood limit.

5 As noted above, the clause requires "each lot to include at least 500m² outside the limit of the 1 in 100 year flood." Even if the new house lot is filled to be above the 1 in 100 year level, it will not be outside the limit of the 1 in 100 year flood, as it would be isolated during such an event. In any event Council is required to assess the merits of the applicant which includes the

- 6 The site is unique in Smithtown and will not set an undesirable precedent for the following reasons: -

Pedestrian access is located at the rear boundary and is available for evacuation to Gladstone Bridge;

The site is more elevated than other sites in Smithtown.

- 7 Emergency Procedures
Disasters of less magnitude can be quarantined and managed given appropriate warning, proper education and adequately trained leadership

- 8 With appropriate emergency plans and evacuation procedures in place on the Lower Macleay and elsewhere residents will cope with disruption, deal with damage then get back to their normal occupations. Refer to Draft Macleay Valley Emergency Risk Management Plan.

- 9 There are 2 registered SES members in Smithtown

effect of flooding.

- 6 Gladstone Bridge will also be isolated, meaning that any person that evacuates to the bridge is isolated for the period of inundation, and will likely need to be evacuated to emergency shelter in the likely inclement weather conditions, with particularly involving persons in ill health, the very young and elderly residents.

- 7 It is important in the planning to have a co-ordinated approach such as is specified by the adopted NSW Flood Plain Development Manual rather than an ad hoc approach to development in flood prone areas.

Chapter 3 Section 3.1.3(c) deals with Local Development Under Part 4 of the EP and A Act for development requiring consent. It states ***“A fundamental principle of flood plain risk management is to assess development applications within the strategic framework of a flood plain risk management plan and not in isolation or individually”.***

- 8 The Draft Macleay Valley Emergency Risk Management Plan has not been finalized to date. Its function in respect to flooding is to provide a significant and co-ordinated multi-agency response within a National Framework for natural disaster management. The plan's risk treatment plan section clearly identifies breaching of the flood mitigation levees as a major consequence and extreme risk.

- 9 The 2001 flood event in the Macleay River was approximately

Gladstone, and 20 Rural Fire service personnel who can assist in emergencies. Two medical emergencies were evacuated by boat during the 2001 flood event, indicating that such emergencies can be accommodated irrespective of the flood levels.

a 1 in 12 year event and was the first flooding event since the construction of flood mitigation levees in the 1970's that over topped this system.

With respect to Flood Warning the 1999 Floodplain Management Plan for the Lower Macleay recognizes the community concern that information on flooding is not being effectively communicated thereby reducing the time left to act and owing to the long time between major floods that SES personnel may not have experienced a large flood and may not know how to respond in a flood emergency. This plan proposes to rectify this by upgrading dissemination of flood information, create desktop flood emergency exercises every 2 years and monitor progress.

10 Council could consider Nestle' Factory as temporary accommodation during 1 in 100 year flood events for those stranded and as an alternative landing area for any emergency helicopter evacuations.

10 The Lower Macleay Flood Plain Management Plan does not identify the Nestles Factory site as a refuge. As stated in the plan all of Smithtown will be inundated during a 1 in 100 year flood event from the Macleay River and significant damage in smaller floods. There are no identified helicopter landing sites contained in this plan.

11 If a small increase in the number of people in a flood prone area is to be the criteria for refusing the building of additional houses then Kempsey should cease taking in new settlers because of the cumulative impact of any development.

11 The issue here is not whether or not to approve of buildings in a flood liable area but whether or not to expand the existing village residential areas by allowing further subdivision in Smithtown and Gladstone.

Council has in place the Lower Macleay Flood Plain Management Plan in order to manage the risks associated with flooding, which are based on the NSW Flood Plain Development Manual. By approving a single one lot subdivision you step outside the risk management plan

	<p>parameters and come into conflict with the process contained in the NSW Manual. This in turn could well jeopardize the indemnity enjoyed by Council under Section 733 of the Local Government Act 1993.</p>
<p>12 Kempsey Shire Council do more to educate members of flood liable communities, promote private family and business flood management plans,</p>	<p>12 Comment as per point 10</p>
<p>13 Page 7 Paragraph 2 of the Macleay Valley Emergency Risk Management Plan information is used. This concerns preparedness of residents of the Lower Macleay and means of effective communication during large flood events.</p>	<p>13 Comment as per point 10</p>
<p>14 The few deaths actually directly attributed to flooding are usually related to individuals refusing to evacuate or leaving the evacuation until the last minute and then driving through dangerous waters.</p>	<p>14 Comment as per point 10</p>
<p>15 Poorly prepared or ill informed visitors of all age categories place a much greater load on emergency services than any minor increase in permanent residents.</p>	<p>15 Development in flood prone areas is assessed within a strategic framework of a flood plain risk management plan and not in isolation.</p>
<p>16 Cumulative Impacts</p> <p>The Population since 1981 has been relative static (ABS figures)</p> <p>There has been a 10% increase in enrollments at the Smithtown public school (2006) which suggest families with young children are looking for cheaper housing find Smithtown an increasing affordable option.</p>	<p>16 In the last 5 years there has been 4 new dwellings constructed on existing land parcels within the confines of the village of Smithtown.</p> <p>Council has approved two (2) applications providing for two (2) additional lots against staff recommendations which has result in additional pressures to permit the current and other subdivisions in Smithtown and Gladstone.</p>

McEvoy DA 7 April 1999 successfully excised 1 housing block from the Smithtown Hotel site was based on a population of 800, and had a cumulative projection to 13 other properties and 32 people.

Walkers Application to excise 1 lot has the propensity to be duplicated in 65 other blocks.

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| <p>17 Since April 1999 there has been no increase in population in Smithtown as confirmed by ABS figures. Council should be able to provide actual statistics rather than projected figures.</p> | <p>17 The consequence of allowing further residential subdivision of this nature is a corresponding increase in population over and above permissible developments within the village.</p> |
| <p>18 Only certain individuals will want to subdivide their blocks into smaller units, with the majority especially those with younger families preferring the extra space. As people get older however they have less need for space and are less able to maintain their gardens and lawns as well as needing extra money for their retirement.</p> | <p>18 The applicants submission clearly shows that as the population ages pressure to subdivide and create additional residential allotments will follow. There will be a corresponding increase in population and therefore add to the burden during times of flood not to mention to socio-economic impacts.</p> |
| <p>19 Suggest only allowing a certain category of individuals to settle in flood liable or bushfire prone areas with emphasis on those who would join the emergency services. Further, that long standing serving existing members of the Emergency Services to be given some recognition for their unpaid service by allowing one off type subdivisions or building alterations.</p> | <p>19 The current NSW Part 4 of the Environmental Planning and Assessment Act 1979 does not make such allowances and councils are not in a position under the current legislation to act to limit certain types of individual to any one area or areas.</p> <p>The proposal does not comply with Council's Flood Risk Management policy.</p> |

Whilst the proposed is considered to be unacceptable and refusal is recommended should Council be of a mind to approve the development the following conditions are provided.

General

1. The development referred to in this application is to be carried out substantially in accordance with the approved development Plan marked *"PROPOSED SUBDIVISION OF LOTS B & C DP399906, CROADS ESPLANADE SMITHTOWN"* and as modified by any conditions of this consent.
2. This consent does not permit commencement of any works. Works are not to commence until such time as a Construction Certificate has been obtained. A Construction Certificate may be obtained from Council upon application being made or from an accredited certifier.
3. Two days prior to commencing work Notice of Commencement of Building or Subdivision work and Appointment of Principal Certifying Authority is to be submitted to Council.
4. A suitable restriction as to user is to be applied over the title of proposed lot 3 prohibiting vehicular access off the Smithtown Road frontage of this proposed allotment.

The restriction is to be clearly marked on the plan of subdivision. Kempsey Shire Council is to be named on the restriction as the sole party to modify and / or withdraw this restriction.

5. Submission of a suitable restriction as to user over the title of all the lots in this subdivision restricting all proposed dwellings to the current flood planning level of 5.00metres on A.H.D., in accordance with Council's Flood Risk Management Policy as amended.

The restriction is to be clearly marked on the plan of subdivision. Kempsey Shire Council is to be named on the restriction as the sole party to modify and / or withdraw this restriction.

6. Applicant is to submit with the final plan of subdivision copies of any instruments under Section 88B or E of the Conveyancing Act 1919 relevant to any restrictive covenants, assessments or rights of way created by or affected by this subdivision prior to the issue of the Subdivision Certificate.
7. Submission of an application for Subdivision Certificate pursuant to Section 4A of the Environmental Planning and Assessment Act 1979, which authorises the registration of the plan of subdivision.

Public Utilities

8. The applicant shall make satisfactory arrangements with Telstra Australia for the provision of underground telephone plant to each lot. A letter from Telstra stating that satisfactory arrangements have been made for the provision of underground telephone plant is to be lodged with Council prior to issue of the Subdivision Certificate.
9. The applicant is to make satisfactory arrangements with Country Energy for the supply of electricity to each lot. A letter from Country

Energy stating that satisfactory arrangements have been made for the provision of underground electricity supply to this development is to be lodged with Council prior to issue of the Subdivision Certificate.

10. Any necessary alterations to or relocations of public utility services to be carried out at no cost to Council.

Contributions

11. The applicant is to pay a contribution towards Outdoor Recreation for each additional dwelling unit after the first unit in accordance with Council's Section 94 Plan for Outdoor Recreation. The contribution is to be paid prior to the release of the Subdivision Certificate, at the rate prevailing at that time. The current rate is \$504 per additional dwelling unit, i.e. \$504 x 1 E.T = \$504 total for 2006 / 2007. (Indexed).
12. Submission of an application for a Certificate of Compliance pursuant to Section 305 of the Water Management Act 2000 and the lodgment of a Certificate of Compliance indicating that the requirements of Section 306 of the Water Management Act 2000 have been met, prior to release of the Subdivision Certificate.
13. You are advised that a Certificate of Compliance pursuant to Division 5 of the Water Management Act 2000 will be issued by Council, subject to the following matters being complied with:-
 - (a) Payment of a contribution towards district water supply at the rate of \$7,468 per equivalent tenement, i.e \$7,468 x 1 E.T = \$7,468 total for 2006 / 2007 (Indexed) in accordance with the current Macleay Water, water supply Developer Service Plan.
 - (b) Payment of a contribution towards Council's sewerage system at the rate of \$6300 per equivalent tenement, i.e \$6300 x 1 E.T = \$6300 total for 2006 / 2007 (Indexed) in accordance with the current Macleay Water sewer system Developer Service Plan.
 - (c) Relocate and extend the existing town sewer main to the side boundaries in a 3metres wide easement to serve all the lots in the proposed development the proposed development, at full cost to the applicant. Detailed plans are to be submitted for approval prior to the issue of the Construction Certificate.
 - (d) Relocate and or extend all existing internal sewer pipes such that they are wholly contained within the proposed new allotment boundaries. Details are to be submitted for approval prior to the issue of the Construction Certificate

Information to be submitted with the Construction Certificate

Roads

14. Prior to release of the Subdivision Certificate, provision of a concrete footpath along the full frontage of all the proposed lots in Croads Esplanade linking the existing concrete footpaths in Main Street and from Smithtown Bridge in accordance with Section D1.16(5) of Development Control Plan No 36.
15. Prior to release of the Subdivision Certificate, provision of functional vehicular access to all proposed lots (including existing lots). The three existing gutter bridges servicing the existing allotments are to be removed and vehicle access reconstruction in accordance with the provisions of DCP 36 Engineering Guidelines for Subdivision and Development.
16. No trees to be lopped or removed except in accordance with Council's Policy on Tree Preservation, and with the written consent of Council.
17. Details of the method(s) to be employed by the appointed Civil Contractor to dispose of cleared vegetation shall be lodged with Council for approval prior to Council issuing the Construction Certificate. **Council will not accept burning off of fallen materials onsite as a means of disposal.**
18. The existing concrete footpath in Main Street is to be adjusted for level to allow for the future construction of a vehicle access using the standard contained in DCP 36 Engineering Guidelines for Subdivision and Development. A concrete gutter bridge will not be accepted as a satisfactory means of crossing the kerb in Main Street.
19. Prior to release of the Subdivision Certificate the applicant is to restore, replace, reconstruct any damage caused to urban road pavements, surfaces or street furniture on the haulage route(s) used for the construction of the subdivision.

Haulage routes for the importation of materials are to be agreed to by the Director of Engineering prior to issuing of the required Construction Certificate.

20. Submission of a Private Flood Plan and accompanying suitable restriction over the title for each of the proposed allotments in this development prepared by a suitably qualified person in accordance with the provision contained in the NSW Floodplain Development Manual 2005 and in consultation with the NSW State Emergency Service prior to the issue of the construction certificate. Council is to be nominated as the sole party to vary or extinguish the restriction.

Inspections

21. The following inspections are required to be made and a minimum of 48 hours notice is necessary where requesting an inspection. Appointments will be made in accordance with the inspection program

for the area. Where inspections are carried out by an accredited certifier other than Council, compliance certificates will be required following each inspection and forwarded immediately to The Principal Certifier.

Note: Accounts will be forwarded for inspections that are required and / or undertaken in addition to those inspections for which a pre-payment has been made.

Inspections required:

- (a) The inspections for the required civil engineering works are listed in Section 6.3 of Council's Engineering Guidelines for Subdivision and Development (DCP 36) and must be undertaken prior to the appointed contractor proceeding to the next stage of the construction.
- (b) Council is to inspect all Telstra and CountryEnergy cables where they cross existing and or new Council sewer or water mains prior to the contractor backfilling the trench.

REPORT IMPLICATIONS:

- ***Environmental***

The proposed development will not generate any adverse environmental impacts.

- ***Social***

This development will place increased population in a flood prone area, creating an additional load on emergency services and the cost associated with emotional, mental and physical health of the residents during and after flood events. Council should consider the cumulative impact of similar development in this locality as part of its Lower Macleay Floodplain Management Plan in order to effectively manage the risk on a strategic basis.

- ***Economic (Financial)***

The new property owner will experience the economic and or financial impacts and any loss will depend upon the size of any flood event. For example minor flooding of the new allotment may damage fencing, garden sheds and or require general clearing of debris external to the dwelling. The new property owner will likely experience loss of wages, sales and or production as a consequence.

However, should this development proposal encourage similar developments the cumulative impacts will be significant. Therefore council should ensure that a strategic approach is applied to management of the Lower Macleay Floodplain.

- *Director's Review*

Council has been consistently advised against approving subdivisions in Smithtown and Gladstone having regard to the lack of an evacuation route in times of flooding.

Council would be aware that the interest generated by the proposed subdivision has resulted in other owners coming forth with plans to subdivide.

In order to ensure that the advice provided to Council in respect to subdivision within Gladstone and Smithtown was consistent with other similarly affected areas throughout the Region, the advice of the Department Natural Resources, which specialises in Flood Risk Management was sought. The Department concurs with the advice provided by Council staff and warns that any relaxation by Council may jeopardise the protection afforded by Section 733 of the Local Government Act.

Council may also recall that the Department of Planning refused a rezoning application to extend Gladstone on the basis that it would give rise to the inappropriate use of SEPP 1 to vary Clause 12 to permit subdivision.

RECOMMENDATION:

That the application for subdivision of Lots B and C DP 399906, Croads Lane, Esplanade, Smithtown, into 3 lots be refused for the following reasons:

1. The proposal is contrary to Clause 12(1)(c) of Kempsey Local Environmental Plan 1987 as none of the 3 proposed lots include any land outside the limit of the 1 in 100 year flood.
2. The applicant's objection to the standard under State Environmental Planning Policy has not demonstrated that the standard is unreasonable or unnecessary in the circumstances, as the standard prevents cumulative impacts of additional houses being a risk during flood events.
3. The proposal would set a precedent that could lead to significant cumulative impacts, particularly for the additional load on emergency services in a major flood event.

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R B Pitt
DIRECTOR SUSTAINABLE DEVELOPMENT SERVICES