



## **DIRECTOR SUSTAINABLE DEVELOPMENT SERVICES REPORT**

July 12 2005

**DSDS6                    PROPOSED DWELLING – PELICAN ISLAND,  
                                  JERSEYVILLE  
                                  FILE: T6-05-118        TJN**

**This report should be read in conjunction with Confidential  
Report DSDS 2.**

### **SUMMARY:**

Reporting that Council has received an application to erect a dwelling on an island located at Jerseyville known as Pelican Island that is considered contrary to the Flood Management Strategy.

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**Applicant:**                    G & N Pye  
**Subject Property:**        Lots 321 & 322 DP 754396  
                                  Pelican Island, Jerseyville  
**Zone:**                         1(a1) "Agricultural Protection"

### **Description of Proposal**

The proposal involves the erection of a single dwelling on an existing holding. The dwelling is to be situated on an existing mound on the southern end of the island, only 5.6 metres from the water.

[\(Appendix O\)](#)

### **Heads of Consideration**

The proposal has been assessed having regard for the Heads of Consideration as identified under Section 79C(1) of the

Environmental Planning and Assessment Act 1979 with the following matters deemed to be of particular relevance: -

## **State Environmental Planning Policy 71 – Coastal Protection**

The subject lot falls within the coastal zone as defined by State Environmental Planning Policy 71. Council is required to have regard for the matters as set out by Clause 8: -

- (a) The proposal is not considered contrary to the aims and objectives as set out in Clause 2 of the State Environmental Planning Policy.
- (b) The dwelling is proposed to be located approximately 5.6 metres from a coastal foreshore. Given that it is located on an island it is considered that it will not impede public access to the foreshore.
- (c) As the site is an island there is no requirement to enhance public foreshore access.
- (d) The proposal is for a single dwelling on an allotment of similar size to holdings on the Lower Macleay.
- (e) The site is not located adjacent to any public coastal foreshore reserve and therefore will not overshadow any public foreshore reserve.
- (f) The proximity of the dwelling to the edge of the island has the potential to diminish the visual amenity of the area.
- (g) The site is cleared meaning that there will be minimal direct impact upon threatened species of flora and fauna.
- (h) The proposal may have indirect impact on marine ecosystems, through future access requirements, effluent disposal systems, increased use of the land.
- (i) The dwelling is on a cleared section of the island meaning that there will be no direct impacts on wildlife corridors.
- (j) The impact of the dwelling on coastal processes is yet to be determined. A geomorphology study would be required to determine impacts.

- (k) Conflict between land and water based activities are not likely to be significant.
- (l) The proposal is not anticipated to impact upon any items of heritage significance.
- (m) Impacts on coastal water bodies are not expected to be significant.
- (n) See (l)
- (o) Not applicable as no rezoning is proposed.
- (p) The proposal complies with Council's energy smart homes criteria. An environmental management plan for the site could be used to address environmental impacts of the proposal.

## **Kempsey Local Environmental Plan 1987 (KLEP 1987)**

The subject land is zoned 1(a1) (Rural "A1" Zone) under the provisions of this plan. The objectives of this zone are: -

- (a) Predominantly provide for agricultural use;
- (b) To preserve the visual amenity of the land; and
- (c) To provide for compatible tourist and industrial uses

The proposal is for a dwelling situated on a parcel of land defined as an "existing holding" under the provisions of KLEP 1987. It is considered that placing a dwelling on the holding would not be contrary to the zone objectives.

## **Referral of the Application to the Department of Infrastructure Planning and Natural Resources.**

The application was referred to DIPNR under the provisions of the River and Foreshore Improvement Act 1948 and comment regarding the pattern of erosion and accretion of the island given the proximity of the proposal to the river bank.

DIPNR's response stated that no approvals were required under the provisions of part 3A of the River and Foreshore Improvement Act 1948. The following comments were issued in relation to the proposal: -

*"The siting of the proposed house on the elevated mound only 5.6m from the riverbank edge is in a zone of high risk from a stability*

*perspective given findings of recent studies completed as part of the Macleay River Estuary Data Compilation Study(draft June 2005). The Geomorphology Report (draft March 2005) identified Pelican Island as being in a zone of active bank erosion. Recent site inspection by the Department supports the draft reports general observations.*

*On the balance of issues surrounding this proposal given the current state of riparian land condition and the erosion processes operating the Department would recommend against locating a dwelling as proposed.*

*If the proponent chooses to continue with a proposed dwelling on the island then it is suggested the site be appraised by a suitably qualified person with expertise in stream geomorphology processes and geo-technical skills to fully assess the site to determine:-*

- 1 How a dwelling can be located with sufficient setback so as not to affect or be affected by bank erosion and flood flow processes.*
- 2 Riparian land restoration options available that will provide long term bank stability and improve the riparian land condition through the establishment of appropriate native riparian species for this location."*

A full copy of the Departments correspondence is attached for Council's information. [\(Appendix P\)](#)

The Departments assessment of the proposed dwelling site is supported. The island is subject to large amounts of erosion and accretion and the proposed location would put the dwelling at an unnecessary risk of structural failure. Given the uncertainty of the geomorphology and geo-technical processes occurring on the island the applicant has been advised to provide the reports suggested by the Department.

Due to the cost of these reports, the applicant has requested that the matter be referred to Council to gain an indication of support for the proposal in relation to the Flood Risk Management Policy prior to expending funds.

### **Access and Parking**

The proposed dwelling is to be located on an island. Any access gained will be by boat. The applicant has indicated that a boat is to be moored on the island, with a vehicle to be parked on an adjacent

piece of land. If Council is of a mind to approve the proposal, the applicant should be required to address the following:

- 1 Details of the location of any mooring points. Council should not approve any application that does not have any legal access. Any mooring points will require landholder consent, as well as the implementation of legal arrangements to ensure that the means of access cannot be discontinued without Council's intervention.
- 2 The owner of the proposed dwelling will also be required to park a vehicle adjacent to the river access point.

It is considered that an instrument under 88B at the Conveyancing Act 1919 will ensure that a legal access can be maintained. However the applicant must firstly approach landholders adjacent to the river to investigate the possibility of gaining the aforementioned access. Such an access should be direct as possible, preferably not to the existing moorings at Jerseyville. Development approval will need to be gained prior to construction of any access related structures.

## **Flood Risk Management Policy**

There is an existing flood mound on the island that provides about 800m<sup>2</sup> of land above the 100 year flood level.

100 year flood level: 3.8m AHD

Natural Surface: About 2 metres AHD

Flood Velocity: About 0.3 metres/second

$V \times D = 0.54$  metres/second

The flood hazard ( $V \times D$ ) at the site of the flood mound is less than 1 metre/second, which satisfies Council's Policy.

This flood mound is located adjacent a streambank that appears to be actively eroding, and subject to the stream processes discussed above. The majority of the island is subject to inundation of between 0.5 metres and 3 metres, with maximum velocities of 0.3 metre/second.

Also of concern is the fact that the dwelling is to be located on an island. Objective 1 of the policy is:-

"To ensure that new development in flood prone lands is compatible with the degree of flood hazard and that adequate flood risk

management measures are incorporated into the design of the redevelopment, thereby minimizing the possibility of loss of life and damage to property”

All access to and from the proposed development will be by boat, with a vehicle proposed to be parked at Jerseyville on the land adjacent to the river (See Access and Parking). During the 1 in 100 year flood event the arm of the river located on the eastern side of the island is subject to a peak velocity of 0.8m/s. In the event that the island is inundated prior to the occupants leaving, the depth and velocity of the water will make wading, or even driving a vehicle unsafe [\(Appendix Q\)](#). The applicant has submitted a flood evacuation plan which can be as summarised as follows: -

- 1 Monitor flood activity and in the event of major flooding evacuate the island immediately.
- 2 Have boats ready for evacuation.
- 3 Have a car located at Jerseyville for road evacuation.

The issue of flood notification was raised in the report prepared by Webb McKeown. It states that flooding is likely to restrict accessibility to and from the island some 18 to 24 hours after the onset of a significant storm event. The accessibility of the island is likely to be restricted for at least three days.

It is acknowledged that there is scope for evacuation of the island, subject to scrutiny of weather warnings and meteorological conditions. If due care is not taken, evacuation could have to take place in floodwaters. There is a risk that by approving the dwelling, Council is knowingly allowing life and property to be at risk during a flood event. The proposal therefore does not comply with the objectives of the policy.

However, if Council is of a mind to approve the concept of a dwelling on the island given the issues raised, the following will be required prior to further determination: -

- 1 Details of a legal arrangement allowing the owner to park their vehicle adjacent to the river.
- 2 Plans and specifications for any proposed wharves and boat moorings.
- 3 A geo-technical and geo-morphological assessment accurately determining a position to place the dwelling that ensures that it will not be placed at undue risk of structural damage in the future. Such a position should be fully compliant with the flood policy.

- 4 Submission of an amended effluent disposal analysis if it is necessary to relocate the dwelling.

## **Advertising**

The proposal was advertised in accordance with Council's advertising policy with no objections being received.

## **REPORT IMPLICATIONS**

### ***Environmental***

*The environmental impact of the dwelling on the island will not be able to be fully determined until a precise location is determined given the presence of SEPP 14 Wetlands on the island. If Council is of a mind to approve the dwelling any conditions of consent will require that the applicant submit an environmental plan of management with the plans for the required construction certificate.*

### ***Economic***

*Any approval will bring an economic benefit for the duration of construction only.*

### ***Social***

*There is the possibility that by placing the dwelling on the island that undue risk will be placed on life and property and add to the number of dwellings to be evacuated in major flood event.*

## **RECOMMENDATION:**

**That the applicant be invited to withdraw the application within 28 days otherwise it will be refused for the following reasons:-**

- 1 The proposal is contrary to the objectives of Councils Flood Risk Management Policy, as there are inadequate means to evacuate the island in times of major floods.**
- 2 The proposed house and effluent disposal system may be subject to threat from stream geo-morphological**

processes, and it is considered inappropriate to allow the development within a dynamic river system.

- 3** The proposal will add to the demand on emergency services during major food events.
- 4** The proposal does not include details of arrangements for access to the land, or dedicated parking for vehicles associated with the development.

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**K J Ward**

**ACTING DIRECTOR SUSTAINABLE DEVELOPMENT SERVICES**