Council Reference: DA09/0527 LN40109 Your Reference:

MP05\_0198



27 January 2012

NSW Department of Planning & Infrastructure Metropolitan and Regional Projects North GPO Box 39 SYDNEY NSW 2001

Attention: Jane Flanagan

Dear Madam

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Development Application MP05\_0198 (Council reference DA09/0527) - 85 lot residential subdivision (MP05\_0198) at Lot 1 DP 167380; Lot 2 DP 961928; Lot 1 DP 134787; Lot 5 DP 1117326, Walmsleys Road & Stott Street, BILAMBIL HEIGHTS

I refer to your request for Council's comments in relation to the Walmsleys Road subdivision at Bilambil Heights.

The revised preferred project report (PPR) was reported to a Council meeting on Tuesday 24 January 2012. The Council resolved as follows:

Insert resolution from meeting

The following letter represents the various Council Officer's comments for your consideration.

# Stormwater Management:

In previous comments, various engineering issues were raised in relation to the PPR. It is generally considered that the issues have been resolved in the revised PPR by way of meetings with the applicant's consultants and via amendments to the plans. Several conditions of consent have been recommended in order to address the remaining concerns regarding stormwater management and landforming issues. Other issues have been referred to the Development Engineer and Traffic Engineer for comment.

### Road Design:

### Walmsleys Road extension:

A "Y type intersection" is still proposed for the separation of DA09/0527 and DA09/0288. Sketch plans have been provided SK20100913 – 1 to 4 to indicate the proposed intersection. The following comments are provided in relation to the proposed intersection:

Approach grades from Road 1 (12%) and Walmsleys Road (14.4%) towards the proposed intersection as demonstrated on sketch sk20100913-1 are steep. Being a neighbourhood connector and access road the designated maximum speed is 60km/h and 50km/h respectively. There are no controls to



slow vehicles down prior to the intersection. A roundabout has been suggested to reduce approach speeds and separate potentially conflicting movements. A roundabout is considered to be a safer option.

- Sketch SK20100913- 2 indicates minimum site distances at the intersection. The landscape master plan indicates planting of primary trees (Hoop Pine, Illawarra Flame Tree and Blue Quandong) near the intersection. These trees are large in size and will potentially interfere with site distance.
- There are four (4) types of sight distance that should be considered when
  designing intersections; they are: Approach Sight Distance (ASD), Safe
  Intersection Sight Distance (SISD), Entering Sight Distance (ESD) and
  Minimum Gap Sight Distance (MGSD). The proposal only illustrates a safe
  stopping site distance at the intersection for Walmsleys Road. Grade
  corrections for site distances should also be considered for ASD and SISD.
- Sketch SK20100913 4 indicates turning templates for a bus. The templates indicate that the bus is required to cross the median strip and mount the kerb in order to complete the full turn. Concerns are raised that the bus can potentially conflict with traffic waiting within the median trying to complete a right hand turn.
- Sketch SK20100913-3 indicates site distances for driveways proposed off Walmsleys Road. A previous drawing by Opus Qantec McWilliam (Figure 15.0 dated April, 2010) indicates a right of carriageway "right of carriageway number 3" for proposed property numbers 1-6. It was considered that the proposed right of carriageway was acceptable to Council, provided that sight distance is acceptable and a maximum of five (5) lots were served. Access off Walmsleys Road was considered unacceptable.
- There are existing driveways located on Walmsleys Road that have not been taken into consideration regarding the proposed intersection. In particular driveways closest to the intersection off Lot 87 in DP776309.
- Figures 1 and 2 indicate that there is a future cul-de-sac road for a community title eight (8) lot subdivision located at the intersection of Walmsleys Road and Road Number 1. The proposal in its current form restricts future development of this subdivision.

The proposed minimal turning radius on steep approaching grades is considered poor engineering design. Modification of the intersection type (eg. roundabout) and removal of Lot 6 will improve the function of the road and provide a safer intersection.

### Road No. 1:

The Road No. 1 cross sections indicate a compliant 3.5m road reserve. The proposed 2.2m high retaining wall is not compliant. Councils Development Design Specification D6 – Site Regrading specifies a maximum retaining wall height of 1.2m.



The absolute maximum gradient for a neighbourhood collector road is 12%. The longitudinal section for Road No. 1 (should read Walmsleys Road) shows gradients up to 14.4%. The road gradient is to be amended to a maximum of 12%. The proposed road still indicates a gradient of 14.4%.

### Road No. 3:

Figure 12.3 indicates a right of carriageway No.3 proposed for Lots 53 & 60 (previous PPR configuration). The proposed right of carriageway does not align with the revised proposed lots, but it is assumed that the proposal is for lots 55 & 62. Lot 62 is a proposed pump station. Below are comments regarding access into Lots 55 & 62:

- Figure 7.2 indicates section 4 through the proposed carriageway with a 1 in 4 batter and an 8% grade to the proposed retaining wall. A conflicting figure 12.3 indicates the same right of carriageway with grades of 2.5% and 10%.
- 2) No change of grades has been considered for the right of carriageway. The maximum rate of change is 6.25% for trucks accessing the sewer pump station.

# Road No. 5:

The minimum footpath verge proposed is 1.5m. Council's standards require the footpath verge to be 5.5m with a 1.2m concrete footpath located on one side. The plans are to be amended to provide an adequate verge width of 5.5m.

### Right of carriageways:

The amended plans show (four) 4 right of carriageways with longitudinal and typical cross sections. The plans do not provide longitudinal and cross sections for access into lots 11 and 12. The plans have deleted right of carriageway access for lots 1-5.

The proposal for carriageways 1, 2 and 4 indicate a battle axe type of arrangement, with all properties having frontage to the street. Although not desirable to have battle axe type lot arrangements on green field sites, Council's development controls do not restrict these types of lots provided that a maximum of 5 lots are served, grades are compliant and services are achieved. Battle axe allotments are generally used in older existing subdivisions where access is restricted and not in new green field sites.

An area of 1m x 6m is dedicated for the provision of bin storage at the frontage of the lots. Bin storage areas have the potential to impact on driveway site distance.

### Proposed access to Lot 6:

Sketch SK20100913-3 indicates sight distance for the driveway to Lot 6 of 40m. Being a neighbourhood connector type road with a maximum targeted speed off 60km/h sight distance required is 55m.

Road gradients greater than 12%



The provision for pedestrian footpaths gradients greater than 12% has not been considered in the design.

#### Traffic:

There are concerns in relation to the proposed intersection of Walmsleys Road and Stott Street. It would be expected that acceptance of this design by Council would result in an unacceptable vehicular crash location that would require remedial works in the future at Council's expense.

#### Water:

## Location of water meters

The revised engineering drawings reflect the removal of Road No 4 (short cul-de-sac in the north west area of the development) in favour of several hatchet blocks with a right of carriageway across the handles to Road No 3. The drawings show a water main along the driveway of proposed lot 38. This is not consistent with Council's preferred practice which is not to have water mains on private property.

This results in a number of water meters located within the properties on what will be an unofficial road. From Water Unit perspective it is much more appropriate that a formal road be included. If not, provision for the location of water meters outside the vehicle path will be required. Similar provision will be required at Lots 69, 70 & 71 and Lots 76, 77 & 78 although the issue is not as significant in these two locations.

### Water tank size / connected roof area

Generally, the statement of commitments covers the area of water supply adequately including changes previously requested, however the statement of the minimum size water tank and connected roof area has omitted the actual amount of roof area required. The words under "Single Dwellings:" should read:

"Minimum 5000L rainwater tank with a minimum 160 m<sup>2</sup> roof area connected to it."

#### Sewerage:

The revised draft statement of commitments has included all requested changes from the previous version in relation to sewerage.

## Section 64 charges:

The statement of commitments includes payment of development contribution charges in relation to water supply and sewerage under Section 64 of the Local Government Act.

These charges should be assessed in accordance with the schedules in Fees and Charges with a credit for the existing Lot 5 DP1117326 in relation to water only. None of the existing lots have previously been connected to sewer.

# Section 94 charges:



Charges in accordance with the following plans apply to the creation of the 82 residential lots:

- Plan No. 4
- Plan No. 5
- Plan No. 11
- Plan No. 12
- Plan No. 13
- Plan No. 15
- Plan No. 18
- Plan No. 22
- Plan No. 26

Trip rate = 6.5 trips per residential allotment. ET rate = 1 ET per residential allotment.

#### Parks:

Landscape Masterplan - 'Public Park Concept

Council's concern with the park in the original PPR was primarily excessive slope across the park. As such, the applicant has simply deleted areas with excessive slope from the park plan but still dedicated this steep land to Council (refer to Dwg SK20100809 – 01 Rev A). This approach is not considered to be appropriate as there is no reason for Council to accept land that does not meet criteria for casual open space.

Accordingly, the 'compliance calculations' included in Dwg SK20100809 – 01 Rev A are not correct and cannot be considered. Slope calculations must include all land in the land parcel proposed for dedication. Despite Council's offer, there has been no discussion with the developer on this matter which could have been clarified had such discussion taken place.

Given the sloping nature of the land in this area, it is reasonable for Council to compromise on slope requirements. Council will accept the park but will require amendments in a detailed landscape plan to be prepared before the Construction Certificate is issued.

- There remain concerns over the slope and drainage in this park. Council will require negotiation over the final detailed plan for this park to ensure it deals with such slope and design issues. For instance, an overland flow path at the northern end of the park also appears to have a garden bed proposed. In addition, a 5% slope is indicated across the play area and no slope indication is provided for the 'kickabout area'.
- The Landscape Masterplan does not indicate park seating, shelter shed or other park infrastructure. The detailed landscape plan must provide for such items. Discussions need to be held between Council staff and the developer regarding provision of park infrastructure.
- Council has noted an opportunity to provide a link in the future through the
  adjoining Lot 6 east of the proposed public reserve (not part of the subject
  site). The park design does not take this into account. It would be appropriate
  for the developer's representatives, including the landscape architect, to meet



with Council to discuss concerns with regard to future access to the adjoining land described as the 'Eastern Conservation Area'.

### Contamination:

The following still requires clarification from the applicant:

Council's GIS does not recognise Lot 4 DP 105848 and it does not match the
Lot and DP description of any of the adjacent Lots in Stott Street. Clarification
is required in respect to whether Lot 4 DP105848 is meant to refer to Lot 5
DP1117326 Stott Street which is an allotment referred to in the proposed
subdivision.

#### Noise:

Further clarification is required to be provided from the applicant as to why they have not included any reference to implementing the provisions and recommendations as contained in the submitted Noise Impact Report dated 30 October 2007 within the Statement of Commitments dated October 2011.

### Fill:

It is important that fill material is not contaminated and therefore an appropriate condition should be placed on any consent to ensure that such fill is uncontaminated and tested if required.

#### CONDITIONS

The following conditions are recommended:

Stormwater (prior to Issue of Construction Certificate)

- All stormwater drainage outlets shall be designed to discharge to a lawful point of discharge, being a Council drainage system, existing watercourse or easement, and shall discharge via stormwater quality control devices, energy dissipation devices and level spreaders as required by Council specifications D5 and D7 to minimise adverse impacts of the development on downstream property. All stormwater discharge onto Lot 6 DP1117326 must satisfy the existing "restriction on the use of land" burdening that land such that it "reflects the existing natural drainage pattern of the catchment". The design and location of all stormwater outlets and related treatment and mitigation structures must consider and make provision for future access for maintenance to the satisfaction of Council.
- All interallotment drainage systems shall be designed in accordance with Development Design Specification D5 - Stormwater Drainage Design, catering for minor and major storm events, with appropriate consideration for blockages, bends, freeboard to adjoining residential development, and adjacent earth retaining structures. Where practical interallotment drainage systems shall discharge to the public stormwater drainage system rather than discharge separately, to minimise the number of outlets.



- Staging plans for the subdivision must provide the necessary stormwater infrastructure to fully service each stage of the development, to the satisfaction of Council.
- Engineering calculations and/or modelling of peak stormwater discharges for a range of storm intensities and durations shall be provided with the construction certificate application to demonstrate any on site detention / retention requirements for individual allotments in order to mitigate adverse downstream impacts. Any measures identified for individual allotments (e.g. rainwater tank sizing, available storage volumes) shall be registered on each land title at subdivision certificate stage.
- All retaining structures and batters must comply with Development Design Specification D6 - Site Regrading. Where variations to this specification are proposed, they must be accompanied by a design report that demonstrates that the proposed varied design achieves a positive engineering, urban design or environmental outcome, which is superior to a compliant design.
- Permanent stormwater quality treatment shall be provided in accordance with the following:
  - The Construction Certificate Application shall detail stormwater management for the occupational or use stage of the development in accordance with Section D7.07 of Councils Development Design Specification D7 - Stormwater Quality.
  - Permanent stormwater quality treatment shall comply with section 5.5.3 of the Tweed Urban Stormwater Quality Management Plan and Councils Development Design Specification D7 - Stormwater Quality.
  - The stormwater and site works shall incorporate water sensitive design principles and where practical, integrated water cycle management.
  - Specific Requirements to be detailed within the Construction Certificate application include:
    - Shake down area along the haul route immediately before the intersection with the road reserve.
- A construction certificate application for works that involve any of the following:-
  - connection of a private stormwater drain to a public stormwater drain
  - installation of stormwater quality control devices
  - erosion and sediment control works

will not be approved until prior separate approval to do so has been granted by Council under S68 of the Local Government Act.

- a) Applications for these works must be submitted on Council's standard s68 stormwater drainage application form accompanied by the required attachments and the prescribed fee.
- Erosion and Sediment Control shall be provided in accordance with the following:



- The Construction Certificate Application must include a detailed erosion and sediment control plan prepared in accordance with Section D7.07 of Development Design Specification D7 - Stormwater Quality.
- Construction phase erosion and sediment control shall be designed, constructed and operated in accordance with Tweed Shire Council Development Design Specification D7 - Stormwater Quality and its Annexure A - "Code of Practice for Soil and Water Management on Construction Works".

# And prior to Commencement of Works:

 Prior to commencement of work on the site all erosion and sedimentation control measures are to be installed and operational including the provision of a "shake down" area where required to the satisfaction of the Principal Certifying Authority.

In addition to these measures the core flute sign provided with the stormwater approval under Section 68 of the Local Government Act is to be clearly displayed on the most prominent position of the sediment fence or erosion control device which promotes awareness of the importance of the erosion and sediment controls provided.

This sign is to remain in position for the duration of the project.

### **Environmental Health:**

- It is the responsibility of the applicant to restrict public access to the construction works site, construction works or materials or equipment on the site when construction work is not in progress or the site is otherwise unoccupied in accordance with WorkCover NSW requirements and Occupational Health and Safety Regulation 2001.
- All work associated with this approval is to be carried out so as not to impact on the neighbourhood, adjacent premises or the environment. All necessary precautions, covering and protection shall be taken to minimise impact from:
  - Noise, water or air pollution
  - dust during filling operations and also from construction vehicles
  - material removed from the site by wind.
- The burning off of trees and associated vegetation felled by clearing operations or builders waste is prohibited. Such materials shall either be recycled or disposed of in a manner acceptable to Councils General Manager or his delegate.
- All imported fill material shall be from an approved source. Prior to the
  commencement of filling operations details of the source of fill, description of
  material and documentary evidence that the fill material is free of any contaminants
  and the proposed haulage route shall be submitted to Tweed Shire Council for the
  approval of the General Manager or delegate.



## Parks:

A detailed landscape plan prepared by a qualified landscape architect must be submitted for all areas of casual open space, structured open space and streetscapes to be dedicated to Council. Such a plan must be approved by the Manager, Recreation Services, Tweed Shire Council and include embellishments such as listed in Councils Subdivison Manual (Section A5 of the Tweed Development Control Plan) and Development Design Specification (D14) and related Standard Drawings and include grassing, landscaping, seating, playground equipment and shade cover. The plans must provide slope information and indicate all underground services. Where play equipment is installed a minimum area of 10m around the equipment is to be turfed and the remaining area seeded.

This detailed plan may include variations to the Landscape Masterplan if sort by Council. This could include allowing for future access to the area described as the 'Eastern Conservation Zone' should it become public land.

- The developer is to liaise with Council's Recreation Services Unit regarding the final design and embellishment of this park.
- Any playgrounds included in landscape plans must comply with the guidelines established in the 'Playground Audit for Tweed Shire Council' (July 2009).
   Appendix 3 of this establishes a procedure for assessing nearby hazards and mitigation measures. New subdivisions designed after development of these guidelines must ensure no playground facility has a Facility Risk Rating exceeding 13 as defined in Table 3A7 of that document.
- The developer is to undertake maintenance operations on all streetscapes, casual open space and structured open space for a minimum of 12 months after the Subdivision is registered with the Land Titles Office. This is the establishment period for new plantings. Such maintenance will include all soft landscaping, particularly mowing and weed control. Any power and water consumption costs during this period must also be met by the developer.
- Prior to the release of a Subdivision Certificate for each stage of the project, casual open space is to be embellished consistent with the approved detailed landscape plans. All earthworks, levelling, turfing, planting, concrete paths, underground services and similar items are to be installed. Installation of hard infrastructure prone to degeneration and vandalism, such as shelter sheds, seating, playground equipment and softfall is however not to occur until 30% of the relevant stage's allotments are occupied. The developer must provide a bank guarantee or cash bond equivalent to the value of such items prior to release of the Subdivision Certificate for each stage. Council will undertake the installation at the appropriate time.
- Prior to issue of a Subdivision Certificate, Work as Executed Plans (WAX) must be submitted for all landscaped casual and active open space. These must show all underground services, irrigation systems and the location of concrete paths, structures, other park infrastructure and garden bed outlines.

The plans are to be certified by a registered surveyor or consulting engineer.



Two categories of WAX plans are to be provided:

- a) the original approved plan with any variation to this indicated.
- b) plan showing only the actual as constructed information,

The plans are to be submitted in the following formats:

- a) 2 paper copies of the same scale and format as the approved landscape plan.
- b) A PDF version on CD or an approved medium.
- c) Electronic copy in DWG or DXF format on CD or an approved medium..

Should you have any further enquiries in relation to this matter, please contact Michelle Lynton of Council's Development Assessment Unit (02) 6670 2756 or <a href="mailto:mlynton@tweed.nsw.gov.au">mlynton@tweed.nsw.gov.au</a>.

Yours faithfully

