

**Additional Information requested by JRPP –
DA-846/2012 - Proposed Marina Development – 146 Newbridge
Road, Moorebank**

(1) Vehicular Access and Traffic;

(a) *Council to confirm the endorsed Road/Bridge/Access Plan which has been referenced in the order issued by the NSW Land and Environment Court between Tanlane and Moorebank Recyclers;*

Council notes that the NSW Land and Environment Court (LEC) considered a road/bridge/access concept plan in the case between Tanlane and Moorebank Recyclers. This plan includes a bridge and a slip lane to provide direct vehicular access to the Marina development from Brickmakers Drive. A copy of the bridge access concept plan is attached.

This is a concept design only and is subject to a full assessment pursuant to Section 79 of the Environmental Planning and Assessment Act 1979. The court judgement noted the requirement to lodge a development application for the endorsed road/bridge/access design.

The initial easement was granted in the Supreme Court of NSW in favour of Tanlane over land owned by Moorebank Recyclers to allow the construction of the road bridge approved by Council in 2006. Moorebank Recyclers sought to appeal this decision to the Court of Appeal. The outcome was that the Court of Appeal broadly approved the terms of the easement in favour of Tanlane. Moorebank Recyclers then sought a grant of easement over Council land. A judgment and orders was handed down in early July 2013 that granted Moorebank Recyclers easements over certain parcels of land owned by Council. During the course of the proceedings, the Court looked at the purpose for which the grants of easement were sought, being the proposed development of land. Evidence presented by various experts was submitted to the Court for its consideration of the proposed development. It is important to note that the Court did not endorse the proposed development but merely endorsed a proposed concept plan to facilitate the creation of an easement to enable access to the Marina development site. Further, the Court was not required to nor did it consider the merits of the proposed development. The Court merely reviewed and considered the proposed development in **context of the easements sought**.

The development applications currently before the JRPP (being the Moorebank Marina) and before Council (being for the use of the road bridge and the modified ramp must be assessed and determined on their merits. As mentioned above, the recent matters dealt with by the Court did not substitute a merit based assessment which needs to be undertaken by the relevant consent authority.

It is also noted that the applicant submitted two plans and is relying on elements of both. In discussions with Council, the applicant has agreed to provide a comprehensive, single plan incorporating all proposed design elements to enable Council to carry out a complete and proper assessment of the proposal and its impacts.

An assessment of the proposal is currently being undertaken in accordance with the requirements of the Environmental Planning and Assessment Act 1979.

(b) Demonstrate that an environmental assessment of the endorsed plan relative to the proposed development has been carried out.

Environmental matters associated with the Marina application were assessed and addressed in Council's report to the JRPP considered at the meeting of 10 October 2013. However, the ecological impacts associated with the construction of the bridge are required to be considered on their merits, and are currently being assessed based on information submitted. It is noted that the applicant has referred to the Experts Joint Report which was submitted in evidence in Court proceedings during the easement hearing. Council is examining material submitted by the applicant in support of the current applications, however; in recent meetings with the applicant and his consultant it has been identified that additional material considered by the Court should be obtained in order to make a complete and proper assessment. This process is underway.

A copy of the Statement of Environmental Effects accompanying the current bridge access applications is included in the requested supporting documents.

(c) Provide further environmental assessment with regard to the cumulative impact of this development as follows:

- ***The report to show and provide assessment of likely traffic generation relative to the proposed development having regard to the future surrounding land and the Moorebank East precinct. Specific consideration shall be made in respect to the road and engineering capacity of the access road to the proposed marina and the surrounding street network. In addition, the engineering capacity/detail should also be considered as part of the proposed development.***

The applicant submitted a Traffic Report dated 4 November 2013, which addresses the traffic generation potential of future development in the Moorebank East precinct. A copy of the report is attached.

The report has outlined that the cumulative traffic from future developments within the Moorebank East Precinct, can be accommodated on the adjoining road network subject to appropriate interim and ultimate intersection treatments off Brickmakers Drive.

Council agrees that the road network can accommodate the projected traffic from the three developments within the Precinct, with the following intersection treatments:

- Intersection treatment of Brickmakers Drive - interim treatment for the proposed development – an urban channelised intersection;
 - Ultimate treatment – traffic control signals (when the threshold is triggered); and
 - Intersection treatment off Newbridge Road – ultimate – traffic control signals (when the demand threshold is triggered).
- ***Consideration of the proposed development in respect to the provisions outlined in Subdivision 2, Division 17 Roads and Traffic in State Environmental Planning Policy (Infrastructure) 2007 with regard to existing and proposed residential/commercial development adjoining the subject development site.***

Council's Moorebank East DCP covers the Tanlane and Flower Power development sites. The Moorebank Recyclers site is the only other future development site in the precinct. It is noted that the proposed developments include residential and commercial uses.

Traffic impact of the proposed marina development has been assessed in accordance with Subdivision 2, Division 17 Roads and Traffic in State Environmental Planning Policy (Infrastructure) 2007, in consultation with the Roads and Maritime Services (RMS). The RMS assessment in consultation with Council, indicates that the proposed development is acceptable subject to the provision of an interim intersection treatment off Brickmakers Drive, and traffic signals would be considered when the demand is triggered.

- ***Provide a report on the proposed development with regard to the road layout plan outlined in Part 2.10 Development in Moorebank East in the Liverpool Development Control Plan 2008 provision, with specific consideration of the impact on adjoining property owners with regard to formal vehicular access within the precinct and the overall achievement of the objects outlined in Section 5 of the Environmental Planning and Assessment Act 1979.***

According to the Moorebank East DCP (Part 2.10 of the Liverpool DCP 2008), the Tanlane site will have direct access from Brickmakers Drive with a secondary access from Davy Robinson Drive. The assessment has recommended an interim intersection off Brickmakers Drive (to be imposed as a consent condition).

As part of the proposed redevelopment of the Flower Power site, intersection treatments off Newbridge Road would be assessed further.

(d) *Confirmation of the final intersection design and treatment required to Brickmakers Drive.*

The applicant has proposed an interim solution involving a non-signalised priority control intersection treatment. The intersection will then be upgraded to traffic signals following further development in the precinct.

The comprehensive design plan to be submitted by the applicant as noted above will incorporate the interim intersection layout as part of the proposed bridge construction works.

As per RMS advice on the development proposal, the intersection with Brickmakers Drive will not require traffic signals until demand thresholds are met as a result of further development in the precinct.

(2) Legal Opinion

(a) *The current position of the proposed development relative to the recent court judgement between Tanlane and Moorebank;*

As discussed above, in terms of the easement access, a series of court proceedings in the Supreme Court and most recently in the Land and Environment Court were initiated and determined effectively granting easements over the adjoining land. Unfortunately, at the time of writing, Council does not yet have a copy of the Supreme Court Orders that granted the easement to Tanlane over Moorebank Recyclers land. Council's Deputy General Counsel is currently seeking access to the relevant documents from the Supreme Court.

(b) *Various matters raised by Moorebank Recyclers Planning Consultant with regard to vehicular access*

As noted above, the development applications lodged by the applicant in respect of bridge access and design are currently being assessed. While the easements

approved through Court proceedings provide for legal access and endorses concept designs, development consents are still required. Other matters raised by the objector are covered elsewhere in this response.

(c) Confirmation of the terms of the Voluntary Planning Agreement (VPA) executed between Council and Tanlane with regard to any dedication of the access road from Brickmakers Drive over Moorebank Recycler's land;

On 11 June 2008, Tanlane entered into a VPA with Council. A copy of the VPA is attached. Amongst other things, if Council granted Tanlane development consent to a subdivision of Tanlane's land up to 225 residential lots, Tanlane would dedicate and transfer certain designated land to Council. At Item 7 in Schedule 3 (page 29) of the VPA, the approved road bridge over the drainage channel, embankment and road to Brickmakers' Drive (as shown in Annexure 1) was required to be constructed and dedicated prior to the issue of the subdivision certificate for a plan when registered, would create the first residential lot with the development on the Tanlane land as follows:

"Construction and dedication of a road bridge over drainage channel, embankment and road to Brickmakers' Drive."

The drainage channel is located on Tanlane land, however part of the embankment and road to Brickmakers' Drive is located in airspace over the panhandle to Moorebank Recycler's land.

Tanlane is not able to dedicate that part of the road bridge "over the drainage channel, embankment and road to Brickmakers' Drive" because that part of the road bridge is over Moorebank Recycler's land.

As Tanlane has already agreed to dedicate and transfer certain designated land to Council, then any approval granted to DA-846/2012 should be subject to a condition of consent requiring Tanlane to dedicate that part of the designated land it holds title to Council as contemplated under the VPA

It is noted that the applicant has had recent discussions with Council regarding proposed changes to the terms of the VPA. There is a process for amending VPAs which Council would be happy to progress when appropriate alternative solutions can be formalised. The changes relate to separating the required works specified in the VPA in order to distinguish land-based works from foreshore works. However, while there is merit in the proposal, in the absence of other development applications for land-based development within this precinct, such amendments will need to be postponed at this time.

(d) Whether JRPP/Council is able to discharge its responsibilities pursuant to Section 79C(1)(b) of the Environmental Planning and Assessment Act 1979 and whether JRPP/Council is empowered to grant a Deferred Commencement Consent pursuant to Section 80(3) of the Environmental Planning and Assessment Act 1979 having regard to the deferral of vehicular access by virtue of a separate development notwithstanding such information provided in support of the subject Development Application.

Council accepts Sparkes Helmore advice that the final determination of DA-846/2012 should be deferred until Council has assessed Tanlane's application for use of the access road bridge.

As noted above, the applications for the road bridge access are currently under assessment. Both applications are yet to be determined.

The impact of these proposed developments, being DA-61/2014 and DA-1552/2006/B must be taken into account in the assessment and determination of the marina development. Council further accepts Sparke Helmore's advice that the JRPP should defer determination because use of the road bridge may impact upon the vehicular access arrangements for the proposed marina development. In advice dated 28 January 2014, Sparke Helmore considered the Minter Ellison advice and concluded that as a matter of logic, the JRPP cannot make a full assessment of the vehicular access and traffic issues associated with DA-846/12 until the vehicular access and traffic issues associated with the use of the road bridge have also been assessed.

(3) Director General Requirements

The Director-General issued DGR No. 563 Clause 6C Certificate (under SEPP Major Development 2005) on 8 July 2011. The application has been assessed in accordance with the Environmental Planning Act and Regulations and statutory requirements have been satisfied. Copies of the applicant's response are attached. The Director-General's requirements are outlined within the applicant's Environmental Impact Statement.

It is noted that the Council's October report to the JRPP does not address the DGR requirements, and this is regretted. A detailed discussion will be included in the revised report when this is returned to the JRPP following completion of the current bridge assessments.

(4) Flooding Impact

(a) *Provide a discussion confirming satisfaction of Clause 7.8 – Flooding in the Liverpool Local Environmental Plan 2008;*

The proposed development satisfies requirements of Clause 7.8 (3) of Liverpool LEP 2008 as outlined below:

Development consent must not be granted to development on flood prone land (other than development for the purposes of residential accommodation) unless the consent authority is satisfied that the development:

- (a) Will not adversely affect flood behaviour and increase the potential for flooding to detrimentally affect other development or properties, and*
- (b) Will not significantly alter flow distributions and velocities to the detriment of other properties or the environment, and*
- (c) Will enable the safe occupation and evacuation of the land, and*
- (d) Will not have a significant detrimental effect on the environment or cause avoidable erosion, siltation, destruction of riparian vegetation or a reduction in the stability of any riverbank or watercourse, and*
- (e) Will not be likely to result in unsustainable social and economic costs to the flood affected community or general community as a consequence of flooding, and*
- (f) If located in the floodway, will be compatible with the flow of flood waters and with any flood hazard on that floodway.*

The detailed flood impact assessment undertaken by the applicant (Ref: Cardno Pty Ltd report dated 29 January 2013) demonstrated that the proposed development will not adversely impact flood behaviour and will not adversely impact on the flood behaviour on adjacent properties, which is considered satisfactory.

The proposed marina structures are located outside the main flood flow areas and are located in a flood storage area with low velocities. As such, there is no adverse impact on flood flow distributions and velocities. This has been demonstrated by the flood impact assessment undertaken by the applicant.

Flooding in the Georges River has a 12 hour warning time issued by the Bureau of Meteorology for severe flooding; as such considerable flood warning time will be available to allow an orderly evacuation. The proposed marina will have a site emergency response flood plan and will be managed on site by the manager of the proposed marina. In addition, there is refuge available in the upper floors of the main building, which is above the PMF flood level. The site emergency response flood plan would be formulated in detail as required by Council's consent conditions (Conditions 115-119).

The proposed marina development will incorporate rock walls around the marina basin perimeter and on the outer walls along the river. This will stabilise the banks and prevent erosion. As the flood velocities are low, any erosion potential would be low.

As the development does not cause any significant change to the flow distribution and velocities, the development would not induce any new instability in the riverbank.

There will be a low rate of siltation in the marina basin due to sediment laden flood flow. The estimated rate of siltation in the marina basin is approximately 120mm over 100yrs. This will not cause any significant problems as a siltation allowance of 300mm has been incorporated into the selection of the design depth of the basin.

The existing riparian vegetation along the river foreshore at the marina site is limited and will be maintained.

Therefore, the proposed marina development satisfactorily demonstrated environmental requirements.

The proposed marina has been designed to minimise the potential flood related damages in terms of the building form, materials selection and adopted floor levels. Also, flood safety has been an important design principle. The proposed development is in accord with the NSW Government Floodplain Development Manual and thus, along with the above design approach, ensures that the development offers a sustainable approach to the social and economic costs of the local and general community. Importantly, it does not require significant additional flood related infrastructure or resources to support the proposed development

The development is not located within a floodway however it still is compatible with the flood flow and hazard. The buildings have been specifically located west of the main flood flows and designed to comply with its flood hazard and the associated requirements of Council's LEP and DCP. For example, the building structures will be constructed from flood compatible building components. The building design would incorporate piles and columns capable of resisting the flood forces. A well designed building would be able to resist the hydraulic loads from a flood in the proposed conditions.

Conditions have been recommended requiring a report to be submitted from a certified engineer at the construction certificate stage confirming these requirements have been satisfied.

(b) Provide an assessment which confirms that the flooding matters have addressed relevant legislation/guidelines and provisions of the Flood Planning Manual;

The NSW Government's Flood Prone Land Policy and Floodplain Development Manual support the wise and rational development of flood prone land. The policy acknowledges that flood prone land is a valuable resource that should not be sterilised by unnecessarily precluding its development and that development should be treated on its merits rather than through the application of rigid and prescriptive criteria. The Manual specifies a process for appropriate risk management which requires Councils to undertake a flood study followed by a flood management study which should lead to the formulation of a floodplain management plan.

Liverpool City Council has developed The Georges River Floodplain Risk Management Study and Plan in accordance with the requirements and guidelines of the NSW Government's Flood Prone Land Policy and Floodplain Development Manual. The requirements have also been integrated into the Local Environmental Plan 2008 (Section 7.8) and the Development Control Plan (DCP) 2008 (Section 9 Flooding Risk). The DCP specifies an industry best practice approach based on a matrix system which provides guidance on allowable development depending on flood risk category, land use risk category and planning controls.

The proposed marina is located westwards of the main river flood flow paths and protected from these flows by the high lands immediately north and south of the site. The detailed 2D flood modeling of the proposed development by Cardno reaffirmed this behaviour with low peak flow velocities in the 100 yr ARI flood of mainly 0 to 0.3 m/s with some isolated areas of higher velocity up to 0.5m/s. The floodway was located in the main river with velocities around 0.5 to 2 m/s (refer to Figure 3-18 in Cardno report). The proposed marina and the area to the south west is a flood storage area which also plays an important part in the flood behaviour. The proposed marina was designed to minimize any loss of flood storage. The Cardno report demonstrated that the proposed marina would not have a significant adverse impact on flood levels and velocities.

Flooding matters have been appropriately addressed to satisfy relevant legislation/guidelines and provisions of the Floodplain Development Manual and Council's Flood Policy.

(c) Provide an assessment of building in a floodway and the structural adequacy having regard to the natural ground level and the finish floor level of habitable rooms.

The buildings have been specifically located west of the main flood flows and designed to comply with flood hazard and the associated requirements of Council's LEP and DCP. The development has addressed flood flow and flood hazards and risks.

The buildings will be open structures up to the flood planning level (FPL: 1% AEP flood level plus 0.5m freeboard) thereby limiting the force on the structures in a flood. The low velocities within the marina will also assist to alleviate the forces on the structures. The building design would incorporate piles and columns capable of resisting the flood forces. An engineer's report is conditioned to be provided to confirm the structure can withstand forces of floodwater, debris and buoyancy up to the FPL. In addition, all structures have flood compatible building components below the FPL.

The above requirements are required to be satisfied by a report from a certified engineer to provide this evidence at the construction certificate stage. There is a consent condition requiring this design and report from a certified engineer (Conditions 27 and 28).

(d) Provide a discussion on the matters to be contained in a Flood Evacuation Plan with regard to a Plan of Management detailing the 'trigger point' for critical flood events and an evacuation strategy for the practical and safe passage of vehicles and patrons from the site.

The site emergency response flood plan is to be formulated in detail as required in Council's consent conditions (Conditions 115-119) prior to the issue of an Occupation Certificate. The approach and structure of this plan is discussed below as demonstrated by the applicant:

The plan would be managed on site by the manager of the marina development. The leases for the onsite activities would identify the manager of the plan and provide the manager with the authority to order various activities under the plan such as training drills and evacuations. Flooding in the Georges River has a 12 hour warning time issued by the Bureau of Meteorology for severe flooding. This warning can be issued electronically direct to the marina manager and other dedicated staff in the marina facility. In addition to this warning, there would be water level readers located at the water's edge which issue an electronic warning and sound an audible alarm when the river level reaches RL 1.3m AHD. The marina manager would then assess the flood risk and decide on the appropriate actions.

In considering the appropriate actions, the manager would review whether advice had been received from SES. The first action would be to clear any cars parked in the southern car park to areas offsite above the PMF level. If the flooding was considered to be severe then the manager would instigate an orderly evacuation of the site. The evacuation would involve:

- Locking down the moored boats;
- Storing any hazardous materials into designated areas above the FPL; and
- Requiring all persons to evacuate by the designated route and remove cars from the northern car park.

The marina pontoons and pile supports would be designed to cater for flood levels, flood flows and debris imposed by the 100 yr ARI flood. A back up anchor pile and chain system would hold in place the marina pontoons. All craft could be readily tied to the chain system with quick lock fixtures when a severe flood warning was received. The marina manager would act as the flood warden and he would have a number of designated assistant flood wardens. It would be the responsibility of the assistant flood wardens to ensure all people and cars in the facility have been evacuated.

The designated evacuation route would be east along the rising marina access road to the proposed bridge to Brickmakers Drive and up to Nuwarra Road. Nuwarra Road is above the PMF flood level and provides opportunities for refuge. Flood warning signs would be provided in the car parks indicating that evacuation may be required and providing directions as to the evacuation route. Each lease provided in the marina would include a flood management package alerting lessees of the potential flood risk, the evacuation plan and the need to follow the directions of the flood warden.

The flood warden would be responsible for providing flood training at the beginning of each new lease and organizing flood evacuation training for all employees on site at least once a year. The flood risk management onsite is relatively straight forward as the people on site will be either employees or visitors to the site all under the control and management of the marina manager. There is also considerable flood warning time allowing for an orderly evacuation. Importantly, there is a failsafe back up evacuation plan which should not need to be used but if for some reason, a person does not evacuate the site in time, and there is refuge available in the upper floors of the main building in areas above the PMF flood level.