GEORGES COVE Residential Development Planning Proposal – Visual Impact Assessment:

The subject site is located in the Liverpool LGA in the South West of Sydney. The site is part of a former Benedict Industries sand and soil quarry and recycling facility. The site has been subject to several studies, Development Applications and planning proposals.

This report has been prepared to support the planning proposal for the subject site to allow a residential use in two parts - see 'Proposed zone boundary change' plan, below.

The first part being a rezoning of a portion of residue land from RE2 Private Open Space to R3 Residential to join the existing zoned R3 residential area subject to development under an application with Liverpool City Council. This is referred to as 'Approximate area to be rezoned R3', shown as a yellow outline in the plan. The second part is for the approval of an enabling clause for terraces and residential flat buildings over part of the existing zoned RE2 - this is referred to as 'residential use envelope' and indicated with a red outline in the plan.



Proposed zone boundary change plan.

The Site:

Area included within the Georges Cove Proposed Residential Development Visual Impact Study:

The site of the proposed residential development is situated within the Upper Estuary Reach of the Georges River. It is bounded on the North by Newbridge Road, on the East by Georges River, on the South by the South Western Motorway and on the West by Brickmakers Drive.

The purpose of this report is to accompany a planning proposal relating to part of the RE2 zoned site to include an enabling clause, allowing residential development

The Upper Estuary Reach of the Georges River is characterised by the level or gently sloping terrain that comprises the river foreshores and the surrounding topography. Few visual cues relating to the existence of the river (such as signs to the river, framed views, or the character of the built form) exist in the area, largely as a result of its topography and the long cleared vegetation.

Built environment and scenic quality:

The relatively flat landscape and wider plains of this reach mean that impacts of change are more noticeable in a narrower corridor, particularly where the river banks are steeper. The level topography and the highly modified foreshore environment mean that scenic sensitivity is confined primarily to the immediate foreshore and river bank with absorption capacity being higher at a distance from the foreshore. Residential development along this part of the river is a significant contributor to its character, particularly on the foreshore. Large lots with houses set back from the foreshore dominate, with gardens and private river walls as prominent visual features.

Threats relate to additional urban development and intensification where development has already occurred, leading to pressures on environmentally significant areas and reductions in water quality.

Discordant visual elements include:

- · highly unstable sand banks, constantly eroded by boat wash and stormwater surges
- variable river wall treatments by landowners, often inappropriate to the context
- · impacts of flood mitigation construction such as walls and deflector mounds at East Hills
- · impacts of buildings not balanced by vegetation
- road crossings where the bulk, scale and character of the structures entirely dominate the views
- the presence of significant litter caught in reeds on the foreshore.

Vegetation is focused in a narrow band on the immediate foreshore, limiting immediate views over much of this reach. The presence of large areas of mown grass on land in either public or private ownership down to the river's edge is a feature of the subject site (there are five golf courses on the foreshore within close proximity to the subject site). This is in contrast to the bushland that still fringes parts of the river over much of its length.

Foreshore access, recreation and leisure:

The outstanding feature of the upper estuarine reach is the rehabilitated sand mining area of the Chipping Norton lake system. This area is highly accessible and has many active and passive recreational areas. As there are large areas of flood prone land around Moorebank and Hammondville, this stretch of the river has remained relatively undeveloped. There are relatively few formal boat launching opportunities, one significantly being to the North West of the subject site.

Natural environment:

This reach supports several important wetlands, including those at Voyager Point, which are listed on the National Estate. Significant stands of mangrove and saltmarsh also occur in the reach and are generally in moderate condition. Several areas of riparian vegetation also remain in this reach, although these are degraded by urban and agricultural influences including disturbance by access tracks and four wheel drivers, as well as introduction of weed species. Remnant bushland can be found in this area, with significant stands in relatively good condition, however no bushland is present on the subject area of this planning proposal.

Upper Estuary Reach: site analysis:

Built environment and scenic quality

• Natural foreshore areas in military ownership have been cleared for army exercises. This provides a stark contrast with the unmodified bushland of the majority of defence landholding.

• A high level lightweight pedestrian bridge provides opportunities for the public to gain enhanced perspective of the river landscape.

· Golf course landscapes extensive in this reach.

Club, Milperra and Warwick Farm Racecourse.

- Boral master planning project commenced in 2005.
- · River character changes dramatically to narrow/steep sided.

Foreshore access:

The level of access to public facilities along the foreshore is generally high and will improve with the dedication of the foreshore land to Liverpool City Council and construction of cycleways under the VPA.
There are low levels of access to Brighton Lakes Golf Course, Hind Park, Moorebank, Riverlands Golf

Recreation and leisure:

· Providing links to existing urban centres (e.g. Liverpool).

An extensive range of diverse recreational and leisure facilities exist including Warwick Farm Racecourse, golf clubs, a sports club and soccer fields, baseball fields, a dog exercise area, walking tracks, cycle paths, playgrounds, picnic and BBQ areas, fishing areas, a restaurant, jetties, boat launches, and a sandy beach area. Similar cycle paths and connections will be provided as a part of the subject development through a VPA with Liverpool City Council for the dedication of the foreshore land and construction of cycleways.
Opportunities to promote existing recreational facilities.

Natural environment:

• The natural environmental condition of this reach has been progressively degraded with the intensification of development.

Conclusions:

By virtue of its flat topography and highly modified landscape the Upper Reach of Georges River, perhaps understandably, receives less focus on scenic amenity and environmental quality than the two lower reaches or the Top Reach of the river.

By comparison with the two lower reaches, the level of foreshore built form development here is relatively limited. Views of the river are however also mostly limited to occasional roadside views and these from public reserves. However, substantial tracts of foreshore land fall in major private landholdings on public land (racecourse, golf courses, former military land and extractive industries) where long-term public access or rights of way may increase with future developments. Such connections and paths will be provided as a part of the subject development through a VPA with Liverpool City Council, including (but not limited to) the dedication of the foreshore land and construction of foreshore cycleways.

The presence of the Chipping Norton Lakes recreational area in the centre of this reach acts as something of a catalyst for more extensive long-term foreshore links downstream to Sandy Point and upstream to Liverpool. Given the mostly flat topography and the absence of significant vegetation, the opportunity to combine pedestrian and cycle paths is perhaps greater in this reach than in the steeper and often more sensitive landscapes of the lower reaches. The important habitats in this reach including saltmarsh and wetlands should not be overlooked.

The high level of recreational boat use is quite appropriate, given the relatively limited foreshore residential development and on the other hand highly problematic given the unstable nature of the foreshores. While limits on boat speeds may reduce impacts, this does not compensate for the inherently unstable nature of much of this foreshore which is also prone to storm damage. Again, the future foreshore development and dedication to Council under the VPA will only benefit the visual impact of the site.

Specific site assessment:

The site for this planning proposal is bounded by Brickmakers Drive on the Western side. To the West of this road is the Georges Fair low density housing estate, with a mix of single and double storey houses on individual plots. These are relatively new and the landscaping around the housing and along the road is under 5 years in maturity.

The area along Brickmakers Drive to the South West of the proposed site is screened by mature and dense woodland – see V1 to V4. The proximity of the trees to the road ensures the subject site will remain significantly screened in this area.

Along sections of Brickmakers Drive, additional circulation roads sit to the West of the main road and are generally raised by about 1000mm, giving more significant visual links to the proposed development of the subject site – see V1, V11 and V12.

The area between the subject site and Brickmakers Drive has existing vegetation, being a mix of lower trees (up to 8m) at the North Western corner and large scale dense trees (10m+ to the South West corner).

This provides good screening to the subject site from Brickmakers Drive, but the upper floors of the subject site remain visible from the raised street access within the housing estate – see v5 to v11. To the North of the site sits the new Brighton Lakes development site, which is set back from the river and Brickmakers Drive, while being bounded at the Northern end by Newbridge Road. The subject site is obscured by mature trees from the Newbridge Road in the North – see V11 to V14. Travelling East along Newbridge Road, mature trees and 2 storey housing obscures the subject site to a great degree. Along Georges River at this location, there are open areas which give access to the water – see V15 to V19. Viewlines through to the subject site become obscured by trees on the Eastern side of the river as one moves away from the subject site location. Viewpoints V18 and V19 give the widest visual link to the site and are located at a public car park, accessing a public slipway into the river.

Across Georges River, to the East of the subject site, is open land, containing a mixture of grazing land, next to the river, which is flood prone. To the North East is a recreational park, containing several football fields belonging to Bankstown Touch Football Association. Mature trees line this area to the North and South, although the viewline to the site remains open looking West – see V20 to V26.

Directly opposite the site, across the river to the East, is grazing land, containing gulleys and small watercourses. A line of mature trees along the river bank are broken at a number of locations, allowing access to the river foreshore – see V17 to V31. These locations give a full, almost uninterrupted view to the subject site.

To the South-East of the proposed site across the river is a similar flood-prone block of grazing / wasteland, behind which is located several streets of mixed housing, being a mixture of one and 2 storey buildings on larger plots. This housing area is well established and the existing and new landscaping is already mature and provides solid visual screening to the subject site from most locations – see V33 to V37. Further East is the link road, Ingram Avenue. Looking from here towards the proposed site, there are several bands of mature trees blocking any potential viewlines from the road – see V38 and V39.

Viewpoint Selection:

As a result of the site's topography, the visual impact is primarily relevant along the site's closer boundaries, since a combination of natural landscape and flatter land to the East and West, minimise the development's potential to disrupt viewlines.



Methodology:

Initially, a fully contoured 3d model has been created, with block modeling matching the building envelope of the latest Mirvac design of the planning proposal, apartments and terrace homes.

Virtual cameras were placed into the model to match viewpoint numbers 8,9 and 27, in both height and position. From these cameras, rendered views have been generated and photomontaged into the existing photos, using the ground plane for alignment. Several site location poles are placed into the 3d model to allow accurate alignment with the original photo. These poles align with known elements, such as trees, lamp posts, vent stacks etc.

The rendered views create an accurate interpretation of the visual impact and provide a basis for minimising any view loss by the incorporation of lower height buildings and landscape, where appropriate. The final selection of images show these stages, concluding with an outline, indicating the potential visual impact, with and without landscaping.



position of locating poles placed into 3d model



original site photo from viewpoint v8



montaged view with locating site poles visible



montaged view indicating extent of visual impact

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VISUAL IMPACT FROM VIEWPOINT V8



original site photo from viewpoint v9



montaged view with locating site poles visible



montaged view indicating extent of visual impact



original site photo from viewpoint v27



montaged view with locating site poles visible



montaged view indicating extent of visual impact

VISUAL IMPACT FROM VIEWPOINT V27

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Assessment of visual impact from viewpoint V8. V9 and V27:

Viewpoint V8:

The original photo at V8 is on the raised access road to the West of Brickmakers Drive. This is approximately 1000mm higher than the main road and provides circulation for the new housing development.

At this viewpoint, there is minimal tree coverage when looking East and a large portion of the new development is visible. This impact would be reduced from the lower main road, which is the principle vehicular route, even with the existing landscape.

The are opportunities to increase the tree cover in this area to reduce the visual impact, particularly from the new housing.

At this location on Brickmakers Drive, vehicles are moving at speed, since this is between junctions for turning into the housing estate.

Viewpoint V9:

The photo from V9 shares similarities with V8. It is on the raised access road around the Georges Fair housing development. There is more tree coverage when looking due East and this could be enhanced within the area adjoining Brickmakers Drive to the East. There is a service access road to the ventilation stacks opposite, which would need to be maintained. There is also a mix of dead trees within the area of landscape between the main road and the subject site. This provide opportunities for rapid growing trees to add visual screening to the subject site.

Viewpoint V27:

This photo is from an area on the Eastern side of Georges river in an area where the grazing land slopes down to the water and is not screened by trees. This area is flood prone and of poor quality. The proposed development is fully visible. Screening will assist along the river edge on the Eastern side and along the Western side of the apartments and terrace homes to minimise the visual impact.

The clusters of trees along the Western river bank serve the purpose of breaking up the overall impact of the new buildings.

Conclusion of visual impact assessments

From the selected montaged viewpoints, it is clear that the subject site is visually screened by existing landscape from most locations along the major vehicular thoroughfares.

As shown in the attached section, the most significant visual impact is from the raised circulation road around the Georges Fair housing development and, in particular, around the service road entry points into the subject site, where the existing landscaping is less substantial. Since these access roads are relatively minor, servicing the periphery of the housing site only, a solution of lower level tree screening along the Western base of the proposed apartments would prove sufficient to break up the continuity of any development on the subject site.

The area to the East of the subject site, across the Georges River, is significantly flood prone and used for material storage and horse grazing currently. There are areas along the riverbank without screening vegetation and, inevitably, at the water's edge, the view to the subject site is fully open. A combination of additional tree screening on both sides of the river, in selected locations would serve to break up the continuity of viewlines to the subject site.



VIEWLINES TO SUBJECT SITE ALONG BRICKMAKERS DRIVE



ISSUE: DWG. NO.

viewpoints v1 to v5





viewpoints v7 to v12



DWG. NO.





viewpoints v13 to v17





DWG. NO.

SCALE:

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viewpoints v18 to v22





viewpoints v23 to v28





viewpoints v29 to v34



SCAL





viewpoints v35 to v39

