

DEM (Australia) Pty Ltd
PO Box 5036
CHATSWOOD WEST NSW 1515

12 May 2017

Attention: Jon Pizey

Dear Jon,

Re: LINDFIELD VILLAGE GREEN - 8 & 10 TRYON ROAD AND 3 & 5 KOCHIA LANE, LINDFIELD – DA0651/16

I refer to the above development application and note that Council has engaged my services to prepare an independent assessment of the application. I have reviewed the application and inspected the site and have review referral comments from the technical sections of Council, external consultants and State Government bodies and completed my initial assessment of the application. From that assessment concerns with the level of information provided and some aspects of the design have been raised and it is requested that the following additional information/amendments are provided/made to the application.

Traffic Engineering

The application has been assessed by Traffix, along with a significant number of submissions which have raised traffic and parking issues, and the assessment report is attached. The following matters (summarised) require a response. Please refer to the attached report for a more comprehensive discussion of these matters.

1. Advice should be provided from TfNSW as to the current level of commuter parking demand on the streets surrounding the site and the basis for determining how the 100 space demand was established. In the absence of such information surveys should be undertaken specifically targeting commuter parking to identify the quantum of commuter parking currently using surrounding streets.
2. Provision of information on the method of ensuring the on-street parking spaces currently being used by commuters will become available for short term parking (eg proposal for signage to limit parking times) and the quantum and location of such spaces.
3. The cumulative impact of the external traffic impacts should be recalculated having regard to the one-way northbound flow in Havilah Lane, the counterintuitive directional split of traffic in Milray Street and the inconsistencies in distribution of trips exiting onto Milray Street, with consideration given to the following:
 - the implications on intersection performance with revised Sidra modelling;
 - the implications for environmental amenity;
 - the relative change in traffic flows and the impact of that on environmental amenity;
 - revision of Figures 7.2 and 7.3 as appropriate with inclusion of existing trips on road segments.

4. Updated Sidra modelling having regard to the delay impacts of heavy vehicles.
5. Redesign of the combined entry-exit driveway from Milray Street to provide a raised (flush) paved footpath across the full driveway width within the road verge so that pedestrians have a clear priority over vehicles both entering and exiting the site. The entry driveway should be as narrow as possible based on the swept path analysis of the adopted Design Vehicle (an 11m Rigid Truck), with the narrowing occurring on the northern side of the combined driveway to increase the landscaped buffer to the adjoining residential property to the north.
6. Consideration should be given to limiting left turn entries into the combined entry-exit driveway from Milray Street to vehicles with a maximum length of 6.4m, requiring larger trucks to enter via a right turn.
7. The following deficiencies in the car park design should be addressed:
 - insufficient sight distance when entering the exiting ramp from Basement 2;
 - insufficient passing between entering and exiting vehicles on the basement ramp;
 - absence of ramp design gradients and transitions on plans;
 - reduction in length of ramp median to allow better manoeuvring;
 - swept path analysis that uninterrupted two-way flow is available on the primary circulation ramp and aisles;
 - pedestrian movement accessing bicycles in storage area on Basement Level 2 is unsafe; and
 - stairwells in basement block visibility at the marked (zebra) foot crossings.
8. No assessment has been made of the impacts of the development on the safety and efficiency of cyclist operations in the general locality or the potential for provision for onsite facilities for cyclists.
9. Consideration of potential impacts upon access to townhouses opposite the site in Milray Street, including impacts of headlight glare.
10. Provision of information confirming the fire hydrants for 2-6 Milray Street will still be able to be accessed as required by NSW Fire Brigade with the changes to the road network.
11. Compliance with Council's DCP in relation to the number of accessible parking spaces provided.
12. Consideration of the provision of a raised traffic calming device in Milray Street, north of Kochia Lane.

Development Engineering

The following information is required:

13. The report and plans provided for re-use of runoff for irrigation and treatment and detention of road and path runoff provides conceptual information only such as layout of pipes and volume of tanks, but no pipe diameters or level information is provided. Reference should be made to Council's DA Guide as well as Part 24E and Part 24R.6 of Ku-ring-gai Local

Centres DCP for the level of detail expected for DA assessment and additional information should be provided, including, but not limited to:

- sections through the detention tank and clarification of its location (noting the tank is shown in the basement on the architectural plans but just below the entry road on the civil plans); to allow assessment of whether it can be drained by gravity to the street system.
- a pollutant trap is indicated in Section 3.3.1 of the Civil Design Report, but is not shown on the plans.
- no details are provided of the drainage system from the Lindfield Centre, which is to be connected to the new system. The transition into the Lindfield Centre is particularly important – there are grated drains at the entrance to the businesses along the southwestern side of the building and the plans should show how runoff will be managed without entering these premises. Grading is preferable to a grated drain which requires maintenance and may affect access.
- stormwater runoff from the buildings at 1-21 Lindfield Avenue is currently discharged to the gutter in Chapman Lane. The plans do not show how this will be managed.
- the plans should show surface and invert levels for all tanks, pits and pipes, as well as pipe diameters.

14. There are no levels or dimensions on the civil plans and insufficient detail on the architectural plans. It is not possible to determine that design gradients for roads and footpaths will comply with Section 3.2.6 of the Civil Design Report. The footpath in Milray Street will have to be lowered by some 700mm. Kerb ramps as shown on the civil plans will not be sufficient to accommodate this change in level. The plans are to show the extent of footpath regrading required to maintain pedestrian access and any battering or retaining structures required in the nature strip.
15. Services such as the Telstra pit and stormwater pit in Milray Street will conflict with the new entry road. The plans are to show how these services will be managed. The Telstra line may have to be lowered.
16. Chapman Lane – the basement appears to extend to the face of the kerb. The shared zone plan states that there will not be a kerb retained in Chapman Lane. At present the businesses at 1-21 Lindfield Avenue place waste containers on the narrow footpath for collection. Council's commercial waste collection vehicle is 11 metres long and has a gross vehicle mass of 22 tonnes. The plans do not show how waste will continue to be collected from these businesses and do not demonstrate that the new Chapman Lane will be able to accommodate vehicles of this size, either geometrically or structurally.
17. Continued access to the parking areas and pedestrian entrances for 1-21 Lindfield Avenue as well as the Lindfield Centre must be demonstrated on the plans.
18. The Civil Design Report refers to Ku-ring-gai Council Road Design Guidelines. This reference should be amended to General Specification for the Construction of Road Works and Drainage Works in Ku-ring-gai.

19. The Civil Design Report refers to *Soil Erosion and Sediment Control – Institution of Engineers, Australia*. This is a Queensland document and the reference should be amended to *Managing Urban Stormwater: Soils and Construction – Landcom 2004*.
20. All concrete pipes are to be rubber ring jointed. Part 3.3.11 of the Civil Design Report should be amended.
21. Water quality measures are to be shown on the plans and modelling results provided to support the rainwater re-use and water treatment strategies. Treatment additional to the proposed gross pollutant trap may be required (eg by a proprietary product).

Landscaping

22. To maximise pedestrian connectivity through the site to Lindfield Centre, connecting path/steps between Gazebo 2 and the path running along the western elevation of the Lindfield Centre should be provided.
23. At least one gazebo should have a roof to protect users of the Village Green, including performers, from sun or rain.
24. The planter on the eastern side of the Coolth Plaza Pavilion is considered too small for the proposed tree planting as well as too close to the roof structure. The planter and light-well also cause a pedestrian “pinch-point” with the stairs and lift of Coolth Plaza. Further, concern is raised that pedestrians should be directed towards the pedestrian crossing in Havilah Lane rather than allowing crossing at the corner. It is recommended that the light-well be relocated (or removed) to free up pedestrian circulation and that a planter box be provided adjacent to the curve in the road between the “kiss and drop” spaces and the pedestrian crossing. A tree could be planted in the relocated planter.
25. The proposed planters to the surrounds of the Café are within the eaves and are unlikely to be viable. It is recommended that the eaves be reduced in width to allow access to light and rainwater.
26. A set of plans at 1:100 scale should be provided. The level detail on the plans is illegible due to the paving textures. Grades are to be provided to demonstrate that principle paths are accessible.
27. Insufficient information has been provided to demonstrate the acceptable integration of the proposed pedestrian walkways and public domain works with existing development along the site boundaries. Existing structures that cross over into the subject site, such as the existing garden beds that run along the western elevation of the Lindfield Centre, will require demolition within the adjoining property and the area will need to be resurfaced.
28. Proposed areas of on-slab and off-slab soil mediums are to be shown. Specification for the structural soil, free draining material and on-slab drainage is to be provided including details of the drainage layer. It is unclear how the battered structural soil for Chapman Lane is to be compacted without adversely impacting the adjoining planting including canopy trees. (Typical section Civil Design Report, Robert Bird, 20/12/16 and Section 2, ar-0201, DEM). The path to the eastern gazebo is shown without a batter. The Civil Design section should indicate the grated trench drain to Chapman Lane as per the Stormwater plan.

29. An undated draft structural report has been provided recommending a contiguous piled wall to the two level basement. The typical sections through the boundary walls shows the piling wall only up to the basement roof ie 2 metres below existing grade. The detail should indicate the site boundary and the means as to how the adjacent levels to adjoining properties are to be retained. The walls include an architectural facing wall and drainage cavity/spoon drain inside the shoring wall (SK-005, 13/12/16, Bird). This is inconsistent with the architectural plans that show carspaces directly adjacent the shoring wall. The report refers to 'optimised apartment layouts'(p5 Section 3.3, Robert Bird Group).
30. Insufficient levels and dimensions have been provided to enable assessment of the water feature. The water feature is considerably larger than the one proposed in the LVMP and its relocation has reduced the grass area. The surrounds to the water feature and bridge are considered insufficient to prevent wear and tear on the adjacent grass and wider paving should be provided on the southern side of the water feature.
31. Additional bollards are to be provided at the edge of the vehicle turning areas within the pedestrianised section of Kochia Lane to 'warn' pedestrians of potential truck movements.
32. Details of proposed retaining walls are to be provided including materials and top of wall levels. This is also required to demonstrate viable soil depths/volumes for proposed plantings on-slab and gradients for garden beds for example on either sides of the proposed driveway entrance.
33. Section 1 of the driveway is to show existing driveway and correct details of the road reserve (dwg. ar2100).
34. Proposed planting of high water use species such as *Flindersia* and *Harpullia* that have large seed pods are to be substituted with hardy low water use species.
35. The proposed planting (*Trachlespernum jasminoides*) on the pergola structures should be substituted with a non-sap producing deciduous species.
36. Planters to Chapman Lane should be considered to enhance the streetscape. The planters would also provide added pedestrian safety if located adjoining the rear pedestrian access from Lindfield Avenue properties into Chapman Lane, providing a protected area to step out of the property.

Heritage

37. The solar panels on the roof of the structures are to be integrated into the roof.

Town Planning

38. It is considered that the parking provided within the basement car park is defined as floor space, other than 10 spaces for the proposed café, as it is not parking required by Council. As such a new FSR calculation is requested which includes the basement car park, other than for 10 spaces and the access to those spaces.
39. In the pre-DA meeting it was requested that information be provided to show the works required to provide an accessible path of travel from the long term parking spaces to the railway station and that such works be included in the application.
40. The stair access to 2 Kochia Lane is currently provided from the footpath of that lane and appears to be located in a position that conflicts with the truck turning path at the northern end of Chapman Lane. Additional information is required to address this conflict.

41. The plans show a pedestrian path (both one with steps and a ramp) to the northern side of the Lindfield Centre, with both exiting to the driveway to the Centre. This presents a conflict point between pedestrians and traffic and needs further resolution.
42. The location of the exhaust on the café is not supported, being a bulky element that will be too visually dominant from the Village Green and will detract from its aesthetic appeal.
43. The location of the accessible public WC is inappropriate and should be relocated to be accessed from the pathway to the south of the café rather than from Chapman Lane. This could be achieved by relocating it with the store room.
44. Additional information is required in relation to the operation of the car park, including whether the short stay car park will be free or charges will apply. Details of proposed security measures and hours of operation for both car parks are requested. In order to minimise unnecessary vehicular manoeuvres, it is considered appropriate that a sign be provided at the driveway entrance from Milray Street advising if both car parks have any capacity, allowing drivers to continue along Havilah Lane, rather than enter the car park if it is full. Confirmation is requested that such is intended to be provided.

Conclusion

Any response to this correspondence should be sent both directly to me as well as copies being provided (both hard and electronic) to Council (attention Jonathan Goodwill).

Given the changes requested to the plans and the number of submissions received, any amended plans/additional information submitted may require renotified.

Should you have any questions in relation to this please do not hesitate to contact me.

Yours faithfully

KERRY GORDON PLANNING SERVICES PTY LTD



Kerry Gordon
Director