

Our reference: ECM Ref: 9811393
Contact: Kathryn Saunders
Telephone: (02) 4732 8567

22 December 2021

Department of Planning, Industry and Environment
Attn: Shaun Williams
Email: shaun.williams@planning.nsw.gov.au

Dear Mr Williams,

Request for Advice - EIS - Kemps Creek Data Centre SSD-10101987 at No. 707 – 769 Mamre Road Kemps Creek

Reference is made to the recent request to provide comments in relation to the above State Significant Development Application under assessment by the Department of Industry, Planning and Environment (DPIE). Thank you for providing Council with the opportunity to comment.

The following review advice is provided for the Department's consideration in relation to its assessment of the application.

1. Planning Considerations

(a) Contributions Plan

As of 27 October 2021, Council's 7.12 City-wide Contributions Plan no longer applies development in the Mamre Road Precinct.

Council has development the Mamre Road Precinct 7.11 Contributions Plan which will apply to development in the Precinct. This Contributions Plan is yet to be adopted by Council and is being re-exhibited between 9 December 2021 and 27 January 2022.

Prior to the adoption of the 7.11 Plan, a Voluntary Planning Agreement (VPA) may be entered and in such a case, the applicant is advised to contact Penrith City Council to begin any negotiations.

(b) Application of Mamre Road Precinct Development Control Plan

The two State Significant Development Applications (**SSDA**) are located on land that formed part of State Significant Development (**SSD**) SSD – 9522. Condition of Consent A10 for SSD – 9522 required a site specific DCP that amended Penrith DCP 2014 be submitted to Council within 6 months of the SSD approval.

A request to amend Penrith DCP 2014 was submitted to Council on 25 November 2021. Council has not amended its DCP as it does not apply to the subject site as the Mamre Road Precinct Development Control Plan (DCP) was adopted on 19 November 2021.

(c) Proposal

Council understands that the State Significant Development Application (**SSDA**) seeks approval for the following:

- Construction and operation (24/7) of a data storage building comprising of 2 x two storey buildings with a height of 21.31m (23.27 to top of lightning rod) and a total of 60,943sqm of gross floor area (**GFA**).
- Utilities installation including 1 x substation, 63 x diesel fuel storage tanks, 62 x emergency back up generators and roof mounted plant machinery, 9 water tanks, power transformers and 480 indoor air handling units and high voltage switch yard,
- Installation of 840 lithium-ion battery cabinets with approximate capacity of 500MWhs of storage capacity.
- 6,255sqm of ancillary office area,
- Earthworks including cut and fill and importation of approximately 9,500m³ of fill.
- 120 car parking spaces, 12 bicycle spaces, and
- Associated landscaping, hardstand, and access roads.

The site is within the land subject to a stage 1 and concept SSDA (refer **Figure 1**) approval under consent no. SSD-9522 issued by DPIE. Bulk earthworks, subdivision and related infrastructure is approved under the SSD consent. This consent has been the subject of one modification under MOD 1 approved 3 September 2021.

As is confirmed in the Environmental Impact Statement (**EIS**) prepared by Willowtree, dated 6 September 2021, the development is state significant development under Schedule 1, Part 25 of State Environmental Planning Policy (State and Regional Development) 2011 (**SEPP (SRD)**) as the development is for Data Storage and will exceed 10 megawatts (**MW**).

The Secretary's Environmental Assessment Requirements (SEARs) have been issued, dated 12 November 2020.



Figure 1: Site. Except from applicant's EIS.

It is noted that Council has previously provided comments to DPIE in relation to the request for SEARs in cover letter dated 30 October 2020 with attention to Mr Shaun Williams.

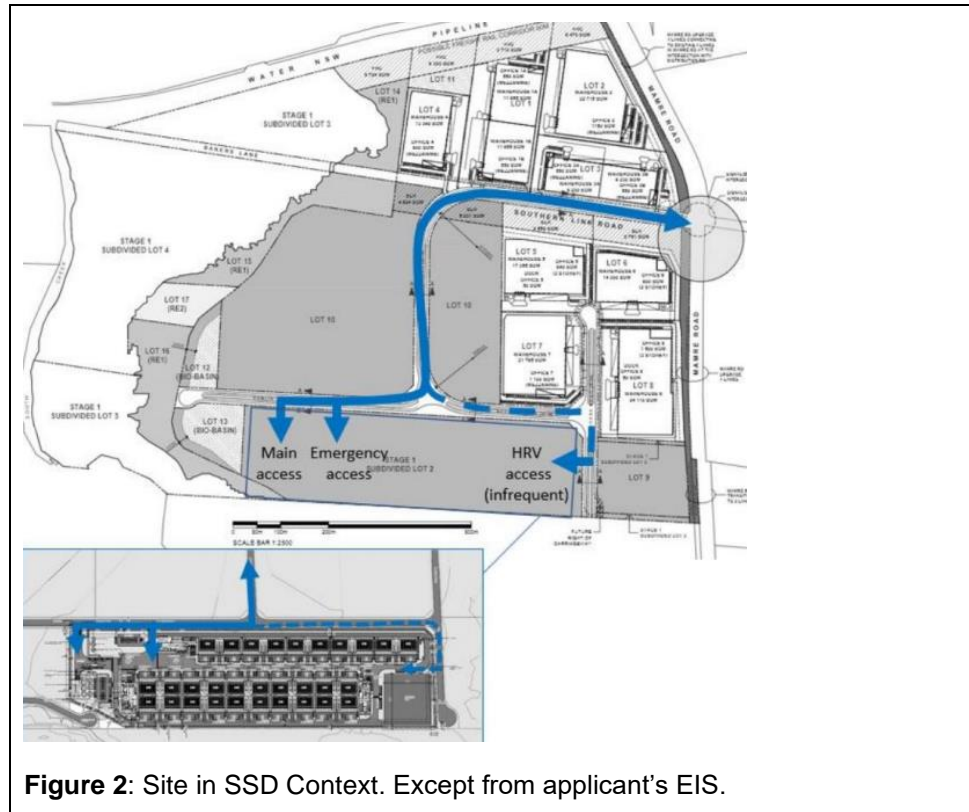


Figure 2: Site in SSD Context. Except from applicant's EIS.

(d) Mamre Road Precinct Development Control Plan (DCP)

The EIS notes at p.61 that a detailed assessment has been undertaken of the development having regard to the Draft Mamre Road DCP at Appendix 26 of the EIS. The EIS is to be amended or an addendum provided which considers the development against the adopted Mamre Road Precinct DCP, noting that amendments were included prior to the adoption of the plan.

Road design, landscaping and setbacks are to be in accordance with the Mamre Road Precinct DCP and recent advice provided to the Department in relation to the overarching SSD (and MODs) are to be considered, prior to the approved of this 'infill' SSD application.

(e) Indicative future RE1 road

The proposed road is located adjacent to the subject site. Its relationship with the SSD is to be examined in the context of related proposals on adjacent sites, cross sections, interface details and levels may need to be provided and so as the interfaces can be understood.

The subject development is surrounded by high retaining walls and adequate clearances and landscaping must be provided to the edge road.

The edge road needs to relate (in terms of levels) with the adjacent open space in the RE1 zone.

It is not known if the Open Space Edge Road identified in the DCP will be dedicated as public road. If this is the intention, its design (vertical and horizontal alignment), location and landscaped setbacks are to be in accordance with the Mamre Road DCP and Council's standards.

(f) Setbacks

Building and landscaped setbacks must be provided in accordance with the adopted Mamre Road DCP and are to be increased to assist in screening visual impacts of services and the substation yard.

The proposed endeavour energy car parking within the eastern landscaped setback does not comply with the DCP (refer 4.2.2 (4)).

(g) Visual impacts and services infrastructure

- The perspectives confirm that services including storage tanks substations, plant machinery, external fire stairs and roof and wall mounted plant machinery are not sufficiently moderated through either landscaped design and mounding, through setbacks, or through design responses including services integration, orientation and location.

Therefore it is recommended that DPIE require greater levels of landscape screening around the development to ensure that the data centre and its plant machinery and services infrastructure are not highly visible and dominant in the public domain.

- Architectural plans note that the substation area forward of the data centre buildings makes provision for future elevated platforms. These are not accounted for in the visual analysis. Although these may not form part of the SSDA, the landscape response must address this potential.
- It is essential that a secondary layer of landscaping be provided in strategically located blisters or an increase to the landscaped setbacks be provided to the street front along the frontage of the switch yard, as the visual impact of the plant machinery and substations will be detrimental to the expected high quality of the Mamre Road Precinct. Landscape blisters around the substation yard are to be increased to ensure that the planting can be sustained over time.
- Landscaping design is to be elevated with clumping of trees included and layers including shrubs and ground covers as well as irrigation included.
- In addition, the endeavour energy control room and associated car parking within the eastern front landscaped setback will present poorly to the street owing to the levels, fencing and dominance along the frontage.

This must be redesigned or relocated (car parking could be relocated behind the structure) and greater levels of landscaping are to be provided around the structure and its parking.

- The Precinct is identified as being 'world-class' within the DCP and thus its presentation must be elevated. The current design response to this aspect is low.

(h) Height

The proposal is significantly higher than the DCP control of 16m from natural ground level (if the site is within 250m of a rural-residential zone) or 20m for other sites. Height is to be measured from natural ground and it is to be clarified if the 16m height control under the DCP applies.

Should the Department accept the proposed heights, the landscaping setbacks proposed are to be increased and quality elevated to ameliorate the impacts of height, bulk and scale.

Council has previously raised that:

‘...the site comprises two very long buildings, which are not visually broken up and therefore have potential for significant visual impacts. An assessment of this visual bulk from various surrounding points, including Wianamatta-South Creek, existing residential communities to the west and north, as well as Mt Vernon to the south should be undertaken as part of any future DA’.

The visual analysis indicates the bulk and scale of the development is not appropriately ameliorated and as discussed under above, setbacks and landscaping design should be amended and be increased.

(i) Design quality, materials and colours

As has been previously advised by Council, consideration should be given to the provision of visually interesting elements to the building, such as through articulation, use of materials or similar.

The building arrangement and architectural form provides elongated buildings with minimal varying of materials. The elevations utilise colour as the only form of articulation.

This is not sufficient and is not resolving related issues of bulk and scale.

The multiple small panels with differing colours increase the bulk and scale of the buildings. Colour patterns must be provided over larger areas of each building and are not to be provided in archaic small patches, which is creating busy and confused elevations.

Appreciating the use is a data centre, embellishment into the architectural form should be encouraged to ameliorate the overall mass and repetition of the building as viewed from the streetscape. The materiality mix must be further resolved and elevated.

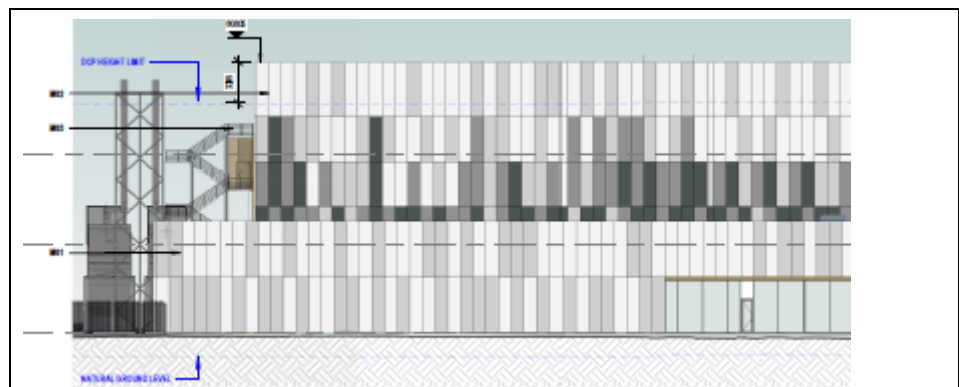


Figure 3: Example of busy façade. Source applicant’s EIS

(j) Sustainability

The development must provide a larger contribution to tree canopy cover and cooling. Solar panels and battery storage are to be detailed. Canopy tree cover is to be provided to all car parking areas in large, landscaped blisters incorporating WSUD elements and at a minimum rate of 1 tree for each 10 spaces (preference is for 1 in 6).

A single row of trees in the front setback is not acceptable, especially when 6m in width. Provision of canopy must be maximized across the site, unless there are constraints (fire) that require less.

(k) Amenity

End of trip facilities and high-quality outdoor staff rest/lunch areas are to be provided. High quality internal amenities rooms are to be provided. Staff safety and CPTED are to be considered.

(l) Plans and Roads - general

Plans are to correlate with the approved plans specifically the setbacks, landscaping and road network (roadway widths and locations) under SSD-9522, as amended via approved MODs.

Heavy vehicle access is to be separated from staff and visitor domestic vehicle access and car parking.

Fencing is shown at 6m on landscaped plans and at 4m on architectural plans.

2. Development Engineering Considerations

(a) General

Heavy vehicle access from the public road shall be physically separated from vehicle access to the car parking areas for safety reasons. Car access to the carparking areas that are in conflict with heavy vehicle movements shown on the plans should be removed and access re-designed.

The conflict between heavy vehicles and access for car parking is to be addressed.

Pedestrian access from the street is to be facilitated safely.

3. Environmental Management Considerations

(a) A Construction Environmental Management Plan (CEMP) is recommended to be prepared and is to include, at minimum, the following:

- Site salinity management plan,
- Unexpected finds protocol,
- Spoil management plan,
- Imported fill material management plan,
- Soil and water management protocol,
- Construction Noise Management Plan, and
- Dust and Air Quality Management Plan as per the recommendations of the Air Quality Impact Assessment for both construction and operation.

(b) Further investigation is required in relation to State Environmental Planning Policy No. 55 – Remediation of Land including:

- Potential soil contamination in relation to building and demolition waste in the south-western and eastern areas of the site.
- Potential soil contamination at the cattle yard and fertiliser storage area in the south-eastern area of the site.
- A hazardous materials assessment is required for the demolition of the existing buildings and structures.

Recommendations outlined in the Hazard and Risk report should be implemented.

- (c) Additional to the Hazard and Risk report, bunding should be installed at each liquid storage area. The bunding should have a minimum capacity of 110%.
- (d) No detail has been provided on the heat rejection method for cooling. Detail is to be provided on what method of cooling will be utilised on site. For example, will the water be chilled utilising cooling towers or air-cooled systems or another method? This detail has also been omitted from the Noise Impact Assessment.
- (e) The proposal includes 1 x electricity substation and 62 back-up generators. No Electromagnetic Energy (**EME**) report has been submitted with this application.

It is recommended that an EME report be submitted prior to the Construction Certificate being issued. The EME report should be provided to the Certifying Authority detailing the electromagnetic energy likely to be produced by the proposed substation and the 62 back-up generators at the development.

The EME report is to be prepared by a suitably qualified and practicing person in accordance with the methodology developed by the Australian Radiation Protection and Nuclear Safety Agency (**ARPANSA**), Energy Australia and any other relevant standards or policies.

The report is to consider the location of the proposed substation and whether it is appropriate or what mitigation measure are required to protect the health of staff and visitors.

- (f) An Operational Noise Management Plan should be developed for the proposal.
- (g) A Spill Management and Pollution Control Plan should be developed for the operation of the site.

4. **Traffic Considerations**

Council notes that the traffic assessment includes that the impacts assessed are based on the future proposed upgrade to the signalised intersection of Mamre Road and Bakers Lane. Initially (2020-2025) all access is proposed to be via an interim upgrade to Mamre Road and Bakers Lane signalised intersection. The SIDRA modelling indicated that in all scenarios the Mamre Road and Bakers lane intersection could accommodate the proposed traffic volumes and maintain a Level of Service (**LOS**) C.

The Department needs to be satisfied of this LOS.

It is noted that 79 staff are expected to be on Site on a typical day. A maximum of 40 visitors are expected to access the Site per day. A maximum

of 10 service vehicles are expected to access the Site per day (up to 19m articulated vehicles). It is estimated the Site would generate 129 inbound trips and 129 outbound trips daily, with approximately 40 movements respectively in the AM and PM peaks.

It is noted that the southernmost extremity of the north/south oriented public access road will need to be constructed as a compliant turning head/cul-de-sac between Lot 2 and Lot 9. The nature of this proposed development is not likely to generate high levels of heavy vehicle movements (these will be primarily for servicing). The main vehicle entry will be located in the north-west corner of the Site. This left in / left out arrangement has been designed to accommodate two-way Articulated Vehicles (**AVs**) movements.

It is noted that the proposed parking provision for the site is significantly below the requirement of the DCP (required = 218; proposed = 120), which the proponent justifies based on the intended use and daily need for parking, referring to this as a “first principles approach”. The Department will need to be satisfied of this justification.

5. Waterways Considerations

The proposed development site is located in an estate with an estate wide Stormwater Management Strategy which was approved as part of SSD 9522.

The proposed approach to stormwater management is generally consistent to what was previously approved as part of SSD 9522. However, clarification is required on the need for the development to comply with the water quality and flow management controls in the Section 2.4 of Mamre Road Precinct DCP, as it is noted that the approved strategy for the estate does not.

Consideration is to be given to compliance with the DCP due to the uncertainty and lack of detail with respect to the proposed regional solution. In this respect the Department should consider whether the development proposal should be supported by a Stormwater Strategy that demonstrates how the development will be able to comply with the DCP in the absence of a regional system.

Should you wish to discuss any aspect of Council’s comments further, please do not hesitate to contact me directly on (02) 4732 8567.

Yours sincerely



Kathryn Saunders
Principal Planner