

Traffic Related Comments on Luddenham Advanced Resource Recovery Centre SSDA

Land use zoning

It is noted that the proposed development is not permitted under the agribusiness zone in accordance with the SEPP (Precincts – Western Parkland City) 2021 and the aerotropolis precinct plan. In addition, the proposal is not consistent with the objectives of agribusiness precinct.

Council's Principal Strategic Planner (Peter Nelson) has raised a similar concern and needs to be taken into consideration in the DA assessment.

Subject to the permissibility of development being addressed, the following traffic related comments and conditions are to be taken into consideration:

1. Traffic generation potential

It is noted that traffic forecast volumes are based on the STFM models as requested by TfNSW. No further information is required.

2. Interim intersection treatment

Due to its location, traffic to/from the proposed development would have significant impact on the Elizabeth Drive/Adams Road intersection. Elizabeth Drive is a classified road under the care and control of TfNSW. TfNSW has a proposal to upgrade Elizabeth Drive. While the required design investigation is being carried out, TfNSW is yet to advise when the road upgrade will be carried out.

In this regard, as discussed at the recent meeting, an interim intersection treatment is required before Elizabeth Drive is widened and for an ultimate intersection treatment and revised haulage route to be agreed to.

The applicant is now proposing interim intersection treatment which involves the following:

- A 120 m deceleration left-hand turn lane into Adams Road.
- Road widening of the existing Elizabeth Drive/Adams Road intersection to accommodate B-double swept paths.
- Provision of a short-left turn lane on Adams Road into Elizabeth Drive.
- Banning right turn movements from Elizabeth Drive west into Adams Road.

This intersection configuration is supported. In-principle approval is required from TfNSW for the proposed interim intersection upgrade. A Traffic Management Plan is required to be submitted to TfNSW and Council for banning right turn movements from Elizabeth Drive West into Adams Road.

The developer is required to execute a Work Authorisation Deed (WAD) agreement with TfNSW for the proposed interim intersection works.

3. Ultimate intersection treatment

The current TfNSW design for the Elizabeth Drive/Adams Road intersection will only permit left turn movements into Adams Road. However, a new four-way signalised intersection is proposed at the Elizabeth Drive/Luddenham Road intersection with a provision for a future sub-arterial road to connect to the precinct. This will provide an opportunity for traffic from Adams Road to be diverted to the new sub-arterial road.

Should the proposed development be permitted in the medium-long term, additional traffic modelling scenario is to be carried out to demonstrate that traffic redistribution to the proposed new Elizabeth Drive/Luddenham Road/the proposed access road can be accommodated.

As indicated in the applicant's submission, the intersection of The Northern Road/Adams Road will be operating at LOS F in 2026. Limited traffic is to be via The Northern Road/Adams Road intersection due to intersection capacity constraints.

4. The Northern Road/Adams Road intersection

It is noted that the traffic count survey to inform the existing traffic volumes was carried out at Old The Northern Road/Adams Road intersection in 2019. The realigned The Northern Road/Adams Road intersection has been constructed at a different location with the different intersection configuration. Change to traffic condition at the new intersection is significant. Hence, it is recommended that additional traffic survey is to be carried out if the application is to be assessed further.

5. A need for Adams Road pavement strengthening

Due to the future restriction at the Elizabeth Drive/Adams Road intersection, heavy vehicle movements will leave the ARRC and travel south along Adams Road.

This road section has an existing 3-tonne load limit and would need to be lifted to permit heavy vehicle movements. This requires pavement strengthening, road widening to provide a minimum of 1.0m road shoulders, Liverpool Local Traffic Committee support and Council's approval.

Hence, should the development be approved, the developer will be required to carry out the following works along Adams Road:

- Road widening to provide a minimum of 1.0m road shoulders and pavement strengthening to accommodate heavy vehicle movements between the site entry and Anton Road; and
- Road widening along Adams Road at the site entry to permit the longest heavy vehicle to access the development site.

It is noted the proponent has advised that the above works would be carried out. Concept/detailed designs to be submitted to Council for approval prior to the road works, and to be reconstructed in accordance Council's specifications. Should the application be approved, the consent conditions are to include the above works.

6. Street Lighting

The above road works are to include street lighting in accordance with Council and Endeavor Energy requirements.

7. Haulage Route

An approval for the proposed PBS route must be sought from NHVR to access the subject site. The design and construction of the proposed internal road layout must comply with Council's engineering specifications.