

Ref: SSD-10398 Hanson Tweed Sand Plant Expansion

Genevieve Lucas Senior Environmental Assessment Officer Energy & Resource Assessments NSW Department of Planning, Industry & Environment Attention: James Mcdonough

20 May 2021

Dear Ms Lucas,

We refer to the Hanson Tweed Sand Plant Expansion (SSD-10398) development application. This letter is intended to provide comment on the Hanson SSD-10398 application in respect of potential impacts to the activities of Australian Bay Lobster Producers.

Australian Bay Lobster Producers

Australian Bay Lobster Producers (**ABLP**) is the operator of an aquaculture facility at 9484 Tweed Valley Way, Chinderah on lot 1 DP 1192506 (**ABLP Site**). The ABLP Site is accessible via the Transport for NSW (**TfNSW**) lot 51 DP1056966 (the **Access Lot**) which connects the ABLP Site to the Tweed Valley Way interchange at the M1 Pacific Motorway southbound. The Access Lot is currently utilised by the operational and construction traffic associated with activities at the ABLP Site, including heavy vehicle traffic importing fill material for the flood protection earthworks at the site.

Hanson Tweed Sand Plant Expansion

Hanson has nominated the Access Lot as the sole point of access for all incoming traffic associated with the Hanson Tweed Sand Plant Expansion (**TSPE**) and additionally has proposed to direct all incoming and outgoing vehicle movements associated with the TSPE via the Tweed Valley Way interchange. Considering the TSPE is projected to generate approximately 62,000 additional heavy vehicle movements at the interchange, of which 31,000 of these vehicles will utilise the Access Lot alongside ABLP traffic, ABLP has engaged with Hanson in a consultation process to address concerns around excessive heavy vehicle traffic at these locations. The primary focus of this process has been to identify a means of circumventing congestion at the Tweed Valley Way interchange and ensuring safe use of the Access Lot for all road users.



Traffic Concerns

ABLP met with Hanson on 7 May to table its concerns with Hanson's SSD-10398 application and discuss the impact of Hanson's proposed heavy vehicle traffic to the safety of road users on the interchange and Access Lot. The key concerns raised at the meeting included:

- The operations of the TSPE are approximately four times the scope of Hanson's existing sand mining operations and will generate a commensurate increase in daily traffic movements to and from the site.
- 2. Hanson heavy vehicles currently access its existing operations at DP1082435 via Tweed Coast Road and Altona Road, however the proposed TSPE proposes to divert all existing heavy vehicle traffic in addition to new traffic associated with the expansion via the Tweed Valley Way interchange. This will lead to an increase of heavy vehicle movements at the interchange by approximately 62,000 vehicles per year, not including light vehicles. This is approximately 64 two-way heavy vehicle movements at this location every hour, or approximately one every three minutes if vehicle movements are dispersed evenly over a 24-hour day.
- 3. Hanson has nominated the Access Lot as the sole access point for vehicles entering the TSPE. This will generate an additional 31,000 heavy vehicle movements through the Access Lot each year. Considering the existing volume of ABLP traffic at this location and accounting for future traffic, the addition of a further 31,000 heavy vehicle movements per year will inundate the Access Lot. The existing road on the Access Lot is not capable of sustaining the proposed volume of heavy vehicle traffic or the opposing traffic streams (incoming/outgoing) of varying vehicle types (e.g. heavy vehicle, light vehicle, public vehicles) which would eventuate.
- 4. The additional traffic movements at the interchange, particularly the magnitude and type (heavy vehicle) of traffic, is expected to create congestion for road users exiting or entering the southbound lanes of the M1 Pacific Motorway via the Tweed Valley Way interchange. This congestion will likely be exacerbated by the addition of the proposed acceleration and deceleration lanes on the interchange. The addition of these lanes in conjunction with the proposed increase to traffic movements will result in multiple high-volume streams of varying traffic types converging in close proximity (i.e. bottleneck).
- An increased collision risk may arise from the interaction of vehicles entering and exiting at the Access Lot with the high volume of TSPE heavy vehicle traffic on the Tweed Valley Way interchange.



Traffic Mitigation Proposals

As part of the consultation process Hanson and ABLP tabled potential traffic mitigation proposals to address the above concerns. This process included discussion of the below.

Upgrade of the Tweed Valley Way interchange and Access Lot

In line with Hanson's SSD-10398 application, Hanson proposed an upgrade of the Tweed Valley Way interchange to include a declaration lane for vehicles turning left onto the Access Lot along with an upgrade to the road of the Access Lot, including widening of the existing lanes, adding a separate delineated lane dedicated to Hanson traffic and adding a crossover point for misdirected traffic.

ABLP notes that this proposal addresses ABLP's concerns in respect of ABLP and Hanson traffic interaction on the Access Lot, however it fails to address concerns around the increase in overall traffic movements passing through the Tweed Valley Way interchange. The addition of the deceleration lane (Refer to Figure 1 below) also adds another traffic stream to the interchange and due to its proximity to Hanson's proposed acceleration lane (Refer to Figure 5.8 of EIS Appendix J Traffic Impact Assessment), will create a convergence point for multiple streams of high-speed traffic. In particular, the addition of the deceleration lane in conjunction with the acceleration lane will result in the following traffic streams interacting between the M1 Pacific Motorway southbound exit and the overpass bridge of the Tweed Valley Way interchange:

- Traffic exiting the M1 Pacific Motorway southbound and decelerating from 110km/hr to 80km/hr.
- Heavy vehicles accelerating to 80km/hr from the Hanson acceleration lane travelling through the Tweed Valley Way interchange (one every three minutes).
- Hanson heavy vehicles (one every three minutes) along with ABLP operations and construction vehicles decelerating via the deceleration lane to enter the Access Lot.
- ABLP vehicles exiting the Access Lot onto the Tweed Valley Way interchange and accelerating to 80km/hr to travel through the Tweed Valley Way interchange.
- ABLP vehicles exiting the Access Lot by right hand turn onto the Tweed Valley Way interchange intending to travel south on the M1 Pacific Motorway.
- ABLP traffic entering the Access Lot via right hand turn from the M1 Pacific Motorway southbound entrance lane of the interchange.

The proximity of the termination/merge point of Hanson's proposed acceleration lane with the start of Hanson's proposed deceleration lane, and the interaction of heavy vehicles accelerating into the



path of heavy vehicles decelerating at this juncture, gives rise to a heightened safety concern for road users in the vicinity.



Figure 1: Hanson's proposed deceleration lane to enter the Access Lot

Alternative TSPE access point to the south of the ABLP Site

ABLP proposes that Hanson relocate the TSPE access point to the M1 Pacific Motorway (southbound), south of the Tweed Valley Way interchange. In order to achieve this, it will be necessary to create a deceleration lane commencing at the M1 Pacific Motorway and extending along the western boundary of ABLP's lot 1 DP1192506 to Hanson's lot 1 DP1250570. To achieve this ABLP offers to grant an easement to Hanson over lots 708 and 709 DP1000580 for the purpose of creating the deceleration lane from the motorway through to Hanson's lot 1 DP1250570. If this access point were adopted it would reduce the additional heavy vehicle traffic at the Tweed Valley Way interchange by 31,000 movements (50%) whilst concurrently circumventing any interaction between ABLP and Hanson traffic on the Access Lot. Further, it would remove the proximity issue with the current acceleration and deceleration lanes proposed by Hanson and reduce the safety risk associated with having multiple streams of varying traffic types converge in close proximity. It is also expected to alleviate the long-term congestion pressures which are otherwise anticipated.

Hanson has advised that this access point may not be favourable due the location of the access off the M1 Pacific Motorway, however, given the significant upside to the safety and function of the Tweed Valley Way interchange, ABLP hopes further consideration will be given to this type of access.



Request for Consideration

The matters listed in this letter are raised in the interests of preserving the safety of all road users of the Tweed Valley Way interchange and Access Lot, irrespective of whether road users are related to ABLP, Hanson or the wider community. Accordingly, ABLP kindly requests the Department of Planning, Infrastructure and Environment (**DPIE**) give regard to the contents of this letter as part of its evaluation of the Hanson SSD-10398 development application. Please note, if appropriate ABLP is open to further discussion on the matter and would welcome a meeting between Hanson, TfNSW and DPIE. Kind regards,

Michael Dalton Managing Director