Appendix J

Addendum
Traffic, transport and access
impact assessment



MEMO

TO: Jarryd Barton

FROM: Ody Murlianto

SUBJECT: Project EnergyConnect Western Section – Traffic and Transport Impact Assessment on

Amended Proposal

OUR REF: Appendix_H_Addendum_ Traffic_and_transport

DATE: 19 March 2021

1. INTRODUCTION

Following exhibition of the EIS, TransGrid has nominated a construction contractor and have further identified a series of design amendments as a result of ongoing design refinements to the proposal and in response to comments received during exhibition of the EIS. The proposed amendments which have been identified as potential resulting in a change in traffic and transport impacts as previously assessed include:

- Wentworth camp: confirmation of the construction compound and accommodation camp site at Wentworth
- Buronga substation upgrade and expansion: amendment to the construction compound and accommodation camp
 area
- inclusion of a potential temporary 220kV transmission line bypass to the south of the Buronga substation during construction
- addition of a series of construction water supply points
- change in construction traffic volumes.

This memo provides an assessment of the above proposed amendments to support the Amendment Report (WSP, 2020) and updates the assessment presented in *Technical Paper 9 – Traffic and transport impact assessment* against the proposed amendments.

2. PROPOSED AMENDMENTS

2.1 WENTWORTH MAIN CONSTRUCTION COMPOUND AND ACCOMMODATION CAMP

2.1.1 SUMMARY OF EXHIBITED PROPOSAL

The EIS identified that up to three construction compound and accommodation camp sites would be required during the construction of the proposal. These included:

- Buronga located in the vicinity of the Buronga substation, providing primary support for the construction of the eastern end of the 330kV transmission line, the 220kV transmission line and the Buronga substation upgrade and expansion. This site would accommodate up to 200 full-time equivalent (FTE) workers.
- Anabranch South located on the Silver City Highway providing primary support for the construction of the western end of the 330kV transmission line. This site would accommodate up to 100 FTE workers.

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— Wentworth (and surrounds) – This potential camp site would provide primary support for the construction of the central section of the 330kV transmission line. The EIS stated that the location of this site, if required, would be subject to further investigation, but would be generally located in the proximity of Wentworth and its surrounds. This site would accommodate up to 100 FTE workers. The Technical paper 9 – Traffic and transport impact assessment had considered this site, with an assumption that it would be located to the north of Wentworth on the Silver City Highway.

2.1.2 SUMMARY OF AMENDMENT

Following the appointment of the nominated construction contractor, it was confirmed that the Wentworth accommodation camp site and laydown area would be required. This would be located on the northern side of Renmark Road, around 17 kilometres west of the township of Wentworth. As with the other sites described in the EIS, the Wentworth construction compound and accommodation camp would provide a range of facilities including:

- staging and laydown facilities
- concrete batching plants
- workforce accommodation camp areas
- demountable offices for up to around 50 workers
- construction support facilities including vehicle and equipment storage, maintenance sheds, chemical/fuel stores and potential stockpile areas.
- parking for up to around 190 light vehicles, 45 heavy vehicles and five 20-seat buses
- other worker facilities such as food and catering facilities, fitness and recreational facilities (such as indoor and outdoor recreational spaces, gymnasium areas), first aid facilities and telecommunication services for personal use.

The confirmed location for the proposed Wentworth main construction compound and accommodation camp site is shown in Figure 2.1. The accommodation would house around 200 FTE workers, an increase from the 100 FTE workers previously considered in the EIS.

In terms of the number of workers for the overall project, the ongoing development of the construction strategy for the proposal has also identified an increase in the number of construction workers required from around 400 FTE to 600 FTE workers during peak periods. This would be divided at each accommodation camp, as follows:

- Buronga: Amended to accommodate up to 400 FTE workers, an increase from 200 FTE workers previously proposed. This site would accommodate around 100 office workers at any one time during work hours.
- Anabranch South: Amended to remove the accommodation camp, which would remove accommodation for 100 FTE workers as previously proposed. This site would maintain its use as an ancillary construction site (i.e. laydown areas, vehicle and equipment storage, maintenance sheds, potential stockpile areas and demountable offices and parking for up to 10 staff).
- Wentworth: Amended to accommodate 200 workers, an increase from 100 FTE workers over that which was previously proposed. This site would accommodate around 50 office workers at any one-time during work hours.



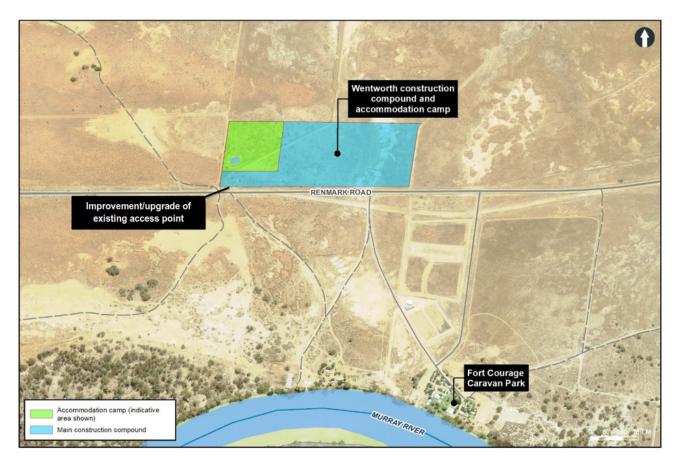


Figure 2.1 Proposed Wentworth construction compound and accommodation camp site location

2.2 BURONGA SUBSTATION UPGRADE AND EXPANSION

As mentioned in Section 2.1.2, Buronga main construction compound and accommodation camp site would see an increase in the number of workers being accommodate on-site, which would increase from around 200 FTE workers to 400 FTE workers.

In addition to this, a number of other amendments to the adjacent Buronga substation upgrade and expansion site include:

- A reduced footprint for the substation upgrade and expansion area to avoid the impacts to Aboriginal sites as far as practical with particular attention given to avoidance of sites of moderate or higher archaeological significance.
 This would reduce the size of the site by approximately 11.9 hectares.
- Amendment to the earthwork methodology to obtain fill materials from a source nearby to the substation site in order to reduce the need for haulage trucks to travel long distances. This would reduce the amount of material previously proposed to be imported. It is proposed that a substantial portion of the required fill material be sourced from two areas adjacent to the substation upgrade and expansion site (referred as the 'earthwork material sites') (subject to the suitability of the available fill material) refer to Figure 2.2. This material is required to construct the raised bench for the substation upgrade and expansion site.

It is anticipated that a substantial portion of the required fill material may be sourced from the earthwork material sites (subject to further geotechnical investigations). However, additional materials (such as gravel or other materials that would not be obtained from these sites) would still be required to be imported to the site from external location(s).



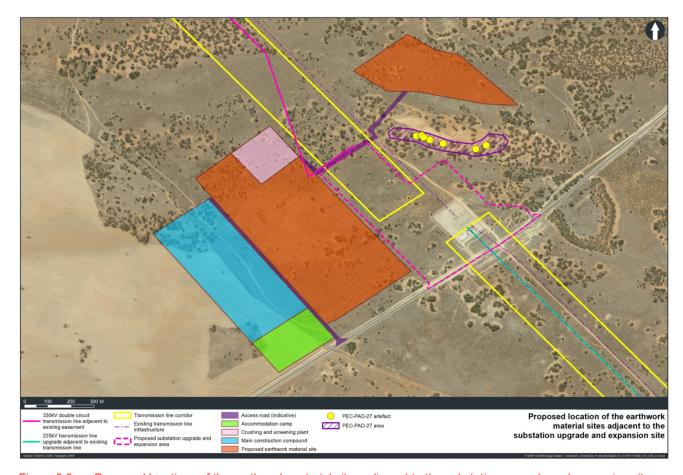


Figure 2.2 Proposed locations of the earthwork material sites adjacent to the substation upgrade and expansion site

2.3 TEMPORARY BYPASS TRANSMISSION LINE SOUTH OF BURONGA SUBSTATION

In order to minimise the disturbance footprint during the construction of 0X1 transmission line, an option to construct and operate a temporary bypass has been identified as part of the ongoing development of the construction methodology following appointment of the nominated construction contractor.

The proposed bypass line would consist of around 6.5 kilometres of temporary transmission line and around 60 supporting transmission line poles (around 18 metres in height).

The bypass line would commence from the existing Buronga substation and travel in a south east direction parallel to the eastern side of the existing 220kV single circuit transmission line. The site would also be accessible using access points already considered for the Proposal alignment.

The installation and removal of the temporary bypass transmission line would generally require transport trucks to deliver materials to the site.

2.4 ADDITIONAL CONSTRUCTION WATER SUPPLY POINTS

Following exhibition of the EIS, ongoing discussions have continued with a range of potential water suppliers to provide additional clarity in relation to water security for the proposed construction works associated with the proposal. As part of the ongoing discussion with the potential water suppliers, a series of water supply points have been identified which would provide connection points to existing water supply pipelines. Details of the locations can be found in the Amendment Report. Table 2.1 below summarises the potential locations and estimated loads per day to be generated from each location.



Table 2.1 Location of water supply points

Location	Typical use	Estimated daily loads at peak construction period		
Alcheringa Road, Buronga	Buronga substation and surrounding area and Transmission line west of Buronga	20		
Fletchers Lake Drive, Dareton	Transmission line west of Buronga	20		
River Drive, Buronga	Buronga accommodation camp and construction compound	2-3		
Beverley Street, Wentworth	Wentworth and Buronga accommodation camp and construction compounds, and concrete batching plants	2		
Silver City Highway intersection with Milpara Road, Anabranch South	Transmission line around Great Darling Anabranch	20		
Wentworth main construction compound and accommodation camp	Wentworth main construction compound and accommodation camp and transmission line (west of Wentworth)	To be directly connected to the proposed Wentworth main construction compound and accommodation camp via a new pipeline. No ongoing truck movements.		
690 Pomona Road, Pomona	Typically, transmission line west of the Darling Anabranch	4-5		

As noted above, the Wentworth main construction compound and accommodation camp site would be directly connected to a water source via a new pipeline. This water source is located in the property across the road from the site and the connection would be trenched across Renmark Road which may require road opening and therefore a short-term temporary road closures extending up to around two days. To minimise interruption to the road network, it is envisaged that the works would take two half-road closures under traffic management.

2.5 UPDATED CONSTRUCTION TRAFFIC VOLUME

Following appointment of the nominated construction contractor and further development of the construction strategy, an increase in overall traffic volumes was identified due to:

- the overall increase in construction workforce for the proposal from 400 to 600 FTE workers (refer to Section 2.1)
- increased clarity on the heavy vehicle volumes required to support transmission line works and the substation upgrade and expansion, including:
 - the amount of materials being delivered to site from the nominated port(s) as well as material being transported from the laydown yard(s) to sites along the transmission line alignment
 - peak activities that would occur concurrently. This would include tower foundations and tower assembly,
 specifically concrete trucks to backfill tower leg foundations, and crane trucks to off load tower steel to site.

A comparison of indicative vehicle movements between those exhibited in the EIS and the proposed revised vehicle movements is presented in Table 2.2. This table provides a consolidated summary of the increase of truck movements resulting from the proposed amendment as described throughout Section 2.



Table 2.2 Comparison of indicative vehicle movements – EIS and revised movements

Vehicle type	Phase	Indicative vehicle movements during construction (EIS) ^{1, 2}	Indicative vehicle movements during construction (with proposed amendments) ^{1, 2}
Buronga subs	tation upgrade and expansion site		
Light vehicles	Indicative daily movements (typical day)	50	80
Light vehicles	Maximum daily movements (critical/peak construction period)	100	200
Heavy vehicles	Indicative daily movements (typical day)	15	40
Heavy vehicles	Maximum daily movements (critical/peak construction period)	80	200³
Transmission	line works		al-
Light vehicles	Indicative daily movements (typical day)	67	200
Light vehicles	Maximum daily movements (critical/peak construction period)	150	300
Heavy vehicles	Indicative daily movements (typical day)	15	100
Heavy vehicles	Maximum daily movements (critical/peak construction period)	30	200

- 1. Indicative daily movements based on current program of works (as at the time of the EIS and following identification of the nominated construction contractor respectively). These numbers are an average. There would be days of increased peak activities (or decreased activities) which may impact these average/indicative numbers
- 2. Vehicle movements are each way (i.e. a heavy/light vehicle arriving and leaving a site within a day counts as two movements).
- 3. 300 movements would occur should the earthwork material sites described in Section 2.2 not proceed.

2.6 ACCESS TRACK STRATEGY

While the EIS identified that existing roads and access tracks would be preferentially used, it was assumed that access tracks would be contained within the centreline clearing area of the transmission lines for assessment purposes. Following appointment of the nominated construction contractor, further refinement of the access track strategy for the proposal has been carried out. This has resulted in:

- identification and focus on the use of existing access tracks to minimise additional disturbance to the transmission line easement wherever possible. This would include the use of existing farm track, alternative property access points and similar existing infrastructure
- reduction in the use of longitudinal access tracks where existing roads are located adjacent to the proposed transmission line alignment (such as along Renmark Road).

This approach also allows for the management of potential traffic conflicts between construction vehicles and to ensure the efficient movement plant and materials between transmission structures. By utilising existing road or track networks wherever possible, construction traffic can utilise existing, dual direction traffic lanes to pass, minimising the need for a wider centre line access track or multiple passing bay areas at regular intervals.



Single lane tracks would continue to be utilised in specific locations of higher environmental sensitivity to limit ground impact, however they are not considered to be practicable for long lengths of track due to the frequency of vehicles passing.

The revised access track strategy seeks to reduce the overall the amount of clearing required to effectively access the sites for transmission structures. When combined with the opportunity to minimise disturbance to areas between transmission line structures to avoid sub-surface impacts (as described earlier in this section), it is considered that the revised access track strategy would result in an overall improved environmental outcome and greater construction efficiency for the proposal.

3. IMPACT ASSESSMENT

3.1 WENTWORTH MAIN CONSTRUCTION COMPOUND AND ACCOMMODATION CAMP

3.1.1 TRIP GENERATION

The potential of a third accommodation camp site and laydown area in Wentworth to some degree was considered in the exhibited assessment. Traffic movements generated for the Proposal were assessed collectively to include traffic movements associated with the delivery of construction plant, crane components, construction camp facilities and the movement of construction materials (steel structures for the transmission line structures, concrete, quarry products, cement, water supply and others). Additionally, traffic movements generated by workers from camps were calculated based on the number of FTE workers proposed at each site.

In the EIS, it was noted that 250 light vehicle movements per day and 80 heavy vehicle movements per day would be generated during the peak of the construction activities overall. The 250 light vehicle movements were distributed across Anabranch South, Wentworth and Buronga camps which were estimated to generate 70, 70 and 110 daily movements per day respectively based on the number of accommodations at each camp.

As part of the proposed amendments, this estimate has been revised to 500 light vehicle movements and 400 heavy vehicle movements with the updated FTE workers, proposed construction methodology and transporting activities, and confirmation of location and layout of camps and water supply.

The details provided in the proposed amendment of the use of each campsites/site compound, size, number of accommodation and proposed site office were used to proportion the traffic activities estimate provided by TransGrid (refer to Table 3.1). These represent the estimated daily traffic movements at the construction peak and would be distributed throughout the day at different locations, with various traffic distribution and assignment to carry out the proposed works.

Table 3.1 Daily vehicle movements generated by the construction of the proposal

Compound and camp sites	Camp accommodation (fte)	Office staff	Light vehicle movements	Heavy vehicle movements
Anabranch South	0	10	50	40
Wentworth	200	50	150	140
Buronga	400	100	300	220
TOTAL	600	160	500	400

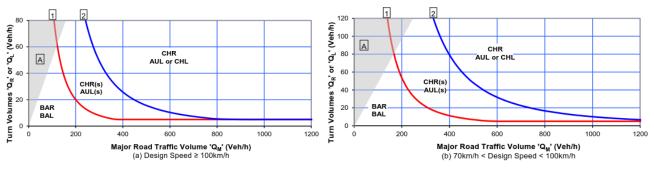


3.1.2 ACCESS TO MAIN COMPOUND/ACCOMMODATION CAMP SITES

In terms of access to the sites compared to the EIS, there would be no change to the access arrangements provided for the Anabranch South main construction compound site access (Silver City Highway (approximately 30 kilometres north of Wentworth)) or the Wentworth main construction compound and accommodation camp site (Arumpo Road). The EIS had identified that Wentworth main construction compound and accommodation camp access would likely be via the Silver City Highway. However, the access would now be provided via Renmark Road and the Silver City Highway.

At the Anabranch South site, Silver City Highway has a posted speed limit of 100 km/h and an Average Daily Traffic (ADT) of 358 vehicles per day (vpd). Arumpo Road has an 80 km/h posted speed limit and ADT of 327 vpd. Renmark Road has a 100 km/h posted speed limit and ADT of less than 50 vpd.

Using an estimate of a typical peak hour traffic consisting of 10 per cent of the daily traffic, Silver City Highway, Arumpo Road and Renmark Road would consist of less than 50 vehicles per hour (vph) travelling in either direction. This was assessed against the turn treatment warrant graphs detailed in Austroads' *Guide to Traffic Management Part 6: Intersections, Interchanges and Crossings Management* (refer to Figure 3.1). Based on this warrant assessment, a major road traffic volume of less than 50 vehicles per hour, regardless of the traffic volumes on the minor road, would require a Basic Right (BAR) and Basic Left (BAL) turn treatments at the intersection. As such, the proposed access points would not generally require any installation of auxiliary lanes.



Source: Austroads Guide to Traffic Management Part 6

Figure 3.1 Warrant for turn treatments on major roads at unsignalised intersections for roads with ≥100km/h posted speed limit (graph a) and 70-100km/h speed limit (graph b)

With consideration of the updated construction traffic volumes provided in Section 3.5 and the confirmed location of the Wentworth construction compound and accommodation camp, the increase in traffic volumes at all main construction compound and accommodation camp access points would not significantly impact the efficiency of the road network and the impacts of the amended proposal are substantially the same as the EIS.

However, given the high-speed environment of the roads that the proposed main construction compounds and accommodation camp sites would use, the EIS included a mitigation measure to design site access/egress points to minimise conflicts with vehicle movements on the road network and in accordance with relevant safety requirements. This may include the provision of acceleration and deceleration lanes at main construction compound and accommodation camp locations, which would be designed to the appropriate design guides and to be approved by the relevant road authority. This mitigation measure would apply to the Wentworth site.

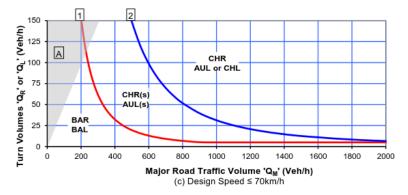
3.1.3 RENMARK ROAD/SILVER CITY HIGHWAY INTERSECTION

Transport for NSW's feedback on the EIS requested the analysis of Renmark Road and Silver City Highway intersection. This intersection is an unsignalised T-intersection with Silver City Highway being the major road. BAL and BAR treatments currently apply for the left and right turning movements respectively. At this location, Silver City Highway has a 60km/h posted speed limit and an ADT of 2,559 vpd. Renmark Road has an AADT of less than 50 vpd.



Based on the amended traffic volumes as detailed in detailed in Table 3.1, Wentworth main construction compound and accommodation camp site, which would be the primary traffic generator at this intersection, would generate approximately 150 light vehicle movements and 140 heavy vehicle movements daily. This would be distributed throughout the day, with various traffic distribution and assignment during the construction program.

Using an estimate of a typical peak hour traffic consisting of 10 per cent of the daily traffic, Silver City Highway in Wentworth would have approximately 250 vph travelling in both directions (refer to Figure 3.2). A BAR and BAL treatment combination (as per existing) allows up to 120 vph for either the left and right turn movements. This is ample capacity for the existing traffic volumes of less than 50 vpd and the additional traffic generated by proposal at this intersection.



Source: Austroads Guide to Traffic Management Part 6

Figure 3.2 Warrant for turn treatments on major roads at unsignalised intersections for roads with ≤70km/h posted speed limit

Construction access would also be required along Renmark Road to access the transmission line construction works in Rufus near Lake Victoria. The majority of traffic distribution towards the north-east from the Wentworth main construction compound and accommodation camp site would minimise impact to the intersection of Renmark Road/Silver City Highway (i.e. located towards the west of Wentworth camp site).

3.2 BURONGA SUBSTATION UPGRADE AND EXPANSION

In terms of traffic and transport impacts, the proposed amendment, to source material from areas adjacent to the substation upgrade and expansion site in lieu of importing a majority of the earthworks from elsewhere would:

- reduce overall truck movements during construction
- reduce safety risk associated with trucks and driver fatigue which was identified as a risk in the EIS
- reduce overall program timeframe
- reduce impacts on local roads and proposed haulage routes.

The benefits as described above would also advantage the non-project communities in the study area with reduced interaction with construction trucks on the road network which would otherwise be required to transfer materials, less environmental disturbance (i.e. noise, pollution) and minimise damage to the pavement on the haulage routes.



3.3 TEMPORARY 220KV BYPASS TRANSMISSION LINE SOUTH OF BURONGA SUBSTATION

The proposed temporary bypass transmission line would generate a small amount of additional light and heavy vehicle movements associated with the delivery, installation and removal of the proposed temporary facility.

These are not expected to generate a significant change in traffic impacts compared to those identified in the EIS as the works would use workers, machineries and tools previously proposed as part of the Proposal. For consistency with the EIS, the additional information associated with the temporary bypass transmission line has been considered collectively with the updated construction traffic volume assessment in Section 3.5. The analysis found the increases in traffic volumes due to amended construction activities are not likely to significantly impact the efficiency of the road network and are substantially the same as the EIS.

3.4 ADDITIONAL CONSTRUCTION WATER SUPPLY POINTS

It is envisaged that the number of trips generated by the transferring of water supply (i.e. approximately 70 truck trips daily at peak construction period accessing the nominated water supply points) could occur across different times of day and spread across various locations. As such, the additional traffic activities associated with the water supply would result in minimal impact to the road network.

In the EIS, heavy vehicle volumes generated by the transporting of water supply were considered in combination with the other type of activities associated with the construction overall. This was quantitatively assessed by estimating the impact of the Proposal, using the light and heavy vehicle movements in the road network during the worst-case peak construction period.

For consistency with the EIS, the additional information associated with water supply points have been considered collectively with the updated construction traffic volume assessment in Section 3.5. The analysis found the increases in traffic volumes due to amended construction activities are not likely to significantly impact the efficiency of the road network and are substantially the same as the EIS.

At Wentworth main construction compound and accommodation camp, trenching is proposed to construct the water connection from the property across the road. It is envisaged that this work would take two half-road closures using a contra-flow lane system, temporarily reduced posted speed limit and under full traffic management (either by traffic controllers or temporary traffic signal system) to manage the right of way. This treatment is considered to be viable for Renmark Road due to its low traffic volume.

3.5 UPDATED CONSTRUCTION TRAFFIC VOLUME

3.5.1 IMPACT ON ROAD NETWORK

Table 3.2 below depicts the impact of the additional construction traffic movements, proposed in this amendment, on the capacity of the key haulage route on the road network. This has been compared to the impact previously assessed in the EIS.

The impact of the revised construction traffic volumes on the construction haulage routes is considered minor. Mid-block capacities of key haulage routes on the road network would likely experience modest increases, however the Level of Service as previously identified in the exhibited EIS would be maintained. However, the volume and the routes used by construction vehicles would vary over any day and across the construction program, given the linear and transitionary nature of construction work.

Surrounding roads which do not form part of the construction haulage routes may experience occasional higher traffic movements with workers travelling into town to access services. However, facilities would be provided within each camp which would cater for workers' day-to-day needs.



Table 3.2 Impact of additional construction traffic on road network performance

	Existing		Construction (EIS)		Construction (Amended Proposal)	
Road Name and Location	Traffic volume (vpd)	V/C and (LOS)	Traffic volume (vpd)	V/C and (LOS)	Traffic volume (vpd)	V/C and (LOS)
Arumpo Road	327	0.9% (LoS A)	657	1.8% (LoS A)	1,227	3.4% (LoS A)
Silver City Highway (B79)						
Ellerslie - between Broken Hill and Wentworth (from Broken Hill to Renmark Road, Wentworth)	358	1.0% (LoS A)	688	1.9% (LoS A)	1,258	3.5% (LoS A)
Wentworth Town Centre (from Renmark Road in Wentworth to Delta Road in Wentworth)	2,559	12.8% (LoS A)	2,889	14.4% (LoS A)	3,459	17.3% (LoS A)
Mourquong - between Dareton and Buronga (from Fletchers Lake Road to Corbett Avenue)	2228	6.2% (LoS A)	2,558	7.1% (LoS A)	3,128	8.7% (LoS A)
within Buronga Town Centre (from Corbett Avenue to Sturt Highway)	5,478	27.4% (LoS B)	5,808	29.0% (LoS B)	6,378	31.9% (LoS B)
Sturt Highway (A20)		•				
George Chaffey Bridge - between Mildura and Silver City Highway, Buronga	10,593	29.4% (LoS B)	10,923	30.3% (LoS B)	11,493	31.9% (LoS B)
within Buronga (between Silver City Highway and Knights Road in Gol Gol)	2,730 eastbound only	54.6% (LoS C)	3,060	61.2% (LoS D)	3,630	72.6% (LoS D)

Vpd: vehicles per day
LOS: Level of Service
V/C: Vehicle/Capacity ratio

Overall, the increases in traffic volumes due to amended proposal is not likely to significantly impact the efficiency of the road network and the impacts are substantially the same as the exhibited proposal. As identified in the EIS, the Sturt Highway in Buronga would experience a deterioration in the level of service (from LoS C to LoS D). While the amended proposal would result in an increase in traffic volumes on this road, the level of service would be maintained at a LoS D.

3.5.2 ACTIVE TRANSPORT

The amended proposal would not change the impact to the active transport network. As noted in the EIS, where interaction does occur, the existing active transport infrastructure including footpaths, bicycle paths, shared paths and onroad shoulders would be maintained as appropriate. Where disruption to the facilities is required, a detour of the route would be planned accordingly.



3.5.3 PUBLIC TRANSPORT

The proposed amendment is not expected to significantly change the impact to the public transport network. With more light and heavy vehicle movements estimated across the region, limited and occasional delays to some routes may be experienced if they coincide with peak periods. The capacity assessment of the road network however suggests that the increases in traffic volumes due to amended construction activities would still be within the capacity of the road network.

3.5.4 ROAD SAFETY

The proposed amendment is not expected to significantly change the impact to road safety across affected road network within the region. While the amended proposal has increased the estimate for light and heavy vehicle movements, the haulage routes proposed in the EIS would be maintained and the mitigation measures noted previously in the EIS (i.e. monitoring pavement condition along haulage routes, establish a vehicle movement plan to detail truck routes, establish a CTMP) would also be maintained to address road safety issues.

3.6 ACCESS TRACK STRATEGY

3.6.1 USE OF EXISTING TRACKS

As part of the revised access strategy, where an existing access track (farm track, alternative property access points and similar existing infrastructure) is available to the transmission line alignment (i.e. Silver City Highway at Anabranch South), the amendment proposes to use the existing access points under traffic control.

This amendment would minimise additional disturbance to the transmission line easement and generally has no additional impact to the strategy proposed in the EIS, subject to an appropriate traffic control being implemented at its intersection with the road network.

3.6.2 MULTIPLE ACCESS POINT

As part of the revised access strategy, where an existing access road runs parallel to the transmission line alignment (i.e. Renmark Road from South Australia border to Nulla Road), the amendment proposes to have multiple access points under traffic management.

Access gate would be made available every 400-500 metres, however noting the rolling nature of the proposal, only a handful of access points would be active at any time during construction. Traffic controllers would be provided at access gates where this is determined to be required as part of the Construction Traffic Management Plan.

This strategy would allow workers, materials and machineries to be transported to the relevant section of the construction site and reduce the concentration of construction access activities at one location.

To manage the interruption to the road network, each access gates are to be numbered and active access points are proposed to be signposted accordingly. This would enable drivers of light and heavy vehicles to identify the active access gate and minimise the likelihood of late braking, significantly reduce travel speed or needing to turn-around to access the correct gate.

Subject to appropriate traffic management control, the impact of this proposed amendment is considered minor considering the low traffic volume on the affected road section (Renmark Road from South Australia border to Nulla Road).



4. MITIGATION MEASURES

In the EIS, mitigation measures were proposed to manage the overall traffic and transport impacts of the proposal. These included the action/requirement for construction contractors to actively liaise with and provide regular updates to the relevant road authority and stakeholders and inform road users of the proposed works on the road network.

Additionally, a traffic and transport management sub-plan would also be prepared in consultation with Wentworth Shire Council as part of the Construction Environmental Management Plan. This plan is to identify localised key management and response strategies to potential transport-related delays and disruptions that may arise due to the proposal. It would include (as a minimum):

- measures to minimise disruption to pedestrians, cyclists and motorists
- management of safe vehicle access/egress from construction compounds and other construction work areas
- measures to manage oversize and overmass vehicle movements during construction, which will consider activities of adjoining land uses and safety of the public, such as entering urban areas from rural highways
- management of long-distance travel through driver fatigue management measures
- measures to ensure safe access to existing properties during construction, or provision of suitable alternatives.

Given the minor road network performance impacts resulting from the amended proposal, the mitigation measures detailed in the EIS are sufficient to address the impacts associated with the proposed amendments. No additional mitigation measures are required.

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