

Powerlink Queensland

# Response to submissions on RfPC 1 CopperString 2032 – Hugenden Camp

Volume 4 Appendix A



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## Submission Responses Summary Table

Sub No.	Submitter Type	Department	Issue/Topic
1	Agency - LG	Flinders Shire Council	No comment
2	Agency - State	Queensland Ambulance Service	No comment
3	Agency - State	Queensland Health	No comment
4.1	Agency - State	Department of Transport and Main Roads	Transport - road
4.2			
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4.5			
4.6		Rail and Public Transport Technical Advice	Transport - rail
5.1	Agency - State	Department of Regional Development, Manufacturing and Water (DRDMW)	Water quality
5.2			
5.3			
6	Agency - State	Department of Resources	No comment
7.1	Agency - State	Department of Environment, Science and Innovation	Land - rehabilitation
7.2			Infrastructure – wastewater
7.3			Infrastructure – wastewater
7.4			Noise
7.5			Air Quality
7.6			Land – Contaminated Land
7.7			Administrative – Commitments Register
7.8			Flora and Fauna
7.9			
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Sub No.	Submitter Type	Department	Issue/Topic
7.11			
8.1	Agency - State	Department of Agriculture and Fisheries	N/A
8.2			N/A
8.3			N/A
8.4			N/A
9.1	Agency - State	State Assessment and Referral Agency	N/A
9.2			N/A
10	Agency - State	Department of Treaty, Aboriginal and Torres Strait Islander Partnerships, Communities, and the Arts	No comment

## Submission comments and responses

### Submission 1

<b>Submission 1</b>
<b>Submitter Type:</b> Agency – LG – Flinders Shire Council
<b>Relevant Chapter:</b> N/A
<b>Issue - Topic:</b> N/A
<b>Submission Issue – Details:</b> Council offers no objection to this change in location
<b>Submitter Recommendations / Suggested Mitigation:</b> N/A
<b>OCG Direction:</b> N/A
<b>Response:</b> N/A

### Submission 2

<b>Submission 2</b>
<b>Submitter Type:</b> Agency – State, Queensland Ambulance Service
<b>Relevant Chapter:</b> N/A
<b>Issue - Topic:</b> N/A
<b>Submission Issue – Details:</b> No comments
<b>Submitter Recommendations / Suggested Mitigation:</b> N/A
<b>OCG Direction:</b> N/A
<b>Response:</b> N/A

### Submission 3

<b>Submission 3</b>
<b>Submitter Type:</b> Agency – State, Queensland Health
<b>Relevant Chapter:</b> N/A
<b>Issue - Topic:</b> N/A
<b>Submission Issue – Details:</b> No comments
<b>Submitter Recommendations / Suggested Mitigation:</b> N/A

**OCG Direction:** N/A

**Response:** N/A

## Submission 4

### Submission 4

**Submitter Type:** Agency – State, Department of Transport (Roads and Rail)

**Relevant Chapter:** Vol 3, Appendix G

### Submission 4.1

**Issue - Topic:** Transport - road

#### **Submission Issue – Details: Proposed Upgrades to Flinders Highway / Unnamed Road Intersection**

Hughenden Camp TIA identifies that the design vehicle utilised for the proposed temporary workers accommodation is a B-Double. This is further reflected within Figure 12 of the traffic impact assessment, which shows a swept path for a B-Double accessing Unnamed Road from the Flinders Highway before travelling to the subject site. However, detailed and scaled swept path plans were not included within the traffic impact assessment, and as such it is unclear as to whether the nominated design vehicle can safely and efficiently access the Unnamed Road from the Flinders Highway. It is acknowledged that swept path plans were included within the traffic impact assessment entitled CopperString 2032 Traffic Impact Assessment – FSC (FCS TIA), prepared by Pitt & Sherry, dated 16 February 2024, reference T-P.22.1676-TRA-REP-001-FSC-Rev03/NA/cd, revision 3, and that these plans indicate that intersection widening is required to facilitate the B-Double movement. However, this information should be consolidated into the Hughenden Camp TIA for clarity.

Furthermore, it is noted that within the FCS TIA, a low loader swept path has been shown, with the vehicle being required to occupy the entire road width of the Flinders Highway in order to manoeuvre into and out of the Unnamed Road. This movement may impact upon the safety and operating conditions of the Flinders Highway if left unmitigated and therefore must be addressed. It is further unclear as to whether this movement is regular or infrequent, which may alter the extent of road works required at the Flinders Highway / Unnamed Road intersection.

Upon consideration of the above, TMR is concerned that the proposed intersection upgrades are insufficient to cater for the intended design vehicles, and may result in adverse safety and operational impacts upon the State-controlled road.

**Submitter Recommendations / Suggested Mitigation:** Provide for TMR consideration, an updated Hughenden Camp TIA that includes, at a minimum:

- (a) Detailed and scaled Swept Path Plans for all intended design vehicles accessing the workers camp;
- (b) Concept road works plans identifying the extent of upgrades required to facilitate the safe and efficient movement of the design vehicles from the Flinders Highway into Unnamed Road;
- (c) Confirmation of the frequency of access required by the proposed low loader to determine whether further road work upgrades are required or if alternate mitigation measures (for example, traffic management) could be appropriate.

**OCG Direction:** Proponent to respond by providing updated appendix and in column H identifying the location of the update in the appendix

**Response:**

- (a) Swept paths plans are included in Appendix D and discussed in Section 7.1.1 of the CopperString Hughenden Camp Hub Traffic Impact Assessment (see update to section 7.4.1 of the RfPC 1 Report 1, Volume 1).
- (b) Concept road design plans are included in Appendix E and discussed in Sections 7.2.2 and 7.2.3 of the CopperString Hughenden Camp Hub Traffic Impact Assessment of the RfPC 1 Report 1, Volume 1 (see update to section 7.4.1 of the RfPC 1 Report 1, Volume 1).
- (c) Commentary provided in Section 5.2.2 - Deliveries of the CopperString Hughenden Camp Hub Traffic Impact Assessment (see update to section 7.4.4 of the RfPC 1 Report 1, Volume 1).

#### Submission 4.2

**Relevant Chapter:** Vol 3, Appendix G, section 5.2.3

**Issue - Topic:** Transport - road

#### **Submission Issue – Details: Safety of Proposed Flinders Highway / Unnamed Road Intersection**

Hughenden Camp TIA identifies that due to the turn warrants assessment Basic Left (BAL) and Basic Right (BAR) turn treatments are required at the Flinders Highway / Unnamed Road intersection. However, BAR turn treatments are undesirable in high-speed environments, in particular when combined with roads accommodating a high percentage of heavy vehicles (such as the Flinders Highway). This is due to the increased risk to the safety of road users associated with the unprotected right-turn movement.

The Road Safety Assessment in section 5.1.6 of the Hughenden Camp TIA is extremely brief and does not address the above safety concern. Nor has the safety assessment been prepared in accordance with the recommendations of TMR's Guide to Traffic Impact Assessment – December 2018 (GTIA). It is acknowledged that the FCS TIA includes a more detailed road safety assessment, however this assessment does not consider the above risk identified at the Flinders Highway / Unnamed Road intersection. Of particular concern for TMR is the PM Peak period in which there will be a larger volume of vehicles utilising the BAR, with potentially fatigued drivers returning to site at the end of their shift.

Furthermore, it is unclear as to whether the turn warrants assessment and safety assessments have taken into consideration the mix of light and heavy vehicles associated with the proposed development, and whether additional turn treatments are required to cater for this mix rather than purely light vehicles.

As such, TMR is concerned that the proposed reliance upon BAR turn treatments at the Flinders Highway / Unnamed Road intersection may adversely impact upon the safety to road users of the State-controlled road network and therefore may be inappropriate in this instance.

**Submitter Recommendations / Suggested Mitigation:** Provide for TMR's consideration, a revised Hughenden Camp TIA that includes, at a minimum:

- (a) A comprehensive road safety impact assessment, prepared in accordance with the requirements of section 9 of GTIA. The road safety impact assessment:

- (i) Must specifically address the increased risk to right-turning vehicles from the Flinders Highway into Unnamed Road;
  - (ii) Must take into consideration the high percentage of heavy vehicles utilising the Flinders Highway, including Type 2 Road Trains and OSOM vehicles;
  - (iii) Must consider the high-speed environment of this portion of the Flinders Highway, noting that it is within close proximity to a transition in posted speed limits;
  - (iv) Should address the potential increase risk associated with seasonal traffic (such as tourists who are unfamiliar with the locality and are likely to be towing caravans);
  - (v) Should take into consideration the possible increased risk associated with potentially fatigued drivers returning from their shift utilising the right-hand turn movement;
  - (vi) Must make appropriate recommendations to suitably mitigate the identified risk to road users.
- (b) Revised intersection concept designs (if required) illustrating the provision of a higher standard of turn treatment (for example, a channelised right (CHR)) to suitably protect the safety of road users.

**OCG Direction:** Proponent to respond by providing updated appendix and in column H identifying the location of the update in the appendix

**Response:**

- (a) A comprehensive road safety assessment including risk tables has been included in Section 7.3 of the CopperString Hughenden Camp Hub Traffic Impact Assessment (see update to section 7.4.1 of the RfPC 1 Report 1, Volume 1).
- (b) Concept road design plans for a CHR/AUL arrangement are included in Appendix E and discussed in Sections 7.2.2 and 7.2.3 of the CopperString Hughenden Camp Hub Traffic Impact Assessment (see update to section 7.4.1 of the RfPC 1 Report 1, Volume 1).

### Submission 4.3

**Relevant Chapter:** Vol 3, Appendix G, Section 3.2, 3.3 and 5.1.1

**Issue - Topic:** Transport - road

#### Submission Issue – Details: Nature of Staff Shift Changes

It is unclear as to whether the worst-case scenario for traffic generation associated with staff movements has been taken into consideration and assessed. In particular, it is unclear as to how staff will travel to the subject site at the start of their rostered shift, and whether coaches from Townsville and/or Mount Isa will be relied upon, or private transport will be utilised. Similarly, it is unclear based on the information submitted to date, whether there will ever be an overlap of staff movements onsite (for example on rostered change-over days will there be double the amount of staff on-site).

If the camp is not to be fully vacated before the next rostered staff arrive, there could be a significantly higher generation of traffic associated with the proposed development than that assessed within the Hughenden Camp TIA. This could result in additional impacts upon the State-controlled road network which may require further mitigation measures.

TMR therefore cannot identify the extent of impact upon the safety and operational conditions of the State-controlled road network based on the information received to date.



**Submitter Recommendations / Suggested Mitigation:** Provide for TMR's consideration, a revised Hughenden Camp TIA that clearly:

- (a) Identifies how rostered shifts will be scheduled and managed to ensure that there is never an overlap of staff onsite at any given time. This is required to ensure that the traffic generation assessed within the TIA is an accurate representation of the proposed development's worst case scenario.
- (b) Recommends additional mitigation measures should there be the possibility of an overlap of staff movements occurring to ensure that the safety and operating conditions of the State-controlled road are protected.

**OCG Direction:** Proponent to respond by providing updated appendix and in column H identifying the location of the update in the appendix

**Response:** Shift rostering is discussed in Section 3.3.2 of the CopperString Hughenden Camp Hub Traffic Impact Assessment. Section 5.2.2 discusses why shift overlap was not considered in the worst-case scenario traffic assessment (see update to section 7.4.4 of the RfPC 1 Report 1, Volume 1).

**Note:** The stormwater management plan included slight alterations predominantly associated with reorienting the camp layout to stay out of the 1%AEP zone to the site layout, these were not updated in the traffic impact assessment at the time of submission but will be updated in due course. The reorienting of the camp was reviewed and is not expected to have any influence on the traffic impact assessment as the main access to the camp has not changed.

#### Submission 4.4

**Relevant Chapter:** N/A

**Issue - Topic:** Transport - road

#### Submission Issue – Details: Location of Staff Pick-up Points

Further to item 3.3 above, should staff be transported to the subject site via coach from their point of origin (e.g. Townsville or Mount Isa), it is not clearly identified within the Hughenden Camp TIA as to where staff will be picked up from (e.g. the Townsville Airport, individual hotels, centrally located pick-up locations etc.). Should consolidated pick up points be proposed for staff, these should be identified (where possible) within the TIA to ensure that there is not an unintended impact upon the State-controlled road network (i.e. due to an overflow of cars being parked on a State-controlled road etc.).

**Submitter Recommendations / Suggested Mitigation:** Provide for TMR's consideration, a revised Hughenden Camp TIA that:

- (a) Clearly identifies how staff are to be transported to and from the subject site at the start and end of their roster.
- (b) Nominates intended pick up locations for staff at their point of origin.
- (c) Clearly demonstrates that these pick up locations are suitably positioned and designed to cater for the traffic volumes associated with the volumes of staff being picked up, without resulting in adverse impacts upon the State-controlled road corridor.

**OCG Direction:** Proponent to respond by providing updated appendix and in column H identifying the location of the update in the appendix

**Response:** Travel to and from the site for the start and end of roster and pick-up/ drop off arrangements are discussed in Section 3.3.3 of the CopperString Hughenden Camp Hub Traffic Impact Assessment (see update to section 7.4.4 of the RfPC 1 Report 1, Volume 1).

#### Submission 4.5

**Relevant Chapter:** N/A

**Issue - Topic:** Transport - road

##### **Submission Issue – Details: Pedestrian connectivity**

Upon review of the Hughenden Camp TIA, it is unclear as to whether pedestrian and/or active transport pathways are being provided between the subject site and the Hughenden township to facilitate staff movements to commercial facilities in town. Similarly, it is unclear as to whether shuttle bus solutions will be provided to cater for this service.

Should staff be required to walk along the Flinders Highway from the site to access facilities within Hughenden, they may be placed at risk of collisions with vehicles. As such, the proposed development may increase the risk to users of the State-controlled road network.

**Submitter Recommendations / Suggested Mitigation:** Provide for TMR's consideration, a revised Hughenden Camp TIA that:

- (a) Clearly identifies whether pedestrian or active transport connections are proposed between the subject site and Hughenden Township.
- (b) Identifies whether a shuttle bus service is proposed as an alternative to private/active transport modes.
- (c) Identifies the proposed location and alignment of any active transport connections/pathways and confirms that they will not place vulnerable road users (i.e. pedestrians) at risk from collisions with vehicles.

**OCG Direction:** Proponent to respond by providing updated appendix and in column H identifying the location of the update in the appendix

**Response:** Recreation and active transport are discussed in Section 3.3.4 of the CopperString Hughenden Camp Hub Traffic Impact Assessment (see update to section 7.4.5 of the RfPC 1 Report 1, Volume 1).

#### Submission 4.6

**Relevant Chapter:** Vol 3, Appendix F

**Issue - Topic:** Transport - Rail

##### **Submission Issue – Details: Stormwater and Flooding Impacts on the Railway Corridor**

The Stormwater Management Plan (SMP) for temporary construction camp and laydown area at Hughenden, prepared by Pitt & Sherry, dated 23/02/2024, report number CU2-HU00-REP-PAS-600-0001 and revision 02 and Hughenden – Camp & Laydown Stormwater Layout Plan, prepared by Pitt & Sherry, dated 08/09/2023, drawing number CU2-HU00-DRG-PAS-100-0021 and revision 0

has not included adequate information to demonstrate that the stormwater and flooding impacts of the proposed development will not adversely impact on the railway corridor. In particular:

- o the SMP applies the stormwater management design objectives detailed in Appendix 2 of the State Planning Policy, however this is not appropriate for infrastructure to be used for the expected life of the workers accommodation camp, nor is it appropriate to ensure the safety and integrity of an operational rail line;
- o diversion drain 012 flows toward the railway corridor. This drain will be affected by peak flows and possible flooding issues. It is unclear whether the proposed stormwater drainage design (drainage channels and basins) will be appropriate for all stormwater events, as the SMP has not analysed these events. In addition, the runoff calculations under Appendix D of the SWMP show flow rate increases from the existing conditions to the post-development without mitigation.
- o the SMP does not provide an assessment of the proposed culvert in Station Creek, which traverses the site. If the culvert is not appropriately sized, considering maximum flows within the creek including the additional development flows, the creek may back-up forcing water into the railway corridor. Additional water within the railway corridor may impact the track foundations and may also cause scour and erosion.
- o the site is flood prone and the proposed filling to achieve adequate flood immunity for the development may adversely impact on the railway corridor. The report only addresses local runoff from the site, not potential worsening of flood levels at the rail line during a Station Creek event.

**Submitter Recommendations / Suggested Mitigation:** The applicant is therefore requested to provide a revised Stormwater Management Plan, including a Flood Impact Assessment, to demonstrate that the management of stormwater and flooding post development can achieve a no worsening impact (on the pre-development condition) for all flood and stormwater events that exist prior to development and up to a 1% Annual Exceedance Probability (AEP). This should include at least the following flood and stormwater events: 63.2%, 50%, 20%, 10%, 5%, 2% and 1% AEP. Stormwater management for the proposed development must ensure no worsening or actionable nuisance to the railway corridor, including rail transport infrastructure, caused by peak discharges, flow velocities, water quality, sedimentation and scour effects. The report should also demonstrate that flood storage capacity is maintained on the site with the development. Overland flow paths/ hydraulic conveyance should be maintained on the site as part of the proposed development.

In particular, the following should be addressed:

- (i) Catchment Analysis. Provide pre-development and post-development catchment plans that clearly identify all internal catchments on the site, external catchments draining into the site, the flow paths (direction of flow) within each catchment, the size of each catchment and the legal point of discharge for each catchment.
- (ii) Flood impact assessment. Provide a hydraulic and hydrological analysis demonstrating the design flood peak discharges for the site and surrounding area which exist in the pre and post development scenarios for all flood and stormwater events up to a 1% Annual Exceedance Probability. This should include at least the following flood and stormwater events: 63.2%, 50%, 20%, 10%, 5%, 2% and 1% AEP. The flood model needs to adequately encompass the railway corridor. Mapping (afflux, water level/depth and velocity impact maps) should be provided to clearly illustrate the pre-development scenario, and the post development impacts for all relevant design events.
- (iii) Maintain the pre-development condition. The pre-development flow scenario will need to be replicated in the post development condition. The proposed development should not impede or interfere with any drainage, stormwater or floodwater flows, including sheet flows, from the railway corridor. The proposed culverts within the existing drainage channel, retaining structures, filling/excavation, landscaping, buildings and structures or any other works to the land should be designed to include provision for drainage so as not to adversely impact on the railway corridor. The development design will need to address any concentration of flows, potential for back-up/ponding and scour/erosion which may undermine the railway corridor.

- In particular, provide an assessment of the following to demonstrate the proposed culverts shown on Hughenden – Camp & Laydown Stormwater Layout Plan, prepared by Pitt & Sherry, dated 08/09/2023, drawing number CU2-HU00-DRG-PAS-100-0021 and revision 0, have been appropriately sized and designed to ensure flows will not adversely impact the railway corridor for all flood and stormwater events: 63.2%, 50%, 20%, 10%, 5%, 2% and 1% AEP.
- (iv) Water quantity assessment. The peak discharge analysis should provide adequate details of the pre and post development impervious area of the site and give adequate consideration to the detention basin requirements of the QUDM, Fourth Edition. The design flood peak discharges should be shown for the mitigated case to demonstrate there is no worsening impact on the railway corridor.
  - (v) Conceptual drainage layout. Provide an updated conceptual stormwater drainage layout plan showing the proposed internal stormwater network on the site, including roofwater connections, pit and pipe network, field inlets and any detention basins/tanks and demonstrating how all roof and surface water flows will be collected and conveyed to the legal points of discharge.  
In particular, provide a conceptual design for 'diversion drain 012' at the rear (southern) boundary of the site and supporting hydraulic/hydrological analysis and calculations to demonstrate that it will be adequately sized/have sufficient capacity and mitigation measures (erosion and scour control) for all relevant design events.
  - (vi) Mitigation measures. include details of the mitigation measures proposed to address any potential stormwater and flooding impacts of the proposed development. All mitigation measures must be located on the site and not in the railway corridor.

**OCG Direction:** Proponent to respond by providing updated appendix and in column H identifying the location of the update in the appendix

**Response:**

- (i) The project now has a pre-development flood study from WMA which shows the 1% AEP event among others.

Pitt & Sherry shows a revised concept drainage layout of the camp and which also shows no intended bulk fill within the flood zone so as to not impact flood conveyance or storage

- (ii) WMA's latest flood assessment shows the current situation flood extents.

A post-development assessment will be undertaken at a future date once pitt & sherry and the JV advance the civil design further in the coming weeks.

Where impacts are evident in the post-development situation, the intent will be to alter the civil designs such that impacts are negligible or tolerable by relevant stakeholders.

Impacts within the waterway through the site will be assessed and for instance, areas of higher velocity will be treated with scour protection and other low impact mitigation methods as required if velocities can be otherwise reduced.

- (iii) The intended waterway crossing design is as follows:

A low flow culvert crossing for the 63.2%AEP (1 in 1 Yr equiv) for use during low rainfall "nuisance runoff" which is likely to be a 300m MIN high box culvert, as well as a secondary adjacent bed-level crossing for additional use in dry weather only conditions. The crossing has not yet been designed nor modelled in a post-development flood model, so we do not yet know the impacts (if any).

If, following a post-development flood assessment, the impacts were found to be significant or not tolerable by stakeholders such as TMR and QR, then we would remove the culvert crossing and revert to a bed-level crossing only which we anticipate would not worsen the situation for the rail corridor.

- (iv) A post-development flood assessment has not yet been conducted. For construction phase water quality reasons, we anticipate having excavated sediment basins (sumps), and these would

allow for added storage more than the current scenario and could be retained beyond camp construction phase and used as operational stormwater management features.

The post-development flood assessment will be undertaken at a future date once pitt & sherry and the JV advance the civil design further in the coming weeks.

Where impacts are evident in the post-development situation, the intent will be to alter the civil designs such that impacts are negligible or tolerable by relevant stakeholders.

(v) A revised stormwater management plan concept layout has been provided (see Appendix F of RfPC 1 Report 1, Volume 3). It shows external catchments are to be diverted for the 10% AEP event and these do not impact the rail corridor nor are they directed at the rail corridor, and they do not rely on the rail corridor to function.

The detailed design of the camp layout is still under development; however we have provided a revised concept layout showing intended core drainage pathways and drainage elements.

The intent for the accommodation camp buildings part of the site is that they release roof water pipe drainage and surface drainage generally in a south easterly direction away from the railway corridor and into the existing waterway. The site on the north of the waterway will be gently graded to follow the natural terrain in the south-easterly direction.

The area on the southern side of the waterway will be left nominally at grade and no filling within the flood zone. The prevailing flow direction will be retained which is north easterly.

Excavated sediment dams will be used to help manage quantity and quality.

Pitt & sherry has engaged a CPESC (Certified Professional in Erosion Control) to assist in the design of ESC and construction phase water quality and drainage measures which will also assist in water volume.

(vi) The intent is to cause no worsening of conditions to the railway corridor.

Furthermore, there will be no need to rely on the railway corridor for drainage conveyance from the camp site.

No works of any kind will be conducted in the Railway corridor. Works will only be conducted in the subject lot itself and the external road access point to the highway.

The intent is to limit any filling that is required and for it to be located outside the 1% AEP flood extents line.

Any works within the 1%AEP line will be at-grade (i.e. matching existing ground levels) such as gravel hardstands at grade (no fill) sealed car parks at grade (no fill) if required.

See update to section 7.4.3 of the RfPC 1 Report 1, Volume 1.

**Note:** The stormwater management plan included slight alterations predominantly associated with re orienting the camp layout to stay out of the 1%AEP zone to the site layout, these were not updated in the traffic impact assessment at the time of submission but will be updated in due course. The re orienting of the camp was reviewed and is not expected to have any influence on the traffic impact assessment as the main access to the camp has not changed.

## Submission 5

### Submission 5.1

**Submitter Type:** Agency – State, Department of Regional Development, Manufacturing and Water

**Relevant Chapter:** Report 1 – Hughenden Camp, Volume 1 – Summary Information:

- Section 3 Overview of Proposed Hughenden Camp Features and Functionality, Page 13
- Section 5.3 Consultation Hughenden Camp, Table 5, Page 24

- Section 7.5.1 Impact on Water Supply, Page 39
- Volume 3 Technical Reports
- Minutes of Meeting – CopperString Hughenden Camp (Flinders Shire Council)

**Issue - Topic:** Water Quality

**Submission Issue – Details: Taking underground water within Lot 129 SP119557**

Underground water at Lot 129 on SP119557 is regulated under the Water Plan (Gulf) 2007 (the Gulf Water Plan) and the Water Plan (Great Artesian Basin and Other Regional Aquifers) 2017 (the GABORA Water Plan). Drill logs for bores in the Hughenden area indicate that formations regulated under the GABORA Water Plan may be present from as shallow as ~12-25 meters.

Hughenden is within the ‘Great Artesian Basin Groundwater Management Area’ under the Gulf Water Plan. The taking of underground water for any purpose is not limited from aquifers managed in this area.

**Submitter Recommendations / Suggested Mitigation:** Provided the proposed bore is not installed within one (1) kilometre of the Flinders River and does not access aquifers managed under the GABORA Water Plan, underground water may be taken for any purpose without the need for a water entitlement. Water bores are required to be drilled by an appropriately licenced water bore driller.

Further information on bores and water bore drilling can be located here:

<https://www.business.qld.gov.au/industries/mining-energy-water/water/bores-and-groundwater>

**OCG Direction:** Proponent to note

**Response:** Noted

## Submission 5.2

**Relevant Chapter:** Report 1 – Hughenden Camp, Volume 1 – Summary Information:

- Section 3 Overview of Proposed Hughenden Camp Features and Functionality, Page 13
- Section 5.3 Consultation Hughenden Camp, Table 5, Page 24
- Section 7.5.1 Impact on Water Supply, Page 39
- Volume 3 Technical Reports
- Minutes of Meeting – CopperString Hughenden Camp (Flinders Shire Council)

**Issue - Topic:** Water Quality

**Submission Issue – Details: GABORA Water Plan**

A water entitlement would be required to take underground water from aquifers managed under the GABORA Water Plan. A water licence may be obtained by trading with existing licensees, either on a permanent or seasonal basis. An application to relocate or seasonally assign a water licence is assessed under Chapter 5 and Chapter 7 respectively of the GABORA Water Management Protocol.

A water permit can be applied for an activity that has a reasonably foreseeable end date. A water permit application is subject to assessment against the criteria specified under section 138 of the

Water Act 2000 (Water Act). The criteria includes the consideration of existing users, natural ecosystems and the physical integrity of watercourses, springs, lakes, and aquifers.

**Submitter Recommendations / Suggested Mitigation:** A water permit should be considered only if other existing options to access water have been exhausted.

Forms and fees that apply to water authorisations under the Water Act can be located here:

<https://www.business.qld.gov.au/industries/mining-energy-water/water/authorisations/application-forms>

**OCG Direction:** Proponent to note

**Response:** Noted

### Submission 5.3

**Relevant Chapter:** Report 1 – Hughenden Camp, Volume 1 – Summary Information:

- Section 3 Overview of Proposed Hughenden Camp Features and Functionality, Page 13
- Section 5.3 Consultation Hughenden Camp, Table 5, Page 24
- Section 7.5.1 Impact on Water Supply, Page 39
- Volume 3 Technical Reports
- Minutes of Meeting – CopperString Hughenden Camp (Flinders Shire Council)

**Issue - Topic:** Water Quality

**Submission Issue – Details: Development assessment under the Planning Act 2016**

An artesian or sub artesian water bore proposed to be constructed into aquifers regulated under the GABORA Water Plan is assessable development, and an application for development approval under the Planning Act 2016 is required.

A sub artesian water bore proposed to be constructed into aquifers regulated under the Gulf Water Plan is not assessable development if it is more than-

- (a) 200m from a boundary of a parcel of land; and
- (b) 400m from another water bore.

**Submitter Recommendations / Suggested Mitigation:** If a proposed bore location cannot meet these setback distances, an application for development approval under the Planning Act 2016 is required.

All enquiries about water options can be directed via email to [waterservicesnorth@rdmw.qld.gov.au](mailto:waterservicesnorth@rdmw.qld.gov.au).

**OCG Direction:** Proponent to note

**Response:** Noted

### Submission 6

#### Submission 6

**Submitter Type:** Agency – State, Department of Resources

<b>Relevant Chapter:</b> N/A
<b>Issue - Topic:</b> N/A
<b>Submission Issue – Details:</b> No comments
<b>Submitter Recommendations / Suggested Mitigation:</b> N/A
<b>OCG Direction:</b> N/A
<b>Response:</b> N/A

## Submission 7

<b>Submission 7.1</b>
<b>Submitter Type:</b> Agency – State, Department of Environment, Science and Innovation
<b>Relevant Chapter:</b> Volume 3 - Appendix C -Early Works Package Camp Hub Submission Support
<b>Issue - Topic:</b> Land – Rehabilitation
<p><b>Submission Issue – Details:</b> Section 3.1.1 under site rehabilitation, states the site would be rehabilitated to near- pre-existing condition, unless an alternate plan is put forward. The camp site is referred as being temporary for five years, however, the car park and the camp site and facilities will be concreted and the laydown will be on hardstands of compacted gravel. It is unclear how and to what degree the site will be rehabilitated.</p> <p>In addition, if the proponent has alternative plans for the site to be converted, the statement that the camp site is temporary for five years is also misleading.</p>
<p><b>Submitter Recommendations / Suggested Mitigation:</b> Clarify how the site will be rehabilitated. Would the concrete and hardstand be removed and topsoil restored?</p> <p>Additionally, if the proponent has alternative plans to utilise the facility, then possible options should be identified and discussed.</p>
<b>OCG Direction:</b> Proponent to respond
<p><b>Response:</b> All imported materials and structures including buildings, hard stand and road base will be removed. Once all is removed, the site will be reshaped to be reflective of pre-development conditions (to the extent practical), and then respread with stockpiled top soil and reseeded for generic revegetation compatible with local vegetation types (see update to section 7.9.4 of the RfPC 1 Report 1, Volume 1)</p>

<b>Submission 7.2</b>
<b>Relevant Chapter:</b> Volume 1 Summary Report & Volume 3 - Appendix C - Early Works Package Camp Hub Submission Support Wastewater treatment
<b>Issue - Topic:</b> Infrastructure - Wastewater



**Submission Issue – Details:** Section 3 of Volume 1 Summary Report states that following consultation with the Council, the preferred option for wastewater disposal is to connect to the local wastewater facility. However, Volume 3 Appendix C Submission Support sections 8.1.2 and 12.2 discuss how the wastewater treatment plant will be designed and how the treated recycled water will be utilised.

**Submitter Recommendations / Suggested Mitigation:** Clarify and update the relevant sections of the report (including appendices) for consistency. For example, post discussion with the Council, if a decision has been made on not installing the wastewater treatment plant, then remove the sections related to how a wastewater treatment plant would be designed and managed.

**OCG Direction:** Proponent to respond in column H

**Response:** An option of an onsite treatment plant was considered however will no longer be progressed as council have indicated that their treatment plan will have sufficient capacity. See update to section 3 of the RfPC 1 Report 1, Volume 1.

### Submission 7.3

**Relevant Chapter:** Volume 3 - Appendix C - Early Works Package Camp Hub Submission Support Wastewater treatment

**Issue - Topic:** Infrastructure - Wastewater

**Submission Issue – Details:** Brine from the reverse osmosis (RO) plant is mentioned in section 12.2.1 of Volume 3 Appendix C. Brine from the RO plant would be diluted to be suitable for construction water or stored in a tank for disposal offsite. The amount of water required to sufficiently dilute the brine and where such water would be sourced from is not addressed.

**Submitter Recommendations / Suggested Mitigation:** Clarify the volume and the source of water proposed to be used to dilute the brine.

**OCG Direction:** Proponent to respond in column H

**Response:** An option of an onsite treatment plant was considered however will no longer be progressed as council have indicated that their treatment plan will have sufficient capacity. See update to section 3 of the RfPC 1 Report 1, Volume 1.

### Submission 7.4

**Relevant Chapter:** Volume 1 Summary report section 7.6; Volume 3 Appendix C Noise Assessment

**Issue - Topic:** Noise

**Submission Issue – Details:** Although the sensitive receptors were identified in Appendix C Table 6, the distance to the sensitive receptors were not listed. The only information available was the distance to the closest receptor (210m).

**Submitter Recommendations / Suggested Mitigation:** Provide the distance to the sensitive receptors listed in Table 6 of Appendix C. This data should be linked to noise and air impact assessments.

**OCG Direction:** Proponent to respond in column H

**Response:** The construction of the Hughenden camp is proposed to occur Monday – Sunday 6:30am-6:30pm and will operate in accordance with the Environmental Protection (Noise) Policy for mitigation controls. Construction of the camp is expected to take approximately 8 months.

**Distance from Hughenden Camp to Receptor # (m)**

R1	990
R2	1111
R3	723
R4	210
R5	265
R6	380
R7	441

See update to section 7.6.1 and section 7.6.3 of the RfPC 1 Report 1, Volume 1)

**Submission 7.5**

**Relevant Chapter:** Volume 1 Summary report; Volume 3 - Appendix C - Early Works Package Camp Hub Submission Support

**Issue - Topic:** Air Quality

**Submission Issue – Details:** The potential impacts to air quality from the workers camp are primarily from dust and odour. The early works package (pitt&sherry 2024) identifies reasonable dust and odour management measures for operation of the camp, however, dust management during construction is not considered.

**Submitter Recommendations / Suggested Mitigation:** Dust management measures during construction are to be presented in the change report application.

**OCG Direction:** Proponent to respond in column H

**Response:** Section 8.1.1 of the early works package (pitt&sherry 2024) relates to dust management measures during construction and operation. As noted in section 8.1.1, the listed dust control measures will be incorporated into the camp hub designs and management plans, including the development by the JV of an Air Quality (Dust) Management Plan.

**Submission 7.6**

**Relevant Chapter:** Volume 3 Appendix D Contaminated land -Technical note

**Issue - Topic:** Land - Contaminated land

**Submission Issue – Details:** The results section of the technical note uses ‘adopted criterion’ levels for nickel (35 mg/kg), copper (50 mg/kg) and zinc (150 mg/kg), however, it is unclear where and how these numbers were derived.

**Submitter Recommendations / Suggested Mitigation:** Clarify, and if relevant, reference the source, of the adopted criterion levels proposed for copper, nickel and zinc.

**OCG Direction:** Proponent to respond in column H

**Response:** The adopted Site Assessment Criteria are derived from the NEPM 2013 Health Investigation Levels (HILs), Health Screening Levels (HSLs) and Ecological Investigation (EILs) and Ecological Screening Levels (ESLs) for a ‘commercial/industrial’ exposure scenario (see update to section 7.9.2 of the RfPC 1 Report 1, Volume 1).

National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013) [NEPM]. Australian Government Publishing Services Canberra: National Environment Protection Council.

### Submission 7.7

**Relevant Chapter:** Volume 3 Appendix B – Appendix I Commitments Register

**Issue - Topic:** Administrative - Commitments Register

**Submission Issue – Details:** Appendix B – Appendix I Commitment Register #C56 on page 7 refers to the Environmental Management Plan which references Appendix O. There is no Appendix O provided. The Environmental Management Plan was in Appendix Q of the final EIS.

**Submitter Recommendations / Suggested Mitigation:** Amend the typo.

**OCG Direction:** Proponent to respond by providing updated appendix

**Response:** Appendix I has been updated to correct typo.

### Submission 7.8

**Relevant Chapter:** Volume 1 Summary Report section 2.3 Volume 3 Appendix I Ecology

**Issue - Topic:** Flora and Fauna

**Submission Issue – Details:** Flora and fauna assessment

It is noted under section 35E of the State Development and Public Works Organisation Act 1971 (SDPWO Act) that sufficient supporting information must be provided for change reports to enable the assessment of impacts. Under section 35H of the SDPWO Act, the Coordinator-General must consider the environmental effects of the proposed change.

It appears that the proposed accommodation camp in Hughenden is in a location that was not subject to assessment in the original EIS. The Summary document (Volume 1) does not provide sufficient supporting information to assess the environmental effects of the proposed change.

Appendix I – Figure 3 states the location of eight “Ecology surveys”. However, the individual reports are “pre-clearance surveys” and indicate that only rapid habitat assessments within a 50m x 50m plot were conducted.

(Note: Time of day has been entered. It is noted that there was 7-10 minutes between one survey plot and the next)

An ecology report that includes field surveys undertaken by suitably qualified ecologists should be provided for assessment. Surveys must comply with relevant Commonwealth and State guidelines.

**Submitter Recommendations / Suggested Mitigation:** Provide sufficient supporting information for a flora and fauna assessment of the site and surrounding location that aligns with requirements from the Flora and fauna (TOR p.10), and Matters of national environmental significance (TOR p.23) sections of the CopperString Project terms of reference.

An ecology report must describe the existing terrestrial ecological values, potential impacts, and avoidance and mitigation measures.

#### OCG Direction:

**Response:** A detailed Ecological Assessment Report (EAR) for Hughenden Camp has been prepared in accordance with the TOR (See Appendix I of the RfPC 1 Report 1, Volume 3). The EAR describes types and methods of surveys undertaken (Section 3), the terrestrial ecological values present (Section 4) and potential impacts and avoidance/mitigation measures (Section 5) (see update to section 7.7 of the RfPC 1 Report 1, Volume 1).

### Submission 7.9

**Relevant Chapter:** Volume 1 Summary Report

**Issue - Topic:** Flora and Fauna

**Submission Issue – Details:** EPBC referral

The location of the proposed accommodation camp is in an area of land that may contain species or species habitat for matters of national environmental significance (MNES). Results from an Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) Protected Matters Report state that 17 listed threatened species and nine listed migratory species may occur in the project area.

**Submitter Recommendations / Suggested Mitigation:** Projects that are likely to impact any protected matters under the EPBC Act should be referred to the Commonwealth Environment Department for a controlled action decision.

**OCG Direction:** Proponent to note

**Response:** Refer to section 4.1.1 of the Ecological Assessment Report for Hughenden Camp (See Appendix I of the RfPC 1 Report 1, Volume 3). No MNES are expected to be impacted by construction or operation of the Hughenden Camp (see section 7.7.1.1 and 7.7.1.2 of the RfPC 1 Report 1, Volume 1).

### Submission 7.10

**Relevant Chapter:** Volume 1 Summary Report

**Issue - Topic:** Flora and Fauna

**Submission Issue – Details:** Environmental values

The report states that the site is "...predominantly devoid of vegetation" p.19. The current "pre-clearance surveys" provide limited observational information and note that Buffel grass is dominant. State regional ecosystem (RE) mapping does not map the site as containing remnant grassland vegetation. It is noted that the site has a current land use of reserve, and aerial imagery indicates the site is largely unmodified, and is surrounded by similar land parcels mapped as remnant RE 4.9.1c.

**Submitter Recommendations / Suggested Mitigation:** A flora survey is recommended in accordance with the Methodology for survey and mapping of regional ecosystems and vegetation communities in Queensland, V 7 to determine whether the tussock grassland vegetation on site should be mapped as remnant RE 4.9.1c.

**OCG Direction:** Proponent to respond in column H

**Response:** As noted in section 7.7.1.4 of the RfPC 1 Report 1, Volume 1, field surveys confirmed the site consists of category X non-remnant grassland dominated by buffel grass (*Cenchrus ciliaris*), with scattered common wireweed (*Sida acuta*) and shrub/tree species including *Acacia tephрина* and *Vachellia farnesiana*. Small patches of regrowth to the south of the watercourse contained individuals of *Acacia tephрина* and *Alectryon olivifolia*. Field surveys recorded the tallest tree reaching 5m in height. Refer to section 4.1.5 of the Ecological Assessment Report for Hughenden Camp (See Appendix I of the RfPC 1 Report 1, Volume 3).

## Submission 7.11

**Relevant Chapter:** Volume 1 Summary Report

**Issue - Topic:** Flora and Fauna

**Submission Issue – Details:** Julia Creek dunnart/ Squatter pigeon

No fauna surveys have been conducted on site. Fauna observations were noted on the pre-clearance surveys and indicated fauna signs such as diggings, scats, tracks and nests.

The Julia Creek dunnart, *Sminthopsis douglasi*, listed as endangered under the Nature Conservation Act 1992, has a species distribution that extends across the Hughenden region.

The squatter pigeon, *Geophaps scripta scripta*, listed as vulnerable under the Nature Conservation Act 1992, has a species distribution that extends across the Hughenden region.

Note: Recent records in March 2024 for Hughenden. Considered likely to occur.

**Submitter Recommendations / Suggested Mitigation:** Generic and targeted fauna surveys are recommended in accordance with guidelines including but not limited to: Survey guidelines for Australia's threatened mammals (Cth, 2011); Survey guidelines for Australia's threatened birds (Cth, 2010); the Terrestrial vertebrate fauna survey guidelines for Queensland (DES 2022); and the EIS terrestrial ecology information guide (DES 2022).

**OCG Direction:** Proponent to respond in column H

**Response:** The site is not considered suitable habitat for Julia Creek dunnart or the squatter pigeon, which has been verified through field surveys and confirmed by suitably qualified experts on each species. See update to section 7.7.2.1 of the RfPC 1 Report 1, Volume 1.

Refer to Section 3, 4 and 5 of the Ecological Assessment Report for Hughenden Camp (See Appendix I of the RfPC 1 Report 1, Volume 3).

## Submission 8

### Submission 8.1

**Submitter Type:** Agency - State

**Relevant Chapter:** Vol 1 - section 6.3 Table 7

**Issue - Topic:** N/A

**Submission Issue – Details:** State Owned Quarry Material (SOQM) has been identified within the project footprint and the project has potential to interfere with SOQM during construction.

**Submitter Recommendations / Suggested Mitigation:** Table 7 should include a reference:

“Consider a requirement to obtain an authority under the Forestry Act 1959 to interfere with State Owned Quarry Material.”

DAF should be noted as the approving authority.

**OCG Direction:** Proponent to respond in column H

**Response:** Construction of the camp will require minor earthworks to prepare the site for accommodation, laydowns and carparks. It is not expected that these minor earthworks will require removal of any material offsite. If, during construction, there is excess material, it is expected to be stockpiled and stabilised for use during the rehabilitation of the site post it's use as temporary accommodation for the construction of the project. See section 7.9.1 of the RfPC 1 Report 1, Volume 3.

### Submission 8.2

**Relevant Chapter:** Volume 1, section 7.8 (p. 45-46)

**Issue - Topic:** N/A

**Submission Issue – Details:** Report states that as the waterway crossing will meet the accepted development requirements ADR a waterway barrier permit is not required.

**Submitter Recommendations / Suggested Mitigation:** The crossing is a waterway barrier work, and an authorisation will be required for its construction. Compliance with the ADR (including pre- and post-works notification) is the authorisation for the waterway barrier works aspect of the development. Should the works not meet the ADR, the crossing would require a development approval under the Planning Act 2016 for constructing or raising waterway barrier works.

**OCG Direction:** Proponent to note

**Response:** Updated to state “The design and installation of this structure will be developed to meet the requirements of the Acceptable Development Requirements (ADR) and therefore provide authorisation for the waterway barrier works aspect of the development.” See update to section 7.8 of the RfPC 1 Report 1, Volume 1.

### Submission 8.3

**Relevant Chapter:** N/A

**Issue - Topic:** N/A

**Submission Issue – Details:** There is no ALC AB/B land within the lot (see image at raw submission)

**Submitter Recommendations / Suggested Mitigation:** Nil required.

**OCG Direction:** Proponent to note

**Response:** Noted

### Submission 8.4

**Relevant Chapter:** N/A

**Issue - Topic:** N/A

**Submission Issue – Details:** Project construction and operation activities could potentially impact several stock routes, causing disturbance to stock movements to pasture for emergency agistment and long-term grazing, especially during extended drought conditions.

**Submitter Recommendations / Suggested Mitigation:** As per Appendix 2 Condition 30 (Recommended condition for the MID - CGER):

The proponent must document and implement management measures for gazetted stock routes that may be impacted by the project that:

- provide safe passage across the easement for stock, personnel and the general public.
- maintain stock routes in accordance with any arrangement reached with landholders, the relevant LGA or the administering authority including any re-aligned stock routes.

No change of condition wording required.

**OCG Direction:** Proponent to note

**Response:** Noted

## Submission 9

### Submission 9.1

**Submitter Type:** Agency – State, Department of Housing, Local Government, Planning and Public Works (SARA)

**Relevant Chapter:** N/A

**Issue - Topic:** N/A

**Submission Issue – Details:** A MCU for workers accommodation that is assessable development under the local government planning scheme

A MCU for workers accommodation that is assessable development under the local government planning scheme may ordinarily require referral to SARA for:

- Schedule 10, Part 9, Division 4, Subdivision 1, Table 1, Item 1 – State transport infrastructure (schedule 20 threshold)
- Schedule 10, Part 9, Division 4, Subdivision 2, Table 4, Item 1 – within 25m of a State transport corridor

**Submitter Recommendations / Suggested Mitigation:** It was unclear if this state interest will be addressed via the OCG works regulation amendment approval pathway.

**OCG Direction:** Proponent to note

**Response:** Powerlink confirms the camp will be assessed under a works regulation under the State Development and Public Works Organisation Act 1971).

## Submission 9.2

**Relevant Chapter:** N/A

**Issue - Topic:** N/A

**Submission Issue – Details:** It wasn't clear whether Riverine Protection Permits, exemptions or assessable development requirements had been considered for removing riverine quarry material in the low risk (green) waterway (if required).

**Submitter Recommendations / Suggested Mitigation:** N/A

**OCG Direction:** Proponent to respond in column H

**Response:** The identified waterway is a defined drainage feature under the Water Act therefore the Riverine Protection Permits or assessable development requirements under the Water Act do not apply.

## Submission 10

### Submission 10

**Submitter Type:** Agency – State, Department of Treaty, Aboriginal and Torres Strait Islander Partnerships, Communities and the Arts

**Relevant Chapter:** N/A



<b>Issue - Topic:</b> N/A
<b>Submission Issue – Details:</b> No comments
<b>Submitter Recommendations / Suggested Mitigation:</b> N/A
<b>OCG Direction:</b> N/A
<b>Response:</b> N/A

# Appendix A

# Appendix B