Macquarie Point Stadium

Movement Technical Review

City of Hobart

11 November 2024

→ **The Power of Commitment**

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1. Introduction

A proposal by the Crown Right of Tasmania for the development of a multipurpose stadium at Macquarie Point has been declared a Project of State significance. The Project involves assessment of impacts performed in accordance with requirements of guidelines prepared by the Tasmanian Planning Commission. Technical studies have been submitted to estimate degree of influence of the project on the environment and communities that may be affected by construction and operation of this project.

1.1 Purpose of this report

GHD have been commissioned by the City of Hobart to undertake an independent peer review of the reports submitted to address the Tasmanian Planning Commission Guidelines for the Macquarie Point Multipurpose Stadium Project of State Significance. This report specifically addresses Section 6 (Movement) and has been prepared by Jane Tan – Senior Transport Planner, Augustus Luo – Senior Transport Modeller and Brad Scouller – Technical Director, Transport Planning. The report has been reviewed by Roland Cathcart – Senior Technical Director, Transport Modelling, Brad Scouller - Technical Director, Transport Planning, Samantha Chapman – Senior Engineer - Transport Planning & Traffic Engineering and Steven Burgess – Technical Director – Transport Planning & Traffic Engineering.

1.2 Documents considered

The 'Movement' technical review is undertaken based upon Section 6 of the Tasmanian Planning Commission (TPC) Project of State Significance (PoSS) Guidelines, with reference to Chapter 4 of the Macquarie Point Multipurpose Stadium Summary Report and referenced technical documents – primarily Appendix N – *Macquarie Point Multipurpose Stadium Transport Study*. The following documentation has also been considered:

– Appendix A – Architectural Drawings
– Appendix B – Stadium Design Description
– Appendix H – Social and Cultural Analysis Report
– CoH Submission Mac Point Draft Precinct Plan Nov 2023

1.3 Scope and limitations

This report: has been prepared by GHD for the City of Hobart and may only be used and relied on by the City of Hobart for the purpose agreed between GHD and the City of Hobart.

GHD otherwise disclaims responsibility to any person other than the City of Hobart arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report (refer section 1.4 of this report). GHD disclaims liability arising from any of the assumptions being incorrect.

1.4 Assumptions

This document contains GHD's professional opinion based on the assessment of the documents indicated in the submission as relevant to Section 6 the PoSS guidelines. Our review does not consider, nor have visibility of, the scope that was requested of the technical consultant(s) that provided documentation for the submission. Where our review has indicated an omission, shortcoming or discrepancy relating to the suitability of the material

provided, this is to indicate what impacts this may have from the view of City of Hobart and is not an assessment of the scope requested or undertaken.

GHD's technical review is based upon qualified 'professional judgement' and does not include quantified verification of assumptions, calculations, recommendations or the like. For example, re-running of traffic modelling to verify calibration, validation and outputs has not been undertaken.

Identified risks have been provided for consideration by City of Hobart, however they not been rated for likelihood and consequence.

2. Key findings

This section summarises the key overall findings from the transport technical review and aims to provide reader perspective when reviewing GHD's findings and potential risks.

Our review identified three key risks from the documents reviewed:

- **The assessment relies on strategic modelling** which has a limited and often conservative assessment of performance impacts, it is noted that the strategic modelling observes oversaturated conditions
- The recommendations rely on a significant amount of **uncommitted and unfunded projects**, including some which are yet to have feasibility confirmed
- There is not an **assessment of suitability of mitigations of issues identified**, or the potential risk based on assessments not undertaken.

Whilst most requirements were addressed, they weren't to the detail the guidelines prescribed. As such, further detailed investigations will be required to resolve these issues to mitigate operational risks. Some of the key omissions include:

- Event transport strategy
- Traffic / pedestrian management strategy
- Parking management strategy
- Travel demand management strategy
- Assessment of emergency services access and provision due to traffic impacts
- No bus staging/layover for the Northern Access Road interchange

Additional elements not addressed are indicated within the detailed section following.

Key modelling and assessment considerations

In GHD's view, in the absence of operational modelling the assessment did not adequately address several PoSS guideline requirements related to road capacity and congestion and as such, was not sufficient to enable if or what road network changes or improvements would be required to maintain an acceptable level of service for road users.

Further:

- The assessment concludes inbound traffic congestion (based on link saturation levels) would be no worse than a typical base case AM peak (in 2030). However, this assessment does not account for the implications of links operating at or above capacity in both directions during the pre-event peak, with traffic signals most likely operating to favour outbound traffic movement.
- Changes to intersection operation that would be required to facilitate increased pedestrian crossing movements during the pre-event peak are not taken into account.
- The impact on traffic delays and level of service would require operational modelling to be appropriately quantified. This modelling should be undertaken before development of the Final Masterplan to determine if road network changes or improvements would be required to address or minimise traffic disruptions.
- Modelling scenarios did not include sensitivity testing for different mode share distributions, age profile of event spectators, variability in weekday/weekend transport demand and overlapping events.
- Reporting indicates that parts of the network will be exceeding capacity. This may not be an acceptable outcome to CoH.

Reliance on assumptions

The submission relies upon many assumptions and (in some cases) has not undertaken sufficient analysis to verify if these assumptions are viable. Examples of these include:

– That there will be no CBD road diversions during event egress and that traffic and public transport routes will remain unimpacted.
– That people choosing to drive will park in CBD parking garages, not in unrestricted parking areas close to the stadium and around the CBD fringe.
– That there will be sufficient bus fleet, drivers and park 'n' ride spaces to fulfill the forecast demand of the event shuttle buses
– Implementation of other projects such as:
    - That the proposed city-wide bus rapid transit system will be operational
    - That the Northern Access Road will be incorporated into the project scope and that the designed bus plaza has sufficient operational capacity to handle forecast demand
    - That the Collins Street pedestrian bridge will be built (noting planning has identified scenarios for this not being built)

With respect to the reliance on uncommitted and/or unfunded projects, it is noted that mitigation is not considered if any of these projects were not to proceed. For example the assessment does not consider strategies to mitigate demands under scenarios where the Collins Street Bridge is not constructed or not as highly used.

Supporting transport infrastructure and intervention requirements

Under a typical planning process there is a requirement to disclose what transport infrastructure requirements are to be implemented to enable the stadium to proceed, including consideration of timing, cost and who will be responsible for implementing.

The assessment includes a high-level assessment of this, however:

– The traffic modelling undertaken does not provide sufficient detail of the network performance to provide confidence in the assessment recommendations relating to intervention requirements
– There has not been assessment of the effectiveness or 'trip capacity' of the interventions and as such if they appropriately meet the requirements
– The line items included as 'essential' are limited and based on the information provided would not be sufficient in isolation
– Line items rated as 'high' or other priority ratings that are not 'essential' are referred to in other areas of the assessment as being important for the operation of the network to support the stadium and ongoing use of the area (either implicitly or explicitly)

3. Movement technical review

Table 1: Section 6.0 – Movement technical review response table

PoSS Guideline	Included	Suitability	GHD Submission Review Comments	Potential Risks
6.1 Travel scenarios and management options				
Clause 6.1.1 The reports are to provide a transport assessment that provides evidence and information on a range of potential travel demand scenarios and travel demand management measures to be implemented and extended/adapted over time to achieve acceptable outcomes for stadium users and the broader transport/movement network. The purpose of the transport assessment is to provide information on the range of strategies and measures that may be required under different demand scenarios to:				
Enable visitors and Tasmanians using the stadium to have an easy, safe, amenable, reliable and convenient door to door travel experience.	✓	⚠	The submission broadly addresses all aspects of a patron's door to door experience, however there are several assumptions and gaps in the submission detail that increases risk at this stage of project development. The key risks are listed as follows: Assumption of rapid transport being implemented and operational That the Northern Access Road (incl. transit facilities) are critical infrastructure, with no commitment to its implementation in scope No strategies or operational plans have been developed for key aspects such as event transport, traffic/pedestrian management, parking and travel demand management Uncertainty regarding implementation of the Collins Street active transport bridge Network traffic assessment indicates key routes to the stadium are predicted to be oversaturated.	The assessment does not quantify or evidence that visitors and Tasmanians using the stadium are enabled to have an easy, safe, amenable, reliable and convenient door to door travel experience. This is due to a number of factors: – The assessment basis (refer Clause 6.1.2) limits the understanding of the network performance, however it is identified that key road routes are forecast to be oversaturated, meaning network access will not be easy, reliable or convenient. – There is reliance on a number of uncommitted and unfunded projects, including some which are yet to have feasibility confirmed – Particular risks raised in subsequent clauses Further detailed investigations in line with the PoSS guidelines are required to 'de-risk' these issues.
Support and encourage active transport.	✓	⚠	Relevant future cycle infrastructure projects that would enhance access to the stadium have been identified. These projects are at various stages of planning and design and as such are not necessarily funded at this stage.	The assessment does not quantify or evidence appropriate level of support and encouragement of active transport. This is due to a number of factors: – The assessment basis (refer Clause 6.1.2) limits the understanding of the network performance, however it is identified

PoSS Guideline	Included	Suitability	GHD Submission Review Comments	Potential Risks
			Key precinct requirements (subject to scenarios) and priority projects to support high volumes are included High-level event traffic management measures including road closures during events and travel demand management considerations have been identified While the 2029 cycle network would improve access to the precinct, there are still gaps in the network for cycling to the precinct. Assisting with delivery – further information / quantitative assessment could be undertaken to identify projects to be prioritised that would have the greatest benefit.	that key road routes are forecast to be oversaturated, meaning network access will not be easy, reliable or convenient. – There has not been an integrated assessment of pedestrians with traffic management requirements and impacts of egress period operational traffic conditions – There is reliance on a number of uncommitted and unfunded projects, including some which are yet to have feasibility confirmed. In particular movement of pedestrians during egress relies on the construction and pedestrian use of Collins Street Bridge. – Particular risks raised in relation to gaps/barriers in the network and uncommitted projects may hamper uptake of cycling – Particular risks raised in relation to the requirement for further confidence to be provided for the mode share target to be achieved and active transport to be encouraged Further detailed investigations in line with the PoSS guidelines are required to 'de-risk' these issues.
Minimise the risk of local and regional traffic disturbance before, during and after events.	⚠	⚠	The report includes discussion of the various transport modes which can assist in the distribution of the transport load. No details pertaining to minimising the risk of traffic disturbance, before, during and after events, such as peak and load spreading strategies have been provided.	The assessment has not quantified the level of traffic disturbance that may occur. As such, the resultant level traffic disturbance to local and regional traffic may not be acceptable to CoH.
Manage to an acceptable level any adverse effects to local businesses and residents from traffic, crowds and parking.	⚠	⚠	Some strategies identified to manage traffic and access. A concept local area transport and access plan has been developed to serve as a basis for future management plans. Note – pedestrian modelling is conservative and under these scenarios (egress over 15-minutes), efficiency / safety relies on projects still in planning phase (and not necessarily funded). Some recommendations provided on management of parking near residential areas. Some high-level impacts to local businesses identified however the report notes further engagement required.	The assessment has not quantified the level of traffic disturbance that may occur. As such, the resultant level of any adverse effects to local businesses and residents may not be acceptable to CoH. From the report the following is noted: – Some strategies identified in the broader transport strategy. An event management plan will be needed to ensure minimal adverse impact to local businesses and residents. – Further engagement with stakeholders will be needed to confirm access restrictions to the waterfront i.e. the Evans/Hunter Street link. – Further scenario assessment and mitigation strategies will be needed should projects that are relied upon not be delivered on time.

PoSS Guideline	Included	Suitability	GHD Submission Review Comments	Potential Risks
Clause 6.1.2 The reports are to provide an overall framework supported by suitable models and assessment methods that:				
Enable a range of possible travel demand scenarios to be understood from the perspective of the users and the overall transport network.	✓	⚠	4 main scenarios tested for different capacities (24,500 / 31,500), and 40% / 60% private car utilisation. Static precinct pedestrian modelling undertaken Mass transit modes such as buses, event transport and coaches were identified and considered as part of the modelling. No sensitivity testing of variations in the mode split, such as changes in the proportion of active transport and public transport users, has been undertaken. The strategic modelling provides some high-level insights into the impacts of the event demands on the overall transport network. However, it is not the most suitable tool to quantify the true extents of the to the overall transport network and the users as it does not appropriately capture the true extents of the delay impacts between the interaction of pedestrians and vehicular demand.	Lack of sensitivity testing for different mode share distributions between scenarios could result in different network performance / outcomes. The scenarios assessed include an assumed level of mode share that relies on travel demand management to be achieved. Strategic modelling does not provide enough detail or confidence in the level of performance expected to be achieved. The level of performance may not be acceptable to CoH
Enable assessment of the effectiveness of a range of possible solutions including capacity creation, network management and behavioural change.	⚠	✗	Assessment only considers the impact of the additional event traffic on the base case This has been considered for two mode share distribution scenarios Capacity creation has been discussed such as changing mode share splits, however details regarding the feasibility of the implementation is lacking. (E.g. number of buses are required to facilitate the transport task, parking management strategy to achieve the target mode splits) Capacity creation via additional infrastructure such as the Collins Street Active Transport Bridge has been assessed for pedestrian purposes The strategic model is unable to account for the interaction between pedestrian and vehicles	The modelling and assessment methods do not enable assessment of the effectiveness of a range of possible solutions, in particular due to: – The assessment of the various elements of the transport network (vehicular and active transport) are isolated – The actual impacts of the event operations may not be fully captured in the modelling undertaken as the interaction between modes (e.g. vehicle and pedestrians) will likely result in worsening of performance – Strategic modelling does not provide enough detail or confidence in the level of performance expected to be achieved. The level of performance may not be acceptable to CoH

PoSS Guideline	Included	Suitability	GHD Submission Review Comments	Potential Risks
Underpin a proposed suite of travel demand measures that can be implemented prior to the stadium commencing operation, as well as extended and adapted over the life of the stadium.	✓	⚠	Travel demand management (TDM) strategies regarding mass/public transport and parking have been identified, however at this level of planning, do not represent a detailed TDM strategy.	As above there are limitations in the detail provided by the modelling. However, it is evident that travel demand management is required based on the modelling undertaken and the target mode shift. TDM Strategy to be developed and evidence appropriate mitigation of risks.
Achieve acceptable public safety outcomes for users of the stadium and all other transport network users; and	✓	⚠	Some safety concerns are flagged along with associated recommendations. Note that some of these recommendations rely on Collins Street Bridge being in place and well utilised during egress. Impacts of pedestrian pinch points and queuing at signalisation has not been fully understood.	The report does not provide evidence of this being assessed or achieved, however in order to do so detailed operational plans or event management plans would be required. It should be noted that such plans would typically not be produced until further design development of the stadium and associated network plans confirmed. No plans or management of how to minimise the likelihood of pedestrian / vehicular interactions have been provided.
Are informed by consideration of relevant transport plans and strategies, at a local and regional level, identified in section 2, including Keeping Hobart Moving - Transport Solutions for Our Future (draft) State of Tasmania Oct 2023 and The Greater Hobart Cycle Plan.	✓	✓	Other relevant transport plans and strategies have been considered and integrated. It is noted that the Inner Hobart Network Operations Plan could have been used to provide assessment of performance against existing operating targets.	Nil
Clause 6.1.3 In preparing the reports, specific consideration is to be given to:				
Modelling and assessing a range of transport scenarios including: A high proportion / P10 use of private cars to travel to the stadium / locality / area, A high proportion / P10 pedestrian movement between the stadium and the Princes Wharf 1 / Salamanca Place area	✓	⚠	Modelling was limited to testing an 'ideal' and 'higher' private car utilisation (40% / 60%) 34% was allocated to the Princes Wharf 1 / Salamanca Place area No further sensitivity analysis of different distributions has been undertaken	Different distributions may lead to different outcomes, other scenarios to be investigated should be considered in order to appropriately cover the likely operating conditions. The assessment undertaken is limited by the two mode share scenarios considered. It is noted that these rely on a significant change to existing mode share proportions.
Travel demand preferences related to local weather events, the time of day/night events are being held, the age profile of event spectators.	⚠	⚠	There will be some standard events (i.e. AFL game) and there also may be ad-hoc events that have vastly different profiles – the fully extent of this and how this has been covered by the assessment is not evident.	Different distributions may lead to different outcomes, other scenarios to be investigated should be considered in order to appropriately cover the likely operating conditions.

PoSS Guideline	Included	Suitability	GHD Submission Review Comments	Potential Risks
			– 60% private vehicle utilisation was used as a proxy for a poor weather event – Modelling has only been undertaken on a scenario overlapping the PM peak volumes with the event demand, no other time periods such as weekends have been assessed. – Age profile of event spectators not considered	The suitability of the performance of the event mode largely hinges on the statement that the PM + Event mode is no worse than the AM peak base case. The assessment undertaken is limited by the two mode share scenarios considered. It is noted that – The 60% private vehicle utilisation was used to represent a poor weather event, so this assumes that under typical weather conditions a lower private vehicle utilisation is achieved (representing a more significant change from existing mode share proportions) – Age profile of event spectators and how this impacts the travel demand preferences was not explicitly included – A worst cast event time of day was considered which relies on an assumption that no event ingress/egress would occur during the AM peak period.
The range of uses and activities proposed, which may include major events at different scales, conferences, exhibitions as well as daily activities.	✓	✓	Day to day origin demands and conference demands considered The modelling only considers the PM + Event mode.	Different distributions may lead to different outcomes, other scenarios to be investigated should be considered in order to appropriately cover the likely operating conditions. The suitability of the performance of the event mode largely hinges on the statement that the PM + Event mode is no worse than the AM peak base case.
The higher and lower levels of confidence associated with anticipated mode share changes resulting from travel demand measures.	✓	✗	40% (with travel demand measures) and 60% (without travel demand measures) private car split has been assumed	The assessment does not quantify or evidence that the mode share assumption can be achieved through the travel demand measures.
Assessing travel preferences, management measures and outcomes from a: whole of Hobart's inner/waterfront precinct perspective whole of local/regional transport network perspective	✓	⚠	The Origins study that was undertaken considers the travel preference of various transport modes from a whole of local / regional transport network perspective for Hobart. However, the management measures and the feasibility of implementation to achieve the desired mode share has not been undertaken in great detail (e.g. whether the public transport fleet is capable of handling the event demand). The strategic modelling that was undertaken provides some insight into the likely outcome of the transport network which shows that several key links will be oversaturated.	Management measures and the feasibility of implementation to achieve the desired mode share has not been undertaken in great detail (e.g. whether the public transport fleet is capable of handling the event demand).

PoSS Guideline	Included	Suitability	GHD Submission Review Comments	Potential Risks
			The pedestrian modelling discusses the likely travel preferences of pedestrians through the Hobart inner / waterfront precinct perspective. Similarly, the management measures and feasibility of implementation has not been discussed in great detail.	
Providing an acceptable level of resilience in the transport network across transport services to enable atypical travel/movement circumstances to be managed.	⚠	⚠	The oversaturation of the network under event scenarios are identified, however the network resilience is not assessed. Strategic models are not the most suitable tool to assess the network resilience across the transport network especially with atypical travel / movements such as road closures.	This assessment doesn't quantify traffic delays and level of service under event conditions and therefore the need for targeted road network changes/improvements was not adequately assessed. Strategic modelling results indicate the network would be oversaturated under event scenarios in the PM peak, but the assessment doesn't quantify the predicted traffic delays or level of service. There is a risk that traffic performance will not be acceptable to CoH. – The assessment basis (refer Clause 6.1.2) limits the understanding of the network performance; however it is identified that key road routes are forecast to be oversaturated, meaning network access will not be easy, reliable or convenient.
Establishing systems that enable travel outcomes to be monitored and evaluated over the lifetime of the stadium and for travel demand measures to be adapted and extend overtime.	✓	✓	High level monitoring and reporting plan provided which is adequate for this stage of the project.	Nil
Where the proposed use includes the potential for events to be held during or overlapping with peak weekday/weekend travel patterns, the options and strategies are to assess this period as a base scenario.	✓	⚠	Modelling considers overlapping of event demands with PM peak travel Report indicates that the peak inbound traffic during the AM period is 4,000 vph across the Tasman Highway. It also notes that 4,000 vph is observed in each direction during the weekends (indicating demands greater than the AM peak) However, no further analysis undertaken for the weekend period (e.g. weekend midday event)	A combination of a weekend traffic peak and weekend midday event may result in higher traffic demands than what has been considered in the report, however it is noted limited detail on weekend profiles is provided. Weekend travel mode split could be vastly different due to a weekday peak, which could result in a higher private vehicle mode share. The suitability of the performance of the event mode largely hinges on the statement that the PM + Event mode is no worse than the AM peak base case.
6.2 Traffic, freight and transport routes				
Clause 6.2.1 The reports are to discuss how the use of the stadium relates to and affects:				

PoSS Guideline	Included	Suitability	GHD Submission Review Comments	Potential Risks
The land transport task and function of roads in the locality and broader area as well as the operation of the Port of Hobart.	✓	⚠	Addresses the build-up of the stadium transport task and identifies projects and how they impact the transport task for the stadium Northern access road identified as a key link for shared used between Port operations and for event traffic management Identified potential overlaps of cruise terminal and stadium events and provided some high-level discussions on ways to manage this. Discussion on the interaction of the Port and stadium operations are largely high level in nature and is not considered in the modelling	The assessment doesn't quantify the predicted traffic delays or level of service. There is a risk that traffic performance will not be acceptable to CoH.
The current and estimated (with/without the proposed project) traffic volumes and levels of services of roads in the area and specifically the risk of and timeframes associated with periods of saturation and congestion.	✓	⚠	High level strategic modelling undertaken which demonstrates traffic volumes and levels of service (based on volume/capacity ratio). Strategic modelling does not consider delay level of service such as intersection impacts. Modelling considers overlapping of event demands with PM peak travel and as such the timeframes are only considered through this assumption.	Strategic modelling is limited in the detail in can provide in related to delays anticipated and as such understanding not provided for the level of performance. Reporting indicates that parts of the network will be exceeding capacity. This may not be an acceptable outcome to CoH
Periods of congestion/saturation on roads in the locality of the stadium as well as the broader road network effects.	✓	⚠	High level strategic modelling undertaken which demonstrates parts of the network would be oversaturated (even in base case conditions). The strategic model that has been produced for this report is not suitable to capture the full extents of the potential congestion and saturation impacts to the broader road network. In addition, the strategic model is not able to capture the interactions between pedestrians and vehicular traffic such as increased phase times/ cycle times at intersections.	Strategic modelling is limited in the detail in can provide in related to delays anticipated and as such understanding not provided for the level of performance. The level of performance may not be acceptable to CoH. Impacts to the road network because of the congestion / saturation may be higher than reported as only strategic level modelling was undertaken.
Clause 6.2.2				

PoSS Guideline	Included	Suitability	GHD Submission Review Comments	Potential Risks
The reports are to assess the:				
Road network changes/improvements and the other management interventions required to maintain the function, level of service and safety of major roads and the broader network.	✓	✗	Identifies the need for higher non-private vehicle transport and considers the pedestrian level of service. Identifies active transport improvements to improve pedestrian safety (Collins Street Bridge). Road network assessment concludes no road network changes/improvements are required ('essential'); however this is based on a high-level assessment using strategic model outputs. It should also be noted that impacts to emergency services and road safety are not included as per Clause 6.2.3. Management of parking and to achieve mode share is not sufficiently provided.	The assessment basis (refer Clause 6.1.2, 6.1.3) limits the understanding of the network performance, however it is identified that key road routes are forecast to be oversaturated. As such network changes and management interventions are considered to be required however the extent and effectiveness is not quantified. The travel demand management identified is considered to likely not be extensive enough to appropriately meet the potential risks. A number of strategies have not been prepared that would be required to appropriately mitigate, including: - Event transport strategy - Traffic / pedestrian management strategy - Parking management strategy - Travel demand management strategy - Bus staging/layover for the Northern Access Road interchange *Note: There is reliance on a number of uncommitted and unfunded projects, including some which are yet to have feasibility confirmed*
Clause 6.2.3 In preparing the reports, specific consideration is to be given to:				
Estimated changes in traffic volumes and characteristics over the operating life of the stadium.	⚠	⚠	Sensitivity has been done for a 2050 background volume, no variations to the mode share split has been tested Base network is already congested at major chokepoints such as Tasman Bridge and Brooker Highway, so the 2050 performance is similar to that of 2030.	Potential for further changes in mode split over the operating life of the stadium which can lead to different impacts on the road network which are not understood.
Continued access to the Port of Hobart via Evans Street and any new proposed freight access route.	✓	✓	Provided	*Note this assessment relies on other projects: there is ongoing planning of the Northern Access Road*
The heavy vehicle volume and types associated with transport to/from the Port of Hobart and any effect vehicles accessing the Tasman Highway or Brooker Highway has for congestion and the risk of crashes.	⚠	⚠	Heavy vehicle volume / types and port operations investigated No consideration for the congestion impact of risk of crashes identified with new access	New port access may result in an increase in crash frequency of crash severity

PoSS Guideline	Included	Suitability	GHD Submission Review Comments	Potential Risks
The proposed and likely timeframes associated with events at the stadium and how the transport task associated with these timeframes relates to current and forecast traffic on the road network.	✓	⚠	No consideration for weekend events Weekend demand profiles are different to weekdays, impacts to the road network could be drastically different to what has been reported for the weekday. This is especially relevant as the report states that the weekend peak traffic along a key link (Tasman Highway) is as high as the weekday AM / PM peaks	Weekend transport task may be vastly different to the weekday evening stadium use and impacts may not be fully understood. The assessment basis (refer Clause 6.1.2, 6.1.3) limits the understanding of the network performance, however it is identified that key road routes are forecast to be oversaturated. The suitability of the performance of the event mode largely hinges on the statement that the PM + Event mode is no worse than the AM peak base case.
The traffic characteristics and specific events that currently, or are forecast to, lead to low level of service on the road network and how this relates to the transport tasks scenarios or traffic related events during use of the stadium.	⚠	⚠	Reporting only considers the 2030 base case as the only other “non-stadium” event 2030 base case performance is already exceeding capacity of key routes into the CBD even without the use of the stadium The pedestrian demand modelling only considers the egress from the event, no consideration for the background pedestrian demand on the network.	Strategic modelling is limited in the detail in can provide in related to delays anticipated and as such understanding not provided for the level of performance. The level of performance may not be acceptable to CoH. It should also be noted that the 2030 base case performance may not be acceptable by the CoH Background pedestrian demand will further contribute to chokepoints identified in the active transport network.
The potential for and effects of traffic congestion resulting from use of the stadium on the provision of emergency services in Hobart area.	✗	✗	No consideration for potential impact of congestion on the provision of emergency services	Significant delays to emergency service access in the Hobart area may occur because of the stadium
The history of vehicle crashes in the locality and the need to avoid and otherwise minimise the number and severity of crashes, where possible.	✗	✗	Vehicle crash review not provided as part of Transport Study Report	The new stadium may worsen an existing blackspot and worsen the road safety of the Hobart transport network.
Clause 6.2.4 The reports are to provide plans, maps and graphs that show:				
The function and characteristics of the land transport network both generally and during periods of low level of service, and how these characteristics change under a range of transport scenarios or traffic related risks associated with the stadium.	⚠	⚠	The assessment demonstrates high level impacts to the road network under stadium event modes The modelling that has been undertaken is strategic in nature which only provides a high-level picture of the impacts to the road network	Strategic modelling is limited in the detail in can provide in related to delays anticipated and as such understanding not provided for the level of performance. The level of performance may not be acceptable to CoH.

PoSS Guideline	Included	Suitability	GHD Submission Review Comments	Potential Risks
			Strategic models are unable to capture the likely traffic interactions between vehicle and pedestrians under an event mode Resilience of the road network is also unable to be assessed during periods of low level of service	
The characteristics of the land transport freight task and proposed network associated with the Port of Hobart and how these changes affect the broader network.	⚠	⚠	Characteristics of land transport freight task considered. No discussion on the impact and how it will affect the broader network.	Impacts to the broader network because of the Port of Hobart not fully understood.
The land transport task and characteristics associated with proposed mass transit services and how this may affect the broader transport network.	⚠	⚠	Maps and plans are broadly included across ferry, existing bus network, future proposed rapid bus and ferry, demonstrating the future networks. High-level concept event bus routes have been developed.	Discussion is included however the assessment does not quantify the task relating to mass transit services. In particular this does not resolve: – If there is sufficient bus fleet to meet demand – If there are sufficient services proposed to meet demand – If there is sufficient availability of drivers to meet demand. – If park 'n' ride has appropriate capacity to service the routes and provide adequate connectivity / catchment. – If business-as-usual (BAU) services and infrastructure (passenger queuing space, bus bays) at the Hobart City Bus Interchange can accommodate additional event demand. – Consideration to if the Rapid Bus network will be implemented prior to the first event and the impacts if this does not occur or requirements for other interventions such as event buses and road network priority
The location and type of proposed road network change/improvement and management interventions.	✓	⚠	Report considers supporting and enabling projects; however, no map is provided	The assessment basis (refer Clause 6.1.2, 6.1.3) limits the understanding of the network performance, however it is identified that key road routes are forecast to be oversaturated, meaning network access will not be easy, reliable or convenient. It is noted that the performance of the transport network exceeds the capacity even with the proposed interventions If the interventions aren't implemented, the network performance could be worse than what is reported. There is reliance on a number of uncommitted and unfunded projects, including some which are yet to have feasibility confirmed. The assessment does not quantify or evidence the mode share target to be achieved through the interventions noted as 'essential'.

PoSS Guideline	Included	Suitability	GHD Submission Review Comments	Potential Risks
6.3 Access: mass/public transport, car use and parking				
Clause 6.3.1 The reports are to discuss and provide information on issues, effects and user preferences associated with people choosing to use mass/public transport rather than cars (private cars/ride share) to travel to the stadium/locality for events. Based on this, the reports are to provide evidence-based strategies for:				
Achieving a planned mass/public transport versus car mode share.	⚠	✕	Mode split is in favour of public / mass transport (at 31% bus trips, 2% ferry trips, 2% coach/charter bus trips) 30% drive (incl. park 'n' ride, pick up / drop off). Future stretch target of 70% (active and public transport) Report identifies that rapid bus is the backbone for ingress/egress events but also states that it is supplementary during ingress/egress (assuming that this means supplementary to the existing bus network). It also does not include the rapid bus as 'essential'. Event buses are also assumed to use associated transit lanes / bus priority for some sections of their route. Report acknowledges that the proposed Rapid Bus is in the planning phase and that Stage 1 is assumed to be in place. The staging of Rapid Bus is unclear in the document (noting that this information is captured in *Keeping Hobart Moving*). It is noted that there are uncertainties and assumptions associated with Rapid Bus given it is in the planning phase.	The report does not provide sufficient evidence that the planned mode share can be met. There is not assessment of the travel demand management provided however it is considered that if only the interventions identified in the report as 'essential' are provided that this is likely insufficient. Management of parking is not covered to appropriate detail to provide confidence in mode share being achieved. *Note: The achievement of mode share would rely on a number of unfunded projects, including the rapid bus network.* *As identified in Clause 6.2.4 the following are not resolved through the assessment:* – If there is sufficient bus fleet to meet demand – If there are sufficient services proposed to meet demand – If there is sufficient availability of drivers to meet demand. – If park 'n' ride has appropriate capacity to service the routes and provide adequate connectivity / catchment. – If business-as-usual (BAU) services and infrastructure (passenger queuing space, bus bays) at the Hobart City Bus Interchange can accommodate additional event demand. – Consideration to if the Rapid Bus network will be implemented prior to the first event and the impacts if this does not occur or requirements for other interventions such as event buses and road network priority
Managing the provision and use of car parking in the broader area to achieve transport outcomes.	✓	⚠	Assumes 22% of trips will result in a parking trip-end Sufficient parking opportunities identified within the surrounding of the stadium between large-scale commercial car parks, off-street employee car parks or off-street private car parks. High-level discussions on managing the parking demand are provided in the parking memo	No detailed parking demand management strategy has been provided. The report identifies there is ample parking available within a 1.2km catchment to the stadium. However, without a clear management strategy, private car use may become more preferred than the target mode share. The report does not provide sufficient evidence that the planned mode share can be met. There is not assessment of the travel demand management provided however it is considered that if only the interventions identified in the report as 'essential' are provided that this is likely insufficient.

PoSS Guideline	Included	Suitability	GHD Submission Review Comments	Potential Risks
			Parking capacity is identified as not being a concern for the study area, however no discussions on how to implement a parking strategy to reduce the private car mode split.	
Clause 6.3.2 The reports are to provide an assessment of the issues and options associated with:				
People accessing the stadium/locality and outline.	✓	✗	High-level cycle access, walk access is covered. Infrastructure to support this has been recommended.	As described relevant to the specific sub-clauses below the assessment does not quantify or evidence that issues and options associated with people accessing the stadium / locality are resolved. *Note: The safety, efficiency of the network relies on a number of unfunded projects, including reconfiguration of Hunter Street car park, footpath expansions.*
The maximum extent, location and design of mass/public transport services and infrastructure (including park and ride) required to achieve planned usage levels with a high degree of confidence.	✓	✗	Identifies the role of mass/public transport, assuming 33% of mode share across local, rapid and event buses, and ferries. No analysis to determine if existing/proposed event patronage uplift can be accommodated on existing/proposed services. No analysis of park 'n' ride supply with respect to the forecast demand of 7,729 passengers using Event Buses. Report notes new park 'n' ride infrastructure at key locations but does not elaborate on this, requires clarification. No analysis of the Bus Plaza to determine if sufficient bus capacity is provisioned. No bus staging area identified.	The report does not provide sufficient evidence that the planned mode share can be met. Without the analysis undertaken there is not confirmation that there is sufficient bus fleet, services proposed and/or availability of drivers to meet demand. Park 'n' ride supply is in shortfall to accommodate the forecast Event Bus demand. Temporary park 'n' ride locations could be identified to further support the mode share or as contingency should additional supply be needed. There is no analysis provided to identify the required demand for the Bus plaza, and therefore it is not clear if it can meet to meet forecast demand.
Strategies to achieve the majority of people accessing the stadium/locality by mass/public transport services.	✓	⚠	Travel demand management (TDM) strategies regarding mass/public transport and parking have been identified, however at this level of planning, do not represent a comprehensive TDM strategy nor mitigate the potential risks.	There is not sufficient network understanding in the report to comment on the appropriateness of the high-level travel demand management indicated, however there is significant risk that the strategies are insufficient. The assessment basis (refer Clause 6.1.2) limits the understanding of the network performance, however it is identified that key road routes are forecast to be oversaturated. Table 8.2 of the report notes a number of interventions as 'essential', it is not evidenced that these interventions alone would appropriately achieve the desired access or mode share.

PoSS Guideline	Included	Suitability	GHD Submission Review Comments	Potential Risks
				Note: The safety, efficiency of the network relies on a number of unfunded projects, including bus rapid transit corridor, pedestrian and cycling routes.
Strategies to manage the capacity and use of metered, multistorey, off-street and on-street car parking and how this will be managed around events.	⚠	✕	Some recommendations on how to manage various car parking demand has been identified, however no high-level parking strategy has been identified It is assumed that there will be ample capacity available throughout the CBD, issues related to oversupply have not been considered. A strategy will be needed to promote the target mode share split, otherwise private car usage may become the more attractive option if parking is too accessible.	Parking strategies have not been identified. Based on the information in the report insufficient strategies to manage parking both operationally and in terms of oversupply are provided. No detailed parking demand management strategy has been provided. The report identifies there is ample parking available within a 1.2km catchment to the stadium. However, without a clear management strategy, private car use may become more preferred than the target mode share.
Strategies for the provision of drop off/pick up areas generally, and arrangements and infrastructure for people with specific access needs.	✓	⚠	Drop off / pick up arrangements have been identified for some transport modes such as event bus and coaches, it is noted this does not yet cover detail of which services would access these facilities. Disability group access has been identified via the event bus plaza A kerbside taxi zone is proposed for Evans Street outside the stadium No consideration for private vehicle drop-off and pick up (under event operations)	Kerbside taxi zone is proposed for Evans Street which may create issues with this provision being too close to the stadium and as such potentially impacting mode share target, pedestrian safety and traffic flow.
Where the proposed use includes the potential for events to be held during or overlapping with peak weekday/weekend travel patterns, the options and strategies are to assess this period as a base scenario.	⚠	⚠	Events at Queens Domain are identified to potentially coincide with stadium events, but strategies are not investigated in detail. Domain events may have a higher private car mode share than stadium events. The strategic models assess an overlap of the PM peak period and the event transport task, with different mode share targets (40% and 60% PV) No modelling for other scenarios such as weekend travel patterns have been undertaken.	Different distributions may lead to different outcomes, other scenarios to be investigated should be considered in order to appropriately cover the likely operating conditions. The suitability of the performance of the event mode largely hinges on the statement that the PM + Event mode is no worse than the AM peak base case. The report has considered the event case as the “options” scenario, and not as a “base” scenario The assessment has not considered the potential for non-stadium events that overlap to have much higher share of private vehicles There may be other variations or scenarios which may result in different types of impacts to the local road network

PoSS Guideline	Included	Suitability	GHD Submission Review Comments	Potential Risks
Clause 6.3.3 In preparing the reports, specific consideration is to be given to:				
The alignment of public/mass transport and parking strategies with the information and outcomes of related travel demand management and transport assessment processes.	⚠	✗	Identifies a list of strategies and recommendations typically considered for managing demand Strategies for the management of cycle access included Travel demand management (TDM) strategies regarding mass/public transport and parking have been identified, however at this level of planning, do not represent a comprehensive TDM strategy. Assessment/stakeholder engagement to inform feasibility of some strategies is unclear	The assessment does not demonstrate alignment of or interaction between the transport assessments and modelling, travel demand management strategy (not provided in detail), car parking strategies (not provided) and public/mass transport strategies. Parking strategies have not been identified. Based on the information in the report insufficient strategies to manage parking are provided. The report identifies there is ample parking available within a 1.2km catchment to the stadium. However, without a clear management strategy, private car use may become more preferred than the target mode share. Travel demand management outcomes not considered or assessed. There is not sufficient network understanding in the report to comment on the appropriateness of the high-level travel demand management indicated, however there is significant risk that the strategies are insufficient. There is no consideration to risks if proposed projects not in place, i.e. should rapid bus not be in place by stadium opening, consideration is required to if local and event buses accommodate the shift in demand. This includes infrastructure (bus stop capacity, layovers, bus fleet) to accommodate the additional services.
The need to ensure plans and redesign for mass/public transport fit with the need to provide pedestrians with safe, amenable, convenient pathways and platforms.	✓	⚠	Current planning assumes existing/proposed public/mass transit routes remain upon existing routes that traverse past the stadium (i.e. Davey Street). Route diversions may reduce delays for bus passengers and improve safety for pedestrians.	The plan requires the event buses, in particular those heading south, are required to cross a key pedestrian route. As such there is conflict between mass/public transport and pedestrians, causing delays for transit services and safety risk for pedestrians.
The capacity of the existing mass/public transport system.	⚠	⚠	Identifies available bus routes, but does not identify capacity i.e. seats available, available capacity	Without the analysis undertaken there is not confirmation that there is sufficient bus fleet and/or availability of drivers to meet demand.
The capacity for plans and strategies for mass/public transport movement to be altered or extended based on experience and evaluation.	✓	✓	The Transport Study represents early-stage project planning. It provides a foundation for further detailed design and operational planning as the project develops.	Based on the level of planning undertaken at this stage there is not detail that quantifies or limits the plans or strategies for mass/public transport. As such this hasn't been explicitly addressed, however no additional risks to those highlighted in Clause 6.2.4 are noted.
Clause 6.3.4 The reports are provide maps, plans and graphics that describe and show:				

PoSS Guideline	Included	Suitability	GHD Submission Review Comments	Potential Risks
The home catchments, key transport routes, modes and vehicle numbers associated with people travelling to/from the stadium/locality.	✓	✓	Provided	Nil
The mass/public transport (coaches, buses, ferries) fleet, capacity and key routes during peak movement periods.	⚠	⚠	No analysis undertaken to determine mass/public transport fleet requirements. With exception of the Event Bus routes, the report makes no mention of mass/public transport routes during events. Route diversions may be necessary to avoid high pedestrian activity zones or – particularly close to event start and egress periods. This is not documented.	Without the analysis undertaken there is not confirmation that there is sufficient bus fleet and/or availability of drivers to meet demand. Without considerations to route diversions it is not understood where mass/public transport routes are compromised by traffic congestion and/or high pedestrian conflicts.
The potential and planned capacity for car parking (metered, multi-storey, off-street and onstreet) to be used around event periods within a 30-minute walking distance of the stadium.	✓	✓	Provided	No detailed parking demand management strategy has been provided. The report identifies there is ample parking available within a 1.2km catchment to the stadium. However, without a clear management strategy, private car use may become more preferred than the target mode share. There is discussion that the car parking capacity likely exceeds demand and this appears to be an appropriate assessment. Further details on operationalising this would need to occur during more detailed planning.
The detailed design of: Mass/public transport infrastructure to be used during peak periods; and Infrastructure/arrangements for general drop off/pick up locations and for people with specific access needs.	✓	⚠	The bus plaza has been designed upon a concave curve, meaning rear sight visibility of approaching vehicles is compromised. No on-plan definition of transit operations and passenger queuing capacity/infrastructure is provided. No weather protection is proposed at the bus plaza. Queens Domain was identified of bus staging (layover) however, no operational considerations provided– this is particularly needed for crowd egress mode.	Risk of rear-end collisions due to poor rear sight visibility of approaching vehicles. No spatial identification of passenger queuing storage – risk of space provision being insufficient. Lack of weather protection may discourage public transport usage during adverse weather. On egress mode, buses will need to queue en-masse to ensure swift arrival of empty buses after full buses depart. Consideration to access management of the bus plaza and which services will use this facility has not been identified.
6.4 Pedestrian / cycling movement				
Clause 6.4.1 The reports are to:				

PoSS Guideline	Included	Suitability	GHD Submission Review Comments	Potential Risks
Discuss the characteristics of the use of the stadium and associated pedestrian, cycling and other non-motorised movement.	✓	✓	Precinct pedestrian modelling has been undertaken (separate to stadium modelling that informs stadium design). Mode share discussed with 25% to walking, cycling and micromobility. Cycle infrastructure that would facilitate improved connections to the stadium are recommended. Dismount is required when entering the stadium precinct during events to avoid conflicts between people walking and riding. Bicycle parking located at select locations (eastern end of Evans Street, near the landing of the proposed Collins Street bridge on the eastern side, on Hunter Street). Monitored temporary parking measures are also discussed (at the Cenotaph) Report notes that if required, large numbers of bicycle parking would be facilitated by temporary parking for events of 23,000 and above.	Characteristics are discussed. However, note that the assessment assumes that there will be a safe, connected network in place. The assessment could consider a prioritisation of cycle routes (overlayed with population/demand) that would be most beneficial to facilitate cycling. This may be beneficial for Council to understand.
Discuss and present information on the origins/destinations, paths, volumes and networks associated with pedestrian and cycle movement.	✓	✓	Pedestrian modelling undertaken. Key recommendations are provided based on the scenario (with and without infrastructure such as Collins Street Bridge) Walking origins, based on the 2021 Census data, undertaken – justified based on memberships sales. For note, the report identifies opportunity to identify if any postcodes have seen an increase in memberships. Noted that a fair amount of demand is assigned to Collins Street Bridge which is subject to feasibility assessments and funding (approximately 30% based on exit points).	A discussion on different distributions is included however it should be noted that these may lead to different results. The assessment does not consider strategies to mitigate demands under scenarios where Collins Street Bridge is not constructed or not as highly used along with e.g. temporary closure of Davey Street.
The associated planning, infrastructure provision and management issues are to be discussed, with consideration given to how these issues change	✓	⚠	Day-to-day operations / modes shares are discussed Modelling has considered scenarios with increased private vehicle mode share that is used as a proxy for bad weather.	The assessment basis (refer Clause 6.1.2, 6.1.3) limits the understanding of the network performance, however it is identified that key road routes are forecast to be oversaturated.

PoSS Guideline	Included	Suitability	GHD Submission Review Comments	Potential Risks
depending on factors such as time of day, prevailing weather conditions and the age and composition of users.			Walk, bicycle, public transport, car through and within the precinct, during an event and during non-events, is identified along with challenges and opportunities. Level of cycling confidence is discussed, along with an assessment that utilises catchment mapping census data.	
Clause 6.4.2 The reports are to assess:				
The physical connections and improvements and management arrangements with surrounding land and road owners, required for pedestrians and cyclists to have safe, visible, amenable, direct and convenient routes when moving to and from the stadium and surrounding area.	✓	⚠	Connections and improvements for cyclists and pedestrians, are assessed and documented. The report flags that the urban realm outside of the footprint will need to be "significantly uplifted" to accommodate the movements. The report flags that ownership details should be undertaken to support and enable further planning. Pedestrian modelling represents a 15-minute egress scenario which is considered conservative. Davey Street will see high volumes of pedestrian movement, alongside live traffic. There is a line in the conclusion of the Appendix G that notes the temporary closure of Davey Street during peak pedestrian movements. At this stage of the project - this hasn't been modelled or considered further in the body of the report. (noting that Davey Street is a key road link). An acceptable pedestrian Level of Service (LoS) on Davey Street is highly reliant on the proposed and unfunded Collins Street Bridge (there are still sections of LoS E and F with the bridge)	The assessment assumes that there will be a safe, connected network in place and does not identify any additional projects to be required as essential. Noting that the modelling provides a conservative assessment of egress occurring within 15-minutes, see below potential risks that mitigation is not provided for: – Safety risks associated with walking alongside traffic on Davey Street and the crossing of Davey Street during post-event egress. – Pedestrian modelling suggests queuing at the signalised crossing on the eastern side of Davey Street at the Davey Street / Campbell Street intersection. There is a risk that that pedestrians will try to cross upstream of the crossing point, navigating between cars. Mitigation measures to be explored (such as treatment on Elizabeth Street). – With high pedestrian egress, potential that event buses, other event car parking may be locked in until congestion clears. *Note: The safety, efficiency of the network relies on a number of unfunded projects, including pedestrian and cycling routes.*
The pedestrian network and standing/queuing area requirements associated with peak use of mass transport services.	✓	⚠	Queuing space is incorporated into pedestrian modelling. Some temporary measures to facilitate mass movements of people walking are identified. Unclear if pedestrian volumes at the Hobart Bus City Interchange, including those	It is not evidenced that there are sufficient standing/ queuing area requirements at all public transport required locations given the level of assessment undertaken. Modelling undertaken in isolation does not provide an appropriate understanding of how the pedestrians movement and arterial traffic flow interact, in particular if there will be additional queuing impacts due to changes made to accommodate other modes.

PoSS Guideline	Included	Suitability	GHD Submission Review Comments	Potential Risks
			waiting and those passing through, can be safely accommodated.	Pedestrian modelling suggests queuing at the signalised crossing on the eastern side of Davey Street at the Davey Street / Campbell Street intersection. There is a risk that that pedestrians will try to cross upstream of the crossing point, navigating between cars. The assessment would benefit from testing the resilience of the network such as signal adjustments to facilitate pedestrian loads.
A range of pedestrian movement scenarios including the peak movement of people to initial destinations in the Salamanca and central city areas.	✓	✓	Movement toward Salamanca is considered – the link along Franklin Wharf, just past Elizabeth Street Pier is included in pedestrian modelling. Wharf and Salamanca, and the CBD is identified as an attractor/destination	Nil
The level of security of proposed bicycle parking infrastructure and number of bicycle bays to be accommodated.	✓	⚠	120 permanent bike hoops are recommended throughout the precinct. This is proposed to be supplemented by secure temporary bike parking, up to around 400 bicycles. Examples that were noted in the report include the use of “temporary fencing, crowd control barriers or other systems”. Monitoring of demand is recommended. End of trip facilities are proposed to be located within the stadium precinct.	Unclear where around the Cenotaph that temporary secure parking for up to 400 bicycles is proposed to be located. Consideration if the temporary infrastructure provided on grassed land will appropriately meet user needs and achieve target mode share.
Pedestrian/cycle conflict and crash risks and interventions.	✓	✓	Strategies to avoid pedestrian / cycle conflict have been recommended.	Nil
Clause 6.4.3 In preparing the reports, specific consideration is to be given to:				
Maintaining the function and traffic flow of major arterial roads in the area during periods of high pedestrian use.	⚠	⚠	Modelling only considers the independent impacts of the transport modes. E.g. effects of vehicle trips on the road network, and the effects of pedestrian trips on the active transport network No consideration on the likely interactions between the two transport modes have been provided (limitation in the form of modelling chosen for this project). Strategic modelling doesn’t quantify the predicted traffic delays or level of service.	Modelling undertaken in isolation does not provide an appropriate understanding of how the pedestrians movement and arterial traffic flow interact. Strategic modelling does not provide enough detail or confidence in the level of performance expected to be achieved. The level of performance may not be acceptable to CoH

PoSS Guideline	Included	Suitability	GHD Submission Review Comments	Potential Risks
The need for plans and management of pedestrian networks to where possible avoid and otherwise minimise the likelihood of near misses or crashes between vehicles and pedestrians/cyclists, and to minimise pedestrian/cyclist conflicts.	⚠	⚠	The report identifies areas of extreme crowding following the egress from an event	Modelling undertaken in isolation does not provide an appropriate understanding of how the pedestrians movement and arterial traffic flow interact. It is expected that more detailed assessment will inform event management plans and operational plans which will indicate if risks are appropriately managed. Risk to active transport users may not be fully understood and subsequently mitigated
Any effect periods of high pedestrian use have on operation of wharf and port activities, tourist activities, parking and cycle paths in and around Sullivans Cove.	✓	✓	Some impacts to the wharf and port activities identified Safety issues related to high pedestrian movements identified namely vehicle restrictions, vehicles held until peak crowd volumes reduce. Dock swing bridges (Victoria Dock bridge, Constitution Dock bridge) proposed to remain in fixed position for pedestrian safety. Vessels proposed to seek alternative docking area A recommendation of the extension of no traffic area on Franklin Wharf, Davey Street Proposed primary access point for TasPorts vehicles is the Northern Access Road – this will enable Evans Street to be redesigned for improved streetscaping.	*Note this assessment relies on other projects: there is ongoing planning of the Northern Access Road including active transport infrastructure.*
A range of potential techniques to manage flow, volume and direction of pedestrian movement before and after events.	✓	✓	A number of techniques are identified in line with the assessment provided: Noted that 'measures to slow down egress from the stadium to be investigated.' Different routes for accessing the CBD identified/modelled. Phasing of lights noted to regulate flow	*Note: this relies on the appropriateness of the modelling assessment*
The integration of pedestrian and cycling routes within the landscape and built form proposal.	✓	⚠	Consideration is given to this integration including: Cycle routes consider the 2029 network. Dismount zones proposed around the Stadium precinct to improve safety (reduce conflicts between cyclists and pedestrians)	*Note: The safety, efficiency of the network relies on a number of unfunded projects, including pedestrian and cycling routes.*

PoSS Guideline	Included	Suitability	GHD Submission Review Comments	Potential Risks
			Identification of key paths / areas that will be required for crowd pedestrian flows. Report notes that cycling infrastructure in Hobart is limited – key projects that will improve connections have been listed.	
The potential for risky/antisocial behaviour before and after events and the effect this has on movement and safety.	✗	✗	No discussion on risky/antisocial behaviour and the impact to movement and safety within the report. Assessment is related to safe pedestrian crowd movement.	Incidences related antisocial behaviour are not fully understood. The assessment would benefit with a review of crowd management. Mass crowds, long queues and extended wait times for buses, taxis, as well as alcohol consumption can trigger anti-social behaviour.
Whether there is an opportunity to create a pedestrian route between Evans and Hunter Streets on Crown land used by the University of Tasmania.	✓	✓	A route between Evans and Hunter Streets is identified to be critical to the event transport strategy. Opportunity to create a pedestrian connection through the University of Tasmania building has been identified, noting this is associated with the UTAS Southern Campus Transformation project/masterplan. The assessment identifies the opportunity to convert the University of Tasmania car park at the eastern end of Evans Street, to alternate uses to improve the urban realm and better integrate with the stadium (Pocket Park).	Confirmation of these opportunities is needed (also noted in Chapter 8.2).
Physical restrictions and pinch/congestion points such as pedestrians waiting to cross at controlled intersections and the shared pedestrian and cycleway on Davey Street/Tasman Highway.	✓	⚠	The modelling has been undertaken in isolation of required operational changes and other modes which may mean some issues are not identified.	Pedestrian modelling suggests queuing at the signalised crossing on the eastern side of Davey Street at the Davey Street / Campbell Street intersection. There is a risk that that pedestrians will try to cross upstream of the crossing point, navigating between cars. Without an understanding of the impacts of changes required for other modes the understanding of the pedestrian risk locations is limited.
Clause 6.4.4 Without limiting the content of the reports, the reports are to provide plans, maps and graphs that show:				
Peak pedestrian movement networks, origins/destinations, preferred desire lines, volumes, level of service/comfort and congestion/risk locations.	✓	⚠	The pedestrian modelling demonstrates several scenarios for different events and with/without the Collins Street pedestrian bridge. These are visually mapped, identifying Level of Service for all links. The modelling has been undertaken without the consideration of traffic management	Without an understanding of the impacts of changes required for other modes the understanding of the pedestrian risk locations is limited. The pedestrian demand modelling only considers the egress from the event, no consideration for the background pedestrian demand on the network. Background pedestrian demand will further contribute to chokepoints identified in the active transport network.

PoSS Guideline	Included	Suitability	GHD Submission Review Comments	Potential Risks
			provisions which makes the result more conservative. The modelling has been undertaken in isolation of required operational changes and other modes which may mean some issues are not identified.	
Linkages between existing and proposed infrastructure.	✓	✓	Provided	Nil
Proposed infrastructure improvements and management interventions.	✓	✓	Provided	Nil
Volumes and timeframes associated with peak pedestrian activity in the area.	⚠	⚠	Only pedestrian level of service (LoS) has been provided on a map. Reporting assumes that event egress occurs over a 15minute period. No pedestrian volumes identified on a plan, map or graph	Pedestrian activity is limited to event egress volumes and does not consider the background usage on the network. Potential for additional chokepoints within the network. Without this analysis understanding of required pedestrian works is limited.

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