

18 May 2023



Mr Marcus Ray  
Deputy Secretary, Planning  
Department of Planning and Environment  
4 Parramatta Square  
12 Darcy Street  
Parramatta NSW 2150

Via email:

**Draft State Environmental Planning Policy (Precincts – Western Parkland City) Amendment (Penrith Lakes Scheme 2023)**

I refer to your letter dated 10 May 2023 regarding the third certificate for the urban south precinct and the phase 1 (Southbank) rezoning request.

As you are aware, the Department of Planning and Environment (DPE) has until 3 July 2023 to provide Penrith Lakes Development Corporation Limited (PLDC) with an urban instrument under clause 10.6 of the 1987 Deed. We do not consider the draft SEPP provided to be an urban instrument for the purposes of clause 10.6 of the 1987 Deed.

We encourage DPE to provide PLDC with an urban instrument consistent with our rezoning request lodged with your Department and the Minister for Planning on 27 May 2022. The submission included our Urban Design Framework and supporting technical studies intended to facilitate the rezoning of the Southbank under the State Environmental Planning Policy (Precincts—Western Parkland City) 2021 (Western Parkland City SEPP). The zones the site is seeking to be rezoned to include:

- Employment
- Tourism, and
- Parkland

consistent with the Land Zoning Map for the site in Schedule 2 of the submission subject to any conditions precedent DPE reasonably consider to be required in respect of evacuation and flooding.

The draft SEPP also includes requirements for development that do not accord with other planning instruments for land in the Hawkesbury Nepean floodplain. The effect of them will be that even with the limited uses provided in the draft SEPP they are unlikely to ever be able to be realised.

We look forward to working with DPE on activating this exciting opportunity for the Western Parkland City.

Yours sincerely,

A handwritten signature in black ink, appearing to read "J. Vozzo".

Jacqueline Vozzo  
Chief Executive Officer  
Penrith Lakes Development Corporation Limited

Penrith Lakes Development Corporation Ltd

Old Castlereagh Road,  
Castlereagh NSW 2749

PO Box 457,  
Cranebrook NSW 2749

T: 02 4729 0044  
F: 02 4730 1462

E: [info@pldc.com.au](mailto:info@pldc.com.au)  
W: [www.penrithlakes.com.au](http://www.penrithlakes.com.au)

ACN 000 133 951  
ABN 46 000 133 951



Our reference: InfoStore  
Contact: Kylie Powell  
Telephone:

24 May 2023

Marcus Ray  
Deputy Secretary, Planning  
Department of Planning and Environment  
4 Parramatta Square, 12 Darcy Street  
PARRAMATTA NSW 2150

Sent by email:

Dear Mr Ray

**Draft State Environmental Planning Policy (Precincts - Western Parkland City) Amendment (Penrith Lakes Scheme) 2023.**

I refer to your letter dated 10 May 2023 regarding amendments to State Environmental Planning Policy (Precincts - Western Parkland City) (SEPP) in relation to land within the Penrith Lakes Scheme considering the recent report of the Flood Advisory Panel and the present challenges in relation to development at Penrith Lakes. Council provided valuable input and advice, however we have not had access to this recent report ahead of the SEPP amendment being provided for comment.

The Draft SEPP provides for very few land uses and very small sites for development which does not fully explore the opportunities for development and public access which is paramount. The site is a significant opportunity for Penrith and Western Sydney more broadly that is not being facilitated

The following comments are provided for your consideration:

***Vision and Masterplan***

The Penrith Lakes site presents a significant opportunity for the community and our City. A fundamental concern remains the absence of strategic master planning for the site, and more critically the

Penrith City Council  
PO Box 60, Penrith  
NSW 2751 Australia  
T 4732 7777  
F 4732 7958  
penrith.city



Our reference: InfoStore  
Contact: Kylie Powell  
Telephone:

development of a parkland that is accessible to the public, which has been consistently promised to the Penrith community.

Our community's expectation over the past 20 years has been that Penrith Lakes will create a diverse open space parkland, including waterway facilities around the lakes, with pedestrian and cycle links from Penrith. There are accessible foreshore areas and contact water available now, ready for our community to enjoy. How will this be facilitated and when?

In 2022, DPE requested two Councillor representatives to be nominated for an Executive Committee for the vision and master plan process for Penrith Lakes. At the Ordinary Meeting of 31 October 2022, Council nominated these Councillor Representatives to sit on the Executive Committee. This Committee has not yet met.

In 2023, the NSW Government announced WestInvest funding of \$15 million to collaborate with key stakeholders to progress the development of the Penrith Lakes precinct as a key tourism, recreation and sporting destination. The Western Parkland City Authority was indicated as the lead agency to carry out this work. We would like an update on this.

### *Flooding and Flood Evacuation*

It has been a well-known fact for some time that the Penrith Lakes Scheme is located within the Hawkesbury Nepean floodplain. And undoubtedly mitigating the impacts of flood and safety of people (through evacuation) is paramount. The current planning for the broader Hawkesbury offers no true solutions to the conundrum we face in the floodplain management and development space.

The Draft SEPP appears to highlight that flood mitigation and evacuation is the limiting factor to future development of these lands. As per our submission to the flood panel, Council continues to advocate:

- The release of both the INSW Hawkesbury Nepean flood study and the FEM2 evacuation modelling

Penrith City Council  
PO Box 60, Penrith  
NSW 2751 Australia  
T 4732 7777  
F 4732 7958  
penrith.city



Our reference: InfoStore  
Contact: Kylie Powell  
Telephone:

- Assumptions within the FEM2 model need to be discussed transparently and revisited to ensure that respond to contemporary information
- The distinction between residential development and non-residential development needs to be understood and reflected in the mitigation planning and evacuation modelling i.e. non-residential will not be operational – given associated catchment conditions, there is a significant element of self-policing
- The site constraints and existing (SES) flood evacuation procedures are well understood, however it is incumbent upon this work to be solutions focused, not only for the Penrith Lakes Scheme, but also for the Penrith City Centre.
- The Penrith City Centre has been subject to a development "cap" on residential development now for several years with no path forward to resolution.

Council met with the panel and provided detailed information and advice, however we have not had the benefit of reviewing the Flood Panel report, therefore Council is unsure if our submission to the flood panel was considered.

### ***State Environmental Planning Policy drafting matters***

The following is further technical feedback on the drafting of the amendment:

- The Amendment introduces Key Sites, Additional Permitted Uses and Special Area with overlapping purposes and is confusing. One additional permitted use is in the "*Miscellaneous Provisions*" while the other is in "*Part 2 of Schedule 4*".
  - What is the purpose of clause 5.38D "*Recreation facilities (outdoor) and restaurants or cafes permitted at 278 Old Castlereagh Road, Castlereagh*" when this could be included in the "*Schedule 1 Additional permitted uses*". In effect this clause is to allow for an additional permitted use with some additional requirements to prepare a Development Control Plan. The

Penrith City Council  
PO Box 60, Penrith  
NSW 2751 Australia  
T 4732 7777  
F 4732 7958  
penrith.city



Our reference: InfoStore  
Contact: Kylie Powell  
Telephone:

community would look at Schedule 1 to determine if there was an additional permitted use rather than *"Miscellaneous provisions"*.

- *Why is additional permitted use (certain land at Old Castlereagh Road) being included as Part 2 of Schedule 4. The community would look for additional permitted uses as part of Schedule 1.*
- The Special Areas Map shows *"Area 1"* which is also called foreshore is confusing. The *"Additional Permitted Use Map"* shows Area 1 and refers to Schedule 1. There is no reference in the amending instrument to *"Schedule 1"*. We expect that all Additional Permitted Uses are in Schedule 1 and included in one map such as the *"Additional Permitted Use Map"*.
- What is the purpose of *"Key Sites Map"* other than identifying *"Area 2"* and *"Area 3"*. These should have been identified on the *"Additional Permitted Use Map"*. There is no other clause in the instrument that introduces or refers to the *"Key Sites"* and any objectives relating to them.
- What is the purpose of *"Special Areas Map"*. It only identifies *"Area 1"* which is also called Foreshore. The only purpose is for reference to it in clause 5.38C. This area is already identified in the *"Additional Permitted use Map"*.
- Clause 5.13 refers to development on unzoned land. Some of the additional permitted uses are on unzoned land. If the purpose is for that use to be permitted, then the land needs to be zoned accordingly.
- Clause 5.38 is ambiguous and drafted in such a manner that it essentially makes it impossible to assess/determine development applications, thus precluding development within the Penrith Lakes Scheme
- Whilst drafted in line with the standard instrument, it seeks to introduce a higher threshold (*"test"*) which is near on impossible to satisfy. For example:

Penrith City Council  
PO Box 60, Penrith  
NSW 2751 Australia  
T 4732 7777  
F 4732 7958  
penrith.city



Our reference: InfoStore  
Contact: Kylie Powell  
Telephone:

- CI 5.38 (1)(e) - introduces the requirement to protect the operational capacity of emergency response and critical infrastructure.
  - CI 5.38 (2) - introduces the threshold of Probable Maximum Flood.
  - CI 5.38 (2)(f) - not likely to result in unsustainable social and economic costs to the community.
- The Draft Clause would appear to be establishing the Probable Maximum Flood (PMF) as the Flood Planning Level (FPL) for the Penrith Lakes Scheme.
  - The threshold tests (in particular the three noted above) are impossible to satisfy.

Given the timeframe to respond we would like further opportunity to comment as the drafting of the amendment is refined. We would also like immediate engagement on the Vision and Masterplan for the site so the parkland can be realised for our community.

If you have any questions about this matter, please contact me on

Yours sincerely

Kylie Powell  
Director City Futures

Penrith City Council  
PO Box 60, Penrith  
NSW 2751 Australia  
T 4732 7777  
F 4732 7958  
penrith.city



23 September 2021

TfNSW reference: SYD14/01487/12

Mr Brett Whitworth  
Deputy Secretary  
Greater Sydney Place and Infrastructure  
Department of Planning, Industry and Environment (DPIE)  
Locked Bag 5022  
Parramatta NSW 2124

Attention: Derryn John

Dear Mr Whitworth

**PUBLIC EXHIBITION – 2021 PROPOSAL TO AMEND THE STATE ENVIRONMENTAL  
PLANNING POLICY (PENRITH LAKES SCHEME) 1989**

Transport for NSW (TfNSW) appreciates the opportunity to comment on the proposed amendment to the *State Environmental Planning Policy (Penrith Lakes Scheme) 1989* (the SEPP), currently on public exhibition on DPIE's Planning Portal.

TfNSW has reviewed the Consultation Paper (August 2021) outlining the proposed SEPP amendment which aims to:

- adopt new mapping to allow access through the NSW Planning Portal and align zoning boundaries with current cadastre boundaries
- include new provisions for protecting solar access and key vistas and view corridors
- ensure flood evacuation will be considered for all land use proposals within the Penrith Lakes Scheme
- amend the satisfactory arrangements clause for designated State public infrastructure
- permit new land uses at specific locations across the site, including:
  - a film production precinct and other ancillary uses;
  - a heliport;
  - a private golf course and associated facilities;
  - tourism and commercial uses of a local heritage item; and the
  - relocation of the Penrith Lakes Development Corporation offices.

TfNSW raises significant concerns that a number of incremental increases to the development permissible on the site under the SEPP have previously been made, and are again proposed to be made, without the completion of a cumulative transport impact assessment (TIA).

A cumulative TIA is required in order to identify:

- a) the sustainable total level and mix of development that can be accommodated on the site, noting the significant constraints on Castlereagh Road and nearby intersections; and
- b) a feasible suite of transport infrastructure, services and travel demand management measures to be provided by the developer to support access to the development site.

It is noted that the areas already zoned for intensive urban development on the site are consequential, and will potentially generate substantial traffic on the surrounding road

network. The existing permissible uses on the site, including approximately 53ha of employment land, is likely to already exceed network capacity if developed. It is unclear if the development already permissible on site can be supported noting constraints on Castlereagh Road, let alone any increase in development.

TfNSW is of the view that a cumulative TIA is a fundamental requirement to understand the transport impacts and infrastructure needs of the current permissible uses on site *before* any further development potential is considered. A sustainable cap on development based on the cumulative assessment and feasible road transport upgrades should be identified, costed (including any land component requirements), and committed by the developer to support access to the development and to mitigate the development traffic impacts on regional transport infrastructure. TfNSW raised this in its previous submission on the 2020 amendment to the SEPP dated 27 May 2020 (see **Attachment A**), which sought to expand the existing employment lands.

A comprehensive TIA based on the proposed amendments, accompanied by an infrastructure schedule and legally binding funding mechanism, needs to be agreed and in place *prior* to amendments to the SEPP to allow further traffic generating uses on the site. As upgrades on Castlereagh Road (both midblock *and* intersection upgrades) are likely to be required to support the existing uses permissible on the site, plus the proposed additional permitted uses, likely **requiring third party land acquisition, TfNSW has significant doubts that the developer will be able to provide the necessary road upgrades to support access to the development.**

Postponing the consideration of the traffic impacts until the DA stage through the satisfactory arrangements and Development Control Plan clauses is likely to result in the SEPP permitting **an unsustainable level of development uplift on the site without understanding the traffic and transport impacts, infrastructure requirements, mitigation requirements, feasibility and funding issues.** Significant traffic generating uses are already permitted on the site without the road transport infrastructure having yet been identified and understood. This creates a false expectation of what level of development is feasible, as the already permissible yield on the site may not be achievable without potentially cost-prohibitive road upgrades.

TfNSW has no funding commitment for any upgrades to Castlereagh Road north of Museum Drive. The developer should be responsible for providing transport infrastructure to mitigate the impacts of their development.

We note that DPIE has commissioned a transport study which is currently investigating the impacts of the Penrith Lakes precinct and infrastructure requirements which has identified a number of **significant road transport constraints to development on this site.** We strongly recommend that the proposed amendments to the SEPP to permit further traffic generating uses not be finalised until the TIA is completed, a supporting infrastructure implementation plan and funding mechanism is in place, and an appropriate sustainable development cap is identified. **Further development potential should not be considered until it can be demonstrated that the existing permissible development can be supported.**

Further, the Penrith Lakes precinct is situated in the Hawkesbury-Nepean floodplain and immediately adjacent to the Nepean River, with a high flood risk with widespread extent and depth of inundation. Expanding urban development across the Hawkesbury-Nepean Valley means that flood exposure will increase in the future, and so growth will need to be carefully managed in the Valley to reduce the flood risk.

The State Emergency Service (SES) is responsible for management of flood emergencies including management of evacuation ahead of forecast flood events. Due to the speed, depth

and extent of flooding in the Hawkesbury-Nepean Valley, the SES has identified in their approved flood plan that mass self-evacuation ahead of forecast floods is the primary method of reducing flood risk to life in the valley. As flood evacuation will predominantly be by private vehicles, the capacity of the road network to cater for flood evacuation events should be carefully considered before further development being made permissible. Also, as the proposed development is adjacent to critical regional flood evacuation routes, the impact of the proposed development on the cumulative evacuation task across the Valley should be assessed to ensure that the proposal does not result in increased risk to life during a flood evacuation.

It is noted that the Consultation Paper states that “The amending SEPP provisions would be supported by a Flood Response Guideline for Penrith Lakes that is being drafted by the Department separate to this SEPP amendment”. We request that this is referred to the Hawkesbury-Nepean Flood Risk Management Directorate in Infrastructure NSW, the SES and TfNSW for review, consideration and endorsement to be considered along with the comprehensive TIA.

We look forward to working with you in the development of the transport study and infrastructure implementation plan.

Should you have any questions or further enquiries in relation to this matter, Rachel Davis would be pleased to take your call on phone or email:  
[development.sydney@transport.nsw.gov.au](mailto:development.sydney@transport.nsw.gov.au)

Yours sincerely



**Cheramie Marsden**  
**Senior Manager Strategic Land Use**  
**Land Use, Network & Place Planning, Greater Sydney Division**

22 May 2023

TfNSW Reference: SYD14/01487/26

Mr Marcus Ray  
Deputy Secretary, Planning  
Department of Planning and Environment  
Locked Bag 5022  
Parramatta NSW 2124



Attention: Catherine Van Laeren

---

**DRAFT STATE ENVIRONMENTAL PLANNING POLICY (PRECINCTS  
WESTERN PARKLAND CITY) AMENDMENT (PENRITH LAKES SCHEME) 2023**

Dear Mr Ray,

Transport for NSW (**TfNSW**) appreciates the opportunity to provide comment on the proposed amendment to the *State Environmental Planning Policy (Precincts - Western Parkland City)* (**SEPP**), Chapter 5 Penrith Lakes Scheme which was referred to TfNSW on 10 May 2023. TfNSW understands that the Department of Planning and Environment (**Department**) is seeking feedback from TfNSW regarding the proposed amendments to the *SEPP* as set out in the draft instrument and draft *SEPP* maps and notes that this includes:

- Amendments to clause 5.38 of the *SEPP*:
  - Flood planning provisions.
  - Provisions for the protection of key vistas and view corridors.
  - Insertion of a 'Satisfactory Arrangements clause' to include a requirement for the concurrence of the Planning Secretary prior to Development Consent being issued for development under this section.
  - Foreshore development provisions ('Area 1' of the Special Areas Map).
  - Site specific provisions for development permitted with consent at 278 Old Castlereagh Road; allowing for outdoor recreation facilities (water park and golf driving range) in 'Area 2' and restaurants and cafes in 'Area 3' of the Key Sites Map.
- Inclusion of additional permitted land uses (with development consent) at specific locations, including:
  - Office premises ('Area 1' on the Additional Permitted Uses Map), and
  - Heliport ('Area 2' on the Additional Permitted Uses Map).
- Other amendments of an administrative nature.

TfNSW understands that the above amendments are proposed to be implemented as a result of the post-exhibition review of the 2021 proposed amendment to the former *State Environmental Planning Policy (Penrith Lakes Scheme) 1989*. After review of the draft *SEPP* (written instrument) and draft *SEPP* maps, TfNSW provides detailed comments in **TAB A** for the Department's consideration. As the Department is aware, the existing surrounding classified and local road network is highly constrained. TfNSW wishes to work with the Department ensuring that any land use considered to be a 'traffic generating development' has the appropriate controls, amelioration measures and the level of infrastructure required in place to support existing and future transport users.

In this regard, TfNSW notes that the Department has completed the Penrith Lakes Traffic and Transport Investigation report (**GHD study**) to investigate the cumulative traffic and transport impacts of the Penrith Lakes precinct, which TfNSW assumes that this study underpins this *SEPP* amendment. Furthermore, TfNSW understands that the Department has now given instruction to GHD to use the information from the GHD study to develop Stage 2 of the Penrith Lakes Traffic and Transport Investigation, being an infrastructure schedule, staging plan and engineering cost estimates for intersections to support the cumulative traffic-generating development in the Penrith Lakes Scheme. TfNSW welcome continued engagement with the Department in the development of the Stage 2 Penrith Lakes Traffic and Transport Investigation and the opportunity to provide comment when requested to do so.

Should you have any questions or further enquiries in relation to this matter, please contact Mr. Colin Langford, Director Land Use, Network, and Place Planning via phone on or via email: [development.sydney@transport.nsw.gov.au](mailto:development.sydney@transport.nsw.gov.au).

Yours sincerely,

A handwritten signature in blue ink, appearing to read 'Trudi Mares'.

**Trudi Mares**  
Deputy Secretary  
Greater Sydney Division

---

OFFICIAL

## TAB A – Detailed TfNSW comments

- TfNSW has identified that the proposed amendments to planning provisions for Penrith Lakes are similar to the suite of amendments in the 2021 proposed amendment to the former *State Environmental Planning Policy (Penrith Lakes Scheme) 1989*, with a notable exception that the previously proposed film production precinct, golf course and proposed tourism and commercial uses of a local heritage item are no longer proposed.

While the currently proposed amendments may be considered relatively minor in nature, TfNSW reiterates comments from its submission to the 2021 amendment, dated 23 September 2021 (copy attached at **TAB B**). This raised significant concerns that several incremental increases to the development permissible on the site have previously been made, and are proposed to be made, without the completion of a cumulative transport impact assessment to identify:

- the sustainable total level and mix of development that can be accommodated on the site, noting the significant constraints on Castlereagh Road (classified road) and nearby intersections; and
- a feasible suite of transport infrastructure, services, and travel demand management measures to be provided by the developer to support access to the development site.

TfNSW notes that the Department commissioned GHD to prepare the Penrith Lakes Traffic and Transport Investigation report (**GHD study**) to investigate the cumulative traffic and transport impacts of the Penrith Lakes precinct which has now been completed (final version dated 25 May 2022). TfNSW appreciates that this initiative is to holistically investigate the traffic impacts of the already permissible development and potential future development on the site, however TfNSW has the following concerns:

- The GHD study identified several significant road constraints that are anticipated to inhibit development in the precinct. TfNSW provided detailed comments on the findings of the GHD study in a letter dated 15 March 2022 (copy at **TAB C**), which have not been addressed.
- The existing permissible uses on the site, including approximately 53ha of employment land, is likely to already exceed network capacity if developed. It is unclear if the development already permissible on site can be supported noting constraints on Castlereagh Road.

TfNSW advises the Department that there is no current funding commitment in its forward works program for upgrades to Castlereagh Road north of Museum Drive and as such, the developer should be responsible for providing transport infrastructure to ameliorate the impacts of their development to ensure an acceptable Level of Service but also the ability to deliver mass evacuation for a highly flood prone area.

- In TfNSW experience of delivering infrastructure, it is questionable whether the developer can provide the necessary transport upgrades to support access to the development along with upgrades on Castlereagh Road (both midblock and intersection upgrades) required to support the existing developable area on the site, plus the proposed additional permitted uses, which TfNSW believes would require third party land acquisition.

In this regard, any postponing of the assessment of traffic impacts until the development application (**DA**) stage through the ‘*Satisfactory Arrangements*’ and Development Control Plan (**DCP**) provisions is likely to result in the *SEPP* permitting a level of development uplift on the site without understanding the traffic and transport impacts, infrastructure requirements, feasibility and funding issues that will create issues for all stakeholders involved.

To address this, TfNSW understands that the Department has now given instruction to GHD to use the information from the GHD study to develop Stage 2 of the Penrith Lakes Traffic and Transport Investigation, being an infrastructure schedule, staging plan and engineering cost estimates for intersections to support traffic-generating development in the Penrith Lakes Scheme.

TfNSW is strongly supportive of this and is committed to working with the Department in the review and finalisation of the Stage 2 Investigation, providing transport advice and direction as required. In this regard, it would be TfNSW preference to not pursue the amendments to the *SEPP* until an infrastructure implementation plan, funding mechanism, and sustainable development cap is identified. Further development potential should not be considered until it can be demonstrated that the existing permissible development can be supported.

- TfNSW also notes that the Department commissioned WMA to determine the road network capacity surrounding the precinct during flood evacuation in consultation with the NSW State Emergency Service (**SES**). While it appears that an onsite vehicle cap to manage flood risk is being considered as a potential solution for the precinct, TfNSW raises concern regarding practicality of implementing, monitoring and enforcing such vehicle cap on daily basis for an expansive precinct with multiple access points.

Given that traffic generation is directly linked to the type and intensity of land use, there are examples where site specific clauses are inserted into planning instruments that cap the development floor space in order to reduce the traffic impacts on the surrounding road network based on empirical analysis. This measure is considered more practicable as it does not require daily monitoring and enforcement of vehicle trips to/from the site and could be further explored.

- TfNSW understands that the overall vision is for Penrith Lakes to be a signature piece of regional open space in the Western Parkland City, with a strong world-class sporting and recreational identity. Noting the significant transport and road network constraints surrounding the subject site which inhibit more intensive traffic-generating land uses being pursued on the site, we suggest that any future SEPP amendments focus on rezoning currently unzoned land to 'Environment' zone (or similar), to create more land available for publicly accessible recreation areas (where appropriate), in line with this vision.
- In relation to proposed clause 5.38, TfNSW requests the following additions (as shown in bold below):

*5.38 Flood planning*

*(1)...*

*(b) to allow development on land that is compatible with the land's flood hazard, taking into account projected changes as a result of climate change, **identified through an agreed flood modelling approach that considers the impacts of climate change on rainfall intensity, duration, and flood behaviour***

*(c) to avoid adverse or cumulative impacts on flood behaviour and the environment, **from use and development of the land***

*(d) to enable the safe occupation and efficient evacuation of people in the event of a flood **in accordance with the requirements of the Penrith Lakes Early Evacuation Guideline,***

*(e) to protect the operational capacity of emergency response facilities and critical infrastructure during flood events **in accordance with the Penrith Lakes Early Evacuation Guideline***

*(2)...*

*(c) will not significantly adversely affect the safe occupation and efficient evacuation of people or exceed the capacity of existing evacuation routes for the Hawkesbury Nepean floodplain in the event of a flood, **with consideration to existing flood evacuation routes and any other flood evacuation route that may be identified,** and*

*(d) incorporates appropriate measures to manage risk to life in the event of a flood, **incorporating all requirements as outlined in the Penrith Lakes Early Evacuation Guideline,** and*

*(3)...*

*(c) whether the design of the building incorporates measures to minimise the risk to life and ensure the safe evacuation of people in the event of a flood **in accordance with the requirements of the Penrith Lakes Early Evacuation Guideline,***

- In addition to the above, TfNSW notes that the proposed (and current) SEPP zoning map appears to zone the State classified section of Castlereagh Road between Cranebrook Road and Nepean Street as 'Environment'. This section of the existing Castlereagh Road corridor within the proposed SEPP zoning map should reflect a zoning of SP2 Infrastructure (Classified Road).

TfNSW requests further consultation regarding the appropriate zoning of this corridor in any future proposed amendments to the SEPP.

15 March 2022

TfNSW Reference: SYD14/01487/18

Derryn John  
Green and Resilient Place  
Department of Planning and Environment  
4 Parramatta Square, 12 Darcy Street  
Parramatta NSW 2150

---

**RE: PENRITH LAKES TRAFFIC AND TRANSPORT INVESTIGATION  
TRAFFIC MODELLING REPORT**

Dear Derryn John,

Transport for NSW (TfNSW) appreciates the opportunity to provide comment on the final Penrith Lakes Traffic and Transport Investigation – Traffic Modelling Report, prepared by GHD and dated 10 January 2022, which was referred to TfNSW in correspondence from Department of Planning and Environment (DPE) dated 24 January 2022.

TfNSW understands that the key objectives of the Penrith Lakes Traffic and Transport Investigation – Traffic Modelling Report (*the final GHD report*), are:

- Advise DPE on the high-level infrastructure requirements associated with any future development of land zoned tourism, employment and residential under the State Environmental Planning Policy (Penrith Lakes Scheme) 1989; and
- Inform the partial development of the Penrith Lakes parkland including Stage 1 Parkland Development, and Environment and Education Precinct at Wildlife Lake and a Cultural/Heritage feature at Hadley Park.

TfNSW has reviewed the final GHD report and provides some key comments at **Attachment A** for DPE's consideration. These comments reflect the summary of key concerns that were previously emailed to DPE on 3 November 2021 following the review of the draft GHD report.

TfNSW notes that Appendix D of the final GHD report provides GHD's responses to TfNSW's modelling comments. However, TfNSW highlights that other 'non-modelling' comments previously emailed to DPE on 27 September 2021, following the review of draft GHD report, have not been addressed/responded in the final GHD report. These previous 'non-modelling' comments have been re-produced at **Attachment B** for DPE's consideration.

TfNSW highlights that the 65% and 100% development scenarios are not supported as significant road works beyond the TfNSW planned, committed upgrades (subject to funding) on Castlereagh Road, north of Museum Drive, would be required to accommodate the level of traffic generated by these development scenarios. As you would appreciate, funding for state road upgrades is limited and allocated on a state-wide priority basis. To support 20% of the development yield on the existing road network, the developer will be required to upgrade five (5) intersections (No. 1, 3, 5, 7 & 8) as 'Works in Kind' and provide contributions and/or Works in Kind to satisfactorily upgrade a further two (2) intersections (No. 2 & 6) on Castlereagh Road as shown in Figure 2 of **Attachment A**.

---

OFFICIAL

TfNSW does not currently have adequate information to identify a development cap for site based on traffic capacity as the high-level 'capping' assessment conducted with 65% of development traffic was limited to mid-block capacity assessment and did not include intersection capacity assessment.

TfNSW is not supportive of any further rezoning until such time that a sustainable development cap, infrastructure schedule, staging plan, cost estimates and funding sources are identified and agreed. TfNSW would appreciate an opportunity to be consulted on these matters prior to them being finalised by DPE.

Thank you for the opportunity to provide advice on the subject planning proposal. Should you have any questions or further enquiries in relation to this matter, Dipen Nathwani would be pleased to take your call on or email: [development.sydney@transport.nsw.gov.au](mailto:development.sydney@transport.nsw.gov.au)

Sincerely,

A handwritten signature in black ink, appearing to read "J Hall".

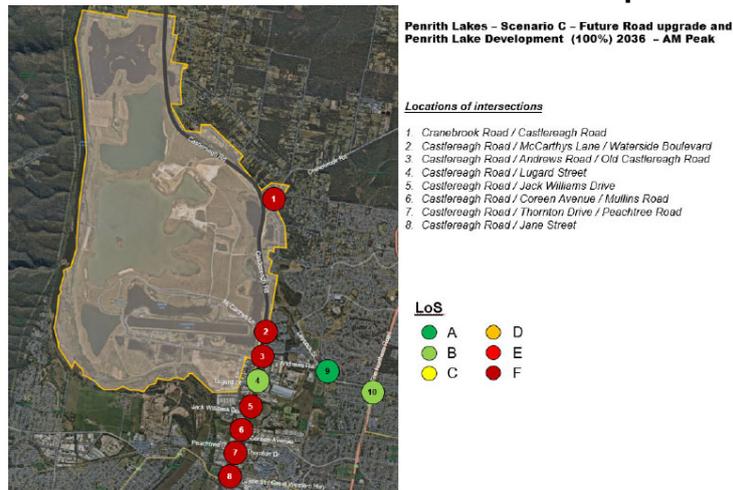
James Hall  
**A/ Senior Manager Strategic Land Use  
Land Use, Network & Place Planning**

## Attachment A: Key Comments on the Penrith Lakes Traffic and Transport Investigation – Traffic Modelling Report (dated 10 January 2022)

The full master plan for the Penrith Lakes site is likely to generate upwards of 3,500 vehicle trips per hour on the road network. All development scenarios assessed (20%, 65% and 100% development traffic) require substantial upgrades on Castlereagh Road. TfNSW currently has no commitment or funding in its forward works program for the planned upgrades to Castlereagh Road north of Museum Drive.

The 65% and 100% scenarios are not supported as significant road works well beyond the major transport infrastructure projects (Refer Figure 14, Section 4.1 of the final report) being planned, committed (subject to funding) would be required to support this level of traffic. Intersection and mid-block upgrades beyond the TfNSW planned upgrades (committed, subject to funding) are required to support 100% of development traffic given that seven (7) intersections modelled fail on Castlereagh Road in the 2036 AM peak even with TfNSW planned upgrades (committed, subject to funding) as shown in Figure 1. Any further upgrades beyond the future planned, committed (subject to funding) major transport projects would likely be unfeasible due to the extent of third-party land components required and costs associated with land acquisition. This means 100% of development traffic is beyond the capacity of Castlereagh Road even with planned, committed (subject to funding) major transport infrastructure upgrades and this level of development (100%) should not be pursued as this would likely result in significant travel time delays to regional traffic and the broader community.

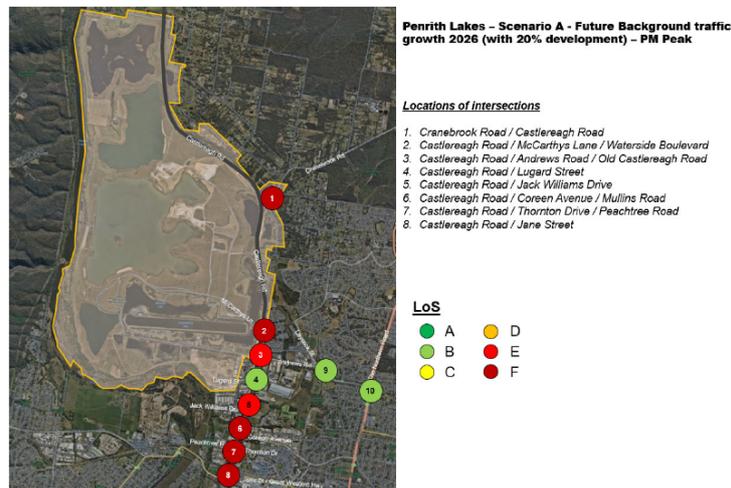
**Figure 1: Scenario C – Future Road Network and 100% Development in 2036**



The report also indicates that with 65% of the development, traffic infrastructure beyond the planned, committed (subject to funding) major transport infrastructure upgrades is required, including uncommitted mid-block and intersection upgrades. TfNSW does not currently have adequate information to identify a development cap for the site as the high-level ‘capping’ assessment conducted with 65% of development traffic was limited to mid-block capacity assessment and did not include intersection capacity assessment. This is evident in Section 6.6 of the final report which states that *“It is anticipated that the staging should likely be even lower than 65%, provided the capacity constraint at the intersections is considered.”*

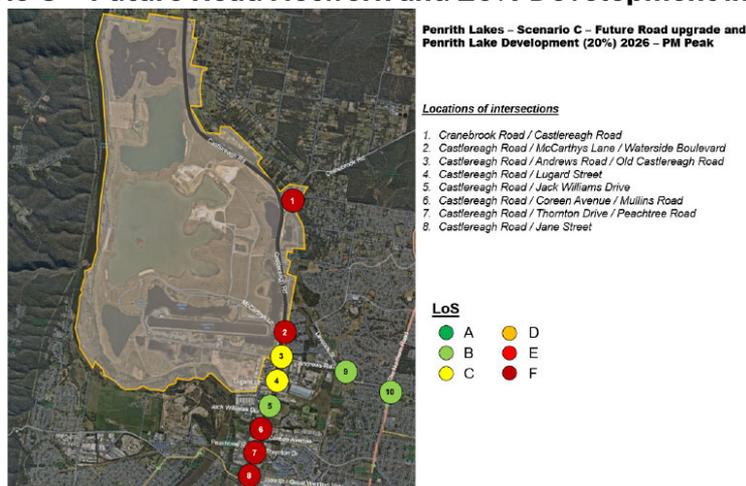
To support 20% of the development yield on the existing road network, the developer must provide Works in Kind to satisfactorily upgrade five (5) intersections (No. 1, 3, 5, 7 & 8) and provide contributions and/or Works in Kind to satisfactorily upgrade further two (2) intersections (No. 2 & 6) on Castlereagh Road as shown in Figure 2.

**Figure 2: Scenario A – Existing Road Network and 20% Development in 2026**



A modelling scenario with 20% development traffic and TfNSW’s planned, committed upgrades (subject to funding) indicates that five (5) intersections (No. 1, 2, 6, 7, 8) on Castlereagh Road require *further* upgrade to support 20% development as per Figure 3. This shows there is a nexus between the development traffic (20%) and the majority of the intersection upgrades required on Castlereagh Road, and that the developer would need to provide upgrades to support this level of development with or without the TfNSW planned, committed upgrades (subject to funding).

**Figure 3: Scenario C – Future Road Network and 20% Development in 2026**



On this basis, the developer should be responsible for delivering satisfactory upgrades to intersections (No. 1, 3, 5, 7 & 8) as Works in Kind in order to unlock 20% development, while an apportionment formula should be used to calculate their contributions towards an upgrade of the other two (2) intersections (No. 2 & 6). However, as McCarthys Lane/Castlereagh Road intersection (No. 2) forms a key access point to the site, and 20% development traffic will bring forward the need for upgrades to this intersection, the developer will also need to provide Works in Kind at this intersection to unlock the 20%

threshold of development. Similarly, the developer should be responsible for delivering Works in Kind for midblock capacity upgrades on the sections of Castlereagh Road that are not predicted to fail in 2026 without development traffic.

The developer would need to deliver identified upgrades to unlock the 20% development by 2026, noting there is no commitment by NSW Government to undertake road works within and adjacent this precinct (i.e. north of Museum Drive). If the developer does not deliver an appropriate scope of Works in Kind to upgrade key Castlereagh Road intersections and midblock sections, the road network will not be able to accommodate 20% development traffic causing congestion and travel time delays for the existing community.

Noting that the Employment lands (53 hectares) that are already zoned account for approximately 55% of the overall traffic generation from the precinct, TfNSW asserts that the rezoning of any further traffic generating uses should not occur until there is NSW Government funding commitment to deliver the TfNSW planned upgrades plus developer commitment to deliver any other upgrades (intersection upgrades and midblock upgrades) identified to support a sustainable level of development.

It is not appropriate to leave these considerations to the DA stage as the site may be subdivided with individually lodged/staged DAs and the cumulative impacts may not be properly assessed to ensure that:

- a) the cumulative impact of development is sustainable and suitably capped/staged at a supportable level aligned with infrastructure provision, and
- b) the full cost of infrastructure provision is borne equitably among all developers.

TfNSW is of the view that given the significant level of traffic generated by the Penrith Lakes proposal and limited capacity of the existing road network to accommodate these additional trips, the developer should deliver identified Works in Kind upgrades required to 'unlock' key thresholds of the development. Any proposed development site access points/upgrades would need to be fully funded and delivered by the developer (once agreed by TfNSW and Council).

TfNSW reiterates that further assessment is required to identify a sustainable threshold of development, Works in Kind upgrades, nexus-based developer contributions and feasibility assessment of upgrades (noting third party land acquisition may be required by the developer in order to be able to deliver the supporting infrastructure). Given all the above, TfNSW does not support any further rezoning until such time that a sustainable development cap, infrastructure schedule, cost estimates, development staging plan and funding sources are identified and agreed with TfNSW.



**Attachment A: TfNSW preliminary comments on the 'Penrith Lakes Traffic and Transport Investigation - Traffic Modelling Report' (dated 29 July 2021)**  
(provided September 2021)

1. Penrith City Council should also be consulted on this report (if not already).
2. The SIDRA modelling has been reviewed and detailed comments on this will be provided under separate cover as soon as possible.
3. Site and traffic survey undertaken during June & July 2020 would have been affected by COVID stay at home restrictions. Although restrictions began to ease from May 2020, a number of venues and services were not reopened until June - July 2020 onwards, with many employment sectors implementing working from home during this time. As a result, the traffic survey data is unlikely to be representative of typical traffic conditions. Comparison with any other available data from late 2019 or early 2021 (pre-lockdown, and not during the road closures around Jane Street/Mulgoa Road/Castlereagh Road for Mulgoa Road upgrade) should be undertaken to ensure the traffic data is valid. Third party traffic survey data may be available to assist (i.e. from a company such as Matrix or similar).
4. Page 23 refers to a Strategic Transport Model, however the traffic growth plots were provided from the Strategic Traffic Forecasting Model (STFM). This data is sensitive and is subject to a data access agreement and raw data excerpts from the model are not to be provided in public facing documents. Appendix B must therefore be removed.
5. The resolution of Figure 11 is poor and it is difficult to read the quantum of zoned land in the labels. Please replace with a clearer readable image so the information can be assessed.
6. **Table 10:**
  - Precinct 2 - Regarding the school trip rates used - selecting a rate from a comparable site may be more appropriate than using Sydney average rates, noting the very inaccessible nature of the subject site.
  - Precinct 3 Camping – It would be reasonable to assume at least some weekday demand (e.g. backpackers), as use of the campgrounds would not be solely on weekends.
  - Precinct 4 - Major hardware & building supplies – the application of the quoted rates from TD2013/04a produces a weekend peak trip figure of 423 (not 332). TfNSW does not agree with an 8% public transport assumption for this particular land use.
  - Precinct 4 - Health/fitness – the source of the data is quoted as US ITE, but the actual rates are not quoted. They are:
    - AM weekday – 1.4 car trips / 100m<sup>2</sup> GFA
    - PM weekday – 3.92 car trips / 100m<sup>2</sup> GFA
    - Saturday – 3.19 car trips / 100m<sup>2</sup> GFA

The application of these rates produce higher PM car trips than shown in the table.

  - Precinct 5 & 8 – as previously advised, TfNSW does not support the assumption for this land use. We understand Business / Special Uses will allow for specialised retail (bulky goods) retail, homemaker centres and the like. The trip rate used assumes a best case scenario (based on a business park in TDT2013/04a). This is likely to underestimate potential trips particularly on weekends.

- Precinct 6 Recreational - the source of the data is quoted as US ITE, but there are 31 separate recreational land uses in ITE. How was the assumed rate of 2.4 trips / 100m<sup>2</sup> derived?
- Precinct 9 – Noting the lack of available trip generation guidance around the film studio land use, it would be prudent to undertake survey of similar existing land use to determine the trip generation (i.e. Fox Studios Moore Park reflecting usual activity taking into account Covid changes etc.), albeit assuming higher vehicle mode share for Penrith Lakes due to accessibility factors. For the office component, this should use the available office trip rates available, not business park trip rates as business parks typically operate under different business hours to office. See comments below on precinct 13 about applying rates for office blocks. It is noted that the visitor accommodation component is likely to include long-term accommodation. This is a concern from a flood evacuation perspective.
- Precinct 9A - Tourism South – the trips shown are too low if the assumed rate of 0.4vtph per unit has been applied for 300 units. How did this calculation arrive at total 34vtph?
- Precinct 11 – Golf Course - this land use is currently being surveyed by TfNSW so soon we will have credible local data. However, the application of the rates in ITE produces slightly different trips than shown:
  - AM: 2.96 trips / hole = 107 trips for a 36-hole course
  - PM: 3.68 trips / hole = 132 trips for a 36-hole course
  - Sat: 3.03 trips / hole = 109 trips for a 36-hole course
  - Sun: 1.39 trips / hole = 50 trips for a 36-hole course
  - Tournaments and other special events will significantly increase these estimates. Are there proposed function centres included, likely to generate significant traffic for events such as weddings and the like?
- Precinct 12 – Rowing/recreation – Why is there only weekend use assumed? Was a survey of the existing uses undertaken?
- Precinct 13 – zoned land. The calculation in this table seems to be slightly misaligned with the explanation in the 'Assumptions and source' column and Figure 11. We note GFA is assumed to be 55% of total land area (53ha), which would be 291,500m<sup>2</sup>. However the notes state that 180,000m<sup>2</sup> office GFA and 75,000m<sup>2</sup> industrial has been assumed (total 255,000m<sup>2</sup> GFA). This is short of the total 291,500m<sup>2</sup> GFA and appears to be flipped, noting elsewhere the explanatory notes suggest 80% of the total GFA is industrial uses and 20% is office.

The office block trip rate taken from RMS TDT2013/04a is based on Sydney average rates TfNSW observed for office commercial from established commercial centres across Sydney in walking catchments of heavy rail. TfNSW observed rates from sites including North Sydney, Chatswood, Hurstville, Macquarie Park, Parramatta etc. This is not reflective of Penrith Lakes, hence a rate could be selected from a comparable site with comparable accessibility factors, e.g. the office site surveyed in Norwest, which was not accessible by Metro at the time of the survey. Those rates were:

AM: 2.83 car trips / 100m<sup>2</sup> GFA  
 PM: 1.17 car trips / 100m<sup>2</sup> GFA

Adjusting the calculations to reflect the above, the total trip generation for Precinct 13 could be up to **2,863vtph AM** (1212.6vtph industrial + 1,649.9vtph office) and **1,988vtph PM** (1,305.9vtph industrial + 682.1vtph office), assuming 233,200m<sup>2</sup> industrial GFA and 58,300m<sup>2</sup> office GFA. Note:

this does not account for potential higher trip generating uses permissible in the zone such as Garden centres and Hardware and building supplies.

Notwithstanding, the total trip generation indicated of approximately 2,000vtp/h for this precinct 13 alone (approximately 55% of the total development traffic) makes the findings on page 52 very concerning, noting that even 20% of the overall development would trigger the need for 5 intersection upgrades on the State/regional road network and there is no funding commitment for this by State Government. Based on the trip generation from this development alone, this warrants upgrades to intersections and mid-block crossings which should be funded and delivered by the developer as these would be required to mitigate the development traffic impacts, and are not for regional traffic benefit (therefore should be funded by the developer and not be delivered using public money).

7. 4.1 Mulgoa Road/Castlereagh Road – this section needs to be revised to remove the suggestion that TfNSW is upgrading Castlereagh Road north of Museum Drive. TfNSW has no funding or commitment to deliver any upgrades north of Museum Drive. The current wording states that TfNSW is upgrading Castlereagh Road to Andrews Road. This should be amended as it gives misinformation to the community and developer. Further to this, if these upgrades are committed by Government in the future they would be for the benefit of the community/regional traffic, not to mitigate the impacts of this private development. Table 11 should clearly state the works are 'Unfunded/not committed'.
8. 5.3 - Noting the interdependencies between Jane Street/Castlereagh Road and High Street/Mulgoa Road intersections, how did the modelling account for the interactions if Jane Street/Castlereagh Road was modelled without being linked to High Street/Mulgoa Road?
9. Section 5.3 – it is stated that average cycle time and phase time were used with peak hour flows – is this average based across the day? Maximum/worst case peak cycle times reflecting SCATS settings should be used to provide a worst case scenario.
10. Section 6 - The future case scenarios for 2026 & 2036 should include a scenario whereby no upgrades by TfNSW north of Museum Drive are provided, and feasible developer upgrades are identified to support their development with 20% development. This is the most likely scenario particularly for 2026. This more realistic scenario would help to identify a more realistic/supportable development yield. If feasible upgrades cannot be identified (i.e. if third party land acquisition is required) the yield cap should be further reduced below 20% to determine what could be supported with *feasible* developer upgrades.
11. Section 6 – the description of the base case is unclear – assuming this does not include any development traffic but this needs to be made clear.
12. Page 45 is missing a description of scenario B.
13. 6.3 – How were the site access points determined? Existing or proposed? It should be noted that new access points on Castlereagh Road require the consent of Penrith City Council as the roads authority and the concurrence of TfNSW under section 138 of the *Roads Act 1993*. The access points (number and layout, assessment requirements etc.) should be discussed and agreed with TfNSW and Council. What are the proposed access layouts? Are they left in/left out only? We require details of the proposed road network internal to the precinct, especially with the new access points and need to understand how they impact Castlereagh Road.

14. 6.3 - 1200pcu per lane – can more detail be provided on how this was derived? Has this assumed free-flow/uninterrupted conditions, or has this accounted for the number of intersections?
15. 6.3.1 states that Table 17 is based on the “number of lanes on Castlereagh Road (**existing**)”. However this table suggests there are 3 lanes in each direction between Andrews Road and south of Thornton Drive. However there are 2 existing lanes in each direction between Andrews Road and Thornton Drive. There is 1 lane in each direction north of McCarthys Lane.

The VCR should break down the ‘with’ and ‘without development’ scenarios so that an apportionment can be calculated for what the developer should be responsible for upgrading vs. what is required to support regional traffic growth.

16. The findings in 6.3.2 Intersection Performance Results are very concerning. Based on a preliminary review of the findings of the GHD report, 100% of the development is **unsupportable**. According to the findings, even 20% of development traffic requires upgrades at several intersections in 2026:
- o Cranebrook Road / Castlereagh Road.
  - o Castlereagh Road / McCarthys Lane / Waterside Boulevard.
  - o Castlereagh Road / Coreen Avenue / Mullins Road.
  - o Castlereagh Road / Thornton Drive / Peachtree Road.
  - o Castlereagh Road / Jane Street.

In addition to the above intersections, it is noted that the intersection of Castlereagh Road/Andrews Road/Old Castlereagh Road would operate at LoS E in the PM peak in 2026 with 20% development traffic. The SIDRA movement summary table should be provided in order to highlight the delays and queues on any critical movements to see if an upgrade here would also be required with 20% traffic.

In 2036 with 100% development traffic in Scenario A, *at least eight intersections would require upgrades*, including intersections that are unlikely to be able to be upgraded any further (i.e. Jane Street/Castlereagh Road, due to proximity to rail bridge, works currently in delivery may be the extent of feasible upgrades). At least five of the intersection upgrades on Castlereagh Road in Scenario A appear to be required as a direct result of the development (i.e. Castlereagh Road intersections with Cranebrook Road, Andrews Road/Old Castlereagh Road, Jack Williams Drive, Thornton Drive/Peachtree Road, Jane Street). It appears Castlereagh Road/Lugard Street also fails under this scenario however it looks to be missing from the summary text for the 2036 results in this section.

17. 6.4 – future scenarios should not assume upgrades north of Museum Drive being delivered by 2026. It needs to be made clear in this section that there is currently no Government commitment or funding to deliver any works north of Museum Drive.
18. 6.4 concludes that even with TfNSW upgrades on Castlereagh Road, in Scenario C 2036 with 100% development traffic, multiple (6) intersections fail. To what extent does the development traffic cause the intersections to fail? It would be beneficial to compare this (or the 65% development scenario) to a ‘2036 background traffic with upgrades no development traffic’ scenario to determine what the developer’s apportionment should be for funding any potential future upgrades noting the development traffic would consume a large proportion (if not all) of the capacity provided by these upgrades.
19. Figure 31 shows that even with significant upgrades on Castlereagh Road (additional lanes), a number of segments of Castlereagh Road are at or over midblock capacity in 2036 with full development traffic. As with the comments above in relation to 6.3.1, the VCR assessment should break down the ‘with’ and ‘without development’ scenarios so that an apportionment can be calculated for

what the developer would be responsible for vs. what is required to support regional traffic growth.

20. 6.5 – the footnote to Table 24 states that the proposed upgrade at Castlereagh Road & McCarthys Lane to accommodate traffic volumes generated by Penrith Lakes development was modelled as an isolated site – for what reason was this isolated? This site may be required to be coordinated with the intersection of Castlereagh Road/Andrews Road (should this be signalised in future).
21. Concern is raised regarding the future performance of Castlereagh Rd/ McCarthys Lane/Waterside Blvd as this intersection will be the major access to the precinct but also to the existing Waterside Cranebrook. While the modelling summary is showing a LoS of B for AM peak and D for PM peak, the LoS, delay and queuing for the side road should be identified in the report. There is some doubt as to whether the single right and single left turn lanes to access and egress Waterside Cranebrook will be adequate. Detailed SIDRA results (movement summaries) should be included in the report for ease of access for review.
22. The 6.6 capping assessment should consider what the development limit should be for both a scenario where TfNSW's upgrades are delivered, and also if the TfNSW upgrades **are not committed** (i.e. development needs to be capped lower than 20% if there is no Government commitment to the upgrades, therefore what is this number lower than 20%?). This should take into account any upgrades the developer could feasibly deliver themselves (not requiring third party land acquisition). There may be opportunity to investigate distributing some traffic generated from the precinct via Lugard Street, which from the report indicates that there may be some capacity in 2026 for Scenario A with 20% development traffic, when compared to the other 2 access roads Old Castlereagh Rd and McCarthys Lane.
23. Conclusions -
  - The development is also likely to bring forward the need for mid-block upgrades (additional lanes in each direction on Castlereagh Road) on segments of Castlereagh Road, noting that for each 1,000 additional vehicles added per hour per direction by the development, an additional lane would be required to be *delivered by the developer* for those segments.
  - The total development envisaged is an over development of the site. Noting the network constraints identified with 20% development traffic it is very concerning that the Precinct 13 Employment Lands (already zoned) alone accounts for **57% of total AM traffic generation and 55% total PM traffic generation**. This shows the level of development that has **already been made permissible under the SEPP is unfeasible without significant road upgrades which are potentially cost prohibitive** (i.e. requiring third party land acquisition). An unsustainable level of development has already been zoned on site with no commitment to road infrastructure to support it. **DPIE should not pursue any further SEPP amendments to allow further traffic generating land uses on the site**. The development should be capped at a sustainable level, based on any *feasible* road upgrades provided by the developer. Even 20% of the development requires further investigation to establish when upgrades are required and what upgrades the developer will be required to deliver and fund (apportionment for contributions and Works in Kind required to unlock 20% of development). No further development should be permitted without Government commitment for delivery of upgrades north of Museum Drive, however even with this, the developer would be responsible for funding substantial upgrades on Castlereagh Road to mitigate the impacts of the development traffic (as

TfNSW's upgrades would be provided for the community/regional traffic benefit, not to mitigate development impacts).

24. Conclusion/Appendix C – Detailed SIDRA summary reports/results should be included in the report. These should be provided to enable the reader to examine individual delays and queues for each critical movement.

**Active transport:**

25. TfNSW's Future Transport Strategy sets objectives to increase the role of walking, cycling and public transport options and reduce reliance on private car use. The Traffic Report needs to assess how non-private car options could be used to support access to Penrith Lakes.
26. The report should investigate opportunities to encourage some level of (realistic) mode shift to public and active transport. The Traffic Report notes poor and disconnected walking and cycling infrastructure to/from Penrith Lakes (page 10). Have opportunities to cater for and encourage higher levels of walking and cycling access (and reduced car trips to the site) in conjunction with TDM measures (including more sustainable car parking provision at the site) been considered? Particularly given the proximity of the proposed employment precinct at the south-east of the site, which is within walking/cycling distance of some adjacent neighbourhoods and cycling distance of Penrith CBD and is projected to generate a large majority of peak hour trips to/from Penrith Lakes.
27. Similarly, site inspections (pages 12-21), crash data (page 22) and nearby road projects (chapter 4) include very little discussion of relevant walking and cycling issues and opportunities. It is not clear how these have been considered.
28. TfNSW has developed guidance on high quality walking and cycling infrastructure, to support the development of safe, convenient and connected active transport networks. These documents – the Walking Space Guide and the Cycleway Design Toolbox – should be referenced along with Austroads guidance when evaluating the suitability of current and future walking and cycling infrastructure.
29. Have crucial missing walking and cycling links and strategic desire lines to/from the site been identified? Has consideration been given to how can these be improved? For example, are there any possible improvements for better connections to Emu Plains, along the river, and to Penrith CBD for a mix of transport and recreational trips?
30. Similarly, have strategic connections for walking and cycling within the site been identified to ensure the internal network is comprehensive, convenient and supports non-car movement?

Further, to the above, as DPIE is aware, the Penrith Lakes precinct is situated in the Hawkesbury-Nepean floodplain and immediately adjacent to the Nepean River, with a high flood risk with widespread extent and depth of inundation. Expanding urban development across the Hawkesbury-Nepean Valley means that flood exposure will increase in the future, and so growth will need to be carefully managed in the Valley to reduce the flood risk.

The State Emergency Service (SES) is responsible for management of flood emergencies including management of evacuation ahead of forecast flood events. Due to the speed, depth and extent of flooding in the Hawkesbury-Nepean Valley, the SES has identified in their approved flood plan that mass self-evacuation ahead of forecast floods is the primary method of reducing flood risk to life in the valley. As flood evacuation will predominantly be by private vehicles, the capacity of the road network to cater for flood evacuation events should be carefully considered before further development being made permissible. Also, as the proposed development is adjacent to critical regional flood evacuation routes, the

impact of the proposed development on the cumulative evacuation task across the Valley should be assessed to ensure that the proposal does not result in increased risk to life during a flood evacuation.

It is noted that the recently exhibited 2021 Penrith Lakes SEPP amendment Consultation Paper states that “The amending SEPP provisions would be supported by a Flood Response Guideline for Penrith Lakes that is being drafted by the Department separate to this SEPP amendment”. We request that this is referred to the Hawkesbury-Nepean Flood Risk Management Directorate in Infrastructure NSW, the SES and TfNSW for review, consideration and endorsement to be considered along with the TIA.

*Please note that the comments provided above are of a preliminary nature. They are not to be interpreted as binding upon TfNSW and may change following review of the formal Development Control Plan and/or SEPP amendment when formally referred.*