Minute 9 – SLPL input to Request for Information from Stantec in order to complete directed expert conferencing on traffic matters

Background

1. Minute 9 directs that transport experts provide additional information and participate in expert conferencing. In order to respond to the Panel's direction, Stantec Principal Transportation Engineer Chris Rossiter has requested information from Southern Link Property Limited (SLPL) on the following questions from Minute 9.

   (a) Q1 b) Conclusion of commercial arrangements and impact to the provision for the carriage of freight by rail.
   (b) Q1 d) Reconciliation of statements of transport benefits
   (c) Q1 e) Recent rail mode transfer impact on project benefits
   (d) Q3.2 e) Alternative tenancy case

2. The following are the responses from SLPL.

Provision of rail freight carriage and commercial freight rate.

<u>Q1 b) Conclusion of commercial arrangements and impact to the provision for the carriage of freight by rail.</u>

3. Redacted

4. Redacted

5. Redacted

6. The SLIP site is rail orientated by design and the project would not be attractive to the applicant without it. The sizing of rail infrastructure at the site is deliberately matched to the recently completed Port Chalmers rail siding development. The 24 wagon rake capacity at the SLIP site fits within the 30 wagon rake capacity at the Port Chalmers – this ensures there is no inefficient breaking and shunting of rakes at the SLIP site. This permits the two ends of the SLIP shunt circuit to operate in tandem. Rail utilisation is critical to enable the consolidation and co-location of warehousing and container depot activity which is currently distributed across Dunedin, Kaikorai Valley and Mosgiel, and the efficient connection to the coastal port. Without a rail siding the co-location of this activity is not beneficial and would mean that the project would not proceed resulting in the existing distributed warehousing and container activities largely remaining in place.

7. The Economic Report has provided a comprehensive assessment of current container trade supply chains including the locations of existing warehousing, container servicing and storage, commercial relationships within the sector and existing transport movements. Savvy Consulting has identified significant and systemic constraints with current container trade logistics that mean that the business as usual future is not sustainable for Port Chalmers, Icon Logistics and the importers/exporters in the southern South Island. These constraints are set out in sections 3.3 and 4.4 respectively of the Economic Report.

8. The economic disbenefits of a business as usual future for container trade via Port Chalmers are set out in section 5.1 of the Economic Report and are significant and potentially widespread in terms of consequent effects and opportunity costs. This includes the reducing efficiency, reputation and competitiveness of Port Chalmers – one of New Zealand major seaport infrastructure assets. Other disbenefits include (but are not limited to) "*Little or no opportunities for existing exporters using Port Chalmers (and Dunedin's 3PL service providers) to increase their output (without further leakage of those supply chains out of Otago Region)*" and "*Higher freight costs for exporters and importers reliant on truck movements that pass through Dunedin's main urban area (slower speeds and higher congestion increase time and costs). Efficiency and productivity will continue to decline as Dunedin's urban population grows"*. Savvy Consulting consider that without transformative change of current container trade supply chain logistics in Dunedin, export and import industry growth opportunities for Otago Region are highly unlikely to be realised.

9. The investment in rail infrastructure is significant - $13.5 m at Port Chalmers and expected $15m investment for the SLIP rail siding. The absence or underutilisation of the rail siding would undermine the opportunity to consolidate Dunedin's container activity and address existing supply chain constraints and risks. It would undermine the value and basis for the project.

Reconciliation of statements of transport benefits.

Q1 d) Reconciliation of statements of transport benefits

10. There is a request as part of para [11] of Minute 9 for clarification of derivation of 19,000 truck movements.

11. The figure of 19,000 truck movements on SH88 is based on actual Port Otago data for FY25 – 12 months ending 30 June 2025. It is an estimate of the truck movements that will be relieved from SH88 through the relocation or import dry release, export dry receival and timber warehouse packing.

12. It is based on actual data for FY25 for Port Otago Container Terminal volumes:

    (a) Import Dry released – 5,736 containers – 5,736 road movements
    (b) Export Dry received – 8,424 container – 8,424 road movements
    (c) Timber received full loads – 2,500 equivalent containers – 2,500 road movements
    (d) Timber – empty return – 2,500 road movements

13. Based on most containers being 40 foot and one 40 foot container per truck movement – this totals 19,160 truck movements. This has been rounded to 19,000 movements. Note - this is conservative as it excludes truck movements of empty containers released to make up the export / import imbalance of container movement.

Clarification of derivation of 15,000 one-way movements.

14. Para [11] of Minute 9 questions the origin of 15,000 one way movements.

15. This figure originates from the original Stantec Integrated Transport Assessment report (15 April 2026) – 4.2.1 State Highway 87 (Gordon Rd) – for all vehicles:

"The count site on Gordon Road recorded typical volumes of approximately 15,000vpd."

Clarification of 70% CO2e saving source and basis

16. Para [11] of Minute 9 questions the origin of 70% CO2e .

17. The source is the Economic Assessment (SAVY)– April 2026. This was submitted as part of the Substantive Application.

18. The 70% figure is independently derived and consistent with KiwiRail's own reporting.

19. The 70% reduction in Greenhouse Gas Emissions from mode shift from road freight to rail is published in a number of KiwiRail reports. The following is a link to one such report (ref SAVY Report pages 10, 13 and 17) all stating the 70% saving: Annual-Integrated-Report-2023-KiwiRail.pdf

20. In addition, in the three case studies discussed in Section 7.3 of the SAVY Economic Assessment (full details in Appendix E), the modelling also showed a 70% reduction in urban CO2-e tonnes per annum (GHG emissions) which is where the mode shift takes place. This was based on compiling a range of emissions factors explained in Appendix E, multiplied by vehicle tonne kms, and comparing the results with and without the Inland Port.

21. The "-70%" is not shown in the actual tables in Appendix E. This is because the net emissions reductions are shown as a figure over the whole transport route, not just the urban part of the route.

Recent rail mode transfer impact on project benefits

Q1 e) Recent rail mode transfer impact on project benefits

22. Para [11] of Minute 9 questions the impact on projects benefit from recent rail mode transfer.

23. The recent West Yard rail mode change should be understood as a temporary pilot activity, undertaken to test and refine the operational solutions proposed for the larger rail-enabled Southern Link Inland Port. The West Yard site is a small 2.3 hectare industrial site at 180 Dukes Road North, owned by SLPL, and is being used to trial the off-site storage of containers pending loading out from customers' cool store operations onto the existing rail siding operated from Fonterra Mosgiel. The purpose of the pilot is to demonstrate the efficiencies that can be achieved through this type of rail-based container handling and storage model, before applying those learnings at the significantly larger 40 hectare SLIP site proposed under the Fast-track application.

24. West Yard is already constrained by its available land area, consent conditions, rail siding capacity and container stack-height limits. It cannot be expanded beyond the current activity and is therefore not a substitute for, or reduction in, the future SLIP proposal. Rather, it is a limited proof-of-concept that supports the project case by demonstrating the operational benefits that can be achieved when the same model is delivered at full inland port scale. The future benefits described in the project application remain unchanged.

Alternative tenancy case

Q3.2 e) Alternative tenancy case

25. The request at para [26] of Minute 9 is to give consideration of an alternative tenancy case that does not share the Dynes / Icon profile. This would best be represented by a new operator to the region. A consideration would include logistics profile flow with an estimate of likely daily and peak hour

volumes on SH87 and Dukes Rd. The following are examples of alternative tenancy cases uses for parts of the SLIP's 80,000 m^2 total warehouse area.

Central Otago Catchment – Export example

26. A plausible example would be a new horticulture exporter. Being export activity it will have a logistics profile based on exported palletised product arriving by road in curtain sided truck from Central Otago location/s to Southern Link based warehouse with final movement to Port Otago, planned to be by rail.

Basis

27. The following describes the example:
    (a) 1,000 export containers per annum (reasonable estimate of opportunity)
    (b) 40 foot containers (30 pallets per container – volume and not weight limited) – export 30,000 pallets
    (c) Bulk curtain sider truck and trailer – inflows. 68 pallets capacity per Truck/trailer - with 80% utilisation = 54 pallets.
    (d) Pallets - 1.4m x 1m (example basis)
    (e) Warehouse holding – seasonally peaky (6,000 pallet store)
    (f) Warehouse storage area – 5,600 m2 – based on 6,000 pallets, 3 high and 50/50 – store to cool down / pack / transport area.
    (g) One truck/trailer (B-Train) carries 54 pallets which converts to 1.8 x 40' containers. Based on industry data for similar logistics operations.

Impact

28. The following determines the trip generation for this tenancy example.

29. The 5,600 m^2 warehouse example would generate a total of 3,112 trips:

    (a) 556 truck trailer visits (1,112 trips – (30,000 pallets / 54) *2)
    (b) 1,000 containers exported to port (2,000 trips – (30,000 pallets / 30) *2)

30. These trips are seasonal and would run for 6 months of the year – from late February to early August.

31. This equates to an effective trip generation rate of 11,114 trips per 10,000 m^2 during the seasonal peak (double the straight annual rate). This is marginally higher compared to the bulk warehouse/export container profile – with a Trip generation rate of 10,607 per 10,000m^2. (Highest trip generator of known large local current warehousing operations).

32. The warehouse area is a 7% proportion of the total warehouse area (5,600 m^2 / 80,000 m^2). The net effect to trip generation and peak hour heavy vehicle volumes on SH87 and Dukes Road North would be 3.3% increase during the peak season only. (Calculation basis – sum of the product of site areas and relevant trip generator rates divided by the product of total site area and standard trip generation rate - 10,607 trips per 10,000 m^2).

33. The impact to SH88 would be 2,000 less road trips related to received export containers at Port Chalmers container terminal.

Third Party Logistics (3PL) Distribution Centre Example

34. Another plausible example would be a Third Party Logistics (3PL) Distribution Centre service. Being an import activity it has a different logistics profile – with imported containers from the coastal port

arriving to a DC warehouse at the SLIP and then devanned freight loaded to curtain sided road transport to run through to Central Otago. Note current imported freight flows come from Lyttelton Port and travel by road to Central Otago, which is a road freight road distance 200km more the road freight distance between the proposed Southern Link site and Central Otago.

Basis

35. The following describes an example 3PL Distribution Centre service:
    (a) 7,500 import containers per annum (reasonable estimate of opportunity).
    (b) 40' containers (30 pallets per container – volume and not weight max) – import 225,000 pallets.
    (c) Bulk curtain sider truck and trailer – inflows. 68 pallets capacity per Truck/trailer - with 80% utilisation = 54 pallets.
    (d) Pallets - 1.4m x 1m (example basis).
    (e) Stock turn 5x - Stock holding (1,500 containers = 45,000 pallets store).
    (f) Warehouse storage area – 15,000 m^2 – based on 45,000 pallets, 6 high and 70/30 – store to pick/transport area.
    (g) One truck/trailer (B-Train) carries 54 pallets which converts to 1.8 x 40' containers. Based on industry data for similar logistics operations.

Impact

36. The following determines the trip generation from the tenancy example.

37. The 15,000 m^2 warehouse example would generate a total of 23,334 trips:

    (a) 7,500 containers imported from port (15,000 trips)
    (b) 4,167 truck trailer visits (8,334 trips – (225,000 pallets / 54) *2).

38. This equates to an equivalent trip generation rate of 15,556 trips per 10,000 m^2. (This is level loaded across the year with no peak).

39. This is higher compared to the bulk warehouse/export container profile that has a Trip generation rate 10,607 per 10,000m^2. (Highest trip generator of known large local current warehousing operations).

40. The warehouse area is a 19% proportion of the total warehouse area (15,000 m^2 / 80,000 m^2).

41. The net effect to trip generation and peak hour heavy vehicle volumes on SH87 and Dukes Road North would be an 8.7% increase. (Calculation basis – sum of the product of site areas and relevant trip generator rates divided by the product of total site area and standard trip generation rate - 10,607 trips per 10,000 m^2).

42. The impact to SH88 would be the avoidance of 15,000 road trips related to import containers supplying distributed Distribution Centres from Port Chalmers container terminal. In addition there is the equivalent road trip shortening of state highway import flows from Lyttelton Port to Central Otago – a saving of around 200km for each trip.