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Oversize Vehicle Route Survey Audit Regime

D19#691324
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Contents

Document Control

Owner	Director Heavy Vehicle Services
Custodian	Manager Heavy Vehicle Road Network Access
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Amendments

Revision Number	Revision Date	Description of Key Changes	Section
1	04/03/2020	Clarified ability to use prior approvals as evidence of route suitability.	All
2	08/08/2024	Added Show Cause Process	S. 6

Definitions

Term	Definition
Main Roads website	www.mainroads.wa.gov.au

1 PURPOSE

All vehicles operating under an Oversize Permit, including a Period Permit and a Single Trip Permit, are required to undertake a route survey prior to moving the oversize load on the public road network.

As this is a condition of access, operators must keep an auditable record to demonstrate compliance with the requirement. This document specifies the minimum requirements for undertaking a route survey, the record keeping requirements and the associated auditing process.

2 ROUTE SURVEY REQUIREMENTS

2.1 Conducting a Route Survey

It is essential for a transport operator to conduct and document a route survey prior to moving an Oversize Vehicle on the public road network, to ensure the route can safely accommodate the vehicle without risk of injury or damage to any person or property.

This section outlines the areas that need to be considered when conducting a route survey to ensure the Oversize Vehicle can physically fit on a particular road without causing any damage or risking injury to other road users.

Route surveys can be undertaken by any of the following means:

(a) Physically measuring clearances;

(b) Using mapping systems such as Google Maps or Nearmap, provided the level of measurement accuracy is taken into account; or

(c) Using prior knowledge of route, where permits have previously been held for an Oversize Vehicle of equal or greater dimensions.

A separate route survey is not required for every Oversize Vehicle movement, except high-risk movements that require a Transport Management Plan. For example, if a road has previously been assessed for an Oversize Vehicle with an 8.5 metre wide load, there is no need to conduct a separate assessment for the same vehicle configuration carrying a 7.5 metre wide load.

Operators, or industry associations, can maintain a catalogue of individual road assessments, which can be used for any Oversize Vehicle within the assessed parameters.

2.2 Road Width & Roadside Impediments

There are a number of aspects to consider when assessing the road width, including:

(a) The road width in the direction of travel, ensuring the road is wide enough to accommodate the Oversize Vehicle's ground contact width.

(b) The width between any guard railings and the height of the guard railings, ensuring the load has sufficient ground clearance to clear the railings.

(c) Roadside furniture, including traffic signals, power poles, signage, light poles etc., ensuring there is sufficient clearance or identifying where roadside furniture requires temporary removal.

(d) Roadside parking, ensuring there is sufficient clearance in the event vehicles are parked on the roadside during the movement of the Oversize Vehicle.

Details of the above factors relating to road widths must be included in the route survey. This detail can include actual measurements, or detail of an Oversize Vehicle of equal or greater dimensions that was recently moved under an approved permit, on the same route and confirming adequate clearances were observed.

Any areas where clearances are marginal must be identified, with a clear procedure on how the driver and pilot(s) will manage the situation.

2.3 Swept Paths

Oversize Vehicles generally have a much wider swept path than conventional freight vehicles, such as road trains and B-doubles. As such, it is necessary to assess each intersection along the journey to ensure the Oversize Vehicle can negotiate the intersection without impacting roadside furniture, such as traffic signals, or cause damage or injury to other road users.

There are a number of methods available for assessing swept path at intersections, including:

(a) Using swept path analysis software such as AutoTURN, AutoTrack, or HeavyGoods to assess each intersection;

(b) Using swept path analysis software such as AutoTURN, AutoTrack or HeavyGoods to compare the swept path of the Oversize Vehicle with the swept path of another relevant vehicle combination already approved to operate on the route, such as a 27.5 metre B-double if the route is approved on RAV Network 2;

(c) Using a swept path analysis conducted for a larger Oversize Vehicle that has used the same route previously, provided nothing has changed on the specific route;

(d) Identifying the swept path width of the Oversize Vehicle and then physically measuring the intersection to ensure there is sufficient clearance, or

(e) Providing detail of an Oversize Vehicle of equal or greater dimensions that was recently moved under an approved permit, on the same route and confirming adequate clearances were observed.

2.4 Height Clearances

It is necessary to ensure there is sufficient overhead clearance above the Oversize Vehicle when travelling under structures, such as bridges and gantries.

Generally, a safety buffer of at least 300mm is required between the top of the load and the underside of the structure. This safety buffer takes into consideration the following factors:

(a) Vertical movement of the load due to fifth wheel lash and/or suspension lash;

(b) Relative movement of the load due to irregularities of the pavement and vehicle, such as load sway, displaced load, cross-fall and road geometry;

(c) Margin of error;

(d) Structure abutment and pier settlement;

(e) Resurfacing and paving overlays; and

(f) Driver’s comfort margin.

The route survey must identify all overhead structures and state the available safety buffer. Where a vehicle is required to be lowered prior to traversing under a structure, this must be clearly identified in the route survey, with a clear procedure on how the driver and pilot(s) will manage the situation.

Where a 300mm safety buffer is not available, this must be specified in the Oversize Permit application and additional bridge video supervision conditions will be applied. This must be clearly identified in the route survey, with a clear procedure on how the driver and pilot(s) will manage the situation.

The cable operator stipulates the clearance requirements for overhead cables, such as power lines and telecommunication cables. It is a requirement to obtain approvals from the relevant cable operators, as stipulated on the Oversize Permit.

2.5 Contraflow Movements

If contraflow movements are required in order to safely negotiate an obstacle and no other alternative route is available, this must be specified in the Oversize Permit application and must be clearly identified in the route survey.

A Traffic Guidance Scheme will be required to ensure the contraflow movement is carried out in a safe manner.

2.6 Periodic Re-assessment

If the same, or smaller, Oversize Vehicles are regularly being moved along the same route, it is not necessary to undertake separate route surveys for every movement. Once the initial route survey has been completed, it is only necessary to have a verification process in place to confirm the route has not altered since the initial survey.

This verification process could be as simple as the driver of the Oversize Vehicle, or a pilot vehicle, who has recently driven the route, signing a register that forms part of the route survey, confirming the route has not altered in a manner that impacts the route survey.

2.7 Travel Impact Notifications

Travel Impact Notifications (TINs) are published when road conditions may impede the movement of Oversize Vehicles. Operators are required to check the TINs on the RAV Mapping Tool on the Main Roads website when conducting a route survey and prior to operating the Oversize Vehicle on the public road network, to ensure there is no relevant information that will impede their vehicle operating on the particular route.

2.8 Route Survey Template

A *Route Survey Template* is provided in *Appendix 1*. It is not mandatory to use this template, however the template provides a detailed example of a route survey that meets all requirements.

3 RECORD KEEPING REQUIREMENTS

3.1 Storage Duration

Route survey documentation must be kept for a minimum of three (3) months.

3.2 Route Survey Format

Route surveys can be documented in any format, provided they are clearly legible and contain the minimum amount of detail specified in this document.

4 AUDITING PROCESS

4.1 Random Audit

A transport operator may be subject to periodic random audits conducted by Main Roads to ascertain if they are complying with the requirements specified in this document.

4.2 Triggered Audit

Where Main Roads has reason to believe a transport operator is not complying with the requirements specified in this document, or an on-road incident has occurred, a triggered audit may be conducted.

4.3 Providing Route Survey Documentation

If a transport operator is subject to a random or triggered audit, they must forward the requested route survey documentation to Main Roads within 7 business days of receiving the request.

5 NON-COMPLIANCE ACTION

Main Roads has the discretion to take any, or all, of the actions in this section if a transport operator fails to comply with the requirements specified in this Audit Regime.

5.1 Prosecution

It is an offence under Section 36 of the *Road Traffic (Vehicles) Act 2012* for a person connected with a vehicle to which a permit or order applies, to fail to comply with each provision of the permit or order. Main Roads may commence court proceedings, or issue an infringement notice, for failing to comply with each provision of the Oversize Permit, which this Audit Regime forms part of.

5.2 Permit Suspension

In accordance with Regulation 199 of the *Road Traffic (Vehicles) Regulations 2014*, Main Roads may suspend or cancel an Oversize Permit if the permit has not been complied with, or there is reason to suspect that there are grounds to refuse issuing an Oversize Permit.

Where it has been identified that the transport operator has not conducted and/or documented a route survey in accordance with this Audit Regime, Main Roads may suspend all permits held by the transport operator that are subject to route survey requirements and will not issue any new permits. The suspension will remain in place until the transport operator can satisfy Main Roads that they have appropriate systems in place to ensure route surveys are conducted and documented for future Oversize Vehicle movements.

5.3 Upfront Route Surveys

Main Roads may impose a requirement for the transport operator to submit route surveys when making application for an Oversize Permit for a specified period. This will continue until Main Roads is satisfied with the quality of the route surveys being provided by the transport operator.

This requirement will apply to all new permit applications and any pending permit applications.

5.4 Warning

Main Roads may issue a warning, advising the transport operator that they will be subject to more severe action for repeat occurrences.

5.5 WA Heavy Vehicle Accreditation Triggered Audit

Main Roads may conduct a triggered audit of the transport operators WA Heavy Vehicle Accreditation (WAHVA) management systems.

6 SHOW CAUSE PROCESS

6.1 Issuing a Show Cause Notice

Prior to Main Roads suspending permits or imposing the requirement for the transport operator to submit upfront route surveys, a show cause process will be followed.

Main Roads will issue the transport operator with a Show Cause Notice (via email), which will require the operator to demonstrate they have appropriate systems in place to ensure route surveys are conducted and documented, and to provide an explanation as to why the incident that prompted this course of action occurred.

6.2 Responding to a Show Cause Notice

The transport operator will be given 7 days to respond to a Show Cause Notice.

Failure to respond within 7 days will result in permit suspension, in accordance with clause 5.2, subject to approval from the Main Roads Manager Heavy Vehicle Road Network Access.

6.3 Actioning a Show Cause Response

If a response is received within 7 days, the Main Roads Permit Manager will review the response.

The response will be deemed adequate if it confirms appropriate systems are in place to ensure route surveys are conducted and documented, and it provides an explanation demonstrating the cause of the incident in question was not a result of an inadequate route survey.

If the response is deemed adequate, an acceptance letter will be provided to the Transport Operator with no further action.

The response will be deemed inadequate if it confirms a route survey was not conducted, the route survey was not documented, or the route survey failed to identify the cause of an incident and it is not unreasonable to expect the cause of the incident to have been identified during the route survey.

If the response is deemed inadequate, Main Roads may suspend permits or impose the requirement for the transport operator to submit upfront route surveys, subject to approval from the Main Roads Manager Heavy Vehicle Road Network Access.

7 APPENDICES

Appendix	Title
Appendix 1	Route Survey Template

APPENDIX 1: Route Survey Template

Oversize Vehicle Route Survey

From {enter location}
to {enter location}

{enter load description}

Contents

Document Control

Owner	
Custodian	
Document Number	
Issue Date	
Review Frequency	Quarterly

Amendments

Revision Number	Revision Date	Description of Key Changes	Section / Page No.

1 VEHICLE & LOAD

This route survey has been conducted for the following vehicle and load:

	Vehicle & Load Details
Load Description	{enter description of load}
Vehicle Configuration	{enter vehicle configuration, e.g. Tri drive prime mover, tandem axle low loader dolly, quad axle low loader}
Overall Width	{enter overall width of the vehicle combination and load}
Overall Length	{enter the overall length of the vehicle combination and load}
Overall Height	{enter the overall height of the vehicle combination and load}
Ground Contact Width	{enter the ground contact width of the trailer, i.e. the widest ground contact}
Load Ground Clearance	{enter the clearance between the ground and the lowest part of the load}
Rear Overhang	{enter rear overhang, i.e. from the centre of the rear axle group to the rear of the load. This does not apply to platform trailers}
Rear Projection	{enter rear projection, i.e. from the rear of the vehicle to the rear of the load}

2 ROUTE DETAILS

This route survey has been conducted for the vehicle and load specified in Section 1, along the following route:

Journey Start Location	Journey End Location
{enter journey start location}	{enter journey end location}

Road Name	From	To
{enter first road on journey}	{enter start location}	{enter next intersection}
{enter next road on journey}	{enter intersection}	{enter next intersection}
{enter next road on journey}	{enter intersection}	{enter next intersection}
{enter last road on journey}	{enter intersection}	{enter end location}

3 ROAD WIDTH AND ROADSIDE IMPEDIMENTS

There is sufficient road width along the route specified in Section 2 to accommodate the vehicle and load specified in Section 1, except for the following pinch points:

Pinch Point	Procedure
Smith Street 	**Example only:** Roadside parking at school inhibits available road width. Do not travel on this road during school pick up hours. Oversize vehicle to wait at truck bay on Jones St while the Pilot ensures no vehicles are parked in this area.
Graham Street 	**Example only:** Width between “give way” signs is only 6 metres, which is not sufficient to accommodate the 6.1 metre load. Pilot must remove left hand sign prior oversize load traveling through the intersection. Driver to take extreme care while Pilots guide the load through the intersection to avoid damage to roadside furniture. Driver to take extreme care and ensure footpath is clear prior to commencing left turn.
Paul St 	**Example only:** Height of power lines only 6.6 metre and width between power lines is only 6.6 metres. Load must be centred between the power lines. Driver to take extreme care while two Pilots guide the load between the power lines. Additional two Pilots required to adequately manage traffic ahead of the load, i.e. effectively closing the road to oncoming traffic.
Alex St 	**Example only:** Width between light pole and guardrail only 5.9 metres. Load must have a minimum ground clearance of 1.2 metres to enable the oversize vehicle to travel to the left of the carriageway, with the load overhanging the guardrail. Driver to take extreme care while Pilots guide the load past the light pole to avoid damage to roadside furniture.

4 SWEPT PATHS

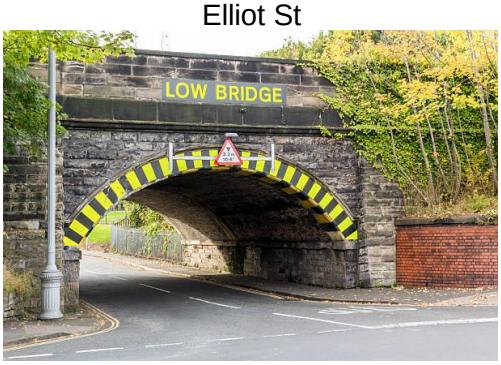
Example only:

AutoTrack Swept Paths conducted for each intersection along the route specified in Section 2.

AutoTrack files saved in 'C' Drive, under file "Route Survey 541".

5 HEIGHT CLEARANCES

There is a minimum 300mm safety buffer between the highest part of the load and all overhead structures, without requiring the load to be lowered, on the route specified in Section 2, except for the following pinch points:

Pinch Point	Procedure
John Street 	**Example only:** John St Bridge only 6.2 metres high. Trailer must be lowered 200mm prior to traversing under the bridge to ensure a 300mm safety buffer is maintained. Trailer to be lowered in the left lane ahead of the bridge, with Pilots providing traffic management. Trailer to be raised again after traversing the bridge, in the left hand lane, with Pilots providing traffic management.
Elliot St 	**Example only:** Due to low bridge on Elliot St, oversize vehicle must use the Peter Hwy to bypass the bridge. Elliot St onto Peter Hwy is left turn only. As such, contraflow movement is required in accordance with the Traffic Guidance Scheme in *Appendix 1.*

6 POWER LINES

Overhead power lines identified along the route specified in Section 2. Western Power and Horizon Power approval obtained, as per *Appendix 2* and *3*. Two Western Power line lifts required as follows:

Pinch Point	Procedure
James Street 	**Example only:** Power line height not sufficient to accommodate the 6.1 metre high load. Western Power Escort to be contacted on 0412 345 678 the day prior to departure to arrange a time for the line lift. Oversize vehicle must only traverse under the power line under direction from the Western Power Escort.
Paul St 	**Example only:** Power line height not sufficient to accommodate the 6.1 metre high load. Western Power Escort to be contacted on 0412 345 678 the day prior to departure to arrange a time for the line lift. Oversize vehicle must only traverse under the power line under direction from the Western Power Escort.

7 ROAD INFORMATION TABLES

Road Information tables have been checked as part of the route survey and will be checked on the day of the movement, prior to commencement. The following areas affect the movement and the specified conditions must be complied with:

Road	Condition
{enter road name}	{enter conditions specified in Road Information table}
{enter road name}	{enter conditions specified in Road Information table}

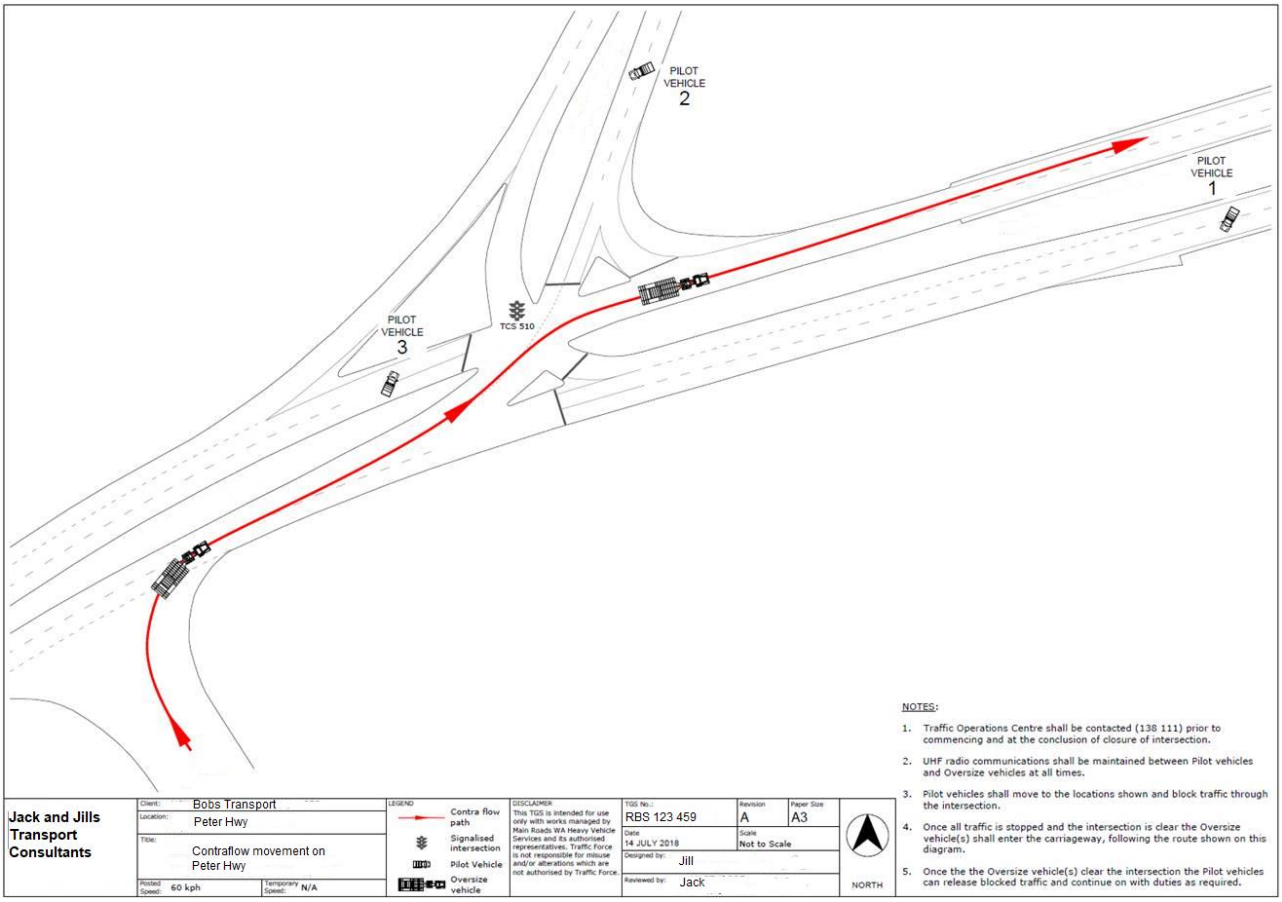
8 PERIODIC REVIEW

Review Date	Description of Any Changes to the Route	Reviewed by	Position Title

9 APPENDICES

Appendix	Title
Appendix 1	Traffic Guidance Scheme for Peter Hwy Contraflow Movement
Appendix 2	Western Power Approval
Appendix 3	Horizon Power Approval

APPENDIX 1: Traffic Guidance Scheme for Peter Hwy Contraflow Movement



APPENDIX 2: Western Power Approval

{Insert Western Power Approval letter}

APPENDIX 3: Horizon Power Approval

{Insert Horizon Power Approval letter}