

Farm Gate Access - Self-Assessment Procedure

B-doubles operating at 4.6m high, Higher Mass Limits (HML) or Productivity Schemes travelling to the Farm Gate

The self-assessment model contains a series of questions designed to assess the magnitude of risk on a low volume road being considered for occasional access of certain combinations under this project. The assessment will be used to justify to the road manager why access should be granted. The approved checklist has been attached for application and should be implemented with the support of this Procedure and the Farm Gate Access-Practitioners Guide.

This procedure will offer targeted guidance to the proponent seeking access, the assessor and local council road managers.

Purpose

The purpose of this procedure is to:

- Define what type of road, traffic volume and frequency can be considered under this procedure
- Guide the assessor through each step and highlight considerations when completing the Farm Gate Access assessment
- Clarify roles and responsibilities for each step involved in the Farm Gate Access assessment and approval process
- Provide a clear and consistent process of reviewing and assessing particular types of access

Risks

Risks to be managed by this procedure include:

- Inconsistent and unclear information or direction provided to the assessor, resulting in poor quality or incorrect assessments
- Ensuring a reasonable and accepted practice is followed by the assessor, for example how sight distance is measured and recorded or explanations on what short stacking means
- Carrying out an assessment for a road, activity or frequency that does not meet the definitions prescribed in this procedure
- Completing regular reviews of access approved using this procedure to ensure currency of data and that it continues to meet the definitions outlined in this document

Scope

Farm Gate Access refers to this procedure, checklist and subsequent practitioners guide for activities associated with the following description for road, activity and vehicle types:

- **Road function** – Our focus is on **local access roads** under the care and control of Councils or otherwise in unincorporated areas. The major function for this type of road is to provide **access to farms or properties and has limited connectivity** to the broader road network.

This project adopts the definition outlined in the Local Government Functional Road Classification Hierarchy table developed by the Institute of Public Works Engineering Australia NSW (IPWEA)¹.

¹ <https://higherlogicdownload.s3.amazonaws.com/IPWEA/c7e19de0-08d5-47b7-ac3f-c198b11cd969/UploadedImages/IPWEA%20Road%20Hierarchy%20posterA3.pdf>

- **Low volume road** – the model of self-assessment will be developed based on low volume road access only. In this project low volume will be defined as roads that are not thoroughfares and do not offer a connection to other key roads and are roads that carry no more than **200 vehicles per day, where 25 or less of these vehicle movements consists of heavy vehicles.**
- **Occasional task** - this project does not seek to address access to facilities which have high volumes of movements relating to operations such as grain terminals or feedlots. This project considers an occasional task to be up to **26 return trips per annum per property.** This means that access to and from the property by one vehicle equates to one trip.
- **Development type and activity** - this project will specifically target local roads that provide access to properties used for primary production. Councils will not be limited in their implementation of the model; however, it will be developed giving consideration to the freight task relating to primary produce.
- **Primary Producer** – A primary producer by definition of the Motor Vehicle Taxation Act means a person:
 - (a) who cultivates or uses the person's own land or that of another for the person's own benefit:
 - (i) for the production of fruit, grain, flowers, vegetables, tobacco or farm or agricultural produce of any description, or
 - (ii) for dairy farming, poultry or other bird farming, pig farming, bee keeping or oyster or fish culture, or
 - (iii) for a nursery, or
 - (iv) as a pastoralist for the rearing or grazing of horses, cattle or sheep, or
 - (b) who gathers leaves from which eucalyptus or other oil is to be distilled.

This procedure is applicable to the proponent who has an interest and/ or need to gain access, and activates the self- assessment model to be carried out in accordance with this framework.

Vehicle types considered under this framework include restricted access vehicles up to and including 26m B-doubles, vehicle combinations that are up to 4.6 metres in height, vehicle or vehicle combinations that are operated at Higher Mass Limits (HML), or being used under Productivity Schemes such as the Grain Harvest Management Scheme (GHMS) or the Livestock Loading Scheme (LLS) in accordance with the definitions outlined in the HVNL.

Road trains are considered out of scope for the purposes of this project.

This process does not remove the responsibilities of approval by the Road Manager which are prescribed under Heavy Vehicle National Law (HVNL).

The cost to carry out remedial work as a result of this access will need to be negotiated and agreed on with the Road Manager at the time access is approved. The Proponent may be required to cover the cost of repair work either in part or in full.

Overview

Farm Gate Access aims to facilitate a greater volume of heavy vehicle access approvals for movements on low volume roads, performing an occasional task - specifically accessing the farm gate. This project complements other work being carried out to develop regional freight networks.

An approach will continue to be developed in partnership with road managers and can be implemented to enable the assessment of routes to be completed by third parties and submitted to the Road Manager who will grant approval. Both 4.6 metre high vehicles and those operating at HML will be considered however treated differently.

The Practitioners Guide is to work in synergy with the risk based Self-Assessment Procedure and Checklist, providing assurance that a sound and methodical process was followed during the assessment. In failing to use the three documents in conjunction with one another will not meet the requirements to approve access.

Legal position

The Road Manager cannot delegate or forfeit their responsibility as Road Manager. The Road Manager will still need to approve an application to grant access and, as such, must be comfortable with the integrity of

the process behind the route assessment.

The Heavy Vehicle National Law does not prescribe what needs to be considered in a route assessment but the general law requires that any approver must act reasonably. There is no specific requirement as to who should carry out the assessment but, in order to be considered reasonable, the assessor should have sufficient local knowledge and experience to provide credible and strong assurance.

In terms of the 'route assessment' – HVNL (s.156 (2)(b)) defines this as:

“...an assessment of the road infrastructure in the areas or on the routes to which the authority is to apply to decide the impact the grant of the authority will have, or is likely to have, on the road infrastructure.”

The Approved Guidelines for Granting Access outlining the requirements for conducting a route assessment exist under the HVNL or are prescribed by the Heavy Vehicle National Regulator. It is expected that the road can be used safely given the proposed dimension and/ or mass of the vehicle and factors such as the nature of the terrain or road surface; the nature of the road and likely traffic or hazards; and obstacles such as overhead bridges, wires, or poles are considered.

Any technical assessment, such as assessing a bridges load capacity, is out of scope.

Practitioners Guide: Data collection methods and best practice

The self-assessment model has been designed to reach members of the community who desire access as an operator or land holder. Generally route assessments are carried out by technical officers who complete formal or on-the-job training and bring with them a technical skill set or background. The Practitioners Guide has been developed to demonstrate accepted methods for collecting technical data that can be used to support access on the roads for vehicle types and activities described in this procedure. This includes best 'accepted' practice while collecting and recording accurate information on:

- Roadside development
- Clear zone requirements
- Road and traffic characteristics related to the road cross section
- Truck sight distance
- Horizontal and vertical alignment (curves or bends and crests or dips)
- Swept Path analysis
- Short Stacking
- Responsibilities under Work Health and Safety (WHS)

Prompts on how to collect this information is contained in the self-assessment checklist however are explained in more detail throughout the Practitioners Guide.

E-learning modules will be developed as an online resource to support the data collection methods described in the Guide.

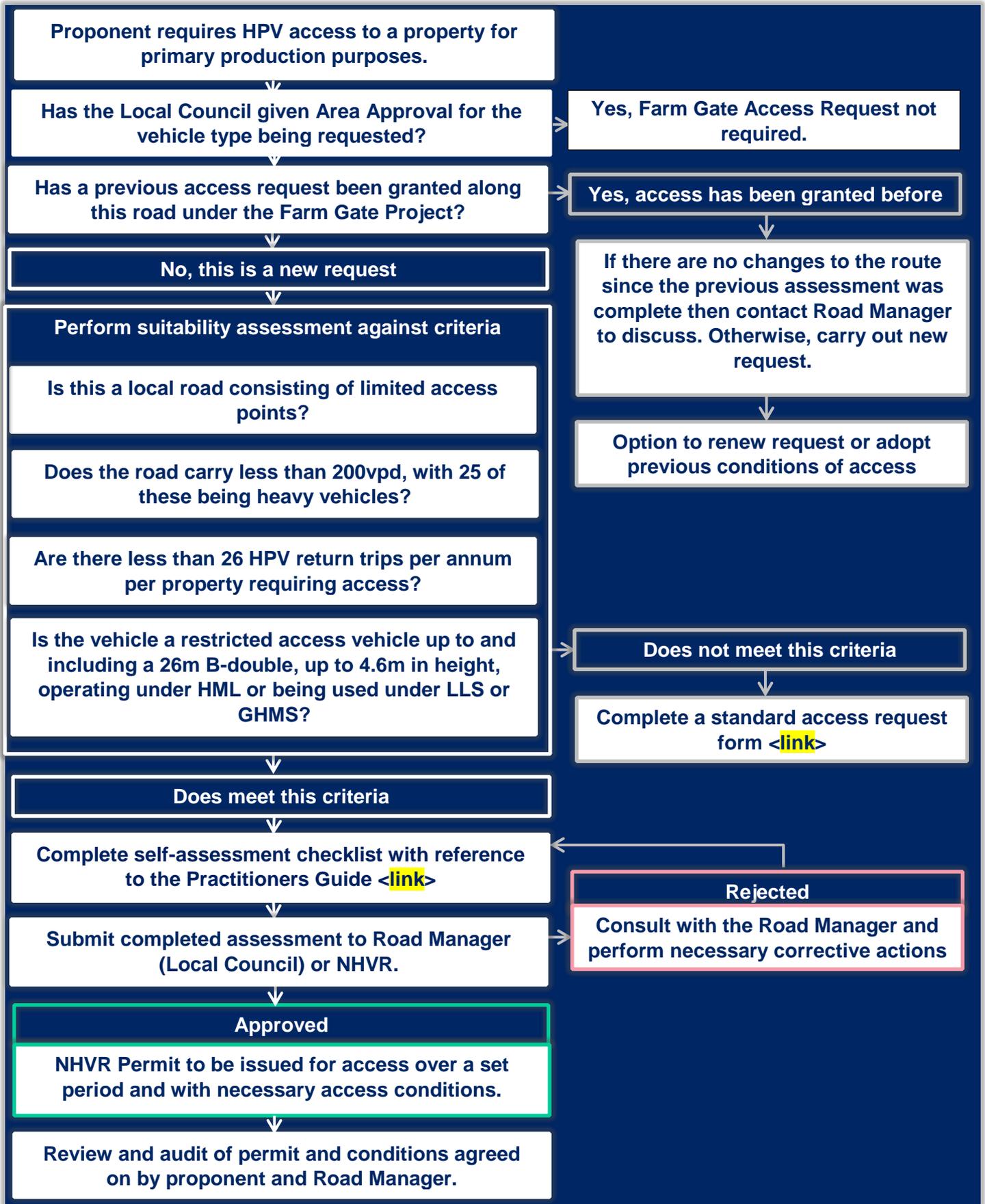
Quality Assurance

Council should carry out regular audits on the quality of information provided by the Assessor. Selection of the route would be at random and Council should consider carrying out a minimum number of audits per annum.

Maintenance cycle

Consideration needs to be given to the lifecycle of the process with regular reviews carried out to ensure any data referenced or best practice methods recommended remain current.

Procedure



Farm Gate Access: Self-Assessment Checklist

Road name(s)	Council	
Total length (km)	Date last assessed	
Assessor	Contact details	Date
Notes		

	Selection	Risk	Action to reduce the risk severity for moderate and high risk items	
1.0 Suitability				
1.1 What type of access is required? (select one or multiple)	4.6m	Low		
	B-Double	Mod		
	HML	High		
	LLS	Mod		
	GHMS	Low		
1.2 Does the route meet the criteria outlined in the Farm Gate Access Procedure?	Yes	Low		
	No	High	Contact council before proceeding	Mandatory condition
1.3 Are you aware of similar vehicles already travelling along the route? (e.g. under permit or already have access approved as a result of this checklist) (Refer 1 below)	Yes	Advise		
	No	N/A		
2.0 Road environment				
2.1 What is the posted speed limit?	<= 60km/h	Low		
	No Visible Speed Limit	Mod	Temporary reduction of speed 60km/h or less	<input type="checkbox"/>
	60-80km/h	Mod	Travel outside peak periods, particularly if this is a school bus route	<input type="checkbox"/>
	>= 80km/h	High	Install warning signs such as Curve warning/speed advisory/"trucks ahead"	<input type="checkbox"/>
2.2 Describe the land use along the route	Rural	Low		
	Rural/ Residential	Mod	Travel outside peak periods, particularly if this is a school bus route	<input type="checkbox"/>
	Residential	High	Use alternative route	<input type="checkbox"/>
	Commercial	High		
	Industrial Mixed	High High	Carry out community consultation	<input type="checkbox"/>
2.3 Are there any objects that can be damaged or cause damage in accordance with "clear zone" requirements? (e.g. fence posts or mature vegetation) (Refer 2 below)	No	Low		
	Yes	High	Remove the object	<input type="checkbox"/>
			Install protection around object. This may include installation of safety barrier	<input type="checkbox"/>
Reduce the operating speed to meet the clear zone requirement.	<input type="checkbox"/>			
2.4 Could the vehicle hit any nearby objects while travelling along the route? (e.g. pedestrian islands/refuges, signs, fencing or drains) (Refer 2 below)	No	Low		
	Yes	High	Remove the object	<input type="checkbox"/>
			Install protection around object. This may include installation of safety barrier	<input type="checkbox"/>
3.0 Road and traffic characteristics				
3.1 Describe the road surface	Sealed	Low		
	Unsealed	Mod	Condition the operating speed of the vehicle	<input type="checkbox"/>

	Selection			Risk	Action to reduce the risk severity for moderate and high risk items	
				Mod	Limit operation to dry conditions	<input type="checkbox"/>
3.2 Select a part of the road and divide the width by two. What is the width of the road? Consider a width that broadly represents the narrowest part of the route. See attached table (Refer 3 below) to identify minimum requirements.	Greater than or equal to min width			Low		
	Less than 0.5m from minimum width			Mod	Temporary reduction of speed 60km/h or less	<input type="checkbox"/>
	Greater than 0.5m from minimum width			High	No travel at school bus times, peak periods, inclement weather, low visibility, etc.	<input type="checkbox"/>
3.3 Are there any steep hills on this road? (Refer 4 below)	No			Low		
	Yes			High	Pilot Vehicle to be used	<input type="checkbox"/>
					Rotating Beacons required and headlights on	<input type="checkbox"/>
3.4 Does the road contain any tight intersections or narrow bends that aren't wide enough to fit the vehicle? (Refer 5 below)	No			Low		
	Yes			High	Pilot Vehicle will be used	<input type="checkbox"/>
	Unsure			Mod	Roadside clearing or relocate roadside furniture	<input type="checkbox"/>
					Rotating Beacons required and headlights on	<input type="checkbox"/>
3.5 Do cyclists or pedestrians use the route?	No			Low		
	Yes			Mod	No travel at school bus times, peak periods, inclement weather, low visibility, etc.	Mandatory condition
3.6 Is this a school bus route?	No			Low		
	Yes			High	No travel at school bus times, peak periods, inclement weather, low visibility, etc.	Mandatory condition
4.0 Intersections or railway level crossings						
4.1 Does the route connect to a main road administered by Roads and Maritime Services?	No			Low		
	Yes			High	Install warning devices, such as signposting, on the connecting road	<input type="checkbox"/>
					Propose conditions of access, such as left in/left out only	<input type="checkbox"/>
4.2 Circle the sign posted speed limit:	60 km/h	80 km/h	100 km/h			
4.2.1 If you were driving at this speed, and there was a hazard on the road, how far down the road can you see? What distance would allow you to come to a complete stop before striking the hazard? (Stopping Sight Distance or SSD) (Refer 6 below)	>110 m	>165 m	>240 m	Low		
	<110 m	<165 m	<240 m	High	Install warning devices, such as signposting, on the connecting road	<input type="checkbox"/>
					Roadside clearing or relocate roadside furniture	<input type="checkbox"/>
					Reduce the vehicle combinations speed limit to meet the sight distance requirements	<input type="checkbox"/>
4.2.2 If you, as a driver, were waiting to turn onto the road from an intersection, how far down the road can see a car approaching so you can proceed safely and without forcing the approaching vehicle to stop? Assume the vehicle is travelling at the posted speed limit. (Safe Intersection Sight Distance or SISD) (Refer 6 below)	>140 m	>215 m	>300 m	Low		
	<140 m	<215 m	<300 m	High	Install warning devices, such as signposting, on the connecting road	<input type="checkbox"/>
					Conduct roadside clearing or relocate roadside objects	<input type="checkbox"/>
					Temporary reduction of speed 60km/h or less	<input type="checkbox"/>
4.3 Is there a railway level crossing on the route? (Refer 7 below)	No			N/A		
	Yes-lights			Low		
	Yes-signs			Low		
	Yes-concern			High	Contact council before proceeding	<input type="checkbox"/>
4.4 Is there a <i>minimum length of 29.5m</i>	Yes			Low		

	Selection	Risk	Action to reduce the risk severity for moderate and high risk items	
to prevent the blocking of an adjacent intersection or railway level crossing? (Refer 8 below)	No	High	Contact council before proceeding	Mandatory condition
5.0 Structures				
5.1 Are there any culverts or causeways on the route?	No	Low		
	Yes	Mod	Contact local Council before proceeding	Mandatory condition
5.2 Are there any bridges on the route?	No	Low		
	Yes	Mod	Contact local Council before proceeding	Mandatory condition
5.3 If yes, are any of these timber structures?	No	Mod		
	Yes	High	Contact local Council before proceeding	Mandatory condition
6.0 Height				
6.1 Are there any overhanging objects, less than 4.6m high, that could be struck by a passing vehicle? (e.g. vegetation, signage, power lines)	No	Low		
	Yes	High	Contact local Council before proceeding – Vegetation, Structure, Lighting Contact relevant utility provider regarding overhead wiring	Mandatory condition Mandatory condition
7.0 Adjacent communities and amenity.				
7.1 Are there any schools, churches or hospitals on the route?	No	Low		
	Yes	Mod	No travel in peak periods, school bus times, inclement weather, low visibility, etc.	<input type="checkbox"/>
Other Applicable Measures (Optional)				
Insert supplementary information related to the route such as safety suggestions as headlights on while on route, Farm Gate to be open for Entry/Exit, Radio or phone communication with driver, contact made with surrounding neighbours of vehicles movements.				
Summary of access conditions				
List e.g., vehicles must travel at "x" km/h, escort required for travel, farm gate must be open for vehicles arrival, Driver training, headlights on				

- All information contained in this checklist are a true and accurate recording of the route conditions on the date this assessment was carried out
- The data collection methods described in the Practitioners Guide have been followed

Legend

No risk or NA
Low risk
Moderate risk
High risk
>Greater than
<Less than

Assessor	Road Manager
Name:	Council:
Accreditation (not mandatory)	Delegation:
Signature: Date:	Signature: Date:

Farm Gate Access: Quick Reference Guide.

1. A **similar vehicle** to the one you are assessing that already uses or had used this route under permit.
2. A **clear zone** is a 'buffer' measured from the edge of the travelled way, outwards away from the road and is free from these non-frangible objects. Each clear zone (in metres) is determined based on the speed limit, volume of traffic using the road on an average day (average daily traffic or data collected over a year and divided by 365 to calculate an average) and the shape of the verge (cut or fill).

Suggested clear zone widths

Speed limit (km/h)	Average Daily Traffic (ADT)	Clear zone width (m)	
		Fill	Cut
Less than or equal to 60	Less than 750	3.0	3.0
70-80	Less than 750	4.5	3.0
90	Less than 750	5.5	3.5
100	Less than 750	7.5	4.5
110	Less than 750	8.0	5.0

3. The **road width** should be representative of the section being assessed. Where lane width varies, use the narrowest point of the road section and make a note of this in the 'other local conditions' comment box on the checklist.

Minimum carriageway widths

Average Daily Traffic	Roadside Development	Road Width	
		Sealed	Unsealed
1-150	Urban	6.0-6.8m	7.2m
	Rural	6.8m	
150-500	Urban	7.0m	7.7m
	Rural	7.6m	

4. A '**grade**', vertical alignment or longitudinal profile along the centreline of the road refers to the steepness a crest or dip and is generally expressed as a percentage of the vertical component divided by the horizontal component.

General maximum grades (%)

Operating speed (km/h)	Terrain (%)		
	Flat	Rolling	Mountainous
60	6-8	7-9	9-10
80	4-6	5-7	7-9
100	3-5	4-6	6-8

5. For the purposes of this self-assessment, the Assessor is required to visually assess the road and indicate whether there may be concerns of **vehicles negotiating the route** and whether they are likely to track to the opposite side of the road using the width of the carriageway. Refer to 3.4 Table 4 Swept Path comparisons and graphical representations of vehicle combinations movement paths.

6. **Stopping Sight Distance (SSD)** is the distance to enable a normally alert driver, travelling at a speed to perceive, react and brake to a stop before reaching a hazard on the road ahead. **Safe Intersection Sight Distance (SISD)** is the minimum sight distance which should be provided on a major road at any intersection. SISD provides sufficient distance for a driver of a vehicle on the major road to observe a vehicle on a minor road approach moving into a collision situation and to decelerate to a stop before reaching a collision point. *Figures shown for sight distance assume the road is flat.*

7. **Railway level crossings** have passive or active controls to guide road users. Passive sites have signs that are unchanging with no mechanical or light devices. In addition to signs, active sites are controlled by automatic warning systems such as flashing lights, automatic gates (booms, boom gates), audible devices (bells, gongs) or other devices that are activated by approaching trains.

8. In some areas the distance between intersections (including railway level crossings) are shorter than the length of some vehicles. This is referred to as '**storage**' or '**stacking distance**'. When a vehicle overhangs the adjacent intersection or railway level crossing we call this 'short stacking'. The distance between intersections or an intersection and railway level crossing must be at least 3.5 metres plus the vehicle length.

Roles and Responsibilities

Role		Responsibilities
Roads and Maritime Services	RMS	Roads and Maritime Services is a NSW Government agency delivering safe and efficient journeys throughout NSW, managing the operations and programs of roads and waterways.
National Heavy Vehicle Regulator	NHVR	The National Heavy Vehicle Regulator (NHVR) is Australia's independent regulator for all vehicles over 4.5 tonnes gross vehicle mass.
Transport for NSW	TfNSW	Transport for NSW role is to lead the development of a safe, efficient, integrated transport system.
Local Council, Various		Seek legal advice on how this project may affect them (optional)
Road Manager		Road Managers have particular responsibilities regarding decision-making for heavy vehicle access to their road network and consenting to access to restricted access vehicles on their roads, and the conditions under which they will operate.
Proponent		The person, company, incorporated body or entity that requires HPV access along a route to a site
Assessor		The assessor is considered to be any party who participates, carries out, and/ or completes the assessment of a low volume road which is sent to the Road Manager as a request for access. The assessor may include, but is not limited to, the land holder, farmer, operator, producer, contractor, external consultant or council staff member.
Rail infrastructure managers		Manage the NSW rail network in accordance with the Rail Safety National Law https://www.transport.nsw.gov.au/industry/asset-standards-authority/find-an-aeo

Acronyms, Abbreviations and Definitions

Term		Definition
Heavy Vehicle National Law	HVNL	The legislative framework that establishes prescribes and imposes all requirements relating to heavy vehicles.
High Productivity Vehicle	HPV	Higher Productivity Vehicles or HPVs are truck-and-trailer combinations that provide the ability to shift more freight more efficiently, with the spin-off of greater environmental and safety performance.
Swept path		The calculation and analysis of the movement and path of different parts of a vehicle when that vehicle is undertaking a turning manoeuvre.
Short stacking		Some railway crossings are prone to vehicles stopping on the railway tracks due to factors involving short storage or stacking distances between the crossing and a nearby intersection, and/or traffic congestion which results in vehicle queues extending back over the crossing. Also, the crossing itself may contribute to queues extending back into nearby intersections.
Permit		A vehicle that exceeds the General Mass and Dimension Limits, 19 metres in length, 4.3m in height and 2.5 metres in width, must carry a permit that is issued to the vehicle/combination or a notice. A Notice is freely available from the National Heavy Vehicle Regulator and must be

		<p>complied with the vehicle must fit inside the envelope requirements of the Notice. Once your vehicle or combination does not fit into this envelope a Permit must be applied for from the NHVR. RMS and Local Councils also have the delegation to issue permits for intrastate travel for some vehicle types.</p>
Checklist or Self-Assessment Model	Attachment 1	<p>A series of questions designed to assess the magnitude of risk on a low volume road being considered for occasional 4.6m high or HML heavy vehicle access under this project.</p>
RFIC	Road Freight Industry Council	<p>The purpose of the Road Freight Industry Council is to provide expert advice to the Minister for Roads and Ports, Transport for NSW (TfNSW) and Roads and Maritime Services (RMS). The work of the Council focuses on road freight transport issues that affect road safety, efficiency and productivity in relation to operational and customer service matters.</p>
NCSC	Network Connectivity Sub-Committee	<p>The purpose of the Network Connectivity Sub-Committee is to provide expert advice on network connectivity and access issues and identify strategies to address connectivity constraints and is established under the auspice of the Road Freight Industry Council (RFIC)</p>
HML	Higher Mass Limit	<p>Allow particular heavy vehicles to access additional mass entitlements providing:</p> <ul style="list-style-type: none"> • Operators of vehicles or combinations running HML on triaxle groups are accredited under the Mass Management Module of the National Heavy Vehicle Accreditation Scheme (NHVAS), with an accreditation label fitted to the hauling unit; and • Vehicles are fitted with certified road friendly suspension.
4.6m high	4.6m	<p>A heavy vehicle must not be higher than—</p> <p>(a) for a vehicle built to carry cattle, horses, pigs or sheep—4.6m; or</p> <p>(b) for a vehicle built with at least 2 decks for carrying vehicles—4.6m; or</p> <p>Note— An example is included under section 12(2).</p> <p>(c) for a double-decker bus—4.4m; or</p> <p>(d) for another vehicle—4.3m.</p> <p>To operate at the 4.6m height, which exceeds the general access limits, the vehicle must utilise the National Class 2 Heavy Vehicle 4.6m High Livestock Carrier Authorisation (Notice) 2014 (no. 1)</p>
Road Manager	RM	<p>²As a road manager, local government is recognised in legislation as being responsible for consenting to access to restricted access vehicles on their roads, and the conditions under which they will operate. The Heavy Vehicle National Law (HVNL) requires local government to formally consent to the operation of restricted access vehicles on their roads before a permit can be issued. This is intended to empower local government to ensure safety for all road users, protect and efficiently manage access to important council infrastructure, such as roads and bridges, and to preserve and manage public amenity.</p>
Restricted Access Vehicle Route Assessment Tool	RAVRAT	<p>The RAVRAT tool guides local government practitioners through a consistent route assessment process, focused specifically upon the road infrastructure assessment criterion that is most relevant to the local roads environment. The system is able to assess routes for prescriptive, PBS and Over Size Over Mass (OSOM) freight movements.</p>

² <https://www.nhvr.gov.au/road-access/local-government-road-managers/local-government-under-the-hvnl>

References and Related Documents

References	
HVNL	https://www.legislation.nsw.gov.au/#/view/act/2013/42a
Practitioners Guide	<link>
NSW Route Assessment Guide for Restricted Access Vehicles (30 October 2012)	http://www.rms.nsw.gov.au/documents/business-industry/heavy-vehicles/route-assessment-guidelines.pdf
NSW Route Assessment Guide – 4.6 metre High Vehicles	http://www.rms.nsw.gov.au/documents/business-industry/heavy-vehicles/route-assessment-guidelines.pdf
NSW Route Assessment Guide – Freight Route Investigation Levels for B-Double and HML route assessments	http://www.rms.nsw.gov.au/business-industry/partners-suppliers/lgr/downloads/documents/freight_route_investigation_levels_for_rav_ed5-12.pdf
Restricted Access Vehicle (RAV) maps and lists	http://www.rms.nsw.gov.au/business-industry/heavy-vehicles/maps/restricted-access-vehicles-map/index.html
Austrroads	http://www.austrroads.com.au/