

PBS Vehicle Approval

Heavy Vehicle National Law Section 23

Heavy Vehicle (General) National Regulation Section 17

IMPORTANT

- This is a **restricted access vehicle** - you must comply with a Notice or operate under an access permit.
- The driver must carry a copy of this PBS Vehicle Approval and an associated access permit (if applicable).
- The driver must be able to produce readable copies (electronic or hard copy) of this VA and access permit if requested by Authorised Officers.
- All vehicle units in a combination (prime movers, trailers, dollies, etc.) must be listed on this VA.
- The driver must be able to identify the specific combination being driven within the VA.
- Failure to comply with the above can incur penalties for the operator and driver.

11 July 2024

Ref No: PBS – VA17036 – V220222 – v1A

This PBS Vehicle Approval modifies any previously issued approval for the vehicle(s) listed herein operating under Design Application Number V220222 .

Design Approval Holder	Robert Smedley SMEDLEY'S ENGINEERS PTY LTD	Address	110 Highett St Richmond VIC 3121
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Design Application	V220222	Vehicle	A-Double (3-2-3)
Load	Quarry and Bulk; Woodchip; Waste; Unladen; Other	Length (mm)	≤ 29900
Assessor	Andrej Bucko	Height (mm)	≤ 4300

Combination Matrix

For each Prime Mover and Trailer Set, the corresponding drawing reference number, dimension set number and mass table number/s are listed below. The dimension set number e.g., ‘Variants 25-34’ indicates the maximum allowable payload heights and/or allowable tyre options for the corresponding Prime Mover and Trailer Set - refer to the Operating Conditions and Approved Tyre Options sections on this VA.

New VINs added in this VA are listed in bold.

Prime Mover 1	Make	GCM (t)	Prime Mover 2	Make	GCM (t)
6F5000000HA459684	KW	97	6F5000000MA472510 6F5000000LA467658 6F5000000MA472509	KW	97

Lead Trailer 1	ATM (t)	Lead Trailer 2	ATM (t)
6B9X3SAHHP3AE6008	40	6F8000000L113151	44

Dolly 1	ATM (t)	Dolly 2	ATM (t)
6B9X2DAHHP3AE6009	18	6F8T250000LE06980	18

Rear Trailer 1	ATM (t)	Rear Trailer 2	ATM (t)
6B9X3SAHHP3AE6010	45	6F8000000L113152	44

Trailer Sets			
Trailer Set 1	Lead Trailer 1	Dolly 1	Rear Trailer 1
Trailer Set 2	Lead Trailer 2	Dolly 2	Rear Trailer 2

	Trailer Set 1	Trailer Set 2
Prime Mover 1	BKL01_001 Variants 27 Table 1, 2	BKL01_001 Variants 29 Table 1, 3
Prime Mover 2	BKL01_002 Variants 37 Table 1, 4	BKL01_002 Variants 39 Table 1, 5

Table 1
Prime Mover 1, 2 and Trailer Set 1, 2

Mass Limits	Level 2	Axle Group Masses	Level 2		
			GML	CML	HML
GML (t)	79.5	Steer (t)	6.5	6.5	6.5
CML (t)	81.5	Drive (t)	16.5	17.0	17.0
HML (t)	85.5	Lead Trailer (t)	20.0	21.0	22.5
Bridge Assessment	Tier 2/3	Dolly (t)	16.5	17.0	17.0
		Rear Trailer (t)	20.0	21.0	22.5

Table 2
Prime Mover 1 and Trailer Set 1

Mass Limits	Level 2	Axle Group Masses	Level 2		
			GML	CML	HML
GML (t)	70.0	Steer (t)	6.5	6.5	6.5
CML (t)	72.0	Drive (t)	16.5	17.0	17.0
HML (t)	76.0	Lead Trailer (t)	20.0	21.0	22.5
Bridge Assessment	Tier 1	Dolly (t)	16.5	17.0	17.0
		Rear Trailer (t)	20.0	21.0	22.5
The mass across axle groups is limited to -					
Axle Groups			GML	CML	HML
1 to 4			59.35	61.35	62.85
2 to 4			51.55	53.55	55.05
2 to 5			63.50	65.50	69.50
3 to 5			54.75	56.75	60.25

Table 3
Prime Mover 1 and Trailer Set 2

Mass Limits	Level 2	Axle Group Masses	Level 2		
			GML	CML	HML
GML (t)	68.5	Steer (t)	6.5	6.5	6.5
CML (t)	70.5	Drive (t)	16.5	17.0	17.0
HML (t)	74.5	Lead Trailer (t)	20.0	21.0	22.5
Bridge Assessment	Tier 1	Dolly (t)	16.5	17.0	17.0
		Rear Trailer (t)	20.0	21.0	22.5
		The mass across axle groups is limited to -			
		Axle Groups	GML	CML	HML
		1 to 4	57.90	59.90	61.40
		2 to 4	50.15	52.15	53.65
		2 to 5	62.00	64.00	68.00
		3 to 5	53.45	55.45	58.95

Table 4
Prime Mover 2 and Trailer Set 1

Mass Limits	Level 2	Axle Group Masses	Level 2		
			GML	CML	HML
GML (t)	70.0	Steer (t)	6.5	6.5	6.5
CML (t)	72.0	Drive (t)	16.5	17.0	17.0
HML (t)	76.0	Lead Trailer (t)	20.0	21.0	22.5
Bridge Assessment	Tier 1	Dolly (t)	16.5	17.0	17.0
		Rear Trailer (t)	20.0	21.0	22.5
		The mass across axle groups is limited to -			
		Axle Groups	GML	CML	HML
		2 to 4	51.55	53.55	55.05
		2 to 5	63.50	65.50	69.50
		3 to 5	54.75	56.75	60.25

Table 5
Prime Mover 2 and Trailer Set 2

Mass Limits	Level 2	Axle Group Masses	Level 2		
			GML	CML	HML
GML (t)	68.5	Steer (t)	6.5	6.5	6.5
CML (t)	70.5	Drive (t)	16.5	17.0	17.0
HML (t)	74.5	Lead Trailer (t)	20.0	21.0	22.5
Bridge Assessment	Tier 1	Dolly (t)	16.5	17.0	17.0
		Rear Trailer (t)	20.0	21.0	22.5
The mass across axle groups is limited to -					
		Axle Groups	GML	CML	HML
		1 to 4	58.35	60.35	61.85
		2 to 4	50.15	52.15	53.65
		2 to 5	62.00	64.00	68.00
		3 to 5	53.45	55.45	58.95

Operating conditions

The NHVR approves the vehicles listed herein for the level(s) shown in the “Mass Limits” table with the following operating conditions:

1. The total combination mass must not exceed the limits in the “Mass Limits” table.
2. The axle group masses must not exceed the limits in the “Axle Group Masses” table.
3. If the “Mass Limits” table specifies Tier 2 or Tier 3, a bridge assessment is required.
4. Maximum payload heights measured from the ground must not exceed: (m)

Variant 27	Lead Trailer		Rear Trailer	
	Base of heap	Peak of heap	Base of heap	Peak of heap
Water level	3.500		3.300	
Heaped 1	3.430	3.560	3.230	3.360
Heaped 2	3.370	3.610	3.170	3.410
Heaped 3	3.310	3.660	3.110	3.460
Heaped 4	3.250	3.710	3.050	3.510
Heaped 5	3.190	3.760	2.990	3.560

Variant 29	Lead Trailer		Rear Trailer	
	Base of heap	Peak of heap	Base of heap	Peak of heap
Water level	3.300		3.100	
Heaped 1	3.230	3.360	3.030	3.160
Heaped 2	3.170	3.410	2.970	3.210
Heaped 3	3.110	3.460	2.910	3.260
Heaped 4	3.050	3.510	2.850	3.310
Heaped 5	2.990	3.560	2.790	3.360

Variant 37	Lead Trailer		Rear Trailer	
	Base of heap	Peak of heap	Base of heap	Peak of heap
Water level	3.500		3.300	
Heaped 1	3.430	3.560	3.230	3.360
Heaped 2	3.370	3.610	3.170	3.410
Heaped 3	3.310	3.660	3.110	3.460
Heaped 4	3.250	3.710	3.050	3.510
Heaped 5	3.190	3.760	2.990	3.560

Variant 39	Lead Trailer		Rear Trailer	
	Base of heap	Peak of heap	Base of heap	Peak of heap
Water level	3.300		3.100	
Heaped 1	3.230	3.360	3.030	3.160
Heaped 2	3.170	3.410	2.970	3.210
Heaped 3	3.110	3.460	2.910	3.260
Heaped 4	3.050	3.510	2.850	3.310
Heaped 5	2.990	3.560	2.790	3.360

The heaped payload cases describe materials with different angles of repose.

5. 6.5 tonne complying steer axle requirements:
 - an engine that complies with the engine emission standards of Australian Design Rule (ADR) 80/01 (Euro 4) or a later version of ADR 80; and
 - a front underrun protection device (FUPD) that complies with UN ECE Regulation 93 or ADR 84; and
 - a cabin that complies with UN ECE Regulation 29.
6. Concessional Mass Limits (CML) requirements:
 - a National Heavy Vehicle Accreditation Scheme (NHVAS) – Mass Management Accreditation must be in force for all motor vehicles listed on this vehicle approval.
7. Higher Mass Limits (HML) requirements:
 - for tandem axles groups, road friendly suspensions;
 - for tri-axle groups, road friendly suspensions and a National Heavy Vehicle Accreditation Scheme (NHVAS) – Mass Management Accreditation must be in force for all motor vehicles listed on this vehicle approval.
8. When operating at Level 2, there is a minimum mass requirement for the drive axle group. The mass on the drive axle group must be at least 19.8% of the total combination mass e.g. at 79.5t total combination mass, $79.5 \times 0.198 = 15.74t$ is required on the drive axle group. This clause does not apply to an unladen vehicle.
9. If drawbar length exceeds 5m, the outermost surface of the drawbar must be fitted with yellow reflective material that complies with Class C material requirements of United National Economic Commission for Europe Regulation No. 104 Uniform provisions concerning the approval of retro-reflective markings for vehicles of category M, N and O.
10. If overall length exceeds 22m but does not exceed 30m, a “LONG VEHICLE” sign must be displayed at the rear of the vehicle.
11. The vehicle may only be operated above 85t at Level 2 under an agreement made with:
 - if a road authority for a jurisdiction is responsible for the roads on which the vehicle is likely to be operating—each responsible road authority; and
 - if 1 or more road managers are responsible for the roads on which the vehicle is likely to be operating—each responsible road manager.

Exemptions

Heavy Vehicle National Law Section 24

Heavy Vehicle (General) National Regulation Section 28

The following table lists exemptions from prescribed vehicle standards that have been granted for the vehicle(s) in this vehicle approval.

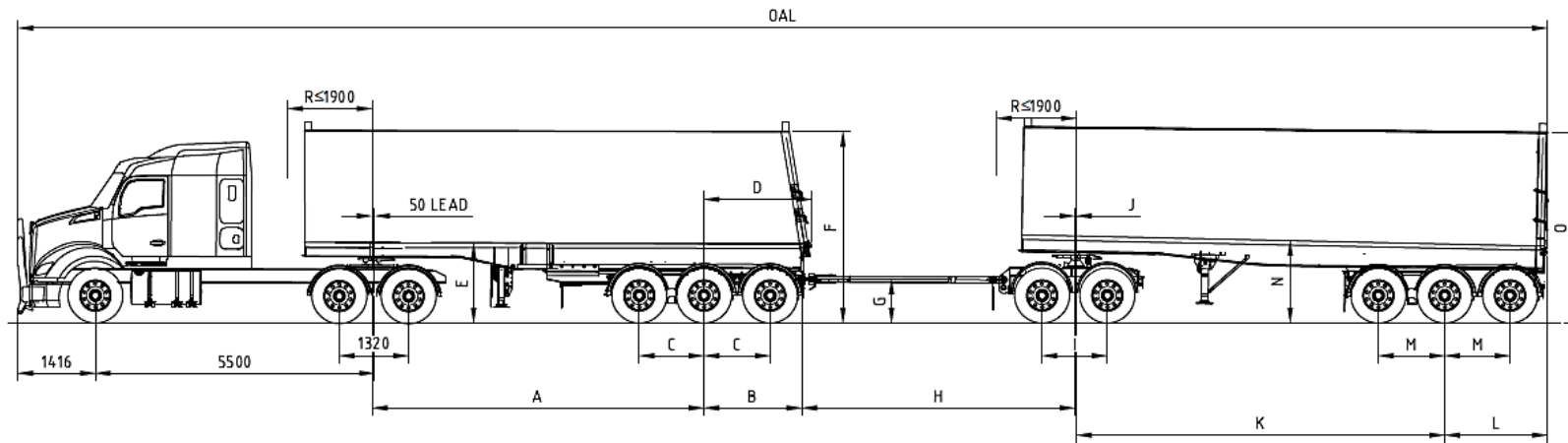
Exemptions	
ADR	Rule 43, Clause 6.2.2 (Drawbar length – Trailers) Rule 63, Clause 5.1 (Tow coupling location)
HV(MDL)NR	Schedule 6, Section 6 (Length – Trailer drawbars)
HV(VS)NR	Schedule 3, Section 29 (Attachment of couplings and drawbar eyes on road trains)

ADR Australian Design Rules



HV(MDL)NR *Heavy Vehicle (Mass, Dimension and Loading) National Regulation*

HV(VS)NR *Heavy Vehicle (Vehicle Standards) National Regulation*

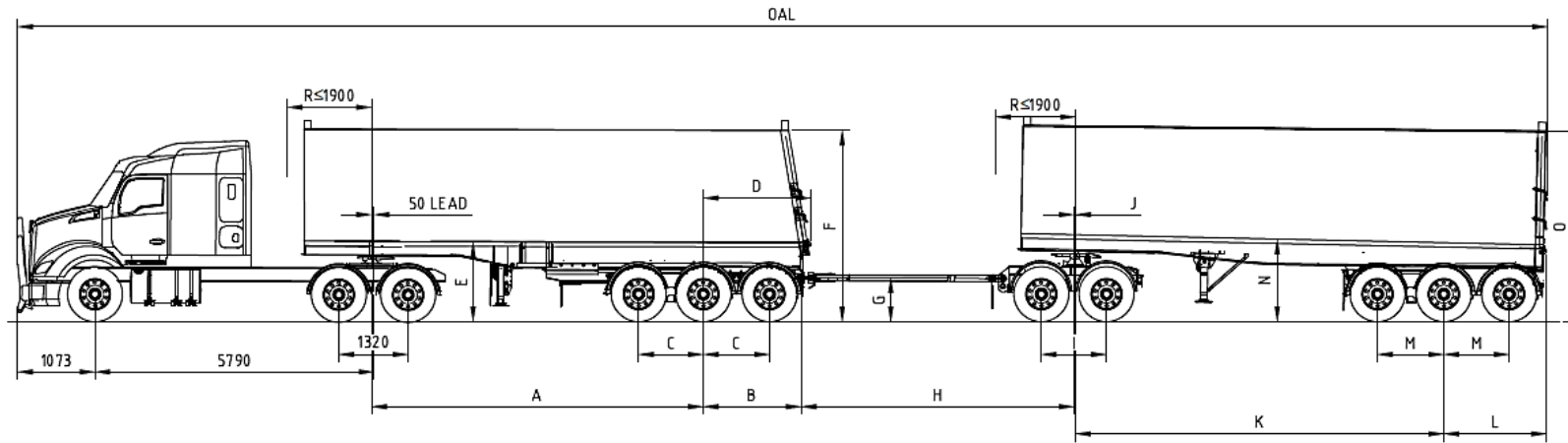
PRIME MOVER 1
TRAILER SET 1, 2





TRAILER SET #	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	OAL
TRAILER SET 1	6465	1774	1250	1895	1475	3635	835	5258	1245	50 LEAD	7226	2340	1385	1435	3630	29879
TRAILER SET 2	6306	1830	1240	2051	1480	3435	765	4341	1395	30 LAG	7305	2385	1250	1375	3460	29063

					ALL DIMENSIONS IN mm UNLESS SPECIFIED TOLERANCES UNLESS SPECIFIED +/- 20 mm	 www.smedleys.co engineers@smedleys.co 110 HIGHTT ST, RICHMOND, VIC 3121		ER240956 BROOKS LOGISTICS - PM1 V220222 P1253C253 VEHICLE LAYOUT DRAWING				
A	INITIAL ISSUE		FO	SW	29/05/24	 DO NOT SCALE		<small>THIS DRAWING AND DESIGN REMAINS THE PROPERTY OF SMEDLEY'S ENGINEERS PTY LTD AND MUST NOT BE COPIED, LOANED OR OTHERWISE USED WITHOUT THE EXPRESSED PERMISSION OR LICENCE IN WRITING. RETURN IMMEDIATELY UPON THIS REQUEST TO DO SO. ALL COPIES OF THIS DRAWING IN THE POSSESSION OF THE RECIPIENT OTHER THAN THOSE REQUIRED FOR THE RECIPIENT'S RECORDS AND ANY UNAUTHORIZED USE OF THIS DRAWING INCLUDING ITS REPRODUCTION IN THREE DIMENSIONAL FORM MAY CONSTITUTE A VIOLATION OF THE COPYRIGHT ACT 1968.</small>				
REV.	DESCRIPTION	DRAWN	APPR.	DATE	AS1100:1992	FO	SW	29/05/24	No Scale	A4	1 of 1	BKL01_001

PRIME MOVER 2
TRAILER SET 1, 2



TRAILER SET #	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	OAL
TRAILER SET 1	6465	1774	1250	1895	1475	3635	835	5258	1245	50 LEAD	7226	234.0	1385	1435	3630	29826
TRAILER SET 2	6306	1830	124.0	2051	1480	3435	765	4341	1395	30 LAG	7305	2385	1250	1375	3460	29010

					ALL DIMENSIONS IN mm UNLESS SPECIFIED TOLERANCES UNLESS SPECIFIED +/- 20 mm	 www.smedleys.co engineers@smedleys.co 110 HIGHETT ST, RICHMOND, VIC 3121		ER240956 BROOKS LOGISTICS - PM2 V220222 P12S3C2S3 VEHICLE LAYOUT DRAWING										
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REV.	DESCRIPTION	DRAWN	APPR.	DATE	AS1100:1992	DRAWN	FO	DESKD	SW	DATE	29/05/24	SCALE	No Scale	SHEET	A4	1 of 1	DWG No	BKL01_002

Approved tyre options – Variant 25-44

Steer –

6.5t axle mass limit

- **275/70R22.5** (Load Index **149** or higher, single configuration)
- **295/80R22.5** (Load Index **149** or higher, single configuration)
- **305/70R22.5** (Load Index **149** or higher, single configuration)
- **315/70R22.5** (Load Index **149** or higher, single configuration)
- **315/80R22.5** (Load Index **149** or higher, single configuration)
- **385/55R22.5** (Load Index **149** or higher, single configuration)
- **385/65R22.5** (Load Index **149** or higher, single configuration)

6.0t axle mass limit

- **275/70R22.5** (Load Index **146** or higher, single configuration)

Drive –

- **11R22.5** (Load Index **140** or higher, dual configuration)
- **275/70R22.5** (Load Index **140** or higher, dual configuration)
- **295/80R22.5** (Load Index **140** or higher, dual configuration)
- **305/70R22.5** (Load Index **140** or higher, dual configuration)

Trailer –

- **11R22.5** (Load Index **140** or higher, dual configuration)
- **275/70R22.5** (Load Index **140** or higher, dual configuration)
- **295/80R22.5** (Load Index **140** or higher, dual configuration)
- **305/70R22.5** (Load Index **140** or higher, dual configuration)

Tyre load index and inflation pressure must be appropriate for the axle mass (inflation pressures must be within legal inflation limits)

Retread tyres are only permitted on the drive, dolly and trailer axles.

Tyres listed herein are specific for PBS application number V220222.

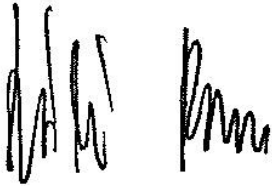
A different list of tyres will apply for other combination types and different PBS application numbers.

Axle spacings for as-built combinations - A-double (1-2-3-2-3)

PM	TS	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	OAL
1	1	4840	1320	4505	1250	1250	5160	1245	5169	1385	1385	29879
1	2	4840	1320	4356	1240	1240	4234	1395	5388	1250	1250	29063
2	1	5130	1320	4505	1250	1250	5160	1245	5169	1385	1385	29826
2	2	5130	1320	4356	1240	1240	4234	1395	5388	1250	1250	29010

Declaration

I, Laszlo Bruzsa Chief Engineer, delegate of the National Heavy Vehicle Regulator, approve this PBS Vehicle Approval PBS–V220222 –VA17036.



Laszlo (Les) Bruzsa
Chief Engineer
National Heavy Vehicle Regulator
Dated: 11/07/24

Revision table

N	VA	Vers	Brief description	Date
1	17036	1A	First issue.	11/07/24

Important information

The driver must keep in the driver's possession a copy of this Vehicle Approval and be able to produce it for inspection by compliance officers. Penalties can apply.

If changes or modifications are required, these are limited to the specifications contained in the relevant PBS Design Approval and the Application for Design Approval Part A and B. Contact the applicant (see the cover page on this document) for information related to the allowed specifications.

A change of components and/or dimensions must be certified by an approved [PBS Certifier](#) and an updated version of this Vehicle Approval must be obtained. A change of tyres, outside of the list contained on this Vehicle Approval, also requires approval but will not require an inspection by a PBS Certifier.

If VA contains multiple tyre option tables, all tyre selections must be chosen from the same tyre options table. Tyres from different tyre options tables are not interchangeable.

Road access

The PBS Vehicle Approval is not an authorisation to access the road network. You must comply with the relevant Notice or obtain an access permit. To apply for an access permit, visit the [NHVR Portal](#).

For more information on PBS Notices visit:

[National Class 2 PBS Level 1 & 2a Truck and Dog Trailer Authorisation Notice 2021 \(No.1\)](#)

[National Class 2 Performance Based Standards \(High Productivity\) Authorisation Notice](#)

[National Class 2 Performance Based Standards \(Tier 1\) Authorisation Notice 2021](#)

If you add vehicles to your PBS Vehicle Approval, the PBS Vehicle Approval number may change depending on the new vehicles added. If the PBS Vehicle Approval number has changed, and your access permit references a PBS Vehicle Approval number, your access permit will need to be amended to reflect the latest Vehicle Approval number. Note that most truck and dog access permits will not reference a PBS Vehicle Approval number and therefore changes to the Vehicle Approval do not require an update to the access permit. For more information, watch [Adding vehicles to a PBS Vehicle Approval](#) video on our YouTube channel.

For more information, please visit our website at www.nhvr.gov.au or call 13 NHVR (13 64 87).

For queries relating to this document please contact the PBS Operations Team at pbs@nhvr.gov.au.

Manage your PBS Vehicle Approval

Please visit our [website](#) to view a list of available options and associated forms to manage your PBS Vehicle Approval.