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### 6.1 DEFINITIONS

### 6.1 DEFINITIONS

"Bridge Formula" is 30 x Wheelbase $(\mathrm{cm})+18,000=$ maximum permissible weight in kilograms - also see S.6.3.2(B) (iii).
"CTAR" means the Commercial Transport Regulations.
"Elk Valley Area" means the area from the BC/AB Border on Highway 3 to all mine sites on Highway 43 and Corbin Road 26.
"Extraordinary load" means vehicles and/or loads that require an Extraordinary Load Approval because they:

- Exceed $64,000 \mathrm{~kg}$ on non-approved overload routes (load must be stripped or fully reduced in order to obtain an approval)
- Exceed $85,000 \mathrm{~kg}$
- Are an oversize non-reducible load travelling more than 110 km
- Exceed 4.4 m wide, except on pre-approved routes described in the CVSE 1001 or 1002 forms
- Exceed 4.88 m high ( 5.33 m in the Peace River Region), or exceed any policy height limit
- Exceed 46 m in overall length (except Lower Mainland, see 6.4.2)
"Lowbed semi-trailer" means a semi-trailer with a depressed deck area.
Folding gooseneck lowbed semi-trailers (single drop scissorneck) are considered lowbed semi-trailers for both drop deck and flat deck operations. Some long heavy haul loads can be transported more safely (less rear overhang) by utilizing the flat deck option of this trailer. Single drop and double drop trailers are also considered lowbeds.

Tilt deck trucks and pony trailers are not considered lowbed semi-trailers.
"Lower Mainland Area" means the area from Hope West to Horseshoe Bay, from the BC/US Border North to Hwy 7 and Hwy 1 (North Shore)
"Non-reducible load" for overweight permits, means any load or vehicle exceeding applicable weight limits that, if separated into smaller loads or vehicles, would:
a) Compromise the intended use or destroy the value of the load or vehicle;
b) Require more than 8 hours to dismantle using appropriate equipment.
c) Result in the vehicle being greatly underweight if one component were removed, where the load consists of only two large components, and the total weight being permitted does not exceed $3,500 \mathrm{~kg}$.

In addition, up to two unattached additional pieces which belong to a component or machine (e.g., buckets, blades, ( frames, rippers, etc.) may be transported on the same vehicle and the combined load will still be considered non-reducible, provided that: the gross combined weight of the load and vehicle does not exceed the preapproved weight rating ( $64,000 \mathrm{~kg}$ except as shown in section 6.3.3) on any portion of its approved route.
"Peace River Area" comprises an area from the BC/AB Border on the East to the Pine Pass (Azuzetta Lake) in the West, and from the Monkman Park area in the South to the BC/YT and NWT Borders in the North. The Peace River at Taylor further divides this area into the North and South Peace areas respectively.

## "Permanently mounted equipment" means a

a) heavy duty crane mounted on a truck tractor or truck,
b) hydraulic or main-engine winch, power-driven off the engine,
c) chassis-mounted rotating ready-mix concrete drum,
d) dump box with tilt cylinders or a multi-stage tilt cylinder mounted behind the cab,
e) liquid tank if $100 \%$ of a liquid tanker truck's payload and capacity consists of a liquid load, or
f) liquid tank associated with hydro-vac equipment if it is designed and used to excavate trenches and holes hydraulically and vacuum the loosened material into the liquid tank, but does not include conventional vacuum truck equipment; (Division 1 Commercial Transport Regulations)
"Super single tire" means a non-steering tire that has a tire width of 445 mm or larger and a bead diameter of 49.5 cm or larger and that meets the requirements of the Motor Vehicle Tire Safety Regulations (Canada); (Division 1 Commercial Transport Regulations)

### 6.2 GENERAL

The issuance of oversize/overload permits presents problems as each move is governed by the structural and route restrictions and the various vehicle configurations presently in use.

All heavy haul equipment (semi-trailers, trailers, jeeps, boosters, etc.), transporting non-reducible loads, will be issued permits using the criteria set out in this chapter.

### 6.3 HEAVY HAUL

### 6.3.1 Size

If legal dimensions are exceeded, then an oversize permit is required. If a vehicle and/or load is also overweight, an oversize/overweight permit is required. For more information on permits and fees, please refer to Chapter 3 of this Manual.

### 6.3.1.A. Vehicle Dimensions Only (load dimensions not included) <br> i) Power Unit - Truck Tractor/Truck

## Dimensions

Legal Dimensions Only - as per Appendix B of the Commercial Transport Regulations

| OAH | 4.15 m |
| :---: | :--- |
| OAL | 12.5 m |
| OAW | 2.6 m |
| FPU | 1 m (if PME only) |
| TTERO | 4 m |
| TRWB | Tandem drive - not specified |
|  | Tridem drive - min. 6.6 m |
| TTWB | Tandem drive - min. 3 m to max. $6.2 \mathrm{~m}{ }^{*}$ |
|  | Tridem drive - min. 6.6 m to max. 6.8 m |

* Exception: 10 m wheelbase is permitted for picker truck tractors with installed cranes that have a tractor tare weight exceeding $14,000 \mathrm{~kg}$.
" OAH " - overall height measured from the ground to the top of the vehicle and/or load.
"OAL" - overall length measured from the front of the vehicle and/or load to the end of the vehicle and/or load.
"OAW" - overall width measured from the widest point on the left side of the vehicle and/or load to the other widest point on the right side of the vehicle and/or load.
"FPU" - front projection measured from the bumper forward to the front of the vehicle and/or load.
"PME" - see Section 6-1 Definitions
"TTERO" - a truck or truck tractor's effective rear overhang measured from the turn centre of the drive axle group to the end of the vehicle or load.
"TTWB" - wheelbase of a truck tractor measured from the centre of the steering axle to the turn centre of the drive axle group.
"TRWB" - wheelbase of a truck measured from the centre of the steering axle to the turn centre of the drive axle group.


## Table 6.3.1.A.i) Size: Vehicle Dimensions Only: Power Unit - Truck Tractor/Truck

ii) Power Unit and Lowbed Semi-Trailer Combinations

## Dimensions

Legal Dimensions

| OAH | 4.15 m |
| :---: | :--- |
| OAL | 23 m 2 vehicle combination <br> 23 m 3 or 4 vehicle combination including jeep and/or booster |
| OAW | 2.6 m |
| KPS | 2 m radius |
| STERO | $35 \%$ of semi-trailer wheelbase |
| STWB | Min 6.25 m to a max of 12.5 m |

Term Permit

| OAH | 4.15 m |
| :---: | :--- |
| OAL | 27.5 m |
| OAW | 3.2 m - deck and axle width (running gear) not to exceed $3.2 \mathrm{~m}^{*}$ |
| KPS | 2 m radius |
| STERO | $35 \%$ of semi-trailer wheel base |
| STWB | min 6.25 m to a max of 12.5 m |

Single Trip Permit

| OAL | Up to 46 m , depending on configuration $\boldsymbol{\checkmark}$ and $\boldsymbol{\star} \mathrm{\star}$ |
| :---: | :--- |
| OAH | 4.15 m |
| OAW | 3.2 m - deck and axle width (running gear) not to exceed $3.2 \mathrm{~m} *$ |
| KPS | 2 m radius |
| STWB | 15.25 m (overall semi-trailer length not to exceed 18.3 m except as permitted below) $\boldsymbol{\Delta}$ |
| KPLA | 18.3 m (lowbeds are permitted to stretch their trailer out ONLY to accommodate overlength loads) |

Notes:

- Other trailers, such as pony trailers and full trailers, may be used for heavy haul operations provided that the trailer itself complies with Appendix E and F of the CTAR
* The width across the axle running gear may not exceed the width of the lowbed semitrailer (excluding jeep and rail lowbeds). Power units (unless permitted under Chapter 5), pony trailers, and full trailers are not permitted to exceed legal width. Only lowbed semitrailers are permitted to an overall vehicle width of 3.2 m for heavy haul operations.
$\checkmark$ Routes with Length Restrictions:
Hope (junction of Hwy 5/3) to Princeton is restricted to 29 m
Hope to Cache Creek on Hwy 1 is restricted to 29 m
Highway 99 through the Fountain Railway underpass, 15 km NE of Lillooet is restricted to 29 m
Fort Nelson (junction Hwy 97/77) to the BC/YT Border is restricted to 36 m
ڤ Empty (no load) combinations will require oversize/overweight permits and will be charged an overload fee based on the total weight beyond 27.5 m .
A Restriction does not apply in the Peace River Area only—lowbed semi-trailers are permitted to exceed 15.25 m wheelbase and 18.3 m overall semi-trailer length does not apply. The king pin to centre of last axle of the lowbed semitrailer can also be exceeded.


### 6.3 HEAVY HAUL

"OAH" means the overall height measured from the ground to the top of the vehicle and/or load.
"OAL" means the overall length measured from the front of the vehicle and/or load to the end of the vehicle and/or load.
"OAW" means the overall width measured from the widest point on the left side of the vehicle and/or load to the other widest point on the right side of the vehicle and/or load.
"KPS" means the kingpin setback measured from the kingpin forward to a maximum radius of 2 m .
"STERO" means a semi-trailer's effective rear overhang measured from the turn centre on the trailer to the end of the vehicle or load.
"STWB" means the wheelbase of a semi-trailer measured from the kingpin to the turn centre of the trailer axle group.
"KPLA" means the measurement taken from the king pin to the centre of the last axle of the lowbed semi-trailer.
Table 6.3.1.A.ii) Size: Vehicle Dimensions Only: Power Unit and Lowbed Semi-Trailer Combinations

### 6.3.1.B. Overall Dimensions (includes vehicle combination and load)

Vehicle dimensions as outlined in 6.3.1 (A) must not be exceeded. The difference between the dimensions outlined above in (A) and the dimensions listed below in (B), are additional allowances made for the load being transported only.

Please refer to Chapter 4 and/or 5 for T-Form requirements

| Term Permit |  |
| :---: | :--- |
| FPK | 3 m |
| OAH | 4.3 m ( 5.33 m in the Peace River Area Only) |
| OAL | 16 m (single vehicle) |
|  | 27.5 m |
| OAW | 3.8 m |
| RPT | 6.5 m |
| STWB | min 6.25 m to a max of 12.5 m |
| Single Trip Permit |  |
|  | 3 m |
| OAH* | 4.4 m on hiboy semi-trailer (5.33 in Peace River Area only) |
|  | 4.72 m on open flat rack container chassis |
|  | 4.88 m (5.33 m in the Peace River Area only) on approved overheight routes (CVSE1001, 1002 and 1010) |
|  | Loads that exceed 4.88 m (5.33 m in the Peace River Area), are permissible depending on route (CVSE1052) required <br> to be completed and signed off by all parties). |
| OAL | Up to 46 m , depending on configuration $\boldsymbol{\checkmark}$ and $\star$ |
| OAW | 4.4 m on unapproved routes |
|  | 5 m on approved routes (Form CVSE1001); 6.1 m on approved routes in the Peace (CVSE1002) |
| RPT | 7.5 m (hiboy semi-trailer without booster), 8.5 m (expando semi-trailer) 9.5 m (lowbed semi-trailer with booster). |
| STWB | 15.25 m (overall semi-trailer length not to exceed 18.3 m except as permitted below) $\mathbf{\Delta}$ |
| KPLA | 18.3 m (lowbeds are permitted to stretch their trailer out ONLY to accommodate overlength loads) $\boldsymbol{\Delta}$ |

## Notes:

* For overheight routing through Abbotsford applicant must phone City Engineering at 604-853-2281.
$\checkmark$ Routes with Length Restrictions:
Hope (junction of Hwy 5/3) to Princeton is restricted to 29 m
Hope to Cache Creek on Hwy 1 is restricted to 29 m
Highway 99 through the Fountain Railway underpass, 15 km NE of Lillooet is restricted to 29 m
Fort Nelson (junction Hwy 97/77) to the BC/YT Border is restricted to 36 m
* Empty (no load) combinations will require oversize/overweight permits and will be charged an overload fee based on the total weight beyond 27.5 m .

A Restriction does not apply in the Peace River Area only - lowbed semi-trailers are permitted to exceed 15.25 m wheelbase and 18.3 m overall semi-trailer length does not apply. The king pin to centre of last axle of the lowbed semitrailer can also be exceeded.
"FPK" means the front projection measured from over the kingpin forward to the front of the vehicle and/or load.
"OAH" means the overall height measured from the ground to the top of the vehicle and/or load.
"OAL" means the overall length measured from the front of the vehicle and/or load to the end of the vehicle and/or load.
"OAW" means the overall width measured from the widest point on the left side of the vehicle and/or load to the other widest point on the right side of the vehicle and/or load.
"RPT" means the rear projection measured beyond the turn centre on the trailer to the end of the vehicle and/or load.
"STERO" means a semi-trailer's effective rear overhang measured from the turn centre on the trailer to the end of the vehicle or load.
"STWB" means the wheelbase of a semi-trailer measured from the kingpin to the turn centre of the trailer axlegroup.
"KPLA" means the measurement taken from the king pin to the centre of the last axle of the lowbed semi-trailer.
Table 6.3.1.B Size: Overall Dimensions

### 6.3.1.C. Size Restrictions

i) In the event heavy haul equipment is used to transport reducible loads (see sections 6.3.2.B and 6.5), the following rules apply:

- Load being transported must not exceed the dimension limits set out in the Reducible Load Policy section 4-2, regardless of the width of the trailer.
- The lowbed semi-trailer wheelbase may not exceed 12.5 m .
ii) The Iron Creek Bridge located South of the Yukon border on Highway 97 has a deck width at the base of $14 \mathrm{ft}(4.27 \mathrm{~m})$ and the structural rail height is 19 inches (48 $\mathrm{cm})$ high. As long as an oversize load exceeding 4.27 m wide up to 4.4 m wide rests higher than 48 cm above the pavement, then oversize permits can be issued.


### 6.3.2 Weight

### 6.3.2.A. Legal Weights

The following chart outlines the legal weights allowed for axles and axle groups. Regardless of the weights listed below, a vehicle may not exceed the axle weight rating as specified by the manufacturer, or the tire size as specified in the CTAR on any axle or axle group.

If legal dimensions are exceeded, then an overweight permit is required. If a vehicle and/or load is also oversize, an oversize/overweight permit is required. For more information on permits and fees, please refer to Chapter 3 of this Manual. Please refer to the subsequent sections in this Chapter for more information on overweight calculation and approved routes.

| Steering Axle |  |
| :---: | :---: |
| Tandem Drive | $6,000 \mathrm{~kg}$ - truck tractor <br> $9,100 \mathrm{~kg}$ - truck tractor with PME or a truck |
| Tridem Drive | $7,300 \mathrm{~kg}$ - truck tractor or truck* <br> $9,100 \mathrm{~kg}$ - truck tractor or truck with PME* |
| Other Axles |  |
| Single (other than steering axle and includes jeeps and boosters) | 9,100 kg $\checkmark$ |
| Tandem | 17,000 kg |
| Tandem Drive with Single Axle Jeep | $24,000 \mathrm{~kg}$ or the weight allowed under 7.17(2) CTAR — whichever is greater |
| Tridem | $24,000 \mathrm{~kg}$ |
| Axle Group Combinations |  |
| Refer to 7.17(2) of the CTAR <br> Refer to the Heavy Haul Quick Reference Chart on page 12 |  |
| Notes: <br> * Minimum of $27 \%$ of tridem drive axle group when loaded <br> $\boldsymbol{\checkmark}$ Legal allowable is to be determined by S.7.17 (2) CTAR for all jeeps and boosters in a combination <br> 1. A maximum of $100 \mathrm{~kg} / \mathrm{cm}$ of tire width is applicable to tires on all vehicle configurations. <br> 2. A maximum of $3,850 \mathrm{~kg} /$ super single tire and $3,000 \mathrm{~kg} /$ tire for all others is applicable to all tires except the steering axle. |  |

## Table 6.3.2.A. Weight: Legal Weights

### 6.3.2.B. Overload Weights

i) Issuance
a) Overweight permits are issued for non reducible loads (as defined in section 6.1), fixed equipment vehicles (as described in section 5.3.4), and may be issued for the specialized bulk haul loads that are approved through the ‘Reducible Load Overweight Policy', as set out in section 6.5.
b) Operators of vehicles with non reducible loads unevenly distributed on axles creating the requirement for an overload permit shall be issued permits provided the axle unit is not overloaded by more than $10 \%$ of the legal allowable weight (e.g., $1,700 \mathrm{~kg}$ overload would be permitted on a tandem axle with a $17,000 \mathrm{~kg}$ legal allowable weight). If an axle unit is overloaded by more than 10 percent, loads must be redistributed on the axles to achieve legal axle weights, when this can be accomplished safely and without undue economic hardship to the carrier.
ii) Heavy Haul Restrictions
a) When pony trailers and full trailers are used with trucks to haul non-reducible loads, the maximum weight allowed by permit is $21,000 \mathrm{~kg}$ for tandem axles. Tridem axles are restricted to legal weights of $21,000 \mathrm{~kg}$ (Appendix E CTAR). No jeeps or boosters are allowed with these trailers.
b) Maximum allowable weight on a full trailer is $34,000 \mathrm{~kg}$; otherwise 5.7 .17 (2) CTAR applies for non-TAC full trailers. No jeeps or boosters are allowed with these trailers.
c) As a general rule the axle track width of the trailer must be a minimum of $50 \%$ of the width of the load.
iii) Bridge Formula Bridge Formula is a mathematical equation that is used to calculate the maximum allowable weight allowed by permit for various axle groups in a combination.

Bridge Formula: $30 \times$ wheelbase $(\mathrm{cm})+18,000 \mathrm{~kg}=$ Maximum weight allowed by permit

For the purposes of calculating Bridge Formula, wheelbase means the distance between the centers of the first axle and last axle of any group of axles of a vehicle or combination of vehicles.

## HOW TO CALCULATE Bridge Formula:

- Determine the wheelbase for each axle group and axle group combinations for the vehicle or combination of vehicles.
- For the purpose of Bridge Formula, Wheelbase means the distance between the center of the first axle and last axle of any group of axles.

- The configuration above consists of 8 axles, each axle is numbered 1-8. There are also a number of axle groups in this configuration.

The following are considered Axle Group Combinations:


- Once the wheelbase for each axle group has been determined, you can now apply these measurements to the Bridge Formula equation.
8 Axles
Wheelbase from axle 1 to axle $8=2,436 \mathrm{~cm}$
Bridge Formula: $30 \times 2,436$ (cm) $+18,000=91,080 \mathrm{~kg}$
The maximum allowable weight for this configuration based on Bridge Formula cannot exceed 91,080 kg
(*APPROVED ROUTE ONLY)


## DIAGRAM 2

NOTE: THE FOLLOWING DIAGRAM SHOWS THE MOST COMMON BRIDGE FORMULA CALCULATIONS FOR THIS CONFIGURATION BUT IT IS NOT A COMPLETE REPRESENTATION OF ALL AXLE GROUP POSSIBILITIES
8 Axles, divided into separate AXLE GROUPS (each axle group must not exceed Bridge Formula)

$30 \times 667(\mathrm{~cm})+18,000=38,010 \mathrm{~kg}$ (*according to Bridge Formula, the maximum allowable Axles 1, 2, weight for this group is $38,010 \mathrm{~kg}$. However, if this was the actual weight for this group of axles, it and 3: would be exceeding the maximum allowable AXLE weights. Therefore, this group would only be allowed a maximum of $32,100 \mathrm{~kg}$ )

Axles 2, 3, $\quad 30 \times 321(\mathrm{~cm})+18,000=27,630 \mathrm{~kg}$ (*axle spacing does not exceed 3.7 m , therefore, this axle group and 4: $\quad$ would be allowed $29,000 \mathrm{~kg}$ )
$30 \times 1225(\mathrm{~cm})+18,000=54,750 \mathrm{~kg}$ (*according to Bridge Formula the maximum allowable
Axle 4,5 , weight for this group is $54,750 \mathrm{~kg}$. However, if this was the actual weight for this group of axles, it 6, and 7: would be exceeding the maximum allowable AXLE weights. Therefore, this group would only be allowed a maximum of $40,000 \mathrm{~kg}$ )

Axle 5, 6, $\quad 30 \times 666(\mathrm{~cm})+18,000=37,980 \mathrm{~kg}$ (*according to maximum allowable AXLE weights this group 7, and 8: would be allowed 40,000 kg. However, Bridge Formula only allows $37,980 \mathrm{~kg}$ )

For vehicles and loads exceeding Bridge Formula, please refer to 6-4 Extraordinary Loads for more information.
iv) Permittable Overload Weights

The following chart outlines the maximum permittable weights for heavy haul configurations. In addition to this chart, heavy haul configurations must be compliant with the Heavy Haul Quick Reference Chart which is provided immediately following this chart. If a vehicle and/or load do not comply with weights listed below or in the Heavy Haul Quick Reference Chart, except if utilizing wheeler groups in the Peace River Area only, please refer to 6-4 Extraordinary Loads.

### 6.3 HEAVY HAUL

| Steering Axle |  |
| :---: | :---: |
| Tandem Drive/Tridem Drive | $9,100 \mathrm{~kg}$ - truck tractor or a truck provided the manufacturer's axle weight rating and tire size ( $100 \mathrm{~kg} / \mathrm{cm}$ of tire width - See Note 1 ) is not exceeded WEIGHT MUST BE LEGAL WHEN EMPTY |
| Other Axles - Semi-Trailers |  |
| Single (other than steering axle and includes jeeps and boosters) | $11,000 \mathrm{~kg}$ |
| Spread Axle Tandem (S.7.24 (TAR) | $18,200 \mathrm{~kg}$ for non-reducible loads and fixed equipment only provided either one of the axles does not exceed 11,000 kg |
| Tandem* | 23,000 kg |
| Tandem Drive with Single Axle Jeep | $28,000 \mathrm{~kg}-2.4 \mathrm{~m}$ to 3.0 m axle spread |
|  | $29,000 \mathrm{~kg}$ - over 3.0 m to 3.7 m axle spread |
| Tridem Drive | $28,000 \mathrm{~kg}-2.4 \mathrm{~m}$ to 2.8 m axle spread |
| Tridem Jeep | $28,000 \mathrm{~kg}-2.4 \mathrm{~m}$ to 3.1 m axle spread |
| Tridem Trailer | $28,000 \mathrm{~kg}-2.4 \mathrm{~m}$ to 3.7 m axle spread with tandem or tridem booster |
|  | $29,000 \mathrm{~kg}-2.4 \mathrm{~m}$ to 3.7 m with no booster or single booster |
| Tridem Booster | $28,000 \mathrm{~kg}-2.4 \mathrm{~m}$ to 3.1 m (only allowed with tridem lowbed) |
| Other Axles - Pony and Full Trailers |  |
| Tandem | $21,000 \mathrm{~kg}$ |
| Tridem | $21,000 \mathrm{~kg}$ (legal) |
| Axle Group Combinations |  |
| Bridge Formula applies |  |
| Gross Vehicle Weight |  |
| 64,000 kg - unless travelling on approved overload routes |  |
| Notes: |  |
| * Bridge Formula does not apply |  |
| 1. A maximum of $100 \mathrm{~kg} / \mathrm{cm}$ of tire width is applicable to all tires on all vehicle configurations, except that 445 tires may be used on an appropriate steering axle to achieve $9,100 \mathrm{~kg}$. |  |
| 3. The drive axle group must have a minimum of 20\% of the gross vehicle weight. | $3,000 \mathrm{~kg} /$ tire for all others is applicable to all tires except the steering axle. f $20 \%$ of the gross vehicle weight. |
| 4. Bridge Formula applies over 3.7 m Axle Spread. |  |
| 5. Regardless of the weights outlined above, weight restrictions as specified on the CVSE1011, exceptions listed in approved overload routes, or posted weight restrictions at structures must not be exceeded. |  |

Table 6.3.2.B.iv) Weight: Permittable Overload Weights

Heavy Haul Quick Reference Chart
Diagram of Tandem/Tridem Drive Axle Truck-Tractors - Heavy Haul Configurations

## Permit Conditions (Overload)

 TRUCK TRACTOR WITH JEEP AND HEAVY HAUL LOWBED SEMI-TRAILER WITH BOOSTER

Typical Maximum Gross Combination Vehicle Weight (GCVW)
(Based on typical axle spacing, and taking bridge formula into account) 116300 kg without PME 118100 kg with PME

* Single steering axle weight is exempted from seasonal axle weight restrictions.
** Minimum steering axle weight is not applicable when a tridem tractor is towing an unladen lowbed and booster.
Notes:
- For all tridem drive configurations and all configurations after Dec 31, 2004 maximum of $100 \mathrm{~kg} / \mathrm{cm}$ of tire width applies to all tires, and a maximum of $3000 \mathrm{~kg} /$ tire is applicable to all axles except steering axle.
- All weights shown are subject to bridge formula limit, whichever is less, unless by special request and approved by Victoria.
- For Heavy Haul applications only, automated steering dolly or manned dolly allowed to replace axle group in the tridem lowbed and/or lowbed-booster.
- Configuration permutations, by removing jeep or boosters, are allowed.
- Tridem drive tractors manufactured before July 1, 2012 are permitted a minimum track width of 2.4 m
- Semi-Trailer lowbed wheelbase up to a maximum 15.25 meters and lowbed overall length up to a maxumum 18.3 meters will be permitted empty or loaded (see Commercial Transport Procedures Manual, Section 6.3.1B for Peace River exemptions) To accommodate overlength loads, lowbed Semi-Trailers may be expanded up to a distance of 18.3 meters from the kingpin to the last axle of the semitrailer


### 6.3.2.C. Term Axle Overweight (TRAX) Permit

The TRAX permit is for empty heavy haul configurations. This type of term overweight permit allows empty, non-PME, heavy haul configurations to exceed legal weight of $6,000 \mathrm{~kg}$, up to $7,300 \mathrm{~kg}$, on the steering axle only. No other weight or size allowances are included in this permit. When a tractor with a TRAX permit is carrying a load, the carrier will still require single trip permits to exceed legal weights on any axle group including the steering axle, and the permit system will still charge for an overweight steering axle on single trip permits. Fees and terms for the TRAX permit are identical to the Term Overweight permit ( $\$ 100$ per month month for a term of up to one year).

### 6.3.3 Approved Overload Routes for Non-Reducible Loads on Compliant Heavy Haul Equipment

This section outlines the overload routes that are approved for heavy haul operations in BC . Provided the vehicle and/or load complies with the policies set out in 6.3 .2 and 6.3.3, and the vehicle and/or load complies with the routes'specific criteria, oversize and/or overweight permits may be issued by the PPC.

If the vehicle and/or load does not comply with the policies set out in 6.3.1 Size, 6.3.2 Jeeps and Boosters, 6.3.3 Overload Weights, and the routes' specific criteria, please refer to 6-4 Extraordinary Loads.

Note: Some vehicles and/or loads can travel through multiple regions using different sections of approved routes. Please ensure the entire route is approved for the requested overweight. Many roads in the Peace River Area were renamed a few years ago under an initiative to clarify the road network naming for emergency 911 purposes. The maps use the new name conventions. Posted road signs are in the new format.

### 6.3.3.A. $\quad 72$ Tonne Non-Reducible Load Routes - Peace River Area

Routes eligible for 72,000 kilogram gross vehicle weight subject to axle weights being legal maximum or less.

A Memorandum of Understanding was signed which allows the following weights and dimensions for non-reducible permit loads during seasonal road restrictions, and similar weights and dimensions would apply year round provided the following maximums are not exceeded.

## Vehicle Criteria

- The maximum gross vehicle weight for trucks, as specified in the chart below, having legal axle weights will be increased $64,000 \mathrm{~kg}$ to $72,000 \mathrm{~kg}$.
-The maximum trailer wheelbase allowed by oversize permits for unloaded 16 and 24 wheel tandem highboy and lowbed trailers will be 15.25 m . The maximum track width for 16 wheel tandems on these trailers which haul loads will remain at 3.2 m .

Peace River Area Routes (72 Tonnes)

| - | Road 117 (Upper Halfway) |
| :--- | :--- |
| - | Road 188 (Doig Road) |

Table 6.3.3.A. Approved Overload Routes: 72 Tonne Routes - Peace River Area

### 6.3.3.B. 80 Tonne Non-Reducible Load Routes - Lower Mainland

## Vehicle/Load Criteria

- Pre-approval covers non-reducible loads and fixed equipment only
- GVW greater than 64,000 kg and GVW less than or equal to 80,000 kg
- Axle group combinations must satisfy Bridge Formula.
- Tandem/single axle combinations are restricted to a maximum weight of $33,000 \mathrm{~kg}$ as long as Bridge Formula is satisfied.
- Distance between the last jeep or drive tandem axle in the front half of the vehicle to the first trailer axle in the back half of the vehicle must be greater or equal to 7 m .
- Lowbed semi-trailers with drop axles are not eligible for permits exceeding $64,000 \mathrm{~kg}$ GVW.


## Lower Mainland Routes (80 Tonnes)

| Highway | Route |
| :---: | :---: |
| 1 | - From Horseshoe Bay to the junction of Hwy 1/Hwy 15 - continues as an 85 tonne route |
| 1A | - From Surrey to junction of Hwy 1A/Hwy 10 |
| 7 | - From 300 m west of Colony Farm Road to Hwy 1 <br> - From Schoolhouse Street to United Boulevard (including ramps) <br> - From 7B (Mary Hill Bypass) to Albion |
| 7 B and 7 | - From Mary Hill Bypass to Albion |
| 7B (Mary Hill Bypass) | - From United Boulevard to Hwy 7 |
| 91 | - From Hwy 99 (Surrey) to Shell Road (Richmond) |
| 91A | - From Hwy 91 to South End of Queensborough Bridge |
| 99 | - From Hwy 17 to 8th Avenue Exit <br> - From Steveston to North End of Oak Street Bridge |
| 99A | - From 8th Avenue to South End of Pattullo Bridge |
| 10th Avenue | - From McBride Boulevard to Kingsway |
| 8th Avenue | - From King George Blvd to Hwy 15 |
| Brunette Street | - Overpass crossing Hwy 1 |
| Canada Way | - From 10th Avenue to Willingdon Avenue |
| Kingsway | - From 10th Avenue to Boundary Road |
| Knight Street | - From Westminster Hwy to Mitchell Island |
| Marine Way | - From Stewardson Way to Boundary Road |
| McBride Street | - From North end of Pattullo Bridge to 10th Avenue |
| Point Roberts Road (56th Street) | - From Hwy 17 to US Border |
| Roberts Bank Road (Delta Port Way) | - From Hwy 17 to Causeway |
| Scott Road | - From 96th Avenue to Hwy 99A |
| Sea Island Way | - From Hwy 99 to Middle Arm Bridge |
| United Boulevard | - From 2441 United Boulevard (south of Hwy 1) to Lougheed Highway, including all interchange ramps |

Table 6.3.3.B. Approved Overload Routes: 80 Tonne Routes - Lower Mainland

### 6.3.3.C. 85 Tonne Non-Reducible Load Routes

## Vehicle Load Criteria

- GVW greater than $64,000 \mathrm{~kg}$ and GVW less than or equal to $85,000 \mathrm{~kg}$.
- Axle group combinations must satisfy Bridge Formula.
- Tandem/single axle combinations are restricted to a maximum weight of $33,000 \mathrm{~kg}$ as long as Bridge Formula is satisfied.
- Distance between the last jeep or drive tandem axle in the front half of the vehicle to the first trailer axle in the back half of the vehicle must be greater or equal to 7 m .
- Lowbed semi-trailers with drop axles are not eligible for permits exceeding $64,000 \mathrm{~kg}$ GVW.
i) Major Highway Routes (excluding Peace River Area)


## Major Highway Routes Excluding the Peace River Area (85 Tonnes)

| Highway | Route |
| :---: | :---: |
| 1 | - From Millstream Road (Langford) to Hwy 19 Nanaimo Parkway (NOTE: Does not include crossing of Millstream Road Overpass) <br> - From Junction Hwy 15 to Junction Old Hwy 3 in Hope. (Includes No. 3 Road on and off ramps at Chilliwack; does not include Hwy 1 crossing of railway leading to downtown Hope.) <br> - From Afton Mines (junction with Hwy 5) to Salmon Arm <br> - From Afton Mines Interchange west of Kamloops to Tobiano Exit (approximately 4.8 km east of Kamloops Lake view point rest area) |
| 1A | - From Hwy 10 to Station Road - includes Langley Bypass <br> (NOTE: TransLink owns infrastructure; CVSE has permit authority) <br> - From Station Road to Hwy 1 <br> (NOTE: City of Abbotsford owns infrastructure; not MoTl for permits call 604-864-5514) |
| 3 | - From Monroe Lake Road junction (approximately 18 km west of Cranbrook) to the Alberta Border |
| 4 | - From Hwy 19 to Beaver Creek Road, Port Alberni <br> - From Ash Forest Mainline Road (near Sproat Lake Provincial Park) west but not including crossing Clutesi Creek Bridge <br> - From Weyerhauser Branch Road \#38 (just west of Friesen Creek Bridge) west to Kennedy Forest Mainline at Sutton Pass |
| 4A | - From Hwy 19 at Parksville to Errington Road (no crossing of structural at Coombs) |
| 5 | - From junction Hwy 1 (Hope) to junction Hwy 1 (Afton Mines Interchange west of Kamloops) <br> - From junction Hwy 1 (Valleyview Interchange Kamloops) North to Hwy 16 |
| 10 | - From Hwy 91 to Hwy 1 |
| 11 | - From USA Border to Hwy 1 |
| 13 | - From USA Border to Hwy 1 |
| 15 | - From USA Border to Hwy 1 |
| 16 | - From Prince Rupert Ferry Terminal to the Alberta Border. (Note: Westbound loads only may opt to bypass Prince George using Old Cariboo Hwy and Hwy 97 northbound) |
| 17 | - From Tsawwassen Ferry Terminal to the junction of Hwy 1 and Hwy 15 (does not include ferry docks, ramps, vessels) <br> - From Swartz Bay to Saanich Road (no exits requiring the use of structures at Royal Oak Drive or Quadra Street) |


| Highway | Route |
| :---: | :---: |
| 18 | - From junction Hwy 1 to junction of Youbou and South Shore Roads |
| 19 | - From Duke Point Ferry Terminal to Port Hardy |
| 19A | - From Buckley Bay Connector 6 km north to McLeod Road <br> - From Comox Valley Parkway to Hwy 19 at Campbell River |
| 20 | - From Bella Coola (kilometre 0) to kilometre 25, but not crossing the Nusatsum River Bridge <br> - From the junction of Hwy 97 and 20 for 103 km to - but not crossing the Anahim Creek Bridge No. 7417 |
| 24 | - Entire route approved |
| 37 | - From the junction with Hwy 37A at Meziadin Junction to city of Kitimat city limits (does not include crossing Haisla Bridge over the river, on Haisla Blvd in Kitimat) |
| 43 | - Entire route approved |
| 91 | - From Hwy 10 to Nordel Way |
| 97 | - From USA border to Hwy 1 <br> - From junction of Hwy 24 to Macalister Rail Siding, approximately 15 km north of McLeese Lake. <br> - South of Prince George: <br> - Northbound Only: From Sintich Road \#152, 7 km to Junction Hwy 16 (includes crossing the new Simon Fraser Bridge over the Fraser River) <br> - Southbound Only: From Continental Way 2.6 km to Sintich Road \#152 (does not include crossing of the old Simon Fraser Bridge over the Fraser River) <br> - North of Prince George: <br> - Southbound direction: from Chetwynd to the Hwy 16 junction in Prince George <br> - Northbound direction: from North Nechako Rd Interchange north of Prince George (including the Nechako Rd Overpass) to Chetwynd (the northbound John Hart Bridge crossing the Nechako River is not approved) <br> - Charlie Lake Frontage Road in Charlie Lake |
| 97A | - From the junction Hwy 97 north of Vernon to Junction of Hwy 97B north of Enderby |
| 97B | - From junction Hwy 97B/Hwy 97A to junction Hwy 1 at Salmon Arm |
| $97 C$ | - From junction of 97D to Highland Valley Mine (Logan Lake) <br> - From Hwy 5 (near Merritt) to Hwy 97 (near Peachland) <br> - Elkhart Rd off highway 97C |
| 97D | - From Hwy 5 to Hwy 97C |

Table 6.3.3.C.i) Approved Overload Routes: 85 Tonne Routes - Major Highways Excluding Peace River Area
ii) Secondary Routes (Excluding Peace River Area)

## Lower Mainland Secondary Routes (85 Tonnes)

## Delta Area

- Nordel Way from Hwy 91 to River Road
- 91 Connector from Nordel Way to Highway 17


## Fraser Valley

- 232nd Street (Livingstone Underpass) connection to Hwy 10
- 264th Street (County Line) Underpass connection to Hwy 13
- Clearbrook Road Underpass
- 8th Avenue, Huntingdon, Vye Road overheight corridor route between Hwy 11 and Hwy 13
(NOTE: Route under the jurisdiction of the Township of Langley and the City of Abbotsford)
- Jones Hill Underpass (Herrling Island Road)


## Fraser Valley (continued)

- McCallum Road Underpass
- Popkum Road Underpass
- Whatcom Road Underpass
- Yale Road West Underpass
- Golden Ears connector from the junction of Hwy 17 to the junction Golden Ear Way
- Mt Lehman Road - from Fraser Highway (1A) to Threshold Drive, in both directions


## Hope Area

- Old Hwy 3 from the junction of Hwy 1 to the junction of Hwy 3/Hwy 5
- Othello Rd between Hwy 5, Othello Tunnels parking lot, Peers Creek Rd between Hwy 5 and Othello Rd but not including the portion of Peers Creek Rd over the Coquihalla River and proceeds south/east
- Old Hope Princeton Way with ramp connections to Hwy 3; (does not include Hwy 1 NB access)


## Surrey Area

Tannery Road, between Pine Road and Span Road
Table 6.3.3.C.ii) Approved Overload Routes: 85 Tonne Routes - Secondary Routes in the Lower Mainland

## Central Interior Secondary Routes (85 Tonnes)

## Prince George Area

- Old Cariboo Highway between Hwy 16 and 97 (except the Old Cariboo Highway between Hwy 16 and Marston Road is under the jurisdiction of the City of Prince George - not part of MoTl's 85 tonne route)
- Hwy 97 between Old Cariboo Highway and up to the Simon Fraser Bridge but NOT across the structure
- Alternate route to bypass the intersection of Hwy 97 and the Old Cariboo Highway (Hwy 97 to Sintich Road, east on Sintich Road to Ellis Road, north on Ellis Road to Johnson Road, east on Johnson Road to Old Cariboo Highway)
- Bearhead Road from the junction with Telegraph road, north to the junction with Highway 16


## Terrace Area

- Thornhill Frontage Rd South from Clark St to Crescent St, and including the portions of Clark St, Sharples Ave and Crescent St connecting to Hwy 16


## Williams Lake Area

- Beaver Lake Road \#19 from Hwy 97 to Gibraltar Mine Road
- Gibraltar Mine Road \#655 from Beaver Lake Road to Gibraltar Mine

Table 6.3.3.C.ii) Approved Overload Routes: 85 Tonne Routes - Secondary Routes in the Central Interior

## Southern Interior Secondary Routes (85 Tonnes)

| Kamloops Area |
| :--- |
| • Aberdeen Underpass (connects 5A at Kamloops) |
| • Copperhead Drive Underpass |
| • Pacific Way Underpass |
| Kelowna Area |
| • William R Bennett Bridge (Hwy 97) |
| Sparwood Area |
| • Corbin Road |
| • Fording Mine Road from junction with Hwy 43 for 24.7 km (to end of Ministry jurisdiction) |

Table 6.3.3.C.ii) Approved Overload Routes: 85 Tonne Routes - Secondary Routes in the Southern Interior

## Vancouver Island Secondary Routes (85 Tonnes)

## Mill Bay, Shawnigan Lake, Duncan and Cowichan Lake Area

- Allenby Road from Hwy 1 to Indian Road
- Benko Road from Frayne Road to Weyerhauser property
- Boys Road
- Cobble Hill Road \#2628 from Hwy 1 at Cowichan Bay Road to Shawnigan Lake Road
- Cowichan Bay Road \#365
- Crofton Road from Hwy 1 to Shoal Island log sort (also called Mt. Sicker Road) to old Chemainus Road to Crofton Road
- Frayne Road from Hwy 1 to Benko Road
- Glenora Road from Indian Road to Waters Road
- Hwy 18 Connector from Hwy 18 to Old Lake Cowichan Hwy ( 60 m Iong road halfway between Paldi and Skutz Falls)
- Hillcrest Road
- Howie Road
-Hutchinson Road
- Indian Road from Allenby Road to Glenora Road
- Koksilah Road from Allenby Road to Riverside Road
- Mountain Road
- Old Lake Cowichan Hwy from Hwy 18 Connector west to Culverton Road
- Pacific Marine Road (formerly Hillcrest Logging Main) from South Shore Road \#367 near Cowichan Lake to Deering Road \#1229 near Port Renfrew. (Note: This does not include crossing the San Juan River on Deering Road to connect to Port Renfrew or Hwy 14)
- Pannell Road
- Renfrew Road \#2696 from Shawnigan Lake Road west to Koksilah Main Logging Road near Burnt Bridge just west of Koksilah Provincial Park
- Riverbottom Road from Stolz Road to River Valley Road
- Riverside Road from Koksilah Road to Mines Road
- Shawnigan Lake Road \#150 from Cobble Hill Road to Renfrew Road
- Shawnigan Lake Road \#150 from Hwy 1 Shawnigan Lake S access to Sooke Lake Road
- Sooke Lake Road \#2707 from Shawnigan Lake Road 1 km to logging road
- South Shore Road \#367 from Hwy 18 to Robertson Logging Main Road at Mesachie Lake. Does not include structure crossings at Robertson River, just West of Mesachie Lake
- Stebbings Road
- Stolz Road from Old Lake Cowichan Hwy to Riverbottom Road
- Waters Road
- West Shawnigan Lake Road 4 km south from Renfrew Road to Butler Road


### 6.3 HEAVY HAUL

## Cassidy Nanaimo Area*

* Note: Contact the City of Nanaimo to purchase single trip permits if travelling on roads under their jurisdiction
- Extension Road. Note: Access is by Cranberry and Extension Roads - jurisdiction City of Nanaimo
- Jamieson Road (off Kilpatrick)
- Jinglepot Road (North End) from Hwy 19 Nanaimo Parkway to Kilpatrick Road - partly jurisdiction City of Nanaimo
- Kilpatrick Road (off Jinglepot)
- Nanaimo Lakes Road. Note: access is by Wakesiah Avenue, Fifth Street, and Nanaimo Lakes Roads
- jurisdiction City of Nanaimo
- Nanaimo River Road from West end of Deadwood Creek (end of MoTl jurisdiction) to Hwy 1
- Northfield Road to Dorman Road to Labieux Road - all jurisdiction City of Nanaimo
- Schon Road
- Spruston Road from Lafarge pit west to end of Ministry of Transportation jurisdiction
-Timberlands Road - Ninatti Road
- West Road (off Jinglepot)
- White Rapids Road

Nanoose, Parksville, Errington, Hilliers Area

- Allsbrook Road
- Bellevue Road
- Clarke Road
- Errington Road
- Fisher Road
- Gilbert Road and Slaney Road
- Grafton Road
- Hilliers Road (portion South of Hwy 19)
- Melrose Road, Claymore Road and Labernum Road
- Morello Road from Hwy 19 to Lussiers gravel pit only
- Pratt Road
- Shawn Road
- Summerset Road Sea Blush Road, Sundew Place
- Winchester Road


## Port Alberni Area

- Bamfield Road from Anderson Avenue (Port Alberni City Limits) to Cameron Shop
- Beaver Creek Road
- Somers Road

Courtenay, Comox Area

- Comox Valley Parkway from Hwy 19 to Hwy 19A
- Hwy 19 connection to Duncan bay Forest Main Road via Comox Valley Parkway, Cumberland Road and Marsden Road


## Horne Lake, Mud Bay Area

- Horne Lake Road
- Horne Lake South Road
- Spider lake Main Road (to end of public road)
- NOT APPROVED - Horn Lake Caves (North) Road due to posted structural restriction


## Buckley Bay Area

- Brean Road
- Buckley Bay Connector (Hwy 19 to Hwy 19A)
- McLeod Road (to end of public road just east of Hwy 19)

Table 6.3.3.C.ii) Approved Overload Routes: 85 Tonne Routes - Secondary Routes on Vancouver Island
iii) Major Highway Routes - Peace River Area

## Major Highway Routes in the Peace River Area (85 Tonnes)

| Highway | Route |
| :---: | :---: |
| 2 | - From BC/AB Border to the Junction of the Dawson Creek Dangerous Goods Route |
| 29 | - All of Hwy 29 (from Hwy 52 at the south end to Hwy 97/Alaska Hwy at the north end) EXCEPT for Hudson's Hope Bridge which is not pre-approved for 85 tonnes |
| 49 | - From BC/AB Border to the junction at Parkhill Drive |
| 52 | - Entire route approved |
| 77 | - From Alaska Hwy 97 to the BC/NWT Border |
| 97 | Northbound and Southbound directions: <br> - From Liard Hwy 77 junction to Dawson Creek Dangerous Goods Route <br> - From Dawson Creek Dangerous Goods Route to the Blueberry Rd/Hoferkamp Rd junction north of Prince George |
| Dawson Creek Dangerous Goods Route | - From junction Hwy 2 to Alaska Hwy 97N |
| Fort Nelson Airport Road | - Entire route approved |
| Fort St. John West Bypass Road \#145 | - From Alaska Hwy 97 to Rose Prairie Rd |
| Fort St. John | - Enterprise Way from Old Fort Rd to 265 Rd |
| Sierra Yoyo Desan Road (SYD) | - Entire route approved |

Table 6.3.3.C.iii) Approved Overload Routes: 85 Tonne Routes - Major Highways in the Peace River Area
iv) Secondary Routes - Peace River Area

Approved local roads are shown on maps supplied by the Ministry of Transportation and Infrastructure, which are in PDF format. These maps can be found on the CVSE website at: www.cvse.ca. If already online, please click on the links provided below.

- South Peace 85 Tonne Routes
- North Peace 85 Tonne Routes
- Fort Nelson 85 Tonne Routes

The North and South Peace Maps may also be viewed and printed on $8.5^{\prime \prime} \times 11^{\prime \prime}$ pages using the following alternate grid map format.

- Peace 85 Tonne Routes

Click on the areas of interest shown on the key map to load a local map printable on $8.5^{\prime \prime} \times 11^{\prime \prime}$ pages. To return to the Key Map click anywhere on the local map.

### 6.3.3.D. Pre-Approved 85 Tonne Routes for Non-Reducible Loads on Wheelers in the Peace River Area

The full policy for wheeler equipment and weights may be found at section 5.3.16, Chapter 5.
This section applies only to'conventional style' wheeler equipment, compliant with the Heavy Haul Quick Reference Chart, with gross combination vehicle weight at or under $85,000 \mathrm{~kg}$, travelling on the pre-approved routes described below.

Overload permits for vehicles meeting the following criteria that are travelling only on routes listed below or shown on related maps can be issued by the PPC at 1-800-559-9688 without further approval of the Structural Engineering Section or Geotechnical, Material and Pavement Engineering Sections of the Engineering Branch.

## Vehicle Load Criteria

- 16 Wheel tandem axles - Maximum 31,000 kg except for structures limited to lower weights where indicated on the Schedule or maps. The $100 \%$ equivalent weight for roads with seasonal load restrictions is $28,000 \mathrm{~kg}$ on these routes.
- 24 Wheel tridem axle - Maximum $40,000 \mathrm{~kg}$ except for structures limited to lower weights where indicated on the Schedule or maps. The $100 \%$ legal equivalent weight for roads with seasonal load restrictions is $34,000 \mathrm{~kg}$ on these routes.
- Pre-approval covers non-reducible loads and fixed equipment only.
- GVW less than or equal to $85,000 \mathrm{~kg}$.
- Combinations of axle groups must satisfy Bridge Formula. 16 wheel tandem axles will be treated as eight (8) wheel tandem axles and 24 wheel tridem axles will be treated as 12 wheel tridem axles for application of Bridge Formula.
- Distance between the last jeep or drive axle in the front half of the vehicle to the first trailer axle in the back half of the vehicle must be greater or equal to 7 m for both 16 wheel tandem axles and 24 wheel tridem axle trailers.
- Jeeps and boosters do not automatically qualify for wheeler weight allowances; requests for extra weight on jeeps and boosters will be evaluated on a case by case basis.
i) Major Highway Routes Pre-Approved for Wheelers up to 85 Tonnes GCVW

Major Highway Routes in the Peace River Area (16 and 24 Wheelers)

| Highway | Route |
| :---: | :---: |
| 2 | - From BC/AB Border to the Junction of the Dawson Creek Dangerous Goods Route |
| 29 | - From Tumbler Ridge to Hart Hwy 97 <br> - From junction Hwy 97S to 19.3 km north but not crossing Moberly River <br> - From junction Hwy 97N to 35 km but not crossing Halfway River |
| 49 | - From BC/AB Border to the junction at Parkhill Drive |
| 52 | - From Hwy 2 to Tumbler Ridge except as follows: (also see maps) <br> - Flatbed Creek Bridge - 16 wheel tandem maximum $28,000 \mathrm{~kg} ; 24$ wheel tridem maximum $35,000 \mathrm{~kg}$ <br> - From Hart Hwy 97S to Tumbler Ridge |
| 77 | - From Alaska Hwy 97 km 483 to the NW Territories except as follows: <br> - Fort Nelson River Bridge located 42 km from Alaska Hwy 97 <br> - 16 wheel tandem maximum $23,000 \mathrm{~kg}$ : 24 wheel tridem maximum 29,000 kg |
| 97 | - From junction Hwy 97/Hwy 29N to Dawson Creek Dangerous Goods Route <br> - From Dawson Creek Dangerous Goods Route north to junction of Hwy 77 (Liard Hwy) except as follows: <br> - Jackfish Creek Bridge located at km 425 (south of Clark Lake Road, Airport Drive Connector, Hwy 77), if over $34,000 \mathrm{~kg}$ on a 24 wheeler, the vehicle may cross the structure as long as it is the ONLY vehicle on the structure and the vehicle crosses down the centre of the structure |
| Airport Drive Connector and Airport Road | - From Alaska Hwy km 453 to SYD Connector |
| Dawson Creek Dangerous Goods Route | - From junction Hwy 2 to Alaska Hwy 97N |
| Fort St. John West Bypass Road \#145 | - From Alaska Hwy to Rose Prairie Road (101) |

Table 6.3.3.D.i) Approved Overload Routes: 16 and 24 Wheeler Routes - Major highways in the Peace River Area
ii) Secondary Routes Pre-Approved for Wheelers up to 85 Tonnes GCVW

Approved local roads are shown on maps supplied by the Ministry of Transportation and Infrastructure, which are in PDF format. These maps can be found on the CVSE website at: www.cvse.ca or via the links provided below.

- South Peace 16 and 24 Wheel Routes
- North Peace 16 and 24 Wheel Routes
- The North and South Peace Maps may also be viewed and printed on $8.5 \times 11$ pages using the alternate grid map format below.
- Tandem Tridem Key Map
- Click on the areas of interest shown on the key map to load a local map printable on $8.5 \times 11$ pages. To return to the Key Map click anywhere on the local map.


### 6.4 EXTRAORDINARY LOADS

An extraordinary load is described as any vehicle and/or load that exceeds policy limits outlined in previous sections and chapters of this manual.

Before approval for an extraordinary load is considered, the following questions should be asked:

1. Can it be reduced?
2. Can it be moved by rail or barge?
3. Has this load been moved before?

### 6.4.1 General Allowances

## Dimensions

| OAH | No limit - dependent on route and commodity requested <br> - (CVSE1052 required to be completed if over $4.88 \mathrm{~m}, 5 \mathrm{~m}$ in Elk Valley Area (route specific - see 6.4.2 below) or 5.33 m in the Peace River Area) |
| :---: | :---: |
| OAL | - No limit - dependent on route and commodity requested - offtracking analysis may be required |
| OAW | - No limit - dependent on route and commodity requested (CVSE1052 required to be completed if over $6.0 \mathrm{~m}, 8 \mathrm{~m}$ in the Elk Valley Area (route specific - see 6.4 .2 below), or 6.1 m in the Peace River Area) <br> - Axle width of trailer must be at least half of the width of the load |
| Weights |  |
| - Governed by vehicle configuration, route requested and structures crossed |  |
| Travel Conditions |  |
| - 0001 - 0500 hrs transport times (Monday to Friday excluding General Holidays) <br> - $3-5$ pilot cars depending on overall weights, dimensions, and routing <br> - Other conditions, such as lights and signs, will be as per closest applicable T-Form |  |
| Note: CVSE has the right to impose more pilot cars or restrict hours further than those listed if needed. |  |
| "OAH" - overall height measured from the ground to the top of the vehicle and/or load. <br> "OAL" - overall length measured from the front of the vehicle and/or load to the end of the vehicle and/or load. <br> "OAW" - overall width measured from the widest point on the left side of the vehicle and/or load to the widest point on the right side of the vehicle and/or load. |  |

## Table 6.4.1 Extraordinary Loads: General Allowances

### 6.4.2 Special Regional Allowances

In addition to the policy limits described in previous chapters of this manual, the following additional allowances for weight and size are permitted while transporting a vehicle and/or load through the various regions in $B C$.

Permits may be issued using the special regional allowances provided the permits are for NON REDUCIBLE LOADS ONLY.

### 6.4.2.A. Elk Valley Matrix

The "Elk Valley" area is located in the southeast corner of BC, in the Elkford and Sparwood area. These permit pre-approvals authorize the purchase of permits for the vehicles shown, with described operating conditions.

Note that dimensional allowances only are available to other configurations that are compliant with the Heavy Haul Quick Reference Chart provided the GCVW is under 85 tonnes.

| Dimensions and Weights |  |
| :--- | :--- |
| OAH | 5 m |
| OAL | 44 m |
| OAW | Up to 10 m on some routes* |
| * Axle width of trailer must be at least half the width of the load. |  |


| ELK VALLEY AREA: PRE-APPROVED OVERWEIGHT CONFIGURATIONS |  |  |  |  |  |  |  |  |  | Axle Sum | GCVW Cap |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10 Axle |  |  |  |  |  |  |  |  |  |  |  |
|  | 0 |  | 00 |  | 00 |  | 000 |  | 00 |  |  |
| Minimum |  | 5.1 m | 1.3 m | 4.2 m | 1.3 m | 8.5 m | 2.8 m | 4.2 m | 1.3 m |  |  |
| Maximum |  | 5.5 m | 1.52 m | 4.8 m | 1.52 m | 16 m | 3.1 m | 4.8 m | 1.52 m |  |  |
| Min kg |  |  | $\begin{aligned} & \text { 20\% } \\ & \text { GCVW } \end{aligned}$ |  |  |  |  |  |  |  | MAX GCVW |
| Max kg | 7,500 |  | 22,000 | 21,000 |  |  | 27,000 |  | 21,000 | 98,500 | 98,500 |
| 11 Axle |  |  |  |  |  |  |  |  |  |  |  |
|  | 0 |  | 00 |  | 000 |  | 000 |  | 00 |  |  |
| Minimum |  | 5.1 m | 1.3 m | 4.2 m | 2.8 m | 10 m | 2.8 m | 4.2 m | 1.3 m |  |  |
| Maximum |  | 5.5 m | 1.52 m | 4.8 m | 3.1 m | 16 m | 3.1 m | 4.8 m | 1.52 m |  |  |
| Min kg |  |  | $\begin{aligned} & \text { 20\% } \\ & \text { GCVW } \end{aligned}$ |  |  |  |  |  |  |  | MAX GCVW |
| Max kg | 9,100 |  | 23,000 |  | 27,500 |  | 27500 |  | 22,000 | 109,100 | 108,000 |
| 12 Axle |  |  |  |  |  |  |  |  |  |  |  |
|  | 0 |  | 00 |  | 000 |  | 000 |  | 000 |  |  |
| Minimum |  | 5.1 m | 1.3 m | 4.2 m | 2.8 m | 10 m | 2.8 m | 4.2 m | 2.8 m |  |  |
| Maximum |  | 5.5 m | 1.52 m | 4.8 m | 3.1 m | 16 m | 3.1 m | 4.8 m | 3.1 m |  |  |
| Min kg |  |  | $\begin{aligned} & \text { 20\% } \\ & \text { GCVW } \end{aligned}$ |  |  |  |  |  |  |  | MAX GCVW |
| Max kg | 9,100 |  | 23,000 |  | 28,000 |  | 28,000 |  | 28,000 | 116,100 | 114,000 |
| 13 Axle |  |  |  |  |  |  |  |  |  |  |  |
|  | 0 |  | 000 |  | 000 |  | 000 |  | 000 |  |  |
| Minimum |  | 5.1 m | 2.6 m | 4.2 m | 2.8 m | 10 m | 2.8 m | 4.2 m | 2.8 m |  |  |
| Maximum |  | 5.5 m | 2.8 m | 4.8 m | 3.7 m | 16 m | 3.7 m | 4.8 m | 3.7 m |  |  |
|  | $27 \%$ of <br> Tridem |  |  |  |  |  |  |  |  |  |  |
| Min kg | Drive <br> Axle Group Weight |  | $\begin{aligned} & \text { 20\% } \\ & \text { GCVW } \end{aligned}$ |  |  |  |  |  |  |  | MAX GCVW |
| Max kg | 9100 |  | 27,000 |  | 27,000 |  | 27,500 |  | 27,500 | 118,100 | 116,000 |

Configuration: 11 Axle Lowbed, Tandem Drive, Tridem Jeep, Tridem Trailer, Tandem Booster


## Travel Conditions

Must be travelling on approved routes:

- Hwy 3 from 5 km west of the Hwy 43 junction to the Alberta Border ( 26 km )
- Hwy 43 to Elkford ( 35 km)
- \#1 Fording Mine Road from the end of Hwy 43 to"End of Public Road" (signed) (26 km). This approval does not include any bridge or structure crossings on the private road which continues to the mine.
- Corbin Mine Road \#26 from Hwy 3 to Corbin Mine

Size A: If the overall width is less than or equal to 4.4 m and overall length is less than or equal to 34 m :

- Time and travel conditions as per the CVSE1000, Category C

Size B: If the overall width is less than or equal to 4.4 m and overall length is greater than 34 m :

- 3 pilot cars are required
- Other time and travel conditions as per the CVSE1000, Category C

Size C: If the overall width is greater than 4.4 m , but less than or equal to 8 m , the following conditions apply:

- 00:01 - 04:00 hrs transport times (Monday to Friday excluding General Holidays)
- Not valid during inclement weather conditions
- Three pilot cars with radio communication
- Front of structure floodlit
- Extremities well lit (amber to the front, red to the rear)
- Applicant responsible for all clearances
- Applicant to advise Police, Ambulance and Fire

Size D: If the overall width is greater than 8 m , but less than or equal to 10 m :

- All Size C conditions apply (except pilot cars), and in addition the following:
- Four pilot cars with radio communication
- Signs must be posted along the route advising that a load move over 8 m OAW is in progress on the roadway:
- If travelling on Hwy 43, signs must be placed northbound at Sparwood Heights Drive and southbound at \#1 Fording Mine Road
- If travelling on Hwy 3, signs must be placed eastbound at Sparwood Transfer Station and westbound at Michel Creek Road
- Routing restricted as follows:


## 8.0 to $8.8 \mathbf{m}$ OAW (both directions)

- Hwy 3 from BC/AB border to 3 km west of Sparwood (Sparwood Transfer Station)
- Hwy 43 from Hwy 3 to Elkford
- \#1 Fording Mine Road
$>8.8 \mathbf{m}$ to $\mathbf{1 0 . 0} \mathbf{m}$ OAW (both directions)
- Hwy 43 from Michel Creek Rd to Elkford
- \#1 Fording Mine Road


## CVSE 1052 signoffs:

- For height, no CVSE1052 signoffs are required (max height 5.0 m )
- For width, when transporting mining equipment to the EIk Valley Mines, CVSE1052 signoffs are only required for widths greater than or equal to 8 m . For all other loads, CVSE1052 signoffs are required for widths greater than 6 m .
6.4.2.A Extraordinary Loads: Special Regional Allowances in the Elk Valley Area


### 6.4.2.B. Lower Mainland Area

The"Lower Mainland Area" means the area from Hope West to Horseshoe Bay, from the BC/ US Border North to Hwy 7 and Hwy 1 (North Shore)

This section authorizes hours of travel and number of pilot vehicles required for permitted loads in the Lower Mainland, at the dimensions given in the table. No other exemptions to regulations or to policies set out in this manual, on permits or on T-Forms is intended or implied.

| Dimensions |  |
| :---: | :---: |
| FPK | - 4 m |
| OAH | - 4.3 m except as authorized in Form CVSE 1010 and/or CVSE 1001, the Provincial Permit Centre, or by Extraordinary Load Approval - (Form CVSE 1052 required to be completed if over 4.88 m high) <br> - For overheight routing through Abbotsford applicant must phone City Engineering at 604-853-2281 |
| OAL | - 40 m |
| OAW | - 4.4 m except 5 m as authorized in Form CVSE 1001 - or as authorized by the provincial permit centre - other travel over 4.4 m wide requires an Extraordinary Load Approval before permit purchase, and travel over 6.0 m wide also requires a Form CVSE 1052 before permit purchase.. <br> NOTE: To mitigate travel delays, PPC staff may need to seek additional input on requested routes from regional staff prior to permit issuance. |

## Travel Conditions

- Not valid during inclement weather conditions
- If front or rear projection only, night restriction does not apply
- For loads exceeding 4.4 m up to 5 m in OAW, and up to 40 m in OAL
- 3 pilot cars, except as authorized in Form CVSE1001
- 2200 - 0500 hrs transport times Sunday to Thursday (excluding General Holidays)
- 0000 - 0500 hrs transport times Friday to Saturday (excluding General Holidays)
- For loads exceeding 5 m in OAW, and up to 40 m in OAL
- 4 pilot cars
- 0000 - 0500 hrs transport times everyday (excluding General Holidays)
- For loads exceeding 5 m in OAW, and exceeding 40 m in OAL
- 5 pilot cars
- 0200 - 0500 hrs transport times everyday (excluding General Holidays)
- Loads traveling outside of the Lower Mainland Area may require an Extraordinary Load approval
"FPK" means the front projection measured from over the kingpin forward to the front of the vehicle and/or load.
" OAH " means the overall height measured from the ground to the top of the vehicle and/or load.
"OAL" means the overall length measured from the front of the vehicle and/or load to the end of the vehicle and/or load.
"OAW" means the overall width measured from the widest point on the left side of the vehicle and/or load to the other widest point on the right side of the vehicle and/or load.
Table 6.4.2.B. Extraordinary Loads: Special Regional Allowances in the Lower Mainland


### 6.4.3 Authority Matrix

### 6.4.3.A. Provincial Permit Centre (PPC)

The PPC (1-800-559-9688) is authorized to issue permits, without special authorization or approval from the Commercial Transport Program, Structural Engineering Section or Geotechnical, Material and Pavement Engineering Sections of the Engineering Branch, to vehicles and/or loads that meet the following criteria:

- Vehicles and commodities that fall within policy limits outlined in Chapters 4 and 5 of this manual
- Oversize and/or overweight permits up to $64,000 \mathrm{~kg}$ — provided weights do not exceed policy limits as set out in S.6.3.3 (B) (iv)
- Oversize and/or overweight permits exceeding $64,000 \mathrm{~kg}-85,000 \mathrm{~kg}$ travelling on approved routes as set out in S.6.3.3 and conforming to the routes'vehicle criteria
- Extraordinary loads that comply with the special regional allowances as set out in s.6.4.2
- Any oversize non-reducible load travelling within 110 km (includes $10 \%$ distance variance) provided it does not conflict with policy limits
- House, building or large structure moves within 110 km - CVSE1052 is required to be signed off and completed by all parties.


### 6.4.3.B. Public Works Canada

Highway 97N is a Federal highway starting at Mile 83.6 ( 135 km ) all the way to the BC/YT Border. Mile $0(0 \mathrm{~km})$ of Highway 97 starts in Dawson Creek. While CVSE is responsible for issuing permits from Mile 83.6 to the border, the actual overload approval is required from Public Works if:

- The vehicle and/or load exceeds Bridge Formula from Mile 83.6 to the BC/YT Border
- The vehicle and/or load exceeds $85,000 \mathrm{~kg}$ from Mile 83.6
- The vehicle and/or load exceeds $64,000 \mathrm{~kg}$ on Highway 97 from the Junction of Highway 97/77 to the BC/YT Border
Requests requiring Public Work's approval are to be sent to the Extraordinary Loads team, at ExtraOrdLoads.DC@gov.bc.ca. A Commercial Transport Advisor will forward the request to Public Works on behalf of the company. Please see S.6.4.2 (C) for the information that will be required to be submitted. Approvals or replies from Public Works can take $3-4$ working days. Please note that if the load is particularly heavy, the request may have to be forwarded to Ottawa and may take longer than 3-4 days.
Once the approval is received from Public Works, a Commercial Transport Advisor will send the approval to the company, the inspection stations along the approved route, and to the PPC. Once the company receives the approval, they can contact the PPC to order their permit. Sometimes multiple approvals are needed from both Public Works and the Ministry of Transportation. Once approval is approved from all parties, a Commercial Transport Advisor will send out the approvals as a total package.

Note: The overall length of the combination cannot exceed 36 metres on Highway 97 from the Junction of Highway 97/77 to the BC/YT Border.

### 6.4.3.C. Commercial Transport Program: Extraordinary Load Approvals

The Commercial Transport Program is responsible for providing special authorizations, approvals or permits for vehicles and/or loads that:

- Exceed $64,000 \mathrm{~kg}$ on non-approved overload routes (load must be stripped or fully reduced in order to obtain an approval)
- Exceed 85,000 kg
- Do not comply with policy limits specified in previous sections of this manual (i.e., Municipal Fire Truck Permits)
- Is an oversize non-reducible load travelling more than 110 km
- Exceed 4.4 m wide, except on pre-approved routes described in the CVSE1001 or 1002 forms
- Exceed 4.88 m high ( 5.33 m in the Peace River Region), or exceed any policy height limit
- Exceed 40 m in overall length (except Lower Mainland)
i) Application Process

A carrier wishing to apply for an Extraordinary Load Approval should submit a complete Approval Request Form and a drawing of their vehicle(s) with load (including all information listed on the request form) to the Commercial Transport Program. If the request is to exceed policy limits, then a letter outlining the reason for the request must also be provided.

Requests should be submitted by email, to ExtraOrdLoads.DC@gov.bc.ca
If email access is not available, requests may be sent in by fax, to (250)784-2280.
ii) Policy Compliance and Routing

Once the Commercial Transport Program receives the request, a Commercial Transport Advisor reviews it for compliance with policy limits and checks the dimensions along the proposed route, obtaining input from a CVSE Vehicle Engineer and/or field staff if needed. If weight is not a factor of the request (either because the vehicle and load are not over-weight or because the over-weight is within limits that are pre-established for heavy haul routes as outlined at the beginning of section 6.3.3, and $100 \%$ of the proposed travel is on such routes,) the Commercial Transport Advisor will send out an oversize approval form and conditions for travel, or reasons why the request cannot be approved. This process takes one to two business days.

## iii) Structural Engineering

If the request is for an overload, the file is submitted to the Structural Engineering Section (and Public Works Canada if applicable), together with a Bridge Formula calculation. A Structural Engineer will evaluate the route and weights, and provide an email either approving the load or providing the reasons why the request was not approved. A Commercial Transport Advisor then forwards the response from Structural Engineering and the conditions of transport to the company and the permit centre, and may copy field staff along the proposed route.

## Average Processing Times

On average, the ministry issues Extraordinary Load Approvals which require structural evaluation within 7 business days. Ninety-five percent (95\%) of extraordinary overload requests are evaluated and processed within 12 business days. This does not include requests for which MoTI has required the applicant to obtain their own structural engineering services, which typically take longer.

While we understand that our clients have time pressures on them, a high volume of requests for updates slows down the work approvals. We ask that clients not request special updates until at least 7 business days have passed from the time their complete information was received by the Extraordinary Load Team.

## Repeat Approvals

The only exception to the above Structural Engineering waiting times are loads that are "identical" to previous overload approvals. These requests can be approved within 1 to 3 business days. "Identical" is defined as:

- Same truck configuration including axle groups and spacings
- All axle weights are the same or less than a previous approval
- Same roads being travelled on in same direction as previous approval
- Same start and end locations
- Permit request provides previous Structural Engineer approval number (i.e., OL1111)
- Previous approval within last 5 years

The turnaround time of 1 to 3 days when the request is identical does not apply to requests that are just similar to previous approvals, but including the information may still help speed analysis of your request and assist the program.
iv) Vehicle Engineering

A proposal for a new configuration or technology should be provided to the Manager, Commercial Transport for initial review of interest in considering the proposal. Results of the initial review will be provided to the applicants for their information, along with a summary of the aspects of the proposal that conflict with current regulations or policy for weight, dimensions or other requirements.

To be formally considered by the Manager, Commercial Transport, the proposal must be accompanied by:

- an engineering evaluation of the vehicle stability and control characteristics of the configuration;
- an explanation of how the configuration or technology addresses the Transport Association of Canada's Memorandum of Understanding for performance criteria; and
- if applicable, a summary of any other considerations, such as foreseeable effects on infrastructure, economic benefit to British Columbians, etc.


### 6.4.4 Transportation Management Plans

"Oversized load" means a load which during transport projects more than 2.6 m in width, or 4.15 m in height, or 23.5 m in length, or has rear or front projection greater than allowed by regulation.
"Seasonal load restriction" means a restriction of loads allowable on roads that have been weakened by excess water in the road base primarily contributed from seasonal road thaw
"PCLMG" means the Pilot Car Load Movement Guidelines, which are the standards for pilot car operation set out in Appendix G of the 2015 Interim Traffic Management Manual for Work on Roadways.
"Pilot Car" means a vehicle that meets the standards set out in Division 8 of the Commercial Transport Regulations
"TCP" means a traffic control person meeting the standards set out in section 2.3 of MoTl's Traffic Control Manual for Work on Roadways
"Taper" means a series of markers for closure of a lane by causing traffic to merge with an adjoining lane
The provincial highway system is designed to accommodate vehicles of certain standard sizes and dimensions. In order to maintain highway operations and highway safety, restrictions are applied on oversized loads to minimize their impacts to the provincial highway network and its other users.

In some circumstances, carriers may be asked to develop written traffic management plans and submit them to the Ministry as part of the approval process prior to moving a load.

The level of detail required for these plans will be a function of how disruptive a load (or loads) might be to highway operations. Factors considered in deciding whether to require a written Transportation Management Plan include size and weight of the load, number of loads, number or difficulty of obstacles on the route, necessary restrictions on speed for structural crossings, expected amount of disruption to other traffic, etc. As a rule, the detail required for the written TMP increases as the complexity of the move increases. You may find it helpful to think about this as 'three levels' of transportation management plan:

Level 1: Usually, carriers are not required to share their plans for managing safety for their permitted loads with the Ministry. The Ministry provides requirements and limitations on the permit, on documents attached to the permit, and in this manual, and expects that the carrier will manage safety appropriately from there verbally or through written documents that are not shared with MoTI.

Level 2: In many cases, where additional concerns about a route or a load's characteristics are quite straightforward, a brief, simple document (a few pages or less) that summarizes the carrier's instructions to the load's driver and any pilot car drivers will be sufficient, provided the document addresses the specific concerns that have been identified. In that case, MoTI's expectation would be that the carrier might use the guidelines in this section as a bit of a checklist of things to consider in planning the move, but the written plan provided to the Ministry (and carried on the trip) would cover only a few specific concerns.

Level 3: When a proposed move is quite complex, perhaps because the oversized loads are so large or heavy that their movements may require temporary removal of structures or block traffic for prolonged periods of time, or one or more sections of the route will require complex planning to manage safely, or the proposal is for a very large number of trips through one region, a more detailed transportation management plan may be required to mitigate some risk in the move's potential impacts to safety.

Although the complexity of a transportation management plan can vary from a one-page document describing the agenda for a tail-gate meeting, to a detailed document that includes maps and turning radius diagrams, the plan should be mindful of the MoTl's available traffic control documents located on the MoTI web site (see Section 6.4.4.B for web links). If you are not sure how detailed your plan needs to be, we suggest seeking clarification from a Commercial Transport Advisor before building the plan. Contact information is available at the end of the chapter.

There is also a sample template available at the end of this chapter; intended to assist in building a more complex (Level 3) transportation management plan.

### 6.4.4.A Transportation Management Guidelines for Oversized Loads

The following guidelines are provided to assist in the formation of a good quality transportation management plan. It is not necessary to include all of the elements listed here in every plan, the intention is to tailor your Transportation Management Plan to the specific risks that need extra management in your proposed move.:
i) Carrier provides all requested information to CVSE in order to obtain required permits, using the Extraordinary Load Approval Request form, which should be sent by email to ExtraOrdLoads.DC@gov.bc.ca or faxed to 250 784-2280.
ii) Carrier reviews Ministry documents; Traffic Control Manual for Work on Roadways, and these Traffic Management Guidelines.

Note: Before finalizing the plan for any move that requires an Extraordinary Load Approval before a permit can be issued, the carrier will need to include accommodation of any conditions for travel that are specified in the approval.
iii) Typical timelines for Extraordinary Load Approvals are set out in Section 6.4.3. Very complex moves may require several weeks notice to ensure adequate analysis, planning, and review is carried out for the move. Contact the Commercial Transport Advisor (and/or representatives in District(s) where the move is to take place, as applicable) to determine level of detail, and the appropriate time lines for development of transportation management plans. The carrier may also be asked to have a document signed off by other stakeholders such as police and utility companies in the districts of the proposed move.
iv) For roads that do not fall under the jurisdiction of the MoTI, the carrier would contact the jurisdiction that owns the road for authorization.
v) Carrier assigns a Traffic Control Supervisor who takes responsibility for the plan and its implementation during the move.
vi) Carrier should provide a detailed route survey indicating all appropriate locations for road/lane closures, pull-over areas, locations of encroachment onto a second travel lane, points where vehicles can pass, utility moves, emergency parking, fuel stops, possible bypass/detour routes for the public, and any anticipated roadside related activities such as for restricting roadside parking.

Other information to consider for a route survey is the significance of turning movements at intersections, and traffic signal operations along the selected route (e.g. number of signals, spacing distance between signals, length(s) of green time, and the need for signal (s) to be placed into flash for Traffic Control Person control). Tight curves with 150 m radius or less and locations with curve warning and advisory speed sign sequences should be noted. Encroachment of vehicles 5.0 m wide and greater are likely at these locations. Tight radius curves may be checked throughout the route with aerial images with graphics and drafting software, or free utility packages. The plan provided should include timelines that sequence the events of the move, including if used, the sequencing of traffic detour set ups and tear downs. Consulting with Ministry representatives in the Districts impacted will help determine the level of detail for the route survey, and items including maps, photographs, diagrams, and CAD drawings that should be included in their transportation management plans.
vii) Carrier should review the appropriateness of the selected route to identify any constraints with due consideration for terrain, road geometrics, and lane width (road cross-section) of route, and structures along the route. Structures such as Ministry median and roadside barrier, rock outcrops, retaining walls, structures, tunnel, underpasses and sign structures should be examined for clearances. Other structures for height clearance consideration are: BC Hydro lines, TV cable lines, traffic signal poles, and luminaires (streetlights). The carrier would be held responsible for all damages caused as the result of the move, and for costs associated with any temporary removal and reestablishment of structures along the route (i.e. roadside barrier).
viii) Carrier should provide detailed escort and traffic control requirements for the route including the procedures that identify the responsibilities of all units involved. The minimum number of escort vehicles required is stated in the regulations and permits, however additional units may be added depending on the load size relative to the number of highway lanes available (4-lane, 2-lane etc.), and/or the size and complexity of structures, road geometrics, and access points encountered. Any elements of pilot car operation not covered by the TMP must be done in accordance with the PCLMG. Where required, police and/or CVSE escorts may be requested. The TMP should state the intended means of communication within the team (pre-meeting and/or en route meetings) and specify the method to be used if the plan needs to be changed while en route in order to meet any needs encountered during the trip.
ix) Carrier should develop incident management plans, including contingency plans for incidents such as breakdowns, spills, or response to inclement weather that may arrive during the time of the move. Incidents should be logged. In general, oversize and/or overweight permits can be cancelled at any time due to adverse changes in road conditions. All oversize permits in BC are void when, because of unfavourable atmospheric conditions, persons or vehicles on the highway are not clearly discernible at a distance of 100 m .

Carriers are reminded to check DriveBC and the Seasonal Load Restriction web-sites regularly for current road and weather conditions, and for seasonal load restrictions during spring thaw. See the links at Section 6.4.4.B
x) Communication and notifications:
a) Carrier would notify the police, fire, ambulance, HAZMAT, and towing companies (HAZMAT, towing, and other emergency responders as relevant.)
b) Carrier would notify any commercial transit operators impacted (i.e. Greyhound Bus, BC Transit.)
c) Carrier shall notify any utility operators impacted (Hydro, Telephone, (able TV etc.)
d) Carrier would notify any municipalities or local residences impacted (via direct contact, radio, newspapers, Changeable Message Signs (CMS) etc.)
xi) Accommodation of Traffic:
a) Carrier shall cause as little inconvenience as possible to the traveling public during the carrier's move operations. Discussions with the Commercial Transport Advisor (and/or District staff, as applicable) will derive guidelines on acceptable times for "delay" for road/lane closures and platooned/accumulated traffic.
b) Carrier shall use traffic control devices as may be considered necessary during the move for the safety of both workers and public traffic.
xii) Maintenance of Traffic:

The carrier should arrange with police, fire, and ambulance a plan to minimize emergency response delay during the time of the move.
xiii) Worksite Hazards and Occupational Health and Safety Program for Move: Carrier has the responsibility to identify worksite hazards and shall develop operational occupational safety policies, procedures and plans. These items are specific to the "mobile" work taking place, and ensure the safety of all persons at the Site and the traveling public passing through/by the Site. If requested, safety policies, procedures and/or plans should be available to verify that safety issues have been reviewed and mitigated.

### 6.4.4.B Peace River Region Transportation Management Planning

If you are requested to produce a Transportation Management Plan for the Peace River Region, please begin by covering these requirements. Depending on the characteristics of your load and your route, further details may be needed.

You may also find our Heavy Haul/Overheight Planning maps helpful:
Route 49 to 97 Map
Route 97 and Cecil Lake to 97 Map
i) General Requirements:

- Describe your strategy when meeting an emergency vehicle.
- Describe your strategy for managing all controlled and uncontrolled intersections, all traffic/pedestrian lights are height restricted to 5.5 m describe how you will manage traffic if you are using a zigzag pattern and lane closures.
- Describe your strategy for managing tight curves, sharp corners and roundabouts. If your strategy involves running over traffic islands with the unit provide an approved prescription on how you will cross the island without causing damage.
- Describe your strategy on how you will manage traffic and load movements on long, narrow roads.
- If you are over 30 m in length, describe your strategy to allow traffic to pass the load.
- If you are closing a road for 30 minutes or longer you require District Manager Approval, you will be required to advertise the closure through various media locations.
- If you will be travelling only a portion of your trip, identify your stop over(s).
ii) Specific Requirements:
- If you are over 4.4 m wide, the following structures must be crossed with no other traffic on structure at the same time as the load: Peace River Bridge (Taylor), East Pine, Clayhurst, Kistatinaw, Beaton River Bridges and Muskwa River.

Note: All structures have not been identified; overweight vehicles may have additional requirements, see your approval.

- Identify how you will manage traffic, duration of closure and your location where you will stop to clear traffic before proceeding on structure. If you are crossing the Peace River (Taylor) Bridge, you must not stop at the Brake Check at the Top of the hill and hold up traffic, you can stop at the bottom of the hill at the chain up area until you are able to stop traffic. You must contact the Taylor Fire Department at 250-789-3392 and advise you will be closing the structure.
- If you are travelling on the Rolla Road (snake pit) south to Hwy 2, identify how long you will be closing the road and how you will manage the traffic.


## Rotatable Base Corridors:

Taylor locations: Height Restricted to 6 m

- Controlled Intersection, Highway 97 and Pine Ave
- Pedestrian Crossing Lights, Highway 97 and Cherry Ave
- Pedestrian Controlled Traffic Lights, Highway 97 and 98th Ave.
- If you exceed 6 m , you must use the southbound lane prior to the railway Crossing Overhead lights.
Charlie Lake Location: Height restricted to 6 m
- Pedestrian Controlled-Traffic lights for school crossing, km 79 of the Alaska Highway, northbound lane only.
- If you exceed 5.5 m , south bound traffic must use the northbound lane.

Dawson Creek:

- Dangerous Goods Route turning onto Hwy 97N

Process for Turning Bases

- If you exceed 6 m in either corridor you must contact, Westcana, Gord Padalec at 250-981-4879 or email gord@westcana.com. Westcana requires 5 working day notice to schedule the turning of the rotatable base and must sign off the CVSE 1052.

Note: If you are closing any road, indicate the length of the closure and how you will manage the traffic.
Note: From October 15th to April 15th, you must contact the Road Maintenance Contractor and advise them of your trip.
South Peace: Argo Road Maintenance, 1-800-663-7623
North Peace: Dawson Road Maintenance, 1-800-842-4122

### 6.4.4.C Ministry and other websites related to transportation management and traffic control.

## BCMoTI's Traffic Control Manual for Work on Roadways

www2.gov.bc.ca/gov/content/transportation/transportation-infrastructure/engineering-standards-guidelines/traffic-engineering-safety/trafficmanagementmanual

## Traffic Management During Construction

www2.gov.bc.ca/gov/content/transportation/transportation-infrastructure/engineering-standards-guidelines/traffic-engineering-safety/trafficmanagementmanual?keyword=traff ic\&keyword=management\&keyword=during\&keyword=construction

## Policy (Technical Circular)

www.cvse.ca/whatsnew.html?tab=compliance

## WorkSafe BC Traffic Control Link

www.worksafebc.com/en/law-policy/occupational-health-safety/searchable-ohs-regulation/ohs-regulation/part-18-traffic-control

## Standard Specifications for Highway Construction (refer to Section 194)

www2.gov.bc.ca/gov/content/transportation/transportation-infrastructure/engineering-standards-guidelines/standard-specifications-for-highway-construction

## WorkSafeBC

www.worksafebc.com/en

## Safety Network's Info on Traffic Control Person Training

www.bccsa.ca/csn_resources/worksafebc_publications.ffm

## DriveBC

www.drivebc.ca/

## DriveBC - Height Clearance Information Tool

www.drivebc.ca/cvrp/index.html?c=hct

## Seasonal Load Restrictions:

www.th.gov.bc.ca/bchighways/loadrestrictions/loadrestrictions.htm

### 6.4.4.D Pilot Car Guidelines

The number of pilot cars required will be determined by the Commercial Transport Advisor. Pilot car operation is to be done in accordance with the TMP; elements of pilot car operation not covered by the TMP, or if one is not required, must be in accordance with the PCLMG. Sample pilot car guidelines and scenarios for oversize loads that require three (3) pilot cars are noted below.
The distances "A", "B" and "C" may also be applied to loads that require a different number of pilot cars, i.e. one (1), two (2), four (4) or other numbers of pilot cars
" $\mathbf{A}$ " is sight distance from (scout or lead) Pilot Car \# 1 to structural crossing, tunnel, end of curve, intersection, roundabout, etc.
" $\mathbf{B}$ " is distance between (front) Pilot Car \#2 and Oversize Load.
" $\mathbf{C "}$ " is distance between (rear) Oversize Load and Pilot Car \#3.

## Structural Crossing or Tunnel

Oversize Load with Three Pilot Cars


1. Lane closures may be required. Traffic control to be based on Ministry's Traffic Control Manual for Work on Highways.
2. Pilot Car \#1 should travel ahead of the convoy prior to the oversize load entering a structure or tunnel, and must be positioned a minimum distance of $\mathbf{A}$ from the end of the structure or tunnel and not move until Pilot Car \#2 is with a distance of $\mathbf{B}$.
3. May be applicable to two or four-lane highways.

| Posted <br> Speed | A | B | C |
| :---: | :---: | :---: | :---: |
| $50 \mathrm{~km} / \mathrm{h}$ | 65 m | 220 m | 110 m |
| $60 \mathrm{~km} / \mathrm{h}$ | 85 m | 260 m | 130 m |
| $70 \mathrm{~km} / \mathrm{h}$ | 100 m | 300 m | 150 m |
| $80 \mathrm{~km} / \mathrm{h}$ | 140 m | 350 m | 175 m |
| $90 \mathrm{~km} / \mathrm{h}$ | 170 m | 400 m | 200 m |
| $100 \mathrm{~km} / \mathrm{h}$ | 210 m | 450 m | 230 m |
| $110 \mathrm{~km} / \mathrm{h}$ | 250 m | 500 m | 250 m |

A is sight distance from Pilot Car \#1 to structural crossing or tunnel.
B is distance between Pilot Car \#2 and Oversize Load.
C is distance between Oversize Load and Pilot Car \#3.

## Series of Tight Curves

Oversize Load with Three Pilot Cars


1. Lane closures may be required. Traffic control to be based on Ministry's Traffic Control Manual for Work on Highways.
2. Wide loads must travel at ADVISORY (posted curve warning) speed limits where applicable.
3. Pilot Car \#1 should travel ahead of the convoy prior to the oversize load entering a series of closely spaced curves, and must be positioned a minimum distance of $\mathbf{A}$ after the end of the last curve and not move until Pilot Car \#2 is within a distance of $\mathbf{B}$.
4. Traffic control must ensure oversize load must not encounter any vehicles through tight curves.
5. May be applicable to two or four-lane highways.

| Posted <br> Speed | A | B | C |
| :---: | :---: | :---: | :---: |
| $50 \mathrm{~km} / \mathrm{h}$ | 65 m | 220 m | 110 m |
| $60 \mathrm{~km} / \mathrm{h}$ | 85 m | 260 m | 130 m |
| $70 \mathrm{~km} / \mathrm{h}$ | 100 m | 300 m | 150 m |
| $80 \mathrm{~km} / \mathrm{h}$ | 140 m | 350 m | 175 m |
| $90 \mathrm{~km} / \mathrm{h}$ | 170 m | 400 m | 200 m |
| $100 \mathrm{~km} / \mathrm{h}$ | 210 m | 450 m | 230 m |
| $110 \mathrm{~km} / \mathrm{h}$ | 250 m | 500 m | 250 m |

$\mathbf{A}$ is sight distance from Pilot Car \#1 to end of curves.
B is distance between Pilot Car \#2 and Oversize Load.
C is distance between Oversize Load and Pilot Car \#3.

Single Tight Curve
Oversize Load with Three Pilot Cars


1. Lane closures may be required. Traffic control to be based on Ministry's Traffic Control Manual for Work on Highways.
2. Wide loads must travel at ADVISORY (posted curve warning) speed limits where applicable.
3. Pilot Car \#1 should travel ahead of the convoy prior to the oversize load entering a curve and must be positioned a minimum distance of $\mathbf{A}$ after the end of the curve and not move until Pilot Car \#2 is within a distance of $\mathbf{B}$.
4. Traffic control must ensure oversize load must not encounter any vehicles through the tight curve.
5. May be applicable to two or four-lane highways.

| Posted <br> Speed | A | B | C |
| :---: | :---: | :---: | :---: |
| $50 \mathrm{~km} / \mathrm{h}$ | 65 m | 220 m | 110 m |
| $60 \mathrm{~km} / \mathrm{h}$ | 85 m | 260 m | 130 m |
| $70 \mathrm{~km} / \mathrm{h}$ | 100 m | 300 m | 150 m |
| $80 \mathrm{~km} / \mathrm{h}$ | 140 m | 350 m | 175 m |
| $90 \mathrm{~km} / \mathrm{h}$ | 170 m | 400 m | 200 m |
| $100 \mathrm{~km} / \mathrm{h}$ | 210 m | 450 m | 230 m |
| $110 \mathrm{~km} / \mathrm{h}$ | 250 m | 500 m | 250 m |

A is sight distance from Pilot Car \#1 to end of curve.
B is distance between Pilot Car \#2 and Oversize Load.
C is distance between Oversize Load and Pilot Car \#3.

Major Intersection
Oversize Load with Three Pilot Cars


1. Lane closures may be required. Traffic control to be based on Ministry's Traffic Control Manual for Work on Highways.
2. Pilot Car \#1 should travel ahead of the convoy prior to the oversize load entering an intersection, and must be positioned a minimum distance of $\mathbf{A}$ from the start of the intersection and not move until Pilot $\mathrm{Car} \# 2$ is within a distance of $\mathbf{B}$.
3. May be applicable to two or four-lane highways.

| Posted <br> Speed | A | B | C |
| :---: | :---: | :---: | :---: |
| $50 \mathrm{~km} / \mathrm{h}$ | 65 m | 220 m | 110 m |
| $60 \mathrm{~km} / \mathrm{h}$ | 85 m | 260 m | 130 m |
| $70 \mathrm{~km} / \mathrm{h}$ | 100 m | 300 m | 150 m |
| $80 \mathrm{~km} / \mathrm{h}$ | 140 m | 350 m | 175 m |
| $90 \mathrm{~km} / \mathrm{h}$ | 170 m | 400 m | 200 m |
| $100 \mathrm{~km} / \mathrm{h}$ | 210 m | 450 m | 230 m |
| $110 \mathrm{~km} / \mathrm{h}$ | 250 m | 500 m | 250 m |

$\mathbf{A}$ is sight distance from Pilot Car \#1 to intersection.
$\mathbf{B}$ is distance between Pilot Car \#2 and Oversize Load.
C is distance between Oversize Load and Pilot Car \#3.

## Roundabouts

Oversize Load with Three Pilot Cars



1. Counterflow movements may be permitted. Lane closures for opposing traffic may be required. Traffic control to be based on Ministry's Traffic Control Manual for Work on Highways.
2. Pilot Car \#1 should travel ahead of the convoy prior to the oversize load entering an intersection, and must be positioned a minimum distance of $\mathbf{A}$ from the start of the intersection and not move until Pilot $\mathrm{Car} \# 2$ is within a distance of $\mathbf{B}$.
3. May be applicable to two or four-lane highways.

| Posted <br> Speed | A | B | C |
| :---: | :---: | :---: | :---: |
| $50 \mathrm{~km} / \mathrm{h}$ | 65 m | 220 m | 110 m |
| $60 \mathrm{~km} / \mathrm{h}$ | 85 m | 260 m | 130 m |
| $70 \mathrm{~km} / \mathrm{h}$ | 100 m | 300 m | 150 m |
| $80 \mathrm{~km} / \mathrm{h}$ | 140 m | 350 m | 175 m |
| $90 \mathrm{~km} / \mathrm{h}$ | 170 m | 400 m | 200 m |
| $100 \mathrm{~km} / \mathrm{h}$ | 210 m | 450 m | 230 m |
| $110 \mathrm{~km} / \mathrm{h}$ | 250 m | 500 m | 250 m |

A is sight distance from Pilot Car \#1 to end of roundabout.
B is distance between Pilot Car \#2 and Oversize Load.
Cis distance between Oversize Load and Pilot Car \#3.

## Counterflow

Oversize Load with Three Pilot Cars


1. Lane closures will be required. Traffic control to be based on Ministry's Traffic Control Manual for Work on Highways.
2. Pilot Car \#1 should travel ahead of the convoy and be in position prior to the oversize load entering the first intersection (where counterflow movement is initiated), to control (stop) opposing traffic until the counterflow movement is complete.
3. Pilot Car \#3 (the rear control vehicle) will be required to control (stop) traffic through the "trailing"intersection(s) until the counterflow movement is complete.

| Posted <br> Speed | A | B | C |
| :---: | :---: | :---: | :---: |
| $50 \mathrm{~km} / \mathrm{h}$ | 65 m | 220 m | 110 m |
| $60 \mathrm{~km} / \mathrm{h}$ | 85 m | 260 m | 130 m |
| $70 \mathrm{~km} / \mathrm{h}$ | 100 m | 300 m | 150 m |
| $80 \mathrm{~km} / \mathrm{h}$ | 140 m | 350 m | 175 m |
| $90 \mathrm{~km} / \mathrm{h}$ | 170 m | 400 m | 200 m |
| $100 \mathrm{~km} / \mathrm{h}$ | 210 m | 450 m | 230 m |
| $110 \mathrm{~km} / \mathrm{h}$ | 250 m | 500 m | 250 m |

4. May be applicable to two or four-lane highways.

### 6.4.4.E Traffic Control Diagrams

Should road closures be required in addition to the required number of pilot cars, traffic control should be based on the Ministry Traffic Control Manual for Work on Roadways. The Ministry Traffic Control Manual for Work on Roadways is provided for reference and guidance. Exact details and layouts will be dependent on the site, geometrics and vehicle dimensions. Traffic control must be designed, reviewed and approved for each unique transport.

Sample diagrams from Chapter 3:
Typical Traffic Control Layouts For Short Duration Work Zones:

Figure 3.4.1 Lane Closure with TCPs - Two Lane Two-way Roadway


- For a temporary speed zone, place $\mathrm{C}-1$ signs at positions shown for $\mathrm{C}-24 \mathrm{~s}$. Move both C-24 and C-4 signs a further $4^{*}$ upstream. Place C-23 signs downstream of each TCP.
- If the one lane section is sufficiently short (e.g., a spot obstruction), sight distance is adequate, and traffic volumes are light, it may be possible to omit the TCP for the open lane or possibly even both TCPs, and let traffic flow be self regulating. If the TCP for the open lane is omitted, the corresponding C-28 sign must be omitted. If the TCP for the closed lane is also omitted, the C-28 for that direction must be replaced with an R-56 Yield to Oncoming Traffic. If both TCPs are omitted, a Class 1 barricade must be added on each side of the work zone.

Figure 3.5.1 One Lane Closed (Near Side)

- Two Lane Two-way Intersection


Figure 3.5.2 One Lane Closed (Far Side)

- Two Lane Two-way Intersection

- If the speed is $60 \mathrm{~km} / \mathrm{h}$ or less; a HLWD or a $360^{\circ}$ plus 4 -way flashers may be used in place of a FAB.
- Also see footnotes for Figure 3.5.1.

The complete Ministry Traffic Control Manual for Work on Roadways may be found here:
https://www2.gov.bc.ca/gov/content/transportation/transportation-infrastructure/engineering-standards-guidelines/traffic-engineering-safety/trafficmanagementmanual

## TABLE A

Positioning of devices on conventional roadways for various speed limits.

| * | Regulatory speed limit | $\mathbf{5 0}$ <br> $\mathbf{k m} / \mathbf{h}$ | $\mathbf{6 0}$ <br> $\mathbf{k m} / \mathbf{h}$ | $\mathbf{7 0}$ <br> $\mathbf{k m} / \mathbf{h}$ | $\mathbf{8 0}$ <br> $\mathbf{k m} / \mathbf{h}$ | $\mathbf{9 0 - 1 0 0}$ <br> $\mathbf{k m} / \mathbf{h}$ |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| 1a | Taper length for lane closure | 35 <br> $(1: 10)$ | 55 <br> $(1: 15)$ | 75 <br> $(1: 20)$ | 90 <br> $(1 / 25)$ | 110 <br> $(1: 30)$ |
| 1b | Taper length for shoulder work or where TCPs <br> used (min. 3 cones) | 5 | 8 | 10 | 12 | 15 |
| 2 | Maximum distance between cones or <br> tubular markers for 1a | 10 | 10 | 10 | 10 | 10 |
| 3 | Minimum tangent distance between tapers | 30 | 60 | 90 | 120 | 150 |
| 4 | Distance between construction signs | 40 | 60 | 80 | 100 | 150 |

Dimensions shown are in metres and are minimums except for $2^{*}$.
Cones and tubular markers are generally used in daylight but if used at night must be reflectorized. Barricades, flexible drums or temporary delineator posts are generally used during hours of darkness and must be reflectorized.

Dimensions $1 \mathrm{~b}^{*}$ apply to downstream tapers, shoulder tapers, and to two-way traffic tapers on travelled lanes where traffic is controlled by TCPs, portable lane control signals or temporary traffic signals.

Dimensions $4^{*}$ represent the minimum advance placement distances for initial signs as well as distances between subsequent signs in multi-sign series.

### 6.5 REDUCIBLE LOAD OVERWEIGHT POLICY

Producers or shippers are eligible to enter into agreements to operate trucks which exceed the weights and/or dimensions identified in the Commercial Transport Regulations (CTR) when carrying reducible loads using vehicle configurations depicted in the Appendices to the CTR, and under the following conditions:

- The commodity must be capable of being hauled using vehicle combinations at legal weights and dimensions as identified in the CTR,
- The haul proponent is responsible for all studies as may be required to confirm:
- the proposed vehicle configuration complies with recognized vehicle dynamics performance and safety thresholds at the requested weights, and
- structural capacities and any upgrades, if necessary to accommodate the haul vehicles at the requested weights,
- The haul proponent will be responsible for paying any costs associated with upgrading infrastructure to accommodate the haul,
- The haul must generate a minimum of $5 \%$ reduction in Equivalent Single Axle Loadings (ESAL) when compared with the ESAL count which would be generated by the haul using a comparable Super B-train at legal weights and dimensions, according to the process outlined in section 6.5.1.
- If the haul is approved, the shipper will be required to ensure that any carrier operating pursuant to this agreement will:
- comply with any pilot car requirements or other travel conditions resulting from the approved dimensions of the configuration and load (see Form CVSE1000),
- implement a system for monitoring axle and gross vehicle weights, and make the vehicle weight information available to Ministry staff as required to audit compliance,
- develop, document and demonstrate a driver training and monitoring program which is specific to the haul,
- install electronic technology, including electronic driver logs, speed monitoring for each driver and vehicle on the haul, and
- maintain a"Satisfactory" rating under the National Safety Code, and
- If the vehicles operate on highways which have inspection stations which are part of the Weigh2Go network, all vehicles operating pursuant to the agreement must be registered and maintain participation in the Weigh2Go program.

Note: For BC's Reducible Load Policy for Dimensions, please see section 4.2 in Chapter 4.

### 6.5.1 Application

The program considers applications to haul reducible loads at weights higher than legal $63,500 \mathrm{~kg}$ and at overall lengths up to 27.5 m . The program is based on the assumption that the proponent already has the option and the ability to move the commodity at legal weights and dimension without any Commercial Transport permit fees or additional analysis. Thus all haul costs are determined in comparison with a legal haul option, and all additional assessment and infrastructure costs are borne by the applicant.

All routes must be reviewed to assess whether structures and pavements can accommodate the bulk haul. Any costs for work done by consultants as may be required to review structure or pavement capacities will be paid by the haul proponent.

All vehicles must be safe to operate on the proposed route. Any new configurations or weight/ dimension changes to existing configurations must be assessed to confirm they comply with recognized vehicle dynamics performance and safety thresholds. Any costs for work done by consultants to conduct the assessments will be paid by the haul proponent.

The proposed haul must generate an ESAL count which is at least 5\% less than the ESAL count which would be generated if the haul occurred with the comparable legal B-train configuration. This ESAL comparison must be conducted and signed off by a Qualified Professional , and will be calculated by comparing the ESAL's which would be generated to move one million tonnes of payload using a standard'Super B Train' (8-axle B Train) combination, with tare weights as shown below, to the ESAL's generated by moving one million tonnes of payload using your proposed vehicle combination.

An additional layer of analysis is required for safety considerations related to the transport of bulk liquids (tankers). Please consult with the Senior Vehicle Engineer, CVSE before initiating such a proposal; contact information can be found at the back of this chapter.

## 8 Axle Super B-Train



## Unloaded Super B-Train Information

| Combination Type | Available <br> Payload (kg) |  |
| :--- | :---: | :---: |
| Open Top/End Dump | 20,320 | 43,180 |
| Side Dump | 20,358 | 43,142 |
| Closed Top/End Dump | 23,180 | 40,320 |
| Wood Chip Train | 19,250 | 44,250 |
| Light-weight Chassis (ore haul) | 13,925 | 49,575 |
| Flat-deck | 17,780 | 45,720 |

When selecting the combination type to use for your comparison, please choose the one with the most similar characteristics to your proposed vehicle combination. If in doubt, contact the Senior Vehicle Engineer, CVSE - see contact info at end of this Chapter.

## Fully Loaded Super B-Train Information

| Axle Weight (kg) |  | TAC ESAL value |  |
| :--- | :--- | :---: | :---: |
| Steer | Tridem Drive | 7,300 | 1.571 |
| Tandem Axle | 17,000 | 2.039 |  |
| Tridem Axle | 24,000 | 1.950 |  |
| GCVW - Fully Loaded | 63,500 | 6.717 |  |

* Although a steer axle in this application can legally be loaded to $6,000 \mathrm{~kg}$, we have used $5,500 \mathrm{~kg}$ here so that the rest of the axle groups can attain maximum axle group weights, for ease of ESAL calculations.

[^0]
### 6.5.2 Shipping Containers in Transit to Gateway Ports in the Lower Mainland

Although overweight permits issued under this policy are normally for gross combination vehicle weight only, carriers transporting shipping containers to Gateway ports in the Lower Mainland may also obtain authorization for small increases above legal axle group weights, under the following conditions:

- The vehicle combination must be a 10 -axle B-Train, loaded with two shipping containers.
- All reasonable measures that do not impede safe operation must be taken to minimize the tare weight of the vehicle combination before increases to axle group weight will be considered.
- Axle group weight increases will be limited to only what is necessary to achieve container weights of ISO 668 maximum $30,480 \mathrm{~kg}$.
- A weighing program that is acceptable to the Ministry must be in place for the duration of the authorization.
- Travel with increased axle group weights will only be authorized from transfer/reload facilities located in the Lower Mainland to Gateway ports located in the Lower Mainland. Where more than one suitable loading facility is available, the closest facility to the destination port should be utilized.
- All other requirements of the Reducible Load Overweight Policy will continue to apply.


### 6.6 CONTACTS

### 6.6.1 Structural Engineering Overloads Section - Highways Department <br> Mark Frew <br> Phone: (236) 468-1991

### 6.6.2 Commercial Transport Program

Extraordinary Load Approvals: Preferred contact: ExtraOrdLoads.DC@gov.bc.ca
Secondary contact: Fax (250) 784-2280
Commercial Transport Advisors: 1-855-795-0313
General Inquiries
Commercial.Transport@gov.bc.ca
Laura Wolf
Phone: (250) 953-4017
Email: Laura.Wolf@gov.bc.ca
Richard Mawhinney
Phone: (250) 953-4017
Email: Richard.Mawhinney@gov.bc.ca
Nicole Hilborne
Phone: (250) 953-4017
Email: Nicole.Hilborne@gov.bc.ca
Website: www.cvse.ca and click on Commercial Transport Program

### 6.6.3 CVSE Provincial Permit Centre

Toll-Free: 1-800-559-9688
Fax: (250) 784-2426
Email: DAWCREEK@gov.bc.ca

### 6.6.4 Public Works Canada

Phone: (250) 774-2551
Fax: (250) 774-6365

### 6.6.5 Senior Vehicle Engineer <br> Nam Nguyen <br> Email: Nam.Nguyen@gov.bc.ca

## Commercial Vehicle Safety \& Enforcement <br> Transportation Management Plan <br> Transportation Management Plan Template for Oversized Loads

Applicant Name:
Commodity:

Origin: Destination:

### 1.1. Vehicle Diagram

Provide (attach) diagram of proposed vehicle with weights and dimensions.
(i.e. overall length, height and width, interaxle spacing, tractor and trailer wheel base, location of the hitch or fifth wheel, overhangs and projections, loaded gross vehicle weight, loaded axle group weights, etc.)

### 1.2. Transport Dates

1.2.1. Is this a multi-day transport?

YES $\square$ $\qquad$ NO $\square$

If YES, identify location(s) where the Oversize Load(s) will be parked during layover(s):

```
1st Leg Layover Location:
2nd Leg Layover Location:
3rd Leg Layover Location:
4th Leg Layover Location:
5th Leg Layover Location:
(If there are additional legs, attach/add additional information on a separate sheet)
```


### 1.2.2. Target Transport Date(s):

1.1.1 Provide a turn-by-turn description of proposed route, with star and end address:
1.1.2 List locations of restricted clearance (i.e. structures, overheads, signs, utilities, etc.) on proposed route.
1.1.3 List locations of encroachment onto second travel lane and limited sight distance on proposed route:
$\square$
1.1.4 List locations of pullouts and frontage roads that can accommodate proposed vehicle on proposed route.

## $1.2 \quad$ Traffic Control (refer to sections 1.1.10., 1.1.14., 1.1.15)

Permitted hours of transport and the number of pilot cars required will be determined by the Commercial Transport Advisor. Conditions will be specified on the permit approval or Letter of Authorization. Please contact the Commercial Transport Advisor and/or District Staff for requirements.
1.2.1 Provide a description of traffic control for locations of restricted clearances and sight distance, and encroachment onto second travel lane on proposed route (attach diagrams as necessary):

Maximum permitted following queues and maximum permitted delays (for road closures) will be determined by the Commercial Transport Advisor and/or District staff. Conditions will be specified on the Permit Approval or Letter of Authorization. Please contact the Commercial Transport Advisor and/or District Staff for requirements.
1.1.1 Provide a description of how traffic will be maintained in compliance with maximum queue and delay allowances:
1.2 Communication and Incident Response Plan
(Refer to Sections 1.1.11., 1.1.13.,1.1.16. of the Transportation Management Plan Guidelines)
$\square$
1.1.1 Provide "during the move" contact information for traffic control supervisor, police/RCMP, utility companies, local tow companies, transit and other stakeholders as required:
1.1.2 Provide a description of how traffic incidents will be handled (agencies/people to be contacted, timelines for contact, notification to the Ministry, etc.):


[^0]:    ${ }^{1}$ A Professional Engineer or Geoscientist registered with the Association of Professional Engineers and Geoscientists of British Columbia (APEGBC) with the appropriate level of education, training and experience to conduct vehicle assessments in order to identify if a vehicle combination loaded with specific commodity and or payload weights is safe for use.

