

PERMIT POLICY MANUAL

SUBJECT: Service Rigs

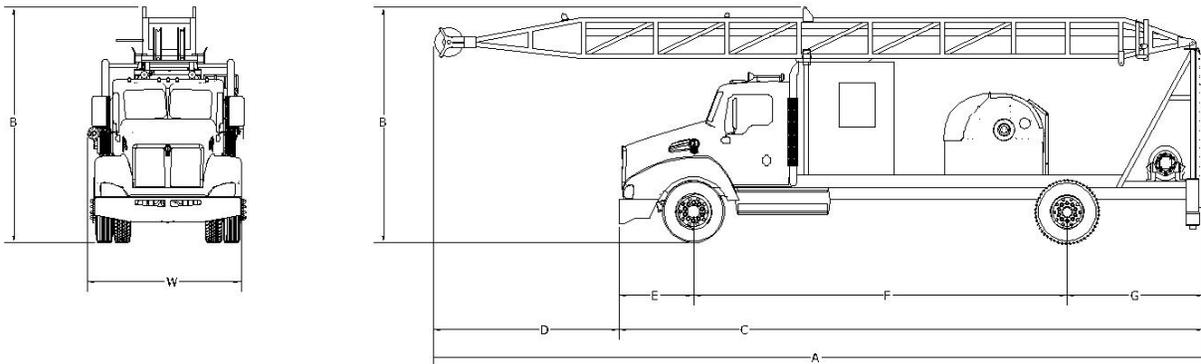
POLICY NUMBER: 4.21.3

Intent: To permit the operation of a service rig which may exceed the weights and dimensions prescribed in *Vehicle Weights and Dimensions on Classes of Highways Regulation 155/2018*.

General Information:

- Policy does not apply to the City of Winnipeg.
- Service rigs may not tow any type of vehicle nor carry any payload of any type.
- Specification sheets and/or provincially scaled weights may be requested prior to a permit being issued.
- Drive axles equipped with wide-base single tires are not eligible for overweight allowances. Must be legal weight requirements as prescribed in Regulation.

Single Steer – Single Drive



DIMENSION	Legal Maximum	Maximum by Permit
Overall Length (A)	Maximum 12.5 m	23.0 m
Overall Width (W)	Maximum 2.6 m	2.6 m
Overall Height (B)	Maximum 4.15 m	4.8 m
Carrier Length (C)	N/A	14.5 m
Front Effective Overhand (D + E)	1.0 m	11.5 m
Effective Rear Overhang (G)	Maximum 4.0 m	5.0 m
Interaxle Spacing (F)	Minimum 3.0 m	Minimum 3.0 m

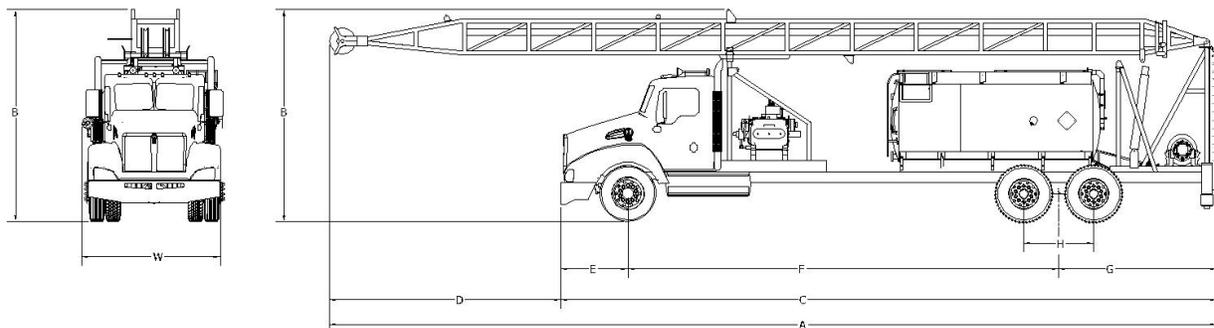
Weight:

WEIGHT LIMIT (kg)				
Axle	RTAC Route	Class A1 Highway	Class B1 Highway	Maximum Weight by Permit
Single Steering Axle	7,300	7,300	7,300	9,100
Drive Axle	9,100	9,100	8,200	9,100
Gross Vehicle Weight Limits	16,400	16,400	15,500	18,200

Axle Weight:

- The gross weight on the single steering axle shall not exceed the lesser of:
 - 10 kg per mm width of the tire (weight multiplied by the width of the tire multiplied by the number of tires);
 - 9,100 kg ;
 - the rated capacity of the tire (weight multiplied by the number of tires); or
 - the gross axle weight rating (GAWR) for the axle unit.
- The gross weight on the drive axle (4 wheels) shall not exceed the lesser of:
 - 10 kg per mm width of tire (weight multiplied by the width of the tire multiplied by the number of tires);
 - 9,100 kg;
 - the rated capacity of the tire (weight multiplied by the number of tires); or
 - the gross axle weight rating (GAWR) for the axle unit.

Single Steer – Tandem Drive



DIMENSION	Legal Maximum	Maximum by Permit
Overall Length (A)	Maximum 12.5 m	23.0 m
Overall Width (W)	Maximum 2.6 m	3.2 m
Overall Height (B)	Maximum 4.15 m	4.8 m
Carrier Length (C)	N/A	14.5 m
Tandem Axle Spread (H)	Min. 1.0 m/ Max 1.85 m	Min. 1.0 m/Max. 1.85 m
Front Effective Overhang (D+E)	1.0 m	11.5 m
Effective Rear Overhang (G)	Maximum 4.0 m	5.0 m
Interaxle Spacing	Minimum 3.0 m	Minimum 3.0 m

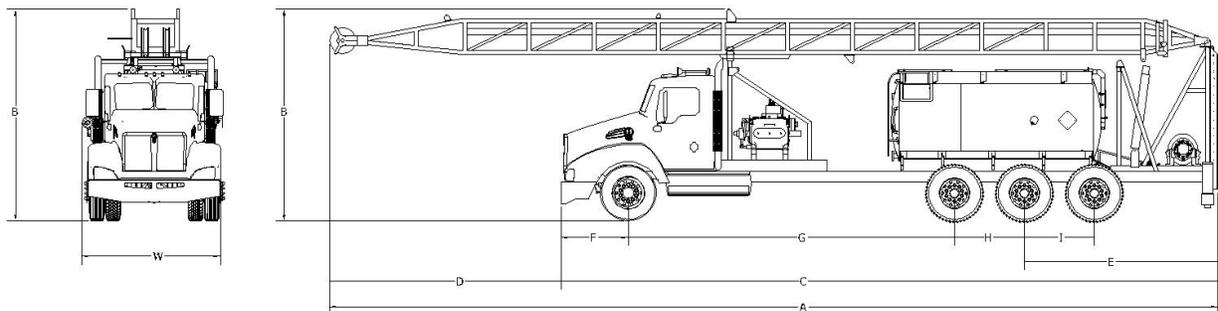
Weight:

WEIGHT LIMIT (kg)				
Axle	RTAC Route	Class A1 Highway	Class B1 Highway	Maximum Weight by Permit
Single Steering Axle	7,300	7,300	7,300	9,100
Tandem Drive Axle	17,000	16,000	14,500	24,000
Gross Vehicle Weight Limits	24,300	23,300	21,800	33,100

Axle Weight:

- The gross weight on the single steering axle shall not exceed the lesser of:
 - 10 kg per mm width of the tire (weight multiplied by the width of the tire multiplied by the number of tires);
 - 9,100 kg ;
 - the rated capacity of the tire (weight multiplied by the number of tires); or
 - the gross axle weight rating (GAWR) for the axle unit.
- The gross weight on the tandem drive axle (8 wheels) shall not exceed the lesser of:
 - 9 kg per mm width of tire (weight multiplied by the width of the tire multiplied by the number of tires);
 - 24,000 kg;
 - the rated capacity of the tire (weight multiplied by the number of tires); or
 - the gross axle weight rating (GAWR) for the axle unit.

Single Steer – Tridem Drive



DIMENSION	Legal Maximum	Maximum by Permit
Overall Length (A)	Maximum 12.5 m	23.0 m
Overall Width (W)	Maximum 2.6 m	3.2 m
Overall Height (B)	Maximum 4.15 m	4.8 m
Carrier Length (C)	N/A	14.5 m
Wheelbase (G+H)	Min. 6.6 m Max. 6.8 m	Min. 6.6 m Max 6.8 m
Tridem Axle Spread (H+I)	Min. 2.4 m Max 3.10 m	Min. 2.4 m Max 3.10 m
Front Effective Overhang (D+F)	1.0 m	11.5 m
Effective Rear Overhang (E)	Maximum 4.0 m	5.0 m

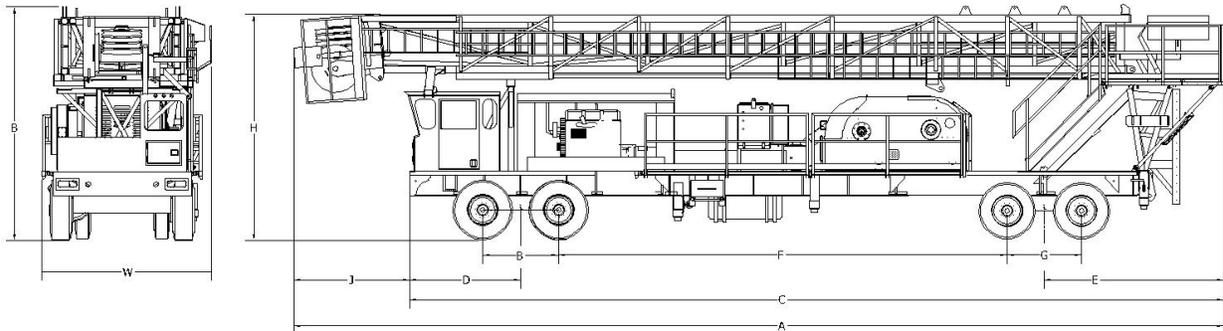
Weight:

WEIGHT LIMIT (kg)				
Axle	RTAC Route	Class A1 Highway	Class B1 Highway	Maximum Weight by Permit
Single Steer	7,300	7,300	7,300	9,100
Tridem Drive				
Spread 2.4 to less than 2.7 m	21,000	21,000	20,000	27,500
Spread 2.7 m to 3.10 m	22,000	21,000	20,000	
Gross Vehicle Weight Limits	28,300 to 29,300	28,300	27,300	36,600

Axle Weight:

- The gross weight on the single steering axle shall not exceed the lesser of:
 - 10 kg per mm width of the tire (weight multiplied by the width of the tire multiplied by the number of tires);
 - 9,100 kg ;
 - the rated capacity of the tire (weight multiplied by the number of tires); or
 - the gross axle weight rating (GAWR) for the axle unit.
- The gross weight on the tridem drive axle (12 wheels) shall not exceed the lesser of:
 - 9 kg per mm width of tire (weight multiplied by the width of the tire multiplied by the number of tires);
 - 27,500 kg;
 - the rated capacity of the tire (weight multiplied by the number of tires); or
 - the gross axle weight rating (GAWR) for the axle unit.

Tandem Steer – Tandem Drive



DIMENSION	Legal Maximum	Maximum by Permit
Overall Length (A)	Maximum 12.5 m	23.0 m
Overall Width (W)	Maximum 2.6 m	3.4 m
Overall Height (B)	Maximum 4.15 m	4.8 m
Carrier Length (C)	N/A	15.0 m
Wheelbase (B+F+1/2G)	N/A	Min. 6.6 m
Tandem Steer Axle Spread (B)	Min 1.0 m to Max 2.2 m	Min 1.0 m to Max 2.6 m
Tandem Axle Spread (C)	Min. 1.0 m Max 1.85 m	Min. 1.0 m Max 1.85 m
Front Effective Overhang (D+E)	1.0 m	11.5 m
Effective Rear Overhang (E)	Maximum 4.0 m	5.0 m
Interaxle Spacing (F)	Minimum 5.0 m	Minimum 5.0 m

If the Interaxle spacing is less than 5.0 meters, the combined allowable steering and drive axle weights will be reduced by 750 kg for each 0.1 m or portion thereof up to a minimum spacing of 3.6 m.

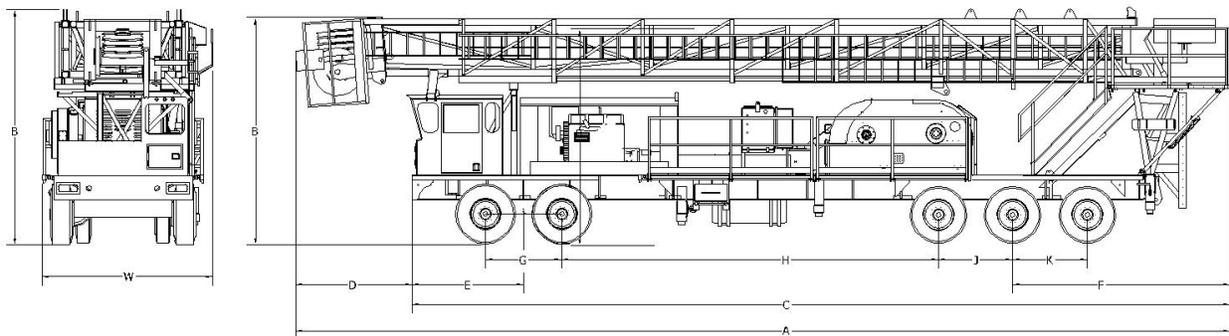
Weight:

WEIGHT LIMIT (kg)				
Axle	RTAC Route	Class A1 Highway	Class B1 Highway	Maximum Weight by Permit
Tandem Steer Axle	13,600	13,600	11,000	18,200
Tandem Drive Axle	17,000	16,000	14,500	24,000
Gross Vehicle Weight Limits	30,600	29,600	25,500	42,200

Axle Weight:

- The gross weight on the steering axle shall not exceed the lesser of:
 - 10 kg per mm width of the tire (weight multiplied by the width of the tire multiplied by the number of tires);
 - 18,200 kg ;
 - the rated capacity of the tire (weight multiplied by the number of tires); or
 - the gross axle weight rating (GAWR) for the axle unit.
- The gross weight on the tandem drive axle (8 wheels) shall not exceed the lesser of:
 - 9 kg per mm width of tire (weight multiplied by the width of the tire multiplied by the number of tires);
 - 24,000 kg;
 - the rated capacity of the tire (weight multiplied by the number of tires); or
 - (bb) the gross axle weight rating (GAWR) for the axle unit.

Tandem Steer – Tridem Drive



DIMENSION	Legal Maximum	Maximum by Permit
Overall Length (A)	Maximum 12.5 m	23.0 m
Overall Width (W)	Maximum 2.6 m	3.4 m
Overall Height (B)	Maximum 4.15 m	4.8 m
Carrier Length (C)	N/A	15.0 m
Wheelbase (G+H+J)	Min. 6.6 m	Min. 6.6 m
Tandem Axle Spread (G)	Min. 1.0 Max 2.2 m	Min. 1.0 Max 2.6
Tridem Axle Spread (H+I)	Min. 2.4 m Max 3.10 m	Min. 2.4 m Max 3.10 m
Front Effective Overhang (D+E)	1.0 m	11.25 m
Effective Rear Overhang (F)	Maximum 4.0 m	5.0 m
Interaxle Spacing (H)	Minimum 5.0 m	Minimum 5.0 m

If the Interaxle spacing is less than 5.0 meters, the combined allowable steering and drive axle weights will be reduced by 750 kg for each 0.1 m or portion thereof up to a minimum spacing of 3.6 m.

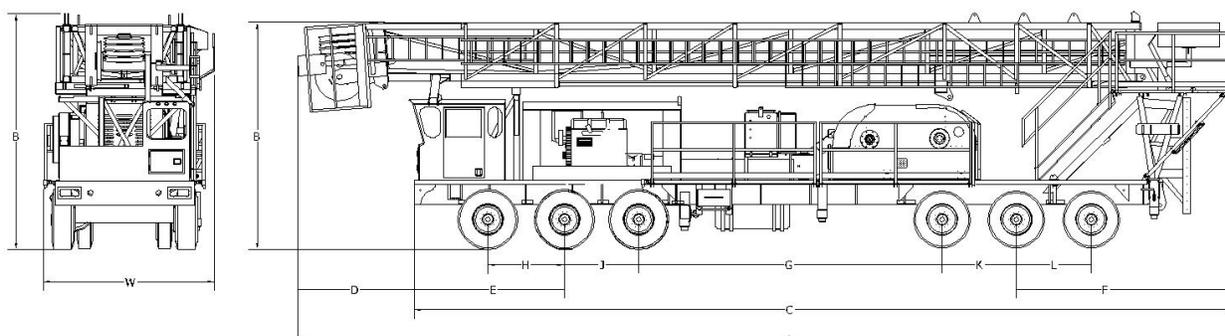
Weight:

WEIGHT LIMIT (kg)				
Axle	RTAC Route	Class A1 Highway	Class B1 Highway	Maximum Weight by Permit
Tandem Steer	13,600	13,600	11,000	18,200
Tridem Drive Spread 2.4 to less than 2.7 m Spread 2.7 m to 3.10 m	21,000	21,000	20,000	27,500
	22,000	21,000	20,000	
Gross Vehicle Weight Limits	34,600 – 35,600	34,600	31,000	45,700

Axle Weight:

- The gross weight on the steering axle shall not exceed the lesser of:
 - (a) 10 kg per mm width of the tire (weight multiplied by the width of the tire multiplied by the number of tires);
 - (b) 18,200 kg ;
 - (c) the rated capacity of the tire (weight multiplied by the number of tires); or
 - (d) the gross axle weight rating (GAWR) for the axle unit.
- The gross weight on the tridem drive axle (12 wheels) shall not exceed the lesser of:
 - (e) 9 kg per mm width of tire (weight multiplied by the width of the tire multiplied by the number of tires);
 - (f) 27,500 kg;
 - (g) the rated capacity of the tire (weight multiplied by the number of tires); or
 - (h) the gross axle weight rating (GAWR) for the axle unit.

Tridem Steer – Tridem Drive



DIMENSION	Legal Maximum	Maximum by Permit
Overall Length (A)	12.5 m	23.0 m
Overall Width (W)	2.6 m	3.4 m
Overall Height (B)	4.15 m	4.8 m
Carrier Length (C)	N/A	15.0 m
Wheelbase (J+G+K)	N/A	Minimum 6.6 m
Tridem Steer Axle Spread (H + J)	N/A	Min 2.4 m Max 3.10 m
Tridem Axle Spread (K+L)	Min 2.4 m Max 3.10 m	Min 2.4 m Max 3.10 m
Tridem Drive Track Width	Min 2.5 m Max 2.6 m	Min 2.5 m Max 2.6 m
Front Effective Overhang (D+E)	1.0 m	11.25 m
Effective Rear Overhang (F)	Maximum 4.0 m	Maximum 6.0 m
Interaxle Spacing (G)	Minimum 6.0	Minimum 5.0 m

Weight:

WEIGHT LIMIT (kg)				
Axle	RTAC Route	Class A1 Highway	Class B1 Highway	Maximum Weight by Permit
Tridem Steer	N/A	N/A	N/A	24,000
Tridem Drive				
Spread 2.4 to less than 2.7 m	21,000	21,000	20,000	27,500
Spread 2.7 m to 3.10 m	22,000	21,000	20,000	
Gross Vehicle Weight Limits	N/A	N/A	N/A	51,500

Tridem Steering axles:

- Must maintain a minimum steering axle group weight of 40% of drive axle weight at all times.
- Must be equally spaced.
- The weight must be equally distributed between axles within 1000kg of an adjacent axle.

Axle Weight:

- The gross weight on the steering axle shall not exceed the lesser of:
 - (i) 9 kg per mm width of the tire (weight multiplied by the width of the tire multiplied by the number of tires);
 - (j) 24,000 kg ;
 - (k) the rated capacity of the tire (weight multiplied by the number of tires); or
 - (l) the gross axle weight rating (GAWR) for the axle unit.
- The gross weight on the tridem drive axle (12 wheels) shall not exceed the lesser of:
 - (a) 9 kg per mm width of tire (weight multiplied by the width of the tire multiplied by the number of tires);
 - (b) 27,500 kg;
 - (c) the rated capacity of the tire (weight multiplied by the number of tires); or
 - (d) the gross axle weight rating (GAWR) for the axle unit.

Permit Conditions:

- Where equipment specifications are not explicitly addressed in this policy, it is deemed that the equipment must meet applicable federal or provincial safety standards.
- Weights and dimensions which are not specifically identified in this policy must comply with the applicable provincial Acts and Regulations.
- Service Rigs with front or rear projections may travel at night provided that lighting requirements are met in accordance with *The Highway Traffic Act*.

Over Width Permit Conditions:

General permit conditions are applied cumulatively. The operator must adhere to all conditions up to and including those for the maximum width of the load or vehicle, whichever is greater.

Exceeding (metres)				When	Highway	Conditions
2.60				Day	All	Orange or red flags are required from one-half hour after sunrise to one-half hour before sunset.
				Night	All	Amber and red lights are required beginning one-half hour before sunset and ending one-half hour after sunrise.
3.05				Always	All	"D" or "WIDE LOAD" sign is required.

Over Height Permit Conditions:

Standard over height permit conditions are applied cumulatively. The operator must adhere to all conditions up to and including those for the maximum height of the load or vehicle, whichever is greater.

Exceeding (metres)		When	Highway	Conditions
4.15		Always	Brandon	Approval from Manitoba Hydro is required for travel in back lanes.
		Always	Brandon	Approval from Bell-MTS is required for travel in back lanes.
	4.60	Always	Brandon	Carrier to survey route for potential conflicts with traffic signal equipment, traffic signs and/or parked vehicles.

Over Height Approval Requirements:

- Applicants are responsible for contacting all required utilities when required (i.e.: Bell-MTS, Manitoba Hydro, CN Rail, CP Rail, etc.) and must reference the Permit Application number.

Height exceeds 4.6 m	<ul style="list-style-type: none"> Carrier must obtain approval from Bell MTS. (Contact (204) 326-8292
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City of Brandon: Specific Information & Conditions

Height exceeds 4.6 m	<ul style="list-style-type: none"> Load shall not be moved on City streets until authorized by Brandon Police Services, through the Chief of Police or his designate, and the applicant meeting all additional conditions, which may be required by the Police Service. Applicant must secure clearance from City of Brandon Operations Dept., BELL MTS, MI Traffic Signals, and Manitoba Hydro.
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Rear Effective Overhang:

These standard conditions apply to rear effective overhangs even if the vehicle does not exceed legal length.

Exceeding (metres)		When	Highway	Conditions
1.0 (from the rear of the vehicle)	Day	All	Red flag required on the rear extremity from one-half hour after sunrise to one-half hour before sunset.	
	Night	All	Red clearance light required on the rear extremity beginning one-half hour before sunset and ending one-half hour after sunrise.	
6.5	Always	Provincial	Rear pilot required.	
9.0	Day	Provincial	Front and rear pilot vehicle required.	
	Night	Provincial	No travel allowed.	

Front Projections:

These standard conditions apply to front projections even if the vehicle does not exceed legal length.

Exceeding (metres)	When	Highway	Conditions
1.0 (from front bumper or front wheels, if no bumper)	Night	All	Amber clearance light or reflector required on the sides of the front extremity beginning one-half hour before sunset and ending one-half hour after sunrise.
3.0 (from the king pin setback)	Always	Provincial All	Front pilot vehicle is required.
6.0 (from the turn centre of the steer axle)	Always	Provincial All	Front pilot vehicle is required.

Annual Permits:

Annual permits can be obtained for the following:

- Heavy steer axle units up to 9,100 kg for a single steer and up to 16,000 kg for a tandem steer;
- Gross vehicle weight of a single unit may not exceed 38,000 kg;

(Reference: Vehicle Weights and Dimensions Standard 4.21.3, version 2)

Date: June 12, 2019