SPEED TABLE

Time Per mile Minutes	Seconds	Miles Per Hour	Time Per mile Minutes	Seconds	Miles Per Hour
0	45	80	1	12	50
0	46	78.3	1	15	48
0	47	76.6	1	20	45
0	48	75	1	25	42.8
0	49	73.5	1	30	40
0	50	72	1	40	36
0	51	70.6	1	45	34.3
0	52	69.2	1	50	32.7
0	53	67.9	2	..	30
0	54	66.6	2	10	27.6
0	55	65.4	2	15	26.6
0	56	64.2	2	20	25.7
0	57	63.1	2	30	24
0	58	62.0	2	40	22.5
0	59	61.0	2	45	21.8
1	..	60	2	50	21.2
1	1	59	3	..	20
1	2	58	3	9	19
1	3	57.1	3	20	18
1	4	56.2	3	31	17
1	5	55.3	3	45	16
1	6	54.5	4	..	15
1	7	53.7	5	..	12
1	8	52.9	6	..	10
1	9	52.1	7	30	8
1	10	51.4	10	..	6

NORTHERN PACIFIC RAILWAY COMPANY

Duluth and Superior Terminals

TIME TABLE 256

In Effect at 12:01 A. M.
Central Standard Time.

Sunday, April 26, 1959

For the Government of Employes only. The Company reserves the right to vary therefrom at pleasure. Be positive that you have the Current Time Table and destroy all previous numbers. Read carefully the Special Instructions and always carry for reference a copy of OPERATING RULES.

W. L. WOOD,
Superintendent.

D. A. THOMSON,
General Manager.

E. S. ULYATT,
General Superintendent of Transportation.

Time Table No. 256

April 26, 1959

Water, Fuel, Scales, Turn Tables, Wyes and Yard Limits.	Car Capacity of Sidings.	Station Numbers.	FIRST CLASS												Distance from East D. M. & I. R. Jct.	STATIONS	
							65	303	57	59	49	55				Telegraph Offices and Calls	
								D. W. & P. 619		G. N. 19	G. N. 23						
							Passenger	Passenger	Passenger	Passenger	Passenger	Passenger					
							Daily	Daily Ex. Sat.	Daily	Daily	Daily	Daily					
															0.0	....EAST D. M. & I. R. JCT....	
OTw XYZ	Yard	WB 71					L 11.15 PM		L 6.05 PM	L 4.30 PM	L 8.00 AM	L 7.45 AM			0.9	DU.....DULUTH.....PDN	
X							11.18	L 8.03 PM	6.07 PM	A 4.32 PM	A 8.02 AM	7.47 AM			1.0 / 1.9	.....GARFIELD AVE.....P	DOUBLE TRACK
X		L02					11.22	8.06							0.9 / 2.8	WEST D. M. & I. R. JCT.	AUTO. BLOCK
X															0.8 / 3.6	SOO LINE CROSSING	
X							11.25	A 8.14 PM							0.9 / 4.5	D. W. & P. JCT.	
X		L04					s 11.29								0.6 / 5.1	WU..WEST DULUTH PDN	
XY		L 5					A 11.35 PM								0.8 / 5.9	...WEST DULUTH JCT..P	
X															0.8 / 6.7	.....72ND AVE. W.....	
															1.1		

TRAINS AND ENGINES USING D. T. RAILWAY WEST OF 72ND AVE. WEST WILL BE GOVERNED BY D. M. & I. R. RY., TIMETABLE AND SPECIAL INSTRUCTIONS.

		LB1											7.8	.....RIVERSIDE JCT.....
	18	LB2											0.4 / 8.2	.....RIVERSIDE.....
	13	LB5											4.3 / 12.5	.....NEW DULUTH.....
							.20	.11	.02	.02	.02	.02		Time Over Subdivision
							15.0	14.2	30.0	30.0	30.0	30.0		Average Speed Per Hour

EXCEPT ON DOUBLE TRACK, EASTWARD TRAINS ARE SUPERIOR TO WESTWARD TRAINS OF THE SAME CLASS, SEE RULE D-72.

SPECIAL INSTRUCTIONS PAGES 6, 7, 8, 9, 10 AND 11.

Time Table No. 256
April 26, 1959

FIRST CLASS

Distance from New Duluth	STATIONS Telegraph Offices and Calls		66	58	50	304	60	56					
					G. N. 24	D. W. & P. 620	G. N. 20						
			Passenger	Passenger	Passenger	Passenger	Passenger	Passenger					
			Daily	Daily	Daily	Daily Ex. Sun.	Daily	Daily					
12.5	...EAST D. M. & I. R. JCT....												
	0.9												
11.6	DU.....DULUTH...PDN	DOUBLE TRACK	A 4.40 AM	A 7.30 AM	A 11.58 AM		A 7.45 PM	A 10.45 PM					
	1.0												
10.6	.....GARFIELD AVE.. P		4.26	L 7.25 AM	L 11.56 AM	A 10.27 AM	L 7.43 PM	10.43					
	0.9												
9.7	WEST D. M. & I. R. JCT.		4.20			10.22		10.39					
	0.8												
8.9	.SOO LINE CROSSING.												
	0.9												
8.0	....D. W. & P. JCT.....		4.15			L 10.17 AM		10.34					
	0.6												
7.4	WU WEST DULUTH PDN		s 4.13					s 10.32					
	0.8												
6.6	.WEST DULUTH JCT.P		L 4.04 AM					L 10.30 PM					
	0.8												
5.8	.....72ND AVE. W.....												
	1.1												

AUTO. BLOCK

TRAINS AND ENGINES USING D. T. RAILWAY WEST OF 72ND AVE. WEST WILL BE GOVERNED BY D. M. & I. R. RY., TIMETABLE AND SPECIAL INSTRUCTIONS.

4.7	.....RIVERSIDE JCT.....												
	0.4												
4.3	.....RIVERSIDE.....												
	4.3												
0.0	.....NEW DULUTH.....												
	Time Over Subdivision		.36	.05	.02	.10	.02	.15					
	Average Speed Per Hour		8.3	12.0	30.0	15.6	30.0	20.0					

EXCEPT ON DOUBLE TRACK, EASTWARD TRAINS ARE SUPERIOR TO WESTWARD TRAINS OF THE SAME CLASS, SEE RULE D-72.

SPECIAL INSTRUCTIONS PAGES 6, 7, 8, 9, 10 AND 11.

FIRST CLASS

89	57	59	49	55	65	Time Table No. 256 April 26, 1959	Distance from Garfield Ave.
C&NW 510		G. N. 19	G. N. 23				
Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	STATIONS	
Daily	Daily	Daily	Daily	Daily	Daily	Telegraph Offices and Calls	
	L 6.07 PM	L 4.32 PM	L 8.02 AM	L 7.47 AM		.....GARFIELD AVE.....P	0.0
	6.09	4.34	8.04	7.49		.....RICES POINT.....P (0.7)	0.7
L 7.07 PM	6.10	4.36	8.06	7.51		.....BRIDGE SWITCH..... (0.6)	1.3
7.10	6.13	4.40	8.10	7.54		.....ELEVATOR STATION.... (0.9)	2.2
A 7.13 PM	6.15	4.42	8.12	7.56		.....C&NW CONN..... (0.7)	2.9
						(0.8)	

BETWEEN C&NW CONNECTION AND BELKNAP STREET TRAINS AND ENGINES USING L. S. T. & T. RAILWAY WILL BE GOVERNED BY L. S. T. & T. RY. TIME TABLE AND SPECIAL INSTRUCTIONS.

	s 6.16	s 4.45	s 8.15	s 7.59	L 11.51 PM	BY.....SUPERIOR U. D.....PDN (0.5)	3.2
	6.18	4.46	8.16	8.00	11.53	Auto. Block / Double Track: .....BELKNAP ST.....P (3.7)	3.7
	A 6.26 PM	A 4.53 PM	A 8.23 AM	As 8.08 AM	As 12.02 AM	Auto. Block / Double Track: AJ...CENTRAL AVE..PDN	7.4
.06	.19	.21	.21	.21	.11	Time Over Subdivision	
16.0	23.3	21.1	21.1	21.1	22.8	Average Speed Per Hour	

EXCEPT ON DOUBLE TRACK, EASTWARD TRAINS ARE SUPERIOR TO WESTWARD TRAINS OF THE SAME CLASS, SEE RULE D-72. SINGLE TRACK OPERATION OVER MINNESOTA DRAW ON ST. LOUIS RIVER BRIDGE, BETWEEN BRIDGE SWITCH AND ELEVATOR STATION—INTERLOCKED. FIRST CLASS TRAINS USE L. S. T. & T. RAILWAY BETWEEN C&NW CONNECTION AND BELKNAP STREET.

SECOND SUBDIVISION EASTWARD

Water, Fuel, Scales, Turn Tables, Wyes and Yard Limits.	Car Capacity of Sidings.	Station Numbers.	Distance from Central Ave.	Time Table No. 256 April 26, 1959	66	58	94	50	60
							C&NW 511	G. N. 24	G. N. 20
				STATIONS	Passenger	Passenger	Passenger	Passenger	Passenger
				Telegraph Offices and Calls	Daily	Daily	Daily	Daily	Daily
X			7.4	.....GARFIELD AVE. .....P		A 7.25 AM		A 11.56 AM	A 7.43 PM
OTw XYZ	Yard	L 1	6.7	.....RICES POINT.....P (0.7)		7.23		11.54	7.41
X			6.1	.....BRIDGE SWITCH..... (0.6)		7.22	A 6.43 AM	11.52	7.39
X			5.2	.....ELEVATOR STATION..... (0.9)		7.18	6.39	11.47	7.34
X			4.5	.....C&NW CONN..... (0.7)		7.15	L 6.37 AM	11.45	7.31
				(0.8)					

BETWEEN C&NW CONNECTION AND BELKNAP STREET TRAINS AND ENGINES USING L. S. T. & T. RAILWAY WILL BE GOVERNED BY L. S. T. & T. RY. TIME TABLE AND SPECIAL INSTRUCTIONS.

X		WB 67	4.3	BY.....SUPERIOR U. D.....PDN (0.5)	As 3.41 AM	s 7.14		s 11.43	s 7.30
X			3.7	Auto. Block / Double Track: .....BELKNAP ST.....P (3.7)	3.39	7.10		11.40	7.24
XY	Yard	67	0.0	Auto. Block / Double Track: AJ.....CENTRAL AVE. .PDN	L 3.30 AM	Lt 7.05 AM		L 11.33 AM	L 7.19 PM
				Time Over Subdivision.....	.11	.20	.06	.23	.24
				Average Speed Per Hour	22.8	22.2	16.0	19.3	18.5

EXCEPT ON DOUBLE TRACK, EASTWARD TRAINS ARE SUPERIOR TO WESTWARD TRAINS OF THE SAME CLASS, SEE RULE D-72. SINGLE TRACK OPERATION OVER MINNESOTA DRAW ON ST. LOUIS RIVER BRIDGE, BETWEEN BRIDGE SWITCH AND ELEVATOR STATION—INTERLOCKED. FIRST CLASS TRAINS USE L. S. T. & T. RAILWAY BETWEEN C&NW CONNECTION AND BELKNAP STREET.

SPECIAL INSTRUCTIONS PAGES 6, 7, 8, 9, 10 AND 11.

Water, Fuel, Scales, Turn Tables, Wyes and Yard Limits.	Car Capacity of Sidings.	Station Numbers.	FIRST CLASS 65 Passenger Daily	317 Soo Line 3 Passenger Daily Ex. Sat.	313 Soo Line 63 Passenger Daily	311 Soo Line 65 Passenger Daily Ex. Sun.	Distance from West Duluth Jct.	Grassy Point Line Time Table No. 256 April 26, 1959 STATIONS Telegraph Offices and Calls	Distance from L. S. T. & T. Ry. Jct.	FIRST CLASS 66 Passenger Daily	318 Soo Line 4 Passenger Daily Ex. Sun.	312 Soo Line 64 Passenger Daily Ex. Sun.	314 Soo Line 63 Passenger Daily
XY		L5	L 11.35 PM				0.0	.....WEST DULUTH JCT.....P	3.8	A 4.04 AM			
								0.3					
X			11.38				0.3	.....ZENITH FURNACE.....	3.0	4.02			
								0.8					
X			11.40 PM	L 8.26 PM	L 3.12 PM	L 318 9.12 AM	1.1	.....BERWIND JCT...P	2.2	3.59	A 311 9.12 AM	A 2.49 PM	A 11.28 AM
								0.7					
							1.8	.....{GRASSY POINT DRAWBRIDGE}... Double Track	1.5				
								1.5					
X			A 11.50 PM	A 8.33 PM	A 3.19 PM	A 9.19 AM	3.3	.....L. S. T. & T. RY.-JCT.	0.0	L 3.50 AM	L 9.05 AM	L 2.42 PM	L 11.21 AM

TRAINS AND ENGINES USING L. S. T. & T. RAILWAY WEST OF L. S. T. & T. RY. JCT. WILL BE GOVERNED BY L. S. T. & T. RY. TIME TABLE AND SPECIAL INSTRUCTIONS.

								Time Over Subdivision					
			.15	.07	.07	.07				.14	.07	.07	.07
			13.2	18.9	18.9	18.9		Average Speed Per Hour		14.1	18.9	18.9	18.9

EXCEPT ON DOUBLE TRACK, EASTWARD TRAINS ARE SUPERIOR TO WESTWARD TRAINS OF THE SAME CLASS, SEE RULE D-72.

WESTWARD FOURTH SUBDIVISION EASTWARD

Water, Fuel, Scales, Turn Tables, Wyes and Yard Limits.	Car Capacity of Sidings.	Station Numbers.	Distance from Allouez.	Time Table No. 256 April 26, 1959 STATIONS Telegraph Offices and Calls	Distance from Central Ave.
X	Yard	61	0.0	.....ALLOUEZ.....	5.6
				1.5	
XY	Yard	63	1.5	.....EAST END.....P	4.1
				0.2	
X	Yard	65	1.7	.....NEWTON AVENUE....	3.9
				1.4	
	Yard		3.1	.....HILL AVE.....P Double Track	2.5
				1.4	
X			4.5	.....SOO LINE CROSSING..	1.1
				1.1	
XY	Yard	67	5.6	AJ.....CENTRAL AVE. PDN	0.0
				Time Over Subdivision	
				Average Speed Per Hour	

EXCEPT ON DOUBLE TRACK, EASTWARD TRAINS ARE SUPERIOR TO WESTWARD TRAINS OF THE SAME CLASS, SEE RULE D-72.

SPECIAL INSTRUCTIONS PAGES 6, 7, 8, 9, 10 AND 11.

SPECIAL INSTRUCTIONS

ALL SUBDIVISIONS.

1. **Speed Restrictions—**

Maximum Speeds Permitted:
Passenger trains.....75 MPH.
Freight and mixed trains.....50 MPH.

The above speeds are subject to the restrictions of maximum speeds in miles per hour as shown by zones under each subdivision.

Where automatic block and interlocking rules and signal indications require movement at restricted speed, such movement must be made prepared to stop short of train, obstruction or switch not properly lined and be on lookout for broken rail or anything that may require the speed of a train to be reduced, but a speed of 15 MPH must not be exceeded.

The definition of Restricted Speed, as designated on page 8 of the 1945 Edition of the Consolidated Code of Operating Rules, will continue to apply except where automatic block and interlocking rules and signals govern as specified above.

Reduce speed limits, within the zones listed, are designated by advance-warning signs (diagonally upwards), Reduce speed signs (square with clipped corners) and Resume speed signs (vertical).

The Advance-warning signs are, except as otherwise specified, located approximately 3000 feet in advance of the Reduce speed signs, and the numerals on both signs indicate in miles per hour the maximum speed permitted from the Reduce speed sign to another Reduce speed limit, or to a sign indicating a higher speed, or to a Resume speed sign.

If speeds authorized by zones or by Reduce speed signs are greater than that prescribed below for certain trains or engines, such trains or engines must not exceed the prescribed speeds.

Locations where reduced speeds are required, but not indicated by signs, are listed under the zones of maximum speeds permitted for each subdivision.

All trains and engines, except as otherwise specified:
Through crossovers, turnouts and gantlets, except where fixed signals provide otherwise.....15 MPH.
Handling steam wrecking cranes, pile drivers, locomotive cranes and similar equipment.....30 MPH.
Handling 4-wheel scale test cars and scale test car 254 { Main Line.....35 MPH. / Branch Lines.....25 MPH.
Picking up train orders from operators.....30 MPH.

Engines— Classes—	Handling trains	Running light.
All A and Q (except on passenger trains where higher speed is authorized)	60 MPH	60 MPH
Z6, Z-7 and Z-8	60 MPH.	50 MPH.
Y, Y-1	40 MPH.	35 MPH.
S-4, T, T-1, W to W-5 inc., Y-2	50 MPH.	45 MPH.
Steam switch engines, without engine trucks, under all conditions	15 MPH.	15 MPH.
All other steam engines, backing up (This restriction does not apply when engines are used as helpers not on head end of train.)	30 MPH.	30 MPH.
Diesel-electric engines:		
No. 98	35 MPH.	35 MPH.
No. 99	50 MPH.	50 MPH.
No. 100	40 MPH.	40 MPH.
100 series	60 MPH.	60 MPH.
400 and 600 series	45 MPH.	45 MPH.
Nos. 500, 501 and 552-569, incl	65 MPH.	65 MPH.
No. 525	60 MPH.	60 MPH.
Nos. 550-551	75 MPH.	65 MPH.
700 series	45 MPH.	45 MPH.
Nos. 800-803	60 MPH.	60 MPH.
850-860 series	65 MPH.	65 MPH.
6000, 7000, 200 and 300 series, except 244 and 245	65 MPH.	65 MPH.
244, 245, 6500, 6600 and 6700 series	75 MPH.	65 MPH.
5400 series	55 MPH.	55 MPH.
Diesel-electric and Gas-electric Motor Cars in service or Being Towed:		
Car B-13	55 MPH.	
Cars B-6, B-11 and B-15 to B-26, incl	65 MPH.	
Cars B-30, B-40 and B-41	75 MPH.	
Coming from shops, under steam, to prevent running hot:		
All A and Q and classes Z-6, Z-7 and Z-8	50 MPH.	
S-4, T, T-1, W to W-5, incl., Y-2	35 MPH.	
Y, Y-1	30 MPH.	

Main Line—With main and side rods removed:
All A and Q and classes Z-6, Z-7 and Z-8.....30 MPH.
S-4, T, T-1, W to W-5, inc., Y to Y-2, inc.....25 MPH.

With main rods removed and side rods in place:
All A and Q and classes Z-6, Z-7 and Z-8.....35 MPH.
S-4, T, T-1, W to W-5, inc., Y to Y-2, inc.....30 MPH.

Branch Lines—With either or both main and side rods removed:
All A and Q classes.....25 MPH.
All other classes.....20 MPH.

On bridges—With either or both main and side rods removed;
Steam switch engines, without engine trucks.....15 MPH.
Other Steam engines.....20 MPH.

In the event the above speeds are in excess of 50% of the permissible speed for operating the engine in working order over any bridge carrying speed restrictions, speed on such bridges shall be 50% of the permissible speed for engine in working order.

Dead steam engines going to shops or being transferred from one district to another with all rods up or in place, the piston rod parted from the crosshead and removed and the valve motion disconnected and blocked, may be moved in trains at not to exceed the permissible speed of freight trains operating in the territory over which the engines are to be moved, or the operating speed restriction for track or bridges for that class of engine, whichever is the lower.

Engines handled in this manner when coming from shops must not exceed the operating speeds specified for engines coming from shops under steam.

Diesel-electric engines may be handled dead in trains at not to exceed the authorized operating speed specified for such engines.

Bridge or other restrictions must be observed for these engines the same as when in operating condition.

2. **Single and Double Headers; operation—track and bridges— general.**

Where there are no governing restrictions specified for double headers in the special instructions for each subdivision, they will be governed by the most restrictive instructions applicable to a single engine when of the same class and to the heavier engine when of different classes.

Where double header restrictions are specified, double headers of different classes of engines will be governed by the restrictions applicable to double headers of the heavier class.

When necessary to doublehead a diesel-electric engine with a steam engine, except in case of emergency, the steam engine must be placed behind the diesel engine.

When passenger Diesel-electric units, Series 6500, 6600 or 6700, are used in multiple with road freights and switch units, passenger units are to be trailing to avoid danger of sliding wheels on freight units.

When handling diesel-electric single unit road switcher or switch engines dead in freight trains, they shall be separated from the road engine and each other by at least one freight car. This does not apply to diesel-electric engines of two or more units.

When two, Four-Unit Diesel locomotives are used to double head freight trains, the leading engine only will apply power to start train, or to make backup movement with cars.

To avoid possibility of fire or damage to traction motors, diesel-electric engines must not be permitted to pass over or to stand on cinder pits containing live fire or hot cinders.

Under no circumstances should diesel-electric engines pass through water which is deep enough to touch the bottom of the traction motor frame. When passing through water, movement must always be at very slow speed (2 to 3 MPH).

Where multiple-unit diesel-electric engines are used in freight service, both the fireman and the head brakeman shall not be absent at the same time from the leading cab while the train is under way on main track between stations.

When two or more Diesel units are coupled in multiple unit operation, the number of the leading unit only will be displayed in accordance with the provision of Rule 24 and used in train orders as prescribed by Rule 206.

Wrecking cranes—250 tons, 45 to 48 inc. must not be coupled directly to engine or tender of engines Classes A-2 to A-5 inc. or Z-5 to Z-8 inc., but must be separated from them by at least two cars of not over 160,000 pounds total weight, for movement over bridges.

3. Use of warning headlight (Mars or Cyralite) on engines so equipped: The warning headlight can be displayed either white or red, in either stationary or oscillating position, at the same time the standard headlight is used.

The warning white headlight may be used in a stationary position as a substitute headlight in case of failure of the standard headlight, but will normally be used in an oscillating light during the time full display of standard headlight is required.

The warning oscillating red headlight will be used when head end protection is required, either by day or by night, by engineer control, if the train becomes disabled or if stopped suddenly due to unusual occurrence with the possibility of an adjacent track being obstructed, or if it overruns the clearance point at a meeting or waiting point, or at the end of double track or at a junction, or in any other emergency situation, independent of the standard headlight.

The engineer of an approaching train, finding the oscillating red headlight displayed, must stop and then be governed by conditions existing. If on an adjacent track which he finds unobstructed and safe for operation, may proceed at restricted speed until the standing train displaying the oscillating red headlight has been passed.

The warning red headlight will be displayed in stationary position in addition to the standard white headlight when a train is occupying the main track at a meeting point with an opposing train until the headlight of the opposing train has been dimmed, per Rule 17(b), after which the red headlight will be extinguished, and the standard white headlight turned on dim until the opposing train is into clear on siding.

The use of the warning red headlight does not in any manner relieve the train or enginemen of responsibility for compliance with the provisions of Rules 99 and 102.

An oscillating rear end red light on Great Northern passenger trains using Northern Pacific tracks between Duluth and Central Avenue, is used except—

1. When train is standing at the initial and terminal stations.
2. When switching is to be performed from rear end of train.
3. When train is on siding to be passed by another train.
4. When operating in double track or in territory where another train is approaching from the rear on an adjacent track, but not until the flagman has definitely ascertained that the approaching train is running on the adjacent track.

Engineer of an approaching train finding such rear end oscillating red light displayed must immediately stop and, if running on an adjacent track, will not proceed until it has been ascertained that track is clear, and will then proceed at restricted speed until train has been passed.

4. Rule 6(A) is modified to include the following variations of the letter "W" which indicate:

"W" (full-faced type) —Water facilities for both steam and Diesel power.
"W" (capital type) —Water facilities for steam power only.
"w" (small type) —Water facilities for Diesel power only.

5. Rule 19, Figs. 2 to 9, inclusive, and Rule 19 (B) of the Consolidated Code of Operating Rules and General Instructions, revised 1945, are supplemented as follows:

"When the rear unit of a train is equipped with built-in electric markers, or electric signal lamps, they must be lighted by day and by night to be considered as markers, and the requirement for showing green to the front or direction of movement and green to the side will not apply.

"Train crews arriving at terminals must not extinguish the built-in markers, or electric signal lamps used as markers, until the train has been delivered to connecting crew or is clear of the main track and the switch is closed."

6. Rule D-97 applies on this division.

7. Rule 606: Emergency Signals are not used at inter-lockings or drawbridges operated by the Northern Pacific Railway.

8. Cars will not be handled behind light-weight observation cars except in emergency or when so authorized by the Superintendent. In such cases passengers shall not be permitted to pass between such cars while train is in motion due to the unprotected opening.

Gas-electric or diesel-electric motor cars, when handled dead in freight trains, must be behind caboose.

4-wheel scale test cars must be handled only in local freight trains. All scale test cars must be placed immediately ahead of caboose.

Instructions for Handling Pile Drivers, Cranes, Derricks, Shovels or Similar Equipment of the Swinging or Pivoting Type are as follows:

(a) When such equipment is moved on their own wheels they shall be prepared and carded in accordance with current A. A. R. Loading Rules unless some condition exists which prevents those requirements being complied with.

(b) Equipment properly prepared and carded may be moved at normal freight train speeds unless there is some condition that prevents it, and in that event the maximum permitted speed shall be noted on the waybill.

(c) Such equipment when not prepared and carded shall be handled at speeds not to exceed 30 miles per hour.

(d) Such equipment that is geared for self-propulsion shall have the driving gears disconnected or removed.

(e) Such equipment that is Company-owned that requires speed to be restricted shall be covered by a message to the train crew stating the maximum speed permitted.

Open cars loaded with material which may shift, such as poles, pipe, timbers, etc., shall not be placed immediately next to diesel-electric engines nor to cabooses in trains.

9. Precautions must be taken on double track to prevent accidents from swinging doors or other loose construction attached to cars or engines. Trains handling logs must stop when being met or passed by passenger trains.

10. Engines and cars equipped with roller bearings shall not be allowed to stand alone without brakes being applied.

Roller bearing failures on cars or locomotives equipped with roller bearing boxes may be due to lack of oil or grease. If the box is not blazing, the oil plug in the cover should be removed and heavy oil added and plug replaced. Oil must never be added to a box that is blazing. Grease lubricated roller bearing boxes have grease plugs locked with a metal strap which must be cut off with chisel before plug can be removed. In case of a hot box, oil should be added and the plug replaced; train should proceed at reduced speed and care exercised until it is apparent the box is running cool.

When operating B-24, B-16, or Budd R. D. C. Car in Automatic Block Signal territory, or on crossing protected by electric signals, engine must be moved at least one car length after making station stop where sand was used.

11. Electric Switch Locks—Two types in service—To operate either type, unlock and open the door.

On locks stenciled "FORCE DROP LOCK", turn lock handle to the plate reading "MOVE LEVER HERE AND WAIT FOR UNLOCK", then follow instructions in sections (a) (b) (c) (d).

On other electric locks, follow instructions in sections (a) (b) (c) (d) after door is opened.

(a) If indicator shows proceed or "UNLOCKED":

Turn lock handle to left until it rests on stop block.

Line switch in usual manner and movement may be made at once

(b) If indicator shows stop or "LOCKED" and no conflicting train movement is evident.

Unlock time release box (if provided) and push the button to start time release. After time release has completed operation, indicator will normally show proceed or "UNLOCKED".

Turn lock handle to left until it rests on stop block.

Line switch in usual manner and movement may be made at once.

(c) After final movement over switch is made:

Restore and lock switch in normal position.

Turn electric lock handle to right until it rests on stop block.

Close and lock doors of time release box (if provided) and electric lock.

(d) Exception—If indicator fails to show proceed or "UNLOCKED" after time release (if provided) has completed operation, and if electric lock is provided with emergency release located at left of indicator:

Remove wire seal and operate emergency release lever.

Wait three (3) minutes after operating emergency release lever, then line switch for movement in usual manner.

Immediately notify train dispatcher so he may call signal maintainer to reset emergency release, as signals will remain at stop until repairs are made.

12. Spring Switches—
Unless otherwise specified, the normal position of spring switches is for main track.

When the target of a spring switch shows red to an approaching train or engine a trailing point movement actuating the spring switch points must not be made.

Signal operation at spring switches equipped for switch key operation—The normal indication of main track signal is Proceed. The normal indication of siding signal is Stop. To clear the siding signal when train is ready to enter main track, insert switch key in control box and turn to right. If route is clear the siding signal will immediately clear.

If siding signal does not clear by switch key operation, open release box and push the button which will put the time release mechanism into operation. After time release has operated, the siding signal will clear if there is no conflicting train movement.

The release box door must be left open until leading wheels of train on the siding have passed the siding signal, then close and lock the release box door. If the siding signal has been cleared and train on the siding is not ready to depart, if necessary to clear signals for a main track movement, open the release box door and push the button which will start the time release mechanism. After the time release mechanism has started to operate, close and lock the release box door.

When a train, light engine or any piece of equipment moves through a spring switch in such a manner as to throw the points, the conductor or a member of the crew shall observe if the signal governing movements in the opposite direction moves to the approach or the proceed position. If it remains in the stop position and there are no other train movements in evidence that would cause it to remain in that position, the dispatcher shall be notified from the nearest open telegraph office that the signal remained in the stop position and also, when practicable, the first opposing train cautioned.

13. First class trains will observe Rule 93 the same as is required of second and inferior class, extra trains and engines. Second and inferior class, extra trains and engines may run ahead of first class trains which are five minutes or more late without train order authority, avoiding delay to such trains to the greatest practicable extent.

14. Extra trains and engines may move in either direction on single track and with the current of traffic on double track without train order or double track clearance authority, except between 72nd Ave. West and New Duluth.

15. The D. T. Ry. main track is the northmost track between the Hanna Coal Dock crossing and connection with Grassy Point main track. All switches leading from this track, when not in use, will be left lined for D. T. Ry.

16. All trains and engines using D. T. Ry. main track from connection of Missabe coal dock to east end of Zenith Furnace Company's lead, on Grassy Point line, will move in both directions at restricted speed, expecting to find the D. T. Ry. main track occupied.

17. D. T. Ry. connection, located at east end of Zenith Furnace Company's lead, Grassy Point line, will be considered a railroad crossing. Trains and engines using this connection will come to a full stop and make sure that track is clear before proceeding.

18. Bulletin Stations—

Duluth.	Union Depot, Fifth Avenue Yard Office, Rices Point North and South End Yard Offices and Roundhouse, West Duluth Yard Office, Soo Line Passenger Station.
Superior.	Superior Yard Office, Soo Line Yard and Roundhouse.

19. Standard Time Clocks—
Duluth—Union Depot, Rices Point Yard Office and Round House.

20. Watch Inspectors—
Duluth—
Kanter Jewelers, 325 W. Superior
Erwin Moen, 1908 W. Superior
Nold Jewelers, 414 N. Central
H. W. Schmidt, 25 West Superior St.
Security Company, Inc., 307 W. Superior St.
Superior—
Peters' Jewelry, 1126 Tower Ave.
Howatt Jewelers, 1425 Tower Ave.

FIRST SUBDIVISION

1. **Speed Restrictions**—

Zone—Between:	Maximum Speeds Permitted Freight	Passenger
First class trains, within yard limits	Restricted Speed.	
East D. M. & I. R. Jct., and West Duluth Jct.	30	30
Over 21st Avenue West Crossing	15	15
West Duluth Jct., and New Duluth	15	15

2. **Bridge and Engine Restrictions**—Between Duluth and West Duluth Junction—Engines classes A-2 to A-5 inc. and Z-6 to Z-8 inc., not permitted.
All bridges—Trains handling wrecking cranes of 250 tons, or heavier, NP cranes 45, 46, 47 and 48.....15 MPH.
Between West Duluth Junction and New Duluth—steam engines heavier than Class Q-4 not permitted.

At Riverside—Steam Engines heavier than Classes L-9 and L-10 not permitted on tracks 1, 3 and 4 at Barnes-Duluth Plant.
Door over tracks entering shop building will not clear man on top of car.

3. **At Duluth**—City ordinance prohibits blocking street crossings at 1st Ave. East and 5th Ave. West for more than 5 minutes; or of any other crossing for more than 10 minutes.
Engine whistle will not be used between 3rd Ave. East and 5th Ave. West, or between 14th Ave. West and 85th Ave. West (except 85th Ave. West) except as an alarm or warning, or to signal towerman, to call for semaphore signals, as a safety precaution in backing cars or engines, or as a signal in testing air brakes. No engine or train will run within the city without having bell ringing while in motion, and approaching any street or avenue.

Westbound freight trains made up in Bridge Yard departing via Terminal First Subdivision will proceed onto Westward main track through Eighteenth Avenue Crossover. Switch tender at Garfield Avenue will line switches after departure of train.

Train No. 66 is assigned Track No. 1 at Duluth Union Depot. Train No. 56 is assigned Track 5 and shall stop clear of crossover between Tracks 4 and 5 to permit return of engine to roundhouse via crossover and Track 4. Train No. 55 is assigned Track 2.

4. **At Garfield Avenue**—Normal position of junction switches will be for First Subdivision.
Trains will stop not less than two hundred (200) feet from Junction switches and not proceed until route is clear.

5. **At Nineteenth Avenue West**—Trains using the Dick tracks must not block crossing.

6. **At Twenty-first Avenue West**—Telephone at crossover—Eastward trains call yard (3 rings) for route when necessary.

7. **At West D. M. & I. R. Jct. Interlocking**—Trains will call for route as follows:

o o o	Martins track to D. M. & I. R. yard.
o o o	D. M. & I. R. yard to Martins track.
o o o—	Martins track to westward main.
o o o o	Martins track to D. T. main.
o o o o	D. T. main to Martins track.
— o	Westward main to D. M. & I. R. yard.
— o	D. M. & I. R. yard to eastward main.
—o o o	Eastward Main to Martin's track.
— —	Through main track movements.

8. **At West Duluth**—Train No. 65 will stop to clear Central Avenue crossing. Train No. 66 will stop with head car immediately opposite East end of station platform, thus avoiding blocking of Central Avenue crossing.

9. **At West Duluth Jct.**—Switch at west end wye will be kept set and locked for First Subdivision.
Yard engines will use west leg of wye and Fond du Lac line but will not leave cars on these tracks.
Switch at end of double track is dual control. Normal position is for the westward track.
To secure a restricting proceed interlocking indication, as per Rule 601-F, Figure (8), at the Westward Dwarf Signal, covering reverse movements on eastward track, engines or trains moving eastward through the dual control switch must, before reversing direction, clear the track circuit, the east end of which is located just east of the switch leading to the new Western Brass Company near 61st Avenue West.

10. **Between West Duluth Jct. and Riverside**—Between 72nd Ave. West and Riverside Jct., trains will run via D. T. Railway, and will be governed by D. M. & I. R. Railway Time Table and Special Instructions. Trains will secure D. M. & I. R. Clearance Card or Branch Train Order Card at West Duluth.
Transfers operating between 72nd Avenue West and New Duluth will be given train orders at West Duluth Passenger Station, covering Westward movement from 72nd Avenue West to Riverside Junction via "DT" Line. On arrival at New Duluth, Conductor will call the Northern Pacific Chief Dispatcher at Duluth, advising estimated time the Transfer will be ready to depart New Duluth on return trip. To facilitate calling, a Northwestern Bell Telephone has been installed in a telephone booth, secured by switch lock, on the station building. This telephone booth must be kept locked at all times. Before departing New Duluth on return trip, Conductors will pick up orders covering return movement from Riverside Junction to 72nd Avenue West in bill box, secured by a switch lock, located on station building at New Duluth.

11. **Yard Limits**—Between yard limit sign at East D. M. & I. R. Jct., Fifth Ave. East, and Lake Superior Division yard limit sign west of West Duluth Jct.

12. **Spring Switches**—West Duluth Jct., at junction of First and Third (Terminal) Subdivisions, normal position for Third (Terminal) Subdivision main track.

13. **Register Stations**—Duluth Union Depot for trains arriving at or departing from Fifth Ave. Yard or Union Depot, Rice's Point Yard office for other trains.
West Duluth.

14. **Register Exceptions**—At Duluth first class trains arriving may register by Form 608, using tube at foot of east stairway for delivery to operator in "DU" office.
At West Duluth trains register by form 608. A check of register on form 602 may be issued by operator when authorized by train dispatcher, either instead of, or in addition to, train order check.

15. **Clearance Exceptions**—Trains originating at East D. M. & I. R. Jct., Garfield Ave., 20th Ave. West, West D. M. & I. R. Jct., D. W. & P. Jct., West Duluth Jct. and New Duluth will not require clearance.

SECONDSUBDIVISION

1. **Speed Restrictions**—

Zone Between:	Maximum Speeds Permitted Freight	Passenger
First Class trains, within yard limits	Restricted Speed.	
Garfield Ave., and Central Ave.	45	55
Superior and Central Ave., Great Northern engines Class P-2	40	
Trains handling loaded ore cars	40	
At Superior—Over switches at Belknap Street and C&NW Conn.	15 MPH.	

2. **Bridge and Engine Restrictions**—Engines classes A-2 to A-5 inc. and Z-6 to Z-8 inc., not permitted.
Bridge 2, St. Louis Bay.....20 MPH
All bridges—Trains handling wrecking cranes of 250 tons, or heavier, NP cranes 45, 46, 47 and 48.....15 MPH

3. **At Garfield Avenue**—Normal position of junction switches will be for First Subdivision.
Trains will stop not less than two hundred (200) feet from junction switches and not proceed until route is clear.

4. **At Rices Point**—Spring switch not equipped with either spring switch target or facing point lock is located 900 feet south of coal dock on roundhouse lead. Target indication—
Yellow—Straight track.
Green—Roundhouse lead.
Normal position of switches designated below is as follows:
South End Rices Point Yard,
switch from B to C yard lead (top switch).when lined for B yard lead;
No. 26 and 31 crossovers on Hump
(A Yard).....when lined for Hump (A Yard) lead;
No. 26 and 31 crossovers on Load
(B Yard) lead.....when lined for Load (B Yard) lead.
North End Rices Point Yard,
switch off outside lead for
lead to C Yard.....when lined for Load (B Yard) lead;
Crossover switch on inside lead.....when lined for inside lead;
Crossover switch off outside lead.....when lined for outside lead.
Roundhouse, hand throw switches No. 2 and No. 4 from the outgoing roundhouse tracks.....when lined for lead.
Crossover switches from yard tracks to main track must be set for yard tracks when not in use, except where otherwise provided.

5. **At Rices Point Interlocking**—Westward dwarf signal is located between Hump (A Yard) Lead and Load (B Yard) Lead at west end of yard. Top light governs movements to westward track and crossover to eastward track; bottom light governs movements to west end of Hump (A Yard) Lead. Normal position of east switch of crossover from Hump (A Yard) Lead to westward track is for westward track, and must be kept lined and locked in this position when not in use.
Push-button on mast of eastward home signal. If home signal indicates Stop, push-button should be operated, and movement governed by signal indication.
Trains will call for route as follows:

For through main track movements	
Eastward track to westward track	o & oo
Eastward track to yard	o & ooo
Yard to westward track	ooo & oo
Yard to eastward track	ooo & o
Westward track to eastward track	oo & o
Westward track to yard	oo & ooo

6. **Between Bridge Switch and Elevator Station, St. Louis River Bridge**—Interlocking signals govern use of tracks.
Single track over Minnesota Draw.
The three-light Home signal on eastward track west of Minnesota Draw indicates position of double track switch, position of draw and route:
Top Light—C&NW
Middle Light—Great Northern
Bottom Light—Northern Pacific
The two-light Home signal on westward track east of Elevator Station indicates route:
Top Light—Straight main track.
Bottom Light—Great Northern freight track.
Westward trains entering onto Minnesota Draw and Eastward trains entering onto Wisconsin Draw will be governed by signal at the approach and, if proceed signal is received, will not be required to stop. During period of open navigation on St. Louis River, westward trains will stop before entering onto Wisconsin Draw and eastward trains will stop before entering onto Minnesota Draw. Maximum length of trains permitted over Minnesota and Wisconsin Draw spans during period of open navigation is 1355 feet which is equivalent to twenty-six (26) average freight cars, road engine, caboose and one helper engine.
During closed season of navigation it will not be necessary for trains or engines to stop at either side of drawbridge when signals indicate "Proceed" and car limit restrictions will not apply.

7. **At Superior**—City ordinance prohibits blocking any street crossing for more than 10 minutes, except in case of unavoidable breakdown.

8. **Spring Switches**—Superior, at west end of Brewery Lead, normal position for main track. To clear Brewery Lead signal when main track signal is displaying proceed indication, open release box and push the button, which will put time release mechanism into operation. After time release has operated, Brewery Lead signal will clear. Release box door must be left open until leading wheels of train on Brewery Lead have passed Brewery Lead signal, then close and lock the release box door. If Brewery Lead signal has been cleared and train on Brewery Lead is not ready to depart, if necessary to clear signal for a main track movement, close the release box door.

9. **At Central Avenue**—No. 1 track will be used as siding.
When helper on Westward trains takes water, road engine will pull train up to clear interlocking, and wait for helper to take water and recouple to train. When setting out or picking up, trains must not block 58th Street, and Tower Avenue crossings.

10. **Yard Limits**—From Garfield Ave. to yard limit sign west of 28th Street, Superior, and from yard limit sign east of Central Ave. to the yard limit sign just east of Soo Line crossing on Terminal Fourth Subdivision, and yard limit sign west of Central Ave. on Second Subdivision of Lake Superior Division.

11. **Derail Switches**—At approach to Minnesota Draw from Duluth.
At Elevator Station.
At Superior—Winter St. just opposite freight house.

12. **Register Stations:**
Rices Point for second class and inferior trains, except passenger extras.
Central Avenue.

13. **Register Exceptions**—At Central Avenue trains register by form 608. A check of register on form 602 may be issued by operator when authorized by train dispatcher, either instead of, or in addition to, train order check.

14. **Clearance Exceptions:**
Trains originating at Garfield Ave., Rices Point (Yard), Bridge Switch, Elevator Station, C&NW Conn. and Belknap St. will not require clearance.
At Central Ave. eastward trains will not require clearance if train order signal is in the proceed position. Westward Great Northern trains enroute to Great Northern tracks, at the Interlocking, not governed by train order signal.

THIRD SUBDIVISION

1. **Speed Restrictions**—

Zones—Between:	Maximum Speeds Permitted Freight	Passenger
First class trains, within yard limits	Restricted Speed.	
West Duluth Jct. and Zenith Furnace	30	30
Zenith Furnace and L. S. T. & T. Jct.	40	40
At West Duluth Jct., around east leg of wye and passing Zenith Furnace Plant	Restricted Speed	

2. **Bridge and Engine Restrictions**—Engines classes A-2 to A-5 inc. and Z-6 to Z-8 inc., not permitted.
All bridges—Trains handling wrecking cranes of 250 tons, or heavier, NP cranes 45, 46, 47 or 48.....15 MPH.
Bridge 94.6, Grassy Point.....20 MPH.

3. **At West Duluth Jct.**—Normal position of switches on east leg of wye is for Third (Terminal) Subdivision main track.

4. **At Berwind Jct. Interlocking**—
Trains will call for route as follows:
— o To and from D. W. & P.
— oo To and from Soo Line.
— Straight track (N. P.)
oooo To and from Mike's Lead to Main track.

5. **Clearance Exceptions:**
Trains originating at West Duluth Jct., Berwind Jct. and L. S. T. & T. Ry. Jct. will not require clearance.

6. **Spring Switches**—West Duluth Jct., at junction of First and Third (Terminal) Subdivisions, normal position for Third (Terminal) Subdivision main track.

7. **Derails**—Winter St. just opposite freight house.

8. **Yard Limits**—Between West Duluth Jct. and yard limit sign east of Grassy Point drawbridge, and between yard limit sign east of L. S. T. & T. Ry. Jct. and Superior.

FOURTH SUBDIVISION

1. **Speed Restrictions**—

Zone—Between:	Maximum Speeds Permitted All Trains and Engines
Yard Limit sign east of Allouez and Central Ave.	Restricted Speed.
Steam Engines heavier than Class W-5	20 MPH.
Trains Handling Loaded Ore Cars	20 MPH.

2. **Bridge and Engine Restrictions:**
Steam Engines Class W or heavier, over trestle approach to Ore Dock.....15 MPH.

3. **At Allouez**—Track No. 2 must not be used by ore trains.

4. **At East End**—Normal position of switch at end of double track is for westward trains.
The approach signal of interlocking at Newton Ave. is an automatic block signal located on single track and governs the single track to end of double track and the westward track to Newton Ave. interlocking.

5. **At Newton Ave.**—No crossover between eastward and westward main tracks. Between C&NW connection at Newton Ave. and East End, the westward track will be used as single track by eastward trains and engines entering at Newton Ave. and by westward trains and engines. Other eastward movements will be made on eastward track.

6. **At Hill Avenue Yard**—Ore trains arriving will stop to clear east end of arriving tracks.
Trains weighing ore on automatic scale will move at about 3 MPH. Semaphore over scale house is operated by weighmaster, and engineers will be governed by its indications:
Green: Proper speed.
Yellow: Reduce speed.
Red: Stop.

7. **At Soo Line Crossing**—When using Soo Line tracks, Northern Pacific crews must have in their possession and be governed by current Soo Line Duluth and Superior Terminal Division Time Table, a supply of which is maintained at Rices Point Yard office and roundhouse.

8. **At Central Ave.**—Normal position of switch at junction of Fourth and Second (Terminal) Subdivisions, in Great Northern interlocker, is for Second (Terminal) Subdivision.

9. **Spring Switches**—Central Ave.—Normal position of spring switch at end of double track is for eastward trains. Normal position of spring switch at wye connection between Second and Fourth (Terminal) Subdivisions is for direct route to Pokegama. These switches are governed by interlocking signals equipped for switch key signal operation. If use of switch key does not give "restricting signal", proceed according to rule.

10. **Yard Limits**—Tracks between yard limit signs west of East End and east of Allouez, and between yard limit sign east of Central Avenue on Second (Terminal) Subdivision and yard limit sign just east of Soo Line crossing on Fourth (Terminal) Subdivision.

11. **Register Stations:**
Central Ave.
Soo Line 21st St. Yard Office, Superior, for D. S. S. & A. Ry.

12. **Register Exceptions**—At Central Ave. trains register by form 608. Eastward ore trains from Lake Superior Second Subdivision will not register. A check of register on Form 602 may be issued by operator when authorized by train dispatcher, either instead of, or in addition to, train order check.

13. **Clearance Exceptions**—Trains originating at Allouez, East End or Hill Ave. will not require clearance.
Ore trains from Lake Superior Second Subdivision will not require clearance at Central Ave.

MAXIMUM CLEARANCES.

Governing Structure—1st Sub-division, Lake Ave. viaduct. Clearance on balance of sub-division Max. 20'-6" obtains for all widths of loads listed 2nd Sub-div., St. Louis Bay Bridge No. 2 restricts height of load at 12'-0" wide	LIMIT OF LOAD MEASUREMENT — HEIGHT ABOVE TOP OF RAIL										
	1 ft. Wide	2 ft. Wide	3 ft. Wide	4 ft. Wide	5 ft. Wide	6 ft. Wide	7 ft. Wide	7 ft. 6 in. Wide	8 ft. Wide	Max. Height	Max. Width
1st Sub-division, Duluth to New Duluth.....	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	12' 0"
2nd Sub-division, Garfield Ave. to Central Ave.	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	12' 0"
3rd Sub-division, W. Duluth Jct. to Superior U.D.	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	12' 0"
4th Sub-division, Allouez to Central Ave.....	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	12' 0'

Governing Structure—1st Sub-division, Lake Ave. viaduct. Clearance on balance of sub-division Max. 20'-6" obtains for all widths of loads listed 2nd Sub-div., St. Louis Bay Bridge No. 2 restricts height of load at 12'-0" wide	LIMIT OF LOAD MEASUREMENT — HEIGHT ABOVE TOP OF RAIL									Max. Height	Max. Width
	8 ft. 6 in. Wide	9 ft. Wide	9 ft. 6 in. Wide	10 ft. Wide	10 ft. 6 in. Wide	11 ft. Wide	11 ft. 6 in. Wide	12 ft. Wide			
1st Sub-division, Duluth to New Duluth.....	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"		18' 6"	12' 0"
2nd Sub-division, Garfield Ave. to Central Ave.	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 4"	20' 2"		20' 6"	12' 0"
3rd Sub-division, W. Duluth Jct. to Superior U.D.	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"		20' 6"	12' 0"
4th Sub-division, Allouez to Central Ave.....	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"		20' 6"	12' 0"

Notes Limit of load measurements based on 52' cars with 42' truck centers. Heights and widths in table allow 6 inches clearance.

AUTHORIZED SURGEONS

Dr. B. L. Derauf, Chief Surgeon..... St. Paul.
Dr. A. McEwan, Dr. Donald Derauf, Dr. C. J. Hedlund, Dr. H. S. Proud. — Associate Surgeons, N. P. B. A. Hospital, 1515 Charles Ave., St. Paul.

SPECIALISTS

St. Paul—
Dr. L. G. Edwards, Eye, Ear, Nose & Throat, 1039 Lowry Bldg.
Dr. R. H. Monahan (Oculist), 1023 Lowry Bldg.
Dr. L. T. Simons, Eye, Ear, Nose & Throat, 1039 Lowry Bldg.
Dr. E. L. Bauer (Ear, Nose & Throat), 621 Lowry Bldg.

Minneapolis—
Dr. R. C. Horns, Oculist, 1137 Medical Arts Bldg.

Duluth—
Dr. M. F. Fellows, Oculist & Aurist, 1209 Medical Arts Bldg.

Superior—
Dr. T. J. Doyle, Eye, Ear, Nose & Throat, 1507 Tower Avenue
Dr. R. T. Thompson, Eye, Ear, Nose & Throat, 1507 Tower Ave.

SURGEONS

Duluth—
Dr. C. L. Haney, 2004 West Superior St.
Dr. Noel Tosseland, 900 Medical Arts Bldg.
Dr. C. M. Smith, 416 Medical Arts Bldg.
Dr. A. J. Spang, 1930 W. Superior St.
Dr. J. S. Spang, 1930 W. Superior St.
Dr. Wm. M. Spang, 1930 W. Superior St.
Dr. R. J. Deutsch, 1930 W. Superior St.

Superior—
Dr. J. W. McGill, 1225 Tower Ave.
Dr. Victor E. Ekblad, 1507 Tower Ave.

C. M. ST. P. & P. RY. SURGEONS

Dr. Cyril M. Smith, 416 Medical Arts Bldg., Duluth

LOCATION OF STRETCHERS

East End Station.
Central Avenue Station.
Superior Freight Station.
Duluth—Fifth Avenue Yard Office, Union Depot, Store Room, Tool Car, Car Shops, Roundhouse.
West Duluth Station.
Superior Ore Dock.

NOTE

N. P. B. A. physicians and surgeons, when called upon, will attend to all cases of sickness and accident to employees, passengers and others. In a case of illness, or of injury unrelated to railway operation to other than N. P. B. A. members, surgeon should endeavor to collect a reasonable fee for service from person attended. If unable to collect, Chief Surgeon should be notified.

Where injuries, to other than N. P. B. A. members, are directly related to railway operation, charge for service should be sent to the General Claim Agent of the railway company.

In case of emergency, proper aid should be procured until arrival of local surgeon, when case must be placed in his hands.

RAILROAD CROSSINGS AND INTERLOCKINGS.

First Sub-division

West D. M. & I. R. Jct., Interlocking.
Soo Line Crossing, Automatic Interlocking.
D. W. & P. Jct., Interlocking.
West Duluth Jct., Automatic Interlocking.
Morgan Park Minnesota Steel Co. Crossing.

Second Sub-division

Rices Point, Interlocking.
Bridge Switch, Interlocking.
St. Louis River Drawbridge;
Minnesota Draw, Interlocking.
Wisconsin Draw, Interlocking.
Elevator Station, Interlocking.
Superior, Winter St., near C&NW Connection.

Third Sub-division

Zenith Furnace—D. M. & I. R. Ry. Crossing.
Berwind Jct., Interlocking, junction with Soo Line and D. W. & P.
Grassy Point Drawbridge, Interlocking.
G. N. Ry. Crossing.
L. S. T. & T. Ry. Jct.

Fourth Sub-division

Allouez—N. W. O. Crossing, Interlocking.
Newton Avenue—C&NW Crossing, Interlocking.
Soo Line Crossing, Interlocking.

S. A. ANDERSON,
Asst. Superintendent.

J. F. PETERSON,
Trainmaster.

J. J. AUGE,
Trainmaster.

C. E. JOHNSON,
Trainmaster-Roadmaster.

E. J. WIGG,
Chief Dispatcher.