



### SPEED TABLE

Time Per mile		Miles Per Hour	Time Per mile		Miles Per Hour
Minutes	Seconds		Minutes	Seconds	
0	49	80	1	12	50
0	46	78.8	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	34.8
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
0	..	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 263

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

## Sunday, October 30, 1960

For the Government of Employees 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.

**2 WESTWARD**

**FIRST SUBDIVISION**

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.	Time Table No. 263 October 30, 1960
			65	303	57	59	55	49		
			Passenger Daily	D. W. & P. 619 Passenger Daily Ex. Sat.	Passenger Daily	G. N. 19 Passenger Daily	Passenger Daily	G. N. 28 Passenger Daily		
BRKOT	Yard	WB 71							0.0	... EAST D. M. & I. R. JCT. ...
X			L 11.45 PM		L 6.05 PM	L 4.30 PM	L 7.45 AM	L 7.40 AM	0.9	DU ... DULUTH ... PDN
X		L03	A 11.48 PM	L 8.03 PM	6.07 PM	A 4.32 PM	7.47 AM	A 7.42 AM	1.9	... GARFIELD AVE. ... F
X				8.06					2.8	... WEST D. M. & I. R. JCT. ...
X									3.6	... 500 LINE CROSSING ...
X		L04		A 8.14 PM					4.5	... D. W. & P. JCT. ...
XY		L 5							5.1	WU ... WEST DULUTH ... PD
X									5.9	... WEST DULUTH JCT. ... F
									6.7	... 72ND AVE. W. ...

0.0	... EAST D. M. & I. R. JCT. ...
0.9	DU ... DULUTH ... PDN
1.9	... GARFIELD AVE. ... F
2.8	... WEST D. M. & I. R. JCT. ...
3.6	... 500 LINE CROSSING ...
4.5	... D. W. & P. JCT. ...
5.1	WU ... WEST DULUTH ... PD
5.9	... WEST DULUTH JCT. ... F
6.7	... 72ND AVE. W. ...

**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												
18	LB2											7.5	... RIVERSIDE JCT. ...
18	LB5											8.2	... RIVERSIDE ...
												12.5	... NEW DULUTH ...
			.03	.11	.02	.02	.02	.02					Time Over Subdivision
			20.0	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.  
SPECIAL INSTRUCTIONS PAGES 6, 7, 8, 9, 10 AND 11.**

Distance from New Duluth	FIRST CLASS												
	66	58	304	50	60	56							
<b>Time Table No. 263</b> October 30, 1960													
	Passenger	Passenger	D. W. & P. 620 Passenger	G. N. 24 Passenger	G. N. 20 Passenger	Passenger							
<b>STATIONS</b>	Daily	Daily	Daily Ex. Sun.	Daily	Daily	Daily							
<b>Telegraph Offices and Calls</b>	Daily	Daily	Daily Ex. Sun.	Daily	Daily	Daily							
12.5 ... EAST D. M. & I. R. JCT... 0.9													
11.6 DU.....DULUTH.. PDN 1.0	A 4.45 AM	A 7.05 AM		A 11.50 AM	A 7.45 PM	A 10.40 PM							
10.6 .....GARFIELD AVE. P 0.9	L 4.32 AM	L 7.03 AM	A 10.27 AM	L 11.44 AM	L 7.43 PM	10.38							
9.7 WEST D. M. & I. R. JCT. 0.8			10.22			10.34							
8.9 .500 LINE CROSSING. 0.9													
8.0 .....D. W. & P. JCT..... 0.6			L 10.17 AM			10.29							
7.4 WU WEST DULUTH PD 0.8						s 10.27							
6.6 WEST DULUTH JCT.P 0.8						L 10.25 PM							
5.8 .....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.

4.7 .....RIVERSIDE JCT..... 0.4													
4.3 .....RIVERSIDE..... 4.3													
0.0 .....NEW DULUTH.....													
Time Over Subdivision	.13	.02	.10	.06	.02	.15							
Average Speed Per Hour	4.6	30.0	15.6	10.0	30.0	20.0							

EXCEPT ON DOUBLE TRACK, EASTWARD TRAINS ARE SUPERIOR TO WESTWARD TRAINS OF THE SAME CLASS.  
SPECIAL INSTRUCTIONS PAGES 6, 7, 8, 9, 10 AND 11.

**4 WESTWARD**

**SECOND SUBDIVISION**

**FIRST CLASS**

**Time Table No. 263**

October 30, 1960

						65	89	57	59	55	49		
							C & N W 510		G. N. 19		G. N. 28		
						Passenger	Passenger	Passenger	Passenger	Passenger	Passenger		
						Daily	Daily	Daily	Daily	Daily	Daily		
						L 11.48 PM		L 6.07 PM	L 4.32 PM	L 7.47 AM	L 7.42 AM	..... GARFIELD AVE..... P	0.0
						11.50		6.09	4.34	7.49	7.44	..... RICES POINT..... P	0.7
						11.52	L 8.07 PM	6.10	4.36	7.51	7.46	..... BRIDGE SWITCH..... P	1.8
						11.55	8.10	6.13	4.40	7.54	7.50	..... ELEVATOR STATION..... P	2.3
						11.59 PM A	8.13 PM	6.15	4.42	7.56	7.52	..... C&N W CONN..... P	2.9

Distance from Garfield Ave.

**BETWEEN C&N W 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 12.05 AM		s 6.16	s 4.45	s 7.59	s 7.55	BY..... SUPERIOR U. D..... PDN	3.2
						12.07		6.18	4.46	8.00	7.56	..... BELKNAP ST..... P	3.7
						A 12.14 AM		A 6.26 PM	A 4.53 PM	As 8.07 AM	A 8.03 AM	..... CENTRAL AVE..... PDN	7.4
						.26	.06	.19	.21	.20	.21	Time Over Subdivision	
						17.2	16.0	23.3	21.1	22.2	21.1	Average Speed Per Hour	

**EXCEPT ON DOUBLE TRACK, EASTWARD TRAINS ARE SUPERIOR TO WESTWARD TRAINS OF THE SAME CLASS. 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&N W CONNECTION AND BELKNAP STREET.**

**WESTWARD**

**THIRD SUBDIVISION**

**EASTWARD**

**FIRST CLASS**

**Grassy Point Line  
Time Table No. 263**

October 30, 1960

**FIRST CLASS**

Water, Fuel, Boilers, Turn Tables, Wyes and Yard Limits.	Car Capacity of Sidings.	Station Numbers.	317 313		Distance from West Duluth Jct.	STATIONS		Distance from L. S. T. & T. Ry. Jct.	318 314	
			Soo Line 3	Soo Line 83		Telegraph Offices and Calls			Soo Line 4	Soo Line 82
			Passenger	Passenger		Passenger	Passenger			
			Daily Ex. Sat.	Daily					Daily Ex. Sun.	Daily
XY		L5			0.0	..... WEST DULUTH JCT..... P	3.3			
X					0.3	..... ZENITH FURNACE..... P	3.0			
X			L 8.01 PM	L 3.12 PM	1.1	..... BERWIND JCT... P	2.2	A 7.37 AM	A 11.48 AM	
					1.8	..... (GRASSY POINT DRAWBRIDGE)..... P	1.5			
X			A 8.08 PM	A 3.19 PM	3.3	..... L. S. T. & T. RY.-JCT..... P	0.0	L 7.30 AM	L 11.41 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.**

			.07	.07		Time Over Subdivision		.07	.07		
			18.9	18.9		Average Speed Per Hour		18.9	18.9		

**EXCEPT ON DOUBLE TRACK, EASTWARD TRAINS ARE SUPERIOR TO WESTWARD TRAINS OF THE SAME CLASS.**

SECOND SUBDIVISION

EASTWARD 5

Time Table No. 263 October 30, 1960					FIRST CLASS								
STATIONS					66	58	94	50	60				
Telegraph Offices and Calls					Passenger	Passenger	Passenger	Passenger	Passenger				
					Daily	Daily	Daily	Daily	Daily				
X			7.4	GARFIELD AVE. .... P			C & NW 811	G. N. 24	G. N. 20				
OTWB KXYZR	Yard	L 1	6.7	RICES POINT. .... P	A 4.32 AM	A 7.03 AM		A 11.44 AM	A 7.43 PM				
X			6.1	BRIDGE SWITCH. ....	4.30	7.01		11.42	7.41				
X			5.2	ELEVATOR STATION. ....	4.28	6.59	A 7.53 AM	11.40	7.39				
X			4.6	C&NW CONN. ....	4.23	6.54	7.49	11.37	7.34				
					4.20	6.51	L 7.47 AM	11.35	7.31				

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.

BY SUPERIOR U. D. .... PDN					s 4.18	s 6.50		s 11.34	s 7.30				
X		WB 67	4.9										
X			8.7	BELKNAP ST. .... P	4.00	6.46		11.29	7.18				
XYR	Yard	67	0.0	CENTRAL AVE. .... PDN	L 3.54 AM	L 6.42 AM		L 11.24 AM	L 7.13 PM				
Time Over Subdivision					.38	.21	.06	.20	.30				
Average Speed Per Hour					11.6	21.6	16.0	22.2	14.8				

EXCEPT ON DOUBLE TRACK, EASTWARD TRAINS ARE SUPERIOR TO WESTWARD TRAINS OF THE SAME CLASS. 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.

WESTWARD

FOURTH SUBDIVISION

EASTWARD

Time Table No. 263 October 30, 1960													
STATIONS													
Telegraph Offices and Calls													
X	Yard	61	0.0	ALLOUEZ. ....					5.6				
XY	Yard	63	1.5	EAST END. .... P					4.1				
X	Yard	65	1.7	NEWTON AVENUE. ....					8.9				
	Yard		8.1	HILL AVE. .... P					2.5				
X			4.5	SOO LINE CROSSING. ....					1.1				
XYR	Yard	67	5.6	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. SPECIAL INSTRUCTIONS PAGES 6, 7, 8, 9, 10 AND 11.

## SPECIAL INSTRUCTIONS

### ALL SUBDIVISIONS.

#### 1. Speed Restrictions—

##### Maximum Speeds Permitted

Passenger trains.....	55 MPH.
Freight and mixed trains.....	45 MPH.

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

All trains and engines, except as otherwise specified:

Through crossovers, turnouts and gantlets, except where fixed signals provide otherwise.....15 MPH.

Handling wrecking cranes, pile drivers, locomotive cranes and similar equipment.....30 MPH.

Handling 4-wheel scale test cars and scale test car 254.....	35 MPH.
Main Line.....	35 MPH.
Branch Lines.....	25 MPH.

Handling air dump cars 89000 to 89059 series.....35 MPH.

Picking up train orders from operators.....30 MPH.

Handling dead diesel-electric engines other than NP and Tenant Lines.....35 MPH.

Handling loaded ore cars.....40 MPH.

Diesel-electric engines handling trains or running light:

No. 98.....35 MPH.

No. 99.....50 MPH.

No. 100.....40 MPH.

100 series except No. 100.....55 MPH.

400, 600 and 700 series.....45 MPH.

Diesel-electric motor cars in service or being towed:

Cars B-6 thru B-41 incl.....55 MPH.

All other diesel-electric engines.....55 MPH.

**Diesel-Electric Engines Handled Dead in Train**—Diesel-electric engines or units may be handled dead in trains. The speed of such trains must not exceed the authorized operating speed specified for such engines or units.

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

All diesel-electric engines or units handled dead in freight train must be placed on head end of train within ten cars of road engine handling train, this to insure that brakes will release properly.

When handling diesel-electric units dead in train, bridge, speed and other restrictions must be observed, same as when in operating condition.

**Diesel-Electric Engines Mixed Consist, Passenger and Freight**—Multiple unit diesel-electric engines having consist of freight and passenger units: The passenger units must be placed in trailing position and speed restrictions for freight units observed, this to prevent damage to traction motors and reduce the danger of sliding wheels on freight units.

If the units of a consist are of different gear ratio, the engine must not be operated at speeds exceeding that of the unit having the lowest maximum permissible speed. Also, the overload short time rating of any unit in the consist must not be exceeded.

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

#### 2. Heavy cars—Cars heavier than the following not permitted without authority of Superintendent:

30 ft. or less in length.....210,000 Lbs.

Over 30 ft. long.....400,000 Lbs.

In weed spraying trains, when tank cars having a capacity of over 13,000 gallons are used, they should be separated from each other by a car of lesser capacity.

#### 3. Rule 607: Emergency Signals are not used at inter-lockings or draw-bridges operated by the Northern Pacific Railway.

#### 4. 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.

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

Four-wheel scale test cars must be handled only in local freight trains. Exception—If there is no local service available, these cars may be handled in dead freights which must be governed by speed restrictions for the handling of four-wheel scale test cars shown under Item 1. All scale test cars must be placed immediately ahead of caboose.

Air dump cars, series 89000-89059, will be handled only in work trains and local trains when available. If local trains not available, cars may be handled on the rear of other trains at a speed not to exceed 35 MPH.

#### **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.

#### 5. 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.

- 6. 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 blazng, 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 blazng. 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.
- 7. Yard Limits.  
All tracks between yard limit signs located at:  
East D. M. & I. R. Junction  
Mile Post 145+1432, West of West Duluth Junction  
Mile Post 9+3632, West of Central Avenue on Second Subdivision  
Mile Post 61+1331, East of Allouez on First Subdivision  
will be operated as one yard.
- 8. Spring Switches—  
Instructions for operation of spring switches are posted at or near the spring switch and must be complied with.  
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.  
Normal indication of siding signal is STOP. If siding signal does not clear on approach of train, movement must be governed by instructions posted at the switch.
- 9. 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.
- 10. 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.
- 11. 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.
- 12. 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.
- 13. 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.
- 14. 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 and Roundhouse.  
Superior. Superior Yard Office, Soo Line Yard and Roundhouse.
- 15. Standard Time Clocks—  
Duluth—Union Depot, Rices Point Yard Office and Round House.

- 16. 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, 1220 Tower Ave.

FIRST SUBDIVISION

- 1. Speed Restrictions—  
Maximum Speeds Permitted  
Zone—Between:  
Freight Trains Passenger Trains  
First class trains, within yard limits..... Restricted Speed  
East D. M. & I. R. Jct., and West Duluth Jct... 30 MPH. 30 MPH.  
Over 21st Avenue West Crossing..... 15 MPH. 15 MPH.  
West Duluth Jct., and New Duluth..... 15 MPH. 15 MPH.
- 2. Bridge and Engine Restrictions—  
All bridges—Trains handling wrecking cranes of 250 tons, or heavier, NP cranes 45, 46, 47 and 48..... 15 MPH.  
At Riverside—  
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.
- 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 (3), 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. Spring Switches**—West Duluth Jct., at junction of First and Third (Terminal) Subdivisions, normal position for Third (Terminal) Subdivision main track. Not equipped with facing point lock.

**12. 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.

**13. 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.

**14. 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.

**SECOND SUBDIVISION**

<b>1. Speed Restrictions—</b>	Maximum Speeds Permitted
	Freight Trains Passenger Trains
Zone—Between:	
First Class trains, within yard limits.....	Restricted Speed
Garfield Ave., and Central Ave.....	45 MPH. 55 MPH.
Superior and Central Ave.....	40 MPH.
Trains handling loaded ore cars.....	40 MPH.
At Superior—Over switches at Belknap Street and C&NW Conn.....	15 MPH.

**2. Bridge and Engine Restrictions—**  
 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.

Unless otherwise instructed, Westward freight trains made up in Bridge Yard, departing via Terminal Second Subdivision, will use Terminal Second Subdivision Eastward main track from connection just East of Garfield Avenue to the Minnesota Drawbridge.

Before this movement can be started, Switchtender at Garfield Avenue will contact Drawbridge Operator; if Drawbridge Operator OK's the movement, train may proceed on Eastward main track, and when Drawbridge Operator gives the approval it will be understood that Drawbridge Operator will not permit any Eastward train on Eastward track until freight train has passed Minnesota Drawbridge.

**4. At Rices Point**—Spring switch not equipped with either spring switch target or facing point lock is located on roundhouse lead about 1200 feet south of sand tower. 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 located between Hump (A Yard) Lead and Load (B Yard) Lead at West end of Yard governs movements to Westward track and crossover to Eastward track and 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 home signal on Eastward track West of Minnesota Draw governs movements to Northern Pacific track and to C&NW track.

Interlocking home signal on Westward track East of Elevator Station governs movements to Straight Main track and to 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-seven (27) average freight cars, road engine and caboose. 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. Not equipped with facing point lock.

9. **At Central Avenue**—No. 1 track will be used as siding. When setting out or picking up, trains must not block 58th Street, and Tower Avenue crossings.

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

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

12. **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.

13. **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**

<b>1. Speed Restrictions—</b>	<b>Maximum Speeds Permitted</b>	
	<b>Freight</b>	<b>Passenger</b>
<b>Zones—Between:</b>	<b>Trains</b>	<b>Trains</b>
First class trains, within yard limits.....	Restricted Speed.	
West Duluth Jct. and Zenith Furnace.....	30 MPH.	30 MPH.
Zenith Furnace and L. S. T. & T. Jct.....	40 MPH.	40 MPH.
At West Duluth Jct., around east leg of wye and passing Zenith Furnace Plant.....	Restricted Speed	

2. **Bridge and Engine Restrictions—**  
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. Not equipped with facing point lock.

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

**FOURTH SUBDIVISION**

1. **Speed Restrictions—** Maximum Speeds Permitted  
**Zone—Between:** All Trains and Engines  
Yard Limit sign east of Allouez and Central Ave. Restricted Speed.  
Trains Handling Loaded Ore Cars..... 20 MPH

2. **Bridge and Engine Restrictions—**  
All Bridges:  
Trains handling Wrecking Cranes 45, 46, 47 and 48..... 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. Not equipped with facing point lock.
- 10. **Register Stations:**  
Central Ave.  
Soo Line 21st St. Yard Office, Superior, for D. S. S. & A. Ry.
- 11. **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.
- 12. **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.**

**LIMIT OF LOAD MEASUREMENT**

		HEIGHT ABOVE TOP OF RAIL										Max. Height	Max. Width
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	8 ft. 6 in. Wide	9 ft. Wide	10 ft. Wide	11 ft. 6 in. Wide	12 ft. Wide
18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"
20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"
20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"

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  
 1st Sub-division, Duluth to New Duluth.....  
 2nd Sub-division, Garfield Ave. to Central Ave.  
 3rd Sub-division, W. Duluth Jct. to Superior U.D.  
 4th Sub-division, Allouez to Central Ave.....

**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	12 ft. 6 in. Wide	13 ft. Wide	13 ft. 6 in. Wide	14 ft. Wide	14 ft. 6 in. Wide	15 ft. Wide
18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"	18' 6"
20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"
20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"	20' 6"

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  
 1st Sub-division, Duluth to New Duluth.....  
 2nd Sub-division, Garfield Ave. to Central Ave.  
 3rd Sub-division, W. Duluth Jct. to Superior U.D.  
 4th Sub-division, Allouez to Central Ave.....

**Note:** 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. I. Derauf, Chief Surgeon.	St. Paul.
Dr. A. McEwan,	Associate Surgeons, N. P. B. A. Hospital 1515 Charles Ave., St. Paul.
Dr. Donald Derauf,	
Dr. C. J. Hedlund,	
Dr. H. S. Proud,	
Dr. R. M. Ahrens,	
Dr. J. E. Brown.	

**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

**SURGEONS**

Duluth—  
 Dr. C. D. Ecklund, 405 Central Ave.  
 Dr. Noel Tosseland, 706 Medical Arts Bldg.  
 Dr. C. M. Smith, 416 Medical Arts Bldg.  
 Dr. A. J. Spang, 2000 W. Superior St.  
 Dr. J. S. Spang, 2000 W. Superior St.  
 Dr. Wm. M. Spang, 2000 W. Superior St.  
 Dr. R. J. Deutsch, 2000 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 Yard Office.  
 Central Avenue Station.  
 Superior Freight Station.  
 Duluth—Fifth Avenue Yard Office, Union Depot, Store Room,  
 Tool Car, Car Shops, Roundhouse, Rices Pt. Yard Office.  
 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. Jet., Interlocking.  
 Soo Line Crossing, Automatic Interlocking.  
 D. W. & P. Jet., Interlocking.  
 West Duluth Jet., Automatic Interlocking.

**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 Jet., Interlocking, junction with Soo Line and D. W. & P.  
 Grassy Point Drawbridge, Interlocking.  
 G. N. Ry. Crossing.  
 L. S. T. & T. Ry. Jet.

**Fourth Sub-division**

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

**S. A. ANDERSON,**  
Asst. Superintendent.

**J. F. PETERSON,**  
Trainmaster.

**J. J. AUGE,**  
Trainmaster.

**W. J. CONDOTTA,**  
Trainmaster-Roadmaster.

**J. E. ROSS,**  
Chief Dispatcher.