

NORTHERN PACIFIC RAILWAY COMPANY

LAKE SUPERIOR DIVISION

TIME 53 TABLE

In Effect at 12:01 A. M. Central or 90th Meridian Time.

SUNDAY, JANUARY 1, 1928.

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 have for reference a copy of TRANSPORTATION RULES.

T. H. LANTRY,
General Manager.

W. H. STRACHAN,
General Superintendent.

O. F. OHLSON,
Superintendent.

P. H. McCAULEY,
General Superintendent of Transportation.

WESTWARD

FIRST SUB-DIVISION (MAIN LINE)

EASTWARD

THIRD CLASS				SECOND CLASS	FIRST CLASS		TIME TABLE No. 53		FIRST CLASS		SECOND CLASS	THIRD CLASS								
			731		53	51	January 1, 1928. Succeeding No. 52G			52	54	732								
			WayFreight		Passenger	Passenger	STATIONS			Passenger	Passenger	Freight								
			Ex. Sunday		Daily	Daily	Telegraph Offices and Calls			Daily	Daily	Ex. Sunday								
			L 7.00AM		L 4.40PM	L 8.45AM	AD	ASHLAND	D	75.8	Yard	A 5.55PM	A 11.30AM	A 4.54AM						
			f 7.14		s 4.50	s 8.55	C.&N.W. Crossing 4.6 Track Conn.													
			f 7.31		f 5.02	f 9.08	ASHLAND JCT. C.St.P.M.&O. Crossing 5.6			71.2		s 5.41	s 11.21	4.42						
			f 7.50		f 5.15 ₅₂	f 9.23	MOQUAH 6.1			65.6	26	f 5.28	f 11.09	4.26						
					f 5.19	f 9.27	INO 1.8			59.5	27	f 5.15 ₅₃	f 10.56	4.07						
			f 8.14		f 5.31	f 9.39	SPIDER 5.6			57.7		f 5.12	f 10.52							
			s 8.29		s 5.42	s 9.51	TOPSIDE 4.7			52.1	13	f 5.00	f 10.40	3.44						
			f 8.41		f 5.52	f 10.01	IRON RIVER 4.0		D	47.4	30	s 4.50	s 10.30	3.30						
			f 8.49		f 5.58	f 10.06	MUSKEG 2.7			43.4	12	f 4.41	f 10.20	3.18						
			s 8.53		s 6.01	s 10.12 ₅₄	TARTER 1.3			40.7	12	f 4.35	f 10.15	3.10						
					f 6.09	f 10.20	BRULE 3.6		D	39.4	30	s 4.32	s 10.12 ₅₁	3.05						
			f 9.08		f 6.13	f 10.23	BELLWOOD 1.5			35.8	Spur	f 4.24	f 10.05							
			f 9.15		s 6.18	s 10.28	BLUEBERRY 2.5			34.3	30	f 4.21	f 10.02	2.49						
			f 9.20		f 6.21	f 10.31	MAPLE 1.5			31.8	Spur	s 4.16	s 9.57	2.41						
			s 9.28		s 6.27	s 10.37	WIEHE 2.6			30.3		f 4.13	f 9.53	2.36						
			f 9.43 ₅₄		s 6.32	s 10.41	POPLAR 2.2		D	27.7	20	s 4.07	s 9.48	2.28						
					f 6.38	f 10.49	WENTWORTH 3.2			25.5	22	s 4.02	s 9.43 ₇₃₁	2.21						
			f 10.02		f 6.45	f 10.57	AMNICON FALLS 3.2			22.3		f 3.55	f 9.36							
					f 6.49	f 11.02	CUTTER 1.8			19.1	25	f 3.48	f 9.29	2.02						
			10.14		f 6.55	f 11.10	PARKDALE 3.0			17.3		f 3.45	f 9.25							
			A 10.20AM		A 7.00PM	A 11.15AM	ALLOUEZ N. W. C. and G. N. Crossings Interlocked 1.8 Track Conn.			14.3	52	f 3.39	f 9.19	1.46						
					s 7.00PM	s 11.15AM	EAST END C. St. P. M. & O. Crossing Interlocked Track Conn.		D	12.5	Yard	L 3.35PM	L 9.15AM	L 1.40AM						

BETWEEN EAST END AND DULUTH TRAINS WILL BE GOVERNED BY DULUTH AND SUPERIOR TERMINALS TIME TABLE

				A 7.35PM	A 11.50AM	WCO TY	WB 71	75.8 DU	DULUTH	DN	0.0 Yard	L 3.00PM	L 8.40AM							
			Ex. Sunday		Daily	Daily						Daily	Daily	Ex. Sunday						
			3.20		2.20	2.30	.....	.....	.....	.....	.....	2.20	2.15	3.14						
			18.9		27.1	25.3	.....	.....	.....	.....	.....	27.1	28.2	19.5						
									Time Over Sub-division											
									Average Speed Per Hour											

EASTWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION.

SPECIAL INSTRUCTIONS, PAGES 7, 8 AND 9.

W. N. STEPHAN
General Superintendent

P. H. SAULEY
Chief Clerk

T. H. LAUREY
General Manager

WESTWARD

SECOND SUB-DIVISION (MAIN LINE)

EASTWARD

THIRD CLASS		SECOND CLASS	FIRST CLASS				TIME TABLE No. 53				FIRST CLASS				THIRD CLASS					
	727	623	65	63	57	55	January 1, 1928 Succeeding No. 52G				58	56	64	66	728					
	Way Freight	Freight	Passenger	Passenger	Passenger	Passenger	STATIONS				Passenger	Passenger	Passenger	Passenger	Way Freight					
	Ex. Sun.	Daily	Daily	Daily	Daily	Daily	Telegraph Offices and Calls				Daily	Daily	Daily	Daily	Ex. Sun.					
			L 11.30PM	L 2.00PM	L 7.00PM	L 8.30AM	WCO TYX	WB 71	0.0	DU	DULUTH 8.3	DN	147.5	Yard	A 9.00AM	A 9.50PM	A 7.00PM	A 6.30AM		
BETWEEN CENTRAL AVE. AND DULUTH TRAINS WILL BE GOVERNED BY DULUTH AND SUPERIOR TERMINALS TIME TABLE.																				
	L 10.40PM		L 12.25AM	L 2.36PM	L 7.27PM	L 8.55AM	WY X	67	8.3	AJ	CENTRAL AVE.	DN	139.2	Yard	A 8.35AM	A 9.25PM	A 6.20PM	A 5.35AM		
	10.46		12.30	2.39	f 7.31	f 9.00		69	10.7	G. N. Crossing Interlocked	2.4	Track Conn.	136.8	79	f 8.30	f 9.20	6.15	5.30		
	11.00		12.39	2.46	f 7.42	f 9.10		74	15.7	Interstate Crossing Interlocked	POKEGAMA 5.0	Track Conn.	131.8	37	f 8.22	f 9.11	6.07	5.19		
	11.10		12.44	2.50	7.48	9.15		78	18.4	WG	ANTON 2.7	P	129.1		f 8.18	9.06	6.01	5.13		
	11.15		12.48	2.53	f 7.52	f 9.19		79	20.1	G. N. Crossing Interlocked	STATE LINE 1.7		127.4	36	f 8.15	f 9.03	5.58	5.10		
	11.27PM		f 12.55	s 3.00	s 7.59	s 9.25		82	23.1	BARKER 3.0		P	124.4	80	f 8.10	s 8.58	s 5.53	f 5.05		
	L 6.55AM	L 12.20AM	A 1.05AM	A 3.07PM	s 8.11	s 9.35	WY OC X	86	27.5	UN	CARLTON Third Sub-div. Crossing 4.9	DN	120.0	Yard	s 8.03	s 8.50	L 5.45PM	L 4.56AM	A 12.53PM	
	f 7.15	12.35			f 8.21	f 9.46		91	32.4	Interlocked	IVERSON 4.8	P	115.1	79	f 7.53	f 8.40			f 12.34	
	s 7.46 58	12.50			s 8.31 56	s 9.56	Y	96	37.3	SA	SAWYER 6.5	D P	110.3	80	s 7.46 58	s 8.31 57			s 12.16PM	
	f 8.07	1.05			f 8.42	f 10.10		102	43.7		CORONA 5.4	P	108.8	79	f 7.36	f 8.20			f 11.51AM	
	s 8.28	1.25			s 8.52	s 10.21	W	108	49.1	CM	CROMWELL 6.1	DN P	98.4	69	s 7.28	s 8.11			s 11.31	
	s 8.48	1.37			s 9.03	s 10.32		114	55.2	WT	WRIGHT 6.1	D P	92.3	80	s 7.18	s 8.00			s 11.08	
	s 9.08	1.49			s 9.14	s 10.45 728		120	61.3	TK	TAMARACK 4.0	D P	86.2	91	s 7.08	s 7.49			s 10.45 55	
	f 9.21	1.57			f 9.21	f 10.53		125	65.3		GRAYLING 5.2	P	82.2	80	f 7.01	f 7.42			f 10.28	
	s 9.38	2.35			s 9.33	s 11.03	YWC X	129	70.5	MG	McGREGOR Soo Line Crossing Interlocked 4.0	DN Track Conn.	77.0	W69 E 80	s 6.54	s 7.33			s 10.09	
	f 9.54 728	2.46			f 9.40	f 11.11		133	74.5		LANSFORD 4.8	P	73.0	69	f 6.46	f 7.26			f 9.54 727	
	s 10.12	3.00			f 9.48	s 11.21		138	79.3	KY	KIMBERLY 5.8	D P	68.2	80	f 6.39	s 7.18			s 9.38	
	f 10.28	3.15			f 9.58	s 11.31		144	85.1		ROSSBURG 6.0	P	62.4	83	f 6.29	s 7.08			f 9.17	
	s 11.00	3.30			s 10.10	s 11.43	WX	150	91.1	KN	AITKIN 4.8	DN P	56.4	W80 E 82	s 6.20	s 6.57			s 8.55	
	f 11.10	3.42			f 10.18	f 11.52AM		155	95.9		CEDAR LAKE 5.6	Track Conn.	51.6	80	f 6.11	f 6.49			f 8.36	
	s 11.25	4.00			s 10.30	s 12.03PM	XY	160	101.5	DO	DEERWOOD 4.0	DN	46.0	79	s 6.03	s 6.39			s 8.15	
	f 11.35	4.13			f 10.37	f 12.11	W	165	105.5		KLONDYKE 5.5	P	42.0	79	f 5.54	f 6.32			f 7.59	
	f 11.50AM	4.30			f 10.46	f 12.21		170	111.0		LOERCH 7.2	P	36.5	80	f 5.46	f 6.23			f 7.39	
	s 12.05PM 55	5.30 58			s 10.58 11.08	s 12.35 12.40	WCO TYX	177	118.2	B M. & I. Ry.	BRAINERD 4.4	DN Track Conn.	29.3	106	s 5.35 5.30	s 6.10 6.00			s 7.12	
	f 1.10	5.42			f 11.15	f 12.49		181	122.6		BAXTER 5.6	P	24.9	81	f 5.23	f 5.52			s 6.56	
	f 1.25	5.55			f 11.24	f 12.59		187	128.2		SYLVAN 3.4	P	19.3	80	f 5.15	f 5.43			f 6.37	
	s 1.48	6.03			s 11.30	s 1.05		191	131.6	PG	PILLAGER 5.0	D	15.9	108	s 5.10	s 5.37			s 6.27	
	f 2.05	6.14 728			f 11.38	f 1.14		196	136.6		WHEBLOCK 3.7		10.9	80	f 5.01	f 5.28			f 6.14 623	
	s 2.30	6.23			s 11.46	s 1.21	W	199	140.3	MO	MOTLEY 4.1	DN	7.2	W80 E 80	s 4.56	s 5.22			s 5.56	
	f 2.40	6.34			f 11.53	f 1.29		203	144.4		HAYDEN 3.1		3.1	80	f 4.49	f 5.15			f 5.41	
	A 3.00PM	A 6.44AM			A 11.59PM	A 1.35PM	WCO TYX	207	147.5	SO	STAPLES	DN	0.0	Yard	L 4.45AM	L 5.10PM			L 5.30AM	
	Ex. Sun.	Daily			Daily	Daily									Daily	Daily	Daily	Daily	Ex. Sun.	
	7.15	8.04			.40	.31									3.45	4.05	.35	.39	7.23	
	16.5	17.3			28.8	37.1									37.1	34.0	32.9	29.6	16.2	
Time Over Sub-division Average Speed per Hour																				

EASTWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION.
AUTOMATIC BLOCK BETWEEN CARLTON AND CENTRAL AVENUE.
DOUBLE TRACK BETWEEN STATE LINE AND ANTON.
SPECIAL INSTRUCTIONS PAGES 7, 8 AND 9.

WESTWARD

THIRD SUB-DIVISION (MAIN LINE)

Table with columns for Third Class (723, 721), Second Class (625, 627), and First Class (61, 63, 65, 67, 69). Includes station names like Duluth, West Duluth Jct., and White Bear. Contains time tables for January 1, 1928, and average speed data.

EASTWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION. AUTOMATIC BLOCK BETWEEN WHITE BEAR AND WEST DULUTH JUNCTION.

SPECIAL INSTRUCTIONS PAGES 7, 8 AND 9.

THIRD SUB-DIVISION (MAIN LINE)

EASTWARD

Table with columns for First Class (68, 70, 64, 62, 66), Time Table No. 53 (January 1, 1928), Second Class (626, 628), and Third Class (722, 724). Includes station names like Duluth and White Bear.

BETWEEN WEST DULUTH JCT. AND DULUTH TRAINS WILL BE GOVERNED BY DULUTH AND SUPERIOR TERMINALS TIME TABLE

Main time table grid with columns for stations (e.g., West Duluth Jct., Smithville, Carlton, etc.), arrival/departure times, and class-specific schedules.

EASTWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION.

AUTOMATIC BLOCK BETWEEN WHITE BEAR AND WEST DULUTH JUNCTION.

SPECIAL INSTRUCTIONS, PAGES 7, 8 AND 9.

WESTWARD FOURTH SUB-DIVISION EASTWARD

(CUYUNA NORTHERN RAILWAY)

Table for Fourth Sub-Division (Cuyuna Northern Railway) showing Second Class trains 741, 739, 738, and 742. Includes stations like Deerwood, Ironton, Soo Junction, C.M.L. Jct., and Trommald.

EASTWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION, EXCEPT

No. 737 is superior to No. 738. No. 739 is superior to No. 740.

Special Instructions Pages 8 and 9.

WESTWARD FIFTH SUB-DIVISION EASTWARD

(CLOQUET BRANCH)

Table for Fifth Sub-Division (Cloquet Branch) showing Second Class trains 99, 75, 97, 98, 74, and 100. Includes stations like Carlton, Scanlon, and Cloquet.

EASTWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION, EXCEPT

No. 97 is superior to No. 98. No. 75 is superior to 74. No. 99 is superior to No. 100.

WESTWARD SIXTH SUB-DIVISION EASTWARD

(GRANTSBURG BRANCH)

Table for Sixth Sub-Division (Grantsburg Branch) showing Second Class trains 735, 733, 734, and 736. Includes stations like Grantsburg, Lind Spur, Benson, St. Croix River, and Rush City.

EASTWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION.

WESTWARD SEVENTH SUB-DIVISION EASTWARD

(TAYLORS FALLS BRANCH)

Table for Seventh Sub-Division (Taylors Falls Branch) showing First Class and Second Class trains 725, 69, 71, 67, 72, 68, 70, and 726. Includes stations like Taylors Falls Yard, Franconia, Shafers, Centre City, Lindstrom, Chisago City, and Wyoming.

EASTWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION.

SPECIAL INSTRUCTIONS.

FIRST SUBDIVISION.

(MAIN LINE.)

- At Ashland**—Trainmen and Enginemen will familiarize themselves with the schedule of C. & N. W. and Omaha first class trains, when using main tracks.
- Bridge and Engine Restrictions**—Speed will be restricted over Bridge O, Vaughan Avenue; Bridge 5, Fish River; Bridge 29, Iron River; Bridge 48, Poplar River; Bridge 49, Middle River and Bridge 53, Amnicon River, as follows: Single or double header engines, Classes T, Q-3, Q-4, W, W-1, W-2 and W-4 eight (8) miles per hour. Engines, Classes A, Q-5, Q-6, W-3, W-5, Z, Z-1, Z-2, Z-3 and Z-4 not permitted. Speed will be restricted over Bridge 37, Brule River, as follows: Single header engines, Classes W, W-1, W-2 and W-4 eight (8) miles per hour. Double header engines, Classes Q, Q-1, Q-2, Q-3, Q-4, R, S, S-1, S-2, S-3, S-4, S-10, X, Y, Y-1, Y-2, Y-3, Y-4 and Y-5 twenty (20) miles per hour. Single and double header engines, Classes A, Q-5, Q-6, W-3, W-5, Z, Z-1, Z-2, Z-3 and Z-4 not permitted. Double header engines, Classes W, W-1, W-2 and W-4 not permitted.
- Speed Restrictions**—All trains, ten (10) miles per hour between 22nd Ave., West and 7th Ave., West, Ashland. Class T—Engine or heavier. East End to Wentworth and Brule to Topside, 30 miles per hour, on curves 25 miles per hour. Wentworth to Brule and Topside to Ashland, 25 miles per hour, on curves 20 miles per hour.
- Register Stations**—Central Avenue. Ashland Freight Office or C. & N. W. Ry. Passenger Station.
- Derail Switches**—Wentworth..... East End Siding. Poplar..... West End Siding. Poplar..... Lange Canning Co.'s Track. Maple..... West End Siding. Brule..... West End Team Track. Tarter..... West End Siding. Iron River..... West End Transfer Track.
- Commercial Spurs**—

	Miles from Duluth	Car Capacity
Bellwood.....	35.8	10
Maple.....	31.8	3

SECOND SUBDIVISION.

(MAIN LINE.)

- At Brainerd**—Connection with the Minnesota & International Railway just west of the Mississippi River Bridge is governed by automatic signals.
- Pusher Districts**—Central Avenue to Sawyer.
- Double Track Switches**—At Anton will be kept set and locked for westward track. Switch at State Line is handled from interlocking tower.
- Retainers**—Retainers will be used on grades between Iverson and Central Avenue and other grades where in the judgment of the Enginemen they are necessary; Conductors are responsible for the application of retaining valves on commencement of descent and for their release at the foot of grades. Such full use of retainers is required as will prevent placing an undue amount of braking on any particular car or cars and as will afford full opportunity for enginemen to recharge and retain a maximum air pressure at all points. On solid trains of ore Trainmen will turn up retaining valves on one-fourth of the total number of cars in train starting at the head end before train leaves Sawyer. This number of retaining valves will be used from Sawyer to Pokegama and will be turned down between Pokegama and Central Avenue, train to be stopped for that purpose. Retaining valves will be turned down at Carlton if necessary to permit of getting train into yard and when engine is to be cut off at Carlton to take water or do switching which requires a brake test to be made before leaving the retaining valves will not be turned up until after the brake test has been made.
- At Carlton**—Eastward Freight Trains and light engines from the Second Sub-Division will head in on North Siding. Westward Trains, Switch Crews or Branch Trains will not use North Siding without permission from the Dispatcher.
- At McGregor**—The Siding east of the Station will be known as "Westward Siding" and used by Westward trains. The Siding west of the Station will be known as "Eastward Siding" and used by Eastward trains.
- At Aitkin**—The South Siding will be known as "Eastward Siding" and used by Eastward trains. The North Siding will be known as "Westward Siding" and used by Westward trains. The crossing of river or mill spur with Soo Line Railway is protected by crossing gates. Normal position of gates is closed for Northern Pacific trains. Soo Line Agent will operate gates between 8:00 A. M. and 5:00 P. M. Conductors using this crossing between 5:00 P. M. and 8:00 A. M. will see that gates are left locked in normal position.
- At Loerch**—Territory between Loerch and Omaha Mine is a part of Loerch Yard.
- At Deerwood**—Territory between Deerwood and Orelands is a part of Deerwood Yard.
- At Motley**—The South Siding will be known as "Eastward Siding" and used by Eastward trains. The North Siding will be known as "Westward Siding" and used by Westward trains.

- At Staples**—Lake Superior Division freight trains leaving Staples between 7:00 A. M. and 4:00 P. M. will get clearance at Yard Office and between 4:00 P. M. and 7:00 A. M. at Sixth Street Tower.
- Joint Tracks**—Trainmen and Enginemen when using Soo Line Tracks between Cedar Lake Junction and Kennedy Mine must have Soo Line Time Tables which may be procured at McGregor. Trainmen and Enginemen will familiarize themselves with the schedules of the St. Paul Division and M. & I. first class trains at Brainerd when using Main Tracks at that point.
- Engine Restrictions**—Engines, classes W, W-1, W-3 and W-4 must not use the following tracks except that class W and W-4 engines may use the hole track and power house spur at Aitkin.

Wrenshall.....	Wrenshall Brick Yards 1 & 2.
Carlton.....	Zenith Gravel Pit Track.
Iverson.....	South Spur.
Tamarack.....	Stock Track.
Aitkin.....	Hole Track and Power House Spur.
Brainerd.....	Track No. 17 in New Yard.
Motley.....	North Spur.
- Speed Restrictions**—At Brainerd passenger trains twenty (20) miles per hour between East Switch and Passenger Station. At Aitkin, 15 miles per hour through village. Trains handling loaded ore cars, twenty-five (25) miles per hour between Deerwood and Aitkin, Kimberly and Lansford and Sawyer to Hill Avenue. Between other points thirty (30) miles per hour. Trains handling cars of logs, twenty (20) miles per hour, Deerwood to Aitkin and Sawyer to Carlton.
- Special Stops and Connections**—Trains 727 and 728 carry adult male passengers between Carlton and Staples from and to points at which these trains stop for other purposes.
- Register Stations**—Central Avenue. Carlton. Brainerd. Staples.
- Bulletin Stations**—Duluth Passenger Station. Duluth Yard Office. Duluth Round House. Carlton. Brainerd. Brainerd Round House. Staples Passenger Station. Staples Yard Office. Staples Round House.
- Standard Time Clocks**—Duluth Passenger Station. Carlton. Staples Passenger Station. Brainerd.
- Watch Inspectors**—H. Hendrickson..... Duluth, 400 West 1st. St. J. Arnold Johnson..... Duluth, 2129 West Sup. St. C. A. Swanson..... Superior. C. L. Burnett..... Brainerd. Jesse L. Cross..... Staples.
- Derail Switches**—Iverson..... East End Loading Track. Sawyer..... East End North Siding. Wright..... West End Loading Track. McGregor..... East End West Siding. McGregor..... West End Transfer Track. Aitkin..... East End House Track. Deerwood..... East End Storage Track. Loerch..... East End Omaha Mine Spur.
- Commercial Spurs**—

	Miles from Duluth	Car Capacity
Zenith Gravel Pit Spur.....	30.2	30
Grass Twine Spur.....	72.6	5

THIRD SUBDIVISION.

(MAIN LINE.)

- Pusher Districts**—West Duluth to Otter Creek.
- At West Duluth Junction**—All eastward trains must come to a stop at double track switch and know that track is not obstructed by trains crossing to Grassy Point Line or to the Fond du Lac Branch.
- At Hinckley**—The Siding east of Grind Stone River will be known as "Westward Siding" and used by Westward trains. The Siding west of Great Northern Crossing will be known as "Eastward Siding" and used by Eastward trains. No. 1 Yard track will be kept clear of cars so it may be used as Siding by trains in both directions when so instructed.

- At Rush City**—The Siding west of the Station will be known as "Eastward Siding" and used by Eastward trains. The Siding east of the Station will be known as "Westward Siding" and used by Westward trains.
- At North Branch**—The Siding west of the Station will be known as "Eastward Siding" and used by Eastward trains. The Siding east of the Station will be known as "Westward Siding" and used by Westward trains.
- At Wyoming**—The Siding west of the Station will be known as "Eastward Siding" and used by Eastward trains. The Siding east of the Station will be known as "Westward Siding" and used by Westward trains.
- At Bald Eagle**—The Bald Eagle Lead may be used by trains in both directions, trains will run on this track expecting to find it occupied.
- At White Bear**—Trainmen and Enginemen will familiarize themselves with the schedules of the Saint Paul Division first class trains when using main track at that point.
- Retainers**—Retainers must be used on grades between Brownell and West Duluth Junction. Conductors are responsible for application of retaining valves on commencement of descent, and for their release at foot of grade. Such full use of retainers is required as will prevent placing an undue amount of braking on any particular car or cars, and as will afford full opportunity for Enginemen to recharge and retain maximum air pressure at all points.
- Speed Restrictions**—Brownell to Smithville eastward freight trains must not exceed any one mile in two minutes and thirty seconds. Brownell to Short Line Park use twelve minutes. Short Line Park to Smithville use nine minutes. These restrictions do not apply to light engines or to engines running with caboose only. Rush City freight trains and light engines ten (10) miles per hour through Village Limits. Rock Creek, all trains fifteen (15) miles per hour. Forest Lake, all trains thirty (30) miles per hour over crossing just east of depot.
- Special Stops and Connections, Etc.**—Way Freight Trains authorized to carry adult male passengers from and to points at which these trains stop for other purposes: Nos. 721 and 722 between Hinckley and White Bear. Nos. 723 and 724 between Carlton and Hinckley. Nos. 67, 68, 69 and 70 will stop on signal at Collette, one and one-fourth miles east of Bald Eagle. No. 61 wait at Carlton for No. 55.
- At Hinckley**—Interlocking Trains will call for route as follows: For Through Main Track Movement—(One Long) For Movement from Main Track to Sidings — (One Long, One Short) For Movement from Sidings to Main Track — (One Short, One Long) For Movement from Siding to Siding — (Two Shorts)
- Register Stations**—West Duluth. Carlton. White Bear.
- Register Exceptions**—Eastward Trains register at West Duluth by ticket, Form 608, and will not require clearance if train order signal is in clear position.
- Bulletin Stations**—Duluth Passenger Station, Yard Office and Round House. Carlton. Hinckley. Rush City. White Bear.
- Standard Time Clocks**—Duluth Passenger Station. Carlton. Hinckley. Rush City. White Bear.
- Watch Inspectors**—H. Hendrickson..... Duluth, 400 West 1st St. J. Arnold Johnson..... Duluth, 2129 West Superior St.
- Derail Switches**—Short Line Park..... East End Siding. Mile Post 17..... East End Spur. Brownell..... East End Siding. Thornton Siding..... East End Siding. Friesland..... West End Loading Track. Mission Creek..... West End of Spur. Stacy..... West End House Track. Garen..... West End Siding. Bald Eagle..... East End Transfer Track.
- Commercial Spurs**—

	Miles from Duluth	Car Capacity
Smithville.....	7.7	10
Power Company Spur.....	17.0	4
Mission Creek.....	78.3	13
Thornton Siding.....	45.7	81
Garen Siding.....	130.7	8

SPECIAL INSTRUCTIONS.

**FOURTH SUBDIVISION.
(IRONTON BRANCH.)**

- At Ironton**—Track from Soo Line connection east of depot to connection about one mile west of depot will be used jointly by Northern Pacific and Soo Line Rys. Movements over this track must be made at a speed that will insure safe operation. Trains using **Soo Line Track** between Ironton and Croft Mine connection must have **Soo Line** time table which may be procured at Ironton. The Minneapolis, St. Paul and Sault Ste. Marie Ry. (Soo Line) have acquired running rights on Northern Pacific Ry. Co. tracks, 4th Subdivision, between Soo Line Junction and Maraco Mine. Trains moving on tracks between Soo Line Jct., Maraco Mine and Trommold must be governed and comply with Rule 93 of Book of Transportation Rules, which reads as follows: "Within yard limits the main tracks may be used, protecting against first class trains. Second and third class and extra trains (including passenger extras) must move within yard limits prepared to stop unless the main track is seen or known to be clear."
- Register Stations**—Ironton.
Deerwood.
- Derail Switches**—
Ironton..... Feigh Mine coal track.

**FIFTH SUBDIVISION.
(CLOQUET BRANCH.)**

- Register Stations**—Carlton and Cloquet.
- Standard Time Clock**—Carlton.
- Bulletin Station**—Carlton.
- Watch Inspector**—L. A. Freeman, Cloquet.

**SIXTH SUBDIVISION.
(GRANSTBURG BRANCH.)**

- Bridge and Engine Restrictions**—
Speed will be restricted over Bridge 5, St. Croix River as follows:
Single header engines, classes S, S-1, S-2, S-3, S-4, S-10 and Q, eight (8) miles per hour.
Double header engines, class F-1 eight (8) miles per hour.
Engines, classes T, Q-1 and heavier not permitted.
- Speed Restrictions**—Trains, four (4) miles per hour on curve one quarter of a mile west of Granstburg.
- Register Stations**—
Rush City.
Grantsburg.
- Bulletin Station**—
Rush City.
- Standard Time Clock**—
Rush City.
- Commercial Spurs**—

	Distance from Rush City	Car Capacity
McGrath Spur.....	3.3	3
Rungren Spur.....	8.0	5
Lind Spur.....	10.5	4
Anderson's Spur.....	15.0	4

Special Stops—Anderson's Spur flag stop for Trains 733, 734, 735 and 736.

**SEVENTH SUBDIVISION.
(TAYLORS FALLS BRANCH.)**

- Bridge and Engine Restrictions**—
Speed will be restricted over Bridges 18, 18-1, 18-2 and 19 as follows:
Single header engines, classes W, W-1, W-2, W-4, T, Q-3 and Q-4, eight (8) miles per hour.
Double header engines, classes S, S-1, S-2, S-3, S-4, S-10, Q, Q-1 and Q-2, eight (8) miles per hour.
Engines, classes A, Q-5, Q-6, W-3, W-5, Z, Z-1, Z-2, Z-3 and Z-4 not permitted.
- Special Stops, Etc.**—Passenger trains will stop on flag at Russell Beach.
- Register Stations**—
Wyoming.
Taylors Falls.
- Derail Switches**—
Franconia..... East and West Ends Siding.

ALL SUBDIVISIONS.

- Conductors of work trains will issue instructions to their flagmen in writing, except when flagman goes back immediately to stop approaching trains.
- Passenger trains must not exceed a speed of one minute or sixty (60) seconds per mile. Classes W, W-1, W-2 and W-4 engines forty (40) miles per hour. Classes W-3, W-5 and C. M. & St. P. Class L-2 and L-2-B engines, thirty-five miles (35) per hour. All trains fifteen (15) miles per hour passing telegraph offices where train orders are received through crossovers and entering siding tracks and thirty (30) miles per hour through interlocking plants.
- When necessary to take slack of freight trains with helper engine on the rear, it should be done by the helper engine.
- Except as otherwise provided, Enginemen will only be required to consult register at initial or starting point.
- Before moving a work or wrecking train whistle signal (14-b) or (14-h) must be sounded for the protection of men working about such trains.
- When conditions will permit enginemen on freight trains will receive proceed signal from rear of train before passing any station.
- Trains handling steam wrecking derrick, pile driver and locomotive crane will not exceed a speed of 25 miles per hour.
- At Carlton**—Trains will not exceed a speed of fifteen (15) miles per hour over diamond switches at the Interlocking Plant, except straight through movement via the Third Subdivision.

**AUTHORIZED SURGEONS.
LOCATION OF STRETCHERS (S)**

- Dr. A. W. IDE, Chief Surgeon, N. P. B. A. Hospital, St. Paul.
 Dr. M. A. SHILLINGTON, Assistant Surgeon, N. P. B. A. Hospital, St. Paul.
 Dr. B. I. DERAUF, Assistant Surgeon, N. P. B. A. Hospital, St. Paul.
 Dr. H. G. COLLIE, Assistant Surgeon, N. P. B. A. Hospital, St. Paul.
 Dr. L. F. CORRY, Assistant, N. P. B. A. Hospital, St. Paul.
 r. W. J. LUND, Assistant, N. P. B. A. Hospital, St. Paul.
 Hospital Phone Nestor 2866.

SPECIALISTS

- DR. A. C. HEATH, Nose and Throat, 339 Lowry Bldg., St. Paul.
 DR. L. A. NELSON, Oculist and Aurist, 830 Lowry Bldg., St. Paul.
 DR. C. G. NORDIN, 942 Lowry Bldg., St. Paul.
 DR. H. S. CLARK, Oculist and Aurist, 616 Syndicate Bldg., Minneapolis.
 DR. F. N. KNAPP, Oculist and Aurist, Bradley Bldg., Duluth.
 DR. J. M. ROBINSON, Oculist and Aurist, 415 Providence Bldg., Duluth.
 DR. N. P. NELSON, Brainerd.

NOTES

SURGEONS will attend when called upon officially, to all cases of accident occurring to employes or passengers. In cases of sickness it is the intention to limit medical service to the locality or town where a surgeon resides, unless some urgent necessity exists, for which distinct official authority must be had in accordance with established regulations.

RAILWAY OFFICIALS are required to call on the nearest authorized surgeons whenever practicable, when surgical or medical services are needed. When such are accessible, the Association will not be responsible for bills for medical services rendered by any other physician. In the event of a sudden emergency, arising from accident, if necessary proper surgical aid should be procured until the arrival of a regularly appointed surgeon, when the case should be placed in his charge, and in no case should the service of any but an authorized company surgeon be continued at the expense of the Railway Company or of the Association after such surgeon is able to assume charge of the case.

BOARD AND NURSING are furnished only at our own hospital. We are not responsible for bills incurred elsewhere unless specially authorized or approved by the Chief Surgeon, and then only in critical cases of injury or illness occurring in the discharge of duty.

LOCAL SURGEONS

	Office Telephone	Residence Telephone
DR. J. W. JESION, Room 320, Genl. Office Bldg., St. Paul. St. Paul Car Foreman's Office (s). St. Paul 4th Street Yard Office (s). St. Paul Mississippi St. Round House (s). St. Paul Como Shops (s). St. Paul Fourth Street Freight Station (s).	Cedar 2340	.....
DR. I. C. McDONALD, 405 Yeates Bldg., Minneapolis DR. R. R. CRAMNER, 601 Syndicate Bldg., Minneapolis DR. F. R. GRATZEK, Minneapolis..... E. Minneapolis (s). Minneapolis Car Foreman's Office (s). Minneapolis Tool Car (s). Minneapolis Northtown Transfer (s).	217 J-1 217 J-1 33	217 J-2 217 J-3 167
DR. J. H. McCLANAHAN, White Bear (s)..... DR. T. S. McCLANAHAN, White Bear..... DR. W. R. HUMPHRY, Stillwater..... Wyoming (s).	29-2 94-W 186-W	29-3 94-J 186-J
DR. J. A. POIRIER, Forest Lake..... DR. D. E. NELSON, North Branch..... DR. ALF. K. STRATTE, Pine City..... DR. H. C. STRATTE, Pine City..... DR. A. E. HOLMES, Rush City (s)..... DR. A. O. FLOM, Chisago City..... DR. V. G. HASELTINE, Taylors Falls..... DR. E. I. BUNKER, Grantsburg..... DR. E. L. STEPHAN, Hinckley (s)..... DR. W. C. EHMKE, Willow River..... DR. THOMAS MOE, Moose Lake..... DR. J. D. GILBERT, Carlton (s)..... DR. A. A. RANKIN, Carlton.....	57 75 175-2 2-W 13 38 7 95 86	57 95 175-3 2-J 13 11 136 96 104-8-B
DR. JAMES FLEMING, Cloquet..... DR. R. G. SPURBECK, Cloquet (s)..... DR. C. S. KNOX, 219 Albany Block, East End, Superior. DR. W. H. SCHNELL, 28 Columbia Bldg., Superior... DR. F. C. SARAZIN, 28 Columbia Bldg., Superior... DR. A. L. KYLLO, Superior..... Superior Freight Station (s). Central Avenue (s). East End Station (s).	247 East 67-J Broad 65 Broad 65 Broad 1458-R1	76 East 67-M Broad 532 Broad 192 North 161
DR. G. D. MacRAE, 400 Lyceum Bldg., Duluth..... DR. C. M. SMITH, 400 Lyceum Bldg., Duluth..... DR. C. L. HANEY, Sloan Bldg., Duluth..... DR. O. E. HEIMARK, Sloan Bldg., Duluth..... DR. GEORGE C. DOYLE, Sloan Bldg., Duluth..... Duluth Yard Office at Rice's Point (s). Dock 2, Duluth (s). Dock 6, Duluth (s). Duluth Union Depot (s). Tool Car, Duluth (s). West Duluth (s).	Melrose 1089 Melrose 1089 Melrose 458 Melrose 458 Melrose 458	Hemlock 3954-W Hemlock 1955 Melrose 579 Melrose 1157 Calumet 515
DR. M. S. HOSMER, Ashland, Wis. (s)..... DR. F. G. JOHNSON, Iron River, Wis..... DR. B. W. KELLY, Aitkin, Minn. (s).....	41 96 2	27 86 Lake Cottage 214-J-10
DR. J. J. RATCLIFFE, Aitkin, Minn..... DR. S. S. SHANNON, Ironton, Minn..... DR. R. A. BEISE DR. J. A. THABES DR. G. I. BADEAUX DR. F. L. HAWKINSON DR. H. A. CARLSON DR. M. P. GERBER	75 47 30-W 5	75 92 30-R 200
Brainerd Shops (s). Brainerd Passenger Station (s).		
DR. F. H. ALLEN, Staples (s)..... DR. J. M. COOK (Asst.), Staples.....	56 22	164 93-W

SPEED TABLE.

Time Per Mile	Miles	
	Per Mins.	Per Hour
1	..	60
1	1	59
1	2	58
1	3	57.1
1	4	56.2
1	5	55.3
1	6	54.5
1	7	53.7
1	8	52.9
1	9	52.1
1	10	51.4
1	12	50
1	15	48
1	20	45
1	25	42.3
1	30	40
1	40	36
1	45	34.3
1	50	32.7
2	..	30
2	10	27.6
2	15	26.6
2	20	25.7
2	30	24
2	40	22.5
2	45	21.8
2	50	21.2
3	..	20
3	9	19
3	20	18
3	31	17
3	45	16
4	..	15
5	..	12
6	..	10
7	30	8
10	..	6

TONNAGE RATING FREIGHT ENGINES.

	Class of Engines											
	E 3 D 2-3		D 5 and S 10		T		W 4		W		W 3-5	
Maximum Train Limit.	65	Cars	70	Cars	99	Cars	99	Cars	99	Cars	99	Cars
Westward.	Tons	Cars	Tons	Cars	Tons	Cars	Tons	Cars	Tons	Cars	Tons	Cars
Ashland to Iron River..	610	14	800	16	1100	22	1300	24	1500	34	.....	.....
Iron River to Central Ave.	700	16	800	18	1100	24	1300	26	1500	34	.....	.....
Duluth to Sawyer, 2nd S-d.....	.....	.....	800	18	1150	26	1350	28	1550	35	2000	40
Sawyer to Brainerd.....	.....	.....	1600	36	2300	52	2700	60	3200	70	4000	80
Brainerd to Staples.....	.....	.....	2000	45	2600	58	3100	70	3800	80	4500	80
Duluth to Carlton, 3rd S-d.....	.....	.....	600	14	950	21	1150	26	1200	25	1500	30
Carlton to Hinckley.....	.....	.....	1700	39	2300	52	2700	55	3200	70	4000	80
Hinckley to White Bear.....	.....	.....	2000	45	2600	58	3000	60	3700	80	4500	80
Eastward.												
Staples to Duluth.....	.....	.....	2000	42	2650	56	2950	66	3400	80	4800	80
Central Ave. to Iron River	650	15	750	17	1150	20	1400	24	.....	.....	.....	.....
Iron River to Ashland..	840	19	940	21	1350	25	1600	28	.....	.....	.....	.....
White Bear to Hinckley.....	.....	.....	1900	46	2250	55	2550	65	3350	80	3500	80
Hinckley to Groningen.....	.....	.....	1450	35	1850	50	2250	60	2750	65	3300	80
Groningen to Duluth.....	.....	.....	1900	46	2250	55	2550	65	3400	80	3800	80

MAXIMUM CLEARANCES.

	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	8 ft. 6 in. Wide	9 ft. Wide	9 ft. 6 in. Wide	10 ft. Wide	10 ft. 2 in. Wide	10 ft. 6 in. Wide	11 ft. Wide	11 ft. 6 in. Wide	Max. Height	Max. Width
First Sub-division, Ashland to East End.....	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	11'-6"
Second Sub-division, Duluth to Staples.....	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	11'-6"
Third Sub-division, Duluth to White Bear.....	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	11'-6"
Fourth Sub-division, Deerwood to C. M. L. Mine.....	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	11'-6"
Fifth Sub-division, Carlton to Cloquet.....	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	11'-6"
Sixth Sub-division, Grantsburg to Rush City.....	19'-5"	19'-5"	19'-5"	19'-5"	19'-5"	19'-5"	19'-5"	19'-5"	19'-5"	19'-5"	19'-5"	19'-5"	19'-5"	19'-5"	19'-5"	19'-5"	19'-5"	19'-5"	11'-6"
Seventh Sub-division, Taylors Falls Yard to Wyoming.....	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	11'-6"
Deerwood to Oreland.....	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	20'-3"	11'-6"

F. L. BIRDSALL,
Asst. Superintendent.

W. D. PEARCE,
Asst. Superintendent.

H. J. COUNCILMAN,
Trainmaster.

GEORGE STEINER,
Chief Dispatcher.

