



### **AUTHORIZED SURGEONS.**

### Location of Stretchers—(S)

Dr R I Dorouf Chief Surgeon

Dr. D. r. Doram, Omer om secon	1 Du. 1 Mui
Dr. A. McEwan,	1
Dr. C. H. Decker,	Associate Surgeons,
Dr. H. S. Proud,	N. P. B. A. Hospital,
Dr. D. E. Derauf,	St. Paul (S)
Dr. C. J. Hedlund	}
Dr. R. R. Cranmer	Minneapolis
Dr. D. M. Thysell	
Dr. W. R. Humphrey	
Dr. T. S. McClanahan	

### SPECIALISTS.

Dr. L. T. Simons, Eye, Ear, Nose & Throat
Or. L. G. Edwards, Eye, Ear, Nose & Throat
Dr. Eugene L. Bauer, Ear, Nose &
Throat 621 Lowry Bldg., St. Paul
Dr. Robert H. Monahan, Oculist (Eye
Specialist)
Dr. Richard C. Horns, Oculist (Eye
Specialist)
St. Paul, General Office Bldg. (8)*
St. Paul, Third Street, Car Foreman's Office (S)
St. Paul, Fourth Street, Yard Office (S)*
St. Paul, Mississippi Street, Round House (S)
St. Paul, Mississippi Street, Yard Office (S)*
St. Paul, Como Shops (S)*
Northtown, Yard Office (S)*
Northtown, Round House (S)*
Northtown, Tool Car No. 4 Steam Derrick (S)
N. P. Freight Yard, Yard Office (S)
*Litter—No equipment.

### 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.

# NORTHERN PACIFIC RAILWAY COMPANY

: AND

MINNEAPOLIS & ST. LOUIS RAILWAY

# JOINT TERMINAL TIME TABLE 304

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

**Sunday, April 28, 1957** 

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.

G. L. SLORAH, Superintendent. E. S. ULYATT, General Superintendent of Transportation.

> D. A. THOMSON, General Manager.

F. B. CLARK, General Superintendent, M. & St. L. RY.

A. W. SCHROEDER, President, M. & St. L. RY. Page 2 left blank in original document

W	estw	ARD				FIRS	T SI	UB-DIVISION			EAST	<b>WARD</b>	3
e e			THIR	D CLASS	FIRST	CLASS		Time Table No. 304		FIRST	CLASS	THIRD	CLAS
i, Scale s, Wyer imits.	mbers.	ty		715	61	65	я.	April 28, 1957	a o	62 66		716	
water, ruel, Scales, Turn Tables, Wyes and Yard Limits.	Station Numbers.	Car Capacity of Sidings		Way Freight	Passenger	Passenger	Distance from Stillwater.		Distance from St. Paul.	Passenger	Passenger	Way Freight	
Tori	Stat	2 gr		Ex. Sun.	Ex. Sun.	Daily	Dia	STATIONS	O	Ex. Sun.	Daily	Ex. Sun.	
x	LG12	Yard		L 12.45 AN			0.0	STILLWATERP	24.0			A 5.00 AM	
	LG9	18		1.00			3.9	SUMMIT	20.1			4.25	
	LG7			1.07			6.2	DULUTH JCT	17.8			4.20	
	LG4	15		1.15			9.1	MAHTOMEDI	14.9			4.10	
	LG2	84		1.20			10.6		13.4			4.05	
wx	L141	Yard		s 1.25 1.45	L 4.42ры	L 5.25 AM	12.7	WB. WHITE BEARDN LAKE	11.3	As 9.08 AM	As  1.40 PM	s 3.30	
XY	L142	Yard		1.50			13.7	M. & D. JCT.	10.8			3.25	
X	L147			A 2.00 A	Af 4.49 PM	A.1 5.34AM	18.9	$\begin{bmatrix} \vec{A} & \left  \text{GNGLOSTERDN} \right  & \\ & 3.2 & \end{bmatrix}$	5.1	L# 8.58 AM	Lf 1.25pm	L 3.15AM	
		· . /*	BET	WILL BE	GOVER	ROUT B	R001	( JCT. TRAINS USING SOO INE TIME TABLE AND RULI	LINE ES.	TRACK	1	205	<u> </u>
				L 2.10 AN				TROUT BROOK JCT		<u>                                       </u>		A 3.05 AM	
rwy	8142	Yard		GOV	ERNED E	Y SECO	ND SU	SSISSIPPI ST. YARD, TRAII B-DIVISION TIME TABLE.  MYMISSISSIPPI STPN				L 3.00AM	
	5142	Taru .		A 2.15A									
X	L147				Lf 4.49 PM	Lf 5.34 AM	18.9	GN. GLOSTER. DN DE CLAYMONT. P	5.1	A1 8.58 AM	A#11.25PM		
1	L149	Yard					21.1	CLAYMONT P able	2.9				
	L150	Yard			4.57	5.38	21.5	EAST 7th STREET	2.5	8.53	11.18		
	L151	Yard			5.02 PM		23.5	0.4   Hotel   Hotel	0.5	L 8.48 AM	L   . 2PM		
<u> </u>			BET WI	WEEN THIRD	STREET NED BY	AND ST. ST. PAUL	PAUL UNI	. UNION DEPOT, TRAINS AND DEPOT RULES AND REG	ID EN	IGINES IONS.			
YWY	8142	·			a 5.05 pm	5.55 AM 6.10 AM		UST. PAULDN (Union Depot) 10.6	0.0	L 8.45AM	11.10 PM 10.57 PM		
الو			BET' TRACI	WEEN ST. PAU (S WILL BE G	L AND N	IINNEAP D BY GR	OLIS Eat N	TRAINS USING GREAT NOF IORTHERN TIME TABLE AN	RTHE ID RU	RN ILES.			
						A 6.40 AM		SMINNEAPOLISDN (Passenger Station)			L 10.32PM		*****
				Ex. Sun.	Ex. Sun.	Daily				Ex. Sun.	Daily	Ex. Sun.	
				1.10	.23	.30		Time Over Sub-Division		.23	.30	1.30	
				19.0	29.5	22.6		Average Speed Per Hour		29.5	22.6	14.9	
<u>'</u>		EA	STWARD	FRAINS ARE S	UPERIOI	R TO TR	AINS	OF THE SAME CLASS IN OP	POSIT	TE DIRE	CTION.	<u> </u>	
				·									

SPECIAL INSTRUCTIONS, PAGES 7, 8 AND 9.

<b>4</b> V	VESTV	VARD		S	ECO	ND S	UB-DI	VISION			
		SECOND CLASS		FI	RST						
wyes Wyes its.	su e	167		31	15	325	317	309	319	Time Table No. 304	_
Water, Fuel, Scales Turn Tables, Wyes and Yard Limits.	Station Numbers	M. & St. L.		S	00 3	Soo Chgo. Div.	500 8	500 62	స్తిల్లం	April 28, 1957	Distance from St. Paul.
od Ye	tation	Freight		Pass	enger	Passenger	Passenger	Passenger	Passenger	STATIONS	Jistan It. Par
PH 8	602	Daily		Da	aily	Daily	Ex. Sat.	Daily	Ex. Sun.		
TWY	8-142					L 7.10pm	L 6.40 <sub>PM</sub>	L 1.50pm		UDN) (Union Depot)	0.0
BET	WEEN ST	r. Paul	UNION DEPOT	AND THIRD S DEPOT RULES	TRE S AN	ET, TRA D REGUI	INS ANI	ENGIN S. (East	ES WILL Side Lin	BE GOVERNED BY ST. PAUL UNI	ON
	L-151					L 7.13m	L 6.42₽	L 1.52m		3RD STREET (East Side Line) 1.2 To Miss. St. Tower	0.6
		L 7.00 PM								7TH STREET (West Side Line)	
CTW		7.05				7.16	6.45	1.55		MX. MISSISSIPPI ST. TOWERDN	1.8
	8-142									MYMISSISSIPPI ST. YARDPN	2.6
		7.07				A 7.17PM	6.46	1.56		IA TROUT BROOK ICT.	2.8
		7.09					A 6.47PM	A 1.57PM		014 MOV	2.9
w	8-137	7.17									b
										EG. N. CROSSING	6.7
	8-1361/2	7.22								<b>◄</b>	7.3
Y	L-156½	7.24				_				To Park Jot. 1.0 To Eustis St06	7.8
	L-156									PARK JUNCTIONP	8.8
	L-154									EAST MINNEAPOLISP	10.4
CTWZ	8-128									NJ DN	13,1
	8-134	7.26								CONTRIBUTION   P   CONTRIBUTIO	8.4
		7.31								504 18TH AVE. SOUTH EASTP	9.9
		a 7.34 pm								™ (28TH AVE. SOUTH	10.7
BE	TWEEN	TWENT	ETH AVENUE	SOUTH AND T D BY M. & ST	HIR	D AVENI	UE NORT	TH, MIN	NEAPOL HOWN (	IS, TRAINS AND ENGINES WILL B	E
		L 7.37 PM		1 1	3.50 PM				L 9.45 AM	STH AVE. SOUTH	11.8
		A 7.39 PM			351				9.46	3RD AVE. NORTH	12.2
				_	3.52 PM				A 9.47 AM	FIRST STREET NORTHP	12.8
		Daily			aily	Daily	Ex. Sat.	Daily	Ex. Sun.		1
	<del></del>	.89		-   <del></del>	.02	.07	.07	.07	.02	Time Over Sub-Division	
		17.4			1.0	21.5	25.0	25.0	24.0	Average Speed Per Hour	

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

SPECIAL INSTRUCTIONS, PAGES 7, 8, 9, 10, 11 and 12.

6	7	WESTW.	WARD THIRD SUB-DIVISION											
				Time Table No. 304										
Water, Fuel, Scales, Turn Tables, Wyes and Yard Limits.		3	3 1 5 Soo 13	11	25	319	1	T	April 28, 1957		l Distance from Minneapolis			
Yan Trans		Passenger	Passenger	Passenger	Passenger	Soo 5 Passenger	Passenger				- itan	1		
Wanga T.		Ex. Sat.	Daily	Daily	Daily	Ex. Sun.	Daily	1	STAT	FIONS	5	K Č		
		I. 10.15PM		ь 9,30рм	£ 7.10 PM		L 9.15AM	8	(Passenge		<b>D</b> i	N 0.0		
BI Ti	ETWEEN M	INNEAPO ENGINES	LIS PAS	SENGER SE GOVE	STATIO	N AND I	FIRST ST	REET N	IORTH I	MINNEA .E AND I	POLIS, RULES.		_]	
		L 10.17PM	L 8.52₽₩	L 9.31 PM	L 7.11PM	L 9.47AM	L 9.17AN		FIRST ST		THP	0.8		
wz		10.18	8.53	9.32	7.12	9.48	9.18		N. P. FRE	ĪGHT YAR	<b>D</b> P	0.8 0.7 0.9		
		10.19	A 8.54 PM			A 9.49 AM	9.19	<u> </u>		E. NORTH			_	
Y		10.22		9.36	7.16		9.22	AUTO.	MULBE	RRY JCT.	Р	2.1	_]	
CTWZ		A 10.27PM		A 9.45 PM	A 7.21 PM		A 9.27 AM	<b>▼</b> (NJ	NORŤ	нто <b>w</b> n	DN	5.0	_[	
		Ex. Sat.	Daily	Daily	Daily	Ex. Sun.	Daily		,			_	_[	
1		.12	.02	.15	.11	.02	.12	<b> </b>		Sub-Divisio			-	
			18.0	20.0	27.3	18.0	25.0	İ	Average Sp	eed Per Ho	ur	1		· ·
EA	STWARD T	RAINS AR		RIOR TO	TRAINS	OF TH	l		· · · · · · · · · · · · · · · · · · ·		ECTION	<del></del>	EASTW	/ARD
EA:	STWARD T		RE SUPE			OF TH	E SAME		· · · · · · · · · · · · · · · · · · ·	1	ECTION CLASS	<del></del>	EASTW	<b>7ARD</b>
EA	ASTWARD T	RAINS AF	RE SUPE	ne Tabl	D TRAINS	OF TH	E SAME		· · · · · · · · · · · · · · · · · · ·	FIRST	CLASS	<del></del>	EASTV	7ARD
EA	ASTWARD T	RAINS AF	RE SUPE	ne Tabl	le No. 3	OF TH	HIRD S	UB-DI	vision 4	FIRST 304 Soo 14	CLASS 302 800 6	2	EASTV	7ARD
EA	ASTWARD T		RE SUPE	ne Tabl April 2	le No. 3	OF TH	HIRD S  26  Passenger	12	VISION 4 Passenger	FIRST 304 Soo 14 Passenger	CLASS 302 Soo 6 Passenger	2 Passenger	EASTV	7ARD
EA	ASTWARD T	RAINS AF	RE SUPE	ne Tabl April 2 STAT	le No. 3 28, 1957	TH	E SAME (HIRD S	12 Passenger Daily	Passenger Ex. Mon.	FIRST 304 Soo 14	CLASS 302 800 6	2		7ARD
EA	ASTWARD T	Pietance from Northtown.	Tin	ne Tabl April 2 S T A TMINNE (Passenger 0 FIRST S	le No. 3 28, 1957 1 O N S APOLIS Station)	TE O4	E SAME OF THE SAME	POLIS. A	Passenger Ex. Mon. A 6.50 M	FIRST 304 Soo 14 Passenger Daily	CLASS 302 Soo 6 Passenger Ex. Sun.	Passenger Daily A 9.57 PM	STATIO	N.
EA	ASTWARD T	RAINS AF	Tin	April 2 STATMINNE (Passenger 0 FIRST S ID ENGI	le No. 3 28, 1957 I O N S APOLIS Station) TREET N NES WILL EET NORT	THE SOLUTION OF THE SOLUTION O	Passenger Daily A 6.10 MINNEA	Passenger Daily A 6.40 M POLIS, A	Passenger Ex. Mon. A 6.50 M	FIRST 304 Soo 14 Passenger Daily	CLASS 302 Soo 6 Passenger Ex. Sun.	Passenger Daily A 9.57 PM SENGER ABLE AN	STATION RULI	N.
EA	ASTWARD T	RAINS AF	Tim	April 2 STATMINNE (Passenger 0) FIRST SID ENGI	le No. 3 28, 1957 I O N S APOLIS Station) .3 TREET N NES WIL EET NORTH	TE  OA  ON  LORTH, L BE GO	Passenger Daily A 6.10 MINNEA	Passenger Daily A 6.40 AM POLIS, A D BY GR A 6.37 AM 6.35	Passenger Ex. Mon. A 6.50 MINEAT NOI A 6.47 MINEAT NOI 6.46	FIRST 304 Soo 14 Passenger Daily INEAPOIRTHERN A 7.02 M 7.01	Soo 6 Passenger Ex. Sun.  LIS PASS TIME T  A 4.42 PM 4.41	Passenger	STATION RULI	N.
EA	ASTWARD T	Distance from Northtown.	Tim	STAT  STAT  MINNE (Passenger 0 FIRST S ID ENGI	le No. 3 28, 1957 LONS Station) .3 TREET N NES WIL EET NORTH.	TE  O4  ON  LORTH, LORDH	Passenger Daily A 6.10 AM  MINNEAD VERNER A 6.07 AM 6.06	Passenger Daily A 6.40 AM POLIS, A D BY GR A 6.37 AM 6.35 6.34	Passenger Ex. Mon. A 6.50 AM  A 6.47 AM 6.46 6.45	FIRST 304 Soo 14 Passenger Daily INEAPOIRTHERN A 7.02 M 7.01	CLASS 302 Soo 6 Passenger Ex. Sun.	Passenger Daily A 9.57 PM SENGER ABLE AN 9.54 PM 9.53 9.52	STATION RULI	N.
EA	ASTWARD T	Distance from Northtown.  See TR  4.7  4.8  4.1  2.9	Tim	April 2 STATminne (Passenger 0 FIRST S ID ENGI	le No. 3 28, 1957 I O N S APOLIS Station) .3 TREET N NES WIL EET NORTH4 CHT YARE .2 RRY JCT	TE  O4  ON  LORTH, LORDH	Passenger Daily A 6.10 AM  MINNEAD VERNER A 6.07 AM 6.06	Passenger Daily A 6.40 M POLIS, A BY GR A 6.37 M 6.35 6.34 6.30	Passenger Ex. Mon.  A 6.50 M  ND MINEAT NOB  A 6.47 M  6.46  6.45  6.42	FIRST 304 Soo 14 Passenger Daily INEAPOIRTHERN A 7.02 M 7.01	Soo 6 Passenger Ex. Sun.  LIS PASS TIME T  A 4.42 PM 4.41	Passenger Daily A 9.57 PM SENGER ABLE AN 9.53 9.52 9.49	STATION RULI	N.
EA	ASTWARD T	Distance from Northtown.	Tim	April 2 STATminne (Passenger 0 FIRST S ID ENGI	le No. 3 28, 1957 I O N S APOLIS Station) .3 TREET N NES WIL EET NORTH .0.4 GHT YARE 0.2 E. NORTH 1.2 RRY JCT	TE  OA  ON  LORTH, L BE GO	Passenger Daily  A 6.10 AM  MINNEA  VERNET  A 6.07 AM  6.06  6.05  6.02  L 5.58 AM	Passenger Daily  A 6.40 AM  POLIS, A  BY GR  A 6.37 AM  6.35  6.34  6.30  L 6.25 AM	Passenger Ex. Mon.  A 6.50 M  RAT NOR  6.46 6.45 6.42 L 6.38 M	FIRST 304 Soo 14 Passenger Daily INEAPOI RTHERN A 7.02 AM 7.01 L 7.00 AM	Soo 6 Passenger Ex. Sun.  LIS PASS TIME T  A 4.42 PM 4.41 L 4.40 PM	Passenger Daily A 9.57 PM SENGER ABLE AN 9.53 9.52 9.49 L 9.45 PM	STATION RULI	N.
EA	ASTWARD T	Distance from Northtown.  See TR  4.7  4.8  4.1  2.9	Tim  TWEEN AINS AN  WOOTE OLD TO THE	April 2  S T A T  MINNE (Passenger 0  FIRST S ID ENGI  IRST STR N. P. FREI 14th AVE	le No. 3 28, 1957 I O N S APOLIS Station) .3 TREET NORTH .6 GHT YARE .2 .2 .4 NORTH1 .2 .4 TREY JCT2 .4 TOWN	THE SOLUTION OF THACK	Passenger Daily  A 6.10 AM  MINNEA  OVERNEL  A 6.07 AM  6.06  6.05  6.02  L 5.58 AM  Daily	Passenger Daily A 6.40 AM POLIS, A 6.37 AM 6.35 6.34 6.30 L 6.25 AM Daily	Passenger Ex. Mon.  A 6.50 MIN EAT NOF  6.46 6.45 6.42 L 6.38 MI Ex. Mon.	FIRST 304 Soo 14 Passenger Daily INEAPOIRTHERN A 7.02 Au 7.01 L 7.00 Au Daily	CLASS 302 Soo 6 Passenger Ex. Sun.  LIS PASS TIME T  A 4.42 PM 4.41 L 4.40 PM  Ex. Sun.	Passenger Daily  A 9.57 PM  SENGER ABLE AN  9.53 9.52 9.49 L 9.45 PM  Daily	STATION RULI	
EA	ASTWARD T	Distance from Northtown.  See TR  4.7  4.8  4.1  2.9	Tin	April 2  S T A T  MINNE (Passenger 0  FIRST S ID ENGI IRST STR N. P. FREI 14th AVE MULBER NORTH	le No. 3 28, 1957 I O N S APOLIS Station) .3 TREET N NES WIL EET NORTH4 CHT YARE .2 RRY JCT	TE OA DN DOUBLE TRACK	Passenger Daily  A 6.10 AM  MINNEA  VERNET  A 6.07 AM  6.06  6.05  6.02  L 5.58 AM	Passenger Daily  A 6.40 AM  POLIS, A  BY GR  A 6.37 AM  6.35  6.34  6.30  L 6.25 AM	Passenger Ex. Mon.  A 6.50 M  RAT NOR  6.46 6.45 6.42 L 6.38 M	FIRST 304 Soo 14 Passenger Daily INEAPOI RTHERN A 7.02 AM 7.01 L 7.00 AM	Soo 6 Passenger Ex. Sun.  LIS PASS TIME T  A 4.42 PM 4.41 L 4.40 PM	Passenger Daily A 9.57 PM SENGER ABLE AN 9.53 9.52 9.49 L 9.45 PM	STATION RULI	N.

SPECIAL INSTRUCTIONS, PAGES 7, 8, AND 12.

## **SPECIAL INSTRUCTIONS**

### ALL SUBDIVISIONS.

1.	SPEED	RES	TRICTI	ON	IS-	-
	35		C	n.		

Maximum Speeds Permitted—
Passenger trains \_\_\_\_\_\_\_\_75 MPH.
Freight and mixed trains \_\_\_\_\_\_\_50 MPH.

The above speeds are subject to the restrictions of maximum speeds 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, 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 green).

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 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.

and Scale Test Car 254	Branch Lines	.25 MPH.
Picking up train orders from operat	ors	.30 MPH.
Engines—	Handling	
Člasses—	trains	light
A and Q (except on passenger		
trains where higher speed is authori	ized)60 MPH.	60 MPH.
Z-6, 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 engin	ie	
trucks, under all conditions	15 MPH.	15 MPH.
All other steam engines, backing up	30 MPH.	30 MPH.
(This restriction does not apply when		
are used as helpers not on head end	d of train.)	
Diesel-electric engines—	0 × 35077	
No. 98	35 МРН.	35 MPH.
400, 600 and 700 series	45 MPH.	45 MPH.
No. 525	60 МРН.	60 MPH.
No. 100	40 MPH.	40 MPH.
100 series except No. 100 and N	lo. 800	40 35 <b>5</b> 51
to No. 803, incl	60 MPH.	60 MPH.
500, 501 and 552 to 569, incl 6000, 7000, 200, 300, 850 an	65 МРН.	65 MPH.
6000, 7000, 200, 300, 850 an	id 860	45 35DTF
series except No. 244 and N	o. 24565 MPH.	65 MPH.
No. 244, No. 245, 6500, 6600 an	d 6700	0 - 3 - DTT
series	75 МРН.	65 MPH.
5400 series	55 MPH.	55 MPH.
No. 550 and No. 551		
Diesel-electric and gas-electric moto	or cars, in service	or being
towed—		
Car B-13		55 MPH.
Cars B-6, B-11 and B-15 to 26	incl	65 MPH.
Cars B-30, B-40 and B41		75 MPH.

Coming from shops, under steam, to prevent running hot:
All A and Q and classes Z-6, Z-7 and Z-850 MPH.
S-4, T, T-1, W to W-5 inc., Y-235 MPH.
Y, Y-1
Main Line—With main and side rods removed:
All A and Q and classes Z-6, Z-7 and Z-830 MPH.
S-4, T, T-1, W to W-5 inc., Y to Y-2 inc
With main rods removed and side rods in place:
All A and Q and classes Z-6, Z-7 and Z-835 MPH.
S-4, T, T-1, W to W-5 inc., Y to Y-2 inc30 MPH.
Branch Lines—with either or both main and side rods removed:
All A and Q classes25 MPH.
All other classes20 MPH.
On bridges—With either or both main and side rods removed:
Steam switch engines, without engine trucks15 MPH.
Other steam engines20 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 doubleheader restrictions, are specified, doubleheaders of different classes of engines will be governed by the restrictions applicable to doubleheaders 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 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.

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.

To avoid possibility of fire or damage to traction motors, dieselelectric 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.

Unit letters will be used in addition to engine numbers of all passenger and freight road diesels except Engines 6600 & 6601. 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 order 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-6 to Z-8 inc., but must be separated from them by at least two cars of not over 169,000 pounds total weight, for movement

over bridges. Use of Mars headlight on engines so equipped-

The Mars headlight can be displayed with either stationary or oscillating white light at the same time that the standard headlight is in use, but cannot be displayed with either stationary or oscillating red light when the standard headlight is in use. The Mars white light may be used in a stationary position as a substitute headlight in case of failure of the standard headlight, but will normally be used as an oscillating light during the time full display of standard headlight is required.

The Mars oscillating red light will be used when head end protection is required, either by day or by night by engineer control. if the train becomes disabled or is 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.

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

The Mars red light shall be displayed in stationary position 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 shall be extinguished, and the standard white headlight turned on dim until opposing train is into clear on siding.

The use of the red headlight does not in any manner relieve the train or enginemen of responsibility for compliance with the pro-

visions of Rules 99 and 102.

Rule 19, Figs. 2 to 9, inclusive, and Rule 19(b) of the Consolidated Code of Operating Rules and General Instructions, Edition,

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"

"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".

- 6. Rule 200-Lights will not be displayed by night on train order signals on the 3rd, 4th, 5th, 6th, 7th and 8th subdivisions. Trains will be governed by the day indication of these train order signals.
- 7. Rule D-97 applies to all divisions.

8. Rule 606: Emergency Signals are not used at interlockings or drawbridges operated by the Northern Pacific Railway.

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

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 caboose in trains.

10. 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.

Locomotives 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.

12. 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.

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

(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. Exception-If indicator fails to show proceed or "UN-LOCKED" 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.

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 signals 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 signed 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.

- Within yard limits all second class and inferior trains and transfer runs occupying main tracks, must display a red flag by day and in addition a red light by night on the rear end of the rear car, except when caboose is used marker lamps displaying red lights to the rear must be used by day and night. The presence or absence of a red flag or a red light will not relieve the approaching train of responsibility for collision where limited to restricted speed, either by speed restrictions or Rule 93. In case of collision, the responsibility will ordinarily rest with the approaching train proaching train.
- 15. Passenger extras, transfers and light engine movements may run ahead of delayed first class trains without train order authority; conductors and switch foremen and engineers of light engines will inform themselves through Yard Master, or Train Dispatcher Minneapolis, as to how late first class trains will be and avoid delaying them.
- 16. In the Twin City Terminals, overhead bridges, protected by tell tales, will not clear man on tank of all A and Z classes engines.
- 17. The City ordinances of St. Paul and Minneapolis prohibit the unnecessary use of the engine whistle.
- 18. BULLETIN STATIONS— St. Paul, Telegraph Office, Union Depot. 4th Street, Yard Office. Mississippi Street, Round House and Yard Office. C.M.St.P.&P. New Yard, Round House & Yard Office. Northtown, Round House and Yard Office. N. P. Freight Yard, Yard Office. East Minneapolis, Yard Office.
- 19. STANDARD TIME CLOCKS— St. Paul, Telegraph Office, Union Depot. Mississippi Street, Round House and Yard Office. Minneapolis, Dispatcher's Office. Northtown, Telegraph Office. White Bear Lake, Telegraph Office.
- 20. WATCH INSPECTORS-St. Paul, Christensen's, 144 East 5th Street.
  - A. Lindahl, 910 Payne Ave. C. J. & H. W. Anderson, 1573 University Ave. Northern Watch Co., 342 Robert St.

- Minneapolis, Samuel H. Lindquist, 4171 Washington Ave. North.

  "Emil Gustafson, 2201 Central Ave.

  Buchkosky & Wikstrom, 1106 West Broadway St.

  Olson Jewelry Co., 211 East Hennepin Avenue.

  Oscar P. Gustafson, 410 Nicollet Ave.

  - Kavchar Jewelry, 2213 Central Ave.

Stillwater, Peder Gaalaas.

### FIRST SUBDIVISION.

BETWEEN 3RD STREET, ST. PAUL AND STILLWATER.

1. Speed Restrictions-

	Freight	
Zone—Between	and mixed	Passenger
White Bear Lake and St. Paul	50 MPH	60 MPH
	Engine	s Classes
Between	_	T Diesel or
White Bear Lake and	W	lighter
Stillwater	20 MPH	80 MPH
	Westward	
At St. Paul, between East 7th	use	
Street and 3rd Street	15 minutes	15 MPH.
At St. Paul Union Depot, throu	gh crossovers.	
turnouts and puzzle switches		10 MPH.
All	back up movem	ents 8 MPH.
At White Bear Lake, all movem	ents over State	,

2. Bridge and Engine Restrictions-

At St. Paul Union Depot, all Classes A engines not permitted on tracks 1 to 5, inclusive, and tracks 6, 7 and 8 under con-course. The stack extension must not be used in terminals. Between White Bear Lake and Stillwater steam engines heavier than class W not permitted.

Bridge 11, North Broadway Street, Stillwater: Steam engine classes T, Y to Y2 and heavier wrecking cranes 41 to 48 inc. and pile drivers No. 25-28 not permitted. Steam engine classes L9 and S4 and lighter ...... 8 MPH. Diesel engines ......10 MPH.

Heavy Car Restrictions-Bridge 11-Cars with total weight exceeding 214,000 pounds not permitted except on authority of Superintendent.

Cars with total weight exceeding 169,000 pounds must be separated from each other and from engine or tender with a car 40 feet long with total weight not over 169,000 pounds; trains handling such cars .....

3. At 3rd Street, St. Paul, crossing with C. B. & Q. R. R. is single track.

The N. P. Ry. and C. B. & Q. R. R. joint tracks between 3rd Street and Division Street are operated under yard rules. All train and engine movements, including first class trains over these tracks are controlled by switchtenders at 3rd Street and Signalman at Division Street and no train or engine may move over these tracks except as controlled by switchtenders at 3rd Street and signalman at Division Street. Eastward movements will only be made on proceed signal from switchtenders at 3rd Street and westward movements will be governed by interlocking signals operated from Division Street.

- East of 4th St. Bridge, all westward trains using crossover to eastward main track will stop and proceed upon signal from 3rd Street Switchtender. Trains moving against the current of traffic on eastward main track will approach crossover expecting to find it in use.
- 5. Between 3rd Street and Claymont, trains running against the current of traffic, will approach Omaha Crossing at Forest Street prepared to stop and know that crossing is clear before proceeding.

Westward freight trains will be governed by the following instructions on the grade between Claymont and 3rd Street, St.

Engineer controlling train must adjust feed valve on engine to obtain 90 pounds brake pipe pressure following the stop for grade crossing at Gloster. Train to be stopped at Claymont for turning up retaining valves and making a brake pipe test. Engineer to sound one blast of steam whistle to advise trainmen that brakes are fully applied for test.

Retaining valve handles must be turned up to the low pressure position (horizontal) as follows:

Trains of 1000 tons or less, no retainers.

Trains of over 1000 tons and up to 4000 tons, use 15 retainers and as many more as engineer requests.

Trains of over 4000 tons, use 15 retainers and 1 additional retainer for each 100 tons in excess of 4000 tons and as many more as engineer requests.

Retainers to be turned up on head portion of train beginning at the engine and not turned down until stop has been made at 3rd Street.

### 6. AT EAST 7th STREET

Spur track switch at C. St. P. M. & O., Interlocking equipped with electric switch lock. The following will govern operation of electric lock and movement to or from spur track:

To enter spur track,

- (a) Interlocking must be lined for Northern Pacific.
- (b) Short unlock track circuit between eastward dwarf signal and switch must be occupied.
- (c) Provisions of Item 12 (sections a, c and d) page 8 apply.

To leave spur track when switch is lined and locked in normal position,

- (a) Interlocking must be lined for Northern Pacific.
- (b) Provisions of Item 12 (sections a, c and d), page 8 apply, except that movement must be made in accordance with indication displayed by dwarf signal located at clearance point. This signal will indicate proceed after switch is reversed if track is unoccupied westward to signal 1.3.
- 7. At Claymont and East 7th Street, switch foremen and engineers of light engines must call operator Gloster or switch-tender 3rd Street and inform themselves as to first class trains before entering main track. Movement may then be made ahead of delayed first class trains without train orders. Care must be used not to delay them.
- 8. At Gloster, automatic crossing protection signals at Frost Avenue do not operate for reverse current traffic movements. Trains or engines moving against the current of traffic must move over the crossing under protection of flagman.

A "STOP" sign for westward trains via Soo Line is placed on the Northern Pacific-Soo Line connection 500 feet east of Soo Line main track switch. If train orders or clearance received when stop is made authorizes movement onto Soo Line main track, train may proceed.

9. At White Bear Lake, normal position of switch at end of double track west of passenger station is for westward trains. Switch will be handled by Operator who will give Signal 12C to eastward Lake Superior Division trains when he has information required by Rule S-83 and authority of Lake Superior Division train dispatcher.

Eastward trains making stop at passenger station must stop with engine or cars west of white post located on south side of track.

Eastward Extras picking up in New Yard will cut off far enough west of Ramaley Avenue so as not to foul the ringing section of the automatic crossing signals on that avenue.

At new yard, the normal position of west switch of crossover will be for the lead to the yard.

Cars must not be spotted on Bald Eagle lead within 800 feet of Fourth Street crossing.

When trains will be delayed more than ten (10) minutes, crossings must be opened promptly.

From Summit to Stillwater, retaining valves must be used. Engineer will determine minimum, and Conductor will use any additional number that he considers necessary.

### 11. Yard Limits-

3rd Street Yard St. Paul to yard limit sign east of Gloster.

### 12. Short Clearances-

St. Paul Yard, overhead bridge at Omaha crossing, and tunnels under 7th Street, located 700 feet east of Third Street, will not clear a man on side of car. Minnehaha and Reaney Street bridges, opposite Hamm's Brewery, will not clear a man on top of car.

### 13. Register Stations-

St. Paul, Telegraph Office Union Depot.

Gloster. White Bear Lake. Stillwater.

Mississippi Street Yard Office, for trains originating or terminating.

### 14. Register Exceptions-

When no operator on duty at Mississippi St. Yard, check of the register shall be secured from Mississippi St. Tower.

At Gloster, trains will register by Form 608. Operators will deliver orders and clearances to trains passing through the wye at wye switch. Eastward trains passing through the wye will be given check of register on Form 602.

At White Bear Lake, westward second class trains and extras from the Lake Superior Division will register by Form 608 and will be given check of register on Form 602 and clearance by operator.

At Stillwater, conductors of trains and enginemen of light engines will fill out register Form 608, covering their arrival and departure and will deliver to the operator at White Bear Lake.

### 15. Clearance Exceptions-

At 3rd Street, C.M.St.P.&P. trains starting will be governed by clearance furnished at C.M.St.P.&P. yard.

At St. Paul, N. P. trains will be governed by clearance furnished at Union Depot.

At Mississippi St. Yard, when no operator on duty N. P. trains via Soo Line to Gloster will secure Soo Line clearances at Mississippi St. Tower.

At Gloster, C.M.St.P.&P. helper engines must secure clearance.

At White Bear Lake, no train order signal. All trains will secure clearance.

At Stillwater, clearance not required.

### 16. Cross-overs-

3rd Street, 4th Street, Claymont, Gloster, M. & D. Jct.

### SECOND SUBDIVISION.

### BETWEEN 3RD STREET, ST. PAUL AND 20TH AVE. SOUTH, MINNEAPOLIS AND

### LINE B. BETWEEN ST. ANTHONY PK. JCT. AND NORTHTOWN

1.	Speed Restrictions— Zone—Between	Freight and mixed	Passenger
	Mississippi St. Tower and 7th St.		
	(West Side line) and 3rd St. (East Side line)	15 MPH	20 MPH.
	Mississippi St. Tower and First St.	35 MPH	35 MPH.
	North Except: Lafayette Ave. and 7th	35 MPH	All Trains
	St. Bridge (West Side line)		8 MPH.
	23rd Ave. S. E. & 20th Ave So. (Minneapolis)		25 MPH.
	At Mississippi Street Interlocking	***************************************	12 MPH.
	At Como Avenue and Como Place, At Snelling Avenue, over crossing	over crossings	35 MPH. 15 MPH.

### 2. Bridge and Engine Restrictions-

At St. Paul Union Depot, all classes A engines not permitted on tracks 1 to 5, inclusive, and tracks 6, 7 and 8 under con-The stack extension must not be used in terminals. At 4th Street, on West Side Line, classes W and W-3 engines must not move on track six (6) beyond the west end of yard office account sharp curve. Lafayette Ave. Viaduct, on East Side Line, engines classes Z-6, Z-7 and Z-8 will not pass under, on Eastward track. At Miss. St. Steam engines heavier than class T not permitted on Storeroom Tracks 4 and 5. Bridge 4, Chatsworth Street, Bridge 7, Raymond Avenue, Bridge 7-1, Bayless Avenue, Line A, engine classes A-2, A-3, A-4, A-5, Z-6, Z-7, Z-8 and CB&Q classes M-1, M-2, M-2A and U-5A \_\_\_\_\_\_\_10 MPH. Engine classes A, A-1, W-3, W-5 and CB&Q classes S-4 and S-4A ...... Trains handling wrecking cranes 45, 46, 47 and 48.....15 MPH. Bridge 7-3, Manville Street, Line A, engine classes A-4, A-5, Z-7 and Z-8 and CB&Q classes M-1, M-2 and M-2A 10 MFH Engine classes A-2, A-3, Z-6 & CB&Q class O-5A 20 MPH Bridge 7, Bayless Avenue, Line B, engines classes A-2, A-3, A-4, A-5, Z-6, Z-7, Z-8 and CB&Q class O-5A 10 MPH. Engines classes A, A-1, W-3, W-5 and CB&Q classes S-4 and S-4A 20 MPH.
Trains handling wrecking cranes 45, 46, 47 and 48....15 MPH.
At St. Anthony Park Jct., all engines classes A, CBQ M1, M2,
M2A and 05A and heavier not possible. M2A and 05A and heavier not permitted on west leg of wye. Line A, St. Anthony Park Jct. to First Street North, Minneapolis, all A classes and Classes Z-6, Z-7, Z-8 and CBQ M1, M2, M2A and 05A engines not permitted. M2A and oba engines not permitted. Como Yard, East End—Class W-3, W and G engines permitted only on passing, Scales, Store No. 1 and Scale pocket tracks also tracks 15 and 16, 300 feet beyond crossover. Class W-3, W and G engines also permitted on lead tracks to Koppers Coke Yard and all tracks in Koppers Coke Yard. West End—Class W and G engines permitted only on west lead as far as No. 9 switch and on House and Wheel tracks.

3. At 3rd Street, St. Paul, crossing with C. B. & Q. R. R. is single track. Westward second class and inferior trains may run ahead of delayed first class trains, when given the route by switchtenders. Double track switch on East Side Line is protected by a derail and color light signal on eastward main track. All eastward trains picking up or setting out cars must leave their train west of the derail. The N. P. Ry. and C. B. & Q. R. R. joint tracks between 3rd Street and Division Street are operated under yard rules. All trains and engine movements, including first class trains over these tracks are controlled by switchtenders at 3rd Street and Signalman at Division Street and no train or engine may move over these tracks except as controlled by switchtenders at 3rd

Street and signalman at Division Street. Eastward movements will only be made on proceed signal from switchtenders at 3rd Street and westward movements will be governed by interlocking signals operated from Division Street.

At Mississippi Street Interlocking—(Connection East and West Side Lines). The train order signal at Mississippi St. tower is to govern Soo Line, Chicago Division outgoing trains exclusively. All movements approaching on main track will be governed by the interlocking color light signal located 100 feet west of the interlocking tower, governing routes as follows: Top light governs movements on eastward main track to 3rd Street. Bottom light governs movements over turn-out to 4th Street yard, via west side line, and movements over cross-over between the eastward and westward main tracks of east side line. Use whistle signals for routes as follows:

West Side Line .....Two long. East Side Line .....Three long. Round House .....Four long. Coal Dock ......Five long.

All movements approaching on east side line will be governed by the interlocking color light signal located 500 feet east of Mississippi Street Bridge. Top light governs movements on westward main track and bottom light governs movements to back lead of Mississippi Street yard. Use whistle signals for routes as follows:

Main Lines .....One long. Back Lead .....Two long.

All movements approaching on west side line will be governed by the two armed semaphore located 500 feet east of Mississippi Street Bridge. Top arm governs movements for west-ward main track and bottom arm governs movements to back lead of Mississippi Street yard.

Use whistle signals for routes as follows:

Main Lines ..... ..One long. Back Lead .....Two long.

All eastward movements out of east end of Mississippi Street yard will be governed by color light signal located 50 feet west of Mississippi Street Bridge.

Use whistle signals for routes as follows:

West Side Line .....Two long. East Side Line .....Three long.

- 5. At Soo Line Jct., Soo Line crews desiring to make reverse movements between Soo Line Jct. and switch of west leg of wye at Trout Brook Jct. before entering the main track will call signalman at Mississippi Street Tower and ascertain if all first class trains due have passed, or if any transfers are moving over westward track, between Mississippi Street Tower and Soo Line Jct. Movement must then be protected as per Rule 99.
- 6. At Como Ave., Como Place and Snelling Ave. crossings, where automatic electric signals are installed, engine whistles must not be sounded except to prevent accidents.
- 7. At Snelling Ave., St. Paul, Line "A".
  When westbound trains are to pick up cars at Como or Koppers Coke, trains must stop and cut off engine at Automatic Signal 55, located 1400 feet west of Como Shops. Conductors and switch foremen will be held responsible for the above instructions being complied with.
- 8. At Union, all eastward and westward trains going to or coming from Great Northern Yard, must call signalman St. Anthony Park Jct. on phone and obtain permission to cross over.
- 9. At St. Anthony Park Junction Interlocking-Enginemen will call for routes as follows: Straight Main Line East or West (Line A)......One long. Line A to Line B Westward track ......Two long. Line A to Eastward track Line B ......Three long. Line B to Line A Eastward track ......One long. Line A is 2nd and 3rd Subdivision.

- 10. At Eustis Street Yard, all trains must call St. Anthony Park Jct. signalman on phone located in Yard Office and obtain permission to cross over before fouling either the eastward or westward main track. In order to prevent cars running out over the derails at the west end of Eustis Street Yard, the hand brakes must in all cases be set with a club on the first six (6) cars from the west end of each track. Yard foremen will be held responsible for knowing this is done.
- 11. Between Eustis Street and 25th Avenue S.E. engine bell will be kept ringing while engine is in motion.
- 12. Line B, double track line, nonautomatic block, is a switching and alternate route between St. Anthony Park Jct. and Northtown, via East Minneapolis. All movements on these tracks are governed by the provisions of Rule 93. Transfer runs occupying main tracks must display a red flag by day and in addition a red light by night on the rear end of the rear car, except when caboose is used, marker lamps displaying red lights to the rear must be used by day and night. The presence or absence of a red flag or a red light will not relieve the approaching train of responsibility for collision where limited to restricted speed, either by speed restrictions, or Rule 93. In case of collision, the responsibility will ordinarily rest with the approaching train.
- 18. At Park Jct., when cars are set out in the Eastbound Yard, sufficient hand brakes must be set to prevent cars running out at west end. Also when trains or portions of trains are left standing on the main track while cars are being set out or picked up, air must first be set before cutting off engine or cars.
- 14. Yard Limits—
  3rd Street, St. Paul to 20th Avenue South, Minneapolis, including 3rd and 4th Street Yard, St. Paul.
- 15. Short Clearances— At St. Paul, short clearances for man on side of car: Lafayette Ave. bridge on East and West Side Lines, stone wall west of Lafayette Ave. bridge on East Side Line and stone wall along diagonal track, 4th Street Yard.

At St. Paul, tunnels on East and West Side Lines and 6th Street bridge in 4th Street Yard will not clear a man on side or top of car.

At St. Paul, doorway of Atlas Mfg. Company's building near Robbins and Eustis Streets will not clear a man on top or side of car and the picking up or setting out of cars must be done outside of building.

At Southeast Minneapolis, three overhead cranes are located on spur to Lewis Bolt and Nut Co. galvanizing plant. Employes must not ride on top of cars approaching or moving under the overhead trolley beams. Beams will not clear a man on top of box car or high load.

The following overhead bridges and structures will not clear a man standing on top of tender piled high with coal, of engines classes Z-6, Z-7 and Z-8, and all A classes:

St. Paul:

St. Paul Union Depot; 6th Street O. H. bridge, East and West Side Line; Lafayette Ave. O. H. bridge, West Side Line; Mississippi Street Tunnels, East and West Side Lines; Mississippi Street O. H. bridge.

Minneapolis:

Minneapolis Passenger Station; First Street No. O. H. bridge; 4th Ave. No. O. H. bridge.

Northtown:

St. Anthony Blvd. O. H. bridge; Soo Line O. H. bridge; University Ave. N. E. O. H. bridge (Line B).

Register Stations—
 St. Paul, Telegraph Office Union Depot.
 St. Paul, 4th Street Yard Office, for M. & St. L. freight trains.
 Mississippi Street Yard Office, for trains originating or terminating.

17. Clearance Exceptions—
At 7th Street, Mississippi Street Yard, Soo Line Jct., 6th Ave.
South, 3rd Ave. North and First Street North, clearance not required.

18. Crossovers-

3rd Street, Mississippi Street, Maryland Street, Soo Line Jct., Chatsworth Street, Snelling Ave., Union, St. Anthony Park Jct., Eustis Street, 27th Ave. South East, 18th Ave. South East, East end Mississippi River bridge, 19th Ave. South, 10th Ave. South, 8th Ave. South, 7th Ave. South, 6th Ave. South, 2nd Ave. North, 3rd Ave. North.

19. Derail Switches—
St. Paul, East Side line, eastward track near 4th Street Bridge.

### FOLLOWING M.&ST.L.RY. SPECIAL RULES GOVERN MAIN TRACK MOVEMENTS BETWEEN 20TH AVE. SOUTH AND 3RD AVE. NORTH, MINNEAPOLIS.

These special rules govern main tracks of the Minneapolis & St. Louis Railroad Company between 3rd Avenue North and 20th Avenue South, Minneapolis, and they supersede all other rules and instructions inconsistent therewith.

Maximum speed limit for passenger trains, 20 miles per hour; for all other trains and light engines, 15 miles per hour.

Between 3rd Avenue North and 6th Avenue South, and between 18th and 20th Avenues South, maximum speed limit for passenger trains, 15 miles per hour; for all other trains and light engines, 10 miles per hour.

All trains and engines must move under control between 3rd Avenue North and 20th Avenue South.

"Under Control" as used herein means being able to stop within the distance track is seen to be clear.

All trains, transfers and light engines will register by ticket at 3rd Avenue North.

Between 1st and 2nd Streets South, Minneapolis; 9:00 AM to 5:00 PM daily except Sundays and holidays, all trains and engines approaching the crossover will come to a stop unless proceed signal is received from the flagman on the ground at or near this crossover. Trains and engines on Minneapolis and St. Louis tracks be signaled with a green flag by day and a green light by night. Trains and engines on Minneapolis Eastern be signaled with a yellow flag by day and a yellow light by night.

5:00 PM to 9:00 AM daily and 9:00 AM to 5:00 PM on Sundays and holidays, trains and engines using the Minneapolis Eastern tracks will proceed over crossover under flag protection. Other trains and engines must at all times approach this crossover under full control, expecting to find the crossover occupied.

Proceed signals given by flagman on the ground at or near the crossover between 1st and 2nd Streets South, Minneapolis, only govern the crossover and must not be construed as indicating that main track beyond is clear.

Unless otherwise ordered train orders are not required between 3rd Avenue North and 20th Avenue South. Engines and trains must use right-hand track and move with the current of traffic. Switch engines may use the double track between these points on the time of all except first class trains, under protection, but be prepared to clear main track without delay to regular trains and transfers; and may use the track UNDER PROTECTION, on the time of first class trains after such trains are five minutes late.

Second and inferior class and extra trains and switch engines may run ahead of first class trains which are five minutes or more late when this can be done without delay to first class trains, and may be run ahead of each other, without orders.

All trains, switch engines and light engines occupying main tracks at any point between 3rd Avenue North and 20th Avenue South must be protected, but this rule will in no manner relieve enginemen of responsibility in case of collision, for failure to

observe speed restrictions or for failure to move under control at any point, and in case of collision, responsibility will ordinarily rest with the approaching train.

Movements over crossovers must be protected in both directions. Movements between 3rd Ave. North and 1st Street South will be governed by automatic block signals; the end of track section protected by automatic block signals is indicated by a sign post reading, "End Block." Lights will govern train movements by day as well as by night; one light only should appear at any one time. A green light indicates track clear, Proceed. A yellow light indicates Caution, that block in advance is occupied, approach next signal at end of block under control. A red light indicates Stop, block not clear, broken rail, open switch or other obstruction, and train must be brought to a full stop at least 20 feet back of signal and may then proceed under control expecting to find the block obstructed and enginemen will be held responsible in case of accident caused by overtaking a preceding train. When signals are out of order, that is when two lights or more show at the same time, or when a white light is shown, or when no lights show, it will be considered a Stop Signal and trains will proceed accordingly; enginemen will report the signal that is out of order to Superintendent at first available telephone or telegraph office. It must be understood that automatic block signals in no way relieve men in charge of trains, switching transfers and light engines, of protecting whenever and wherever required by these special rules.

Switches at 3rd Avenue North will be handled by switch tenders. All trains and engines must approach these switches under control, prepared to stop, and must not proceed until it is known that the track is clear, switches are right, and a proceed signal has been received from the switch tender.

Dwarf signal located 626 feet west of Cedar Avenue Bridge is connected with main track switch to Wheat Yard, Railway Transfer.

All eastward trains or engines will approach signal prepared to stop and will not pass the signal unless at proceed position. When signal is at stop position and when not on the time of first class trains and when weather conditions are favorable for vision, trains (except first class) and engines with or without cars may occupy the eastward main track between the signal and 20th Avenue South without flag protection.

Engine bell must be kept ringing when engine is moving at all points between 3rd Avenue North and 20th Avenue South. Cars must not be left on main track without an engine attached unless unavoidable in case of accident, in which event they must be protected by flagmen.

Between sunset and sunrise and at other times when day signals cannot be clearly seen, a red light must be displayed on the rear of all transfer trains; when such trains are provided with caboose, proper display of markers is required.

Between 3rd Avenue North and 20th Avenue South, passenger train flagmen must ride outside on rear platform to be in position to drop off immediately their train stops and protect it. Conductors will see that flagmen comply with this rule.

### THIRD SUBDIVISION.

BETWEEN FIRST STREET NORTH AND NORTHTOWN, INCLUDING MULBERRY LINE.

1. Speed Restrictions-

Freight mixed and

Passenger

Zone-Between

mixed and other trains

Not exceed average of

First St. and Northtown ....... Use not less than 12 minutes

Schedule Speed

2. Bridge and Engine Restrictions-

At Minneapolis Passenger Station, all classes A engines not permitted on tracks 1 to 4, inclusive, tracks 12, 13 and 14. Elevator shaft on West End of track 7 will not clear these engines backing.

The stack extension must not be used in terminals.

At NP Freight Yards: Steam engines heavier than Class W not permitted on tracks in this yard, except Class W-5 permitted on transfer tracks 1, 2 and 3 and yard tracks 16, 17 and 18.

Steam engines Classes G-1 and heavier not permitted over the following tracks:

Bousfield Wooden Ware Co. tracks. Gluek Brewing Co. tracks.

Track 6, 24th Avenue North Yard.

At Northtown: Steam engines heavier than Class W-5 not permitted on the following tracks:

Tracks leading to and including Republic Elevator tracks 1, 2, 3 and 4.

Grove Yard: Tracks 1, 2, 3, 4 and 5.

D Yard: Repair track lead and rip pocket track. Tracks 16, 17, 18, 19 and House Lead.

West End D Yard: Steam engines heavier than Class W-5 permitted on tracks D-3 to D-12 inclusive, only as far as 33rd Avenue overhead bridge.

East End D Yard: Steam engines heavier than Class W-5 not permitted except on tracks D-1 and D-2.

Steam engines Classes W and heavier, except Class G, not permitted over Gould Elevator tracks.

At Northern States Power Co., Riverside Plant, engines Classes G-1, G-2 and T are permitted on track 5 only, and then only as far as the clearance post. Engines are not permitted on trestle bridges.

- 3. At Minneapolis Passenger Station, when westward passenger trains are pushed, helper engine will be cut off at the stop board.
- At First Street North, after stop is made, all eastward trains and light engines must receive proceed signal from G. N. switchtender before proceeding.
- 5. At Mulberry Jet., a telephone is located on pole adjacent to wye track. Conductors and switch foremen and engineers of light engines before entering Line A must call train dispatcher, Minneapolis, on telephone, and ascertain if all first-class trains due have passed.
- At Northtown, switchtenders' territory extends from Soo Line overhead bridge to three hundred and ten (810) feet east of 33rd Ave. N. E. overhead bridge.

Eastward trains from eastward main line to Line A will not be governed by Stop Sign located east of Soo Line overhead bridge.

7. Yard Limits-

First Street North, Minneapolis, to Yard Limit Sign west of Northtown.

8. Short Clearances-

At Minneapolis Passenger Station, clearance between track and elevator shafts, tracks 3, 5, 7 and 11 at both ends is not sufficient to permit men riding on side or steps of engines. Enginemen must use care when passing.

At Minneapolis, between Plymouth Ave. North and Broadway Street North, the side clearance along the Omaha delivery track adjoining the main track and between the Omaha delivery and receiving tracks is not sufficient to permit men riding on side of cars at all points.

Northtown, east end D yard, short side clearance between tracks 2 and 3 for distance of two hundred (200) feet from lead. Cars must not be left standing on track 2 within the above distance from lead and all employes should avoid standing between tracks 2 and 3 at that point when cars are moving on both tracks.

9. Register Stations— Minneapolis passenger station. Northtown.

 Register Exceptions— At Northtown, first class trains and passenger extras will register by Form 608. 11. Clearance Exceptions—
Eastward trains will not require clearance at Northtown if train

order signal is in proceed position.

Trains whose runs terminate at N. P. Freight Yard, Minneapolis,

may leave Minneapolis passenger station without clearance.

Passenger extras originating, must secure clearance at Minneapolis passenger station.

At First Street North, N. P. Freight Yard, and 15th Ave. North,

clearance not required.

12. Crossovers-

N. P. Freight Yard, 15th Ave. North, Broadway Street North, Grand Street, Mulberry Jct., Lowry Ave., Northtown.

### FOURTH SUBDIVISION.

### BETWEEN EAST MINNEAPOLIS AND M. & D. JCT.

1. Speed Restrictions-

Between East Minneapolis and M. & D. Jct. \_\_\_\_\_\_ 80 MPH

- Bridge and Engine Restrictions— Steam engines heavier than Class W-5 not permitted.
- At East Minneapolis, normal position of east wye switch, east of Broadway crossing, will be for the Minneapolis Branch main track.
- 4. At White Bear Lake, New Yard, Conductors on transfers moving via Minneapolis Branch will call train dispatcher Minneapolis, on telephone, immediately before departure and advise time train will depart.
- 5. Register Stations— East Minneapolis.

### 6. Clearance Exceptions-

At M. & D. Jct. and East Minneapolis clearance not required.

# SPECIAL INSTRUCTIONS FOR GREAT NORTHERN FAIR GROUNDS AUTOMATIC INTERLOCKING

Signals for train movements in either direction on either track will not indicate Proceed unless gates are set and properly locked against G. N. trains and the smash board on the route desired is in the Proceed position.

The derail on NP Industry Track is connected to and thrown by the switchstand.

When a train is stopped by a Home or Dwarf signal trainman will go to the crossing, unlock the release box and operate the release after making certain gates are set against G. N. trains.

# SPECIAL INSTRUCTIONS FOR 18TH AVE. N. E. MINNEAPOLIS AUTOMATIC INTERLOCKING.

The signals for the G. N. tracks are color light type and for the N. P. track are semaphore type equipped with smashboards.

N. P. trains must Stop within one hundred (100) feet of the home signals and wait for two (2) minutes for time relay to operate before smashboards and signal will indicate Proceed.

If the smashboards do not clear and signal does not indicate proceed after two minutes have elapsed, and no train is approaching on an opposing line, trainman shall go to the crossing and operate the hand release. After operating release, wait two (2) minutes and if the automatic home signal does not indicate Proceed and no immediate crossing train movement is evident, the trainmen at the crossing, after placing themselves in position to fiag any train movement on the conflicting line, may hand signal their train to proceed over the crossing.

### SPEED TABLE

w	Time Per mile Minutes Seconds		Miles Per Hour	Per Per mile					
	muco	Beconds							
	0	45	80	1	12	50			
	Ŏ	46	78.3	1	15	48			
	Ö	47	76.6	1	20	45			
	Ŏ	48	75	1	25	42.8			
	Ŏ	49	78.5	1	80	40			
	Ŏ	50	72	1	40	36			
	ŏ	51	70.6	1	45	84.8			
	ŏ	52	69.2	1 1 2 2	50	\$2.7			
	Ŏ	58	67.9	2	• •	80			
	Ŏ	54	66.6	2	10	27.6			
	Ŏ	55	65.4	2	15	26.6			
	Ö	56	64.2	2 2	20	25.7			
	ē	57	63.1	1 2	30	24			
	0	58	62.0	2	40	22.5			
	Ö	59	61.0	2 2	45	21.8			
	1	-	60	3	50	21.2			
	ī	1	69	8		20			
	1 1	3	58		. 9	19			
	ī	3	57.1	8	20	18			
	1	4	56.2	] 3	81	17			
	1 1	5	55.8	8	45	16			
		6	54.5	4	• •	15			
	1 1	7	58.7	[ 5	• •	12			
	1	8	52.9	6		10			
	1	,	52.1	7	20	8			
	1	10	51.4	10	• •	•			

### RAILROAD CROSSINGS AND INTERLOCKINGS.

### First Sub-Division

EAST 7TH STREET.

C. St. P. M. & O. Crossing—Interlocking. Operated by trainmen.
GLOSTER. Soo Line Crossing (Gate).

DULUTH JCT. Soo Line Crossing.

### 2nd Sub-Division

MISSISSIPPI STREET.

Junction East and West Side Lines—Interlocked. G. N. CROSSING. Fair Grounds—Automatic interlocking. ST. ANTHONY PARK JUNCTION.

Junction Lines A and B-Interlocked.

LINE B-PARK JCT.

Minn. Transfer Ry. Crossing-Interlecked.

18TH AVE. SOUTH EAST.

C. M. St. P. & P. Crossing-Interlocked.

### 3rd Sub-Division

FIRST STREET NORTH. G. N. Crossing.

15TH AVE. NORTH. Soo Line Jct.-Interlocked.

18TH AVE. NORTH EAST.

G. N. Crossing with Mulberry Line—Automatic Intertocking. NORTHTOWN. G. N. Crossing.

### 4th Sub-Division

BELT LINE CROSSING.

Belt Line Crossing-Automatic interlocking.

Limit of load measurements based on 52' cars with 42' truck centers.

Note—Heights and widths in table allow 6 inches elearance.

MAXIMUM CLEARANCES. Table is based on open car loading equally divided on either side of center line of car.

elearance.    LIMIT OF LOAD—MEASUREMENT										1
1	, and the second of the second	<u>_</u>			LOAD - ABOVI					
		1'0"   1 Wide	2'0" 1	1 3'0" 1	4'0"     Wide	1 5'0"	1 6'0"	Max.	Max.	GOVERNING STRUCTURE
1st Subdivision	White Bear Lake to 3rd Street Jct., St. Paul	17′ 1″ 1	7′ 1″	17′ 1″	17′ 1″	17′ 1″	17′ 1″	17′ 1″	11′ 0″	Seventh Street Tunnel and Minne- haha Ave. Over Crossing, St. Paul.
1st Subdivision		20′ 6″ 2			1 1	1	1			
2nd Subdivision	3rd St., St. Paul to 19th Ave. South, {W. B. Minneapolis									
2nd Subdivision	West Side Line, St. Paul									
2nd Subdivision	East Minneapolis to White Bear Lake via Gloster.					.1				
2nd Subdivision	19th Ave. South to 1st Street North, Minneapolis.								_	Over Crossings.
3rd Subdivision	1st Street North, Minneapolis to Northtown	17′11′′ 1	. <mark>7′11″</mark>	17′11′′	17′11′′	17'11"	17'11"	17′11″	′ 12′ 0″	" Northtown-"Soo Line" Over Crss'g
4th Subdivision	M. & D. Jet. to East Mpls. Jet	18'11" 1	18'11"	18'11"	18'11"	18'11"	18'11"	18'11"	12' 0"	" Near M. P. 8—"Soo Line" Over Crs'g
					LOAD-					
	,				ABOVE				- 3.4	GOVERNING STRUCTURE
		Wide			8'6" Wide		Wide	Height		h
1st Subdivision	White Bear Lake to 3rd Street Jct., St. Paul							,		haha Ave. Over Crossing, St. Paul.
1st Subdivision		20′ 6″ 2			1					l
2nd Subdivision	MinneapolisE. B.	1 1	18′ <b>3″</b>	18′ 1″	17′10″	17′ 8″	<b>'</b>  17′ 6′′	19′ 4″	" 12' 0"	Tunnels No. 1 and No. 2, St. Paul.
2nd Subdivision		16' 8" 1 16' 9" 1								
2nd Subdivision	East Minneapolis to White Bear Lake via Gloster.									
2nd Subdivision	19th Ave. South to 1st Street North, Minneapolis.									Over Crossings.
3rd Subdivision		17′11″ 1		.			_	.		
4th Subdivision	M. & D. Jet. to East Mpls. Jet	18′11′′1	18'11"	18'11"	18'11"	18'11"	18'11"	18'11"	′12′ 0″	" Near M. P. 8—"Soo Line" Over Crs'g
	1				LOAD-					
		10'0"   1 Wide			ABOVI   11'6"     Wide				h	GOVERNING STRUCTURE
1st Subdivision		16′ 9″ 1	16′ 2′′	15' 6"			. 17′ 1″	11' 0"	<u>"</u>	Seventh Street Tunnel and Minne- haha Ave. Over Crossing, St. Paul.
1st Subdivision										
2nd Subdivision	3rd St., St. Paul to 19th Ave. South, {W. B. Minneapolis	16'10'' 1 17' 4'' 1	16′ 5″ 17′ 1″	15'10" 16' 6"	15′ 2″ 16′ 0″	14' 5" 15' 4"	'' 19' 2'' '' 19' 4''	' 12' 0' ' 12' 0'	"	Mississippi St. Over Crossing and Tunnels No. 1 and No. 2, St. Paul.
2nd Subdivision	West Side Line, St. Paul	15' 4" 1 14' 6" 1	14′10′′ 13′10′′	14' 3" 13' 3"	13′ 8″ 12′ 8″	' 13' 0" ' 11'11"	" 18' 0" " 18' 0"	' 12' 0' ' 12' 0'	"	Westminster Street Tunnel.
2nd Subdivision	East Minneapolis to White Bear Lake via Gloster.	20′ 6″ 2	20′ 6″	20′ 6″	17' 8"			-		Rice Street Over Crossing, St. Paul
2nd Subdivision								11' 0"		First Street So. & Hennepin Ave. Over Crossings.
1	1 4 Okara Nasal Minasa Nasal Asam	17'11" 1	17′11′′	17'11"	17'11"	17'11"	17'11"	12' 0'	<b>,</b>	Northtown"Soo Line" Over Crss'g
3rd Subdivision		18'11" 1				!_			•	

T. A. GREGORY, Asst. Supt.

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R. H. ANDERSON, **Trainmaster** 

R. W. HALL, **Trainmaster** 

G. W. MINKEL, Trainmaster L. L. WOLLSCHLAEGER, Trainmaster

E. A. LEE, **Trainmaster**  J. A. SOVA, Chief Dispatcher