

AUTHORIZED SURGEONS

Dr. A. W. Ide, Chief Surgeon St. Paul.

Dr. M. A. Shillington, Dr. H. G. Collie, Dr. B. I. Derauf,

Dr. J. W. Jesion,

Assistant Surgeons, N. P. B. A. Hospital, St. Paul (S)

SPECIALISTS

Dr. L. A. Nelson, Oculist...........830 Lowry Bldg., St. Paul

Dr. H. E. Binger,

Eye, Ear, Nose and Throat.....1039 Lowry Bldg., St. Paul Dr. H. S. Clark, Oculist and Aurist, 1845 Medical Arts Bldg., Minneapolis.

Dr. J. M. Robinson, Oculist and Aurist, 415 Providence Bldg.,

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

Duluth.

Dr. N. P. Nelson, Brainerd.

SURGEONS

Dr. A. L. Kyllo, 5719 Tower Ave., Superior Dr. W. H. Schnell, 28 Columbia Bldg., Superior Dr. F. C. Sarazin, 28 Columbia Bldg., Superior Dr. C. H. Christiansen, Superior Dr. G. C. MacRae, 925 Med. Arts Bldg., Duluth Dr. C. M. Smith, 1115 Med. Arts Bldg., Duluth Dr. O. E. Heimark, 2004 W. Superior St., Duluth Dr. C. L. Haney, 2004 W. Superior St., Duluth Dr. M. F. Fellow, Oculist and Aurist, 815 Med.

Dr. M. F. Fellow, Oculist and Aurist, 815 Med. Arts Bldg.,

Dr. J. M. Robinson, Oculist and Aurist, Providence Bldg., Duluth

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

Dr. L. A. Sukeforth, 318 Providence Bldg., Duluth Dr. Cyril M. Smith, 1115 Medical Arts Bldg., Duluth Dr. M. F. Fellows, 1209 Med. Arts Bldg., Duluth

LOCATION STRETCHERS

East End Passenger-Station. Central Avenue Freight Station. Superior Freight Station. Fifth Avenue Switch Shanty, Duluth. Dock 6, Duluth. Duluth Union Depot. Tool Car, Duluth. West Duluth Passenger Station. Store Room, Duluth.

INDEX

First Sub-Division—Westward	4 and 5
Second Sub-Division	7
Special Instructions. Maximum Clearances.	8 and 9

NORTHERN PACIFIC RAILWAY COMPANY

Duluth and Superior Terminals

TIME **TABLE** 190

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

Sunday, July 25, 1937

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 TRANSPORTATION RULES.

W. C. SLOAN, General Manager.

G. H. JACOBUS. Superintendent.

F. R. BARTLES, Assistant General Manager.

P. H. McCAULEY. General Superintendent of Transportation.

2	WE	STW	ARD				FIR	ST SUE	3-DIVI	SION				
g 8							FIRST	CLASS				ſ	4	Time Table No. 190
Water, Fuel, Scales, Turn Tables, Wyes and Yard Limits.	.	Bberr.	65	57	303	405	51	201	61	401	407	55	Distance from East D. M. & N. Jot.	July 25, 1937 Succeeding No. 189.
r, Fuel Table	Car Capacity of Sidings.	Station Numbers.	N. P. 65	N. P. 57	D. W. & P.	D. M. & N.	N. P. 52	D. M. & N.	N. P. 61	D. M. & N. 12	D. M. & N.	N. P. 55	D. M.	STATIONS
vate nd y	r Sid	tati	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	133	SIAIIONS
₽H3	50	- 20 I	Daily	Daily	Ex. Sun.	Daily	Ex. Sun.	Daily	Ex. Sun.	Daily	Daily	Daily		Telegraph Offices and Calls
	i l	1 1	 '	-	ļ	L 5.46mm	/ <u> </u>	 '	 	L 8.25 AM	M L 8.20 AM	.	0.0	
WCO TYX	Yard	WB 71	L 11.30m	L 7.30 PM	<i>i</i> '	- A 5.50 PM	L 2.20 PM	L 9.00 AM	L 8.30 AM	A 8.30 AM	M A 8.25 AM	L 7.50A	0.9	
	i	1 1	11.33	A 7.33 PM		/ '	A 2.24 PM	9.03	8.33			A 7.53 M	1.9	GARFIELD AVE
	, !	L 2	11.35		7.21			9.04	s 8.35	<u>'</u>	 '		2.2	20TH AVE. W
	 	L 02	11.37		7.22			- 4 9.06 AM	8.36				2.8	WEST D. M. & N. JCT
			11.40		A 7.29 PM				8.40				8.6 4.4	12 0.8
	, ,	T. 04	s 11.44		A 1.47F	-			8.40					WUWEST DULUTH,.DN
WYX	, !	1 1	A 11.50PM					,	A 8.45				5.8	E 0.7
" 1 1		"	A 11.30ra						A 0.43~				7.0	1.2
	 					<u> </u> '	<u> </u>	<u> </u> '			<u> </u>		8.1	
	, ,	LB 2	<u> </u>	 '	 	 '	 	 '	 '	-		 	8.5	
	. !	LB 3	 '	· '		 	 '	 '	 '		'	 	9.7	MORGAN PARK
	, !	1001	 	·['		 	 '	 '	l'		 '	 	10.7	BOAT CLUB
	, ,	LB 5	 '	 '				 '	 	 	<u> </u>		12.4	
		LB 8					,	<u> </u>					15.1	-
			Daily	Daily	Ex. Sun.	Daily	Ez. Sun.	Daily	Ex. Sun.	Daily	Daily	Daily		
			.20	.03	.10	.04	.04	.06	.15	.05	.05	.08		Time Over Sub-Division
	/	<u> </u>	14.7	20.0	15.0	13.5	15.0	19.0	19.6	10.8	10.8	20.0		Average Speed Per Hour

July 25, 1937									WES
July 25, 1937		D CLASS	SECON						
Succeeding No. 189	Jot.	623	627						
	from M. & N.	N. P. 623	N. P. 627						
82 STATIONS	tance f	Freight	Freight						
Telegraph Offices and Calls	Dis	Daily	Daily						
0.0EAST D. M. & N. JCT	0.0								
PH 0.9 DUDULUTHDN	0.9	L 6.00pm	L 7.35 PM					ļ	
PH 1.9 GARFIELD AVE 0.3	1.9	A 6.03 PM			 				
0.6	2.2		7.40		 				
2.2	2.8		7.42					l	
_ 8.6 🙍500 LINE CROSSING 🖁	8.6								
4.4 g D. W. a.P. JCT	4.4		7.48		 		- -		
4.4 0 0.7 0.	5.1		7.51		 		_ _		
_ 5.8 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	5.8		A 7.55 PM		 				
7.0 D. T. CROSSING	7.0						_		
8.1RIVERSIDE	8.1								
8.5SPIRIT LAKE	8.5				 	···			
9.7 MORGAN PARK	9.7				 				
10.7BOAT CLUB	10.7		·		 				
12.4NEW DULUTHP	12.4				 		-		
15.1FOND DU LAC	15.1								
		Daily	Daily				-		
Time Over Sub-Division		.03	.20						
Average Speed Per Hour		20.0	14.7						

4					I	FIRST	SUB-D	IVISIO	N			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	EA	STWAR	D O
				Time Table No. 190					FII	RST CLA	\SS				
4 2.		į.		July 25, 1937	66	304	58	400	52	62	204	404	402	56	
let, Ser Linit	ofty.	ad an	rom	Succeeding No. 189	N. P.	D. W. & P.	N. P. 58	D. M. & N.	N. P. 51	N. P. 62	D. M. & N.	D. M. & N.	D. M. & N. 11	N. P. 56	
Water, Fuel, Scales, Turn Tables, Wyes and Yard Limits.	Car Capacity of Sidings.	Station Number	Distance from Fond du Las.	STATIONS	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	
AL B	Of Br	Stat	Die	Telegraph Offices and Calls	Daily	Ex. Mon.	Daily	Daily	Ex. Sun.	Ex. Sun.	Daily	Daily	Daily	Daily	
WCO.			15.1	EAST D. M. & N. JCT				A 9.04 AM				A 4.05 PM	A 6.00 PM		
TYX	Yard	₩B	14.2	DUDULUTHDN)	A 6.30 AM		A 8.40 AM	l 9.00 am	A 11.45 AM	A 12.25 PM	A 3.50 PM	L 4.00 PM	L 5.55 PM	A . 0₽₩	
х		71	13.2		6.25	A 8.10 AM	l 8.37 am		L 11.42 M	12.22	3.47			L 11.07 PM	
x		L 2	12.9	20TH ĂVE. W 🙎	6.22	8.07				12.21	3.46				
x		L02	12.8	0.6 NEST D. M. & N. JCT. 6.8	6.19	8.06				12.19	L 3.43 PM				
х			11.5	SOO LINE CROSSING.											
x	ĺ		10.7	일 D. W. & P. JCT 등	6.14	L 8.00 AM				12.15					
x		L04	10.0	WU WEST DULUTH DN	s 6.12					s 12.13					
YX		L 5	10.0 9.8	.WEST DULUTH JCTP	l 6.03 am					L 12.10PM					
			8.1	1.2 D. T. CROSSING											·
			7.0	RIVERSIDE 0.4 SPIRIT LAKE											
		LB2	6.6	1.2											
I		LB8	5.4	1.0											
ı			4.4	BOAT CLUB											
		LB5	3.7	NEW DULUTHP											
		LB8	0.0	FOND DU LAC											
					Daily	Ex. Mon.	Daily	Daily	Ex. Sun.	Ex. Sun.	Daily	Daily	Daily	Daily	
				Time Over Sub-Division	.27	.10	.03	.04	.03	.15	.07	.05	.05	.08	
- 1				Average Speed Per Hour	10.9	15.0	20.0	18.5	20.0	19.6	16.8	10.8	10.8	20.0	

				FIRS	SUB-DIVISION	EASTWARD 5
	Time Table No. 190				SECOND CLASS	
	July 25, 1937	624	626	628		
Distance from Fond du Lec.	Succeeding No. 189	N. P. 624	C. M. St. P. & P. 626	N. P. 628		
np p	STATIONS					
P.O. P. O. D.	Telegraph Offices and Calls	Freight	Freight	Freight		
		Daily	Daily	Daily		
15.1	EAST D. M. & N. JCT					
14.2	DUDULUTHDN			A 4.30 M		
18.2 12.9	0.8 20TH AVE. W	A 3.10 AM	A 4.05 AM	4.20 4.09		
12.3	(.WEST D. M. & N. JCT.	3.10 Am	3.53	4.09		
				4.00		
11. 5 10.7	SOO LINE CROSSING.	2.57	3.46	4.00		
10.7		2.57 2.55	3.46 3.43	4.00 3.58		
9.8	WU WEST DULUTH DN 0.7	L 2.50 AM	E .	1		
8.1	D. T. CROSSING					
7.0	1.1					
6.6	SPIRIT LAKE					
5.4	MORGAN PARK					
4.4	1.0 BOAT CLUB		<u> </u>			
2.7	NEW DULUTHP					
0.0	FOND DU LAC					
		Daily	Daily	Daily		
 	Time Over Sub-Division	.20	.25	.85		
	Average Speed Per Hour	10.8	8.6	8.4		

6	WESTV	VARD				SECO	OND S	UB-DI	VISIO	A				
SI	COND C	LASS					FIR	ST CLAS	is				Time Table No. 190	
629	625	623	35	57	89	93	19	51	23	33	55	65	July 25, 1937 Succeeding No. 189.	
N. P. 630	C. M. St. P. & P. 62	N. P. 628	G. N. 85	N. P. 57	Omaha 510	Omaha 512	G. N. 19	N. P. 52	G. N. 28	G. N. 88	N. P. 55	N. P. 65		from Ave.
Freigh	t Freight	Freight	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger		tral
Ex. Sa	. Daily	Daily	Daily	Daily	Daily	Daily	Daily	Ex. Sun.	Daily	Ex. Sun.	Daily	Daily	Telegraph Offices and Calls	ÄÖ
		L 6.03 PA		L 7.33 PM				L 2.24 PM			l 7.53 an		GARFIELD AVE	7.8
L 10.00	PM L 7.40	6.04		7.35				2.26			7.55		0.8 RICES POINT 2	6.5
10.0	7.45	6.06	L 9.07 PM	7.36	L 7.12 PM	L 5.05 PM	L 4.37 PM	2.28	L 8.07 AM	L 8.02 M	7.57		BRIDGE SWITCH	6.0
10.0	7.49	6.09	9.10	7.39	7.15	5.08	4.40	2.31	8-10	8.05	8.00		ELEVATOR STATION.	5.1
10.1	7.51	6.11	9.12	7.41	A 7.18PM	A 5.10PM	4.42	2.33	8.12	8.07	8.02		OMAHA CONN	4.4
			s 9.15	s 7.42			s 4.45	s 2.34	s 8.15	s 8.10	s 8.05	L 12.06 M	BY.SUPERIOR U. DD	4.1
10.20	8.00	6.22	9.16	7.44			4.46	2.35	8.16	8.11	8.06	12.08	O.4 BELKNAP STREET	3.7
A 10.45	A 8.30	M A 7.00 PI	A 9.25 PM	As 7.55 PM			A 4.53 PM	As 2.45 PM	A 8.24 AM	A 8.19 AM	As 8.14 M			0.0
Ex. Sa	. Daily	Daily	Daily	Daily	Daily	Daily	Daily	Ex. Sun.	Daily	Ex. Sun.	Daily	Daily		-
.45	.50	.57	.18	.22	-06	.05	.16	.21	.17	. 17	.21	.14	Time Over Sub-Division	
8.7	7.8	7.7	20.0	19.9	13.7	19.1	22.5	20.8	21.1	21.1	20.8	17.1	Average Speed Per Hour	

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

DOUBLE TRACK BETWEEN BELKNAP STREET AND CENTRAL AVENUE, EXCEPT OVER MINNESOTA DRAW ON ST. LOUIS
RIVER BRIDGE WHICH IS GOVERNED BY INTERLOCKING SIGNAL.

FIRST CLASS TRAINS USE L. S. T. & T. RAILWAY BETWEEN OMAHA CONNECTION AND BELKNAP STREET.

i	SEC	D SU	B-D	1412	ION

EASTWARD

				Time Table No. 190					FIRS	ST CLAS	S				SECOND CLASS
4 8 4 8 4 8		Ë		July 25, 1937 Succeeding No. 189.	66	94	36	58	52	96	24	34	20	56	630
Water, Fuel, Scales, Turn Tables, Wyes and Yard Limits.	oity	Number	from Ave.	STATIONS	N. P. 66	Omaha 511	G. N. 86	N. P. 58	N. P. 51	Omaha 513	G. N. 24	G. N. 34	G. N. 20	N. P. 56	N. P. 629
Tal	Car Capad of Sidings.	Station P	Distance Garfield		Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Freight
Wa. Tur and	Car of 8	Sta	ğ	Telegraph Offices and Calls	Daily	Daily	Daily	Daily	Ex. Sun.	Daily	Daily	Ex. Sun.	Daily	Daily	Ex. Sun.
X WCO TYX			0.0	GARFIELD AVE				а 8.37 м	A 11.42 AM					▲ 1.07pm	
TYX	Yard	L 1	0.8	RICES POINT				8.34	11.38					11.05	A 8.30 AM
x			1.8	BRIDGE SWITCH	<u> </u>	A 7.18 AM	A 7.33 AM	8.32	11.36	A 11.56AM	A 1.43 PM	A 4.03 PM	A 7.53 PM	11.04	8.27
х			2.2	ELEVATOR STATION.		7.14	7.29	8.29	11.33	11.53	1.39	3.59	7.49	11.01	8.23
x			2.9	OMAHA CONN		L 7.12 M	7.27	8.26	11.30	L 11.50M	1.37	3.56	7.46	10.59	8.20
X		WB	8.2	BY.SUPERIOR U. DD	As 5.40 M		s 7.25	s 8.24	s 11.29		s 1.35	3.55	s 7.45	s 10.58	
x		67	8.6	O.4 SELKNAP STREET	5.38		7.21	8.21	11.27		1.31	3.50	7.41	10.52	8.10
WYX	Yard	67	7.8	AJ CENTRAL AVEDN	L 5.29 M		L 7.13 AM	L 8.13 AM	L 11.19A		L 1.23 PM	L 3.43 PM	L 7.36 PM	L 10.45 PM	1
					Daily	Daily	Daily	Daily	Ez. Sun.	Daily	Daily	Ex. Sun.	Daily	Daily	Ex. Sun.
				Time Over Sub-Division	.11	.06	.20	.24	.28	-06	.20	.20	.17	.22	.30
				Average Speed Per Hour	22.8	18.7	18.0	18.2	19.0	18.7	18.0	18.0	21.1	19.9	13.0

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

DOUBLE TRACK BETWEEN BELKNAP STREET AND CENTRAL AVENUE, EXCEPT OVER MINNESOTA DRAW ON ST. LOUIS
RIVER BRIDGE WHICH IS GOVERNED BY INTERLOCKING SIGNAL.

FIRST CLASS TRAINS USE L. S. T. & T. RAILWAY BETWEEN OMAHA CONNECTION AND BELKNAP STREET.

SPECIAL INSTRUCTIONS PAGES 8 AND 9.

W	EST	WA	RD				THI	RD	SUB-DIVISION				EAS	TWAR	D 7
			Second Class		FIRST	CLASS			Time Table No. 190			FIRST	CLASS		Secon d Class
Water, Fuel, Scalon, Turn Tables, Wyes and Yard Limits.		bers.	311	65	53	317	313	Jot.	July 25, 1937	۵.	54	66	318	314	312
Fuel.	Car Capacity of Sidings.	Number	Soo Line 163	N. P.	D. S. S. & A.	Soo Line	Soo Line	nce from Duluth Jot	Succeeding No. 189	r U. D.	D. S. S.	N. P.	Soo Line	Soo Line	Soo Line
ater, urn nd Ye	Sidin	Station	Mixed	Passenger	Passenger	Passenger	Passenger	Distant West D	STATIONS	Distance Superior	Passenger	66 Passenger	17 Passenger	62 Passenger	162 Mixed
PHE	0.8	ă.	Ex. Sun.	Daily	Ex. Sun.	Daily	Daily	Ω ₩	Telegraph Offices and Calls	Ωő	Ex. Mon.	Daily	Daily	Daily	Ex. Sun.
YX		L5		L 11.50mm				0.0	WEST DULUTH JCTP	8.6		A 6.03 AM			
x				11.53				0.6		8.0		6.01			
х			L 7.14 M	11.55 PM	L 8.17pm	L 5.38 PM	L 1.14PM		DW&PBERWIND JCT)	2.8	A 5.16AM	5.58	A 7.5 M	A 5.51 PM	A 5.05 PM
								1.8	O.5 GRASSY POINT Transfer DRAWBRIDGE 1.5	1.8					
x			A 7.22 M	12.05 AM	A 8.27 PM	A 5.47 PM	A 1.20 PM	8.8	L. S. T. & T. RY. JCT	0.3	L 5.08 AM	5.49	l 7.44 am	L 5.44mm	L 4.57mm
х		WB 67		A = 12.06 M				8.6	SUPERIOR U. DD	0.0		L 5.40 AM			
			Ex. Sun.	Daily	Ex. Sun.	Daily	Daily				Ex. Mon.	Daily	Daily	Daily	Ex. Sun.
			.08	.16	.10	.09	.06		Time Over Subdivision		.08	.28	.07	.07	.08
			15.0	18.5	12.0	18.8	20.0		Average Speed Per Hour		15.0	9.4	17.1	17.1	15.0

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

WI	EST	WA	R	D
wı	70 I	W P	١ĸ	"

FOURTH SUB-DIVISION

EASTWARD

, 3			SE	COND C	LASS	FIRST	CLASS		Time Table No. 190		FIRST	CLASS	SEC	OND CL	.AS
Water, Fuel, Scales, Turn Tables, Wyes and Yard Limits.		umbers.		629	631	51	53	8	July 25, 1937	a .	52	54	632	630	
Sep Sep Sep	pacity ngs.	Z			D. S. S. & A.		D. S. S. & A.	nd.	Succeeding No. 189	Se from		D. S. S. & A.	D. S. S. & A.	Freight	
d H	Car Capae of Sidings.	Station		Freight	Freight	Passenger	Passenger	Distance fr East End.	STATIONS	Distano Central	Passenger	Passenger	Freight	Freight	
≥ ₹8	ಕರ	6		Ex. Sun.	Daily	Ex. Sun.	Ex. Mon.	Ü.	Telegraph Offices and Calls	ದೆರೆ	Ex. Sun.	Ex. Sun.	Daily	Ex. Sat.	
WOY X X	Yard	68		L 7.45 AM	L 5.20 AM	L 11.10A	L 4.51AM	0.0	EAST_END	4.0	As 2.55 PM	A 8.50 PM	A 12.15AM	A 10.55 PM	
x	Yard	65		7.46	A 5.21AM	11.11	A 4.52 AM		Newton Avenue C. St. P. M. & O. Cressing		2.54	L 8.49 ры	L 12.14 AM	10.54	
				7.49		11.14		1.8	C. St. P. M. & O. Crossing	2.2	2.51			10.51	
WYX	Yard	67		A 7.55 AM		Asii.19M		ŀ		1.1 0.0	l i			L 10.45 PM	
				Ex. Sun.	Daily	Ex. Sun.	Ez. Mon.				Ex. Sun.	Ex. Sun.	Daily	Ex. Sat.	
				. 10	.01	.09	.01		Time Over Subdivision		.10	.01	.01	. 10	
	1			24.0	12.0	26.7	12.0		Average Speed Per Hour		24.0	12.0	12.0	24.0	

SPECIAL INSTRUCTIONS

FIRST SUBDIVISION

- 1. At Fifth Avenue West-Main track switch will be kept set for Union Depot.
- 2. At Garfield Avenue-Junction switches will be kept set for First Sub-Division.

Trains stop not less than two hundred (200) feet from Junction Switch and crossover used by D. W. & P. and not proceed until track is known to be clear.

- 3. At Nineteenth Avenue West-Trains using the Dick tracks must not block crossing.
- 4. At Twenty-first Avenue West-Telephone at crossover-Eastward trains call yard (3 rings) for route when necessary.
- 5. At West D. M. & N. Junction Interlocking—Trains will call for route as follows:

Martins track to D. M. & N. yard—THREE SHORT.
D. M. & N. yard to Martins track—THREE SHORT.
Martins track to Westward main—THREE SHORT—ONE LONG.

Martins track to D. T. Main—FOUR SHORT. D. T. main to Martins track—FOUR SHORT.

Westward main to D. M. & N. yard-ONE LONG AND ONE

SHORT. D. M. & N. yard to Eastward main-ONE LONG AND ONE

SHORT.

Through Main Line Movements-ONE LONG.

6. At West Duluth Junction-Switch at West end wye will be kept set and locked for first sub-division.

Switch engines will use West leg of wye and Fond du Lac main line but will not leave cars on these tracks.

Switch at end of double track is automatic. Normal position is for the Westward track. If signals fail to clear switch must be examined, and if not in proper position first throw power lever, then operate switch with hand-throw lever. Power lever must not be returned to normal position until after final move over switch is made. Both levers must be left in normal position and locked. Trains setting out on Fond du Lac and other tracks must be sure switches are lined for such movement.

- 7. At Fond du Lac-Trains will call upper Power Plant (Douglas 50), from New Duluth and secure permission to use track between Fond du Lac and Power Plant.
- 8. Yard Limits-Between D. M. & N. connection at Fifth Avenue East and St. Louis River bridge and from Garfield Avenue to Grassy Point bridge and to the main line (Third Sub-division) yard board West of West Duluth Junction.
- 9. Bridge and Engine Restrictions-West Duluth Junction to Fond du Lac-engines heavier than class L-7 not permitted. Bridge 4, five (5) miles per hour.
 Fond du Lac to Power Plant, eight (8) miles per hour.

- 10. Derail Switches-Fond du Lac.
- 11. Register Stations-Duluth Union Depot for first class, passenger extras, and trains arriving at or departing from Fifth Avenue Yard. Rices Point Yard office for second class and inferior trains, except passenger extras and trains arriving at or departing from Fifth Avenue Yard. West Duluth.
- 12. Register Exceptions-At West Duluth trains register by ticket, form 608, and Eastward trains will not require clearance if train order signal is in clear position.

SECOND SUBDIVISION

1. At Garfield Avenue—Junction switches will be kept set for First Sub-Division.

Trains will stop not less than two hundred (200) feet from Junction switch and crossover used by D. W. & P. and not proceed until track is known to be clear.

2. Indication of Spring Switches, Round House lead, 900 feet South of coal dock:

Yellow-Straight Track Green-Round House Lead.

3 Rules Governing Movement of Trains over St. Louis River Bridge—Interlocking signals govern use of tracks between Bridge Switch and Elevator Station.

Single track over Minnesota Draw.

The three-arm semaphore on Eastward track West of Minnesota Draw indicates position of double track switch, position of draw and route:

> Top Arm—Northern Pacific Middle Arm—Great Northern

Bottom Arm—C. St. P. M. & O.
The two-arm semaphore on Westward track East of Elevator Station indicates route:

Top Arm—Straight main line

Bottom Arm—Great Northern Freight Track All trains will stop before entering onto Wisconsin draw. All Eastward trains will stop before entering onto Minnesota draw. Westward trains entering onto Minnesota draw will be governed by signal at the approach and, if proceed signal is received, will not be required to stop.

- 4. At Superlor—Trains using tracks of L. S. T. & T. Railway between Omaha connection and Belknap Street will be governed by L. S. T. & T. time table rules and regulations.
- 5. At Central Avenue—Westward trains and engines have right to use Eastward main track between West lead from yard and Junction with Fourth (Terminal) Sub-Division without protection. All Eastward trains will approach and pass through this territory at restricted speed, expecting to find track occupied.
- 6. Speed Restrictions:

At Minnesota and Wisconsin Drawbridges—twenty (20) miles per hour.

At Superior—all trains and engines will run at restricted speed between West yard limit board and Omaha connection, including L. S. T. & T. tracks between Belknap Street and Omaha connection, expecting to find track occupied, and will not exceed fifteen (15) miles per hour over switches at Belknap Street.

7. Derail Switches:

At approach to Minnesota Draw from Duluth.

At Elevator Station.

At Superior—just East of N. P. freight house.

8. Register Stations:

Rices Point for second class and inferior trains, except passenger

Superior Union Depot for first class trains and passenger extras. Central Avenue.

9. Register Exceptions—At Central Avenue trains register by ticket, form 608, and Eastward trains will not require clearance if train order signal is in clear position.

THIRD SUBDIVISION

- 1. At West Duluth Junction—Trains will run at restricted speed around East leg of wye and passing Zenith Furnace Plant, looking out for switch engines working on main track. Switches on East leg of wye will be kept set for Third (terminal) Subdivision main track.
- 2. Speed Restrictions—Grassy Point Bridge twenty (20) miles per
- 3. Register Station—Superior Union Depot for first class trains and passenger extras.

FOURTH SUBDIVISION

1. At East End-Switch at end of double track will be kept set for Westward trains

The distant semaphore of interlocking is an automatic signal governing single track to end of double track and Westward track to Newton Avenue interlocking. Eastward D. S. S. & A. and C. St. P. M. & O. trains and engines will use Westward Main Track between Newton Avenue interlocking and end of double track, as single track, under single track and yard limit rules.

2. At Central Avenue-End of double track at East leg of wyeswitch will be kept set for Eastward trains. Switch at Junction of Fourth and Second (Terminal) Sub-divisions will be kept set for Second Sub-division. East leg of wye is on sharp curve and single track—trains will use this track, expecting to find it occupied and at not to exceed twenty (20) miles per hour, and in foggy or stormy weather will protect by flag.

3. Speed Restrictions—Over trestle approach to ore dock—engines classes W or W-3 fifteen (15) miles per hour.

4. Register Stations—Central Avenue.

Soo Line, 21st St. Yard Office, Superior, for D. S. S. & A. Rv. Superior.

5. Register Exceptions—At Central Avenue trains register by ticket. form 608, and Eastward trains will not require clearance if train order signal is in clear position.

AT ALLOUEZ:

Track No. 2 must not be used for ore trains.

ALL SUBDIVISIONS

- 1. Conductors of work trains will issue instructions to their flagmen in writing, except when flagmen go back immediately to stop an approaching train.
- 2. Speed Restrictions-

Passenger trains, one mile per minute.

All trains thirty (30) miles per hour over interlocked crossings. Fifteen (15) miles per hour through crossovers, turnouts and gauntlets and passing telegraph offices where orders are received.

- 3. When a siding is to be used temporarily as a main track, the switches are to be set and locked for the siding and must be protected by flagman until train order covering the movement is issued to all trains and to the Section Foreman of that Section; the flagman to remain until released by the Train Dispatcher.
- 4. Before occupied outfit cars are switched or handled, air brakes must be cut in.
- 4. Spring Switches-

Maximum speed for all facing point and trailing point movements through switch, fifteen (15) miles per hour.

Trailing movements on the track for which the switch is normally lined

may be made at normal speed. Trains trailing through or stopping on a spring switch must not back up or take slack until points have been thrown by hand.

Flying switches over or through spring switches are prohibited. When operated by hand, lever must be moved slowly, keeping a steady pressure on the handle until the switch is thrown and the handle is in

the notch on the switch stand provided for it.

When signal governing block in which spring switch is located is at stop, or where automatic block signals do not govern account trains running against current of traffic, facing point movements must not be made over switch until points have been examined. Sand must not be used over points of spring switches.

6. Derail switches will be set in derail position when not in use.

7. Trains pulling into side tracks or leaving the main line at Junction points must pull entirely into clear of the insulated joints before stopping to pick up the man attending switch.

Always observe position of switch points after throwing switch, and see that the switch lever is pushed firmly into the notch before leaving

9. Second class and inferior trains may run ahead of delayed first class trains between West Duluth Junction and Duluth, Superior and Rice's Point, West Duluth Junction and Superior, Superior and East End, without orders.

- 10. All inferior to first class trains may run ahead of each other without
- 11. Clearance Form A will not be required at Rice's Point Yard, Superior Freight Station or Superior Union Depot.

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

13. Helper engines waiting to help trains will keep clear of main track until train to be helped has arrived and stopped.

- 14. Extra trains, work extras and switch engines do not require train orders for movement between West Duluth Junction and Duluth, between Central Avenue and Rice's Point, between Central Avenue and East End. nor between West Duluth Jct. and Superior.
- 15. A Brakeman or Flagman must be stationed on the rear car of all trains, at all times, and be provided with proper flagging equipment. In case train is stopped on main track, Flagman must go back immediately with stop signals a sufficient distance to insure full protection to his train. Conductors and switch foremen will be held responsible for the strict observance of this rule.
- 16. To insure personal safety, Telegraphers having train orders or messages to deliver to passing trains, will stand to the right hand side of the train and avoid standing between tracks when possible to do so.
- 17. At points where there are close clearances, trainmen will work on the opposite side of train from them; and, if necessary, the fireman will receive the signals and communicate them to the enginman.
- 18. All trains must move within yard limits prepared to stop unless the main track is seen or known to be clear.
- 19. The D. T. main track is the northmost track between the Boston Coal Dock crossing and connection with Grassy Point main track. All switches leading from this track, when not in use, will be left lined for same.
- 20. All train crews, switch crews and light engines using D. T. main track from connection of Missabe coal dock with this track to east end of Zenith Furnace Company's lead, on Grassy Point line, will move in both directions at restricted speed, expecting to find the D. T. main track occupied.
- 21. D. T. connection, located at east end of Zenith Furance Company's lead, Grassy Point line, will be considered a railroad crossing. Trains using this connection will come to full stop and make sure that track is clear before proceeding.
- 22. Bulletin Stations-

Rice's Point Yard Office. Rice's Point Roundhouse. Duluth Union Depot.

23. Standard Time Clocks

Rice's Point Yard Office. Duluth Union Depot.

24. Watch Inspectors-

Duluth, Garon Bros. Duluth, L. Pederson. West Duluth, W. F. Hurst. Superior, L. J. Howatt.

RAILROAD CROSSINGS AND INTERLOCKINGS.

First Sub-division

West D. M. & N. Junction, Interlocked. Soo Line Crossing, Interlocked. D. W. & P. Junction, Interlocked. West Duluth Junction, Automatic Interlocking. Morgan Park. Minnesota Steel Co. Crossing.

Second Sub-division

Between Bridge Switch and Elevator Station. Minnesota Draw, Interlocked. Wisconsin Draw, Interlocked.

Third Sub-division Berwind Junction.

Soo Line and D. W. & P. Junetions, Interlocked. Grassy Point Draw, Interlocked.

D. T. Connection.

Fourth Sub-division East End C. St. P. M. & O. Crossing, Interlocked. Soo Line Crossing, Interlocked.

10		MAXII	MUM (CLEAR	ANCES	•					
				LI	MIT OF	LOAD N	MEASUR	EMENT			
				E	EIGHT	ABOVE	TOP OF	RAIL			
	1 ft. Wide	2 ft. Wide	3 ft. Wide	4 ft. Wide	5 ft. Wide	6 ft. Wide	7 ft. Wide	7 ft. 6 in. Wide	8 ft. Wide	Max. Height	Max. Width
1st Sub-division, Duluth to Fond du Lac	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 8″	20′ 3″	11′ 6″
2nd Sub-division, Garfield Ave. to Central Ave.	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 3″	11' 6"
3rd Sub-division, W. Duluth Jct. to Superior U. D.	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 3″	11' 6"
4th Sub-division, East End to Central Ave	21' 0"	21' 0"	21' 0"	21' 0"	21' 0"	21' 0"	21' 0"	21' 0"	21' 0"	21' 0"	11' 6"

	HEIGHT ABOVE TOP OF RAIL									
	8 ft. 6 in. Wide	9 ft. Wide	9 ft. 6 in. Wide	10 ft. Wide	10ft. 2in. Wide	10 ft. 6 in. Wide	11 ft. Wide	11ft.6in. Wide	Max. Height	Max. Width
1st Sub-division, Duluth to Fond du Lac	. 20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 3″	11' 6"
2nd Sub-division, Garfield Ave. to Central Ave	. 20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 3″	11' 6"
3rd Sub-division, W. Duluth Jct. to Superior U. D.	. 20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 3″	20′ 3″	11' 6"
4th Sub-division, East End to Central Ave	. 21′ 0″	21′ 0″	21' 0"	21′ 0″	21′ 0″	21′ 0″	21′ 0″	21' 0"	21′ 0″	11' 6"

SPEED TABLE.

Time per Mile Min. Sec.	Miles per Hour	Ti: per l Min.	me Mile Se c .	Miles per Hour	Tir per M Min.		Miles per Hour
1 1 1 1 2 1 3 4 1 5 1 6 1 7 1 8 1 9 1 10 1 12 1 15	59 58 57.1 56.2 55.3 54.5 58.7 52.9 52.1 51.4 50	1 1 1 1 1 2 2 2 2 2 2 2 2	20 25 30 40 45 50 10 15 20 80 40 45	45 42.3 40 36 34.3 32.7 30 27.6 26.6 25.7 24 22.5 21.8	2 3 3 3 4 5 6 7	50 · 9 20 31 45 · · · · · · · · · · · · · · · · · · ·	21.2 20 19 18 17 16 15 12 10 8

C. T. SPONSEL, Asst. Supt. H. J. McCALL, Asst. Supt. H. J. COUNCILMAN, Trainmaster. E. J. WIGG, Chief Dispatcher.