# NORTHERN PACIFIC RAILWAY COMPANY.

DULUTH AND SUPERIOR TERMINALS

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

SUNDAY, SEPTEMBER 29, 1929.

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 have for reference a copy of TRANSPORTATION RULES.

W. C. SLOAN, General Manager W. H. STRACHAN, General SuperIntendent. G. H. JACOBUS,
Superintendent.

P. H. MCCAULEY,
General Superintendent of Transportation.

WESTWARD

FIRST SUB-DIVISION (DULUTH AND SUPERIOR TERMINAL)

				FIRS	T CLASS					-			Time Table No. 147				FI	RST CLA	ASS		SEC	COND CL	ASS	THIRD	CLA
55	201	401	61	53	305	63	403	51	203	1 88 88 88 88 88 88 88 88 88 88 88 88 88			September 29, 1929		:	303	57	405	407	65	623	625	627	717	-
Ń. P.	D. M. & N.	D. & I. R.	N. P.	N. P.	D. W. & P.	N. P.	D. & I. R.	N. P.	D. M. & N.	l. Soal	mbers,	Jot.	Succeeding No. 146.	from Lac.	· A	D. W. & P.	N. P.	D. & I. R. 52	D. & I. R.	N. P.	N. P. 623	C. M. St. P. & P. 625	N. P. 627	N. P. 717	
assenger	Passenger	Passenger	Passenger	Passenge		Passenger	Passenger	<del></del>	<del> +</del>	4 4 5 10 5	on Nu	ance from I. R. Jot.	STATIONS	Distance fr Fond du L	Car Capacity of Sidings.	Passenger	Passenger	Passenger	Passenger	Passenger	Freight	Freight	Freight	Way Freight	
Daily	Daily	Daily	Ex. Sun.	Dally	Daily	Daily	Daily	Daily	Daily	Wafe Turr and	Stati	D Seta Se	Telegraph Offices and Calls	Fonce	of Si	Daily	Daily	Daily	Dally	Daily	Daily	Daily	Dally	Ex. Sun.	
		L 8.05A					L 2.41P					0.0	D. & I. R. JCT.	. 15.1				L 8.45 <b>P</b>	L 10.25 <b>P</b>						
7.00 <b>A</b>	L 8.00 <b>A</b>	A 8.10A	L 8.35#	∟ 9.004	<u> </u>	L 2.00F	A 2.45P	L 2.50 <b>P</b>	L 3.50 <b>P</b>	WCC TYX	  WB71	0.9	DUDULUTHDN	14.2	Yard		L 7.00F	A 8.50P	A 10.30P	L 11.30P	L 5.30P		L 8.00P		
7.03 <b>A</b>	8.03		8.38	A 9.03	A L 9.04A	2.02		A 2.54P	3.53		-	1.9	GARFIELD AVE.	13.2		L 6.37 <b>P</b>	a 7.03F			11,33	A 5,33P		8.04		
	8.04		s 8.39		9.05	2.04			3.54		L 2	2.2	20TH AVE	12.9		6.39				f 11.35		L 8.30 <b>P</b>	8.05	∟ 9.15 <b>A</b>	
	a 8.06 <b>A</b>		8.41		9.07	2.07			A 3.56F	<u> </u>	L 02	2.8		. 12.3		6.40				11.37		8.33	8.07	9.19	
				-						<b></b>		3.6	SOO LINE CROSSING	[1.5			<del></del> _								
			8.47		A 9.14 <b>A</b>	2.13						4.4		. 10.7		A 6.45 <b>P</b>				11.40		8.42	8.13	9.26	
			s 8.49			s 2.15				2.2.	L 04	5.1	WUWEST DULUTHDN 0.7	10.0		-				s 11.44		8.46	8.16	в 9.30	
			A 8.52A			A 2.18F	<u>-</u>			WYX	L 5	5.8	1.2			1				A 11.50F		A 8.50P	A 8.20P	s 9.34	
<del></del>				ļ	-						-	7.0		8.1		<b>-</b>	· · · -		<del> </del>					s 9.49	
											LB 2	8.1	RIVERSIDE 0.4 SPIRIT LAKE	7.0		1		]		17 4	-	ere ere		s 9.5!	
	-					_	i juda Si				LB 3		1.2	5.4		1					-:-			s 9.58	
					}		y .					"	Minn. Steel Co. Crossing			1									
										<u></u>		10.7	1.7	4.4	_ <del></del>	1	44, D <sub>4</sub>		45-		1.4	A. 5		s 10.15	
			ļ		ļ						LB 5		NEW DULUTHP	0.0		···		<u> </u>						a 10.34A	
Daily	Daily	Daily	Ex. Sun.	Daily	Daily	Dally	Daily	Daily	Daily		LD 6	12.1	TOND DO LAG	0.0		Daily	Daily	Daily	Daily	Daily	Daily	Dally	Daily	Ex. Sun.	
.03	.06	.05	.17	.03	,10	.18	.04	.04	.06	1-	1,300	-	Time Over Sub-Division			.08	.03	.05	.05	.20	.03	.20	.20	1.19	
20.0	19.0	10.8	17.2	20.0	15.0	16.3	13.5	15.0	19.0			-	Average Speed Per Hour	1	<del></del>	18.7	20.0	10.8	10.8	14.7	20.0	10.8	14.7	9.8	•

# EASTWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION. DOUBLE TRACK BETWEEN DULUTH AND WEST DULUTH JUNCTION. AUTOMATIC BLOCK SIGNALS FROM D. M. & N. JCT. TO WEST DULUTH JCT.

SPECIAL INSTRUCTIONS PAGE 7.

YARD LIMITS:

REGISTER STATIONS: Duluth Union Depot and West Duluth for first class trains and passenger extras. Rice's Point yard office and West Duluth for second and third class trains and extras.

At West Duluth Nos. 61, 63, 65, 627 and 625 register by ticket Form 608. At West Duluth, Eastward trains register by ticket Form 608 and not require clearance unless train order signal is displayed at caution or stop. REGISTER EXCEPTIONS:

BULLETIN STATIONS: Duluth Union Depot.
Rice's Point yard office and Round House.

Duluth Union Depot. Rice's Point yard office. STANDARD TIME CLOCKS:

Duluth yard extends from connection with D. & I. R. Ry., at Fifth Ave. East, to the easterly end of the St. Louis River bridge, and from Garfield Avenue to the yard limit sign on the Third Sub-Division main track west of West Duluth Junction, and to Grassy Point bridge.

BRIDGE RESTRIC-

TIONS:

When not in use must be kept set in derailing position. Main track 110 feet west of Fond du Lac Depot. DERAIL SWITCHES:

WHISTLE CALLS:

D. M. & N. Jet. Interlocking Plant. Trains will call for routes as follows:
Martin's track to D. M. & N. yard—Three short.
Martin's track to westward main track—Three short and one long.
Martin's track to D. T. main track—Four short.
D. T. main track to Martin's track—Four short.
D. M. & N. Jet. to Martin's track—Three short.
Westward main track to D. M. & N. Jet.—One long and one short.
D. M. & N. Jet. to eastward main track—One long and one short.
Through Westward main track movements—One long.
Through Eastward main track movements—One long.

Duluth to Fond du Lac no restrictions. Great Northern Power Co. track. Speed will be restricted on all bridges for S, S1, S3, S4 and S10 to eight

(8) miles per hour. Engine classes T, Q1 and heavier will not be permitted.

#### FIRST SUB-DIVISION (DULUTH AND SUPERIOR TERMINAL)

EASTWARD

-	. ,	2 3	: <b>F</b>	IRST (	LASS	<u>.</u>	· .		·				Time Table No. 147	· ,				FIRST	CLASS			SECONI	CLASS	THIRD CLAS
66	304	58	400	20	2   !	52	62	406	204	es es			September 29, 1929			64	54	306	408	402	56	626	628	718
N. P. 66	D. W. & P. 20	N, P. 58	D. & I. F	D. M. 8	N. 1	N. P. 51	N. P. 62	D. & I. R. 53	D. M. & N.	el, Soal es, Wy Limits	ımbers.	Jon.	Succeeding No. 146.	from Lac.	uty	N. P. 64	N. P. 53	D. W. & P.	D. &I. R.	D. & I. R. 55	N. P. 56	C. M. St. P. & P. 626	N. P. 628	N. P. 718
assenge	Passenger	Passenger	Passenge	r Passen	ger Pas	ssenger	Passenger	Passenger	Passenger	ter, Fu 'n Tabl Yard	Station N	Distance from D. & I. R. Jot.	STATIONS	Distance f Fond du I	Capacity sidings	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	r Freight	Freight	Way Freight
Daily	Daily	Daily	Daily	Daily		Daily	Ex. Sun.	Daily	Daily	Twa Bud	Star	ÄÄ	Telegraph Offices and Calls	Dis	of Sir	Daily v	Daily	Daily	Daily	Daily	Daily	Dally	Daily	Ex. Sun.
			A 8.49			٠.		A 2.55P		WCO	· 	0.0	D. & I. R. JCT.	15.1	· 	:			a 9.15 <b>P</b>	A 10.40P				
6.30A		A 8.45 <b>A</b>	L 8.45/	A 10.5	7 <b>A</b> A I	12.01 P	A. 2.10P	L 2.50P	A 3.45P			0.9	DUDULÚTHDN	14.2	Yard	a 7.00P	A 7,25F	·	L 9.10 <b>P</b>	L 10.35P	A 11.30F		a 5.30 <b>A</b>	
6.25	A 8.33A	1. 8.42 <b>A</b>		10.5	4 <u>L</u>	11.58 <b>A</b>	2.06	. : - : .	3.42			1.9	GARFIELD AVE.	13.2		6.56	L 7.22F	A 8.29P			L 11.27F		5.20	
6.22	8.31		::	10.5	3		s 2.05		3.41	·	L 2	2.2	<b>20TH AVE.</b>	12.9		6.55		8.27				A 5.10A	5.15	A 12.22P
6.19	8.29			L 10.5	IA .		2.02	-	L 3.39P		L 02	2.8	D. M. & N. JCT. Interlocked	12.3		6.53		8.25				5.03	5.08	12,18
****			<del></del>			,						3.6	SOO LINE CROSSING	11.5										
6.14	L 8.23A						1.55					4.4	D. W. & P. JCT. Interlocked 0.7	10.7		6.49		L 8.19 <b>P</b>		: .		4.53	5.02	12.08
6.12			•				s 1.52				L 04		WUWEST DULUTHDN	10.0		s 6.47						4.50	5.00	s 12.04
6.03 <b>A</b>							L I.48P			WYX	L5	5.8	1.2			L 6.44P						L 4.45 <b>A</b>	L 4.55A	s 12.01 <b>P</b>
<u> </u>												7.0	D. T. CROSSING	8.1				ļ						
						ļ				·		1.8	RIVERSIDE 0.4	7.0		1.								s 11.45 <b>A</b>
. • •	14	. :				.	-		-		LB 2	8.5	SPIRIT LAKE	6.6										s 11.43
											LB 3	9.7	MORGAN PARK Minn. Steel Co. Crossing	5.4		78, d								s 11.35
												10.7	BOAT CLUB	4.4										
•											LB 5	12.4	P	2.7										s  1.18
	1										LB 8	15.1	FOND DU LAC											L 11.00A
Daily	Daily	Daily	Daily	Daily	D	Daily	Ex. Sun.	Daily	Daily							Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Ex. Sun.
.22	.10	03	.04	.06	<u></u>	.03	.22	.05	.06	<u> </u>			Time Over Sub-Division			.16	.03	.10	.05	.05	.03	.25	.35	1.22
11.1	15.0	20.0	13.5	19.0	2	0.0	13.3	10.8	19.0				Average Speed Per Hour			18.3	20.0	15.0	10.8	10.8	20.0	8.6	8.4	9.4

EASTWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION EXCEPT NO. 717 IS SUPERIOR TO NO. 718 WEST DULUTH JCT. TO FOND DU LAC.

DOUBLE TRACK BETWEEN DULUTH AND WEST DULUTH JUNCTION.

AUTOMATIC BLOCK SIGNALS FROM D. M. & N. JCT. TO WEST DULUTH JCT.

#### SPECIAL INSTRUCTIONS PAGE 7.

AT DULUTH:

Garfield Avenue, junction switches will be kept set for First Sub-Division. Rice's Point Yard, trains heading in and using the Dick tracks, Nos. 1 and 2, must not block the crossing at 19th Ave. West.

Fifth Ave. West, main track switch leading into Union Depot for use of D. & I. R. Ry. passenger trains will be kept set and locked for main track.

Garfield Avenue, all trains come to full stop not less than two hundred (200) feet from junction switch and cross-over used by D. W. & P. Ry. trains and not proceed until track is known to be clear.

At 21st Ave. West, telephone located at cross-over for Eastward freight trains call yard for route when necessary (3 rings).

AT FOND DU LAC:

Track between Fond du Lac and Power Plant will not be used except by authority of train orders.

AT WEST DULUTH JUNCTION:

Switch engines will use west leg of wye at West Duluth Junction and the Fond du Lac main track between West Duluth Junction and yard limit board for switch purposes, but will not leave cars on these tracks. All trains will look out for switch engines working in these limits. Switches at end of double track West Duluth Junction will be kept set and locked for Eastward trains from Third Sub-Division main track.

WESTWARD

#### SECOND SUB-DIVISION (DULUTH AND SUPERIOR TERMINAL)

				FI	RST CLA	SS					<u> </u>		1	Time Table No. 147		1	FIRST	CLASS	SECONI	CLASS
55	53	23	33	63	51	95	19	93	57	89	sles, Tyes	9.		September 29, 1929 Succeeding No. 146.			35	65	623	731
N. P. 55	N. P. 54	G. N. 23	G. N. 33	N. P. 63	N. P. 52	Omaha 304	G. N. 19	Omaha 512	N. P. 57	Omaha 310	ael, Scales, les, Wyes Limits.	umpea	from Ave.	STATIONS	e from Ave.	oity.	G. N. 35	N. P. 65	N. P. 623	N. P. 732
Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenge	rer, Fr	N dok	Distance Garfield	31AIIUNS	Distance 1 Central A	Car Capacity of Sidings.	Passenger	Passenger	Freight	Freight
Đạily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daity	Wa Tur and	Star	Gar	Telegraph Offices and Calls	Cen	D'S.	Daily	Daily	Daily	Ex. Sun.
∟ 7.03 <b>A</b>	∟ 9.03 <b>A</b>				L 2.54P	<u> </u> 		E	L 7.03P				0.0	GARFIELD AVE.	7.3				L 5.33 <b>P</b>	
7.06	9.05				2.56				7.05		WCC		0.8		6.5	Yard			5.34	L 12.35A
7.08	9.07	L 8.32 <b>A</b>	L 8,43 <b>A</b>		2.58	L 3.51 P	L 4.07P	L 5.43P	7.07	L 9.06F	ļ	ļ <u>.</u>	1.3	BRIDGE SWITCH	6.0		L 9.37P		5.36	12.41
7.11	9.10	8.37	8.46		3.01	3.54	4.11	5.46	7.10	9.09			2.2	ELEVATOR STATION	5.1	   <del></del>	9.40		5.39	12.47
7.13	9.12	8.39	8.48		3.03	A 3.57P	4.14	A 5.49P	7.12	à 9.12F	<u></u>		2.9	OMAHA CONN.	4.4		9.42		5.41	12.55.
3 7.14	s 9.14	s 8.40	s 8.50	L 2.31P	s 3.04		s 4.15		s 7.15		X	WB 67	3.2	BYSUPERIOR U. DD	4.1		s 9.45	L 12.06 <b>A</b>		
7.16	9,15	8.41	8.51	2.33	3.05		4.16		7.17				3.6	BELKNAP STREET	3.7		9.46	12,10	5.52	1.00
as 7.30A	As 9.25 <b>A</b>	As 8.50 <b>A</b>	as 9.00 <b>A</b>	As 2.43P	As 3.15P		A 4.24P		As 7.32 <b>P</b>		WYX	67	7.3	AJCENTRAL AVENUEDN	0.0	Yard	As 9.55P	as 12.20 <b>A</b>	As 6.30P	a 1.25 <b>A</b>
Daily	Daily	Daily	Daily	Daily	Daily	Daily	Dally	Daily	Daily	Daily							Daily	Daily	Daily	Ex. Sun.
.27	.22	.18	.17	.12	.21	.06	.17	.06	,29	.06				Time Over Sub-Division			.02	.14	.57	.50
16.2	19.9	20.0	21.1	20.5	20,8	16.0	21.1	16.0	13.7	16.0		1		Average Speed Per Hour			18.0	17.1	7.7	7.8

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

DOUBLE TRACK BETWEEN GARFIELD AVENUE AND OMAHA CONNECTION, AND BETWEEN BELKNAP STREET AND CENTRAL AVENUE, EXCEPT OVER MINNESOTA DRAW ON ST. LOUIS RIVER BRIDGE WHICH IS

GOVERNED BY INTERLOCKING SIGNAL.

AUTOMATIC BLOCK SIGNALS BETWEEN CENTRAL AVENUE AND 21ST STREET, SUPERIOR.

SPECIAL INSTRUCTIONS PAGE 7.
REGISTER STATIONS: Superior Union Depot and Central Avenue for first class trains and passenger extras.
Rice's Point and Central Avenue for second class and inferior trains.

BULLETIN STATIONS: Rice's Point yard office. Rice's Point round house.

REGISTER EXCEPTIONS:

At Central Avenue Eastward trains register by ticket, Form 608, and will not require clearance unless train order signal is displayed at stop or caution.

DERAIL SWITCHES:

When not in use must be kept set in derailing position. East end N. P. Freight House track, Superior. Main track just east of N. P. Freight House, Superior.

SPEED RESTRICTIONS: At Superior, all trains and engines will run with restricted speed between west yard limit board, Superior and Omaha connection, including Lake Superior Terminal & Transfer tracks between Belknap Street and Omaha connection expecting to find track occupied, and will not exceed ten (10) miles per hour over switches

Omaha connection expecting to find track occupied, and will not exceed ten (10) miles per hour over switches at Belknap Street.

Second and inferior class trains will move with great care between Winter and Belknap Streets, Superior Freight yard, expecting to find the main tracks blocked.

All trains using tracks of Lake Superior Terminal & Transfer Railway, between Omaha connection and Belknap Street, will be governed by L. S. T. & T. Ry. time table rules and regulations.

Belknap Streets, Superior Terminal & Transfer Railway, between Omaha connection and Belknap Street, will be governed by L. S. T. & T. Ry. time table rules and regulations.

Westward trains and engines have the right to use Eastward main track between west lead from yard and the junction switch leading to terminal Fourth Sub-Division main track without protection, and all eastward trains will approach and pass through this territory with restricted speed expecting to find track occupied.

Garfield Ave., all trains will come to a full stop not less than two hundred (200) feet from junction switch and cross-over used by D. W. & P. trains and not proceed until track is known to be clear.

#### SECOND SUB-DIVISION (DULUTH AND SUPERIOR TERMINAL)

EAST	<b>'WARD</b>
JURIU 1	

				FIRST	CLASS					1			Time Table No. 147			FI	RST CL	ASS	THIRD	CLASS	
66	36	94	58	52	96	20	34	64	54	Soales, Wyes	ğ		September 29, 1929. Succeeding No. 146.			24	90	56	732		
N. P. 66	G. N. 36	Omaha 511	N. P. 58	N. P. 51	Omaha 303	G. N. 20	G. N. 34	N. P. 64	N. P. 53	uel, Scoles, V	Number	from Ave.	STATIONS	6 from	oity.	G. N. 24	Omaha 307	N. P.	N. P. 731		
Passenge	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenge	ter; F Tard	Station 1	Distance Carfield		ra l	Car Capacit of Sidings.	Passenger	Passenger	Passenger	Way Freight		
Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	A T &	St	Q Q ign	Telegraph Offices and Calls	Constant	20.2	Daily	Dally	Daily	Ex. Sun.		
			A 8.42 <b>A</b>	a 11.58 <b>a</b>					a 7.22 <b>F</b>			0.0	GARFIELD AVE.	7.3				A 11.27P			
			8.40	11.54					7.19	WCO TYX	LI	0.8	RICES POINT	6.5	Yard			11.25	a [1.15 <b>A</b>	:	
	A 7.38 <b>A</b>	a 7.55 <b>A</b>	8.39	11.52	A 12.30P	a 2.18P	A 5.53P		7.17	ļ	ļ	. 1.3	BRIDGE SWITCH	6.0		A 8.23P	A 8.32 <b>P</b>	11.24	11.12		
	7.34	7.50	8.36	11.49	12.26	2.14	5.49		7.14			2.2	ELEVATOR STATION	5.1		8.19	8.28	11.21	11.08	:	
	7.32	L 7.47 <b>A</b>		11.46	L 12.23P	2.12	5.47		7.12	<u> </u>		2.9	OMAHA CONN	4.4.		8.16	L 8.26 <b>P</b>	11.19	11.05	· .	
As 5.47A	1 -		-	s 11.45		s 2.10	s 5.45	As 6.31P	s 7.11	X	WB67	3.2	BYSUPERIOR U. DD	4.1		s 8.15		s 11.18			
5.40	7.27		8.30	11.44		2.06	5.41	6.26	7.09	ļ		3.6	BELKNAP STREET 3.7	3.7		8.11		11.15	11.02		
L 5.29 <b>.</b> A	L 7.16A		L 8.19 <b>A</b>	L 11.35A		L 1.58 <b>P</b>	L 5.33P	L 6.15 <b>P</b>	L 7.00P	WYX	67	7.3	AJCENTRAL AVENUEDN	0.0	Yard	L 8.03 <b>P</b>		L 11.05P	L 10.45 <b>A</b>	··· -	
Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Dally			-			·	Daily	Daily	Daily	Ex. Sun.		
.18	.22	.08	.23	.22	.07	.20	.20	.16	.22				Time Over Sub-Division			.20	.06	.22	.30		
13.6	16.3	12.0	19.0	19.9	13,7	18.0	18.0	15.4	19.9	1			Average Speed Per Hour	-[		18,0	16.0	19.9	13.0		

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

DOUBLE TRACK BETWEEN GARFIELD AVENUE AND OMAHA CONNECTION AND BETWEEN BELKNAP STREET AND CENTRAL AVENUE, EXCEPT OVER MINNESOTA DRAW ON ST. LOUIS RIVER BRIDGE WHICH IS

GOVERNED BY INTERLOCKING SIGNAL.

AUTOMATIC BLOCK SIGNALS BETWEEN CENTRAL AVENUE AND 21ST STREET, SUPERIOR.

## RULES GOVERNING MOVEMENT OF TRAINS OVER ST. LOUIS RIVER BRIDGE.

#### **LOCATION OF SIGNALS**

#### SPECIAL INSTUCTIONS PAGE 7.

SPECIAL INSTUCTIONS PAGE 7.
Interlocking semaphore signals govern use of tracks between Bridge Switch and Elevator Station.
All semaphore signals are upper quadrant type with following indications:
Top arm, horizontal, red light, stop.
Diagonally upward or yellow light, caution.
Vertical, green light, proceed, clear.
With the exception of the three-arm semaphore located west of Minnesota draw on eastward track, and the two-arm semaphore located just east of Elevator Station on the westward track, a lower arm, half length, is provided, and following indications of this arm will govern:
Diagonally upward or yellow light, proceed with restricted speed expecting a train immediately ahead or routes lined up for movement against current of traffic.
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.

Top arm, Northern Pacific.

Middle arm, Great Northern. Bottom arm, C. St. P. M. & O.

SPEED RESTRICTION: At Minnesota and Wisconsin drawbridges twenty (20) miles per hour.

The two-arm semaphore on westward track east of Elevator Station is route indication.

Top arm, straight main line.

Bottom arm, Great Northern freight track.

Bottom arm, Great Northern freight track.

Derails are located as follows:

At approach to Elevator Station from east and west.

At approach to Minnesota draw from Duluth.

All trains in both directions will come to a full stop before entering onto Wisconsin draw.

All eastward trains will come to a full stop before entering onto Minnesota draw.

If proceed signal is recived at the approach to Minnesota draw from the east, it will not be necessary to stop for such draw, it being protected by derail protected by derail.

Dwarf signals are of modern, upward quadrant type and govern movements against current of traffic.

Horizontal, red light, stop.

Vertical, green light, caution.

WESTWARD

#### THIRD SUB-DIVISION (DULUTH AND SUPERIOR TERMINAL)

**EASTWARD** 

			FI	RST CLA	ASS	-						Time Table No. 147					11-	F1	RST CLA	SS			
65	309	317	63	313	321	307	311	319	Scales, Wyes its.	ers.	Jot.	September 29, 1929 Succeeding No. 146.			66	318	310	322	312	314	308	64	320
N, P. 65	D. S. S. & A. 8	Soo Line	N. P.	Soo Line 63	Soo Line	D. S. S. & A.	Soo Line	Soc Line	Fuel, Sables,	Nump	Distance from West Duluth Jo	STATIONS	or U. D.	Car Capacity of Sidings.	N. P. 66	Soo Line	D. S. S. & A. 7	Soo Line 162	Soo Line	Soo Line 62	D. S. S. & A. 5	N. P. 64	Soo Line
Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	rra I	tion	stan sst I		Distance	0.5 1.50	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenge
Daily	Daily	Dally	Daily	Daily			Ex. Sun.	i———	, ¥ç ğ	St.	ä	Telegraph Offices and Calls	Ä	ಕರಿ	Dally	Daily	Daily	Ex. Sun.	Ex. Sun.	Daily	Ex. Sun.	Daily	Ex. Sun
11.50 <b>P</b>	-		L 2.18 <b>P</b>	:					WYX	L5	0.0		3.6		а 6.03 <b>.</b>							A 6.44P	
11.53			2.20	:					<del></del>		0.6	0.7	-3.0		6.01		-					6.42	
11.55 <b>P</b>	∟ 6.20 <b>P</b>	∟ 5.43 <b>P</b>	2.22	L 1.44P	L 10.50A	L 8.19A	L 7.46 <b>A</b>	L 6.28 <b>A</b>				Soo Line Conn. DW&P BERWIND JCT. Interlocked 0.5	2,3		5.58	A 7.46A	A 9.28 <b>A</b>	A 4.38P	A 5.04P	A 5.30P	A 5.35P	6.40	A 6.41
12.02 <b>A</b>	A 6.26P	 A 5.49 <b>P</b>	2.28	A 1.50P	a 10.56 <b>A</b>	a 8.25 <b>A</b>	A 7.52 <b>A</b>	а 6.34 <b>А</b>			3.3	GRASSY POINT DRAWBRIDGE Interlocked 1.5 Lt, S, T. & T. RY, JCT	0.3		5,49	L 7.39 <b>A</b>	L 9.22 <b>A</b>	L 4.30 <b>P</b>	L 4.57P	L 5.24 <b>P</b>	L 5.29P	6.32	Ĺ 6.34
s 12.06A	A 0.201		As 2.31P	. 1,501	7 10.507		7.521	A 0,541		WB 67	3.6	0.3	0.0		L 5.47 <b>A</b>							∟ 6.31 <b>₽</b>	
Daily	Daily	Daily	Daily	Daily	Ex. Sun.	Ex. Sun,	Ex. Sun	Ex. Sun.							Daily	Daily	Daily	Ex. Sun.	Ex. Sun.	Daily	Ex. Sun.	Daily	Ex. Sun
.16	.06	.06	.13	.06	.06	.06	.06	.06	<b> </b>			Time Over Sub-Division		-	.16	.07	.06	.08	.07	.06	.06	.13	.07
13.5	20.0	20.0	16.6	20.0	20.0	20.0	20.0	20.0				Average Speed Per Hour			13.5	17.1	20.0	15.0	17.1	20.0	20.0	16.6	17.1

## EASTWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION. DOUBLE TRACK BETWEEN BERWIND JCT. AND L. S. T. & T. RY. JCT., SUPERIOR.

SPECIAL INSTRUCTIONS, PAGE 7.

REGISTER STATIONS: Superior Union Depot for first class trains and passenger extras.

AT GRASSY POINT DRAW BRIDGE:

SPEED RESTRICTIONS: At Grassy Point Bridge twenty (20) miles per hour.

A torpedo machine is located just inside of the Home Signal and is operated in connection with derail. The explosion of one torpedo indicates that derail is set in derailing position and train must be brought to a stop immediately to prevent derailment.

RULES GOVERNING THE MOVEMENT OF TRAINS OVER GRASSY POINT DRAW BRIDGE.

AT WEST DULUTH JUNCTION:

All trains will run with restricted speed around east leg of wye and passing Zenith Furnace plant, looking out for switch engines working on main track.

Junction switch will be kept set and locked for terminal First Sub-Division main track.

East leg of wye is terminal Third Sub-Division main track and the switch at junction at east and west legs of wye will be kept set and locked for main track.

WESTWARD

FOURTH SUB-DIVISION (DULUTH AND SUPERIOR TERMINAL) EASTWARD

THIRD	CLASS	FIRST	CLASS	. en en		   .	Time Table No. 147			FIRST	CLASS	SECOND	CLASS
	731	53	51	el, Scales, es, Wyes Limits.	umbers.	rom	September 29, 1929 Succeeding No. 146.	rom	oity.	54	52	732	
	Way Freight	Passenger	Passenger	Water, Fu Turn Tabl	Station N	Distance from East End.	STATIONS	Distance from Central Ave.	Car Capacity of Sidings.	Passenger	Passenger	Freight	
	Ex. Sun.	Daily	Daily	≱∺ g	St.	ÄÄ	Telegraph Offices and Calls	ÄÖ	೦೭	Daily	Daily	Ex. Sun.	
	L 10.30A	L 6.50 <b>P</b>	L 11.25A	WOY	63	0.0	Pass. Station SPEAST ENDD C. St. P. M. & O. Crossing	4.0	Yard	as 9.35 <b>A</b>	As 3.25 <b>P</b>	д 1.40 <b>A</b>	
	10.39	6.54	11.29		· · · · · · · · · · · · · · · · · · ·	1.8	Interlocked 1.8 Track Conn. HILL AVE.	2.2	Yard	9,31 <sub></sub>	3.21	1.33	-
	A 10.45 <b>A</b>	As 7.00 <b>P</b>	As I I.35 <b>A</b>	WYX	67		SOO LINE CROSSING Interlocked l.i Track Conn. AJCENTRAL AVEDN	0.0	Yard	L 9.25 <b>A</b>	L 3.15 <b>P</b>	∟ 1.25 <b>A</b>	
*******	Ex. Sun.	Daily	Daily							Daily	Daily	Ex. Sun.	
	.15	.10	.10				Time Over Sub-Division			,10	.10	-15	
	16.0	24.0	24.0				Average Speed Per Hour			24.0	24.0	16.0	

# EASTWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION. DOUBLE TRACK BETWEEN EAST END PASSENGER STATION AND EAST LEG OF WYE AT CENTRAL AVE.

REGISTER STATION: Central Avenue.

AT CENTRAL AVENUE: Switches at west end of double track will be kept set and locked for eastward trains. Switches at connection of Fourth and Second Terminal Sun-Divisions near depot will be kept set and locked

Care will be taken by train and enginemen when using east leg of wye, as it is single track and on sharp curve; trains will not exceed twelve (12) miles per hour, and in foggy or stormy weather they will protect by flag.

AT EAST END: Switches at east end of double track, east of passenger station, will be kept set and locked for westward trains from First Sub-Division main track.

The distant semaphore of interlocking signals governing movement of westward trains from First Sub-Division main track, is an automatic signal of upper quadrant type. When horizontal or red light, it indicates track or cross-overs between signal and passenger station in use. When diagonally upward or yellow light, caution. When vertical or green light, proceed.

## SPECIAL INSTRUCTIONS.

(Note Changes.)

- 1. 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.
  - 2. All inferior to first class trains may run ahead of each other without orders.
- 3. Clearance Form A will not be required at Rice's Point Yard, Superior Freight Station or Superior Union Depot.
- 4. 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.
- 5. 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.
- 6. 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.
  - 7. All trains must move within yard limits prepared to stop unless the main track is seen or known to be clear.
- 8. 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.

- 9. 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 under full control, expecting to find the D. T. main track occupied.
- 10. 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 make usual stop and make sure that track is clear before proceeding.
  - 11. Bridge Restrictions.

Speed will be restricted over St. Louis Bridge between Duluth and Superior to twenty (20) miles per our.

- 12. Great Northern Power Co. Track. Speed will be restricted on all bridges for Engines Class S3, S4 and S10 to eight (8) miles per hour. Engines Classes T, Q1 and heavier will not be permitted.
- 13. When necessary to use a side track for main track, in addition to setting and locking switches for the siding and covering the same by train order, a flagman with proper flagging material will be stationed to fully protect approaching trains in the manner called for in Transportation Rules until movement over main track is resumed. When conductors find it necessary to leave switches set for siding they must fully protect approaching trains until relieved by trackmen or other employees fully competent and equipped to do so.
  - 14.—The following letters when placed after the figures of schedule indicate:

"A"—AM "P"—PM

AUTH	ORIZED	SURGEONS:-

Dr. C. S. KNOX, 219 Albany Block, Superior, East End, 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. G. C. MacRAE, 400 Lyceum Bldg., Duluth, Dr. C. M. SMITH, 400 Lyceum Bldg., Duluth, Dr. O. E. HEIMARK, 2004 W. Superior St., Duluth, Dr. C. L. HANEY, 2004 W. Superior St., Duluth,

Office Residence Telephone Telephone East 67R1 East 67R2 Broad 1458R1 Broad 161 Broad 65 Broad 532 Broad 65 Broad 192 Melrose 1089 Hemlock 3954W Melrose 1089 Hemlock 1955 Melrose 458 Melrose 1157 Melrose 458 Melrose 579

LOCATION STRETCHERS:— East End Freight Station.

Central Avenue Freight Station.
Superior Freight Station.
Rices Point Yard Office, Duluth.
Dock 6, Duluth.
Duluth Union Depot.
Tool Car, Duluth.
West Duluth Passenger Station.

### WATCH INSPECTORS:-

H. HENDRICKSON, Duluth, 416 West Superior St.

E. E. ESTERLY,, Duluth, 1919 W. Superior St.

W. F. HURST, West Duluth, 301 N. Central Ave.

L. J. HOWATT, Superior, 1313 Tower Ave.

#### MAXIMUM CLEARANCES.

	<u></u>					<u> </u>	• •	LIM	IT OF L	OAD MEA	SUREM	ENT.					****		
					,				Height	Above Top	of Rail.						: 65		
	1 ft. Wide	2 ft. Wide	3 ft. Wide	4 ft. Wide	5 ft. Wide	6 ft. Wide	7 ft. Wide	7 ft. 6 in. Wide	8 ft. Wide	8 ft. 6 in. Wide	9 ft. Wide	9 ft. 6 in. Wide	10 ft. Wide	10 ft. 2 in. Wide	10 ft. 6 in. Wide	11 ft. Wide	11 ft. 6 in. Wide	Max. Height	Max. Width
First Sub-division, Duluth to Fond du Lac	20′-3″	20'-3"	20′-3″	20′-3″	20′-3″	20′-3″	20′-3″	20′-3″	20'-3"	20'-3"	20′-3″	20′-3″	20′-3″	20'-3"	20′-3″	20′-3″	20′-3″	20′-3″	11'-6'
Second 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″	20′-3″	20′-3″	20'-3"	20'-3"	20'-3"	20'-3"	20′-3″	11'-6"
Third Sub-division, West 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″	20'-3"	20'-3"	20′-3″	20'-3"	20'-3"	20′-3″	20'-3"	20'-3"	11'-6"
Fourth 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"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	21'-0"	11'-6"

F. L. BIRDSALL.

Ass't Superintendent.

W. D. PEARCE,

Ass't Superintendent.

H. J. COUNCILMAN,
Trainmaster.

A. S. CRITCHFIELD

Trainmaster.

GEORGE STEINER, Chief Dispatcher.

