

NORTHERN PACIFIC RAILWAY COMPANY.

DULUTH AND SUPERIOR TERMINALS

TIME 160 TABLE

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

SUNDAY, JUNE 14, 1931.

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,
Assistant General Manager

G. H. JACOBUS,
Superintendent.

P. H. MCCAULEY,
General Superintendent of Transportation.

WESTWARD

FIRST SUB-DIVISION
(DULUTH AND SUPERIOR TERMINAL)

FIRST CLASS										Water, Fuel, Scales, Turn Tables, Wyes and Yard Limits.	Station Numbers.	Distance from D. & I. R. Jct.	Time Table No. 160 June 14, 1931 Succeeding No. 159.			Distance from Fond du Lac.	Car Capacity of Sidings	FIRST CLASS			SECOND CLASS		THIRD CLASS	
55	401	201	305	407	61	51	403	203	405				STATIONS					303	57	65	623	627	717	727
N. P. 55	D. M. & N. 10	D. M. & N. 1	D. W. & P. 5	D. M. & N. 8	N. P. 61	N. P. 52	D. M. & N. 12	D. M. & N. 3	D. M. & N. 6				Telegraph Offices and Calls					D. W. & P. 19	N. P. 57	N. P. 65	N. P. 623	N. P. 627	N. P. 717	N. P. 727
Motor Car	Passenger	Passenger	Passenger	Passenger	Motor Car	Motor Car	Passenger	Passenger	Passenger									Passenger	Passenger	Passenger	Freight	Freight	Way Freight	Way Freight
Daily	Daily	Daily	Daily	Daily	Ex. Sun.	Daily	Daily	Daily	Daily				Ex. Sun.	Daily	Daily	Daily	Daily	Daily	Ex. Sun.	Mo., Wed. and Fri.				
	L 7.55AM			L 11.36AM			L 3.30PM		L 5.31PM	WCO	0.0	EAST D. M. & N. JCT.	15.1											
L 7.15AM	A 8.00AM	L 8.30AM		A 11.40AM	L 1.00PM	L 2.50PM	A 3.35PM	L 3.50PM	A 5.35PM	TYX WB 71	0.9	DULUTH DN	14.2	L 7.30PM	L 11.30PM	L 5.30PM	L 8.00PM							
A 7.18AM		8.33	L 9.04AM		1.03	A 2.54PM		3.53			1.9	GARFIELD AVE.	13.2	L 6.36PM	A 7.33PM	11.33	A 5.33PM	8.04						
		8.34	9.05		s 1.04			3.54		L 2	2.2	20TH AVE.	12.9	6.38		f 11.35		8.05	L 9.15AM	L 5.30AM				
		A 8.36AM	9.07		1.07			A 3.56PM		L 02	2.8	WEST D. M. & N. JCT.	12.3	6.39		11.37		8.07	9.19	5.33				
											3.6	SOO LINE CROSSING	11.5											
			A 9.14AM		1.14						4.4	D. W. & P. JCT.	10.7	A 6.44PM		11.40		8.13	9.26	5.39				
					s 1.17					L 04	5.1	WU WEST DULUTH DN	10.0			s 11.44		8.16	s 9.30	5.42				
					A 1.23PM					WYX L 5	5.8	WEST DULUTH JCT. P	9.3			A 11.50PM		A 8.20PM	s 9.34	A 5.45AM				
											7.0	D. T. CROSSING	8.1											
											8.1	RIVERSIDE	7.0						s 9.49					
										LB 2	8.5	SPIRIT LAKE	6.6						s 9.51					
										LB 3	9.7	MORGAN PARK	5.4						s 9.58					
											10.7	Minn. Steel Co. Crossing												
												BOAT CLUB	4.4											
										LB 5	12.4	NEW DULUTH P	2.7						s 10.15					
										LB 8	15.1	FOND DU LAC	0.0						A 10.34AM					
Daily	Daily	Daily	Daily	Daily	Ex. Sun.	Daily	Daily	Daily	Daily			Time Over Sub-Division		Ex. Sun.	Daily	Daily	Daily	Daily	Ex. Sun.	Mo., Wed. and Fri.				
.03	.05	.06	.10	.04	.23	.04	.05	.06	.04			Average Speed Per Hour		.08	.03	.20	.03	.20	1.19	.15				
20.0	10.8	19.0	15.0	13.5	13.3	15.0	10.8	19.0	13.5					18.7	20.0	14.7	20.0	14.7	9.8	14.4				

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 WEST D. M. & N. JCT. TO WEST DULUTH JCT.

SPECIAL INSTRUCTIONS PAGE 7.

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.

REGISTER EXCEPTIONS: At West Duluth Nos. 61, 65 and 627 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.

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

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

YARD LIMITS: Duluth yard extends from connection with D. M. & N., 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 RESTRICTIONS:

Duluth to Fond du Lac no restrictions.
Great Northern Power Co. track. Speed will be restricted on all bridges for S3, S4 and S10 to eight (8) miles per hour.
Engine classes T, Q1 and heavier will not be permitted.

DERAIL SWITCHES:

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

WHISTLE CALLS:

D. M. & N. Jct. 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. Jct. to Martin's track—Three short.
Westward main track to D. M. & N. Jct.—One long and one short.
D. M. & N. Jct. to eastward main track—One long and one short.
Through Westward main track movements—One long.
Through Eastward main track movements—One long.

AT DULUTH:

All westward freight trains between Fifth Avenue West and Garfield Avenue must not exceed a speed of twelve miles per hour through cross-over switches at west end of depot yard near switch shanty and over crossings and switches at Garfield Avenue.

FIRST SUB-DIVISION
(DULUTH AND SUPERIOR TERMINAL)

EASTWARD

FIRST CLASS											Water, Fuel, Scales, Turn Tables, Wyes and Yard Limits.	Station Numbers.	Distance from D. & L. R. Jct.	Time Table No. 160. June 14, 1931 Succeeding No. 159.		Distance from Fond du Lac.	Car Capacity of Slidings.	FIRST CLASS		SECOND CLASS		THIRD CLASS	
66	304	400	58	202	408	52	62	204	404	402				STATIONS				306	56	626	628	718	728
N. P. 66	D. W. & P. 20	D. M. & N. 5	N. P. 58	D. M. & N. 2	D. M. & N. 9	N. P. 51	N. P. 62	D. M. & N. 4	D. M. & N. 7	D. M. & N. 11				Telegraph Offices and Calls				D. W. & P. 6	N. P. 56	C. M. St. P. & P. 626	N. P. 628	N. P. 718	N. P. 728
Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Motor Car	Motor Car	Passenger	Passenger	Passenger								Passenger	Motor Car	Freight	Freight	Way Freight	Way Freight
Daily	Ex. Mon.	Daily	Daily	Daily	Daily	Daily	Ex. Sun.	Daily	Daily	Daily								Daily	Daily	Daily	Daily	Ex. Sun.	Tue. Thu. and Sat.
		A 8.39AM			A 11.50AM				A 4.14PM	A 5.45PM	WCO	0.0	EAST D. M. & N. JCT.	15.1									
A 6.30AM		L 8.35AM	A 9.35AM	A 11.15AM	L 11.45AM	A 12.01PM	A 2.10PM	A 3.50PM	L 4.10PM	L 5.40PM	TYX	0.9	DU DULUTH DN	14.2	Yard	A 11.30PM		A 5.30AM					
6.25	A 7.53AM		L 9.32AM	11.12		L 11.58AM	2.06	3.47				1.9	GARFIELD AVE.	13.2	A 8.21PM	L 11.27PM		5.20					
S 6.22	7.50			11.11			S 2.05	3.46			L 2	2.2	20TH AVE.	12.9	8.18		A 5.10AM	5.15	A 12.22PM	A 2.27PM			
6.19	7.49			L 11.09AM				2.02	L 3.44PM		L 02	2.8	WEST D. M. & N. JCT.	12.3	8.16			5.03	5.08	12.18	2.24		
												3.6	SOO LINE CROSSING	11.5									
6.14	L 7.43AM						1.55					4.4	D. W. & P. JCT.	10.7	L 8.11PM		4.53	5.02	12.08	2.18			
S 6.12							S 1.52				L 04	5.1	WU WEST DULUTH DN	10.0			4.50	5.00	S 12.04	2.15			
L 6.03AM							L 1.48PM				WYX	5.8	WEST DULUTH JCT. P	9.3			L 4.45AM	L 4.55AM	S 12.01PM	L 2.12PM			
												7.0	D. T. CROSSING	8.1									
												8.1	RIVERSIDE	7.0					S 11.45AM				
											LB 2	8.5	SPIRIT LAKE	6.6					S 11.43				
											LB 3	9.7	MORGAN PARK	5.4					S 11.35				
												10.7	Minn. Steel Co. Crossing	4.4									
											LB 5	12.4	BOAT CLUB	2.7					S 11.18				
											LB 8	15.1	NEW DULUTH P	0.0					L 11.00AM				
													FOND DU LAC										
Daily	Ex. Mon.	Daily	Daily	Daily	Daily	Daily	Ex. Sun.	Daily	Daily	Daily						Daily	Daily	Daily	Daily	Ex. Sun.	Tue. Thu. and Sat.		
.22	.09	.04	.03	.06	.05	.03	.22	.06	.04	.05				Time Over Sub-Division		.10	.03	.25	.35	1.22	.15		
11.1	16.6	13.5	20.0	19.0	10.8	20.0	13.3	19.0	13.5	10.8				Average Speed Per Hour		15.0	20.0	8.6	8.4	9.4	14.4		

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 WEST 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. M. & N passenger trains will be kept set for Depot 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. Switch at west end wye will be kept set and locked for First Sub-Division.

WESTWARD

SECOND SUB-DIVISION
(DULUTH AND SUPERIOR TERMINAL)

FIRST CLASS									Water, Fuel, Sales, Transfer, Yards and Yard Limits.	Station Numbers.	Distance from Garfield Ave.	Time Table No. 160 June 14, 1931 Succeeding No. 159.		Distance from Central Ave.	Car Capacity of Sidings.	FIRST CLASS		SECOND CLASS				
55	23	33	51	95	19	93	57	89				STATIONS				35	65	731	623	625		
N. P. 55	G. N. 23	G. N. 33	N. P. 51	Omaha 304	G. N. 19	Omaha 512	N. P. 57	Omaha 510								G. N. 35	N. P. 65	N. P. 732	N. P. 623	C. M. St. P. & P. 625		
Motor Car	Passenger	Passenger	Motor Car	Passenger	Passenger	Passenger	Passenger	Passenger								Passenger	Passenger	Freight	Freight	Freight		
Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily				Telegraph Offices and Calls				Daily	Daily	Ex. Sun.	Daily	Daily		
L 7.18AM			L 2.54PM				L 7.33PM					0.0	GARFIELD AVE.			7.3			L 5.33PM			
7.21			2.56				7.35					0.8	RICE'S POINT			6.5	Yard		L 12.35AM	5.34	L 8.00PM	
7.23	L 8.32AM	L 8.43AM	2.58	L 3.51PM	L 4.07PM	L 5.43PM	7.36	L 9.06PM				1.3	BRIDGE SWITCH			6.0		L 10.07PM	12.41	5.36	8.05	
7.26	8.37	8.46	3.01	3.55	4.11	5.46	7.39	9.09				2.2	ELEVATOR STATION			5.1		10.10	12.47	5.39	8.09	
7.28	8.39	8.48	3.03	A 3.59PM	4.14	A 5.49PM	7.41	A 9.12PM				2.9	OMAHA CONN.			4.4		10.12	12.55	5.41	8.11	
S 7.29	S 8.40	S 8.50	S 3.04		S 4.15		S 7.42					3.2	BY SUPERIOR U. D.			4.1		S 10.15	L 12.06AM			
7.31	8.41	8.51	3.05		4.16		7.44					3.6	BELKNAP STREET			3.7		10.16	12.10	1.00	5.52	8.20
AS 7.45AM	AS 8.50AM	AS 9.00AM	AS 3.15PM		A 4.24PM		AS 7.55PM					7.3	AJ CENTRAL AVENUE DN			0.0	Yard	AS 10.25PM	AS 12.20AM	A 1.25AM	AS 6.30PM	A 8.50PM
Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily										Daily	Daily	Ex. Su n.	Daily	Daily
.27	.18	.17	.21	.08	.17	.06	.22	.06					Time Over Sub-Division					.18	.14	.50	.57	.50
16.2	20.0	21.1	20.8	12.0	21.1	16.0	19.9	16.0					Average Speed Per Hour					20.0	17.1	7.8	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 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.
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.

AT SUPERIOR:

AT CENTRAL AVENUE:

AT DULUTH:

SECOND SUB-DIVISION
(DULUTH AND SUPERIOR TERMINAL)

EASTWARD

FIRST CLASS								Water, Fuel, Scales, Turn Tables, Wyes and Yard Limits.	Station Numbers.	Distance from Garfield Ave.	Time Table No. 160 June 14, 1931 Succeeding No. 159		Distance from Central Ave.	Car Capacity of Sidings.	FIRST CLASS			THIRD CLASS	
66	36	94	58	52	96	24	34				STATIONS				20	90	56	732	
N. P. 66	G. N. 36	Omaha 511	N. P. 58	N. P. 51	Omaha 503	G. N. 24	G. N. 34				Telegraph Offices and Calls				G. N. 20	Omaha 307	N. P. 56	N. P. 731	
Passenger	Passenger	Passenger	Passenger	Motor Car	Passenger	Passenger	Passenger								Passenger	Passenger	Motor Car	Way Freight	
Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily			Daily	Daily	Daily	Ex. Sun.						
			A 9.32AM	A 11.58AM				WCO	L 1	0.0	GARFIELD AVE. 0.8	7.3			A 11.27PM				
			9.30	11.54				TYX		0.8	RICES POINT 0.5	6.5	Yard			11.25	A 11.15AM		
	A 7.53AM	A 8.00AM	9.28	11.52	A 12.13PM	A 2.18PM	A 5.53PM			1.3	BRIDGE SWITCH 0.9	6.0		A 8.23PM	A 8.49PM	11.24	11.12		
	7.49	7.55	9.25	11.49	12.09	2.14	5.49			2.2	ELEVATOR STATION 0.7	5.1		8.19	8.45	11.21	11.08		
	7.47	L 7.50AM	9.23	11.46	L 12.05PM	2.12	5.47			2.9	OMAHA CONN. 0.3	4.4		8.16	L 8.41PM	11.19	11.05		
A 5.40AM	7.45		9.21	11.45		2.10	5.45	X	WB 67	3.2	BY SUPERIOR U. D. 0.4	4.1		8.15		11.18			
5.38	7.41		9.20	11.44		2.06	5.41			3.6	BELKNAP STREET 3.7	3.7		8.11		11.15	11.02		
L 5.29AM	L 7.28AM		L 9.10AM	L 11.35AM		L 1.58PM	L 5.33PM	WYX	67	7.3	AJ CENTRAL AVENUE DN	0.0	Yard	L 8.03PM		L 11.05PM	L 10.45AM		
Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily							Daily	Daily	Daily	Ex. Sun.		
.11	.25	.10	.22	.22	.08	.20	.20				Time Over Sub-Division			.20	.08	.22	.30		
22.3	14.4	9.6	19.9	19.9	12.0	18.0	18.0				Average Speed Per Hour			18.0	12.0	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 INSTRUCTIONS 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.

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.

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 received at the approach to Minnesota draw from the east, it will not be necessary to stop for such draw, it being 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									
FIRST CLASS					Water, Fuel, Scales, Turn Tables, Wyes and Yard Limits.	Station Numbers.	Distance from West Duluth Jct.	Time Table No. 160 June 14, 1931 Succeeding No. 159.					Distance from Superior U. D.	Car Capacity of Sidings.	FIRST CLASS									
65	309	317	313	311				STATIONS							310	66	318	314	312					
N. P. 65	D. S. S. & A. 8	Soo Line 18	Soo Line 63	Soo Line 61				Telegraph Offices and Calls							D. S. S. & A. 7	N. P. 66	Soo Line 17	Soo Line 62	Soo Line 60					
Passenger	Passenger	Passenger	Passenger	Passenger											Passenger	Passenger	Passenger	Passenger	Passenger					
Daily	Daily	Daily	Daily	Ex. Sun.											Daily	Daily	Daily	Daily	Ex. Sun.					
L 11.50PM								WYX	L 5	0.0	WEST DULUTH JCT. P					3.6		A 6 03AM						
11.53										0.6	ZENITH FURNACE					3.0		6.01						
11.55PM	L 8.17PM	L 6.13PM	L 1.44PM	L 7.14AM						1.3	Soo Line Conn. DW&P BERWIND JCT.					2.3		A 5.16AM	5.58	A 7.46AM	A 5.31PM	A 7.52PM		
										1.8	{ GRASSY POINT DRAWBRIDGE }					1.8								
12.05AM	A 8.27PM	A 6.19PM	A 1.50PM	A 7.22AM						3.3	Interlocked 1.5 L. S. T. & T. RY. JCT.					0.3		L 5.08AM	5.49	L 7.39AM	L 5.24PM	L 7.45PM		
A 12.06AM					WB67		3.6	SUPERIOR U. D. D					0.0		L 5.40AM									
Daily	Daily	Daily	Daily	Ex. Sun.						Daily	Daily	Daily	Daily	Ex. Sun.										
.16	.10	.08	.08	.08	Time Over Sub-Division					.08	.23	.07	.07	.07										
18.5	12.0	20.0	20.0	15.0	Average Speed Per Hour					18.0	9.4	17.1	17.1	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.

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

AT GRASSY POINT DRAW BRIDGE: 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. East leg of wye is terminal Third Sub-Division main track and the switches will be kept set and locked for main track.

WESTWARD										FOURTH SUB-DIVISION (DULUTH AND SUPERIOR TERMINAL)										EASTWARD									
THIRD CLASS				FIRST CLASS				Water, Fuel, Scales, Turn Tables, Wyes and Yard Limits.	Station Numbers.	Distance from East End.	Time Table No. 160 June 14, 1931 Succeeding No. 159.				Distance from Central Ave.	Car Capacity of Sidings.	FIRST CLASS		SECOND CLASS										
731				51							STATIONS						52	732											
Way Freight				Motor Car							Telegraph Offices and Calls						Motor Car	Freight											
Ex. Sun.				Daily													Daily	Ex. Sun.											
L 10.30AM				L 11.25AM				WOY	63	0.0	Pass. Station EAST END				4.0	Yard	A 3.25PM	A 1.40AM											
10.39				11.29				X	65	1.8	C. St. P. M. & O. Crossing Interlocked 1.8 Track Conn. HILL AVE.				2.2	Yard	3.21	1.33											
										2.9	SOO LINE CROSSING Interlocked 1.1 Track Conn. AJ CENTRAL AVE. DN				1.1														
A 10.45AM				A 11.35AM				WYX	67	4.0					0.0	Yard	L 3.15PM	L 1.25AM											
Ex. Sun.				Daily														Daily	Ex. Sun.										
.15				.10								Time Over Sub-Division						.10	.15										
16.0				24.0								Average Speed Per Hour						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 Sub-Divisions near depot will be kept set and locked for Second Sub-Division. 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 Furnace 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 hour.

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. 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.

14. 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.

15. At West Duluth Jct.—Automatic Power Switch installed at end double track and Spring Switch at East end Wye to Grassy Point Line in connection with Spring Switch be governed by Rule (13), Special Instructions, Page (7) current Time Table. Automatic Power Switch at West Duluth Jct., end of double track, operated automatically by electric switch machine. When necessary to operate Switch by hand first throw lever marked "POWER LEVER," then throw lever marked "HAND-THROW LEVER." Both levers must be returned to normal position and locked after completing movement. Home Signal 146.1, Dwarf Signal 146.3, Home Signal 146.0, Dwarf Signal 146.2, Dwarf Signal 146.4, Signal 145.8 and Home Signal 146.6 are all Interlocking Signals and rules governing Interlocking apply. Trains finding Eastward Signal 146.0 and Westward 146.1 or Dwarf Signal 146.3 at "STOP" must examine end of double track switch, and if not in proper position use hand-throw lever and comply with Interlocking Signal Rules. Normal position of Spring Switch for Grassy Point Line Normal position of Power Switch for Westward trains.

AUTHORIZED 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. 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 Telephone	Residence Telephone
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.

	LIMIT OF LOAD MEASUREMENT.																		
	Height Above Top of Rail.																		
	1 ft. Wide	2 ft. Wide	3 ft. Wide	4 ft. Wide	5 ft. Wide	6 ft. Wide	7 ft. Wide	7 ft. 6 in. Wide	8 ft. Wide	8 ft. 6 in. Wide	9 ft. Wide	9 ft. 6 in. Wide	10 ft. Wide	10 ft. 2 in. Wide	10 ft. 6 in. Wide	11 ft. Wide	11 ft. 6 in. Wide	Max. Height	Max. Width
First Sub-division, 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"	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.

C. T. SPONSEL,
Ass't Superintendent.

H. J. COUNCILMAN,
Trainmaster.

GEORGE STEINER,
Chief Dispatcher.

