

NORTHERN PACIFIC RAILWAY COMPANY.

DULUTH AND SUPERIOR TERMINALS

TIME 47 TABLE

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

SUNDAY, NOVEMBER 23rd, 1913.

For the Government of Employees only. The Company reserves the right to vary therefrom at pleasure. Be positive that you have the Current Time Table and destroy all previous numbers. Read carefully the Special Rules and always have for reference a copy of TRANSPORTATION RULES.

G. A. GOODELL,
General Manager.

C. L. NICHOLS,
General Superintendent.

P. H. MCCAULEY,
Superintendent of Transportation.

A. V. BROWN,
Superintendent.

WESTWARD FROM DULUTH

	FOURTH SUB-DIVISION—DULUTH AND SUPERIOR TERMINALS																		TIME TABLE No. 47. NOVEMBER 23, 1913.		STATIONS		Distance from Duluth	Distance from Central Ave	95 OMAHA 95 Daily		
	2nd CLASS	2nd CLASS	2nd CLASS	1st CLASS	1st CLASS	1st CLASS	1st CLASS	1st CLASS	1st CLASS	1st CLASS	1st CLASS	1st CLASS	1st CLASS	1st CLASS	1st CLASS	1st CLASS	1st CLASS	1st CLASS	Telegraph Offices and Calls.								
	729 N. P. 730 Mon. Wed. Fr.	733 N. P. 734 Tu. Thur. Sat.	727 N. P. 727 Ex. Sunday	181 N. P. 181 Ex. Sunday	201 D. M. & N. I Daily	55 N. P. 55 Daily	53 N. P. 54 Daily	23 G. N. 23 Daily	183 N. P. 183 Daily	33 G. N. 33 Daily	161 OMAHA 61 Ex. Sunday	61 N. P. 61 Ex. Sunday	59 N. P. 59 Daily	303 D. W. P. 3 Daily	185 N. P. 185 Ex. Sunday	63 N. P. 63 Daily	37 G. N. 37 Ex. Sunday	187 N. P. 187 Daily									
DULUTH				L 6.20 AM	L 7.40 AM	L 7.50 AM	L 8.00 AM		L 8.40 AM			L 9.00 AM	L 10.00 AM		L 11.30 AM	L 1.55 PM		L 2.30 PM	0.0	DU	DULUTH	DN	8.3				
GARFIELD AVENUE				6.23	7.43	7.53	8.03		8.43			9.04	10.03	L 10.08 AM	11.33	1.58		2.33	1.0		GARFIELD AVENUE			7.3			
20TH AVENUE				6.25	7.44	Via St. Louis Bridge	Via St. Louis Bridge		8.45			9.06	10.04	10.09	11.35	1.59		2.35	1.3		20TH AVENUE			11.1			
D. M. & N. JCT.			6.27	A 7.46 AM				8.47		9.08	10.06	10.11	11.37	2.01		2.37	1.9		2.37	0.6		D. M. & N. JCT.			10.5		
D. W. and P. JCT.			6.32					8.52		9.12	10.10	A 10.16 AM	11.42	2.05		2.42	3.5		2.42	1.6		D. W. and P. JCT.			9.1		
WEST DULUTH			6.35					8.55		9.17	10.13		11.45	2.08		2.45	4.2		2.45	0.7		WU	WEST DULUTH	DN		8.2	
WEST DULUTH JCT.			6.38					8.58		A 9.20 AM	10.15		11.48	2.10		2.48	5.0		2.48	0.8		WEST DULUTH JCT.			7.5		
SPIRIT LAKE			6.44							9.04			11.54 AM			2.55	7.6		2.55	2.6		SPIRIT LAKE			6.7		
NEW DULUTH			6.53							9.13			12.03 PM			3.03	11.5		3.03	3.9		WD	NEW DULUTH	D		2.9	
FOND DU LAC			A 7.00 AM							A 9.20 AM			A 12.10 PM			A 3.10 PM	14.2		A 3.10 PM	2.7		FN	FOND DU LAC	D		0.0	
ZENITH FURNACE								7.56	8.06						10.16					0.6		5.5	ZENITH FURNACE			6.9	
D. W. and P. JCT.															10.17					0.7		6.2	D. W. & P. JCT.			6.4	
GRASSY POINT SIDING													10.23					1.9		8.1	GRASSY POINT SIDING			4.6			
RICE'S POINT	L 4.00 AM	L 6.05 AM	L 6.30 AM			7.56	8.06													1.0		RICE'S POINT			6.3		
BRIDGE SWITCH	4.05	6.10	6.33			7.57	8.08	L 8.32 AM		L 8.52 AM	L 8.57 AM								1.3		2.3	BRIDGE SWITCH		L 3.38 PM			
ELEVATOR STATION	4.12	6.17	6.40			8.02	8.13	8.37		8.57	9.02								0.9		3.2	ELEVATOR STATION		8.43			
OMAHA CONN.	4.15	6.20	6.43			8.04	8.14	8.39		8.59	A 9.04 AM								0.7		3.9	OMAHA CONN.		A 3.45 PM			
SUPERIOR U. D.						8.05	8.15	8.40		9.00			10.29			2.24	2.10		0.3		4.2	BY	SUPERIOR U. D.	U	4.1		
BELKNAP STREET	4.40	6.40	7.00			8.06	8.16	8.41		9.01			10.30			2.25	2.11		0.4		4.6	BELKNAP STREET			3.6		
CENTRAL AVENUE	A 4.50 AM	A 6.50 AM	A 7.15 AM			A 8.15 AM	A 8.25 AM	A 8.50 AM		A 9.10 AM			A 10.40 AM			A 2.34 PM	A 2.20 PM		3.6		8.3	AJ	CENTRAL AVENUE	DN	0.0		

EASTWARD TO DULUTH

EASTWARD TO DULUTH										FOURTH SUB-DIVISION—DULUTH AND SUPERIOR TERMINALS															
	2nd CLASS	2nd CLASS	1st CLASS	1st CLASS	1st CLASS	1st CLASS	1st CLASS	1st CLASS	1st CLASS	1st CLASS	1st CLASS	1st CLASS	1st CLASS	2nd CLASS	1st CLASS	1st CLASS	1st CLASS	1st CLASS	Distance from Duluth	TIME TABLE No. 47. NOVEMBER 23, 1913. STATIONS Telegraph Offices and Calls.		Distance from Central Ave	2nd CLASS		
	624	628	66	18	180	36	58	302	94	72	182	202	52	626	38	96	186	62					734		
	N. P. 624 Daily	N. P. 628 Daily	N. P. 66 Daily	G. N. 18 Daily	N. P. 180 Ex. Sunday	G. N. 36 Daily	N. P. 58 Daily	D. W. P. 2 Daily	OMAHA 94 Daily	N. P. 72 Daily	N. P. 182 Daily	D. M. & N. 2 Daily	N. P. 51 Daily	N. P. 626 Daily	G. N. 38 Ex. Sunday	OMAHA 96 Daily	N. P. 186 Ex. Sunday	N. P. 62 Ex. Sunday					N. P. 733 Tues ThurSat		
DULUTH		A 6.20 AM	A 6.30 AM		A 8.20 AM		A 8.15 AM			A 9.40 AM	A 10.10 AM	A 10.31 AM	A 11.40 AM				A 1.50 PM	A 2.05 PM	0.0	DU	DULUTH	DN	8.3		
GARFIELD AVENUE		5.10	6.25		8.16		8.12	A 9.07 AM		9.35	10.07	10.28	11.36				1.47	2.02	1.0		GARFIELD AVENUE		7.3		
20TH AVENUE	A 1.50 AM	5.03	6.24		8.14			9.06		9.33	10.05	10.27		A 11.40 AM			1.45	2.00	1.3		20TH AVENUE		11.1		
D. M. & N. JCT.	1.45	4.58	6.22		8.12			9.04		9.31	10.03	L 10.25 AM		11.35			1.43	1.57	1.9		D. M. & N. JCT.		10.5		
D. W. & P. JCT.	1.38	4.53	6.17		8.07			L 9.00 AM		9.26	9.57			11.28			1.37	1.52	3.5		D. W. & P. JCT.		9.1		
WEST DULUTH	1.35	4.51	6.15		8.05					9.23	9.55			11.25			1.35	1.50	4.2	WU	WEST DULUTH	DN	8.2		
WEST DULUTH JCT.	L 1.30 AM	L 4.46 AM	6.12		8.01					L 9.20 AM	9.52			L 11.20 AM			1.32	L 1.47 PM	5.0		WEST DULUTH JCT.		7.5		
SPIRIT LAKE			Point Line		7.54		Via St. Louis Bridge				9.46						1.26		7.6		SPIRIT LAKE		6.7		
NEW DULUTH					7.43							9.37						1.17		11.5	WD	NEW DULUTH	D	2.9	
FOND DU LAC					L 7.35 AM							L 9.30 AM						L 1.10 PM		14.2	FN	FOND DU LAC	D	0.0	
ZENITH FURNACE				6.10																5.5		ZENITH FURNACE		6.9	
D. W. & P. JCT.			6.09																6.2		D. W. & P. JCT.		6.4		
GRASSY POINT SIDING			6.00																	8.1		GRASSY POINT SIDING		4.6	
RICE'S POINT			Via Grassy					8.09						11.33						1.0		RICE'S POINT		6.3	
BRIDGE SWITCH				A 6.18 AM		A 8.03 AM		8.08		A 9.13 AM					11.32		A 12.43 PM	A 12.32 PM			2.3		BRIDGE SWITCH		6.0
ELEVATOR STATION				6.13		7.53		8.03		9.03					11.27		12.38	12.27			3.2		ELEVATOR STATION		5.1
OMAHA CONN.				6.11		7.56		8.01		L 9.06 AM					11.25		12.36	L 12.25 PM			3.9		OMAHA CONN.		4.4
SUPERIOR U. D.				5.55	6.10	7.55	8.00							11.24		12.35				4.2	BY	SUPERIOR U. D.	D	4.1	
BELKNAP STREET				5.54	6.09	7.54	7.59							11.23		12.34				4.6		BELKNAP STREET		3.6	
CENTRAL AVENUE			L 5.45 AM	L 6.00 AM		L 7.45 AM	L 7.50 AM						L 11.12 AM		L 12.25 PM				8.3	AJ	CENTRAL AVENUE	DN	0.0		

FOURTH SUB-DIVISION—DULUTH AND SUPERIOR TERMINALS

EASTWARD TO DULUTH

FOURTH SUB-DIVISION—DULUTH AND SUPERIOR TERMINALS

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

3rd CLASS	3rd CLASS	1st CLASS	1st CLASS	Distance from East End.	TIME TABLE No. 47. NOV. 23, 1913.		Distance from Central Ave.	1st CLASS	1st CLASS	3rd CLASS	3rd CLASS
733	729	53	51					52	54	730	734
WAY F'R'T.	WAY F'R'T	PASSENGER	PASSENGER					PASSENGER	PASSENGER	WAY F'R'T.	WAY FREIGHT
Tues., Thurs. & Sat.	Mon., Wed. & Fri.	Daily	Daily			Daily	Daily	Mon., Wed. & Fri.	Tues., Thur. & Sat.		
L 1.00 PM	L 1.40 PM	L 6.13 PM	L 11.00 AM	0.0	SP.....EAST END.... D	3.9	As 4.35 PM	As 8.35 AM	As 5.25 AM	As 7.25 AM	
1.10	1.50	6.17	11.04	1.81.8HILL AVE.....	1.8	4.31	8.31	5.15	7.15	
As 1.25 PM	As 2.05 PM	As 6.24 PM	As 11.11 AM	2.92.1 AJ. CENTRAL AVE. DN	0.0	L 4.25 PM	L 8.25 AM	L 5.05 AM	L 7.05 AM	

SPECIAL RULES FOR MOVEMENT OF TRAINS ON DOUBLE TRACK BETWEEN EAST END AND CENTRAL AVENUE.

No. 183	has right over	No. 182.
" 185	" "	" 186.
" 187	" "	" 188.
" 181	" "	" 180.
" 189	" "	" 190.

Main Line just east of N. P. Freight House. Superior.

tion and Central Ave., but must observe all rules relative to protection of rear end and use of double track.

All eastward trains must get clearance at Central Ave. Transfer crews coming from Cadotte Ave. yard will not occupy main line until they know that superior class trains have passed. First class westward trains will leave register ticket with operator East End passenger station.

To insure personal safety, operators having train orders or messages to deliver to passing trains should stand to the right hand side of train and avoid standing between tracks when possible to do so.

Within yard limits the main track may be used, protecting against first class trains.

All trains must move within yard limits prepared to stop unless the main track is seen or known to be clear.

Special Rules governing trains on Fond du Lac Branch—

No. 183	has	right	over	No. 182.
" 185	"	"	"	" 186.
" 187	"	"	"	" 188.
" 181	"	"	"	" 180.
" 189	"	"	"	" 190.

REGISTERING STATIONS.—First Class trains and passenger extras will register at Duluth Union Depot, Superior Union Depot, Central Avenue, West Duluth and Fond du Lac.

Second Class trains, extras and light engines will register at Rice's Point, Central Avenue, West Duluth and Fond du Lac, and at Superior Freight Station when running via Grassy Point Line.

Clearances will not be required at Rice's Point, Superior Freight Station and Superior Union Depot.

BULLETIN STATIONS.—Duluth Union Depot, Rice's Point Yard Office, Superior Union Depot, Central Avenue. All train and enginemen must inspect bulletins before departing on their run.

STANDARD CLOCKS.—Rice's Point Yard Office and Dispatcher's Office, Duluth.

DERAIL SWITCHES.—When not in use must be kept set in derailing position.

West end of Zenith Furnace track.
East End N. P. Freight House track, Superior.
Main Line just east of N. P. Freight House, Superior.

DOUBLE TRACK RULES.

1. Double track extends from Duluth Union Depot to West Duluth Junction and from Garfield Ave. to Central Ave. Except over Minnesota Draw Span governed by interlocking signals and from Omaha connection to Superior Union Depot governed by Switch Tenders at both points.
2. All trains and engines using double track will keep to the right, unless otherwise directed.
3. Inferior Class trains and Extras will keep out of the way of Superior Class trains going in the same direction.
4. Junction Switch at Garfield Avenue will be kept set for straight line.
5. The switch at end of double track West Duluth Junction will be kept set for eastward trains from Third Sub-division.
6. Grassy Point Line Switch at West Duluth Junction will be kept set for main line eastward track.
7. Extras, work extras and switch engines do not require telegraphic orders for movements between Central Ave. and Duluth running via St. Louis Bridge or between West Duluth Junction and Duluth, but must observe all rules relative to protection of rear end and use of double track.
8. Westward trains and switch crews will have the right to use eastward track at Central Ave. between west lead from yard and junction switch leading to first sub-division main line without protection, and all eastward trains will approach and pass through such territory with train under perfect control, expecting to find track occupied.
9. Rule 86, Book of Rules, is modified to the extent that between Superior and Duluth and between West Duluth Junction and Duluth, Second Class and extra trains may run ahead of First and Second Class trains without orders. Between Central Avenue and Superior extras may run ahead of Second Class trains without orders.
10. To insure personal safety operators having train orders or messages to deliver to passing trains should stand to the right hand side of train and avoid standing between tracks when possible to do so.

SPECIAL RULES. (Note Changes.)

East leg of wye at West Duluth Junction is "Grassy Point Main Line," and the switch at junction of east and west legs of wye will be kept set for Grassy Point Line.

All trains must run slow around east leg of wye at West Duluth Junction and passing Zenith Furnace Plant, looking out for switch engines working on main line. Switch Engines working in this territory must be fully protected at all times.

Third Sub-Division main line trains will register and receive clearance and orders at West Duluth.

Eastward second class and inferior trains coming from Third Sub-Division, may register at West Duluth by ticket.

A brakeman or flagman must be stationed on the rear car of all trains, at all times, and be provided with proper danger signals, and in case of stoppage on the main track must immediately go back and protect the train. Conductors and Switch Foremen will be held responsible for the strict observance of this rule.

All trains and engines without trains will run under full control between Belknap Street connection and west yard limit board, Superior, expecting to find main track occupied.

Within yard limits the main track may be used, protecting against First Class trains.

All trains must move within yard limits prepared to stop, unless the main track is seen or known to be clear.

Duluth Yard extends from connection with D. & I. R. Ry. at 5th Ave. East to east end of St. Louis Bridge and from Garfield Avenue to West Duluth Junction and Third Sub-Division yard limit board and to Grassy Point Bridge. Switch engines will work within these limits, avoiding regular trains.

All extras and delayed regular trains must approach the terminal grounds at Superior with extreme caution, having train under full control.

Nos. 64 and 627 will register at West Duluth by ticket.

SPECIAL RULES.—Continued.

Nos. 59, 60, 63 and No. 64 and G. N. trains 19, 20 and 24 will register at Central Avenue by ticket. All trains must come to a full stop before crossing tracks of M. St. P. & Sault Ste. M. Ry. just east of Garfield Ave.

All trains and yard engines on the West Duluth route must come to a full stop at 19th Avenue West, where Duluth, Winnipeg and Pacific trains enter and leave main track.

All trains and yard engines on the Grassy Point Line must come to a full stop before passing the junction with the Duluth, Winnipeg & Pacific Railway one-half mile west of the Zenith Furnace.

All eastward trains and yard engines leaving West Duluth must come to a full stop before passing the junction with the Duluth, Winnipeg & Pacific Railway, seven-tenths of a mile east of West Duluth Depot.

All eastward trains and engines, and all westward trains and engines via St. Louis River Bridge must come to a full stop two hundred (200) feet from Junction Switch at Garfield Avenue and must not proceed until the way is known to be clear.

All trains and engines must run under full control between West Yard Limit Board, Superior and Omaha connection. This includes Lake Superior terminal tracks between Belknap St. and Omaha connections. Extreme caution will be used expecting to find track occupied by trains or switch crews. Do not exceed 10 miles an hour over switches at Belknap St.

Track between Fond du Lac and Power Plant must not be used except by authority of train orders. N. P. and Zenith Furnace switch engines will use west leg of Wye at West Duluth Junction and Fond du Lac main line between West Duluth Junction and yard limit board for switching purposes, but will not leave cars on these tracks. All trains will look out for these crews in above limits.

The following amendments have been made to Automatic Block Signal Rule No. 504, Book of Transportation Rules:

504-C. When a train is stopped by a Block Signal having two lights (called the home signal) on single track, Automatic Block Signal territory, it may proceed when the signal is cleared, or if not immediately cleared, it may proceed under caution after obtaining authority from the Train Dispatcher, or if unable to communicate with the Train Dispatcher, the train may proceed under protection of flag, to the next Signal that indicates clear or caution.

504-D. When a train is stopped by an intermediate Block Signal on single track, it may proceed when the signal is cleared or at caution, or if not immediately changed it may proceed at once under caution, except when a train is proceeding under flag from the last Home Signal as provided in Rule 504-C.

Within Automatic Block Signal territory, trains using a cross-over must have at least one switch open while occupying any part of the cross-over.

LOCATION OF YARD LIMIT SIGNS.

East End, Central Avenue, Superior and Duluth

Authorized Surgeons.

Dr. C. S. KNOX, East End.
Dr. J. C. ADAMS, Superior.
Dr. ROOD TAYLOR, Duluth.
Dr. A. J. BRADEN, Duluth.
Dr. C. L. HANEY, Duluth.
Dr. T. J. JENSEN, West Duluth.
(Emergency cases only.)

Location Stretchers.

East End Freight Station.
Central Avenue Freight Station.
Superior Freight Station.
Rices Point Yard Office.
Duluth Union Depot.
Tool Car, Duluth.
West Duluth.

RULES GOVERNING MOVEMENT OF TRAINS OVER ST. LOUIS BRIDGE.

LOCATION OF SIGNALS.

Interlocking signals and switches will govern use of tracks between Bridge Switch and Elevator Station.

All semaphore signals are of the modern, upper quadrant style with following indications:

- Top arm, horizontal, red light, stop.
- Angle 45°, yellow light, proceed with 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:

Upward, diagonal, yellow light, train may proceed under full control 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.

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.

Full stop is required of trains in both directions, before entering onto Wisconsin draw and, by eastward trains 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 style:

- Horizontal, red light, stop.
- Vertical, green light, caution

and govern movements against current of traffic.

After a train has received a signal to move in one direction it must not move in opposite direction without receiving proper signal for such movement

RULES GOVERNING THE MOVEMENT OF TRAINS OVER GRASSY POINT BRIDGE.

Interlocking Semaphore Signals will govern the movement of trains over the Grassy Point Bridge.

All semaphore signals are of the upper quadrant, three position pattern, with the following indications:

- Horizontal, or red light, STOP.
- Angle of 45°, or yellow light, proceed with CAUTION, prepared to stop at next signal.
- Vertical or green light, PROCEED—CLEAR.

Derail switches are located on both sides of the drawbridge just inside of the Home Signal, and are operated in connection with the Home Signal.

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.

When trains approach the Grassy Point Drawbridge and the Home Signal indicates "stop" enginemen must not, under any circumstances, allow their engines to pass beyond the Home Signal, as it will result in derailment.

When the Home Signal indicates "caution" or "proceed," it will not be necessary for trains to stop for the drawbridge but enginemen must be absolutely certain of the position of the Home Signal before passing it.

Enginemen and trainmen must not proceed on hand signals as against interlocking signals until they are fully informed of the situation and know that they are protected.

G. W. ATMORE,
Ass't Superintendent.

T. B. QUINN,
Trainmaster.

L. F. NEWTON,
Trainmaster.

F. E. POTTER,
Chief Dispatcher.

