



**MESABI DIVISION**

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**TIME TABLE No. 36**

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**EFFECTIVE 12:01 A. M.  
CENTRAL TIME.**

**SUNDAY, OCTOBER 29, 1933.**

Photographed from the Michael J Denuty Collection by Charles V Mutschler. Converted to PDF by Dean Ogle.

**F. D. KELSEY, Superintendent.**

**J. B. SMITH, General Superintendent of Transportation.**

**F. J. GAVIN, General Manager.**











THIRD CLASS.		SECOND CLASS.		FIRST CLASS.		Car Capacity	Siding	Other Tracks	Station Numbers	Distance from Duluth	Time Table No. 36.		Telegraph Cauts	Distance from Cass Lake	SIGNS	FIRST CLASS.		SECOND CLASS.	
		413	421	35	33						Effective October 29, 1933.	STATIONS.				34	36	414	
		Time Freight	Time Freight	Passenger	Passenger											Passenger	Passenger	Time Freight	
		Daily	Daily	Daily	Daily											Daily	Daily	Daily	
		L 11-58 <sup>pm</sup>	L 11-10 <sup>pm</sup>			L 9-33 <sup>pm</sup>	L 8-47 <sup>am</sup>		J125	13.22	BOYLSTON First Subdivision Junction	J	149.40	R DNP I	A 3-55 <sup>pm</sup>	A 7-25 <sup>am</sup>		A 12-50 <sup>am</sup>	
		12-10 <sup>am</sup>	11-20			f 9-43	8-56	99	Y251	19.13	5.91 DEWEY		143.49	P	3-45	f 7-15		12-40	
		12-30	11-35			9-50	9-03		Y249	23.01	8.88 STATE LINE TOWER N. P. Ry. Crossing	8	180.61	DNP I	3-39	7-09		12-30	
										29.00	5.99 BRIDGE 6		133.62	I P					
		12-55	12-05 <sup>am</sup>			*10-14	* 9-20	85	Y236	32.93	3.93 CARLTON N. P. Ry. Crossing	A	129.09	DNPW I	* 3-22	* 6-52		12-05 <sup>am</sup>	
						f10-19	9-25		Y232	36.19	3.26 SCANLON		126.43	P	3-15	f 6-41		11-50	
		1-25	12-20			*10-30	* 9-32	96	Y229	38.89	2.70 CLOQUET	KN	123.73	D P X O	* 3-10	* 6-35		11-45	
		2-46	1-30			*11-02	* 9-58	82	Y213	55.38	16.49 BROOKSTON Eighth Subdivision Junction	BN	107.34	R DNPWCXY I	* 2-45	* 6-10		11-10	
						f11-15	f10-10		Y205	63.23	7.85 PAUPORES		99.39	P	f 2-30	f 5-56		10-40	
		3-16	1-46			f11-23	f10-16		Y200	67.85	4.63 MIRBAT		94.77	P	f 2-22	f 5-48		10-30	
		3-28	1-58			*11-35	*10-25	65	Y195	73.20	5.35 FLOODWOOD	OD	89.42	D P	* 2-13	* 5-40		10-15	
		3-40	2-10			f11-46	10-35		Y189	79.29	6.09 ISLAND		83.33	P	2-02	f 5-27		10-00	
		3-53	2-22			f11-57	f10-45		Y182	85.80	6.51 WAWINA		76.82	P	f 1-52	f 5-17		9-45	
		4-02	A 2-35 <sup>am</sup>			*12-22 <sup>am</sup>	*10-53	116	Y178	89.76	8.96 SWAN RIVER Tenth Subdivision Junction	WA	72.82	R DNPWCXY	* 1-46	* 5-10		9-30	
		4-14				*12-32	f11-01	29	Y172	95.23	5.47 WARBA	FB	67.39	D P	f 1-35	* 4-58		9-00	
		4-26				f12-42	f11-11		Y166	101.64	6.41 BLACKBERRY		60.98	P	f 1-25	f 4-48		8-45	
		4-40				12-49	11-18	82	Y161	106.22	4.58 GUNN Eleventh Subdivision Junction	GU	56.40	PWX Y I	1-17	4-40		8-35	
		5-10				* 1-06	*11-24	84	Y189	109.27	8.05 GRAND RAPIDS	GR	53.35	R DNPWX Y	* 1-12	* 4-35		8-20	
		5-23				* 1-17	f11-31	123	Y166	114.17	4.90 COHASSET	CH	48.45	D P	f 1-01	* 4-22		8-05	
		5-53				* 1-37	*11-46	42	Y145	123.50	9.43 DEER RIVER M. & R. Ry. Crossing	RI	39.03	DNP X I	*12-46	* 4-07		7-45	
		6-07				f 1-51	f11-56	70	Y138	130.62	7.03 BALL CLUB		32.00	P	f12-31	f 3-53		7-20	
		6-32				* 2-13	f12-14 <sup>pm</sup>	69	Y126	143.53	12.91 BENA	BA	19.09	PW	f12-14 <sup>pm</sup>	* 3-36		6-55	
		6-47				f 2-28	12-27	123	Y118	151.07	7.54 SCHLBY		11.55	P	11-58	f 3-23		6-30	
										153.11	2.04 M. St. P. & S. S. M. Ry. Crossing		9.51	I					
		A 7-10 <sup>am</sup>				A 2-51 <sup>am</sup>	A 12-46 <sup>pm</sup>	Yard	690	Y106	162.62	9.51 CASS LAKE	CB		RKDNFWCOYX	L 11-40 <sup>am</sup>	L 3-05 <sup>am</sup>		L 6-00 <sup>pm</sup>
		7-12 20.7	8.25 22.4			5.18 28.1	3.59 37.5				Time Over Subdivision Average Speed Per Hour					4.15 35.1	4.20 34.4		6.50 21.8

Special Rules.

Westward trains are superior to eastward trains of the same class.

All trains will register at Boylston by card.  
 Double track Boylston to Swan River, except over Gauntlet at Bridge 6, M. P. 29, which is governed by interlocking signals.  
 Gunn is registering station for Eleventh Subdivision trains only.  
 Trains only for which Grand Rapids is initial and terminal station will register at that station

WHISTLE SIGNALS FOR ROUTES AT JUNCTIONS AND INTERLOCKING PLANTS.

Routes—	Whistles—	Routes—	Whistles—
Straight away.....	One long, one short	Siding.....	Four short
Diverging line.....	Two long	Against current traffic.....	Two short, one long

MAXIMUM SPEED.

Between	Passenger	Freight
Boylston and Cass Lake.....	50 miles per hour.	40 miles per hour.



WESTWARD.

FOURTH SUBDIVISION—CASS LAKE AND CROOKSTON YARD.

EASTWARD. 5

THIRD CLASS		SECOND CLASS	FIRST CLASS				Car Capacity		Time Table No. 36		SIGN.	FIRST CLASS				THIRD CLASS		
559	551		(133)	33	105	35	Slings	Other Trucks	Effective	Distance from Crookston		Distance from Crookston	36	106	(134)	34	552	560
Local Freight	Local Freight		Passenger	Passenger	Passenger	Passenger			October 29, 1933.				Passenger	Passenger	Passenger	Passenger	Local Freight	Local Freight
Daily Ex. Sun.	Tue., Thur. and Sat.		Daily Ex. Sun.	Daily	Daily Ex. Sun.	Daily			STATIONS				Daily	Daily Ex. Sun.	Daily Ex. Sun.	Daily	Mon., Wed. and Fri.	Daily Ex. Sun.
L 7.30am			L 12.51pm	L 8.05am	L 2.58am	Yard	690	Y106	.....CASS LAKE.....	106.91	CB	R DNKWCY X	A 2.58am	A 10.25am	A 11.35am		A 3.10pm	
7.45			12.58	f 8.13	3.05		18	Y101	4.13 .....PARRIS.....	102.75		P	2.51	f 10.17	11.28		2.55	
8.01			1.06	f 8.21	3.14	69	10	Y 96	5.53 .....ROBBY.....	97.16		P	2.41	f 10.08	11.19		2.40	
									4.59 .....M. & I. RY. CROSSING..	92.57		I						
8.45			s 1.21	A 8.30am	s 3.40	70	182	Y 90	0.93 .....BEMIDJI.....	91.64	BM	R DNPWX	s 2.31	L 10.00am	s 11.10		2.15	
9.15			f 1.31		s 3.53	70	10	Y 84	5.24 .....WILTON.....	85.40	N	D P	s 2.08		f 10.55		3.13	
9.45			f 1.41		s 4.06		26	Y 78	5.04 .....SOLWAY.....	79.36	80	D P	s 1.55		f 10.45		1.00	
10.33			f 1.51		s 4.19	69	37	Y 72	5.30 .....SHEVLIN.....	78.16	VN	D P	s 1.42		f 10.33		12.40	
11.13			s 2.02		s 4.36	78	57	Y 65	5.70 .....BAGLEY.....	65.46	BY	D PW	s 1.27		s 10.22		12.15pm	
11.45			f 2.13		f 4.49	101	92	Y 58	7.23 .....EBRO.....	59.14	RO	D P Y	f 1.13		f 10.09		11.45	
12.15pm			f 2.24		s 5.03	70	28	Y 53	5.92 .....LENGBY.....	53.12	G	D P	s 1.02		f 9.59		11.15	
12.55			s 2.37		s 5.19	70	82	Y 45	7.04 .....POSSON.....	46.08	70	DPWC X	s 12.47		s 9.47		10.45	
1.20			s 2.51		s 5.36	70	35	Y 37	7.58 .....McINTOSH.....	38.50	MC	D P	s 12.31		s 9.33		10.00	
									5.73 .....MST. P. & S. N. RY. CROSSING	32.77		I						
1.50			f 3.02		s 5.51	72	37	Y 31	0.31 .....BRSKINE.....	32.46	RS	D PW	s 12.18		f 9.20		9.30	
2.15			f 3.14		s 6.06	71	34	Y 24	5.71 .....MENTOR.....	25.75	MR	D P	s 12.03am		f 9.09		8.50	
2.30					3.22	70	26	Y 18	5.55 .....DUGDALE.....	20.17		P	11.50		9.00		8.20	
2.32	L 2.22pm		L f 7.50pm	f 3.24	f 6.18			Y 17	1.10 .....TILDEN JUNCTION... N. P. Ry. Crossing	19.07	ON	R D P I	f 11.48	A f 10.38am	f 8.58	A 7.35am	8.15	
2.45	2.35		f 7.59	3.31	6.26	70	29	Y 12	4.54 .....BENOIT.....	14.23		P	11.40	f 10.28	8.50		7.15 8.00	
3.05	2.55		f 8.10	3.41	5.52 6.36	70	34	Y 6	5.55 .....BURWELL.....	7.55		P	11.30	f 10.16	8.39		6.38 7.40	
									3.20 .....N. P. RY. CROSSING...	4.35		P I						
A 3.20pm	A 3.10pm		A 8.20pm	A 3.50pm	A 6.48am	Yard	418	A298	2.37 .....CROOKSTON YARD....	1.98	CA	R NWCYX	L 11.20pm	L 10.05am	L 8.30am	L 6.10am	L 7.30am	

TRAINS BETWEEN CROOKSTON YARD AND CROOKSTON BE GOVERNED BY DAKOTA DIVISION TIME TABLE.

	A 8.25pm	A 3.55pm	A 7.00am		106.91	1.98	.....CROOKSTON.....	R DNK X	L 11.15pm	L 10.00am	L 8.25am						
7.50	.30	2.59	.25	3.50			Time Over Subdivision		3.38	.25	.33	3.05		1.25	7.40		
13.4	34.1	35.1	36.6	27.4			Average Speed Per Hour		28.8	36.6	31.0	34.0		12.0	13.6		

Special Rules.

Westward trains are superior to eastward trains of the same class.  
Register at Bemidji, Tilden Jct. and Crookston Yard for trains originating and terminating at these stations.

SPEED RESTRICTIONS—M. & I. RY. CROSSING—BEMIDJI

All trains 8 miles per hour through interlocking limits.

MAXIMUM SPEED.

Between	Passenger	Freight
Cass Lake and Crookston Yard.....	50 miles per hour.	40 miles per hour.



**6 FIFTH SUBDIVISION. WESTWARD. PARK RAPIDS JCT. AND CASS LAKE EASTWARD.**

THIRD CLASS	FIRST CLASS	Car Capacity		STATIONS	Time Table No. 36 Effective October 29, 1933.	SIGNS	FIRST CLASS	THIRD CLASS
523	105	Sidings	Other Tracks				106	524
Local Freight	Passenger						Passenger	Local Freight
Daily Ex. Mon.	Daily Ex. Sunday						Daily Ex. Sunday	Daily Ex. Sun.
L 3.15Am	L 2.30Am	85	110	117	0 00	SAUK CENTER	A 3.55Pm	A 12.15Pm

TRAINS BETWEEN PARK RAPIDS JCT. AND SAUK CENTER BE GOVERNED BY DAKOTA DIVISION TIME TABLE.

L	L							A	A
3.20Am	2.33Am			0 16	PARK RAPIDS JCT.			3.52Pm	12.10Pm
				0 58	N. P. Ry. CROSSING.		I		
3.35	2.43	4	K 7	7.26	KANDOTA			3.39	11.50
3.50	2.48	5	K-10	10.40	LITTLE SAUK			3.33	11.40
4.10	2.55	15	K-14	13.86	ROUND PRAIRIE	RN		3.27	11.25
4.50	3.08	51	47 K-18	18.60	LONG PRAIRIE	NE	D W	3.17	11.05
5.20	3.24	50	28 K-24	26.46	BROWERVILLE	VI	D	2.57	10.30
5.40	3.35	31	K-32	31.84	CLARISSA	RU	D	2.45	10.05
6.05	3.46	34	32 K-36	36.53	EAGLE BEND	GD	D	2.33	9.45
6.25	4.06	32	30 K-44	44.04	BERTHA	BR	D	2.17	9.05
6.45	4.16	27	K-48	48.07	HEWITT	HW	D	2.06	8.45
7.10 7.55	4.36	63	K-56	56.21	WADENA	WD	D W	1.51	8.15 7.55
				56.44	N. P. Ry. CROSSING		I		
8.15	4.46	28	K-60	60.53	LEAP RIVER			1.31	7.45
8.35	4.57	7	K-65	65.25	ROCKWOOD			1.22	7.35
9.15	5.10	41	21 K-70	70.46	SEBEKA	SK	D	1.13	7.15
9.50	5.30	27	K-79	79.19	MENAHQA	MH	D	12.52	6.50
10.00	5.39	7	K-83	83.31	HORTON			12.42	6.30
10.40	5.08	30	85 K-91	91.19	PARK RAPIDS	J	D W X	12.27	6.10 5.35
10.55	6.21	15	K-98	97.76	DORSET	DE	D	12.09Pm	5.20
11.15	6.34	36	K-103	103.09	NEVIS	N	D	11.59	5.00
11.48	6.47	65	K-109	109.32	AKELEY	MN	D W	11.48	4.35
12.20Pm	7.04	26	K-119	118.84	WALKER	K	D	11.33	3.55
				120.94	M. & I. Ry. CROSSING				
12.35	7.15	15	K-124	124.21	LEECH LAKE			11.15	3.25
12.55	7.29	12	K-131	130.93	WILKINSON			11.02	3.10
A 1.20Pm	A 7.54Am	Yard	690 Y-106	140.40	CASS LAKE	CS	RKD NOWCX	L 10.41Am	L 2.45Am
10.00 14.9	5.21 26.2							5.11 27.4	9.25 14.9

**Special Rules.**

Westward trains are superior to eastward trains of the same class. Normal position wye switch at Cass Lake is for east leg of wye.

**DRAW BRIDGES.**

Kabekona River, 2 miles west of Walker.  
Steamboat River, 1 1/4 miles west of Wilkinson.

**MAXIMUM SPEED.**

Between Park Rapids Jct. and Cass Lake Passenger 40 miles per hour. Freight 25 miles per hour.

**SIXTH SUBDIVISION. WESTWARD. N. P. RY. JCT. AND MILACA JCT. EASTWARD.**

SECOND CLASS	Car Capacity		STATIONS	Time Table No. 36 Effective October 29, 1933.	SIGNS	SECOND CLASS
305	Sidings	Other Tracks				306
Mixed						Mixed
Daily Ex. Sunday						Daily Ex. Sunday
L 8.52Am			G-28	0 00	ELK RIVER	R DN W

TRAINS BETWEEN N. P. RY. JCT. AND ELK RIVER BE GOVERNED BY N. P. RY. TIME TABLE.

L								A
8.54Am			0.74	N. P. RY. JCT.	WR	I		1.25Pm
9.25	38	H-11	10.23	ZIMMERMAN				1.00
10.05	47	93	19.16	PRINCETON	CT	D W X		12.30
10.20	22	H-24	23.36	LONG'S SIDING				12.10Pm
10.38	16	H-29	28.58	PEASE	EA			11.55
A 10.50Am			32.58	MILACA JCT.		P		11.40Am

TRAINS BETWEEN MILACA JCT. AND MILACA BE GOVERNED BY SECOND SUBDIVISION SCHEDULES.

A								L
10.55Am		J-28	33.19	MILACA	MU	R DPWC X		11.35Am
1.56 10.4								1.45 16.1

**Special Rules.**

Westward trains are superior to eastward trains of the same class.

**MAXIMUM SPEED.**

Between Elk River and Milaca Jct. All trains 25 miles per hour.

**SEVENTH SUBDIVISION. WESTWARD. ALLOUEZ AND SAUNDERS. EASTWARD.**

Car Capacity	STATIONS	Time Table No. 36. Effective October 29, 1933.	SIGNS.
Sidings			
Yard 4946	YA 26	ALLOUEZ	BJ RKPWCXYX
Yard 166	J 130	SAUNDERS	B P X I

**WESTWARD. EIGHTH SUBDIVISION. EASTWARD. BETWEEN BROOKSTON AND KELLY LAKE.**

Car Capacity	STATIONS	Time Table No. 36. Effective October 29, 1933.	SIGNS.
Sidings			
82	Y 213	BROOKSTON	BN 80.33 R DN PW C X Y
	YD 4	ARLBERG	45.12 P
65	YD 11	BADEN	30.13 P
74	YD 21	DUMBLANE	30.28 PW
17	YA 5	CASCO	19.20 P
16	YA 12	ONBOA	18.45 P
		D. M. & N. RY. CROSSING	6.40 I
17	YA 19	RILEY	5.68 P
Yard 1300	YB 251	KELLY LAKE	KY RKNPWC OYX

**WESTWARD. NINTH SUBDIVISION. EASTWARD. BETWEEN CHISHOLM AND EMMERT TOWER.**

Car Capacity	STATIONS	Time Table No. 36. Effective October 29, 1933.	SIGNS.
Sidings			
	YC 1	CHISHOLM	CM 10.75 D P X
		Jct. with D. M. & N. Ry.	10.00
		DUNWOODY	8.10
Yard 108	YD 59	EMMERT TOWER	RN 6.22 P I



WESTWARD.		TENTH SUBDIVISION—BETWEEN VIRGINIA AND SWAN RIVER.										EASTWARD.			
SECOND CLASS	FIRST CLASS		Car Capacity		Station Numbers	Distance from Virginia	Time Table No. 36.		Telegraph Calls	Distance from Swan River	SIGNS.	FIRST CLASS		SECOND CLASS	
		77 D. M. & N. 4 Passenger Daily	75 D. M. & N. 1 Passenger Daily	Sidings			Other Tracks	Effective October 29, 1933.					76 D. M. & N. 1 Passenger Daily	78 D. M. & N. 4 Passenger Daily	422 Time Freight Daily
							<b>VIRGINIA</b>	YA	50.76	R D P XY					
						0.47	D. W. & P. RY. CROSSING		50.29	I					
						1.00	D. M. & N. RY. CROSSING		49.76	I					
						1.20	D. W. & P. RY. CROSSING		49.56	I					
						9.75	D. M. & N. RY. CROSSING		41.01						
						10.11	LUCKNOW		40.65	PW					
						12.08	BUHL	BU	38.68	DP					
						19.00	EMMERT TOWER D. M. & N. RY. CROSSING Ninth Subdivision Junction		31.67	PW IX					
						19.80	NORTH MITCHELL		30.96	P X					
						20.58	RUBY JCT.		30.18	R P X					
						21.63	SOUTH HIBBING	AC	29.13	R DP X					
						22.21	SCRANTON MINE CROSSING		28.55	I X					
						25.31	KELLY LAKE Eighth and Eleventh Subdivision Junctions	KY	25.45	RKDNPWC X OY					
						33.25	LYNWOOD		17.51						
						36.13	BENGAL		14.63	P					
						41.89	ACROPOLIS		8.87						
						44.59	GOODLAND		6.17	P					
						50.76	SWAN RIVER Third Subdivision Junction	WA		R DNPWC XY					
							Time Over Subdivision Average Speed Per Hour								

**Special Rules.**

**SEVENTH, EIGHTH, NINTH, TENTH AND ELEVENTH SUBDIVISIONS.**

**MAXIMUM SPEED.**

Between	Passenger	Freight
Saunders and Allouez	20 miles per hour	20 miles per hour
Brookston and Kelly Lake	25 miles per hour	25 miles per hour
Swan River and Virginia	45 miles per hour	35 miles per hour
Kelly Lake and Gunn	45 miles per hour	35 miles per hour

**DOUBLE TRACK EXTENDS FROM ALLOUEZ TO BRIDGE A-8.**

Westward trains are superior to eastward trains of the same class.

All except first class trains will approach all mining spurs at restricted speed, expecting to find main track occupied.

Home signals located 500 feet in advance of block stations at Calumet and Holman Jct. govern approach of train into block territory. Automatic signal located one thousand feet east of Arcturus Mine track connection switch protects movements in and out of this track. Staff rules as now in effect are modified to extent that D. M. & N. trains going into Arcturus Mine will be governed exclusively by home signal indications and authority of staff operators.

Westward D. M. & N. trains from Arcturus Mine to main line will be authorized by block operator at Holman Jct. over telephone in iron box located on pedestal at connection switch. The connection switch and derail located at fouling point on Arcturus Mine track are electrically locked from block station at Holman Jct.

**RULES GOVERNING THE OPERATION OF DOUBLE TRACK BETWEEN KELLY LAKE AND EMMERT TOWER.**

1. Trains or engines moving in this territory must keep to the left unless otherwise provided.
2. Trains or engines will run with current of traffic between Kelly Lake and Emmert Tower, without train orders or clearance card.

WESTWARD.		ELEVENTH SUBDIVISION—BETWEEN KELLY LAKE AND GUNN.										EASTWARD.			
THIRD CLASS	FIRST CLASS		Car Capacity		Station Numbers	Distance from Kelly Lake	Time Table No. 36.		Telegraph Calls	Distance from Gunn	SIGNS.	FIRST CLASS.		THIRD CLASS.	
		87 D. M. & N. 67 Passenger Daily		Sidings			Other Tracks	Effective October 29, 1933.					88 D. M. & N. 68 Passenger Daily		
							<b>KELLY LAKE</b> Eighth and Tenth Subdivision Junctions	KY	31.32	RKDNPWC OYX					
						4.02	KEEWATIN	KW	27.30	D P					
						4.86	MOORE		26.46						
						9.50	NASHWAUK	N	21.73	D PW X					
						16.19	CALUMET	CU	18.13	D PW X					
						17.08	MARBLE	RB	14.24	D P X					
						20.58	HOLMAN JCT.	HO	10.74	P					
						21.60	TACONITE JCT.	NI	9.72						
						23.43	BOVEY	BY	7.89	D P					
						24.24	COLERAINE	CR	7.08	D P					
						31.32	GUNN Third Subdivision Junction	GU		R PW XY					
							Time Over Subdivision Average Speed Per hour								



## INSTRUCTIONS TO TRAINMEN ON OPERATIONS OF AUTOMATIC AND SEMI-AUTOMATIC INTERLOCKING PLANTS

### AUTOMATIC INTERLOCKING.

Bridge 6.....M. P. 29 Third Sub-Div. Gauntlet.  
Schley.....2.04 West of M. St. P. & S. S. M. Ry.  
Wadena.....0.23 West of N. P. Ry.  
Crookston Yard 2.37 East of N. P. Ry.  
Park Rapids Jct. 0.52 West of N. P. Ry.

### SEMI-AUTOMATIC INTERLOCKING.

Elk River.....0.74 West of N. P. Ry.  
Allouez.....East End Yard, D. S. S. & A. Ry.

### SCHLEY-WEDENA, PARK RAPIDS JCT. AND CROOKSTON YARD N. P. CROSSING

#### STANDARD INTERLOCKING RULES 601 TO 685, INCLUSIVE, SUPPLEMENTED BY THE FOLLOWING SHALL GOVERN IN THE USE OF THE AUTOMATIC INTERLOCKING PLANTS.

If a train is stopped by a home signal and no immediate conflicting train movement is evident, trainman shall proceed to the crossing and operate hand release located in iron box marked "RELEASE" and locked with a standard switch lock. Turn knob to the right until stopped, hold a few seconds and let go. Clockwork movement will return pointer to the zero or "NORMAL" position after a period of from one to two minutes. Under ordinary conditions the completion of the return movement should cause home signal to indicate "PROCEED". If home signal desired does not indicate "PROCEED" and no smash boards are in use, trainman may flag train over the crossing after making certain that conflicting home signals are in the "STOP" position and no conflicting train movement is evident.

In addition, if smash boards are in use, and are in the "REVERSE" position on the route desired and operation of the hand release does not clear the proper home signal, trainman shall signal his train to proceed over the crossing, after making certain that home signals and smash boards on the conflicting route are in the "NORMAL" position. If smash boards on the route desired are not in the "REVERSE" position and operation of hand release does not clear the proper home signal, trainman shall operate smash board to the "REVERSE" position by hand, and may then, if home signal desired does not indicate "PROCEED", signal his train to proceed over the crossing, after making certain that home signals and smash boards on the conflicting route are in the "NORMAL" position.

#### TO OPERATE SMASHBOARD MECHANISM BY HAND.

Crank for operation of smash board mechanism by hand is located in the "RELEASE" box at the crossing. Crank must be inserted in shaft on back of smash board mechanism, after opening small cover locked with a standard switch lock. Crank shall be turned slowly and uniformly until movement has made its entire stroke and smash board has been moved downward to the vertical position. When operation is completed small cover must be locked and crank returned to the "RELEASE" box.

### Bridge 6—Third Subdivision.

If a train is stopped by a home signal and no immediate conflicting train movement is evident, trainman shall proceed to home signal governing train movements in opposite direction, at the other end of the gauntlet, and operate hand release located in iron box marked "RELEASE" and locked with a standard switch lock. Turn knob to the right until stopped, hold a few seconds and let go. Clockwork movement will return pointer to the zero or "NORMAL" position after a period of from one to two minutes. Under ordinary conditions the completion of the return movement should cause home signal to indicate "PROCEED."

If smash board on the route desired is in the "REVERSE" position and operation of hand release does not clear the proper home signal, trainman shall signal his train to proceed over the gauntlet, after making certain that home signal and smash board on the conflicting route is in the "NORMAL" position.

If smash board on the route desired is not in the "REVERSE" position and operation of hand release does not clear the proper home signal, trainman shall operate smash board to the "REVERSE" position by hand, and may then, if home signal desired does not indicate "PROCEED," signal his train to proceed over the gauntlet after making certain that home signal and smash board on the conflicting route are in the "NORMAL" position.

If train moving against regular current of traffic is stopped by a dwarf home signal trainman will operate release located in "RELEASE" box nearest the dwarf home signal, and if signal does not indicate proceed when release returns to normal position, trainman may flag train through gauntlet, making certain that smash board at opposite end of gauntlet is in the "REVERSE" position.

#### To Operate Smash board Mechanism by Hand.

Located in an iron box on a post and marked "CRANK" is the operating hand crank for the mechanism operating the smash board and torpedo machine. This box is locked with a standard switch lock. Crank should be taken out of box and inserted in the shaft on top of the operating mechanism, after opening the door locked by a standard switch lock. The crank should be turned slowly and uniformly until movement has made its entire stroke, in which position smash board will be "REVERSED." If home signal clears under these conditions train may proceed in the regular manner, except that trainman shall remove crank from the mechanism retaining it until entire train has passed smash board, when it must again be placed in the crank box and locked. UNDER NO CONDITION SHALL CRANK BE PLACED IN CRANK BOX UNTIL AFTER ENTIRE TRAIN HAS PASSED THE SMASH BOARD.

### ELK RIVER N. P. RY. JUNCTION.

Train movements from westward main track to G. N. Princeton Line train will stop at westward home signal. Trainman will operate electric switch lock and reverse the switch and derail by throwing lever of junction ground throw switch machine. Bottom arm of westward home signal will then clear.

Train movements from G. N. Princeton Line to eastward main track train will stop at G. N. home signal. Trainman will push button of both eastward and westward switch indicators and if both indicators show clear he may operate electric switch locks and reverse junction and crossover switches by throwing levers of ground throw switch machines. The top arm of eastward G. N. home signal will then clear.

Train movements over crossover train will stop at dwarf signal for route desired. Trainman will push button of switch indicator for track to which move is to be made. If indicator shows clear he may then operate the electric switch lock and reverse crossover by throwing lever of ground throw switch machine. The dwarf signal for route should then clear.

#### TO OPERATE ELECTRIC SWITCH LOCKS.

Open bottom door of iron box marked "ELECTRIC LOCK" and push the "PUSH BUTTON". If lock indicator shows clear switch may be unlocked by turning handle to left. Handle must be returned to normal position before door can be locked. If indicator does not show clear when button is pushed and no conflicting train movement is evident electric switch lock may be released by operating time release.

#### TO OPERATE TIME RELEASE.

Open top door of iron box marked "RELEASE" and turn knob of release to right until stops. Hold 3 seconds and then release. The clockwork will return to normal position in two minutes which should release electric lock as shown by indicator.

#### TO OPERATE SMASH BOARD MECHANISM.

Attached by a chain to smash board mechanism located near base of mast of main line home signals is a small crank which may be placed over a shaft of operating mechanism after opening small door locked with a switch lock. Turn crank slow to left until smash board has been moved to clear position being sure the stroke has been completed. Remove crank and lock door.

#### ALL APPARATUS MUST BE RETURNED TO NORMAL POSITION AND LOCKED WITH SWITCH LOCKS PROVIDED BEFORE LEAVING.

### ALLOUEZ AND D. S. S. & A. RY. CROSSING.

Train movements over the crossing in either direction on the Four Great Northern tracks will be governed by standard interlocking signal indications of the color light type (Figure 93 Rule 601A and Figure 113 Rule 601G) in accordance with Standard Interlocking Rules 601 to 685, inclusive.

Train movements on the D. S. S. & A. will be governed by gates set normally against their trains and operated by their trainmen.

No signalman will be on duty at this interlocking.

If a Great Northern train receives a "STOP" signal indication it will be governed by Rule 663 and may proceed over the crossing after making certain that no immediate D. S. S. & A. train movement is evident and that the gates are in their normal position against D. S. S. & A. trains.



NAME	LOCATION	OPENS	CAPACITY
<b>First Subdivision</b>			
Howe's Spur.....	1.38 miles east of Henriette.....	West	9 Cars
<b>Second Subdivision</b>			
Brunson.....	2.21 miles west of Mora.....	East	4 Cars
<b>Third Subdivision</b>			
Wingate.....	3.21 miles east of Carlton.....	West	58 Cars
Flint.....	1.77 miles east of Brookston.....	East	132 Cars
Hartley's Spur.....	1.02 miles west of Island.....	West	8 Cars
Erickson Spur.....	2.36 miles west of Deer River.....	East	13 Cars
Page & Hills.....	1.37 miles west of Schley.....	West	11 Cars
Webster Lumber Co.....	5.26 miles west of Schley.....	East	13 Cars
<b>Fourth Subdivision</b>			
Thorson's.....	3.41 miles west of Benoit.....	West	30 Cars
<b>Fifth Subdivision</b>			
Wadena Potato Spur.....	3.96 miles east of Wadena.....	East	7 Cars
Rubion Spur.....	2.56 miles west of Wilkinson.....	East	9 Cars
<b>Tenth Subdivision</b>			
Morrell.....	3.34 miles east of Swan River.....	East	10 Cars
Coal Spur.....	2.46 miles east of Buhl.....	East	3 Cars
<b>Eleventh Subdivision</b>			
Range Sand Lime & Brick Company.....	3.01 miles west of Nashwauk.....	West	16 Cars
Kevin Siding.....	2.07 miles west of Nashwauk.....	East & West	28 Cars

**SPECIAL RULES.**

Rule 671 to 671 (f), inclusive, amended as follows:  
 The speed of trains through the Approach and Home signal zones of an interlocking plant shall not exceed thirty miles per hour.  
 Trains moving against the current of traffic on double track through interlocking plants, or where governed by dwarf signals shall not exceed eight miles per hour.  
 Conditions may require a further speed restriction for all trains, per special rules, and at draw bridges the speed of trains shall not exceed eight miles per hour.  
 The letter "I" in column headed "SIGNS" indicates interlocking plant.

**MAXIMUM SPEED.**

Loaded ore trains 25 miles per hour.  
 Engines backing up 20 miles per hour.

**MINE SPURS.**

NAME	LOCATION
Stevenson, Lamberton.....	0.52 miles east Kelly Lake.
Maboning, So. Agnew, Smith, Agnew.....	1.81 miles east Kelly Lake.
Scranton.....	2.43 miles west North Mitchell.
Susquehanna.....	0.71 miles west North Mitchell.
Webb, Albany, Alexandria.....	0.81 miles east North Mitchell.
Dunwoody, Bruce.....	1.70 miles east North Mitchell.
Billings.....	2.05 miles west Buhl.
Drew.....	1.46 miles west Buhl.
Grant.....	1.21 miles west Buhl.
Wabigon.....	0.25 miles west Buhl.
Harold-South Uno.....	1.53 miles east Kelly Lake.
Utica.....	2.08 miles east Kelly Lake.
Margaret.....	0.82 miles east Buhl.
Kinney, Wade, Helmar.....	2.94 miles east Buhl.
Wacoutah.....	3.83 miles west Virginia.
Hanna-Pilot, Wheeling.....	2.64 miles west Virginia.
Columbia, Commodore.....	0.47 miles west Virginia.
Bennett Shaft No. 1.....	2.73 miles west Kelly Lake
St. Paul, Bennett.....	0.25 miles east Kawatin.
Sargent, Mesaba Chief Nos. 2 and 3, Mississippi.....	0.34 miles east Moore.
La Rue, Shada.....	0.16 miles east Nashwauk.
Hawkins.....	0.37 miles east Nashwauk.
York.....	0.37 miles west Nashwauk.
Harrison-Quinn.....	0.77 miles west Nashwauk.
Kevin-Patrick.....	2.26 miles west Nashwauk.
Majorca.....	0.73 miles east Calumet.
Hill Annex.....	0.60 miles east Calumet.
Hill Annex Washer.....	0.70 miles east Calumet.
Hill.....	0.36 miles west Calumet.
Danube, Orwell.....	0.37 miles east Bovey.
Holman.....	1.83 miles east Bovey.
Greenway.....	2.80 miles east Gunn.
Canisteo.....	1.50 miles east Coleraine.

**COMPANY SURGEONS.**

Dr. Roscoe C. Webb..... Chief Surgeon..... Office phone Main 7508, House 4101, Colfax, 1849 Medical Arts Building 9th Street and Nicollet Ave., Minneapolis, Minn

Dr. H. M. N. Wynne..... Assistant Chief Surgeon..... Minneapolis, Minn.  
 Dr. Ernest R. Anderson..... Assistant to Chief Surgeon..... Minneapolis, Minn.  
 Dr. F. J. Savage..... Division Surgeon..... St. Paul, Minn.  
 Dr. P. C. Sarazin..... Division Surgeon..... Superior, Wis.  
 Dr. W. H. Schnell..... Assistant Division Surgeon..... Superior, Wis.  
 Dr. Egil Boeckmann..... Chief Ophthalmic Surgeon..... St. Paul, Minn.  
 Dr. C. N. Spratt..... Ophthalmic Surgeon..... Minneapolis, Minn.  
 Dr. R. C. Smith..... Ophthalmic Surgeon..... Superior, Wis.  
 Dr. C. B. Lewis..... Assistant Division Surgeon..... St. Cloud, Minn.  
 Dr. A. D. Whiting..... Ophthalmic Surgeon..... St. Cloud, Minn.

**LOCAL SURGEONS.**

Dr. Arthur C. Craine..... Anoka.  
 Dr. Leroy J. Larson..... Bagley.  
 Dr. L. Gilmore..... Bemidji.  
 Dr. Einer W. Johnson..... Bemidji.  
 Dr. A. W. Shaw..... Buhl.  
 Dr. Chas. Swenson..... Braham.  
 Dr. W. W. Will..... Bertha.  
 Dr. L. H. Hedenstrom..... Cambridge.  
 Dr. James Fleming..... Cloquet.  
 Drs. Raiter & Raiter..... Cloquet.  
 Dr. Z. E. House..... Cass Lake.  
 Dr. O. L. Bertelson..... Crookston.  
 Dr. Arthur Kahala..... Crookston.  
 Dr. A. N. Collins..... Duluth.  
 Dr. G. A. Miners..... Deer River.  
 Dr. H. W. Huseby..... Floodwood.  
 Dr. G. A. Holdridge..... Foley.  
 Dr. R. Turnbull..... Fosston.

Dr. H. E. Binet..... Grand Rapids.  
 Dr. C. E. Sisler..... Grand Rapids.  
 Dr. B. S. Adams..... Hibbing.  
 Dr. E. L. Stephan..... Hinckley.  
 Drs. R. L. & C. R. Christie..... Long Prairie  
 Dr. H. J. Kooiker..... Milaca.  
 Dr. M. F. Hayes..... Nashwauk.  
 Dr. C. A. Huston..... Park Rapids.  
 Dr. H. C. Cooney..... Princeton.  
 Dr. H. P. Dredge..... Sandstone.  
 Dr. H. W. Goehrs..... St. Cloud.  
 Dr. C. D. Sutton..... St. Cloud.  
 Drs. J. A. & J. F. DuBois..... Sauk Center.  
 Dr. Earl E. Carpenter..... Superior.  
 Dr. C. B. Lenont..... Virginia.  
 Dr. H. B. Ewens..... Virginia.  
 Dr. Paul Kenyon..... Wadena.

C. E. HORNBECK,  
 Chief Dispatcher.

W. J. HOPE,  
 Chief Dispatcher.

E. F. BAILEY,  
 Trainmaster.

T. J. MASON,  
 Trainmaster.

D. J. FLYNN,  
 Assistant Superintendent.



Water --- ★  
Fuel --- ◆  
Elevation --- 81

