



# SOO LINE RAILROAD COMPANY

## WESTERN DIVISION TIMETABLE AND SPECIAL INSTRUCTIONS NO. 20

EFFECTIVE 12:01 A.M.  
CENTRAL STANDARD TIME

SUNDAY, JANUARY 1, 1984

For the government and  
information of employees only.

Vice President Operations  
C. C. LEARY

General Supt.-Trans.  
J. M. FANDRICH

Director of Transportation-Operations  
D. J. LYONS

### DIVISION OFFICERS

**D.H. Nelson** Superintendent Minneapolis Mn (Shoreham)

G. P. Economon Asst. Supt. Minneapolis Mn (Shoreham)  
D. J. Hansen Terminal Supt. Minneapolis Mn (Shoreham)  
K. E. Murphy Term. Trainmaster, Mpls Mn (Shoreham)  
M. D. Neidt Trainmaster, Mpls Mn (Shoreham)  
D. A. Solinger Trainmaster, Mpls, Mn  
L. L. Schiestl Manager Twin City Term. Mpls Mn (Shoreham)  
P. F. Madsen Chf. Train Dispatcher Mpls Mn (Shoreham)  
T. M. Parsons Western Regional Engr. Mpls Mn (Shoreham)  
L. A. Taylor Terminal Superintendent Superior Wi.  
R. P. Olson Trainmaster, Superior Wi.  
W. A. Forsberg Trainmaster/Agent T R Falls, Mn.  
D. R. Engle Asst. Superintendent, Enderlin, N.D.  
W. M. Iverson Trainmaster-Agent, Minot, ND  
J. M. Coppin Trainmaster-Agent, Harvey, ND

### TRAIN DISPATCHERS — SHOREHAM

A. F. Burke, Jr. G. L. Braasch  
S. N. Braun P. A. Grover  
J. P. Erickson D. A. Schwartztrauber  
S. J. Nelson K. J. Rochon  
R. E. Gabel C. A. Christianson  
S. R. Johnson G. E. Walcker  
V. C. Wigfield R. W. Dooley  
C. F. Roark R. W. Gillund  
S. L. Carlson T. E. Carlson

### SHOREHAM DISPATCHER'S OFFICE

612-789-0881  
612-789-0897

### SPEED TABLE

Miles Per Hour	Time Per Mile		Miles Per Hour	Time Per Mile	
	Minutes	Seconds		Minutes	Seconds
5	12	0	35	1	43
8	7	30	38	1	35
10	6	0	40	1	30
12	5	0	43	1	24
15	4	0	45	1	20
18	3	20	48	1	15
20	3	0	50	1	12
23	2	36	52	1	09
25	2	24	55	1	06
27	2	12	58	1	02
30	2	0	60	1	0
32	1	52	62	0	58





## 2 PAYNESVILLE SUBDIVN

WESTWARD ↓	Milepost Location	Station Numbers	Distance from Shoreham	Siding Capacity	STATIONS	Rule 6(A)	EASTWARD ↑
	3.4	1003	0.0	Yard	SHOREHAM	BCFKPQ RTWYZ	
	2.0		1.4		UNIVERSITY AVE.	Y	
	4.3				CENTRAL AVE.	XY	
	2.0		1.4		UNIVERSITY AVE.	Y	
	1.5	1001	1.9		MARSHALL ST.	PY	
	1.1	3940	2.3		CAMDEN PLACE	JPTY	
	0.5	3925			14th AVE. NORTH	IJPY	
	3.1	3940		Yard	CAMDEN PLACE	JPTY	
	4.5	3945	3.7	▶208	HUMBOLDT YD.	PQY	
	6.8	3955	6.0		CRYSTAL	APY	
	7.2	3965	6.4		M.N. & S. JCT. (Jct. Northfield Sub.)	JPY	
	15.5	4016	14.7	82	HAMEL	P	
	21.3	4021	20.5	▶150	LORETTO	PQ	
	26.5	4027	25.7	80	ROCKFORD	P	
	36.5	4037	35.7	▶119	BUFFALO	OP	
	44.2	4044	43.4	62	MAPLE LAKE	P	
	50.5	4051	49.7	82	ANNANDALE	P	
	55.4	4056	54.6	160	SOUTH HAVEN	P	
	60.8	4061	59.8	61	KIMBALL	P	
	66.0	4066	65.2	96	WATKINS	P	
	72.9	4073	72.1	77	EDEN VALLEY	PQ	
	82.2	4082	81.4	150	PAYNESVILLE	AOP	
	89.1	4089	88.3	79	REGAL	P	
	97.3	4098	96.5	102	BELGRADE	P	
	104.1	4104	103.3	110	BROOTEN (Jct. Brooten Sub.)	JOPR	
	112.2	4112	111.1	69	SEDAN		
	120.0	4120	119.2	Yard	GLENWOOD	BCFIJKP QRTWYZ	

▶ Controlled Siding

CTC and ABS are in service between Central Ave. and west switch Buffalo and between Camden Place and 14th Ave. North.

**NOTE:** Eastward train and engine movements accepting a Diverging Clear signal (Rule 240M, Fig. 1) at University Ave. must approach the next signal at Central Ave. prepared to proceed on diverging route at prescribed speed until aspect can be clearly seen.

## PAYNESVILLE SUBDIVN

SPEED RESTRICTIONS		MPH
MAXIMUM SPEED	.....	40
<b>EXCEPTIONS:</b>		
Within 200 feet from edge of crossing while approaching crossing at 35th Avenue N.E., Minneapolis, known as Columbia Heights Main Line	.....	6
Between 14th Avenue North and Camden Place, including Both Legs of Wye at Camden Place	.....	10
Between Central Ave. and Marshall St.	.....	20
Between Dual Control Switch near Marshall Street and MP 3.94 (Just west of Humboldt Ave. North)	.....	10
Between MP 3.94 (just West of Humboldt Ave. No.) and West Yard limit board	.....	20
MP 117.65—over wheel checker Glenwood	.....	10

**M. At Glenwood**

Extreme care must be used when riding cars or working about cars in the yard at Glenwood account close clearances between tracks and around switch stands.

**15. ENGINE WHISTLE SIGNALS**

Within the City Limits of Minneapolis, the whistle shall not be blown except as a warning of imminent and immediate danger to life or property.

**83(A). TRAIN REGISTER EXCEPTIONS**

**Shoreham**—All trains arriving or departing Humboldt Yard will register at Shoreham. Register of eastward trains at Shoreham covers their arrival at Humboldt Yard.

**Brooten**—Only when directed by train order to register.

**83(B). CLEARANCE PROVISIONS AND EXCEPTIONS**

**Central Ave.** Trains will obtain initial clearance at Shoreham.  
**University Ave.**  
**Humboldt Yard**

Exception: Rule 83(B) will not apply at Central Ave. to westward trains from the New Richmond Subdivision that are to terminate at Shoreham or Humboldt Yard.

**14th Ave. North** Rule 83(B) does not apply.

**Glenwood** Eastward Paynesville Subdivn trains enroute to the Brooten Subdivn will obtain a clearance at Glenwood bearing notation "Brooten Subdivn" and will not require an initial clearance at Brooten if train order signal indicates proceed.

**93. YARD LIMITS**

West MP	East MP
9.30 MN&S Jct.-Central Ave. (10.59 miles)	6.95
3.10 Camden Place-14th Ave. North	0.50
123.46 Glenwood	117.70
124.12 Glenwood (Detroit Lakes Subdivision)	

# PAYNESVILLE SUBDIVN

# PAYNESVILLE SUBDIVN 3

## 98. RAILROAD GRADE CROSSINGS

**NOTE:** ††Operating approach signals that do not indicate condition of track between approach signal and interlocking signal.

Location	Railroad	Signals
MP 6.80-Crystal	B.N.	Auto. Interlocked
††MP 84.24-1.7 miles west of Paynesville	B.N.	Auto. Interlocked

## 103(B).

**Minneapolis**—City Ordinance prohibits blocking of any street or alley for a period of more than five (5) minutes.

## 104. NORMAL POSITION OF SWITCHES AT JUNCTIONS

Location	Switch Lined For
Brooten-West switch of siding	Paynesville Subdivision (Track between Brooten Subdivn. connection and the Junction Switch will be considered a part of the siding.)

104. The following main track switches may be left lined and locked in either the normal or reverse position:

**Glenwood**—Old Main-New Main switch located approximately 1,000 feet east of Glenwood Depot.

## 104(H). LOCATION OF SPRING SWITCHES

South Haven (Facing Point locked) . . . . . West end siding

105. Tracks between University Ave. and Shoreham are yard tracks — Rule 105 applies.

## 268(A). HAND THROW SWITCHES IN CTC LIMITS:

Within CTC limits where maximum speed exceeds 20 MPH, a train or engine must not clear the main track through a hand throw switch, not electrically locked, for the purpose of meeting, passing or being passed by another train or engine.

## 275. LOCATION OF DUAL CONTROL SWITCHES

14th Ave. North	Soo Line Junction switch to BN
Central Avenue	Crossover Switches
Central Avenue	High Line Switch
University Avenue	High Line Switch
Marshall St.	Switch to yard
Camden Place	West Wye Switch (Toward Humboldt)
Camden Place	East Wye Switch (Toward Shoreham)
Camden Place	South Wye Switch (Toward 14th Ave. N.)
Humboldt Yd.	Both ends of siding
MN&S Junction	Junction switch
Loretto	Both ends of siding
Buffalo	Both ends of siding
*Glenwood	Junction switch
*Glenwood	Old main track — west end

\*Controlled by Glenwood operator.

## 275(A). (AT MARSHALL ST. & CAMDEN PLACE)

When instructed to hand operate the dual control switch on the bridge, train or engine may move to a point 20 feet from that dual control switch, comply with Rule 275(A) and proceed as instructed.

## 280. LOCATION OF ELECTRIC LOCKS

Heney	Both ends of run-around track
Hamel	Both ends of siding
Rockford	Both ends of siding
Buffalo	Both ends of house track

## TRAIN DEFECT DETECTORS

Location	Type	Read Out
MP 5.5 Humboldt Yard	Wheel Checker Drag, Equip.	Recorder in Dispatchers Office
MP 33.1 between Rockford and Buffalo	Hot Box	Recorder in Dispatchers Office (Alarm light at site.)
MP 86.4 between Paynesville and Regal	Hot Box	Recorder in Dispatchers Office
MP 117.65 east end Glenwood	Wheel Checker Drag, Equip.	Monitor Display Board

# 4 DETROIT LAKES SUBDIVN

WESTWARD	Milepost Location	Station Numbers	Distance from Glenwood	Siding Capacity	STATIONS	Rule 6(A)	EASTWARD
	120.0	4120	0.0	Yard	GLENWOOD	BCFLJKP QRTWYZ	
	130.2	5009	10.2	90	FORADA		
	136.8	5015	16.8	36	ALEXANDRIA	P	
	143.9	5023	23.9	65	CARLOS		
	149.2	5029	29.2		MILTONA		
	156.7	5035	36.7		PARKERS PRAIRIE	P	
	170.2	5049	50.2	110	HENNING	OPQ	
	179.3	5058	59.3		OTTERTAIL	P	
	186.1	5065	66.1	90	RICHVILLE		
	191.7	5070	71.7		DENT		
	201.1	5079	81.1	106	VERGAS	P	
	213.7	5092	93.7	113	DETROIT LAKES	AOPQ	
	225.7	5104	105.7	50	CALLAWAY		
	234.4	5113	114.4		OGEA	P	
	240.0	5119	120.0		WALUBUN		
	249.2	5128	129.2	117	MAHNOE	OPQ	
	257.8	5137	137.8		BEJOU		
	264.4	5143	144.4		WINGER		
	273.7	5153	153.7	53	ERSKINE	AP	
	283.7	5163	163.7		BROOKS		
	290.7	5170	170.7	90	PLUMMER (Jct. Bemidji Sub.)	JOP	
	298.7	5178	178.7	64	HAZEL		
	306.4	5185	186.4	Yard	T R FALLS	BCFJKPQ RTUWYZ	

### SPEED RESTRICTIONS MPH

MAXIMUM SPEED	40
EXCEPTIONS:	
MP 136.6—MP 137.4 Alexandria, over street crossings and on curve	25
Vergas, on Vergas Pit trackage	5
MP 213.4—MP 214.5 Between Willow Street, Detroit Lakes, and BN crossing	20
MP 306.4—T.R. Falls, over First, Third and Eighth Streets	10

#### M. At Glenwood

Extreme care must be used when riding cars or working about cars in the yard at Glenwood account close clearances between tracks and around switch stands.

#### 83(B). CLEARANCE PROVISIONS AND EXCEPTIONS

**T.R. Falls** Eastward Detroit Lakes Subdivn trains enroute to the Bemidji Subdivn will obtain a clearance at T.R. Falls bearing notation "Bemidji Subdivn" and will not require an initial clearance at Plummer if train order signal indicates proceed.

# DETROIT LAKES SUBDIVN

#### 93. YARD LIMITS

West MP	East MP
124.12 Glenwood	117.70
123.46 Glenwood (Elbow Lake Subdivn.)	
311.13 T. R. Falls	304.71
311.90 T. R. Falls (Devils Lake Subdivn.)	

#### 98. RAILROAD GRADE CROSSINGS

Location	Railroad	Signals
MP214.51-Detroit Lakes	B.N.	Auto. Interlocked
MP273.66-Erskine	B.N.	Auto. Interlocked

#### 104. NORMAL POSITION OF SWITCHES AT JUNCTIONS

Location	Switch Lined For
#Plummer - West switch of siding . . . Detroit Lakes Subdivision	
T. R. Falls . . . . . Noyes Subdivision	
#Plummer—Track between Bemidji Subdivn. connection and the Junction Switch will be considered a part of the siding.	

104. The following main track switches may be left lined and locked in either the normal or reverse position:

**Glenwood**—Old Main-New Main switch located approximately 1,000 feet east of Glenwood Depot.

#### 275. LOCATION OF DUAL CONTROL SWITCHES

Glenwood	Junction switch
Glenwood	Old main track — west end

(Controlled by Glenwood Operator)

#### TRAIN DEFECT DETECTORS

Location	Type	Read Out
MP 151.5 between Miltona and Parkers Prairie	Hot Box Hot Wheel Drag. Equip.	Radio Talker
MP 221.4 between Detroit Lakes and Callaway	Hot Box Hot Wheel Drag. Equip.	Monitor Display Board
MP 280.8 between Erskine and Brooks	Hot Box Drag. Equip.	Monitor Display Board



# 6 NORTHFIELD SUBDIVN

WESTWARD ↓	Milepost Location	Station Numbers	Siding Capacity	STATIONS	Rule 6(A)	↑ EASTWARD
	53.75	3849	Yard	<b>NORTHFIELD</b> 9.61	BFJKOP QWY	
44.14	3839	56	<b>EUREKA CENTER</b> 3.74	P		
40.40			<b>AIR LAKE PARK</b> 1.08	P		
39.32	3835		<b>#LAKEVILLE</b> 6.43	Q		
32.89	3828		<b>#ORCHARD GARDENS</b> 4.82	P		
28.07	3824		<b>#SAVAGE</b> 0.69	PY		
27.38	3823	Yard	<b>PORT CARGILL</b> 1.75	Y		
25.63	3821	Yard	<b>AUTO CLUB</b> (Jct. Nicollet Ave. Spur) 0.79	JPY		
24.84	3820		<b>*NESBITT</b> 3.75	Y		
21.09	3817	20	<b>ATWOOD</b> 2.90	PY		
18.19		36	<b>WARDEN</b> 1.90	Y		
16.29	3812		<b>#MILWAUKEE JCT.</b> 1.82	Y		
14.67			<b>PARK MANOR</b> 1.58	Y		
13.09	3809		<b>SOONOR</b> 1.56	JTY		
	3700	Yard	<b>GLENWOOD JCT.</b> 0.53	BCFJK PQWYZ		
13.09	3809		<b>SOONOR</b> 0.53	JTY		
12.56	3808	Yard	<b>WESTERN AVE.</b> 5.36	MY		
7.20	3965		<b>M.N.&amp;S. JCT.</b>	JY		

\* Spur-switch at west end.  
# Spur-switch at east end.

### SPEED RESTRICTIONS MPH

On all tracks other than main tracks	10
Over Turners Crossroad	10*
Over Glenwood Ave.	10*
Over Old Wayzata Blvd.	10*
Over access road immediately east of bridge over Highway 12	15*
Over Cedar Lake Road	15*
Over Dakota Avenue, St. Louis Park	15*
Over Lake Street and Library Lane	15*
Over Walker Street	15*
Over Excelsior Blvd. and South Brookside Avenue and main track between them	15*
M.P. 26.50 to Minnesota River bridge, eastward trains only	15
Between opposing stop signs each side of Minnesota River bridge	10
Between Savage and Northfield	30

\*Speed may be resumed as soon as the engine has passed beyond the limits of the restriction.

NOTE: Speed Signs are not in use between M.N. & S. Jct. and Savage.

# NORTHFIELD SUBDIVN

15. Except as a warning of immediate danger to life and property, signal 15(l) will *not* be sounded:
- between Glenwood Jct. and old Wayzata Blvd., inclusive.
  - between Minnehaha Creek bridge 17.04 and east siding switch, Atwood.
  - between Glenwood Jct. and Douglas Drive, inclusive.
  - between Penn Ave. interlocking and end of track at 7th St. (Minneapolis Terminal trackage).

All public crossings at grade west of Savage will be identified by crossbucks and/or automatic crossing protection devices; whistle posts will not be displayed.

83(B). Verbal clearances by the train dispatcher will constitute compliance on this subdivision.

### S-89. AT AIR LAKE PARK

Westward trains holding order to *take siding* at Air Lake Park for meets with eastward trains will stop at west switch and then proceed according to third sentence of Rule S-89.

Eastward trains which are to hold main track at Air Lake Park for meets with westward trains will wait west of M.P. 39 (clear of highway crossings) until it is verbally determined that westward train is clear of main track, then proceed at reduced speed to Air Lake Park.

(This applies *only* when westward trains are directed to take siding.)

### S-89. AT ORCHARD GARDENS

Eastward trains holding order to *take siding* at Orchard Gardens for meets with westward trains will stop at east switch and then proceed according to third sentence of Rule S-89.

Westward trains which are to hold main track at Orchard Gardens for meets with eastward trains will wait east of M.P. 35 (clear of highway crossings) until it is verbally determined that eastward train is clear of main track, then proceed at reduced speed to Orchard Gardens.

(This applies *only* when eastward trains are directed to take siding at Orchard Gardens.)

### 93. YARD LIMITS

**M.N. & S. Jct. — Savage:** from junction switch at M.N. & S. Jct. to 1304 feet east of east switch Savage.

**Northfield:** from 2823 feet west of St. Olaf Avenue to end of track.

### 98. RAILROAD GRADE CROSSINGS

†Non-operating approach signals.

Location	Railroad	Signals
MP 12.04 — 0.52 miles west of Western Ave.	MIR	Gate
†MP 3.25 — Penn Ave. (Mpls. Trml. trackage)	B.N.	Auto. Interlocked

### 98. DRAWBRIDGES

MP 27.04 Over Minnesota River . . . . . Stop Signs

103(B). Trains, engines or cars must not stand on public highway crossings longer than five minutes.

# NORTHFIELD SUBDIVN

## 104. AT SOONOR/WESTERN AVE.

The wye switches at Soonor-Western Avenue may be left lined as used. The wye switch at Turners Crossroad may be left lined as used if the dispatcher permits.

**AT NORTHFIELD** — The main track switch immediately west of 5th Street may be left lined as used if the dispatcher permits.

## 804(C). SWITCHING AT AUTO CLUB

Before pulling cars to switch at east end of Auto Club yard, trainmen will cut in air on sufficient cars to control movement — judgement of engineer and conductor to govern.

## 804(C). RUNNING BRAKE TESTS

To ensure that train brakes apply, before descending grades into the Minnesota River Valley, the following will apply in addition to prescribed brake tests:

Crews are to apply running brake tests on:

- (1) Eastward trains between west switch Nesbitt and M.P. 26;
- (2) Westward trains between east switch Orchard Gardens and M.P. 32.

Conductor, or trainmen on rear of train, will advise the engineer promptly when brakes have applied on rear of train. In absence of this advice, immediate action will be taken to stop the train.

## CLEARANCE RESTRICTIONS

Bridge 1.82, Wirth Parkway overhead, located at east end Glenwood Jct. yard, has a vertical clearance of 19 feet - 1 inch.

Employees concerned with the handling of dimensional shipments at this location will restrict movement as required to assure clearance.

Transfer assignments handling dimensional shipments to or from the B.N. interchange at Northtown will be governed by instructions from the B.N. yardmaster at Union yard. Dispatchers will ascertain applicable restrictions before transfer assignments depart from Glenwood Jct. yard or Northtown.

## ENGINE RESTRICTIONS

Six-axle units must not operate on tracks as follows:

- (1) Industrial tracks leading off Air Lake Park industrial lead;
- (2) Over or east of Credit River bridge at Port Cargill, except as authorized by dispatcher;
- (3) General Motors spur at Atwood;
- (4) L. & O. Distributing spur at Soonor;
- (5) Rip track No. 2 at Glenwood Jct.;
- (6) Minneapolis terminal trackage between M.W. Jct. and end of track (7th St.);
- (7) Brechet & Richter spur;
- (8) Laurel Ave. Spur (Swamp Track) at Soonor, east of Colorado Ave. crossing.

### Exception:

Six-axle units may operate on the industrial tracks leading off the Air Lake Park industrial lead if units are in the same power consist with MNS units 36 & 37 which are equipped with automatic flange lubricators.

# NORTHFIELD SUBDIVN

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WEST WARD ↓	Milepost Location	Station Numbers	NICOLLET AVE. SPUR STATIONS		Rule 6(A)	↑ EAST WARD
	9.00	3755	NICOLLET AVE.			
	8.70	3754	RICHFIELD (62nd St.)			
	6.80	3752	WILSON (78th St.)			
	4.53	3750	OXBORO			
		3821	AUTO CLUB		P	

All trackage on the Nicollet Ave. Spur is yard trackage governed by Rule 105.

## SPEED RESTRICTIONS

MPH

On all tracks ..... 10

15. Except as a warning of immediate danger to life and property, signal 15(l) will *not* be sounded at 59½ St. and 61st St.

All public crossings at grade will be identified by crossbucks and/or automatic crossing protection devices; whistle posts will not be displayed.

103(B). Trains, engines or cars must not stand on public highway crossings longer than five minutes.

## 804(C). SWITCHING AT AUTO CLUB

Before pulling cars to switch at east end of Auto Club yard, trainmen will cut in air on sufficient cars to control movement — judgement of engineer and conductor to govern.

## ENGINE RESTRICTIONS

Six-axle units must not operate between Normandale Blvd. and end of track Nicollet Ave.

# 8 BROOTEN SUBDIVN

WESTWARD	Milepost Locations	Station Numbers	Siding Capacity	STATIONS	Distance from Glenwood	Rule 6(A)	EASTWARD
	282.4	2102	Yard	STINSON YARD	197.2	ABCFLJKP QRTUWYZ	
	277.9	2098		JUNCTION 278 (Jct. Danbury Sub.)	192.7	JY	
	273.2	7172	59	BOREA	188.0		
	265.4	7164	74	FROGNER	180.2		
	257.6	7156	74	BLACKHOOF	172.4		
	250.1	7149	61	NEMADJI	164.9		
	241.3	7140	Yard	MOOSE LAKE (Jct. Bemidji Sub.)	158.1	JOPRTY	
	229.3	7128	61	DENHAM	144.1		
	210.2	7109	53	MCGRATH	125.0		
	198.2	7097		ISLE	113.0		
	187.6	7086	90	ONAMIA	102.4	OY	
	164.2	7083	59	GENOLA	79.0		
	147.0	7046	59	BOWLUS	61.8		
	139.8	7039	50	HOLDINGFORD	54.6		
	122.3	7021	50	NEW MUNICH	37.1		
	116.6	7016		GREENWALD	31.4		
	111.6	7011		ELROSA	26.4		
	101.1	4104	110	BROOTEN	15.9	JOPRY	
	120.0	4120	Yard	GLENWOOD	0.0	BCFLJKP QRTWYZ	

ABS is in service between "MJ" Crossing and Stinson Yard.  
 Rules 261-264 are in use between "VN" Crossing (MP 281.15) and "MJ" Crossing (MP 279.46).

SPEED RESTRICTIONS	MPH
MAXIMUM SPEED	40
EXCEPTIONS:	
MP 263—MP 264 Between Blackhoof and Frogner	25
MP 277.9—MP 281.15 between Junction 278 and Stinson Yard	20
DULUTH-SUPERIOR TERMINALS-ALL TRACKS	20
Except over Highway Crossings at:	
Connors Point	10
Belknap Street, Superior	10
21st Ave., Duluth	10

### 5. TIME APPLIES

Jct. 278—Junction switch.

### 15. ENGINE WHISTLE SIGNALS

Within the City Limits of Superior the whistle shall not be blown except as a warning of imminent and immediate danger to life or property.

### 83(A). TRAIN REGISTER EXCEPTIONS

**Stinson Yard**—Helper Engines arriving at 28th Street Junction from the Fifth Subdivision of the Eastern Division will register with the Operator at Stinson Yard by radio.

**Moose Lake**—Only when directed by train order to register.

**Brooten**—Only when directed by train order to register.

# BROOTEN SUBDIVN

### 83(B). CLEARANCE PROVISIONS AND EXCEPTIONS

- Junction 278** Rule 83(B) does not apply.
- Moose Lake** Rule 83(B) does not apply if train order signal indicates proceed.
- Brooten** Eastward Paynesville Subdivn trains enroute to the Brooten Subdivn will obtain a clearance at Glenwood bearing notation "Brooten Subdivn" and will not require an initial clearance at Brooten if train order signal indicates proceed.

### 93. YARD LIMITS

West MP	East MP
276.57 Superior	Stinson Yard
143.00 Superior (Danbury Subdivision)	Stinson Yard
459.60 (28th St. Jct.)	
Superior (Fifth Subdivn., Eastern Divn.)	456.8
240.18 Moose Lake	243.08
242.34 Moose Lake (Bemidji Subdivn.)	
186.87 Onamia	189.52
Brooten	104.24

### 98. RAILROAD GRADE CROSSINGS

**NOTE:** †Non-operating approach signals.  
 \*Eastward approach signal does not indicate track conditions between it and the absolute signal at MJ Crossing.

Location	Railroad	Signals
†MP 466.35-Jenswold St. Tower	B.N.	Auto. Interlocked
MP 464.68-West Duluth	B.N.	Stop Signs
MP 285.40-Connors Point	LST&T	Stop Signs
†MP 284.97-12th St. Jct.	C&NW	Auto. Interlocked
†MP 283.52 (MP 459.24)-28th St. Jct.	Soo	Gate
	(Gate may be left lined for either route.)	
MP 281.15-"VN" Crossing	B.N.	Interlocked
*MP 279.46-"MJ" Crossing	B.N.	Semi-Auto Intrik
	(Operator Stinson Yard controls "VN" & "MJ" crossings and routes)	

**103(B). Superior**—City Ordinance prohibits blocking of any street or alley for a period of more than ten (10) minutes. City Ordinance also prohibits any interference with normal flow of highway traffic on any state or federal highway crossing within the city while engaged in switching operations.

### 104. NORMAL POSITION OF SWITCHES AT JUNCTIONS

Location	Switch Lined For
28th St. Junction	Western Division
#Brooten-West switch of siding	Paynesville Subdivision
Moose Lake	Brooten Subdivision
Junction 278	Brooten Subdivision
#Brooten	Track between Brooten Subdivn. connection and the Junction Switch will be considered a part of the siding.

**261.** Rule 261 is in effect between "MJ" Crossing "VN" Crossing. Train and engine movements within these limits will be authorized by block signal indication or verbal authority from the control operator at Stinson Yard. Authority to pass a signal indicating stop per Rules 509 and 606 must be obtained from the control operator at Stinson Yard instead of the train dispatcher.

# BROOTEN SUBDIVN

## 280. LOCATION OF ELECTRIC LOCKS

Saunders ..... At the BN Switch

(Note: When using the BN Connection at Saunders, stop short of yellow insulated joints and call the Stinson Yd Operator who will obtain permission from the BN for operation of electric lock. When permission is received, operate electric lock in prescribed manner and line switch for route and be governed by signal indication.)

606. At "VN" Crossing — Paragraph (c) applies.

TRAIN DEFECT DETECTORS		
Location	Type	Read Out
MP 281.85 Stinson Yard	Wheel Checker Drag. Equip.	Monitor Display Board

# BEMIDJI SUBDIVN

WESTWARD ↓	Milepost Location	Station Numbers	Siding Capacity	STATIONS	Distance from TR Falls	Rule 6(A)	EASTWARD ↑
	241.3	7140	Yard	MOOSE LAKE 8.4	209.2	JOPRTY	
	247.7	7206	59	KETTLE RIVER 14.4	202.8		
	262.1	7221	74	LAWLER 8.6	188.4		
	270.7	7229	61	McGREGOR 11.0	179.8	CIJQRY	
	281.7	7240	43	PALISADE 15.4	168.8		
	297.1	7256		SWATARA 10.2	153.4		
	313.3	7272	59	REMER 19.2	137.2		
	332.5	7291	85	FEDERAL DAM 7.0	118.0		
	339.5	7298	59	PORTAGE LAKE 8.4	111.0		
	345.9	7304		SOO JCT. 24.8	104.6	J	
Between Soo Jct. and Bemidji be Governed by BN Time Table & Rules							
	370.7	7329	61	BEMIDJI 7.7	79.8	BJKORUY	
	378.4	7337		*SCRIBNER 7.3	72.1		
	385.4	7344		PINEWOOD 7.9	65.1		
	393.3	7352		LEONARD 7.8	57.2		
	401.1	7360	60	CLEARBROOK 4.9	49.4		
	406.0	7365		GONVICK 5.7	44.5		
	411.7	7370		GULLY 3.7	38.8		
	415.4	7374		TRAIL 8.4	35.1		
	423.8	7382	59	OKLEE 11.0	26.7		
	434.8	5170	90	PLUMMER 15.7	15.7	JOPY	
	306.4	5185	Yard	TR FALLS	0.0	BCFJKPQ RTUWYZ	

\*Spur-switch at east end.

SPEED RESTRICTIONS	MPH
MP 241—MP 256 between Moose Lake and Lawler . . . . .	25
MP 269.8—BN crossing, McGregor, until crossing is occupied . . . . .	20
MP 256—MP 270 between Kettle River and McGregor . . . . .	40
MP 270.3—McGregor from 300 ft. East of and over highway crossing East of station . . . . .	20
Between McGregor and Soo Jct. . . . .	25
Between Bemidji and Plummer . . . . .	25
Trail gravel pit track . . . . .	5

# BEMIDJI SUBDIVN

## 83(A). TRAIN REGISTER EXCEPTIONS

McGregor—All trains may register by register ticket.

Moose Lake—Only when directed by train order to register.

Bemidji—Only trains originating or terminating will register.

## 83(B). CLEARANCE PROVISIONS AND EXCEPTIONS

Moose Lake Rule 83(B) does not apply if train order signal indicates proceed.

Bemidji Eastward trains must obtain Soo Line clearance and BN clearance from BN operator.

Plummer Eastward Detroit Lakes Subdivn trains enroute to the Bemidji Subdivn will obtain a clearance at T.R. Falls bearing notation "Bemidji Subdivn" and will not require an initial clearance at Plummer if train order signal indicates proceed.

## 93. YARD LIMITS

West MP	East MP
242.34 Moose Lake	
271.24 McGregor	268.64
372.88 Bemidji	369.27
433.00 Plummer	432.35

## 98. RAILROAD GRADE CROSSINGS

NOTE: †Non-operating approach signals.

Location	Railroad	Signals
†MP 270.27-McGregor . . . . .	B.N.	Interlocked
MP 370.20-Bemidji . . . . .	B.N.	Stop Signs

## 104. NORMAL POSITION OF SWITCHES AT JUNCTIONS

Location	Switch Lined For
#Plummer - West switch of siding . . . . .	Detroit Lakes Subdivision
Moose Lake . . . . .	Brooten Subdivision

#Plummer—Track between Bemidji Subdivn. connection and the Junction Switch will be considered a part of the siding.

## 606. AT McGREGOR

When control operator at McGregor is not on duty and Soo Line trains or engines are stopped by the governing absolute signal, if no movement is evident on the conflicting route, such train or engine will move one car length beyond the absolute signal and comply with paragraph (c) of Rule 606.

Before movement is made over the remote control switch located at the BN connection, the switch must be inspected and it must be known that switch points are in proper position for safe movement.

## 608. MANUAL INTERLOCKINGS AT WHICH CONTROL OPERATOR IS NOT ON DUTY CONTINUOUSLY

Location	Specified Route when control operator off duty
McGregor	BN

Note: At McGregor, during hours when control operator is not on duty, Soo Line movement will be authorized by compliance with Special Instruction 606 (at McGregor); Rule 608 modified accordingly.

# 10 DANBURY SUBDIVN

WESTWARD ↓	Milepost Location	Station Numbers	Siding Capacity	STATIONS	Rule 6(A)	EASTWARD ↑
			2102	Yard	STINSON YARD	
	145.5	2098		JUNCTION 278	JY	
	134.2	2087	56	PATZAU	P	
	126.7	2079	59	HARLIS	P	
	114.8	2067	58	KINGSDALE	P	
	109.9	2062		CLOVERTON	P	
	104.7	2057	59	MARKVILLE	P	
	98.3	2051	56	DANBURY	P	
	89.4	2042	59	WEBSTER	P	
	83.1	2035	58	SIREN	P	
	77.4	2030		LEWIS	P	
	72.0	2024	59	FREDERIC	P	
	65.7	2018	59	LUCK	P	
	62.1	2014		MILLTOWN	P	
	56.0	2008	61	CENTURIA	P	
	47.7	1057	Yard	DRESSER	JKOPRT WY	

NOTE: Trains for which Jct. 278 is initial or terminal station will originate or terminate at Stinson Yard.

SPEED RESTRICTIONS		MPH
MAXIMUM SPEED		40
EXCEPTIONS:		
Trains handling pulpwood		35
Dresser, St. Croix Falls ind. trackage		10
MP 83.3—MP 120.7 between Siren and Harlis		25
MP 124.8—MP 135.1 between Kingsdale and Junction 278		25
MP 143 over Bridge D-143-A		25

### 5. TIME APPLIES

Jct. 278—Junction switch.

### 83(A). TRAIN REGISTER EXCEPTIONS

Dresser—All trains may register by register ticket.

Stinson Yard—All trains arriving or departing Junction 278 will register at Stinson Yard. Register of eastward trains at Stinson Yard covers their arrival at Junction 278.

### 83(B). CLEARANCE PROVISIONS AND EXCEPTIONS

Junction 278 Rule 83(B) does not apply.

### 93. YARD LIMITS

West MP	East MP
143.00 Junction 278	Stinson Yard
46.71 Dresser	50.03
Dresser (Barron Subdivision)	48.69

### 104. NORMAL POSITION OF SWITCHES AT JUNCTIONS

Location	Switch Lined For
Junction 278	Brooken Subdivision
Dresser	Barron Subdivision

# NEW RICHMOND SUBDIVN

WESTWARD ↓	Milepost Location	Station Numbers	Siding Capacity	STATIONS	Distance from Shoreham	Rule 6(A)	EASTWARD ↑
	352.2	0114	Yard	C. F. YARD	100.2	BCFKPQR TWYZ	
	358.8	0107	82	HOWARD	93.6	P	
	362.0	0104		ALBERTVILLE	90.4	PQ	
	369.0	0095	105	COLFAX	83.4	P	
	379.4	0084	73	WHEELER	73.0	P	
	386.2	0078		BOYCEVILLE	66.2	P	
	389.9	0074	116	DOWNING JCT.	62.5	JP	
	390.7	0075		DOWNING		Y	
	393.2	0077		GLENWOOD CITY		Y	
	389.9	0074	116	DOWNING JCT.	62.5	JP	
	399.3	0065	117	EMERALD	53.1	PQ	
	404.4	0060	72	CYLON	48.0	P	
	413.5	0050	98	NEW RICHMOND	38.9	OPY	
	421.1	0037	74	SOMERSET	31.3	P	
	23.7	1045	66	WITHROW (Jct. Barron Sub.)	20.3	JOPQRY	
	18.1	1038		*BALD EAGLE (East End Dbl Trk.)	14.7	AP	
	11.8	1030	Yard	CARDIGAN JCT. (Jct. St. Paul Sub.)	8.4	JOPQTXY	
	7.7	1013	45	NEW BRIGHTON (East End 2 Main Trks.)	4.3	PTUXY	
	4.3			CENTRAL AVE. (West End 2 Main Trks.)	0.9	XY	
	3.4	1003	Yard	SHOREHAM	0.0	BCFKPQR TWYZ	

\*Spur switch at west end

NOTE: Between Downing Jct. and Glenwood City, trains and engines will operate in accordance with provisions of Rule 93.

Double track is in use between Cardigan Jct. and Minnesota Transfer Railway railroad crossing at New Brighton.

Two Main tracks are in use between Minnesota Transfer Railway railroad crossing at New Brighton and Central Avenue. Beginning from the South, the main tracks are Numbered No. 1 and No. 2 main tracks.

CTC and ABS are in service between Minnesota Transfer Railway railroad crossing at New Brighton and Central Avenue.

SPEED RESTRICTIONS		MPH
MAXIMUM SPEED		40
EXCEPTIONS:		
Crossover switches and wye track switch located just west of New Brighton until occupied		20
MP 12.8—Over wheel checker one mile east of Cardigan Jct.		23
MP 23.7—Through junction switch crossover Withrow		25
MP 424.25—Over St. Croix Bridge		25
Between Downing Jct. and Glenwood City		10
EXCEPT: MP 391.2 over Bridge N-391-B one-half mile West of Downing		5

# NEW RICHMOND SUBDIVN

## 5. TIME APPLIES

**Withrow**—Junction switch.

## 15. ENGINE WHISTLE SIGNALS

Within the City Limits of Minneapolis the whistle shall not be blown except as a warning of imminent and immediate danger to life or property.

## 83(A). TRAIN REGISTER EXCEPTIONS

**Withrow**—Only when directed by train order to register.

**Shoreham**—All trains arriving or departing Central Ave. will register at Shoreham. Register of westward trains at Shoreham covers their arrival at Central Ave.

## 83(B). CLEARANCE PROVISIONS AND EXCEPTIONS

**Central Ave.** Trains for which Central Ave. is initial station will obtain initial clearance at Shoreham.

**Withrow** Rule 83(B) does not apply if train order signal indicates proceed.

## 93. YARD LIMITS

West MP	East MP
Central Ave.	6.95
7.00 New Brighton	8.87
10.65 Cardigan Jct.	12.72
Cardigan Jct. (St. Paul Subdivn.)	13.08
22.32 Withrow	24.58
Withrow (To C. F. Yard)	430.85
415.30 New Richmond	412.37
394.40 Glenwood City — Downing Jct.	389.82
354.18 C. F. Yard	349.88

**NOTE:** In the application of the fifth paragraph of Rule 93, the following will apply:

Movements against the current of traffic within yard limits at Cardigan Junction and New Brighton will be verbally authorized by the Train Dispatcher.

## 98. RAILROAD GRADE CROSSINGS

Location	Railroad	Signals
*MP 8.45-New Brighton	MTFR	Auto. Interlocked
MP 18.10-Bald Eagle	B.N.	Auto. Interlocked

\*Westward approach signals 813 and 815 do **NOT** indicate the condition of the track between the approach signal and the Westward absolute signals at New Brighton.

## 104. NORMAL POSITION OF SWITCHES AT JUNCTIONS AND AT END OF DOUBLE TRACK

Location	Switch Lined For
Cardigan Junction:	
At end of double track	Westward Track
Junction (East wye switch)	New Richmond Subdivision
#Withrow	New Richmond Subdivision
Downing Junction	Siding

#Withrow—Operators will line Junction switch for Barron Subdivn. on four short blasts of whistle when operator on duty.

104. The following main track switches may be left lined and locked in either the normal or reverse position:

**Cardigan Junction**—South wye switch to the St. Paul Subdivn.

# NEW RICHMOND SUBDIVN 11

104(A). At New Brighton—Crossover Switch on center Siding near East End of Siding must be lined and locked for the Siding.

The switch at the East End of the Center Siding must be lined and locked toward the Eastward Main Track.

## 104(H). LOCATION OF SPRING SWITCHES

Each is facing point locked:

Cardigan Junction	East end double track
Downing Junction	West end siding
Emerald	West end siding

105. Tracks between Central Ave. and Shoreham are yard tracks - Rule 105 applies.

## 268(A). HAND THROW SWITCHES IN CTC LIMITS:

Within CTC limits where maximum speed exceeds 20 MPH, a train or engine must not clear the main track through a hand throw switch, not electrically locked, for the purpose of meeting, passing or being passed by another train or engine.

## 275. LOCATION OF DUAL CONTROL SWITCHES

Central Avenue	Crossover Switches
Central Avenue	High Line Switch

## 613. At New Brighton

Westward movements from the center siding must use the push-button to select the interlocking. The push-button is mounted on the Westward Number Two Main Track absolute signal. Instructions are posted inside the push-button box.

## TRAIN DEFECT DETECTORS

Location	Type	Read Out
MP 12.8 between Bald Eagle and Cardigan Jct.	Wheel Checker Drag. Equip.	Recorder in Dispatchers Office
MP 21.53 between Withrow and Bald Eagle	Hot Box	Recorder in Dispatchers Office
MP 384.92 between Wheeler and Boyceville	Hot Box	Recorder in Dispatchers Office (Alarm light at site.)

# 12 BARRON SUBDIVN

# BARRON SUBDIVN

WESTWARD	Milepost Location	Station Numbers	Siding Capacity	STATIONS	Distance from Shoreham	Rule 6(A)	EASTWARD
	129.8	1130	Yard	LADYSMITH	126.4	BCKQRT UWYZ	
	121.3	1121	48	BRUCE	117.9		
	114.1	1114		WEYERHAUSER	110.7	W	
	100.6	1101		CANTON	97.2		
	96.1	1096		CAMERON	92.7	AJY	
	102.8	1107		RICE LAKE	99.4	Y	
	96.1	1096		CAMERON	92.7	AJY	
	91.0	1091	40	BARRON	87.6	KORTY	
	85.4	1086	51	POSKIN	82.0		
	81.0	1081		ALMENA	77.6		
	75.7	1076	59	TURTLE LAKE	72.3		
	70.4	1071		JOEL	67.0		
	62.9	1065	44	AMERY	59.5		
	56.3	1061		WANDERROOS	52.9		
	47.7	1057	49	DRESSER (Jct. Danbury Sub.)	44.3	BJKOP RTWY	
	42.8	1055	50	OSCEOLA	39.4	P	
	33.2	1049	29	MARINE	29.8		
	28.2	1047	59	MAPLE ISLAND	24.8	P	
	23.7	1045	66	WITHROW	20.3	JOPQRY	
	3.4	1003	Yard	SHOREHAM	0.0	BCFKPQR TWYZ	

NOTE: Between Cameron and Rice Lake trains and engines will operate in accordance with the provisions of Rule 93.

ABS in service between MP 39.74 and MP 42.45 between Marine and Osceola.

SPEED RESTRICTIONS	MPH
MAXIMUM SPEED	40
EXCEPTIONS:	
MP 39.74—MP 42.45 Between Marine and Osceola	25
MP 96.1—C & NW crossing Cameron	35
MP 109.3—MP 114.1 Between Canton and Weyerhauser	35
Between Cameron and Rice Lake	20
EXCEPT: When backing train	10

### SLIDE DETECTOR FENCES

Slide detector fences are in service between MP 40 and MP 42 between Marine and Osceola. If slide is detected, a radio will transmit an intermittent tone for five seconds to alert train crews. Automatic Block Signals will also be caused to display Restricted Proceed indications. Trains proceeding on a Restricted Proceed indication should advise Dispatcher if any unsafe condition is noted in the area.

### 5. TIME APPLIES

**Withrow**—Junction switch.

### 83(A). TRAIN REGISTER EXCEPTIONS

- Barron**—Only when directed by train order to register.
- Dresser**—All trains may register by register ticket.
- Withrow**—Only when directed by train order to register.

### 83(B). CLEARANCE PROVISIONS AND EXCEPTIONS

**Withrow** — Rule 83(B) does not apply if train order signal indicates proceed.

### 93. YARD LIMITS

West MP	East MP
22.32	24.58
46.71	48.69
89.77	91.93
95.60	96.89
126.27	102.87
355.47	132.09
	351.75

### 98. RAILROAD GRADE CROSSINGS

NOTE: †Non-operating approach signals.

Location	Railroad	Signals
MP 96.12-Cameron	C&NW	Auto. Interlocked
†MP 99.82-3 miles west of Rice Lake	C&NW	Auto. Interlocked
MP 129.69-Ladysmith	Eastern Divn.	Stop Signs

**98(A). Ladysmith**—Trains and engines need not stop at railroad crossing stop sign if hand proceed signal is received from an employee of the company who must be standing at the crossing. An understanding must first be reached with the employee who is to give hand proceed signal that he will protect the crossing against any conflicting movements.

### 103. MOVEMENT OVER PUBLIC CROSSINGS

**Rice Lake**—All movements of trains, engines and cars over the following streets crossing the main track on the outskirts of Rice Lake, Wisconsin, must be protected by a member of the crew:

- South Street—Approximately 100 feet south of the south switch of track serving the Fink Industry.
- Coleman Street—Approximately 1300 feet south of switch to Penny Spur Track presently serving Shell and Texaco Oil Companies.

### 104. NORMAL POSITION OF SWITCHES AT JUNCTIONS

Location	Switch Lined For
#Withrow	New Richmond Subdivision
Dresser	Barron Subdivision
Cameron	Withrow-Ladysmith

#Withrow—Operators will line Junction switch for Barron Subdivn on four short blasts of whistle when operator on duty.

### 104. Osceola Industry Park (MP 44.33)

Switch spiked. Arrangements must be made with Withrow section foreman for use.

# ST. PAUL SUBDIVN

# ST. PAUL SUBDIVN 13

WESTWARD ↓	Milepost Location	Station Numbers	Siding Capacity	STATIONS	RULE 6(A)	↑ EASTWARD
	18.0	1721	Yard	MARYLAND AVE. 0.4	BKOPQR YZ	
Between Maryland Ave. and Soo Line Jct. be governed by B.N. Time Table and Rules.						
17.1	1775		SOO LINE JCT. 0.5	JY		
16.6	1777		PARKWAY JCT. 1.4	JY		
18.0	1721	Yard	MARYLAND AVE. (Via Jessamine Yd.) 4.8	BKOPQR YZ		
16.6	1777		PARKWAY JCT. 4.8	JY		
11.8	1030	Yard	CARDIGAN JCT.	JOPQTY		

CTC and ABS are in service between Cardigan Jct. and Parkway Jct.

### PERMISSION FOR MOVEMENT

Trains and engines intending to enter CTC at Parkway Jct. must obtain permission for Westard movement from control operator (Shoreham dispatcher) before departure from Maryland Avenue yard.

### SPEED RESTRICTIONS MPH

SPEED RESTRICTIONS	MPH
MAXIMUM SPEED .....	20
EXCEPTIONS:	
Between Bridge 17.05 (BN Overhead Bridge) and East Yard Lead Switch at Maryland Avenue yard .....	10
East Yard Lead Switch at Maryland Avenue yard to End of Main Track at 2750 feet east of MP 18 .....	5

### 15. ENGINE WHISTLE SIGNALS

Within the City Limits of St. Paul the whistle shall not be blown except as a warning of imminent and immediate danger to life or property.

### 30. ENGINE BELL USE

Within the City Limits of St. Paul, bell shall not be rung except as a warning against immediate danger and when an engine is about to move.

### 83(B). CLEARANCE PROVISIONS AND EXCEPTIONS

Rule 83(B) does not apply on the St. Paul Subdivision.

### 93. YARD LIMITS

West MP	East MP
10.65 Cardigan Jct.	12.72
Cardigan Jct. (St. Paul Subdivn.)	13.08
14.98 Parkway Jct. — Maryland Ave.	18.53
14.98 Parkway Jct. — Soo Line Jct.	17.10

103(B). St. Paul — City Ordinance prohibits blocking of any street or alley for a period of more than ten (10) minutes.

### 104. NORMAL POSITION OF SWITCHES AT JUNCTIONS AND AT END OF DOUBLE TRACK

Location	Switch Lined For
Cardigan Junction:	
At end of double track .....	Westward Track
Junction (East wye switch) .....	New Richmond Subdivn
Parkway Junction .....	Either Route

104. The following main track switches may be left lined and locked in either the normal or reverse position:

Cardigan Junction — South wye switch to the St. Paul Subdivn.

104(A). Maryland Avenue Yard — The Chicago and Northwestern Railroad Interchange Track Switch at St. Paul Maryland Avenue Yard will be lined and locked for the Interchange Track at all times as backup derail protection for switching operations in that yard.

### ENGINE RESTRICTIONS:

Engines with six (6) wheel trucks must not be operated on the CNW Roseport Line between "Q" Junction and Roseport and also not on any of the trackage at the Roseport Industrial Park.

Engines with six (6) wheel trucks also cannot be operated on any industrial trackage at the CNW State Street Yard in South St. Paul but may be operated on Yard Tracks 7, 8 & 9 at State Street Yard proper. These engines may be used on any train movements through State Street Yard when trains pass each other there or when the yard is used for detour movements.

Six (6) wheel truck locomotives also may not be used on the CNW Interchange Track at Maryland Avenue Yard.

**OPERATION ON FOREIGN TRackage**

The Consolidated Code of Operating Rules, Edition of 1980, in addition to the following instructions will govern employees while operating on Minnesota Transfer Railway Company and the St. Paul Union Depot Company trackage:

Rule 93 applies within the limits of St. Paul Union Depot Company and Minnesota Transfer Railway Company.

The limits of the St. Paul Union Depot Company property extend from connection with BN tracks at Third Street and connection with CMSTP&P-BN tracks between Third Street and Division Street on the east to connection with the C&NW and CMSTP&P tracks at Robert Street on the west.

Within the limits of St. Paul Union Depot Company property, trains and engines must not exceed ten (10) miles per hour through crossovers and turn-outs.

The entrance to this property is controlled on the east by signal indication at Third Street or verbal authority from BN East Hump Dispatcher at Northtown Yard and on the west by signal indication or verbal authority from the CMSTP&P control operator at St. Paul Yard.

Northward train and engine movements from C&NW trackage South St. Paul must contact C&NW operator at South St. Paul who will advise BN East Hump Dispatcher at Northtown Yard.

Southward or westward train and engine movements from BN or joint CMSTP&P-BN trackage must contact BN East Hump Dispatcher at Northtown Yard.

Eastward train and engine movements from C&NW trackage at Western Avenue must contact CMSTP&P control operator at St. Paul Yard.

Control operators at CNW South Park and BN East Hump Dispatcher at Northtown Yard will coordinate these movements.

A manually controlled interlocking governs the northward and southward movements over the CMSTP&P crossing at Robert Street and is interconnected with the CTC system controlled by control operator at St. Paul Yard. Phone to St. Paul Yard control operator is located on pole next to signal bungalow.

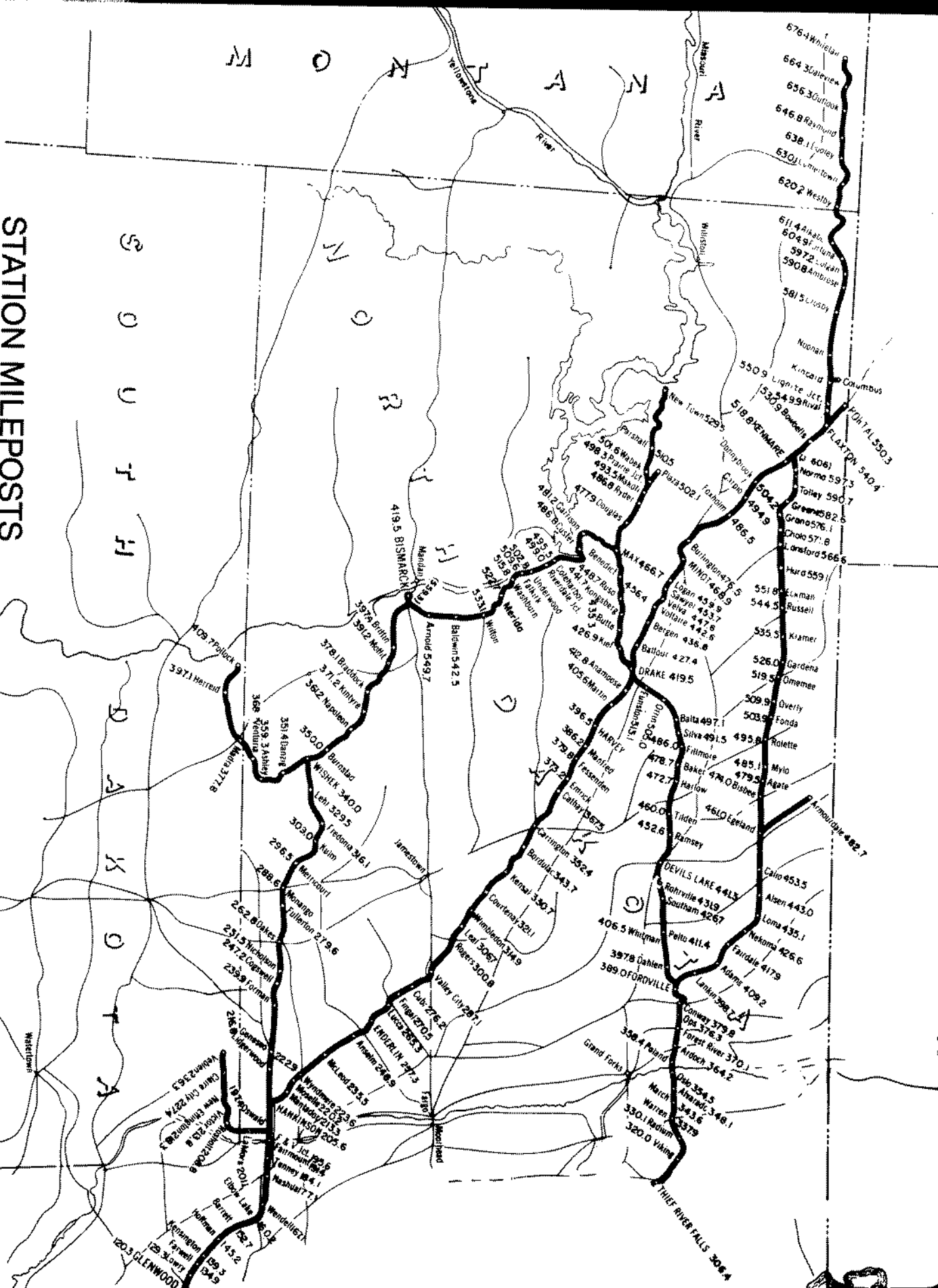
Milwaukee Road bulletins applicable to the St. Paul Union Depot area will be posted on all C&NW and Soo Line bulletin boards.

**INDUSTRIAL TRACKS AND OTHER TRACKS NOT SHOWN AS STATIONS IN TIMETABLE**

Station Number	Switch at	Mile Post Locations
<b>PAYNESVILLE SUBDIVISION</b>		
		Minneapolis . . . . . 0.0
3985	New Hope . . . . . West end	8.3
4005	Plymouth . . . . . East end	9.1
4010	Heney . . . . . West end	12.1
4018	Mannix Spur . . . . . West end	17.4
4031	Dickinson Spur . . . . . West end	31.08
<b>NORTHFIELD SUBDIVISION</b>		
3803	Crystal Spur . . . . . Both ends	7.57
3804	New Hope Spur . . . . . Both ends	8.58

Station Number	Switch at	Mile Post Locations
<b>BEMIDJI SUBDIVISION</b>		
7248	Bain . . . . . East end	288.7
7261	Shovel Lake . . . . . West end	302.4
7314	Cass Lake . . . . . Various	On BN Joint track
7320	Potlatch Spur . . . . . East end	On BN Joint track
<b>NEW RICHMOND SUBDIVISION</b>		
0109	Wheaton-Peaking Plant Spur. West end	356.9
1007	Spur 6 . . . . . East end	6.0
1019	Husby Spur . . . . . East end	9.5
1024	North Lexington Ind. Park . . . . . East end	9.8
1035	White Bear Lake Spur 17 . . . . . East end	16.71
<b>BARRON SUBDIVISION</b>		
1056	Osceola Ind. Park . . . . . East end	44.33
1122	Bruce Pit Spur . . . . . East end	122.0
<b>CARRINGTON SUBDIVISION:</b>		
4348	Siding 348 . . . . . Both ends	348.8
4900	Frazier (Old Clementsville Line) . . . . . East end	314.1
<b>PORTAL SUBDIVISION:</b>		
4465	Minot Gravel Pit . . . . . East end	464.9
<b>BISBEE SUBDIVISION:</b>		
6502	Barks Spur between Egeland and Armourdale . . . . . East end	463.0
6225	Spur 531 . . . . . East end	531.9
6265	Chola . . . . . East end	572.0
<b>WHITETAIL SUBDIVISION:</b>		
4714	Stampede . . . . . Both ends	On BN Joint track
4715	Kincaid . . . . . Both ends	On BN Joint track
4718	Columbus . . . . . East end	On BN Joint track
4720	Larson . . . . . Various	On BN Joint track
4721	Larson Mine . . . . . Both ends	On BN Joint track
4729	Noonan, N.D. . . . . Various	On BN Joint track
4776	Westby Gravel Pit . . . . . East end	617.8
<b>WISHEK SUBDIVISION:</b>		
8012	BN Spur (Lidgerwood) . . . . . East end	216.42
8203	Stewartdale . . . . . West end	408.7
<b>MISSOURI RIVER SUBDIVISION:</b>		
8268	Coal Creek Jct. . . . . Wye	508.9
8270	Falkirk Mining Jct. . . . . Wye	506

# STATION MILEPOSTS GLENWOOD/T FALLS WEST



# 16 ELBOW LAKE SUBDIVN

WESTWARD	Milepost Location	Distance from Glenwood	Station Numbers	Siding Capacity	STATIONS	Rule 6(A)	EASTWARD
	120.3	0.0	4120	Yard	GLENWOOD	BCFLJKP QRTWYZ	
	129.3	9.0	4129	97	LOWRY		
	134.9	14.6	4135	62	FARWELL		
	139.3	19.0	4139	76	KENSINGTON	Q	
	145.2	24.9	4145	90	HOFFMAN	PW	
	152.7	32.4	4153	73	BARRETT		
	160.2	39.9	4159	90	ELBOW LAKE	OPW	
	167.1	46.8	4166	75	WENDELL	P	
	177.1	56.8	4176	117	NASHUA	P	
	178.9	58.6			B.N. JCT.	AJP	
	184.1	63.8	4183	60	TENNEY	P	
	191.4	71.1	4191	97	FAIRMOUNT	OPW	
	195.6	75.3			VEBLEN JCT. (Jct. Veblen Sub.)	JPT	
	197.4	77.1	4197	65	OSWALD		
	205.6	85.3	4205	102	HANKINSON (Jct. Wishek Sub.)	BFJKOP QRTWYZ	
	213.3	93.0	4212	63	MANTADOR		
	220.2	99.9	4219		*MOSELLE		
	223.6	103.3	4223	150	WYNDMERE	PU	
	235.5	115.2	4235	83	MCLEOD	P	
	248.9	128.6	4248	74	ANSELM	AP	
	257.3	137.0	4256	Yard	ENDERLIN	BCFKP QRTWYZ	

\*Spur-switch on West end.

SPEED RESTRICTIONS		MPH
MAXIMUM SPEED		40
EXCEPTIONS:		
Fairmount—on new industry track		5
Engines must not operate beyond road crossing.		
MP 205.8—Hankinson, over Cannon St., 1st crossing west of depot		10
MP 205.9—Hankinson, through Junction switch		10
MP 252.6—BN Crossing, 3.7 miles west of Anselm, until crossing is occupied		20

### 83(A). TRAIN REGISTER EXCEPTIONS

Hankinson—Only trains originating or terminating will register. Burlington Northern trains may register by Register Ticket when operator on duty.

### 83(B). CLEARANCE PROVISIONS AND EXCEPTIONS

B.N. Jct. — Burlington Northern trains originating at B.N. Jct. will obtain Soo Line R.R. clearance at Breckenridge and will not require an initial clearance at B.N. Jct.

Veblen Jct. — Rule 83(B) does not apply.

### 93. YARD LIMITS

West MP	East MP
123.46 Glenwood	117.70
122.36 Glenwood (Detroit Lakes Subdivn.)	
206.68 Hankinson	203.60
207.44 Hankinson (Wishek Subdivision)	
260.00 Enderlin	253.75

# ELBOW LAKE SUBDIVN

### 98. RAILROAD GRADE CROSSINGS

NOTE:

†Non-operating approach signals.

††Operating approach signals that do not indicate condition of track between approach signal and interlocking signal.

Location	Railroad	Signals
††MP 178.87-B.N. Jct.	B.N.	Auto. Interlocked
MP 223.19-Wyndmere	B.N.	Stop Signs
†MP 252.61-3.7 miles west of Anselm	B.N.	Auto. Interlocked

### 103. MOVEMENT OVER PUBLIC CROSSINGS

At Kensington—all movements over Central Ave. on the southerly industry track crossing by switch crews or train crews shall be preceded by a member of the train or switch crew on the crossing to warn highway traffic of impending train or engine movement over the crossing. This applies whether an engine is leading or cars are leading.

### 104. NORMAL POSITION OF SWITCHES AT JUNCTIONS

Location	Switch Lined For
Veblen Jct.	Elbow Lake Subdivision
Hankinson	Elbow Lake Subdivision
B.N. Jct.	Elbow Lake Subdivision

104(A). At Tenney—The switch at the west end of the siding leading into the elevator track must be left lined for movement on the elevator track.

### 109. ADDITIONAL BULLETIN OR GENERAL ORDER BOARDS

Breckenridge and Aberdeen for B.N. Crews operating over Soo Line.

### 221. TRAIN ORDER SIGNALS

Hankinson—Governs Elbow Lake subdivision trains only.

### 275. LOCATION OF DUAL CONTROL SWITCHES

Glenwood	Junction switch
Glenwood	Old main track — west end

(Controlled by Glenwood Operator)

### TRAIN DEFECT DETECTORS

Location	Type	Readout
MP 156.60 between Barrett and Elbow Lake	Hot Box	Radio Talker
MP 240.45 between McLeod and Anselm	Hot Box Drag. Equip. Hot Wheel	Radio Talker

# VEBLEN SUBDIVN

WESTWARD	Milepost Location	Station Numbers	Siding Capacity	STATIONS	Rule 6(A)	EASTWARD
	195.6			VEBLEN JCT.	JPT	
	201.1	4610		LaMARS		
	208.8	4618	19	ROSHOLT	0	
	213.8	4623		VICTOR		
	218.3	4627		NEW EFFINGTON		
	223.4	4633		HAMMER		
	227.4	4636		CLAIRE CITY		
	236.3	4646		VEBLEN	TY	

## VEBLEN SUBDIVN

### SPEED RESTRICTIONS

	MPH
MAXIMUM SPEED .....	30
EXCEPTIONS:	
MP 210—MP 226 Between Rosholt and Claire City .....	10
MP 226—MP 236.3 Between Hammer and Veblen .....	20

### 83(B). CLEARANCE PROVISIONS AND EXCEPTIONS

Veblen Jct. — Rule 83(B) does not apply.

### 93. YARD LIMITS

West MP	East MP
236.48 Veblen	235.68

### 104. NORMAL POSITION OF SWITCHES AT JUNCTIONS

Location	Switch Lined For
Veblen Jct. ....	Elbow Lake Subdivision

104(A). At Rosholt—East and west house track switches must be left lined and locked for the house track.

### ENGINE RESTRICTIONS

- Do not operate four-axle locomotives exceeding a total weight of 267,000 lbs.
- Do not operate six-axle locomotives except Unit No. 2381 (SD-9).

## CARRINGTON SUBDIVN

104(A). At Valley City—Soo Line-BN interchange track limits are designated as follows:

300 feet east of curve on downtown track to and including old designated interchange tracks.

Cars placarded flammable gas or explosive will be left on the Soo end of the interchange. Other cars may be left on the BN end of the interchange. No cars are to be left standing on Shyenne River Bridge.

### TRAIN DEFECT DETECTORS

Location	Type	Readout
MP 305.1 between Rogers and Leal	Hot Box	Monitor Display Board
MP 360.2 between Carrington and Cathay	Hot Box	Radio Talker

### ENGINE RESTRICTIONS — WIMBLEDON

Locomotives with six-wheel trucks will not be operated on the middle transfer track at Wimbledon.

Four-axle locomotives exceeding a total weight of 267,000 lbs. and six-axle locomotives except Unit No. 2381 (SD-9) will not be operated on trackage to Frazier.

## CARRINGTON SUBDIVN 17

WESTWARD	Milepost Location	Station Numbers	Distance from Enderlin	Siding Capacity	STATIONS	Rule 6(A)	EASTWARD
	257.3	4256	0.0	Yard	ENDERLIN	BCFKPQ RTWY	
	265.3	4264	8.0	60	LUCCA	A	
	270.5	4270	13.2	61	FINGAL		
	276.2	4275	18.9		CUBA	Q	
	279.8	4279	22.5	59	SIDING 280	P	
	287.1	4286	29.9	98	VALLEY CITY	OPW	
	300.8	4300	43.6	63	ROGERS	PU	
	306.7	4306	49.5	62	LEAL	Q	
	314.9	4314	57.7	113	WIMBLEDON	TY	
	321.1	4320	63.9	62	COURTENAY		
	330.7	4330	73.5	112	KENSAL	P	
	343.7	4343	86.5	40	BORDULAC		
	352.4	4352	95.2	111	CARRINGTON	OPQUWY	
	367.5	4367	110.3	61	CATHAY		
	373.2	4372	116.0		EMRICK		
	379.8	4379	122.6	109	FESSENDEN		
	386.2	4385	129.0	43	MANFRED		
	396.5	4396	139.2	Yard	HARVEY	BCFKPQ RTWY	

### SPEED RESTRICTIONS

	MPH
MAXIMUM SPEED .....	40
EXCEPTIONS:	
Valley City—on Uptown Track over first curve crossing highway and two curves at bridge .....	5
Valley City—on Soo Line-BN interchange track .....	10
MP 294.0—MP 297.0 Between Valley City and Rogers ..	30
MP 314.5—MP 314.9 Wimbledon .....	20
MP 330.7—Kensal, trains using siding, over first crossing east of depot .....	5

### 93. YARD LIMITS

West MP	East MP
260.00 Enderlin	253.75
316.78 Wimbledon	313.48
353.55 Carrington	351.40
398.29 Harvey	392.50

### 98. RAILROAD GRADE CROSSINGS

#### NOTE:

††Operating approach signals that do not indicate condition of track between approach signal and interlocking signal.

Location	Railroad	Signals
††MP 265.21-Lucca .....	B.N.	Auto. Interlocked
MP 300.80-Rogers .....	B.N.	Stop Signs
MP 353.26-0.9 miles west of Carrington .....	B.N.	Stop Signs

# 18 PORTAL SUBDIVN

WESTWARD ↓	Milepost Location	Station Numbers	Distance from Harvey	Siding Capacity	STATIONS	Rule 6(A)	↑ EASTWARD
	396.5	4396	0.0	Yard	HARVEY	BCFKPQ RTWY	
	405.6	4405	9.2	89	MARTIN		
	412.8	4412	16.4	44	ANAMOOSE		
	419.5	4419	23.1	76	DRAKE (Jct. Devils Lake & Missouri River Subs.)	BJKO PQTWY	
	427.4	4427	31.0	43	BALFOUR		
	436.8	4436	40.4		BERGEN	Q	
	442.6	4442	46.2	91	VOLTAIRE	TY	
	447.6	4447	51.3	58	VELVA		
	453.7	4453	57.3	61	SAWYER		
	467.0		70.6	90	SIDING 466	Y	
	468.9	4468	72.5		MINOT	BFKOPQ TWYZ	
	469.3		72.9		SOO TOWER	CIQPY	
	476.5	4476	80.1	48	BURLINGTON		
	486.5	4486	90.1	88	FOXHOLM	Q	
	494.9	4494	98.5		CARPIO		
	504.2	4503	107.8	39	DONNYBROOK		
	518.8	4518	122.4	64	KENMARE (Jct. Bisbee Sub.)	BJKO PTWY	
	530.9	4530	134.5	39	BOWBELLS	AQ	
	540.4	4540	144.0	67	FLAXTON (Jct. Whitetail Sub.)	JPTY	
	550.2	4549	153.8	Yard	PORTAL	BFKOP QRTWY	

### SPEED RESTRICTIONS MPH

MAXIMUM SPEED	40
EXCEPTIONS:	
MP 396.8—Harvey, Highway 3 crossing until crossing is occupied	10
Voltaire—On Consolidated Coal Trackage (beginning at tail of wye) and C.F. Industries trackage	5
MP 468.0—MP 469.18, Minot, between 9th Street and east absolute signal Soo Tower	10
Restriction applies only while head end of movement is passing through these limits.	
MP 550.2—Portal, over wheel checker	20

### 83(B). CLEARANCE PROVISIONS AND EXCEPTIONS

Drake — Rule 83(B) does not apply if train order signal indicates proceed.

### 93. YARD LIMITS

West MP	East MP
398.29 Harvey	392.50
420.97 Drake	418.44
Drake (Devils Lake Subdivision)	520.14
419.96 Drake (Missouri River Subdivision)	
444.33 Voltaire	441.49
472.23 Siding 466 — Minot — Soo Tower	465.20
520.74 Kenmare	517.68
Kenmare (Bisbee Subdivision)	604.28
541.00 Flaxton	539.15
541.73 Flaxton (Whitetail Subdivision)	
550.28 Portal	548.42

# PORTAL SUBDIVN

### 98. RAILROAD GRADE CROSSINGS

#### NOTE:

†Non-operating approach signals.

††Operating approach signals that do not indicate condition of track between approach signal and interlocking signal.

Location	Railroad	Signals
†MP 469.28—Soo Tower (in Minot)	B.N.	Interlocked
††MP 529.88—1 mile east of Bowbells	B.N.	Auto Interlocked

101. At Voltaire — Consolidated Coal trackage west of C.F. Industries switch can be used for empties only.

### 104. NORMAL POSITION OF SWITCHES AT JUNCTIONS

Location	Switch Lined For
Drake	(2) Portal Subdivision
Kenmare	Portal Subdivision
Flaxton	Portal Subdivision

104. At Portal the east switch may be left lined and locked in either the normal or reverse position.

### 109. ADDITIONAL BULLETIN OR GENERAL ORDER BOARDS

B.N. General Order boards are located at Portal, Kenmare and Westby for Soo Line crews operating over the B.N.

### 221. TRAIN ORDER SIGNALS

Drake—Governs Portal and Missouri River subdivision trains only.

Kenmare—Governs Portal subdivision trains only.

808(E). At Anamoose cars spotted for loading at east elevator may foul siding at house track east switch.

### TRAIN DEFECT DETECTORS

Location	Type	Readout
MP 436.6 Bergen	Hot Box	Monitor
	Drag. Equip.	Display Board
	Hot Wheel	
MP 509 between Donnybrook and Kenmare	Hot Box	Monitor
	Drag. Equip.	Display Board
MP 550.2 Portal	Wheel Checker Drag. Equip.	Recorder in Depot Office

### WHEEL CHECKER AND DRAGGING EQUIPMENT DETECTOR AT PORTAL - MP 550.2

When recorder indicates a defective wheel condition or dragging equipment condition, operator or clerk at Portal will notify carmen or train crew to make necessary inspection of specified car or cars.

### ENGINE RESTRICTIONS

At Drake locomotives cannot be operated beyond clearance point of track 15 (loading platform track).

At Flaxton — The wye can be used by locomotives only.

# DEVILS LAKE SUBDIVN

# DEVILS LAKE SUBDIVN 19

WESTWARD ↓	Milepost Location	Station Numbers	Siding Capacity	STATIONS	Distance from Drake	Rule 6(A)	EASTWARD ↑
	306.4	5185	Yard	T R FALLS 13.6	214.7	BCFJKP QRTUWYZ	
	320.0	6014	59	VIKING 10.1	201.1		
	330.1	6024		RADIUM 7.8	191.0		
	337.9	6032	36	WARREN 5.7	183.2	AW	
	343.6	6037		MARCH 4.5	177.5		
	348.1	6042	57	ALVARADO 6.4	173.0		
	354.5	6048	41	OSLO 3.9	166.6		
	358.4	6052		POLAND 5.8	162.7		
	364.2	6058	29	ARDOCH 5.9	156.9	U	
	370.1	6064		FOREST RIVER 6.4	151.0	U	
	376.5	6070		OPS 3.3	144.6		
	379.8	6073		CONWAY 9.2	141.3	A	
	389.0	6083	Yard	FORDVILLE (Jet. Bisbee Sub.) 8.8	132.1	BJKOP RTWY	
	397.8	6309		DAHLEN 8.7	123.3		
	406.5	6317		WHITMAN 4.9	114.6		
	411.4	6322		*PELTO 4.4	109.7		
	415.8	6327		SARDIS 10.9	105.3	U	
	426.7	6338		SOUTHAM 5.2	94.4		
	431.9	6343		ROHRVILLE 4.1	89.2		
	436.0	6347		*ESSEX 5.3	85.1		
	441.3	6352	Yard	DEVILS LAKE 11.3	79.8	ABKOP RUWY	
	452.6	6364		RAMSEY 7.4	68.5		
	460.0	6371		TILDEN 12.7	61.1		
	472.7	6384		HARLOW 6.0	48.4		
	478.7	6391		BAKER 7.3	42.4		
	486.0	6398		FILLMORE 5.5	35.1		
	491.5	6404		SILVA 5.6	29.6		
	497.1	6409		BALTA 7.9	24.0		
	505.0	6417		ORRIN 8.1	16.1		
	513.1	6425		*FUNSTON 8.0	8.0	A	
	521.1	4419	Yard	DRAKE	0.0	BJKOP QRTWY	

\*Spur-switch at East end.

SPEED RESTRICTIONS	MPH
MAXIMUM SPEED	25
EXCEPTIONS:	
MP 337.9—BN Crossing, Warren, until crossing is occupied	20
MP 348.1—Over Boundary and Marshall Streets Alvarado	5
MP 379.8—BN Crossing, Conway, until crossing is occupied	20
MP 391.0—Fordville Junction Switch	10
MP 395.8—Over Bridge W-396-A, 2 miles east of Dahlen	10
(Enginemen must avoid application of brakes while any part of train is on bridge.)	
MP 406.9—Whitman, Highway Crossing until crossing is occupied	20

## SPEED RESTRICTIONS - CONT. MPH

MP 415.8—Sardis, between house track switches	10
MP 440.8—MP 442.5 Devils Lake, from road crossing 1220 feet east of east siding switch to road crossing 4300 feet west of west siding switch	10
MP 445.3—BN Crossing, 4 miles west of Devils Lake, until crossing is occupied	20
MP 515.3—BN Crossing, 2.2 miles west of Funston, until crossing is occupied	20

### 83(A). TRAIN REGISTER EXCEPTIONS

Devils Lake—Only trains originating or terminating will register.

Fordville—Only trains originating or terminating will register.

### 83(B). CLEARANCE PROVISIONS AND EXCEPTIONS

Fordville — Rule 83(B) does not apply if train order signal indicates proceed.

### 93. YARD LIMITS

West MP	East MP
311.90 T. R. Falls	304.71
311.13 T. R. Falls (Noyes Subdivn.)	
391.17 Fordville	388.04
391.17 Fordville (Bisbee Subdivision)	
442.96 Devils Lake	440.15
420.97 Drake (Portal Subdivision)	418.44
Drake (Devils Lake Subdivision)	520.14
419.96 Drake (Missouri River Subdivision)	

### 98. RAILROAD GRADE CROSSINGS

NOTE: †Non-operating approach signals.

Location	Railroad	Signals
†MP 337.99-Warren	B.N.	Auto. Interlocked
MP 364.79-Ardoch	B.N.	Stop Signs
MP 370.66-Forest River	B.N.	Stop Signs
†MP 380.55-Conway	B.N.	Auto. Interlocked
MP 417.60-1.8 miles west of Sardis	B.N.	Stop Signs
MP 441.89-Devils Lake	B.N.	Stop Signs
†MP 445.62-4.0 miles west of Devils Lake	B.N.	Auto. Interlocked
†MP 515.55-2.2 miles west of Funston	B.N.	Auto. Interlocked

### 103(C). PLACING CARS NEAR ROAD CROSSINGS

At Alvarado cars must not be placed closer than 150 feet from the edge of the traveled roadway of Highway 220.

### 104. NORMAL POSITION OF SWITCHES AT JUNCTIONS

Location	Switch Lined For
Drake	Portal Subdivision
Fordville	Bisbee Subdivision
TR Falls	Noyes Subdivision

### 104. At Devils Lake—the house track is designated as additional interchange track.

When there are more cars to be interchanged to the Burlington Northern than the transfer track will hold, the transfer track will be filled to capacity clearing the transfer track east switch.

Additional cars to be interchanged beyond the capacity of the interchange track will be left on the west end of Soo Line house track with the west cars at the main track clearance point.

## 20 DEVILS LAKE SUBDIVN

Under such conditions the transfer track east switch and house track west switch will be left lined and locked for a continuous movement from the transfer track to the main track to the house track.

Trains arriving at Devils Lake expect to find switches lined as above described.

Unless the house track is being used for surplus interchange movement, transfer track east switch and house track west switch will be left lined in normal position.

**104(A). At Viking**—East and west house track switches must be left lined and locked for the house track.

**At Alvarado**—East and west house track switches must be left lined and locked for the house track.

**At Forest River**—the siding is designated as an extension of the present interchange track between the Burlington Northern and Soo Line Railroad. Switches at the west end of the yard will be left lined from the Burlington Northern interchange track to the siding. Targets have not been changed.

### 221. TRAIN ORDER SIGNALS

**Drake**—Governs Portal and Missouri River subdivision trains only.

#### TRAIN DEFECT DETECTORS

Location	Type	Readout
MP 309.47 West End T.R. Falls	Wheel Checker Drag. Equip.	Monitor Display Board

#### ENGINE RESTRICTIONS

Four-axle locomotives exceeding a total weight of 267,000 lbs. and six-axle locomotives except Unit No. 2381 (SD-9) will not be operated on this subdivision except:

Any type of locomotive may be operated within yard limits at T.R. Falls and Drake at a speed not to exceed ten miles per hour (10 MPH).

At Drake locomotives cannot be operated beyond clearance point of track 15 (loading platform track).

## BISBEE SUBDIVN

WEST WARD ↓	Milepost Location	Station Numbers	Siding Capacity	STATIONS	Distance from Kenmare	Rule 6(A)	↑ EAST WARD
	389.0	6083	Yard	FORDVILLE 9.7	217.0	BJKOP RTWY	
	398.7	6092		LANKIN 10.5	207.3		
	409.2	6103		ADAMS 8.3	196.8		
	417.9	6112		FAIRDALE 8.7	188.1		
	426.6	6120		NEKOMA 8.5	179.4		
	435.1	6129		LOMA 7.9	170.9		
	443.0	6137		ALSEN 10.5	163.0	U	
	453.5	6147		CALIO 7.5	152.5		
	461.0	6155		EGELAND 21.7	145.0	JTU	
	482.7	6522		ARMOURDALE		T	
	461.0	6155		EGELAND 13.0	145.0	JTU	
	474.0	6168		BISBEE 5.5	132.0	BKPRUY	
	479.5	6178		AGATE 5.6	126.5		
	485.1	6179		MYLO 10.7	120.9		
	495.8	6189		ROLETTE 8.1	110.2		
	503.9	6198		FONDA 6.0	102.1		
	509.9	6203	Yard	OVERLY 9.6	96.1		
	519.5	6213		OMEMEE 6.5	86.5	U	
	526.0	6220		GARDENA 9.5	80.0		
	535.5	6229		KRAMER 9.0	70.5		
	544.5	6238		RUSSELL 7.3	61.5	U	
	551.8	6245		*ECKMAN 7.3	54.2		
	559.1	6253		*HURD 7.5	46.9		
	566.6	6260		LANSFORD 9.5	39.4	U	
	576.1	6270		GRANO 6.5	29.9		
	582.6	6276		GREENE 8.1	23.4		
	590.7	6284		TOLLEY 6.6	15.3		
	597.3	6291		NORMA 8.7	8.7		
	606.0	4518	Yard	KENMARE	0.0	BJKO PRTWY	

\*Spur-switch at East end.

NOTE: Between Egeland and Armourdale trains and engines will operate in accordance with the provisions of Rule 93.

#### SPEED RESTRICTIONS

	MPH
MAXIMUM SPEED	25
EXCEPTIONS:	
MP 409.2—Adams, over highway 710 crossing until crossing is occupied	10
MP 418.3—Fairdale, over Main Street crossing until crossing is occupied	5
MP 461.0—MP 482.7 Between Egeland and Armourdale	20
EXCEPTION: When handling any high capacity tank or hopper car whose gross weight exceeds 200,000 pounds	10
MP 605.8 Kenmare—Over 4th street NW crossing until crossing is occupied	10

## BISBEE SUBDIVN

### 83(A). TRAIN REGISTER EXCEPTIONS

**Bisbee** — Only trains originating or terminating will register.

### 83(B). CLEARANCE PROVISIONS AND EXCEPTIONS

**Fordville**—Rule 83(B) does not apply if train order signal indicates proceed.

### 93. YARD LIMITS

West MP	East MP
391.17 Fordville	
391.17 Fordville (Devils Lake Subdivision)	388.04
475.46 Bisbee	472.99
Kenmare	604.28
520.74 Kenmare (Portal Subdivision)	517.68

### 98. RAILROAD GRADE CROSSINGS

Location	Railroad	Signals
MP 446.62-3.4 miles west of		
Alsen	B.N.	Stop Signs
MP 460.87-Egeland	B.N.	Stop Signs
MP 474.04-Bisbee	B.N.	Stop Signs
MP 519.54-Omemee	B.N.	Stop Signs
MP 542.20-2.5 miles east of		
Russell	B.N.	Stop Signs
MP 566.74-Lansford	B.N.	Stop Signs

### 104. NORMAL POSITION OF SWITCHES AT JUNCTIONS

Location	Switch Lined For
Kenmare	Portal Subdivision
Egeland	Kenmare - Fordville
Fordville	Bisbee Subdivision

#### ENGINE RESTRICTIONS

Four-axle locomotives exceeding a total weight of 267,000 lbs. and six-axle locomotives except Unit No. 2381 (SD-9) will not be operated on this subdivision except:

Any type of locomotive may be operated within yard limits at Kenmare at a speed not to exceed ten miles per hour (10 MPH).

## WHITETAIL SUBDIVN

### 104. NORMAL POSITION OF SWITCHES AT JUNCTIONS

Location	Switch Lined For
Flaxton	Portal Subdivision
Lignite Jct.	B.N.

### 109. ADDITIONAL BULLETIN OR GENERAL ORDER BOARDS

B.N. General Order boards are located at Portal, Kenmare and Westby for Soo Line crews operating over the B.N.

#### ENGINE RESTRICTIONS

Four-axle locomotives exceeding a total weight of 267,000 lbs. and six-axle locomotives except Unit No. 2381 (SD-9) will not be operated on this subdivision except:

Any type of locomotive may be operated within yard limits at Flaxton at a speed not to exceed ten miles per hour (10 MPH).

**At Flaxton** — The wye can be used by locomotives only.

## WHITETAIL SUBDIVN 21

WESTWARD	Milepost Location	Station Numbers	Distance from Flaxton	Siding Capacity	STATIONS	Rule 6(A)	EASTWARD
	540.4	4540	0.0	Yard	<b>FLAXTON</b>	JPTY	
	549.9	4710	9.5		<b>RIVAL</b>	Y	
	551.2		10.8		<b>LIGNITE JCT.</b>	JY	
BETWEEN LIGNITE JCT. AND CROSBY BE GOVERNED BY B.N. INC. TIME TABLE AND RULES.							
	581.5	4741	43.6		<b>CROSBY</b>	RWY	
	590.8	4750	52.9		<b>AMBROSE</b>		
	597.2	4757	59.3		<b>COLGAN</b>		
	604.9	4764	67.0		<b>FORTUNA</b>		
	611.4	4771	73.5		<b>ALKABO</b>		
	620.2	4780	82.3		<b>WESTBY</b>	BRY	
	630.1	4790	92.2		<b>COMERTOWN</b>		
	638.1	4798	100.2		<b>DOOLEY</b>		
	646.8	4806	108.9		<b>RAYMOND</b>		
	656.3	4816	118.4		<b>OUTLOOK</b>	T	
	664.3	4824	126.4		<b>DALEVIEW</b>		
	676.4	4836	138.5	34	<b>WHITETAIL</b>	TWY	

#### SPEED RESTRICTIONS

SPEED RESTRICTIONS	MPH
MAXIMUM SPEED	25
EXCEPTIONS:	
MP 541.0—MP 551.2 Between Flaxton and Lignite Jct.	10
Crosby—All Soo Line trackage	5
MP 590.8 Ambrose—State Highway No. 42 Crossing until crossing is occupied	10
MP 581.5—MP 591.5 Between Crosby and Colgan	10
MP 632.6—MP 677.6 Between Comertown and Whitetail	20
Columbus Spur, Highway No. 5—Stop on track circuit 75 feet from crossing. Proceed when crossing signals operate.	
Columbus Spur and in Columbus Yard	10

### 83(A). TRAIN REGISTER EXCEPTIONS

**Crosby**—Only trains originating or terminating will register.

**Westby**—Only trains originating or terminating will register.

### 83(B). CLEARANCE PROVISIONS AND EXCEPTIONS

**Flaxton** — Rule 83(B) does not apply.

**Lignite Jct.** — Westward trains operating beyond Lignite Jct. will obtain Burlington Northern clearance at Portal or Kenmare.

**Crosby** — Eastward trains operating beyond Crosby will obtain Burlington Northern clearance at Whitetail, Westby, or Crosby.

### 93. YARD LIMITS

West MP	East MP
541.73 Flaxton	
541.00 Flaxton (Portal Subdivision)	539.15
550.94 Rival-Lignite Jct.	549.58
583.01 Crosby	581.80
620.90 Westby	619.30
676.83 Whitetail	675.99

## 22 WISHEK SUBDIVN

WESTWARD	Milepost Location	Station Numbers	Siding Capacity	STATIONS	Rule 6(A)	EASTWARD
	205.6	4205	Yard	HANKINSON 12.2	BFJKO PQRTWY	
	217.8	8012	26	LIDGERWOOD 5.7		
	223.5			GENESEO JCT. 0.5	J	
	224.0	8018		GENESEO 17.4		
	241.4	8035	30	FORMAN 7.0		
	248.4	8043		COGSWELL 15.5		
	263.9	8058	32	OAKES 2.9	UWY	
	266.8	8061		NORWAY 13.9		
	280.7	8075		FULLERTON 7.9		
	288.6	8083		MONANGO CROSSING 8.9		
	297.5	8092		MERRICOURT 12.7		
	310.2	8104	42	KULM 7.1		
	317.3	8111		FREDONIA 13.3		
	330.6	8125	42	LEHR 10.4		
	341.0	8135	Yard	WISHEK (Jct. Pollock Sub.) 10.0	BJKOP RTWY	
	351.0	8145		BURNSTAD 11.3		
	362.3	8156		NAPOLEON 10.0		
	372.3	8166		KINTYRE 6.9		
	379.2	8173		BRADDOCK 13.3		
	392.5	8186		MOFFIT 6.0	U	
	398.5	8193		*BRITTON 21.6		
	420.1	8214	Yard	BISMARCK	ABFJKO PQRTWY	

\*Spur-switch at East end.

SPEED RESTRICTIONS	MPH
MAXIMUM SPEED	25
EXCEPTIONS:	
MP 288.9—MP 313.8 Between Monango Crossing and Fredonia	10
MP 330.6 Lehr, over main street crossing	10
MP 350.9 Burnstad—Eastward trains over street crossing located just east of station sign until crossing is occupied	10
MP 356.5—MP 420.1 Between Burnstad and Bismarck	20
MP 418.0 BN Crossing, Bismarck	10

### 83(A). TRAIN REGISTER EXCEPTIONS

**Hankinson**—Burlington Northern trains may register by Register Ticket when operator on duty.

### 83(B). CLEARANCE PROVISIONS AND EXCEPTIONS

**Geneseo Jct.** — Burlington Northern trains originating at Geneseo Jct. will obtain Soo Line R.R. clearance at Aberdeen and will not require an initial clearance at Geneseo Jct.

## WISHEK SUBDIVN

### 93. YARD LIMITS

West MP	East MP
208.00 Hankinson	
206.68 Hankinson (Elbow Lake Subdivision)	203.60
264.28 Oakes	263.46
342.22 Wishek	340.40
342.15 Wishek (Pollock Subdivn.)	
420.10 Bismarck (Wishek Subdivision)	417.18
560.50 Bismarck (Missouri River Subdivision)	557.65

### 98. RAILROAD GRADE CROSSINGS

NOTE: †Non-operating approach signals.

Location	Railroad	Signals
MP 264.06-Oakes	C.&N.W.	Stop Signs
MP 390.35-1.5 miles east of Moffit	B.N.	Stop Signs
†MP 417.96-Bismarck	B.N.	Auto. Interlocked

### 104. NORMAL POSITION OF SWITCHES AT JUNCTIONS

Location	Switch Lined For
Hankinson	Elbow Lake Subdivision
Geneseo Jct.	Wishek Subdivision
Wishek	Wishek Subdivision
Bismarck	Wishek Subdivision

**104(A). At Lidgerwood**—East house track switch must be left lined and locked for the house track.

**At Kulm**—East house track switch must be left lined and locked for the house track.

### 109. ADDITIONAL BULLETIN OR GENERAL ORDER BOARDS

Breckenridge and Aberdeen for B.N. Crews operating over Soo Line.

### 221. TRAIN ORDER SIGNALS

**Hankinson**—Governs Elbow Lake subdivision trains only.

**808(E). At Oakes** in order to provide additional empties to Shafer Seed Company of Oakes, house track west switch must be left lined for the main track, but empties may be left on house track up to switch points and fouling normal main track clearance.

### ENGINE RESTRICTIONS

Four-axle locomotives exceeding a total weight of 267,000 lbs. and six-axle locomotives except Unit No. 2381 (SD-9) will not be operated on this subdivision except:

Any type of locomotive may be operated within yard limits at Hankinson at a speed not to exceed ten miles per hour (10 MPH).

# POLLOCK SUBDIVN

# NEW TOWN SUBDIVN 23

WESTWARD ↓	Milepost Location	Station Numbers	Siding Capacity	STATIONS	Rule 6(A)	↑ EASTWARD
	341.0	8135	Yard	WISHEK 10.5	BJKO PRTWY	
	351.5	8310		*DANZIG 9.3		
	360.4	8319		ASHLEY 8.8	W	
	369.2	8329		VENTURIA 9.6		
	378.8	8338		MADRA 19.3	U	
	398.1	8357		HERREID 12.6		
410.2	8370	Yard	POLLOCK	TWY		

WESTWARD ↓	Milepost Location	Station Numbers	Siding Capacity	STATIONS	Rule 6(A)	↑ EASTWARD
	466.7	9048	Yard	MAX 11.2	BJKOP QRTWY	
	477.9	9059		DOUGLAS 8.9		
	486.8	9068		RYDER 6.7		
	493.5	9075		MAKOTI 4.8		
	498.3	9079	32	PRAIRIE JCT. 3.8	JTY	
	502.1	9084		PLAZA	Y	
	498.3	9079	32	PRAIRIE JCT. 3.3	JTY	
	501.6	9083		WABEK 8.9		
	510.5	9092	21	PARSHALL 19.1	W	
	529.6	9111	Yard	NEW TOWN	TY	

\*Spur-switch at West end.

SPEED RESTRICTIONS		MPH
MAXIMUM SPEED	.....	20

**93. YARD LIMITS**

West MP	East MP
342.15 Wishek	
342.22 Wishek (Wishek Subdivn.)	340.40
410.27 Pollock	409.32

**98. RAILROAD GRADE CROSSINGS**

Location	Railroad	Signals
MP 378.93-Madra	B.N.	Stop Signs

**104. NORMAL POSITION OF SWITCHES AT JUNCTIONS**

Location	Switch Lined For
Wishek	Wishek Subdivision

S-225. Absolute Block Register Territory is in use on the Pollock Subdivision. Register book is located at Wishek.

**ENGINE RESTRICTIONS**  
Four-axle locomotives exceeding a total weight of 267,000 lbs. and six-axle locomotives except Unit No. 2381 (SD-9) will not be operated on this subdivision.

SPEED RESTRICTIONS		MPH
MAXIMUM SPEED	.....	40

**EXCEPTIONS:**

MP 498.3-MP 502—Between Prairie Jct. and Plaza	10
MP 517-MP 530—Between Parshall and New Town	30

**NOTE:** Between Prairie Jct. and Plaza trains and engines will operate in accordance with the provisions of Rule 93.

**83(B). CLEARANCE PROVISIONS AND EXCEPTIONS**  
Max — Rule 83(B) does not apply if train order signal indicates proceed.

**93. YARD LIMITS**

West MP	East MP
467.70 Max	
467.70 Max (Missouri River Subdivn.)	465.60
499.12 Prairie Jct.	497.91
502.39 Prairie Jct. (to and including Plaza)	
530.32 New Town	528.26

**104. NORMAL POSITION OF SWITCHES AT JUNCTIONS**

Location	Switch Lined For
Max	Missouri River Subdivision
Prairie Jct.	Max-New Town

# 24 MISSOURI RIVER SUBDIVN

# MISSOURI RIVER SUBDIVN

<b>WESTWARD</b>	Mile post Location	Station Numbers	Siding Capacity	<b>STATIONS</b>	<b>Rule 6(A)</b>
	418.5	4419	Yard	<b>DRAKE</b> 8.4	BJKO PQRTWY
	426.9	9008		<b>KIEF</b> 8.4	
	435.3	9017	75	<b>BUTTE</b> 6.4	
	441.7	9023		<b>*KONGSBERG</b> 7.0	
	448.7	9030	67	<b>RUSO</b> 7.7	
	456.4	9038		<b>BENEDICT</b> 10.3	
	466.7	9048	Yard	<b>MAX</b> (Jct. New Town Sub.) 14.5	BJKOP QRTWY
	481.2	8291	40	<b>GARRISON</b> 8.6	
	486.8	8286	59	<b>CUSTER</b> 8.7	
	495.5	8279		<b>COLEHARBOR</b> 8.5	
	499.0	8276		<b>RIVERDALE JCT.</b> 8.8	
	502.8	8272		<b>UNDERWOOD</b> 6.8	W
	509.6	8266		<b>FALKIRK</b> 8.7	
	521.5	8258		<b>MERIDA</b> 11.6	
	515.8	8259	17	<b>WASHBURN</b> 17.3	
	533.1	8242	29	<b>WILTON</b> 9.4	W
	542.5	8232		<b>BALDWIN</b> 7.5	
	550.0	8225		<b>ARNOLD</b> 10.5	Y
	560.5	8214	Yard	<b>BISMARCK</b>	BFJKOP QRTWY

**EASTWARD**

## 221. TRAIN ORDER SIGNALS

**Drake**—Governs Portal and Missouri River subdivision trains only.

## ENGINE RESTRICTIONS

Four-axle locomotives exceeding a total weight of 267,000 lbs. and six-axle locomotives except Unit No. 2381 (SD-9) will not be operated on this subdivision except:

Any type of locomotive may be operated within yard limits at Drake at a speed not to exceed ten miles per hour (10 MPH).

At Drake locomotives cannot be operated beyond clearance point of track 15 (loading platform track).

\*Spur-switch at East end.

SPEED RESTRICTIONS		MPH
MAXIMUM SPEED	.....	40
EXCEPTIONS:		
MP 467—MP 471 Between Max and Garrison	.....	25
MP 502.7 Underwood—Over Lincoln Ave.	.....	5
MP 518—MP 523 Between Washburn and Wilton	.....	35
MP 523—MP 531 Between Washburn and Wilton	.....	25

## 83(B). CLEARANCE PROVISIONS AND EXCEPTIONS

**Drake** — Rule 83(B) does not apply if train order signal indicates proceed.

## 93. YARD LIMITS

West MP		East MP
420.10	Bismarck (Wishek Subdivision)	417.18
560.50	Bismarck (Missouri River Subdivision)	557.65
550.98	Arnold	548.83
467.70	Max	465.60
467.70	Max (New Town Subdivn.)	
420.97	Drake (Portal Subdivision)	418.44
	Drake (Devils Lake Subdivision)	520.14
419.96	Drake (Missouri River Subdivision)	

## 104. NORMAL POSITION OF SWITCHES AT JUNCTIONS

Location	Switch Lined For
Drake	Portal Subdivision
Max	Missouri River Subdivision
Bismarck	Wishek Subdivision

NOTE: Where station names on a subdivision page are printed in non-boldface *ITALICS*, it indicates that station is not a part of the subdivision, but is shown for information or clarity purposes only.

Consolidated Code of Operating Rules numbers correspond to the numbers used in these special instructions, and are added to or revised in part as shown below:

A. When operating over trackage of another railroad be governed by Rules, Special Instructions and Time Table of that railroad.

2. Employees in train, engine and yard service, train dispatchers and other employees as may be designated must, while on duty, have a railroad grade watch of 21 or more jewels equipped with lever set unless an approved wrist watch is worn.

Employees governed by time service rules must not wear wrist watches while on duty unless such watches are of an approved type.

Approved type wrist watches are:

Rodania Quartz Railroad Approved Q9361-8213 (stainless)  
 Rodania Quartz Railroad Approved Q9361-8214 (yellow)  
 Seiko Quartz Railroad Approved FJ055M, HA163M, FY625M and PD 143 (stainless)

Seiko Quartz Railroad Approved FJ056M, HA 164M, FY626M and PD 144 (yellow)

Pulsar Quartz Railroad Approved JG041 (stainless)

Pulsar Quartz Railroad Approved JG038S (yellow with strap)

Wyer Dynaquartz Railroad Approved Q1504RA (stainless)

Wyer Dynaquartz Railroad Approved Q3504RA (yellow)

Bulova Accutron Quartz Railroad Approved

Elgin, 13/0 size, 23 jewel, B. W. Raymond model

Ball, 13 ligne size, 21 jewels. Official R.R. Standard 1604B model

Hamilton 505 Electric Railroad Watch

Bulova Acutron Electric Railroad Approved

7(B). At wrecks, unless radio is used, one member of train crew will be assigned to give hand signals to the engine handling the wrecker. To avoid confusion and to facilitate compliance with Rule 7(B) a yellow or orange paddle by day and a yellow light by night will be used to give hand signals to the engineer in the immediate vicinity of wreck. This in no way modifies the requirements of Rule 7(B) or 12.

9. Reflectorized rigid flags of the prescribed colors are authorized for use by night.

11. A train or engine engaged in spraying operations, when stopped by a lighted fusee, must extinguish the fusee before passing over it.

Lighted fusees must not be thrown off a train or engine engaged in spraying operations in a manner that will cause the spray equipment to pass over it.

12-14-14(A). In the NOTE for Rules 12, 14 and 14 (A), "multiple main track" means double and three or more tracks.

12. If the green flag indicating the end of a restriction not covered by train order is absent, authority to resume normal speed may be obtained verbally from the train dispatcher who must first ascertain the safety of such permission.

14. If the green flag indicating the end of a restriction not covered by train order is absent, authority to resume normal speed may be obtained verbally from the train dispatcher who must first ascertain the safety of such permission.

18. Yard engines must display headlight during daylight hours.

**19. AUTHORIZED MARKERS:**

**By night —**

Built in markers displaying red light to the rear.

**By day —**

Built in markers displaying red light to the rear.

**19. ADDITIONAL REQUIREMENT**

In addition to the existing requirements governing the display of markers:

On cabooses so equipped, red beacon roof light must be displayed by day and by night when caboose is **on the rear of a train on the main track.**

21. Work equipment when run extra and not provided with white lights must display two white flags by day and by night as classification signals.

**25. ADDITIONAL RULE**

On engines so equipped, yellow beacon cab roof light must be displayed while engine is running, except when on tie up track.

**S-83 and D-83:**

In the proper application of Rules S-83 and D-83 train crews must ascertain whether all trains due, which are superior, have arrived or left.

Below are the methods by which a crew may determine the arrival or departure of a superior train:

1. By checking the train register when restricted for a regular train or when authorized by train order Form W, examples 5 and 6, to use train register to check against an extra train.

2. By receipt of a train order Form V stating that the superior train has arrived or left.

3. By visual observation of the superior train by the crew of the restricted train. It must be ascertained that the entire train has arrived.

4. By communication between crew members of the superior train and the restricted train. Such communication may be person-to-person or by phone or radio.

5. By communication between a crew member of the restricted train and the train dispatcher, either directly or through an operator.

The above procedures for ascertaining the arrival of a superior train are also applicable when a train has been restricted by train order for an opposing train (See Form S-C, examples 1, 2, 3 and 4 and Form G, example 5).

When verbal communication is used to ascertain train arrival or departure, the information conveyed must in every instance be repeated to positively insure a correct understanding.

83(B). Superintendent's initials are required on clearances instead of the Chief Dispatcher's initials.

**83(B). CLEARANCE PROVISIONS AND EXCEPTIONS**

**Turn-around Station in CTC Territory** Rule 83(B) will not apply when so authorized by the train dispatcher.

**In CTC Territory** Rule 83(B) will not apply at intermediate stations when so authorized by the train dispatcher.

**Turn-around Station Established by Form G, Example 6 train order** Unless directed by train order to obtain clearance, Rule 83(B) will not apply.

# 26 SPECIAL INSTRUCTIONS — ALL SUBDIVISIONS

85 and 85(A). Sections will not be operated on the Soo Line Railroad.

**90. Rule 90 is revised as follows:**

When a train approaches a point where it is to wait, meet another train or is restricted by Form Y train order, other crew members, if practicable, must call attention of engineer to the restriction after passing the last station, but not less than two miles from point of restriction. Should engineer fail to act to comply with restriction, the conductor or other crew member must stop train.

After passing the last station, but not less than two miles before reaching the first switch of the station where a meeting or waiting point has been established by train order, the engineers of the trains involved must contact each other by radio, when practicable, to determine that both train crews have a common understanding of the requirements of such train orders.

When radio communication is available, the engineer must advise the conductor or other crew member on the rear of the train of the explosion of torpedoes, the display of fuses and signals, per Rules 10, 11, 12, 14 and 14(A) or of the presence of a flagman ahead and any signal given or displayed by such flagman.

Conductor and engineer, when radio communication is available, must discuss any train orders picked up enroute to insure a common understanding of train order requirements, as required by Rule 214, and must discuss indications displayed by wayside detectors, such as those indicating hot boxes or other conditions that may affect the safety of the train.

**91, 91(A), D-91  
INSTRUCTIONS FOR SPACING OF TRAINS**

The following instructions apply in Non-ABS territory. Except as affected by Instructions (1) through (7), all other Operating Rules and Special Instructions remain in effect. They do not relieve trainmen and enginemen from compliance with Rule 99.

(1) Train order signals at open offices will be used to space trains. A train may pass a train order signal indicating STOP at reduced speed to make a station stop, or to meet a train at the siding beyond the signal, providing track is seen or known to be clear. A train order signal or clearance authorizing a train to proceed does not indicate that main track within yard limits is unoccupied.

(2) Operator must not report a train as having arrived at his station unless the entire train has passed train order signal or train is in clear on siding and operator is so advised by the conductor.

(3) A train which has arrived at an open train order office must not re-enter the main track between that office and the next open office to the rear, except as authorized by train order, or when protected as prescribed by Rule 99.

(4) Operator on duty must space trains 15 minutes apart. Trains must also be spaced 15 minutes apart when moving against the current of traffic.

(5) Trains in the same direction must keep not less than 15 minutes apart, except in closing up at stations.

(6) Conductors, engineers and operators must keep train dispatcher informed as to weather conditions in order that dispatcher may direct movement of trains accordingly.

(7) During stormy and foggy weather, to the extent practicable, only one train in the same direction will be permitted to occupy main track between open train order offices. When this is not practicable, trains in the same direction will be spaced not less than 30 minutes apart leaving open train order offices.

**99. FLAG PROTECTION**

On all subdivisions, the prescribed distance for a crew member with flagman's signals to go back or go forward to provide flag protection will be **one mile**.

Exception: When protection against following trains is required, and the rear of a train moving in the specified direction is located within the limits specified below, the prescribed distance will be **two miles**.

FROM	TO	LOCATED BETWEEN STATION and STATION		DIRECTION
<b>Paynesville Subdivision</b>				
MP 76	MP 71	Paynesville	Watkins	Eastward
MP 64	MP 56	Watkins	South Haven	Eastward
MP 56	MP 60	South Haven	Kimball	Westward
<b>Danbury Subdivision</b>				
MP 54	Yard Limit MP 50.03	Centuria	St. Croix Jct.	Westward
MP 128	Yard Limit MP 144.15	Harlis	Jct. 278	Eastward
<b>New Richmond Subdivision</b>				
MP 358	Yard Limit MP 354.12	Howard	C. F. Yard	Eastward
<b>Barron Subdivision</b>				
MP 33	MP 38.9	Maple Island	Osceola	Eastward
Yard Limit	MP 38.9	Dresser	Marine	Westward
MP 46.71				
MP 103	MP 99	Weyerhauser	Cameron	Westward
<b>Carrington Subdivision</b>				
MP 280	MP 288	Siding 280	Rogers	Westward
MP 297	MP 291	Rogers	Valley City	Eastward
<b>Portal Subdivision</b>				
MP 525	Yard Limit MP 520.6	Bowbells	Kenmare	Eastward
<b>Devils Lake Subdivision</b>				
MP 400	Yard Limit MP 391.2	Whitman	Fordville	Eastward
<b>Bisbee Subdivision</b>				
MP 590	MP 581	Tolley	Grano	Eastward
MP 603	Yard Limit MP 604.3	Norma	Kenmare	Westward
<b>Whitetail Subdivision</b>				
MP 660	MP 665	Outlook	Whitetail	Westward
Yard Limit	MP 665	Whitetail	Daleview	Eastward
<b>Wishek Subdivision</b>				
MP 305	MP 291	Kulm	Monango Crossing	Eastward
MP 354	MP 351	Napoleon	Burnstad	Eastward
MP 384	MP 387	Braddock	Moffit	Westward
MP 409	MP 415	Brittin	Bismarck	Westward
<b>Pollack Subdivision</b>				
MP 372	MP 383	Venturia	Herreid	Westward
<b>Missouri River Subdivision</b>				
MP 532	MP 523	Wilton	Washburn	Eastward
MP 534	MP 548	Wilton	Arnold	Westward
MP 550	Yard Limit MP 558.4	Arnold	Bismarck	Westward

The prescribed distance of two miles will also apply when protection against opposing movements is required, and the front of a train moving in the **opposite** direction is located within the above limits.

**99. EXCEPTION**

Unless otherwise instructed, protection against following trains as required by Rule 99 is not required as follows:

<b>Subdivision</b>	<b>Between</b>
Bemidji Subdivision	Moose Lake and Plummer
Danbury Subdivision	Dresser and Junction 278
Veblen Subdivision	Veblen Jct. and Veblen
Devils Lake Subdivision	T. R. Falls and Drake
Bisbee Subdivision	Fordville and Kenmare
Whitetail Subdivision	Flaxton and Whitetail
Wishek Subdivision	Geneseo Jct. and Bismarck
Pollack Subdivision	Wishek and Pollock
Missouri River Subdivision	Drake and Bismarck
New Town Subdivision	Max and New Town

If it becomes necessary to operate more than one train in the same direction on the Subdivision the trains involved will be instructed to provide rear end protection by train order.

**99(A).** Delete the word "junction" (See Rule 98).

**103(B). STATE OF MINNESOTA** — "Blocking of Roads", State Law M.S.A. 219.383 - Subd: "No railway corporation shall permit public road or streets crossing a railroad track to be closed for traffic by a standing train for a period longer than ten (10) minutes unless and only in event of some unforeseen mechanical difficulty."

**103(B). STATE OF NORTH DAKOTA** law requires that where there is an alternative of using a crossing with signals or inactive signing, in that event, "where feasible," the railroad shall block or obstruct the crossing with inactive signing rather than the adjacent crossing with active signals.

A crossing may be blocked only ten (10) minutes, with the following six exceptions:

- 1) When necessary to comply with safety signals affecting the safety of the movement of trains;
- 2) When necessary to avoid striking any object or person on the track;
- 3) When the train is disabled, by accident or otherwise;
- 4) When the train is in motion except when engaged in switching operations;
- 5) When there is no vehicular traffic waiting to use the crossing; or
- 6) When necessary to comply with a government statute or regulation.

*Any person who violates this section is guilty of an infraction. The provisions of this section do not apply to cities which have on the date of such obstruction ordinances covering this same subject matter.*

**103(D). MOVEMENT OVER HIGHWAY CROSSINGS**

Trains or engines, with or without cars, moving on or from sidings, or other auxiliary tracks over a public crossing protected by automatic devices, will not obstruct crossing until protective devices are operating a sufficient time to protect the crossing or the movement is protected by a member of the crew.

**104(C). DERAILS**

When entering track on which hand operated derail is located at entering end, derail must be removed from track before switch is lined for movement.

**104(E).** A switch equipped with a switch point lock pedal is identified with a yellow stripe on both sides of the switch stand. The pedal must be depressed before operating switch.

**104(G).** Engines will not move onto or over the live rail of track scales.

**104(H). SPRING SWITCHES**

A spring switch must not be operated by hand when wheels are standing on any part of the switch points or before the points have completed their full movement after being trailed through unless the employee is in a position so that no part of him will be struck by the switch handle when it is released from the catch and makes a powerful swing.

**105. SIDING CAPACITY**

Siding capacities are based on distance between insulated joints, allowing 150 feet for 3-unit diesel and 34 feet for cabooses, and based on 50 foot car lengths, and allowance of 92 feet for each highway crossing to be cut.

In a train consisting of ore cars exclusively figure 25 foot average car length.

**200.** Train orders will be issued by the authority and over the signature of the Superintendent instead of the Chief Dispatcher.

**202.** The initials of the Superintendent will be placed directly under the last word in the body of the order instead of the Chief Dispatcher's initials.

**209.** Reference to signature of the Chief Dispatcher is changed to signature of the Superintendent.

**211.** Train orders may be duplicated mechanically at all stations subject to the following:

Necessary additional copies of the order will be made by duplicating machine from the original master copy until the order is annulled. When the order is annulled, the master copy will be used to comply with the requirements of Form L (annulling) train orders.

Copies must be legible and without omission and will be delivered to those addressed along with other necessary train orders and clearance in accordance with Rules 213 and 219. Operator will not be required to repeat to the train dispatcher when additional copies of the train order are made, but is responsible to know that all duplicated copies are clearly legible and without omission and must initial each copy of the order in the lower right hand corner to indicate that it has been checked for accuracy. Copies which are not legible or do not contain the entire original order must be destroyed immediately.

Should the duplicating machine fail to reproduce exact legible copies or become otherwise inoperative, its use will be discontinued immediately for train order reproduction purposes. Additional copies of existing train orders or any new orders will then be made in accordance with Rule 211.

**213.** When a train has more than one engine in service, or, when an engine is added between terminals, a copy of all train orders and clearances affecting their movement must be furnished to each engineer and conductor.

A copy of all train orders and clearances will be furnished the snow plow operator on all trains in snow plow service.

**219.** Superintendent's initials are required on clearances instead of the Chief Dispatcher's initials.

Train orders must be listed on clearance in the following sequence:

- Previous date orders numerically,
- Current date orders numerically,
- Slow orders numerically.

Operators will show temperature on upper left hand corner of clearance followed by "A" for above zero or "B" for below zero.

**221. REFLECTORIZED "C"**

Where color light train order signal is in use, absence of light must be regarded as the most restrictive indication that can be displayed by that signal, except where train order signals are equipped with reflectORIZED "C", which must be displayed only when office is closed. Under such conditions, requirement that train obtain clearance on train order signal will not apply.

NOTE: ReflectORIZED "C" applies only when train order signal does not display an indication.

**224.** Authorized abbreviations include the initials for signature of the Superintendent.

**FORM "Y" TRAIN ORDER**

The speed restriction specified in a Form "Y" Train Order applies only during the hours specified in the order.

**FORM "Z" RELIEF OF FLAG PROTECTION.**

The following example (2) may be used as herein provided:

(2) After 7:01 a.m. Eastward extra trains between H and B except Extra 77 east wait at H until 4:10 p.m.

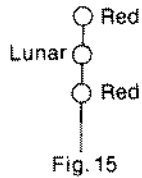
This example may be used when it is desired to begin relief of protecting against following extra trains after a specified time.

**Rule 240B. REVISED**

The name for Rule 240B (Stop and Proceed) as shown in the Consolidated Code of Operating Rules is changed to "Restricted Proceed".

The indication for Rule 240B as shown in the Consolidated Code of Operating Rules is changed to "Proceed at restricted speed and prepared to stop in one-half the range of vision".

**240N. ADDITIONAL ASPECT**



This aspect is added as Figure 15 to the aspects shown for Rule 240N.

**240N. QUALIFIED**

Figure 2 or Figure 15 aspect will be used when movement is for the diverging route.

Where one unit multi-lens signals are in use, a red over lunar aspect will be used when movement is for the diverging route.

**240W.** Slow orders at the beginning of a subdivision or line will be designated by both the Speed Sign and the Restricting Sign on one post.

When a Speed Sign and a Restricting Sign are mounted on the same post, train will proceed at speed indicated by that sign.

Exception:

When speed is to be increased within a speed restriction limit (but not to normal speed), the Speed Sign and the Restricting Sign may be mounted on the same post to indicate that train may proceed at that speed when the entire train has passed the Speed Sign and the Restricting Sign.

**240W.** At certain railroad and road crossings shown under Speed Restrictions normal speed may be resumed after the crossing is occupied. The indication for the Resume Speed Sign is modified accordingly at these locations.

**244.** Control operators will not provide verbal information to train or engine crews concerning the position of control machine signal levers other than as specifically provided for in the rules.

Control operators will not inform train or engine crews that signals are lined in advance of their movement.

**268.** Controlled sidings may be entered at hand operated switches which are not protected by signals without authority from control operator. All movements on controlled sidings are governed by Rule 105.

**269-275-613.** In CTC territory when an automatic interlocking absolute signal displays stop, first comply with Rule 269. If a signal indication to proceed is not received, comply with Rule 613 and Rule 275 before proceeding.

**269.** Within yard limits, a train or engine may be permitted to enter an occupied block as follows when the control operator knows that all other movements within the block are proceeding at restricted speed: "Block is occupied. Proceed at restricted speed to the next signal."

**271 and 271(A).** Track and time will not be issued to Maintenance of Way employees or equipment.

**271.** Control operator may authorize track and time limits by adding to the form in Rule 271 — "Clearing Extra (number) (East) (West)" — as applicable, but not until receiving conductor advises the control operator that the train to be cleared has passed.

**275.** The third paragraph of Rule 275 will not apply.

**613.** At automatic interlockings where push buttons are provided on signals to enable a return movement to be made over the crossing while switching, trainmen will unlock box and press button. If signal does not clear comply with Rule 613.

**655. BASE AND WAYSIDE RADIO STATIONS**

Station	Location	M.P.	Channel	Period of Operation	Control Point
Shoreham		3.4	1, 2, 4	Continuous	Shoreham
Humboldt Yd		5.5	1 & 2	Continuous	Humboldt Yd
*Loretto		19.5	1	Continuous	Shoreham
*Eden Valley		72.0	1	Continuous	Shoreham
*Glenwood		120.3	1, 2	Continuous	Shoreham & Glenwood
*Henning		170.2	1	Continuous	Shoreham & Henning
*Det. Lakes		213.7	1	Continuous	Shoreham & Det. Lakes
*Mahnomon		249.2	1	Continuous	Shoreham & Mahnomon
*T. R. Falls		307.3	1	Continuous	Shoreham & T. R. Falls
*Noyes		386.5	1 & 2	Continuous	Shoreham & Noyes
Noyes		386.5	BN&CP	Continuous	Noyes
Emerson		386.5	1 & CP	Continuous	Emerson
C. F. Yd		352.2	1	Continuous	C. F. Yd.
#Albertville		362.0	1	Continuous	Shoreham
#Emerald		399.3	1	Continuous	Shoreham
#Withrow		23.7	1	Continuous	Shoreham & Withrow
St. Paul		18.5	1 & 2	Continuous	Shoreham & Maryland Ave. Yard
Cardigan Jct.		11.8	1 & 2	Irregular	Cardigan Jct.
Superior		282.2	1 & 2	Continuous	Stinson Yard
Superior		282.2	1	Continuous	Stinson Yard Operator & Roundhouse.
McGregor		270.3	1	Continuous	BN McGregor Depot

Station	Location	M.P.	Channel	Period of Operation	Control Point
Cass Lake	BN RR		1	Continuous	BN Depot
Bemidji	BN RR		BN & 1	Irregular	BN Bemidji Depot
Ladysmith		129.8	1&2	Continuous	Ladysmith
Northfield		53.75	1&2	Irregular	Northfield
Lakeville		39.32	1	Continuous	Shoreham
#Kensington		139.3	1	Continuous	Shoreham
#Hankinson		205.6	1	Continuous	Shoreham & Hankinson
#Enderlin		257.3	1	Continuous	Enderlin
#Cuba		276.2	1	Continuous	Shoreham
#Leal		305.1	1	Continuous	Shoreham
#Carrington		352.4	1	Continuous	Shoreham & Carrington
#Harvey		396.5	1	Continuous	Shoreham & Harvey
Drake		418.7	1	Irregular	Drake
#Bergen		436.6	1	Continuous	Shoreham
Minot		467.8	1	Irregular	Yard Office
Minot		469.3	1	Continuous	Soo Tower
#Foxholm		485.7	1	Continuous	Shoreham
#Bowbells		529.2	1	Continuous	Shoreham
Portal		550.2	1	Continuous	Portal
Bismarck		560.5	1	Irregular	Bismarck
Max		466.7	1	Irregular	Max

**NOTE: Channel Assignments**

- Channel #1 - Road Operation
- Channel #2 - Yard Operation
- Channel #4 - Yard Operation Shoreham Only

Note: \*—Use "Disp 1" call to contact dispatcher  
 #—Use "Disp 2" call to contact dispatcher

**703.** In the event service is rendered in excess of the twelve hours permitted by law for any reason whatever, conductor or foreman will wire Superintendent's office a complete report, providing all details. Wire must be sent within twenty-four hours.

**710.** Employees may be carried in the caboose of freight trains upon authority from Superintendent's office, but only to and from stations where such trains are required to stop. The number of persons must be limited so as not to interfere with crew carrying out their duties.

**729.** Employees governed by the Consolidated Code of Operating Rules must have Soo Line Form 1070, Instructions For Handling Hazardous Materials, in their possession while on duty and must be conversant with and obey instructions contained therein.

**805(D).** Pivoted, rotating or swinging machinery, derricks, cranes, piledrivers, etc., moving in trains on own wheels will be handled only on instructions of Chief Train Dispatcher. Copy of message authorizing movement must be fastened to each waybill, copy given to engineer and conductor handling in road trains, and copy given to train dispatcher over whose territory machine moves. Conductors of trains handling such machines must not permit trains to proceed without such authority. Machine must be handled in rear of trains not more than five cars from caboose when practicable (See Speed Restrictions).

The boom end of the machine must be trailing whether the boom is attached or not.

When conditions require, such as handling of wrecker, instructions of Mechanical Department supervisor in charge will govern.

**805(D).** Soo Line work equipment and supply cars bearing prefix 'X' or 'W' must be located on the rear of the train handling, except—

1. Wreckers and wrecker equipment stationed at Schiller Park, Stevens Point, Shoreham and Harvey may be located anywhere in the train.
2. Wreckers and wrecker equipment stationed at Superior may be handled on the head end of train, provided total train consist does not exceed 30 cars.
3. Russell plows, Jordan spreaders and dozer equipment may be handled on head end when in service.
4. Wheel cars, X-626, X-628, W-1152, W-1153, X-1759, W-1760, X-1761 and X-1762 may be located anywhere in the train.
5. Ballast Cars X644, X645, X646, X647, and X648 may be located anywhere in the train.
6. Tank cars X613, X614, X615, X629, X630, X631, X632, X633, X634, X649, and X650 may be located anywhere in the train.
7. CWR threader car X-652 may be located anywhere in the train.

**805(E).** Poles loaded on flat cars must move within the head 40 cars of trains and must not be moved in certain trains as designated by local instructions.

**806.** Occupied outfit cars standing on any track will display a yellow signal at each end of the cars.

**814.** The following paragraph is added to Rule 814:

When trains are left standing unattended on a grade, a sufficient number of hand brakes must be applied to the cars in addition to the locomotive so that cars will not move should the locomotive brakes be released or the locomotive detached.

**900.** Caboose must be locked and windows closed at all times when they are not occupied.

**904.** Locomotives or cars must not be handled in trains when a wheel has a flat spot in excess of two and one-half inches, or there are two or more adjoining flat spots each two inches or more in length on a wheel. When equipment as described above is found, the train must be stopped immediately and the dispatcher notified. Be governed by instructions issued by the train dispatcher.

**904. TOFC**

When single TOFC trailers are placed on flat cars equipped to carry two trailers, they must be placed with trailer wheels near center of car and secured to stanchion at the end of the car so greater proportion of load is toward the center and not overhanging the flatcar truck.

957. Signature of person to whom line-up is delivered is not required.

Line-ups may be duplicated mechanically at all stations subject to the following:

Necessary additional copies of the line-up will be made by duplicating machine from the original master copy.

Copies must be legible and without omission. Operator will not be required to repeat to the train dispatcher when additional copies of the line-up are made, but is responsible to know that all duplicated copies are clearly legible and without omission and must initial each copy of the line-up in the lower right hand corner to indicate that it has been checked for accuracy. Copies which are not legible or do not contain the entire original line-up must be destroyed immediately.

Should the duplicating machine fail to reproduce exact legible copies or become otherwise inoperative, its use will be discontinued immediately for line-up reproduction purposes. Additional copies of existing line-up or any new line-ups will then be made in accordance with Rule 957.

### TRAIN DEFECT DETECTORS

#### HOT BOX DETECTORS — RECORDER TYPE

Hot Box Detectors measure the heat of each journal as it passes the "Detector" and transmit a reading to the train dispatcher's office.

When the reading indicates a hot journal, the train dispatcher will notify the train to stop and inspect a particular journal or journals. Each journal to be inspected will be identified by car count, wheel count (1, 2, 3 or 4) and rail (north or south).

When the reading indicates a warm journal, the train dispatcher will notify the train crew to watch the journal closely and identify it by car count, wheel count and rail. When practicable, train crew will advise the train dispatcher the initial and number of car they were notified to watch and the total number of cars in train.

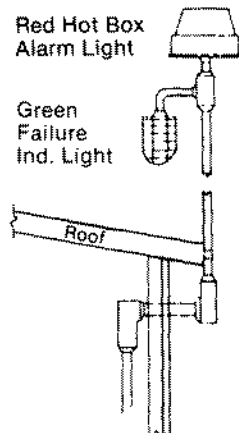
#### HOT BOX DETECTOR ON-SITE ALARM LIGHT TYPE

(MP 384.92 — Boyceville)  
(MP 33.1 — east of Buffalo)

The on-site indication is located on the hot box scanner bungalow and the same indication governs Eastward and Westward movements.

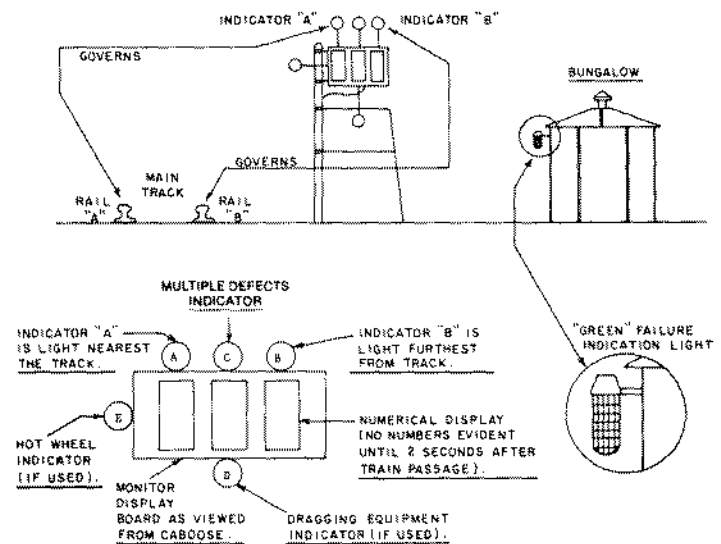
The green light indicates that the hot box detector system is functioning normally. If the green light is *not* lit, unless otherwise provided, dispatcher must be notified.

Operation of the oscillating red light means that the train has a hot box detected and stop must be made immediately, dispatcher notified and inspection made. The dispatcher will be able to give the location of the hot box. If communication with dispatcher is not available, inspect entire train for hot box.



### DETECTORS WITH MONITOR DISPLAY BOARD

The Monitor Display Board apparatus governs train and engine movements as follows:



The Green Failure Indication light must be lighted and observed prior to and after passage. Should the light go out or be extinguished notify the dispatcher.

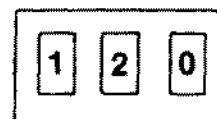
The display board indicating a condition of the train or engine is visible after the movement has passed. When a defect is detected a radio will transmit an intermittent tone for 5 seconds to alert the crew to the defect. After passing the Monitor Display Board, crew members must look back to determine applicable information.

Refer to the Train Defect Detector List or General Orders to determine the exact type of defect detector (Hot Box, Wheel Checker, Dragging Equipment, Hot Wheel) in service at each location.

Refer to the "Defect Inspection Procedures" Section to determine how to inspect for the particular type of defect detected at each location.

#### IMPORTANT

If defect is not located at the indicated axle, inspect two cars on both sides of the indicated axle location to preclude errors in counting axles.



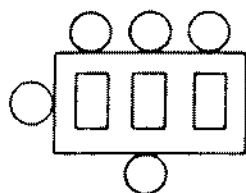
Number shown on numerical display board is the number of axles from the rear of the train where the first defect occurred.

Example:

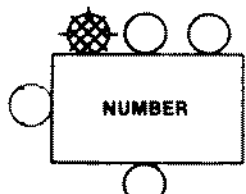
- 117 = rear axle of 30th rear car
- 118 = 2nd axle from rear of 30th rear car
- 119 = 3rd axle from rear of 30th rear car
- 120 = 4th axle from rear of 30th rear car
- 121 = rear axle of 31st rear car

Allowance should be made for any six axle cars in train.

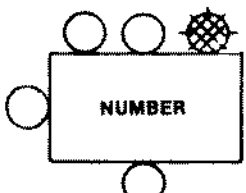
## EXPLANATION OF VARIOUS COMBINATIONS OF DEFECT INDICATIONS



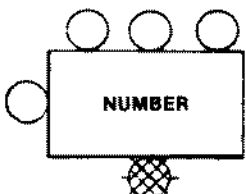
**No lights on and all zero display:**  
No defects detected on train.



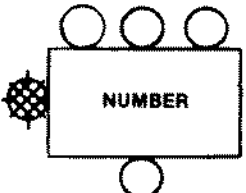
**One indicator light flashing on:**  
Inspect for defect on specified side at the indicated axle location.



**One indicator light flashing on:**  
Inspect for defect on specified side at the indicated axle location.

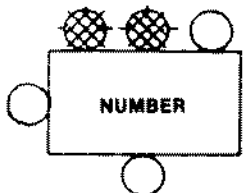


**Dragging Equipment Indicator Light Flashing On: (if applicable)** Inspect for dragging equipment at the indicated axle location.



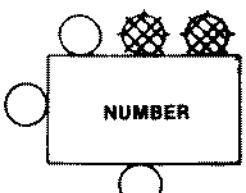
**Hot Wheel Indicator Light Flashing On: (if applicable)** Inspect both sides for hot wheel at the indicated axle location.

## MULTIPLE DEFECT COMBINATIONS



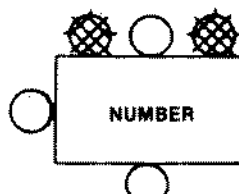
**One indicator light flashing on and Multiple Defects light flashing on:**

1. Inspect for first defect on specified side at the indicated axle location.
2. Inspect for additional defects on same side of all cars from the indicated axle location to the rear of the train.



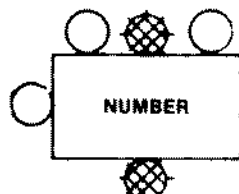
**One indicator light flashing on and Multiple Defects light flashing on:**

1. Inspect for first defect on specified side at the indicated axle location.
2. Inspect for additional defects on same side on all cars from the indicated axle location to the rear of the train.



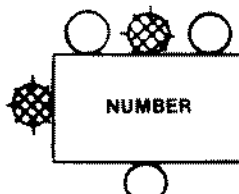
**Both indicator lights flashing on:**

1. Inspect for one defect on each side of train. First defect should be found at the indicated axle location (either side) from the rear of the train.
2. Inspect for one additional defect on the opposite side of the train on all cars from the indicated axle location to the rear of the train.



**Dragging Equipment Indicator light flashing on (if applicable) and Multiple Defects light flashing on:**

1. Inspect for dragging equipment at the indicated axle location.
2. Inspect for additional dragging equipment on all cars from the indicated axle location to the rear of the train.



**Hot Wheel Indicator light flashing on (if applicable) and Multiple Defects light flashing on:**

1. Inspect both sides of the train for the first hot wheel at the indicated axle location.
2. Inspect for additional hot wheels on both sides of the train on all cars from the indicated axle location to the rear of the train.

There are numerous other combinations of multiple defects. In case of any combination of multiple defects indications not covered here, be governed by the following general guideline:

1. Inspect for first defect on indicated side or sides at indicated axle location
2. Inspect all cars on indicated side or sides from the indicated axle location to rear of train for additional defects.

### Note:

1. Monitor Display Board at locations not equipped with dragging equipment detector will not have dragging equipment indicator light below the numerical display.
2. Monitor Display Board at locations not equipped with hot wheel detectors will not have hot wheel indicator light on end of numerical display.
3. Upon receiving any indication of a hot box, dragging equipment, hot wheel or wheel defect, stop must be made immediately, dispatcher notified and inspection made.
4. At Monitor Display Board locations enginemen must alert crew members on rear of train when approaching detector site.

### DETECTORS WITH RADIO TALKER

The detector is a radio talker device that uses the train radio system to notify a train crew of a defect in their train. The defect can be one or more of the following: Hot boxes, sticking brakes or dragging equipment. The talker takes this defect information and transmits it by radio directly to the train crew.

Each radio message from this site will contain the site identification information, followed by various status messages.

Train crews must monitor the detector and must be governed by the information furnished by the radio after the train passes.

# 32 SPECIAL INSTRUCTIONS — ALL SUBDIVISIONS

Examples of Radio Messages	Train Crew Response
* 1. Soo Line (location) Detector Operating	Proceed
2. Soo Line (location) Detector Not Working	Notify Dispatcher at First Opportunity of Non-working Detector and Continue Moving, Watching Train Closely
†3. Hot Box Southside Axle 123	Stop Train For Inspection at Indicated Axle
†4. Warm Box Northside Axle 176	Watch Car Closely
†5. Sticking Brakes Near Axle 175	Stop Train For Inspection Near Indicated Axle
†6. Dragging Equipment Near Axle 123	Stop Train For Inspection Near Indicated Axle
7. Soo Line (location) Detector No Defects	Proceed

\*Detectors near Carrington and Elbow Lake will not include the word "Operating".

†Sticking brakes will also activate the detectors near Carrington and Elbow Lake but the indication given will be for a hot box. Multiple hot box indications adjacent to each other will probably mean sticking brakes.

‡Not applicable at detectors near Carrington and Elbow Lake.

Detector radio messages may describe more than one defect such as:

- First Hot Box South-side Axle 123
- Second Hot Box North-side Axle 84
- First Sticking Brakes Near Axle 151
- Second Sticking Brakes Near Axle 43.

All detector messages will be transmitted with priority given in following order:

1. Hot Boxes
2. Warm Box
3. Sticking Brakes
4. Dragging Equipment

Each defect message is given twice.

**The axle count given is from the rear of the train.** Start with the very last axle on the rear car and count to the axle reported as having a defect. If a defect is not located at the indicated axle, inspect two cars on either side to preclude error in counting axles.

When an incomplete radio message is received, stop train for inspection, notifying dispatcher the results of inspection at first opportunity.

When no message is received, apply example two.

## DEFECT INSPECTION PROCEDURES

### HOT BOX INSPECTION—FRICTION AND ROLLER BEARING (at hot box detector sites)

#### In case of hot box indication:

**Friction bearing:** If upon inspection the journal does not appear to be hot, open journal cover and check for: Sufficient oil in journal box, sufficient oil on pad, thinning or separation of oil on end of axle. In the event the journal still does not appear to be hot, carefully test for the presence of heat with the bare hand. If a hot journal is not detected by this examination, carefully inspect for source of heat such as sticking brakes or traction motor defects. In all cases, the cover of the journal box inspected must be left open and a red "Hot Box" tag attached. Advise the train dispatcher all details after making inspection.

**Roller bearing:** Carefully place the bare hand on the adapter and if the hand cannot be held on the adapter and the bearing is noticeably warmer than the other bearings, the bearing in question is considered to be overheated. If a buildup of grease combined with heat around the bearings or any broken parts are noted, the car or engine should be set out and the Chief Dispatcher notified immediately.

### DRAGGING EQUIPMENT INSPECTION (at dragging equipment detector sites)

In case of dragging equipment indication: Look for equipment or material that extends below the ball of the rail. Common items to look for are hanging brake shoes, brake shoe keys, brake rigging, tie-down bands, wire or chains. Dragging equipment should be cleared for safe running, if possible, and if not safe to run, the car should be set out at the nearest point. Advise the train dispatcher all details after making inspection.

### HOT WHEEL INSPECTION (at hot wheel detector sites)

In case of hot wheel indication: Look for sticking brakes on all wheels of indicated car. If upon inspection the wheels do not appear to be hot, carefully test for the presence of heat with the bare hand. Advise the train dispatcher all details after making inspection.

### WHEEL DEFECT INSPECTION (at wheel checker sites)

When inspecting wheels on a wheel defect indication, look for broken flange, thin flange, broken rim, loose wheel, flat spots, wheels with metal build-up, extra long brake shoe keys, brake rigging down or dragging equipment. To determine if a wheel is loose examine it for the following:

1. Excessive spacing between wheel flange and rail.
2. Heavy cuttings on the wheel flange.
3. Particles of metal on the inside of the wheel seat or axle.
5. A shiny area on the axle near the wheel.
6. Oil seepage around the wheel seat and axle.

After inspection has been made, advise the train dispatcher the initial and number of the car or cars inspected, advise the result of the inspection, and be governed by instructions from the train dispatcher.

When instructed to set out a car with a loose wheel, broken flange or broken rim, do not exceed 5 MPH while handling the car and watch it closely so that a prompt stop can be made if the car derails.

### AFTER ANY DEFECT INSPECTION IS MADE, NOTIFY THE TRAIN DISPATCHER WITH THE FOLLOWING INFORMATION:

1. Location of Detector
2. Car initial & number
3. Number appearing on display board
4. Count from head end of train
5. Count from rear of train
6. Wheel number
7. Side (north or south)
8. Indicator lights displayed (A, B, C, D, E)
9. Findings after stop & inspection  
(if no defect report No Defect Found)
10. Set out station (if set out)

### CLEARANCE RESTRICTIONS

Soo X635 Flat which is the "Leads" car for Crane No. 258054 — "Pile Driver" Outfit will not clear the overhead obstruction of an engine house door, roundhouse door or shop building door and movement into these buildings is prohibited when loaded with "Leads" in their normal traveling position.

## SPEED RESTRICTIONS

ALL SUBDIVISIONS	MPH All Trains
Through turnout of all switches, except where another speed is prescribed:	
Dual Control switches and spring switches . . . . .	20
All other switches . . . . .	10
Unless otherwise provided, trains and engines using other than main track must not exceed turnout speed for that track.	
When ambient temperature exceeds 90 degrees F, and where authorized speed is 20 MPH or higher, speed must be reduced 10 MPH below the authorized speed. (Exception: Where authorized speed is 25 MPH, speed must be reduced to 10 MPH.)	
Locomotive servicing and car shop repair track areas	5
Over wheel checkers unless otherwise provided . . . .	25
Approaching "19" indication train order signal until rear of train has passed . . . . .	30
Trains handling ore cars loaded or empty . . . . .	30
Trains handling scale test cars except Soo Line X-870	25
Locomotives with friction bearings when handled dead in a train . . . . .	25
<b>TRAINS HANDLING PIVOTING MACHINERY ON ITS OWN WHEELS, derricks, pile drivers, cranes, etc., except wreckers . . . . .</b>	
	<b>25</b>
(Note: Locomotive cranes 258054 and DS-823—speed shown applies only when boom end is trailing. Boom car must be behind crane. When lined up otherwise, handle only on separate instructions)	
<b>WRECKERS</b>	*Freight Train Speed
Diesel & Steam Wreckers with boom end trailing and boom car behind.	
*Unless slower speed required as directed by wrecker foreman. Conductor will confer with wrecker foreman to determine speed desired.	
Note: Diesel wrecker W-3 must not be operated on the Rice Lake line of the Barron Subdivision.	

## ROSTER OF LOCOMOTIVES Soo Line Railroad Company

Eng. No.	Model	Unit HP	Weights	Comments
MNS 30-35	SW-1200	1,200	247,100	
321-328	SW-1200	1,200	247,180	
2111-2115	SW-9	1,200	247,100	
2117-2119	SW-9	1,200	247,100	(Units MU to each other only)
2120-2127	SW-1200	1,200	247,180	
MNS 36-37	Sw-1500	1,500	247,100	
500A, 502A	FP-7	1,500	257,200	
2201A	F-7	1,500	231,180	
2500A	FP-7	1,500	256,980	
375-378	GP-7	1,500	245,600	
381-383	GP-7	1,500	245,600	
400-405	GP-9	1,750	246,340	
408-412, 414	GP-9	1,750	246,340	(411 has low nose)
550-558	GP-9	1,750	241,540	
2550-2556	GP-9	1,750	241,540	(2554 has low nose)
2400-2413	GP-9	1,750	246,340	(2403 & 2411 have low nose)
*2381	SD-9	1,750	296,600	
700-713	GP-30	2,250	255,480	
715-721	GP-30	2,250	255,480	
*MNS 40-41	SD-39	2,300	368,500	
722-724	GP-35	2,500	262,480	
726-731	GP-35	2,500	262,480	
732-735	GP-40	3,000	263,840	
*737-756	SD-40	3,000	367,500	
*757-765	SD-40-2	3,000	367,500	
*767-781	SD-40-2	3,000	367,500	
*783-789	SD-40-2	3,000	367,500	
*801-804	U30-C	3,000	365,000	
*807-809	U30-C	3,000	365,000	
4400-4407	GP-38-2	2,000	267,000	
4409-4429	GP-38-2	2,000	267,000	
4431-4452	GP-38-2	2,000	267,000	
*6601-6604	SD-40-2	3,000	367,500	
*6606-6613	SD-40-2	3,000	367,500	
*6614-6616	SD-40-2	3,000	390,000	
*6617	SD-40-2	3,000	379,000	

\*Six-axle, six motor units

## SPEED RECORDERS

All road locomotives used as controlling units must be equipped with a speed recorder.

The engineer is required to check the accuracy of such recorders as soon as possible after departure from the initial terminal. The speed recorder must be accurate within plus or minus three (3) MPH at speeds of ten (10) to thirty (30) MPH, and accurate within plus or minus five (5) MPH at speeds above thirty (30) MPH. The Mile Posts will be used for this speed check through the use of a regulation watch and the time distance calculations as shown on the prescribed timetable.

SOO LINE RAILROAD  
M. D. FORM 98

MANDATORY ASCENDING GRADE  
SHORT TIME RATINGS IN MPH

January 1978

	1HR.	1/2HR.	1/4HR.	60	30	15		
F 7 GP7&9	11.5 MPH	11.0 MPH	10.0 MPH	M 50 40 30 20 10 0	30 25 20 15 10 5 0	15 10 5 0		
GP30&35	11.5	11.0	10.0					
GP40 GP38-2	11.0	10.5	10.0					
SD40	11.0	10.5	9.5					
U30C	9.5	9.0	8.5					
SD9	7.0	6.5	5.5					
THE HIGHEST "1HR" MPH RATING WITHIN THE LOCOMOTIVE CONSIST MUST BE USED FOR THE ENTIRE CONSIST.								
Time ratings are not accumulative. Timing starts on the "1HR SCALE" when speed drops into "1HR" range, & transfers to the "1/2HR SCALE" when speed drops into "1/2HR" range, & transfers to the "1/4HR SCALE" when speed drops into "1/4HR" range, continue until time limit is reached.								
If time limit, or stall is reached, throttle must be returned to idle at once, center reverser, return throttle to position #5, cool electrical equipment for 20 minutes before continuing operation.								
Violation of these ratings can seriously damage equipment and result in disciplinary action.								
CHIEF MECHANICAL OFFICER								

**SPECIAL INSTRUCTIONS — ALL SUBDIVISIONS**

**HELPER ENGINES**

When pusher engines are required at the rear of trains to assist on restrictive grades the following guidelines will apply:

- 1) Extreme care must be exercised in all pusher service movements.
- 2) The throttle should be advanced only to minimum position required to assist the head end in starting and moving the train.
- 3) Not more than 6000 horsepower may be used to push trains. If pusher consist exceeds 6000 horsepower, the excess units must be isolated.
- 4) Not more than 12 powered axles may be used to push trains. If pusher consist exceeds 12 powered axles, the excess units must be isolated.
- 5) If it becomes necessary to isolate a unit, the one furthest from the train must be isolated.
- 6) A) When pusher consist totals 3000 horsepower or less, not to include units isolated, the throttle handle must be reduced to the sixth position or lower while entire train is passing through crossovers or turnouts.  
 B) When pusher consists exceeds 3000 horsepower, not to include units isolated, the throttle handle must be reduced to the fourth position or lower while entire train is passing through crossovers or turnouts.  
 C) The throttle handle will not be advanced until the entire pusher consist has passed through the crossover or turnout.
- 7) When locomotives not equipped with coupler alignment devices are used in the pusher consist, they must be at least the second unit behind the caboose. However, if the pusher consist is only one unit, this restriction does not apply.
- 8) If the pusher consist exceeds 3000 horsepower, trainmen on the rear of trains may ride the pusher consist, and the train will be stopped at the summit so trainmen may transfer to the caboose.

**TONNAGE RATINGS**

Unless otherwise specified by the Chief Train Dispatcher, the permissible tonnage is restricted to an amount which can be handled by 24 powered axles in the lead consist. (For helper restrictions, refer to HELPER ENGINE requirements.)

MNS units 40 and 41 have same tonnage rating as 2500 H.P. units.

**GLENWOOD/TR FALLS EAST**

**SINGLE UNIT ENGINE RATING IN TONS OF 2,000 POUNDS BETWEEN ENGINE AND CABOOSE**

EASTWARD		HORSEPOWER					
From	To	SD40	GP40	2000	SD-9	GP-9	1500
		U30C	3000	2300	1750	1750	
		3000		2500			
Noyes	TR Falls	9000	7425	6750	7150	5500	4500
TR Falls	Mahnomen	8400	6925	6300	6400	5000	4200
Mahnomen	Glenwood	6600	5450	4950	5200	4000	3300
Glenwood	Shoreham	9100	7500	6825	7300	5600	4550
Shoreham	Withrow	5500	4550	4125	4600	3500	2750
Withrow	CF Yard	6800	5675	4250	5150	3950	3400
Plummer	McGregor	9600	7925	6200	6900	5300	4800
McGregor	Lawler	12300	10150	9225	9600	7400	6150
Lawler	Blackhoof	15600	12875	10700	11700	9000	7800
Blackhoof	Superior	22000	18150	16500	17000	14000	11000
Brooten	Moose Lake	9900	8000	7375	7800	5600	4950
Withrow	Amery	4500	3725	3375	3600	2750	2250
Amery	Canton	5000	4125	3750	4200	3200	2500
Canton	Weyerhauser	3600	2975	2700	3100	2400	1800
Weyerhauser	Ladysmith	5800	4785	4350	4400	3400	2900
Dresser	Centuria	2900	2300	2100	2300	1750	1450
Centuria	Superior	5300	4375	3975	4150	3150	2650
So. St. Paul	Roseport	2700	2250	2025	2100	1500	1350

WESTWARD		HORSEPOWER					
From	To	SD40	GP40	2000	SD-9	GP-9	1500
		U30C	3000	2300	1750	1750	
		3000		2500			
CF Yard	Howard	2800	2300	2100	2200	1600	1400
Howard	Withrow	4000	3300	3000	3100	2350	2000
Ladysmith	Canton	4100	3375	3075	3250	2500	2050
Canton	Turtle Lake	5300	4375	3975	4100	3150	2650
Turtle Lake	Dresser	10100	8325	7575	7700	5900	5050
Superior	Harlis	4400	3625	3300	3450	2650	2200
Harlis	Frederic	4700	3875	3525	3750	2850	2350
Frederic	Dresser	5200	4300	3900	4000	3050	2600
Dresser	Maple Island	4700	4275	3525	3750	2850	2350
Maple Island	Withrow	6400	5275	4800	4950	3800	3200
Withrow	Cardigan Jct.	6400	5275	4800	4950	3800	3200
St. Paul	Cardigan Jct.	2250	1875	1700	1750	1350	1125
Cardigan Jct.	Shoreham	4900	4050	3675	3800	2950	2450
Shoreham	Paynesville	4800	3950	3700	3900	3000	2400
Paynesville	Glenwood	6600	5450	4950	5200	4000	3300
Glenwood	Calloway	6200	5125	4650	4750	3650	3100
Calloway	Mahnomen	8000	6600	6000	6150	5600	4000
Mahnomen	TR Falls	12800	9675	8800	9000	7500	6400
TR Falls	Noyes	10000	8250	7500	7850	6450	5000
Superior	Moose Lake	6700	5525	5025	5250	3800	3350
Moose Lake	Brooten	9100	7500	6825	7000	5350	4550
Moose Lake	McGregor	5600	4625	4200	4300	3200	2800
McGregor	Gully	9100	7500	6825	7000	5350	4550
Gully	Plummer	12300	9275	8425	8750	6950	6150
<b>BN Tracks</b>							
St. Paul Union Depot	Soo Line Jct.	1800	1550	1400	1500	1200	1100

# SPECIAL INSTRUCTIONS — ALL SUBDIVISIONS

## ELBOW LAKE, CARRINGTON, PORTAL, WHITETAIL, VEBLLEN, DEVILS LAKE & BISBEE SUBDIVISIONS

### SINGLE UNIT ENGINE RATING IN TONS OF 2,000 POUNDS BETWEEN ENGINE AND CABOOSE

WESTWARD		HORSEPOWER						
From	To	6 Axle 3000		4 Axle 3000		2000 2250	1750	1500
		2300	2500	2300	2500	2500		
Glenwood	Hankinson	7900	6550	5925	4800	3950		
Hankinson	Enderlin	9500	7850	7125	5760	4750		
Enderlin	Siding 280	4800	4000	3600	3000	2400		
Siding 280	Valley City	9500	7850	7125	5760	4750		
Valley City	Rogers	4800	4000	3600	3000	2400		
Rogers	Bordulac	6600	5450	4950	4000	3300		
Bordulac	Harvey	7900	6550	5925	4800	3950		
Harvey	Drake	7600	6300	5700	4600	3800		
Drake	Balfour	6200	5150	4650	3900	3100		
Balfour	Kenmare	7400	6100	5550	4560	3700		
Kenmare	Bowbells	5000	4150	3750	3100	2500		
Bowbells	Portal	7600	6300	5700	4560	3800		
Flaxton	Dooley		5150	4650	3685	3100		
Dooley	Whitetail		3750	3375	2600	2250		
Veblen Jct.	Rosholt		5650	5100	3850	3400		
Rosholt	New Effington		3725	3375	2600	2250		
New Effington	Hammer		3475	3150	2340	2100		
Hammer	Veblen		5300	4800	3500	3200		
T.R. Falls	Conway		6975	6300	5050	4200		
Conway	Adams		4975	4500	3800	3000		
Adams	Hurd		6950	6300	5050	4200		
Hurd	Tolley		4650	4200	3500	2800		
Tolley	Kenmare		6650	6000	4400	4000		
Fordville	Whitman		4300	3900	2950	2600		
Whitman	Harlow		5950	5400	3950	3600		
Harlow	Baker		5800	5250	3850	3500		
Baker	Drake		5650	5100	3750	3400		

EASTWARD		HORSEPOWER						
From	To	6 Axle 3000		4 Axle 3000		2000 2250	1750	1500
		2300	2500	2300	2500	2500		
Portal	Drake	9200	7350	6650	5540	4600		
Drake	Harvey	9600	7650	6950	5780	4800		
Harvey	Kensal	9000	7450	6750	5520	4500		
Kensal	Valley City	11000	10000	8250	6760	5500		
Valley City	Siding 280	4800	3800	3450	2900	2300		
Siding 280	Enderlin	11000	10000	8250	6760	5500		
Enderlin	Nashua	9500	7850	7125	5760	4750		
Nashua	Glenwood	8300	6850	6225	5040	4150		
Whitetail	Dooley		3500	3150	2500	2100		
Dooley	Fortuna		5150	4650	3800	3100		
Fortuna	Crosby		5400	4875	4000	3250		
Crosby	Rival		6650	6000	4500	4000		
Rival	Flaxton		7500	6750	5800	4500		
Veblen	Hammer		5150	4650	3800	3100		
Hammer	Rosholt		6300	5700	4600	3800		
Rosholt	LaMars		7400	6675	5450	4450		
LaMars	Veblen Jct.		8300	7500	6000	5000		
Drake	Baker		5800	5250	4100	3500		
Baker	Harlow		6000	5400	4300	3600		
Harlow	Essex		6650	6000	4750	4000		
Essex	Whitman		7300	6600	4950	4400		
Whitman	Fordville		8600	7800	5900	5200		
Kenmare	Norma		4050	3675	2950	2450		
Norma	Grano		4800	4350	3500	2900		
Grano	Overly		6650	6000	4850	4000		
Overly	Agate		5975	5400	4350	3600		
Agate	Loma		7125	6450	5200	4300		
Loma	Fairdale		5550	5025	4700	3350		
Fairdale	Warren		10300	9300	8850	6200		
Warren	T.R. Falls		6975	6300	5300	4200		

**WISHEK, POLLOCK, MISSOURI RIVER  
AND NEW TOWN SUBDIVISIONS**

WESTWARD		HORSEPOWER			
		4 Axle	2000	2250	2300
From	To	3000	2500	1750	1500
Hankinson	MP 253	4975	4500	3400	3000
MP 253	Oakes	4475	4050	3100	2700
Oakes	Merricourt	5475	4950	3800	3300
Merricourt	Wishek	4300	3900	3000	2600
Wishek	Napoleon	5150	4650	3500	3100
Napoleon	Bismarck	5800	5250	4000	3500
Wishek	Ashley	5150	4650	3500	3100
Ashley	Madra	4800	4350	3300	2900
Madra	Pollock	5650	5100	3800	3400
Drake	Max	4800	4350	3300	2900
Max	Coleharbor	6475	5175	3900	3450
Coleharbor	Washburn	4475	4050	3100	2700
Washburn	Wilton	2975	2700	2100	1800
Wilton	Arnoid	3825	3450	2600	2300
Arnoid	Bismarck	8300	7500	5700	5000
Max	Ryder	5475	4450	3800	3300
Ryder	New Town	5650	5100	3900	3400

WESTWARD		HORSEPOWER			
		4 Axle	2000	2250	2300
From	To	3000	2500	1750	1500
Bismarck	Braddock	3475	3150	2400	2100
Braddock	M.P. 357	5475	4950	3800	3300
M.P. 357	Wishek	5300	4800	3700	3200
Wishek	MP 323.0	3825	3450	2600	2300
MP 323.0	Merricourt	5650	5100	3900	3400
Merricourt	Oakes	6650	6000	4500	4000
Oakes	MP 252	5725	5175	4000	3450
MP 252	Hankinson	8125	7350	5300	4900
Pollock	Ashley	4300	3900	3000	2600
Ashley	Wishek	5650	5100	3800	3400
Bismarck	Wilton	3325	3000	2400	2000
Wilton	Underwood	4150	3750	2900	2500
Underwood	Max	4300	3900	3000	2600
Max	Ruso	5475	4950	3700	3300
Ruso	Butte	7475	6750	5200	4500
Butte	Drake	9300	8400	6300	5600
New Town	Prairie Jct.	5150	4650	3500	3100
Prairie Jct.	Ryder	5475	4950	3800	3300
Ryder	Max	5475	4950	3700	3300

**TRAIN DISPATCHERS PHONE WIRE ON POLE LINE**

**Facing in the direction of increasing Mile Posts:**

From 26th Avenue North, Minneapolis to Western Division Jct., Glenwood—Third and fourth pin positions from left end on third crossarm.

From junction switch, Glenwood to Noyes—Seventh and eighth pin positions from left end on top crossarm.

From junction switch, Glenwood to Fairmount—Third and fourth pin positions from left end of crossarm.

From Fairmount to Portal—First and second pin positions from left end of crossarm.

From Camden Place to Central Ave.—Third and fourth pin positions from left end on top crossarm.

From Central Ave. to Shoreham—Third and fourth pin positions from left end on third crossarm.

From Central Ave. to Withrow—First and second pin positions from left end on top crossarm.

From Withrow to a point about one-half mile east of Withrow on the Ladysmith Line—Eighth and ninth pin positions from left end on third crossarm.

From a point about one-half mile east of Withrow to Dresser—First and second pin positions from left end on top crossarm.

From Dresser to Superior depot—Ninth and tenth pin positions from left end of top crossarms.

From Cardigan Jct. to Soo Line Jct.—First and second pin positions from left end on top crossarm.

**Facing East**

Withrow to C.F. Yard—Second and third wires from right end of top crossarm.

**LOCATION OF TRAIN DISPATCHER'S TELEPHONES**

In addition to stations showing "P" in Column 6(A) where train dispatcher's telephone is located, telephones are located at various locations as indicated:

**PAYNESVILLE SUBDIVISION**

- 14 Ave. No.—Signal Bungalow
- Camden Depot
- Camden—Signal Bungalow
- Camden—West Wye Switch
- Low Line Switch West of Marshall St.
- Marshall St.—Signal Bungalow
- University Ave.
- Humbolt East—Signal Bungalow (Lyndale Ave. No.)
- Humbolt West—Signal Bungalow
- BN Interlocker Crystal—Signal Bungalow
- MNS Jct.—Signal Bungalow
- MP 9.2 (Signal 9)
- Henev Spur west end
- Hamel East Switch
- Hamel West Switch
- Loretto-East Signal Bungalow
- Loretto-West Signal Bungalow
- Rockford West Switch
- Rockford East Switch
- Buffalo-East Signal Bungalow
- MP 36.40 Buffalo Electric Lock on East end of House track
- Buffalo-West Signal Bungalow
- Annandale 2 poles West of MP 51
- South Haven Spring Switch
- Kimball—Booth
- Watkins—Booth
- Regal West End of Yard
- Belgrade—Booth

**DETROIT LAKES SUBDIVISION**

Forada—MP 130.2  
Carlos—MP 143.9  
Ottertail—MP 179.3  
Vergas—MP 201  
Winger—MP 264.4  
Erskine—BN Crossing

**NORTHFIELD SUBDIVISION**

Atwood—next to Gen'l. Mtrs. Spur  
Auto Club—west end of yard  
Minnesota River bridge—shanty, east end  
Savage—tool house  
Air Lake Park—shanty  
Eureka Center—west end siding  
Northfield—Yard office and Section Shanty

**BROOTEN SUBDIVISION**

DM & IR Connection (Yard Phone)  
V.N. Crossing (Yard Phone)  
500 Ft. East of V.N. Crossing (Yard Phone)  
21st St. Yard Office (Yard Phone)

**DANBURY SUBDIVISION**

MP 140—3 poles East of Black River Bridge  
Harlis—Booth  
MP 123—3 poles West  
Kingsdale—Booth  
Cloverton—Booth  
Markville—Section House  
Danbury—Booth  
Webster—Booth  
Siren—Section House  
Lewis—Booth  
Luck—Section House  
Milltown—Booth  
Centuria—Booth

**NEW RICHMOND SUBDIVISION**

Central Ave.—MP 4.3  
New Brighton—Signal Bungalow  
MP 16.7—Bald Eagle Section House  
MP 12.8—Cardigan Jct.  
MP 21.53  
Withrow West End of Depot  
MP 425.2 Between Withrow and St. Croix Bridge  
MP 424.9 East End—St. Croix Bridge  
MP 421.1—Somerset  
MP 404.8—Cylon  
MP 399.3  
MP 396  
MP 389.9—Downing Jct.  
MP 385  
MP 379.4—Wheeler  
MP 375  
MP 372.5  
MP 362—Albertville  
MP 358.5—Howard

**BARRON SUBDIVISION**

Maple Island—Booth  
Marine—Booth  
Osceola—Booth

**LOCATION OF TRAIN DISPATCHER'S TELEPHONES**

Includes phones not shown in Rule 6A Column. Phones are located in depots unless specified otherwise.

**ELBOW LAKE SUBDIVISION**

Glenwood  
Hoffman  
Elbow Lake  
Wendell (on pole)  
Nashua (on pole)  
B.N. Jct. (on pole west transfer switch)  
Tenney (on pole)  
Fairmount  
Vebien Jct. (on pole east end)  
Hankinson  
Wyndmere (section shelter)  
McLeod (pump house)  
Anselm (on pole)  
Enderlin

**CARRINGTON SUBDIVISION**

Enderlin  
Siding 280 (on pole east end)  
Valley City  
MP 294.5 (on pole)  
Rogers (section shelter)  
Kensal  
Carrington  
Harvey

**PORTAL SUBDIVISION**

Harvey  
Drake  
Minot  
Soo Tower  
Kenmare  
Flaxton (on pole)  
Portal

**DEVILS LAKE SUBDIVISION**

Thief River Falls  
Fordville (dial phone)  
Devils Lake (dial phone)  
Drake

**BISBEE SUBDIVISION**

Fordville (dial phone)  
Bisbee (dial phone)  
Kenmare

**WHITETAIL SUBDIVISION**

Flaxton (on pole)

**WISHEK SUBDIVISION**

Hankinson  
Wishek (dial phone)  
Bismarck (dial phone)

**MISSOURI RIVER SUBDIVISION**

Drake  
Max (dial phone)  
Bismarck (dial phone)

**COMPANY PHYSICIANS**

Location	Name	Clinic (where applicable)
Minneapolis, MN . . . .	Dr. D. A. Godfrey (Medical Director) . . . .	} Internists, Ltd.
	Dr. E. W. Ollila (Medical Director) . . . .	
	Dr. R. H. Scott (Medical Director) . . . .	
	Dr. L. W. Weber (Medical Director) . . . .	
Alexandria, MN . . . .	Dr. Kai K. Hunt . . . . .	
Bemidji, MN . . . . .	Dr. L. C. Lundsten . . . . .	Bemidji Clinic
Bismarck, ND . . . . .	Dr. Phillip O. Dahl . . . . .	} Mid Dakota Clinic
	Dr. Scott B. Girard . . . . .	
Detroit Lakes, MN . . . .	Dr. M. E. Odlund . . . . .	Lakes Medical Center
Devils Lake, ND . . . . .	Dr. L. F. Pine . . . . .	} Lake Region Clinic
	Dr. R. D. McBane . . . . .	
	Dr. W. J. Turkula . . . . .	
	Dr. N. L. Montaniel . . . . .	
Drake, ND . . . . .	Dr. B. A. Hordinsky . . . . .	
	Dr. R. Lenzmeier . . . . .	
	Dr. W. Mayo . . . . .	
Enderlin, ND . . . . .	Dr. C. Jensen . . . . .	} Tri County Medical Center
	Dr. J. Burh . . . . .	
	Dr. R. Wiisanen . . . . .	
Enderlin/Lisbon, ND . . . .	Dr. A. K. Lewis . . . . .	} Enderlin/Lisbon Clinic
	Dr. W. J. Palmer . . . . .	
	Dr. P. R. Marquez . . . . .	
	Dr. S. R. Rillo . . . . .	
Fessenden, ND . . . . .	Dr. M. J. Towarnicky . . . . .	
Garrison, ND . . . . .	Dr. J. T. Boyle . . . . .	} Garrison Clinic
	Dr. K. Leonard . . . . .	
	Dr. R. G. Hallare . . . . .	
Glenwood, MN . . . . .	Dr. G. E. Lee . . . . .	} Glenwood Medical Center
	Dr. J. Schlueter . . . . .	
Hankinson, ND . . . . .	Dr. H. Patterson . . . . .	St. Girard's Outpatient Clinic
Harvey, ND . . . . .	Dr. W. Mayo . . . . .	
	Dr. C. Nyhus . . . . .	
Mahnomen, MN . . . . .	Dr. C. B. Mercil . . . . .	
Minot, ND . . . . .	Dr. T. O. Langager . . . . .	Medical Arts Clinic
New Town, ND . . . . .	Dr. H. J. Wilson . . . . .	
Paynesville, MN . . . . .	Dr. E. J. Aulick . . . . .	} Paynesville Medical Clinic
	Dr. J. J. Groshens . . . . .	
	Dr. R. J. Lindeman . . . . .	
Thief River Falls, MN . . . .	Dr. P. D. Johnson . . . . .	} Falls Clinic
	Dr. G. B. Martin . . . . .	
Thief River Falls, MN . . . .	Dr. D. Davidson . . . . .	} Thief River Clinic
	Dr. L. Herber . . . . .	

**JUDGING SPEED**

Accurate judgment of coupling speed depends upon correct timing. An excellent way to get accurate timing without a watch is to count "one hundred and thirty-one, one hundred thirty-two" and so on as the car passes a stationary point. With a little practice counting can be done at the rate of one a second.

Ability to closely estimate speed at time car strikes is extremely important because impact force builds up as the square of the speed. This means that impact delivered by a car coupled at 8 miles per hour is not four times that at 2 miles per hour, but 16 times as great. Damage to freight or car can be avoided by always keeping coupling speed within the safe range—NOT OVER 4 MILES PER HOUR—A BRISK WALK.

**IMPACT FORCE AT VARIOUS STRIKING SPEEDS**

Car Coupled at		Units of Destructive Force
1 mph	Safe	1
2 mph		4
3 mph		9
4 mph		16
5 mph	Damaging	25
6 mph		36
7 mph		49
8 mph		64
9 mph		81
10 mph		100

**SPEED CARD**

**To Find Coupling Speed at 40 Foot and 50 Foot Car**

Sight vertical end of car body on a fixed point and note the number of seconds it takes car to pass. Speed in miles per hour is shown opposite.

Seconds	40 Foot Car Miles Per Hour	50 Foot Car Miles Per Hour
1	28	35
2	14	17.5
3	9.3	11.6
4	7	8.7
5	5.6	7
6	4.7	5.9
7	4	5
8	3.5	4.4
9	3.1	3.9
10	2.8	3.5
11	2.5	3.1
12	2.3	2.9
13	2.15	2.7
14	2	2.5

Damage as a result of Rough Handling makes up a large part of the claim bill for Loss and Damage to Freight. From the Railroad standpoint it is the major item in the expense. We all know that Rough Handling can be reduced, often eliminated. It is hoped that this card will be helpful in your efforts to prevent Rough Handling.

Switch Crews must function as a team. Clear signals properly given are mighty important; talk it over—prevent Rough Handling—it can be done.

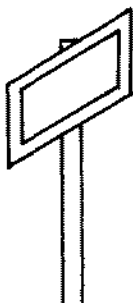
**CAR CODES AND AVERAGE TARE TONS**

**NOTES**

Kind of Car Code	Average Tare Tons	Kind of Car
B	29	Box
C	40*	Flat with container
F	31	Flat
G	31	Gondola
H	29	Hopper except covered hopper
J	30	Covered hopper
O	19	Ore
P	70	Passenger
Q	35	Equipped flat without trailer or container
R	40	Refrigerator
S	22	Stock
T	37	Tank
V	40*	Flat with trailer
W	Stencil Weight	Work equipment (X or W)
D	25	Deadhead caboose
Z	141	Deadhead engine unit

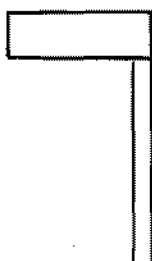
\*Includes 5 tons for trailer or container, add 5 tons for each additional trailer or container.

**ROADWAY SIGNS**

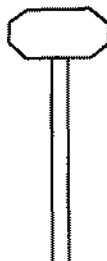


**"STATION 1-MILE" SIGN**

This sign is placed 1 mile from exterior station grounds switches except where yard limit boards occur signs shall be placed one mile from yard limit board.



**SNOW PLOW CLEARANCE SIGN**



**FLANGER SIGN**



**PRACTICE SAFETY  
EVERYWHERE  
ALL THE TIME**