



INDEX

	Page
Hours of Train Order Offices.....	Inside Front Cover
Fair Weather Engine Rating.....	1
Holly Subdivision.....	2 and 3
Grand Rapids Subdivision.....	4
Muskegon Subdivision	5
Mt. Clemens Subdivision.....	6
Saginaw Subdivision	7
Jackson Subdivision	8
Cass City Subdivision.....	9
Special Instructions, Etc.....	10 to 15
Extracts from City and Village Ordinances.....	16
Speed Schedule.....	Inside Back Cover

Grand Trunk Western Railroad Company

DETROIT DIVISION & DETROIT TERMINAL

Employees Time Table

Safety No. 7 First

**EFFECTIVE 1.01 A. M.
Sunday, Sept. 24, 1939**

EASTERN STANDARD TIME

Superseding Time Table No. 6

This Time Table is for the government and information of employees only, and is not an advertisement of the time of any train. The Company reserves the right to vary therefrom as circumstances may require.

READ RULES AND SPECIAL INSTRUCTIONS CAREFULLY. IMPORTANT CHANGES HAVE BEEN MADE.

Operating Rules and General Regulations in Book form dated July 1st, 1929, will govern the movement of trains on this time table.

On single track, eastward or southward trains as indicated by time table heading are, unless otherwise specified, superior to trains of same or inferior class, running in opposite direction, in accordance with Rule 72.

DESTROY FORMER TIME TABLES

J. A. CLANCEY, General Manager. **W. J. HOGAN** General Superintendent.

W. H. EDMONDSON Superintendent. **E. F. GORMAN,** Terminal Superintendent.

HOURS OF SERVICE FOR TRAIN ORDER OFFICES

Train Order Offices (T) are Open 24 Hours Daily Except—

Smith's Creek..	8.00 a. m. to	5.00 p. m. daily except Sunday
Richmond.....	9.00 a. m. to	5.00 p. m. daily except Sunday
	7.15 p. m. to	3.15 a. m. daily except Sunday
New Haven.....	8.00 a. m. to	5.00 p. m. daily except Sunday
Fraser.....	8.00 a. m. to	5.00 p. m. daily except Sunday
Birmingham.....	8.15 a. m. to	5.15 p. m. daily except Sunday
Waterford.....	8.00 a. m. to	5.00 p. m. daily except Sunday
Clarkston.....	7.00 a. m. to	4.00 p. m. daily except Sunday
Fenton.....	6.45 a. m. to	3.45 p. m. daily except Sunday
Linden.....	7.00 a. m. to	4.00 p. m. daily except Sunday
Gaines.....	7.15 a. m. to	4.15 p. m. daily except Sunday
Vernon.....	7.00 a. m. to	4.00 p. m. daily except Sunday
Corunna.....	7.00 a. m. to	4.00 p. m. daily except Sunday
Owosso.....	2.15 a. m. to	6.15 p. m. daily except Sunday
	3.00 p. m. to	5.00 p. m. Sunday only
Ovid.....	8.00 a. m. to	5.00 p. m. daily except Sunday
St. Johns.....	8.30 a. m. to	5.30 p. m. daily except Sunday
	2.30 p. m. to	4.30 p. m. Sunday only
	7.00 p. m. to	4.00 a. m. daily except Sunday
	2.00 a. m. to	4.00 a. m. Monday only
Fowler.....	9.00 a. m. to	6.00 p. m. daily except Sunday
Pewamo.....	8.00 a. m. to	5.00 p. m. daily except Sunday
Muir.....	7.30 a. m. to	4.30 p. m. daily except Sunday
Ionia.....	1.30 a. m. to	9.30 a. m. daily except Sunday
	11.30 a. m. to	7.30 p. m. daily
Saranac.....	8.00 a. m. to	5.00 p. m. daily except Sunday
Malta.....	7.30 a. m. to	3.30 p. m. Sunday only
Ada.....	7.30 a. m. to	4.30 p. m. daily except Sunday
Grand Rapids...	7.45 a. m. to	4.45 p. m. daily
Coopersville.....	9.00 a. m. to	6.00 p. m. daily except Sunday
Spring Lake.....	9.00 a. m. to	6.00 p. m. daily except Sunday
Ashley.....	9.45 a. m. to	6.45 p. m. daily except Sunday
Perrinton.....	8.00 a. m. to	5.00 p. m. daily except Sunday
Middleton.....	8.15 a. m. to	5.15 p. m. daily except Sunday
Carson City.....	8.00 a. m. to	5.00 p. m. daily except Sunday

Butternut.....	8.00 a. m. to	5.00 p. m. daily except Sunday
Vickeryville.....	9.00 a. m. to	6.00 p. m. daily except Sunday
Sheridan.....	9.00 a. m. to	6.00 p. m. daily except Sunday
Greenville.....	8.00 a. m. to	5.00 p. m. daily except Sunday
Cedar Springs...	8.00 a. m. to	5.00 p. m. daily except Sunday
Sparta.....	8.00 a. m. to	5.00 p. m. daily except Sunday
Muskegon.....	6.45 a. m. to	3.45 p. m. daily except Sunday
	11.00 a. m. to	1.00 p. m. Sunday only

Henry St..... 3.00 p. m. to 7.00 a. m. daily

Lennon.....	8.00 a. m. to	5.00 p. m. daily except Sunday
Flushing.....	8.00 a. m. to	5.00 p. m. daily except Sunday
Brent Creek.....	9.00 a. m. to	6.00 p. m. daily except Sunday
Montrose.....	9.00 a. m. to	6.00 p. m. daily except Sunday
Bay City.....	11.30 a. m. to	8.30 p. m. daily except Sunday
Armada.....	9.00 a. m. to	6.00 p. m. daily except Sunday
Romeo.....	8.30 a. m. to	5.30 p. m. daily except Sunday
Washington.....	8.30 a. m. to	5.30 p. m. daily except Sunday
Rochester.....	9.00 a. m. to	6.00 p. m. daily except Sunday
Orchard Lake...	8.00 a. m. to	5.00 p. m. daily except Sunday
Walled Lake.....	9.00 a. m. to	6.00 p. m. daily except Sunday
New Hudson.....	9.00 a. m. to	6.00 p. m. daily except Sunday
South Lyon.....	8.00 a. m. to	12.15 a. m. daily except Sunday
Lakeland.....	7.30 a. m. to	4.30 p. m. daily except Sunday
Pinckney.....	9.00 a. m. to	6.00 p. m. daily except Sunday
Gregory.....	9.00 a. m. to	6.00 p. m. daily except Sunday
Stockbridge.....	8.00 a. m. to	5.00 p. m. daily except Sunday
Munith.....	8.00 a. m. to	5.00 p. m. daily except Sunday
Jackson.....	7.00 a. m. to	4.00 p. m. daily except Sunday
Dryden.....	8.00 a. m. to	5.00 p. m. daily except Sunday

Lum.....	9.00 a. m. to	6.00 p. m. daily except Sunday
North Branch...	9.00 a. m. to	6.00 p. m. daily except Sunday
Kingston.....	9.00 a. m. to	6.00 p. m. daily except Sunday
Wilmot.....	8.00 a. m. to	2.00 p. m. daily except Sunday
Cass City.....	8.30 a. m. to	5.30 p. m. daily except Sunday
Gagetown.....	9.10 a. m. to	6.10 p. m. daily except Sunday
Owendale.....	8.45 a. m. to	5.45 p. m. daily except Sunday
Pigeon.....	8.20 a. m. to	5.20 p. m. daily except Sunday
Caseville.....	7.45 a. m. to	4.45 p. m. daily except Sunday
Bad Axe.....	8.00 a. m. to	5.00 p. m. daily except Sunday

C. E. SHERMAN, Operating Inspector, Detroit
C. P. LOCKWOOD, Supt. Terminals, Port Huron

TRAINMASTERS

R. C. STEVENSON, Grand Rapids, Muskegon, Holly and Saginaw Subdivisions.
J. M. MUNNINGS, Holly, Mt. Clemens, Jackson and Cass City Subdivisions.
F. B. LYMAN, Terminal Trainmaster, Milwaukee Jct.

CHIEF DISPATCHER

E. O. DUNN

TRAIN DISPATCHERS

DURAND

C. C. CHROUCH J. W. WHELAN F. A. SUMMERHAYS
H. B. DELL F. A. THOMAS H. L. BRIM
W. W. LUCKEY D. W. PECK L. C. O'CONNOR
G. E. PILMORE

Following symbols on schedule sheets of time table indicate:—

- * See footnote.
- A Arrive.
- B Bulletins and Train Register.
- C Coal.
- F Flag Stop.
- K Standard Clock, Bulletins, and Train Register.
- L Leave.
- P Listening Telephone.
- R Register.
- S Regular Stop.
- T Train Order Office.
- W Water.
- Y Wye.
- Ex Except.

FAIR WEATHER EQUATED TONNAGE RATING

Car Factor	WEST AND NORTH						BETWEEN	EAST AND SOUTH						Car Factor
	*28%	34%	41%	52%	55%	55%		52%	41%	34%	*28%			
	660-928	5600-5611 5030-5048	2664-2684 5627-5631	3405-3524	3715-3757	3715-3757		3405-3524	2664-2684 5627-5631	5600-5611 5030-5048	660-928			
8		1150	1450	1650	2750	2900	Detroit & Pontiac.....	5300	5000	3950	3275	2000		9
6		2000	2550	2900	3700	3900	Pontiac & Durand.....	3600	3400	2700	2350	1850		9
9		1700	2200	2500	3175	3350	Durand & Grand Rapids.....	3500	3300	2800	2450	1900		9
9		1550	2000	2300	2900	3100	Grand Rapids & Muskegon.....	2600	2400	1900	1575	1200		9
9		1550	2000	2300	2900	3100	Grand Rapids & Grand Haven...	2600	2400	1900	1575	1200		9
12		2600	3300	3800	4800	5000	Tappan & Richmond.....	4500	4300	3400	3000	2300		9
12			CAR LIMIT	(100 Cars)			Richmond & New Haven.....	3750	3550	2800	2450	1900		9
12			CAR LIMIT	(100 Cars)			New Haven & Milwaukee Jct.....	4500	4300	3400	3000	2300		9
5		1150	1350	1650	2100	2200	Durand & Greenville.....	2050	2000	1600	1300	1100		5
5		1200	1450	1750	2200	2300	Greenville & Muskegon.....	1850	1800	1450	1100	900		5
10		1800	2300	2625			Durand & W. Bay City.....			2275	2000	1550		8
7		1850	2400	2725	3450	3650	Richmond & Shelby Pit.....	3825	3600	2850	2500	1950		9
7		1350	1750	2000	2525	2675	Washington & Pontiac.....	3150	3000	2300	2000	1500		9
7		1250	1600	1825	2300	2450	Pontiac & Walled Lake.....	3350	3175	2500	2200	1700		9
7		1350	1750	2000	2525	2675	Walled Lake & New Hudson							
							New Hudson & Jackson.....			2150	1900	1475		9
5		1050	1350	1525	1925	2025	Pontiac & Oxford.....	3625	3450	2725	2400	1850		9
5		1100	1400	1600	2000	2115	Oxford & Imlay City.....	1540	1740	1375	1200	925		5
5		975	1250	1425			Imlay City & Caseville.....			1475	1300	1000		5
8		1500	1925	2200			Cass City & Bad Axe.....			2200	1925	1500		8

Notes (1) Eastward Milwaukee Jct. to Tappan through trains will carry New Haven—Richmond tonnage until further notice.
(2) D. & T. S. L. Engines 15 to 20, inclusive, are 41%; D. & T. S. L. Engines 21 to 32, inclusive, are 55%.
(3) Through Port Huron-Toledo trains must not handle to exceed 80 cars west of Milwaukee Junction.

GENERAL INSTRUCTIONS

1. The equated tonnage of any train is determined by multiplying the number of cars in the train by the car factor and adding the result to the sum of the tare and contents.

Example: (1) 42 cars Total gross weight..... 2100 tons
Car Factor 10 × 42 cars..... 420 tons
EQUATED TONS 2520 tons

(2) 84 cars Total gross weight..... 1680 tons
Car Factor 10 × 84 cars..... 840 tons
EQUATED TONS 2520 tons

2. The car factor is an allowance for frictional resistance and varies on different subdivisions according to the ruling grade; the principle being that on low gradients the frictional resistance is a higher proportion of the total resistance than on steeper gradients. By use of the car factor the trainload is so adjusted that the resistance is the same for all trains of equal equated tonnage whether composed of fully loaded, partly loaded, or empty cars.

3. Established ratings will be exceeded by 1% if by so doing another car can be handled in the train.

4. The equated ratings shown are "A" or fair weather. These ratings will be reduced as authorized by ratings "B" to "E" for temperature.

TONNAGE REDUCTIONS		
Temperature	Weather Condition	Modifications
	Rating	Reduction in Tonnage
Above freezing (32° F. above)	A	Nil
32° above to 16° F. above (or bad rail)	B	5%
15° above to zero	C	10%
Zero to 10° below	D	15%
11° below to 20° below	E	20%

The Chief Dispatcher will issue special instructions in case of storm or temperatures lower than those shown.

5. New engines or engines out of shops after receiving medium or heavy repairs will be loaded 20% light on first outward trip and 10% light on return trip. Locomotive Foremen will advise Chief Dispatcher and Yardmaster in such cases.

6. Passenger engines in freight service will be allowed a further reduction of one hundred (100) tons.

7. A reduction of 100 tons will be made for designated manifest trains, except westbound Detroit to Pontiac, where full rating will be carried.

8. When an engine of different capacity from those shown in the table is used, the proper equated tonnage will be arrived at by taking the rating of the engine with the closest percentage capacity, dividing this rating by its percentage capacity and multiplying the result by the percentage of capacity of the engine to be used.

Example: To find the equated rating of a 38% engine—
Published rating of 41% engine is 2500 tons—
Equated tonnage rating of 38% engine is—
 $2500 \times 38 = 2317$ equated tons
41

9. To determine proper tonnage for pusher, doubleheader, or helper engines, unless special rating is given, add to equated rating of the first engine 95% of the equated rating in effect for each class of helper.

10. In making up trains, weights must be obtained by taking tare and contents from the waybill. When tare weights are not available, car weights may be taken as under:—

Passenger Cars:—		Steel frame auto cars.....	
4-wheeled trucks	50 tons	Low-side Gondolas	20 tons
6-wheeled trucks	60 tons	Steel frame box cars.....	20 tons
Express Refrigerator	40 tons	Hart cars	20 tons
Freight Refrigerator	30 tons	Stock cars	18 tons
100,000 cap. steel gons	23 tons	Wooden frame box cars....	18 tons
Hopper cars	23 tons	Flat cars	18 tons
		Caboose cars	20 tons

11. In computing tonnage, fully loaded cars of grain, coal, rails, lumber, pulpwood, ties, etc., where weights are not given on the waybill, will be considered as carrying the marked carrying capacity of the car.

12. When dead engines are included in a train, four times the car factor will be added to the actual weight of each engine.

13. The ratings given in the rating table are for the ruling grade; excess tonnage will be handled when it is to be set out short of or picked up beyond the ruling grade.

14. When an engine is unable to handle the authorized rating, a joint message signed by conductor and engineer will be sent to the Chief Dispatcher, advising the reduction made and giving the reason for same.

15. Yardmasters and Conductors will be held responsible for their trains being loaded to full authorized rating when tonnage is available.

HOLLY SUBDIVISION

		Time Table No. 7		WESTWARD TRAINS									
		Effective 1.01 A. M. Sunday, Sept. 24, 1939		FIRST CLASS									
		STATIONS											
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Stations indicated by ★ have no side track

SINGLE TRACK BETWEEN CLAY AVENUE AND BOULEVARD, MILWAUKEE JCT.

All westward trains will obtain Terminal Clearance at Milwaukee Jct.

6000, 6300 and 6400 class engines must not use tracks adjacent to depot platforms, Birmingham, but will use siding between main tracks.

Color lights, combination green and lunar white, installed Bloomfield Hills, Charing Cross and Oak-

wood Boulevard to be displayed to stop trains which are scheduled to stop on flag.

All trains will obtain Terminal Clearance at Pontiac.

Westward trains will not require Terminal Clearance at West Pontiac.

HOLLY SUBDIVISION

EASTWARD TRAINS											
FIRST CLASS											
Time Table No. 7			Symbols— Rule 6	72	74	54	33	22	56	76	35
Car Capacity of Sidings	Car Capacity of Other Tracks	Distance from Detroit		Suburban	Suburban	Detroit Express	Mail and Express	Mail and Express	Detroit Express	Suburban	Mail and Express
				Ex. Sunday	Ex. Sunday	Daily	Ex. Sunday	Ex. Sunday	Daily	Ex. Sunday	Ex. Sunday
STATIONS											
LEAVE											
78 N 74 S	Yard	06.97	DURAND	K WC TY			A. M.		A. M.		
88	31	62.63	GAINES	T			6.45		10.25		3.55
100	44	55.29	LINDEN	T			F 6.51		\$10.33		4.00
	113	58.63	PAXTON	P			F 6.59		\$10.43		4.09
91	81	50.74	FENTON	T			\$ 7.04		\$10.49	\$ 4.15	
97	91	46.49	HOLLY	TW			\$ 7.10		\$11.00	\$ 4.23	
	42	41.45	DAVISBURG	P			F 7.17		\$11.06	4.29	
97	8	38.54	ANDERSONVILLE	P			7.20		11.09	4.33	
48	82	35.23	CLARKSTON	T			\$ 7.24		\$11.13	4.38	
		34.37	*WINDIATE						F11.14		
88 S 88 N	15	33.29	WATERFORD	T			F 7.27		F11.16	4.40	
	45	31.14	DRAYTON PLAINS				F 7.30		F11.19	4.43	
		29.09	WEST PONTIAC	Y	A. M.	A. M.	7.33		11.22	4.48	
	Yard	26.34	PONTIAC	K WC TY	7.10	7.50	\$ 7.55		\$11.25	\$ 4.55	
		26.06	M. A. L. CROSSING	P	7.11	7.51	7.57		11.26	4.56	
		25.23	SOUTH BOULEVARD		7.14	7.54	8.00		11.27	4.58	
		24.27	BELT LINE JCT								
		22.64	*BLOOMFIELD HILLS		\$ 7.18	\$ 7.58	* 8.04		F11.31	F 5.02	
		21.24	*CHARING CROSS		\$ 7.20	\$ 8.00	8.06		F11.34	F 5.04	P. M.
139	200	17.75	BIRMINGHAM	T	\$ 7.24	\$ 8.04	\$ 8.10		\$11.40	\$ 5.07	5.10
		14.32	*OAKWOOD BLVD		\$ 7.29	\$ 8.09	* 8.14		F11.44	* 5.11	F 5.14
	Yard	12.95	ROYAL OAK	T	\$ 7.32	\$ 8.12	\$ 8.20		\$11.48	\$ 5.13	\$ 5.17
		11.97	PLEASANT RIDGE		\$ 7.33	\$ 8.13			F11.50		F 5.19
		10.89	FERNDALE	W	\$ 7.35	\$ 8.15	8.23		F11.52	* 5.16	F 5.21
55		9.25	STATEFAIR								
		7.21	FORD JCT								
		6.58	HIGHLAND PARK	P	\$ 7.44	\$ 8.24	F 8.28	A. M.	F11.58	* 5.25	F 5.30
	Yard	4.13	MILWAUKEE JCT	K WC TY	\$ 7.49	\$ 8.29	\$ 8.35	\$11.50	\$12.05	\$ 5.32	\$ 5.37
		0.00	DETROIT	B P	8.00	8.40	8.50	12.05	12.20	5.45	5.50
ARRIVE											

Stations indicated by ★ have no side track

Station platforms at Birmingham will not clear man riding on side of car or on steps of coaches leaning out.

*No. 54 will stop at Bloomfield Hills and Oakwood Blvd. to let off passengers from Battle Creek and points west.
*No. 56 will stop at Oakwood Blvd., Ferndale and Highland Park to let off passengers from Durand and points west.

PONTIAC

Watchman in tower at Sanderson Ave. will control flashlight signals at Johnson, Florence and Sanderson Ave. on D. G. H. & M., Sanderson Ave., Cass Ave. on P. O. & N. West wye and Oakland Ave. on Cass City Subdivision.

Annunciator to warn watchman of approaching trains Eastbound over Johnson Ave. has been installed on eastbound main track on D. G. H. & M., west of Johnson Ave., also north of Oakland Ave., Cass City Subdivision for southbound movements over this street.

Pilot lights located on top of flashlight signal at Johnson Ave., when lighted will show that flashlights are operating, and when signal is not operating, yardmen and trainmen can

warn watchman of movements over Johnson Ave. by pushing button on southeast corner of yard office.

At Oakland Ave. on P. O. & N. one pilot light placed on top of flashlight signal on south side of street and when lighted, will show that flashlights are operating, and Train and Yard movements will NOT have to stop before crossing Oakland Ave. When not in operation, train and yard movements must stop and flashlight signals be operated by member of crew by control levers located in building on south side of Oakland Ave. After crossing is cleared, flashlights must be turned off.

All engines and train movements over Cass Ave. on the east leg of the wye and adjacent tracks will be brought to a complete stop and a member of the crew will protect this crossing.

GRAND RAPIDS SUBDIVISION

WESTWARD TRAINS				EASTWARD TRAINS			
Time Table No. 7				Time Table No. 7			
Effective 1.01 A. M.				Effective 1.01 A. M.			
Sunday, Sept. 24, 1939				Sunday, Sept. 24, 1939			
STATIONS				STATIONS			
Third Class	FIRST CLASS		Distance from Detroit	Third Class	FIRST CLASS		Distance from Detroit
41	21	57		22	56	42	
Mixed Tue., Thur. Sat.	Muskegon Express Daily	Muskegon Express Ex. Sunday		Mall and Express Ex. Sunday	Detroit Express Daily	Mixed Mon., Wed. Fri.	
A. M.	P. M.	A. M.		A. M.	P. M.	P. M.	
6.00	3.40	2.20	Yard 66.97	10.20	3.40	1.00	
6.05	3.44	2.24	40 70.15	\$10.12	3.28	12.55	
6.14	3.50	2.30	65 75.52	\$10.03	3.21	12.45	
6.18	\$ 3.55	\$ 2.38	46N 34S 78.52	\$ 9.58	\$ 3.18	12.35	
6.20	3.56	2.40	79.17	9.54	3.15	12.30	
A. M.	4.02	2.46	69 18 84.33	F 9.48	3.09	P. M.	
Tue., Thur. Sat.	\$ 4.07	\$ 2.52	85 98 88.78	\$ 9.43	\$ 3.04	Mon., Wed. Fri.	
41	4.10	2.55	55 91.49	F 9.39	3.00	42	
	\$ 4.17	\$ 3.05	157 193 98.13	\$ 9.30	\$ 2.53		
	4.27	3.15	93 71 107.43	\$ 9.18	2.43		
	4.34	3.21	74 58 112.79	\$ 9.10	* 2.37		
	4.40	3.26	63 36 117.73	\$ 9.02	2.32		
	\$ 4.50	\$ 3.35	101 Yard 124.16	\$ 8.50	\$ 2.25		
			35 125.48				
	F 5.00	3.44	85 51 132.47	\$ 8.38	2.13		
	5.07	3.52	92 138.95	8.30	2.06		
	F 5.08	3.53	27 50 139.38	\$ 8.29	\$ 2.05		
	F 5.18	4.02	25 148.01	\$ 8.19	1.56		
	5.24	4.08	56 24 152.55	8.13	1.51		
	5.33	4.14	56 Yard 157.61	8.07	1.45		
	5.35	4.15	158.21	8.05	1.44		
			159.72	8.00	1.40		
A. M.	\$ 5.45	\$ 4.25	159.72	\$ 7.64	\$ 1.35		
9.30	5.50	4.30					
9.38	5.56	4.36	158.21	7.49	1.28	4.39	
9.40	5.58	4.37	158.85	7.48	1.27	4.38	
9.48	6.05	4.45	31 165.29	7.41	1.20	4.28	
	6.06	4.46	166.13	7.40	1.19		

PENNSYLVANIA RAILROAD

Time Table No. 7				Time Table No. 7			
Effective 1.01 A. M.				Effective 1.01 A. M.			
Sunday, Sept. 24, 1939				Sunday, Sept. 24, 1939			
STATIONS				STATIONS			
Third Class	FIRST CLASS		Distance from Detroit	Third Class	FIRST CLASS		Distance from Detroit
51	21	57		22	56	50	
Mixed Ex. Sunday	Muskegon Express Daily	Muskegon Express Ex. Sunday		Mall and Express Ex. Sunday	Detroit Express Daily	Mixed Ex. Sunday	
A. M.	P. M.	A. M.		A. M.	P. M.	P. M.	
9.50			26 28 166.57	4.25			
\$10.00			38 65 172.58	\$ 4.15			
F 10.05			18 175.61	F 4.05			
F 10.10			35 179.45	F 4.00			
\$10.20			38 186.35	\$ 3.49			
10.23			50 187.10	3.48			
10.30			Yard 188.30	3.45			
A. M.				P. M.			
Ex. Sunday	Daily	Ex. Sunday		Ex. Sunday	Daily	Ex. Sunday	

All Grand Trunk trains using Pennsylvania Railroad between Walker and Shaw will be governed by Pennsylvania Railroad time table and rules.

Trains coming from A. A. R. R. at Owosso Jct. will not require Terminal Clearance.

The normal position of the switch at the junction of the Wyes on the Grand Rapids Terminal Line is for the East Wye.

All trains will protect against trains and engines moving between the A. A. connection just west of M. C. R. R. diamond, Owosso Jct., and Cedar Street, which is the first street east of M. C. R. R. diamond.

*No. 56 stops at Pewamo daily except Sunday, for U. S. mail.

All passenger trains secure terminal clearance at Grand Rapids and Iowa. No train order signal at Grand Rapids.

Westward passenger trains will head into Grand Rapids and back from Grand Rapids through East Wye to Terminal Jct. Eastward passenger trains will back through East Wye from Terminal Jct. to Grand Rapids.

Switch at East Wye, Terminal Junction, is electrically operated from Taylor Street tower. Green light indicates switch set for Grand Rapids Subdivision. Red light indicates switch set for East Wye. Absence of light by day or night must be regarded as danger signal and all engines and trains must stop and not proceed until hand signal is received from towerman on ground.

Trains coming off P. R. R. at Walker will not require Terminal Clearance.

ADDITIONAL TRACKS

Corunna Mine Track.—Mileage 75. Spur to clay pits and other industries. Connected at West End.

Gamble Track.—Mileage 97.54—East of overhead bridge, St. Johns—5 cars—connected east end.

Grand River Gravel Pit.—Mileage 128.33—Run around track, 55 cars. Pit track, 48 cars.

MUSKEGON SUBDIVISION

WESTWARD TRAINS				EASTWARD TRAINS			
Time Table No. 7				Time Table No. 7			
Effective 1.01 A. M.				Effective 1.01 A. M.			
Sunday, Sept. 24, 1939				Sunday, Sept. 24, 1939			
STATIONS				STATIONS			
Third Class	FIRST CLASS		Distance from Ashley	Third Class	FIRST CLASS		Distance from Ashley
41	21	57		22	56	42	
Mixed Tue., Thur. Sat.	Muskegon Express Daily	Muskegon Express Ex. Sunday		Mall and Express Ex. Sunday	Detroit Express Daily	Mixed Mon., Wed. Fri.	
A. M.	P. M.	A. M.		A. M.	P. M.	P. M.	
6.20			0.00			12.30	
			22 7 4.48				
			23 6.44				
			25 21 10.48				
			15 31 12.02				
			194 18.93				
			27 22.43				
			21 24.93				
			28 35 30.72				
			11 35.14				
			5 37.78				
			28-38 Yard 40.38				
			14 45.55				
			30 48.97				
			21 50.88				
			10 52.73				
			59 56.38				
			61.71				
			29 65.49				
			6 69.71				
			22 74.58				
			10 77.33				
			12 81.57				
			93 46				
P. M.							

41 NOS. 41 AND 42 WILL ARRIVE AT AND DEPART FROM HENRY STREET, MUSKEGON 42

Time Table No. 7				Time Table No. 7			
Effective 1.01 A. M.				Effective 1.01 A. M.			
Sunday, Sept. 24, 1939				Sunday, Sept. 24, 1939			
STATIONS				STATIONS			
Third Class	FIRST CLASS		Distance from Shaw	Third Class	FIRST CLASS		Distance from Shaw
21	523	521	57	22	522	56	524
Muskegon Express Daily	P. R. R. Ex. Sunday	P. R. R. Ex. Sunday	Muskegon Express Ex. Sunday	Mall and Express Ex. Sunday	P. R. R. Ex. Sunday	Detroit Express Daily	P. R. R. Ex. Sunday
P. M.	P. M.	A. M.	A. M.	A. M.	Ex. Sunday	P. M.	Ex. Sunday
6.48	1.26	9.52	5.35	0.00	7.03	10.59	12.43

MUSKEGON RAILWAY AND NAVIGATION CO.

Time Table No. 7				Time Table No. 7			
Effective 1.01 A. M.				Effective 1.01 A. M.			
Sunday, Sept. 24, 1939				Sunday, Sept. 24, 1939			
STATIONS				STATIONS			
Third Class	FIRST CLASS		Distance from Simpson	Third Class	FIRST CLASS		Distance from Simpson
21	523	521	57	22	522	56	524
Muskegon Express Daily	P. R. R. Ex. Sunday	P. R. R. Ex. Sunday	Muskegon Express Ex. Sunday	Mall and Express Ex. Sunday	P. R. R. Ex. Sunday	Detroit Express Daily	P. R. R. Ex. Sunday
P. M.	P. M.	A. M.	A. M.	A. M.	Ex. Sunday	P. M.	Ex. Sunday
6.49	1.31	9.58	5.36	0.54	7.02	10.57	12.42
6.55	1.35	10.00	5.45	1.65	7.00	10.55	12.40
P. M.	P. M.	A. M.	A. M.	A. M.	A. M.	P. M.	P. M.
Daily	Ex. Sunday	Ex. Sunday	Ex. Sunday	Ex. Sunday	Ex. Sunday	Daily	Ex. Sunday

Stations indicated by ★ have no side track
All trains using M. R. & N. tracks between Shaw and Simpson will be governed by P. R. R. time table and rules.
All Grand Trunk trains using A. A. R. R. tracks between Owosso Jct. and Ashley will be governed by A. A. R. R. time table and rules.

The normal position of the Junction Switch at Simpson will be for the M. R. & N.

Trains coming from M. R. & N. at Simpson will not require terminal clearance.

No. 42 will not require terminal clearance at Simpson.

No train order signal at Ashley.

ADDITIONAL TRACKS

Michigan Sugar Co. Spur.—At Mileage 15.32, holds 7 cars, connected at East end.

MOUNT CLEMENS SUBDIVISION

WESTWARD TRAINS FIRST CLASS

35	33	Car Capacity of Sidings	Car Capacity of Other Tracks	Distance from West Detroit
Mall and Express Ex. Sunday	Mall and Express Ex. Sunday			
P. M. 7.00	A. M. 10.10			
7.04	10.14			
F 7.15	F 10.25	80	142	48.61
F 7.20	F 10.35	11	44.88	
S 7.35	S 10.50	112S 89N	Yard	37.92
F 7.42	F 10.57	122	47	32.21
F 7.49	F 11.04	44	22	26.61
S 8.05	S 11.15	87	Yard	21.97
F 8.14	F 11.24	83	52	16.48
8.21	11.31			11.35
8.24	11.34		Yard	10.10
8.26	11.36			9.14
8.29	11.39			8.34
8.33	11.43			7.19
				6.64
				5.11
S 8.40	S 11.50			4.57
9.00	12.05			
P. M.	P. M.			4.57
				2.33
				0.45
			Yard	0.00
Ex. Sunday	Ex. Sunday			
35	33			

Time Table No. 7

Effective 1.01 A. M.
Sunday, Sept. 24, 1939

STATIONS

L.	A.	Symbol	Rule 6
PORT HURON		K T	
TUNNEL YARD		K W C	
TAPPAN		T	
SMITH'S CREEK		T	
COLUMBUS			
RICHMOND		TR WY	
NEW HAVEN		T	
CHESTERFIELD		P	
MOUNT CLEMENS		T W	
FRASER		T	
Double Track Switch		P	
GILLEN YARD			
NOLAN YARD			
MOUNT OLIVET			
FOREST LAWN			
EAST YARD		W P	
M. C. RY. CROS'G.			
MILWAUKEE JCT.		K W C T Y	
DETROIT		B P	
MILWAUKEE JCT.		K W C T Y	
EVERY AVENUE			
MICHIGAN AVENUE			
WEST DETROIT		W	

EASTWARD TRAINS FIRST CLASS

34	36	Car Capacity of Sidings	Car Capacity of Other Tracks	Distance from West Detroit
Mall and Express Ex. Sunday	Mall and Express Ex. Sunday			
P. M. 4.40	P. M. 11.30			
4.30	11.20			
F 4.20	F 11.10			
F 4.10	F 11.00			
S 4.00	S 10.50			
S 3.50	F 10.40			
F 3.41	F 10.31			
S 3.35	S 10.25			
S 3.20	F 10.05			
3.10	9.55			
3.06	9.51			
3.04	9.49			
3.02	9.47			
2.59	9.44			
S.255	S 9.40			
2.45	9.30			
P. M.	P. M.			
Ex. Sunday	Ex. Sunday			
34	36			

All Eastward Trains will obtain Terminal Clearance at Milwaukee Jct. and will not require Terminal Clearance at Double Track Switch.

NORMAL POSITION OF DOUBLE TRACK SWITCHES:

At Double Track Switch is for Westward main track.
At Milwaukee Junction, east of Holly Subdivision, is for Eastward main track; west of Holly Subdivision, is for Westward main track.
At West Detroit, is for Eastward main track.

ADDITIONAL TRACKS

Mt. Clemens Sugar Factory Spur.—1 mile east of Mt. Clemens. Mileage, 22.98 from West Detroit. Connected at East end.
East Detroit (4 tracks).—Mileage 12.09. Holds 104 cars.

Injuries to Persons Other than Passengers and Company's Employees

1. In assisting in providing medical relief for persons injured, the Company has in view humanitarian consideration and desire for the general welfare of the service, but any such action is not to be regarded as an admission or evidence of liability.
2. In performance of this humanitarian duty in cases of injury to persons other than passengers or employees while upon the Company's premises, the assistance is to be limited to rendering first-aid only. First-aid means such medical and surgical services as are known to relieve the immediate danger or suffering of the injured person, and to make it safe and comfortable for such person to be removed from the Company's premises. Under no circumstances should it mean

the performance of surgical operations or elaborate surgical dressings, such as setting fractures, etc. The further disposal of the injured person must rest with the Transportation Officer on duty. This officer is usually the Chief Dispatcher of the District.

3. The employees of the Company immediately handling the case should make every effort to see that the injured person is given in charge of friends or the Municipal Authorities.

4. Where the injuries are of such character as to require hospital treatment, this should be arranged for by the friends or Municipal Authorities.

5. Where it is impossible to reach friends or Municipal Authorities, such as in cases occurring in the night or in rural districts, the Chief Transportation Officer on duty may arrange for the injured person to be taken by train to the nearest general hospital. In such cases all concerned, including the Hospital Authorities, should be advised of the circumstances under which application for admission is being made, and particulars of this should appear on the casualty report.

6. The instructions of the Transportation Officer should be given in writing, or by telegraph if necessary, so that a copy may accompany the medical accounts for first-aid or such other medical services as may be authorized, for the information of our Asst. Chief Surgeon and Gen. Claims Agent.

7. Employees of the Company, whether authorized to do so or not, when calling for the services of a physician, should notify said physician that the call is for first-aid only, which will not include services rendered subsequent to the first dressing on the Company's premises or adjacent thereto.

SAGINAW SUBDIVISION

NORTHWARD TRAINS THIRD CLASS

39	Car Capacity of Sidings	Car Capacity of Other Tracks	Distance from Durand
Mixed Ex. Sunday			
P. M. 4.15			0.00
S 4.30	37	20	6.28
S 4.45	30	73	12.87
S 4.55	31	16	17.11
S 5.05	59	21.15	
S 5.15	30	25.44	
F 5.20	9	27.39	
F 5.24	37	29.68	
F 5.31	14	32.94	
5.40	Yard	37.48	
5.45	20	38.61	
5.47		39.07	
S 5.55		39.16	
F 6.00		40.78	
F 6.04	38	41.99	
F 6.09		43.73	
F 6.33	Yard	51.65	
6.45		52.29	
P. M.	Yard	53.19	
		54.32	
		56.10	
Ex. Sunday			
39			

Time Table No. 7

Effective 1.01 A. M.
Sunday, Sept. 24, 1939

STATIONS

L.	A.	Symbol	Rule 6
DURAND		K W C T Y	
LENNON		T	
FLUSHING		T	
BRENT CREEK		T	
MONTROSE		T	
BURT			
VERNE			
FOSTERS			
ORVILLE			
SAGINAW FR'T YARD		W C	
BREWSTER SIDING			
MEREDITH ST. JCT.		M. C. R. R.	
MX TOWER			
SAGINAW			
MERSHON			
CARROLLTON			
ZILWAUKEE			
SALZBURG			
BAY CITY		K W C T Y	
WEST BAY CITY			
M. C. R. R. CROSSING			
NORTH BAY CITY			

SOUTHWARD TRAINS THIRD CLASS

38	Car Capacity of Sidings	Car Capacity of Other Tracks	Distance from Durand
Mixed Ex. Sunday			
P. M. 2.50			
S 2.25			
S 2.05			
S 1.43			
S 1.33			
S 1.21			
F 1.17			
F 1.12			
F 1.05			
12.58			
12.54			
12.52			
S 12.45			
F 12.40			
F 12.36			
F 12.31			
F 12.07			
12.01			
P. M.			
Ex. Sunday			
38			

Stations indicated by ★ have no side track

All Grand Trunk trains using M.C.R.R. tracks between Meredith St. Junction and Merston will be governed by M.C.R.R. Time Table and Rules.

No train order signal at MX Tower.

Conductors on all Northbound trains will call operator at "MX" Tower (Emerson St.) Saginaw, from Telephone Booth at Jefferson St., when ready to go to M.C.R.R., and be governed by his instructions.

All Southward trains will receive Terminal clearance from operator at "MX" Tower before leaving Saginaw Yard.

Trains Nos. 38 and 39 will use M.C.R.R. passenger station at Genesee Avenue for handling passengers.

Time shown at Saginaw is for information only.

All trains and engines at Durand will look out for A.A. Ry. first-class trains using Saginaw Subdivision main track between Holly Subdivision and A. A. diamond crossing and Junction Switch with Saginaw Subdivision and A.A. Ry. 200 feet north of G.T.W. main track.

BAY CITY TERMINAL

South Wye Switch leading to Bay City is located at Mileage 52.12. North Wye switch is located at Mileage 52.35.

Passenger trains arriving from the south will back through North Wye and go to Bay City.

Normal position of the Switch at the junction of the WYES will be for the South WYE.

Passenger trains will regularly use No. 6 track at Bay City Station.

ADDITIONAL TRACKS

Consumers Power Co. Track.—Mileage 44.61, Industrial Siding, holds 14 cars.

Lennon Sand & Gravel Track.—Mileage 3.83, connected at north end—holds 20 cars.

FIGHTING FIRES

An organization of Yard Employees has been inaugurated at each terminal for the extinguishing of fires, using yard locomotives equipped with fire extinguishing apparatus.

General alarm for calling engines or other assistance will consist of a succession of short blasts on the whistle, to be followed by a number of whistles showing location of fire, the alarm from switchers to be repeated until operator is sure same has been properly heard.

Enginemen and trainmen, upon an alarm of fire, will at once prepare to cut loose from train on which they are working, first clearing the main and ladder tracks and cross-over switches and proceed promptly to point of fire.

Yardmasters, Assistant Yardmasters, Train Dispatchers, Levermen and Switch Tenders must see that all engines are promptly relieved of the work in which engaged and given the right-of-way over all running tracks and switches in order that they may reach the fire with the least possible delay.

All yard employees are required to familiarize themselves with the working of fire apparatus, code of fire signals, limits of each district, and unite for the protection of company property.

The direction of fire operations will be in charge of Conductor of crew having fire apparatus; at fire, where either the Supervisor of Fire Protection or Chief of Fire Brigade is present, fire operations will be under their general direction.

JACKSON SUBDIVISION

WESTWARD TRAINS						EASTWARD TRAINS		
THIRD CLASS		Car Capacity of Sidings	Car Capacity of Other Tracks	Distance from Richmond	Time Table No. 7 Effective 1.01 A. M. Sunday, Sept. 24, 1939	Symbols— Rule 6	THIRD CLASS	
45	47						46	44
Mixed	Mixed						Mixed	Mixed
Ex. Sunday	Ex. Sunday						Ex. Sunday	Ex. Sunday
P. M.					L.		A. M.	
12.15			Yard	0.00	RICHMOND	TRYW	11.00	
12.35			45	7.28	ARMADA	T	10.30	
1.00		100	65	14.11	ROMEO	T	10.10	
1.15		24	14	19.88	WASHINGTON	T	9.35	
1.35			28	25.23	BAY CITY CROSSING		9.25	
1.60			31	26.31	ROCHESTER	T W	9.20	
2.05		44	10	31.08	AUBURN HEIGHTS	F	9.05	
2.15				33.00	M. A. L. JCT		8.55	
				35.29	M. A. L. CROSSING			
	A. M.						P. M.	
2.45	6.00				PONTIAC	K WCTY	3.15	
P. M.							A. M.	
	6.03			35.29	M. A. L. CROSSING		2.55	
	6.12		27	39.96	ORCHARD LAKE	T	2.40	
	6.27	44	19	47.59	WALLED LAKE	T	2.15	
	6.34		30	50.71	WIXOM	T W	2.00	
				53.76	SLATER'S PIT			
	6.50		82	55.14	NEW HUDSON	T Y	1.30	
	7.00	12N148	59	59.00	SOUTH LYON	T	1.05	
	7.07			61.74	★ RUSHTON		12.50	
	7.14			64.48	★ WHITMORE BEACH		12.40	
	7.23	21		67.42	HAMBURG	W	12.30	
	7.30		31	69.87	LAKE LAND	T	12.20	
	7.45		27	74.95	PINCKNEY	T	11.55	
	7.57			78.62	★ ANDERSON		11.41	
	8.08		30	82.48	GREGORY	T	11.30	
	8.24		40	87.64	STOCKBRIDGE	T	11.10	
	8.40		25	92.92	MUNITH	T	10.45	
	8.47		9	95.36	HENRIETTA		10.33	
	8.55		7	98.08	ROOT'S		10.25	
				102.16	NEW PRISON SIDING			
	9.15			104.38	M. C. R. R. CROSSING		10.05	
	9.20		Yard	105.92	JACKSON	K WCT	10.00	
	A. M.				A.		A. M.	
Ex. Sunday	Ex. Sunday						Ex. Sunday	
45	47						46	
							44	

Stations indicated by ★ have no side track

M. A. L. Junction is connection with Belt Line.

The passenger station at Pontiac is located on the Holly Subdivision, .83 mile west of M.A.L. Crossing. Conductors of Jackson Subdivision trains, before moving their trains to or from Pontiac station, will first make sure that the Holly Subdivision Main Track is clear and then proceed carefully.

All Grand Trunk Western trains will protect against Ann Arbor engines at Lakeland moving between G.T.W. station protecting signal located 2800 feet west of depot and G.T.W. distant signal 1960 feet east of depot.

ADDITIONAL TRACKS

Detroit Edison Co.	Mileage	20.94,	holds	27 cars,	connected at	East end
Ray Sand & Gravel Co., Runaround track	Mileage	22.51,	holds	26 cars,	connected at	Both ends
Ray Sand & Gravel Co., 2 Pit tracks	Mileage	23.14,	holds	51 cars,	connected at	East end
Ray Sand & Gravel Co., 2 Storage tracks	Mileage	52.80,	holds	92 cars		
Standard Gravel Pit	Mileage	53.28,	holds	103 cars,	connected at	East end

Train movements over M.A.L. diamond, Pontiac, will be governed by color light signals located at East Wye switch and at derail west of diamond. Normal position of East Wye switch will be for the Wye. From 9.00 a. m. to 5.00 p. m., signals operated by leverman; 5.00 p. m. to 9.00 a. m., trainmen will operate signals for M.A.L. movement.

CASS CITY SUBDIVISION

[illegible]

*Distance from Cass City

Normal position of north Cass City Subdivision switch, Pontiac, will be for Belt Line movement.

Normal position of WYE switches at Cass City will be for the Cass City Subdivision main track. The normal position of junction WYE switch will be for the North Wye.

At Imlay City, Cass City Subdivision trains go to Grand Trunk Flint Subdivision Station through the Wye to receive and discharge passengers, mail, baggage and express and must not foul Flint Subdivision Main Track unless under protection of a flag.

Cass City Subdivision train movements between the hours of 5 p. m. and 8 a. m. over Almont Street crossing, Imlay City, are to be protected by member of crew.

All trains must obtain terminal clearance from operator at Imlay City.

Freight service only between Bad Axe and Cass City.

All southward trains making Diamond stop at Pigeon, will stop just north of street crossing north of depot.

ADDITIONAL TRACKS

Scripp's Wildwood Spur.—Mileage 8.26, holds 7 cars, connected at North end.

Niebauer's Spur.—Mileage 88.73, holds 10 cars.
connected at South end.

Stewart Track.—Mileage 95.83, holds 13 cars, connected at Both ends.

SPECIAL INSTRUCTIONS

No Engineman or Conductor must undertake to handle an engine, with or without cars, over any portion of this Division or Terminal until he has learned the road, location and use of signals, passed an examination, on Grand Trunk Operating Rules and provided himself with a copy of current time-table.

Special attention is called to Rule 98 of the Operating Rules and General Regulations governing stopping at non-interlocked crossings. State Laws fix a severe penalty for employees who violate this requirement.

STANDARD CLOCKS indicating standard time are located as follows:—

Depot Master's office, Detroit, Telegraph office Milwaukee Jct., Pontiac, Durand, Grand Rapids, Plainfield Ave., Muskegon, Henry St., Greenville, Bay City, Bad Axe, Caseville, Jackson, Tunnel Yard, Port Huron. Also in Round House at Milwaukee Jct., Pontiac, Durand and Tunnel Yard.

TRAIN REGISTERS are located at:—

Saginaw Subdivision.—Durand and Bay City.

Holly and Grand Rapids Subdivisions.—Detroit, Milwaukee Junction, Pontiac, Durand, Grand Rapids, Plainfield Ave., and Grand Haven. Passenger trains only will register at Grand Rapids and Detroit.

Muskegon Subdivision.—Ashley, Greenville and Muskegon.

Mt. Clemens Subdivision.—Detroit, Milwaukee Jct., Port Huron and Tunnel Yard.

Jackson Subdivision.—Jackson, Pontiac and Richmond.

Cass City Subdivision.—Pontiac, Caseville, Bad Axe and Cass City.

Conductors of trains not requiring to stop at Register Stations will throw off O. S. Ticket Form. Operators will enter all information on same in register book. Failing to find O. S. Ticket, operator must not enter anything in register book except as authorized by train dispatcher.

Operators at Tappan will register first-class trains by message from train dispatcher.

BULLETIN BOOKS are located at following points:—

Telegraph Office:—	Bay City	Muskegon
Milwaukee Junction	Tunnel Yard	Jackson
Pontiac (Yard Office)	Port Huron	Tunnel Yard
Durand	Round House:—	Stationmaster's Office:—
Grand Rapids	Milwaukee Junction	Detroit
Plainfield Ave.	Pontiac	
Muskegon	Durand	
	Grand Rapids	

Derails must be set in proper position before main track switch is opened.

When freight trains handle passenger cars "Deadhead," such cars must be placed next ahead of the caboose. When the passenger cars carry passengers, they must be placed in rear of the caboose on rear of train.

In handling dead engines in trains they must be hauled with the pilot end ahead, and must, when practicable, be placed at least five cars from the train engine. If more than one dead engine in train they must be separated by at least five cars, speed to be governed as the condition of such engines permit.

Pile drivers, steam shovels, and other such machinery handled on a freight train, must be placed at least five cars ahead of the caboose, when train is handling as many as five cars other than those referred to. Boarding cars should in all cases be placed next to the caboose.

CANCELLATION OF SCHEDULES

Holly Subdivision Suburban trains 72, 74, 75, 76, 77 and 79: Grand Rapids Subdivision trains 50 and 51, 41-42: Muskegon Subdivision trains 41 and 42: Saginaw Subdivision trains 38 and 39: Jackson Subdivision trains 44, 45, 46 and 47 and Cass City Subdivision trains 49 and 52 will not run on the following holidays: New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day. When any of these holidays fall on Saturday, No. 83 will not run. When any of these holidays fall on Sunday, the following day (Monday) will be observed as a holiday and the above mentioned trains will not run.

OPERATION OF SPRING SWITCHES

West Pontiac and Double Track Switch, Mt. Clemens Subdivision

Normal position of spring switch is for facing point movement: color light signal located ten feet from switch governs facing point movement: **GREEN**, Proceed. **RED**, or

other restrictive indication—Stop: inspect switch and know that points are properly lined and free from obstruction before using. In removing obstructions from points, use bar or other suitable instrument to avoid injury. In event trailing point movement is stopped before entire train has passed over points, do not attempt to reverse movement until switch points have been **MANUALLY** lined and secured for such movement. Enginemen must not use sand while passing over spring switch. Do not exceed twenty (20) miles per hour over Switch.

OPERATION OF PLANT AT PENN. JCT.

This plant controls movement to and from Walker on the cut off, and to and from Grand Haven on Grand Rapids Subdivision.

Eastward distant signal located 3800 feet west of Junction switch on Grand Rapids Subdivision.

Eastward home signal located 300 feet west of junction switch on Grand Rapids Subdivision.

Westward distant signal 3600 feet east of Junction switch on Grand Rapids Subdivision. Westward home signal located 100 feet east of Junction switch on Grand Rapids Subdivision:—

GREEN indicates switch lined for Grand Rapids subdivision.

YELLOW indicates switch lined for cut-off.

RED indicates **STOP**.

Eastward distant signal on cut-off located 1825 feet west of Junction switch.

Eastward home signal on cut-off located 300 feet west of Junction switch:—

GREEN, Proceed.

RED, Stop.

Westward home signal on cut-off located 825 feet east of Junction switch at Walker governs movement to Pennsylvania main track.

GREEN, Proceed.

RED, Stop.

Eastward home signal located 100 feet west of Junction switch at Walker on Pennsylvania main track. Semaphore type, two-arm signal:—

LOWER ARM AT 45 DEGREES ABOVE HORIZONTAL OR YELLOW, INDICATES SWITCH LINED FOR CUT-OFF.

Eastward trains arriving Walker will accept clear home signal indication as authority to move to Penn. Jct. against superior trains.

The junction switches at Walker and Penn. Junction are of dual control type and, if for any reason, switches cannot be operated from tower, trainmen must get permission from operator at tower before attempting to disconnect switch from motor to operate it manually.

Switches which have been operated manually must be left in normal position by trainmen using them. Normal position is switch connected to operate electrically.

Set out track at Penn. Junction, not connected with interlocker has derails at each end operated from independent switch stand.

Telephone in booth at Junction switches at Walker and Penn. Junction, connected with tower located 2100 feet east of junction switch at Penn. Junction.

OPERATION FERRYSBURG JOINT SECTION

Grand Rapids Subdivision main track used jointly by trains and engines of the Grand Trunk Western and Pere Marquette Railroads between east junction switch at Ferrysburg and west junction switch located east of Munroe Street, Grand Haven. Approximately .60 mile of single track.

Normal position of junction switches for through movement of Pere Marquette trains and engines. East switch operated by bridge tender at Ferrysburg. West switch operated by Grand Trunk train crews, who will be held responsible for restoring switch to normal position after using.

All movements over the Joint Section made by automatic signal indication, which supersedes time table superiority and takes the place of train orders.

Low color-light automatic block signals showing two indications—**RED** and **GREEN**—located 180 feet east of east junction switch and 200 feet west of west junction switch. Westward signal, showing **GREEN** indication, also governs move-

ments over Ferrysburg drawbridge. Color light signal located 498 feet west of west end of drawbridge, showing **GREEN** indication, governs eastward movements over Ferrysburg drawbridge. This signal does not give block indication. All trains and engines will make stop for this non-interlocked drawbridge in accordance with Rule 98.

Pere Marquette northward trains and engines, intending to make eastward movement over the Joint Section, will approach the west junction switch at restricted speed and, if signal displays **GREEN** indication, may enter upon the Joint Section without stopping.

Eastward Grand Trunk trains and engines will not open west junction switch while the indicator at this switch shows **STOP**. If no train is seen to be approaching on the Joint Section and indicator does not show **CLEAR**, after waiting five minutes, trains and engines may proceed, when preceded by a flagman, to the east end of the Joint Section.

In event of failure of automatic signals, either westward or eastward, all trains and engines will move only when preceded by a flagman.

AUTOMATIC BLOCK SIGNALS

Automatic block signals are in operation between M.C.R.R. interlocker, Milwaukee Jct., and Huron St., Pontiac, and on Pontiac Belt Line track between Junction Wye switch west of Oakland Avenue bridge and west of Cass City Subdivision at Walton Blvd. Distant signal 1,000 feet north of north wye switch, Cass City Subdivision.

At Grand Rapids, westward, between Fuller Ave. and Coldbrook St., eastward from 150 feet east of M. P. 160 to 150 feet west of P.R.R. Diamond.

STATION SIGNALS

Signals protecting East Crossover at Aetna Portland Cement Co. plant. Eastward signal located at Mileage 53.4. Westward signal at Mileage 52.1.

Signals protecting switch at Corunna are located 2,500 ft. east of east siding switch and 2,100 ft. west of west siding switch.

Signals protecting Grand River Gravel Pit track between State Prison and Saranac are located 3,100 feet east of east switch and 2,500 ft. west of west switch.

SPEED RESTRICTIONS

When clear signals are shown where one railway crosses another at grade, trains must not exceed schedule speed until the entire train has passed the crossing, regardless of whether the crossing is interlocked or non-interlocked. These instructions supersede the third paragraph of Rule 98 in our Book of Operating Rules and General Regulations.

Engines running tender first, not equipped with pilot or without leading trucks, must not exceed twenty-five miles per hour.

Trains handling dead locomotives will not exceed 25 miles per hour with dead road locomotives and 15 miles per hour with dead switch engines with smaller wheels. 3500 class switch engines coming under road power regulations.

Speed of trains handling cranes (including industrial cranes), clam shells and steam shovels on own wheels and wrecking cranes, will not exceed twenty-five miles per hour; ten miles per hour when in, on or leaving sidings, and a slower rate of speed when in the judgment of the train and engine crew a slower rate of speed is necessary.

Conductors and Enginemen must not permit trains to be run at an excessive rate of speed descending grades, around sharp curves or through junction stations and large yards.

Other Restrictions as Follows:

Between —	Passenger	Freight
Detroit and Penn. Jct.	60	45
Penn. Jct. and Grand Haven	35	35
On Reverse Curve West of Muir	60	40
Terminal Jct. & Grand Rapids in back-up movement	12	25
Between Penn. Jct. and Walker	35	40
Milwaukee Jct. and Tappan	60	40
Ashley and Harvard	30	30
Harvard and Muskegon	25	25
Richmond and Mileage 33	50	40
Mileage 33 and New Hudson	33	25

SPECIAL INSTRUCTIONS—Continued

	Miles per Hr.
New Hudson and Jackson	Sched. Time 20
Pontiac and Oxford	50
Oxford and North Branch	40
North Branch and Caseville	32
Cass City and Bad Axe	25
Durand and Brent Creek	25
Brent Creek and Saginaw	40
Saginaw and Bay City	20
Jack engines on Cass City Subdivision, North Branch to Caseville, twenty miles per hour.	

Holly and Grand Rapids Subdivision—	All Trains
On Corunna Mine Track	10
Grand Rapids, Taylor Avenue—Engines with cars ahead or behind them and pushing cars after dark, stop in advance of crossing and make sure gates are lowered	
Coopersville—Eastmanville St.—Stop and flag across	
Spring Lake and Ferrysburg, over drawbridges	6

Muskegon Subdivision—	
Sheridan, over Main Street, stop before crossing Westward	
Mt. Clemens Subdivision—	
Movements over Smith's Creek Clay Pit track must be made carefully. Engines must not go beyond stop sign located 1,500 feet from end of track.	

Jackson Subdivision—	
Over Bay City Crossing	20
Mileage 64-18, over Whitmore Lake Bridge	6
Jackson, over Ganson St., flag across	
Jackson, over North St., Eastward, stop within 30 and 50 feet before crossing	

PONTIAC—All trains and engines must be brought to a stop before passing over Sanford St., Paddock St., and Jessie St., and crossing protected by a member of crew.

Saginaw Subdivision—	
Bay City, over Drawbridge	10
Bay City, over 11th St. and Midland St., stop within 30 and 75 feet and flag across	
Bay City, over State St., flag across	
Bridges—Mileage 48.99 and 50.03	8

YARD LIMITS

Yard Limit Boards are located as follows:—

DETROIT—Holly Subdivision. 1.66 miles west of State Fair (just east of Mileage 11).

Mt. Clemens Subdivision. 2600 feet east of Double Track Switch.

ROYAL OAK—1649 feet west of Passenger Station and just east of Mileage 11.

PONTIAC—Holly Subdivision. 15,504 feet east of M. A. L. Crossing and 2,525 feet west of West Pontiac.

Jackson Subdivision. 11,780 feet east and 19,626 feet west of Holly Subdivision Crossing.

Cass City Subdivision. 2,288 feet north of North Wye Switch.

DURAND—Holly and Grand Rapids Subdivisions. 8,000 feet east and 11,336 feet west of Passenger Station.

Saginaw Subdivision. 5,500 feet north of Passenger Station.

OWOSSO—1,000 feet east of Mileage 78. 1,580 feet west of Diamond Crossing at Owosso Jct.

PLAINFIELD AVE—11,800 feet east of Telegraph Office, 8,954 feet west of Fuller.

GRAND HAVEN—2,500 feet east of Spring Lake Passenger Station.

SAGINAW—One-half mile south of Saginaw Freight Yard and 5,534 feet north of Mershon.

BAY CITY—100 feet north of Brooks.

PORT HURON—Mt. Clemens Subdivision. 8,330 feet west of Tappan.

JACKSON—500 feet east of M. C. Crossing.

LAKELAND—2,815 feet west of Passenger Station.

RICHMOND—Mt. Clemens Subdivision. 4,017 feet east of most Easterly switch and 2,900 feet west of Station.

Jackson Subdivision, 7,815 feet west of Passenger Station.

OXFORD—12,540 feet north of Passenger Station and Mileage 12.71.

CASS CITY—Cass City Subdivision, 3,624 feet north and 9,244 feet south of Passenger Station.

D. & H. Ry., Mileage 2.

MUSKEGON—Mileage 90.28.

GREENVILLE—4,500 feet east and 5,257 feet west of Passenger Station.

ASHLEY—4,000 feet west of A.A. connection.

SPECIAL INSTRUCTIONS—Continued

RAILROAD GRADE CROSSINGS GOVERNED BY INTERLOCKING SIGNALS

Holly and Grand Rapids Subdivisions

DETROIT	Mack Avenue	D. S. R.
"	Forest Avenue	D. S. R.
"	Milwaukee Avenue	D. S. R.
MILWAUKEE JUNCTION		M. C. R.
FORD JUNCTION		D. T.
ROYAL OAK	Fourth Street	D. S. R.
PONTIAC	M. A. L. Crossing	Jackson Subdivision
HOLLY		P. M. Ry.
CORUNNA	Mine Track (Operated by G. T. W. Trainmen)	A. A.
IONIA		P. M. Ry.
MALTA		P. M. Ry.

Holly Subdivision train movement over M. A. L. diamond, Pontiac governed by standard interlocking signals of color light type, located each side of M. A. L. Crossing.

From 9.00 A. M. to 5.00 P. M. daily, signals will be operated by leverman.

From 5.00 P. M. to 9.00 A. M. daily, home signals will be normally clear for Holly Subdivision trains.

When home signals display "STOP" (Rule 601-A) between the hours of 5.00 P. M. and 9.00 A. M.: when no leverman is on duty, clearance card Form "D" cannot be delivered to engineman. Therefore trains may proceed, only after the conductor or brakeman has inspected the track within the interlocking limits and reports to the Engineman that the way over the crossing is known to be clear, and no trains closely approaching on the Jackson subdivision.

Muskegon Subdivision

GREENVILLE	P. M. Ry.
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Mt. Clemens Subdivision

TAPPAN.....	Flint Subdivision	
“.....	P. M. Ry.	
MT. OLIVET.....	Van Dyke Avenue.....	D. S. R.
FOREST LAWN.....	D. T.
“.....	M. C. R. R.
MILWAUKEE JUNCTION.....	One-half mile east.....	M. C. Belt
“.....	Beaubien Street.....	M. C.

Jackson Subdivision

BAY CITY CROSSING.....	M. C.
PONTIAC.....M. A. L. Crossing.....	Holly Subdivision
WIXOM.....	P. M.
SOUTH LYON.....	P. M. Ry.
LAKELAND.....	A. A.
JACKSON.....One mile east.....	M. C.

Cass City Subdivision

OXFORD	M. C.
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Saginaw Subdivision

SAGINAW	Dead Line	P. M. Brewster St. Spur
"	Emerson Street	M. C.
MERSHON		P. M.
ZILWAUKEE		Consumers Power Co.
BAY CITY	Main Street (Operated by G. T. W. Trainmen)	M. C.
"	Hart Street (Operated by G. T. W. Trainmen)	M. C.

RAILROAD GRADE CROSSINGS GOVERNED BY SIGNALS (NOT INTERLOCKED)

Holly and Grand Rapids Subdivisions

		Position of Signal Indicating Proceed to G. T. Trains
MILWAUKEE JUNCTION	Mt. Clemens Subdivision	When way is known to be clear
DURAND	A. A.	Color Light
"	Flint Subdivision	Gate
OWOSSO JUNCTION	M. C.	Color Light
FULLER	P. M.	Gate
"	Pennsylvania	Gate

SPECIAL INSTRUCTIONS—Continued

RAILROAD GRADE CROSSINGS
GOVERNED BY SIGNALS (NOT INTERLOCKED)—Continued

Muskegon Subdivision

Position of Signal Indicating
Proceed to G. T. Trains

SIMPSON	P. M.	Gate	Across P. M.
SPARTA	P. M.	Gate	Across P. M.
CEDAR SPRINGS	P. R. R.	Gate	Across P. R. R.

Mt. Clemens Subdivision

MILWAUKEE JUNCTION	Holly Subdivision	When way is known to be clear
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Cass City Subdivision

CLIFFORD	P. M.	Target	Perpendicular
WILMOT	D. C. & S.	Semaphore	Lower blade depressed
PIGEON	P. M.	Semaphore	Lower blade depressed
PONTIAC	Belt Line		When way is known to be clear

Saginaw Subdivision

DURAND	Flint Subdivision	Gate	Across Flint Subdivision tracks and proceed hand signal
"	Port Huron Wye	Gate	Across wye and proceed hand signal
SAGINAW—Sheridan Avenue	P. M. Belt	Gate	Across P. M. track
BAY CITY—Water Street	M. C. Belt	Gate	Across M. C. track
MERSHON to SALZBURG	M. C. Sidings	Gates	Normal position clear for G. T. and G. T. trains not required to stop
MERSHON	M. C. R. R.	Derail (No Signals)	Normal position clear for M. C. G. T. Trainmen operate.

DRAWBRIDGES.—The State Law requires all trains and engines to stop before passing over the following drawbridges that are not interlocked:—

Location	Subdivision	Signals	Proceed Indication
SPRING LAKE	GRAND RAPIDS	Semaphore	Top arm vertical
FERRYSBURG	"	Color lights	Green
BAY CITY	SAGINAW	Two-arm Semaphore, each end of bridge	Top arm vertical

OTHER SIGNALS

Location	Subdivision	Type	Trains Governed	Proceed Indication
OWOSSO JUNCTION	GRAND RAPIDS	Semaphore Fixed	Eastward	Caution
BETWEEN WIXOM and NEW HUDSON	JACKSON—Mileage 53.56	Semaphore Fixed	East- and Westward	Horizontal, Caution
LAKELAND	"	Semaphore Fixed	Eastward	Horizontal, Caution
IMLAY CITY	CASS CITY	Semaphore Fixed	North- and Southward	Stop and Proceed
OWENDALE	"	Semaphore Fixed	North- and Southward	Horizontal, Caution

JOINT MAIN TRACKS

FORD JUNCTION.—First cross-over east of interlocker and main track joint with Detroit Terminal R. R. G. T. time table and rules govern.

HOLLY.—Main track from P. M. Crossing to House Track Switch joint with Pere Marquette. G. T. time table and rules govern.

OWOSSO JCT.—From A. A. connection to Cedar St. joint with A. A. R. R. G. T. W. time table and rules govern.

FULLER.—Main track from wye track switch at Broadway to first switch east joint with Pere Marquette. G. T. time table and rules govern.

FULLER.—P. M. main track from wye track switch at Broadway to Long Siding joint with Pere Marquette. Pere Marquette time table and rules govern.

WALKER and HENRY ST., MUSKEGON.—Joint with Pennsylvania. P. R. R. time table and rules govern.

SIMPSON and SHAW.—Joint with M. R. & N. P. R. R. time table and rules govern.

SIMPSON and MUSKEGON.—Joint with P. R. R. G. T. W. time table and rules govern.

FERRYSBURG.—Joint with Pere Marquette. From East Junction Switch to West Switch, East of Monroe St., Grand Haven.

GREENVILLE.—P. M. main track from wye switch to first switch south of diamond joint with Pere Marquette. P. M. time table and rules govern. Train order must be obtained from P. M. dispatcher to occupy above section.

WEST DETROIT TO BEAUBIEN STREET.—Main track joint with Wabash Ry. G. T. time table and rules govern.

WEST DETROIT TO DIX AVENUE.—Use Wabash main track in making moves to M. C. stockyards. Wabash time table and rules govern.

WEST DETROIT TO DEAROAD.—Use Wabash and Detroit & Toledo Shore Line main tracks and be governed by their time tables and rules when occupying respective tracks.

JACKSON.—From M. C. R. R. interchange to New Prison Siding, joint with M. C. R. R. G. T. W. time table and rules govern.

SOUTH LYON.—P. M. main track from interchange track switch to house track switch joint. P. M. time table and rules govern.

OWENDALE.—Main line through yard joint with Michigan Central. G. T. time table and rules govern.

DURAND.—Saginaw Subdivision main track from Holly Subdivision crossing to junction switch 200 feet north of Flint Subdivision crossing joint with Ann Arbor.

SAGINAW.—Main track from cross-over at Howard Street south 5,420 feet to Saginaw Improvement Company's spur, joint with Pere Marquette. G. T. time table and rules govern.

MAIN TRACK FROM MERSHON TO MEREDITH ST. JUNCTION JOINT WITH MICHIGAN CENTRAL RY.—M. C. time table and rules govern.

PORT HURON DISTRICT

All engines with or without cars in either direction between Tappan and Port Huron must move with train under control, prepared to stop within the distance in which main track is known to be clear.

TAPPAN AND PORT GRATIOT, via Court Street.—Use Chicago Division time table.

DETROIT TERMINAL DISTRICT

Brush St. to Mileage 10.81 Holly Subdivision and W. Detroit to Double Track Switch Mt. Clemens Subdivision

Operation of single track between Clay Ave. and Boulevard, Milwaukee Jct., is controlled from M. C. R. R. interlocker at Milwaukee Jct.

No. 1.—Special passenger trains, extra freight trains, switch engines and light engines, may run without orders in Detroit Terminal under the rules and special instructions.

No. 2.—Trains leaving Brush Street Station, Detroit, will not be required to obtain a Terminal Clearance.

No. 3.—Yard crews, when making movements from Holly Subdivision to Mt. Clemens Subdivision or vice-versa at Milwaukee Junction, must first ascertain whether all first-class trains which are overdue have departed.

No. 4.—Trains moving from Holly Subdivision to Mt. Clemens Subdivision via the Sugar House Wye will use westward main line from crossover switch located 404 feet west of Wye switch at Clay Avenue, but must not pull through crossover and occupy westward main line until switches and signals are lined up for Wye movement. In making this move, use westward main track on Mt. Clemens Subdivision from east Wye switch to crossover, 531 feet east of Wye switch. ALL TRAINS AND YARD ENGINES MUST BE UNDER CONTROL, EXPECTING TO FIND WESTWARD MAIN TRACK OCCUPIED. Trains and yard engines moving from Mt. Clemens Subdivision to Holly Subdivision via Sugar House Wye will not proceed until switches and signals are lined up for Wye movement and will then proceed with caution.

No. 5.—All movements made from side track to the main track or across main tracks must be fully protected.

No. 6.—A Detroit City Ordinance prohibits the use of engine whistle within the city limits except when required in case of great danger, or to prevent accident.

No. 7.—Engines, with or without cars, are not permitted to operate on Atwater Street between Brush Street and Public Lighting Plant, except between the hours of 12.20 a. m. and 4.00 a. m.

No. 8.—A trainman must ride on the rear car of every train while moving through Detroit Terminal, and be in position to communicate signals and apply brake in case of train parting.

No. 9.—In case of delay to train within the Terminal or any derailment or accident involving accident to property or person, report must be sent at once to Terminal Superintendent, Milwaukee Jct.

No. 10.—Switch runs must have air coupled and air brakes in service in making runs between yards. Trainmen, when backing passenger equipment into Brush Street Depot, must see that air is coupled up and in service, and a trainman riding on rear end with back-up hose controlling movement. Speed of movements should be such as to insure absolute safety.

No. 11.—When necessary to switch over a highway crossing, a member of the crew will be stationed on the crossing to afford protection to pedestrians and vehicles.

No. 12.—When leaving cars in the vicinity of crossing, no part of car must stand beyond the building line of street, and not then when it is possible to place car a greater distance from the highway.

No. 13.—The conductor or his representative must in all cases look over the cars and tracks before beginning work to ascertain if any obstructions under or about the cars, or if men are working in the cars. Obstructions will be removed and men warned before work is begun.

No. 14.—Before coupling onto cars on a track which is down grade, conductors will see that sufficient brakes are set to prevent cars getting away while couplings are being made. In order to avoid injury to persons or damage to property, conductors will see that air is coupled and in operation while switching at points where down grade is severe. Cars cut away from those attached to the engine must have hand brakes set so as to secure them in case air in brake cylinder for any reason fails to hold the cars.

No. 15.—Motor- and Hand-Cars must not exceed a speed of ten miles per hour within the Detroit Terminal, and at street crossings where there are no gates they must not exceed a speed of four miles per hour.

WARNING.—Overhead bridges between Milwaukee Junction and Riopelle Street will not clear a man on top or side of a car. Trainmen must not attempt to pass under these bridges on top of a car.

No car or dead engine must be placed on or foul of a siding without protection or permission from Superintendent or Trainmaster.

Enginemen, Trainmen and Yardmen are warned not to ride on top or side of engine or cars passing through any tunnel, subway or under any overhead bridge protected by tell-tales, or where it is known such structure will not clear a man on top of car; they are also warned not to ride on side of engine or car passing high switch stands, water columns, stock chutes or other obstructions known to be closer than six feet to the nearest rail, AND WHEN APPROACHING OR PASSING OVER ANY THROUGH TRUSS BRIDGE.

On either side of overhead bridges on this Division that will not clear a man on top of a box car, tell-tales or warning signals consisting of pieces of rope suspended from a wire have been located.

Some trainmen have tied ropes together and thrown them up over wires so that the rope would clear a man on top of a car, thereby exposing other employees to imminent danger.

Employees guilty of removing or intentionally displacing these ropes, except to repair or renew same, will be dismissed from the service of the Company.

Conductors will be expected promptly to report such cases by wire, also notify the Trainmaster by wire where tell-tales or warning signals are required, or where they are not in proper place.

Trainmen are warned to look out for the following overhead bridges which will not clear a man standing on the top of a box car:—

LOCATION

Highway Crossing.....1 Mile East of Dewey
Highway Crossing.....1 mile West of Dewey
Highway Crossing.....¼ mile West of Dewey
Highway Crossing.....East end long siding, Plainfield Ave.
Highway Crossing.....2 miles West of Fuller
Highway Crossing.....1¾ miles West of Marne
Drawbridge.....Ferryburg
Highway Crossing.....½ mile West of Orchard Lake
Highway Crossing.....1¼ miles West of Lakeland
Farm Crossing.....1 mile West of Gooding
Under Crossing, Main Line at Imlay City.
Joslyn Road, Perry St., Mt. Clemens St. and Featherstone Avenue, on Belt Line, Pontiac.

The unauthorized use of motor cars, velocipedes, hand- and push-cars is forbidden. When operated where there is more than one main track, should be run in the direction of traffic; at the same time a careful watch must be kept at all times for approaching diverted trains. When used on a single track, trains may be expected from either direction.

At streets where there are gates, motor-cars must not cross until the gates are lowered.

Should anyone using this Time Table have any doubt as to its meaning, it is his duty to apply to the Superintendent or Trainmaster for the proper explanation.

LIST OF SURGEONS

Dr. G. W. Stockwell, Regional Medical Officer, Detroit, Mich., 801 Stroh Bldg.

Detroit.....Dr. W. H. Parker, Oculist
1025 David Whitney Bldg.

Detroit.....“ Don Campbell, Oculist
1613 David Whitney Bldg.

Detroit.....“ Benj. W. Stockwell, District Surgeon
801 Stroh Bldg.

Milwaukee Jct.....“ F. S. Curry, Local Surgeon
7721 Oakland Ave.

Royal Oak.....“ D. A. Cameron, Local Surgeon

Birmingham.....“ Geo. P. Raynale, Local Surgeon

Pontiac.....“ E. V. Howlett, District Surgeon

Pontiac.....“ H. B. Yoh, Local Surgeon

Holly.....“ C. E. Lockwood, Local Surgeon

Fenton.....“ J. B. Sauber Local Surgeon

Durand.....“ L. F. Bates, District Surgeon

Durand.....“ V. E. Linden, Local Surgeon

Owosso.....“ A. L. Arnold, Jr., District Surgeon

St. Johns.....“ Sherwood R. Russell, District Surgeon

Ionia.....“ F. M. Marsh, District Surgeon

Grand Rapids.....“ George L. Riley, 1404 Plainfield Ave.

Grand Haven.....“ S. L. DeWitt, Local Surgeon

Muskegon.....“ F. W. Garber, Jr., District Surgeon

Greenville.....“ Wm. Bird, Local Surgeon

Carson City.....“ F. H. Furgeson, Local Surgeon

Bay City.....“ J. W. Gustin, District Surgeon

Saginaw.....“ D. C. Durman, Local Surgeon

Mt. Clemens.....“ H. G. Berry, Local Surgeon

Richmond.....“ O. F. Banting, District Surgeon

Port Huron.....“ T. H. Cooper, District Surgeon
1002½ Military St.

Jackson.....“ R. C. Fraser, Oculist, 940 Military Ave.

South Lyon.....“ E. S. Peterson, District Surgeon

Kingston.....“ M. Millman, Local Surgeon

Imlay City.....“ Geo. Bates, Local Surgeon

Oxford.....“ C. C. Jackson, Local Surgeon

Milwaukee, Wis.....“ E. A. Lass, Local Surgeon

205 W. Greenfield Ave.

GENERAL

On double track a flagman sent out in advance must not be recalled, but picked up.

On double track all trains and light engines, when passing other trains in the immediate vicinity of highway crossings, will reduce speed and look out carefully for persons or vehicles that may attempt to cross the track immediately behind train clearing the crossing.

On double track, yard engines running against the current of traffic will protect such moves against other trains and engines.

Rule 22 is amended as follows: When two or more engines are coupled and displaying signals for following section, each engine will display the signals.

Extras may run ahead of third-class trains without train orders.

At all public highway crossings protected by flash light signals at which a reverse switch movement is being made, a member of the train crew must in every instance precede the movement and flag the crossing.

No car or cars must be left closer than 50 feet to any street or highway crossing.

All Train Service Employees will provide themselves with copy of “New Form 8914, Instructions to All Train Service Employees Relative to Operation and Care of Train Equipment.”

AIR BRAKES.—Air brakes must be in service while switching occupied passenger equipment, also while switching equipment on or off occupied passenger equipment or boats.

Switch runs and yard engine must have air coupled and air brakes in service when making runs between yards.

Impassable track will be protected in accordance with Operating Rule No. 42 and second paragraph of Rule No. 43 on the following subdivisions:—

Cass City Subdivision, between Imlay City and Caseville, and between Cass City and Bad Axe; Jackson Subdivision, between New Hudson and Jackson; Muskegon Subdivision, between Ashley and Muskegon; Saginaw Subdivision, between Durand and Bay City

Note.—Trains brought to a stop behind a preceding train must leave headlight dimmed until train ahead is in motion, trainmen safely on caboose and signals have been exchanged.

Trains moving through yard limits on other than assigned tracks will be governed by written instructions over the signature of Yardmasters who will be held responsible for safety of such movement. Enginemen handling trains must use caution.

The following code of signals to be used in connection with Rule 90 B.

HOT JOURNALS.—By day: Hold nose with first finger and thumb of right hand and point down toward track with left hand. By night: Swing lamp in small vertical circle, lamp to be held in hand by the guard wires around the globe.

CONNECTION DRAGGING.—By day or by night: Stop signal to be given.

CAR DOOR SWINGING OR ABOUT TO FALL OFF.—By day: Raise and lower right hand full length of body slowly. By night: Same signal with hand lamp. In addition, give stop signal.

BRAKES STICKING.—By day: Shove hand in sliding movement out from body. By night: Same signal to be given with lamp in hand.

ALL CLEAR.—By day: Raise hand and hold it stationary. By night: Quick, sharp “All Right” signal.

TELEPHONES

A telephone connected with Train Dispatcher's circuit is in all telegraph offices: Port Huron to Detroit, inclusive, and Detroit to Durand, inclusive.

Listening Telephones are in Interlocking Tower at:— Forest Lawn.

Listening Telephones at:—

Tunnel Yard (In Yard Office)	Drayton Plains (In Depot)
Milwaukee Jct.	Andersonville (In Station)
(In M. C. Tower)	Davisburg (In Station)
Chesterfield (In Station)	Paxton (In Booth)
Detroit, Holbrook Avenue (D. & M. Yard Office)	Durand (At East End South Siding)
Ford Jet	Detroit East Yard (In Yard Office, East End and West End)
Ferndale (In Yard Office)	Detroit (In Booth) Double Track Switch East of Gillen Yard
In Booth near Hilton Road West of Ferndale Yard.	East Detroit (Booth)
Royal Oak (10 Mile Road)	
Birmingham (on platform)	
Foot Street (In Tower)	
Pontiac, Johnson Avenue (In Yard Office)	

EXTRACTS FROM CITY AND VILLAGE ORDINANCES

Saginaw Subdivision

BAY CITY.—All westward or southward engines, with or without cars, must come to a stop not less than thirty feet nor more than seventy-five feet from the east street line of 13th and Water Streets at Bay City, and sound the regular crossing whistle signal before passing over same; this refers to the M. C. R. R. crossing near the Industrial Works.

All engines, with or without cars, will come to a stop not less than thirty feet nor more than seventy-five feet from Midland, Henry, State, Belinda and 11th Street crossings, Bay City, and one of the engine or train crew will flag over these Street crossings.

SAGINAW.—Michigan Public Utilities Commission orders covering crossing protection at various streets:—

At Holden Ave., all switch movements over the transfer track to Michigan Central Connection at Meredith Street, must be protected by member of train or yard crew on ground with flag.

At Holden Ave., Meredith St. and Hoyt St. on old main line, all movements must be protected by member of train or yard crew on ground with flag.

At Thompson St., Washington St., Genesee St. and Davenport St., all movements on old main line must be brought to a stop before crossing street and member of train or yard crew must flag over street with a flag.

Holly and Grand Rapids Subdivisions

GRAND RAPIDS.—Crossings at West Leonard and Sixth Sts. on Terminal Line are protected 7.00 a. m. to 6.00 p. m. daily, except Sunday, and from 12.45 p. m. to 6.00 p. m. Sunday.

All movements over these crossings during the time crossings are not protected, must be brought to a stop and flagged by a member of crew.

No person or persons shall blow or cause to be blown any steam whistle within the limits of the City of Grand Rapids between the hours of 6.30 P. M. and 6.00 A. M. No person or persons shall blow or cause to be blown a steam whistle of a locomotive within the limits of the City of Grand Rapids between the hours of 6.00 A. M. and 6.30 P. M. for a street crossing at which there is an auto-

matic electric signal, flasher, gates, or other devices installed for warning the general public of an approaching train, and that the blast of a steam whistle not herein prohibited shall not exceed three seconds.

Provided, that locomotive whistles may be blown when the same is necessary to avoid collision or for the purpose of signaling to preserve property or life, or when whistle signals are prescribed by the laws and regulations of the United States Government.

IONIA.—Engine bells to be rung continuously while engine or cars are in motion within city limits.

ST. JOHNS.—Crossing protection signals at Lansing, Ottawa, Clinton and Mead Streets, are operated continuously during each twenty-four hours by track circuit on main track, but NOT on side tracks. Extreme caution must be observed in moving on side tracks.

HOLLY.—Unlawful to sound engine whistle within village limits except as an alarm signal in case of fire, collision or other imminent danger, or in connection with proper protection of train.

ROYAL OAK.—All trains will sound highway crossing whistle signal when approaching Lincoln Street; and at Fourth Street Crossing, where the D. S. R. track crosses Holly Subdivision.

Jackson Subdivision

JACKSON.—Engine whistle not to be blown except to prevent accident; engine bell to be rung continuously while engine or cars are in motion, approaching street crossing, or when starting near a street crossing.

No engine, car or cars or train of cars to stop in or remain standing upon any street or railroad crossing, except in case of accident, for more than five minutes.

The cylinder cocks of any engine shall not be open so as to permit steam to escape therefrom at any time while running upon or along any street or where the engine is in immediate proximity to any street or railroad crossing; Provided, however, that when such engines shall be standing at such point and for four revolutions of the driving wheels after being put in motion, the said cocks may be opened for the purpose of allowing condensed steam to escape.

Person violating ordinance subject to a fine of not less than \$5 nor more than \$25.

SPEED TABLE

Time per Mile	Miles per Hour	Time per Mile	Miles per Hour	Time per Mile	Miles per Hour	Time per Mile	Miles per Hour
0 min. 36 sec.	100.00	1 min. 30 sec.	40.00	2 min. 24 sec.	25.00	3 min. 18 sec.	18.18
0 " 37 "	97.30	1 " 31 "	39.56	2 " 25 "	24.83	3 " 19 "	18.09
0 " 38 "	94.74	1 " 32 "	39.13	2 " 26 "	24.66	3 " 20 "	18.00
0 " 39 "	92.31	1 " 33 "	38.71	2 " 27 "	24.49	3 " 21 "	17.91
0 " 40 "	90.00	1 " 34 "	38.30	2 " 28 "	24.32	3 " 22 "	17.82
0 " 41 "	87.80	1 " 35 "	37.89	2 " 29 "	24.16	3 " 23 "	17.73
0 " 42 "	85.71	1 " 36 "	37.50	2 " 30 "	24.00	3 " 24 "	17.65
0 " 43 "	83.72	1 " 37 "	37.11	2 " 31 "	23.84	3 " 25 "	17.56
0 " 44 "	81.82	1 " 38 "	36.73	2 " 32 "	23.68	3 " 26 "	17.48
0 " 45 "	80.00	1 " 39 "	36.36	2 " 33 "	23.53	3 " 27 "	17.39
0 " 46 "	78.26	1 " 40 "	36.00	2 " 34 "	23.38	3 " 28 "	17.31
0 " 47 "	76.60	1 " 41 "	35.64	2 " 35 "	23.23	3 " 29 "	17.22
0 " 48 "	75.00	1 " 42 "	35.29	2 " 36 "	23.08	3 " 30 "	17.14
0 " 49 "	73.47	1 " 43 "	34.95	2 " 37 "	22.93	3 " 31 "	17.06
0 " 50 "	72.00	1 " 44 "	34.62	2 " 38 "	22.78	3 " 32 "	16.98
0 " 51 "	70.59	1 " 45 "	34.29	2 " 39 "	22.64	3 " 33 "	16.90
0 " 52 "	69.23	1 " 46 "	33.96	2 " 40 "	22.50	3 " 34 "	16.82
0 " 53 "	67.92	1 " 47 "	33.64	2 " 41 "	22.36	3 " 35 "	16.74
0 " 54 "	66.67	1 " 48 "	33.33	2 " 42 "	22.22	3 " 36 "	16.67
0 " 55 "	65.45	1 " 49 "	33.03	2 " 43 "	22.08	3 " 37 "	16.59
0 " 56 "	64.29	1 " 50 "	32.73	2 " 44 "	21.95	3 " 38 "	16.51
0 " 57 "	63.16	1 " 51 "	32.43	2 " 45 "	21.82	3 " 39 "	16.44
0 " 58 "	62.07	1 " 52 "	32.14	2 " 46 "	21.69	3 " 40 "	16.36
0 " 59 "	61.02	1 " 53 "	31.86	2 " 47 "	21.56	3 " 41 "	16.29
1 " 0 "	60.00	1 " 54 "	31.58	2 " 48 "	21.43	3 " 42 "	16.22
1 " 1 "	59.02	1 " 55 "	31.30	2 " 49 "	21.30	3 " 43 "	16.14
1 " 2 "	58.06	1 " 56 "	31.03	2 " 50 "	21.18	3 " 44 "	16.07
1 " 3 "	57.14	1 " 57 "	30.77	2 " 51 "	21.05	3 " 45 "	16.00
1 " 4 "	56.25	1 " 58 "	30.51	2 " 52 "	20.93	3 " 46 "	15.93
1 " 5 "	55.38	1 " 59 "	30.25	2 " 53 "	20.81	3 " 47 "	15.86
1 " 6 "	54.55	2 " 0 "	30.00	2 " 54 "	20.69	3 " 48 "	15.79
1 " 7 "	53.73	2 " 1 "	29.75	2 " 55 "	20.57	3 " 49 "	15.72
1 " 8 "	52.94	2 " 2 "	29.51	2 " 56 "	20.45	3 " 50 "	15.65
1 " 9 "	52.17	2 " 3 "	29.27	2 " 57 "	20.34	3 " 51 "	15.58
1 " 10 "	51.43	2 " 4 "	29.03	2 " 58 "	20.22	3 " 52 "	15.52
1 " 11 "	50.70	2 " 5 "	28.80	2 " 59 "	20.11	3 " 53 "	15.45
1 " 12 "	50.00	2 " 6 "	28.57	3 " 0 "	20.00	3 " 54 "	15.38
1 " 13 "	49.31	2 " 7 "	28.35	3 " 1 "	19.89	3 " 55 "	15.32
1 " 14 "	48.65	2 " 8 "	28.12	3 " 2 "	19.78	3 " 56 "	15.25
1 " 15 "	48.00	2 " 9 "	27.91	3 " 3 "	19.67	3 " 57 "	15.19
1 " 16 "	47.37	2 " 10 "	27.69	3 " 4 "	19.57	3 " 58 "	15.13
1 " 17 "	46.75	2 " 11 "	27.48	3 " 5 "	19.46	3 " 59 "	15.06
1 " 18 "	46.15	2 " 12 "	27.27	3 " 6 "	19.35	4 " 0 "	15.00
1 " 19 "	45.57	2 " 13 "	27.07	3 " 7 "	19.25	4 " 17 "	14.00
1 " 20 "	45.00	2 " 14 "	26.87	3 " 8 "	19.15	4 " 36 "	13.00
1 " 21 "	44.44	2 " 15 "	26.67	3 " 9 "	19.05	5 " 0 "	12.00
1 " 22 "	43.90	2 " 16 "	26.47	3 " 10 "	18.95	5 " 27 "	11.00
1 " 23 "	43.37	2 " 17 "	26.28	3 " 11 "	18.85	6 " 0 "	10.00
1 " 24 "	42.86	2 " 18 "	26.09	3 " 12 "	18.75	6 " 40 "	9.00
1 " 25 "	42.35	2 " 19 "	25.90	3 " 13 "	18.65	7 " 30 "	8.00
1 " 26 "	41.86	2 " 20 "	25.71	3 " 14 "	18.56	8 " 34 "	7.00
1 " 27 "	41.38	2 " 21 "	25.53	3 " 15 "	18.46	10 " 0 "	6.00
1 " 28 "	40.91	2 " 22 "	25.35	3 " 16 "	18.37	12 " 0 "	5.00
1 " 29 "	40.45	2 " 23 "	25.17	3 " 17 "	18.27		