GREAT NORTHERN RAILWAY

CASCADE DIVISION.

TIME TABLE No. 77

TO TAKE EFFECT AT TWELVE-ONE (12:01) O'CLOCK A. M.
PACIFIC TIME.

SUNDAY, OCTOBER 15, 1911

Superseding Time Table No. 76 and all Supplements thereto.

THIS TIME TABLE IS FOR THE USE OF EMPLOYES ONLY.

J. H. O'NEILL, Superintendent.
F. S. ELLIOTT, Asst. General Superintendent.
E. L. BROWN, General Superintendent.
W. C. WATROUS, General Supt. of Transportation.
GEO. H. EMERSON, Asst. General Manager.
J. M. GRUBER, General Manager.

2 **WEST BOUND.** **FIRST DISTRICT—LEAVENWORTH TO EVERETT JUNCTION.**

THIRD CLASS.					SECOND CLASS.				FIRST CLASS.						CAPACITY OF SIDE TRACKS		Distance from Leavenworth	Time Table No. 77 In Effect Oct. 15, 1911.	Telegraph Calls
				715				411		401		285	27	43	1	3	Passing Tracks	Other Tracks		STATIONS.	
				Mdse. Freight				Fast Freight		Fast Freight		Passenger	Fast Mail	Passenger	Passenger	Passenger					
				Leave Daily Ex. Sunday				Leave Daily		Leave Daily		Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily					
								1.00pm		8.00am			11.40pm	4.25pm	1.35pm	2.30am	60	492		LEAVENWORTH	CH
								1 1.53		8.45			11.58	4.43	411 1.53	2.48	67		6.3	6.3 DRURY	DY
								4 2.45		9.15			12.09am	f 4.55	2.04	3.00	184	22	10.5	4.2 CHIWAUKUM	CY
								3.05		9.30			12.16	5.08	2.11	3.08	58	5	13.0	2.5 WINTON	
								3.25		9.45			12.22	5.12	2.18	f 3.17	69	5	17.5	4.5 NASON CREEK	
								3.40		10.00			2 12.33	s 5.19	s 4 2.25	s 44 3.27	135	41	20.5	3.0 MERRITT	CK
								4.30		10.55			12.44	5.40	2.45	3.45	70		24.9	4.4 GAYNOR	GR
								5.05		11.30			12.54	f 5.55	3.00	4.00	140		28.0	3.1 BERNE	BR
								5.50 43 6.30		12.30pm			s 1.08	s 411 6.15	s 3.20	s 35 4.20	75	165	32.3	4.3 CASCADE TUNNEL	CN
								6.45		12.55			s 1.21	s 6.30	s 3.35	s 4.35	90	91	35.9	3.6 TYE	WN
								7.05		4 1.25			1.31	6.41	3.46	4.46	63	9	39.5	3.6 ALVIN	NY
								7.20		1.40			1.40	6.49	3.55	4.54	54	12	42.2	2.7 COREA	
								7.40		2.05			44 1.50	s 7.00	s 4.06	s 5.04	69	6	45.2	3.0 SCENIC	MA
								7.55		2.20			2.00	f 7.10	4.15	5.13	60	6	48.3	3.1 NIPPON	GI
								8.10		2.35			2.10	f 7.20	4.25	5.23	60		51.8	3.5 TONGA	G
				9.00am				8.30 9.00		3.00 3.30		7.30am	s 2.25 28 2.30	s 7.35 7.40	s 4.40 4.45	s 5.35 5.40	73	184	57.0	5.2 SKYKOMISH	KY
				9.15				9.20		3.45		f 7.42	2.40	286 7.55	4.55	5.50	68	7	61.1	4.1 GROTTO	
				9.40				2 9.51		4.00		s 7.55	2.50	8.07	5.06	6.02	67		66.1	5.0 HALFORD	SA
				10.15				10.05		4.20		s 8.10	3.01	s 8.22	5.19	6.14	78	18	71.2	5.1 INDEX	NX
				10.35				10.20		4.40		f 8.20	3.10	8.32	5.29	6.24	68	2	76.3	5.1 REITER	
				4 11.13				10.30		4.55		s 8.30	3.16	s 8.47	5.38	6.38	69	45	80.0	3.7 GOLD BAR	GB
				11.30								s 8.38	3.21	s 8.55	5.43	6.38		18	82.4	2.4 STARTUP	RU
				11.55				10.45		5.20		s 8.48	3.27	2 s 9.08	5.51	6.45	55	22	85.8	3.4 SULTAN	SU
				12.55pm				11.05		1-286 6.10		s 9.05	3.41	s 9.19	286-401 s 6.10	s 7.02	91	42	93.3	7.5 MONROE	RO
				1.55				44 11.29		6.40		s 9.25	3.55	s 9.37	s 6.28	s 7.18	52	25	100.2	6.9 SNOHOMISH	S
				2.35				11.50		7.00		s 9.37	4.05	9.47	6.40	7.28	60	30	106.0	5.8 LOWELL	W
												f 9.40	4.08	9.52	6.43	7.32	44	100	107.6	1.6 PACIFIC AVENUE	D
												s 9.52	s 4.17	s 10.02	s 6.53	s 7.42			108.7	1.1 EVERETT	
												s 9.55am	4.20am	10.05pm	6.55pm	7.45am			109.5	1 EVERETT JUNCTION	JN
				6.10pm				12.30am		8.00pm							85	600	109.3	Via N. P. Ry. DELTA	PG
				Arrive Daily Ex. Sunday				Arrive Daily		Arrive Daily		Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily					
				715				411		401		285	27	43	1	3					
				6.10 8.0				11.30 9.5		12.0 9.1		2.25 21.8	4.40 23.4	5.40 19.3	5.20 20.6	5.15 21.				Time Over District Average Speed Per Hour	

ELECTRIC TRAIN STAFF BLOCK SYSTEM

Read carefully Rules covering Operation Electric Train Staff Block, Pages 12 and 13.

Time Table No. 77.
In Effect Oct. 15, 1911.

STATIONS.	Distance from Delta	SIGNS. See Rule 7, page 15.	FIRST CLASS. 28 Express Arrive Daily	4 Passenger Arrive Daily	2 Passenger Arrive Daily	44 Passenger Arrive Daily	286 Passenger Arrive Daily
LEAVENWORTH	109.5	R● DN WCTYOP	s 6.00Am	s 3.15Pm	s 1.25Am	s 4.20Am	
6.3 DRURY	103.2	DN P	5.40	2.57	1.07	4.02	
4.2 CHIWAUKUM	99.0	DN W P	5.30	411 2.45	12.57	3.52	
2.5 WINTON	96.5	DN P	5.25	2.39	12.51	3.46	
4.5 NASON CREEK	92.0	DN P	5.11	f 2.32	12.41	3.36	
3.0 MERRITT	89.0	DN WY P	5.03	f 1 2.25	27 12.33	3 3.27	
4.4 GAYNOR	84.6	DN P	4.51	2.15	12.19	3.15	
3.1 BERNE	81.5	DN W P	4.40	2.07	12.09Am	3.02	
4.3 CASCADE TUNNEL	77.2	R DN W T P	s 3 4.20	s 1.55	s 11.57	s 2.50	
3.6 TYE	73.6	●DN WC P	s 4.02	s 1.40	s 11.40	s 2.32	
3.6 ALVIN	70.0	DN W P	3.42	401 1.25	11.23	2.13	
3.7 COREA	67.3	DN P	3.32	1.15	11.13	2.02	
3.0 SCENIC	64.3	DN W P	s 3.20	s 1.03	s 11.02	s 27 1.50	
3.1 NIPPON	61.2	DN W P	3.04	f 12.48	10.45	1.34	
5.5 TONGA	57.7	DN P	2.52	f 12.37	10.33	1.22	
5.2 SKYKOMISH	52.5	R● DN WC Y P	s 2.35 27 2.30	s 12.20 12.15	s 10.15 10.10	s 1.05 1.00	s 8.10Pm
4.1 GROTTO	48.4	P	2.20	12.04Pm	10.01	12.51	f 43 7.55
5.0 HALFORD	43.4	D W P	2.10	11.58	411 9.51	12.40	s 7.35
5.1 INDEX	38.3	DN P	1.56	s 11.38	9.37	12.27	s 7.18
6.1 REITER	33.2	W P	1.44	11.20	9.25	12.15	f 7.00
4.7 GOLD BAR	29.5	DN Y P	1.37	715 11.13	9.18	12.08	s 6.50
2.4 STARTUP	27.1	P	1.33	11.08	9.14	12.04Am	s 6.43
3.4 SULTAN	23.7	D P	1.27	s 11.02	43 9.08	11.58	s 6.33
7.5 MONROE	16.2	DN W Y P	s 1.18	s 10.49	s 8.54	s 11.44	s 1-401 6.10
6.9 SNOHOMISH	9.3	DN P	s 12.56	s 10.32	s 8.39	s 411 11.29	s 5.55
5.8 LOWELL	3.5	R DN P	12.48	10.20	8.27	11.17	s 5.37
1.6 PACIFIC AVENUE	1.9	DN Y P	12.40	10.15	8.24	11.14	s 5.34
1.1 EVERETT	0.8	K	s 12.36	s 10.10	s 8.20	s 11.10	s 5.30
8 EVERETT JUNCTION	0.0	R DN P	12.30Am	10.05Am	8.15Pm	11.05Pm	5.20Pm
Via N. P. Ry. DELTA		R● DN WCTYOP					
			Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily
			28	4	2	44	286
Time Over District			5.30	5.10	5.10	5.15	2.50
Average Speed Per Hour			20.8	21.2	21.2	21.0	18.9

ELECTRIC TRAIN STAFF BLOCK SYSTEM

Special Rules.

West bound trains are superior to east bound trains of the same class.

No 27 is superior to all other trains. Opposing first class trains will clear No. 27 five (5) minutes.

Other opposing trains will clear No. 27 ten (10) minutes.

All west bound trains must be clear at the time No. 27 is due to leave the next station in the rear where time is shown.

Freight trains will use N. P. tracks between Lowell and Delta and will be governed by N. P. time table and rules between these points.

Freight trains on ascending grade in either direction between Leavenworth and Skykomish will take siding at meeting point.

All trains will reduce speed to eight miles per hour through Martin Creek Tunnel and over bridges at either end.

All trains will reduce speed to ten miles per hour over crossing just east of Pacific Ave. Freight House.

Additional to other required tests of the air brake, no train will leave Cascade Tunnel until the air brakes have been carefully tested. Engineer will set the brakes and leave them set until trainmen examine each car, then release them, and trainmen will again examine each car and see that brakes release before giving the signal to start the train. Conductors must inform engineers how many cars loaded and empty in the train, and how many cars of "air" are working.

All retainers must be used from Cascade Tunnel to Merritt, and from Chiwaukum to Leavenworth, and from Cascade Tunnel to Skykomish.

Trains are operated between a block post, 125 feet west of the east crossover switch Cascade Tunnel and the safety switch west end depot at Tye, by a train staff block system. No train or engine will be run in either direction between the limits mentioned unless train engineman and the engineman of helper engine each has in their possession a section of a staff which will be handed to them by operators and will be retained by them until entire train has cleared block, then sections of staff must be handed to operator. When no helper engine is used, or when any cars behind helper, conductor or brakeman located on rear of train must be in possession of one-half of the staff.

Only one train is permitted to enter or use the block at the same time.

Bulletin boards are located at Leavenworth, Cascade Tunnel, Skykomish, Delta.

Semaphore located 1200 feet east of switch at Holmquist Spur half-mile east of Monroe.

Berlin and Baring and B. B. & R. Spur two miles east of Index will be flag stop for Nos. 285 and 286.

No. 43 stops at any station to let off passengers from east of Colbert.

No. 44 stops at any station to pick up passengers for points south of Shelby.

Yard limit boards placed each way from Skykomish, Cascade Tunnel and Leavenworth, and east from Pacific Avenue.

INITIAL STATIONS.

Leavenworth for trains Nos. 3, 1, 43, 27, 401 and 411.
Everett Jct. for trains Nos. 28, 4, 2, 44 and 286.
Skykomish for trains Nos. 285 and 715.

TERMINAL STATIONS.

Leavenworth for Nos. 28, 4, 2 and 44.
Skykomish for train No. 286.
Everett Jct. for trains 3, 1, 43, 27 and 285
Delta, 401, 411 and 715.

DERAIL SWITCHES.

Derail switches must always be set for derail except when in actual use, whether there are any cars on the tracks or not
Cascade Tunnel east passing track lead, 30 feet from main line.
Tye, west end Industry track.
Tye Safety Switch, 70 feet west of station, on main line.
Scenic Industry track.
Grotto, 150 feet east of west head block Industry track.
Halford passing track 150 feet east of west head block.
Index Industry track 120 feet from west head block.
Monroe Mill Spur, 200 feet from head block.
Derail Brewery Spur, Pacific Ave., 210 feet from head block.
Frye-Bruhn Spur, 120 feet from Crossing Agnew Hardware Co. Spur
Power House Spur, 105 feet from head block

LAP SIDINGS.

Chiwaukum and Merritt. When trains meet at these points, rule 99 is modified to the extent that inferior trains will enter the switch at the lap.

Business tracks not shown as stations on time table.

NAME	LOCATION	OPENS	LENGTH	CAR CAPACITY
Nippon Lumber Co.'s Spur	At Nippon	West		4
Seattle-Boston Copper Co. Spur	0.8 Miles west of Tonga	East	300 feet	3
Skykomish Mill Co.'s Spur	0.3 Miles west of Skykomish	East		20
Great Republic Mining Co., Berlin	1.6 Miles west of Skykomish	West		14
Berlin Spur, Miller River Co	1.5 Miles west of Skykomish	West		4
Grotto Lumber Co	0.3 Miles east of Grotto	East	1200 feet	25
G. N. Shingle Co.'s Siding	3.5 Miles west of Grotto	Both ends		24
Baring Cedar Co. Spur	Off of G N. Sbgl Siding	East		18
Baring Granite Spur		West	450 feet	
B. B. & R. Spur	2.0 Miles east of Index	West		5
Heybrook Spur	1.5 Miles east of Index	East		2
Smith Lumber Co	0.5 Miles east of Index	East		12
Soderburg Spur	0.7 Miles west of Index	West		10
Robinson's Spur	0.5 Miles west of Gold Bar	East		26
Casey's Spur	0.1 Miles east of Sultan	East		5
Owen's Spur	4.7 Miles east of Monroe	East		3
Holmquist Spur	0.5 Miles east of Monroe	East		4
Monroe Mill Spur	0.3 Miles east of Monroe	East		18
Monroe Gravel Pit	0.0 Miles west of Monroe	West		10
Wagner & Wilson Lbr. Co. Spur	0.5 Miles west of Monroe	West		25
Woodruff	2.0 Miles west of Monroe	Both ends		24
Cascade Lumber Co. Spur	0.1 Miles east of Snohomish	East		27
Creosote Spur	0.5 Miles east of Lowell	West		25
House Track	0.0 Miles east of Lowell	East		25

SECOND DISTRICT—EVERETT JUNCTION TO SEATTLE.

WEST BOUND.

THIRD CLASS			SECOND CLASS				FIRST CLASS.										CAPACITY OF SIDE TRACKS		Distance from Everett Junction	Time Table No. 77. In Effect Oct. 15, 1911		Telegraph Calls
		717				401	43	355	1	273	359	277	285	3	357	27	Passing Tracks	Other Tracks		STATIONS.		
		Mdse. Freight				Fast Freight	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Fast Mail						
		Leave Daily				Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily						
		4.00Pm				2.30Am	10.05Pm	8.20Pm	27s 6.55Pm	5.35Pm	718 2.10Pm	10.05Am	9.55Am	7.45Am	6.40Am	4.20Am				EVERETT JUNCTION	DOUBLE TRACK.	JN
		4.35				2.45	10.12	8.27	7.03	s 5.45	2.16	s 10.15	10.02	7.52	s 6.50	4.27		68	3.8	3.8 MUKILTEO		MU
		5.05				2.55	10.20	8.33	7.10	f 5.53	2.22	f 10.23	10.09	8.00	f 6.58	4.35			7.9	4.1 MOSHER		
		5.25				3.05	10.26	8.38	7.17	f 6.00	2.27	f 10.30	10.14	8.06	f 7.05	4.42		5	10.9	3.0 MEADOWDALE		AD
		6.00				3.25	10.34	8.45	7.24	s 6.10	2.33	s 10.40	10.21	8.15	s 7.15	4.51		37	14.8	3.9 EDMONDS		DR
		6.30				3.35	10.40	8.51	7.31	s 6.18	2.38	s 10.49	10.26	8.21	f 7.23	4.59		50	17.8	3.0 RICHMOND BEACH		R
		7.00				4.05	10.51	9.02	7.42	6.29	2.47	11.00	10.36	360 8.32	f 7.35	5.12			24.0	6.2 METUM		UN
		7.10				4.20	10.58	9.08	7.50	s 6.37	2.53	s 11.12	10.43	8.39	s 7.45	5.20		183	26.9	2.9 BALLARD		BD
		2 7.20Pm				4.30Am	11.02	9.12	7.55	s 6.42	2.57	s 11.17	10.47	8.43	s 7.50	5.25	80	626	28.0	1.1 INTERBAY		RB
							11.07	9.17	8.00	6.47	3.02	11.22	10.52	8.48	f 7.55	5.30		415	29.3	1.3 G. N. DOCK	Double Track	Z
							s 11.20Pm	s 9.30Pm	s 8.15Pm	s 7.00Pm	s 3.15Pm	s 11.35Am	s 11.05Am	4 s 9.00Am	s 8.10Am	s 5.45Am		533	32.7	3.4 SEATTLE		UD
								10.30Pm	8.35Pm		3.45Pm				10.00Am	6.00Am				SEATTLE	Via N. P. Ry.	
								s 11.50Pm 11.59	s 10.10Pm		s 5.00 5.05				s 11.20 11.30	s 7.05Am			73.4	40.7 TACOMA		
								s 6.00Am			s 10.00Pm				s 5.00Pm				215.8	142.4 PORTLAND		
		Arrive Daily				Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily						
		717				401	43	355	1	273	359	277	285	3	357	27						
		3.20 8.4				2.00 14.0	1.15 26.2	1.10 28.2	1.20 24.5	1.25 23.0	1.05 30.1	1.30 21.8	1.10 28.2	1.15 26.2	1.30 21.8	1.25 23.0				Time Over District Average Speed Per Hour		

Special Rules.

West bound trains are superior to east bound trains of the same class.

No. 27 is superior to all other trains. Opposing first class trains will clear No. 27 five (5) minutes.

Other opposing trains will clear No. 27 ten (10) minutes.

All west bound trains must be clear at the time No. 27 is due to leave the next station in the rear where time is shown.

Double track between Everett Jct. and Metum and between G. N. Dock and Seattle

285 meets No. 4 and 718.
277 meets 718.
717 meets 286, 358 and 278.
273 meets 278, 358 and passes 717.
270 passes 718.
No. 1 meets No. 2.
No. 43 meets No. 44 and 712 on double track between Metum and Mukilteo.

357 meets 360 on double track between G. N. Dock and Seattle.

All trains will reduce speed to 8 miles per hour passing through town limits of Edmonds and Ballard.
Control Manual Block System is in operation between Pacific Avenue and Everett Jct. between Metum and G. N. Dock.
Trains entering double track at Everett Jct. and Metum and at G. N. Dock and Seattle will not exceed speed of ten miles per hour.
Ballard, Edmonds and Mukilteo are flag stops for No. 4 to take passengers for Spokane or points east of Spokane.
Mile post 10 between Metum and Richmond Beach will be flag stop for 277 and 278.
Trains 1 and 2 will stop at stations between Tacoma and Seattle to pick up or let off passengers for or from points east of Seattle complying with N. P. time table schedule.
Ballard will be flag stop for No. 2 to take passengers for Spokane or points east of Spokane.
No. 43 will stop at any station to let off passengers from east of Colbert.
No. 44 will stop at any station to pick up passengers for points south of Shelby.
All Great Northern Trains between Seattle and Vancouver, Wash., will be governed by time table and rules of Northern Pacific Railway.
All Great Northern trains between Vancouver, Wash., and Portland will be governed by time table and rules of Spokane, Portland & Seattle Railway.
Yard limit boards east of Ballard covers limits to Seattle.
Bulletin boards are located at Interbay and Seattle.

INITIAL STATIONS.
Seattle for trains Nos. 360, 4, 270, 358, 286, 278, 2, 44, 28, 356.

TERMINAL STATIONS.
Interbay for trains Nos. 401 and 717.

DERAIL SWITCHES.
Mukilteo Lumber Co., Spur, 144 feet from head block.
Richmond Beach, 120 ft west H. B. Industry track.

INTERLOCKER governing C. M. & P. S. Crossing, just east of Drawbridge No. 4, Ballard.
Distant signal west bound located three thousand feet from crossing on right hand side of industry track, and is a bracket signal.
Home signal is located 600 feet from crossing on right hand side of industry track, and is a bracket signal. The lower arm is fixed, and denotes home signal, with derail fifty-five feet in advance.
Distant signal, west bound, is located twenty feet west of fixed signal for draw bridge No. 4. This signal is automatic.
Home signal east bound is located 500 feet from crossing under trestle, and has two arms. Lower arm is fixed, and denotes home signal, with derail fifty-five feet in advance of signal.
Printed instructions are posted in cabin for operation of this plant. Cabin is locked with G. N. and C. M. & P. S. Ry. switch locks, so can get in cabin to operate plant.

INTERLOCKING governing N. P. Ry. Crossing just west of Interbay yard:
Westbound home signal is located 300 feet east of crossing. Eastbound home signal is located 300 feet west of crossing. Both home signals have two arms. Top arm works from zero to 90 degrees up and is semi-automatic. Lower arm is fixed and denotes home signal.
Derails are located 55 feet in advance of home signals. Distance signal eastbound is located 3000 feet from eastbound home signal and works zero to 45 degrees up and is authomatic. Derails and dwarf signals on G. N. yard track are 150 feet from crossing, east and west.
Derails on N. P. track are located 200 feet from crossing, with dwarf signal 5 feet from them.
Printed instructions posted in cabin for the operation of this plant. Cabin is locked with a G. N. switch lock and an N. P. switch lock, so trainmen from both roads will have keys to get into cabin to operate plant.
Derail on N. P. transfer track near Glass Works Spur in operation. Derail is pipe connected with switch stand.
Trainmen using this switch should see that all cars and engines are clear of derail before closing switch.

Business Tracks Not Shown as Stations on Time Table.

NAME	LOCATION	OPENS	LENGTH	CAR CAPACITY
Mukilteo Shingle Spur	0.7 miles east of Mukilteo	West		3
Doucett Spur	0.5 miles east of Mukilteo	West		2
Mukilteo Lumber Co.	2.1 miles east of Mukilteo	West		10
Brown Bay Logging Co. Connection	0.5 miles west of Meadowdale	West		.
Invincible Railjoint Spur	0.4 miles west of Edmonds	East		8
E. W. Mills Spur	2.3 miles west of Richmond Beach	East		2
		West		10

EAST BOUND.

SECOND DISTRICT—EVERETT JUNCTION TO SEATTLE.

Time Table No. 77.
In Effect Oct. 15, 1911

STATIONS.	Distance from Seattle	SIGNS. See Rule 7, page 15.	FIRST CLASS.										SECOND CLASS.				THIRD CLASS		
			360	4	270	286	358	278	2	44	28	356	712				718		
			Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Express	Passenger	Fast Freight				Mdse. Freight		
			Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily				Arrive Daily		
DOUBLE TRACK — EVERETT JUNCTION	32.7	R DN P	285 9.25Am	10.05Am	1.20Pm	5.20Pm	5.40Pm	1 6.50Pm	8.15Pm	11.05Pm	12.30Am	1.10Am	11.59Pm				1.30Pm		
3.8 MUKILTEO	28.9	D P	s 9.19	9.58	s 1.12	f 5.11	5.33	s 6.40	8.09	10.59	12.23	s 12.58	11.50				1 12		
4.1 MOSHER	24.8	P	f 9.10	9.51	1.02	f 5.01	5.26	f 6.31	8.02	10.52	12.16	f 12.48	11.35				12.35		
3.0 MEADOWDALE	21.8	D	f 9.08	9.46	12.56	f 4.55	5.21	f 6.24	7.57	10.47	12.11	f 12.40	11.25				12.20		
3.9 EDMONDS	17.9	D W P	s 8.55	9.40	s 12.50	s 4.47	5 14	s 6.16	7.50	10.40	12.06Am	s 12.32	11.15				12.01Pm		
3.0 RICHMOND BEACH	14.9	D P	s 8.44	9.34	s 12.41	s 4.38	5 09	s 6.09	7.45	10.35	11.59	f 12.24	11.05				11.05		
6.2 METUM	8.7	DN	3 8.32	9.25	12.30	f 4.25	5.00	5.57	7.34	10.25	11.50	f 12.11	10.50				10.25		
2.9 BALLARD	5.8	D	s 8.23	9.19	12.24	f 4.19	4.54	s 5.50	7.29	10.19	11.44	s 12.05	10.40				10.10		
1.1 INTERBAY	4.7	R● DN WCTOPK	s 8.15	9.15	12.20	f 4.15	4.50	s 5.45	717 7.25	10.15	11.40	s 12.01Am	10.30Pm				10.00Am		
DOUBLE TRACK — 1.3 G. N. DOCK	3.4	DN P	8.10	9.10	12.15	f 4.10	4.45	5.40	7.20	10.10	11.35	f 11.55							
3.4 SEATTLE	.0	R DN I P K	8.00Am	3 9.00Am	12.05Pm	4.00Pm	4.35Pm	5.30Pm	7.10Pm	10.00Pm	11.25Pm	11 45Pm							
VIA N. P. RY. — SEATTLE	183.1		s 7.30Am				s 4.15Pm		s 6.50Pm		s 11.10Pm	s 11.15Pm							
40.7 TACOMA	142.4		6.05 6.00Am				3.00 s 2.55Pm		5.25Pm		10.00Pm	10.05 s 10.00							
142.4 PORTLAND	.0		12.15Am				10.00Am					5.00Pm							
			Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily				Leave Daily		
			360	4	270	286	358	278	2	44	28	356	712				718		
Time Over District			1.20	1.05	1.15	1.20	1.05	1.20	1.05	1.05	1.05	1.25	1.29				3.30		
Average Speed Per Hour			24.6	30.1	26.1	24.6	30.1	24.6	30.1	30.1	30.1	23.0	20.6				8.1		

Automatic Block Interlocking Signals and Semaphores

Everett Junction interlocking, westbound home signal, (high line), is located 200 feet from westbound crossover switch, and has three arms; the top arm is for main line trains through crossover; the second arm fixed; bottom arm for diverging movements.

Westbound Home Signal, Coast line, is located fifty-five feet from east end of eastbound crossover switch and has three arms; top arm is for main line; second arm fixed; bottom arm crossover movements.

Distant signals, westbound high line and Coast line, are located 3500 feet from home signal, and work from zero to 45°.

First automatic signal west bound, is 2500 feet west of Everett Junction. From first automatic signal to Metum, they are located about 7500 feet apart.

G. N. Dock to Seattle first automatic signal westbound is located 500 feet from G. N. Dock; second 3000 feet; third signal is distant signal for North Portal Interlocking Plant.

First automatic signal east bound is located 3000 feet from eastbound home signal, North Portal; second 3000 feet from first one; next signal is Manual Controlled Block for G. N. Dock.

First automatic signal at Metum is located 3000 feet west of end of double track, and works from zero to 45°. Signal at 45° shows clear track to second automatic signal located on double track. From Metum to Everett Junction, signals are about 7500 feet apart, to Home signal for interlocking plant at Everett Junction.

Eastbound home signal, Everett Junction Interlocking is located 200 feet from west end of eastbound crossover switch, and has two arms; Top arm is for main line to St. Paul, lower arm for crossover up the Coast line.

Semaphores at Pacific Avenue and Metum for westbound trains, and at G. N. Dock and Everett Junction for eastbound trains, will be used for manual controlled block.

For Further Instructions and Diagrams see page 14.

THIRD DISTRICT—EVERETT JUNCTION TO BELLINGHAM.

SOUTH BOUND.

Time Table No. 77.
In Effect Oct. 15, 1911.

THIRD CLASS			SECOND CLASS.	FIRST CLASS.						CAPACITY OF SIDE TRACKS		Distance from Bellingham	STATIONS.	Telegraph Calls
717	713		711	279	355	273	359	277	357	Passing Tracks	Side Tracks			
Mdse. Freight	Mdse. Freight		Fast Freight	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger					
Leave Daily	Leave Daily Ex. Sunday		Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily					
	712 6.30Am		358 7.50Pm	5.10Pm	6.05Pm	2.40Pm	12.05Pm	7.10Am	3.00Am	42	202	0.0	BELLINGHAM	HM
	7.00		8.15	s 5.20	s 6.15	s 714 2.52	s 360 12.15	s 7.20	s 3.15	47	30	2.9	2.9 SOUTH BELLINGHAM	FN
	7.15		8.30	f 5.30	6.22	f 3.00	12.23	f 7.30	f 3.30	67	8	6.9	4.0 SOCKEYE	
	277 7.40		8.45	5.42	6.32	f 3.10	12.33	f 713 7.40	f 356 3.50	68	8	12.5	5.6 SAMISH	
				f 5.48		s 3.14		f 7.43			10	13.2	0.7 BLANCHARD	
	280 8.40		278 9.02	s 5.58	6.39	s 270 3.25	12.40	s 7.50	s 4.03	68	17	16.6	3.4 BOW	BO
	9.05		9.30	s 6.10	6.46	s 3.35	714 12.47	s 7.58	s 4.14	27		21.2	4.6 BELLEVILLE	BV
	9.15 10.30 714		10.15	s 6.20Pm	s 358 6.55	s 3.47	s 12.55	s 280 8.10	s 712 4.30	48	225	23.8	2.6 BURLINGTON	BU
	360 11.10		10.35		s 7.05	s 4.02	s 1.03	s 8.22	s 4.45	44	38	27.9	4.1 MT. VERNON	NR
	11.35		11.00		7.13	s 4.13	1.12	s 8.33	s 5.02	67	20	33.3	5.4 FIR	FR
						s 4.18		s 8.38			4	35.0	1.7 MILLTOWN	
	12.25Pm		11.35		7.25	s 4.28	1.24	s 714 8.47	s 5.20	68	33	40.4	5.4 STANWOOD	B
	1.00		11.55		7.34	s 4.40	1.33	s 9.06	s 5.35	29		45.9	5.5 SILVANA	NA
	1.35 356 2.05 270		12.15Am		278 7.42	f 4.50	713 1.40	f 9.17	f 5.47	68	17	50.0	4.1 ENGLISH	
	3.05		12.45		7.52	s 5.06	270 1.50	s 9.33	s 6.06	67	17	57.0	7.0 MARYSVILLE	MS
3.35Pm	3.30Pm		1.00Am		7.58	5.12	718 1.56	s 9.41	714 6.15			59.7	2.7 DELTA WYE	
3.40					8.01	5.16	1.59	360 9.45	6.20	37		60.7	1.0 LONG SIDING	
3.50					s 8.15	s 5.25 5.32	s 2.08	s 10.02	s 6.37		145	63.3	2.6 EVERETT	
4.00Pm					8.20Pm	5.35Pm	2.10Pm	10.05Am	6.40Am			64.1	0.8 EVERETT JUNCTION	JN
Arrive Daily	Arrive Daily Ex. Sunday		Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily					
717	713		711	279	355	273	359	277	357					
0.25 10.5	9.00 6.6		5.10 12.0	1.10 20.4	2.17 28.5	2.55 22.	2.05 30.5	2.47 23.	3.40 17.3				Time Over District Average Speed Per Hour	

Special Rules.

South bound trains are superior to north bound trains of the same class.

All trains will reduce speed to 8 miles per hour passing through town limits of Marysville, Mount Vernon, Burlington and over Bond Street and Hewitt Ave., Everett.

Side clearance Tunnel 20, one-quarter mile south of Sockeye, not good. Clearance four feet, standard six feet.

Register for Delta Wye is located on ground floor interlocking plant.

Bulletin boards are located at Burlington and Bellingham.

Norman, one mile north of Silvana is flag stop for Nos. 277 and 278.

Steam whistle signals for tracks with switches controlled from Interlocking Towers.

Main Line—One Long.
Delta Yard from North—One Long, One Short.
Delta Yard from South—Two Long, One Short.
Delta Yard North—Two Long.
Delta Yard South—Three Long, One Short.

Semaphore located 1200 feet south of south switch South Bellingham.

Yard limit boards placed each direction Burlington, South Bellingham and Bellingham.

All trains will reduce speed to 8 miles per hour over all draw bridges.

Everett yard limits includes Delta yard and from North end of Draw Bridge 11 to yard limit board south of Everett Junction.

INITIAL STATIONS.

Blaine for trains Nos. 277, 711 and 720.
Bellingham for trains Nos. 279 and 713.
Burlington, for train No. 280.
Delta Wye, for trains Nos. 712, 714, 717.
Everett Jct., for trains Nos. 270, 358, 360, 356, 278, 718 and 712.
Fraser River Jct., for trains Nos. 386 and 398.
New Westminster, for train No. 385.
Vancouver, for trains Nos. 359, 355, 273, 357, 397 and 719.

TERMINAL STATIONS.

Blaine for trains Nos. 278, 712 and 719.
Bellingham, for trains Nos. 280 and 714.
Burlington, for train No. 279.
Delta Wye, for trains Nos. 711, 713, 718.
Everett Jct., for trains Nos. 359, 355, 273, 357 and 277.
Fraser River Jct., for trains Nos. 385 and 397
New Westminster, for train No. 386.
Vancouver for trains Nos. 270, 358, 360, 356, 398 and 720.

DERAIL SWITCHES.

Chuckanut, east end siding.
B. B. & E. Transfer Track east end.

Interlocking System.—Governing movement of trains N. P. crossing and Bridge 10 just north of Delta Wye.

All south bound trains from Vancouver will be governed by a Two Arm Home Signal located 700 feet north of draw span. Top arm at 90 degrees up proceed to Two Arm Home Signal located 20 feet north of N. P. crossing, top arm at 90 degrees up proceed to Bayside. lower arm 90 degrees up proceed to Delta yard. A Caution Fixed Signal is located 2500 feet north of Two Arm Home Signal.

Train movements from Bayside to Vancouver will be governed by top arm on Two Arm Home Signal located 60 feet south of wye switch, and by Two Arm Home Signal located on trestle 500 feet south of draw span. A Caution Fixed Signal is located 2000 feet south of wye switch.

Train movements from Delta to Vancouver will be governed by top arm on Two Arm Home Signal located 60 feet south of wye switch, and by Two Arm Home Signal located on trestle 500 feet south of draw span.

Trains between Delta and Bayside will be governed by bottom blade on two blade semaphore located 60 feet south of wye switch.

Interlocking system in use bridge 10, 11 and 12 between Delta and Marysville and at Skagit R. R. Crossing one mile south of Fir.

NORTH BOUND.

THIRD DISTRICT—EVERETT JUNCTION TO BELLINGHAM.

Time Table No. 77.
In Effect Oct. 15, 1911.

STATIONS.	Distance from Everett Junction	SIGNS. See Rule 7, page 15	FIRST CLASS. 356 Passenger Arrive Daily	360 Passenger Arrive Daily	270 Passenger Arrive Daily	358 Passenger Arrive Daily	278 Passenger Arrive Daily	280 Passenger Arrive Daily	SECOND CLASS. 712 Fast Freight Arrive Daily	THIRD CLASS 714 Mdse. Freight Arrive Daily Ex. Sunday	718 Mdse. Freight Arrive Daily
BELLINGHAM	64.1	R⊗ DN CWTK	s 4.25Am	s 12.30Pm	s 4.00Pm	s 711 7.45Pm	s 9.40Pm	s 9.30Am	713 6.30Am	3.30Pm	
2.9 SOUTH BELLINGHAM	61.2	D W	s 4.12	s 359 12.15	s 3.49	s 7.33	s 9.29	s 9.15	6.15	273 2.52	
4.0 SOCKEYE	57.2		f 4.02	f 12.03Pm	3.41	7.25	f 9.20	f 9.04	6.00	2.35	
5.6 SAMISH	51.6	W	357 3.50	11.51	3.31	7.15	f 9.10	8.51	5.40	2.00	
0.7 BLANCHARD	50.9			s 11.48			f 9.08	f 8.49			
3.4 BOW	47.5	D	s 3.38	s 11.41	273 3.25	7.09	s 711 9.02	s 713 8.40	5.25	1.20	
4.6 BELLEVILLE	42.9	D	s 3.28	s 11.31	3.16	7.00	s 8.53	s 8.27	5.10	359 12.47	
2.6 BURLINGTON	40.3	R DN COWYX	s 3.20	s 714 11.25	s 3.10	s 355 6.55	s 8.47	277 8.20Am	5.00 357 4.30	12.15Pm 360 10.30 713	
4.1 MT. VERNON	36.2	DN	s 3.05	s 713 11.10	s 2.55	s 6.45	s 8.34		4.10	10.00	
5.4 FIR	30.8	D	s 2.45	s 10.53	s 2.42	6.37	s 8.20		3.50	9.20	
1.7 MILLTOWN	29.1			s 10.46	f 2.36		s 8.14				
5.4 STANWOOD	23.7	DN	s 2.25	s 10.37	s 2.27	6.26	s 8.05		3.25	277 8.47	
5.5 SILVANA	18.2	D W	s 2.11	s 10.23	s 2.15	6.18	s 7.51		3.05	8.15	
4.1 ENGLISH	14.1		f 1.59	f 10.18	713 2.05	6.11	f 355 7.42		2.50	7.35	
7.0 MARYSVILLE	7.1	DN	s 1.42	s 9.59	s 359 1.50	6.01	s 7.25		2.15	6.45	
2.7 DELTA WYE	4.4	R I Y	1.30	9.49	1.40	5.55	7.10		2.00Am	357 6.15Am	359 1.55Pm
1.0 LONG SIDING	3.4		1.27	277 9.45	1.37	5.52	7.07				1.45
2.6 EVERETT	0.8		s 1.20	s 9.35	s 1.30	s 5.47	s 7.00				1.35
0.8 EVERETT JUNCTION	0.0	R DN	1.10Am	9.25Am	1.20Pm	5.40Pm	6.50Pm				1.30Pm
			Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily Ex. Sunday	Leave Daily
			356	**360**	**270**	**358**	**278**	**280**	**712**	**714**	**718**
Time Over District			3.15	3.05	2.40	2.05	2.50	1.10	4.30	9.15	0.25
Average Speed Per Hour			19.7	20.	23.8	30.5	22.2	20.4	13.2	6.7	10.5

Business tracks not shown as stations on time table.

NAME	LOCATION	OPENS	LENGTH	CAR CAPACITY
Chuckanut Quarry Spur	1.0 Miles north of Sockeye	North		38
Chuckanut Cannery Spur	0.7 Miles north of Sockeye	North		3
Blanchard Spur	0.5 Miles south of Samish	North		30
Winner Shingle Co.'s Spur	0.2 Miles south of Bow	North		6
Sound Shingle Co's Spur	2.9 Miles north of Belleville	South		6
Burlington Quarry	0.5 Miles north of Burlington	South		11
Lamar Spur	1.5 Miles south of Burlington	South		2
Little Mountain Spur	1.7 Miles south of Mt. Vernon	South		3
Skagit Crossing Tr. Track	0.9 Miles south of Fir	South		6
Hawley Spur	1.3 Miles south of Fir	North		6
Morrison Mill Spur	2.1 Miles south of Fir	South		8
Ketchum Spur	2.5 Miles north of Stanwood	South		4
Hal's Spur	1.4 Miles south of Stanwood	South		2
Florence	1.5 Miles south of Stanwood	North		4
Banner	2.0 Miles south of Stanwood	South		3
Rabel's Spur	1.8 Miles north of Silvana	North		2
Norman Spur	1.1 Miles south of Silvana	South		2

Business tracks not shown as stations on time table.

NAME	LOCATION	OPENS	LENGTH	CAR CAPACITY
Summit Mill Co	0.1 Miles north of English	South		2
Kennedy Spur	4.2 Miles north of Marysville	South		6
Kruse Bros. Spur	2.5 Miles north of Marysville	North		2
Cox's Spur	1.4 Miles north of Marysville	North		4
Union Slough	1.5 Miles south of Marysville	South		6
Old Main Line	1.5 Miles south of Marysville	South		30
Transfer Track	0.8 Miles north of Long Siding	North		14
Blackman Spur	0.4 Miles south of Long Siding	North		7
Weidauer & Landsdown Spur	0.0 Miles south of Long Siding	South		20
Neff's Spur	1.0 Miles south of Long Siding	North		50
Wheelihan Spur	1.1 Miles north of Everett	North		7
Log Dump Spur	1.0 Miles north of Everett	North		21
Clark Nickerson Mill	1.0 Miles north of Everett	North		31
Everett Milling Co,	0.7 miles north of Everett	North		26
Nickerson Machinery Co	0.0 Miles north of Everett	South		4
Nail House Spur	0.8 Miles north of Everett Jct	South		24
Weyerhauser Timber Co	0.2 Miles north of Everett Jct	North		38

THIRD DISTRICT—VANCOUVER TO BELLINGHAM.

THIRD CLASS.		SECOND CLASS.			FIRST CLASS.					CAPACITY OF SIDE TRACKS		Distance from Vancouver	Time Table No. 77. In Effect Oct. 15, 1911 STATIONS.	Telegraph Calls
719		711	385	397	277	355	273	359	357	Passing Tracks	Other Tracks			
Mdse. Freight		Fast Freight	Mixed	Mixed	Passenger	Passenger	Passenger	Passenger	Passenger					
Leave Daily		Leave Daily	Leave Daily Ex. Sunday	Leave Daily Except Sunday	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily					
8.45Am				2.00Pm		4.00Pm	12.15Pm	10.00Am	12.15Am		65	0.0	VANCOUVER	VN
8.50				2.05		4.04	12.20	10.04	12.20			0.7	0.7 WYE	
9.00				f 2.10		4.09	f 12.25	10.09	f 12.26	43		3.5	2.8 STILL CREEK	
9.10				f 2.15		4.12	f 12.28	10.12	f 12.30	15	10	5.3	1.9 ARDLEY	
9.20				f 2.22		4.17	f 12.33	10.16	f 12.36	41		7.9	2.6 BURNABY	
												12.9	5.0 SAPPERTON WYE	
9.45				s 2.33		4.24	f 12.42	10.24	12.49	29		13.1	0.2 SAPPERTON	
9.55			1.00Pm	s 2.40		s 4.28	s 12.47	s 10.28	s 12.55		62	13.8	0.7 NEW WESTMINSTER	MN
10.00			1.10Pm	360 2.45Pm		4.33	12.52	398 10.33	1.00			14.2	0.4 FRASER RIVER JUNCTION	
10.20						720 4.42	f 1.01	10.42	f 1.10	67		19.4	5.2 TOWNSEND	
359 10.50						f 4.51	s 1.14	f 10.50	s 1.20	67	62	24.8	5.4 COLEBROOK	C
11.15						4.57	s 1.23	10.57	f 1.28		11	28.4	3.6 CRESCENT	
11.45						s 270 5.07	s 360 1.37	s 11.07	s 1.40	30		33.2	4.8 WHITE ROCK	WR
												36.2	3.0 INTERNATIONAL BOUND.	
12.15Pm		5.45Pm			6.15Am	s 5.20	s 720 1.50	s 11.20	s 2.00	68	91	36.7	0.5 BLAINE	BN
		6.20			s 6.30	5.38	s 2.06	11.33	s 2.20	42	5	44.2	7.5 CUSTER	CU
					f 6.35		f 2.10		f 2.26			46.9	2.7 ENTERPRISE	
		6.50			s 6.44	s 5.48	s 2.17	11.43	s 2.35	43		49.8	2.9 FERNDALE	FD
					f 6.49		f 2.22		2.40			52.0	2.2 BRENNAN	
		358 7.30Pm			s 712 7.05Am	s 6.00Pm	s 2.35Pm	s 11.58Am	s 2.55Am	42	202	58.8	6.8 BELLINGHAM.	HM
Arrive Daily		Arrive Daily	Arrive Daily Except Sunday	Arrive Daily Except Sunday	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily					
719		711	385	397	277	355	273	359	357					
3.30 16.8		1.45 12.5	.10 .4	1.45 19.	.50 26.6	2.00 29.4	2.20 25.2	1.58 29.6	2.40 22.1				Time Over District Average Speed Per Hour	

Special Rules.

South bound trains are superior to north bound trains of the same class.

The normal position of switches at Colebrook Junction, Guichon Line Junction and Fraser River Junction will be for main line.

Ferndale will be flag stop for 358 for passengers from Everett and south of Everett.

Custer will be flag stop for 355 for passengers for south of Seattle.

Semaphores for protection of draw on Fraser River bridge between Fraser River Junction and New Westminster are located on south and north ends of bridge.

All trains will come to full stop within 50 feet of home signal on either side of Fraser River Bridge and will not proceed until clear signal is displayed and will not exceed a speed of six miles per hour over this Bridge. All trains will reduce speed to 8 miles per hour over all other draw bridges.

All trains will reduce speed to 8 miles per hour through city limits Blaine.

No trains in either direction will cross International Boundary at Blaine and White Rock without permission of Customs Officers.

Yard limit boards at Bellingham, New Westminster and Vancouver.

All trains to and from Sixth district will protect between New Westminster and Fraser River Junction.

Bulletin boards are located at Bellingham and Vancouver.

Trains 359, 270, 355 and 358 will register by card at Colebrook.

DERAIL SWITCHES. Ferndale, 200 feet from east head block passing track.

New Westminster Interlocking System.—Signal tower is located 3,094 feet north of north end of Fraser River bridge, opposite crossing of the C. P. Ry. This apparatus controls the crossing of the C. P. Ry., also switches leading to and from the Fraser River Bridge tracks and New Westminster. Distant Semaphores are located 1,200 feet south and north and Home Signals are 500 feet south and north of tower, respectively.

Interlocking plants are in use on bridges 69 and 70 between Crescent and Colebrook. Home signals and derails are located 600 feet north and south of both bridges. The caution fixed signals are located 3000 feet from home signals. All signals have standard Indications.

Interlock system used on bridge 64, 1,000 feet south of Ferndale. Derails located 55 feet in advance of home signals.

THIRD DISTRICT—VANCOUVER TO BELLINGHAM.

Time Table No. 77. In Effect Oct. 15, 1911 — STATIONS.	Telegraph Calls	Distance from Bellingham	SIGNS. See Rule 7, page 15	FIRST CLASS. 356 Passenger Arrive Daily	360 Passenger Arrive Daily	270 Passenger Arrive Daily	358 Passenger Arrive Daily	278 Passenger Arrive Daily	SECOND CLASS. 398 Mixed Arrive Daily Except Sunday	386 Mixed Arrive Daily Except Sunday	712 Fast Freight Arrive Daily	THIRD CLASS. 720 Mdse. Freight Arrive Daily
VANCOUVER	VN	58.8	R● DN WC O K	s 7.30Am	s 3.30Pm	s 6.30Pm	s 10.00Pm		s 11.25Am			6.15Pm
0.7 WYE		58.1	Y	7.24	3.25	6.23	9.53		11.20			6.05
2.8 STILL CREEK		55.3		f 7.18	f 3.19	6.17	9.47		f 11.12			5.55
1.9 ARDLEY		53.5		f 7.13	f 3.15	6.13	9.43		f 11.07			5.45
2.6 BURNABY		50.9		f 7.05	f 3.10	6.07	9.37		f 11.00			5.35
5.0 SAPPERTON WYE		45.9	Y K									
0.2 SAPPERTON		45.7		f 6.54	f 2.57	5.58	9.28		f 10.47			5.20
0.7 NEW WESTMINSTER	MN	45.0	R DN K	s 6.50	s 2.53	s 5.55	s 9.25		s 10.42	s 11.10Am		5.10
0.4 FRASER RIVER JUNCTION		44.6		6.42	397 2.47	5.48	9.18		359 10.35Am	11.05Am		5.00
5.2 TOWNSEND		39.4		f 6.30	f 2.35	5.40	9.10					355 4.42
5.4 COLEBROOK	Q	34.0	R DN WY	s 6.15	s 2.20	f 5.31	f 9.00					4.05
3.6 CRESCENT		30.4		f 6.02	f 2.05	f 5.20	8.50					3.30
4.8 WHITE ROCK	WR	25.6	DN	s 5.45	1.50 273 s 1.37	355 s 5.07	s 8.40					3.00
3.0 INTERNATIONAL BOUND.		22.6										
0.5 BLAINE	BN	22.1	R DN TW O	s 5.25	s 1.30	s 4.50	s 8.25	s 10.30Pm			9.00Am	273 2.05Pm
7.5 CUSTER	CU	14.6	D	s 5.07	s 1.13	s 4.35	8.13	s 10.15			8.25	
2.7 ENTERPRISE		11.9		f 4.59	f 1.05			f 10.07				
2.9 FERNDALE	FD	9.0	D	s 4.54	s 12.57	s 4.20	8.05	s 10.02			7.50	
2.2 BRENNAN		6.8		4.45	f 12.50			f 9.56				
6.8 BELLINGHAM	HM	0.0	R● DN CW T K	4.30Am	12.35Pm	4.05Pm	711 7.50Pm	9.45Pm			277 7.05Am	
				Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily Except Sunday	Leave Daily Except Sunday	Leave Daily	Leave Daily
				356	360	270	358	278	398	386	712	720
Time Over District Average Speed Per Hour				3.00 19.6	2.55 20.2	2.25 24.3	2.10 27.2	.45 30.	.50 17.3	.05 .6	1.55 11.0	4.10 8.8

Business tracks not shown as stations on time table

NAME	LOCATION	OPENS	Length	Car Capacity
Maddoughs-Shaw Spur	0.7 Miles north of Ardley	North	....	5
Wolfs Spur	0.5 Miles north of Burnaby	North	....	4
Mill No. 2 Spur	0.7 Miles south of Burnaby	South	....	22
Pifers Mill Spur	3.0 Miles north of Sapperton	South	....	8
Sand Pit Spur	0.7 Miles north of Sapperton	South	....	18
Distillery Spur	0.0 Miles north of Sapperton	South	....	25
Blaine Spur	1.9 Miles south of Blaine	South	....	..
Blaine Shingle Co.'s Spur	2.0 Miles south of Blaine	South	....	9
Blaine Spur	1.9 Miles south of Blaine	South	....	..
Shelton Spur (off Blaine Spur)		South	....	2
City Dock Spur (off Blaine Spur)		South	....	81
Erie Mill Spur (off City Dock Spur)		South	....	6
Monarch Mill Spur (off City Dock Spur)		South	....	14
Barge Spur (off City Dock Spur)	.0 Blaine	South	....	5
Melrose Spur	2.5 Miles north of Custer	South	....	4
McDonald Spur	1.2 Miles north of Custer	South	....	2
Enterprise Spur	0.7 Miles north of Enterprise	South	....	3
Sand Pit Spur	0.8 Miles south of Enterprise	South	....	13
Henry Spur	1.0 Miles south of Brennan	South	....	2
Marietta Spur	3.3 Miles north of Bellingham	South	....	2

CHERRY VALLEY BRANCH

WEST SECOND CLASS 393 Mixed Leave Daily Except Sunday	WEST FIRST CLASS 391 Passenger Leave Daily	Capacity of Side Tracks: Passing Tracks	Capacity of Side Tracks: Other Tracks	Distance from Monroe	Time Table No. 77 In Effect Oct. 15, 1911 — STATIONS	Distance from Toltz	Telegraph Calls	SIGNS	EAST FIRST CLASS 390 Passenger Arrive Daily	EAST SECOND CLASS 392 Mixed Arrive Daily Except Sunday
11.00Am	6.20Pm			0.0	MONROE	17.6	Ro	D N Y W P	s 9.00Am	s 3.30Pm
s 11.45	s 6.50	35		9.1	DUVALL	8.5		D P	s 8.15	s 2.35
s 12.30Pm	s 7.15Pm	33	45	17.6	TOLT	0.0		D T W P	7.40Am	2.00Pm
Arrive Daily Except Sunday	Arrive Daily								Leave Daily	Leave Daily Except Sunday
393	391								390	392
1.30 11.7	.55 19.4				Time over District Average Speed per Hour				1.20 13.2	1.30 11.7

Initial Stations {Tolt 390–392. Monroe 391–393.

Terminal Stations {Monroe 390–392. Tolt 391–393

Eastbound Trains have right of Track over Westbound Trains of the same class.

Business tracks not shown as stations on time table.

NAME	LOCATION	OPENS	LENGTH	CAR CAPACITY
Stephens Bird Ind. Spur	3.5 Miles west of Monroe	West	510 ft.	10
Stephens Bird Logging Co.'s Spur	3.8 Miles west of Monroe	East	388 ft.	7
Cerenis Spur	4.6 Miles west of Monroe	West	268 ft.	6
C. B. Spur	5.2 Miles west of Monroe	East	418 ft.	8
O'Neil Gowan Spur	6.4 Miles west of Monroe	West	485 ft.	9
C. V. Log. Co.'s Spur	7.3 Miles west of Monroe	West	474 ft.	9
Novelty Spur	11.6 Miles west of Monroe	West	658 ft.	15

THIRD CLASS.		SECOND CLASS.	FIRST CLASS.				CAPACITY OF SIDE TRACKS		Distance from Rockport	Time Table No. 77. In Effect Oct. 15, 1911.	Telegraph Calls	Distance from Anacortes	SIGNS. See Rule 7, page 15.	FIRST CLASS.					THIRD CLASS.	
724	726	400	284	292	290	280	Passing Tracks	Other Tracks		STATIONS.				289	279	293	291	283	725	723
Mdse. Freight	Mdse. Freight	Mixed	Passenger	Passenger	Passenger	Passenger								Passenger	Passenger	Passenger	Passenger	Passenger	Mdse. Freight	Mdse. Freight
Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily								Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily
6.15Am					4.10Pm	6.00Am	42			ROCKPORT	RK	53.7	R D YW	s 2.10Pm	s 9.10Pm					5.00Pm
6.35					f 723 4.30	f 6.17	22		5.8	5.8 FABER		47.9		f 1.50	f 8.54					290 4.30
7.05					s 4.44	s 6.26		3	9.1	3.3 CONCRETE	BA	44.6	D	s 1.37	s 8.43					3.45
8.00					f 4.50	f 6.32	39		10.2	1.1 GRASSMERE		43.5	W	f 1.25	f 8.33					3.00
8.25					s 5.03	s 6.47	43		15.5	5.3 BIRDSVIEW		38.2		s 1.10	s 8.20					2.30
8.50					s 5.18	s 7.02	38	10	20.6	5.1 HAMILTON	H	33.1	D W	s 12.55	s 8.07					2.00
9.25					s 5.31	s 7.13		25	23.9	3.3 LYMAN	MY	29.8		s 12.40	s 7.55					1.30
9.50					f 5.46	f 7.27	22		29.2	5.3 COKEDALE JUNCTION		24.5		f 12.22	f 7.40					12.45
10.20	8.30Am				s 6.05	s 725 7.42	35	64	32.4	3.2 SEDRO-WOOLLEY	WL	21.3	R D K	s 12.10Pm	s 7.31				280 7.30Am	12.30
					f 6.12	f 7.48		7	34.7	2.3 STERLING		19.0		f 11.58	f 7.19					
10.45Am	8.50 11.15 291	8.35Am	7.15Pm	11.50Am	s 6.25Pm	s 8.00Am	48	225	37.2	2.5 BURLINGTON	BU	16.5	R DN COWYX	s 724 11.50Am	7.10Pm	s 8.00Am	s 726 11.15Am	s 6.25Pm	7.10 6.15	12.01Pm
	11.30	s 8.43	s 7.24	s 11.58				25	40.0	2.8 AVON		13.7				s 7.49	s 11.05	s 6.14	6.00	
	11.40	f 8.50	f 7.33	f 12.06Pm				7	42.6	2.6 FREDONIA		11.1				f 7.41	f 10.58	f 6.06	5.45	
	11.55	s 8.57	s 7.40	s 12.15			25		44.1	1.5 WHITNEY		9.6				s 7.55	s 10.53	s 6.00	5.35	
									46.3	2.2 DRAW BRIDGE		7.4								
	12.20Pm	f 9.16	f 7.53	f 12.30				4	49.6	3.3 FIDALGO		4.1				f 7.21	f 10.37	f 5.46	5.15	
	12.30Pm	s 9.30Am	s 8.10Pm	s 12.40Pm				94	53.7	4.1 ANACORTES	AC		R D T W			7.10Am	10.25Am	5.35Pm	5.00Am	
Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily								Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily
724	726	400	284	292	290	280								289	279	293	291	283	725	723
4.30 8.3	4.00 5.3	.55 18.2	.55 18.2	.50 19.5	2.15 16.6	2.00 18.6				Time Over District Average Speed Per Hour				2.20 16.0	2.00 18.6	.50 19.5	.50 19.5	.50 19.5	2.40 8.5	5.00 7.4

Special Rules.

East bound trains are superior to west bound trains of the same class.

No. 724 has right over No. 723, Rockport to Burlington.
Yard limit boards are located at Burlington and Anacortes.
All trains will reduce speed to 8 miles per hour over all draw bridges
Bulletin boards are located at Anacortes, Burlington and Rockport.

INITIAL STATIONS.
Anacortes for trains Nos. 291, 293, 283 and 725.
Rockport for trains Nos. 280, 290 and 724.
Burlington for trains Nos. 292, 284, 400, 289, 279, 723 and 726.

TERMINAL STATIONS.
Anacortes for trains Nos. 292, 284, 400 and 726.
Rockport for trains Nos. 289, 279 and 723.
Burlington for trains Nos. 280, 290, 293, 291, 283, 724 and 725.

Business tracks not shown as stations on time table.

NAME	LOCATION	OPENS	LENGTH	CAR CAPACITY
Sauk Spur	2.0 Miles west of Rockport	West		2
Tower Mill Co	0.3 Miles west of Faber	East		19
Van Horne's Spur	0.5 Miles west of Faber	East		16
Harpst Lumber Co. Spur	0.8 Miles east of Faber	West		3
Washington Port Cement Co.	0.7 Miles east of Concrete	East		30
Superior Portland Cement Co. Spur	0.7 Miles west of Concrete	West		28
Burpee Shingle Spur	0.4 Miles west of Grassmere	West		3
Anna Shingle Spur	2.0 Miles west of Grassmere	West		2
L. L. Spur	0.2 Miles west of Hamilton	West		..
Hop Ranch Spur	0.8 Miles east of Lyman	West		3
Skagit Mill Co. Spur	Lyman	West		22
Hitchock-Kelly	0.1 Miles west of Lyman	West		3
Minkler's Mill	3.0 Miles east of Cokedale Jct.	Both ends		13
Green Mill Spur	3.3 Miles east of Woolley	Both ends		22
Sound Iron Spur	Woolley	West		7
Holbrook's Spur	0.4 Miles west of Woolley	West		8
Burlington Mill Spur	0.6 Miles west of Burlington	West		6
North Avon Lumber Co. Spur	0.3 Miles west of Avon	West		2
Hawkin's Spur	0.7 Miles east of Fredonia	East		7
Callahan-Abbott Spur	Fredonia	West		6
Gravel Pit Spur	5.9 Miles east of Anacortes	West		9
Log Rollway	1.5 Miles east of Anacortes	Both ends		22
Fidalgo Island Shingle Co. Spur	4.6 Miles east of Anacortes	East		2
Fidalgo Mill Spur	2.3 Miles east of Anacortes	East		3

SECOND CLASS. 387 Mixed Leave Daily Except Sunday	397 Mixed Leave Tue., Thur., Sat.	397 Mixed Leave Mon., Wed., Fri.	CAPACITY OF SIDE TRACKS: Passing Tracks	Other Tracks	Distance from Sumas	Time Table No. 77. In Effect Oct. 15, 1911 — STATIONS.	Telegraph Calls	Distance from Guichon	SIGNS. See Rule 7, page 15.	SECOND CLASS. 398 Mixed Arrive Daily Except Sunday	388 Mixed Arrive Daily Except Sunday
7.00am					0.0	SUMAS, WASH.	SU	46.5	D C W		s 6.45pm
					0.0	0.0 INTERNATIONAL BOUNDARY		46.5			
s 7.02			30		0.1	0.1 HUNTINGDON		46.4	W		s 6.40
s 7.15			42	21	3.6	3.5 ABBOTTSFORD	FS	42.9	D W		s 6.20
s 7.30				6	8.1	4.5 PINEGROVE		38.4			s 5.45
s 7.55			69	22	12.7	4.6 ALDERGROVE		33.8			s 5.20
s 8.10			28		16.9	4.2 OTTER		29.6			s 4.45
8.35			67	20	21.6	4.7 LINCOLN		24.9	W		s 4.20
s 9.00am	4.30pm	3.45pm	67		29.4	7.8 CLOVERDALE	CL	17.1	R D Y	s 8.30am	3.45pm
	f 4.45	f 4.00		5	33.4	4.0 ALLUVIA		13.1		s 5.15	
	f 4.50	f 4.05		4	34.9	1.5 SOUTHPORT		11.6		f 8.10	
	4.55	4.10			35.9	1.0 COLEBROOK JCT		10.6	Y	8.00	
	s 5.10	s 4.25	67	62	35.9	0.0 COLEBROOK	G	10.6	R DN W	s 7.55	
	5.15	4.30			36.7	0.8 GUICHON LINE JCT		9.8	Y	7.45	
	f 5.40	f 4.55		10	42.7	6.0 INVERHOLM		3.8		f 7.25	
	f 5.55	f 5.10		3	45.1	2.4 CHALLUCTHAN		1.4	W ½ Mile East	f 7.10	
	s 6.00pm	s 5.15pm	10	10	46.5	1.4 GUICHON		0.0	W	7.00am	
Arrive Daily Except Sunday	Arrive Tue., Thur., Sat.	Arrive Mon., Wed., Fri.								Leave Daily Except Sunday	Leave Daily Except Sunday
387	**397**	**397**								**398**	**388**
2.00 14.7	1.30 11.4	1.30 11.4				Time Over District Average Speed Per Hour				1.30 11.4	3.00 9.4

Special Rules.

West bound trains are superior to east bound trains of the same class.

The normal position of switches at Colebrook Junction, Guichon Line Junction are for main line.
All trains Fifth District will protect against all Third District trains between Colebrook Jct. and Guichon Line Jct.

INITIAL STATIONS.
Guichon for train No. 398. Sumas for train No. 387. Cloverdale for trains No. 388 and 397.

TERMINAL STATIONS.
Guichon for train No. 397.
Cloverdale for trains No. 387 and 398.
Sumas for train No. 388.

DERAIL SWITCHES
Derail switches must always be set for derail except when in actual use whether there are cars on the tracks or not.
Abbottsford east end of passing track.

INTERLOCKING governing B. C. E. Ry. crossing, Cloverdale, B. C. Distant signal on north side is located 2500 feet from crossing and has one arm showing caution. Home signal is located 75 feet from crossing and has two arms. Lower arm one indication, upper arm governs train movements. Home signal on south side is located 15 feet from crossing and distant signal 1500 feet from crossing. Derails are placed five feet inside each home signal. Normal position of signals will be clear for our line.

Business tracks not shown as stations on time table.

NAME	LOCATION	OPENS	CAR CAPACITY
Guichon Slip Spur	0.1 Miles east of Guichon	East	3
Gowdy Road Spur	2.9 Miles east of Guichon	West	1
Patterson's Spur	5.7 Miles east of Guichon	West	9
Smith Road Spur	5.8 Miles east of Guichon	West	2
Matthew Road Spur	6.8 Miles east of Guichon	West	3
Colebrook Road Spur	8.2 Miles west of Cloverdale	West	5
Gravel Pit Spur	3.3 Miles west of Cloverdale	West	9
Surry Spur	1.1 Miles west of Cloverdale	West	3
Fernridge Lbr. Co. Spur	1.4 Miles east of Lincoln	West	15
Lincoln Lbr. Co. Spur	1.0 Mile east of Lincoln	West	30
Clark's Spur	1.0 Mile west of Otter	East	2
Otter Shingle Co. Spur	at Otter	East	15
Aldergrove Lbr. Co. Spur	at Aldergrove	East	20
Fish Trap Pit	1.5 Miles west of Pinegrove	Both	40
Pinegrove Lbr. Co. Spur	.8 Mile east of Lincoln	West	10

SOUTH BOUND. SIXTH DISTRICT—FRASER RIVER JCT. TO CLOVERDALE. NORTH BOUND.

SECOND CLASS. 387 Mixed Leave Tue., Thur., Sat.	397 Mixed Leave Tue., Thur., Sat.	397 Mixed Leave Mon., Wed., Fri.	385 Mixed Leave Daily Except Sunday	Car Capacity of Other Sidings	Car Capacity of Passing Tracks	Distance from Fraser River Jct.	Time Table No. 77. In Effect Oct. 15, 1911 — STATIONS.	Telegraph Calls	Distance from Hazelmere	SIGNS See Rule 7, page 15.	SECOND CLASS. 396 Mixed Arrive Tue., Thur., Sat	384 Mixed Arrive Tue., Thur., Sat.	398 Mixed Arrive Daily Except Sunday	386 Mixed Arrive Daily Except Sunday
	2.47pm	2.47pm	1.10pm			0.0	FRASER RIVER JCT		20.3				s 10.35am	s 11.05am
	2.53	2.53	s 1.15			1.0	1.0 LIVERPOOL		19.3				10.30	s 10.55
						3.3	2.3 BON ACCORD		17.0	W 2 Miles South				
	f 3.20	f 3.20	s 2.00		17	9.0	5.7 PORT KELLS		11.3				f 10.05	s 10.30
8.40am	s 3.35	f 3.35pm	s 2.45pm	67		15.2	6.2 CLOVERDALE	CL	5.1	R D	s 9.20am	s 4.20pm	9.45am	9.55am
s 8.55am	s 4.00pm					20.3	5.1 HAZELMERE		0.0		9.05am	4.05pm		
Arrive Tue., Thur., Sat.	Arrive Tue., Thur., Sat.	Arrive Mon., Wed., Fri.	Arrive Daily Except Sunday								Leave Tue., Thur., Sat.	Leave Tue., Thur., Sat.	Leave Daily Except Sunday	Leave Daily Except Sunday
387	**397**	**397**	**385**								**396**	**384**	**398**	**386**
.15 20.0	1.13 16.3	.48 18.5	1.35 11.4				Time Over District Average Speed Per Hour				.15 20.0	.15 20.0	.50 19.0	1.10 13.0

Special Rules.

South bound trains are superior to north bound trains of the same class.

Initial Stations.
Fraser River Jct. for trains Nos. 385 and 397. Cloverdale for trains Nos. 386, 387 and 398 Hazelmere for trains Nos. 384 and 396.

Terminal Stations:
Cloverdale for trains Nos. 385, 396 and 397. Hazelmere for trains Nos. 387 and 397. Fraser River Jct. for trains Nos. 386 and 398.

Trains will register at Cloverdale.

All Sixth District trains will protect against all Third District trains between Fraser River Junction and New Westminster.

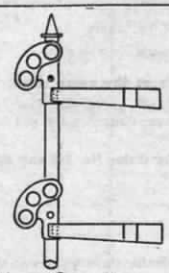
All trains will reduce speed to 8 miles per hour over all draw bridges.

Business tracks not shown as stations on time table.

NAME	LOCATION	OPENS	CAR CAPACITY
Davis Spur	0.5 Miles south of Liverpool	North	4
Brownsville Spur	1.0 Miles north of Liverpool	South	15
Flummerfelt Spur	2.0 Miles north of Port Kells	South	4
McNair Spur	2.0 Miles north of Cloverdale	South	2
David Bell & Co. Spur	1.5 Miles north of Cloverdale	South	25
Washington Shingle Co.	2.2 Miles north of Blaine	South	8
Great Western Shingle Spur	0.5 Miles south of Port Kells	North	7
Hazelmere Spur	3.4 Miles north of Blaine	South	4

ELECTRIC TRAIN STAFF BLOCK SIGNAL DIAGRAMS.

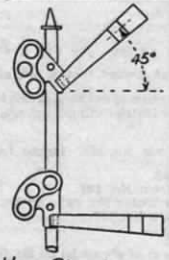
Fig. No. 1



Home Signal

Color — Upper Arm RED light at night. Lower Arm RED light at night.
Indication — STOP. Proceed only when Signal clears.
Name — STOP Signal.

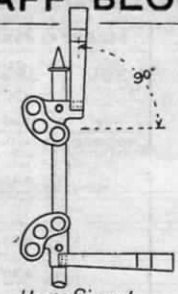
Fig. No. 2



Home Signal

Color — Upper Arm YELLOW light at night. Lower Arm RED light at night.
Indication — Proceed on main line with caution, prepared to stop at the Block Station.
Name — CAUTION Signal.

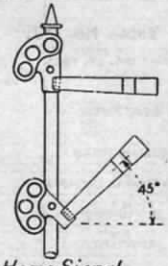
Fig. No. 3



Home Signal.

Color — Upper Arm GREEN light at night. Lower Arm RED light at night.
Indication — Main line route clear. Staff in crane. PROCEED
Name — CLEAR Signal.

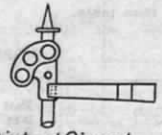
Fig. No. 4



Home Signal.

Color — Upper Arm RED light at night. Lower Arm YELLOW light at night.
Indication — Take Passing Track.
Name — CAUTION Signal.

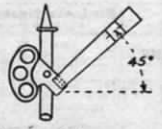
Fig. No. 6



Distant Signal

Color — RED light at night.
Indication — STOP, then proceed with caution to home signal.
Name — STOP Signal.

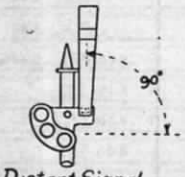
Fig. No. 7



Distant Signal.

Color — YELLOW light at night.
Indication — Proceed with CAUTION prepared to stop at home signal.
Name — CAUTION Signal.

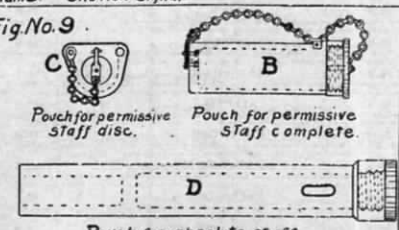
Fig. No. 8



Distant Signal.

Color — GREEN light at night.
Indication — PROCEED. Staff in Crane.
Name — CLEAR Signal.

Fig. No. 9.



Pouch for permissive staff disc.

Pouch for permissive staff complete.

Pouch for absolute staff.

Bell Code of Signals.

1 ·—	To attract attention.
2 — —	All Right. Yes.
3 - - -	Block wanted, Unlock my Instrument, Ans. by Unlocking or by 5 or 3-1
4 - - - -	Train has entered Block.
5 - - - - -	Block is not clear.
6 - - - - - -	Has a train entered this Block? Answer by 2 or 2-1
1-2 — - -	Clear. Train has cleared Block.
2-1 - - —	No.
2-2-2 - - - -	Previous Signal given in error Answer by 2.
2-4 - - - - -	Has train Cleared Block? Answer by 5 or 3-1
3-1 - - - —	Have unlocked, Block is clear. It must not be used unless Block is known to be clear.
3-3 - - - -	Train in Block.
5-5-5 - - - - - - - - - -	Obstruction in Block. Stop all trains approaching this station, Ans. by repeating.
8 - - - - - - -	Testing. Ans. by repeating.

GENERAL INSTRUCTIONS.
FOR
OPERATING TRAIN STAFF INSTRUMENTS.

To Remove Staff from Machine.

Instruction to Operator removing Staff

1st. Press bell Key "A" Once ① Answer will be two ② taps.
2nd. Press bell Key "A" Three ③ times. Then watch current indicating needle "F." until it deflects to the right.
3rd. Turn preliminary spindle "B" to the right as far as it will go and then release it permiting it automatically return to its former position. A white disc will appear in place of the red one at "H". This indicates that Staff is ready to be removed.
4th. Move end Staff "E" up vertical slot into engagment with guard "N." This guard having been turned so that the Staff will slip into the slot in the edge of the guard "N."
5th. Revolve guard "N" using staff as a handle and with-draw the staff thru the opening at "M." this operation moves Staff-indicating needle "G" from "Staff in" to "Staff out."
6th. Immediately upon with-drawal of Staff press bell Key "A" once. This is absolutely necessary.

Instructions to Operator aiding in removal of a Staff.

1st. Upon receipt of one ring acknowledge same by two pushes on bell Key "A."
2nd. Upon receipt of three rings press bell Key and hold it so until Staff indicating needle "F" moves from Left to Right Twice, then release Key "A" as operation is complete.

To Replace Staff in the Machine.

Instructions to Operator replacing Staff.

1st. Turn outer guard "N" to place and insert Staff in the opening "M."
2nd. Using Staff as handle revolve guard "N" to the right and allow Staff to roll down spiral into place.
3rd. Press bell Key "A" according to Signal 1-2 of the bell code.

Instructions to Operator at opposite end of Block.

The signal 1-2 of the bell code must in every case be answered in order to place the machines in proper condition for the with-drawal of the next staff.

To Remove the Permissive Staff from Machine.

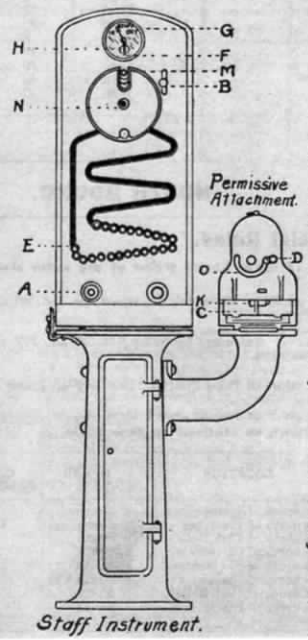
1st. Insert solid Staff in the opening "D" of the permissive attachment. And move to the extreme left of the Slot "O."
2nd. Turn the latch "K" and allow door "C" to drop and the permissive staff to roll out.

To Replace the Permissive Staff in the Machine.

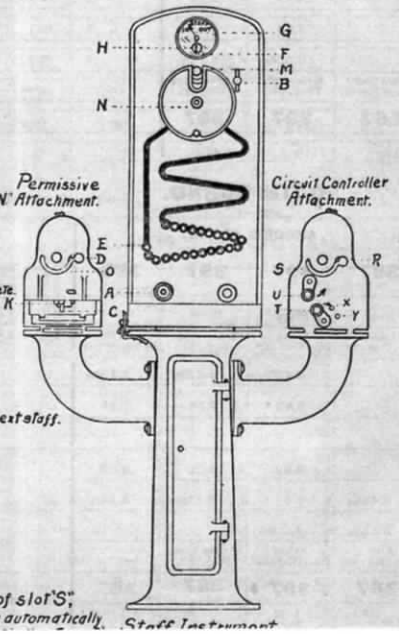
1st. Be sure all discs are on the permissive staff in their proper numerical order.
2nd. Place staff in attachment, close door "C" and latch with "K."
3rd. Move solid staff to the right thru slot "O" and remove at opening "D."

Instructions for Operating Semaphore Signals through Circuit Controller Attachment.

1st. To operate Upper Arm of Semaphore 0° to 45° (See Fig. No. 2) turn handle "T" to the Right clockwise to stop "X."
2nd. To operate Upper Arm of Semaphore 45° to 90° (See Fig. No. 3) with-draw absolute staff and insert into opening "R" and move to extreme left of slot "S," then turn handle "T" to right to Stop "Y" remove absolute staff from opening "R" and place staff in Pouch D. Fig 9. Then place Pouch in Staff crane which action automatically
3rd. To operate Lower Arm of Semaphore 0° to 45° (See Fig. No. [illegible]) turn handle "T" to the right to stop "[illegible]"



Staff Instrument.



Staff Instrument.

Electric Train Staff Block Signal System in operation between Leavenworth and Skykomish, Everett Jct., and Pacific Ave., and between Delta Wye and Marysville.

The use of the divided staff through Cascade Tunnel and all rules and instructions pertaining thereto will continue in effect.

All rules relating to the protection of trains are in force and are only modified by the General Instructions herein.

1. All trains and engines in both directions will be governed exclusively in their movements by the train staff.

2. Home and Distant semaphores are located at each block station. Home signals are located at the passing track switches. Distant Signals are located about 4000 feet from home signals. The signal indications are illustrated by figures Nos. 1, 2, 3, 4, 6, 7, 8 and the meaning of the positions of the signal arms and lights is explained under the diagrams. In all cases the block signals are located upon the right of and adjoining the track upon which trains are governed by them. The semaphore arms that govern are displayed to the right of the signal mast as seen from an approaching train.

3. The possession of the staff by the Engineer gives his train the absolute right of track to the next block.

ENGINEERS MUST KNOW THAT THE STAFF IS IN THE POUCH BEFORE PROCEEDING.

4. The staff will be handled by the Engineer of the leading engine of the train; and the staff must be in the actual possession of the Engineer before he moves his train into a block, and such engine must not be uncoupled from the train except at a block station. The Conductor will receive a "proceed" signal from Block Operator to indicate that staff has been delivered to Engineer. (See Rule 29).

4-A. In the case of an engine pushing a train, it must be considered as part of that train through to the next block station, and may be uncoupled only at a block station. Such engine, if then uncoupled, must be treated as a separate train.

5. When a staff has been secured by the Engineer, he will announce the fact by sounding one short, one long and one short blast of the whistle, thus (o—o).

6. An absolute staff permits but one train at a time to use a block. See D figure No. 9.

6-A. A permission staff disc, permits two or more trains in the same direction at one time to use a block on ascending grade only. Each train must be in possession of a permissive staff disc before proceeding. See C, Fig. No. 9.

6-B. Permissive staff complete permits but one train at a time to use a block. See B, Fig. No. 9 and Rule No. 22-F.

7. The delivery of the staff to the Enginemen will be either by staff crane, hand of Block Operator, or the Conductor or head Brakeman of his own train and the Engineer must not accept delivery of a staff from any other person. Block Operators will not deliver staff to any other than one of these employes.

8. Staff will be delivered by Engineer on arrival at Block Station by dropping same at a designated spot, or, in case of taking siding, and it cannot be personally delivered by Engineer, it will immediately be sent to Block Operator by head Brakeman or Conductor.

UNDER NO CIRCUMSTANCES WILL A STAFF BE TRANSFERRED FROM ONE TRAIN TO ANOTHER. IT IS THE DUTY OF THE BLOCK OPERATOR TO SEE THAT ALL OF THE TRAIN CLEARS THE BLOCK BEFORE INSERTING STAFF INTO INSTRUMENT.

9. In case a train parts, or it is necessary to "double," the staff must be retained by the Engineer until all the train is clear of the block. A train is clear of a block when it has passed the home signal. A train proceeding on main track enters a block at the block office. It may occupy the main track inside of home signals in either direction to do station work or to allow another train to enter the sidetrack, but must not proceed until in possession of a staff, as per Rule No. 3.

9-A. A train making switching movements may use the main track to, but not beyond the distant signal, when protected as per Rule 99. Superior class trains must not be delayed.

10. Enginemen and Trainmen will carefully note the position of all signals and be governed accordingly in the movement and protection of their trains. See Figs. Nos. 1, 2, 3, 4, 6, 7, 8.

11. Conductors and Engineers, before leaving initial points, must secure clearance card, Form 219.

12. Block Operators, unless otherwise instructed by Train Dispatcher, will staff the train of superior time table rights and side track the inferior train when a meeting point developes at their station.

13. When it is desired to reverse the right of track, trains will be moved by Train Dispatcher's orders on Form 19, issued to Block Operators giving instructions to staff the train that is to receive preferred attention, and side track the superior train.

14. Work trains, after receiving orders authorizing the existence of the train, will occupy the block after receiving the absolute staff until same is surrendered at a block station at either end of the block. They will be given a time by the Train Dispatcher when delivery shall be made, and unless otherwise instructed, they shall clear the block and deliver the staff to the Block Operator so that regular and extra trains will not be delayed. Train Dispatcher may authorize the delivery of a permissive disc in the prescribed direction to enable work train to work under protection of flag until following train approaches.

15. In case of failure of staff apparatus, all concerned must be notified and trains will be moved by train orders until it has been repaired. In such event, the train order takes the place of the staff, though only one block on each train order and this order must be given jointly to the Conductor and Engineer of the train and the Block Operator at both ends of the block.

15-A. In the event of staff apparatus and other means of communication becoming out of order due to the breakage of line wires or other causes, trains will move in accordance with general rules and time table rights, obtaining at each block office, block card, Form No. 2615 signed by Block Operator.

15-B. When a staff apparatus has been repaired it will not be put into use until authorized by Train Dispatcher.

15-C. Before issuing train orders, superseding staff system, the Train Dispatcher must know that block is clear and the Block Operator and Train Dispatcher must know that the full number of staffs are in the two instruments of this block.

16. In case a staff should be lost, the staff instruments in this block are inoperative and trains must be moved only by the authority of Train Dispatcher, who will then issue train orders. The staff can only be replaced by Signal Repairman who has charge of the staffs not in use. No extra staffs will be allowed in the possession of any other employe.

17. Should a train pass a block station without markers, the Block Operator must notify the Train Dispatcher and the next block station in each direction and must not report that train clear of the block until he has ascertained that the train is complete.

18. A record of all trains must be kept at each block station on Form No. 290.

19. In case of unexpected delay to a train to which a staff has been delivered, same can be recalled by Block Operator and return of staff to the instrument will cancel the authority given to such train to proceed. The train then has no right to main track until given another staff.

20. Block Operators must not deliver a staff received from one train to another train. It must be placed in the instrument and another withdrawn in accordance with the rules.

21. BLOCK OPERATORS WILL HANDLE THE STAFF MACHINES IN ACCORDANCE WITH THE RULES AND GENERAL INSTRUCTIONS FOR OPERATING STAFF INSTRUMENTS.

21-A. When two or more trains bound in opposite directions are at a block station, Block Operator must exercise great care in delivery of staffs and must know that the staff is delivered to the train for which it was withdrawn.

22. Absolute staffs (See D, Fig. No. 9) must be used for all trains on decending grades, or eastbound from Cascade Tunnel to Leavenworth, and westbound from Tye to Skykomish.

22-A. Permissive staff discs (See C, Fig. No. 9) may be used on ascending grades, or westbound from Leavenworth to Cascade Tunnel, and eastbound from Skykomish to Tye, for all trains except as per rule 22-B.

22-B. Permissive staff discs must not be given to Engineers with light engines or light tonnage trains to follow a passenger train.

22-C. Trains moving under authority of a permissive staff disc must protect against following trains as per Rule No. 99.

22-D. When two or more trains use permissive staff discs the last train will be given the permissive staff (See B, Fig. No. 9) with all the remaining discs and this confers the same rights as a single permissive staff disc.

22-E. The Block Operator receiving the permissive staff must at once assemble on it in numerical order all the permissive discs received from preceding trains and place the complete permissive staff in the permissive attachment.

22-F. The first train in the opposite direction (descending the grade) must be given the complete permissive staff, which confers the same rights as an absolute staff.

23. When no train movement is imminent, home signals must be kept in stop position.

24. Block Operators must not make nor permit any unauthorized alterations or additions to the apparatus. If alterations or additions are made, the work will be done under the direction of the Signal Supervisor.

25. If any electrical or mechanical appliance fails to work properly, the Signal Repairman and Train Dispatcher must be notified and only duly authorized persons permitted to make repairs.

26. Block Operators must have the proper appliances for hand signaling (a yellow flag by day and a yellow light by night) ready for immediate use. Hand signals must not be used when the proper indications can be displayed by the fixed signals. When hand signals are necessary, they must be given from such a point and in such a way that there can be no misunderstanding on the part of Enginemen or Trainmen as to the signals or as to the train for which they are given.

27. Block Operators are responsible for the care of the block station, lamps and supplies and of the signal apparatus unless provided for otherwise.

28. Lights in block stations must be so placed that they cannot be seen from approaching trains.

29. Block Operators will remain in view until the rear of a train has passed and will give a "proceed" signal to the Conductor on rear of train to indicate that a staff has been delivered to Engineer.

30. The Engineer of a train which has parted must sound the whistle signal for "train parted" on approaching a block station.

31. An Engineer receiving a "train parted" signal must answer by two short blasts of the whistle.

32. When a parted train has been recoupled the Block Operator must be notified.

33. If the track is obstructed between block stations notice must be given to the nearest Block Operator.

34. If a train is held by a block signal to exceed two minutes, the Conductor must ascertain the cause.

34-A. The Conductor must report to the Superintendent any unusual detention at block stations.

35. Special attention of all concerned is directed to meaning of caution signal as shown by Fig. No. 2.

36. Staff instruments must be kept locked. Keys will be furnished to the signal repairman but to no other person.

AUTOMATIC BLOCK, INTERLOCKING SIGNALS AND SEMAPHORES.

AUTOMATIC BLOCK SYSTEM.

Automatic Block Signals are in operation between King Street Station Seattle and the Interlocking Plant at the North Portal of Seattle Tunnel, also between Metum and Everett Junction

The Controlled Manual Block Signal System is in operation between the Interlocking Plant at the North Portal of Seattle Tunnel and Metum.

1. In all cases the Automatic Block and Interlocking Signals are located upon the Right of and adjoining the track upon which trains are governed by them. The Semaphore arms that govern are displayed to the Right of the Signal mast as seen from an approaching train.
2. The movement of trains will be regulated by Block Signal Indications as follows;
   - A. An Arm in the horizontal position (see Fig. No. 6) indicates that the Block is not clear and is a signal to "STOP."
   - B. An Arm in the inclined position 45 degrees above the horizontal see Fig No 7 indicates proceed with Caution prepared to stop at the next Signal.
   - C. An Arm in the vertical position 90 degrees above the horizontal see Fig. No 8. indicates that Block is "CLEAR" and is a Signal to "PROCEED."
   - D. At night the Position of the Signals will in addition be shown by the Standard Colored Lights.

     RED indicates "STOP."
     YELLOW indicates "CAUTION." proceed with caution prepared to Stop at next Signal
     GREEN indicates "PROCEED."
3. Track Circuits are used to Control Automatic and Semi-Automatic Block Signals and include all turn-outs up to the fouling points.
4. Block Signals do not dispence with the Use or Observance of other Signals wherever or where ever they may be required Nor do they relieve Enginemen and Trainmen from taking all precautions required by train rules for the protection of their trains.
5. The Block Signals apply only to trains running in the established direction
6. When a train is stopped by a Block Signal it may proceed with caution after coming to a FULL STOP, expecting to find Block obstructed.
7. A train stopped by a Block Signal must stand facing the Signal so that it's indication may be observed from the engine.
8. Switches in main tracks and switches of Cross-overs to main track Set-Signals to "Stop" when moved from their normal positions.
9. Main line Semaphore Interlocking Signals located within the Automatic Block Signal limits are made Semi-Automatic and part of the Block Signal System.
10. Cars and Engines on Sidings must stand clear of bonded Rails and insulated Joints.
11. In making train Movements through Cross-over Switches between main Tracks one of the Switches must be kept open until the train movement is completed.
12. When a Signal is found at Stop from any cause other than a train in the Block Engineman will report same, using Form 2800. and Operator will transmit in accordance with instructions thereon.
13. All Automatic Block Signals are designated by numbers. Signals governing East bound trains have even numbers. Signals governing West bound trains have odd numbers.
14. Home Interlocking Signals are equipped with two arms and two lights (see Figures Nos. 1, 2, 3, 4, and 5). These Signals are not permissive and may be passed only when signal indicates "PROCEED," or upon Prescribed Hand Signal from Signalman Rule governing reads as follows.

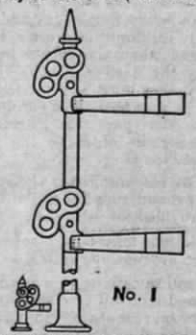
    When from any cause signals cannot be operated, Signalman must examine switches and Know that the way is clear. The train must be required to come to a full Stop before the prescribed hand Signal is given Signalman giving hand signals must do so from the center of the track upon which the train movement is to be made, using a yellow flag by day and a yellow light by night. When more than one train is in sight, hand signals must be given from a point not to exceed one hundred feet in advance of the locomotive.
15. Dwarf Signals (see Figs. Nos. 1, 9 and 10) are provided to govern train movements against the current of traffic and slow movements either to or from main tracks to storage and industry Tracks.
16. Single Arm and Single light Semaphore will be continued for Train Order Signals.
17. A signal imperfectly displayed, the absence of a signal at place where one is usually shown, or a white Signal at a place where a colored signal should be shown must be regarded as a STOP Signal, and the fact reported to the Superintendent.
18. Firemen as well as Enginemen must watch signals closely, as frequently the first view can be had from the Fireman's side.

Interlocking Signals.

Within the limits of the Automatic Block Signal System Interlocking Plants are located as follows.

South Portal of Seattle Tunnel.
North " " " "
Everett Junction.

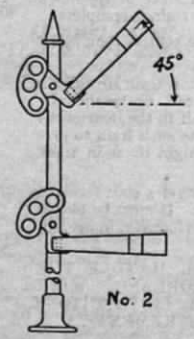
On the Single track between G.N. Docks and Metum an Interlocking Plant is in use at the Salmon Bay Draw Bridge Interlocking Plants are under construction at the N.P. Crossing located at the west end of the Yard at Interbay, and at the Crossing of the S.E.I. located in 15th Ave. Ballard. Due notice will be given when these Plants are placed in operation.



No. 1

INTERLOCKING HOME SIGNAL.

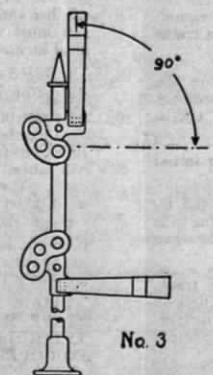
Color. Upper Arm, RED light at night. Lower Arm RED light at night.
Indication. STOP. Proceed only when Signal clears, or upon prescribed hand signal from Signalman.
Name STOP Signal.



No. 2

INTERLOCKING HOME SIGNAL.

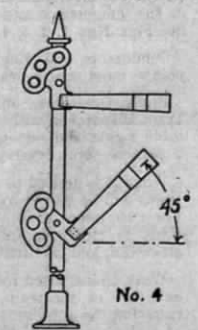
Color. Upper Arm YELLOW light at night. Lower Arm RED light at night.
Indication. Main line route clear, proceed with CAUTION, prepared to stop at next signal
Name CAUTION Signal.



No. 3

INTERLOCKING HOME SIGNAL.

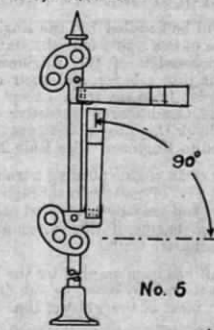
Color. Upper Arm, GREEN light at night. Lower Arm RED light at night.
Indication. Main line route clear, PROCEED
Name CLEAR Signal.



No. 4

INTERLOCKING HOME SIGNAL.

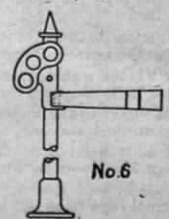
Color. Upper Arm RED light at night Lower Arm. YELLOW light at night.
Indication. Diverging route clear proceed with CAUTION
Name CAUTION Signal.



No. 5

INTERLOCKING HOME SIGNAL.

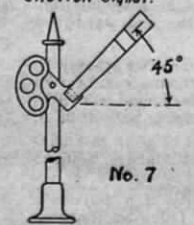
Color. Upper Arm, RED light at night Lower Arm, GREEN light at night
Indication. Diverging route Clear, proceed at reduced speed.
Name CLEAR Signal.



No.6

AUTOMATIC BLOCK SIGNAL.

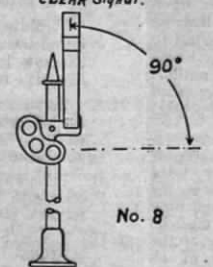
Color. RED light at night.
Indication STOP.



No. 7

AUTOMATIC BLOCK SIGNAL.

Color. YELLOW light at night.
Indication. PROCEED with CAUTION. pre-



No. 8

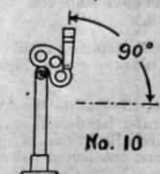
AUTOMATIC BLOCK SIGNAL.

Color. GREEN light at night
Indication. PROCEED

No. 9

DWARF SIGNAL.

Color. RED light at night.
Indication STOP.



No. 10

DWARF SIGNAL.

Color. GREEN light at night
Indication PROCEED

CAPACITY OF ENGINES IN ADDITION TO WEIGHT OF ENGINES, TENDERS AND CABOOSES.

STATIONS	Ruling Grade	Class M2-1950-1990				Class L1-1900-1921				Class L2-1800-1844				Class F4-1095-1099 " F5-1100-1109 " F6-1110-1129 " F7-1130-1139 " F8-1140-1199 " F9-1300-1324 " G5- 800- 807				Class G2-700-719 " G3-720-769				Class F1-500-565 " D5-450-476				Class D2-300-359				Class D4-400-426				Class B6-232-238			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Everett to Skykomish	1.0	1700	....	....	....	1600	....	....	....	1400	....	....	....	1200	....	....	....	1000	..	....	....	775	....	....	....	575	....	....	....	715	....	....	....	385	....	....	....
Skykomish to Cascade Tunnel	2.2	850	....	....	....	800	....	....	....	700	....	....	....	600	....	....	....	480	..	....	....	360	....	....	....	276	....	....	....	340	....	....	....	183	....	....	....
Cascade Tunnel to Leavenworth	Down	1900	....	....	....	1800	....	....	....	1800	....	....	....	1500	....	....	....	1250	..	....	....	900	....	....	....	....	....	....	....	....	..	....	....	....	....	....	....
Leavenworth to Cascade Tunnel	2.2	850	....	....	....	800	....	....	....	700	....	....	....	600	....	....	....	480	..	....	....	360	....	....	....	275	....	....	....	340	....	....	....	185	....	....	....
Seattle to Delta	0.5	....	....	....	....	....	....	....	....	....	....	....	....	2100	....	....	....	1750	..	....	....	1350	....	....	....	1050	....	....	....	....	....	....	....	....	....	....	....
Delta to Seattle	0.4	....	....	....	....	....	....	....	....	....	....	....	....	2500	....	....	....	2100	..	....	....	1460	....	....	....	1120	....	....	....	....	....	....	....	....	....	....	....
Cascade Tunnel to Lowell	Down	1900	....	....	....	1800	....	....	....	1800	....	....	....	1500	....	....	....	1250	..	....	....	900	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Silvana to Delta	0.5	....	....	....	....	....	....	....	....	....	....	....	....	1800	....	....	....	1400	...	....	....	1080	....	....	....	875	....	....	....	....	....	....	....	....	....	....	....
Delta to Silvana	0.4	....	....	....	....	....	....	....	....	....	....	....	....	2500	....	....	....	1800	....	....	....	1460	....	....	....	1120	....	....	....	....	....	....	....	....	....	....	....
Bellingham to Silvana	0.5	....	....	....	....	....	....	....	....	....	....	....	....	2100	....	....	....	1800	...	....	....	1350	....	....	....	1050	....	....	....	....	....	....	....	....	....	....	....
Silvana to Bellingham	0.5	....	....	....	....	....	....	....	....	....	....	....	....	2100	....	....	....	2100	....	....	....	1350	....	....	....	1050	....	....	....	....	....	....	....	....	....	....	....
Bellingham to New Westminster	1.1	....	....	....	....	....	....	....	....	....	....	....	....	1080	....	....	....	900	....	....	....	700	....	....	....	515	....	....	....	....	....	....	....	....	....	....	....
New Westminster to Bellingham	1.5	....	....	....	....	....	....	....	....	....	....	....	....	800	....	....	....	675	....	....	....	600	....	....	....	485	....	....	....	....	....	....	....	....	....	....	....

WEATHER RATING {1—When temperature is 25 degrees above zero or over
2—Very frosty or wet. 5 to 25 above zero.
3—Five degrees above to 10 below zero.
4—Ten below zero and colder.

Chief Train Dispatcher may increase or decrease above rating as it may be found necessary.

Weight of Empty Cars and Dead Engines and Tenders will be estimated as follows, when not marked:

Box Cars, 28 to 30 foot	11 Tons
Box Cars, 33 foot	12 Tons
Box Cars, 34 foot	13 Tons
Box Cars, 36 foot	15 Tons
Box Cars, 40 foot	17 Tons
Refrigerator Cars	20 Tons
Furniture Cars, 30 to 40 foot	17 Tons
Furniture Cars, 40 to 50 foot	19 Tons
Cabooses, 8 wheel	17 Tons
Cabooses, 4 wheel	10 Tons
Flat Cars, 28 to 30 foot	9 Tons
Flat Cars, 33 and 34 foot	11 Tons
Flat Cars, 40 foot	12 Tons
Coal Cars	12 Tons
Gondola Cars	13 Tons
Ore Cars, Wood	12 Tons
Ore Cars, Steel	15 Tons
Oil Tanks	15 Tons
Ballast Cars	12 Tons
Steam Wreckers	75 Tons
Engine Tank (Empty)	30 Tons
Mail Cars	25 Tons
Baggage Cars	30 Tons
Coaches, 8 wheel	30 Tons
Coaches, 12 wheel	35 Tons
Dining Cars and Tourist Cars	40 Tons
Sleeping Cars, Parlor Cars and Observation Cars	40 Tons

The following will govern when handling empty cars: With 10 or less empty cars in a train no allowance will be made for wheel friction; with 10 to 20 empty cars in a train, add to actual weight 5 tons for each empty car for wheel friction; with more than 20 empty cars in a train add 6 tons per car for wheel friction.

Weight of Dead Engines.

Engines numbered below 200 series	80 Tons
Engines numbered in 200 series	90 Tons
Engines numbered in 300 series	86 Tons
Engines numbered in 400 series	110 Tons
Engines numbered in 500 series	115 Tons
Engines numbered in 600 series	120 Tons
Engines numbered in 700 series	140 Tons
Engines numbered in 800 series	155 Tons
Engines numbered in 900 series (except 992 to 997)	115 Tons
Engines numbered 992 to 997	95 Tons
Engines numbered 1000 to 1007	131 Tons
Engines numbered 1050 to 1069	144 Tons
Engines numbered 1079 to 1095	158 Tons
Engines numbered in 1100 and 1200 series	160 Tons
Engines numbered in 1300 series	160 Tons
Engines numbered 1400 to 1405	173 Tons
Engines numbered 1406 to 1425	188 Tons
Engines numbered in 1500 and 1600 series	179 Tons
Engines numbered in 1700 series	180 Tons
Engines numbered in 1800 series	219 Tons
Engines numbered in 1900 series	252 Tons

Speed Limits for Trains.

Between	Passenger	Freight
Leavenworth and Skykomish	35 miles per hour.	20 miles per hour.
Through Cascade Tunnel	20 miles per hour.	15 miles per hour.
Skykomish and Gold Bar	40 miles per hour.	20 miles per hour.
Gold Bar and Pacific Avenue	50 miles per hour.	25 miles per hour.
Cherry Valley Line	25 miles per hour.	15 miles per hour.
Everett Jct. and Seattle	50 miles per hour.	25 miles per hour.
Delta Wye and Samish	50 miles per hour.	25 miles per hour.
Samish and Bellingham	40 miles per hour.	20 miles per hour.
Bellingham and Still Creek	45 miles per hour.	25 miles per hour.
Still Creek and Vancouver	20 miles per hour.	15 miles per hour.
Skagit Branch	25 miles per hour.	15 miles per hour.
Fraser River Jct. to Cloverdale	25 miles per hour.	15 miles per hour.
Guichon to Cloverdale	25 miles per hour.	15 miles per hour.
Cloverdale to Sumas	30 miles per hour.	20 miles per hour.
Cloverdale to Hazelmere	20 miles per hour.	15 miles per hour.

L-1, L-2 and M-2 engines will not exceed speed of 25 miles per hour.
F-7, 8 and 9 engines will not exceed speed of 30 miles per hour.

Speed Table.

50 miles per hour is equivalent to one mile in 1 minute and 12 seconds.
45 miles per hour is equivalent to one mile in 1 minute and 20 seconds.
40 miles per hour is equivalent to one mile in 1 minute and 30 seconds.
35 miles per hour is equivalent to one mile in 1 minute and 43 seconds.
30 miles per hour is equivalent to one mile in 2 minutes and 0 seconds.
25 miles per hour is equivalent to one mile in 2 minutes and 24 seconds.
20 miles per hour is equivalent to one mile in 3 minutes and 0 seconds.
15 miles per hour is equivalent to one mile in 4 minutes and 0 seconds.

SPECIAL RULES.

1. Freight trains will not carry passengers.
2. Horizontal position of the semaphore blades by day and yellow light shown by night indicates that switches with which the distant signals are connected are open and approaching trains should immediately be brought under control.
3. Diagonal position of the blades and green lights displayed at night indicate that switches with which the distant signals are connected are properly set and train should proceed as per rule.

REFERENCE MARKS.

4. In addition to signs provided for in rule 7, Book of Rules, the following signs in column headed "Signs" indicate:

D	Day telegraph or telephone office.
N	Night telegraph or telephone office.
DN	Day and night telegraph or telephone office.
P	Dispatcher's telephone accessible at all times.
I	Interlocked.
K	Connection with foreign road.
•	Standard clock.

PERSONAL INJURIES.

1 Whenever passengers or employes are injured, everything must be done to care for them properly. If they are able to be moved, take them for treatment to the nearest place at which the Company has a surgeon. If they cannot be moved, call the nearest Company surgeon. If the case is urgent and the Company surgeon cannot be immediately procured, the conductor, agent or officer in charge is authorized to call the nearest surgeon available to administer first aid and care for the patient until the Company surgeon can take charge of the case.

No surgical operation must be performed until the arrival of the Company surgeon, unless it may be required for the immediate safety of the patient.

2. In cases of serious accidents to trains, conductors, after making everything safe, must give their undivided attention to the care and comfort of their passengers, especially to those who are injured. Bedding and linen may be taken from sleepers for this purpose, the conductor keeping careful account of all material so taken, and its return or safe keeping attended to; and, when necessary, injured persons may be put in the sleepers.

When a number of persons are injured, the service of competent surgeons in the vicinity should at once be secured, and every possible effort made to care for the injured, the Division Surgeon being notified by wire to come immediately to the place of the accident.

3. When tramps, boys and other persons, climbing on or jumping from moving trains, or persons walking or lying on the track, are injured or killed, they should be sent to their homes or placed in charge of the local county, city or village authorities, and no expense incurred on the part of the Company in the matter.
4. When people are killed away from a station the body should be picked up and taken to the nearest station and the authorities notified. Never take a body out of the county where the accident happened if it can be avoided, but if there is no station in that county take it to the nearest station in the next county, notifying the county authorities in all cases.
5. A report of all accidents must be made, and immediately sent by wire to Superintendent, giving all information.

In reporting accidents to trains carrying passengers, conductors should give the correct names of the injured and uninjured, the addresses and destinations of all persons on the train, and of the injured, and the extent of their injuries. This report must be sent from first telegraph office to the General Claim Agent and to the Assistant Claim Agent in whose jurisdiction the accident occurs.

As soon as possible thereafter Form 245 should be made out by each employe and forwarded to the Superintendent of the Division; a separate report being made for each person injured.

6. Every effort must be made to procure the names and addresses of all persons, outsiders as well as employes, who witnessed the accident, especially when persons are injured within the corporate limits of any city, town or village, or when crossing the tracks at a public highway.
7. In every case of personal injury in any Department, a full and complete report must be made at once by every employe immediately present, no matter whether he considers his statement of importance or not, answering every question as fully as possible.
8. When persons are injured by an accident which may have been caused by defective appliances, tools or machinery, the car or appliance, tool or machinery must be immediately examined by the person in charge to ascertain its condition, and report made of the inspection, giving the numbers and initials of cars examined, with names, occupation and address of the persons making the inspection. This inspection must be made before the car or engine leaves the place where the accident occurred, and afterwards at the first district terminal by the inspector, foreman, or Master Mechanic at such point, the Superintendent to notify such person of the necessity of making such examination. When an accident is caused by the breaking of machinery, tools, appliances or rails, the broken parts must be so marked as to be readily identified, and immediately turned over to the Superintendent.
9. This Company will not recognize any responsibility for board, medicine, nursing or surgical attention furnished by other than Company Surgeons, except for the emergency service required under Rules 1 and 2, unless authorized by the Superintendent, General Claim Agent, or a general officer of the Company, and when so authorized the General Claim Agent should at once be notified.

COMPANY SURGEONS.

Dr. J. A. Quinn, Chief Surgeon, Ernst Building, Cor. 5th and Wabasha, St. Paul.
Dr. J. W. Chamberlin, Ophthalmic Surgeon, Lowry Building, St. Paul.

Leavenworth	DR. G. W. HOXSEY.
Skykomish	DR. C. E. GREASON.
Monroe	DR. H. K. STOCKWELL.
Everett	DR. P. M. WALKER & W. O. COPPS
Interbay	DR. F. A. BOOTH.
Seattle	DR. H. M. READ.
Seattle	DR. R. W. PERRY, Oculist.
Tacoma	DR. JAMES A. LA GASA.
Burlington	DR. H. E. CLEVELAND.
Bellingham	DR. W. A. KIRKPATRICK.
Blaine	DR. A. S. REEDY.
New Westminster	DR. GEO. E. DREW.
Vancouver	DR. A. S. MONRO.
Anacortes	DR. GEO. B. SMITH.
Woolley	DR. M. B. MATTICE.

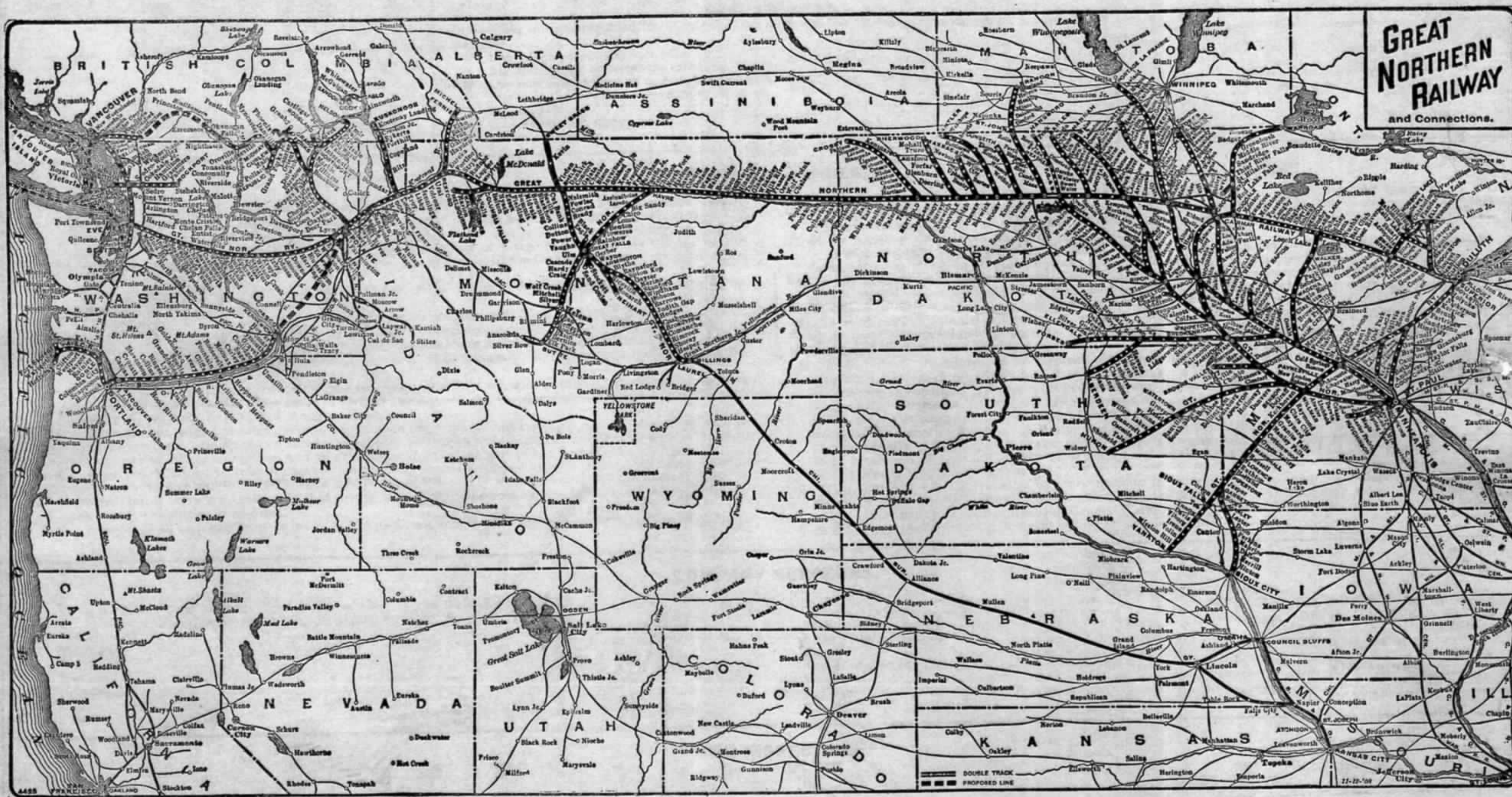
TIME INSPECTORS.

Leavenworth	F. E. CARLQUIST.
Seattle	J. F. HUNTER.
Burlington	J. H. CROSSBY.
Everett	R. G. COLVIN & CO.
Bellingham	BEHRENS & SON.
Vancouver, B. C.	PAUL & McDONALD.
Centralia, Wash.	BEN SALICK.
Portland, Ore.	C. CHRISTENSON.

E. O. WADHAMS, Dispatcher
G. E. WELLEIN, Dispatcher.
C. O. JOHNSON, Dispatcher.
F. J. ROE, Dispatcher.
T. H. REED, Dispatcher.

C. E. LAMKIN, Dispatcher.
H. L. CAULKINS, Dispatcher
D. MOORE, Ass't. Chief Dispatcher.
G. R. MILLER Chief Dispatcher.

S. CORRIGAN, Train Master.
W. H. BROKAW, Train Master
J. C. DEVERY, Assistant Superintendent.


GREAT NORTHERN RAILWAY
and Connections.
BRITISH COLUMBIA
ALBERTA
ASSINIBOIA
MANITOBA
WASHINGTON
MONTANA
NORTH DAKOTA
SOUTH DAKOTA
OREGON
IDAHO
WYOMING
NEBRASKA
IOWA
CALIFORNIA
NEVADA
UTAH
COLORADO
KANSAS
GREAT NORTHERN RAILWAY
DOUBLE TRACK
PROPOSED LINE