# BURLINGTON NORTHERN INC.

### PACIFIC DIVISION

## Special Instructions No. 1

IN EFFECT AT 12:01 A.M.
Pacific Standard Time

Friday May 10, 1968

### ALL SUBDIVISIONS

		11111 50221 151011		
1.	Speed F	Restrictions	Maximum Speeds	
	Freight	er trainstrains	65 MPH.	
	The about	ove speeds are subject to modificati as indicated under each subdivision	ion under speed respecial instructions.	
	All trai	ns and engines through turnouts an as specified in special instructions gnals indicate otherwise	nd gantlets or where	
	Engines	running light or with caboose on	nly 50 MPH. unless	
	otherwi	se provided.	Branch	
	Equipm Ore car	ent Mairs (except CP ore cars)45	in Line Line MPH. 20 MPH.	
	CP ore Load	cars (series 370000-377000)	MPH. 15 MPH.	
	Empt	ty25 ng derricks30	MPH. 15 MPH.	
	Loco c	ranes30	MPH. 15 MPH.	
	Pile dri	vers 30	MPH. 15 MPH.	
	Tandan	ells and shovels30 spreaders30	MPH. 15 MPH. MPH 15 MPH	
	Scale t	est cars 30	MPH. 20 MPH.	
	Air du	mp cars (loaded)35	MPH. 20 MPH.	
	Rotary	spreaders 30 est cars 30 mp cars (loaded) 35 plows, wedge plows and dozers 30 ains 30	MPH. 15 MPH. MPH. 15 MPH.	
2.	Diesel	ent of engines dead in trains: engines not equipped with alignme	ent control counlers	
	or align	nment control lock blocks when in tov	w in freight or mixed	
	trains	must be handled singly, not in group or more than 15 cars from the road en	ps and not less than	
	Other	diesel units when in tow dead in tra	ains should not be in	ı
	groups	of more than 5 units, such units ma	y be handled next to	
	road u	nits. Diesel units equipped with o must have lock blocks in "Down	coupler control lock	
	multipl	le groups.	position when in	
	Diesel	units not equipped with alignment of	control devices:	
		1 through 195 9103 through 9106		
	CBQ	9136, 9137, 9139 through 9106	h 0142 0147 through	
		9153, 9203 through 92	48, 9400 AB through	1
		9413 AB, 9249 through 9308, 9310 through 93	h 9292, 9300 through	ı
	NP	99 through 177		
		500-501-525-551: 555 thr	rough 558	
		602-603-651; 700 through	h 724	
		750; 800 through 803; 85 900 through 912	00 through 853	
	SPS	11 through 55		
		856 through 869		
	Diesel GN	units equipped with coupler alignme	ent lock blocks:	
	CBC	550 through 599 2200 through 267, 270 th 300 through 374, 400 th	rough 287 rough 411	
	NP	430 through 459 200 through 375, 552 th		
	SPS	562 through 569 60 through 84	- · - <b>3</b> - · · ·	
		ther Diesel units are equipped wit	th -li	,
	couple		и видишени сопио	E
	Maxim	num Speed Diesel Units Dead In Tow-	_	
	CBQ	9103 through 9106		
		9136, 9137, 9139 through 9143, 914 9153, 9203 through 9292, 9300 thro	47 through ough 9308 50 MPH	
		100 through 999		
		9916 through 9993	79 MPH	
	NP	99, 100, 400 Series, 600 Series	40 MPH	[.
		700 and 5400 Series	50 МРН	[.

		200 Series 200 Series 500 501 550 through	00	B11 11.
		200 Series, 300 Series, 500, 501, 550 through 569, 850 Series, 860 Series, 900 Series,		
		2500 Series, 2800 Series, 3600 Series,		
		6000 Series, 7000 Series.		
		6500 Series, 6600 Series, 6700 Series	79	MPH.
		Budd Cars B-30, B-31, B-32, B-40, B-41, B-42, on rear of train only	70	мрп
	CN	•		
	GN	1 through 195	50	MPH.
		279 (A&B), 307 through 317 (ABC),		
		430 through 474 (ABCD), 550 through 915,		
		2000 through 2035, 3000 through 3025	65	MPH.
		320 through 333, 350 through 375, 400 through 417, 500 through 512, 679, 680		
		2500 through 2538, 3026 through 3040	79	MPH.
		Budd Car 2350, on rear of train only	79	MPH.
	SPS	11, 22 through 28, 40 through 45,		
		50 through 55		
		60 through 98, 154 through 327, 856, 869 330 through 335, 150 through 153, 750,	65	мен.
		800 through 806	79	MPH.
	When	NP road passenger diesel units 6500-6600-6700	ser	ies are
	couple	ed in multiple with road freight or road switcher	uni	ts, the
	wheel	passenger units must be trailing to avoid danger s on the freight or road switcher units due to	ex	cessive
	brake	cylinder pressure. The speed restrictions for fr	reig	ht and
	road s	witcher units must be observed to avoid damage	to ti	action
3.		ving equipment loaded or empty must be handle ins unless otherwise provided:	a o	n rear
	Outfit	cars		
		ats (GN X4800 to X4975, X4410) test cars (next ahead of caboose)		
		king derricks		
	Pile d	rivers		
		cranes y Snow Plows, dozers, wedge plows		
		n spreaders		
		ump cars loaded or empty		
	_	ats — NP 117002 to 117892	- nla	and on
	rear	ars 80 feet or longer, loaded or empty, should be of train for movement over any grade of 1% or	mo	re and
	where	e track curvature is 6° or greater.		
		following subdivisions have curves of 6° or more 6 or more.	on	grades
		Subdivision 7th Subdivision		
		Subdivision 11th Subdivision		
		Subdivision 14th Subdivision Subdivision 15th Subdivision		
	-	elper territory, helper engines must be cut in	ah	ead of
		e equipment.		
4.	Heavy	y Cars—Cars heavier than the following not ut authority of Superintendent:	pe	rmitted
		or less in length2	20 (	100 lbs.
	Over	40 ft. long	63.0	000 lbs.
	EXCI	EPT: On mainline subdivision cars at least	••,	,
	64'8"	over strikers with minimum axle spacing of		
	6'0",	minimum truck centers of 53'7" and minimum diameter of 38"3	15 4	)()() lhe
5		223 — Unless otherwise provided lights will n		
J	playe	d on train order signals on branch line subdivision	ons.	Train <b>s</b>
	will l	be governed by the day indication of these t	rain	order
e	signa			
6.		tain Grade Operation— lecting points established by train orders, the t	reir	order
	marat	eeting points established by train orders, the t	- a11	order

siding.

100 Series (except 100), 525, 800 through 803 60 MPH.

Unless otherwise directed, the ascending train will take the

Descending freight or mixed trains holding main track at the meeting point must not pass the upper switch of siding until the ascending train is clear of the main track.

To the extent practical, empty cars must not be handled in head 15 cars of trains descending mountain grades.

must specify which train will take siding.

Ninety pound (90#) brake pipe pressure must be maintained on all freight trains unless otherwise provided.

Conductor must know that required brake pipe pressure is being maintained before passing summit.

Trains handled by locomotives equipped with brake pipe maintaining feature must use the maintaining method of braking on mountain grades.

The use of retainers will not be required on trains handled by Diesel-electric locomotives having dynamic brakes and/or brake pipe pressure maintaining feature in operative condition.

Retaining valves shall be used when requested by enginemen. If dynamic brake becomes inoperative, train must be stopped and retaining valves used as outlined for handling train with engine having no dynamic brake.

In the event of failure of the dynamic brake on any unit of diesel-electric engine or when proper control of speed cannot be maintained, engineer must take action promptly to stop the train by use of the train brakes and instruct head brakeman to notify conductor that retaining valve handles must be turned up on cars in train to the requirement specified for trains handled by engines having no dynamic brake. Conductor shall instruct the brakeman accordingly and notify the engineer when specified number of retaining valve handles have been turned up, and train may proceed.

Descending trains handled by engine having no dynamic brake or when engine does not have dynamic brake in effective operation on all units, retaining valve handles will be turned up on all loads and one-half of empty cars, alternating the empties.

To avoid derailing cars in the head portion of freight trains while descending grades 2.2% or greater, engineers must limit maximum dynamic braking amperage, in line with the number and type of diesel units in the engine consist, to that shown in the following tables:

Table 1
Any combination of fourmotored diesel units, equipped
with dynamic brakes, coupled
in multiple

Table 2
All six-motored diesel units coupled in multiple

_					
Number of Units	Maximum Allow- able-Amperage	Number of Units	Maximum Allow- able-Amperage		
3	700	3	575		
4	650	4	480		
5	580	5	430		
6	540	6	400		
7	500	7	375		
8	460	8	350		
9	430	9	330		
10	410	10	310		

When any NP 5400 or NP 6000 series units are in an engine consist, to avoid overloading and damaging the electrical equipment, the maximum dynamic brake amperage must not exceed 540 ampere, regardless of the number or type of other units in the engine consist.

When six-motored diesel units are coupled in multiple with four-motored diesel units, each six-motored diesel unit must be counted as two units to arrive at the number of units to use in determining the maximum allowable dynamic brake amperage permissible as shown under Table 1. Example: engine consist of two NP 2500 series units and two NP 200, NP 300 or NP 7000 series units, a total of four units operating the train, but a total of six units for use in determining maximum allowable dynamic brake amperage permissible under Table 1, which would be 540 amperes. In no event shall tonnage exceed 75 tons per brake.

If engine is to be detached, trainmen must not close the angle cock on car or engine until whistle signal has been given. After recoupling and opening the angle cock, brake system must be recharged to the required pressure and upon receipt of proper signal, application and release test of brakes on rear car shall be made from the engine as outlined in Air Brake Rules.

The automatic air brake must not be depended upon to hold a locomotive, cars or train, when standing on a grade, whether

locomotive is attached or detached from cars or train. When required, a sufficient number of hand brakes must be applied to hold train, before air brakes are released. When ready to start, hand brakes must not be released until it is known that the air brake system is properly charged.

When necessary to make a backup movement on ascending mountain grade sufficient hand brakes must be set on rear end to hold up the slack; then when ready to proceed ahead, hand brakes must be released starting from the rear car first and working toward the head end of train so the slack will run out gradually and avoid break-in-two.

If stop is made on descending grade, sufficient time must be allowed to recharge the train brake system which shall not be less than ten minutes after brake valve handle is placed in running position.

If stop is made on descending grade and engine brake only is not sufficient to hold the train, hand brakes must be applied to hold the train and to allow sufficient time to fully charge the train brake system.

Conductors of trains using helper engine will determine the location of the helper engine in the train on each trip. Helper engine may shove against caboose in either direction with the following exceptions:

Do not shove against passenger equipment, 80 foot or longer cars or wooden underframe equipment.

Air must be cut in on all helper engines and engine must not be cut off while train is in motion.

### 7. Log Instructions:

Rule 805E will not apply to trains handling only logs in the consist. Conductors must personally know that cars are not overloaded or improperly loaded and are safe to move without loss of lading, giving particular attention to permitted maximum width of load.

Top or "peaker" logs will not be handled on loads of thirteen or more logs in order that binders will bear on all outside logs instead of being held away from sides of logs by a top log. Cars must not be accepted for movement when loaded to a height exceeding 13 feet above top of rail, except where height of not more than one log extends above 13 foot limit to a maximum height of not more than 14 feet above top of rail.

A careful running inspection must be made before entering tunnels, and if visibility is such as to prevent a good running inspection, stop for inspection must be made prior to entering tunnels.

### TRAINS HANDLING LOGS, WOOD BOLTS, OR VENEER BLOCKS, LOADED ON FLAT CARS WILL BE GOVERNED BY THE FOLLOWING INSTRUCTIONS:

Loaded log flats without permanent steel stakes will not be handled in trains unless logs are secured with at least two log binder cables, or two  $2'' \times .050''$  high tension steel bands, or two  $1'4''' \times .065''$  high tension steel bands, with binder cables or steel bands so placed that they will bear on each end of all top logs. Such bands or cables must extend around the entire load. In addition, where logs of less than full length are loaded on top of the so-called bunk log, there must be additional binder cables or bands as necessary so that cables or bands will bear on each end of such short logs. Band and cables must be tight.

When necessary to cut cable binders, they should be securely fastened to deck of car to avoid possibility of loose binders catching in switch points.

Such trains must, when running between stations, have a trainman stationed on rear platform or in cupola of caboose to watch for logs, wood bolts or veneer blocks that may be lost from cars, and obstruct other tracks, and prompt action must be taken to protect trains in case of obstruction. After dark such trainmen must be provided with lighted electric lamp, lantern or fusees to watch for logs.

DOUBLE TRACK — Conductors will notify train dispatcher when logs, wood bolts, or veneer blocks, loaded on flat cars are in their train and secure train order that trains, except work trains, on opposite track will be held at the next station until they have arrived. Trains handling logs loaded on flats must not meet or be passed by trains, except work trains, between stations on opposite track of double track; must be standing when passenger trains on opposite track meet or pass such train; and if practicable, must be standing when freight trains are met, or

passed on opposite track; but if not practicable, will pull by standing freight trains at reduced speed. When meeting or passing work trains between stations, one train must, when practicable, be standing.

### EXCEPTION:

When loaded in compliance with the following instructions, logs in gondolas, skeletonized gondolas, permanent side stake log cars (SBF cars) and high stake log flats equipped with bunks may be handled in double track territory and through tunnels without log orders:

Bands on SBF log loads or bands and stakes on gondolas are not required when outside logs are loaded with more than ½ their diameter below top side of gondola or top of stakes on SBF cars. Inside logs must have good lay with four inches of log below end of gondola. Inside logs on SBF cars must have good lay and no short logs near car ends or used as top logs.

good lay and no short logs near car ends or used as top logs. Two 2"x.050", or 14"x.065" high tension bands per pile of logs must be used when outside logs are loaded with two-thirds or more of their diameter above top side of gondola. Inside logs must be well pyramided with each log to have good lay and no portion of any log resting on top side of gondola. No top logs are permitted on small to medium pulp and paper logs. Bands should be placed about 6 feet from ends of logs, being around and over all logs with two-thirds or more of log above gondola sides. When short logs are loaded above gondola sides, such logs must be secured as above by at least two bands.

When loaded in gondolas, two 8-ft. stakes with diameter per Rule 10, Sec. 1, of AAR loading rules on each side of and two 2-inch bands per pile of logs may be used with logs loaded one foot below top of stakes, with five strands No. 9 wire or ¾-inch band across top of load between stakes.

When loaded in gondolas, four 8-ft. stakes with diameter per Rule 10, Sec. 1, of AAR loading rules on each side of car may be used with five strands No. 9 wire or ¾-inch band across top of load between stakes. No bands around logs are required. Car length logs loaded on high stake log flats equipped with bunks must have good lay on bunks and outside logs held in place by four stakes per side. Short length logs loaded on high stake log flats must have good lay on at least 2 bunks and outside logs held in place by at least 2 stakes per side and with no part of a log extending beyond car side. Stakes must be connected together at stake top with either chain or cable across car. Chain or cable passing through log load to be positioned so top logs have good lay and top logs must have sufficient weight to hold side stakes vertical. Side logs must not extend more than ½ their diameter above stake tops. Inside logs must be well pyramided with no short top logs. When loaded as above, no bands are required for logs loaded on high stake flat cars.

Eight foot logs loaded crosswise in gondola cars must have side protection of wire mesh or boards per Figure 11 of the AAR loading rules unless that portion loaded above gondola side is made up in bundles of not more than 1½ cords secured with two ¾ "x.028" steel bands and loaded with the lower edge of bundles not less than six inches below top of car side. When loaded in this manner, eight foot pulpwood of uniform size must be placed vertically to provide a solid wall at each end of the car and these vertical pieces secured with one ¾ "x.028" high tension band encircling all of the vertical pieces in a figure eight fashion so as to prevent lateral movement.

The following Rules of the Uniform Code of Operating Rules apply in Canada:

### ENGINE WHISTLE SIGNALS

Rule 14. (k-a) 0 0 —

Answer to 15k

Rule 98. Unless protected by block or interlocking signals, trains and engines must approach the end of two or more tracks, junctions, railway crossings at grade and drawbridges, at restricted speed.

Unless otherwise specified in special instructions, the speed of any train or engine must not exceed thirty-five miles per hour at interlocked railway crossings at grade until the entire movement has passed the crossing.

Unless otherwise specified in special instructions, the speed of any train or engine must not exceed twenty-five miles per hour at interlocked drawbridges until the entire movement has passed the drawbridge.

Trains or engines must stop at the stop signs at non-interlocked railway crossings at grade and at non-interlocked drawbridges and not proceed until the proper signal has been given for that purpose.

Rule 99 outside ABS territory, when a train is moving under circumstances in which it may be overtaken by another train, lighted fusees must be dropped off at proper intervals and such other action taken as may be necessary to ensure full protection.

When a train stops under circumstances in which it may be overtaken by another train, a flagman must immediately go back a sufficient distance to ensure full protection:

In daytime, if there is no down grade toward train within one mile of its rear and there is a clear view of its rear of 2000 yards from an approaching train.....at least 1000 yards:

At other times and places, if there is no down grade toward train within one mile of its rear......at least 1500 yards:

If there is a down grade toward train within one mile of its rear\_\_\_\_at least 2000 yards.

The flagman must, after going back a sufficient distance from train to ensure full protection, take up a position where there will be an unobstructed view of him from an approaching train of, if possible, 500 yards, first placing torpedoes not more than 100 nor less than 50 yards apart to cause two explosions at least 200 yards beyond such position. If necessary to go beyond the required distance, he will leave the torpedoes at the required distance as an indication of the location of his train, but must, under such conditions, also place torpedoes at the point at which an approaching train is flagged. Torpedoes so placed must not be removed.

The front of a train must be protected in the same manner when necessary.

Within ABS territory, when a train stops under circumstances in which it may be overtaken by another train, with the protection of at least two block signals to the rear, protection against following trains will have been afforded when flagman has taken up a position on the ground at a point from which stop signals can be plainly seen by an approaching train from a distance of at least 300 yards from the train being protected. When necessary to protect against trains moving in the opposite direction, flag protection provided for outside ABS territory must be provided, except that on single track where there are at least two block signals to the front governing opposing trains, protection will have been afforded a standing train when flagman has taken will have been afforded a standing train when flagman has taken up a position on the ground at a point from which stop signals can be plainly seen by an approaching train from a distance of at least 300 yards from the train being protected.

Both outside and within ABS territory, when a train stops under circumstances in which it may be overtaken by another train, the engineman will immediately signal the flagman to protect the rear. When ready to proceed he will recall the flagman.

After taking up position at the distance required, flagman must remain at that point until recalled or relieved and safety of the train will permit. Flagman must always on the approach of a train display stop signals.

If recalled before another train arrives, he must leave a fusee burning red at the point from which he returned, and while returning to his train, a fusee burning red must be placed at such points or times as may be necessary to ensure full protec-tion. A fusee burning red must be left at the point from which the train moves.

When curvature, weather or other conditions require, or when snow plows or flangers may be running, extra precaution must be taken.

Flagmen must each be equipped for daytime with:

A red flag on a staff,

At least eight torpedoes and

Seven red fusees; and

For nighttime and when weather or other conditions obscure day signals,

A white light,

A supply of matches,

At least eight torpedoes and

Seven red fusees.

A train should not stop between stations at a place where the view from following trains is obstructed if it can be avoided.

Conductors and enginemen are responsible for the protection of their trains.

- Rule 40. (a) Before undertaking any work which may render the main track unsafe for movement at normal speed, or if rendered unsafe from any cause, trackmen, bridgemen, or other employees must provide protection by sending out a flagman with flagman's signals in each direction at least 2000 yards from the defective or working point.
- (b) After going out the required distance, flagman must take up a position where there will be a clear view of him from an approaching train of, if possible, 500 yards, first placing torpedoes not more than 100 nor less than 50 yards apart to cause two explosions at least 200 yards beyond such position.

(c) Flagman must not return until recalled or relieved.

(d) If necessary to go beyond the required distance, flagman will leave the torpedoes at the required distance, but under such conditions must also place torpedoes at the point at which an approaching train is flagged.

(e) On the approach of a train flagman must display stop signals, using lighted fusees at night or in obscure weather.

- (f) Trains stopped by a flagman will be governed by his instructions, and on reaching the defective or working point will there be governed by instructions of the foreman in charge.
- (g) Flagmen must each be equipped for daytime with:

A red flag on a staff,

At least eight torpedoes and

Seven red fusees; and

For nighttime and when weather or other conditions obscure day signals,

A red light,

A white light,

A supply of matches,

At least eight torpedoes and

Seven red fusees.

- Rule 43. When the nature of the defect does not require stop to be made, and after speed restriction has been placed by train order and the foreman so advised, Rule 40 may be modified as follows:
- (a) By day place a yellow flag and, in addition, by night a yellow light at least 2000 yards in each direction from the defective point to the right of the track as seen from an approaching train, also:
- (b) By day place a green flag and, in addition, by night a green light in each direction immediately beyond the defective point.
- (c) Trains must reduce speed to comply with requirements of the train order, and must not increase speed until the entire train has passed the green signal.
- (d) When weather or other conditions obscure day signals night signals must be used in addition.
- Rule 45. In providing protection each main track must be regarded as a track upon which trains may run in either direction. Where two main tracks are on the same roadbed, flags and lights required to be placed to the right of the track as seen from an approaching train under Rule 43 must be placed to the outside of the track affected and not between the two main tracks.
- Rule 46. When flags or lights are placed as set forth in Rules 43 and 45 they will be mounted on staffs and elevated so there will be an unobstructed view of them from an approaching train.
- Rule 47. Where the use of torpedoes is required, duplicates should be placed on the opposite rail to explode simultaneously.
- Rule 48. Torpedoes must not be placed near stations nor on public crossings at grade.
- Rule 49. A sign bearing figures indicating permissible speeds, or the world SLOW, placed at the side of track will indicate

- a permanent slow order; its location and speeds permitted will be specified in the time table or special instructions.
- The time for points in the U.S. shown in this timetable reflect the standard time established by the Uniform Time Act of 1966. The times for points in Canada shown in this timetable reflect Canadian Pacific Standard Time.
- 10. RULES 200 AND 83(B) and other rules pertaining to authority for, and signature on, train orders and clearances are modified to permit train orders and clearance to be issued by the authority and over the signature of the Chief Dispatcher.

Until further notice train dispatchers offices will remain at present locations and will govern the same districts as prior to the merger.

 Should flat spots on wheels develop on passenger train cars or any engine, conductor or engineer will immediately advise Chief Dispatcher and be governed by his instructions.

### FIRST SUBDIVISION

Speed Restrictions—	Maximum Speed Permitted
Between	Freight
Wenatchee and Seattle	60 MPH.
Seattle, through turnouts South 1	Portal 10 MPH.
Seattle, over public crossings	20 MPH.
Monroe, CMStP&P RR movement	s between signals of
controlled switch from siding to	_
Cascade Tunnel No. 15, Eastwa	
Eastward passenger trains from	
Refuge bay No. 4, 1.0 mile west of	
35 MPH.—Trains or engines t	hrough No. 20 turnouts at
following locations.	

Both siding switches at:

Leavenworth

Winton

1.

Merritt

Berne

Goldbar

East siding switch at Cashmere, Scenic and Skykomish.

West siding switch at P.A. Jct.

Wenatchee, #1 switch East lead and #2 crossover switch.

Interbay, yard lead at 23rd Ave. overhead bridge.

25 MPH.—Trains or engines through No. 15 turnouts at following locations.

Both siding switches at Baring and Monroe East and West crossover switch West end of yard Wenatchee, and West siding switch at Cashmere, Scenic and Skykomish.

Seattle, King Street Passenger Station Tunnel Rules— King Street Passenger Station Tunnel Rules shall consist of Great Northern Block and Interlocking Rules as set forth in the Consolidated Code of Operating Rules, supplemented by the fol-lowing special instructions, and will govern train and engine movements between North Portal and South Portal.

A positive block is maintained in both directions between these stations. Trains and engines may make a forward or backward movement within these limits without flag protection, observing governing signal indications.

No train or engine will make a complete through movement between North Portal and South Portal against the current of traffic, or pass the governing signal at the immediate entrance to the tunnel on either track displaying a "Stop" indication, except on the authority of a "Tunnel Card" properly completed by operator in charge and OK'd by the operator at opposite station. When this governing signal indicates "Stop", trains and engines, after stopping, must proceed at restricted speed to the next signal and be governed by its indication.

Tunnel Cards shall be used as required: Form 26 for train and engine movements from North Portal to South Portal, and Form 26-A for train and engine movements from South Portal to North Portal.

"Tunnel Card" does not dispense with the observance of or compliance with the indications of westward signals at the west end of the tunnel governing entrance to the South Portal Interlocking or the eastward signals governing entrance to the North Portal Interlocking.

At South Portal, trains and engines may enter the tunnel on either track for short switching movements if required. If the governing signal at the immediate entrance to the tunnel displays a Stop-indication, a Tunnel Card must first be secured. The maximum permissible speeds between North Portal and South Portal for all trains and engines are: 20 MPH. moving with the current of traffic, and 10 MPH. moving against the current of traffic.

Operating directions are: "East" from south end of King Street Station through South Portal to North Portal, and "West" from North Portal through South Portal to west end of King Street Station.

When a train or engine is stopped by Stop-indication of dwarf signal located between eastward and westward main tracks, west end of King Street Station governing eastward train and engine movements on westward main track (Tunnel track 4), operator must be informed of desire to make the eastward movement on westward main track (Tunnel track 4) by four operations of the push button located on top of the signal.

Westward movements from 8th Subdivision main track are governed by signal located 300 feet west of the tower.

Whistle signal: 1 long to tunnel; 3 long to waterfront; 4 long to old main track; 5 long to running track; 1 short from American Can Spur to main track.

Westward movements from Pier 70 lead are governed by a signal located 1360 feet west of tower.

Whistle signal: 1 long to waterfront.

Westward movements against the current of traffic into the tunnel are governed by a signal located 250 feet east of the east entrance to the tunnel.

3. INTERBAY, when an eastward movement is to be made from yard lead to main track, trainmen shall operate push button "R" at signal 4.8. If no conflicting movement is being made on main track and spring switch is in proper operating condition, signal 4.8 will indicate proceed after a time interval of three minutes. After push button "R" is operated a white light will be displayed if operation is effective.

Westward freight trains will enter yard at the connection from westward main track at east end of yard unless otherwise instructed by yardmaster. Trains or engines must stop east of signal 5.3 and not proceed until trainmen have lined switch to enter yard.

Interbay-Westward Dwarf Signal 5.5 of color light type located between Eastward and Westward main tracks East End Interbay Yard governing Westward train and engine movements is controlled from Interlocking Bridge No. 4, Ballard, Washington.

When train or engine is stopped by the Stop Indication of this signal, a member of the crew must operate push button located on a cable post south side of Eastward track opposite the dwarf signal. This operation will inform Signalman on Bridge 4, and automatically clear signal 5.5 if there are no conflicting train movements.

 Double track extends between Seattle and Edmonds except between M.P. 4.1 and M.P. 5.4 Interbay, and automatic Interlocking Ballard.

Westward track is signalled for traffic in both directions between M.P. 5.4 Interbay and Edmonds. Two main tracks known as No. 1 main (water side) and No. 2 main (bank side) extend between Edmonds and Everett Jct.

- Rules 251, 252, 253 and 254 are in effect on double track between Edmonds and Interbay. Running orders are not required for movements with the current of traffic.
- 6. Seattle train, yard and engine movements between freight yard and 5th Avenue tracks will be made via UP main track Oregon

Street connection and their time-tables and Special Instructions will govern.

- At Seattle, between Bay Street and Blanchard Street, engine whistle must not be sounded except to prevent an accident not otherwise avoidable.
- The following signals are located to the left of the track which they govern:

Signals governing westward movements on No. 2 main track. Everett Jct. to MP 17.4 Edmonds.

Signals governing eastward movements on No. 1 main track MP 17.4 Edmonds to Everett Jct.

Signals governing eastward movements on westward track between M.P. 5.4 Interbay and Edmonds.

Skykomish and Scenic, eastward governing signal for main track at east switch of siding.

westward governing signal for siding at west switch of siding.

Berne, westward governing signal for siding at west switch of siding.

Merritt, eastward governing signal for siding at east switch of siding.

- McKinnon Spur, 2.4 miles west of Monroe, main track switch not equipped with electric lock, Rule 268(A) applies.
- Switching light key controller located on signal mast at west switch of siding Berne and on bungalow at east switch of siding 10. Scenic. Two white lights, normally dark, with signs reading "Sw. Lt." are located 2000 and 5000 feet west of west switch Berne also 2000 and 5000 feet east of east switch Scenic. To operate switching lights, trainman should insert switch key in controller and turn fully clockwise to light the lights, then turn key to center position to extinguish lights.

These lights are to be used as an aid in switching when radio or hand signals cannot be used. Light should be turned on for movement in one direction, turned off to stop, again turned on to reverse direction. Prior arrangements must be made between crew members before using these switching lights.

11. East switch Berne to west switch Scenic. Signal transmission line carries 13,200 volts.

All wires must be considered energized unless a clearance has been obtained from the Train Dispatcher.

Telegraph and telephone wires are not located along right-of-way. Never attempt to connect field telephone apparatus to any wires located along right-of-way in this zone.

12. Instruction Governing Operation Trains Skykomish to Wenatchee-

(See Mountain Grade Operation All Subdivisions)

Diesel engines operated on freight trains through Cascade tunnel will be governed as follows:

Hot engine alarms are set at 195 degrees and should the hot engine alarm sound, isolate the unit if temperature exceeds 205 degrees. Place the unit back on the line after water temperature is reduced to normal and check has been made of water level in engine cooling water tanks. Should the water level fall below minimum level shut engine down.

If, for any reason, eastward trains stop in tunnel, members of crew on both head end and rear end of train must communicate with each other on telephone located in each bay of the tunnel and have a thorough understanding with entire crew whether train will be backed out of tunnel or doubled out to Berne. If backed out to Scenic, train must be stopped before passing east siding switch and not back down main track unless protected by train order or flagman, or backing in siding, it must be known siding is clear. In making these moves definite understanding must be had with all members of the crew as to what is to be done to avoid accident.

Crew of eastward or westward trains stopped in Cascade tunnel must communicate by telephone, located in each bay of tunnel, with dispatcher to have tunnel ventilating fans operating and tunnel closure door at Berne closed during time train is standing. In case of emergency, a train in the tunnel may make a forward or backward movement to Scenic or Berne without flag protection and may pass signals indicating stop and proceed at restricted speed without stopping except signal 1700.3 and 1700.4. Train or Engine crew will contact dispatcher by tunnel phone and advise the movement they are to make.

Westward trains encountering signal 1706.1 inside West Portal displaying stop indication must not pass West Portal until it is known track is clear to east switch Scenic.

At Scenic, two white lights flashing alternately mounted in a vertical position on a bracket attached to the power pole just east of east switch on south side of main track to indicate ventilating system functioning. Eatsward trains must not pass Scenic unless alternate flashing white lights are operating unless directed by dispatcher to do so.

Ventilating fans and tunnel door located at the East Portal of Cascade Tunnel No. 15, Westward signal 1700.3 located 65 feet east of tunnel door, and Eastward signal 1700.4 located 100 feet west of tunnel door. When a train or engine is stopped by either of these signals, in addition to the usual observance of Rules, contact by phone to dispatcher must be made and great care must be taken before proceeding to see that the tunnel door is not closed, or in a partially open position.

In the event ventilating door, Cascade tunnel, is closed, denying movement, crew must first contact dispatcher who will take proper action. A hand-hoist at the East portal is provided for hand operation of the door in event of power failure. In any event be guided by instructions of dispatcher who has remote control of door operation. Further, see instructions relative to operation of hand hoist mounted adjacent to tunnel door.

Four Scott Air Packs have been placed in each bay of Tunnel. Whenever one of these air packs are used, advise the Superintendent and Asst. Supt. Wenatchee by wire the number of the air pack used so that it can be recharged at once.

Eastbound freight train enginemen handling helper engines through Cascade tunnel will operate in throttle 8 position and head engineer will control speed of train. Helper engine will reduce to throttle 6 at Bay 4.

13. Swing brakeman on eastward trains will get off at west switch Scenic and on westward trains will get off at east switch Berne and will inspect train as it pulls by slowly. If anything is found wrong, key controller located on signal mast can be used to actuate the dragging equipment light and engineer will stop the train and not move until he receives proper signal from the trainman. When crew consist does not include a swing brakeman, the head brakeman will make this inspection. When crew consist does not include a fireman or swing brakeman, the rear brakeman will arrange to be on engine and get off to make this inspection.

Special Red slide fence light is placed 1350 feet from the West Portal of Cascade tunnel, Scenic, to give indication for Westward trains when necessary. This signal will not show light unless there is slide-fence operation between West Portal of the tunnel and East siding switch.

If this signal shows Red indication, trains must stop and not pass until they send flagman ahead to see whether or not main track is blocked by slide, and make report promptly of the condition.

- 14. Scenic and Berne, two rail clamps provided for emergency use. When necessary to set out bad order car on siding see clamps are properly secured and blocked to rail on low end of car. Crew picking up car see clamps removed and replaced in depot.
- 15. At Wenatchee, engine whistle must not be sounded except to prevent an accident not otherwise avoidable.

  Pashastin Lumber and Roy Co. spur located at MP 1645 9, one

Pashastin Lumber and Box Co. spur located at MP 1645.9, one mile east of crossover at east end of Wenatchee, main track switch not equipped with electric lock, Rule 268(A) applies.

16. Train Register Exceptions-

Monroe, register only for CMStP&P RR trains.

Snohomish, Trains to and from Eighth Subdivision register by ticket.

Interbay, first class trains register by ticket.

Clearance Provisions and Exceptions Rule 83(B)—
 Within CTC district Rule 83(B) does not apply except at Wenatchee.

### Crossovers Not Indicated at Station-

Facing Point MP 15, Standard Oil spur 3 miles west of Edmonds.

Trailing Point

MP 14.1, 3.4 miles west of Edmonds.

MP 24.3 between Edmonds and Mukilteo.

MP 31.3, 1 miles west of Everett Jct.

MP 30.6, 1½ miles west of Everett Jct.

Manual Interlockings, Not Indicated at Station-

Ballard, Br. 4 Salmon Bay drawbridge.

20. Manual Interlockings with Dual Control Switches-

North Portal-South Portal......King Street Tunnel and terminal tracks.

Interbay ..... East Roundhouse lead switch.

Automatic Interlockings-

Ballard, between MP 7 and 8......Automatic interlocking with spring switches. Instructions posted on interlocking signal masts. When a train or engine is stopped by a stop indication a member of crew must call dispatcher before operating time release.

Spring switch at east end of single track near MP 8 Ballard equipped with electric lock, which is normally unlocked.

When eastward track east of this point must be taken out of service and westward track is to be used as single track, spring switch must be reversed by hand and locked with electric lock.

If dispatcher then authorizes a movement to or from the east-ward track, electric lock must be released and switch lined by hand for this movement, after which switch must again be lined for westward track and locked with electric lock.

### SECOND SUBDIVISION

•		
Between	$\mathbf{F}$	reight
Everett Jct. and Vancouver	60	MPH.
Everett, over street crossings	25	MPH.
South Bellingham, 12 Subdivision Crossing	20	MPH.
Bellingham, over street crossings	10	MPH.
Bellingham, over CMStP&P RR Crossings	20	MPH.
New Westminster, Fraser River Bridge	10	MPH.
Over Front St. Crossing	10	MPH.
Vancouver, over Pender, Union, Cordova Streets, Burrard Inlet, CPR Crossing, Powell St	8	MPH.
Bridge 10 Delta Jct. and overhead bridge 200 feet south of interlocked switch Delta Jct	15	MPH.
Overhead bridge 200 feet south of interlocked switch Delta Jct. and G.N. Jct	40	мрн.
35 MPH.—Trains or engines thru No. 20 turnouts at locations.	fol	lowing
Both siding switches at:		

Speed Restrictions—

Stanwood Bow

Samish So. Bellingham

Maximum Speed Permitted

West siding switch at Mt. Vernon.

Train Register Exceptions-

Vancouver, Vancouver Jct., register located in train order office at Vancouver. Arrival of First Class trains on register at Van-couver will cover their arrival at Vancouver Jct. New Westminster, all trains register by ticket

Clearance Provisions and Exceptions Rule 83(B)-At Everett Jct., Delta Jct., GN Jct., Brownsville and Townsend, Rule 83 (B) does not apply.

Clearance received at Vancouver will clear trains at Vancouver Jct.

Canadian National eastward trains may enter CTC limits at the east end of Fraser River Bridge when the governing signal

indicates proceed, obtaining clearance at New Westminster station.

4. Restricted Clearances-

High voltage electric wires at Stillcreek and Vancouver, B. C. will not clear man on top of cars. Train and engine men must keep off top of cars and engines while passing under these wires except in emergency and then use extreme caution. Clearance from top of rail as follows:

8"

Vancouver, Hastings St. viaduct 19'

 Powell St.—Vancouver, B. C. BI Line
 26" 5"

 Main St., Vancouver, B. C.
 19' 6"

 Renfrew St. — Stillcreek
 21' 0"

New Westminster, retaining wall Front Street crossing in front of penitentiary will not clear man on side of car or engine.

- 5. Bellingham, eastward freight trains leave train west of Pine Street near old Bloedel-Donovan Mill site, bring their set-out to yard and move pick-up back to train. Westward freight trains leave train east of "F" Street crossing. When necessary to take siding at Bellingham, crossing at "C" and "F" Street will have to be cut. Under no circumstances will any crossing be blocked for more than five minutes.
- Blaine-White Rock, trains will not pass International Border without permission of Customs and Immigration Inspectors.
- 7. Still Creek, eastward trains having wait or meet orders to fulfill at this point, or when governing signal indicates "stop", train will stand west of Renfrew Street Crossing until through movement can be made to clear Grandview Highway, 13th Avenue to avoid circuit operating signals at this crossing.
- 8. Vancouver, Canadian National Railway operate jointly with BN over BN tracks between Water Front and connection with BN main track north of CN Jct.; also between east leg of wye from main track switch and connection with Canadian National Railway in the BN South Yard, all of which is located within yard limits of Vancouver. Telephones for City and train dispatcher are located in booth near BN main track connection. There is also a City Telephone and train register in yard office near Dock. Movements in both directions over the Burrard Inlet Line must be recorded in train register. Before movement is made over Burrard Inlet Line in either direction between CN waterfront yard and BI Jct. or Glen yard, yard foreman or engineer will communicate with the yard office near Dock to ascertain if it is safe to proceed; air brakes must be cut in and operative on all engines and cars; the engine must be on the leading end of the cars at all times in making this movement.
- 9. The Board of Transport Commissioners for Canada, General Order O-7, forbids the handling of freight cars in main line passenger trains unless equipped with air brakes, communicating signals, steel or steel tired wheels, and trucks designed for use in passenger train service.
- Crossovers on Double Track Not Indicated at Station— Trailing point.

At MP 152.4—1.4 miles west of Still Creek. Dominion Bridge Co. spur.

At Vancouver Steel Co. spur, 2.5 miles west of Still Creek. MP 147.8—1 mile east of Burnaby.

11. Manual Interlockings Not Indicated at Station-

 Fraser River Jct.....drawbridge and junction with CN and BCE Rys.

Marysville, drawbridge 12, when interlocking signals display stop indication, bridge operator or signal maintainer must be called to check bridge equipment before trains are permitted to proceed over bridge.

Instructions for operating dual controlled derails are posted at home signals.

Following instructions will govern operation over Fraser River Bridge:

Westward BN Trains and Engines approaching Fraser River Bridge; Signal 4 short blasts of whistle for line up from Bridge to West BN Main track.

Explosion of one torpedo indicates stop. No steam or electric locomotive, or train operated by steam, electricity, or other power, no hand or push car or speeder shall cross the bridge in either direction at speeds greater than 10 miles an hour on approaching Absolute Signals and move between Absolute Signals at speed not exceeding 10 miles an hour.

No train shall move forward against a stop signal (red indication or no indication) unless the engineman has been handed a clearance form provided by the Department of Public Works by the Bridge Superintendent or a person authorized by him to do so. No hand flag or lamp signal or verbal instructions are to be accepted as a clearance to cross the bridge.

All entering signals to Fraser River Interlocking are under full control of bridge operator.

The top indication of Eastward and Westward leaving Signals Fraser River Bridge govern entrance to CTC territory on BN main tracks and are jointly controlled by bridge operator and CTC control operator New Westminster, B. C. station.

12. Manual Interlocking with Dual Control Switches—
Delta Jct. .....Drawbridge 10 and 11th Subdivisions crossing.

These switches are electrically controlled by operator at Delta Jct.

Whistle signals for routes:

Main track ......1 long.

From East to Delta Yard.....1 long, 1 short.

From West to Delta Yard......2 long, 1 short.

From Delta Yard to East......2 long.

From Delta Yard to West......3 long, 1 short.

From Tenth Subdivision to East........ 1 long, 1 short, 1 long.

From East to Tenth Subdivision .......... 1 long, 1 short, 2 long.

### 13. Automatic Interlockings-

To obtain proceed indication on signal to enter main track, trainmen shall operate switch key controller located on signal

A positive block is maintained in both directions between the westward interlocking signal, C.N. Junction, and the eastward interlocking signal, Still Creek. When a train or engine is stopped by a stop indication of these signals it will be governed by Rule 509.

Between Still Creek and C.N. Junction extra trains will be governed with respect to opposing extra trains by signal indication; this does not modify the provisions of Rule 93.

### 14. Semi-Automatic Interlockings Not Indicated at Station-

New Westminster, 0.9 miles west

New Westminster, 0.4 miles west.....Fraser Mill Spur. CPR crossing.

Normal position of gates is stop for BN.

Normal position of gates is stop for BN.

BN trains or engines shall stop clear of Powell Street until gates are opened and the way is clear for movement across CPR tracks to avoid blocking traffic on Powell Street. Crossing signals governing traffic on Powell Street are manually controlled by handle of electric gate lock.

- 15. BN train and engine movements over the semi-automatic interlocking at the CPR crossing at Burrard Inlet, Vancouver, B.C. is governed by manually operated gates on both sides of the CPR tracks, electrically locked under control of CPR Centralized Traffic Control operators at Port Coquitlem, B.C. Authority to release the gate lock must be obtained from the CP Railway control operators at Port Coquitlem. CP Railway telephone is attached to side of bungalow about one hundred (100) feet east of crossing.
- 16. Railroad Crossings Protected by Gates Not Indicated at Station—
  Burlington——————————————Twelfth Subdivision crossing.

Normal position is for Second Subdivision.

Normal position is for BN.

- New Westminster, radio call is CJN 253, Vancouver, CJN 282, and station name must not be used.
- 18. Canadian National train and engine movements between Tilbury Island and Townsend must receive authority from train dispatcher or control operator, New Westminster before making move from Dow Chemical Spur to Townsend. At Brownsville C.N. train and engine movements must receive authority from train dispatcher before fouling or entering controlled siding through cross-over switches between interchange track and siding. Eastward C.N. train and engine movements entering Brownsville Siding must notify control operator when clear of controlled siding and switch is properly relined for siding.
- 19. There is no superiority of trains between C.N. Jct. and Vancouver Jct. That portion of Consolidated Code Rule 93 reading "Within yard limits the main track may be used, clearing first class trains when due to leave the last station where time is shown" does not apply between these points. Within these limits first class trains must move at reduced speed.

  Before occupying main track between these points on the time of delayed first class trains, extra trains and engines must obtain permission from operator Vancouver or train dispatcher, in order to avoid delay to first class trains. In addition switch indicators must be operated in accordance with Rule 240-T.
- 20. Intalco Spur, gate located west of headblock of tail of wye switch. Normal position of gate is in open position. When train or engine occupies this spur, gate should be locked across track. While gate is secured across track, other trains or engines must not enter this spur.

### THIRD SUBDIVISION

1.	Speed Restrictions—	Maximum Speeds Permitted		
				All Freight and
	ZoneBetween	P	assenger	Mixed trains
	Seattle and Centralia except as in cated below		75 MPH.	65 MPH.
	Argo and Centralia against the c		9 MPH.	49 MPH.
	MP 0 (Seattle) and MP 4 (west of Argo)	6	30 MPH.	50 MPH.
	MP 38 and MP 40 (Tacoma)	3	30 MPH.	30 MPH.
	At Black River Interlocking	€	60 MPH.	40 MPH.
	At Reservation Interlocking	9	30 MPH.	30 MPH.
	U.P. Jct. and McCarver Street	8	30 MPH.	30 MPH.
	Centralia and MP 51 (west of Buco	da) 6	60 MPH.	60 MPH.

	All Trains
	Handling Chips loaded in open top cars without net covering between Tacoma and Centralia
	King St. Station, entering tunnel tracks
	East of Holgate St., puzzle switches 10 MPH.
	Between King St. and Argo, over all public crossings
	At Argo Interlocking
	At Puyallup within Corporate limits
	At Sumner, Kent and Auburn within corporate limits 40 MPH.
	except at Auburn all trains will approach junction switch and
	crossovers at west end of passenger station platform at reduced speed.
	At Tacoma—
	Reservation to East D Street, via Head of Bay Line 30 MPH.
	Between East D Street and 21st Street
	At Titlow, over 6th Avenue crossing
	Day Island crossing
	At Steilacoom, within corporate limits
	At Bucoda, within corporate limits
	At Centralia, within corporate limits
	At Seattle, all trains and engines using westward or eastward main tracks between the west switch of the Diagonal Wye and
	King Street Station move at reduced speed. Second class and
	inferior trains, or engines, may use main track with current of
	traffic within these limits on the time of delayed first class trains
	without train order authority, but must be prepared to protect immediately. In foggy or obscure weather all trains must stop
	and know before proceeding that there are no trains approaching
	on main track before entering from yard track.
	All engines using West Seattle connection at Colorado Avenue,
	Seattle, will use every precaution when crossing the north and south strips of Spokane Street pavement, movement in both
	directions to be made at reduced speed.
	At the point on East Marginal Way, Seattle, where West Seattle
	Line crosses the northbound traffic lane, vision of approaching
	motorists is obscured by a building. All trains and engines mov-
	ing toward West Seattle, will come to a full stop short of north- bound lane. A member of the crew will walk ahead and protect
	movement over crossing.
	At First Avenue, where the West Seattle line crosses, the view
	of southbound motorists is obscured by a building. Trains and engines moving westward must not exceed two (2) MPH ap-
	proaching this point, the whistle must be sounded and the bell
	ringing.
2.	Bridge and Engine Restrictions-
	Wrecking cranes 250 ton:
	West Seattle LineNot Permitted
	Bridge 19.9, East D Street Log DumpNot Permitted
	Bridge 8.78 on Tideflats Branch, Bridge 17.2, all bridges on Highline in Tacoma and Bridges 14.07
	and 0.40 on St. Paul and Tacoma Lumber Co. Spurs 20 MPH.
	U25C, U-28C, SD-45 Series Locomotives over Bridge
	20, West Seattle Line 10 MPH.
	Cars under 40 ft. long weighing between 177,000 lbs.
	and 220,000 lbs. when coupled in groups of two or more:
	Over Bridge 17.2, Bridge 19.9 on East D Street Log
	Dump, all bridges on Highline in Tacoma, Bridges
	36.8 and 73.9 on West Seattle Line
	Over Bridge 8.78 on Tideflats Branch
	All trains, over rail locks on Bridge 36.8 on West Seattle Line 20 MPH.
	Trains handling logs, wood bolts, or veneer blocks, loaded on flat
	cars, will not exceed a speed of ten (10) MPH over the follow-
	ing bridges and when passing over them trainmen will be so
	stationed as to notice falling logs, wood bolts, or veneer blocks that might damage bridge and pass signal to engineer for quick
	stop. Engineer must be on lookout for such signal.
	Bridge 29.1, Puyallup River, between Meeker and Sumner.
	Bridge 24, White River, between Dieringer and Auburn.
	Bridge 17.2, Green River, between Thomas and Kent.
	47

Bridge 14, Chambers Creek, between Titlow and Steilacoom. Bridge 47, Skookumchuck River, between Bucoda and Wabash. Bridge 0.59-Cowlitz River-Longview Line-

Over Bascule span...... 20 MPH.

250 Ton wrecking cranes over Bridges on Longview 

8. At Seattle

From 7:00 AM until 11:59 PM eastward trains or engines entering King Street Station must not pass the fouling point of the trailing point crossover between eastward and westward Main Track located about 2000 feet east of Holgate Street without proceed signal from switchtender.

All trains and engines using main tracks, otherwise known as Tunnel Tracks 4 and 5, between the hours of 1:30 PM and 5:30 PM daily, use extreme caution when approaching plank crossing directly opposite King Street Passenger Station account passengers and Red Caps with baggage carts use this crossing when transferring from Union Pacific Train 338 to Train 194; also when passengers from King Street Station are loading to Union Pacific Train 337 Pacific Train 337.

King Street Yardmasters and Towermen will see that no trains are allowed to block this O&W crossing between 1:30 PM and 2:30 PM and between 4:45 PM and 5:30 PM.

Trains and engines will use four-party track as westward running track from King Street to Atlantic Street.

Trains on West Seattle Line making movements across Spokane Trains on West Seattle Line making movements across Spokane Street will actuate the crossing signals on approach to Spokane Street. Westward trains stopping north of the north traffic lane and eastward trains stopping south of the south traffic lane will hold the crossing signals at the "STOP" position. Crossing protection "Stop and Start" push buttons are located just north and south of Spokane Street on West Seattle Line and are to be used by train crews to stop and start the crossing protection as required by switching moves.

At Lander Street-

Trains operating in either direction on running track or Mud Track will actuate signals at a point 400 feet from crossing. Separate time relays are provided for each approach to these tracks and set to turn off crossing signals when train occupies approach in excess of 60 seconds. Should movement over Lander Street be made after crossing signals have timed out, movement must be protected in accordance with Rule 103.

Between Argo and Spokane St. Tower-

Through trackage between these points is designated as follows: Former N.P. Colorado Ave. Line Track 1
Former P.C. Eastward track Track 2
Former P.C. Westward track Track 3

Before permitting movement between Argo and Spokane St. Tower on these tracks Control Operators will confer with each other to insure track is clear of opposing trains or engine movements.

When practicable, Track 1 will be used for Eastward Through train and engine movements, and track 2 will be used for Westward through train and engine movements.

At Spokane St. trainmen on trains using track 2 must secure train orders from Tower operator and deliver to engineer and conductor.

At Spokane Street Tower, following whistle signals to be used for interlocking routes:

To or from Argo via Track 2......3 long. 

Spokane Street Interlocking crossover located 800 ft. west of tower is equipped with hand throw switches mechanically locked from Interlocking Tower. Switches must be unlocked by towerman before trainmen can line for desired movement.

Westward trains from Tracks 2 or 3 or Milwaukee Railroad desiring to use crossover will sound whistle signal, 1 short, 1 long, 1 short, and proceed on interlocking signal indication to east switch of crossover. After towerman unlocks crossover switches, trainmen will line by hand for desired movement.

Eastward trains from Track 1 desiring to use crossover will sound whistle signal 1 long, 3 short, 1 long for Track 2, or whistle signal 1 long, 4 short, 1 long for Track 3. Trainmen will line crossover and movement may proceed after receiving hand signal from towerman.

Trains and engines moving from track 2 to Harbor Island line before starting crossover movement will call Spokane St. towerman to ascertain whether or not it is all clear to make crossover move. Engines coming off the Harbor Island line will call the Spokane St. towerman before crossing the Colorado St. Line to ascertain whether or not it is all clear to make such move.

### At Argo-

Approach signal to Thirteenth subdivision is located on left hand side of Track 3, 3000 east of Argo.

Westward trains entering Thirteenth Subdivision from Track 1, stop on Track 1 at crossover and phone control operator at Argo notifying him of route desired.

Crossover located 800 feet east of Argo Tower between Track 1 and Track 2 and crossover located 1050 feet east of Argo Tower between tracks 2 and 3 are interlocked and controlled from Argo Tower. Standard interlocking signal indications will govern movements over all routes.

The following whistle signals will be used for interlocking routes:

Eastward from Track 1 through crossover 

Eastward from Track 1 to Argo Yard

Westward to Thirteenth Subdivision.......... long

Westward from Track 2 to Track 1...... long, 1 short, 1 long

Westward to eastward main track through crossover ......4 short

Westward main track to coal spur.....4 short

Switch at east end of crossover just east of Argo and switch on eastward main track leading to Oregon St. Transfer are electrically locked. To operate these, first communicate by phone with Interlocking operator, who will release the locks so they may be operated in accordance with instructions posted in the door of each lock.

Dragging Equipment Indicators located as follows:
 At Argo—On eastward and westward interlocking signals for normal direction of traffic only.

Between Titlow and Ketron, on eastward and westward interlocking signals at Bridge 14, Chambers Creek Lift Bridge, for normal direction of traffic only.

That part of Rule 240-T stating "A member of train or engine crew must report to Control Operator immediately" does not apply. After train crew has inspected train for dragging equip-ment, Superintendent must be notified from first available point of communication.

- 7. At Black River Interlocking: Trains entering the interlocking to back in on east leg of wye, or working interchange tracks, or making reverse movement between Black River station and interchange track, should notify U. P. Black River operator by phone, so that arrangements can be made to protect movement.
- Eastward trains handling flat cars loaded with logs, wood bolts, or veneer blocks, must obtain train order authority and use westward track between Black River and Argo.
- At Black River: Trains from the Seventh Subdivision must not pass governing signal to enter the Third Subdivision if signal indicates Stop, except under flag protection. If signal indicates proceed, movement may be made without flag protection.

In setting out cars on the east leg of wye cars must not be left between Third Subdivision east wye switch and road crossing approximately 765 feet from that switch in the direction of Renton.

At Kent, account track curvature, trains switching at Lynch Spur will use one unit only. 10.

### At Auburn:

All eastward trains waiting for trains operating to and from the Fourth Subdivision, and all trains doing station work at Auburn, must stop clear of the H&R crossover at the east end of Auburn Yard in order to avoid blocking switch crews using this crossover.

Highway signals at Main Street crossing are not connected with house track and operate only with train movements on main

Trains moving to or from Fourth Subdivision will be governed by instructions in Item three of Fourth Subdivision special instructions.

At Auburn passenger station, train order signal does not govern Fourth Subdivision trains leaving or entering Third Subdivision. Switchtenders are on duty at Auburn Yard 6:00 AM to 2:00 PM and 4:00 PM to 12:00 Midnight. Hours of assignments subject to change.

- 12. At Meeker: Trains from Fourteenth Subdivision must not pass governing signal to enter Third Subdivision if signal indicates Stop, except under protection of flag against first class trains. If signal indicates proceed, movement may be made without flag protection.
- At Puyallup: Eastward trains setting out will stop short of 7th Street crossing.

### 14. Between Reservation and Tacoma:

Trains leaving yard or eastward extra trains originating at former G.N. or Head of Bay yards must obtain authority from operator at Reservation before leaving yard.

Westward trains originating at Head of Bay Yard must obtain authority from operator at U.P. Jct. before leaving yard.

### 15. At Tacoma:

Switching movements along or over public crossings must be preceded by flagmen who are required to give proper warning for safety of persons approaching crossings, except when locomotive is equipped with flashing amber light and precedes other units of train.

During switching operations when visibility is restricted due to weather; smoke or steam conditions, flagmen must use flares at grade crossings not protected by flashing lights, bell signals or traffic signals, and at the following specific intersections:

- East 11th and Canal Streets
- 2. East 11th Street and St. Paul lumber mill
- Puvallup Avenue and East L Street

Except for through trains in motion, trains or switching movements are not permitted to block the following crossings for in excess of 4 consecutive minutes:

- Canal Street
- 2. Lincoln Avenue
- McCarver Street
- McKinley Avenue
- Pacific Avenue 5. 6. Pine Street
- 7. Puyallup Avenue
- 8. Ruston Way
- 9. St. Paul Avenue
- 10. Wilkeson Street
- 11. East D Street

- 12. East 11th Street
- 13. East 15th Street
- 14. South 15th Street
- South 17th Street 15.
- 16. South 19th Street
- 17. South 21st Street
- 18. South 23rd Street 19. South 25th Street
- 20. South 56th Street
- 21. South 74th Street

When grade crossing is cleared in accordance with the above, waiting vehicles and pedestrians are to be allowed to cross before crossing is again occupied.

Grade crossings other than those listed above may not be blocked in excess of 10 consecutive minutes.

No switching operations are permitted on or across Puyallup Avenue and East 11th Street between 6:30 AM and 8:30 AM, and between 3:30 PM and 6:00 PM except on Saturdays, Sundays and legal holidays.

### 16. At Sperry Mill:

Trains and yard engines will sound engine whistle signal approaching Sperry Mill just east of McCarver Street.

### 17. At U.P. Jct .:

Train order signal will not govern trains via Drawbridge line or South Tacoma Line.

When ready to leave Union Station, push button must be operated to call for signals; two rings for Drawbridge Line, one ring for South Tacoma Line.

- Extra Trains—Between Tenino Jct. and Tacoma, will run via Third Subdivision unless otherwise instructed by train order.
- 19. Logs: Flat cars loaded with logs, wood bolts or veneer blocks may be handled in trains after dark between South Tacoma and Tacoma, as provided under instructions for All Subdivisions. Eastward trains handling flat cars loaded with logs, wood bolts or veneer blocks must stop and make inspection of these loads before passing 25th Street crossing at Tacoma, and, if safe for movement, may operate via Drawbridge Line, otherwise will run via Half Moon Yard pulling train in reverse order to Head of Bay Yard.

At Ostrander Tunnel and Nelson Bennett Tunnel—Trains handling logs on all types of flat cars through either tunnel must be sure loads are in good condition before entering. A trainman must make inspection from rear of train while passing through tunnel to ascertain if the tracks are left clear. Conductor of train will be responsible for inspection of train prior to entering tunnel and for knowing that tunnel is clear after passing through.

- 20. Nelson Bennett Tunnel—Between McCarver St. and Titlow: Marker lamps must be lighted on all trains passing through tunnel. Work trains and track cars must not occupy tunnel without first securing permission from the train dispatcher. Rock loaded on flat cars must not be handled unless secured on cars with side boards.

  SPECIALLY CONSTRUCTED BOX CARS for movement of
  - SPECIALLY CONSTRUCTED BOX CARS for movement of airplane wings are higher and wider than ordinary box cars and account restricted clearance in tunnels, must move via Westward track between Titlow and McCarver St.
- 21. At Cascade Spur, normal position of switch leading from set out track to Cascade Paper tracks is for Paper tracks and must be left in this position to serve as derail.
- 22. At Nisqually, Trains from Fifth Subdivision must not pass governing signal to enter the Third Subdivision if signal indicates stop, except under protection of flag against first class trains.

If signal indicates proceed, movement may be made without flag protection.

Trains from Sixth Subdivision must not enter Third Subdivision until authority is received from dispatcher.

Extra trains from Sixth Subdivision may run as westward extra trains with the current of traffic Nisqually to U.P. Jct. without train order authority.

Extra trains from Sixth Subdivision may run as Eastward extra trains with the current of traffic Nisqually to Centralia without train order authority.

train order authority.

23. At Saint Clair—Trains from the Sixth Subdivision must not pass governing signal to enter the Third Subdivision if signal indicates stop, except under protection of flag. If signal indicates

indicates stop, except under protection of flag. If signal indicates proceed, movement may be made without flag protection.

Trains from Sixth Subdivision must not enter Third Subdivision until authority is received from dispatcher.

Extra trains from Sixth Subdivision may run as westward extra train with the current of traffic Saint Clair to U.P. Jct. without train order authority.

24. At Tenino Junction—Trains from the Fifth Subdivision must not pass governing signal to enter the Third Subdivision if

signal indicates stop, except under protection of flag. If signal indicates proceed, movement may be made without flag protection.

Bill box equipped with switch lock located opposite junction switch will be used for waybills for cars set out for Fifth Subdivision; when instructed to register by ticket at Tenino Jct., it will be left in this box.

- 25. At Centralia—Portland Division instructions apply.
- 26. Special Track Circuit— On the West Seattle Line at Spokane Street Interlocking, a special track circuit in operation within interlocking limits requires all train movements be completed.

27. Switches Equipped with Electric Switch Locks— At Argo, switch at east end of crossover and switch on eastward main track, just east of Argo, leading to Oregon Street transfer. Equipped with emergency release.

At Black River, the west wye switch to the Seventh Subdivision and the east switch of the crossover between main tracks. Equipped with emergency release.

At Auburn, the junction switch leading to Fourth Subdivision and the switches at both ends of the first crossover west of the passenger station, not equipped with emergency release.

The east switch of the crossover between main tracks, located 750 feet east of MP 24 equipped with emergency release.

The east and west switches of tracks leading off the westward main track to H&R and stock yard tracks equipped with emergency release.

The west switch of main track crossover at MP 22 equipped with emergency release.

The extreme west yard switch leading off eastward main track—Each of the three crossover switches on the "Inbound track" leading to eastward main track, between MP 22 and 700 feet east of MP 22—

At Meeker, the west switch of the crossover leading from the Fourteenth Subdivision connection to eastward main track and the east switch of the crossover between main tracks.

At Tacoma—Switch connecting east end of Coach Yard tracks to westward passenger track. Switch connecting Cammarano Spur to eastward passenger track equipped with emergency release.

Nisqually, switch leading to Eleventh Subdivision and the east switch of crossover.

Saint Clair, west switch of crossover and Sixth Subdivision switch, equipped with emergency release.

Tenino Jct., east switch of crossover and Fifth Subdivision switch.

28. Yard Limits: Tracks between yard limit signs west of Argo, east of Interbay and east of Keith operated as one yard. Tracks between yard limit signs east of Black River and west of Kent operated as one yard. Tracks between yard limit signs east of Sumner an dwest of Puyallup operated as one yard.

Tracks between yard limit signs east of Reservation and west of McCarver St., and South Tacoma operated as one yard.

Tracks between Yard Limit signs west of Centralia and east of Wabash operated as one yard.

29. Train Register Stations: Stacy St. Yard Office, Auburn Yard Office, for trains originating or terminating and for through trains running via yard tracks. Register at Auburn Yard will also show information of the arrival and departure of first class trains at Auburn.

Head of Bay Yard Office for extra trains that originate or terminate at Head of Bay Yard or at UP crossing on Drawbridge Line.

30. Train Register Exceptions: At Reservation and U.P. Jct. trains will register by Register Ticket, and will be furnished check of register by train order, or register ticket issued by operator. Centralia yard for extra trains originating.

Centralia passenger station: Through trains register by register ticket and will be furnished check of register by train order or register ticket issued by operator.

31. Clearance Provisions and Exceptions Rule 83(B)—At Seattle, trains from Stacy St. Yard secure clearance at Spokane St. Tower; trains from Second Avenue yard at South Portal Tower.

At Auburn Yard, all through trains running via yard tracks must secure clearance.

Black River.

At Meeker, trains originating must secure authority from dispatcher through operator at Puyallup, before entering Third Subdivision main track. Clearance will be issued at Puyallup.

At Reservation, eastward extra trains will secure clearance

Eastward extra trains, originating at GN yard or Head of Bay yard, may run with the current of traffic to Reservation without clearance, but must secure clearance at Reservation for movement beyond.

Westward extra trains originating at GN Yard or Head of Bay Yard will not require clearance and may run ahead of delayed first class trains to UP Jct. without train order authority avoiding delay to first class trains. Clearance must be secured at UP Jct. for movement beyond.

Westward trains must secure clearance at U.P. Jct.

St. Clair, Tenino Jct., Nisqually.

32. Interlockers and Drawbridges Not Indicated at Station-

On West Seattle Line:

Drawbridge 36.8, Interlocked.

Between Black River and Argo:

CMStP&P Crossing, Interlocked. Reservation: Junction UP---Interlocked.

Between Reservation and Union Depot, Drawbridge Line:

UP Crossing—Interlocked. Drawbridge 39—Interlocked.

Drawbridge 39 to Union Depot-Interlocked.

Between Reservation and Union Depot:

21 Street to Union Depot—Interlocked.

Between Moon Yard and South Tacoma: MoonYard to Pacific Avenue—Interlocked.

Between Union Depot and McCarver Street: Union Depot to 11th Street—Interlocked.

Between Titlow and Steilacoom: Drawbridge 14, Chambers Creek, Interlocked.

33. Railroad crossings not indicated at stations-

Colorado Ave. Line Atlantic St. UP-CMSTP&P

Duwamish Ave. CMSTP&P Diagonal Wye, Tail Track CMSTP&P

West Seattle Line

East Marginal Way, joint track crossing.

1.

Tacoma

Lincoln Ave. Line CMSTP&P

34. On this subdivision Rule 509 will not apply when signal governs movement over or through a spring switch. In Automatic Block Signal territory when a train or engine has been stopped by a signal governing movement over or through a spring switch and signal continues to display a stop indication, after complying with Rule 104(H), movement may proceed at restricted speed through entire block. When stopped at leaving end of siding the indication may be due to an opposing train proceeding on an approach indication and every precaution consistent with train rights and condition of track ahead must be taken before proceeding.

### FOURTH SUBDIVISION

1 COMITT BODDI	1 101	<i>-</i>		
Speed Restrictions— Maximum Speeds Permitt				mitt <b>ed</b>
			$\mathbf{A}$ ll $\mathbf{F}$ :	reight
			a	nd
Zone-Between	Pas	ssenger	Mixed	trains
Yakima and Auburn except as in	ıdi-			
cated below		MPH.	65	$\mathbf{MPH}$ .
Yakima and MP 16 (Kountze)	70	MPH.		
Easton and Cabin Creek	60	MPH.	60	MPH.
Cabin Creek and Martin either				
direction	30	MPH.	20	MPH.
Descending against the current of tra	ffic 25	MPH.	20	MPH.
Through Stampede Tunnel No. 3	30	MPH.	30	MPH.

Stampede Tunnel No. 3 and Lester in		
either direction	30 MPH.	20 MPH.
Descending against the current of traffic	25 MPH.	20 MPH.
Lester and MP 82 (Kanaskat)	60 MPH.	60 MPH.
MP 82 and MP 101 (East of Auburn)	70 MPH.	
MP 101 and MP 103 (East Auburn)	60 MPH.	60 MPH.
At Ellensburg—Within corporate limits	50 MPH.	35 MPH.
Approach Ellensburg passenger station	at reduced	speed.
		All Train <b>s</b>
At Lester—Movements over Loop Track		5 MPH.
At Cle Elum over crossing west of passen	ger station.	25 MPH.

2. Bridge and Engine Restrictions:

U25C, U28C and SD45 series locomotives on yard track over Bridge 90 ...... 10 MPH.

At Holmes Spur engines not permitted on logging company tracks.

At Ellensburg, engines turning on wye track must start movement via east leg and move slowly on curves.

At Easton, engines not allowed beyond clearance point on Miller's Spur.

Between Kanaskat and Palmer Jct. trains handling logs will not cross on overhead bridge No. 81 while a CMStP&P train is passing under this bridge.

3. At Auburn—Fourth Subdivision trains handling logs on flat cars and entering yard on track paralleling eastward Third Subdivision main track should stop and remain standing for trains passing on main track.

At Auburn Passenger Station, train order signal does not gove**rn** Fourth Subdivision trains leaving or entering Third Subdivision.

Between Auburn and East Auburn:

Train and engine movements will be governed by Rules 261 through 264 between the west switch at East Auburn and the junction at Auburn. All train and engine movements between East Auburn and Auburn yard will also be goverened by Rules 261 through 264. Freight trains, yard engines and light engines moving within these limits must avoid delay to first-class trains and passenger trains operating as extras.

Westward train and engine movements will be governed by westward block signal at the west switch of East Auburn.

Eastward train and engine movements will be governed by eastward block signal located 309 feet east of Fifth Subdivision junction switch.

Eastward train and engine movements from Auburn Yard on outbound track to Fourth Subdivision main track, will be governed by eastward signal near junction switch. Trains using this track, enter the track circuit approximately 750 feet before reaching this signal and, when occupying track circuit will set signals against movements in either direction on main track between Auburn and East Auburn. These signals may be cleared by opening knife switch located inside of metal case at signal governing eastward movements from outbound track. This knife switch must be returned to closed position after being used.

Eastward train and engine movements from Auburn Yard on inbound track to Fourth Subdivision main track will be governed by eastward signal near junction switch. A switch indicator, located near junction switch, indicates occupancy of main track between Auburn and East Auburn. Before lining main track switch, a member of crew must observe switch indicator. If switch indicator shows "proceed," main track switch may be opened and train or engine movement will then be governed by indication displayed by signal.

At Auburn, eastward trains or engines on Third Subdivision main track, awaiting arrival or departure of trains to or from Fourth Subdivision, must remain west of governing signal located on eastward main track about 500 feet west of Fourth Subdivision junction switch.

Trains or engines from Fourth Subdivision will not pass governing signal located 309 feet east of Fourth Subdivision junction switch in STOP position except under protection of flag against first-class trains.

Westward Third Subdivision trains or engines, using main track crossover to Fourth Subdivision, will not pass governing signal located immediately east of main track crossover in STOP

postion except under protection of flag against first-class trains. If signal indicates proceed, flag protection will not be required.

At Auburn, Third Subdivision instructions govern.

At East Auburn, all eastward trains making station stops should stop with the lead wheels of the train west of the "Crossing Signal Restart" sign and should proceed at a slow enough speed when departing to allow the gates to be activated and to be down in the horizontal position before the train occupies the crossing.

Telltales are located on main track at each end of transfer platform to call attention to restricted clearance of umbrella

- 5. At Palmer Jct.—Trains from Fourteenth Subdivision must not pass governing signal to enter Fourth Subdivision if signal indicates Stop, except under protection of flag against first class trains. If signal indicates proceed, movement may be made without flag protection.
- Between Kanaskat and Lester all toilets in trains must be kept locked and employees are cautioned against throwing off refuse or articles which might become unsanitary. Supply of cards warning passengers that train is operating through Green River watershed is kept in locker in each end of coaches. Before locking toilet doors trainmen will display warning cards on the doors sufficiently in advance to notify passengers of this requirement.
- At Lester—Crews switching and moving cars east of Signal 592 on eastward track will set all westward signals at Stop on that track to and including Signal 503 on signal bridge at west end of Stampede.

Crews switching and moving cars on westward track east of Signal 594 will set all westward signals at Stop on that track to and including Signal 505 on signal bridge at west end of Stampede and will also set westward controlled signals at Stop in CTC territory at Stampede and Martin unless the route at Stampede is lined for other than the westward main track.

If it becomes necessary for crews to switch cars east of Signal 592 on the eastward track, or Signal 594 on the westward track, a member of crew must secure permission from Dispatcher before doing so to avoid stopping tonnage trains.

- At Easton—Normal position of switch leading from east end of west No. 2 track to eastward main track is for west No. 2 track and must be left lined for No. 2 track when not in use.
- At Ellensburg—All train, engine and car movements over Fifth Street Crossing, on Auxiliary Tracks, must be preceded by trainmen

Normal position of switch to old caboose track will be for that track, to serve as a derail in event of cars running out of yard. Main track switch equipped with "Attend to derail" sign, and target of caboose track switch will display yellow indication when in normal position.

At the Ellensburg Lumber Company's loading platform there is no overhead clearance.

- 10. At Yakima--Portland Division Instructions Govern. 11. Sidings-

Cle Elum: No. 6 track between crossover opposite passenger station and first crossover east is eastward siding. Track between crossover west of county road crossing to extreme west switch, on north side, is westward siding.

Thorp: North siding is eastward, south siding is westward.

Ellensburg: No. 1 track in east yard (east of Fifth Street) will be used as westward siding, and No. 1 track in west yard (west of Fifth Street) will be used as eastward siding. The normal position of switches of connecting track between west No. 1 and east No. 1 tracks is for the connecting track and must be left in normal position after being used.

Thrall: North siding is eastward, south siding is westward.

Pomona: North siding is eastward, south siding is westward.

Selah: South siding is eastward, north siding is westward.

12. Switches Equipped with Electric Switch Locks-At Palmer Jct., both east and west wye switches leading to Four-teenth Subdivision equipped with emergency release.

At Auburn, the junction switch leading to Third Subdivision and the switches at both ends of the first crossover west of the passenger station.

### 13. Spring Switches-

Instructions for operation of spring switches are posted at or near the spring switch and must be complied with.

Unless otherwise specified, the normal position of spring switches is for main track.

When the target of a spring switch shows "red" to an approaching train or engine, a trailing point movement actuating the spring switch points must not be made.

Normal indication of siding signal is STOP. If siding signal does not clear on approach of train, movement must be governed by instructions posted at the switch.

Spring switch equipped with facing point lock, between East Auburn and Auburn, where outbound wye track from Auburn Yard connects with main track.

Spring switches equipped with facing point locks and for switch key signal operation:

At Covington, east end of siding.

At Ravensdale, east end of siding.

At Kanaskat, east end of siding.

At Eagle Gorge, east end of siding.

At Maywood, east end of siding.

At Nelson, west end of siding.

Dual control switches—At Easton and Lester, switches at end of double track, normal position for westward track are dual control and electrically operated with remote control by operator. At Martin—switch at west end of siding. Switch at end of double

At Stampede-Switch at east end of siding. Switch at end of double track.

### 15. Open Flame Switch Heaters-

track.

Open flame switch heaters are installed and will be operated at the following switches during the winter months:

Kanaskat .....East Siding Switch Eagle Gorge .....East Siding Switch Maywood .....East Siding Switch

Logs—Logs, wood bolts or veneer blocks loaded on flat cars without permanent steel stakes will not be handled through Stampede Tunnel between Martin and Stampede nor after dark 16. west of Lester.

Trains handling logs, wood bolts or veneer blocks loaded on all types of flat cars will make inspection of these loads at Easton and Lester.

17. Both tracks between Lester and Stampede and between Martin and Easton are signaled for movements in both directions.

At Kennedy, crossover movements are governed by signals located at each end of the crossover.

18.

Centralized Traffic Control between Stampede and Martin— Employes must not enter tunnels between Martin and Stampede Employes must not enter tunnels between Martin and Stampede unless authorized by the control operator. Before authorizing occupancy of the tunnels, the control operator must reverse and block the tunnel lever in the control machine and specify the time limit authority. After tunnels have been cleared, employe to whom authority was granted must promptly advise control operator, who must then restore the tunnel lever in control machine to normal position.

Positive block must be maintained between Stampede and Martin. Between east switch at Stampede and west switch at Martin protection by Rule 99 will not be required.

Westward trains, except passenger trains, must be held at Martin while a preceding passenger train is occupying the track to be used between Stampede and Lester.

After the passenger train has arrived at Lester, the control operator at Easton may advance a westward train being held at Martin.

Eastward trains, except passenger trains, must be held at Stampede while a preceding passenger train is occupying the track to be used between Martin and Easton.

After the passenger train has arrived at Easton, the control operator at Easton may advance an eastward train being held

Westward trains, except passenger trains using eastward track Stampede to crossover at Kennedy, must not be permitted to meet an eastward passenger train on eastward track at Kennedy.

Exception may be made to the above five paragraphs when authorized by the train dispatcher and under favorable weather conditions, for the movement of light engines, and all light tonnage trains not exceeding the engine rating on ascending grade. A vertical mounted alternating flashing lunar white signal is located 200 feet west of the west portal of Tunnel 3. The signal is approach lighted by eastward trains and is an indicator for the ventilating plant. Eastward trains will not enter the tunnel unless they receive a flashing lunar white signal. If the signal remains dark, it indicates that the ventilating fans are operating and train must be stopped and the control operator at Easton must be notified to stop the fans before proceeding into the tunnel. CTC telephone for this purpose is available inside the snowshed of tunnel.

The ventilating plant at Tunnel 3 is remotely controlled by the control operator at Easton, the instructions for which are posted at the control machine.

Spur track switch located 900 feet west of MP 49 at Stampede is equipped with an electric lock and release of lock is controlled by control operator at Easton, who must be contacted to release the lock.

### 19. Mountain Grade Operation-

Mountain grade between Easton and Lester. Ruling grade descending east  $2.2\,\%$ , west  $2.2\,\%$ .

### See All Subdivisions Mountain Grade Operation.

- (a) Eastward freight or mixed trains handled by engine having no dynamic brake or when engine does not have dynamic brake in effective operation on all units, stop will be made at Lester or before leaving Stampede to make brake pipe test and turn up retaining valve handles on all loads and one-half empty cars, alternating the empties.
  - Retaining valve handles will be turned down, wheels cooled, and train inspection made when stop is made at Easton.

Trains not requiring the use of retaining valves need not stop at Lester or Stampede to make brake pipe test if consist of train has not been changed or angle cock closed after leaving terminal where train test is made. Conductor must know that required brake pipe pressure as indicated on caboose gauge is being maintained before passing summit.

- (b) On westward freight or mixed train handled by engine having no dynamic brake or when engine does not have dynamic brake in effective operation on all units, stop will be made at Easton, or before leaving Martin, to make brake pipe test and turn up retaining valves on all loads and one-half empties, alternating the empties.
  - Retaining valves will be turned down, wheels cooled, and train inspection made when stop is made at Lester.

Trains not requiring the use of retaining valves need not stop at Easton or Martin to make brake pipe test if consist of train has not been changed or angle cock closed after leaving terminal where train test is made. Conductor must know that required brake pipe pressure as indicated on caboose gauge is being maintained before passing summit.

- (c) Trainmen must not close angle cocks to detach engine until signal is given. An examination of the train brakes must be made to determine if brakes are applied on each car. The air pressure must not be coupled into the train from the helper or road engine, nor signal given engineer on road engine for a release of brakes until the examination has been completed.
- (d) Engineer on leading diesel-electric engine will adjust the feed valve to 110 pounds brake pipe pressure for passenger trains and 90 pounds brake pipe pressure for freight trains at Easton on westward trains; at Lester on eastward trains. Conductor must observe caboose gauge before train enters Tunnel No. 3 and if sufficient pressure is not indicated, must take immediate action to stop the train.
- (e) Descending trains will carry 110 pounds brake pipe pressure for passanger trains and 90 pounds brake pipe pressure for freight trains to Lester and to Easton. Following any stops during the descent the engineer must fully recharge the brakes before starting. On freight trains the conductor must not give the "Proceed" signal until at least 80 pounds is shown by the caboose gauge.
- (f) If for any reason the train breaks in two or more parts while in Tunnel No. 3, train and enginemen should arrange

to get engines out of tunnel as promptly as possible. If necessary, take engines and cars out in either or both directions. When portion of train is left in tunnel, same should be made secure by blocking and not moved out until gas has cleared and it can be done safely. Blocking will be found on walls of tunnel on right hand side going east, about 100 feet apart and six feet above the rail.

(g) When stop is made at Easton, eastward, or Lester, westward, brake pipe pressure will be reduced to 80 pounds and continued at that pressure through to terminal. Conductor must know by caboose gauge that this has been done before

proceeding.

(h) Speed of trains through Stampede Tunnel No. 3 must be so controlled that they can be stopped on emerging.

Trains handling express or expedited freight have a consist of cars equipped for passenger train operation, or with a small percentage of freight refrigerators intermingled, will be governed by speed specified for passenger trains descending mountain grades.

 Yard Limits—Track between yard limit signs east of Palmer Junction and west of Kanaskat operated as one yard.

### 21. Train Register Stations-

Auburn Passenger Station for first class trains, except first class trains originating or terminating at Auburn Yard.

Auburn Yard—for trains originating and terminating and through trains running via yard track. This register will also show information of the arrival and departure of first class trains at Auburn.

### 22. Train Register Exceptions-

1.

At Auburn passenger station first class trains register by ticket. At Ellensburg—Train register in passenger station to be used by train and engine crews originating and terminating, information required by this form to be furnished for record purposes. Register check Form V train order will be furnished first class and passenger trains operating as extras to train and engine crews originating.

- 23. Rule D-83 does not apply at Stampede or Martin.
- 24. Clearance Provisions and Exceptions Rule 83(B)—At Auburn Yard, all through trains running via yard tracks must secure clearance.

At Ellensburg, first class trains must secure clearance.

25. On this subdivision Rule 509 will not apply when signal governs movement over or through a spring switch. In Automatic Block signal territory when a train or engine has been stopped by a signal governing movement over or through a spring switch and signal continues to display a stop indication, after complying with Rule 104 (H), movement may proceed at restricted speed through entire block. When stopped at leaving end of siding the indication may be due to an opposing train proceeding on an approach indication and every precaution consistent with train rights and condition of track ahead must be taken before proceeding.

### FIFTH SUBDIVISION

Speed Restrictions—		
	um Speeds Per	mitted
Reservation and Tenino Jct		MPH.
On curves and over drawbridge 39 between		
ing on drawbridge line and 15th St	15	MPH.
Between 15th St. and Union Station on inc		MPH.
At Tacoma westward trains or engines ar	proach Pa-	
cific Ave. at reduced speed.		MOTE
Between Commerce St. and 15th St		MPH.
Between Wilkeson St. and Commerce St.		MIDIT
ing grade	20	MPH.
Lakeview and Nisqually		
At South Tacoma, entering double track.		MPH.
At McChord Field and Mobase — on (	Government	
tracks	10	MPH.
At Rainier, within corporate limits	30	MPH.
At Yelm, within corporate limits	30	MPH.

 Bridge and Engine Restrictions— South Tacoma and Tenino Jct.

At McChord Field: Engines must not go beyond derail of McChord Field track connections.

250-ton wrecking cranes not permitted on Dupont spur at Fort Lewis.

- Extra Trains—Between Tenino Jct. and Tacoma, will run via Third Subdivision unless otherwise instructed by train order.
- Mountain Grade: Between 15th Street, Tacoma, and 2½ miles west. Ruling grade descending: east 2.2%.

See All Subdivisions Mountain Grade Operation.

At South Tacoma:

Terminal test of air brakes must be made on all freight or mixed trains before commencing the descent of mountain grade, record of test to be furnished on prescribed form, filled out by the conductor and engineer.

Air test card to be delivered to the operator at UP Junction.

Descending trains will carry 90 pounds brake pipe pressure South Tacoma to Tacoma. Following any stops during the descent the engineer must full recharge the brakes before starting and the conductor must not give proceed signal until at least 80 pounds is shown by the caboose gauge.

Immediately following departure from Lakeview engineer of eastward freight trains will increase train line pressure to 90

pounds.

These instructions do not apply to yard crews leaving Tacoma to perform switching on mountain grade and who do not go to South Tacoma, but are applicable to yard crews on eastward movements from South Tacoma.

- At South Tacoma—Normal position of double track switch is for eastward track. 42nd and 51st Street crossings must not be blocked over ten minutes.
- At Lakeview—
   Normal position of junction switch is for South Tacoma Tenino Jct. line.
- 7. At Mobase and McChord Field—Train or engine movements over cantonment tracks must be made at reduced speed. Toilets of cars must be kept locked and no refuse thrown from trains.

  At Mobase—Permanent drainage ditch, about 3 feet deep and

At Mobase—Permanent drainage ditch, about 3 feet deep and 1700 feet long in place between main track leading into cantonment and first track south, does not allow room to walk between these tracks.

Gate into Mount Rainier Army Depot will be kept locked at all times with switch lock. BN trains having cars to set out or pick up from this interchange will be permitted to open gate, perform switching, and will relock the gate upon leaving.

On hospital spur at Mobase, trains must back in, as concrete wall and platform paralleling track on engineer's side will not clear engine or man on side of car.

The Army has gun emplacements in the area east of track between Roy and Hillhurst, the firing to be over main track.

When firing is in progress, army guards will be stationed at the following locations:

950 feet west of MP 15 3000 feet west of MP 17 4300 feet west of MP 19

and, on the approach of train or track car, they will immediately arrange for firing to cease and allow train and/or track car to pass through normally.

Guards will not stop trains unless an emergency exists.

 At Yelm—Train or engine movements on siding or house track over highway crossings station must be protected by trainman on ground.

- 10. At Rainer-South siding is westward siding, north siding is eastward siding.
- At Tenino Jct.—Switch leading to Third Subdivision and east switch of crossover is electrically locked. See also Item 24 of 11. Third Subdivision.

Movements between clearance point between Third and Fifth Subdivisions and yard limit sign on Fifth Subdivision one mile east of Tenino Jct. must be made as prescribed by Rule 93.

12.

Between Lakeview and Fort Lewis— Due to rusty rail conditions which contribute to poor shunting of the track circuit, indicator lights have been installed at the following crossings:

> Bridgeport Way Signals 06 and 07 Thorne Lane Signals 31 and 32 Berkeley Street 41st Division Drive Signals 38 and 39 Signals 56 and 57 Signals 91 and 92 Lake Street

These indicator lights are mounted on the track side of the cable pole on the instrument case at each of these crossings. If the crossing signal flashing lights are operating properly these indicator lights will flash in unison with them. If indicator lights are not flashing all trains will stop and flag over such crossing.

At Fort Lewis and North Fort Lewis

Train and engine movements over Cantonment tracks shall be made at reduced speed.

Train or engine movements over the following crossings must be protected by flagman on ground:

On Cantonment tracks when backing or pushing cars ahead of engine over street crossings.

Other movements over street crossings will be made at reduced speed.

Many government warehouses, semi-portable loading ramps and other structures have less than standard side clearance, and employes working along these tracks will be governed accordingly.

STAFF SYSTEM—DUPONT SPUR: No train or engine will move on the DuPont Powder Company's spur until they have obtained staff from staff box at the junction switch. Possession of staff makes a train superior to all other trains on this spur, staff to be returned to staff box after completion of trip.

Derail on DuPont Powder Company's spur 950 feet from main track switch.

Entrance to DuPont Powder Company Plant protected by gate across the spur near Cap Magazine. No cars will be disturbed inside of gate until foreman consulted and permission obtained.

Engines using north and south lines move at reduced speed expecting to find cars spotted at different locations on these

Toilets must be kept locked and no refuse thrown from trains on Cantonment tracks or inside Fort Lewis Yard Limits.

At Camp Murray-Toilets of cars must be kept locked and no refuse thrown from trains.

At Fort Lewis-Time of trains applies at passenger station. Depot siding (Capacity 27 cars) designated as siding.

House track switch must be left lined for house track to act as derail for east end of "depot" siding.

- At Nisqually-Switch leading to Third Subdivision and east switch of crossover are electrically locked. Train order signal does not govern Fifth Subdivision trains. See also Item 22 of Third Subdivision.
  - Train Register Exceptions-At Nisqually and U.P. Jct. trains register by ticket.
- 17. Clearance Exceptions and Provisions Rule 83(B)-Westward extra trains originating at Reservation or Head of Bay yard may run to UP Jct. without clearance but must secure clearance at UP Jct. for movement beyond. Tenino Jct.
- Yard Limits-Tracks between yard limit signs east of Reserva-tion and west of McCarver St. and South Tacoma operated as 18. one yard.
- 19. Railroad crossings not indicated at station-Fort Lewis in Dupont Powder works 4 narrow gauge railroad crossings protected by gates with reflectorized stop signals.

### SIXTH SUBDIVISION

Maximum Speeds Permitted

.8

.s

 $\mathbf{Zone}$ —Between

1. Speed Restrictions-

- b. All switch movements over crossings, unless protected by automatic signal devices, must be protected by flagmen, except when engine precedes cars over crossing, in which case no flagmen necessary, but engine must stop before entering crossing.
- c. No engine, railroad car or cars may be left unattended on any main track having a grade of 1% or more.
- d. No street or street crossing may be blocked to vehicular traffic for more than 5 minutes at any time.
- e. Not more than 3 consecutive street intersections may be blocked by any moving train at any given time.
- f. No more than 2 consecutive street intersections may be blocked by any standing train at any time.
- g. No switch move may exceed a speed of 5 MPH. at any intersection within the City of Olympia.
- h. When switching movements across grade crossing have been completed and the crossing cleared, reverse movement across such crossing may not be made until all accumulated vehicular traffic at the crossing shall have cleared the intersection.
- i. Switch movements of engine and 5 cars only may be moved across the following crossings between the hours of 7:30 a.m. and 8:15 a.m., 11:50 a.m. and 12:20 p.m., 12:40 p.m. and 1:05 p.m., 3:25 p.m. and 3:45 p.m., and between 4:50 p.m. and 5:30 p.m.:

East Union Avenue East State Avenue Legion Way East Fourth Avenue East State Avenue Columbia Street at West Seventh

- j. No public road or street crossing may be blocked to vehicular traffic by any standing engine, car or train during the hours prescribed in paragraph i above.
- k. No car may be left standing on any track within 25 feet of a street right-of-way line, except on spurs or sidings serving industries.

By reason of the grade on the scale track in the Union Pacific Yard, crews must leave one good hand brake set on the north end of this track at all times.

Second track north of main track from crossover opposite freight depot to main track switch, used exclusively for repair track.

- At Gate—Portland Division Instructions Govern—Normal position of the main track junction switch is for Centralia-Moclips line.
- At Belmore and Little Rock—When necessary, sidings may be blocked with cars without notice.
- Train Register Stations—
   Olympia—for trains originating and terminating.
- Clearance Provisions and Exceptions Rule 83(B)— Saint Clair, Gate.

### SEVENTH SUBDIVISION

Speed Restrictions—		
Zone—Between Maximum Speeds	Per	mitted
Black River and Woodinville	30	MPH.
Woodinville and Wickersham	35	MPH.
Wickersham and Sumas	40	MPH.
Kruse and Edgecomb	30	MPH.
At Renton, within corporate limits	20	MPH.
Except between 7th Avenue South and 2nd Avenue North	10	мрн.
At Kirkland, within corporate limits		MPH.
At Edgecomb	30	MPH.
At Sedro Woolley, within corporate limits	30	MPH.
At Sumas, within corporate limits	25	MPH.
Advance-warning signs are located 1500 feet in adva Reduce speed signs.		

### 2. Bridge and Engine Restrictions-

Heavy car restrictions:

1.

Cars under 40 ft. long and weighing between 177,000 lbs. and 220,000 lbs. when coupled in groups of two or more, over Bridges 61.1 and 85 and 110 ...... 10 MPH.

- Extra Trains—Between Black River and Sumas will run via Seventh Subdivision unless otherwise instructed by train order.
- 4. At Black River—In setting out cars on the east leg of wye, cars must not be left between Third Subdivision east wye switch and road crossing approximately 765 feet from that switch in the direction of Renton.

Logs destined Everett will be set out on east leg of wye track from Seventh Subdivision switch.

- 5. At Renton—When switching do not exceed 5 MPH. over Boeing private road crossing located 2862 feet east of MP 3 Actuating circuits for crossing signals extend 100 feet on each side of crossings on these tracks. Circuits are equipped to allow the gates to clear for vehicular traffic if circuits are occupied over 1 minute. When this occurs and movement is to be made over road crossing Rule 103 must be complied with or use manual control push buttons.
- At Bellevue—Do not leave cars between main track and gate at Safeway spur account descending track.
- 7. At Woodinville—Normal position of junction switch is for Seventh Subdivision.
- At Bromart and Edgecomb—Normal position of junction switch is for Seventh Subdivision.

Road crossings between Bromart and Bridge 35 may not be blocked more than fifteen (15) minutes.

9. At Snohomish-On First Subdivision.

Highway crossing signals just east of passenger station are automatically operated on all tracks by approaching trains. When the crossing is not to be fouled by a train standing or switching on the control sections, the operation of the signals should be temporarily suspended by a member of the crew operating the manual control in accordance with instructions inside the control box. Care must be used to have the signals restored to operation in case of the approach of another train.

- 10. At Snohomish—On Seventh Subdivision—The track extension from the tail of the wye crosses a high speed main highway at "D" Avenue (2323 feet northwesterly from the wye tail track switch). Before train or engine movements are made over this crossing, the manually controlled highway crossing signals must be placed in operation by a member of the crew operating the electric switches which are contained in metal boxes on poles located on each side of the street and north of the track. After movements have been completed, the signals must be restored to non-operating.
- 11. At Hartford—Switch leading to the mill should be left lined for the mill track to act as a derail for the lumber and shingle sheds.
- 12. At Kruse Jct.—A switch indicator, governing train and engine movements from the Seventh Subdivision to the Second Subdivision, consisting of a single unit (normally dark) and a switch-key-controller mounted on an iron mast, is located at the clearance point of the Seventh Subdivision connection, and must be operated by a member of the crew who, together with the engineer, must observe and be governed by its indication before fouling the Second Subdivision track or lining main track switch for movement to the Second Subdivision.

If indicator displays a yellow light when switch-key-controller is operated, switch may be lined and movement to main track may be made immediately in accordance with train rights and operating rules. Display of yellow light must continue until leading wheels have passed clearance point.

If indicator does not display a yellow light when switch-keycontroller is operated, train or engine movement to Second Subdivision may be made in accordance with train rights and operating rules.

To operate switch indicator, insert switch key in controller and turn clockwise toward "R", hold a few seconds and remove key. If yellow light is displayed and intended movement is not made, insert switch key in controller and turn counter-clockwise toward "N" to restore signal system to normal condition to avoid delay to train on Second Subdivision.

Switch-key-controller must never be operated toward "N" after having been operated toward "R" if intended movement to main track is to be made.

- At Arlington—Expect to find cars fouling east end of house 13. track lead.
- Between Clear Lake and Sedro-Wooley-Trains handling logs stop and make inspection of loads before crossing Bridge 85 14. over Skagit River.
- At Sedro-Wooley-Jameson Street crossing at west end of yard tracks must not be blocked to exceed ten (10) minutes.
- At Nooksack—State highway crossing one-half mile west must not be blocked by standing trains.
- At Sumas—Electric eye, installed by U.S. Immigration Service on house track, Sumas. Train and engine crews must clear border on house track southward at least two car lengths so as not to foul this mechanism. The above applies only to cars left on this track over night.
- Yard Limits-Track between yard limit sign east of Renton and 18. the connections with double track at Black River operated as one yard.

Tracks between yard limits west of Bromart and east of Snohomish operated as one yard.

Tracks between Yard Limit sign west of Bromart and First Subdivision Junction switch operated as one yard.

Tracks between Yard Limit signs west of Arlington and east of Arlington Junction operated as one yard.

19. Train Register Stations

Wickersham for Train 144.

Arlington for Ninth Subdivision trains.

Train Register Exceptions 20. Trains will register at old GN-Snohomish by ticket when operator

is on duty. Trains 143 and 144 register at Woodinville by ticket when

operator is on duty. Register books at Bromart and Edgecomb for use as instructed.

- 21. Clearance Provisions and Exceptions Rule 83(B)—At Arlington Jct., clearance not required. Trains originating secure clearance at Arlington.
  - Black River, Bromart, Kruse Jct. and Wickersham.
- 22. Derail—At Clear Lake derails at both ends of siding.
- Switches Equipped with Electric Locks and 23. Emergency Releases-

At Black River, west wye switch leading to Third Subdivision and the east switch of crossover from the eastward to the westward main track. (See also Items 7 and 9 of Third Subdivision.)

24. Interlockings and Draw Bridges Not Indicated at Station-

Between Bromart and Snohomish:

Drawbridge 38, Snohomish River.

Between Clear Lake and Sedro-Wooley: Drawbridge 85, Skagit River.

25. Railroad Crossings Not Indicated at Stations-

Between Renton and Quendall:

Thirteenth Subdivision.

Between Sedro-Wooley and Thornwood: Two Twelfth Subdivision Crossings

Between Nooksack and Sumas: CMStP&P.

### EIGHTH SUBDIVISION

1.	Speed Restrictions— Maximum Spe	eds I	Per	mitt <b>ed</b>
	Zone—Between			Trains
	North Portal and Woodinville		30	MPH.
	Except, Trains handling wrecking cranes, pile dri	$\mathbf{ver}$		
	or locomotive cranes		25	MPH.
	Woodinville and Fall City			
	Fall City and North Bend		15	MPH.
	At Seattle-Between South Portal and Bay St		20	MPH.
	At Interbay:			
	Through crossover, 1000 feet west of station		10	MPH.
	Between governing signals of interlocking at cross	ing	•	NATUTY.
	of lead to Naval Supply Depot Spur		20	MPH.
	Approach public crossing at University Way and 1	oth A	AVE	. N.E.
	at reduced speed, not exceeding 10 MPH. over protecting all switch movements by flagman.	cros	2111	g, and
	Between Keith and Navalair Jct., approach publ	ic cr	088	ino on
	65th Street at reduced speed.	10 01	000.	6 011
	Between Lake and Bothell, do not exceed 15 MPH	. ove	: c1	ossing
	at 170th Street (Lake Forest Park) located 337	8 fee	et €	east of
	MP 18, between the hours of 8:00 A.M. and 4:00	P <b>.M.,</b>	M	ondays
	through Fridays.		•	LEDIT
	At Bothell, within corporate limits		30	MPH.
	Near Issaquah, over public crossing 1062 feet eas	t of	10	MDH
	MP 18		TÜ	MPH.
	At Issaquah, within corporate limits			
	At North Bend, within corporate limits			
	Advance-warning signs are located 1500 feet in a	idvan	ce	of the
	Reduce speed signs.			

### 2. Bridge and Engine Restrictions:

Between North Portal and Woodinville-

On Terry Avenue Line 250 ton wrecking cranes not permitted.

### Between Woodinville and North Bend-

250-ton wrecking cranes not permitted.

U25C, U28C, SD45 series locomotives not permitted over bridges between Issaquah and Snoqualmie.

Pile drivers 26-33 incl., boom must be supported on idler car over bridges.

150 ton wrecking cranes and pile driver 25 not permitted between Issaquah and North Bend.

All trains:

 Over Bridge 20, 27.2, 28, 31, and 31.1
 15 MPH.

 Over Bridge 31.2
 10 MPH.

Cars under 40 ft. long and weighing between 177,000 lbs. and 220,000 lbs. and cars over 40 ft. long and weighing between 220,000 lbs. and 263,000 lbs. must be separated from each other by a car weighing under 177,000 lbs.

3. At Bridge 4, bascule span—Whistle signals to be used by eastward trains and engines for interlocking routes:

To Fremont: 1 long.

To Ballard: 1 long, 1 short.

- At Woodinville—Normal position of junction switch is for Seventh Subdivision.
- At North Bend—Normal position of east wye switch will be for the wye.
- At Preston—Trains departing must keep at least fifteen minutes apart.
- 7. At Tanner—Engines and loads not permitted on St. Regis runaround track. Track may be used for empties only.
- Clearance Provisions and Exceptions Rule 83(B)— North Bend.
- 9. Unless otherwise instructed, protection against following trains, as required by Consolidated Code Rule 99, is not necessary on the Eighth Subdivision between Woodinville and North Bend.

### 10. Drawbridges Not Indicated at Station-

Between Interbay and Fremont:
Drawbridge 4, Lake Washington Canal, Interlocked.

### 11. Yard Limits-

Track between Yard Limit sign west of Argo east of Interbay and east of Keith operated as one yard.

### 12. At North Portal-No train order signal maintained.

Interlocking and whistle signal indications:

Eastward movements from King Street Tunnel are governed by signal located 960 feet east of the east end of the tunnel. Upper light governs route to First Subdivision main track; middle light governs route to Eighth Subdivision main track; lower light governs diverging routes.

Eastward movements against the current of traffic from the tunnel are governed by a signal located 960 feet east of the east end of the tunnel.

Eastward movements from the old main track are governed by signal located 1400 feet west of the tower. Lower light governs route to Eighth Subdivision main track; upper light governs route to First Subdivision main track.

Whistle signal: 4 long to Eighth Subdivision main track; 2 long, 1 short to First Subdivision main track.

Eastward movements from waterfront are governed by a signal located 1550 feet west of the tower.

Whistle signal: 3 long to Eighth Subdivision main track, 1 long to Pier 70 lead.

Westward movements from Eighth Subdivision main track are governed by signal located 300 feet west of the tower.

Whistle signal: 1 long to tunnel; 3 long to waterfront; 4 long to old main track; 5 long to running track; 1 short from American Can Spur to main track.

Westward movements from Pier 70 lead are governed by a signal located 1360 feet west of tower.

Whistle signal: 1 long to waterfront.

Westward movements against the current of traffic into the tunnel are governed by a signal located 250 feet east of the east entrance to the tunnel.

### Railroad Crossings Not Indicated at Stations— Tanner, CMStP&P

### NINTH SUBDIVISION

	THE THE BOBBIT ISION
1.	Speed Restrictions
	Zone—Between Maximum Speeds Permitted
	Arlington Jct. and Oso, all trains
	Oso and Darrington all trains
2.	Bridge and Engine Restrictions—
	250-ton wrecking cranesNot Permitted
	U25C, U28C, SD45 series locomotives, pile drivers 25-28 incl., 150 ton wrecking cranes
	Over Bridge 10 10 MPH.
	Trains handling logs over steel Bridges 2, 7, 10, 11, 18 and 22.1
	Heavy Car Restrictions: Over Bridge 10, cars under 40 ft. long and weighing between 177,000 lbs. and 220,000 lbs. and cars over 40 ft. long weighing between 220,000 lbs. and 263,000 lbs. must be separated from each other by a car weighing under 177,000 lbs.

At Darrington, engines may use main track to engine stop sign located 1028 feet east of west switch to Sauk Logging Co.'s set out track. Set out track may be used to engine stop sign

located 1000 feet east of west switch. Loading track may be used for a distance of 360 feet from west switch.

At Darrington, engines not permitted beyond Spar Tree on B & W track.

- At Arlington—Grade crossings may not be blocked for over 5 minutes except by trains or cars in motion.
- Clearance Provisions and Exceptions Rule 83(B)—At Arlington
  Jct., clearance not required. Trains secure clearance at Arlington and Darrington.
- Derails—At Darrington, on main track 300 feet east of passenger station.
- Unless otherwise instructed, protection against following trains, as required by Consolidated Code Rule 99, is not necessary on the Tenth Subdivision.

### TENTH SUBDIVISION

1. Speed Restrictions-

- At Lowell—Private road crossing leading to Simpson Lee Paper Company west of station, is the only vehicular route to the plant. Train stopping should avoid blocking this crossing when practicable.
- 3. At Everett—Manually-operated, electrically-locked gates are in service at freight house line crossing of "C" Line. Normal position of gates is across the freight house lead. The control gate located on east side of crossing is electrically locked. Instructions for operating are posted.
- 4. At Sealine Jct. and GN Jct.—Normal position of switch at Sealine Jct. is for Sealine movement. At GN Jct. normal position of switch is for Third Subdivision. Telephone located at GN Jct. to enable crews to call Everett operator. Switch foreman and conductor must contact operator at Everett and inform themselves as to first class trains before opening switch. Care must be used not to delay first class trains.
- 5. At Delta Jct. Interlocking—Eastward trains will call for route with whistle signal: one long, one short, one long. Westward trains will call for route with whistle signal: one long, one short, two long.
- Train Register Exceptions—
   At Everett first class trains may register by ticket when operator is on duty.
- Clearance Provisions and Exceptions Rule 83(B)—
   P.A. Jct., Milwaukee Jct. and GN Jct.
   Trains originating at P.A. Jct. will secure clearance at Everett, and trains originating at GN Jct. will secure clearance at Delta Jct.
- 8. Railway crossing 300 feet north of P.A. Jct., crossing gates electrically locked. Eastward interlocking signals and westward approach signal P.A. Jct. are operated in conjunction with gates and when these signals do not indicate proceed Rule 98A must be complied with.

### ELEVENTH SUBDIVISION

1.	Speed Restrictions—  Zone—Between Wickersham and Bellingham Maximum Speeds Permitted 20 MPH.
	except over public crossing between MP 15 and Larson 15 MPH.
	Trains handling wrecking crane, pile driver, or locomotive crane:  MP 5 and MP 8 10 MPH.
	At Bellingham, between Kentucky Street and Passenger station
	Advance warning signs are located 1500 feet in advance of the Reduce speed signs.
2.	Bridge and Engine Restrictions— 250-ton wrecking cranes not permitted over Bridge 10.
	U25C, U28C and SD45 series locomotives, pile drivers 25-28 incl., 150 ton wrecking cranes, cars under 40 ft. long and weighing between 177,000 lbs. and

220,000 lbs. when coupled in groups of two or more, and cars over 40 ft. long weighing between 220,000 lbs. and 263,000 lbs. when coupled in groups of two or more: Over Bridge 10 ...... 10 MPH. Bridge 22 and track at west end of this bridge is unsafe for operation. This is first bridge east of crossing.

At Bellingham—Flagman must precede all trains between Champion and Laurel Streets. Trains must stop and be preceded by flagman crossing Holly St. Normal position of gate at Second Subdivision crossing is against Eleventh Subdivision trains.

- Derails—At Bellingham, derail on main track 568 feet west of Second Subdivision crossing, between Bellingham and South Bellingham.
- Clearance Provisions and Exceptions Rule 83(B)—Wickersham.

### TWELFTH SUBDIVISION

Maximum Speeds Permitted

1. Speed Restrictions-

	Between Anacortes and Concrete
2.	Bridge and Engine Restrictions— Bridge 12, Whitney
3.	Clearance Provisions and Exceptions Rule 83(B)— Burlington, Thirteenth Subdivision trains must secure clearance.
4.	Manual Interlockings Not Otherwise Indicated in Time Table-

Unless otherwise instructed, protection against following trains, as required by Consolidated Code Rule 99, is not necessary on Twelfth Subdivision.

Whitney, one mile west of Drawbridge 12

### THIRTEENTH SUBDIVISION

1.	Speed Restrictions— Between	Maximum Pas	Speeds senger		
	Argo and Maple Valley	50	MPH.	35	MPH.
	Maple Valley and Black Diamond			20	MPH.
	Renton. Over paved district and all	street cross	sings	10	MPH.
	North Renton Line			10	MPH.
	All paved streets in Seattle			6	MPH.
	Between absolute signals of interloc Black River Tower Over Bridge 22.8 Maple Valley				

### 2. Restricted Clearances-

Black Diamond — No clearance for engines or men at coal ramps. Caboose and engine will not clear coal bunkers.

### 3. Train Register Exceptions-

Black River Tower, Renton, and Maple Valley-Trains may register by ticket.

### 4. Clearance Provision and Exceptions-

If the initial station for a train is a non-telegraph station, or a telegraph station at which the operator is not on duty, a clearance will not be required.

### 5. Electrified Zone Instructions—Argo to Maple Valley

Trolley wires at the following points are not at standard clearance:

Albro Place Viaduct just west of Argo

Highway Bridge just east of Black River Tower

Highway Bridge at Cedar Mountain

The wires on the trolley and transmission line poles and supports carry high voltage. Contact with them either by person or equipment is liable to cause fatal injury or damage to property.

THEY MAY BE HANDLED ONLY BY THOSE WHO HAVE RECEIVED SPECIFIC AUTHORITY TO DO SO.

If wires are found hanging down, or any part of the trolley or transmission system deranged in such a way that a person might come in contact with the wires, the train dispatcher must be notified from the first point of communication.

If conditions are such that train or equipment is unable to pass without touching the wires, the train dispatcher must be notified and he will give necessary instructions.

In case of fire, extinguishers filled with carbon tetrachloride only should be used if it is possible for the extinguishing liquid to come in contact with the wires.

In case of electric shock, resulting in apparent unconsciousness, application of the Back Presure Arm Lift Method of Resuscitation must proceed immediately; the knowledge of this method is required of all persons having duties within the electrified zone.

Freight trainmen will not be required to ride on top of train in electrified territory unless some real emergency condition exists, which in the judgment of the conductor of the train, would require special attention from some member of the crew located on top of the car. These instructions are not to be considered as relieving trainmen from the necessity of getting on top of cars while switching operations are carried on when conditions require. However, in no case must trainment get on top of cars where, on account of lack of clearance, there is danger of contacting any part of energized trolley system.

Due to settling of trolley poles on fills, raising track when ballast is applied, and other similar causes over a period of years, the height of trolley wire above top of rail is variable; and in some locations, it is less than standard height of 24'2".

### 6. Automatic Block Signals-

- (a) Signals 5.2, 7.2 and 9.0 governing westward track between Argo and Black River Tower are on the left hand side of that track.
- (b) Eastward interlocking signal suspended from trolley bridge 374 feet west of Seventh Subdivision crossing Renton governs eastward movements over spring switch. Rule 104(H) governs.
- (c) Signal located on North Renton Line at fouling point is equipped with a light type indicator and two push buttons attached to signal mast.

To enter main track, train or engine must stop before passing signal. If light indicator is burning, press button painted yellow. After an interval of approximately two minutes this signal will display a proceed indication if route is clear. If for any reason route is not accepted, immediately press button painted red to restore main track routes.

### 7. Crossovers on Double Track Not Otherwise Indicated in Time Table-

### FACING POINT:

Van Asselt. East end of Milwaukee Yard

Black River. 2300 ft. west of Tower

Black River. 7800 ft. west of Tower

### TRAILING POINT:

Argo. 1500 ft. west of Tower

Van Asselt. West end of Milwaukee Yard

Black River Tower, Third Subdivision Transfer for Black River Tower Renton. East end of Yard

Crossover between eastward and westward main tracks one-half mile east of Black River Tower is not provided with trolley wire.

### Spring Switches-

Black River Tower. West end of Black River Yard (normally set for westward track).

Renton. End of double track (normally set for eastward track). Renton. North Renton Line junction (normally set for main track).

- Yard engines and extra trains are not permitted to use Main Tracks within Seattle Yard Limits west of Argo Tower except upon train order authority.
- Renton city ordinance prohibits blocking street crossings for a period longer than five consecutive minutes.
- Cars must not be kicked at the Boeing Plant at Renton and hand brakes must be set on all cars left standing on lead. Engine must not enter Boeing zone between the hours of 11:45 AM and 12:35 PM also 3:45 PM and 4:45 PM.
- Trains and engines must come to full stop before passing over grade crossing leading to Shuffleton Plant. Renton, Seventh Subdivision Crossing near Lake Washington Boulevard protected by gate.
- 13. At Argo-Third Subdivision Special Instructions Apply.

### 14. Argo-

Whistle signals:

Eastward to Spokane St.—One Long

Eastward for crossover to UP Tracks—One Long, One Short, One Long.

### Black River Tower—

Whistle Signals:

Thirteenth Subdivision Main Tracks-One Long Diverging routes except U.P. Interchange Track - One Long, One Short, One Long

U.P. Interchange Track -- One Long, Two Short, One Long Upper arms on train order signal govern movements of trains Thirteenth Subdivision.

### Automatic Interlocking-

RENTON, SEVENTH SUBDIVISION CROSSING

Trains must approach the interlocking signals at reduced speed and if a proceed indication is obtained may proceed over the crossing at a speed not to exceed 10 MPH.

### FOURTEENTH SUBDIVISION

1.	Speed Restrictions—
	Zone—Between Maximum Speeds Permitted Palmer Jct. and Meeker
	Cascade Jct. and Wilkeson: Trains handling wrecking crane, pile driver or locomotive cranes
	Other trains 20 MPH.
	Orting and Lake Kapowsin:  Lake Kapowsin and MP 8
	Trains handling wrecking crane, pile driver or loco- motive crane
	Through corporate limits of: Enumclaw, Buckley, South Prairie
	Advance warning signs are located 1500 feet in advance of the Reduce speed signs.
2.	
4.	250-ton wrecking cranes:
	Between Cascade Jct. and WilkesonNot Permitted Orting-Lake Kapowsin BranchNot Permitted
	U25C, U28C and SD45 series locomotives:
	Orting-Lake Kapowsin BranchNot Permitted Over Bridges 0 and 4, Wilkeson Branch
	Multiple unit diesels N.P. 5400 series to 7000 series incl. Orting-Lake Kapowsin BranchNot Permitted
	All trains, Orting-Lake Kapowsin Branch, Bridge 8, Puyallup River
	Track between Wilkeson and Carbonado out of service.
	Heavy car restrictions:
	Cars under 40 ft. long and weighing between 177,000 lbs. and 200,000 lbs. when coupled in groups two or more:
	Over Bridge 16, Buckley Line 20 MPH.
	Over Bridges 0 and 4, Wilkeson Branch 20 MPH.
	Cars over 40 ft. long and weighing between 220,000 lbs. and 263,000 lbs. when coupled in groups of two or more:
	Over Bridges 0 and 4, Wilkeson Branch 20 MPH.
	Heavy cars listed above must be separated from the engine and each other over Orting Branch, Bridge 8, Puyallup River.
8.	At Bayne Jct.—Normal position of junction switch is for CMStP&P main track.
4.	At Enumclaw—While using main track of Weyerhaeuser Co. between junction switch with CMStP&P and yard limit sign 2000 feet east, all movements will be made in accordance with Rule 93.
	All movements of engines and cars over highway crossing on track between BN and Weyerhaeuser Company's tracks must be protected by flagman.
5.	At Wilkeson—Normal position of junction switch is for Carbonado Line.
6.	Switches Equipped with Electric Locks and Emergency Releases—
	At Palmer Junction both east and west switches of wye track

At Meeker, the west switch of the crossover leading from the Fourteenth Subdivision connection to the eastward main track and the east switch of the crossover between tracks. (See Item 12 of Third Subdivision.)

Mountain Grade—See All Subdivision Mountain Grade Operations.

From 1000 feet west of MP 14, west of Buckley, to Cascade Junction, the descending grade reaches the maximum of 1.7%. The descending grade from end of track at Wilkeson to Cascade Junction reaches a maximum of 2.2%.

From 2000 feet east of MP 8 to 1000 feet east of MP 6, between Orting and Lake Kapowsin, the grade reaches a maximum of 1.9% descending for a short distance.

- Clearance Provisions and Exceptions Rule 83(B)—Meeker, Palmer Jct. and Lake Kapowsin.
- Derails—At Wilkeson on main track 1051 feet west of east switch of siding.

At Orting, on main track just east of passenger station.

At Lake Kapowsin, on main track 100 feet west of first west switch.

At Lake Kapowsin on St. Regis spur 3000 ft. east of Landing No. 1.

10. Unless otherwise instructed, protection against following trains, as required by Consolidated Code Rule 99, is not necessary on the Fourteenth Subdivision.

### FIFTEENTH SUBDIVISION

- 1. Speed Restrictions— Maximum Speeds Permitted

  Zone—Between All Trains
  Cle Elum and Ronald 20 MPH.
  Cle Elum through city limits 10 MPH.
- Public Crossing—On track leading to Mine 9, trains will stop before passing and trainmen protect movement of cars or engines over crossing.
- Mountain Grade—Between Cle Elum and 4.2 miles west. Ruling grade descending west 2.2%.

See All Subdivision Mountain Grade Operation.

Before beginning descent, air brake tests must be made as prescribed by Air Brake Rules and air test card delivered to operator at Cle Elum.

Descending trains must carry 90 pounds brake pipe pressure. Following any stops during descent, engineer must recharge brakes before starting, and conductor must not give proceed signal until at least 80 pounds is shown on caboose gauge.

- 4. Derail—On main track 2520 feet west of MP 1, between Cle Elum and Roslyn. At this location Rule 104(C) is modified to require derail to be set in derailing position while caboose or cars stand on main track and while switching to and from main track of coal washing plant. At all other times, derail shall be left in non-derailing position.
- Unless otherwise instructed, protection against following trains, as required by Consolidated Code Rule 99, is not necessary on the Fifteenth Subdivision.